Torres Rojas, Genara

From: lgafigy@hotmail.com
Sent: Wednesday, March 18, 2015 4:03 PM
To: Duffy, Daniel
Cc: Torres Rojas, Genara; Van Duyne, Sheree; Ng, Danny
Subject: Freedom of Information Online Request Form

Information:

First Name: Antonio
Last Name: Figueiredo
Company: PAFSA
Mailing Address 1: 236 Oneida Place
Mailing Address 2:
City: North Plainfield
State: NJ
Zip Code: 07060
Email Address: lgafigy@hotmail.com
Phone: 862-849-0563
Required copies of the records: No

List of specific record(s):
Dear MadamSir, Under the Freedom of Information Law. I am hereby requesting information on the Airport Certification Manual for EWR, LGA, JFK Airports. The specific sections only: 139.303 --Personnel 139.327--Self Inspection 139.337--Wildlife Hazard Management 139.339--Airport Conditionn Reporting139.341--Identifying, Marking, lighting Construction Unserviceable Areas. Kindly forward response to my email in PDF if possible. Thank you.

THE PORT AUTHORITY OF NY & NJ

FOI Administrator

June 18, 2015

Mr. Antonio Figueiredo
PAFSA
236 Oneida Place
North Plainfield, NJ 07060

Re: Freedom of Information Reference No. 15898

Dear Mr. Figueiredo:

This is in response to your March 18, 2015 request, which has been processed under the Port Authority's Freedom of Information Code (the "Code", copy enclosed) for copies of the following records related to the Airport Certification Manual for EWR, LGA, JFK Airports: The specific sections only: 139.303 --Personnel 139.327--Self Inspection 139.337--Wildlife Hazard Management 139.339--Airport Condition Reporting139.341--Identifying, Marking, lighting Construction Unserviceable Areas.

Material responsive to your request and available under the Code can be found on the Port Authority's website at http://www.panynj.gov/corporate-information/foi/15898-O.pdf. Paper copies of the available records are available upon request.

Pursuant to the Code, certain portions of the material responsive to your request are exempt from disclosure as, among other classifications, security.

Please refer to the above FOI reference number in any future correspondence relating to your request.

Very truly yours,

Danny Ng
FOI Administrator

Enclosure

4 World Trade Center, 18th Floor
150 Greenwich Street
New York, NY 10006
T: 212 435 3642 F: 212 435 7555

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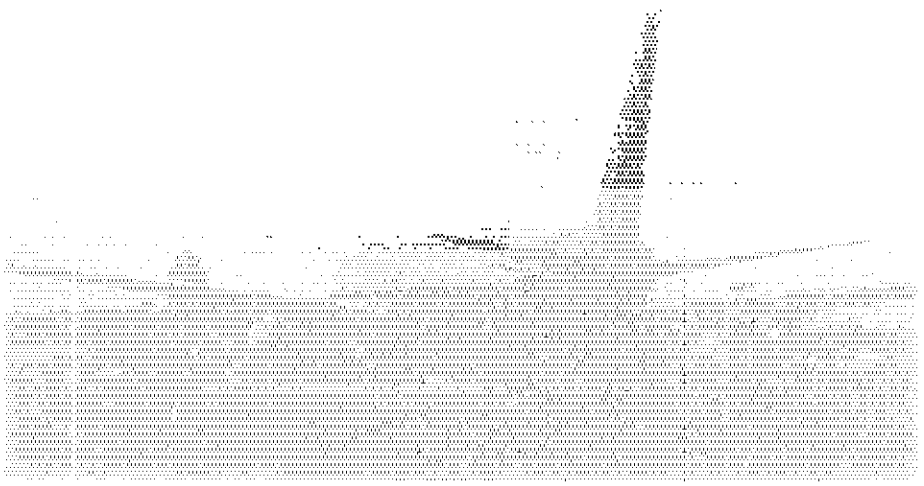

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Page Revision Log

Date of Revision	Pages	Airport Approval (s)
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Exhibit 36A

EWR

Operations Movement Area Training Records
C.F.R. Part 139.303 & 139.327

Check Ride Date: _____ Trainer: _____

Night Check Ride Date: _____ Trainer: _____

NJ Firearms Purchaser Card

SUBAREA	2015		2016		2017		2018	
	DATE	Trng Int	DATE	Trng Int	DATE	Trng Int	DATE	Trng Int
Wildlife								
Shotgun & Cryo-Technic								
LOA's								

Initial Expiration Date: / / Operational Date: / /

DMWILLIS

Pilot Signature

Exhibit 30-B

EWR

Check Ride Date: _____ Trainer: _____

Night Check Ride Date: _____ Trainer: _____

SUBJECT AREA	2015		2016		2017		2018	
	DATE	Trng Int	DATE	Trng Int	DATE	Trng Int	DATE	Trng Int

SUBJECT AREA	2019		2020		2021		2022	
	DATE	Trng Int	DATE	Trng Int	DATE	Trng Int	DATE	Trng Int

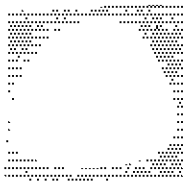
Ride-ID Explanation Date: ___/___/___ Orientation Date: ___/___/___

COMMENTS

Employee Signature: _____

Trainer Signature: _____

Exhibit 30[illegible]



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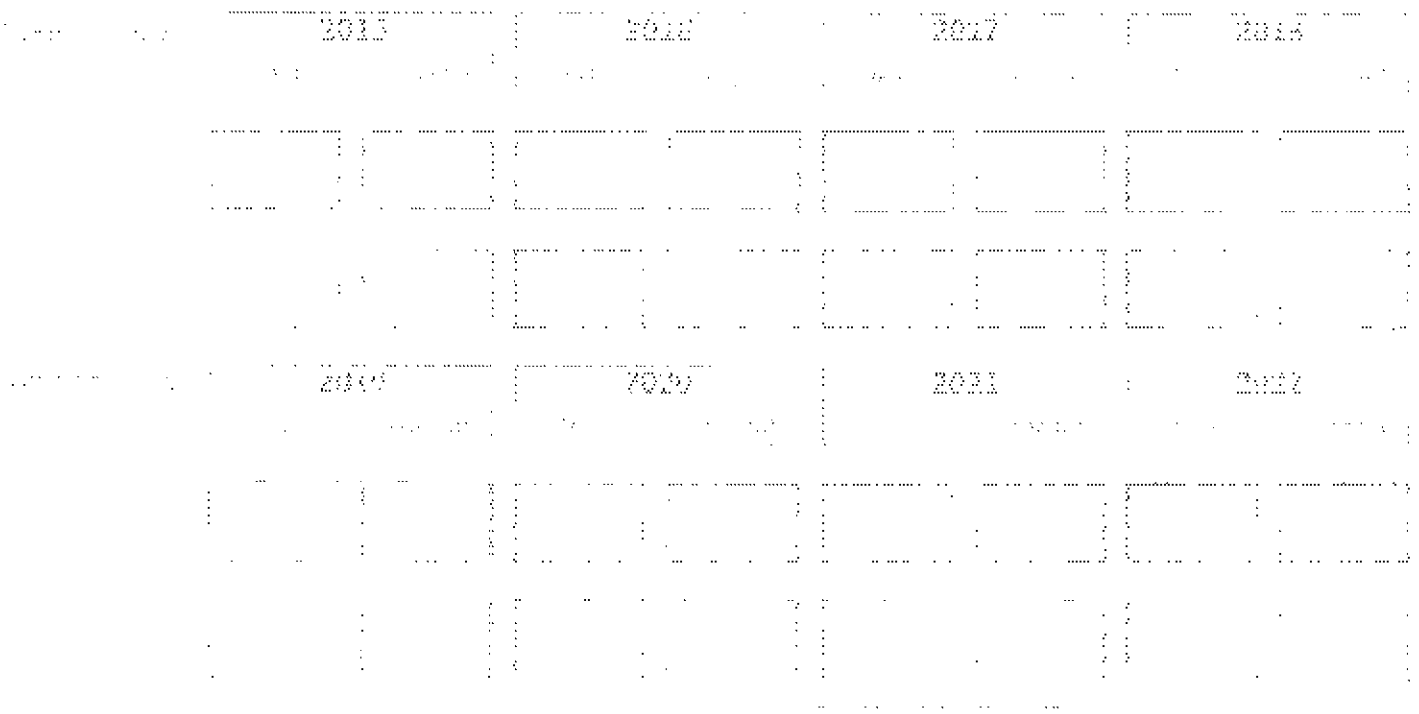

Exhibit 305D

EWR

Check Ride Date: _____ Trainer: _____

Night Check Ride Date: _____ Trainer: _____

SUBJECT AREA	2015		2016		2017		2018	
	DATE	Trng Int	DATE	Trng Int	DATE	Trng Int	DATE	Trng Int

SUBJECT AREA	2019		2020		2021		2022	
	DATE	Trng Int	DATE	Trng Int	DATE	Trng Int	DATE	Trng Int

Pilot ID Expiration Date: ___/___/ Orientation Date: ___/___/

COMMENTS:

Employee (signature): _____

Trainer (signature): _____

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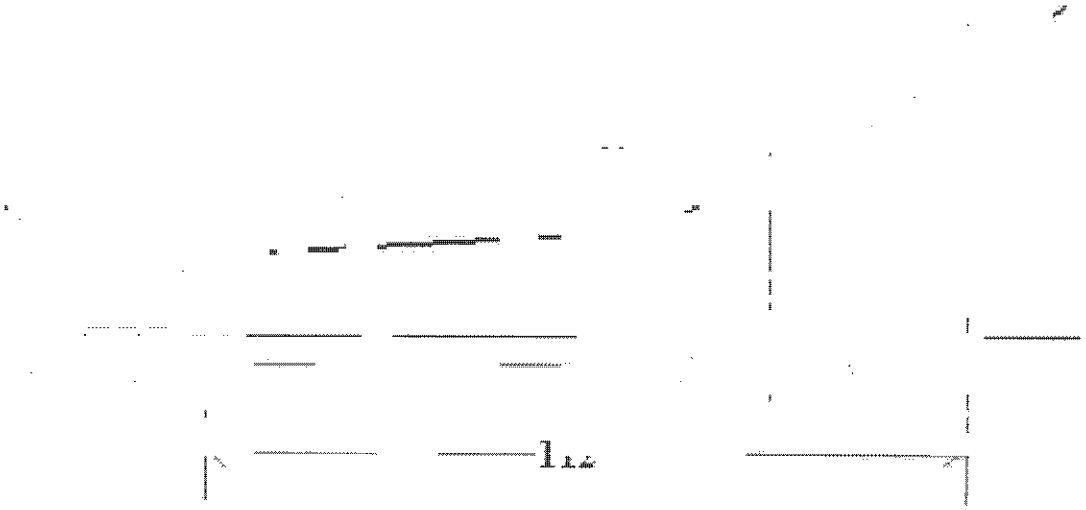

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Section 315

15 - Aircraft Rescue and Fire Fighting (ARFF): Index Determination

Section 3

The ARFF Index at the Airport is Index E, based on Boeing 747-400 aircraft operations at Newark Liberty International Airport.

FEDERAL AVIATION ADMINISTRATION

APPROVED: Evelyn Martinez

DATE: NOV 1 6 2012

Original Date: 12/9/04

Revision Date:

Section 317

Section 317 - Aircraft Rescue & Firefighting: Equipment and Agents (see Exhibit 6 on the following page)

FEDERAL AVIATION ADMINISTRATION

APPROVED: Evelyn Martinez

DATE: NOV 16 2012

Original Date: 12/9/04

Revision Date:

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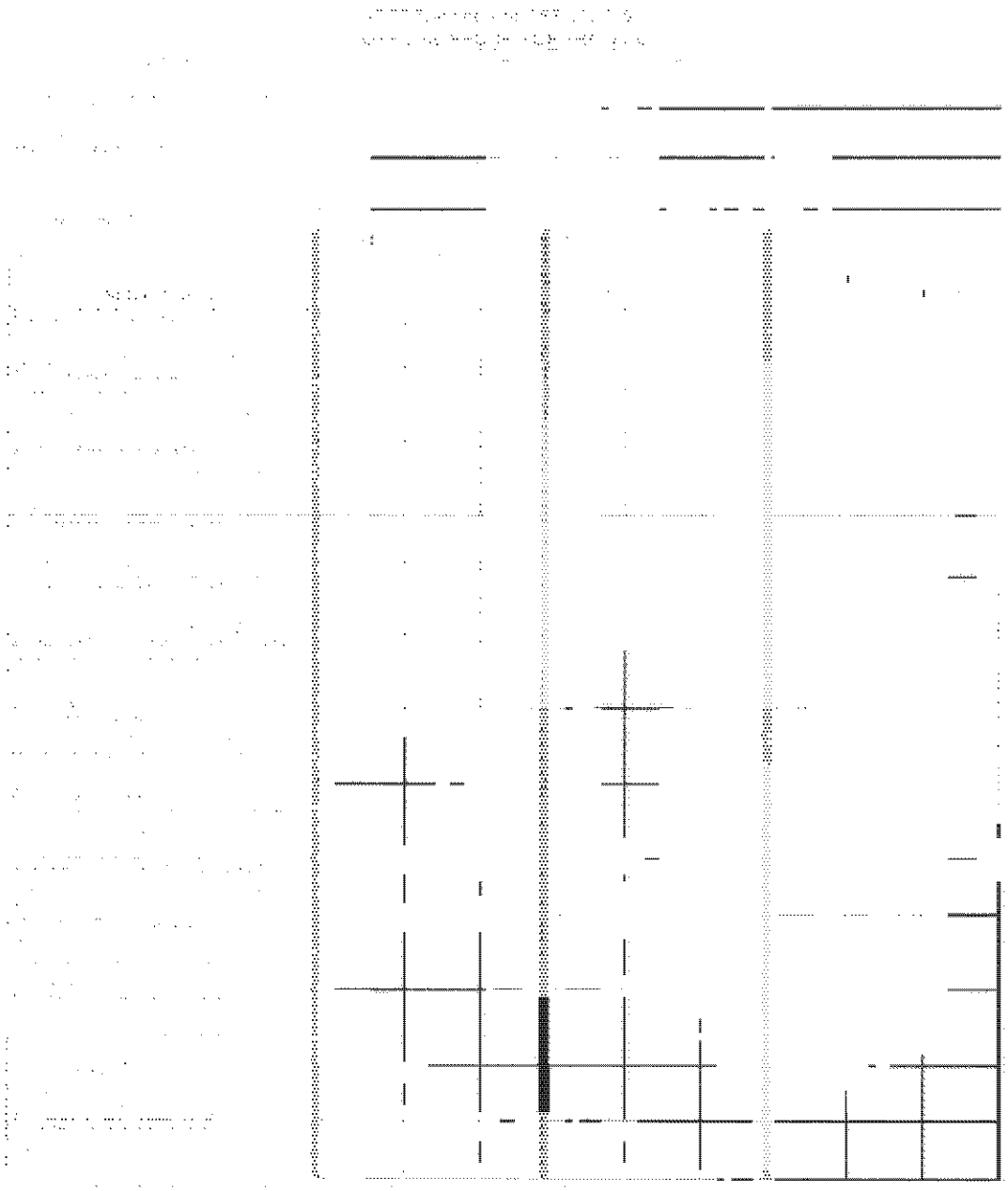

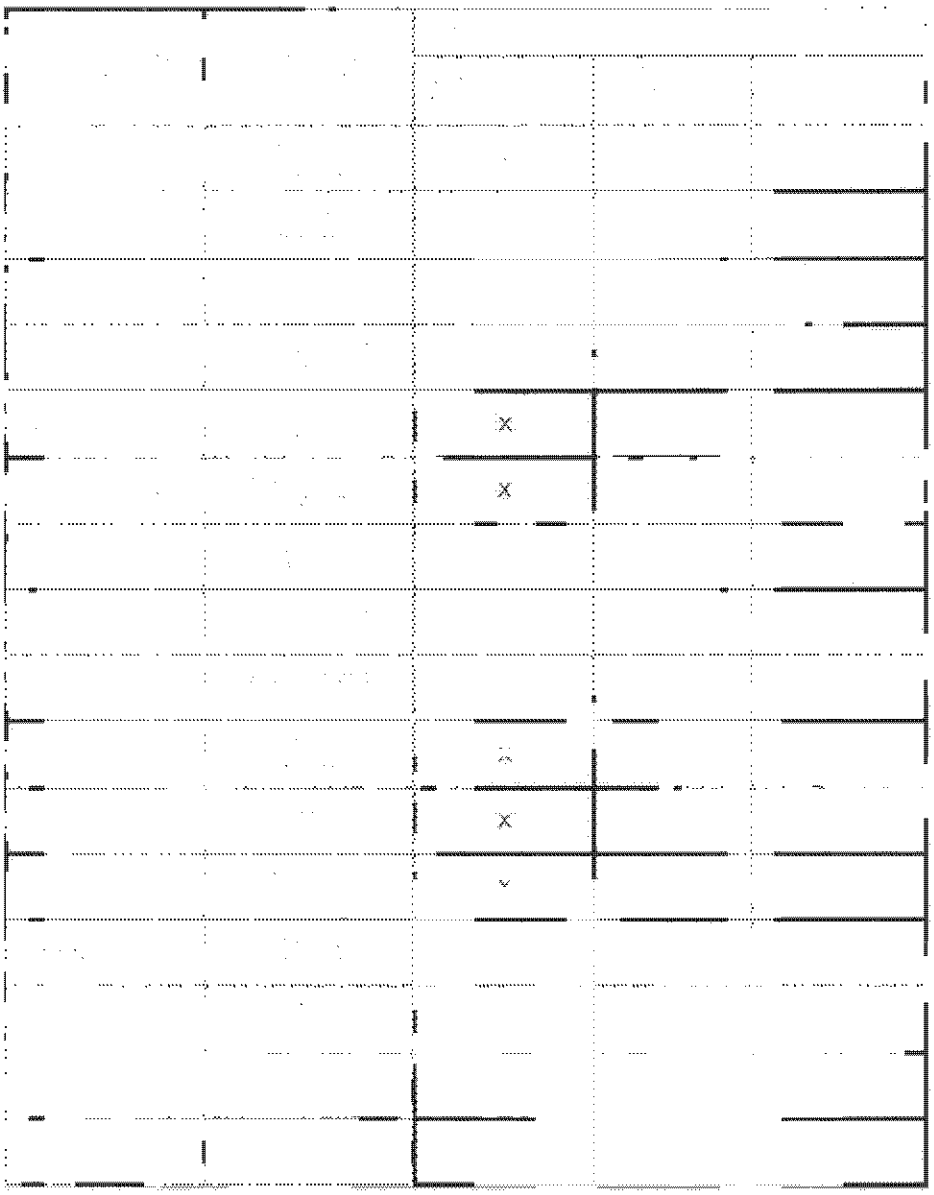

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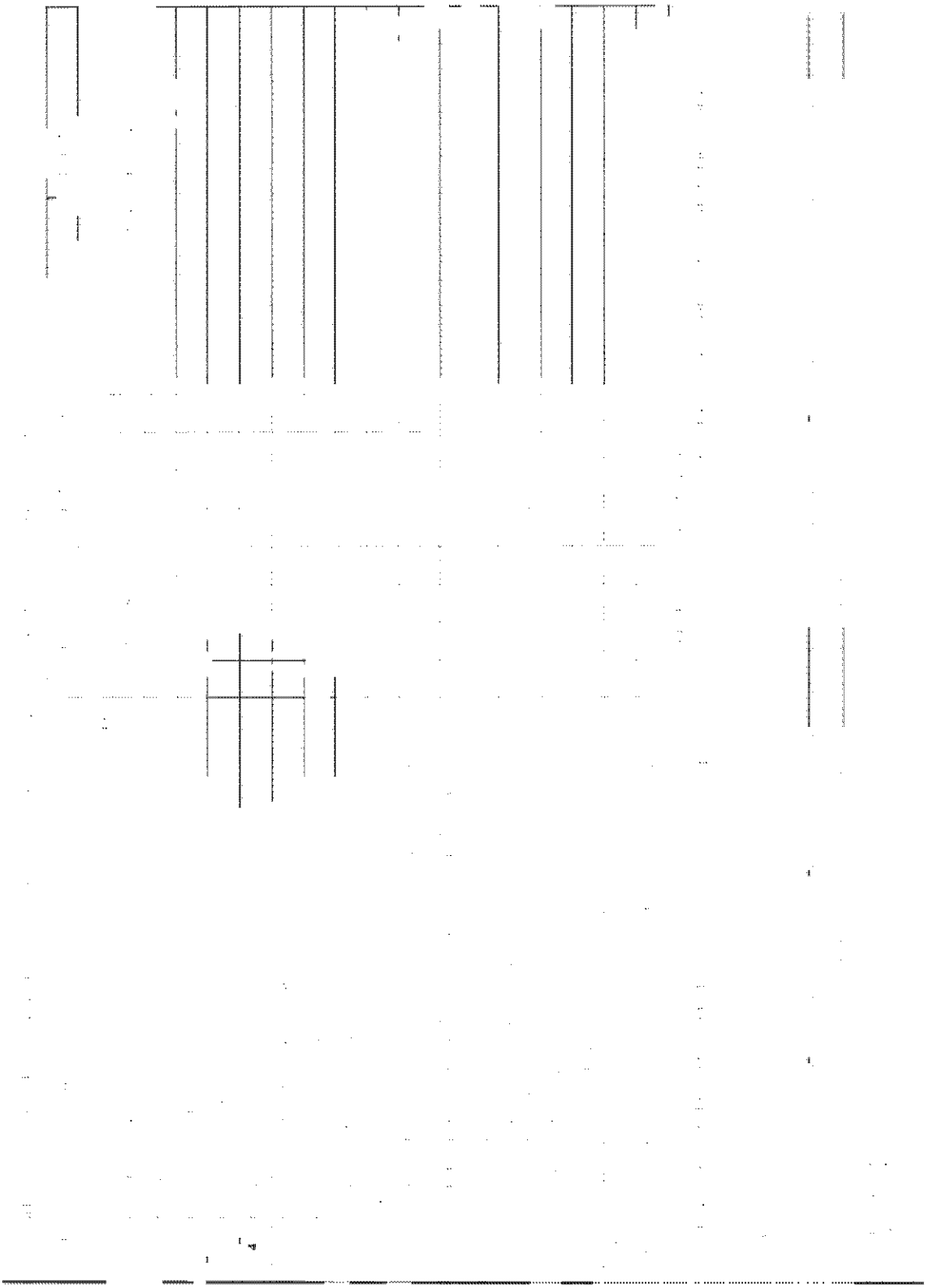

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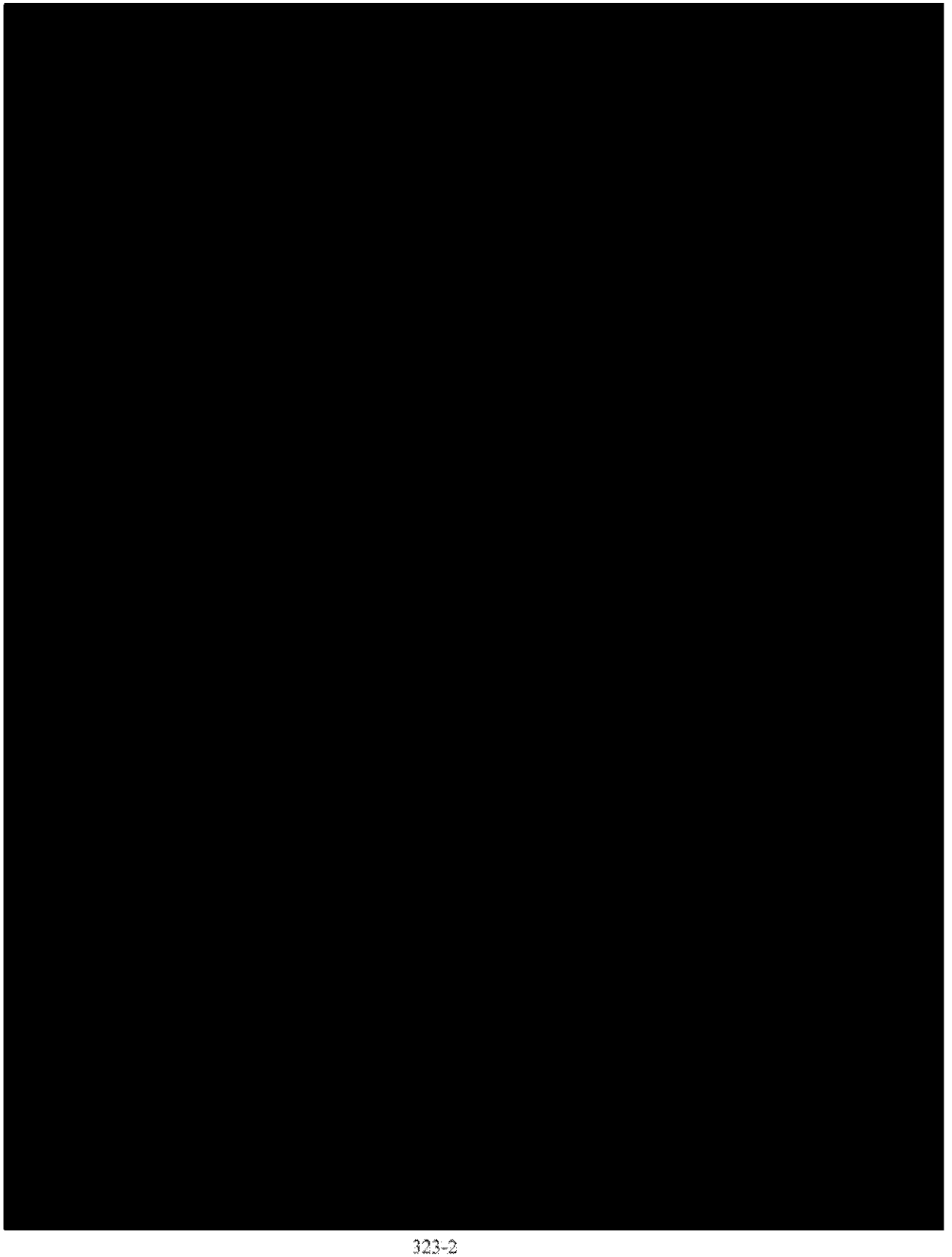

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Exhibit 15-1

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Exhibit 15-3

Exhibit 15-4

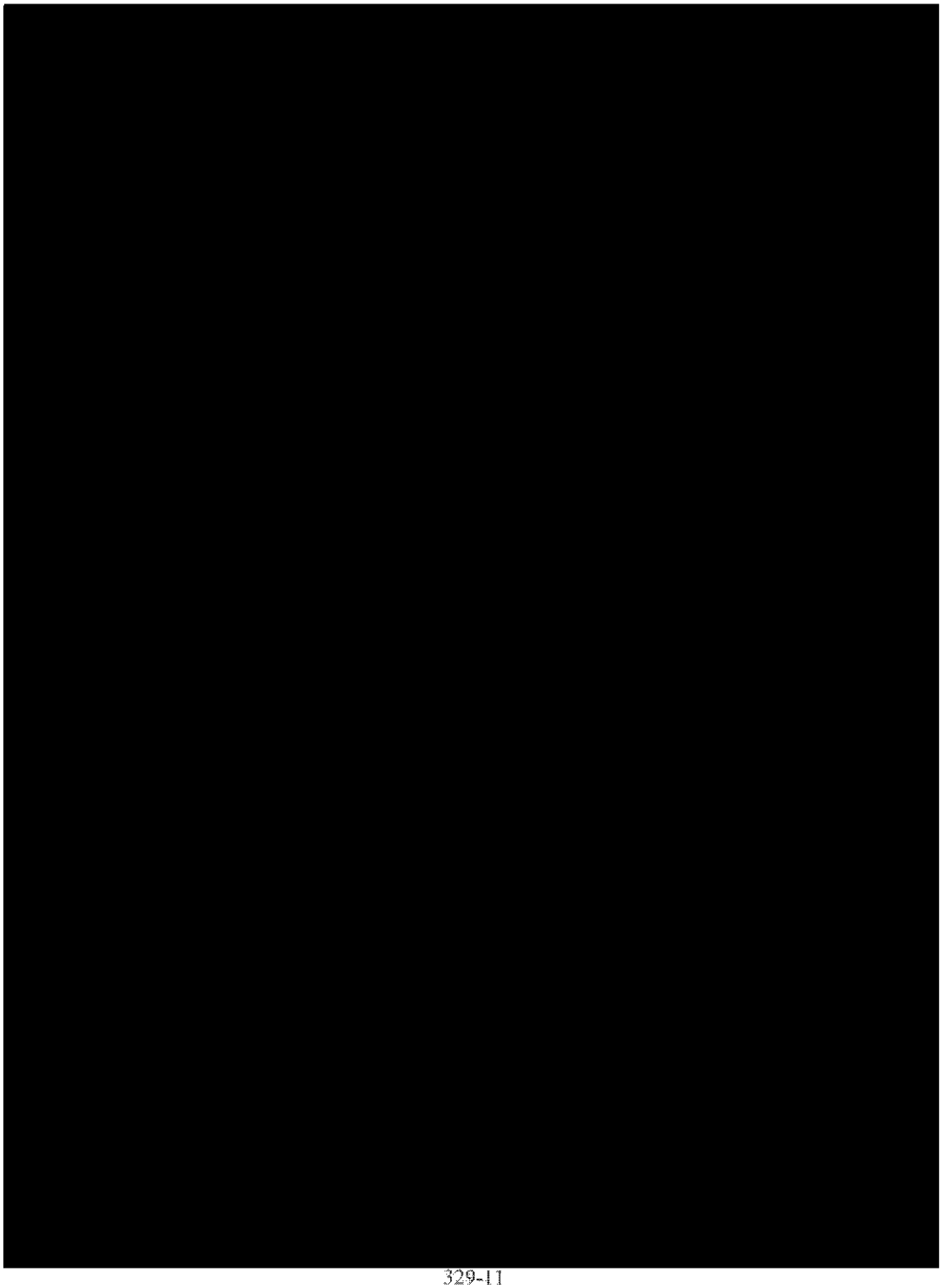

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Exhibit 15-6

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Exhibit 15-7

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EXHIBIT 16A **THE PORT AUTHORITY** OF NY & NJ

Newark Liberty
INTERNATIONAL AIRPORT

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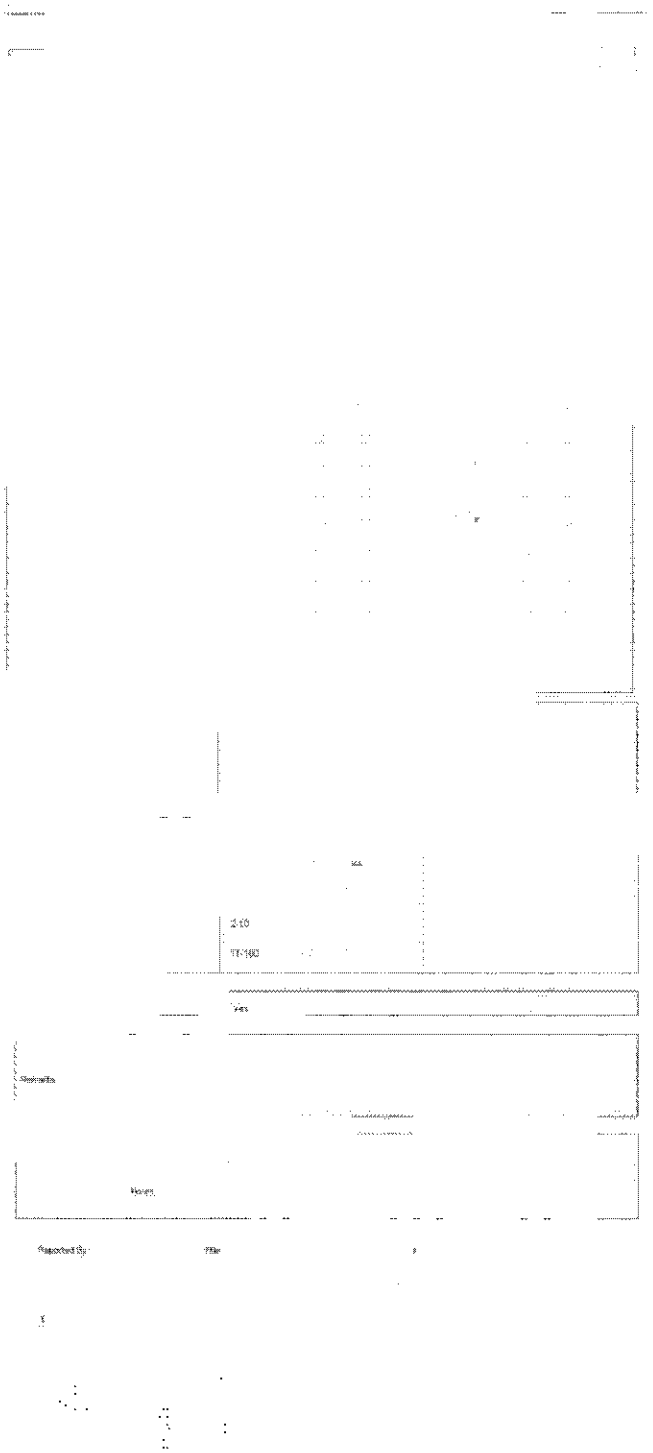

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Exhibit 18

Newark Airport - Airside Log

NOTAM-DIST

NOTICE TO AIRMAN - DISTANT

Entered By

Days Open

CANCELLED

Date

Received By

Time

L Tower OPS Sup

FSS NOTAM #

Z A.F.S.S.

Component:

Condition

Reason

Effective Date

Sent By:

START STOP

OPS Sup

Tower

L L

Z Z

Entered By

Log A/ Report

FEDERAL AVIATION ADMINSTRATION

APPROVED:

DATE:

11/29/ 04 Page 1

Section 341

Section 341 – Identifying, Marking, Lighting Construction and Unserviceable Areas

General

All construction work and contractor activity within the aeronautical area is closely monitored by the Resident Engineer and the ADM, and is performed in accordance with AC 150/5370-2, *Operational Safety on Airports during Construction*, current edition. Each contract clearly defines the limitations of the contractor while performing work within aeronautical areas. Prior to the commencement of any construction on the AOA, a determination will be made on whether construction will impact the movement area at EWR. If it is found the movement area will be impacted, a Construction Safety Phasing Plan (CSPP) will be written by the Airport Operations Unit in accordance with AC 150/5370-2. A Pre-Construction meeting is held prior to the commencement of any contract. At this meeting the Contractor will be given a copy of the CSPP and will be advised on such items as haul routes, marking and lighting of work areas, construction equipment, service vehicles, closing of active areas, movement within, to or from work areas, and compatibility with airport operations safety. At this time all utilities in areas of work, including those that service NAVAIDs, are described to the contractor. All known utilities or cables will be defined or marked prior to start of work by a contractor working for the Resident Engineer's Office. Utility Plans for airport utilities are on file in the Resident Engineer's Office. The Resident Engineer's Staff is responsible for monitoring construction activity on the airport to prevent the interruption of utilities.

Construction equipment and service vehicles will be confined to haul routes either physically marked with paint, delineated with traffic cones or under the guidance of construction guards. When and where exposure to aeronautical operations require it, all movements of the contractor will be by escort, and if necessary, the closures of runways and taxiways will be planned.

NAVAID Signal Protection

Prior to the installation of any new NAVAID equipment, the FAA and the Port Authority will enter into an agreement which specifies any restrictions to construction, aircraft, or vehicle movement within the area of signal crossing. Where temporary construction or vehicle service roads are located within a restricted area, the airport will provide adequate signing to alert drivers of the restriction. In areas where interference is critical, the roadway may be closed or rerouted around the critical zone. Aircraft ILS critical areas, which coincide with pavement, are marked in accordance with AC 150/5340-1, *Standards for Airport Markings*, current edition.

Marking and Lighting

Construction, unserviceable pavement and safety areas are marked by low mass barricades and/or cones, and are lighted (permanent or portable) as required. Construction equipment shall be marked and lighted as appropriate.

Low Mass Barricades

The primary method used to mark unserviceable pavement and safety areas is the use of obstruction marked barricades. In areas of jet blasts, low mass barricades are secured as necessary. Alternate stripes of orange and white are painted on the barricades. Temporary closing of limited sections of the aeronautical area may be achieved by placing orange traffic cones during daylight and portable obstruction lights during the hours of darkness.

Barricade Lighting

Approved construction hazard lights will be attached to barricades. Operation of construction equipment in aeronautical areas is the responsibility of the ADM through the Resident Engineer. The ADM ensures that proper portable obstruction lights are used at night. Where construction occurs in aeronautical areas, the areas adjacent to the construction site may be NOTAMed closed. Where this cannot be achieved, flagmen or escorts are positioned at all crossings of any active areas to prevent entry of vehicles when aircraft are moving near the construction site.

Inspection of Construction Areas

Construction sites are continually inspected by Airport Operations personnel during the work period and checked daily by the Airport Duty Manager. Deviations from approved safety procedures will be immediately corrected.

Dissemination of Information

Information concerning closed taxiways, hazardous construction areas, unserviceable areas or facilities, will be disseminated to all air carriers, tenants, and users of the airport utilizing NOTAM's, Construction Bulletins, telephone, FAX and/or the Field Condition Report system.

Original Date: 12/9/04

Revision Date: _____

APPROVED:

DATE:

Section 343

Section 343 – NONCOMPLYING CONDITIONS

a) Airport Operators shall inform the Airport Manager (or designee) through the Airport Duty Manager of any condition, which he/she feels, warrants closing of all or a portion of the airport to air carrier traffic. The Airport Manager (or designee) shall decide the severity of the condition and the necessity for closing, and shall take appropriate actions, including a notification to the FAA and air carriers accordingly.

b) Should, in the Airport Manager's opinion (or designee), any areas of the airport be deemed unsafe for air carrier operations, it shall be so marked by Airport Operations. The air carriers will be so notified by the Airport Manager or his/her Airport Duty Manager.

THE PORT AUTHORITY OF NY & NJ

JOHN F. KENNEDY INTERNATIONAL AIRPORT

AIRPORT CERTIFICATION MANUAL

Mr. Michael Moran
General Manager
John F. Kennedy International Airport

NOV 1 0 2014

U.S. Department of Transportation

Federal Aviation Administration

AIRPORT OPERATING CERTIFICATE

This certifies that the Port Authority of New York and New Jersey as owner and operator of the John F. Kennedy International Airport, Jamaica, New York, has met the requirements of the Title 49 USC, Subtitle VII – Aviation Program, and the rules, regulations, and standards prescribed thereunder for the issuance of this certificate, and is hereby authorized to operate as a certificated airport in accordance with and subject to said statute and the rules, regulations, and standards prescribed thereunder, including but not limited to 14 CFR Part 139, and any additional terms, conditions, and limitations contained herein or in the approved Airport Certification Manual on file with the Federal Aviation Administration.

This certificate is not transferable and, unless sooner surrendered, suspended or revoked, shall continue in effect.

By Direction of the Administrator

Effective Date: May 21, 1973
Reissue Date: August 3, 2005
Issued at: Jamaica, New York

Manager, Airports Division

Form Approved OMB No. 2120-0675

APPLICATION FOR CERTIFICATE

Department of Transportation
Federal Aviation Administration

☒ Airport Operating Certificate
☐ Time-Limited Airport Operating Certificate

FAA USE ONLY
Site Number

Complete all sections of the form as indicated. Submit original and three copies of the form and two copies of the Airport Certification Manual to the headquarters of the appropriate FAA Regional Office.

Type of Submission (Check One)

☐ Original ☒ Amendment ☐ Exemption

A. Location of Airport

1. Name of Airport John F. Kennedy International Airport	2. Address (Number, Street, P.O. Box) Bldg. #14, South Cargo Service Road

3. City Jamaica	4. County Queens	5. State NY	6. Zip Code 11430

6a. Latitude N40° 38' 39"	6b. Longitude W73° 46' 74"	Airport is: a. State Licensed ☐ Yes ☒ No b. State Inspected ☐ Yes ☒ No

B. Ownership

1. ☐ Municipality ☐ State ☐ Military ☐ Corporation ☐ County ☐ Other (Explain) ☒ Port Authority ☐ Airport Authority	2. Airport is ☒ Civil ☐ Mil/Civ Joint Use ☐ Shared Use

3. Name of Owner Port Authority of NY and NJ	4. Name of Manager/Operator Same
Number/Street/P.O. Box 225 Park Avenue South	Number/Street/P.O. Box
City New York County Manhattan State New York Zip 10003	City County State Zip

C. Operative Data

1. Certificate Applied For: ☒ Class I ☐ Class II ☐ Class III ☐ Class IV	2. Fire Fighting Equipment (Check Current Index and ensure equipment is listed in ACM) ☐ A ☐ B ☐ C ☐ D ☒ E
3. Air Carriers to be served (UA, DL, CO, AA, etc.) See attachment	4. Air Carrier Aircraft to be served (737, DC-9, A-320, etc.) various aircraft type with more than 31 seats. ARC D-V
5. ARFF Exemption Applied For: ☐ Yes ☒ No	6. Other exemptions applied for: none

D. Remarks ☐ Check here and use additional sheet of paper.

E. Certification
This application, including the Airport Certification Manual, is submitted in order to obtain an Airport Operating Certificate or Time-Limited Airport Operating Certificate. I certify, under penalty of 18 U.S. Code, Section 1001, and other applicable provisions of law that the statements and information in the application form and manual are complete and true to the best of my knowledge.

Applicant Signature		Applicant Address/Number/Street/P.O. Box General Aviation Terminal, Bldg. 145, General Aviation Way		
Applicant Name (typed) Robert H. Junge		City Jamaica		
Applicant Title Manager, Aeronautical Services	Date Submitted December 8, 2004	State New York	Zip 11430	Telephone No. (718) 244-3771

FAA Use Only

1. Date Application received		2. Date Proposed for Inspection	
3. Date Inspection Completed		Signature	Title
4. Recommended for: ☐ Certificate ☐ Modification ☐ Disapproval ☐ Letter of Authorization	Date	Signature	Title
5. Remarks			

AIRPORT CERTIFICATION MANUAL DISTRIBUTION LIST

No. 1 – Chief Operations Supervisor
Building 145
Original Copy

No. 2 – General Manager
General Manager's Office, Building 14

No. 3 – Manager, Aeronautical Services
Manager, Aeronautical Services Office, Building 145

No. 4 – Airport Duty Manager
Airport Duty Manager's Office, Building 145

No. 5 – Port Authority Police Commanding Officer
Building 269

No. 6 - Port Authority Police Security & Equipment Lieutenant
Building 254

No. 7 –Fire Chief, ARFF
4 World Trade Center, New York, NY

No. 8 – ARFF Captain, Rescue Training Center
Building 254

No. 9 – ARFF Captain
Building 254

No. 10 – ARFF Crew Chief
ARFF Emergency Garage, Building 254

No. 11 – ARFF Crew Chief
ARFF Emergency Garage, Building 269

No. 12 – FAA, Airports Division, Eastern Region
1 Aviation Plaza, Jamaica, NY

AIRPORT CERTIFICATION MANUAL DISTRIBUTION LIST

No. 13 – General Manager, Airport Certification & Safety
4 World Trade Center, New York, NY

No. 14 – Manager, Physical Plant & Redevelopment
Building 14

No. 15 – FAA, Manager, Air Traffic
John F. Kennedy International Air Traffic Control Tower

NOTE: *ALL REVISIONS MADE TO THE OFFICIAL COPY MUST FIRST BE APPROVED BY THE FAA.*

Table of Contents

FEDERAL AVIATION ADMINSTRATION
APPROVED: Evelyn Martinez
DATE: MAR 26 2012

Exhibits List

Letter of Agreement (LOA) List

Number	Name
LOA-1	Access to Airport Movement Area (AMA) of Kennedy Airport (JFK) by Ground Vehicles
LOA-2	Winter Operations
LOA-3	Discrete Aircraft Rescue and Firefighting Radio Communications Operating Procedures
LOA-4	Notification Process by the Airport for Surface Area NOTAMs
LOA-5	Operation of High-Speed, Towbarless Aircraft Tractors at John F. Kennedy International Airport – **American Airlines**
LOA-6	Operation of High-Speed, Towbarless Aircraft Tractors at John F. Kennedy International Airport – **JetBlue Airways Corporation**
LOA-7	Operation of High-Speed, Towbarless Aircraft Tractors at John F. Kennedy International Airport – **Delta Airlines, Inc.**
LOA-8	Operation of High-Speed, Towbarless Aircraft Tractors at John F. Kennedy International Airport – **Ground Services International Inc.**
LOA-9	Operation of High-Speed, Towbarless Aircraft Tractors at John F. Kennedy International Airport – **United Airlines**
LOA-10	Operation of High-Speed, Towbarless Aircraft Tractors at John F. Kennedy International Airport – **Aircraft Service International, Inc.**
LOA-11	Operation of High-Speed, Towbarless Aircraft Tractors at John F. Kennedy International Airport – **Swissport USA, Inc.**
LOA-12	Operation of High-Speed, Towbarless Aircraft Tractors at John F. Kennedy International Airport – **Triangle Services**

Modification of Airport Standards (MOS)

311-1	Modification of Airport Standards – Runway 13L Centerline Lights/Displaced Threshold
311-2	Modification of Airport Standards – Four Taxiway Guidance Signs
311-4	Modification of Airport Standards – Runway 4R/22L Threshold/End Lights
311-6	Modification of Airport Standards – Taxiway Edge Lights/Delineators
311-7	Modification of Airport Standards – Runway 4L/22R Threshold/End Lights

Page Revision Log

Date of Revision	Section	Description
01/23/2006	331 - Obstructions	Revised page 1 of 2
01/23/2006	317 – ARFF: Equipment and agents	Revised page 1
07/05/2006	311 – Marking, signs, and lighting	Revised page 1 of 3
07/05/2006	311 – Marking, signs, and lighting	Revised page 2 of 3
07/05/2006	311 – Marking, signs, and lighting	Revised page 3 of 3
07/05/2006	319 – ARFF: Operational requirements	Revised page 3 of 7
07/05/2006	319 – ARFF: Operational requirements	Revised page 4 of 7
07/05/2006	321 – Handling and storing of hazardous substances and materials	Revised page 2 of 2
07/05/2006	Exhibit 11 – Fire Safety Inspection	Page 1 – Mobile Tank Trucks
06/06/2007	Exhibit 1 – Modification of Standards (MOS)	Added MOS for Sign # 235 – nonstandard distance from runway hold short line.
06/06/2007	311 – Marking, signs, and lighting	Revised pages 1 thru 3
06/06/2007	Exhibit 3 – LOA – Access to Movement Area	Updated
10/12/2007	321 – Handling and storing of hazardous substances and materials	Revised page 1 of 2
10/12/2007	Exhibit 11 – Fire Safety Inspection	• Page 2 – Loading Racks & Dispensing Areas • Page 3 – Fuel Farm Storage Area • Page 4 – Satellite Fuel Storage Area
12/05/2007	329 – Pedestrians and Ground Vehicles	Revised
12/05/2007	313 – Snow and ice control	Revised
01/15/2008	309 – Safety areas	Revised
01/15/2008	Exhibit 5 – EMAS	Added Rwy 22L EMAS maintenance manual
01/30/2008	Title Page	Revised
01/30/2008	Exhibits List	Revised page ii
01/30/2008	311 – Marking, signs, and lighting	Revised
01/30/2008	Exhibit 1 – Modification of Standards (MOS)	Added MOS for four twy guidance signs (Signs # 316C, 326B, 326C, 326D) – nonstandard distance from rwy/twy edge.
01/30/2008	Exhibit 6 – W[illegible] Op[illegible]s	Revised
01/30/2008	313 – Snow [illegible]nd ice control	Revised page 3 of 4
[illegible]	ACM Cover Sh[illegible]	Revised

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: MAR 26 2012

Date of Revision	Section	Description
01/27/2009	323 – Traffic and wind directino indicators	Revised page 1 of 2
01/27/2009	Exhibit 16 – Airport Operations Log – Notice to Airman	Added
01/27/2009	Exhibit 5 – EMAS	Added 2009 ESCO EMAS Manufacturer's Certification letters
01/27/2009	Exhibit 12 – Wind Direction Indicators	Revised
04/02/2009	Page Revision Log	Page iii (page # changed to iv)
04/02/2009	Page Revision Log	Page iv (page # changed to iii)
04/02/2009	303 – Personnel	Page 5 of 5 (text modification – personnel trng)
04/02/2009	321 – Handling and storing of hazardous substances and materials	Page 2 of 2 (text modification – fueling/trng)
04/02/2009	339 – Airport condition reporting	Page 1 of 2 (text corrections)
04/02/2009	Exhibit # 9 – ARFF Training Requirements	Updated form
04/29/2009	311 – Marking, signs, and lighting	Page 1 of 4 (Signs) – Refer to Exhibit 1 & the Signage Plan
04/29/2009	Exhibit # 2	Removed - Training records now in database
04/29/2009	303 - Personnel	Page 2 of 5 – Added WHMP to Manager, Aeronautical Services duties
04/30/2009	Page Revision Log	Added Table of Contents page v
04/30/2009	Exhibit # 2a – High Speed Tow Operators	Added American Airlines LOA
04/30/2009	Exhibit # 2b – High Speed Tow Operators	Added JetBlue Airlines LOA
04/30/2009	Exhibits List	Updated
01/29/2010	313 – Snow and ice control	Revised
01/29/2010	Exhibit 6A – Winter Operations LOA	Added
01/29/2010	Exhibit 6B – Priority One Areas	Added
01/29/2010	Exhibit 6C – Snow Bank Criteria	Revised page 2 of 2
01/29/2010	Exhibit 5 – EMAS Manual	Updated 2010 ESCO EMAS Manufacturer's Certification letters
01/29/2010	Section 323 – Traffic and wind direction indicators	Revised pages 1thru 2
01/29/2010	Exhibit 12 – Wind Direction Indicators	Revised
01/29/2010	Exhibit 3 – LOA – Access to Movement Area	Updated
01/29/2010	Wildlife Hazard Management Plan	Revised
02/02/2010	Exhibit Index Page	Revised
04/22/2010	Revision Log Page	Section iv page 1
04/22/2010	101 – Subpart B-Certification: General Requirements	Revised page 2 of 2
04/22/2010	201 – General Requirements (ACM Maintenance/Revisions)	Revised page 1 of 1

FEDERAL AVIATION ADMINISTRATION
APPROVED: [signature]
DATE: MAR 26 2012

Date of Revision	Section	Description
04/22/2010	321 – Handling and storing of hazardous substances and materials	Revised page 2 of 2
04/22/2010	325 – Airport emergency plan	Revised page 1 of 3
04/22/2010	327 – Self-inspection program	• Revised page 1 of 3 • Revised page 2 of 3
04/22/2010	329 – Pedestrians and ground vehicles	• Revised page 4 of 5 • Revised page 5 of 5
04/22/2010	337 – Wildlife hazard management	Revised page 7 of 26
04/22/2011	311 – Markings, signs, and lighting	• Revised page 1 of 4 • Revised page 2 of 4
04/22/2010	327 – Self-inspection program	• Revised page 2 of 3 • Revised page 3 of 3
06/21/2011	329 – Pedestrians and ground vehicles	• Revised page 5 of 5
06/21/2011	337 – Wildlife hazard management	• Revised page 6 of 26 • Revised page 7 of 26
06/21/2011	Exhibit 4 – Movement/Non-movement areas	Revised
06/21/2011	Exhibit 6b – Priority One	Added
06/21/2011	Exhibit 7 & 14 ILS Critical Areas, Navigational,and Restriction Map	Revised
06/21/2011	Exhibit 12 – Wind Direction Indicators	Revised
03/23/2012	Title page	Revised
03/23/2012	Exhibits List	Revised to reference exhibits in their respective sections
03/23/2012	Revision Log Page	"Airport Approval By" column renamed "Descritpion"
03/23/2012	101 – General Requirements	• Changed Airport Reference Code (ARC) designation from V to VI • Added Airport elevation • Deleted Runway Information (moved to Section 305)
03/23/2012	111 – Exemptions	Deleted sentence pertaining to MOS and Exhibit 1
03/23/2012	201 – General Requirements (ACM Maintenance/Revisions)	Deleted reference to " on page iv" in third paragraph
03/23/2012	301 – Records	• Paragraph d: corrected title of training supervisor • Paragraph d: added "consecutive calendar"
03/23/2012	303 – Personnel	• Added titles and major duties for Maintenance and Operations • Added Exhibit 303-1 • Added Exhibit 303-2 • Added references to 303 training requirements (from Section 309)

Federal Aviation Administration
APPROVED: Evelyn Matthews
DATE: MAR 26 2012

Date of Revision	Section	Description
03/23/2012	305 – Paved Areas	• Added Runway Information (from Section 101) as Exhibit 305-2 • Renamed Exhibit 4 to Exhibit 305-1 • Exhibits 2a and 2b renamed 305-3 and 305-4 respectively (AMA Technical Orders) • Added LOA paragraph • Exhibit 3 renamed LOA-1 • Deleted reference to JFK Operational Plan • Deleted reference to Exhibit 4 • Added Exhibits 305-5 and 305-6 (AMA Technical Orders) • Added MOS paragraph • Added MOS Exhibits 305-7 and 305-8
03/23/2012	309 – Safety Areas	• Change Airport Reference Code (ARC) designation from V to VI • Changed taxiway safety area dimension • Changed Rwy 13L RSA dimension (490 ft to 515 ft) • Deleted reference to Exhibit 5 • Added Exhibits 309-1 thru 309-11 • Added Runway 13R departure to patrol road reference (pg 309-11)
03/23/2012	311 – Markings, signs, and lighting	• Updated FAA & PANYNJ roles on airfield emergency genarators • Added MOS paragraph • Added MOS Exhibits 311-1 thru 311-7
03/23/2012	313 – Snow and ice control	• Exhibits 6a, 6b, 6c renamed LOA-2, 313-1, 313-2 respectively • Added reference to runway friction reporting • Revised priority areas to include NAVAID access and mutual aid access
03/23/2012	315 – ARFF: Index Determination	Revised Index E language
03/23/2012	317 – ARFF: Equipment and Agents	Added language to reflect the need for 3 ARFF vehicles to meet Index
03/23/2012	319 – ARFF: Operational Requirements	• Exhibit 13 renamed 325-1 • Revised language in "Structural Fire Alarm" paragraph • Exhibit 7 renamed 319-1 • Exhibit 8 renamed LOA-3 • Revised language in paragraph g, "Response Requirements" • Exhibit 9 renamed 319-2

FEDERAL AVIATION ADMINISTRATION
APPROVED: [illegible] Martinez
DATE: MAR 26 2012

Date of Revision	Section	Description
03/23/2012	319 – ARFF Operational Requirements	• Added LOA-3 description • Chapter 19 reference on page 6; replaced with *AEP, Annex A, LOA Airport Emergency Service* • Exhibit 10 renamed 319-3
03/23/2012	321 – Handling and Storing of Hazardous Substances and Materials	• Added NFPA 407 title • Added SheltAir Aviation as a fueling agent • Exhbit 11 renamed 321-1 • Added Exhibits 321-2 thru 321-6 • Added reference to PW Grosser conducting audits of training records
03/23/2012	323 – Traffic and Wind Indicators	• Edit reference from Twy K1 to KA • Exhibit 12 renamed 313-1 • Removed windsock adjacent Bldg 269 (# 4)
03/23/2012	325 – Airport Emergency Plan	• Remove reference of "AEP kept separate from the ACM" • Exhibit 13 renamed "AEP"
03/23/2012	327 – Self-Inspection Program	• Exhibit 14 edited • Exhibit 14 renamed 327-1 • Updated "Reporting System" • Edited proper title of position responsible for "Training"
03/23/2012	329 – Pedestrians and Ground Vehicles	• JFK Airport Master Security Plan renamed JFK Security Program • Exhibit 3 renamed LOA-1 • Referenced Exhibits 305-3 thru 305-6 • Moved training references to FAR Part 139.303 and 139.327 to Section 303 - Personnel
03/23/2012	331 - Obstructions	• Exhibit 331-1 added • Updated number of total obstruction lights • Added reference to updated obstruction chart
03/23/2012	335 – Public Protection	Updated procedure for inspecting fencing
03/23/2012	337 – Wildlife Hazard Management	• Exhibit 14 renamed "WHMP" • Remove reference of "WHMP kept separate from the ACM"
03/23/2012	339 – Airport Condition Reporting	• Updated list of peronnel authorized to issue Airport Condition Reports • Updated Airport Condition Reporting System • Changed [illegible] from ISP AFSS [illegible] Lockh[illegible] Martin Flight [illegible]

FEDERAL AVIATION ADMINISTRATION
APPROVED: [illegible]
DATE: MAR 26 2012

Date of Revision	Section	Description
03/23/2012	339 – Airport Condition Reporting	• Exhibit 16 renamed 339-1 • Exhibit 339-2 added
03/23/2012	341 – Identifying, Marking, Lighting Construction and Unserviceable Areas	• Added reference to Construction Safety Phasing Plan (CSPP) • Revised section 341; added paragraphs b thru g
03/23/2012	339 – Airport Condition Reporting	• Exhibit 16 renamed 339-1 • Exhibit 339-2 added
03/23/2012	341 – Identifying, Marking, Lighting Construction and Unserviceable Areas	• Added reference to Construction Safety Phasing Plan (CSPP) • Revised section 341; added paragraphs b thru g
03/23/2012	343 – Noncomplying Conditions	Referenced Airport Duty Manager
04/03/2012	305 – Paved Areas	Edited Exhibit 305-2 to include Runway Declared Distance Information table
06/05/2012	309 – Safety Areas	Updated Exhibits 309-10 and 309-11, EMAS Manufacturer's Certification Letter
07/13/2012	329 – Pedestrian & Ground Vehicles	• Added Exhibit 329-1 – DR1 Manual • Added Exhibit 329-2 – DR2/DR3 Manual • Revised paragraph a, *Limiting Access/Personnel and Equipment*, to include TSA and USDA (contractor) vehicles • Revised paragraph a to include references to DR1 and DR2/DR3 manuals and training specifics • Added paragraph d, *Movement Area Training (DR3)* • Assigned paragraph e to *Consequences of Non-Compliance* • Paragraph e, *Maintain Records*, renamed paragraph f
09/21/2012	311 – Marking, Signs and Lighting	Exhibit 311-1 updated
09/28/2012	319 – ARFF: Operational Requirements	• Exhibit 319-2 updated • Exhibit 319-3 renamed • Exhibit 319-4 added (was Exhibit 319-3)
11/16/2012	ACM Distribution List	Added 5 locations: • General Manager • PAPD Commanding Officer • PAPD Security & Equipment Lieutenant (3 copies) • Rescue Training Center • Manager Physical Plant & Development

FEDERAL AVIATION ADMINISTRATION

APPROVED: [signature]

DATE: NOV 16 2012

Date of Revision	Section	Description
11/16/2012	Exhibits List	• Added Exhibit 319-5, *Authorized ARFF Personnel List*, Exhibit 319-6, *ARFF Experation Dates Memo*, and Exhibit 319-7, *ARFF Training Subject Areas/Lesson Plans Summary*
11/16/2012	205 – Amendment of Airport Certification Manual	• Added paragraph to reflect coordination of ACM review • Added responsibility to Manager, Aeronautical Services for submission of ACM
11/16/2012	301 – Records	PAPD ARFF training records retention responsibility added
11/16/2012	303 – Personnel	• Operational Lines of Succession list edited • Paragraph 2, *Organizational Chart* added • Added Part 139 compliance language to General Manager duties • Added Part 139 compliance language to Manager, Airport Operations Division duties • Added duties for Asst Chief Ops Sup of Cert & Training • Edited/added ARFF language for Police Commanding Officer duties • Added Part 139 compliance language to Police Tour Commander • Added Security & Equipment Lieutenant and respective duties • Added General Manager, Airport Certification and Safety and respective duties • Added Manager, Airport Certification and Safety and respective duties • Exhibit 303-1, Organizational Chart, edited to reflect ARFF operational control and added Part 139 positions
11/16/2012	319 – ARFF: Operational Requirements	• Edited language to reflect ARFF operational control and compliance to Part 139 ARFF training requirements • Paragraph 6, renamed *Rescue & Fire Fighting Capability* • Added language describing Aviation Department responsibilities under Section 319

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: NOV 16 2012

Date of Revision	Section	Description
11/16/2012	319 – ARFF: Operational Requirements	• Paragraph b renamed *Emergency Alarms and Notifications* • Paragraph b(1), *Aircraft Emergency Alarm*, edited to reflect the FAA will activate the Crash Alarm (not PAPD)Paragraph c renamed *ARFF Emergency Garage Facilities* • Paragraph d renamed *Vehicle Communications* • Paragraph f(2), Vehicle Readiness, added language of notification to FAA and airline community • Paragraph g(1), *Response Requirements*, edited to reflect one ARFF vehicle capable of responding • Paragraph h, *Personnel*, edited to reflect current ARFF training curriculums and procedures • Added Table 319-1, *ARFF Positions* • Paragraph i, *Procedures-Aviation Department Oversight of ARFF Training Records* added • Paragraph i redesignated to j • Paragraph j redesignated to k • Added Exhibit 319-5, *Authorized ARFF Personnel List*, Exhibit 319-6, *ARFF Experation Dates Memo*, and Exhibit 319-7, *ARFF Training Subject Areas/Lesson Plans Summary*
12/11/2012	Title Page	Grammatical edit
12/11/2012	ACM Distribution List	Added Manager, Aeronautical Services
12/11/2012	Exhibits List	Removed Exhibit 339-2, *JFK IROPSNet sample page*
12/11/2012	Letter of Agreement List	Added LOA-4, *Notification Process by the Airport for Surface Area NOTAMs*, added
12/11/2012	305 – Paved Areas	Exhibit 305-2, *Pavement Descriptions* – 82 foot wide taxiway added
12/11/2012	309 – Safety Areas	• Runway 13L Approach End description edited (515 ft to 514 ft & 550 ft to 552 ft) • Exhibit 309-5, *Runway 13L Approach End RSA Dimension* edited to reflect surveyed dimensions • Exhibits 309-10 & 309-11, Manufacturer's Certification Letters renewed

FEDERAL AVIATION ADMINISTRATION
APPROVED: [illegible]
DATE: DEC 12 2012

Date of Revision	Section	Description
12/11/2012	313 – Snow and Ice Control	• Acronym IROPS deleted • Paragraph 3(a), *Pre-storm planning*, the word manpower deleted • Paragraph 6, *Contractors*, the word Operations deleted
12/11/2012	323 – Traffic and Wind Indicators	Windsock 13 edited to reflect Rwy 13L
12/11/2012	325 – Airport Emergency Plan	• *Annual Review of the Airport Emergency Plan* paragraph edited to reflect Manager, Aeronautical Services responsibility • Added language to relfect AEP as a standalone document
12/11/2012	327 – Self-Inspection Program	Acronym IROPS deleted
12/11/2012	339 – Airport Condition Reporting	• Paragraph b, *Airport Condition Reporting System*, procedure revised to reflect new LOA-4 • LOA-4, *Notification Process by the Airport for Surface Area NOTAMs*, added • Exhibit 339-2, *JFK IROPSNet sample page*,removed • Acronym IROPS deleted • Reference to Airport Manager or Airport Operations Bulletins
12/11/2012	Wildlife Hazard Management Plan (WHMP)	• Several revisions due to the Annual WHMP review. Revisions are highlighted within the WHMP
2/26/2013	Airport Emergency Plan	• Several revisions – reference document's "Record of Changes" log
3/27/2013	319 – ARFF: Operational Requirements	• Paragraph h4 edited to reflect Resuce Training Center training frequency and ARFF subject areas • Paragraph h5 edited to reflect training of ARFF subject areas • Added Paragraph i6, ***ARFF Training Records-Audits***
4/1/2013	319 – ARFF: Operational Requirements	Updated Table 319-1, ***ARFF Positions***
4/22/2013	319 – ARFF: Operational Requirements	Updated Table 319-1, ***ARFF Positions***
6/7/2013	ACM Distribution List	Replaced Manager, Aviation Technical Services Division with General Manager, Airport Certification & Safety
6/7/2013	Modification of Airport Standards (MOS)	• Removed 305-7, 305-8, 311-3, 311-5 • 311-4, 311-6, 311-7, removed "FAA approval pending" language

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Mathney
DATE: 6/20/2013

Date of Revision	Section	Description
06/07/2013	305 – Paved Areas	• Removed *Modification of Airport Standards (MOS)* paragraph • Removed Exhibit 305-8
06/07/2013	309 – Safety Areas	Edited *Required Conditions of Safety Areas* paragraph to include exceptions
06/07/2013	311 – Marking, Signs and Lighting	• Removed "FAA approval pending" language in paragraph f, MOS • Removed Exhibit 311-3
06/07/2013	319 – ARFF: Operational Requirements	Exhibit 319-1 updated
06/07/2013	323 – Traffic and Wind Indicators	Exhibit 323-1 updated
06/07/2013	321 – Handling and Storing of Hazardous Substances and Materials	• Exhibits 321-1 and 321-2 updated • Exhibits 321-3 and 321-4 removed
06/07/2013	Exhibits List	Exhibit numbers updated for Section 321
06/26/2013	Wildlife Hazard Management Plan (WHMP)	Several revisions due to the Annual WHMP review. Revisions are highlighted within the WHMP
08/09/2013	Wildlife Hazard Management Plan (WHMP)	Federal Collect & Possess Permit updated
08/15/2013	311 – Marking, Signs and Lighting	Edited Paragraph d, *Maintenance*, to include in-pavement runway guard lights
09/03/2013	319 – ARFF: Operational Requirements	Added sub-paragraph iv to paragraph **(l)2, Authorized List of ARFF Personnel**
12/06/2013	ACM Distribution List	Added FAA, Manager, Air Traffic
12/06/2013	Exhibits List	Renamed Exhibits 321-3 and 321-4
12/06/2013	311 – Marking, Signs and Lighting	• Edited paragraph **(a) Markings** to include additional marking types • Edited paragraph **(d) Maintenance** to read "...Tables 1-10, of AC15/5340-26"
12/06/2013	321 – Handling and Storing of Hazardous Substances and Materials	• Exhibits 321-3 and 32-4 edited to include proper AC 150/5230-4B language pertaining to training • Added page numbers to Exhibits 321-1 and 321-2
12/06/2013	327 – Self-Inspection Program	Added airport diagram to Exhibit 327-1
12/06/2013	Airport Emergency Plan	Distribution List updated– reference document's "Record of Changes" log
03/24/2014	ACM Distribution Page	• Added ARFF Crew Chiefs • Added ARFF Fire Chief • Added ARFF Captain
03/24/2014	301 – Records	Paragraph d language edited to reflect ARFF Captain responsibilities.
03/24/2014	303 – Personnel	Updated Organizational Chart to reflect new ARFF Unit

FEDERAL AVIATION ADMINISTRATION

APPROVED: [signature]

DATE: MAR 3 1 2014

Date of Revision	Section	Description
03/24/2014	303 – Personnel	• Several grammatical edits • Several edits pertaining to new ARFF Unit and respective new positions
03/24/2014	317 – ARFF: Equipment and Agents	Removed vehicle number column
03/24/2014	319 – ARFF: Operational Requirements	• Several grammatical edits • Several edits pertaining to new ARFF Unit • Added language to include General Manager to be notified in the event of an inoperative ARFF vehicle • Removed references to water rescue/training • Table 319-1 edited to reflect new ARFF unit response positions • Exhibits 319-5 & 319-6 edited to reflect ARFF Captain • Removed Water Rescue lesson plan from Exhibit 319-7
03/24/2014	329 – Pedestrians and Ground Vehicles	Removed TSA from DR2 privilidges
03/24/2014	LOA-1: Access to AMA of JFK by ground vehicles	Added language pertaining to runway closure coordination with FAA ATC
07/14/2014	Wildlife Hazard Management Plan (WHMP)	Several revisions due to the Annual WHMP review. Revisions are highlighted within the WHMP
11/03/2014	Title Page	Revised to reflect new General Manager
11/03/2014	309 – Safety Areas	Exhibits 309-10 & 309-11, EMAS Manufacturer's Certification Letters renewed
11/03/2014	313 – Snow and Ice Control	• Paragraph IVc., ***Snow Removal Operations***, added note about twy "TB" positive gradient • Exhibit 313-1, revised Priority One areas and added Priority Two areas
11/03/2014	329 – Pedestrians and Ground Vehicles	Updated Exhibits 329-1 and 329-2 to reflect FAA comments and field changes
11/03/2014	339 – Airport Condition Reporting	Exhibit 339-1 updated to reflect NOTAM forms used in CALS
12/01/2014	309 – Safety Areas	Exhibit 309-9 updated; inspection maintenance repair manual for new EMAS
12/01/2014	313 – Snow and Ice Control	Exhibit 313-1 revised; removed helipads
12/01/2014	323 – Traffic and Wind Indicators	• Updated advisory circular references • Exhibit 323-1 revised; removed helipads

Date of Revision	Section	Description
12/01/2014	327 – Self-Inspection Program	Exhibit 327-1 revised; removed airport control lighting, added EMAS, removed helipads in airport diagram
12/01/2014	331 – Obstructions	Updated language pertaining to JFK's 2010 Obstruction survey
12/22/2014	313 – Snow and Ice Control	LOA-2 revised to include "two poor" braking action report response by ATC and Operations personnel
02/04/2015	ACM Distribution List	ACM No's. 7 & 13 – location updated
02/04/2015	Exhibits List	Removed Exhibits 305-3, 305-4, 305-5, 305-6 (being replaced with Letters of Agreements)
02/04/2015	Letter of Agreement (LOA) List	• LOA-5 added (replace Exhibit 305-3) • LOA-6 added (replace Exhibit 305-4) • LOA-7 added (replace Exhibit 305-5) • LOA-8 added (replace Exhibit 305-6) • LOA-9 added • LOA-10 added • LOA-11 added • LOA-12 added
02/04/2015	305 – Paved Areas	• Deleted language pertaining to technical orders to reflect new LOAs • Removed Exhibits 305-3 thru 305-6 • Added LOAs 5 thru 12 • Exhibit 305-1 revised, removed helipads
02/04/2015	309 – Safety Areas	• Added language pertaining to patrol road south of Rwy 4L • Exhibit 309-8 title corrected and EMAS dimensions revised • Exhibit 309-10 EMAS Manufacturer's Certification Letter renewed
02/04/2015	311 – Marking, Signs and Lighting	Added language to paragraph **d, Runway Edge Lights**, pertaining to redundant edge light circuits
02/04/2015	313 – Snow and Ice Control	Revised paragraph **5. Requirements for Runway Closures** to properly reflect LOA-2 date

Section 101 – General Requirements

Purpose

This Airport Certification Manual provides direction and lines of responsibility in the day –to-day operation of John F. Kennedy International Airport (JFK). As well, it details operating procedures to be followed for both routine matters and unusual circumstances for emergencies that may arise. The contents of this manual are designed to meet the Federal Aviation Administration (FAA) rules and regulations for airport certification contained in the February 10, 2004 Federal Register 14 CFR Part 139, effective June 9, 2004.

Airport Information

John F. Kennedy International Airport is operated by The Port Authority of NY & NJ under a lease with the City of New York. Under this regulation John F. Kennedy International Airport operates as a Class I airport with scheduled air carrier service comprising of various aircraft with over 31 seats. JFK 's Airport Reference Code (ARC) is designated as D-VI.

Address

The Port Authority of New York and New Jersey
John F. Kennedy International Airport
Building 14
Jamaica, NY 11430

Location

John F. Kennedy International Airport is located in the southeastern section of Queens County, New York City. The airport reference point is located on Terminal 4 ramp. Its coordinates are N40 degrees 38.39' W73 degrees 46.74'. Airport elevation is 13 feet.

FEDERAL AVIATION ADMINSTRATION
APPROVED: Marilyn Martinez
DATE: MAR 26 2012

Section 105 – Inspection Authority

The airport shall allow the Administrator to make any inspections including unannounced inspections, or test to determine compliance with 14 CFR Part 139.

FEDERAL AVIATION ADMINSTRATION

APPROVED: Vincent E. Cammisa

DATE: FEB 0 8 2005

Section 111 – Exemptions

There are currently no exemptions from the requirements of FAR 139.

FEDERAL AVIATION ADMINSTRATION
APPROVED: Evelyn Martinez
DATE: MAR 26 2012

Section 113 - Deviations

Deviation

In an emergency condition requiring immediate action for the protection of life or property, the Airport may deviate from an operational requirement of Title 14 CFR Part 139, Subpart D, or the Airport Certification Manual, to the extent required to meet that emergency.

Reporting

In the event of a deviation, the Airport shall notify the FAA Regional Airports Division by phone or email within 14 days of the nature, extent, and duration of the deviation. If requested by FAA, the Airport shall submit a report in writing to the FAA Regional Airports Division Manager.

FEDERAL AVIATION ADMINSTRATION
APPROVED: Vincent E. Cerrino
DATE: FEB 0 8 2005

Section 201 - General Requirements (ACM Maintenance/Revisions)

ACM Maintenance

The Airport will comply with the following:

(1) Keep the ACM current at all times. The Airport Manager or his designee is responsible for maintaining the ACM;

(2) Maintain at least one complete and current copy of the approved ACM on the Airport, which will be available for inspection by the FAA. This copy will be maintained in the Airport Duty Manager's office;

(3) Furnish the applicable portions of the FAA approved ACM to the airport and other personnel responsible for its implementation (see distribution list);

(4) Ensure that the FAA Regional Airports Division is provided a complete copy of the most current ACM including any approved amendments.

FEDERAL AVIATION ADMINSTRATION
APPROVED: Evelyn Martinez
DATE: MAR 26 2012

Section 205 – Amendment of Airport Certification Manual

Amendments

The following procedure is in effect for amendments to the ACM:

(1) Prior to submission of an ACM change, a coordination process will take place among relevant internal and external stakeholders to ensure each party will have an opportunity to review and comment on any proposed changes prior to submission to FAA.

(2) Revisions/amendments to the ACM will be submitted by the Manager, Aeronautical Services, or designee, at least 30 days prior to the proposed effective date. They will be submitted as needed to maintain currency;

(3) The ACM Page Revision Log will be completed and submitted with each revision;

(4) Each page of the revision, including the Page Revision Log, will have the date of the revision and the original approval date of the ACM;

(5) Two copies in color, if applicable, of the revision will be submitted to the following address:
Federal Aviation Administration
Airports Division, AEA-620
1 Aviation Plaza
Jamaica, NY 11434

(6) Upon FAA approval, copies of the approved revision will be made and distributed to the holders of the Airport Certification Manual on the Distribution List.

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Mathney
DATE: NOV 16 2012

Section 301 – Records

(a) Furnish Records

Upon request of the Administrator, the Airport will furnish records listed under this section.

(b) List of Required Records

The Airport will maintain the following records:

(1) *Personnel Training* – 24 consecutive calendar months for personnel training records under Sections 303 and 327;

(2) *Emergency Personnel Training* – 24 consecutive calendar months for ARFF and emergency medical service personnel training records under Section 319;

(3) *Airport Fueling Agent Inspection* – 12 consecutive calendar months for records of inspection of fueling agents under Section 321;

(4) *Fueling Personnel Training* – 12 consecutive calendar months for fuel agent training records under Section 321;

(5) *Self-Inspection* – 12 consecutive calendar months for self-inspection records under Section 327;

(6) *Movement Areas and Safety Training* – 24 consecutive calendar months for records of training given to pedestrians and ground vehicle operators with access to movement areas and safety areas under Section 329;

(7) *Accident and Incident* – 12 consecutive calendar months for each accident or incident in movement areas or safety areas involving air carrier aircraft and/or ground vehicles under Section 329;

(8) *Airport Condition* – 12 consecutive calendar months for records of airport condition information dissemination under Section 339;

(9) *Widlife Hazard Management Training* – 24 consecutive calendar months for personnel training records under Section 337.

(c) Additional Records

The Airport will make and maintain any additional records required by the Administrator.

FEDERAL AVIATION ADMINISTRATION
APPROVED: [signature]
DATE: MAR 3 1 2014

(d) Training Records

Training records for each individual include a description and date of training received. The records are kept by the Assistant Chief Operations Supervisor of Certification & Training. ARFF training records are kept by the ARFF Captain or designee. The ARFF Captain is responsible for ensuring that only qualified and trained personnel are assigned to ARFF positions. Training records are kept for at least 24 consecutive calendar months.

Section 303 – Personnel

1. Operational Lines of Succession

Titles

General Manager
Deputy General Manager
Manager, Airport Operations Division
Manager, Aeronautical Services
Assistant Manager, Aeronautical Services
Chief Operations Supervisor
Assistant Chief Operations Supervisor/Airport Duty Manager (ADM)

2. Organizational Chart

The organizational chart is attached as Exhibit 303-1.

3. Part 139 Positions and Responsibilities/Major Duties

General Manager

The General Manager, John F. Kennedy International Airport, has overall responsibility for the Airport, delegated to her/him by the Director of Aviation. This includes authority and responsibility for Part 139 compliance, planning, construction, operations, maintenance, Aircraft Rescue and Firefighting (ARFF) and security at the airport, negotiations with Aviation Department tenants, and balancing public service obligations against net revenue requirements. Any further reference to the General Manager throughout this document will mean "General Manager or designee".

Deputy General Manager

The Deputy General Manager assists the General Manager in the day-to-day operation of JFK. In the absence of the General Manager, performs General Manager duties and responsibilities.

Manager, Airport Operations Division

The Manager of Airport Operations is responsible to the General Manager for overseeing all Part 139 regulatory requirements, the aeronautical operations (details under Manager, Aeronautical Services), Aircraft Rescue and Firefighting (ARFF), civilian security programs, public parking lots, airport bus services, taxi dispatching services, ground transportation information

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counters, signing and tenant liaison. He/she has primary responsibility for inspection and notification procedures.

Manager, Aeronautical Services

The Manager, Aeronautical Services, is responsible to the Manager of Airport Operations for conducting the Port Authority responsibilities on aircraft operating areas in a safe and efficient manner, ensuring that JFK's physical airfield features and operational/emergency procedures meet the standards as set forth by Part 139, keeping aircraft operating areas in safe and effective operating condition, providing support for airport emergency, security services, and initiating improvements in these activities, and for training and developing a highly competent staff.

Assistant Manager, Aeronautical Services

Responsible to the Manager, Aeronautical Services in assisting with the daily operations of the Airport. Assumes overall responsibility of the Aeronautical Division in the absence of the Manager, Aeronautical Services.

Chief Operations Supervisor

Under the supervision of the Manager, Aeronautical Services, oversees a staff in the operation and inspection of the airport. Coordinates activities with Maintenance Division, FAA Control Tower operations, FAA officials, airline operators, etc. Supervises inspection of field for hazards and obstructions to aeronautical safety, notifies tower operators of such hazards, ascertains that corrective or preventive measures are taken and that hazards are properly marked. Composes bulletins (NOTAM's) for issue concerning special airport hazards or conditions. Settles routine and semi routine problems involving itinerant aircraft and airlines. Is responsible for the entire facility in the absence of Airport Manager or his/her designee.

Assistant Chief Operations Supervisor/Airport Duty Manager

The Airport Duty Manager (ADM) at JFK performs responsible supervisory and inspection work under the supervision of the Manager of the Aeronautical Services. As the ADM, he/she acts as the chief official of JFK on off shifts, Saturdays, Sundays and holidays, when the General Manager or his/her designee is not present. The ADM is then responsible for keeping of aircraft operating areas in safe and effective operating condition and for providing airport emergency and security services in accordance/compliance with all applicable Part 139 sections. Settles routine and semi routine problems involving itinerant aircraft and airlines.

Assistant Chief Operations Supervisor of Certification & Training

Assistant Chief Operations Supervisor of Certification & Training at JFK performs responsible supervisory and inspection work under the supervision of the Chief Operations Supervisor. He/She is responsible to ensure personnel who have responsibilities under Part 139 are trained, except for ARFF personnel. He/She is responsible to maintain Part 139 training records, except for ARFF training records.

Assistant Airport Duty Manager

The Assistant Airport Duty Manager (AADM) maintains the safe and effective condition of facility operations through daily airfield inspection routines, implementing emergency and security plans as needed and coordinating snow removal efforts for aeronautical areas during storm events. Trains and supervises lower-level staff. Makes operational decisions in absence of Airport Duty Manager.

Wildlife Supervisor

The Wildlife Supervisor monitors wildlife activity in and around aircraft operating areas. He/She is required to disperse and, if necessary, use lethal means to reduce wildlife activity in aircraft operating areas at JFK. The Wildlife Supervisor is responsible to the ADM and AADM.

Airport Operations Agent/Wildlife Bird Agent

The Airport Operations Agent/Wildlife Bird Agent (AOA) is responsible to the AADM and Wildlife Supervisor. The AOA provides positive escorts during construction activity, follow-me escorts for aircraft, runway sweeps at the request of the FAA Air Traffic Control, wildlife monitoring and other duties by the AAM and Wildlife Supervisor.

Chief of Department, Port Authority Police

The Chief of Department, Port Authority Police oversees all aspects of the Police Department. The Chief of Department, Port Authority Police also oversees compliance with the Incident Command System utilized by the Port Authority during all emergencies in protection of life and property.

Police Commanding Officer

The Commanding Officer of police personnel at the airport reports to the Chief of Department, Port Authority Police, but receives guidance on the utilization of Police resources to address airport concerns from the General Manager, JFK, or his/her designee. In cases of life safety, and until their resolution, the Commanding Officer or his/her designee has the lead responsibility. He/she is responsible for airport security, vehicle traffic

operations. In connection with these responsibilities, he/she must plan, coordinate, and execute those procedures necessary to affect proper control and response, and in so doing, maintain liaison with Port Authority officials and city agencies as required. This responsibility entails the assurance of the proper handling and control of public gatherings, the implementation of security arrangements for V.I.P.'s and situations involving sabotage and any other law enforcement related conditions.

Tour Commander

Under the direct supervision of the Commanding Officer, the Tour Commander is responsible for airport security, traffic movement, and all other operations and functions as delegated by the Commanding Officer. The Tour Commander is the initial designated Incident Commander for all airport emergencies and incidents.

Fire Chief, Aircraft Rescue and Firefighting (ARFF)

The Fire Chief, who reports to the Chief Security Officer (CSO), is a technical expert and is responsible for personnel matters in accordance with the CBA. The Fire Chief has overall responsibility for developing and delivering standardized ARFF training in coordination with the General Manager of Airport Certification and Safety. The ARFF Fire Chief will oversee the Rescue Training Center operation. Additionally, the Fire Chief will work closely with the General Manager of Airport Certification and Safety, the Airport General Managers, and the Facility ARFF Captains to ensure that Part 139 ARFF requirements are met.

Aircraft Rescue and Firefighting (ARFF) Captain

The ARFF Captain is the Commanding Officer of the ARFF Unit at JFK and supervises ARFF personnel. He or she reports directly to the Manager, Airport Operations. The ARFF Captain is responsible for ensuring that only qualified and trained personnel are assigned to ARFF positions. The ARFF Captain implements Part 139 ARFF requirements and coordinates with the Fire Chief on training personnel and technical standards at JFK.

Aircraft Rescue and Firefighting (ARFF) Rescue Training Center Captain

The Captain of the Rescue Training Center reports to the Fire Chief and will develop and implement the ARFF training curriculum to include initial and recurrent training and airport-specific training programs and materials. The Captain of the Rescue Training Center will be responsible for providing completed training records to the JFK ARFF Captain.

Manager, Airport Maintenance

The Manager of Airport Maintenance is responsible to the General Manager JFK for Port Authority and is responsible for maintaining the physical condition of the airport facilities and equipment to established standards. Maintains a staff of qualified personnel and directs activities of the airport maintenance department.

Assistant Manager, Airport Maintenance

The Assistant Manager of Airport Maintenance is responsible to the Manager of Airport Maintenance in assisting with maintaing the physical condition of the Airport. Assumes overall responsibility of the Maintenance Division in the absence of the Maintenance Manager.

Chief Maintenance Supervisor

The Chief Maintenance Supervisor is responsible to the Manager of Airport Maintenance on matters pertaining to structural and landscaping on aircraft operating areas. These include, but not limited to, pavement and concrete repairs, replacing delineators, airfield fencing and airfield signage.

Chief Mechanical Supervisor

The Chief Mechancial Supervisor is responsible to the Manager of Airport Maintenance on matters pertaining to the Airport's water distribution system (including fire suppression), sewage lines, and mechanical equipment support for the Air Traffic Control Tower and electrical switch houses.

Chief Electrical Supervisor

The Chief Electrical Supervisor is responsible to the Manager of Airport Maintenance on matters pertaining to the Airport's lighting systems (runways, taxiways, signs, obstructions) and the Airport's high tension electrical distribution system.

General Manager, Airport Certification and Safety

The General Manager of Airport Certification and Safety has oversight and performs quality control of compliance with Part 139 certification and safety standards at all Port Authority airports. The General Manager of Airport Certification and Safety acts as a principal liaison to the FAA with regard to airport certification matters, provides the airports with standardized policy guidance on Part 139 requirements, and develops and directs associated training and education programs.

Manager, Airport Certification and Safety

The Manager of Airport Certification and Safety reports directly to the General Manager, Airport Certification and Safety and provides compliance and audit information to the Manager, Airport Operations, Security & Services Division. The position monitors compliance with Part 139 and associated Advisory Circulars, Cert Alerts and other FAA regulatory guidance and provides technical oversight for all Part 139 training. The position also audits all ARFF, wildlife, and driver training records for compliance with regulatory requirements.

Personnel Requirements

The Airport will comply with the following personnel requirements:

(a) Maintain sufficient qualified personnel to comply with the requirement of the ACM and the requirements of Part 139;

(b) Equip personnel with sufficient resources needed to comply with the requirements of Part 139;

(c) Train all personnel who access the movement areas and safety areas and perform duties in compliance with the requirements of the ACM and Part 139. This training shall be completed before initial performance of duties. Recurrent training shall be completed at least once every 12 consecutive calendar months thereafter. An example of the airport operations division personnel training log is in Exhibit 303-2. The curriculum for initial and recurrent training shall include at least the following areas:

(1) Airport familiarization, including airport marking, lighting and sign system;

(2) Procedures for access to, and operation in, movement areas and safety areas under Section 329;

(3) Airport communications

(4) Duties required under the Airport Certification Manual and the requirements of Part 139;

(5) Any additional subject areas required under Part 139 Sections 319, 321, 327, 337 and 339, as appropriate.

Training of Employees Authorized to Operate on the Movement Area and Safety Areas

Training under Part 139.303 and Part 139.327 is for all personnel who access the movement area and safety areas and perform duties in compliance with the requirements of the Airport Certification Manual. The Manager, Aeronautical Services, or designee, will ensure compliance with all elements of Part 139 pertaining to training for all personnel who access the movement area. Part 139.327 requires additional training for those responsible for the Airport Self-Inspection Program.

(A) All Airport Operations Division personnel accessing the movement area will receive Part 139.303 and 139.327 training in the following areas:

1. 139.303 Personnel – Airport Familiarization, airport markings, lighting, and signing. Airport Communications – including radio communications between air traffic control tower and airport personnel.
2. 139.301 Records
3. 139.305 Paved Areas
4. 139.307 Unpaved Areas
5. 139.309 Safety Areas
6. 139.311 Markings, lighting signing
7. 139.313 Snow and Ice Control
8. 139.315 ARFF Index determination
9. 139.317 Equipment and Agents
10. 139.319 ARFF Operational Requirements
11. 139.321 Handling and Storage of Hazardous Substances and Materials
12. 139.323 Traffic and Wind Direction Indicators
13. 139.325 Airport Emergency Plan
14. 139.327 Self-Inspection Program
15. 139.329 Pedestrians and Ground Vehicles
16. 139.331 Obstructions
17. 139.333 Protection of NAVAIDS
18. 139.335 Public Protection
19. 139.337 Wildlife Hazard Management
20. 139.339 Airport Condition Reporting
21. 139.341 Identifying, marking, and lighting, construction and other unserviceable areas.
22. 139.343 Non Complying Conditions

(B) All Non-Airport Operations Division personnel other than the Port Authority Police Department and the Federal Aviation Administration personnel accessing the movement area will receive initial and recurrent Part 139.303 and 139.327 training in the following areas:

1. 139.303 Personnel – Airport Familiarization, airport markings, lighting, and signing. Airport Communications – including radio communications between air traffic control tower and airport personnel.
2. 139.301 Records
3. 139.305 Paved Areas
4. 139.307 Unpaved Areas
5. 139.309 Safety Areas
6. 139.311 Markings, lighting signing
7. 139.313 Snow and Ice Control
8. 139.315 ARFF Index determination
9. 139.317 Equipment and Agents
10. 139.319 ARFF Operational Requirements
11. 139.321 Handling and Storage of Hazardous Substances and Materials
12. 139.323 Traffic and Wind Direction Indicators
13. 139.325 Airport Emergency Plan
14. 139.329 Pedestrians and Ground Vehicles
15. 139.331 Obstructions
16. 139.333 Protection of NAVAIDS

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17. 139.335 Public Protection
18. 139.337 Wildlife Hazard Management
19. 139.339 Airport Condition Reporting
20. 139.341 Identifying, marking, and lighting, construction and other unserviceable areas.
21. 139.343 Non Complying Conditions

(C) All Port Authority Police Department and ARFF personnel accessing the movement area will receive initial and recurrent Part 139.303 and 139.327 training in the following areas:

1. 139.303 Personnel – Airport Familiarization, airport markings, lighting, and signing. Airport Communications – including radio communications between air traffic control tower and airport personnel.
2. 139.301 Records
3. 139.305 Paved Areas
4. 139.307 Unpaved Areas
5. 139.309 Safety Areas
6. 139.311 Markings, lighting signing
7. 139.315 ARFF Index determination
8. 139.317 Equipment and Agents
9. 139.319 ARFF Operational Requirements
10. 139.321 Handling and Storage of Hazardous Substances and Materials
11. 139.323 Traffic and Wind Direction Indicators
12. 139.325 Airport Emergency Plan
13. 139.329 Pedestrians and Ground Vehicles
14. 139.331 Obstructions
15. 139.333 Protection of NAVAIDS
16. 139.335 Public Protection
17. 139.337 Wildlife Hazard Management

(D) All Federal Aviation Administration personnel accessing the movement area will receive initial and recurrent Part 139.303 and 139.327 training in the following areas:

1. 139.303 Personnel – Airport Familiarization, airport markings, lighting, and signing. Airport Communications – including radio communications between air traffic control tower and airport personnel.
2. 139.305 Paved Areas
3. 139.307 Unpaved Areas
4. 139.309 Safety Areas
5. 139.311 Markings, lighting signing
6. 139.313 Snow and Ice Control Plan
7. 139.321 Handling and Storage of Hazardous Substances and Materials
8. 139.323 Traffic and Wind Direction Indicators
9. 139.325 Airport Emergency Plan
10. 139.329 Pedestrians and Ground Vehicles
11. 139.331 Obstructions
12. 139.333 Protection of NAVAIDS
13. 139.335 Public Protection
14. 139.337 Wildlife Hazard Management

(d) Make record of all training completed by each individual in compliance with this section including, at a minimum, a description and date of training received. Such records shall be maintained for 24 consecutive calendar months after completion of training.

(e) As appropriate, comply with the following training requirements of Part 139:

(1) Section 319 - Aircraft Rescue and Firefighting: Operational Requirements;

(2) Section 321 - Handling and Storage of Hazardous Substances and Materials;

(3) Section 327 - Self-Inspection Program;

(4) Section 329 - Pedestrian and Ground Vehicles;

(5) Section 337 - Wildlife Hazard Management;

(6) Section 339 - Airport Condition Reporting

Exhibit 303-1 **John F. Kennedy International AirportOrganizational Chart**

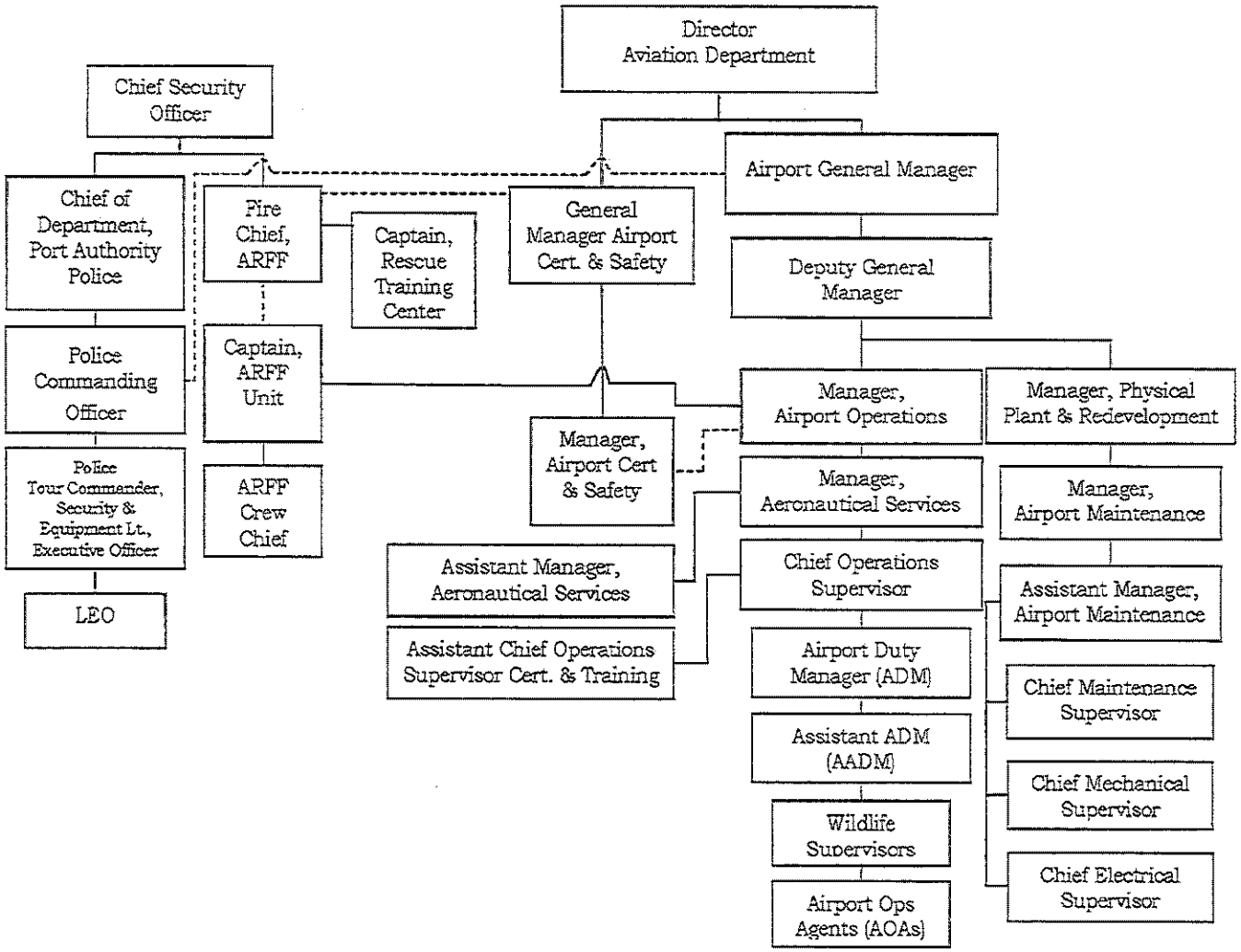

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Exhibit 303-2

John F. Kennedy International Airport
Personnel Training Records

Employee Name: Trainer Name:

Date of Hire:

Subject:	YEAR Date Qualified	Employee Initials	Trainer Initials	YEAR Recurrent Training	Employee Initials	Trainer Initials	YEAR Recurrent Training	Employee Initials	Trainer Initials
1. Paved areas/Unpaved areas/Safety areas (Access procedures and operations)									
2. Markings, signs, and lighting (Runways, taxiways, and ramps, airport owned lighting)									
3. Snow and ice control (Annual review of plan)									
4. Aircraft Rescue and Firefighting (Index determination, equipment and agents, operational requirements)									
5. Hazardous Substances and Materials (Procedures for fueling, quarterly inspections and reporting/correcting discrepancies)									
6. Traffic and wind direction indicators/Protection of NAVAIDS (Location and purpose of NAVAIDS)									
7. Airport emergency plan (Familiarization with duties and responsibilities and procedures)									
8. Self-inspection program/Airport Condition reporting (Procedures for daily inspections, dissemination of information, NOTAM procedures, reporting and correcting discrepancies)									
9. Pedestrians and Ground Vehicles (Enforcement procedures, escort procedures, radio communication, limited access, radio procedures for ATC)									
10. Obstructions and Part 77/Identifying, marking, and lighting construction and other unserviceable areas (Procedures for construction,reporting and correcting discrepancies)									
11. Wildlife hazard management (Procedures to identify, control and manage wildlife hazards)									

Additional Comments:

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APPROVED: [signature]

DATE: MAR 3 1 2014

Section 305 – Paved Areas

(a) Required Conditions of Paved Areas

Airport pavement areas available to air carriers, including aprons available for air carrier operations, shall be promptly repaired and maintained as follows:

(1) Pavement edges shall not exceed 3 inches difference in elevation between abutting pavement sections and between pavement and abutting areas;

(2) Pavement shall have no holes exceeding 3 inches in depth, nor any hole the slope of which from any point in the hole to the nearest point at the lip of the hole is 45 degrees or greater as measured from the pavement surface plane, unless, in either case, the entire area of the hole can be covered by a 5" diameter circle;

(3) The pavement shall be free of cracks and surface variations that could impair directional control of an air carrier aircraft. Any pavement crack or surface deterioration that produces loose aggregate or other contaminants shall be promptly repaired;

(4) Mud, dirt, sand, loose aggregate, debris, foreign objects, rubber deposits, and other contaminants shall be removed promptly and as completely as practicable, except the associated use of materials such as sand and deicing solutions for snow and ice control;

(5) Pavement shall be sufficiently drained and free of depressions to prevent ponding that obscures markings or impairs safe aircraft operations.

The paved areas are inspected daily in accordance with AC 150/5200-18, current edition.

Additional safety inspections shall be conducted whenever required by the following circumstances:

1. During and after construction activity;
2. During rapidly changing meteorological conditions;
3. Immediately after any incident or accident;
4 After any other unusual condition on the airport.

Maintenance of Paved Areas

Corrective action shall be initiated by the Airport Duty Manager, or his/her designee, as soon as practical when any unsatisfactory conditions are found in the paved areas. Maintenance Department personnel are responsible for the correction of any unsatisfactory conditions on paved areas. If Airport Duty Manager or his/her designee determines that an uncorrected condition in a paved area is unsafe for aircraft operations, that portion of the airport shall be closed to air carrier operations until the unsafe condition is corrected.

Paved Areas Available for Air Carriers

All movement and non-movement areas at John F. Kennedy International Airport are available for aircraft use as indicated in Exhibit 305-1. Exhibit 305-2 provides a description of movement areas and non-movement areas. A movement area is defined as the runways, taxiways, and other areas of the airport that are used for taxiing or hover taxiing, air taxiing, takeoff and landing of aircraft, exclusive of loading ramps and aircraft parking areas.

Letters of Agreement (LOA)

LOA-1 is the Letter of Agreement, which establishes procedures for the issuance of authorization by the Port Authority of New York and New Jersey (PANYNJ) and Kennedy Air Traffic Control Tower (FAA ATCT) for access to and movement on the Airport Movement Area (AMA) by personnel and ground vehicles.

LOA-5 is the Letter of Agreement which defines the authority, responsibilities, requirements, and procedures for **American Airlines** to operate high-speed, towbarless aircraft tractors, known as "supertugs", in the Airport Movement Area (AMA).

LOA-6 is the Letter of Agreement which defines the authority, responsibilities, requirements, and procedures for **JetBlue Airways Corporation** to operate high-speed, towbarless aircraft tractors, known as "supertugs", in the Airport Movement Area (AMA).

LOA-7 is the Letter of Agreement which defines the authority, responsibilities, requirements, and procedures for **Delta Airlines, Inc.** to operate high-speed, towbarless aircraft tractors, known as "supertugs", in the Airport Movement Area (AMA).

LOA-8 is the Letter of Agreement which defines the authority, responsibilities, requirements, and procedures for **Ground Services International Inc.** to operate high-speed, towbarless aircraft tractors, known as "supertugs", in the Airport Movement Area (AMA).

LOA-9 is the Letter of Agreement which defines the authority, responsibilities, requirements, and procedures for **United Airlines** to operate high-speed, towbarless aircraft tractors, known as "supertugs", in the Airport Movement Area (AMA).

LOA-10 is the Letter of Agreement which defines the authority, responsibilities, requirements, and procedures for **Aircraft Service International, Inc.** to operate high-speed, towbarless aircraft tractors, known as "supertugs", in the Airport Movement Area (AMA).

LOA-11 is the Letter of Agreement which defines the authority, responsibilities, requirements, and procedures for **Swissport USA, Inc.** to operate high-speed, towbarless aircraft tractors, known as "supertugs", in the Airport Movement Area (AMA).

LOA-12 is the Letter of Agreement which defines the authority, responsibilities, requirements, and procedures for **Triangle Services** to operate high-speed, towbarless aircraft tractors, known as "supertugs", in the Airport Movement Area (AMA).

THE PORT AUTHORITY OF NY & NJ
AND
JOHN F. KENNEDY INTERNATIONAL AIRPORT AIR TRAFFIC CONTROL TOWER

LETTER OF AGREEMENT

EFFECTIVE: March 31, 2014

SUBJECT: Access to the Airport Movement Area (AMA) of John J. Kennedy International Airport (JFK) by ground vehicles.

1. **PURPOSE.** This letter establishes procedures for the issuance of authorization by The Port Authority of NY & NJ (PANYNJ) and the JFK Air Traffic Control Tower (ATC) for access to, and movement on, the AMA by ground vehicles.

2. **CANCELLATION.** The PANYNJ and JFK ATC Letter of Agreement dated July 15, 2011.

3. **RESPONSIBILITES.** The PANYNJ shall establish, in accordance with this agreement, procedures for vehicular access to the AMA and shall provide suitable training in such procedure to all airport employees authored by the PANYNJ and Federal Aviation Administration (FAA) enter the AMA.

4. **DEFINITIONS.** The AMA shall consist of all taxiways and runways at JFK on which aircraft and ground vehicle traffic is subject to the control of the ATC. These include the taxiway throats as outlined in paragraph 5(e).

5. **PORT AUTHORITY PROCEDURES.** The PANYNJ shall:

   a. In concert with the FAA, issue authorization for access to the AMA only to persons and ground vehicles that are necessary for airport operations. All other vehicles must use the perimeter road(s) for transition.
   b. Establish procedures and training for persons authorized to enter the AMA. The training shall, as a minimum, cover the safe and orderly access to, and operation on, the AMA by ground vehicles, including provisions that identify the consequences of non-compliance with the procedures.
   c. Ensure that all vehicles requiring access to or needing to cross any active runway are in direct communications with, or are escorted by, a vehicle that is in direct communications with the ATC.
      (1) All runway crossing and inspections/sweeps of open runways shall be coordinated on ground control frequency.

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(2) PANYNJ police and emergency vehicles shall only be authorized to cross runway(s) in response to a known, coordinated emergency or security event or return to station from such an event.

d. Ensure that ground vehicles operating on the AMA:
   (1) have an operating rotation beacon; and;
   (2) are capable of two-way radio communication with ATC, or
   (3) are accompanied by an escort vehicle having two-way radio communications capability with ATC.

e. The AMA consists of all runways and taxiways at the airport where aircraft and ground vehicles are subject to positive control by the ATC. Vehicles operating on the Restricted Vehicle Service Road (RVSR) at the throats of Taxiways A, R, S, Q, C, A, CB, CE, W, and between Taxiway C and the cargo ramps are exempt from the required radio procedures, vehicle equipment requirements, and FAA control. To ensure vehicles "give way" to aircraft, drivers authorized to operate on the RVSR receive specialized training and the RVSR has the appropriate signage in accordance with AC 150/5340-18F or later series. The non-movement markings are located prior to the RVSR in order to maintain clearance from aircraft taxiing on the perpendicular taxiway (see attachments A & B).

f. Ensure that vehicles operating on taxiways and non-active runways within the AMA shall monitor the appropriate FAA control frequency or be escorted by a vehicle that is two-way radio equipped as noted in d (1), d (2), and d (3).

g. Ensure that vehicles on active runways within the AMA shall monitor the appropriate FAA ATC frequency or be escorted by a vehicle that is two-way radio equipped as noted in d (1), d (2), and d (3). On request, provide the FAA with an estimated runway occupancy time and immediately confirm when the vehicle(s) clear of the active runway.

h. Ensure that vehicles losing radio contact while on an active runway will exit the runway and notify the FAA immediately.

i. Ensure that vehicles allowed (by PANYNJ and the FAA) to enter or transition the AMA without direct approval from ATC, five way to all aircraft. However, this in no way allows these vehicles to enter or cross an active runway without direct clearance from ATC.

j. Ensure that vehicular access to the AMA is kept to a minimum and encourage the use of perimeter or service roads to the maximum extent possible. Runway sweeps and non-emergency runway crossings shall be pre-coordinated with the ATC so as to be conducted under the most operationally advantageous times.

k. At the request of the FAA, make available for inspection, any record of accidents or incidents on the AMA involving aircraft and/or ground vehicles.

l. Coordinate all runway closures/opening with the FAA tower supervisor or controller-in-charge via recorded landline or local controller frequency. Coordination is not complete until the PANYNJ confirms closure/opening on appropriate local control frequency.

m. Provide the FAA estimated times of closures for all runway and taxiway closures.

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APPROVED: Shelyn Martinez

DATE: MAR 3 1 2014

6. **FAA PROCEDURES.** The FAA shall:

   a. Advise the Port Authority Duty Supervisor of any circumstance or condition which may affect or create a hazard to ground vehicle on any part of the AMA or make vehicular travel on the AMA, or any designated part thereof, undesirable or prohibited.

   b. Consistent with the safe operation of aircraft and vehicles on the AMA, and upon request therefore, issue clearances to vehicles to enter and operate on the AMA that are proceeding to a runway and, as workload permits, issue traffic advisories as necessary to such vehicles.

   c. Report to the PANYNJ any observed failure of a vehicle on the AMA to comply with PANYNJ and/or FAA rules, regulations, or procedures regarding operations on the AMA.

   d. Make available to the PANYNJ, all records and reports of incidents or infractions of PANYNJ and/or FAA rules and procedures by vehicles on the AMA.

   e. When the PANYNJ closes a runway, the FAA releases that runway to the PANYNJ. ATC clearance is not required for authorized vehicles to cross and/or for authorized vehicles, people and equipment, including those under escort, to operate on a closed runway once closure verification has been received from the Port Authority.

   f. Unless otherwise coordinated with the PANYNJ, be permitted to cross closed runways. The PANYNJ shall take appropriate precautions to prevent construction or other vehicles under escort, as described in Section 5(e) of this document, from entering runway crossing points.

   g. Retain control over any intersection, where a closed runway intersects an active runway. Crossing or operating in these intersections will be permitted after proper coordination is completed between the ATC and the vehicle and clearance was acknowledged by the vehicle.

7. **LIABILITY.** The Port Authority of New York & New Jersey and the Federal Aviation Administration covenant and expressly agree that with regard to any liability which may arise from the operation within the AMA, that each party shall be solely and exclusively liable for the negligence of its own agents, servants, and/or employees, in accordance with applicable law, and that neither party looks to the other to save or hold it harmless for the consequences of any negligence on the part of one of its own agents, servants, and/or employees.

David Siewert
Air Traffic Manager
Federal Aviation Administration
JFK Air Traffic Control Tower

Jerry Spampanato
General Manager
The Port Authority of NY & NJ
John F. Kennedy International Airport

FEDERAL AVIATION ADMINISTRATION
APPROVED: Shelyn Martinez
DATE: MAR 3 1 2014

LOA-5

LETTER OF AGREEMENT

OPERATION OF HIGH-SPEED, TOWBARLESS AIRCRAFT TRACTORS AT JOHN F. KENNEDY INTERNATIONAL AIRPORT

The Port Authority of New York and New Jersey

and

The Federal Aviation Administration Air Traffic Control Tower

and

American Airlines

at

John F. Kennedy International Airport

EFFECTIVE: 12/31/14

1. **PURPOSE:** This Letter of Agreement (LOA) defines the authority, responsibilities, requirements, and procedures for operating high-speed, towbarless aircraft tractors, known in the industry as "supertugs", in the Airport Movement Area (AMA) area at John F. Kennedy International Airport (JFK).

2. **BACKGROUND:** American Airlines require the occasional movement of aircraft on the AMA with supertugs for numerous reasons including aircraft parking and departure metering. Qualified personnel and authorized equipment at JFK sourced from two different manufacturers. Because of their high speed and towbarless operation, supertugs will be permitted to cross an active runway.

3. **PROCEDURES & RESPONSIBILITIES:**

The Port Authority of NY & NJ; the Federal Aviation Administration Air Traffic Control Tower (FAA ATCT); and American Airlines at John F. Kennedy International Airport agree to comply with the following procedures for operating supertugs within the movement area.

American Airlines

1. Supertugs shall be operated in accordance with:
   a. All applicable FAA regulations and guidelines pertaining to aircraft towing operations;
   b. All applicable PANYNJ Air Terminal Rules and Regulations and local airport policies;
   c. All applicable company requirements.
2. Supertug operators shall meet all high-speed, towbarless tractor operator qualifications and maintain currency in required operator certifications and training, to include being properly trained and credentialed to Port Authority DR3 driver standards and maintaining currency in DR3 driver certification.
3. To operate within the movement area, supertugs must be properly equipped with functional radios capable of providing two-way communication with ATCT and

airline/terminal ramp control, and must have a flashing or rotating beacon to enhance vehicle conspicuity.

4. Any JFK employee operating a tug must use a call sign that begins with "tug" at all times when communicating with FAA ATCT.
5. When towing an aircraft, the primary means of communication is FAA ground control frequency and between FAA ATCT and the tug operator. Communications with FAA ATCT via the aircraft brake rider is acceptable only in an emergency situation (i.e., lost communications). This requirement does not preclude the brake rider from listening to radio transmissions between the tug operator and FAA ATCT.
6. Operating conventional, towbar tugs on the AMA between the hours of 1400L-2200L remains prohibited.
7. The operator is responsible for all movements on the ramp area and must obtain tower approval prior to entry onto the AMA and comply with control instructions issued to them while on that area. This includes those vehicles used to conduct pushback operations and shall require approval prior to moving aircraft/vehicles out of the loading ramps or parking areas.
8. JFK Airport Operations does not require the brake rider to be qualified with DR3 driving privileges. Air carriers determine their own brake rider qualifications.
9. Unless otherwise approved, supertugs operating on the AOA with no aircraft in tow shall use the Restricted Vehicle Service Road (RVSR). When supertug operations require movement across onto the AMA with no aircraft in tow, American Airlines shall request a vehicle escort from Port Authority Airport Operations and shall only enter the movement area under positive escort by Port Authority Airport Operations.
10. Supertug operators operating within the movement area with an aircraft under tow shall follow proper ATCT communication procedures, strictly adhere to all ATCT clearances, and utilize communications headsets, an enclosed tug cab, or other means to attenuate ambient noise.
11. JFK Airport Operations does not require the use of a brake rider.

Port Authority Airport Operations and FAA Air Traffic Control Tower

1. Port Authority Operations and FAA ATCT personnel will monitor supertug operations to ensure compliance with all safety and traffic procedures, rules and regulations.
2. Both the FAA and the Port Authority have the authority to immediately suspend supertug operations if it observes an unsafe act or procedure.

SIGNATURE PAGE FOR LETTER OF AGREEMENT HIGH SPEED TOW OPERATIONS:

Edward MacAskill
Director Line Maintenance JFK/LGA
American Airlines

Date: _____

David Siewert
Air Traffic Manager
Kennedy Tower
Federal Aviation Administration

Michael Moran
General Manager
Kennedy International Airport
The Port Authority of NY &

Date: 1/13/15

Date: 1/9/15

LOA-6

LETTER OF AGREEMENT

OPERATION OF HIGH-SPEED, TOWBARLESS AIRCRAFT TRACTORS AT JOHN F. KENNEDY INTERNATIONAL AIRPORT

The Port Authority of New York and New Jersey

and

The Federal Aviation Administration Air Traffic Control Tower

and

JetBlue Airways Corporation

at

John F. Kennedy International Airport

EFFECTIVE: (as of 12/31/2014)

1. **PURPOSE**: This Letter of Agreement (LOA) defines the authority, responsibilities, requirements, and procedures for operating high-speed, towbarless aircraft tractors, known in the industry as "supertugs", in the Airport Movement Area (AMA) area at John F. Kennedy International Airport (JFK).

2. **BACKGROUND**: JetBlue Airways Corporation ("JetBlue") requires the occasional movement of aircraft on the AMA with supertugs for numerous reasons including aircraft parking and departure metering. Qualified personnel and authorized equipment at JFK sourced from two different manufacturers. Because of their high speed and towbarless operation, supertugs will be permitted to cross an active runway.

3. **PROCEDURES & RESPONSIBILITIES**:

   The Port Authority of NY & NJ; the Federal Aviation Administration Air Traffic Control Tower (FAA ATCT); and JetBlue at John F. Kennedy International Airport agree to comply with the following procedures for operating supertugs within the movement area.

   1. Supertugs shall be operated in accordance with:
      a. All applicable FAA regulations and guidelines pertaining to aircraft towing operations;
      b. All applicable PANYNJ Air Terminal Rules and Regulations and local airport policies;
      c. All applicable company requirements.
   2. Supertug operators shall meet all high-speed, towbarless tractor operator qualifications and maintain currency in required operator certifications and training, to include being properly trained and credentialed to Port Authority DR3 driver standards and maintaining currency in DR3 driver certification.
   3. To operate within the movement area, supertugs must be properly equipped with functional radios capable of providing two-way communication with ATCT and

airline/terminal ramp control, and must have a flashing or rotating beacon to enhance vehicle conspicuity.

4. Any JFK employee operating a tug must use a call sign that begins with "tug" at all times when communicating with FAA ATCT.
5. When towing an aircraft, the primary means of communication is FAA ground control frequency and between FAA ATCT and the tug operator. Communications with FAA ATCT via the aircraft brake rider is acceptable only in an emergency situation (i.e., lost communications). This requirement does not preclude the brake rider from listening to radio transmissions between the tug operator and FAA ATCT.
6. Operating conventional, towbar tugs on the AMA between the hours of 1400L - 2200L remains prohibited.
7. The operator is responsible for all movements on the ramp area and must obtain tower approval prior to entry onto the AMA and comply with control instructions issued to them while on that area. This includes those vehicles used to conduct pushback operations and shall require approval prior to moving aircraft/vehicles out of the loading ramps or parking areas.
8. JFK Airport Operations does not require the brake rider to be qualified with DR3 driving privileges. Air carriers determine their own brake rider qualifications.
9. Unless otherwise approved, supertugs operating on the AOA with no aircraft in tow shall use the Restricted Vehicle Service Road (RVSR). When supertug operations require movement across onto the AMA with no aircraft in tow, JetBlue shall request a vehicle escort from Port Authority Airport Operations and shall only enter the movement area under positive escort by Port Authority Airport Operations.
10. Supertug operators operating within the movement area with an aircraft under tow shall follow proper ATCT communication procedures, strictly adhere to all ATCT clearances, and utilize communications headsets, an enclosed tug cab, or other means to attenuate ambient noise.

<u>Port Authority Airport Operations and FAA Air Traffic Control Tower</u>

1. Port Authority Operations and FAA ATCT personnel will monitor supertug operations to ensure compliance with all safety and traffic procedures, rules and regulations.
2. Both the FAA and the Port Authority have the authority to immediately suspend supertug operations if it observes an unsafe act or procedure.

SIGNATURE PAGE FOR LETTER OF AGREEMENT HIGH SPEED TOW OPERATIONS:

ACKNOWLEDGED AND AGREED:

JetBlue Airways Corporation

By: _____
Name: Ian Deason
Title: Vice President Airports
Date: 10-31-14

David Siewert
Air Traffic Manager
Kennedy Tower
Federal Aviation Administration

Date: 12/29/14

Michael Moran
General Manager
Kennedy International Airport
The Port Authority of NY & NJ

Date: 12/23/14

LOA-7

LETTER OF AGREEMENT

OPERATION OF HIGH-SPEED, TOWBARLESS AIRCRAFT TRACTORS AT JOHN F. KENNEDY INTERNATIONAL AIRPORT

The Port Authority of New York and New Jersey

and

The Federal Aviation Administration Air Traffic Control Tower

and

Delta Air Lines, Inc.

at

John F. Kennedy International Airport

EFFECTIVE: December 12, 2014

1. **PURPOSE**: This Letter of Agreement (LOA) defines the authority, responsibilities, requirements, and procedures for operating high-speed, towbarless aircraft tractors, known in the industry as "supertugs", in the Airport Movement Area (AMA) area at John F. Kennedy International Airport (JFK).

2. **BACKGROUND**: Delta Air Lines requires the occasional movement of aircraft on the AMA with supertugs for numerous reasons including aircraft parking and departure metering. Qualified personnel and authorized equipment at JFK sourced from two different manufacturers. Because of their high speed and towbarless operation, supertugs will be permitted to cross an active runway.

3. **PROCEDURES & RESPONSIBILITIES**:

The Port Authority of NY & NJ; the Federal Aviation Administration Air Traffic Control Tower (FAA ATCT); and Delta Air Lines at John F. Kennedy International Airport agree to comply with the following procedures for operating supertugs within the movement area.

Delta Air Lines, Inc.

1. Supertugs shall be operated in accordance with:
    a. All applicable FAA regulations and guidelines pertaining to aircraft towing operations;
    b. All applicable PANYNJ Air Terminal Rules and Regulations and local airport policies;
    c. All applicable company requirements.
2. Supertug operators shall meet all high-speed, towbarless tractor operator qualifications and maintain currency in required operator certifications and training, to include being properly trained and credentialed to Port Authority DR3 driver standards and maintaining currency in DR3 driver certification.
3. To operate within the movement area, supertugs must be properly equipped with functional radios capable of providing two-way communication with ATCT and

airline/terminal ramp control, and must have a flashing or rotating beacon to enhance vehicle conspicuity.

4. Any JFK employee operating a tug must use a call sign that begins with "tug" at all times when communicating with FAA ATCT.
5. When towing an aircraft, the primary means of communication is FAA ground control frequency and between FAA ATCT and the tug operator. Communications with FAA ATCT via the aircraft brake rider is acceptable only in an emergency situation (i.e., lost communications). This requirement does not preclude the brake rider from listening to radio transmissions between the tug operator and FAA ATCT.
6. Operating conventional, towbar tugs on the AMA between the hours of 1400L - 2200L remains prohibited.
7. The operator is responsible for all movements on the ramp area and must obtain tower approval prior to entry onto the AMA and comply with control instructions issued to them while on that area. This includes those vehicles used to conduct pushback operations and shall require approval prior to moving aircraft/vehicles out of the loading ramps or parking areas.
8. JFK Airport Operations does not require the brake rider to be qualified with DR3 driving privileges. Air carriers determine their own brake rider qualifications.
9. Unless otherwise approved, supertugs operating on the AOA with no aircraft in tow shall use the Restricted Vehicle Service Road (RVSR). When supertug operations require movement across onto the AMA with no aircraft in tow, Delta Air Lines shall request a vehicle escort from Port Authority Airport Operations and shall only enter the movement area under positive escort by Port Authority Airport Operations.
10. Supertug operators operating within the movement area with an aircraft under tow shall follow proper ATCT communication procedures, strictly adhere to all ATCT clearances, and utilize communications headsets, an enclosed tug cab, or other means to attenuate ambient noise.

<u>Port Authority Airport Operations and FAA Air Traffic Control Tower</u>

1. Port Authority Operations and FAA ATCT personnel will monitor supertug operations to ensure compliance with all safety and traffic procedures, rules and regulations.
2. Both the FAA and the Port Authority have the authority to immediately suspend supertug operations if it observes an unsafe act or procedure.

SIGNATURE PAGE FOR LETTER OF AGREEMENT HIGH SPEED TOW OPERATIONS:

Ion Balan
General Manager – Airport Coordination Center
Delta Air Lines, Inc.
JFK International Airport
Terminal 4, Tower, 2nd Floor

Date: 11/16/14

David Siewert
Air Traffic Manager
Kennedy Tower
Federal Aviation Administration

Date: 12/29/14

Michael Moran
General Manager
Kennedy International Airport
The Port Authority of NY &

Date: 12/23/14

LOA-8

LETTER OF AGREEMENT

OPERATION OF HIGH-SPEED, TOWBARLESS AIRCRAFT TRACTORS AT JOHN F. KENNEDY INTERNATIONAL AIRPORT

The Port Authority of New York and New Jersey

and

The Federal Aviation Administration Air Traffic Control Tower

and

Ground Services International Inc.

at

John F. Kennedy International Airport

EFFECTIVE: (12/31/2014)

1. **PURPOSE**: This Letter of Agreement (LOA) defines the authority, responsibilities, requirements, and procedures for operating high-speed, towbarless aircraft tractors, known in the industry as "supertugs", in the Airport Movement Area (AMA) area at John F. Kennedy International Airport (JFK).

2. **BACKGROUND**: Ground Services International under contract with British Airways require the occasional movement of aircraft on the AMA with supertugs for numerous reasons including aircraft parking and departure metering. Qualified personnel and authorized equipment at JFK sourced from two different manufacturers. Because of their high speed and towbarless operation, supertugs will be permitted to cross an active runway.

3. **PROCEDURES & RESPONSIBILITIES**:

   The Port Authority of NY & NJ; the Federal Aviation Administration Air Traffic Control Tower (FAA ATCT); and Ground Services International at John F. Kennedy International Airport agree to comply with the following procedures for operating supertugs within the movement area.

   Ground Services International Inc.

   1. Supertugs shall be operated in accordance with:
      a. All applicable FAA regulations and guidelines pertaining to aircraft towing operations;
      b. All applicable PANYNJ Air Terminal Rules and Regulations and local airport policies;
      c. All applicable company requirements.
   2. Supertug operators shall meet all high-speed, towbarless tractor operator qualifications and maintain currency in required operator certifications and training, to include being properly trained and credentialed to Port Authority DR3 driver standards and maintaining currency in DR3 driver certification.

3. To operate within the movement area, supertugs must be properly equipped with functional radios capable of providing two-way communication with ATCT and airline/terminal ramp control, and must have a flashing or rotating beacon to enhance vehicle conspicuity.
4. Any JFK employee operating a radio in a tug must use a call sign that begins with "tug" at all times when communicating with FAA ATCT.
5. When towing an aircraft, the primary means of communication is FAA ground control frequency and between FAA ATCT and operator of the radio in the tug. Communications with FAA ATCT via the aircraft brake rider is acceptable only in an emergency situation (i.e., lost communications). This requirement does not preclude the brake rider from listening to radio transmissions between the tug operator and FAA ATCT.
6. Operating conventional, towbar tugs on the AMA between the hours of 1400L-2200L remains prohibited, unless approval is given from FAA ATCT for emergency reasons only.
7. The Tug Radio operator is responsible for all movements on the ramp area and must obtain tower approval prior to entry onto the AMA and comply with control instructions issued to them while on that area. This includes those vehicles used to conduct pushback operations and shall require approval prior to moving aircraft/vehicles out of the loading ramps or parking areas.
8. JFK Airport Operations does not require the brake rider to be qualified with DR3 driving privileges. Air carriers determine their own brake rider qualifications.
9. Unless otherwise approved, supertugs operating on the AOA with no aircraft in tow shall use the Restricted Vehicle Service Road (RVSR). When supertug operations require movement across onto the AMA with no aircraft in tow, British Airways Operations shall request a vehicle escort from Port Authority Airport Operations and shall only enter the movement area under positive escort by Port Authority Airport Operations.
10. Supertug operators operating within the movement area with an aircraft under tow shall follow proper ATCT communication procedures, strictly adhere to all ATCT clearances, and utilize communications headsets, an enclosed tug cab, or other means to attenuate ambient noise.

Port Authority Airport Operations and FAA Air Traffic Control Tower

1. Port Authority Operations and FAA ATCT personnel will monitor supertug operations to ensure compliance with all safety and traffic procedures, rules and regulations.
2. Both the FAA and the Port Authority have the authority to immediately suspend supertug operations if it observes an unsafe act or procedure.

SIGNATURE PAGE FOR LETTER OF AGREEMENT HIGH SPEED TOW OPERATIONS:

Michael Falacara
Sr. Director of New York Region.
Ground Services International Inc.

Date: 11-20-2014

David Siewert
Air Traffic Manager
Kennedy Tower
Federal Aviation Administration

Date: 12/29/14

Michael Moran
General Manager
Kennedy International Airport
The Port Authority of NY &

Date: 12/23/14

LOA-9

LETTER OF AGREEMENT

OPERATION OF HIGH-SPEED, TOWBARLESS AIRCRAFT TRACTORS AT JOHN F. KENNEDY INTERNATIONAL AIRPORT

The Port Authority of New York and New Jersey

and

The Federal Aviation Administration Air Traffic Control Tower

and

United Airlines

at

John F. Kennedy International Airport

EFFECTIVE: (no later than 12/31/2014)

1. **PURPOSE**: This Letter of Agreement (LOA) defines the authority, responsibilities, requirements, and procedures for operating high-speed, towbarless aircraft tractors, known in the industry as "supertugs", in the Airport Movement Area (AMA) area at John F. Kennedy International Airport (JFK).

2. **BACKGROUND**: United Airlines require the occasional movement of aircraft on the AMA with supertugs for numerous reasons including aircraft parking and departure metering. Qualified personnel and authorized equipment at JFK sourced from two different manufacturers. Because of their high speed and towbarless operation, supertugs will be permitted to cross an active runway.

3. **PROCEDURES & RESPONSIBILITIES**:

The Port Authority of NY & NJ; the Federal Aviation Administration Air Traffic Control Tower (FAA ATCT); and United Airlines John F. Kennedy International Airport agree to comply with the following procedures for operating supertugs within the movement area.

United Airliens

Supertugs shall be operated in accordance with:

a. All applicable FAA regulations and guidelines pertaining to aircraft towing operations;

b. All applicable PANYNJ Air Terminal Rules and Regulations and local airport policies;

c. All applicable company requirements.

2. Supertug operators shall meet all high-speed, towbarless tractor operator qualifications and maintain currency in required operator certifications and training, to include being properly trained and credentialed to Port Authority DR3 driver standards and maintaining currency in DR3 driver certification.

3. To operate within the movement area, supertugs must be properly equipped with functional radios capable of providing two-way communication with ATCT and airline/terminal ramp control, and must have a flashing or rotating beacon to enhance vehicle conspicuity.

4. Any JFK employee operating a tug must use a call sign that begins with "tug" at all times when communicating with FAA ATCT.

5. When towing an aircraft, the primary means of communication is FAA ground control frequency and between FAA ATCT and the tug operator. Communications with FAA ATCT via the aircraft brake rider is acceptable only in an emergency situation (i.e., lost communications). This requirement does not preclude the brake rider from listening to radio transmissions between the tug operator and FAA ATCT.

6. Operating conventional, towbar tugs on the AMA between the hours of 1400L - 2200L remains prohibited.

7. The operator is responsible for all movements on the ramp area and must obtain tower approval prior to entry onto the AMA and comply with control instructions issued to them while on that area. This includes those vehicles used to conduct pushback operations and shall require approval prior to moving aircraft/vehicles out of the loading ramps or parking areas.

8. JFK Airport Operations does not require the brake rider to be qualified with DR3 driving privileges. Air carriers determine their own brake rider qualifications.

9. Unless otherwise approved, supertugs operating on the AOA with no aircraft in tow shall use the Restricted Vehicle Service Road (RVSR). When supertug operations require movement across onto the AMA with no aircraft in tow, United Airlines shall request a vehicle escort from Port Authority Airport Operations and shall only enter the movement area under positive escort by Port Authority Airport Operations.

10. Supertug operators operating within the movement area with an aircraft under tow shall follow proper ATCT communication procedures, strictly adhere to all ATCT clearances, and utilize communications headsets, an enclosed tug cab, or other means to attenuate ambient noise.

<u>Port Authority Airport Operations and FAA Air Traffic Control Tower</u>

1. Port Authority Operations and FAA ATCT personnel will monitor supertug operations to ensure compliance with all safety and traffic procedures, rules and regulations.

2. Both the FAA and the Port Authority have the authority to immediately suspend supertug operations if it observes an unsafe act or procedure.

SIGNATURE PAGE FOR LETTER OF AGREEMENT HIGH SPEED TOW OPERATIONS:

Anthony Serrao
Senior Manager Airport Operations
United Airlines

Date: 12/19/14

David Siewert
Air Traffic Manager
Kennedy Tower
Federal Aviation Administration

Date: 12/29/14

Michael Moran
General Manager
Kennedy International Airport
The Port Authority of NY &

Date: 12/23/14

LOA-10

LETTER OF AGREEMENT

OPERATION OF HIGH-SPEED, TOWBARLESS AIRCRAFT TRACTORS AT JOHN F. KENNEDY INTERNATIONAL AIRPORT

The Port Authority of New York and New Jersey

and

The Federal Aviation Administration Air Traffic Control Tower

and

Aircraft Service International, Inc.

John F. Kennedy International Airport

EFFECTIVE: (no later than 12/31/2014)

1. **PURPOSE**: This Letter of Agreement (LOA) defines the authority, responsibilities, requirements, and procedures for operating high-speed, towbarless aircraft tractors, known in the industry as "supertugs", in the Airport Movement Area (AMA) area at John F. Kennedy International Airport (JFK).

2. **BACKGROUND**: Aircraft Service International Inc. on behalf of Airlines require the occasional movement of aircraft on the AMA with supertugs for numerous reasons including aircraft parking and departure metering. Qualified personnel and authorized equipment at JFK sourced from two different manufacturers. Because of their high speed and towbarless operation, supertugs will be permitted to cross an active runway.

3. **PROCEDURES & RESPONSIBILITIES**:

   The Port Authority of NY & NJ; the Federal Aviation Administration Air Traffic Control Tower (FAA ATCT); and Aircraft Service International, Inc. at John F. Kennedy International Airport agree to comply with the following procedures for operating supertugs within the movement area.

   1. Aircraft Service International, Inc. Supertugs shall be operated in accordance with:
      a. All applicable FAA regulations and guidelines pertaining to aircraft towing operations;
      b. All applicable PANYNJ Air Terminal Rules and Regulations and local airport policies;
      c. All applicable company requirements.
   2. Supertug operators shall meet all high-speed, towbarless tractor operator qualifications and maintain currency in required operator certifications and training, to include being properly trained and credentialed to Port Authority DR3 driver standards and maintaining currency in DR3 driver certification.
   3. To operate within the movement area, supertugs must be properly equipped with functional radios capable of providing two-way communication with ATCT and

airline/terminal ramp control, and must have a flashing or rotating beacon to enhance vehicle conspicuity.

4. Any JFK employee operating a tug must use a call sign that begins with "tug" at all times when communicating with FAA ATCT.
5. When towing an aircraft, the primary means of communication is FAA ground control frequency and between FAA ATCT and the tug operator. Communications with FAA ATCT via the aircraft brake rider is acceptable only in an emergency situation (i.e., lost communications). This requirement does not preclude the brake rider from listening to radio transmissions between the tug operator and FAA ATCT.
6. Operating conventional, towbar tugs on the AMA between the hours of 1400L - 2200L remains prohibited.
7. The operator is responsible for all movements on the ramp area and must obtain tower approval prior to entry onto the AMA and comply with control instructions issued to them while on that area. This includes those vehicles used to conduct pushback operations and shall require approval prior to moving aircraft/vehicles out of the loading ramps or parking areas.
8. JFK Airport Operations does not require the brake rider to be qualified with DR3 driving privileges. Air carriers determine their own brake rider qualifications.
9. Unless otherwise approved, supertugs operating on the AOA with no aircraft in tow shall use the Restricted Vehicle Service Road (RVSR). When supertug operations require movement across onto the AMA with no aircraft in tow, Aircraft Service International, Inc. shall request a vehicle escort from Port Authority Airport Operations and shall only enter the movement area under positive escort by Port Authority Airport Operations.
10. Supertug operators operating within the movement area with an aircraft under tow shall follow proper ATCT communication procedures, strictly adhere to all ATCT clearances, and utilize communications headsets, an enclosed tug cab, or other means to attenuate ambient noise.

<u>Port Authority Airport Operations and FAA Air Traffic Control Tower</u>

1. Port Authority Operations and FAA ATCT personnel will monitor supertug operations to ensure compliance with all safety and traffic procedures, rules and regulations.
2. Both the FAA and the Port Authority have the authority to immediately suspend supertug operations if it observes an unsafe act or procedure.

SIGNATURE PAGE FOR LETTER OF AGREEMENT HIGH SPEED TOW OPERATIONS:

By: _____
Tony Lefebvre
Title: President and COO
Aircraft Service International, Inc.

APPROVED AS TO FORM:
LEGAL DEPT.

Date: 12-4-2014

David Siewert
Air Traffic Manager
Kennedy Tower
Federal Aviation Administration

Michael Moran
General Manager
Kennedy International Airport
The Port Authority of NY &

Date: 12/29/14

Date: 12/23/14

FEDERAL AVIATION ADMINISTRATION
APPROVED
FEB 17 2015

LOA-11

LETTER OF AGREEMENT

OPERATION OF HIGH-SPEED, TOWBARLESS AIRCRAFT TRACTORS AT JOHN F. KENNEDY INTERNATIONAL AIRPORT

The Port Authority of New York and New Jersey

and

The Federal Aviation Administration Air Traffic Control Tower

and

Swissport USA, Inc.

at

John F. Kennedy International Airport

EFFECTIVE: (no later than 12/31/2014)

1. **PURPOSE**: This Letter of Agreement (LOA) defines the authority, responsibilities, requirements, and procedures for operating high-speed, towbarless aircraft tractors, known in the industry as "supertugs", in the Airport Movement Area (AMA) area at John F. Kennedy International Airport (JFK).

2. **BACKGROUND**: Swissport USA, Inc. Airlines require the occasional movement of aircraft on the AMA with supertugs for numerous reasons including aircraft parking and departure metering. Qualified personnel and authorized equipment at JFK sourced from two different manufacturers. Because of their high speed and towbarless operation, supertugs will be permitted to cross an active runway.

3. **PROCEDURES & RESPONSIBILITIES**:

The Port Authority of NY & NJ; the Federal Aviation Administration Air Traffic Control Tower (FAA ATCT); and Swissport USA, Inc. at John F. Kennedy International Airport agree to comply with the following procedures for operating supertugs within the movement area.

Swissport USA, Inc.

1. Supertugs shall be operated in accordance with:
   a. All applicable FAA regulations and guidelines pertaining to aircraft towing operations;
   b. All applicable PANYNJ Air Terminal Rules and Regulations and local airport policies;
   c. All applicable company requirements.
2. Supertug operators shall meet all high-speed, towbarless tractor operator qualifications and maintain currency in required operator certifications and training, to include being properly trained and credentialed to Port Authority DR3 driver standards and maintaining currency in DR3 driver certification.

3. To operate within the movement area, supertugs must be properly equipped with functional radios capable of providing two-way communication with ATCT and airline/terminal ramp control, and must have a flashing or rotating beacon to enhance vehicle conspicuity.
4. Any JFK employee operating a tug must use a call sign that begins with "tug" at all times when communicating with FAA ATCT.
5. When towing an aircraft, the primary means of communication is FAA ground control frequency and between FAA ATCT and the tug operator. Communications with FAA ATCT via the aircraft brake rider is acceptable only in an emergency situation (i.e., lost communications). This requirement does not preclude the brake rider from listening to radio transmissions between the tug operator and FAA ATCT.
6. Operating conventional, towbar tugs on the AMA between the hours of 1400L - 2200L remains prohibited.
7. The operator is responsible for all movements on the ramp area and must obtain tower approval prior to entry onto the AMA and comply with control instructions issued to them while on that area. This includes those vehicles used to conduct pushback operations and shall require approval prior to moving aircraft/vehicles out of the loading ramps or parking areas.
8. JFK Airport Operations does not require the brake rider to be qualified with DR3 driving privileges. Air carriers determine their own brake rider qualifications.
9. Unless otherwise approved, supertugs operating on the AOA with no aircraft in tow shall use the Restricted Vehicle Service Road (RVSR). When supertug operations require movement across onto the AMA with no aircraft in tow, Swissport USA, Inc. shall request a vehicle escort from Port Authority Airport Operations and shall only enter the movement area under positive escort by Port Authority Airport Operations.
10. Supertug operators operating within the movement area with an aircraft under tow shall follow proper ATCT communication procedures, strictly adhere to all ATCT clearances, and utilize communications headsets, an enclosed tug cab, or other means to attenuate ambient noise.

Port Authority Airport Operations and FAA Air Traffic Control Tower

1. Port Authority Operations and FAA ATCT personnel will monitor supertug operations to ensure compliance with all safety and traffic procedures, rules and regulations.
2. Both the FAA and the Port Authority have the authority to immediately suspend supertug operations if it observes an unsafe act or procedure.

SIGNATURE PAGE FOR LETTER OF AGREEMENT HIGH SPEED TOW OPERATIONS:

Carl Haugen
VP NY Airports
Swissport USA, Inc.

Date: 12/15/14

David Siewert
Air Traffic Manager
Kennedy Tower
Federal Aviation Administration

Michael Moran
General Manager
Kennedy International Airport
The Port Authority of NY &

Date: 12/29/14

Date: 12/23/14

LOA-12

LETTER OF AGREEMENT

OPERATION OF HIGH-SPEED, TOWBARLESS AIRCRAFT TRACTORS AT JOHN F. KENNEDY INTERNATIONAL AIRPORT

The Port Authority of New York and New Jersey

and

The Federal Aviation Administration Air Traffic Control Tower

and

Triangle Services

at

John F. Kennedy International Airport

EFFECTIVE: (no later than 12/31/2014)

1. **PURPOSE:** This Letter of Agreement (LOA) defines the authority, responsibilities, requirements, and procedures for operating high-speed, towbarless aircraft tractors, known in the industry as "supertugs", in the Airport Movement Area (AMA) area at John F. Kennedy International Airport (JFK).

2. **BACKGROUND:** Triangle Services Airlines require the occasional movement of aircraft on the AMA with supertugs for numerous reasons including aircraft parking and departure metering. Qualified personnel and authorized equipment at JFK sourced from two different manufacturers. Because of their high speed and towbarless operation, supertugs will be permitted to cross an active runway.

3. **PROCEDURES & RESPONSIBILITIES:**

The Port Authority of NY & NJ; the Federal Aviation Administration Air Traffic Control Tower (FAA ATCT); and Triangle Services at John F. Kennedy International Airport agree to comply with the following procedures for operating supertugs within the movement area.

Triangle Services

1. Supertugs shall be operated in accordance with:
   a. All applicable FAA regulations and guidelines pertaining to aircraft towing operations;
   b. All applicable PANYNJ Air Terminal Rules and Regulations and local airport policies;
   c. All applicable company requirements.
2. Supertug operators shall meet all high-speed, towbarless tractor operator qualifications and maintain currency in required operator certifications and training, to include being properly trained and credentialed to Port Authority DR3 driver standards and maintaining currency in DR3 driver certification.
3. To operate within the movement area, supertugs must be properly equipped with functional radios capable of providing two-way communication with ATCT and

airline/terminal ramp control, and must have a flashing or rotating beacon to enhance vehicle conspicuity.

4. Any JFK employee operating a tug must use a call sign that begins with "tug" at all times when communicating with FAA ATCT.
5. When towing an aircraft, the primary means of communication is FAA ground control frequency and between FAA ATCT and the tug operator. Communications with FAA ATCT via the aircraft brake rider is acceptable only in an emergency situation (i.e., lost communications). This requirement does not preclude the brake rider from listening to radio transmissions between the tug operator and FAA ATCT.
6. Operating conventional, towbar tugs on the AMA between the hours of 1400L - 2200L remains prohibited.
7. The operator is responsible for all movements on the ramp area and must obtain tower approval prior to entry onto the AMA and comply with control instructions issued to them while on that area. This includes those vehicles used to conduct pushback operations and shall require approval prior to moving aircraft/vehicles out of the loading ramps or parking areas.
8. JFK Airport Operations does not require the brake rider to be qualified with DR3 driving privileges. Air carriers determine their own brake rider qualifications.
9. Unless otherwise approved, supertugs operating on the AOA with no aircraft in tow shall use the Restricted Vehicle Service Road (RVSR). When supertug operations require movement across onto the AMA with no aircraft in tow, Triangle Services, shall request a vehicle escort from Port Authority Airport Operations and shall only enter the movement area under positive escort by Port Authority Airport Operations.
10. Supertug operators operating within the movement area with an aircraft under tow shall follow proper ATCT communication procedures, strictly adhere to all ATCT clearances, and utilize communications headsets, an enclosed tug cab, or other means to attenuate ambient noise.

Port Authority Airport Operations and FAA Air Traffic Control Tower

1. Port Authority Operations and FAA ATCT personnel will monitor supertug operations to ensure compliance with all safety and traffic procedures, rules and regulations.
2. Both the FAA and the Port Authority have the authority to immediately suspend supertug operations if it observes an unsafe act or procedure.

SIGNATURE PAGE FOR LETTER OF AGREEMENT HIGH SPEED TOW OPERATIONS:

Peter Diaz
SVP Operations & Services

Date: 12/23/2014

David Siewert
Air Traffic Manager
Kennedy Tower
Federal Aviation Administration

Michael Moran FOR
General Manager
Kennedy International Airport
The Port Authority of NY &

Date: 12/29/14

Date: 12/31/14

FEB 17 2015

Section 307 - Unpaved Areas

There are no unpaved areas available for air carrier operations at JFK International Airport.

FEDERAL AVIATION ADMINSTRATION
APPROVED: Vincent E. Gaetano
DATE: FEB 0 8 2005

Section 309 – Safety Areas

(a) Safety Area Dimensions

Safety areas are maintained at the dimension that existed on December 31, 1987. If a runway or taxiway is reconstructed or a runway is extended, safety area dimensions shall conform to FAA standards in AC 150/5300-13, *Airport Design*, unless otherwise authorized by the Administrator. The Airport Reference Code (ARC) is D-VI. Safety area dimensions are as follows:

- **Runways 13R/31L Approach Ends** – 250 feet each side of runway centerline. From runway threshold to a distance of 1,000 feet; extending 250 feet each side of the extended runway centerlines. See Exhibit 309-1 and 309-2.

- **Runway 4L Approach End** – 250 feet each side of runway centerline. From runway threshold to a distance of 141 feet; extending 250 feet each side of the extended runway centerline. See Exhibit 309-3.

- **Runway 22R Approach End** – 250 feet each side of runway centerline. From runway threshold to a distance of 885 feet; extending 250 feet each side of the extended runway centerline. See Exhibit 309-4

- **Runway 13L Approach End** – 250 feet each side of runway centerline. From runway threshold to a distance of 514 feet, extending 250 feet south of the extended runway centerline. From runway threshold to a distance of 552 feet, extending 250 feet north or the extended runway centerline. See Exhibit 309-5.

- **Runway 31R Approach End** – 250 feet each side of runway centerline. From runway threshold to a distance of 1,000 feet, extending 250 feet each side of the extended runway centerline. See Exhibit 309-6.

- **Runway 4R Approach End** – 250 feet each side of runway centerline. From runway threshold to a distance of 467 feet, extending 250 feet each side of the extended runway centerline. An Engineered Material Arresting System (EMAS) is installed 35 feet from runway threshold to a distance of 405 feet, extending 113 feet each side of the extended runway centerline. See Exhibit 309-7

- **Runway 22L Approach End** – 250 feet each side of runway centerline. From runway threshold to a distance of 514 feet, extending 250 feet each side of the extended runway centerline. An Engineered Material Arresting System (EMAS) is installed 113.5 feet from runway threshold to a distance of 392 feet, extending 109.5 feet each side of the extended runway centerline. See Exhibit 309-8.

- **Taxiways** – 131 feet each side of taxiway centerlines.

Required Conditions of Safety Areas

Safety area conditions are maintained as follows:

(1) Each safety area shall be cleared and graded, and shall be maintained free of potentially hazardous ruts, humps, depressions, or other surface variations. *The only exceptions are the taxiway bridges on taxiways A and B and an area west of taxiway B (from the extended centerline of taxiway NC to the taxiway bridge);*

(2) Each safety area shall be drained by grading and storm sewers to prevent water accumulation;

(3) Each safety area shall be capable under dry conditions of supporting snow removal equipment, aircraft rescue and firefighting equipment and the occasional passage of aircraft without causing major damage. Manhole or duct access covers are constructed of material of sufficient thickness and strength to support equipment and aircraft;

(4) No object shall be located in any safety area, except for objects that need to be located in the safety area because of their function. These objects shall be constructed, to the extent practical, on frangible mounted structures of the lowest practical height and maintained so the frangible point is no higher than 3 inches above grade. *The only exceptions are a blast fence located north of taxiway FA and a fence located west of taxiway E (between taxiway FB and taxiway Y);*

(5) Safety areas shall conform to dimensions acceptable to the FAA if any runways or taxiways are constructed, reconstructed, or extended.

EXHIBIT 311-1

AIRPORTS DIVISION
[redacted] CRITERIA WAIVER REQUEST

NUMBE	IDENTIFICATION	CY	SEQUENCE
INTERIM			
OFFICIAL			

1. FACILITY AND LOCATION *(Including applicable runway, if Navaids)*

Centerline Lights, R/W 13L, JFK Intl. Airport, Jamaica, N. Y.

2. WAIVER REQUIRED AND APPLICABLE STANDARDS

To permit installing bi-directional centerline lights in displaced threshold area in lieu of uni-directional (blanked out) centerline lights as required by AC 150/5340-4C, par. 3C(1).

3. REASON FOR WAIVER *(Justification for nonstandard treatment)*

To provide centerline lights for take-off operations when the RVR is below 1600 as required by Order 6560.10A.

4. ALTERNATIVE SOLUTIONS CONSIDERED AND REASONS FOR NOT RECOMMENDING

Re-wire light system to permit operating centerline lights in displaced area independently of centerline lights in landing area. This solution is not considered economically feasible since the system is existing and extensive construction would be required.

5. LIST OF SUPPORTING DOCUMENTS ATTACHED

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: 9/21/2012

6. PERSON MOST FAMILIAR WITH SITUATION
J. F. Ryan

TELEPHONE NO.
995-3747

7. SUBMITTED BY

OFFICE IDENTIFICATION	TITLE	SIGNATURE
AEA-620	Airport Engineering Officer	John F Ryan

FAA Form 6000-3 (3-73) SUPERSEDES FAA FORM 6700-1

8. REGIONAL REVIEW ACTION									
INITIAL	ROUTING SYMBOL	DATE	CONCUR	DO NOT CONCUR	INITIAL	ROUTING SYMBOL	DATE	CONCUR	DO NOT CONCUR
	600	3/13/78				400	4/13		
	200	4/12/78							
	500	4/19/78							

COMMENTS

AEA-620: This criteria waiver request will be approved at regional level. There will be no Washington action.

RECOMMEND APPROVAL / DISAPPROVED	SIGNATURE	TITLE AEA-620 Chief, Engineering Branch	DATE

9. WASHINGTON ACTION									
INITIAL	ROUTING SYMBOL	DATE	CONCUR	DO NOT CONCUR	INITIAL	ROUTING SYMBOL	DATE	CONCUR	DO NOT CONCUR
	AFS-260	4/4/78							

OMMENTS

FEDERAL AVIATION ADMINISTRATION

APPROVED: Evelyn Mastracy

DATE: 9/21/2012

APPROVED / DISAPPROVED	SIGNATURE	TITLE Chief, Air Carrier Division AFS-200	DATE 4/5/78

*-1976-GPO-1703M/771-758/3

Info
600 4/20
601
Ret. → 620 for
[illegible]

April 19, 1978

AEA-620

JFK Intl. Airport, Jamaica, New York
Newark Intl. Airport, Newark, New Jersey
Criteria Waiver Requests, Centerline Lights

Chief, Engineering & Certification Branch, AEA-620

ADO - N. Y.

We concur in the request for a waiver to AC 150/5340-4C, par. 3c(1) referred to in your letter of April 17, 1978.

Enclosed for your information and files are copies of FAA Form 6000-3, Criteria Waiver Request. There is one completed copy for JFK R/W 13L and one copy for Newark R/W 4R.

Original Signed By
John E. Ryan

CARL J. STEINHAUER

Enclosures - 2

JRyan:dbl AEA-620 ext.3747 4/19/78

cc: file

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: 9/21/12

EXHIBIT 311-2

FAA EASTERN REGION
MODIFICATION OF AIRPORT DESIGN STANDARDS

BACKGROUND

1. AIRPORT:	2. LOCATION (CITY, STATE):	3. LOC ID:
John F. Kennedy International Airport	Queens, New York	JFK

4. EFFECTED RUNWAY/TAXIWAY:	5. APPROACH (EACH RUNWAY):	6. AIRPORT REF. CODE (ARC):
Westside of R/W 4R-22L and T/W H.	_X_ PIR ___ NPI ___ VISUAL	D-V

7. DESIGN AIRCRAFT (EACH RUNWAY/TAXIWAY):

747-400

MODIFICATION OF STANDARDS

8. TITLE OF STANDARD BEING MODIFIED (CITE REFERENCE DOCUMENT):

AC 150/5300-18C, Table 2: Location Distances for Taxiway Guidance Signs

9. STANDARD/REQUIREMENT:

A size 3 sign has a perpendicular distance from defined taxiway/runway edge to near side of sign between 35 – 60 feet.

10. PROPOSED:

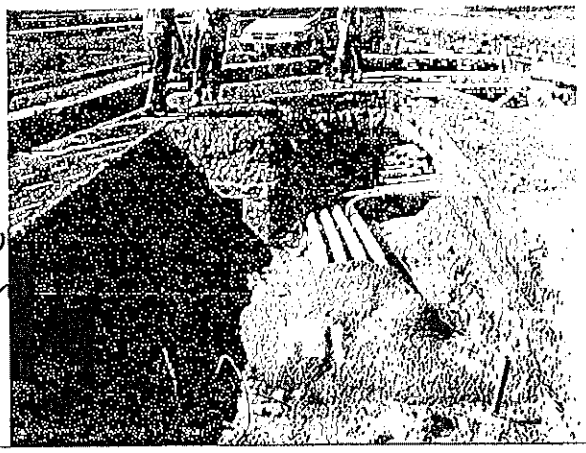
To allow the following four (4) signs to have a distance greater than 60 ft. Signs 316C and 326B are located at 70 ft, and sign 326C is located at 66' from the runway edge. Sign 326D is located at 68' from the taxiway edge.

See attached Spread Sheets Exhibit A, B and C for photos of current location of signs and shoulder diagram of 4R.

11. EXPLAIN WHY STANDARD CANNOT BE MET (FAA ORDER 5300.1B):

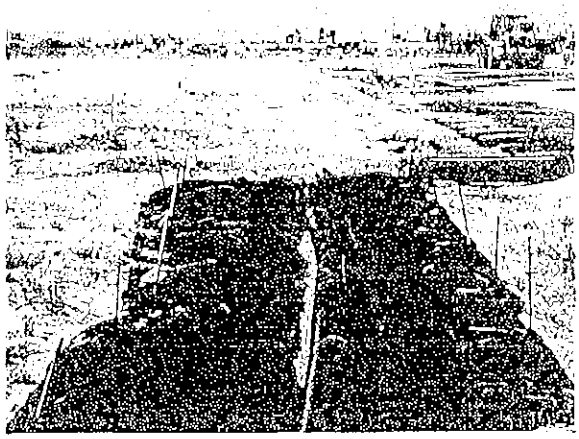
Reasons why the signs can't be placed either 1) over the Power & Communications Duct banks or 2) over / in the French (Stone) Drain:

1) The Port Authority standard cover over the top of a duct bank is 30" of back fill (as is the case for the electrical & communications duct banks that parallel Runway 4R-22L. The depth of the actual pre-cast concrete sign foundation is 34". In addition, the standard detail also calls for an additional 6" of sub base material under the foundation. Without extensive remedial work in modifying (chopping/ cutting), the sign cannot be placed over the duct bank.



FEDERAL AVIATION ADMINSTRATION
APPROVED: Evelyn Martin
DATE: MAR 26 2012

2) The detail for the French drain includes the excavated trench, a geotextile trench liner, a 12" diameter perforated pipe, and filter stone backfill. Although the trench averages 5 ' in depth, installation of the sign foundation directly over the perforated pipe, "in" the drain system, jeopardizes the integrity of the pipe and reduces the effective area of draw down for the French drain system.



The signs would also pose a significant hazard in the compliant location (40' from runway edge) due to being subjected to increased exposure to jet blast. The signs placed in the AC compliant locations will impact our abilities to remove snow in an acceptable manner, the signs would then be placed where snow would be "thrown" from our removal process, not only rendering them useless if covered, however: more likely damaged.

12. DISCUSS VIABLE ALTERNATIVES (FAA ORDER 5300.1E):

No other alternatives.

13. STATE WHY MODIFICATION WOULD PROVIDE ACCEPTABLE LEVEL OF SAFETY (FAA ORDER 5300.1E):

Exit signs 316C, 326B and 326C off of runway 4R-22L as well as sign 326D off of taxiway H are visible to pilots and cause no unsafe level of operation.

ATTACH ADDITIONAL SHEETS AS NECESSARY – INCLUDE SKETCH/PLAN

FEDERAL AVIATION ADMINSTRATION
APPROVED: Evelyn Martinez
DATE: MAR 26 2012

FAA EASTERN REGION
MODIFICATION OF AIRPORT DESIGN STANDARDS

MODIFICATION:	LOCATION:	PAGE 2 OF 2
Signage	John F. Kennedy International Airport	

14. SIGNATURE OF ORIGINATOR:	15. ORIGINATOR'S ORGANIZATION:	16. TELEPHONE:
Kevin Bleach, Manager Aviation Aeronautical & Technical Services Division	Port Authority of NY & NJ Aviation Department	212.435.3727

17. DATE OF LATEST FAA SIGNED ALP:

18. ADO RECOMMENDATION:	19. SIGNATURE:	20. DATE:
Conditional approval	Philip Brito	09/04/04

21. FAA DIVISIONAL REVIEW (ATL/AIRFS):

ROUTING SYMBOL	SIGNATURE	DATE	CONCUR	NON-CONCUR

COMMENTS:

22. AIRPORTS' DIVISION FINAL ACTION:

[X] UNCONDITIONAL APPROVAL	[ ] CONDITIONAL APPROVAL	[ ] DISAPPROVAL

DATE:	SIGNATURE:	TITLE:

CONDITIONS OF APPROVAL:

FEDERAL AVIATION ADMINSTRATION
APPROVED: Evelyn Martinez
DATE: MAR 26 2012

FAA EASTERN REGION
MODIFICATION OF AIRPORT DESIGN STANDARDS

MODIFICATION:	LOCATION:	PAGE 2 OF 2
Signage	John F. Kennedy International Airport	

14. SIGNATURE OF ORIGINATOR:	15. ORIGINATOR'S ORGANIZATION:	16. TELEPHONE:
Kevin Bleach, Manager Aviation Aeronautical & Technical Services Division	Port Authority of NY & NJ Aviation Department	212.435.3727

17. DATE OF LATEST FAA SIGNED ALP:

18. ADO RECOMMENDATION:	19. SIGNATURE:	20. DATE:
Conditional approval	Philip Brito	09/04/04

21. FAA DIVISIONAL REVIEW (AT/AE/FS):

ROUTING SYMBOL	SIGNATURE	DATE	CONCUR	NON-CONCUR

COMMENTS:

22. AIRPORTS' DIVISION FINAL ACTION:

[ ] UNCONDITIONAL APPROVAL	[X] CONDITIONAL APPROVAL	[ ] DISAPPROVAL

DATE:	SIGNATURE:	TITLE:

CONDITIONS OF APPROVAL:

SEE LETTER DATED 4/26/05

FEDERAL AVIATION ADMINSTRATION

APPROVED: Evelyn Martinez

DATE: MAR 26 2012

EXHIBIT 311-4

FAA EASTERN REGION
MODIFICATION OF AIRPORT DESIGN STANDARDS

Date, June 7, 2007

BACKGROUND

JFK International Airport	Queens, New York	KJFK
RWY 4R/22L	4R / 22L PIR NPI VISUAL	D - V

B747-400

MODIFICATION OF STANDARDS

STANDARD BEING MODIFIED

AC 150/5340-30B, Design and Installation Details for Airport Visual Aids dated 8/1/2006

Chapter 2, paragraph 2.1.2 b. Threshold / Runway End Lights ...combination threshold and runway end lights are located on a line perpendicular to the extended runway centerline not less than 2 feet and not more than 10 feet outboard from the designated runway threshold

and

Figure 105, see Attachment A

PROPOSED

Permit the existing Threshold / Runway End Lights to remain at 24 inches high within 10 feet of the runway thresholds

EXPLAIN WHY STANDARD CANNOT BE MET

The existing runway edge light system for Runways 4R and 22L has threshold/runway end lights, 24 inches high, located within 10 feet of the runway thresholds, current regulations require the lights to be installed at 14 inches. The runway edge light system would have to be relocated to 10 feet from the runway threshold. Lowering the lights to the identified heights present's two safety concerns:

1) A conflict with the existing ALSF-2 threshold bars that are located 10 feet from the runway thresholds. Lowering the lights to 14-inch height will result in two sets of lights on an identical light plane only a few feet apart. The installation of the lights at an equal height with minimal separation will create a blending effect, rendering the runway end lights indiscernible, creating an unsafe runway environment.
2) Obscuration of the lights during periods of heavy snow accumulation

ALTERNATIVE

Reduce the Threshold / Runway End Lights to 14 inches, creating what we believe to be an unsafe condition

Relocate the Threshold / Runway End Lights out to 10 feet. This alternative would place the light bar beyond the ALSF-2 Threshold Bar, this is an unacceptable alternative, see Attachment B

FEDERAL AVIATION ADMINISTRATION

APPROVED: Evelyn Martinez

DATE: 6/20/2013

EXHIBIT 311-4

FAA EASTERN REGION
MODIFICATION OF AIRPORT DESIGN STANDARDS

Date: June 7, 2007

[illegible] PROVIDE ACCEPTABLE LEVEL OF SAFETY [illegible]

The purpose of the Threshold / Runway End Lights is to provide identifiable means for locating the runway end during nighttime or low visibility conditions. By elevating the Threshold / Runway End Lights to 24 inches we are creating a more conspicuous means of identifying the runway end. Lights installed at a height of 14 inches may become camouflaged within the ALSF-2 threshold bar, reducing the visual conspicuity or obscured during heavy snow accumulation.

ATTACH ADDITIONAL SHEETS AS NECESSARY - INCLUDE SKETCH/PLAN

FEDERAL AVIATION ADMINISTRATION

APPROVED: Evelyn Martinez

DATE: 6/20/2013

EXHIBIT 311-4

FAA EASTERN REGION
MODIFICATION OF AIRPORT DESIGN STANDARDS

Date: June 7, 2007

MODIFICATION RWY 4R/22L Threshold/Runway End Lights	LOCATION: JFK – Runway 4R/22L	
14. SIGNATURE OF ORIGINATOR: Scott Marsh – Aeronautical and Technical Services	15. ORIGINATOR'S ORGANIZATION: The Port Authority of New York and New Jersey	16. TELEPHONE 212-435-3808

17. DATE OF LATEST FAA SIGNED ALP

Dec. 3, 2004, with parallel changes

18. ADO RECOMMENDATION Unconditional Approval	19. SIGNATURE	20. DATE 11/19/12

21. FAA DIVISIONAL REVIEW (AT ADO LEVEL)

ROUTING SYMBOL	SIGNATURE	DATE	CONCUR	NON-CONCUR
AEA-620		11/21/2012	✓	

COMMENTS

22. AIRPORTS DIVISION FINAL DECISION

[ ] UNCONDITIONAL APPROVAL	[X] CONDITIONAL APPROVAL	[ ] DISAPPROVAL

DATE 1/14/13	SIGNATURE	TITLE ARS-100 MANAGER

CONDITIONS OF APPROVAL

CONDITIONS AS PER MEMO FROM JOHN A DERMODY TO TERESA RIZZUTO DATED JAN 14, 2013 (SEE ATTACHED)

FEDERAL AVIATION ADMINISTRATION

APPROVED: Evelyn Martinez

DATE: 6/20/2013

EXHIBIT 311-6

FAA EASTERN REGION
MODIFICATION OF AIRPORT DESIGN STANDARDS

Date: October 10, 2007

BACKGROUND

1. AIRPORT	2. LOCATION(CITY,STATE)	3. LOC ID:
JFK International Airport	Queens, New York	KJFK

4. EFFECTED RUNWAY/TAXIWAY:	5. APPROACH (EACH RUNWAY):	6. AIRPORT REF. CODE (ARC):
All Taxiways	4R, 4L, 13L, 22R, 22L, 31R, 31L PIR ___ NPI 13R VISUAL	D – V (Future D–VI)

7. DESIGN AIRCRAFT (EACH RUNWAY/TAXIWAY):

B747-400 (Future Airbus - A380)

MODIFICATION OF STANDARDS

8. TITLE OF STANDARD BEING MODIFIED (CITE REFERENCE DOCUMENT):

AC 150/5340-30B – Design and Installation Details for Airport Visual Aids

9. STANDARD/REQUIREMENT:

Paragraph 2.1.3.b "Fixtures in the edge lighting system are located... not more than 10 feet outward of the full strength pavement."

10. PROPOSED:

The Port Authority of NY & NJ requests approval to increase the offset distance to 15 feet outward of the full strength pavement (taxiway edge).

11. EXPLAIN WHY STANDARD CANNOT BE MET (FAA ORDER 5300.1E):

Taxiway centerline lighting has been installed as the primary taxiway lighting system at JFK International Airport. The centerline lighting is supplemented with taxiway edge delineators throughout the entire taxiway system. Taxiway edge lighting is installed at key locations as a supplement as well.

The active taxiway lighting system complies with current FAA standards as detailed within AC 150/5340-30B. The Port Authority of NY & NJ is submitting this proposal in an effort to increase safety and prevent injury. Air traffic demand is increasing, delays are increasing, and aircraft size is increasing. However, the ability to increase the airport size is prohibited by physical constraints. The increase in aircraft size has caused us to survey potential hazardous conditions and implement corrective actions. One area identified is the accumulation of snow banks along the taxiway delineators and/or lights see Attachment A. Snow banks have the potential of containing compacted snow and ice which has been removed from the taxiway surfaces. These snow banks currently are directly under the engines of larger aircraft. We have had instances where these materials have been ingested, causing damage to aircraft engines, which has the possibility of causing injury.

Increasing the displacement of the fixtures, lights/delineators, to a distance of 15 feet from the defined taxiway edge will allow an increased level of safety by removing the accumulated snow from below aircraft engines as quickly as possible.

12. DISCUSS VIABLE ALTERNATIVES (FAA ORDER 5300.1E):

1. Do nothing.
2. Remove the existing taxiway edge lighting systems, lights and delineators.
3. Develop snow removal procedures requiring extended taxiway closures, which will result in increased delays and financial hardships on the airlines, airport tenants, and operators at the airport.

FEDERAL AVIATION ADMINISTRATION

APPROVED: Evelyn Mastroy

DATE: 6/20/2013

EXHIBIT 311-6

FAA EASTERN REGION
MODIFICATION OF AIRPORT DESIGN STANDARDS

Date: October 10, 2007

13 STATE WHY MODIFICATION WOULD PROVIDE ACCEPTABLE LEVEL OF SAFETY (FAA ORDER 5300.1E):

This request to increase the separation of the taxiway edge lighting system from the standard of 10 feet to an improved distance of 15 feet is an effort to minimize a potential hazard and increase the level of safety at the facility.

As previously stated, taxiways at JFK are equipped with taxiway centerline lighting as the primary lighting system, all taxiway edge lighting systems are supplemental

ATTACH ADDITIONAL SHEETS AS NECESSARY - INCLUDE SKETCH/PLAN

FEDERAL AVIATION ADMINISTRATION

APPROVED: Shulyn Mastney

DATE: 6/20/2013

EXHIBIT 311-6

FAA EASTERN REGION
MODIFICATION OF AIRPORT DESIGN STANDARDS

Date: October 10, 2007

MODIFICATION: TWY Delineator	LOCATION: JFK International Airport	
14. SIGNATURE OF ORIGINATOR: Scott Marsh – Aeronautical and Technical Services	15. ORIGINATOR'S ORGANIZATION: The Port Authority of New York and New Jersey	16. TELEPHONE: 212-435-3898

17. DATE OF LATEST FAA SIGNED ALP:

Dec. 3, 2004, with pen/ink changes

18. ADO RECOMMENDATION: Unconditional Approval	19. SIGNATURE:	20. DATE: 11/19/12

21. FAA DIVISION REVIEW (AT, ATS):

ROUTING SYMBOL	SIGNATURE	DATE	CONCUR	NON-CONCUR
AEA-620		11/21/2012	✓	

COMMENTS:

22. AIRPORT SPONSOR ACTION:

[ ] UNCONDITIONAL APPROVAL	[X] CONDITIONAL APPROVAL	[ ] DISAPPROVAL
DATE: 1/14/13	SIGNATURE:	TITLE: ARS-100 MANAGER

CONDITIONS OF APPROVAL:

CONDITIONS PER ATTACHED MEMO FROM ARS-100 MANAGER TO AEA 620 MANAGER DATED JAN. 14, 2013

FEDERAL AVIATION ADMINISTRATION

APPROVED: Marilyn Martinez

DATE: 6/20/2013

EXHIBIT 311-7

FAA EASTERN REGION
MODIFICATION OF AIRPORT DESIGN STANDARDS

Date: February 4, 2010

BACKGROUND

1. AIRPORT	2. LOCATION (CITY, STATE)	3. LOCID
JFK International Airport	Jamaica, New York	KJFK

4. AFFECTED RUNWAY/TAXIWAY	5. APPROACH (EACH RUNWAY)	6. AIRPLANE FAMILY (ARC)
RWY 4L/22R	4L / 22R PIR NPI VISUAL	C – V

7. DESIGN AIRCRAFT (EACH RUNWAY):

B747-400

MODIFICATION OF STANDARDS

8. NAME OF STANDARD BEING MODIFIED (CITE REFERENCE DOCUMENT):

AC 150/5340-30D, Design and Installation Details for Airport Visual Aids, dated 9/30/2008

9. STANDARD REQUIREMENT:

Chapter 2, paragraph 2.1.2 b, Threshold / Runway End Lights . combination threshold and runway end lights are located on a line perpendicular to the extended runway centerline not less than 2 feet and not more than 10 feet outboard from the designated runway threshold. ..
and Figure 106, see Attachment A.

10. PROPOSED

Permit the existing Threshold / Runway End Lights to remain at 24 inches high within 10 feet of the runway thresholds

11. EXPLAIN WHY STANDARD CANNOT BE MET (ORDER 5300.15):

The existing runway edge light system for Runways 4L and 22R has threshold/runway end lights, 24 inches tall, located within 10 feet of the runway thresholds, current regulations require the lights to be installed at 14 inches. The runway edge light system would have to be relocated to 10 feet from the runway threshold. Lowering the lights to the identified height present a safety concern during periods of heavy snow accumulation the lights may be obscured.

12. DISCUSS WHY THE PROPOSED MODIFICATION IS ACCEPTABLE (ORDER 5300.15):

Reduce the Threshold / Runway End Lights to 14 inches, creating what we believe to be an unsafe condition

Relocate the Threshold / Runway End Lights out to 10 feet. This alternative would be accomplished during the planned runway rehabilitation within 5 years.

13. STATE WHY THE PROPOSED MODIFICATION WILL PROVIDE AN EQUIVALENT LEVEL OF SAFETY (ORDER 5300.15):

The purpose of the Threshold / Runway End Lights is to provide identifiable means for locating the runway end during nighttime or low visibility conditions. By elevating the Threshold / Runway End Lights to 24 inches we are creating a more conspicuous means of identifying the runway end. Lights installed at a height of 14 inches may become obscured during heavy snow accumulation.

ATTACH ADDITIONAL SHEETS IF NECESSARY. INCLUDE ALL RELEVANT DATA.

FEDERAL AVIATION ADMINISTRATION

APPROVED: Evelyn Martinez

DATE: 6/20/2013

EXHIBIT 311-7

FAA EASTERN REGION
MODIFICATION OF AIRPORT DESIGN STANDARDS

Date. February 4, 2010 — Page 2 of 2

MODIFICATION: RWY 4L/22R Threshold/Runway End Lights	LOCATION: JFK – Runway 4L/22R	
14. SIGNATURE OF ORIGINATOR: Scott [illegible] – Administrical and Technical Services	15. ORIGINATOR'S ORGANIZATION: The Port Authority of New York and New Jersey	16. TELEPHONE 212-435-3898

17. DATE OF LATEST FAA SCOPING MEETING:

Dec. 3, 2004, with pen/ink changes

18. ADO RECOMMENDATION: UNCONDITIONAL APPROVAL	19. SIGNATURE: [signature]	20. DATE: 11/19/12

21. FAA DIVISIONAL REVIEW (AT, AF, FS)

ROUTING SYMBOL	SIGNATURE	DATE	CONCUR	NON-CONCUR
AEA-620	[signature]	11/21/2012	✓	

COMMENTS:

22. AIRPORTS DIVISION FINAL ACTION

[ ] UNCONDITIONAL APPROVAL	[X] CONDITIONAL APPROVAL	[ ] DISAPPROVAL

DATE 1/14/13	SIGNATURE [signature]	TITLE AAS-100 MANAGER

CONDITIONS OF APPROVAL

CONDITIONS PER ATTACHED MEMO FROM AAS-100 MANAGER TO AEA-620 MANAGER DATED JAN 14, 2013.

FEDERAL AVIATION ADMINISTRATION

APPROVED: [signature]

DATE: 6/20/2013

Section 313 - Snow and Ice Control

I. Responsibilities and Supervision

The Airport Manager or his/her designee is responsible for the following during pre-season planning, pre-storm planning, continuous monitoring, and runway closure operations and decisions:

1. Pre Season Planning

Snow and Ice Control Meetings

JFK Airport hosts a Snow and Ice Control Meeting prior to the start of the snow season. Other Snow and Ice Control meetings are conducted throughout the season, as needed.

The Snow and Ice Control meetings consist of:

- Airport operations and maintenance staff
- Airline personnel
- FAA
- Other concerned parties deemed necessary, such as service providers and contractors

The Snow and Ice Control meetings address the following:

- Pre-season preparations
- The operational plan
- The needs of airport users
- Critique of / Feedback on the previous snow removal operation

When practical a Snow and Ice Control Meeting will be held after every major snow event.

2. Snow Control Center (SCC)

A Snow Control Center is established during the snow season. This is the primary location for snow and Ice control planning and monitoring activities. The JFK SCC is located in the Operations Control Center located at Building 145.

3. **Pre-Storm Planning**

(a) When inclement weather is expected, a complete weather forecast will be compiled by the Airport Duty Manager (ADM), or designee. Its information should contain, when available, facts such as:

- Storm Movement
- Types of Precipitation
- Wind Direction and Velocity
- Ambient Temperatures
- Surface Temperatures
- Expected Accumulation
- Extended Forecast

Once information is compiled, the ADM will consult with airport management and airport maintenance to determine the best course of action for the impending storm. Discussions will include alert level, start time, staffing levels, anticipated anti-icing/deicing strategies and anticipated snow removal strategy.

(b) Appropriate staffing (based on alert level) will be notified of impending storm and given a response time.

(c) Information on impending storm, alert level and start time will be disseminated to the airport community via Irregular Operations Network.

4. **Continuous Monitoring**

(a) While freezing and/or frozen precipitation is falling, it is the responsibility of the ADM to continuously monitor aspects such as:

- Surface Conditions
- Air Temperatures
- Surface Temperatures
- Precipitation Types
- Precipitation Accumulation Rates
- Weather Patterns
- Pilot Braking Action Reports (PIREP).

(b) The ADM will maintain a constant check of runway conditions during snow or ice storms to evaluate the presence of contaminants, type and depth.

(c) The ADM will monitor ATC and pilot communications (PIREPS). Braking action reports are provided via PIREPS to the ATCT. JFK Operations does not issue NOTAMS regarding braking action reports.

(d) If the ADM deems necessary, due to prevailing conditions, runways and/or taxiways will be closed and appropriate NOTAMS issued. Once conditions are improved, the ADM will reopen areas for aircraft operations and NOTAMS will be cancelled.

(e) During snow removal operations runway friction testing may be conducted by the ADM to provide trend data (Mu values) for Airport Operations staff. Mu values will not be transmitted via NOTAM or comumunicated to ATCT.

5. **Requirements for Runway Closures**

(a) The runway will be closed for aircraft use if it has more than one half inch of slush, wet snow or two (2) inches of dry snow.

(b) Two consecutive "POOR" braking action reports or a "NIL" pilot braking action report requires ATCT Staff to immediately cease operations and notify the ADM of these conditions. Upon notification, the ADM will close the affected runway.

Under the conditions noted above Operations Staff will take the appropriate steps, using all available equipment and materials, to improve the surface conditions. The ADM will notify ATCT Staff when it is satisfied that the conditions no longer exist. See LOA-2, dated December 18, 2014

6. **Contractors**

All outside contractors employed for snow and ice control operations will be subject to all airport regulations. They will operate under the supervision of the ADM or his/her designee. At no time will the contractors be permitted to operate equipment on movement areas without being escorted by qualified personnel. Snow removal contractors will provide equipment and trained personnel for emergency snow removal operations as appropriate.

Terminal Operators

Terminal Operators are responsible for snow removal within their leasehold area.

Other

Port Authority Operations will:

- Maintain access for FAA personnel to NAVAID sites
- Advise ATC of current field conditions
- Disseminate airport conditions through the NOTAM and current electronic disseminiation systems

II. Priority Areas

Active runways, their associated taxiways, access for FAA personnel to NAVAID sites, mutual aid access point, including gate operability (Guard Post W adjacent Building 269), and emergency response roadways on the AOA will receive priority. Priority One areas will be addressed first unless weather conditions dictate otherwise. All other areas will be addressed in order of importance. See Exhibit 313-1 for Priority One Area Map.

III. Vehicles

(a) All snow removal vehicles operating on aircraft movement areas must be equipped with a two-way radio and flashing yellow beacons -or- be under the direct control of a vehicle so equipped.

(b) Facility snow fighting equipment is essentially divided into four major categories:

1) Multifunctionals (Plowing, sweeping, snow blowing)
2) Sweeper & De-icer Equipment
3) Heavy Duty Speed Plows
4) High Speed Rotary Equipment

(c) Runways and Taxiways may be cleaned by groups made up of equipment from each of these four classes. The specific composition of each of these groups will depend entirely on equipment available and amount and nature of the snow to be removed. Contractor's equipment may also be hired and used in these areas as needed. In any event, there will be simultaneous operations on both Runway and Taxiways, all of which will be supervised by both Maintenance and Operations personnel.

IV. Snow Removal Operations

(a) The following principles regarding snow removal shall be adhered to in maintaining safe operating conditions on airport movement areas:

- Drifted or windrowed snow will be removed promptly from runway, taxiway, and ramp surfaces.

- In the event of heavy snow accumulation, the height of snowbanks alongside usable runway, taxiway, and ramp surfaces must be such that all aircraft propellers, engine pods, rotors and wingtips, will clear each snowdrift and snowbank when the aircraft's landing gear traverses any full strength portion of the movement area.
- In the event that the snow removal crew is unable to comply promptly with the requirements stated above, the ADM will utilize the NOTAM system to describe the conditions and will promptly notify the air carrier operations offices, airport control tower, and other airport users.
- The snow removal program will be activated as soon as snow starts to fall. The runways to be plowed are determined on the basis of wind direction. The associated taxiways are also cleared for a particular runway.

(b) Runway conditions will be disseminated to air carriers via the NOTAM and Irregular Operations Network. Runway use will be at the discretion of the Pilot-in-Command. Additionally, snow will be removed from all ILS critical areas as appropriate and in accordance with AC 150/5200-30, current edition.

(c) Drifted or piled snow will be moved off useable runway and taxiway surfaces and positioned at a height so regulated that all aircraft propellers, engine pods, and wingtips will clear snowdrifts and snowbanks when the aircraft's most critical landing gear is located at any point along the full strength edge of the runway or taxiway. Snow or snowbank heights will not exceed the following criteria as stated in AC 150/5200-30, current edition. See Snowbank Height Criteria shown in Exhibit 313-2.

- **NOTE:** The shoulder area northeast of taxiway "TB", between the taxiway and the JFK Expressway, has a positive gradient of 5%.

(d) Snowbank Height Criteria as follows:

a. 0 inches of snow at the edge of the full strength pavement
b. 6 inches of snow outboard of the runway edge lights
c. 3 feet of snow at 50 feet from the edge of the full strength pavement
d. 5 feet of snow 66 feet from the edge of the full strength pavement
e. 14 feet of snow 112 feet from the edge of the full strength pavement

When unable to comply with this requirement, the airport shall issue a NOTAM describing the existing conditions.

(e) Signs and lights will be frequently inspected by the ADM or his designee for visibility and should be cleared as appropriate or a NOTAM will be issued.

(f) In the event that the rate of snow fall, together with gusty winds and poor visibility, requires that airport operations cease, the ADM will advise of the estimated downtime of the airport and the estimated time of reopening. Appropriate NOTAMS will be issued and messages will be disseminated via the Irregular Operations Network.

(g) During winter operations when the airport is performing snow removal on a runway(s), the runway(s) will be closed with local coordination between FAA Air Traffic Control and Airport Operations. If any runway has an anticipated closure time of greater than ninety (90) minutes, then a Notice-to-Airmen (NOTAM) will be issued utilizing the NOTAM system.

V. Ice Control

A. A Runway Weather Information System (RWIS) with sensors embedded in runway and taxiway surfaces will be utilized along with physical inspections to monitor the surface condition relating to snow and ice.

B. Ice control on runways – In accordance with the specification contained in AC 150/5200-30, current edition, a combination of glycol (or Potassium Acetate) and sand which will be used to create a surface acceptable for aircraft operations.

C. A liquid chemical may be used in both an anti-icing mode and de-icing mode on taxiways along with a glycol and sand mix.

D. ABSOLUTELY NO CHLORIDE SALTS OR OTHER CORROSIVE CHEMICALS WILL BE USED ON AIRCRAFT MOVEMENT AREAS.

VI. Cleanup

The ADM or operations staff will assure the following:

- All snow windrows are removed as soon as possible after a storm ends
- Excess sand is removed from runways as soon as the surface is dry and braking action has been restored
- The airfield is checked for broken or damaged lights and signs and repairs are made

LOA-2

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY
JOHN F. KENNEDY INTERNATIONAL AIRPORT
AND
FEDERAL AVIATION ADMINISTRATION
JOHN F. KENNEDY INTERNATIONAL AIRPORT
AIR TRAFFIC CONTROL TOWER

LETTER OF AGREEMENT

EFFECTIVE DATE: December 18, 2014

CANCELLATION: This agreement cancels and supersedes the Letter of Agreement (LOA) entitled *Winter Operations*, dated January 12, 2010, and any previous Winter Operations LOAs, between the Port Authority of New York and New Jersey and John F. Kennedy Air Traffic Control Tower (ATCT) Winter Operations.

SUBJECT: WINTER OPERATIONS

PURPOSE: This Letter of Agreement outlines the operational procedures for the coordination of reporting and conducting runway surface condition reports at John F. Kennedy International Airport (JFK) during adverse weather conditions between JFK Airport Operations and JFK ATCT Staff.

RESPONSIBILITIES AND PROCEDURES:

The following procedures shall be used during winter operations.

JFK ATCT shall:

1. As soon as practicable, notify the JFK Airport Duty Manager (ADM), by direct telephone, when they receive a braking action report of FAIR, POOR, NIL, or a report that has improved to GOOD. This allows Airport Operations to properly monitor runway conditions.

2. Immediately cease operations on the affected surface after receiving two (2) consecutive POOR braking action reports on any runway or taxiway and notify the ADM by direct telephone of these conditions. The ADM will close the runway or taxiway, inspect the surface conditions, and, if required, treat the runway or taxiway prior to the next operation.

3. Immediately cease operations on the affected surface after receiving one (1) NIL pilot braking action report and notify the ADM by telephone of these conditions. Under the condition of a NIL braking action report the ADM will close and treat the affected runway or taxiway.

FEDERAL AVIATION
ADMINISTRATION
APPROVED: [signature]
DATE: JAN 06 2015

JFK Airport Operations shall:

1. Continuously monitor runway conditions. Provide as much advanced notification to JFK ATCT Staff as possible when requesting runway availability in order to conduct runway surface condition inspections. It is anticipated that a period of approximately 10 minutes will be required per runway inspection. Likewise, ATCT Staff will continually update JFK Operations Staff when the runway will be available to Operations for purposes of continuous monitoring.

2. After receiving notification of one (1) NIL pilot braking action report, close the runway before the next flight operation. The ADM will treat the affected runway or taxiway and will not re-open the runway until he/she is satisfied that the NIL condition no longer exists.

Michael Moran
General Manager
John F. Kennedy International Airport
Port Authority of New York and New Jersey

David Siewert
Air Traffic Manager
John F. Kennedy International Airport
Federal Aviation Administration

FEDERAL AVIATION
ADMINISTRATION
APPROVED:
DATE: JAN 06 2015

Section 315 – Aircraft Rescue and Fire Fighting (ARFF): Index Determination

The ARFF Index at the Airport is Index E, based on air carrier aircraft of at least 200 feet in length.

FEDERAL AVIATION ADMINSTRATION
APPROVED: Evelyn Martinez
DATE: MAR 26 2012

Section 317 – Aircraft Rescue & Firefighting: Equipment and Agents

VEHICLE TYPE	MANUFACTURER YEAR	PERSONS/SHIFT PRIMARY/AUXILIARY	AGENT	WATER (GALLONS).	AFFF (GALLONS)	DRY CHEMICAL (LBS)	BLDG.
RIV STRIKER 1500	OSHKOSH 2002-2003	1/1	A B	1500 750	200	900 16	269
STRIKER 3000	OSHKOSH 2002-2003	1/1	A B	3000 1000	420		269
STRIKER 3000	OSHKOSH 2002-2003	1/1	A B	3000 1000	420		269
RIV STRIKER 1500	OSHKOSH 2002-2003	1/1	A B	1500 750	200	900 16	269
STRIKER 3000	OSHKOSH 2002-2003	1/1	A B	3000 1000	420		254
RIV STRIKER 1500	OSHKOSH 2002-2003	1/1	A B	1500 750	200	900 16	269
STRIKER 3000	OSHKOSH 2002-2003	1/1	A B	3000 1000	420		254
STRIKER 3000	OSHKOSH 2002-2003	1/1	A B	3000 1000	420		269

*In order to meet ARFF Index E requirements a minimum of three trucks are required; one (1) Striker 1500 and two (2) Striker 3000.

**In addition to the listed agents, each truck has four (4) hand extinguishers, two (2) halon and two (2) Metal-X extinguishers.

Legend: A = Quantity of Extinguishing Agent
B = Discharge in GPM or LBS/SEC

FEDERAL AVIATION ADMINISTRATION
APPROVED: [signature]
DATE: MAR 3 1 2014

Exhibit 319-2

Official Record of Training

ARFF Training - 14 CFR 139.319(i)
OFFICIAL RECORD OF TRAINING

Shield No. _____ PA Empl. No. _____ Year A Trainer Names (Printed): _____ Year B Trainer Names (Printed): _____ Year C Trainer Names (Printed): _____

Command (Circle) EWR JFK LGA TEB

Employee Name (Printed) _____

Employee Signature _____

Date of Hire: _____

Subject Area:	Year A: Initial or Recurrent Date (circle)			Year B: Recurrent			Year C: Recurrent		
	Mo. / Date	Empl. Initials	Trainer Initials	Mo. / Date	Empl. Initials	Trainer Initials	Mo. / Date	Empl Initials	Trainer Initials
1. Airport Familiarization Runways, taxiways, marking, lighting, signage, Grid maps, movement areas									
2. Aircraft Familiarization Identify aircraft to include doors, emergency exits/slides, types of fuels, aircraft systems									
3. ARFF Personnel Safety Aircraft hazards, communicable diseases, personnel stress, use of protective clothing and SCBA									
4. Emergency Comm. & Alarms Alarm notification, radio frequencies, ATC procedures, hand signals, multiple alarms									
5. Use of Fire hoses,nozzles,turrets, etc. Purpose, location & functions of ea. piece of equipment,adaptors, re-supply, agents									
6. Application of extinguishing agents Identify and be able to demonstrate agent application techniques to include portable fire extinguishers									
7. Aircraft Evacuation Aircraft entry, emergency procedures, exit points and procedures to protect the evacuation points, associated hazards									
8. Fire Fighting Operations SOPs for various emergency procedures; rescue paths, protective streams, fuel spills, aircraft wreckage									
9. Adapting Structural equip to ARFF Procedures and methods used to adapt the equipment for ARFF use									
10. Aircraft Cargo Hazards Identify hazards, DOT Emergency Response Guidebook, risk assessment, evacuation, rescue									
11. Familiarization of fire fighters Identify airport profile plans, SOPs, incident command systems and duties required by the Airport Emergency plan									
12. Live Hot Fire Drill Pit fire w/aircraft mock up or similar device using airport ARFF equipment									
13. HRET (operators/drivers) HRET ARFF vehicle operation, FAA HRET DVD, HRET operation & demonstrate use									

Note 1: Initial Training in all subject areas is required prior to assuming ARFF duties
Note 2: Recurrent training is required for each subject area at least once every 12 consecutive months
Note 3: Training records shall be maintained for 24 consecutive months after completion of training

See Ac 150/5210-17 for full training curriculum

Revised 10/21/13
FEDERAL AVIATION ADMINISTRATION
APPROVED: Shelley Martinez
DATE: MAR 3 1 2014

Exhibit 319-3

Summary Cover Sheet

ARFF Training - 14 CFR 139.319(i)
SUMMARY COVER SHEET (dates only)

Employee Name(Printed): _____

Date of Hire: _____

Subject Area:	YR: Initial or Recurrent Date (circle) Write Month/Date	YR: Recurrent Write Month/Date	YR: Recurrent Write Month/Date
1. Airport Familiarization Runways, taxiways, marking, lighting, signage, Grid maps, movement areas			
2. Aircraft Familiarization Identify aircraft to include doors, emergency exits/slides, types of fuels, aircraft systems			
3. ARFF Personnel Safety Aircraft hazards, communicable diseases, personnel stress, use of protective clothing			
[illegible]y Comm. & Alarms Alarm notification, radio frequencies, ATC procedures, hand signals, multiple alarms			
5. Use of Fire hoses,nozzles,turrets, etc. Purpose, location & functions of ea. piece of equipment,adapters, re-supply, agents			
6. Application of extinguishing agents Identify and be able to demonstrate agent application techniques to include portable fire extinguishers			
7. Aircraft Evacuation Aircraft entry, emergency procedures, exit points and procedures to protect the evacuation points, associated hazards			
8. Fire Fighting Operations SOPs for various emergency procedures; rescue paths, protective streams, fuel spills, aircraft wreckage			
9. Adapting Structural equip to ARFF Procedures and methods used to adapt the equipment for ARFF use			
10. Aircraft Cargo Hazards Identify hazards, DOT Emergency Response Guidebook, risk assessment, evacuation, rescue			
11. Familiarization of fire fighters Identify airport prefire plans, SOPs, incident command systems and duties required by the Airport Emergency plan			
12. Live Hot Fire Drill Pit fire w/aircraft mock up or similar device using airport ARFF equipment			
13. HRET (operators/drivers) HRET ARFF vehicle operation, FAA HRET DVD, HRET operation & demonstrate use			

Note 1: Initial Training in all subject areas is required prior to assuming ARFF duties
Note 2: Recurrent training is required for each subject area at least once every 12 consecutive months
Note 3: Training records shall be maintained for 24 consecutive months after completion of training

See Ac 150/5210-17 for Training Curriculum

Revised 10/2013

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: MAR 3 1 2014

Exhibit 319-5

Authorized ARFF Personnel List

THE PORT AUTHORITY OF NY & NJ

MEMORANDUM

Aviation Department

To: ARFF Captain
From: Manager, Airport Certification and Safety
Date: *Insert*
Subject: AUTHORIZED ARFF PERSONNEL LIST

Copy To: General Manager, Airport Certification and Safety
Manager, Airport Operations
Fire Chief, ARFF

The listed ARFF personnel are qualified and eligible for assignment to a designated ARFF post in accordance with training received (Basic ARFF, and HRET). Records reviewed document that the training completed is in accordance with Part 139 training requirements.

This list, dated *month, date, year*, replaces the prior list dated, *month, date, year*

Please note the Authorized List reflects training status only and does not show SIDA ID badge status (current, expired, etc.)

- HRET indicates High Reach Extendable Turret qualified.

No.	Name	ID	HRET
1	Last, First	#	HRET
2	Last, First	#	
3	Last, First	#	
4	Last, First	#	
5	Last, First	#	
6	Last, First	#	
7	Last, First	#	

FEDERAL AVIATION ADMINISTRATION
APPROVED: [illegible]
DATE: MAR 31 2014

Exhibit 319-6

ARFF Expiration Dates Memo

THE PORT AUTHORITY OF NY & NJ

MEMORANDUM

Aviation Department

To: ARFF Captain
From: Manager, Airport Certification and Safety
Date: *Insert*
Subject: ARFF Expiration Dates

Copy To: General Manager, Airport Certification and Safety
Manager, Airport Operations
Fire Chief ARFF
ARFF Captain, Rescue Training Center

ARFF training records indicate recurrent training is due before the expiration date in the subject area(s) listed for the following individuals. Training must be received and documented prior to the end of the listed month or they will expire and be unauthorized to work an ARFF Post.

Note that this memorandum reflects training only and not Airport SIDA ID badge expiration.

As per the requirements of the Airport Certification Manual, a response is required within five business days to identify the scheduled training date(s) for each individual and subject area.

Current Month	Subject Area	Scheduled Training Date
Last Name, First Name	1, 2, 3	
Last Name, First Name	1, 2, 3	
Last Name, First Name	1, 2, 3	
Last Name, First Name	1, 2, 3	

Next Month	Subject Area	Scheduled Training Date
Last Name, First Name	1, 2, 3	
Last Name, First Name	1, 2, 3	
Last Name, First Name	1, 2, 3	
Last Name, First Name	1, 2, 3	

Third Month
Last Name, First Name
Last Name, First Name
Last Name, First Name
Last Name, First Name

FEDERAL AVIATION ADMINISTRATION
APPROVED: [signature]
DATE: MAR 3 1 2014

Exhibit 319-7

ARFF Training Subject Areas/Lesson Plans Summary

Lesson Plan 1 – Airport Familiarization

- Lesson Plan #1 (Runways, taxiways, marking, lighting, signage, Grid maps, movement areas)
- Lesson Plan #1A (Airport Rules and Regulations)
- Lesson Plan #1B (Roles of Law Enforcement Personnel)

Lesson Plan 2 – Aircraft Familiarization: Identify aircraft to include doors, emergency exits/slides, types of fuels, aircraft systems

Lesson Plan 3 – ARFF Personnel Safety: Aircraft hazards, communicable diseases, personnel stress, use of protective clothing and SCBA

Lesson Plan 4 – Emergency Communication & Alarms: Alarm notification, radio frequencies, ATC procedures, hand signals, multiple alarms

Lesson Plan 5 – Use of Fire Hoses, Nozzles, Turrets, Etc.: Purpose, location & functions of ea. piece of equipment, adapters, re-supply, agents

Lesson Plan 6 – Application of Extinguishing Agents: Identify and be able to demonstrate agent application techniques to include portable fire extinguishers

Lesson Plan 7 – Aircraft Evacuation: Aircraft entry, emergency procedures, exit points and procedures to protect the evacuation points, associated hazards

Lesson Plan 8 – Firefighting Operations: SOPs for various emergency procedures; rescue paths, protective streams, fuel spills, aircraft wreckage

Lesson Plan 9 – Adapting Structural Equipment to ARFF: Procedures and methods used to adapt the equipment for ARFF use

Lesson Plan 10 – Aircraft Cargo Hazards: Identify hazards, DOT Emergency Response Guidebook, risk assessment, evacuation, rescue

Lesson Plan 11 – Familiarization of Firefighters: Identify airport prefire plans, SOPs, incident command systems and duties required by the Airport Emergency plan

Lesson plan 12 – Live Hot Fire Drill: Pit fire w/aircraft mock up or similar device using airport ARFF equipment

Lesson Plan 13 – HRET (Operators/Drivers): HRET ARFF vehicle operation, FAA HRET DVD, HRET operation & demonstrate use

FEDERAL AVIATION ADMINISTRATION
APPROVED: Shelley Marshall
DATE: MAR 3 1 2014

The terms of establishment and requirements for the Port Authority ARFF Cadre, per Settlement Agreement between the FAA and Port Authority dated April 8, 2013, are as follows:

a. The terms governing the establishment of the ARFF Cadre and its full operation cannot be modified without the consent of the FAA.

b. ARFF Cadre Firefighters will perform only ARFF duties and no collateral duties as Police Officers, except for the following:

i. On days they are not scheduled to perform ARFF duties, ARFF Cadre Firefighters may attend only firearms training and any other training required under State law up to 36 hours to maintain their status as sworn Police Officers.

ii. ARFF Cadre Firefighters are prohibited from performing non-ARFF duties, including police duties, except to the extent permitted under 14 CFR § 139.113.

c. ARFF Cadre Firefighters will not perform overtime for police duties or any non-ARFF function.

d. The PANYNJ intends to recruit ARFF Cadre Firefighters from the current and future pools of trained and documented PAPD Police Officers.

e. ARFF Cadre Firefighters will commit to a minimum of five years of service to the ARFF Cadre, except for 1) retirement, 2) voluntary or involuntary termination from PANYNJ service, or 3) opportunity for promotion to another rank.

f. The ARFF Cadre will report to the Department of Aviation. In addition, the ARFF Fire Chief will report to the Chief Security Officer and will oversee ARFF technical standards.

Section 321 – Handling and Storing of Hazardous Substances and Materials

(a) Cargo Handling Agent

The Port Authority, as opeator of the airport, does not directly handle or store any hazardous articles or materials other than on emergency equipment and fuel for its own requirements. Safe storing, dispensing and otherwise handling of fuel, lubricants and compressed gases on the airport must conform to the applicable provisions of the Airport Rules and Regulations.

(b) Airport Fire Safety Fuel Handling Standards

The Airport complies with NFPA 407, Standard for Aircraft Fuel Servicing (current edition) and Port Authority Rules and Regulations.

(c) Fueling Agents

The following fueling agent operates at the airport:

- Allied New York Services
- SheltAir Aviation

All fueling agents are required by the Airport to comply with NFPA 407 (current edition) and Port Authority Rules and Regulations. Reasonable surveillance of all fueling activities on the airport are conducted by PW Grosser and Allied Supervision.

(d) Inspection of Fueling Facilities

PW Grosser (Port Authority consulting/audit firm) personnel conduct periodic inspections of the fueling agents fuel storage area, mobile fuelers and hydrant carts for compliance with the airport's fire safety standards at least once every 3 consecutive months. Follow up inspections will be conducted when unsatisfactory items are found. Checklists used by PW Grosser when conducting the inspections and follow-up inspections are included as Exhibit 321-1, *Fire Safety Inspection Fuel Trucks and Mobile Hydrant Servicers* and Exhibit 321-2, *Fire Safety Inspection Fuel Farm/Storage Area/Loading Racks/Dispensing Areas.* Inspection records are maintained in the Allied Building 90 and Port Authority Fueling Supervisor at Building 14 for at least 12 consecutive calendar months.

All fueling agents engaged in handling and dispensing aviation fuel are required to take immediate corrective action whenever notified of noncompliance with any of the NFPA 407 (currrent edition) and Port Authority Rules and Regulations. If corrective action cannot be

accomplished within a reasonable period of time, the Port Authority Fueling Supervisor will notify the assigned Airport Certification Safety Inspector and Airport Duty Manager.

(e) **Training Requirements**

1. Each fueling agent will have a minimum of one supervisor complete an aviation fuel-training course in fire safety that is acceptable to the FAA. The supervisor will receive recurrent training at least once every 24 consecutive calendar months. If a new supervisor is hired, he/she will successfully complete an authorized aviation fuel-training course within 90 days.
2. All other employees at each fueling agent who fuel aircraft, accept fuel shipments, or handle fuel, shall receive at least initial on-the-job training in fire safety and recurrent training every 24 consecutive calendar months from the supervisor who has been trained in the fuel-training course in fire safety acceptable to the FAA.
3. All fueling agents engaged in handling and dispensing fuel at the airport shall submit written certification to airport management once every 12 consecutive calendar months that the above training standards have been accomplished. Those records shall be maintained in the office of the Chief Operations Superivsor for 12 consecutive calednar months. The sample form to be used by the fueling agents for certifying training is shown as Exhibits 321-3 and 321-4.
4. PW Grosser personnel conduct periodic audits of training records for supervisors and fueling agents of Allied New York Services and SheltAir Aviation.

EXHIBIT 321-1

JOHN F. KENNEDY INTERNATIONAL AIRPORT
FUEL TRUCKS AND MOBILE HYDRANT SERVICERS

DATE: OPERATOR: INSPECTOR:

INSPECTION TYPE: ☐ Quarterly ☐ Follow-Up ☐ Additional

Vehicle Number:						
Fuel Type:						
EMERGENCY SHUTOFF SYSTEM NFPA 407 4.3.15						
1. EMERGENCY FUEL SHUTOFF sign at least 2" high contrasting color						
2. Method of operation "PUSH" or "PULL" or indicated by an arrow						
3. Two shutoffs required, one on each side of the vehicle						
HOSES & NOZZLES NFPA 407 4.2, 5.16						
1. Dust caps and nozzles stored properly						
2. Hose Condition: No leaks, blistering, kinks, or severly worn						
3. Nozzle Condition						
4. Inspect Deadman						
BONDING & GROUNDING NFPA 407 4.1.2						
1. Cables to be free of kinks, damage or paint						
2. Clamps to be free of paint, properly attached to vehicle, and in good working condition						
3. Both clamps and cables stored properly to prevent damage						
LIGHTS NFPA 407 4.3.7.6						
1. No cracked/missing light lenses, must be fully enclosed & gasketed						
2. No exposed electrical wires						
SIGNAGE NFPA 407 4.3.11, 4.3.10						
1. The word "FLAMMABLE" on each side and rear in 3" high letters						
2. "NO SMOKING" on all sides, front, rear and cab of vehicle						
3. Product name "AVGAS" or "JET A" on each side & rear in 3" high letters						
4. Signs must be unobstructed						
FIRE EXTINGUISHERS NFPA 407 4.3.9, NFPA 10						
1. Tankers: 2 - 20 B:C rated extinguishers, one on each side with current inspection Hydrant carts: at least 1-20 B:C rated extinguisher						
2. Readily accessible from the ground						
3. Area adjacent to or behind extinguisher contrasting color						
4. Verify inspection tags are current						
5. Extinguisher to be kept clear of ice, snow, or equipment						
GENERAL VEHICLE NFPA 407 4.3.6, 4.3.7, 4.3.8, 5.18						
1. Exhaust not to discharge near fueling pumping equipment no leaks allowed, Must be secured to vehicle						
2. Fuel vehicles parked at least 10' apart & 50' from buildings/hangars						
3. Batteries to be covered and secured						
4. Vehicle tire condition						
5. Operating parking brake or two wheel chocks						
6. No fuel leaks; tank, valves, nozzles						
VEHICLE CAB NFPA 407 4.3.11						
1. "NO SMOKING" sign conspicuously posted						
2. Ashtray and lighter removed, rendered inoperable, or sealed shut						
3. Cab free of trash, rags, or other combustible materials						

S - Satisfactory U - Unsatisfactory R - Remark

Remarks: _____

Inspector.
Signature _____
Print Name _____

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: 6/20/2013

EXHIBIT 321-2

JOHN F. KENNEDY INTERNATIONAL AIRPORT
FUEL SITE INSPECTION REPORT

DATE: _____ OPERATOR: _____

LOCATION: ☐ MAIN FUEL FARM ☐ SATELLITE FUEL FARM ☐ LOADING RACKS & DISPENSING AREAS

STORAGE AREA: ☐ JET A ☐ 100 LL

INSPECTION TYPE: ☐ Quarterly ☐ Follow-Up ☐ Additional

EMERGENCY FUEL SHUTOFFS	S	U
NFPA 407 4.4.5		
1. Located outside probable spill area	☐	☐
2. Near route that would normally be used to exit spill area or to reach fire extinguishers	☐	☐
3. At least one shutoff conveniently accessible to each fueling position	☐	☐
4. Access to shutoffs must be kept clear at all times	☐	☐
5. Deadman controls in working order and not tampered with	☐	☐
6. Sign located at least 7 feet above grade	☐	☐
PLACARDS		
NFPA 407 4.4.5.7		
1. EMERGENCY FUEL SHUTOFF lettering at least 2" high	☐	☐
2. Method of operation indicated by arrow or word "PUSH" or "PULL"	☐	☐
3. Lettering to be sharply contrasting from background	☐	☐
4. Can be seen from a distance of 25 feet	☐	☐
PIPING		
NFPA 407 4.4.6		
1. Piping properly labeled with product name	☐	☐
2. No leaks: piping, fitting & flanges	☐	☐

FIRE EXTINGUISHERS	S	U
NFPA 407 4.1.6		
1. One required at each loading station. Additional extinguishers as required.	☐	☐
2. Extinguishers adequately mounted with contrasting background	☐	☐
3. Weatherproof tag attached. Tamper devices intact. Tag current	☐	☐
4. Unrestricted access to each extinguisher	☐	☐
BONDING/GROUNDING		
NFPA 407 4.1.2, 5.4		
1. Bonding wires kept on a reel or properly stored	☐	☐
2. Bonding wires in good condition	☐	☐
3. Clamps in good working order	☐	☐
HOSES		
NFPA 407 4.2		
1. Hoses shall be free of cracks and excessive wear	☐	☐
2. Hoses must be properly stored	☐	☐
3. Nozzles covered or capped	☐	☐
4. No bandit clamps	☐	☐
SIGNAGE		
1. "FLAMMABLE" and "NO SMOKING" signs required and are at least 3" high	☐	☐
2. Type of fuel required on piping and at dispensing site, "JET A" and "AVGAS"	☐	☐
STORAGE & GENERAL		
1. No open trash containers	☐	☐
2. Grounds kept free weeds, trash or other combustibles	☐	☐
3. Public Protection - Fencing & Locks	☐	☐
4. No evidence of ignition sources	☐	☐
5. No open fuel containers	☐	☐

S - Satisfactory
U - Unsatisfactory

Remarks:

_____
_____
_____
_____
_____
_____

Inspector
Signature _____
Print Name _____

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Mastny
DATE: 6/20/2013

Exhibit 321-3

TENANT FUELING AGENT

LINE FUEL SERVICE TRAINING CERTIFICATE

*In accordance with the requirements of FAR 139.321(e)(2), "all other employees who fuel aircraft, accept fuel shipments, or otherwise handle fuel must receive at least initial on-the-job training and recurrent instruction every 24 consecutive calendar months in fire safety from the supervisor trained in accordance with paragraph (e)(1) of 139.321."

Organization: _____

Individual Employee Name (or attached list): _____

"Has successfully completed all classroom and practical application for the requirements of 14 CFR Part §139.321(b)(1) through (b)(7) and 139.321 (e) (2), excluding fire extinguisher training"

Date of Completion (or attached list): _____

Training Provided By: _____

*Note: In accordance with 139.321(e)(2) training shall be provided by a Fuel Line Supervisor who has attended a fuel line supervisor course approved by the Administrator. In addition, the Fuel Line Supervisor must be current with recurrent training requirements.

*Note: after receiving Line Fuel Service training, the Line Fuel Service employee should receive instruction regarding "fire code of the public body having jurisdiction over the airport". Normally, this training is given by local fire department personnel, local fire marshal, or local ARFF department personnel conversant in local fire code.

Date Local Fire Code Training Received: _____

Local Fire Code Training Provided By: _____

Exhibit 321-4

TENANT FUELING AGENT

SUPERVISOR TRAINING CERTIFICATE

*In accordance with the requirements of FAR 139.321(e)(1), "at least one supervisor with each fueling agent must have completed an aviation fuel training course in fire safety that is authorized by the Administrator. Such an individual must be trained prior to initial performance of duties, or enrolled in an authorized aviation fuel training course that will be completed within 90 days of initiating duties, and receive recurrent instruction at least every 24 consecutive calendar months." Current authorized courses are provided via the FAA's current Advisory Circular.

Organization: _____

Fuel Line Supervisor Name (or attached list): _____

"Has successfully completed all classroom and practical application for the requirements of 14 CFR Part §139.321(b)(1) through (b)(6) and 139.321 (e) (1), excluding fire extinguisher training".

Date of Completion (or attached list): _____

Note: recommend attaching a copy of training certificate to this form.

Aviation Fuel Training Course Attended: _____

*Note: after receiving Fuel Line Supervisor training at one of the approved courses, the Fuel Line Supervisor should receive instruction regarding "fire code of the public body having jurisdiction over the airport". Normally, this training is given by local fire department personnel, local fire marshal, or local ARFF department personnel conversant in local fire code.

Date Local Fire Code Training Received: _____

Local Fire Code Training Provided By: _____

Section 323 - Traffic and Wind Direction Indicators

(a) Wind Direction Indicators

The primary and supplemental wind cones are provided and maintained in accordance with the current editions of AC 150/5340-30 and AC 150/5340-26.

There are 14 wind cones at the Airport that are all lighted and located in the following areas:

1. East side of Twy PE between Rwy 13R & Twy P
2. North side of Twy Q between Twy PB & Twy QD
3. West side of Twy PA between Rwy 13R Twy P
4. South side of Rwy 31L displaced threshold West of Twy K
5. West side of Rwy 4L in grass area between Twy KA & Twy KB
6. South side of Rwy 31L between Twy Z & Rwy 4L
7. East side of Twy J between Twy J & Rwy 4R
8. East side of Rwy 22R between Twy Z & Twy G
9. East side of Rwy 22R between Rwy 31R & Twy FB
10. East side of Rwy 22L between Twy E & Twy FB
11. North side of Twy E on the East side of Police Satellite Garage
12. North side of Twy E on the West side of Police Satellite Garage
13. North side of Rwy 13L between Twy CB & Twy CD
14. South side of Twy Q West of Twy QH

For location see the Wind Direction Indicators Map – Exhibit 323-1.

(b) Segmented Circle

The airport does not have a segmented circle since the ATCT is 24 hours.

(c) Maintenance

The wind direction indicators are inspected each day during the daytime and nighttime safety inspection conducted by designated self-inspection personnel.

The wind direction indicators are maintained clearly visible and functional. Corrective action shall be initiated promptly by Airport Duty Manager when unsatisfactory conditions are found with the wind direction indicators.

Section 325 – Airport Emergency Plan

Airport Emergency Plan (AEP)

The FAA approved Airport Emergency Plan is a stand alone document and kept separate from this section. The AEP for John F. Kennedy International Airport was written in compliance with Title 14 of the Code of Federal Regulations, Chapter 1 – FAA, DOT, Part 139.325, Certification and Operations: Land airports serving certain air carriers, using Advisory Circular 150/5200-31, current edition, as guidance. This plan was developed and coordinated with Port Authority Police, Operations, ARFF Unit, Maintenance, the FAA Control Tower, mutual-aid law enforcement agencies, rescue and firefighting agencies, medical personnel and organizations, principle airport tenants, and all other agencies/persons who have responsibilities under this plan.

Airport Emergency Plan Objective

The objectives of the AEP are to:

1) Provide prompt and effective rescue of passengers and crew aboard the aircraft while protecting life and minimizing damage to other airport property.
2) Establish plans and procedures for immediate notification of the airport's mutual-aid agencies for response and assistance.
3) Coordinate and control the Port Authority and mutual-aid response and emergency activities of fire, police, medical, and other civilian resources.
4) Restoring the airport to operational status as quickly as possible.

Annual Review of the Airport Emergency Plan

Every 12 consecutive calendar months, the Manager of Aeronautical Services, or designee, will perform an annual review of the AEP with input from all supporting Port Authority Departments to make appropriate changes.

Training of Airport Personnel

All airport personnel that have duties and responsibilities under the AEP are properly trained and familiar with their assignments.

Tabletop and Triennial Full-Scale Exercise of the AEP

A full-scale exercise of the AEP is conducted at least once every 3 years, followed by a review of the plan in the subsequent years. The full-scale exercise involves, to the extent practicable, all mutual-aid participants and equipment. The purpose of these exercises is to test the effectiveness of the AEP through a combined response of the airport and mutual-aid agencies to

FEDERAL AVIATION ADMINISTRATION
APPROVED: [signature]
DATE: MAR 3 1 2014

an air carrier aircraft accident that occurs on the airport, or on adjacent property, within the authority and responsibility of airport management and emergency personnel to initiate a response. They also serve to familiarize airport and mutual-aid personnel with their responsibilities in the plan.

Consistency with Security Regulations

The AEP contains instructions for response to bomb incidents, including designation of parking areas for the aircraft involved. It also includes instructions for sabotage, hijack and other unlawful interference with operations that are consistent with the approved airport security program.

Airport Emergency Plan Contents

The AEP provides an overview of the airport's approach to emergency operations when dealing with the following incidents:

1) Aircraft Incidents and Accidents
   a) Largest Aircraft Type
   b) Responding Agencies
   c) On Airport Situation and Assumption
   d) Off Airport Situation and Assumption
   e) Emergency Assignments
   f) Emergency Response Duties
   g) Injured and Uninjured Accident Survivors
   h) Removal of Disabled Aircraft
   i) Emergency Alarm Systems
   j) Airport/Control Tower Action Coordination
   k) Notification of Support agencies
   l) Tabletop and Full-Scale Exercises
2) Bomb Incidents
3) Structural Fires
4) Natural Disasters
5) Hazardous Materials/Radiological Incidents
6) Sabotage, Hijack Incidents and Other Unlawful Interferences with Operations
7) Failure of Power for Movement Area Lighting
8) Water Rescue Situations
9) Crowd Control
10) Tank Farm Fire
11) Animal Control and Care

12) Overview of Organization and Assignment of Responsibilities
13) Maps and Diagrams
14) Letters of Agreement

The FAA approved Airport Emergency Plan is a standalone document and kept separate from this section.

Section 327 – Self-Inspection Program

(a) Frequency of Inspection

The Airport Duty Manager or his/her designee uses the Airport Self-Inspection Checklist (Exhibit 327-1) to conduct the daily inspection of the airport indicating date, time, etc. The daily airport self-inspections are conducted in accordance with AC 150/5200-18, current edition.

Additional safety inspections shall be conducted whenever required by the following circumstances:

1. During and after construction activity;
2. During rapidly changing meteorological conditions;
3. Immediately after any incident or accident;
4. After any other unusual condition on the airport.

Reporting System

Any discrepancies will generate a work order and will be forwarded to Airport Maintenance Services, utilizing the Computerized Airport Logging System (CALS), for immediate corrective action. The Airport Duty Manager (ADM), if necessary, will issue required NOTAMs advising the FAA and airlines of field conditions and contact the appropriate maintenance office for implementation. Details of the field conditions requiring correction shall be noted on the Airport Self-Inspection Checklist for follow-up. Through a web base application, the Irregular Operations Network, the ADM will report all current field conditions for aeronautical information including any changes that will affect the field conditions. The information is updated as required during emergency situations. Copies of all forms used in the daily field inspection are retained in the Airport Duty Manager's Office, by the designee of the General Manager, for a minimum of 12 consecutive calendar months.

(b) Training

The Assistant Chief Operations Supervisor of Certification and Training is responsible for training the aeronautical services unit personnel to ensure that qualified personnel perform the inspections. In addition to on-the-job training, a training program has been established and includes initial and recurrent training every 12 consecutive months in the following subject areas:

1. Airport familiarization;
2. Airport Emergency Plan (AEP);
3. Notice to Airmen (NOTAM) notification procedures;

4. Procedures for pedestrian and ground vehicles in movement areas and safety areas;
5. Discrepancy reporting procedures.

(c) Inspection Records

A copy of the Airport Self Inspection Checklist used is included as Exhibit 327-1. Inspection records will show the conditions found and all corrective action taken. Inpsection records are kept on file in the Airport Duty Manager's office for at least 12 consecutive months.

(d) Training Records

Training records for each individual include a description and date of training received. The records are kept by the Assistant Chief Operations Supervisor of Certification and Training. Training records are kept for at least 24 consecutive months.

Exhibit 327-1

THE PORT AUTHORITY OF NY & NJ

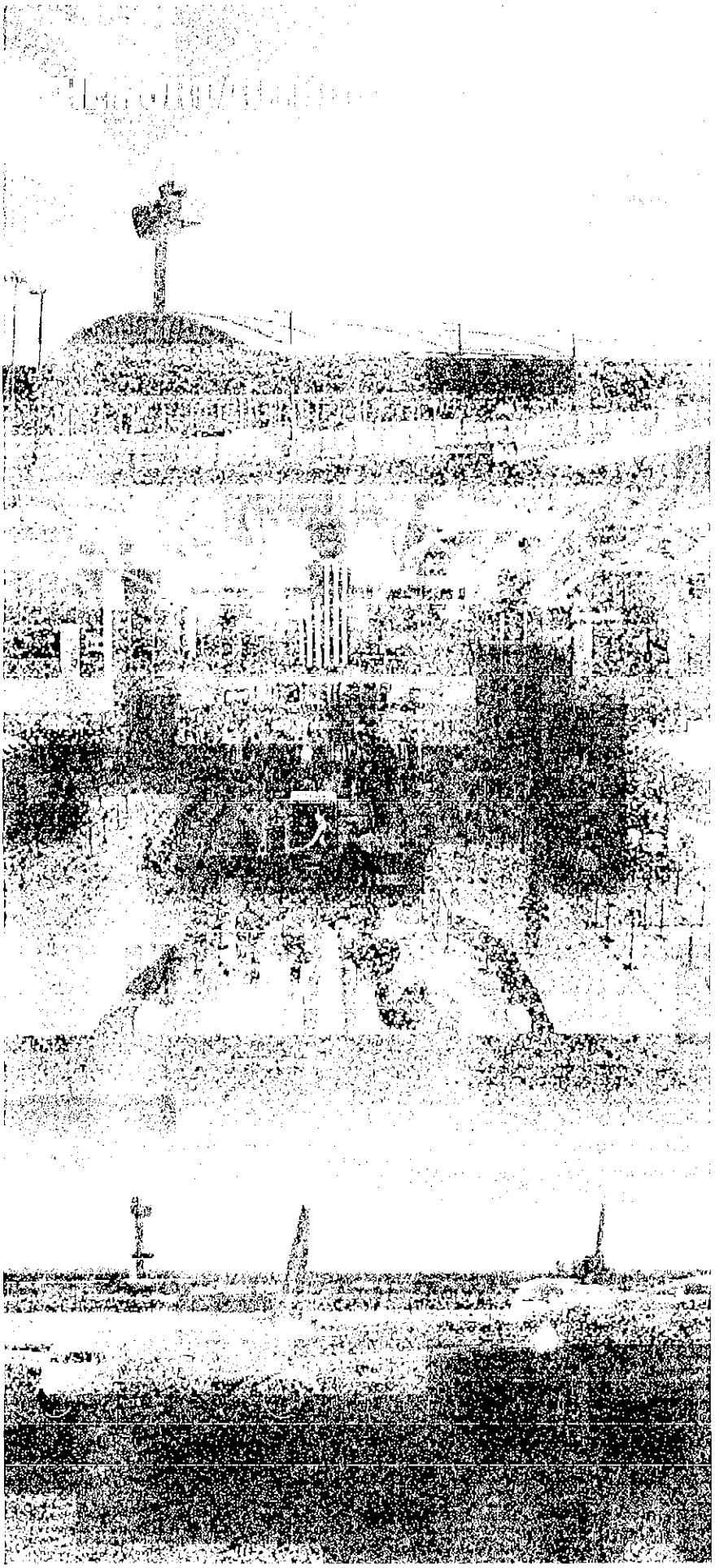
John F. Kennedy International Airport
Daily Operations Self – Inspection Form

Date: _____
Time: _____
Inspector: _____

[illegible]	[illegible] elevation				
	Hole [illegible]meter/3" [illegible]				
	Cracks/spalling/heaves				
	FOD: gravel/debris/sand				
	Rubber deposits				
	Ponding/edge dams				
SAFETY AREAS	Ruts/bumps/erosion				
	Drainage/construction				
	Support equipment/[illegible]				
	Fuel [illegible]				
	Unauthorized [illegible]				
	EMAS				
MARKINGS	Clearly visible				
	Runway/Taxiway markings				
	Holding position markings				
	Glass beads				
SIGNS	Standard/meet Sign Plan				
	Obscured/operable				
	Damaged/retroflective				
LIGHTING	Obscured/dirty/operable				
	Damaged/missing				
	Faulty/aim/adjustment				
	Runway/Taxiway lighting				
NAVIGATIONAL AIDS	Rotating beacon operable				
	Wind indicators				
	REILs/VGSI systems				
OBSTRUCTIONS	Obstruction lights operable				
	Cranes/trees				
FUELING OPERATIONS	[illegible]				
	Fuel [illegible]				
	Fire [illegible]				
	[illegible]				
	Fuel [illegible]s/vegetation				
SNOW & ICE	Surface conditions				
	Snowbank clearances				
	Lights & signs obscured				
	NAVAIDS				
	Fire access				
CONSTRUCTION	Barricades/lights				
	Equipment parking				
	Material stock[illegible]				
	Confusing signs/mark[illegible]				
ARFF	Equipment/crew av[illegible]				
	Communications/alarms				
	Response routes affe[illegible]				
PUBLIC PROTECTION	Fencing/gates/signs				
	Jet bl[illegible] problems				
WILDLIFE HAZARDS	Wildl[illegible] seat/location				
	Comp[illegible] with WHMP				
	Dead [illegible]				

REMARKS: _____

EXHIBIT 329–2

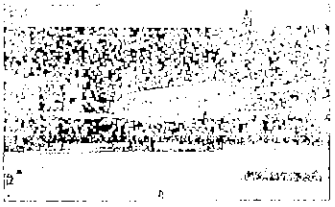


John F. Kennedy
INTERNATIONAL AIRPORT

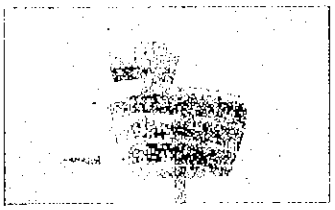
MOVEMENT AREA DRIVER TRAINING

DEC 8 - 2014

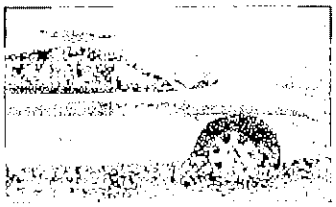
I. DEFINITIONS



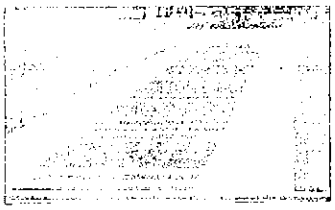
Apron or Ramp: A defined area on an airport or heliport intended to accommodate aircraft for the purposes of parking, loading and unloading passengers or cargo, refueling, or maintenance.

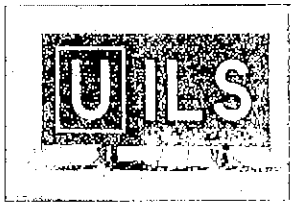


Federal Aviation Administration Airport Traffic Control Tower (FAA ATCT): A service operated by the FAA to promote the safe, orderly, and expeditious flow of air traffic.

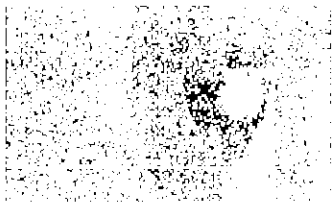


Ground Vehicle: All conveyances, except aircraft, used on the ground to transport persons, cargo, fuel, or equipment.

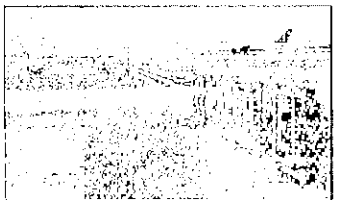




ILS Critical Area: An area provided to protect the signals of the navigational aids, such as localizer and glide slope. When visibility is 3 miles or less OR broken clouds 1000 feet or less, ILS Critical Area Holding Position Markings should not be crossed because they could interfere with aircraft instrument approaches, localizers or glide slopes.



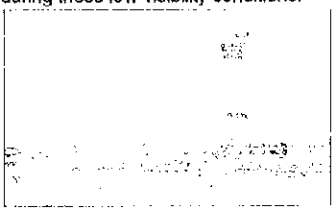
Light Gun: A hand-held, directional light-signaling device that emits a bright narrow beam of white, green, or red light, as selected by the tower controller. The color and type of light transmitted can be used to approve or disapprove anticipated pilot or vehicle actions where radio communication is not available. The light gun is used for controlling traffic operating in the vicinity of the airport and aircraft and vehicle traffic in the Movement Area.



Movement Area: The runways, taxiways, and other areas of an airport that aircraft use for taxiing, takeoff, and landing, exclusive of loading ramps and parking areas and that are under the control of FAA ATCT.

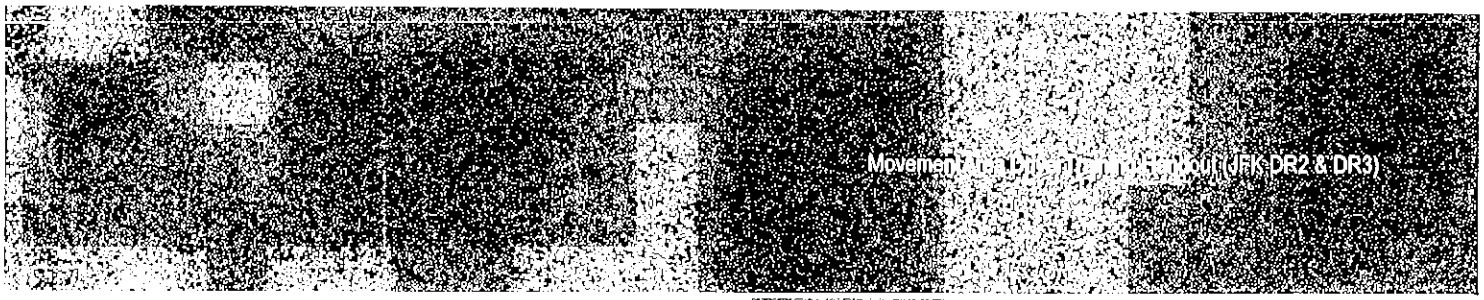
The Airport Movement Area consists of all runways and taxiways at the airport where aircraft and ground vehicles are subject to positive control by the Air Traffic Control Tower. Vehicles operating on the Restricted Vehicle Service Road (RVSR) at the throats of Taxiways A, R, S, Q, C, CA, CB, CE, W, and between Taxiway C and the Cargo Ramps are exempt from the required radio procedures, vehicle equipment requirements, and FAA control. To ensure vehicles "Give Way" to aircraft, drivers authorized to operate on the RVSR receive specialized training and the RVSR has the appropriate signage in accordance with AC 150/5340-18(current edition). The Non-Movement markings are located prior to the RVSR in order to maintain clearance from aircraft taxiing on the perpendicular taxiway.

Nighttime and Poor Weather Driving Conditions: These conditions tend to obscure visual cues, roadway markings and airport signs presenting additional risks for vehicle operators in the Movement Area. Snow, fog and rain are common examples of poor weather driving conditions. All vehicle operators are urged to exercise constant situational awareness and remain vigilant of their surroundings/operating boundaries. All vehicle operators are also reminded to maintain adequate distance separation from snow removal equipment and aircraft operating during these low-visibility conditions.



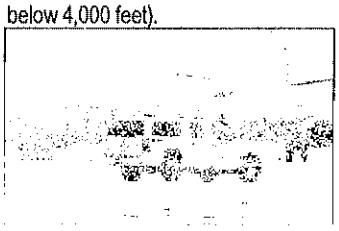
Non-Movement Area: Taxiways, taxilanes, aprons, and other areas not under the control of FAA ATCT. Ramp Control directs traffic within the Non-Movement Area.

The Airport Movement Area consists of all runways and taxiways at the airport where aircraft and ground vehicles are subject to positive control by the Air Traffic Control Tower. Vehicles operating on the Restricted Vehicle Service Road (RVSR) at the throats of Taxiways A, R, S, Q, C, CA, CB, CE, W, and between Taxiway C and the Cargo Ramps are exempt from the required radio procedures, vehicle equipment requirements, and FAA control. To ensure vehicles "Give Way" to aircraft, drivers authorized to operate on the RVSR receive specialized training



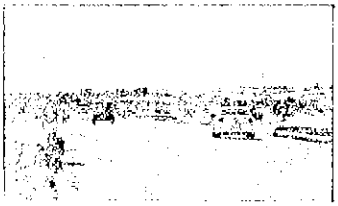
and the RVSR has the appropriate signage in accordance with AC 150/5340-18(current edition).The Non-Movement markings are located prior to the RVSR in order to maintain clearance from aircraft taxiing on the perpendicular taxiway.

Precision Obstacle Free Zone (POFZ): The POFZ is defined as a volume of airspace above an area beginning at the runway threshold, at the thresh-old elevation, and centered on the extended runway centerline. POFZ is 200 feet long and 800 feet wide. The POFZ must be clear when an aircraft on a vertically guided final approach is within 2 nautical miles of the runway threshold and the reported ceiling is below 250 feet -or- visibility less than 3/4 statute mile (or runway visual range below 4,000 feet).



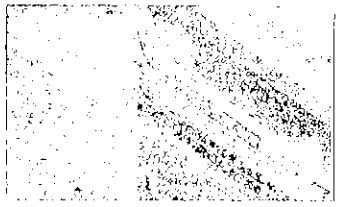
Surface Incident: Unauthorized or unapproved movement within the designated Movement Area (excluding runway incursions) or an occurrence in that same area associated with the operation of an aircraft that affects or could affect the safety of flight.

Restricted Areas: Areas of the airport not open to the public, including but not limited to, baggage make-up areas, passenger and cargo loading ramps, hangar areas, runways and taxiways.



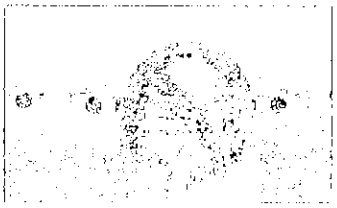
Restricted Vehicle Service Road: A designated roadway for vehicles in a Non-Movement Area.

The Airport Movement Area consists of all runways and taxiways at the airport where aircraft and ground vehicles are subject to positive control by the Air Traffic Control Tower. Vehicles operating on the Restricted Vehicle Service Road (RVSR) at the throats of Taxiways A, R, S, Q, C, CA, CB, CE, W, and between Taxiway C and the Cargo Ramps are exempt from the required radio procedures, vehicle equipment requirements, and FAA control. To ensure vehicles "Give Way" to aircraft, drivers authorized to operate on the RVSR receive specialized training and the RVSR has the appropriate signage in accordance with AC 150/5340-18F. The Non-Movement markings are located prior to the RVSR in order to maintain clearance from aircraft taxiing on the perpendicular taxiway.



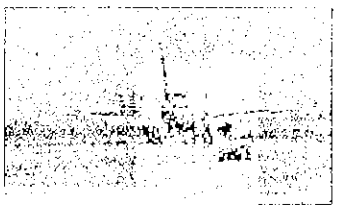
Runway: A defined rectangular area on a land airport for the landing and takeoff run of aircraft along its length.

Runway In Use or Active Runway: Any runway(s) currently being used for takeoff or landing. When multiple runways are used, they are all considered active runways.



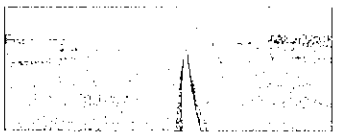
Runway Incursion: Any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft.

Runway Incursions are classified as Categories A, B, C or D based on severity. Category A is most severe whereas Category D is least severe. Effective October 1, 2008, the FAA Administrator adopted this International Civil Aviation Organization (ICAO) definition.

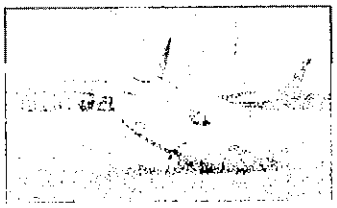


Runway Safety Area: A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway.

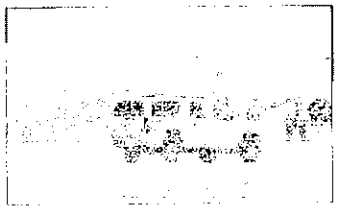
Surface Movement Guidance and Control System (SMGCS): A system comprising the provisions for guidance to, and control or regulation of all aircraft, ground vehicles, and personnel of the airport during low-visibility operations. Guidance relates to facilities and information necessary for pilots and ground vehicle operators to find their way about the airport. Control or regulation means the measures necessary to prevent collisions and to ensure that traffic flows smoothly and efficiently. SMGCS is in effect at JFK during low visibility conditions - less than 1200 feet Runway Visual Range (RVR) down to and including 600 feet RVR.



Taxiways: Those parts of the airside used for the surface maneuvering of aircraft to/from runways and aircraft parking areas.



Foreign Object Debris (FOD): Debris that can cause damage to aircraft engines, tires, or skin from rocks, trash, or the actual debris found on runways, taxiways, and aprons.



Vehicle/Pedestrian Deviation (V/PD): Any entry or movement on the Movement Area by a vehicle (including aircraft where there is no intent for flight) or pedestrian that has not been authorized by FAA ATCT.

II. Introduction

The Movement Area Driver Training (DR2 & DR3) is a comprehensive training program developed by The Port Authority of New York and New Jersey (PANYNJ). The goal of this program is to enable vehicle operators with responsibilities within the Movement Area to conduct themselves in a safe manner and to instill critical airfield knowledge for positive situational awareness while performing necessary assignments.

You must first understand that only **authorized vehicles** necessary for airport operations may enter the Movement Area. Therefore, fuel trucks, maintenance vehicles, non-authorized tugs, catering trucks, and other non-essential vehicles should not be permitted to enter the Movement Area. Exceptions may include PANYNJ-authorized vehicles with appropriately trained personnel. Airport Operations/Maintenance will coordinate all other vehicle operations within the Movement Area.

The International Civil Aviation Organization (ICAO) and the FAA defines a **Runway Incursion** as any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft. Runway Incursions are classified as Categories A, B, C or D based on severity. Category A is most severe whereas Category D is least severe. They are primarily caused by communication or human errors (60% - 80%), lack of airport familiarity, or loss of situational awareness. Runway incursions are very serious safety violations that could cost an airfield driver their driving privileges, fines and possibly result in loss of human lives. For example, at a Russian airport in 1984, an aircraft landing at an airport crashed into unauthorized maintenance vehicles on the runway. The accident killed 174 people on the plane and four people on the ground.

However, there are several ways one can prevent accidents from happen-ing - the first being the complete adherence to the first rule of thumb on any airfield - **Aircraft always have the right of way on an airfield.** The second is the completion of the Movement Area Driver Training program. As one would imagine, unlike the Non-Movement Area Driver Training (DR1), this program requires a more thorough comprehension of the airport environment and constant vigilance since there are dangers asso-ciated with the movement area that are not present in the non-movement area. This manual will discuss the following topics:

- Understanding of the established standard movement area driving procedures and rules, including the consequences of not following them
- Meeting vehicle requirements necessary before accessing the Movement Area
- Identifying and understanding the meaning of important holding position and other markings, signs and lighting systems within the airfield environment
- Effective radio communications with FAA ATCT – clear and complete transmissions, ability to follow instructions, listening to clearances carefully, completing mandatory read-backs and never assuming when uncertain
- Seeing the big picture and maintaining positive situational awareness at all times by knowing your location, observing what is going on around you in all directions and monitoring the proper FAA radio frequency
- Seeking help from Airport Operations and FAA ATCT when needed. It is better to damage one's pride than property or lives.

On the JFK ID Badge for easy identification, drivers authorized to operate in the Non-Movement Area will have a **DR1** on their ID badge, whereas drivers authorized to operate in the Movement Area will have a **DR2** or **DR3** on their ID badge.

Note: Tug/Super Tug Operators, Brake Riders, and Mechanics that reposition aircraft utilizing the Movement Area are required to receive this specialized Airfield Movement Area Training. This group will have DR3 on their ID and will be able to traverse the Movement Area when actively engaged and in the movement of aircraft only. They must be under positive control of the FAA ATC at all times. ***(See Exhibit B)***

With safety being our first priority, Movement Area drivers are strongly encouraged to either use perimeter service roads around runway surfaces or perform runway crossings at the ends rather than the midpoints unless during emergencies. For more standard procedures pertaining to operation in the Movement Area, please refer to the Letter of Agreement between the FAA ATCT and PANYNJ. ***(See Exhibit B)***

III. Initial and Recurrent Movement Area Training Requirements

The FAA and JFK Rules & Regulations dictate the following stipulations to be met before an individual is allowed to drive in the Movement Area:

- Possession of a valid state driver's license and valid JFK ID Badge at all times
- Job duties must require access to the movement area
- Familiarity with Airport Rules & Regulation and Part 139 (including consequences for non-compliance)
- Successful completion of the DR2 & DR3 Movement Area Driver Training Program

JFK requires annual recurrent training for Movement Area Drivers every 12 months.

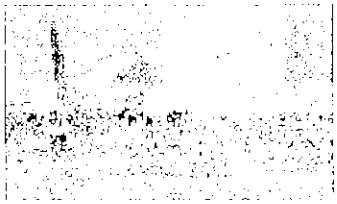
Vehicles in the Movement Area are limited to those necessary for the in-spection and maintenance of the movement area and emergency vehicles responding to an aircraft emergency within the movement area. All other vehicles (including Operations, Maintenance, Construction, etc.) must use perimeter service roads or public roads in lieu of crossing movement areas whenever possible. Exemptions will be made for construction vehicles and equipment at assigned locations for specific projects.

All employees are encouraged to contact Airport Operations with questions or concerns regarding this program using the contact information below:

Port Authority Operations
Driver Training Coordinator
(718) 244-3797
Monday – Friday 7am-3pm

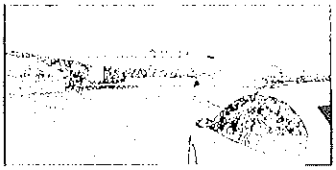
Port Authority Operations
Assistant Airport Duty Manager
(718) 244-3801 (24-hour emergency contact)

IV. Movement Area vs. Non-Movement Area – *(see Exhibit B)*



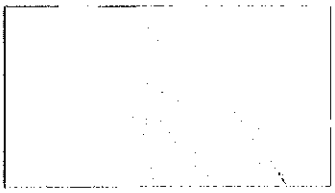
A. Movement Area

The Movement Area is defined as the runways, taxiways, and other areas of the airport that are used for taxiing, air taxiing, and takeoff and landing of aircraft, exclusive of loading ramps and aircraft parking areas.



One of the most important rules of the Movement Area is that aircraft and emergency vehicles have the right of way at all times. There are no exceptions!

B. Non-Movement Area



The Non-Movement Area is defined as taxilanes, parking aprons, service roads and other areas not under the control of FAA ATCT. The Non-Movement Area is under the control of the terminal operator/airline ramp control.

The Movement Area is considered "positive control", meaning that all vehicle operators will need permission from ATC before entering the Movement Area.

The Airport Movement Area consists of all runways and taxiways at the airport where aircraft and ground vehicles are subject to positive control by the Air Traffic Control Tower. Vehicles operating on the Restricted Vehicle Service Road
(RVSR) at the throats of Taxiways A, R, S, Q, C, CA, CB, CE, W, and between Taxiway C and the Cargo Ramps are exempt from the required radio procedures, vehicle equipment requirements, and FAA control. To ensure vehicles "Give Way" to aircraft, drivers authorized to operate on the RVSR receive specialized training and the RVSR has the appropriate signage in accordance with AC 150/5340- 18F. The Non-Movement markings are located prior to the RVSR in order to maintain clearance from aircraft taxiing on the perpendicular taxiway.

A laminated copy of Exhibit B should be kept in your vehicle.

V. Movement Area Driver and Vehicle Requirements/Authorized Vehicles

Before you start each day, regardless of what kind of vehicle you drive, it's proper procedure to check out your vehicle. It may seem obvious, but you are expected to check out your tires, wipers, horn, brakes, lights on the front, back, and sides and the back up warning signals if your vehicle has them. Check and adjust the seat and the mirrors especially if someone else drove your vehicle during the previous shift. It's a great idea to work from a checklist so you cover every inspection item.

Make sure your vehicle has its Port Authority plates on the front and rear. Those plates allow you to operate at JFK. If you find something not right, the vehicle should be placed out of service until repairs are completed. If you drive it with known problems, you are responsible if you are stopped by the Port Authority Police or Operations, or worse, if you are involved in an accident.

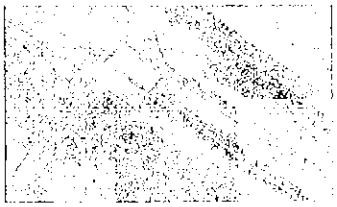
Audio devices, live hand held cell phones, iPods and walkmans are not permitted while you are driving.

Speed Limits

- Restricted Vehicle Service Road--20 MPH
- Ramp Area--10 MPH

VI. Runways

Runways are areas where aircraft land and take off. Runways are always designated by a number such as 4 or 22. The number indicates the compass heading of the runway. An aircraft taking off on Runway 4 is headed forty degrees or north-northeast.

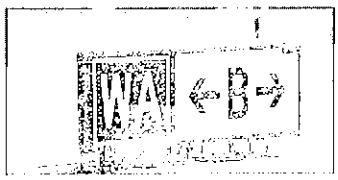


If there are two parallel runways in the same direction, the letter "L" for left and the letter "R" for right are used. JFK has two sets of parallel runways: 31R-13L, 31L-13R and 4L-22R and 4R-22L.

At JFK, there are four runways. They are listed below along with their specifications:

Runway	Length	Width
13R-31L	14,511 feet	200 feet
13L-31R	10,000 feet	150 feet
4L-22R	11,351 feet	150 feet
4R-22L	8,400 feet	200 feet

VII. Taxiways



Taxiways are generally designated by letters or by a letter/number combinations such as A, CD, or K1.

In order to improve situational awareness, it is important for vehicle operators in the Movement Area to be aware that aircraft landing on a runway may exit onto what is commonly referred to as a high-speed taxiway. The primary purpose of these taxiways is to enhance airport capacity by allowing aircraft to exit the runway at greater speeds.

VIII. Aircraft Parking Areas

At JFK Airport, the Port Authority maintains several aircraft parking areas. Airlines must contact Port Authority Operations (718-244-3801) on a daily basis to arrange parking. Parking will be authorized on a first come first serve basis.

IX. Terminals

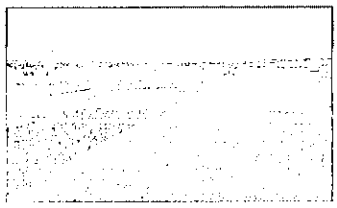
JFK is made up of multiple terminal buildings. Each terminal is used for aircraft loading/unloading, departures (ticketing/check-in), and arrivals (baggage claim). Each terminal is individually identified: Terminal 1, Terminals 2, Terminal 4, Terminal 5, Terminal 7, Terminal 8 and the General Aviation Terminal.

X. Helipad

Helipads are depicted with a large 60 foot by 60 foot white "H" painted in a square and are illuminated by yellow lights at night. Always treat a helipad as you would an active runway.
NEVER Drive Across a Helipad.

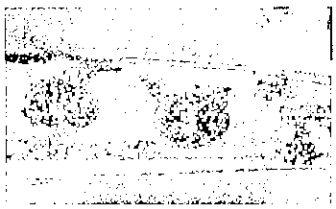
JFK Airport has one public / general use helipad. Located as follows:

- General Aviation Terminal Ramp



There are also private helipads on some terminal ramps at JFK. Always use caution.

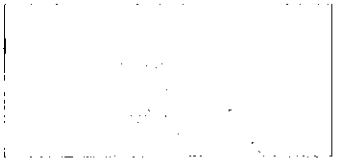
XI. Jet Blast



Always be aware that jet blast from an aircraft engine is powerful and can turn foreign objects, or even you, into a dangerous projectile. Always maintain a safe distance behind aircraft whether they are parked or moving.

XII. Airport Markings

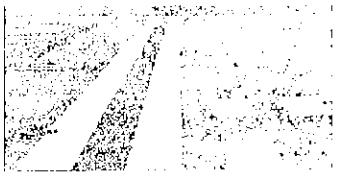
A. Movement Area Boundary Markings



Movement Area Boundary Markings divide the Movement Area from the Non-Movement Area. These markings consist of a set of 2 yellow lines and 1 space, each 12 inches in width. Of these 2 yellow lines, one is a solid line while the other is dashed. The solid line is located on the Non-Movement Area side, while the dashed yellow line is located on the Movement Area side. A vehicle operator or aircraft must not cross from the solid-line side of the marking without first obtaining clearance from ATC.

The Airport Movement Area consists of all runways and taxiways at the airport where aircraft and ground vehicles are subject to positive control by the Air Traffic Control Tower. Vehicles operating on the Restricted Vehicle Service Road (RVSR) at the throats of Taxiways A, R, S, Q, C, CA, CB, CE, W, and between Taxiway C and the Cargo Ramps are exempt from the required radio procedures, vehicle equipment requirements, and FAA control. To ensure vehicles "Give Way" to aircraft, drivers authorized to operate on the RVSR receive specialized training and the RVSR has the appropriate signage in accordance with AC 150/5340- 18F. The Non-Movement markings are located prior to the RVSR in order to maintain clearance from aircraft taxiing on the perpendicular taxiway.

B. Runway Hold Position Markings



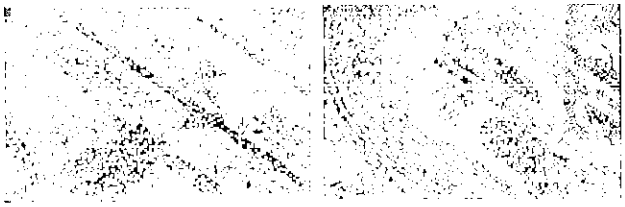
Runway Hold Short Markings are located across each taxiway that leads directly onto a runway. Adjacent to Runway Holding Position Signs, these markings consist of a set of 4 yellow lines and 3 spaces, each 12 inches in width. Of these 4 yellow lines, two are solid lines while the other two are dashed. The dashes are 3 feet in length separated by spaces of 3 feet. A vehicle operator or aircraft must not cross from the solid-line side of the marking without first obtaining clearance from ATC.

Running parallel to the holding position markings is a row of in-pavement flashing amber lights across the entire width, with elevated fixtures on each side, called guard bar lights.

C. ILS Markings

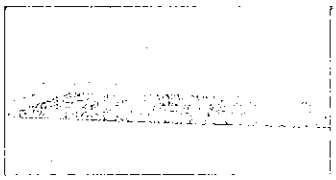
Instrument Landing System, or ILS, Critical Area Hold Short Markings are comprised of two parallel yellow lines with lines running perpendicular between the two parallel yellow lines, similar to the shape of a ladder. ILS Holding Position Signs have white letters on a red background. These markings and signs identify the location on a taxiway where an aircraft or vehicle is to stop when it does not have clearance to enter ILS critical areas.

D. Runway Pavement Markings



Pavement markings on a runway are white. These markings include: Threshold and Threshold Bars, Aiming Point, Designation, Touchdown Zone, Centerline, Edge Lines, and Displaced Threshold Markings. The only non-white lines on a runway are yellow lead-on, lead-off lines that extend from the runway centerline beyond the runway holding position marking.

E. Surface Painted Signs

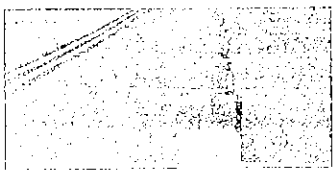


Surface painted signs, such as this holding position sign, are used to provide extra guidance to pilots and drivers. This surface painted holding position sign denotes the entrance to a runway from a taxiway and supplements the elevated holding position signs.

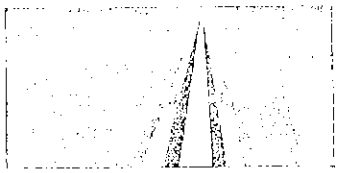
F. Intermediate Hold Position Markings

Intermediate holding position marking, consist of a single dashed line extending across the width of the taxiway and are used for taxiway/ taxiway intersections to support the operational need by the airport traffic control tower to manage taxiing aircraft through a congested intersection.

G. Taxiway Pavement Markings



Pavement markings on taxiways are always yellow. The taxiway centerline is painted on all taxiways. On the edges of each taxiway, there is a solid, double yellow line or double-dashed line. If aircraft are permitted on both sides of the line, the lines will be dashed; if not, the lines will be solid. The edges are also reflected with blue and white cones, called delineators, or blue edge lights where applicable. Red reflector delineators are also used to denote the locations of drains, and other various obstructions locations throughout the airfield.

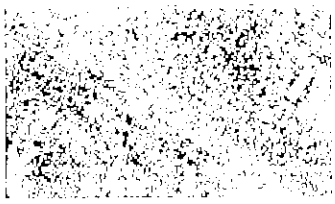


Enhanced Taxiway Centerline Markings accentuate the centerline with dashed lines up to 150 feet before a runway hold line appears. These markings are intended to serve as an additional warning to flight crews and vehicle operators that they are approaching the runway.

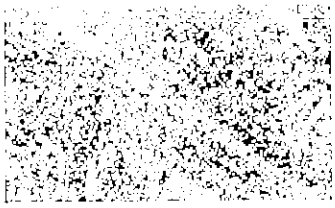
XIII. Airport Lighting

A. Runway Lighting

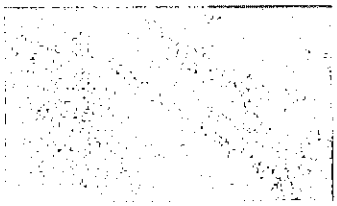
Runways are lighted with a variety of colored lights. Some of these lights are listed here:



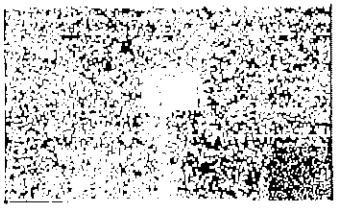
1) Runway Edge Lights are white. If the runway has an instrument approach, as in the case at JFK for all runways, the last 2,000 feet of the runway will be yellow in color.



2) Runway Centerline Lights are white except for the last 3,000 feet of the runway, where they begin to alternate red and white. For the last 1,000 feet of runway, they are all red.



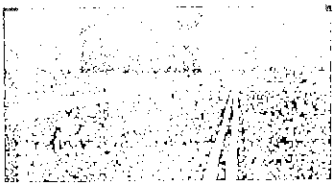
3) Runway Touchdown Zone Lights (TDZL) are white. At JFK these can be found on the following runways: 4R, 22L, 13L, 31R.

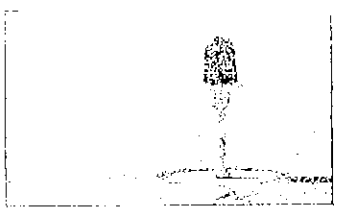


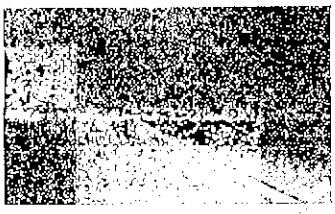
4) Runway Threshold Lights consists of red and green split lenses, emitting green light outward from the runway and emitting red light toward the runway. The green lights indicate the landing threshold to landing aircraft and the red lights indicate the end of the runway, both landing and departing.

Threshold lights are installed in two groups of four lights each. They are located on a line perpendicular to the extended runway centerline not less than 2 feet and not more than 10 feet outboard from the runway threshold markings. The outermost light in each group is located in line with the runway edge lights. The other lights in each group are located on 10 feet centers towards the extended runway centerline.

B. Taxiway Lighting







Taxiways are usually lighted by edge lights (and/or edge markers) and centerline lights. Taxiway edge markers, also referred to as delineators, are sometimes used to supplement taxiway edge lighting systems. These edge markers are white with blue reflective tape. Taxiways edge lights are blue whereas taxiway centerline lights are green with the following exceptions:

1) Lead-off Lights

Taxiway centerline lights which provide visual guidance to person exiting the runway (lead-off lights) are color-coded to warn pilots and vehicle drivers that they are within the Runway Safety Area (RSA) or Instrument Landing System (ILS) Critical Area. Alternate green and yellow lights are installed from the runway centerline (beginning with a green light) to one centerline light position beyond the runway hold or ILS critical area hold position ending with a yellow light. The fixture inside the runway hold position must always be green when approached from the taxi direction and yellow when approached from the runway direction (bidirectional). If the layout of the lights results in an odd number of color-coded lights, the first two taxiway centerline lights on the runway should be green.

2) Lead-on Lights

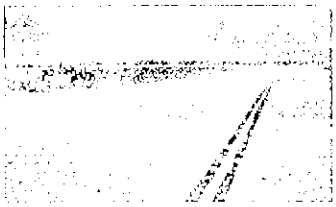
Lead-on lights provide visual guidance to pilots entering the runway. They are also color-coded with the same yellow/green color pattern as lead-off lights to warn pilots and vehicle drivers that they are within the RSA or ILS Critical Area. The color-coding begins with a green light at the runway centerline and progresses to one light beyond the runway hold or ILS critical hold position. The fixture used prior to the runway hold or ILS Critical Area position must always be green when approached from the taxi direction and yellow when approached from the runway direction (bidirectional).

3) Intersections

Taxiway centerline lights that cross a runway are color-coded with a green light beginning at the runway centerline and must end with a yellow light one centerline light position beyond the runway hold or ILS Critical Area holding position.

C. Runway Guard Lights (RGL)/Wig-Wag Lights

There are two types of runway guard lights, elevated and in-pavement, which provide a visual indication that a vehicle operator is approaching a runway holding position location. Since snow could obscure in-pavement RGLs, or there might be an acute angle between the holding position and the direction of approach to the holding position, we have found it advantageous to supplement in-pavement RGLs with elevated RGLs. Each elevated RGL fixture consists of two alternately illuminated, unidirectional yellow lights. In-pavement RGLs consist of a row of alternately illuminated, unidirectional yellow lights.



In-pavement RGLs are centered on an imaginary line that is parallel to, and 2 feet from, the holding side of the runway holding position marking. Elevated RGLs are collocated with the runway holding position marking and are normally installed on each side of the taxiway.

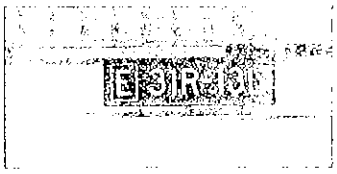
D. Obstruction Lights

Obstruction lights are steady-burning red lights installed atop structures to increase conspicuity and permit early obstruction recognition by pilots. An example of an obstruction light would be that atop on a wind cone.

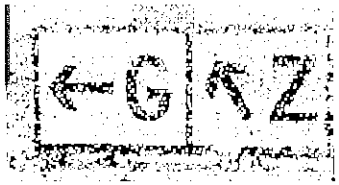
XIV. Airport Signage

A. Runway Signs

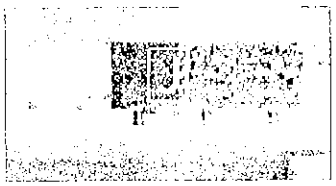
Here are the basic types of Movement Area signs:



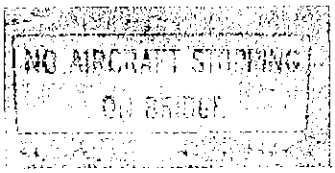
1. Mandatory Instruction – white inscriptions with a black outline on a red background



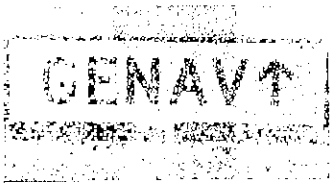
2. Direction – black inscription on a yellow background and always contain arrows



3. Location – yellow inscription on a black background with a yellow border



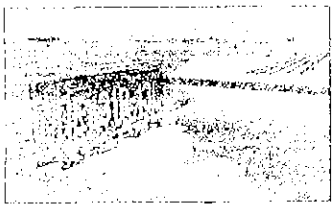
4. Information – black inscription on a yellow background



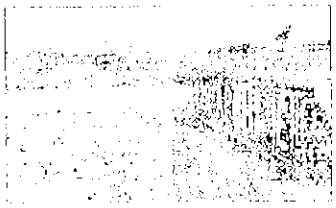
5. Destination – black inscription on a yellow background and always contain an arrow

The following are common signs at JFK:

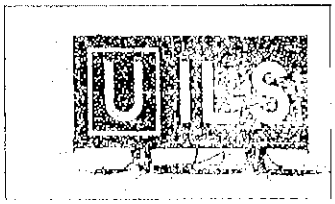
B. Mandatory Instruction Signs



1. Runway Holding Position Signs have a white inscription with a black outline on a red background. These are located at each entrance to a runway and are adjacent to runway holding position markings. Do not proceed beyond these signs until clearance is given by the FAA ATCT to enter onto the runway.

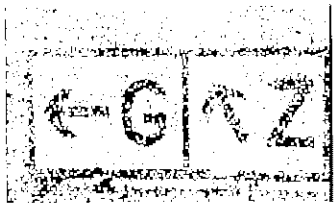


2. Holding Position Signs for Runway Approach Areas have the associated runway designation followed by a dash and the abbreviation APCH for approach. These signs have a white inscription with a black outline on a red background. The sign is installed on taxiways located in approach areas where an aircraft on a taxiway would either cross through the runway safety area or penetrate the airspace required for the approach or departure runway.

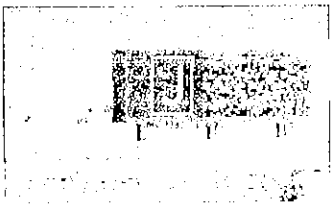


3. Holding Position Signs for ILS Critical Areas have a white inscription with a black outline on a red background. These signs tell pilots and vehicle operators where to stop to avoid interrupting a type of navigational signal used by landing aircraft. This is a critical area, and a vehicle/equipment operator must remain clear of it. If a vehicle proceeds past this ILS marking, it may interfere with the signal to be transmitted to the landing aircraft. (During IFR condi-tions, do not proceed beyond these signs until clearance is given by the FAA ATCT to access a runway.)

C. Taxiway Signs



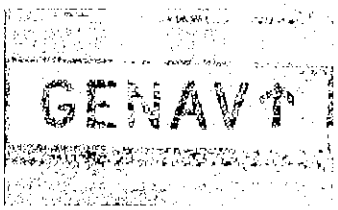
1. Direction Signs have a black inscription on a yellow background and always contain arrows. These signs indicate directions of other taxiways leading out of an intersection. The arrows are always oriented to approximate the direction of turn. There are taxiway direction signs and runway exit signs which are located on the runway itself prior to the runway/taxiway intersection on the side and in the direction from which the aircraft is expected to exit. (Refer AC 150-5340-18, current edition)



2. Location Signs have a yellow inscription on a black background with a yellow border. These signs identify taxiways or runways upon which an aircraft or vehicle is located.

3. Information Signs are those signs that are installed on the airside of an airport other than mandatory instruction signs, taxiway guidance signs and runway distance remaining signs. Information signs have black inscriptions on a yellow background and provide

adequate clearance to aircraft. Examples include noise abate-ment procedures, crossing vehicle roadways, or other specialized information. These signs need not be lighted but are required to be retro-reflective and frangibly mounted. The size and message of the inscription is at the discretion of the airport operator.

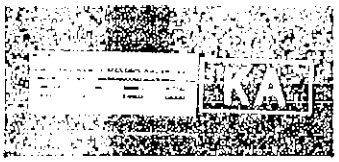


4. Destination Signs have black inscriptions on a yellow background and always contain an arrow. These signs indicate the general direction to a remote location where taxiway location and direction signs alone do not adequately guide a pilot or a vehicle operator to the desired destination. There are two types of destination signs namely outbound destination signs and inbound destination signs.

Outbound destination signs are used to identify directions to the takeoff runways. There routes usually begin at the entrance to a taxiway from an apron area. The inscription is the runway number plus an arrow indicating the direction. Inbound destination signs are used to identify directions to major destination areas such as aprons, fueling areas, etc.

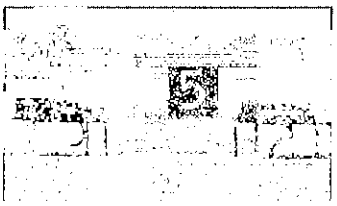
D. Other Signs

Runway Distance Remaining Signs have a black background with white numbers. The numbers indicate the distance of the remaining runway in thousands of feet. For instance, this sign means that there are 5,000 feet of runway remaining.



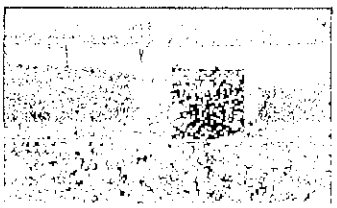
Another sign you should be familiar with is the Runway Approach Boundary sign. This sign faces the runway and is visible to pilots exiting the runway. Taxi past this sign to be sure you are clear of a runway.

XV. NAVAIDS



Precision Approach Path Indicators (PAPI) - This system provides visual approach slope guidance and assists the pilot in maintaining a safe distance above hazardous objects. The light units are installed in a line perpendicular to the runway edge. Each light unit emits a two-color (red and white) light beam. When the light units are properly aimed, the optical system provides visual approach slope information. Where terrain, intersecting runways, or taxiways make an installation on the left side of the runway impractical, the light housing units may be located on the right side of the runway. The following runways have a PAPI installed: R/W 22L, R/W 13R, R/W 31L.

Visual Approach Slope Indicator (VASI) – This system provides vertical visual approach slope guidance to aircraft during approach to landing by radiating a directional pattern of high intensity red and white focused light beams which indicate to the pilot is "on path" if he sees red/white, "above path" if white/white, and "below path" if red/red. Some airports serving large aircraft have three-bar VASIs which provide two visual glide paths to the same runway.
Note: This system is slowly being phased out and replaced with the newer PAPI system. The following runway has a VASI installed: R/W 13L

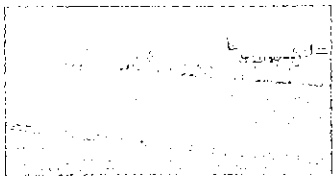


Runway End Identifier Lights (REIL) - These lights are installed at airports to provide rapid and positive identification of the approach end of a particular runway.

The system consists of a pair of synchronized white flashing lights located laterally on each side of the runway threshold, shortly before the actual runway surface.

XVI. Safety Areas

A. Runway Safety Areas



Surrounding runways are safety areas. These areas include any pavement, shoulders, blast pads and stopways on runways and taxiways and help reduce the risk of damage to an airplane that undershoots, overshoots or leaves the runway. Safety areas need just as much attention and care as the runways and taxiways they surround.

At JFK, all runway safety areas are 500 feet wide. The lengths are 1,000 feet for Runways 13R, 31L and 31R; 141 feet on the approach end of 4L and 885 feet on the approach end of 22R; and 467 feet on the approach end of 4R and 514 feet on the approach end of 22L.

Ground vehicles and pedestrians are not permitted inside the RSA without the authorization of Airport Operations and the FAA ATCT.

B. Taxiway Safety Areas

A Taxiway Safety Area (TSA) is a defined surface surrounding the taxiway prepared or suitable for reducing the risk of damage to airplanes in the event of an excursion from the taxiway.
At JFK, the TSA is 131' feet each side of the taxiway centerline.

XVII. Runway Obstacle Free Zone

The Runway Obstacle Free Zone (OFZ) is a defined volume of airspace centered on the runway centerline. The OFZ adds a measure of safety for landing aircraft by prohibiting penetrating objects in the airspace close to the runway. At JFK, the patrol road, which parallels Runway 4R-22L on the west side (clear of the runway's safety area), is located within the safety area for the Runway 13L departure end. Also, the patrol road behind Runway 13L is located within the safety area for Runway 31R departure end.

XVIII. Movement Area Access Procedures – Vehicles

Besides individual movement area driver requirements, vehicles must be authorized to operate in the movement area. Authorized vehicles can be defined as those vehicles necessary for airport operations and thus may enter a Movement Area. With the exception of aircraft tugs/super-tugs towing aircraft, other vehicles such as baggage tugs, fuel trucks, catering trucks, and other non-essential vehicles are not permitted unescorted access in the Movement Area.

Ground vehicles operating in the movement area must:

- be safe and in proper working order
- have company markings, overhead beacons and reflective stripes in accordance with AC 150/5210-5, Current Edition
- have two-way radio equipment for communications with the FAA ATCT (or must be under escort of a vehicle having two-way communications with the FAA ATCT)
- have airport "PONYA" plates, valid state inspection, registration and insurance
- have a DR2 or DR3 qualified operator with a valid driver's license

XIX. Communications

A. Movement Area Communication

In order to operate in the Airport Movement Area (AMA), all vehicles must be equipped with two-way radios capable of communicating with FAA ATCT at any given moment. Operators should monitor the appropriate radio frequency, generally FAA ATCT - Ground Control (121.9 MHz), which controls all ground traffic. All vehicle operators must contact Airport Operations for permission before entering the AMA. If approval is given, then all vehicles must obtain clearance from the ATC prior to entering the AMA if proceeding to a runway or intersecting throat. Runway crossings should occur at runway ends rather than the midpoint whenever possible.

For example: "Ground Car 1234 at the GAT ramp to go to T/W "J" hold short of R/W 4L-22R." At this point Ground Control may elect to give progressive instructions – or –advise to proceed at as requested. When you arrive at T/W "J" short of R/W 4L-22R that is when you would call to cross R/W 4L-22R.

The Letter of Agreement between the Port Authority and Kennedy's ATCT details the procedures for access to the AMA by ground vehicles (Exhibit B).

B. Radio Communication Procedures

There are basic procedures that must be followed to effectively communicate by radio:

- First, your vehicle should have an identifying call sign. Before communicating over the radio, you must know the call sign so that you can identify yourself
- Know what you are going to say before you begin communicating, and keep your communication as short as possible.
- Before you start talking on the radio, make sure that no one else is already talking on that frequency. Do not try to talk over them
- If the radio is clear, begin by saying who it is that you are calling, followed by who you are, by saying your call sign
- Wait for the controller to respond
- Always remember that the phrase "Go Ahead" does NOT mean to proceed onto the runway or taxiway. It means to continue with your request
- Tell the controller again your call sign, where you are, and what you want to do
- The controller may respond by repeating your request, or he may tell you to "stand by", "hold short" or "continue holding"
- Listen carefully to the controller's response, and always repeat back the instructions given by the controller to make sure you heard them correctly.
- If at any time you are unsure of the instructions, continue to hold short and ask for the instructions to be repeated. Proceed only when both you and the ATC have a clear and mutual understanding of your intentions and you have been given clearance to proceed.

C. Standard Phraseology

When vehicle operators proceed onto a Movement Area, they must tell Airport Operations and/or FAA ATCT the following three things:

- WHO you are
- WHERE you are; and
- WHAT your intentions are

It is important to use standard phraseology to avoid miscommunication. Below are commonly used phrases with their corresponding meanings:

WHAT IS SAID	WHAT IT MEANS
Acknowledge	Let me know you have received and understand this message
Advise Intentions	Let me know what you plan to do
Affirmative	Yes
Correction	An error has been made in the transmission, and the correct version follows
Go Ahead	Proceed with your message only
Hold/Hold Short	Phrase used during ground operations to keep a vehicle/aircraft within a specified area or at specified point while awaiting further clearance from air traffic control
How do you hear me?	Question relating to the quality of the transmission or to determine how well the transmission is being received
Immediately	Phrase used by ATC when such action compliance is required to avoid an imminent situation
Without delay	Phrase used by ATC when such action compliance is required to avoid an imminent situation
Negative	"No" or "Permission not granted" or "that is not correct"
Out	The radio conversation is ended, and no response is expected
Over	My radio transmission is ended, and I expect a response

Read Back	Repeat my message to me
Roger	I have received all of your last transmission
Standby	Means the controller or pilot must pause for a few seconds, usually to attend to other duties of a higher priority. Also means to wait as in "stand by" for clearance." The caller should reestablish contact if a delay is length.
Unable	Indicates inability to comply with a specific instruction, request, or clearance.
Verify	Request confirmation or information

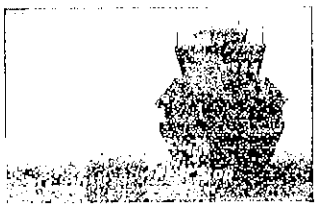
D. Phonetic Aviation Alphabet

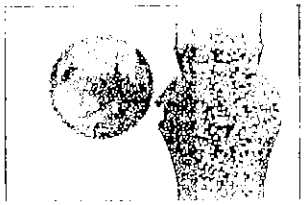
English is the international language for communication between an aircraft and a control tower both domestically and internationally, regardless of the two parties' native languages. The international aviation alphabet assigns code words to the letters of the English alphabet acrophonically so that critical combinations of letters (and numbers) can be pronounced and understood by those whom transmit and receive voice messages by radio or telephone regardless of their native language, especially when the safety of navigation or persons is essential. The paramount reason is to ensure intelligibility of voice signals over radio links. In order to eliminate wide variations in pronunciation, the aviation alphabet was standardized and is laid out in the table below:

A	Alpha	N	November
B	Bravo	O	Oscar
C	Charlie	P	Papa
D	Delta	Q	Quebec
E	Echo	R	Romeo
F	Fox-trot	S	Sierra
G	Golf	T	Tango
H	Hotel	U	Uniform
I	India	V	Victor
J	Juliet	W	Whiskey
K	Kilo	X	X-Ray
L	Lima	Y	Yankee
M	Mike	Z	Zulu

For example, Taxiway B would be referred to as Taxiway Bravo.

E. Radio Failure Procedures/ATC Light Gun Signals





Air traffic controllers have a backup system for communicating with aircraft or ground vehicles if their radios stop working. The controller has a light gun in the tower that can send out different colored lights to tell the pilot or driver what to do. If a vehicle operator experiences a radio failure on a runway/taxiway or experiences disorientation, the operator should vacate the runway or taxiway as quickly and safely as possible and park in the nearest grassy area. Once in the grassy area, the operator should turn the vehicle towards FAA ATCT and start flashing the vehicle headlights and wait for the controller to signal with the light gun.

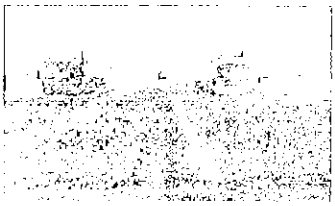
Light Gun Signal	What it Means
Steady Green	Ok to cross runway or taxiway
Steady Red	STOP!
Flashing Red	Move off the runway or taxiway
Flashing White	Go back to where you started
Alternating Red & Green	Use extreme caution

XX. LowVisibility/Winter Driving Conditions

At night or during low visibility conditions, it is your responsibility to reduce vehicle operating speeds as conditions warrant. All headlights, taillights, turn signals and brake lights, as well as overhead rotating beacons and FAA radios, must be in proper working order at all times.

As with low visibility conditions, several things happen at night to make driving even more hazardous. First, things look different. Landmarks you normally use for guidance are not visible and depth perception is greatly reduced. Additionally, the many flashing lights on aircraft and equipment can distract you from

things you need to see. Finally, allow sufficient time for your eyes to adjust to nighttime conditions after being in a lighted area.



Winter driving conditions require special safety considerations. You should, of course, drive more slowly and use more caution for icy and slippery conditions and low visibility when it is snowing. Remember that it is difficult to stop on treated pavement. Also be alert for snow removal equipment, piles of snow and aircraft.

XXI. Aircraft and EmergencyVehicle Right of Way

One of the most important rules of the Movement Area is that aircraft and emergency vehicles have the right of way at all times. There are no exceptions!

XXII. Tug/SuperTug Procedures (DR3)

Tug/Super Tug Operators are able to access the Movement Areas only when actively engaged in the movement of aircraft. The operators must be Airfield Movement Area DR3 certified and remain under positive control of the FAA ATCT at all times!

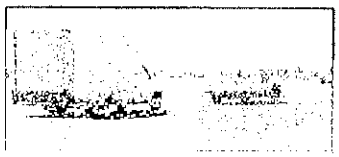
XXIII. Construction/Safety Procedures

There is construction taking place almost everywhere at JFK both on the public roads and on the airfield. Airfield construction projects are usually secured around the perimeter by low mass barriers. Low mass barriers are orange/white and have red caution lights mounted on them. Orange traffic cones with reflective tape are also used periodically to close construction areas for short durations. These barriers warn you to watch for an open excavation or other hazards. Stay out of barricaded areas and use caution when walking or driving by them. All construction personnel are instructed on essential airport procedures and all safety considerations. Operational safety is a standing agenda item during work progress and tool box meetings throughout the duration of the contract.

Contract personnel can enter the aircraft movement area by Escort or Haul Routes. Qualified Airport Operations personnel will provide escorts to contract personnel. Haul Routes can be established and requires vehicles to have placards, flags, and a listed of pre-cleared names.

All of JFK's active construction sites that are located within the Movement Area will have an aeronautically trained Safety Observer. You must adhere to all instructions given by the Safety Observer at all times. Failure to do so could result in suspension of aeronautical driving privileges.

XXIV. Airfield Escort



If your JFK ID card gives you the privilege of escorting you must follow these simple but important guidelines:

- Be sure that the person you are escorting has a legitimate need to be on the airfield
- The person or vehicle being escorted must remain in your line of sight at all times
- The person or vehicle you escorted on the AOA must be escorted off the airfield when their business is completed
- If you pass the escort on to someone else, be sure to get that person's name and ID number
- And, if your escort is found on the airfield alone, YOU are in violation of the Airport Rules and Regulations

XXV. Movement Area Driving Penalties and Fines

The Port Authority has a violation system for your airport driving permit, just like the state does with your

regular driver's license. Certain infractions are more serious than others. Depending on infractions, you can lose your AOA drivers permit or even your AOA access card. You can also lose your job. JFK's contractors, the airlines and the Port Authority take safe driving very seriously.

For a violation on the Movement Area, you will automatically lose your driving privileges until you have attended a Breach of Rules (BOR) and/or the Driver Training Refresher class. For a violation on the Non-Movement Area, you will have your driving privileges automatically suspended until you have attended a BOR class. It is vital to our airport's operations and security.

XXVI. Safety/Incursions

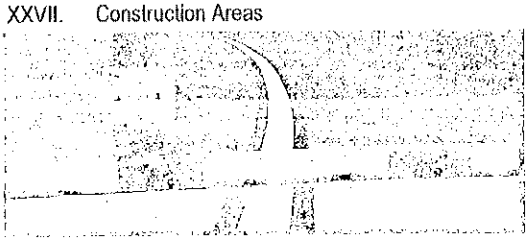
A runway incursion is any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and takeoff of aircraft.

Both surface incidents and runway incursions are serious safety violations that could cost you your airport driving privileges or job, and even your life and or the lives of others.

Surface incidents and runway incursions are primarily caused by communication errors, lack of airport familiarity, or loss of situational awareness.

An example of an incursion is a vehicle straying onto Runway 4R in front of an aircraft, causing the pilot to take an action to avoid a collision.

XXVII. Construction Areas



When inside a construction area, all vehicles and equipment should have a Yellow beacon or Orange/ White checkered flag.

Use caution in and around construction areas, extra vigilance is necessary when driving on an airport during construction. Normal driving routes may be altered, runways and taxiways may be closed.

Unless you are assigned to the worksite REMAIN CLEAR OF AREA. There may be open excavation, open manholes, and wet paint! During runway closures, you must maintain situational awareness and be aware that runway intersections may be active and not part of the closure.

Example: If RWY 4L-22R is closed, Runways 13R-31L & 13L-31R are open through the runway intersections.

XXVIII. Lessons Learned

Human factors has been documented as a primary contributor to more than 70 percent of commercial airplane accidents. While typically associated with flight operations, human factors has also recently become a major concern in aviation maintenance practices, airport operations and air traffic management. Despite rapid gains in technology, humans are ultimately responsible for ensuring the success and safety of the aviation industry. It is important that when driving in the movement area individuals maintain situational awareness.

As an example, a recent incursion occurred that involved intersecting runways. RWY 13L-31R was closed for maintenance and aircraft were departing on RWY 4L. The driver lost situational awareness and thought both runways were closed. For this reason, it is important to confirm runway crossings with JFK Air Traffic Control on ground frequency.

XXIV. Conclusion

Since it was developed more than 60 years ago as Idelwild Field, JFK International Airport has been known as one of the most progressive airports in the world. While many changes have taken place over the years, the safeguards learned here today never change. These, combined with situational awareness and common sense will allow you to work safely in our aviation environment. Thank you for attending today, and remember where you are at all times.

Port Authority General Information

For questions and assistance, remember the following phone numbers:

Port Authority Police

Emergency-Medical-Fire: .....(718) 244-4333

Port Authority Police – General: .....(718) 244-4335

Port Authority Operations: .....(718) 244-4111

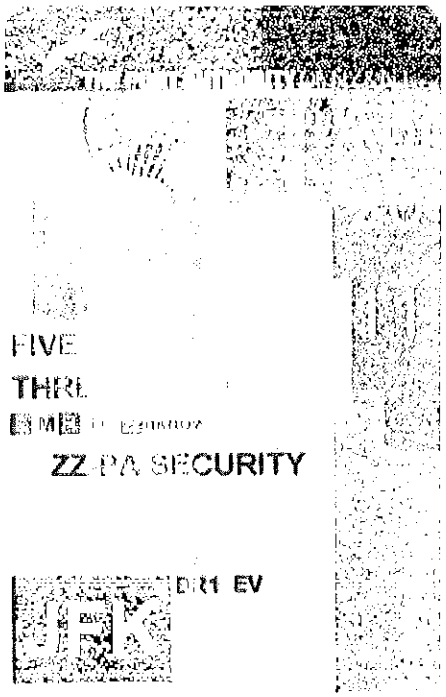
Security I.D. Office: .....(718) 244- 4220

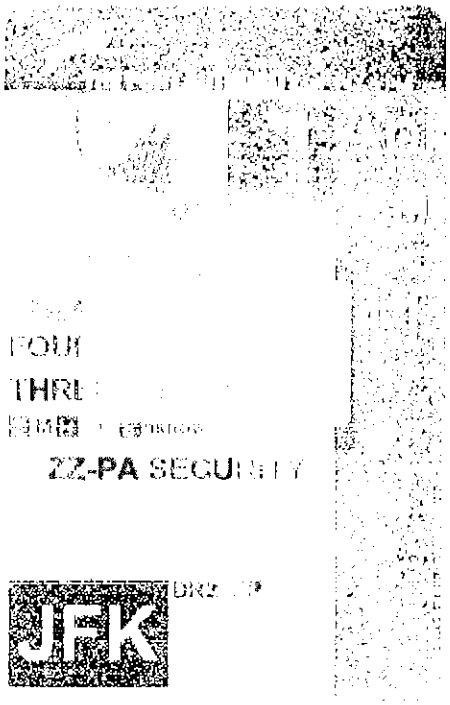
General Information: ..... (718) 244-4444

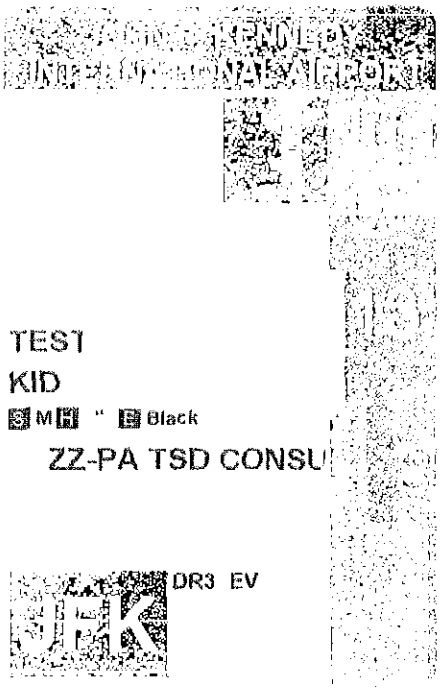
JFK / PA Website: .....http://www.panynj.gov/airports/jfk

Movement Area Driver Training Handout (JFK DR2 & DR3)

Exhibit A







DEC 8 - 2014

NOTES

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THE PORT AUTHORITY OF NY & NJ

DEC 8 - 2014

New York John F. Kennedy International Airport Movement Area Driver Training Handout (JFK DR2)

John F. Kennedy International Airport

WILDLIFE HAZARD MANAGEMENT PLAN

The Port Authority of New York and New Jersey
John F. Kennedy International Airport
Building 145, Second Floor
Jamaica, New York 11430

June 2014

TABLE OF CONTENTS

INTRODUCTION

John F. Kennedy International Airport (JFK) has been operated by the Port Authority of New York and New Jersey (PANYNJ) since June 1947 and is one of the world's busiest airports. The airport's location adjacent to a national wildlife refuge poses challenges to safe aircraft operations. Many ~~bird~~ wildlife species use nearby habitats to forage, live, and nest. Gulls (*Larus* spp.) and waterfowl species present the largest hazard to flight operations at JFK.

In response to the threat posed by aircraft striking wildlife and in accordance with 14 CFR Part 139.337(f), a ~~new~~ Wildlife Hazard Assessment (WHA) was completed in December 2011 to assess wildlife hazards on and within 5 miles of the airport and address the effectiveness of the Wildlife Hazard Management Plan. The WHMP outlines the airport's procedures, activities, and responsibilities associated with reducing wildlife hazards at JFK. Upon completion of the WHA, the WHMP was updated accordingly. As detailed in the WHMP, JFK monitors ~~all~~ wildlife activity on-, and around the airport through on-going monitoring programs and analysis of depredation and wildlife strike history. These data are used to ensure that JFK's WHMP properly addresses wildlife hazards.

In accordance with its WHMP and 14 CFR Part 139, JFK will take immediate action to alleviate wildlife hazards whenever they are detected.

AUTHORITY – 14 CFR Part 139.337(f)(1)
The individuals having authority and responsibility for implementing each aspect of the plan.

The persons and departments responsible for implementing the airport's WHMP include staff from Airport Operations Division, Aviation Technical Services, and Plant, Structures & Airport Redevelopment Division (Maintenance Services) as follows:

Aeronautical Services Manager
The Aeronautical Services Manager is designated by the Airport Manager to be responsible for all 14 CFR Part 139.337~~FAR Part 139~~ regulations that involve airside operations at the airport. The Aeronautical Services Manager:

- coordinates with the Port Authority Wildlife Biologist and the Chief Operations Supervisor to ensure that the WHMP is being adhered to and that JFK complies with all Federal, State, and local wildlife laws and regulations and Port Authority policy.
- ~~has the signatory authority for all Federal, State, and local wildlife permits and~~ notifies the Port Authority Wildlife Biologist of all pertinent changes to airport, Port Authority, or FAA policy and practices ~~or may designate the Wildlife Biologist to be the signatory authority for all Federal, State, and local wildlife permits.~~
- The Aeronautical Services Manager also has the authority to issue Notices to Airmen (NOTAMs) to the Air Traffic Control Tower (ATCT) when necessary.

Port Authority Wildlife Biologist

The Port Authority Wildlife Biologist reports to the Aeronautical Services Manager and is responsible to the Airport Manager for all ~~FAR~~14 CFR Part 139 regulations having to do with wildlife management (~~FAR~~14 CFR Part 139.337). The Port Authority Wildlife Biologist:

- oversees the airport's wildlife management activities, including providing direction, technical expertise and guidance to the Wildlife Management staff
- manages and administers all contracts for wildlife ~~control~~ management and research, including wildlife monitoring, Wildlife Hazard Assessments, the Gull Hazard Reduction Program, and Seasonal Wildlife Control Program
- evaluates current wildlife programs and develops new wildlife hazard management goals
- is the airport's liaison to all Federal, State, and Local regulatory agencies regarding wildlife issues,
- has the signatory authority for and obtains all Federal, State, and local wildlife permits ~~obtains all necessary wildlife permits~~
- reviews and updates the WHMP in accordance with 14 CFR Part 139.337
- reviews the airport's WHMP after triggering wildlife strikes (defined in 14 CFR 139.337) and coordinates with airport management, USDA, and the FAA to determine if a wildlife hazard assessment is warranted
- maintains the airport's depredation and wildlife strike databases and notifies other airport departments of wildlife activities as necessary
- provides wildlife reports to the Aeronautical Services Manager monthly or as requested
- ~~reports~~ reviews wildlife strikes submitted to FAA.

Chief Operations Supervisor (FS-9)

The Chief Operations Supervisor reports directly to the Aeronautical Services Manager and is responsible for:

- ~~administering~~ ensuring compliance with all ~~FARCFR Part 139~~14 CFR Part 139.337 regulations.
- coordinating with the Port Authority Wildlife Biologist to ensure compliance with all ~~FARCFR Part 139~~14 CFR Part 139.337 regulations.
- issuing NOTAMs when necessary.

Airport Duty Manager (ADM)(FS-8 Assistant Chief Operations Supervisor)

The Airport Duty Manager reports directly to the Chief Operations Supervisor and is responsible for:

- supervising day-to-day airport operations activities and all Airport Operations field employees, including the Wildlife Management staff.
- conducting runway ~~bird sweeps~~surface inspections, responding to wildlife strikes, and dispersing or controlling any wildlife hazards to aircraft when there is no Wildlife Supervisor on duty
- conducting nonlethal and lethal wildlife activities on an emergency basis
- notifying all wildlife management contract employees of current airport conditions and expected or unexpected events that may affect airside airport operations

- issuing NOTAMs when necessary.

Assistant Airport Duty Manager (AADM)(FS-5 *Assistant Airport Duty Supervisor*)
The Assistant Airport Duty Manager reports directly to the Airport Duty Manager and is responsible for:

- monitoring day-to-day activities of airside airport operations and all Wildlife Supervisors, Senior Airport Operations Agents and Airport Operations Agents.
- conducting nonlethal and lethal wildlife management activities as directed by the Airport Duty Manager or when there is no Wildlife Supervisor on duty
- issuing NOTAMs, when necessary.

Senior Wildlife Supervisor (FS-5 Assistant Airport Duty Supervisor)
The Senior Wildlife Supervisor reports directly to the Port Authority Wildlife Biologist and the Airport Duty Manager and his/her primary duty is the day-to-day supervision of wildlife management activities and Wildlife Management staff as directed by the Port Authority Wildlife Biologist. The Senior Wildlife Supervisor is responsible for:

- supervising the Wildlife Management staff, including training those employees in the airport's wildlife management practices and policies
- maintaining and inventorying all firearms, pyrotechnics, and other wildlife-related equipment and supplies as the Airport Operations firearms custodian
- issuing or recommending NOTAMS to the Airport Duty Manager for wildlife hazard management activities or strike hazards that may impact aircraft safety
- supervising wildlife management contractors
- conducting ~~bird-sweeps~~surface inspections of runways, taxiways, and airside service roads
- conducting nonlethal or lethal wildlife control when necessary
- providing monthly strike reports to the Port Authority Wildlife Biologist
- reporting wildlife attractants to the Port Authority Wildlife Biologist.

Wildlife Supervisor (FS-3 Operations Services Supervisor)
The Wildlife Supervisor reports directly to the Senior Wildlife Supervisor or the Assistant Airport Duty Manager in the absence of the Senior Wildlife Supervisor. The Wildlife Supervisor is responsible for:

- conducting day-to-day wildlife hazard management activities to reduce the threat of wildlife strikes using lethal and nonlethal methods
- supervising the Wildlife Agent
- supervising wildlife management contractors in the absence of the Senior Wildlife Supervisor.
- conducting continuous wildlife patrols during which they shall monitor, move, and control ~~birds~~ wildlife in active airport areas,
- conducting runway and taxiway ~~bird-sweeps~~surface inspections
- investigating reported ~~bird~~ wildlife strikes to aircraft, submitting strike reports to FAA, and informing the Port Authority Wildlife Biologist and Senior Wildlife Supervisor of all ~~bird~~ wildlife strikes

- reporting wildlife attractants to the Senior Wildlife Supervisor
- notifying the Senior Wildlife Supervisor and/or the Assistant Airport Duty Manager of wildlife strike hazards or wildlife hazard management activities that may impact aircraft safety and recommend the issuance of a NOTAM
- coordinating with the Senior Wildlife Supervisor and/or the Airport Duty Manager or Assistant Airport Duty Manager to conduct emergency wildlife management activities.

Wildlife Agent (AOA)(C-47 Airport Operations Agent)
The Wildlife Agent reports directly to the Wildlife Supervisor and is responsible for:

- conducting day-to-day wildlife hazard management activities to reduce the threat of wildlife strikes using nonlethal methods only (including pyrotechnics)
- conducting continuous wildlife patrols during which they shall monitor, move, and control ~~birds~~ wildlife in active airport areas
- reporting wildlife attractants to the Wildlife Supervisor
- assisting the Wildlife Supervisor with wildlife activities as directed.

Chief Maintenance Supervisor (FM-6)
The Chief Maintenance Supervisor reports to the Manager of the Maintenance Division and supervises Port Authority Maintenance or contract staff performing any maintenance jobs. Maintenance is responsible for:

- managing grass at a height of 6"-10" where conditions allow or as directed by the Wildlife Management staff in the AOA
- trimming or removing shrubs and trees within the AOA
- removing trash and debris from the AOA
- applying pesticide in the AOA
- coordinating with the Port Authority Wildlife Biologist or Senior Wildlife Supervisor to conduct maintenance projects for the purpose of reducing or controlling wildlife at the airport.

Landside Operations Supervisor (FS-3 Operations Services Supervisor and FS-4 Operations Group Supervisor)
The Landside Operations Supervisor reports to the Airport Duty Manager and is responsible for:

- conducting day-to-day wildlife hazard management activities streetside (outside the AOA) to reduce the threat of wildlife strikes using nonlethal methods only (including pyrotechnics)
- conducting wildlife patrols during which they shall monitor, move, and control ~~birds~~ wildlife in streetside areas of the airport
- reporting wildlife attractants to the Senior Wildlife Supervisor, Wildlife Supervisor, or Port Authority Wildlife Biologist
- coordinating with the Wildlife Supervisors as needed to conduct wildlife hazard control in streetside areas of the airport.

~~**USDA Wildlife Biologist**~~
~~The USDA Wildlife Biologist reports to the Aeronautical Services Manager for Part 139 Compliance and is responsible for:~~

- ~~conducting wildlife hazard assessments~~
- ~~conducting routine wildlife surveys~~
- ~~reporting findings and unusual wildlife observations to the Airport Duty Manager and the Port Authority Wildlife Biologist~~
- ~~using findings from surveys, assessments, research and publications to recommend improvements to the JFK WHMP~~
- ~~supervising the Gull Hazard Reduction Program and Seasonal Wildlife Control Program~~
- ~~coordinating with Airport Operations and the Port Authority Wildlife Biologist to interface with off-airport property owners and business operators regarding mitigation of wildlife hazards to aircraft~~
- ~~employing appropriate wildlife control methods when hazardous wildlife are detected during routine surveys or observations~~
- ~~assisting the wildlife management staff with projects as requested.~~

~~**USDA Wildlife Specialist**~~

~~The USDA Wildlife Specialist works at JFK on a part-time basis and reports to the Aeronautical Services Manager for Part 139 Compliance and is responsible for:~~

- ~~assisting the Port Authority and USDA Wildlife Biologists as requested~~
- ~~reporting findings and unusual wildlife observations to the Airport Duty Manager and the Port Authority Wildlife Biologist~~
- ~~employing appropriate wildlife control methods when hazardous wildlife are detected during routine surveys or observations~~
- ~~assisting the wildlife management staff with projects as requested.~~

PRIORITIZED ACTIONS – 14 CFR Part 139.337(f)(2)
Prioritized actions identified in the Wildlife Hazard Assessment and target dates for initiation and completion.

Wildlife Population Management – 14 CFR Part 139.337(f)(2)(i)

Gull Hazard Reduction Program

Gulls (*Larus* spp.) pose a risk to aircraft at JFK and since 1991 the airport has conducted an annual reduction program to shoot gulls that are attempting to fly over the airport. In addition to gulls, Canada geese (*Branta canadensis*), Atlantic brant (*Branta bernicla*), double-crested cormorants (*Phalacrocorax auritus*), mute swan (*Cygnus olor*), rock pigeon (*Columba livia*), mallard (*Anas platyrhynchos*), American black duck (*Anas rubripes*), American crow (*Corvus brachyrhynchos*), fish crow (*Corvus ossifragus*), common grackle (*Quiscalus quiscula*), boat-tailed grackle (*Quiscalus major*), black-tailed jackrabbits (*Lepus californicus*), Eastern cottontail (*Sylvilagus floridanus*), and muskrat (*Ondatra zibethicus*) are also depredated. This program is conducted during the summer breeding season and continues into the fall migration period (the exact timing of this program varies slightly from year to year). Numbers of birds depredated, locations, and effort are recorded to monitor the population. ~~USDA maintains a set of standard operating procedures that further details the specifics of this program.~~

In conjunction with the Gull Hazard Reduction Program, the airport is required by New York State Department of Environmental Conservation (NYSDEC) to conduct an annual census of the laughing gull (*Larus atricilla*) colony in Jamaica Bay. The census is conducted in June and consists of an annual aerial survey and a ground-truthing survey at least once every three years. Ground-based surveys are conducted in coordination with the National Park Service (NPS), who owns the property where the laughing gulls nest.

~~USDA generates yearly reports that document the results and activities of the Gull Hazard Reduction Program and nest colony census.~~

Target Date for Completion: Annual/May-October

New York City Goose Population Management

In 2009, The Port Authority of NY & NJ signed a Memorandum of Understanding (MOU) with the City of New York recognizing the threat that resident Canada geese pose to aviation at JFK and LGA. The City and Port Authority have agreed to contract with United States Department of Agriculture – Wildlife Services (USDA) to remove Canada geese from certain public areas within New York City and Nassau County that are located within the 5-mile radius of JFK. The Port Authority, in conjunction with the City of New York and members of the New York City Airports Wildlife Hazard Management Steering Committee, will continue to monitor and address resident Canada goose populations inhabiting the areas around JFK. The Port Authority anticipates working with the City and neighboring landowners to extend this program into the foreseeable future. In 2013, egg oiling was conducted at two sites within a 5-mile radius of JFK. Additional sites may be added in the future, as needed.

USDA generates annual reports to summarize the removals and continued monitoring of the removal sites. These reports are reviewed to help determine the effectiveness of the program.

Target Date for Completion: Annual/June-July

Mute Swan Management

In 2013, The Port Authority of NY & NJ coordinated with NPS and USDA on mute swan management in the Jamaica Bay Wildlife Refuge. NPS will continue with their mute swan egg-oiling program and has authorized The Port Authority and USDA to conduct lethal control of mute swans, pending environmental review.

Additionally, NYC Parks & Recreation authorized USDA to oil mute swan eggs in ~~Baisley Pond Park~~ their parks as needed.

Target Date for Completion: Annual/April-July

Pigeon and Starling Trapping

The airport traps and euthanizes pigeons and starlings (*Sturnus vulgaris*) to reduce the risk of strikes with aircraft. Other nuisance birds including red-winged blackbirds (*Agelaius phoeniceus*), brown-headed cowbirds (*Molothrus*

ater), and house sparrows (*Passer domesticus*) are also trapped and euthanized. Trapping is conducted daily during the summer and fall and as needed during other times of the year. Trapping results are summarized in airport's depredation database.

Target Date for Completion: Ongoing

Wildlife Monitoring

~~The airport conducts surveys at dawn or dusk twice per month to monitor wildlife populations at locations on and off the airport. Surveys are conducted at multiple sites within the AOA, at the CTH, and at several parks within a 5-mile radius of the airport.~~

Routine wildlife surveys are conducted at locations on and off the airport. Results are summarized in monthly and annual reports.

Target Date for Completion: Ongoing

Seasonal Wildlife Control Program

The airport uses additional wildlife contractors to supplement Airport Operations staff in dispersing wildlife from the airport, especially the Aircraft Operations Area (AOA). The wildlife contractors use nonlethal (pyrotechnics, ~~bio~~acoustics, vehicles, paintball, laser, or other methods) and lethal strategies to control ~~birds and other~~ wildlife. This program is conducted during May-October.

Target Date for Completion: Annual/May-October

Terrapin Management

In 2010, the airport began collecting data and marking nesting diamondback terrapins (*Malaclemys terrapin*) and coordinating those activities with a similar project at Jamaica Bay Wildlife Refuge. Terrapins that have been collected are released in a more remote location to reduce their potential impact on runways and aircraft traffic. The airport also consulted with terrapin experts to design and test terrapin barriers adjacent to the perimeter fence on Runway 4L. In 2012, the airport monitored the trial terrapin barriers and assessed their effectiveness. These results were incorporated into a final barrier design ~~and rehabilitation~~ that was completed in June 2013. Additional fencing and/or filling of gaps under fences will be provided as needed.

Target Date for Completion: ~~December 2014~~June 2013/Ongoing

Habitat Modification - 14 CFR Part 139.337(f)(2)(ii)

Turf, Woody Vegetation, and Landscaping

All newly planted airport vegetation will be in accordance with the Port Authority Engineering Department's "Aviation Landscape and Sustainable Design Criteria". Also, more specific grass seed specification can be found in Engineering Document 02930, Section 02930 "Seeding C-Specification". For more detailed plant lists, please refer to those documents.

Turf will be managed at a height of 6-10 inches (15-25 cm) where conditions allow. Grass will be seeded in bare areas to eliminate or reduce ground-nesting birds. In areas prone to grazing by geese, turf alternatives will be used such as

planting of alternative grasses, artificial turf, or reshaping of turf through plantings of shrubs or trees.

Fruiting trees and shrubs, such as blackberries, will be removed to the extent possible. Bayberry maintenance will be conducted annually. Trees that promote nesting or roost sites will be thinned or removed and trees will be planted in landside turf areas where feasible to reduce attractiveness to geese. Trees in close proximity to Rwy 4R were removed in fall ~~2012~~2013 and shrubs and trees along the shoreline parallel to Rwy 13R were removed in April summer, and fall ~~2012~~2013.

Target Date for Completion: Ongoing

Perching Structures

Where feasible, JFK will remove abandoned equipment or structures and modify structures still in use to reduce bird perching. JFK's AirTrain Stations are modified with bird netting and other anti-perching devices to prevent starlings and pigeons from roosting and nesting on ledges, exposed beams, and other structures. Anti-perching devices are installed on FAA equipment within the AOA to deter raptors from perching. These anti-perching devices will be maintained and expanded as needed.

Target Date for Completion: Ongoing

Central Taxi Hold

A large electronic messaging board advises drivers not to feed birds and metal signs in three languages instructing drivers not to feed the birds are installed in prominent locations around the Central Taxi Hold (CTH). Additionally, anti-perching devices were installed on buildings and lighting to reduce perching ~~on buildings and lighting~~.

Target Date for Completion: Ongoing

~~Shock strips to deter perching from the edge of the roof of the CTH amenities building were installed in June 2012. They have effectively eliminated all perching on the building roof and reduced gull and pigeon activity in the CTH.~~

~~**Target Date for Completion: Completed 2012**~~

Temporary Standing Water

Large puddles after rain events will be removed where feasible. Repeat ponding in areas will be examined to determine the cause. Drains may be clogged or grading/repaving may be necessary to eliminate the problem. Pumping may be an immediate solution to remove water while a long-term solution/repair is developed. Problem areas are reported to the Port Authority Wildlife Biologist who will communicate the issue with Aeronautical Services Manager, and Maintenance or engineering staff. Paving in summer 2012 eliminated ponding in the parking lot at Building 151 and Taxiway Sierra.

Target Date for Completion: Ongoing

Airport Buildings

Puddles on buildings, roofs and structures will be drained using the most appropriate method available. Recommendations have been made for all new buildings to be designed with improved drainage systems wherever feasible to

eliminate the problem in the future and all new (exterior) building construction plans are sent to the Port Authority Wildlife Biologist for review.

Holes or gaps in walls and doors will be filled and hangar and garage doors closed when not in use. If birds begin perching or nesting in or on a building, exclusion devices will be installed. Modifications may include the installation of netting, porcupine wire, or other materials that either totally excludes birds from that location or change the angle of the flat surface to prevent perching or nesting. The airport met with FAA Facilities staff in spring 2012. Doors were secured on and/or repairs made to FAA shacks to eliminate access to wildlife in spring 2012. FAA will remove one abandoned shack in ~~2013~~2014.

Mothballed (all utilities have been disconnected) buildings will be sealed and monitored periodically to check for signs of birds. Broken windows or small holes will be repaired to the extent possible to prevent access to birds and other wildlife.

Target Date for Completion: Ongoing

Airport Construction

Construction projects will be kept as neat as possible to avoid attracting ~~birds~~wildlife. Food waste will be disposed of in closed trash containers and care will be taken to avoid creating sources of fresh water such as empty drums, buckets, and even wheelbarrows. Contractors are educated by the Resident Engineers office at pre-construction meetings about ~~bird~~ wildlife hazards at the airport and how to avoid them, including not feeding the birds. There is also standard language in all construction contracts regarding ~~bird~~ wildlife hazards and how to prevent them.

All airport construction plans, including construction projects of airport tenants, that include building exteriors or landscaping are sent to the ~~airport~~ Port Authority Wildlife Biologist for review and comment to help prevent the creation of new wildlife attractants.

Target Date for Completion: Ongoing

Insect Control

Pesticide is applied aerially by contractors biweekly from mid-May - Labor Day within the AOA adjacent to Runway 4R/22L, Bergen Basin, and between Runways 4L/22R and 4R/22L. Applications are made on Sundays approximately from 4:00-6:00 a.m. to minimize the impact on people in the area. The first two applications are carbaryl (Sevin), which targets Japanese beetles (*Popillia japonica*) and grasshoppers. The Port Authority Wildlife Biologist and Wildlife Supervisors monitor the effect of the insect control program and may recommend shifting the pesticide application dates or using alternative pesticides to increase control. Additional applications are of Anvil, applied for control of mosquito larvae using the same methodology.

Target Date for Completion: Ongoing

Trash, Debris, & Feeding

All trash containers in landside and airside areas will be closed containers to prevent access to food waste by ~~birds and other~~ wildlife. Construction and

other debris will be removed to eliminate cover for small mammals, which are a prey source for raptors. Trash cans in the CTH, Cell Phone Lot, and Limo Lot were replaced in spring 2012 to reduce use by wildlife.

Signs and other educational methods were installed or distributed to stop feeding of ~~birds and other~~ wildlife by the public and by employees. Airport staff will issue verbal warnings to persons involved in feeding wildlife and can issue Breach of Rules citations for severe or repeat infractions. The Port Authority Wildlife Biologist or other staff give presentations to the airport community via meetings such as the Chief Pilots' meetings, Kennedy Airport Airlines Management Council (KAAMCO), or snow plan briefings ~~to communication~~ regarding wildlife issues.

The Port Authority's Air Terminal Rules and Regulations includes language prohibiting feeding and watering of animals on airport property (except for police dogs, animals under control of their owner, or animals used for wildlife control programs) and requiring airport tenants that have outdoor garbage containers to have lids that prevent access to wildlife. These rules are provided to all airport tenants and are available on the Port Authority's web site.

Target Date for Completion: Ongoing

Land Use Changes - 14 CFR Part 139.337(f)(2)(iii)

The Port Authority, the City of New York and/or its neighboring landowners will notify the airport of any significant mitigation, restoration, or construction project within a 5-mile radius of the airport. No new wildlife attractants should be created within a 5-mile radius of the airport. The Port Authority and the City of New York have a Memorandum of Agreement (MOA) to help coordinate and communicate about any developments that may be impacted by FAA Advisory Circular (AC) 150/5200-33 (current edition) on hazardous wildlife attractants. Information is also provided at airport task force meetings or through communications with the Port Authority's Office of Environmental and Energy Programs.

Wetlands

Most of the freshwater wetlands east of Runway 4R have been eliminated. Additional work to tie some of the areas into the airport's outfalls for improved drainage was completed in 2011.

Tidal wetlands regulated by the United States Army Corps of Engineers cannot be eliminated. JFK focuses control efforts in these areas at low tide to deter feeding, particularly gulls dropping clam shells over the airport. Vegetation is also maintained as close as possible to the shoreline to allow for greater visibility for control efforts and to reduce cover available to wildlife.

Target Date for Completion: Ongoing

Pennsylvania & Fountain Avenue Landfills

The Pennsylvania and Fountain Avenue Landfills, about three miles west of the airport, were closed in 1986. The landfill underwent extensive habitat management work to convert the large area into coastal habitat planted with

native northeastern coastal vegetation in 2006. Due to the potential to attract geese and other birds, the Port Authority contacted the New York City Department of Environmental Protection (NYCDEP), who manages the sites, about monitoring and mitigating the attractant. NYCDEP hired USDA to conduct surveys and perform wildlife control at the sites and NYCDEP also participates in the NYC Wildlife Task Force and the airport's wildlife hazard task force. The monitoring program has been completed, but the site will be monitored occasionally for Canada goose activity during the summer breeding and molt.

Target Date for Completion: Ongoing

PERMITS – 14 CFR Part 139.337(f)(3)

Wildlife Permits
Copies of the depredation permits are carried with the Wildlife Supervisors and/or other personnel conducting wildlife control on the airport.

Federal Permits
In accordance with Title 50, Code of Federal Regulations Part 10 (50CFR10), Title 50, Code of Federal Regulations Part 13 (50CFR13), and Title 50, Code of Federal Regulations Part 21 (50CFR21), the airport is required to obtain a federal permit to kill or possess migratory birds. Both permits must be renewed annually through the Region 5 United States Fish & Wildlife Service (USFWS) office in Hadley, Massachusetts.

A report of the species taken under the permit must be filed at the time of renewal or expiration of the depredation permit. The report must contain the species taken, the dates the species were taken, how many of each species were taken, the number of nests and eggs destroyed, and the final disposition of the carcass (buried, incinerated, or donated to permitted individuals or agencies). The annual report and the permit renewal form must be returned to USFWS no later than 30 days prior to the expiration of the permit. Copies of these reports must also be sent to NYSDEC Special Licenses Unit in Albany, New York.

A federal explosives permit from the Bureau of Alcohol, Tobacco, and Firearms is required to purchase or transfer exploding pest control devices (pyrotechnics).
The Port Authority is exempt from this requirement, however, the airport still must comply with all ATF storage requirements for pyrotechnics.
~~The Port Authority is exempt from this requirement.~~

USFWS authorizes trapping and relocation of American kestrel (*Falco sparverius*), osprey (*Pandion haliaetus*), and snowy owls (*Nyctea scandiacus*) or lethal control of those species when trapping and relocation is not feasible. However, the airport must also have matching authorization on the State permit to conduct these activities. State permits only authorize snowy owls to be trapped and relocated.

State Permits

As long as JFK holds a current USFWS migratory bird depredation permit, no state migratory bird depredation licenses are required. However, because JFK has special authorization to take osprey (state-listed species of special concern) and nonlethally disperse state-listed threatened and endangered species, JFK must maintain a New York State Depredation License (Airport #42). NYSDEC provides special authorization for the airport to trap and relocate snowy owls (as an approved nonlethal control methods, not otherwise specifically listed on the permit). New York State also requires the airport to obtain a state airport air strike hazard permit to take nuisance wildlife at any time when it becomes a threat to aircraft and airport safety. Nuisance wildlife includes "all wildlife except threatened and endangered species, species of special concern, and migratory birds requiring federal and/or state permits and licenses." This airport air strike hazard permit is continuous until revoked and does not need to be renewed. JFK is required to keep a daily log of all control activity conducted under this permit and must forward it to the NYSDEC Regional Wildlife Manager annually.

City Permits

The City of New York requires a permit to trap pigeons within city limits. The Port Authority is exempt from this City requirement on airport property.

Pesticide Permits & Regulations

Pesticide permits are required for applications of insecticides to control grasshoppers, Japanese beetles, and mosquitoes. The contractor maintains all necessary permits.

Firearm Permits

New York City requires that all firearms be registered. Additionally, the airport has designated a firearm custodian under the New York City Shotgun/Rifle Organization Certificate, who is responsible for the control of all firearms in the custody of the airport's Wildlife Management staff. ~~PANYNJ requires all Airport Operations staff that are authorized to use firearms at the airport to obtain a New York City shotgun/rifle permit. All of these permits are obtained through the New York City Police Department, Firearms Control Section.~~

RESOURCES – 14 CFR Part 139.337(f)(4)
Identification of resources that the certificate holder will provide to implement the plan.

Personnel

The Port Authority's Airport Operations Division is primarily responsible for wildlife management and the full-time Wildlife Management staff is comprised of the Port Authority Wildlife Biologist, Senior Wildlife Supervisor, Wildlife Supervisor, Wildlife Agent, and Landside Operations Supervisor. Other staff trained in wildlife management includes the Airport Duty Manager, Assistant Airport Duty Manager, ~~Senior Airport Operations Agent,~~ and Airport Operations Agent. Wildlife contractors also assist the airport with wildlife management. PANYNJ contracts with USDA for consulting and technical, operational, and research assistance at JFK including wildlife monitoring, WHA, the gull hazard

reduction program, goose population management, seasonal wildlife control (nonlethal and lethal), and pigeon and starling trapping. ~~and may be contacted at their office in Castleton, New York.~~

Wildlife Hazard Task Force
PANYNJ created a Wildlife Hazard Task Force with representatives from regional and national organizations and government agencies. The expert members come from a diversity of backgrounds including aviation, community and government relations, environmental and wildlife conservation, environmental engineering, legal affairs, and wildlife management. The role of the task force is to provide the best scientific and technical recommendations to help the airports and surrounding landowners to help mitigate wildlife hazards and to ensure that the strategies being employed at the airports are effective, humane, and sufficient. The task force also provides a forum for other agencies to share plans that might have an impact on the airports.

New York City Wildlife Hazard Management Steering Committee
PANYNJ and New York City Mayor's Office created a Wildlife Hazard Management Steering Committee to coordinate efforts and develop regional policies to mitigate wildlife hazards and help implement community-level wildlife management strategies (i.e. New York City Goose Population Management) within the City of New York. Other agencies who are invited to participate in the steering committee include USDA, NYSDEC, NYCDEP, NYC Parks & Recreation, National Park Service (NPS), USFWS, Nassau County, and such other members as deemed appropriate by PANYNJ and the City. Members are asked to represent the interests of their agency to ensure that cooperative solutions are reached.

Equipment & Supplies
The Wildlife Management staff keeps wildlife control equipment and supplies at the General Aviation Terminal (GAT) or the Operations trailer at Building 208 at JFK. Firearms, pyrotechnics, and ammunition are secured in fire-resistant firearm safes. Equipment and supplies include:

- Pyrotechnics
- Pyrotechnic launchers
- Shotguns and live ammunition (12-gauge, 22-caliber Marlin Garden Gun)
- Firearm and pyrotechnic launcher cleaning supplies
- Paintball gun and paintballs
- Mylar tape
- Green laser
- Helikites (and helium tank)
- Pigeon traps
- Live traps
- Terrapin kit (syringe, caliper, rasp, nail polish, microchips, & microchip scanner)
- Pet carriers
- Heavy-duty leather & kevlar-lined gloves (animal handling)
- Animal graspers (like snake tongs)
- Welbourne cat catcher (net attached to catch pole)
- Starling nest box traps
- Catch pole
- Snake tongs
- Snake bag
- Binoculars
- Wildlife strike collection kits (latex gloves, DNA cards, cotton swabs, alcohol wipes)
- Wildlife strike supplies (plastic bags, labels, hand wipes, etc.)
- Wildlife, insect, & plant identification field guides

- Dissection kits
- CO^2 chamber and CO^2 tank for euthanasia)
- Heavy-duty freezers

WILDLIFE CONTROL PROCEDURES – 14 CFR Part 139.337(f)(5)
Procedures to be followed during air carrier operations.

Assignment of Duties – 14 CFR Part 139.337(f)(5)(i)
The normal staffing levels are:

A Tour (6:00 A.M. – 2:00 P.M.)*	B Tour (2:00 P.M. – 10:00 P.M.)*	C Tour (10:00 P.M. – 6:00 A.M.)*
Airport Duty Manager	Airport Duty Manager	Airport Duty Manager
Assistant Airport Duty Manager	Assistant Airport Duty Manager	Assistant Airport Duty Manager
Wildlife Supervisor **	Wildlife Supervisor**	3 - Landside Operations Supervisor
Wildlife Agent	Wildlife Agent	
4 - Landside Operations Supervisor	5 - Landside Operations Supervisor	

* All staff members listed above are trained to respond to and address wildlife hazards using nonlethal control methods (including pyrotechnics). Additionally, Airport Duty Managers, Assistant Airport Duty Managers, and Wildlife Supervisors are trained to use lethal control methods.
** Between April and September the schedules of the Wildlife Supervisor shift from 6:00 A.M. to 2:00 P.M. and 2:00 P.M. to 10:00 P.M. to 5:00 A.M. to 1:00 P.M. and 1:00 P.M. to 9:00 P.M.

Generally, the Aeronautical Services Manager, Port Authority Wildlife Biologist, and Chief Operations Supervisor are available during normal business hours. The Senior Wildlife Supervisor is available from 7:00 A.M – 3:00 P.M. These schedules may vary depending on special projects and the needs of the airport.

The Port Authority Wildlife Biologist will direct the overall management of all wildlife control activities and may direct day-to-day activities or special projects. The Senior Wildlife Supervisor is also responsible for reviewing all strike reports and submitting all FAA 5200-7 wildlife strike reports (online).

The Wildlife Supervisors will conduct daily runway ~~sweeps~~surface inspections, respond to wildlife strikes, supervise Wildlife Agents and contract employees, and conduct wildlife patrols. The Wildlife Supervisors direct the day-to-day activities of the Wildlife Agents. The Wildlife Supervisors will enter all wildlife strikes and wildlife control activity (species, numbers, type of activity conducted, and location) into the airport's computerized operations log by the end of each shift. The Senior Wildlife Supervisor and/or Port Authority Wildlife Biologist will review all strike reports for accuracy and update as needed. The Staff Wildlife Supervisor is also responsible for ordering and dispersing wildlife uniforms.

The Wildlife Agents will conduct daily wildlife patrols and may assist the Wildlife Supervisors, Senior Wildlife Supervisor, or Port Authority Wildlife Biologist as requested.

Landside Operations Supervisors will conduct nonlethal wildlife management during patrols for hazardous wildlife on airport property outside the AOA. They will enter all wildlife control activity (species, numbers, type of activity conducted, and location) into the airport's computerized airport operations log (CALS) by the end of each shift.
All staff responsible for wildlife management (including contractors) are issued radios and/or cellular phones that allow them to coordinate control activities as needed to effectively mitigate wildlife hazards.

Inspections – 14 CFR Part 139.337(f)(5)(ii)
Daily runway ~~sweeps~~ surface inspections~~will be~~are conducted at or around sunrise. During the morning ~~runway sweep~~runway surface inspection, the Wildlife Supervisor and Wildlife Agent will search for carcasses from any unreported wildlife strikes. Additional runway ~~sweeps~~ surface inspections will be conducted as needed.

During wildlife patrols, Wildlife Supervisors and Agents and Landside Operations Supervisors disperse or depredate birds and other wildlife that are creating or may create a hazard to aircraft. Additionally, staff will search for any wildlife-related problem, such as the presence of attractants, and either rectify the problem or report it to the Senior Wildlife Supervisor or Port Authority Wildlife Biologist.

Wildlife Hazard Control Measures – 14 CFR Part 139.337(f)(5)(iii)
Before conducting any wildlife control activities for the first time, staff must read and understand all conditions for control in the airport's wildlife permits. Staff must read all new or updated permits when they are issued to ensure that staff is familiar with the most current permit conditions.

Bird Control

- Harassment

Wildlife Management staff will use pyrotechnics, helikites, lasers, or other legal non-lethal methods to disperse wildlife hazards. If initial harassment methods are ineffective, assistance may be obtained from additional operations or wildlife contract staff or lethal control may be used. **New York State listed threatened and endangered species and species of special concern may be harassed using nonlethal control methods only, except up to 20 osprey may be taken per year). Federally listed threatened and endangered species and bald eagles may not be harassed without prior approval from USFWS.**

~~Staff authorized to use pyrotechnics will practice safety when handling. Pyros will be stored in the firearms safe when not in use and stored in the ammo box while on patrol. Protective eyewear and earplugs will be worn and pyros will be loaded and fired from outside the vehicle.~~

Gulls, starlings, brant, Canada geese, osprey, double-crested cormorants, mallards ~~(*Anas platyrhynchos*)~~, and black ducks ~~(*Anas rubripes*)~~ will be aggressively harassed using pyrotechnics or other hazing methods; lethal control may also be used by trained staff as necessary. At low tide, staff will

coordinate with other staff or contractors as needed to deter gull clamming activity and prevent buildup of clam shells from taxiway and runway surfaces. Waterfowl and wading birds will be dispersed immediately from any wetland areas in the AOA. **Staff will maintain a zero tolerance policy for geese and mute swans and will not allow geese or mute swans to land or sit on airport property.** During late fall and winter, Landside Operations staff will coordinate with Wildlife Management or wildlife contract staff for additional assistance as needed to prevent geese, especially brant, from moving from one location to another. Immediate dispersal of geese is the first priority outside the AOA where lethal control will not be used. Within the AOA, lethal control of geese and mute swans will be the first priority and harassment will be used when lethal control is not feasible.

- Capture

Starlings, house sparrows, red-winged blackbirds, brown-headed cowbirds, or pigeons will be trapped and euthanized. When used, traps must be checked at least once per day and food and water must be available in the trap for captured birds. Birds will be euthanized and disposed of in accordance with the airport's depredation permits. Any non-target birds will be immediately released from the trap. Nets, boxes, or blankets may also be used to capture injured birds. Snowy owls may be trapped and relocated. Owls must be released within 48 hours with bands (leg or petagial) at least 5 miles from the airport. Owl traps will be checked frequently and thus do not require food and water to be available.

- Lethal Control

When non-lethal control efforts have failed to produce the desired results or when there is an immediate threat to aircraft safety, lethal control may be used. Lethal control consists of shooting, euthanasia by cervical dislocation or CO^2, or egg addling (oiling). Lethal control will be conducted within the AOA only, unless otherwise authorized by the Port Authority Wildlife Biologist. ~~Staff will wear eye and hearing protection when discharging firearms. Firearms will be kept locked in the firearm safe when not in use and transported unloaded with the action open and the muzzle in a safe direction.~~ All depredated birds should be disposed of in accordance with the airport's depredation permits.

Geese and mute swans will be killed whenever present in the AOA, unless shooting is not feasible (i.e. too far to shoot, adjacent to aircraft or in public view). When lethal control cannot be used, geese and swans must be aggressively harassed using nonlethal methods.

Gulls, mallards and black ducks will also be targeted for lethal control. Shooting gulls acts as a deterrent to gulls flying over the airport and may reinforce nonlethal control methods. Mallards and black ducks often become immune to nonlethal control methods and require lethal control to reinforce nonlethal methods.

Canada goose, oystercatcher (*Haematopus palliatus*), double-crested cormorant, barn swallow (*Hirundo rustica*), and killdeer (*Charadrius vociferous*) eggs will be oiled and/or destroyed in accordance with the airport's depredation permits to

prevent the eggs from hatching. Once eggs have been destroyed, Wildlife Management staff must re-check nests regularly to make sure that no re-nesting has occurred. Other bird nests and eggs will also be destroyed as emergency take under the airport's permits. Pigeon and starling nests and eggs will be destroyed at any time and no permit is required for those activities. The Wildlife Biologist will coordinate with NYSDEC for nest and egg control of any threatened, endangered, or species of special concern.

Birds not specifically listed on the airport's federal depredation permit or covered under the airport's state airport air strike hazard permit may be taken if the bird presents an immediate hazard to aircraft. This must be reported to the Port Authority Wildlife Biologist, who must file a written report of the emergency take to USFWS within 72 hours. **Threatened and endangered birds are excluded from this emergency take clause and may not be killed under any circumstances.**

Mammal Control

- Harassment

Mammals can be harassed using any available legal method; however, capture or lethal control are more effective for mammal control.

- Capture

Catchpoles, nets, and live traps will be used to capture mammals, particularly feral and domestic cats (*Felis domesticus*) and dogs (*Canis familiaris*). Traps are checked at least once per day and will not be left open in extreme heat or cold. Attempts will be made to contact the owners of any captured dog or cat, and severely injured wildlife may be taken to a veterinarian or wildlife rehabilitator for medical care. If an owner cannot be identified for cats or dogs, staff will take the animal to the local animal control shelter in Brooklyn and all paperwork should be given to the Port Authority Wildlife Biologist.

Raccoons (*Procyon lotor*), opossums (*Didelphis virginiana*), and gray squirrels (*Sciurus carolinensis*) will be captured and euthanized and must not be relocated on or off airport property.

- Lethal Control

Mammals such as black-tailed jackrabbits ~~(*Lepus californicus*)~~, muskrats ~~(*Ondatra zibethicus*)~~, cottontail rabbits ~~(*Sylvilagus floridanus*)~~, raccoons ~~(*Procyon lotor*)~~, opossums ~~(*Didelphis virginiana*)~~, and gray squirrels ~~(*Sciurus carolinensis*)~~ will be shot in accordance with the airport's state Airport Air Hazard Permit. Jackrabbits may be taken at any time. Shooting of dogs or cats is appropriate only when aircraft safety is threatened or when the animal is acting aggressively towards people or exhibits symptoms of rabies.

All mammal depredations will be recorded by date, species and number and disposed of in accordance with the airport's airport air strike hazard permit.

Communication with Air Traffic Control Tower (ATCT) – 14 CFR Part 139.337(f)(5)(iv)

Procedures & Training

Staff receive initial training in proper radio procedures during on-the-job training and movement area driver training. Recurrent training is provided via Part 139 computer kiosk training.

Staff will monitor the runways, taxiways, and associated safety areas and take action as needed. Staff will notify the ATCT when wildlife control activities may affect aircraft or their flight path. If necessary, staff will close the runway until the wildlife condition is mitigated. Before resuming operations on any closed runway, staff will conduct an inspection of the runway and disperse any wildlife, if present. In the event of significant bird activity or a reported birdstrike, the ATCT will inform the Airport Duty Manager who will respond accordingly.

ATCT will be notified of special projects such as spotlight or nest surveys, large roost dispersals, or the start of the gull hazard reduction program. Notification will be made in writing or verbally over the telephone.

Equipment

All vehicles driven in the movement area are equipped in accordance with PANYNJ's Pedestrian and Ground Vehicle Program.

REVIEW OF WILDLIFE HAZARD MANAGEMENT PLAN – 14 CFR Part 139.337(f)(6)

Procedures to review and evaluate the wildlife hazard management plan every 12 consecutive months or following an event described in 14 CFR Part 139.337(b)(1), (b)(2), and (b)(3).

The WHMP will be reviewed once every 12 consecutive months by representatives of all of the staff offices responsible for implementing the WHMP. Upon completion of the annual WHMP review, the airport will complete an annual review report detailing the results of the review and a list of attendees and review coordinator. The report will be submitted to FAA. Following a triggering event as described in 14 CFR Part 139.337(b)(1), (b)(2), and (b)(3), the WHMP will be reviewed monthly by the Port Authority Wildlife Biologist and a report on the details of the event(s) kept on file. If necessary, the WHMP will be revised based on this review.

Management Plan Effectiveness – 14 CFR Part 139.337(f)(6)(i)

The plan's effectiveness in dealing with known wildlife hazards on and in the airport's vicinity.

The effectiveness of the airport's WHMP will be evaluated on a continual basis by the Port Authority Wildlife Biologist and during the annual review of the plan. The Port Authority Wildlife Biologist will provide an annual summary of wildlife strikes, wildlife depredation, significant events, and relevant data from

any wildlife surveys. In addition, the Port Authority Wildlife Biologist will review and summarize all relevant reports related to wildlife management activities at JFK, including the annual reports of the NYC Goose Management Program and the Gull Hazard Reduction Program. The Port Authority Wildlife Biologist will also share information from the Wildlife Hazard Task Force, New York City Airports Wildlife Hazard Management Steering Committee, and Birdstrike USA/Canada Meeting.

Aspects to Reevaluate – 14 CFR Part 139.337(f)(6)(ii)
Aspects of the wildlife hazards described in the wildlife hazard assessment that should be reevaluated.

The Port Authority Wildlife Biologist will identify changes in bird or mammal species through monitoring surveys, strike records, or wildlife control activities. The Port Authority Wildlife Biologist will modify the WHMP as needed to continually reduce wildlife hazards.

A new wildlife hazard assessment will be conducted if there is a noticeable increase in damaging wildlife strikes despite wildlife control measures or significant changes in habitat or land use that are not monitored with existing wildlife monitoring or surveys.

TRAINING – 14 CFR Part 139.337(f)(7)
A training program conducted by a qualified wildlife damage management biologist to provide airport personnel with the knowledge and skills needed to successfully carry out the wildlife hazard management plan required by paragraph (d) of this section.

~~Airport Operations Staff~~Wildlife Management Training
Staff members ~~(specified in (f)(1) of this WHMP)~~ responsible for implementing the WHMP must take initial and annual recurrent training in wildlife management taught by a qualified wildlife damage management biologist or trainer who meets FAA requirements for teaching wildlife management training as per FAA Advisory Circular 150/5200-36 (current edition). This mandatory training is based on the airport's WHMP and WHA and other topics as mentioned in FAA Advisory Circular 150/5200-36 (current edition) and must be taken every 12 consecutive calendar months. Additionally, the Port Authority Wildlife Biologist and/or Senior Wildlife Supervisor are available to accompany staff members on field inspections and routine patrols to instruct wildlife control procedures or to help with bird identification. Staff required to attend the initial and annual recurrent training in wildlife management are:

- Aeronautical Services Manager
- Port Authority Wildlife Biologist
- Chief Operations Supervisor (FS-9)
- Airport Duty Manager (FS-8)
- Assistant Airport Duty Manager (FS-5)
- Senior Wildlife Supervisor (FS-5)
- Landside Operations Supervisor (FS-3 & FS-4)
- Wildlife Supervisor (FS-3)

- Wildlife Agent (AOA)
- Chief Maintenance Supervisor (FM-6)
- ~~Landscaping Supervisor~~

All staff that attend the training in wildlife hazard management ~~are provided with~~ will be taught how to use a bird identification field guide (Sibley Field Guide to Birds: Eastern North America or other) and the Wildlife Supervisors are required to keep a copy in their vehicle for reference while on duty. A wildlife management library with books on identification of birds, mammals, insects, and plants and bird behavior and bird mass is provided at the Senior Wildlife Supervisor's desk.

~~The Port Authority Wildlife Biologist will attend the Bird Strike Committee USA/Canada conference at least every three years. The Senior Wildlife Supervisor will attend the Bird Strike Committee USA/Canada conference at least once every three years to maintain their training certification.~~

Firearms Training

Staff authorized to use firearms ~~and pyrotechnics~~ receive initial and recurrent safety training to use these tools. ~~The Chief Operations Supervisor, Airport Duty Manager, Assistant Airport Duty Manager, Senior Wildlife Supervisor, and Wildlife Supervisor positions receive firearm training.~~ Firearm training ~~will be~~ is conducted by a National Rifle Association (NRA) certified instructor. Initial firearm training will consist of either the NRA First Steps Shotgun Course or the NRA Basic Shotgun Course for all positions authorized to use firearms~~, Wildlife Supervisors may elect to take the NRA Basic Shotgun Course~~. Recurrent training will be conducted in the classroom and/or field for a minimum of 30 minutes during which staff must demonstrate that they are familiar with the handling of the firearm and are able to shoot (live fire in the field only). Self-study will also be encouraged for additional instruction. Staff required to receive initial and recurrent firearms safety training every 12-consecutive calendar months include:

- Airport Duty Manager (FS-8)
- Assistant Airport Duty Manager (FS-5)
- Senior Wildlife Supervisor (FS-5)
- Wildlife Supervisor (FS-3)

Pyrotechnic Training

~~All non-management Airport Operations staff are trained in the usage of pyrotechnics. Pyrotechnic training may be conducted through on-the-job or classroom training or a combination of the two.~~ Training ~~focuses on~~ covers safety and handling of pyrotechnics and live fire exercises and must be conducted initially and every 12 consecutive calendar months for the following staff:

- Airport Duty Manager (FS-8)
- Assistant Airport Duty Manager (FS-5)
- Senior Wildlife Supervisor (FS-5)
- Landside Operations Supervisor (FS-4)
- Wildlife Supervisor (FS-3)

- Wildlife Agent (AOA)

Other Training

New ~~employees~~ Wildlife Supervisors and Wildlife Agents receive on-the-job training from senior staff members, the Senior Wildlife Supervisor, or the Port Authority Wildlife Biologist. The topics and length of this training varies based on the experience level of the new employee ~~but will last for a minimum of 5 days~~. The training will conclude once the new employee has demonstrated the ability to individually perform their job functions and is able to use the tools and techniques authorized for their position.

~~Wildlife Supervisors must obtain a NYC shotgun/rifle license within their first six months in that position and all Airport Duty Managers and Assistant Airport Duty Managers must maintain a current NYC shotgun/rifle license. Firearm and/or pyrotechnic use and safety must be taken every 12 consecutive calendar months by staff who are responsible for implementing the WHMP.~~

~~The Wildlife Biologist will attend the Bird Strike Committee USA/Canada conference at least once every three years and the Senior Wildlife Supervisor should attend the Bird Strike Committee USA/Canada conference at least once every three years to maintain their training certification.~~

~~**Other JFK Personnel**~~

~~JFK Maintenance staff including at least the Chief Maintenance Supervisor and Landscaping Supervisor who are responsible for implementing the WHMP attend the annual training in wildlife hazard management and also receive the wildlife hazard awareness program annually as part of their annual Part 139 (kiosk) training.~~

~~Other airport staff not responsible for implementing the WHMP will receive wildlife hazard awareness training as part of their FAR 139 training. This training is available on the computerized kiosk system.~~

~~**Contractors**~~

~~The airport's wildlife contractors receive the wildlife hazard awareness program annually as part of their annual Part 139 (kiosk) training. USDA Wildlife Services staff conduct their own training programs.~~

APPENDIX A – REFERENCES

United States Fish & Wildlife Service (Regional Office)
300 Westgate Center Drive
Hadley, MA 01035
Contact: Migratory Bird Permit Specialist
(413) 253-8641

United States Department of Agriculture, Animal & Plant Health Inspection Service,
Wildlife Services (NY State Office)
1930 Route 9
Castleton, NY 12033-9653
(518) 477-4837
Contact: State Director
Assistant State Director

United States Department of Agriculture, Animal & Plant Health Inspection Service,
Wildlife Services, National Wildlife Research Center
C/o Plum Brook Station
6100 Columbus Ave., Rm. 229
Sandusky, OH 44870-9660
(419) 625-0242
Contact: Field Station Leader
Research Scientist

Federal Aviation Administration (Regional Office)
1 Aviation Plaza
Jamaica, NY 11434-4809
Contact: Lead Airport Certification Inspector, Safety & Standards Branch
(718) 553-3348
Environmental Specialist
(718) 553-2511

Federal Aviation Administration (Headquarters)
Office of Safety & Standards
800 Independence Ave. SW
Washington, D.C. 20591
Contact: Staff Wildlife Biologist
(202) 267-3778

Federal Aviation Administration Technical Center (Research & Development)
AAR-410
Pomona, NJ 08405
Contact: Project Manager, Wildlife & Pavement
(609) 485-8816

Federal Aviation Administration (JFK Control Tower)
Contact: Manager, JFK Control Tower
(718) 656-0335

National Park Service
Gateway National Recreation Area
Floyd Bennett Field, Bldg. 69
Brooklyn, NY 11234
Contact: Superintendent Jamaica Bay Unit
(718) 338-3625
Jamaica Bay Wildlife Refuge
(718) 318-4340

New York State Department of Environmental Conservation (Region 2 Office)
47-40 21st Street
Hunter's Point Plaza
Long Island City, NY 11101
Contact: Region 2 Biologist
(718) 482-4922

New York State Department of Environmental Conservation (State Office)
Special Licenses Unit
625 Broadway
Albany, NY 12233-4752
Contact: Special Licenses Unit
(518) 402-8985

New York State Department of Environmental Conservation (Pathologist)
Wildlife Pathology Unit
Game Farm Road
Delmar, NY 12054
Contact: Pathologist
(518) 478-3032

New York City Police Department, License Division
Firearms Control Section
Room B11
120-55 Queens Blvd.
Kew Gardens, NY 11424
Contact: Sgt. Yvette Ward
(718) 520-9300

Bird Banding Laboratory
Patuxent, MD
(800) 327-BAND
(301) 497-5790

APPENDIX B – WILDLIFE CONTROL/WILDLIFE STRIKE/TOUR REPORT/LANDSIDE WILDLIFE REPORT COMPUTER LOGS

~~These forms will be completed by the~~ Wildlife Staff can complete these forms in the field. GPS locations ~~will automatically~~can be assigned to each entry and ~~Staff~~ staff ~~also~~ have the ability to attach photographs to ~~each~~ reports.

Wildlife Control Form

Related Item(s): <NONE> GO

Modification(s): <NONE> GO

Date/Time Entered: 5/9/2014 15:50

Event Date Time: 05/09/2014 15:50

Entry Last Updated:

Entry Closed:

Routing

Enter date and time in the Event Date Time field (above)

Airport:

Species (Dominant): Online Bird ID Guide

Action Taken

Observed: # Harassed: # Eggs:

Depredated/Euthanized: # Nest:

Trapped: # Relocated: # Released on site:

Other Species (Optional)

Species (Secondary):

Observed: # Harassed:

Depredated/Euthanized

Trapped

Method: # Pyrds or Ammo Used:

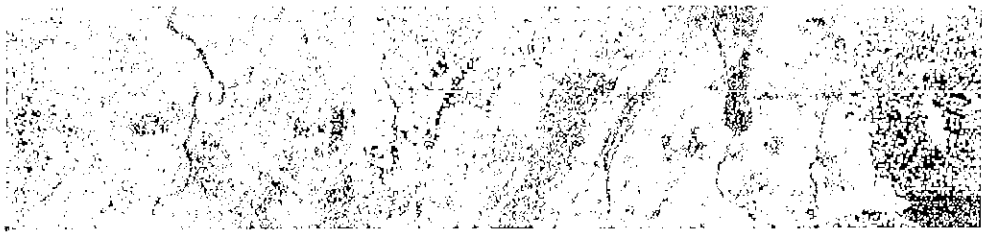
Method #2: # Pyrds or Ammo Used:

Duration of Control:

Location:

Other Comments:

ONLY USE NUMBERIC CHARACTERS



Wildlife Strike Form

Attach File:

Desc.

Browse...

Attach File

Wildlife Strike

Date Time Entered 8/10/2010 4:02 PM

Event Date Time 8/10/2010 4:02 PM

Related Item <NONE> GO

Modifications <NONE> GO

Entered By jkolodziuski

Print

Save

Name of Carrier

Aircraft Make/Model

Engine Make/Model

Aircraft Registration

Date of Incident

Time of Incident

Flight Number

Bird Remains

☐ Collected ☐ Sent to Smithsonian

Airport Name/ID

Runway Used

Location if En Route and/or Distance from Airport (nearest Town/Reference & State/Airport)

Height (AGL) ft

Speed (IAS) kts

Phase of Flight

Parts of Aircraft Struck

	S	D
A. Radome	☐	☐
B. Windshield	☐	☐
C. Nose	☐	☐
D. Engine #1	☐	☐
E. Engine #2	☐	☐
F. Engine #3	☐	☐
G. Engine #4	☐	☐

☐ Bird(s) Ingested? (Check for Yes)

(Cont)

	S	D
H. Propeller	☐	☐
I. Wing/Rotor	☐	☐
J. Fuselage	☐	☐
K. Land Gear	☐	☐
L. Tail	☐	☐
M. Lights	☐	☐
N. Other	☐	☐

If "Other" Explain

Effect on Flight

☐ None

☐ Aborted Take-Off

☐ Precautionary Landing

☐ Engine Shutdown

Other

Sky Condition

Precipitation

☐ Fog

☐ Rain

☐ Snow

☐ None

Bird/Other Wildlife Species

(Only include confirmed indentifications. Speculations, such as pilot comments, should be included in the remarks section below.)

Number Seen and/or Struck

Number	Seen	Struck
1	☐	☐
2-10	☐	☐
11-100	☐	☐

Size of Bird(s)

Pilot Warned of Birds/Wildlife? Yes

Remarks

Aircraft time out of service hours

Estimated cost of repairs or replacement (US$)

Estimated other costs (US$) (e.g., revenue loss, fuel, and lodging or rescheduling, etc.)

Reported By

Title

Date Reported 8/10/2010

FAA Confirmation Number

Email

Phone

Tour Report

Related Item(s): <NONE GO

Modification(s): <NONE> GO

Date/Time Entered: 5/9/2014 16:00

Event Date Time: 05/09/2014 16:00

Entry Last Updated:

Entry Closed:

Ro ng

Wildlife Tour Summary

(To be completed by the wildlife supervisor and wildlife agent once per tour)

Airport:

Tour:

RWY	Time(s) of inspection

Select times when low or no wildlife activity was observed*

Time Period	Condition
00:00 - 01:59	
02:00 - 03:59	
04:00 - 05:59	
06:00 - 07:59	
08:00 - 09:59	
10:00 - 11:59	
12:00 - 13:59	
14:00 - 15:59	
16:00 - 17:59	
18:00 - 19:59	
20:00 - 21:59	
22:00 - 23:59	

*Periods of low or no wildlife activity are defined as periods of time when no wildlife control actions are required.

☐ Firearms Cleaned

☐ Pyro Launcher Cleared

Noteworthy observations, runway inspections, and other comments:

Landside Wildlife Report

Related Item(s): <NONE> GO Modification(s): <NONE> GO

Date/Time Entered: 5/14/2014 16:03 Event Date Time: 05/14/2014 16:03

Entry Last Updated: Entry Closed: Print Save »

Routing

Area	Time	Species	Number	Action Taken	# Pyro Used
	00:00:00	No Activity		None	
Comments					
	00:00:00	No Activity		None	
Comments					
	00:00:00	No Activity		None	
Comments					
	00:00:00	No Activity		None	
Comments					
	00:00:00	No Activity		None	

DATE: OCT 2 0 2014

APPENDIX C - PERMITS

FEDERAL AVIATION ADMINISTRATION
OCT 2 0 2014

DEPARTMENT OF THE INTERIOR
U S FISH AND WILDLIFE SERVICE

FEDERAL FISH AND WILDLIFE PERMIT

2. AUTHORITY-STATUTES
16 USD 703-712

REGULATIONS
50 CFR Part 13
50 CFR 21.41

1. PERMITTEE

PORT AUTHORITY OF NY AND NJ
dba J.F. KENNEDY INTERNATIONAL AIRPORT
BUILDING 145 - 2ND FLOOR
JAMAICA, NY 11430
U.S.A.

3. NUMBER
MB816581-0

4. RENEWABLE ☒ YES ☐ NO

5. MAY COPY ☒ YES ☐ NO

6. EFFECTIVE 03/01/2014

7. EXPIRES 02/28/2015

8. NAME AND TITLE OF PRINCIPAL OFFICER (If not individual)
LAURA FRANCOEUR
WILDLIFE BIOLOGIST

9. TYPE OF PERMIT
DEPREDATION AT AIRPORTS

10. LOCATION WHERE AUTHORIZED ACTIVITY MAY BE CONDUCTED

ALL PROPERTY BELONGING TO J.F. KENNEDY INTERNATIONAL AIRPORT, JAMAICA, NY

11. CONDITIONS AND AUTHORIZATIONS:

A. GENERAL CONDITIONS SET OUT IN SUBPART D OF 50 CFR 13, AND SPECIFIC CONDITIONS CONTAINED IN FEDERAL REGULATIONS CITED IN BLOCK #2 ABOVE, ARE HEREBY MADE A PART OF THIS PERMIT. ALL ACTIVITIES AUTHORIZED HEREIN MUST BE CARRIED OUT IN ACCORD WITH AND FOR THE PURPOSES DESCRIBED IN THE APPLICATION SUBMITTED. CONTINUED VALIDITY, OR RENEWAL, OF THIS PERMIT IS SUBJECT TO COMPLETE AND TIMELY COMPLIANCE WITH ALL APPLICABLE CONDITIONS, INCLUDING THE FILING OF ALL REQUIRED INFORMATION AND REPORTS.

B. THE VALIDITY OF THIS PERMIT IS ALSO CONDITIONED UPON STRICT OBSERVANCE OF ALL APPLICABLE FOREIGN, STATE, LOCAL, TRIBAL, OR OTHER FEDERAL LAW.

C. VALID FOR USE BY PERMITTEE NAMED ABOVE.

D. You are authorized to take, temporarily possess, and transport the migratory birds specified below to relieve or prevent injurious situations impacting public safety. All take must be done as part of an integrated wildlife damage management program that emphasizes nonlethal management techniques, where practical and effective. Lethal take is not to be the primary means of control. Active hazing, harassment or other non-lethal techniques must continue in conjunction with any lethal take of migratory birds. You may not use this authority for situations in which migratory birds are merely causing a nuisance.

(1) The following may be lethally taken:
- (a) 5,500 Laughing gulls,
- (b) 1,500 Herring gulls,
- (c) 800 Atlantic brant
- (d) 50 American black ducks,
- (e) 400 Great black-backed gulls
- (f) 300 Canada geese and Double-crested cormorants
- (g) 20 American oystercatchers,
- (h) 600 Ring-billed gulls
- (i) 1000 Mourning doves,
- (j) 100 Mallards
- (k) 50 Killdeer
- (l) 75 Barn Swallows
- (m) 10 Tree Swallows
- (n) 25 Snow Buntings
- (o) 5 Gadwall and Snow Geese

2) The following may be live-trapped and relocated: FIVE (5) American kestrels; TWENTY (20) OSPREY; and, FIFTEEN (15) Snowy owls. Alternatively you are authorized to kill these birds, when capture or relocation is not practical or effective.

☒ ADDITIONAL CONDITIONS AND AUTHORIZATIONS ALSO APPLY

12. REPORTING REQUIREMENTS

1) Annual Report is due with next renewal. Report forms can be found at: <http://www.fws.gov/migratory birds/mbpermits.html>.
2) Supplemental Report on the relative success of any trapping and relocation efforts per condition (K) of this permit is due with next renewal.

ISSUED BY	TITLE	DATE
	CHIEF, MIGRATORY BIRD PERMIT OFFICE - REGION 5	06/11/2014

(3) The following active nests (including eggs) may be destroyed: Up to 10 Killdeer nest, 75 Barn Swallow nests, 2 Gadwall nests, 300 Double-crested cormorant nests, and 25 American oystercatcher nests, and any eggs contained therein. Alternatively, authorized to freeze, shake, puncture, or oil (using Egg Oil, 100% food grade corn oil, ADC Tech Note-June 1996) and immediately replace the eggs in these nests for subsequent incubation. (NOTE: you can eliminate inactive (NO EGGS or CHICKS) Osprey nests without a depredation permit; therefore, you should not have active nests on airport property).

(4) Raptors used for hazing other migratory birds as part of the airport's integrated wildlife damage management program must be housed at the airport in appropriate facilities as follows: (a) raptors housed for less than thirty (30) days must be provided with an adequate perch and protected from extreme temperatures and excessive disturbance; and (b) raptors held for longer than thirty (30) days must be provided with facilities described in 50 CFR 21.29(g).

A copy of the Federal permit or Form 3-186A or similar record of acquisition, indicating lawful possession of the raptors used for hazing other migratory birds, must be prominently displayed at or near the mews or weathering area for each bird. Only captive-bred raptors may be used, and must be marked on the metatarsus with a seamless numbered band issued by the USFWS. Eagles may not be used for these purposes.

State restrictions: Peregrine falcons and other bird species are listed as endangered/threatened by New York State law and therefore may not be taken, unless otherwise authorized by the New York Department of Environmental Conservation.

E. You are authorized in emergency situations only to take, trap, or relocate any migratory birds, nests and eggs, including species that are not listed in Condition D (except bald eagles, golden eagles, or endangered or threatened species) when the migratory birds, nests, or eggs are posing a direct threat to human safety. A direct threat to human safety is one which involves a threat of serious bodily injury or a risk to human life.

You must report any emergency take activity to your migratory bird permit issuing office by **FAXING to 413-253-8424** within 72 hours after the emergency take action. Your report must include the species and number of birds taken, the method of take, and a complete narrative description of the circumstances under which you determined an emergency existed. In doing so, you shall discuss species behaviors that created the hazard or risk being addressed; location of the birds relative to the aircraft or airport operations; duration of bird presence in the area where the emergency existed; timing and amount of practical non-lethal measures attempted prior to the lethal take, as well as results.

F. You are authorized to salvage and temporarily possess migratory birds found dead or taken under this permit for (1) disposal, (2) transfer to the U.S. Department of Agriculture, (3) diagnostic purposes, (4) purposes of training airport personnel, (5) donation to a public scientific or educational institution as defined in 50 CFR 10.12, (6) donation to persons authorized by permit or regulation to possess them, or (7) donation of migratory game birds only to a public charity (those suitable for human consumption). Any dead bald eagles or golden eagles salvaged must be reported within 48 hours to the National Eagle Repository at (303) 287-2110 and to the migratory bird permit issuing office at **413-253-8424(fax)**. The Repository will provide directions for shipment of these specimens.

G. You may not salvage and must immediately report to U.S. Fish and Wildlife Service Office of Law Enforcement any dead or injured migratory birds that you encounter that appear to have been poisoned, shot, electrocuted, have collided with industrial power generation equipment, or were otherwise killed or injured as the result of potential criminal activity. See USFWS OLE contact information below.

H. You may use the following methods of take: (1) Shotguns (1a) other types of firearms by USDA only; (2) nets; (3) registered animal drugs (excluding nicarbazin), pesticides and repellents; (4) falconry abatement; and (5) legal lethal and live traps (excluding pole traps). Birds caught live may be euthanized or transported and relocated to another site approved by the appropriate State wildlife agency, if required. When using firearms, you may use rifles or air rifles to shoot any bird when you determine that the use of a shotgun is inadequate to resolve the injurious situation. You may use paint ball guns to haze birds or deter birds only when other methods of hazing are ineffective.

Anyone who takes migratory birds under the authority of this permit must follow the American Veterinary Medical Association Guidelines on Euthanasia when euthanization of a bird is necessary (http://www.avma.org/issues/animal_welfare/euthanasia.pdf).

I. You may temporarily possess and stabilize sick and injured migratory birds and immediately transport them to a federally licensed rehabilitator for care.

J. The following subpermittees are authorized: **Employees of the Port Authority of NY & NJ; employees of Falcon Environmental Services and employees of USDA/APHIS/Wildlife Services.** In addition, any other person who is (1) employed by or under contract to you for the activities specified in this permit, or (2) otherwise designated a subpermittee by you in writing, may exercise the authority of this permit.

K. REPORTING: Along with the above Annual Report, you shall annually report on the relative success of any trapping and relocation efforts undertaken pursuant to Conditions D(2) and E of this permit. Such report shall at a minimum: include the dates and species for which trapping and relocation efforts occurred, whether or not successful; specify the number of trapping attempts for each species and an the relative effectiveness described in terms of both trapping success, relocation success, and number of birds that return to the Airport once relocated.

L. You and any subpermittee(s) must comply with the attached Standard Conditions for Migratory Bird Depredation Permits. These standard conditions are a continuation of your permit conditions *and must remain with your permit.*

For suspected illegal activity, immediately contact USFWS Law Enforcement at: Valley Stream, NY: 516-825-3950

Standard Conditions
Migratory Bird Depredation Permits
50 CFR 21.41

All of the provisions and conditions of the governing regulations at 50 CFR part 13 and 50 CFR part 21.41 are conditions of your permit. Failure to comply with the conditions of your permit could be cause for suspension of the permit. The standard conditions below are a continuation of your permit conditions and must remain with your permit. If you have questions regarding these conditions, refer to the regulations or, if necessary, contact your migratory bird permit issuing office. For copies of the regulations and forms, or to obtain contact information for your issuing office, visit: http://www.fws.gov/migratorybirds/mbpermits.html.

1. To minimize the lethal take of migratory birds, you are required to continually apply non-lethal methods of harassment in conjunction with lethal control.
   [*Note: Explosive Pest Control Devices (EPCDs) are regulated by the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF). If you plan to use EPCDs, you require a Federal explosives permit, unless you are exempt under 27 CFR 555.141. Information and contacts may be found at http://www.atf.gov/explosives/how-to/become-an-fel.html.*]

2. Shotguns used to take migratory birds can be no larger than 10-gauge and must be fired from the shoulder. You must use nontoxic shot listed in 50 CFR 20.21(j).

3. You may not use blinds, pits, or other means of concealment, decoys, duck calls, or other devices to lure or entice migratory birds into gun range.

4. You are not authorized to take, capture, harass, or disturb bald eagles or golden eagles, or species listed as threatened or endangered under the Endangered Species Act found in 50 CFR 17, without additional authorization.

   For a list of threatened and endangered species in your state, visit the U.S. Fish and Wildlife Service's Threatened and Endangered Species System (TESS) at: http://www.fws.gov/endangered.

5. If you encounter a migratory bird with a Federal band issued by the U.S. Geological Survey Bird Banding Laboratory, Laurel, MD, report the band number to 1-800-327-BAND or http://www.reportband.gov.

6. This permit does not authorize take or release of any migratory birds, nests, or eggs on Federal lands without additional prior written authorization from the applicable Federal agency, or on State lands or other public or private property without prior written permission or permits from the landowner or custodian.

7. Unless otherwise specified on the face of the permit, migratory birds, nests, or eggs taken under this permit must be:
   (a) turned over to the U.S. Department of Agriculture for official purposes, or
   (b) donated to a public educational or scientific institution as defined by 50 CFR 10, or
   (c) completely destroyed by burial or incineration, or
   (d) with prior approval from the permit issuing office, donated to persons authorized by permit or regulation to possess them.

(page 1 of 2)

8. A subpermittee is an individual to whom you have provided written authorization to conduct some or all of the permitted activities in your absence. Subpermittees must be at least 18 years of age. As the permittee, you are legally responsible for ensuring that your subpermittees are adequately trained and adhere to the terms of your permit. You are responsible for maintaining current records of who you have designated as a subpermittee, including copies of designation letters you have provided.

9. You and any subpermittees must carry a legible copy of this permit, *including these Standard Conditions*, and display it upon request whenever you are exercising its authority.

10. You must maintain records as required in 50 CFR 13.46 and 50 CFR 21.41. All records relating to the permitted activities must be kept at the location indicated in writing by you to the migratory bird permit issuing office.

11. Acceptance of this permit authorizes the U.S. Fish and Wildlife Service to inspect any wildlife held, and to audit or copy any permits, books, or records required to be kept by the permit and governing regulations.

12. You may not conduct the activities authorized by this permit if doing so would violate the laws of the applicable State, county, municipal or tribal government or any other applicable law.

(DPRD - 12/3/2011)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Depredation Licenses - Airport # 42

LICENSE

Under the Environmental Conservation Law (ECL)

Licensee and Facility Information

License Issued To:
LAURA C FRANCOEUR
THE PORT AUTHORITY OF NY AND NJ,
ATTN: LAURA FRANCOEUR
225 PARK AVE., SOUTH R-1209
NEW YORK, NY 10003

(718) 244-3773
COUNTY: QUEENS
REGION: 2

Facility:
JFK INTERNATIONAL AIRPORT
JOHN F KENNEDY EXPRY

JAMAICA, NY 11430

DEC Contact Information

DIVISION OF FISH, WILDLIFE AND MARINE RESOURCES
SPECIAL LICENSES UNIT
625 BROADWAY, ALBANY, NEW YORK 12233-4752
PHONE: (518) 402-8985 FAX: (518) 402-8925
WEBSITE: www.dec.state.ny.us

License Authorizations

Depredation Licenses - Airport
License # 42

Renewal Effective Date: 4/1/2014 Expiration Date: 3/31/2015

NYSDEC Approval

By acceptance of this license, the licensee agrees that the license is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this license.

License Regulations

6 NYCRR Part 182
ECL 11-0535
6 NYCRR Part 175
ECL 11-0521
ECL 11-0505 (5)

DEPREDATION LICENSES - AIRPORT - LICENSE CONDITIONS

1. DEPA – Authorization for Non-lethal Control Methods The licensee is authorized to use department approved non-lethal control methods on migratory birds, including state listed endangered or threatened species or species of special concern (6 NYCRR Part 182), that are creating or will create a hazard to human health or safety at JFK International Airport Queens County, New York.

2. DEPA – Authorization for Lethal Control Methods – JFK The licensee is authorized to use lethal control methods (pursuant to take limits provided by Federal License MB816581-0 on migratory birds, except endangered or threatened species or species of special concern (6 NYCRR Part 182), when non-lethal control methods have failed to deter birds from entering JFK International Airport airspace or when immediate removal of birds is required to protect human health or safety. Lethal control techniques include:

1. shooting, using shotguns and non-toxic shot only;
2. trapping, using modified Bal-Chatri noose traps;
3. treatment of nests and eggs of Canada geese (Branta canadensis);
4. removal of nests and eggs of double-crested cormorants (Phalacrocorax auritus);
5. removal of nests and eggs or American oystercatchers (Haematopus palliates);
6. removal or inactive (No eggs or chicks) osprey (Pandion haliaetus).

3. DEPA - Authorization for Lethal Control Methods Exception The licensee is authorized to take no more than 20 Osprey (Pandion haliaetus) on airport grounds when non-lethal control measures have failed and the animal has landed on a runway in use or poses a direct threat to human safety.

4. DEPA – Federal Emergency Authorization with Exception The licensee is authorized in emergency situations only to take, using shotguns not larger than 10 gauge any migratory bird, (except bald eagles, golden eagles or endangered or threatened species with the exception of 20 Osprey (Pandion haliaetus) listed in Condition DEPA - Authorization for Lethal Control Methods Exception) when the migratory birds, are posing a direct threat to human safety. A direct threat to human safety is one which involves a threat of serious bodily injury or a risk to human life.

5. DEPA – Control Measures Control measures shall include non-lethal methods designed to frighten migratory birds from the authorized location(s).

6. DEP – ALL – License not Valid Without Federal Permit This license is not valid without a corresponding Federal Permit from the US Fish and Wildlife Service. The licensee shall comply with all terms and conditions of the Federal Permit.

7. DEPA – Training Requirement Prior to Use of Lethal Control Methods Only persons who have received training in species identification and wildlife control techniques within the previous two (2) years are authorized to use lethal control methods pursuant to this license.

8. DEPA – No Take of Non - Target Species This license does not authorize the taking of any non-target species. In the event such species are taken, the licensee shall cease activities and contact the New York State Department of Environmental Conservation's Regional Wildlife Manager at

Regional Wildlife Manager
NYSDEC REGION 2 HEADQUARTERS
47-40 21ST ST
LONG ISLAND CITY, NY11101 -5407

9. DEPA – Retrieval and Disposal of Carcasses The licensee shall attempt to retrieve birds shot or found dead on the property and properly dispose of the carcasses by donation to public, scientific and/or educational institutions, or by prompt burial and/or incineration.

10. DEPA – Reporting Endangered or Threatened Species Found Dead The licensee shall immediately freeze and hold the carcasses of any endangered or threatened species found dead, and shall notify the NYSDEC Endangered Species Unit (518) 402-8863 within three (3) business days of finding the carcass.

11. DEP –ALL – Designated Agents The licensee may designate agents to conduct activities authorized by this license. Such designations shall be made in writing by sending a list with the name and address of the person(s) the licensee wishes to designate as an agent to the NYSDEC Special Licenses Unit at the address listed on the front of this license. This list shall be current and on file at the NYSDEC Special Licenses Unit. The licensee is responsible for all actions taken by designated agents under this license.

12. DEPA – Laughing Gull Nesting Colony Census – JFK The licensee shall conduct a census of the laughing gull (Larus atricilla) colony at Joco, East High Meadow and Silver Hole Marshes, Gateway National Recreation Area, Jamaica Bay, Queens County, prior to or immediately after implementation of shooting and prior to June 15.

13. DEPA – Status Report Requirement – JFK The licensee shall submit an annual status report that identifies specific activities that have been undertaken to reduce bird attractants both on and off the airport. Activities to reduce bird attractants shall include:

1. vegetation management;
2. insect control;
3. solid waste management;
4. water retention management;
5. removal of food sources and garbage from the airport;
6. landscape management.

The licensee shall update the previous year's report and identify activities accomplished, those still ongoing and those actions still in the planning stage. Estimated time frames shall be provided.

14. DEPA – Reporting Requirement - Regional Manager The licensee shall file a written annual report prior to the expiration date of this license. Such annual report shall contain: a) name of the licensee, b) license number, c) number of birds shot or found dead on the property by species, d) any band numbers or other markings present on birds shot or found dead, and e) number of individuals shooting. The licensee shall send this report to

Regional Wildlife Manager
NYSDEC REGION 2 HEADQUARTERS
47-40 21ST ST
LONG ISLAND CITY, NY11101 -5407

The licensee shall consult with the Regional Wildlife Manager as deemed appropriate.

15. DEP - ALL – Licensee Shall Submit copies of Federal Reports The licensee shall submit copies of all reports required under their Federal Permit to the NYS DEC Special Licenses Unit at the address listed on the front of this license prior to the expiration of this license.

GENERAL CONDITIONS - Apply to ALL Authorized Licenses

1. GC – Licensee Shall Read All Conditions The licensee shall read all license conditions prior to conducting any activities authorized pursuant to this license.

2. GC – License is Not Transferrable This license is not transferrable and is valid only for the person identified as the licensee.

3. GC – Licensee Responsible for Federal, State or Local Permits/Licenses The licensee is responsible for obtaining any and all necessary, corresponding Federal, State or local permits or licenses prior to conducting any activity authorized pursuant to this license.

4. GC – Reasons for Revocation This license may be revoked for any of the following reasons:

i. licensee provided materially false or inaccurate statements in his or her application, supporting documentation or on required reports;
ii. failure by the licensee to comply with any terms or conditions of this license;
iii. licensee exceeds the scope of the purpose or activities described in his or her application for this license;
iv. licensee fails to comply with any provisions of the NYS Environmental Conservation Law, any other State or Federal laws or regulations of the department directly related to the licensed activity;
v. licensee submits a check, money order or voucher for this license or application for this license that is subsequently returned to the department for insufficient funds or nonpayment after the license has been issued.

5. GC – Licensee Shall Carry Copy of License The licensee shall carry a copy of this license or a document provided by the department, if relevant, when conducting activities pursuant to this license.

6. GC – Licensee Shall Notify of Change of Address The licensee shall notify the Special Licenses Unit in writing, by mail or email, within five (5) days of the official change of residence.

7. GC – Licensee is Liable for Designated Agents If designated agents are authorized pursuant to this license, the licensee shall be liable and responsible for any activities conducted by designated agents pursuant to this license or any actions by designated agents resulting from activities authorized by this license.

8. GC – Licensee Renewal The licensee shall submit a written request for the renewal of this license

prior to the expiration date listed on the license. The licensee shall include accurate and complete copies of any required reports with their renewal request. This renewal paperwork shall be sent to:

NYSDEC
Special Licenses Unit
625 Broadway
Albany, NY 12233-4752.

This license is deemed expired on the date of expiration listed on the license.

NOTIFICATION OF OTHER LICENSEE OBLIGATIONS

MN– Licensee is Liable
The licensee shall be liable and responsible for any activities conducted under the authority of this license or any actions resulting from activities authorized by the license.

MN – Access by Law Enforcement
The licensee shall allow representatives of the NYS DEC Division of Law Enforcement to enter the licensed premises to inspect his or her operations and records for compliance with license conditions.

Trespassing Prohibited
This license is not a license to trespass. The licensee shall obtain permission from the appropriate landowner/land manager prior to conducting activities authorized pursuant to this license

FEDERAL AVIATION ADMINISTRATION
APPROVED: [illegible]
DATE: OCT 2 0 2014

DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE

FEDERAL FISH AND WILDLIFE PERMIT

AUTHORITY STATUTES
16 USC 703-712

REGULATIONS
50 CFR Part 13
50 CFR 21.27

PORT AUTHORITY OF NEW YORK & NEW JERSEY
JOHN F. KENNEDY INTERNATIONAL AIRPORT
BUILDING 145, 2ND FLOOR
JAMAICA, NY 11430
U.S.A.

PERMIT #
MB049255-0

FOR RENEWAL
YES
NO

MAY COPY
YES
NO

EFFECTIVE
06-18-2013

EXPIRES
06-31-2016

CHIEF OR PRINCIPAL OFFICER (Office or Business)
FRANK OLIVER
FLSA WILDLIFE BIOLOGIST

TYPE OF PERMIT
SPECIAL PURPOSE POSSESSION- DEAD MIGRATORY BIRDS FOR EDUCATIONAL USE

AUTHORIZED ACTIVITY MAY BE CONDUCTED

Anywhere in the US permittee has appropriate corresponding State authority.

CONDITIONS AND LIMITATIONS

D. You are authorized to possess for conservation education purposes lawfully acquired dead migratory bird specimen(s), including parts, nests, and nonviable eggs. This authorization to possess migratory birds does not apply to bald eagles or golden eagles.

E. Any person who is
(1) employed by or under contract to you for the activities specified in this permit, or
(2) otherwise designated a subpermittee by you in writing, may exercise the authority of this permit.

F. You and any subpermittees must comply with the attached Standard Conditions for Special Purpose Possession Dead Migratory Bird Educational Use Permits. **These standard conditions are a continuation of your permit conditions *and must remain with your permit.***

For suspected illegal activity, immediately contact USFWS Law Enforcement at: Valley Stream, NY 516-825-3950

FEDERAL AVIATION
ADMINISTRATION
OCT 20 2014

ADDITIONAL CONDITIONS AND AUTHORIZATIONS ALSO APPLY

REPORTING REQUIREMENTS

ANNUAL REPORT IS DUE BY JANUARY 31 OF EACH YEAR

REPORT FORMS CAN BE FOUND AT: www.fws.gov/migratorybirds/mbpermits.html

SIGNATURE

TITLE
CHIEF, MIGRATORY BIRD PERMIT OFFICE - REGION 5

DATE
06-18-2013

Standard Conditions
Special Purpose Possession
Dead Migratory Bird Educational Use Permits
50 CFR 21.27

All of the provisions and conditions of the governing regulations at 50 CFR part 13 and 50 CFR part 21.27 are conditions of your permit. Failure to comply with the conditions of your permit could be cause for suspension of the permit. The standard conditions below are a continuation of your permit conditions and must remain with your permit. If you have any questions regarding these conditions, refer to the regulations or, if necessary, contact your migratory bird permit issuing office. For copies of the regulations and forms, or to obtain contact information for your issuing office, visit: http://www.fws.gov/migratorybirds/mbpermits.html.

1. The intent of this permit is wildlife conservation education. Your educational programs must include information about migratory bird ecology, biology, and/or conservation.

2. You must present a minimum of 12 programs that are open to the public each year.

3. You may not display any migratory bird specimen(s) in any manner that implies personal use. You may not use any migratory bird specimens to promote or endorse any product, merchandise, goods, services, business or organization except your own educational activities.

4. Whenever you exhibit any specimens, you must include either a written or verbal statement that your possession and exhibition of the migratory bird specimen(s) is by permission of the U.S. Fish and Wildlife Service.

5. You must obtain prior written approval from the migratory bird permit issuing office before you acquire, transfer, or dispose of any migratory bird specimen(s).

6. Any migratory bird carcass you send to a taxidermist must be returned to you.

7. A subpermittee is an individual to whom you have provided written authorization to conduct some or all of the permitted activities in your absence. Subpermittees must be at least 18 years of age. As the permittee, you are legally responsible for ensuring that your subpermittees are adequately trained and adhere to the terms of your permit. You are responsible for maintaining current records of who you have designated as a subpermittee, including copies of designation letters you have provided. Other individuals, including those under the age of 18, may conduct the permitted activities only if you or a designated subpermittee are present.

8. You and any subpermittees must carry a legible copy of this permit and display it upon request when exercising its authority. Subpermittees must also carry your written subpermittee designation letter.

9. Any migratory bird specimen(s) held under this permit remain in the stewardship of the U.S. Fish and Wildlife Service and may be relocated at any time for just cause.

10. You must maintain records as required in 50 CFR 13.46 and 50 CFR 21.27. All records relating to the permitted activities must be kept at the location indicated in writing by you to the migratory bird permit issuing office.

11. Acceptance of this permit authorizes the U.S. Fish and Wildlife Service to inspect any wildlife held, and to audit or copy any permits, books, or records required to be kept by the permit and governing regulations.

FEDERAL AVIATION
ADMINISTRATION
APPROVED
DATE: OCT 2 0 2014

12. You may not conduct the activities authorized by this permit if doing so would violate the laws of the applicable State, county, municipal or tribal government or any other applicable law. (SPPSD - 12/3/2011)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
License to Collect or Possess - Education/Exhibition # 754

LICENSE
Under the Environmental Conservation Law (ECL)

Licensee Information

FEDERAL AVIATION ADMINISTRATION APPROVED BY ... DATE OCT 2 0 2014

License Issued To:
LAURA C FRANCOEUR
THE PORT AUTHORITY OF NY AND NJ,
ATTN: LAURA FRANCOEUR
225 PARK AVE., SOUTH R-1209
NEW YORK, NY 10003

(718) 244-3773
COUNTY: QUEENS
REGION: 2

DEC Contact Information

DIVISION OF FISH, WILDLIFE AND MARINE RESOURCES
SPECIAL LICENSES UNIT
625 BROADWAY, ALBANY, NEW YORK 12233-4752
PHONE: (518) 402-8985 FAX: (518) 402-8925
WEBSITE: www.dec.state.ny.us

License Authorizations

License to Collect or Possess - Education/Exhibition
License # 754

New License Effective Date: 7/18/2014 Expiration Date: 7/17/2015

NYSDEC Approval

By acceptance of this license, the licensee agrees that the license is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this license.

License Regulations

6 NYCRR Part 175

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
License to Collect or Possess - Education/Exhibition # 754

ECL 11-0515 (1)

FEDERAL AVIATION ADMINISTRATION
APPROVED BY
DATE OCT 2 0 2014

LICENSE TO COLLECT OR POSSESS - EDUCATION/EXHIBITION - LICENSE CONDITIONS

1. Education/Exhibition Reporting Requirement The licensee shall submit an accurate and complete Fish and Wildlife Education/Exhibition Report Form prior to the expiration date of this license. The licensee shall send this report to the NYSDEC Special Licenses Unit 625 Broadway, Albany, NY 12233-4752.

2. Scientific Collection – Salvage Authority Wildlife The licensee is authorized to salvage wildlife found dead or taken under the licensee's Depredation Airport License. This license is invalid for the salvage of migratory birds without a corresponding Federal permit issued by the U.S. Fish and Wildlife Service.

3. Definition – Education Educational shall mean possession and exhibition in order to teach or instruct about the characteristics, ecological role, or conservation needs of the listed fish or wildlife species, population or community.

4. Definition – Exhibition Exhibition shall mean regular public display or showing of the listed fish or wildlife species where the display itself is the chief object.

5. LCP - Possession of Endangered or Threatened Species Prohibited The licensee shall not possess endangered or threatened species pursuant to this license.

6. Salvage - Providing Copy of License to Taxidermist The licensee shall provide a copy of this license to the person mounting the animal(s) for purpose of identification.

7. Live Animal - Sale and Propagation Prohibited The licensee shall not sell or propagate the listed animals.

8. Live Animal - Authority to Designate Agents The licensee is authorized to designate agents to assist the licensee with the listed animals at the licensee's facilities and while conducting programs pursuant to this license provided that:

a. the licensee submits a written request to the NYSDEC Special Licenses Unit at the address listed on the front of this license containing the:
   i) name
   ii) address
   iii) age
   iv) phone number of the person he or she is nominating as a designated agent, and;

b. the licensee receives an amended license from the Special Licenses Unit listing the designated agent he or she has nominated before that person can conduct activities authorized by this license.

9. Authorized Designated Agents The following Designated Agents are authorized: USDA-APHIS Wildlife Staff.

GENERAL CONDITIONS - Apply to ALL Authorized Licenses

1. **GC – Licensee Shall Read All Conditions** The licensee shall read all license conditions prior to conducting any activities authorized pursuant to this license.

2. **GC – License is Not Transferrable** This license is not transferrable and is valid only for the person identified as the licensee.

3. **GC – Licensee Responsible for Federal, State or Local Permits/Licenses** The licensee is responsible for obtaining any and all necessary, corresponding Federal, State or local permits or licenses prior to conducting any activity authorized pursuant to this license.

4. **GC – Reasons for Revocation** This license may be revoked for any of the following reasons:

i. licensee provided materially false or inaccurate statements in his or her application, supporting documentation or on required reports;
ii. failure by the licensee to comply with any terms or conditions of this license;
iii. licensee exceeds the scope of the purpose or activities described in his or her application for this license;
iv. licensee fails to comply with any provisions of the NYS Environmental Conservation Law, any other State or Federal laws or regulations of the department directly related to the licensed activity;
v. licensee submits a check, money order or voucher for this license or application for this license that is subsequently returned to the department for insufficient funds or nonpayment after the license has been issued.

5. **GC – Licensee Shall Carry Copy of License** The licensee shall carry a copy of this license or a document provided by the department, if relevant, when conducting activities pursuant to this license.

6. **GC – Licensee Shall Notify of Change of Address** The licensee shall notify the Special Licenses Unit in writing, by mail or email, within five (5) days of the official change of residence.

7. **GC – Licensee is Liable for Designated Agents** If designated agents are authorized pursuant to this license, the licensee shall be liable and responsible for any activities conducted by designated agents pursuant to this license or any actions by designated agents resulting from activities authorized by this license.

8. **GC – Licensee Renewal** The licensee shall submit a written request for the renewal of this license prior to the expiration date listed on the license. The licensee shall include accurate and complete copies of any required reports with their renewal request. This renewal paperwork shall be sent to:

NYSDEC
Special Licenses Unit
625 Broadway
Albany, NY 12233-4752.

This license is deemed expired on the date of expiration listed on the license.

NOTIFICATION OF OTHER LICENSEE OBLIGATIONS

MN– Licensee is Liable
The licensee shall be liable and responsible for any activities conducted under the authority of this license or any actions resulting from activities authorized by the license.

MN – Access by Law Enforcement
The licensee shall allow representatives of the NYS DEC Division of Law Enforcement to enter the licensed premises to inspect his or her operations and records for compliance with license conditions.

Trespassing Prohibited
This license is not a license to trespass. The licensee shall obtain permission from the appropriate landowner/land manager prior to conducting activities authorized pursuant to this license

FEDERAL AVIATION
ADMINISTRATION
APPROVED: [illegible]
DATE: OCT 2 0 2014

New York State Department of Environmental Conservation
Division of Fish, Wildlife and Marine Resources
Bureau of Wildlife
47-40 21 st Street, Long Island City, New York 11101
Phone: (718) 482-4922 • **FAX:** (718) 482-4502
Website: www.dec.state.ny.us

Denise Sheehan
Commissioner

AIRPORT AIR STRIKE HAZARD PERMIT

Issued pursuant to Environmental Conservation Law §11-0521

PERMIT NUMBER	AIRPORT MANAGER	TELEPHONE NUMBER
06-2-001	Port Authority of New York & New Jersey	
AIRPORT ADDRESS JFK International Airport, Building 14, 2nd Floor, Jamaica, NY 11430 att: L. Francoeur		

The permittee and any person employed by or acting under authorization of the permittee may kill or scare nuisance wildlife at any time when it becomes a threat to aircraft and airport safety and/or operations as stipulated below:

A. Nuisance wildlife, for the purposes of this permit, means all wildlife **except** threatened and endangered species, species of special concern, and migratory birds requiring federal and/or state permits and licenses.

B. The permittee is authorized to use: (1) firearms to kill nuisance wildlife; and/or (2) auditory or visual scare devices such as shell crackers, live ammunition, zon guns, falconry and trained dogs to repel nuisance wildlife.

C. The permittee is authorized to capture and kill nuisance wildlife (except deer) by using box, cage, foothold, and/or body-gripping traps.

D. Nuisance wildlife may **not** be removed or relocated from the site.

E. All carcasses shall be disposed of by burial or incineration, unless otherwise directed (see Special Conditions, if any).

F. This permit must be carried and displayed whenever exercising the authorities granted herein.

G. Any shooting, trapping or killing must be entered on the Daily Log (included with your permit) on the dates of occurrence.

H. This permit is continuous until revoked. Date of issuance is: March 17, 2006

FEDERAL AVIATION
ADMINISTRATION
APPROVED: [illegible]
DATE: OCT 2 0 2014

I. The reporting period for this permit is January 1 to December 31. The permittee is required to forward a copy of the Daily Log **by January 1** of each year to the Bureau of Wildlife at the above address. The Daily Log must contain the species, date taken, sex, and disposition of each animal taken and/or transferred under the authority of this permit.

J. This permit is conditional upon compliance with all applicable local, state and/or federal laws/regulations and with any Special Conditions listed in K.

K. Special Conditions:

1.Only persons who have received training in species identification and wildlife control techniques within the previous two (2) years are authorized to use lethal control methods pursuant to this permit.

2. The permittee shall develop and implement a wildlife control plan consistent with FAA requirements. This plan shall include but not be limited to vegetation management, insect control, solid waste management, stormwater control and landscape management. The approved plan shall be submitted to the Department upon acceptance by the FAA.

3. List of New York State endangered, threatened and species of special concern is attached.

Joseph J. Pane
Principal Fish & Wildlife
Biologist

March 17, 2006
Date

FEDERAL AVIATION
ADMINISTRATION
APPROVED:
DATE: OCT 2 0 2014

LaGuardia Airport

Certification Manual

Lysa Scully, Deputy General Manager

FEDERAL AVIATION ADMINISTRATION

APPROVED:

DATE: 3/26/14

Original Date: 12/9/04
Revision Date: 3/24/14

FAA Approval_____

U.S. Department of Transportation

Federal Aviation Administration

AIRPORT OPERATING CERTIFICATE

This certifies that the Port Authority of New York and New Jersey as owner and operator of LaGuardia Airport, Flushing, New York, has met the requirements of the Title 49 USC, Subtitle VII – Aviation Program, and the rules, regulations, and standards prescribed thereunder for the issuance of this certificate, and is hereby authorized to operate as a certificated airport in accordance with and subject to said statute and the rules, regulations, and standards prescribed thereunder, including but not limited to 14 CFR Part 139, and any additional terms, conditions, and limitations contained herein or in the approved Airport Certification Manual on file with the Federal Aviation Administration.

This certificate is not transferable and, unless sooner surrendered, suspended or revoked, shall continue in effect.

By Direction of the Administrator

Effective Date: May 21, 1973
Reissue Date: August 3, 2005
Issued at: Jamaica, New York

for Manager, Airports Division

Form Approved OMB No. 2120-0675

APPLICATION FOR CERTIFICATE

Department of Transportation
Federal Aviation Administration

☒ Airport Operating Certificate
☐ Time-Limited Airport Operating Certificate

FAA USE ONLY
Site Number
15794.A

Complete all sections of the form as indicated. Submit original and three copies of the form and two copies of the Airport Certification Manual to the headquarters of the appropriate FAA Regional Office.

Type of Submission (Check One)

☐ Original ☒ Amendment ☐ Exemption

A. Location of Airport

1. Name of Airport La Guardia Airport		2. Address (Number, Street, P.O. Box) Hangar 7 Center	
3. City Flushing		4. County Queens	5. State New York	6. Zip Code 11371
6a. Latitude 40° 46' 38" N	6b. Longitude 73° 52' 21" W	Airport is: a. State Licensed ☐ Yes ☒ No b. State Inspected ☐ Yes ☒ No		

B. Ownership

1. ☐ Municipality ☐ State ☐ Military ☐ Corporation ☐ County ☐ Other (Explain) ☒ Port Authority ☐ Airport Authority	2. Airport is ☒ Civil ☐ Mil/Civ Joint Use ☐ Shared Use
3. Name of Owner Port Authority of NY & NJ	4. Name of Manager/Operator Warren D. Kroeppel
Number/Street/P.O. Box 225 Park Avenue South	Number/Street/P.O. Box LaGuardia Airport, Hangar 7 Center
City NY County Manhattan State NY Zip 10003	City Flushing County Queens State NY Zip 11371

C. Operative Data

1. Certificate Applied For: ☒ Class I ☐ Class II ☐ Class III ☐ Class IV	2. Fire Fighting Equipment (Check Current Index and ensure equipment is listed in ACM) ☐ A ☐ B ☐ C ☒ D ☐ E
3. Air Carriers to be served (UA, DL, CO, AA, etc.)	4. Air Carrier Aircraft to be served (737, DC-9, A-320, etc.) D - IV
5. ARFF Exemption Applied For: ☐ Yes ☒ No	6. Other exemptions applied for: None

D. Remarks ☐ Check here and use additional sheet of paper.

E. Certification
This application, including the Airport Certification Manual, is submitted in order to obtain an Airport Operating Certificate or Time-Limited Airport Operating Certificate. I certify, under penalty of 18 U.S. Code, Section 1001, and other applicable provisions of law that the statements and information in the application form and manual are complete and true to the best of my knowledge.

Applicant Signature		Applicant Address/Number/Street/P.O. Box LaGuardia Airport, Hangar 7 Center		
Applicant Name (typed) Warren D. Kroeppel		City Flushing		
Applicant Title General Manager	Date Submitted December 9, 2004	State New York	Zip 11371	Telephone No. (718) 533-3401

FAA Use Only

1. Date Application received		2. Date Proposed for Inspection	
3. Date Inspection Completed		Signature	Title
4. Recommended for ☐ Certificate ☐ Modification ☐ Disapproval ☐ Letter of Authorization	Date	Signature	Title
5. Remarks			

FEDERAL AVIATION ADMINISTRATION
APPROVED
DATE JAN 27 2005

FAA 5280-1 (2-04) Supersedes Previous Edition

AIRPORT CERTIFICATION MANUAL
LaGuardia Airport

TABLE OF CONTENTS

FEDERAL AVIATION ADMINISTRATION
APPROVED

FAA Approval Date

JAN 27 2005

AIRPORT CERTIFICATION MANUAL
LaGuardia Airport

FEDERAL AVIATION ADMINSTRATI
APPROVED: [illegible]
DATE:

Original Date: 12/9/04

FAA Approval_____

Revision Date:

JAN 2 7 2005

SECTION 101
GENERAL REQUIREMENTS

Purpose

The contents of this manual will comply with the Federal Aviation Administration rules and regulations Title 14 CFR Part 139, effective June 9, 2004. This manual provides direction and lines of responsibility in the day-to-day operation of LGA. It details operating procedures to be followed for both routine matters and unusual circumstances or emergencies that may arise. There are no limitations imposed on LGA by the Administrator.

LaGuardia Airport

Under this regulation, LaGuardia Airport operates as a class I airport with scheduled air carrier service with various aircraft having over 31 seats.

LaGuardia Airport is operated by The Port Authority of New York and New Jersey. It is located in Queens County, New York City.

The mailing address is as follows:

LaGuardia Airport

Hangar 7 Center

Flushing, New York 11371

LGA Orientation

LGA consists of 680 acres and is located approximately 6 miles from New York City.

LGA location point coordinates are as follows:

Latitude	**40°**	**-**	**46'**	**-**	**38.075" N**
Longitude	**73°**	**-**	**52'**	**-**	**21.393" W**

Airport Reference Point (ARP) is located at the north end of Concourse C of the Central Terminal Building.

Magnetic Variation	**13° 18' West**
Elevation	**22 Feet**

Runway / Taxiway Identification

The runways carry the standard magnetic heading identification and the taxiways are identified by a single or double letter.

SECTION 105
INSPECTION AUTHORITY

LaGuardia Airport shall allow the Administrator to make any inspections including unannounced inspections, or tests to determine compliance with 14 CFR Part 139.

FEDERAL AVIATION ADMINISTRATION
APPROVED
DATE JAN 27 2005

SECTION 111
EXEMPTIONS

Currently, there are no exemptions issued to LaGuardia Airport by the FAA.

AVIATION AUDIT
APPROVED
DATE
JAN 27 2005

Original Date: 12/9/04

FAA Approval_____

Revision Date:

SECTION 113
DEVIATIONS

The General Manager, or his/her designee, has the authority to take immediate action in an emergency which requires deviation from the provision of the airport operating certificate or airport certification manual without first obtaining FAA concurrence when the interest of the public safety is served. If such emergency action is taken, he/she shall, as soon as practicable, but within 14 days, report in writing to the FAA Regional Office stating the nature, extent, and duration of the deviation.

FEDERAL AVIATION ADMINSTRATION
APPROVED: Vincent E. Cannuno
DATE: JAN 27 2005

Original Date: 12/9/04

FAA Approval_____

Revision Date:

139.201
GENERAL REQUIREMENTS (ACM MAINTENANCE / REVISIONS)

The LaGuardia Airport (LGA) General Manager is responsible for ensuring this Manual remains current and that airport personnel adhere to the procedures and requirements contained herein. The Chief Operations Supervisor or designee is responsible for reviewing the entire ACM at least annually. The complete and current original ACM will be available for FAA inspection at the Port Authority Chief Operations Supervisor's office in the Central Terminal Building at LaGuardia Airport. The Chief Operations Supervisor will provide applicable portions of the FAA-approved ACM for LGA to the appropriate personnel responsible for their implementation, as indicated in the Distribution List on page 2 of this section.

A complete copy of the most current ACM, including any approved amendments, will be provided to the FAA Eastern Region, Airports Division, AEA-620.

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: NOV 16 2012

DISTRIBUTION LIST

ACM – OFFICIAL COPY

CHIEF OPERATIONS SUPERVISOR, OPERATIONS STAFF OFFICE
CENTRAL TERMINAL BUILDING, 3RD FLOOR, ROOM 3801

PRINTED COPIES

FEDERAL AVIATION ADMINISTRATION
EASTERN REGION, AIRPORTS DIVISION, AEA-620
1 AVIATION PLAZA, JAMAICA, NY

AIRPORT DUTY MANAGER, LGA
CENTRAL TERMINAL BLDG., 1ST FLOOR, OPERATIONS OFFICE

ARFF GARAGE, LGA
BLDG 137

NOTE: ANY REVISIONS TO ACM ARFF SECTIONS (139.315, 139.317 AND 139.319) WILL BE SENT TO THE PORT AUTHORITY POLICE RESCUE TRAINING CENTER, JOHN F. KENNEDY AIRPORT, BUILDING 254

ELECTRONIC COPIES

ELECTRONIC COPIES OF THE ACM WILL BE MAINTAINED ON THE FOLLOWING PA SHARE DRIVES:

- LGA CENTRAL TERMINAL BUILDING SHARE DRIVE
- LGA HANGAR 7 SHARE DRIVE
- PAS SHARE DRIVE

THE FAA AIRPORTS DIVISION MUST APPROVE ALL ACM REVISIONS.

FEDERAL AVIATION ADMINISTRATION
APPROVED: [signature]
DATE: 3/24/2014

139.205
AMENDMENT of AIRPORT CERTIFICATION MANUAL

AMENDMENTS

The following procedure is in effect for amendments to the ACM:

1. Revisions or amendments to the ACM will be made as necessary to ensure it remains relevant and current. All revisions or amendments will be submitted by the Manager, Aeronautical Services, or designated representative, at least 30 days prior to the proposed effective date.

2. Prior to submission of an ACM change, the Chief Operations Supervisor will coordinate with all relevant internal and external stakeholders to ensure all parties have an opportunity to review and comment on proposed changes prior to submission to the FAA for approval.

3. The ACM Page Revision Log will be completed and submitted with each revision.

4. Each page of the revision, including the Page Revision Log, will indicate the date of the revision and the original approval date of the ACM.

5. Two copies of the revision, in color, if applicable, will be submitted to the FAA for approval at the following address:

   Federal Aviation Administration
   Airports Division, AEA-620
   1 Aviation Plaza
   Jamaica, NY 11434

6. Upon FAA approval, the Chief Operations Supervisor will make copies of each approved revision and distribute the revised pages, as appropriate, to designated holders of the Airport Certification Manual listed on the Distribution List on page 2 of Section 201.

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: NOV 16 2012

REVISION LOG

Date of Revision	Description	Section/Page
09/15/08	Add Deputy General Manager to Distribution list	201-2
09/15/08	Revision Log changes	205-2
09/15/08	Add TDZ to Runway 13 lighting serviced by Port Authority Electrical Unit	311-6
09/15/08	Remove MOS for non standard in-pavement runway guard lights dated June 27, 2001	311-14
09/15/08	Replace OBS 289 - new OBS 289 dated July 2007	331-2
09/15/08	Replace pages 337-3 through 337-14 with updated WHMP pages 337-3 through 337-10	337-3 to 337-14
05/04/09	Revision Log changes	205-2
05/04/09	Changes to record keeping and/or training requirements	319-3, 329-3, 325-1 and 337-10
05/04/09	Training Log – updated	303-8
05/04/09	LAHSO-LOA – changed "Installing" to "Maintaining" FAA added Available Landing Distance data	311-10 to 311-11
05/04/09	EMAS inspection checklist added	309-2
05/04/09	Bird Strike Control Log added	337-1
05/04/09	Depredation Permits added	337-2
05/04/09	AEP – HAZMAT Notification List updated	325 Annex VIII/7
02/25/10	Revision Log Changes	205-2
02/25/10	Current NY State Depredation Permit Added as Exhibit	337
02/25/10	Air Strike Depredation Permit Added as Exhibit	337
02/25/10	AEP-Hazmat Notification List Updated	325 Annex VIII/7
02/25/10	AEP-Patrol Borough Queens North Incident Action Plan for LaGuardia Airport	325 Annex III
02/25/10	Language referencing EMAS Maintenance manual added	309/2
02/25/10	EMAS Maintenance Manual added as exhibit	309
02/09/11	Revision Log Changes	205-2
02/09/11	Updated Cover Signature Page with new CM	Cover
02/09/11	Updated Application for Certification with new GM	Intro
02/09/11	Personnel – Added description for Mgr, Aero Svcs	303-4
02/09/11	Lighting - Added TDZ's on RWY 4, Replaced VASI's with PAPI's on RWY 13 and RWY 22	311-6
02/09/11	Updated Operational Plan (Grid-Map)	319-9, 327-8
02/09/11	Hazardous Materials – Added as exhibit fuelers policy on intrinsically safe radios	321
02/09/11	Pedestrian and Ground Veh. – Updated Movement Area training procedures and LOA	329-1 to 5, 329-6
02/09/11	Updated Movement Area Map	305-3, 329-9
02/09/11	Wildlife Mgmt Replaced pages 337-1 to 337-2 with updates	337-1 to 2
02/09/11	Updated Wildlife Hazard Management Plan	337

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Mestney
DATE: 9/28/12

FAA Approval: _____

REVISION LOG

Date of Revision	Description	Section/Page
04/17/12	Added CAT II Markings, RGL's, RWY 31 PAPI's Added MOS for Start-Up Positions as exhibit at end of section Removed [illegible] AHSO remarks and LOA	311-1 to 311-9
04/17/12	Added Under Responsibilities: Monitor Braking Action, Added Priority Areas, Requirements for RWY Closures, Policy on Friction Measurement/Mu Readings Priority Area Maps Added as an Exhibit at End of Section	313-1 to 313-7
04/17/12	Updated Location and Grid Ref to New ARFF Bldg [illegible], Off-Field Response Map Added as an Exhibit at End of Section	319-2, 319-5
04/[illegible]/12	Added Wind Direction Indicator Maps as an Exhibit at End of Section	323
[illegible]/12	Removed all Ref to [illegible]	327-1
[illegible]/12	Removed all Ref to [illegible]	339-1
[illegible]/12	Updated [illegible] Included New Org Chart	303-1 thru 303-7
09[illegible]	Removed all References to Gateway, Added EMAS Crew Removal Procedures and Included Updated RSA Diagram	309-1 thru 309-3
09/[illegible]/12	Added LOA on [illegible] Reports as an Exhibit	313
09/24/12	Included Most Current Aircraft to Determine ARFF Index	315-1
09/27/12	Added Water Rescue to Personnel/Training and Training Log Checklist for PAPU Training as an Exhibit	319-3, 319
09/01/12	Provided Details on Role of Contractor Responsible for Inspecting Fuel Farm Facility, Fuelers and Fire Safety Training	321-1, 321-2
09/25/12	Removed Reference to 303 Personnel Training. Changed Self-Inspection Form with CALS Daily Inspection Report and added Daily Inspection Forms as an Exhibit.	327-1, 2
09/24/12	Removed References to Section 303 and 327	[illegible] thru 329-5
09/01/12	Updated to Reflect WHMP, Current Edition	[illegible]
09/24/12	Remove any Reference to FSS and Included New Condition Reporting Procedures Through Direct Digital NOTAM Manager and OpsNet. Included [illegible] as an Exhibit	[illegible]
[illegible]	Modified Responsibilities and Added CSPP and Notification Procedures	341-1, 341-2
10/[illegible]	Added Supervising and Directing Landside Staff	WHMP pg 2
10/[illegible]2	Removed Position Titles, FS9, FS[illegible] 65 etc	WHMP pg 2-3
10/[illegible]	Removed Reference to NYC Shotgun Permit Requirement	WHMP pg 11
10/[illegible]2	Under Personnel, Changed "Terminal Duty Mgr" to *Landside Duty Mgr*"	WHMP pg 11
10/09/12	Under Provisions, 1st Paragraph, Added *"and/or"*; Changed "searching" to *"monitoring and managing"*; Changed "Parking Lot/Roadway Supv" to *"supervisor's performing landside functions"*	WHMP pg 13
10/09/12	2nd Paragraph, Changed Language; *"Operations Staff Maintain Vigilant*	WHMP pg 13
10/09/12	Added Language; re Qualified Field Supv on Duty During Air Carrier Operations	WHMP pg 13
10[illegible]	Under Air Traffic Control Comm., Paragraph 3, Added *"ATCT"*	WHMP pg [illegible]
10[illegible]	Removed General Ops Supervisor's, Ops Group Supervisor's and Airport Agents from 8-Hour Class Req	WHMP pg [illegible]
10/[illegible]	Removed Reference to NYC Shotgun Permit Requirement	WHMP [illegible]
10/[illegible]	WHMP-Split Pyro and Shotgun Recurrent Training Requirement and Removed Chief of Ops, General Ops Supv and Operations Group Supv	WHMP [illegible]

FEDERAL AVIATION ADMINISTRATION

APPROVED: [illegible]

DATE: 10-18-12

REVISION LOG

Date of Revision	Description	Section/Page
11/16/12	Revision Log Changes	205-4
11/16/12	Revised and replaced Section 139.201 General Requirements (ACM Maintenance / Revisions)	201-1 thru 201-2
11/16/12	Revised and replaced Section 139.205 Amendments of ACM	201-1
11/16/12	Revised and replaced Section 139.301 Records	301-1
11/16/12	Revised and replaced Section 139.303 Personnel	303-1 thru 303-11
11/16/12	Revised and replaced Section 139.319 ARFF Requirements	319-1 thru 319-20
3/25/13	Revision Log Changes	205-4
3/25/13	Updated Section 139.319 ARFF Requirements to include monthly and annual audit requirements	319-11
4/12/13	Revision Log Changes	205-4
4/12/13	Revised/updated portions of Section 139.319 ARFF Requirements	319-5 thru 319-11
4/12/13	Removed Exhibit 2 Section 139.319 ARFF Requirements and replaced with Exhibit Page Intentionally Left Blank	319-13
4/12/13	Revised/updated Exhibit 4 in Section 139.319 ARFF Requirements	319-15
4/12/13	Section 139.325 (AEP) Attachment: add U.S. Coast Guard Response to rear of section	325
4/12/13	Section 139.329 Pedestrians and Ground Vehicles: add Driver Training Manuals to rear of section	329
5/1/13	Revision Log Change	205-4
5/1/13	Updated Wildlife Hazard Management Plan (WHMP); add WHMP to rear of section 139.337	337
8/15/13	Revision Log Change	205-4
8/15/13	Revised Section 139.315: Aircraft Rescue and Fire Fighting Index Determination	315-1

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Mastrey
DATE: 8/19/2013
FAA Approval:

REVISION LOG

Date of Revision	Description	Section/Page
09/19/13	Revision Log Changes	205-5
9/19/13	Updated ARFF Requirements Section 139.319 Training Records - Authorized List of ARFF Personnel	319-10
10/2/13	Revision Log Changes	205-5
10/2/13	Updated Section 139.331 Obstructions	331-1
3/24/14	Updated ACM cover page to reflect current manager	Cover Page
3/24/14	Revision Log Changes	205-5
3/24/14	Distribution List Updated	201-2
3/24/14	Aircraft Start-Up Position Map Updated In the rear of section 311 – Markings, Signs & Lighting	311
3/24/14	Wind Indicators Updated	323-1
3/24/14	Wind Indicator Map Updated In the rear of section 323	323
3/24/14	139 Inspection Log – Updated Version	327
3/24/14	Ground Vehicle Access to the AMA LOA Updated	329-6 thru 329-8
3/24/14	Aircraft Start-Up Position Map Updated In the rear of section 335 – Public Protection	335
3/24/14	Updated Wildlife Hazard Management Plan (WHMP) and Wildlife Hazard Management Letter of Agreement (LOA); add WHMP & LOA to the rear of section 337	337
5/16/14	Revision Log Changes	205-5
5/16/14	Updated Section 309 – TSA Restriction on Twy Y and revised EMAS Dimensions	309-1 thru 309-3

FEDERAL AVIATION ADMINISTRATION
APPROVED: [signature]
DATE: 6/2/2014

Original Date: 12/9/04

Revision Date: 05/16/14

FAA Approval: _____

139.301
RECORDS

Upon request of the Administrator, LGA will furnish records listed under this section.

List of Required Records

The Airport will maintain the following records:

1. *Personnel Training* - 24 consecutive calendar months for personnel training records under Sections 303 (personnel), 327 (self-inspection) and 337 (wildlife).
2. *Emergency Personnel Training* - 24 consecutive calendar months for ARFF under Section 319
3. *Airport Fueling Agent Inspection* - 12 consecutive calendar months for records of inspection of airport fueling agents under Section 321
4. *Fueling Personnel Training* - 12 consecutive calendar months for training records of fueling personnel under Section 321
5. *Self-Inspection* - 12 consecutive calendar months for self-inspection records under Section 327
6. *Movement areas and safety training* - 24 consecutive calendar months for records of training given to pedestrians and ground vehicle operators with access to movement areas and safety areas under Section 329
7. *Accident and Incident* - 12 consecutive calendar months for each accident or incident in movement areas and safety areas involving air carrier aircraft and/or ground vehicles under Section 329
8. *Airport Condition* - 12 consecutive calendar months for records of airport condition information dissemination under Section 339

Additional Records

LGA will make and maintain any additional records required by the Administrator.

Training Records

Training records will be maintained for time periods specified under "List of Required Records" outlined above. Civilian records are kept by the Assistant Chief Operations Supervisor of Certification & Training. Port Authority ARFF training records are kept by the ARFF Captain or designee. The ARFF Captain is responsible for ensuring that only qualified and trained personnel are assigned to ARFF positions.

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: MAR 3 1 2014

139.303
PERSONNEL

OPERATIONAL LINES OF SUCCESSION

The General Manager, LaGuardia Airport, has overall responsibility for the airport. In the absence of the General Manager, LaGuardia Airport's lines of succession are as follows:

- Deputy General Manager
- Manager, Airport Operations, Security & Services Division
- Manager, Physical Plant & Redevelopment
- Manager, Aeronautical Services
- Chief Operations Supervisor
- Assistant Chief Operations Supervisor / Airport Duty Manager (ADM)

The LaGuardia Airport organizational chart can be found at the end of this section.

OPERATIONAL JOB TITLES - MAJOR DUTIES

GENERAL MANAGER

The General Manager, LaGuardia Airport, has overall responsibility for the Airport, delegated by the Director of Aviation. This includes authority and responsibility for Part 139 compliance, planning, construction, operations, maintenance Aircraft Rescue and Firefighting (ARFF), and security at the airport, negotiations with Aviation Department tenants, and balancing public service obligations against net revenue requirements. Any further reference to General Manager throughout this document will mean 'General Manager or designee'.

DEPUTY GENERAL MANAGER

The Deputy General Manager assists the General Manager in the day-to-day operation of LGA. In the absence of the General Manager, performs General Manager duties and responsibilities.

MANAGER, AIRPORT OPERATIONS, SECURITY & SERVICES DIVISION

The Manager of Airport Operations is responsible to the General Manager for compliance with all Part 139 regulatory requirements and overseeing aeronautical operations, civilian security programs, landside and terminal operations, to include public parking lots, airport bus services, taxi dispatching services, ground transportation information counters, airport signage and tenant liaison. He/she has primary responsibility for airfield inspection and emergency notification procedures.

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: MAR 3 1 2014

MANAGER, PHYSICAL PLANT & REDEVELOPMENT

The Manager, Physical Plant & Redevelopment is responsible to the General Manager, LGA, for the timely development of LGA project plans and their implementation, as well as maintaining the LGA airfield and physical plant in acceptable operating condition. The Manager maintains a staff of qualified personnel and directs activities of the airport Maintenance Division.

MANAGER, AERONAUTICAL SERVICES

The Manager, Aeronautical Services, is responsible to Manager of Airport Operations, Security & Services Division for compliance with all regulatory requirements pertaining to operations on, and the features and condition of, the aircraft operating areas, including both movement and non-movement areas. These responsibilities include compliance with standards set forth in Title 14 CFR Part 139 for self-inspection and airport condition reporting; public protection; routine operational and emergency procedures, including winter weather operations and the Airport Emergency Plan; implementation of the Wildlife Hazard Management Plan; construction site safety; pedestrian and ground vehcle operations and reporting of non-complying conditions. Also ensures compliance with Part 139 requirements pertaining to training for all personnel who access the airport operations area (AOA).

CHIEF OPERATIONS SUPERVISOR

The Chief Operations Supervisor is responsible to the Manager of Airport Operations, Security & Services Division for airport operations. He/she oversees staff in the operation of the airport, supervises inspection of the airfield for hazards to aeronautical safety, notifies FAA Air Traffic Control (ATC) and airline operators of such hazards, and ascertains that corrective or preventive measures are taken and that hazards are properly marked. He/she settles routine and non-routine matters involving itinerant aircraft and air carrier operations. He/she is also responsible for coordinating with the Maintenance Division, FAA ATC, airline operators, the FBO and others on items pertaining to the aeronautical area and the overall operation of the airport. He/she has primary responsibility to oversee inspection and notification procedures under Part 139.

ASSISTANT CHIEF OPERATIONS SUPERVISOR / AIRPORT DUTY MANAGER

The Airport Duty Manager (ADM) at LGA directly supervises personnel performing operational and inspection work under the supervision of the Manager, Airport Operations, Security and Services Division. The ADM is the chief Port Authority official at LGA on off-shifts, Saturdays, Sundays and holidays, when the General Manager or designated representative is not present. The ADM is responsible for maintaining aircraft operating areas in safe and efficient operating condition and for providing airport emergency services in accordance and compliance with Part 139. The ADM settles routine and non-routine matters involving itinerant aircraft and air carrier operations. The ADM ensures that only Division personnel who meet all of the training requirements of Part 139 are assigned to positions having responsibilities under Part 139, as described in this section.

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: MAR 3 1 2014

ASSISTANT CHIEF OPERATIONS SUPERVISOR / CERTIFICATION & TRAINING

Under the direction of the Chief Operations Supervisor, the Assistant Chief Operations Supervisor/ Certification & Training performs supervisory and inspection work related to airport certification and regulatory compliance. He/she is responsible to ensure personnel, who have responsibilities under Part 139, are trained and qualified. He/she is also responsible for maintaining Part 139 training records.

ASSISTANT AIRPORT DUTY MANAGER

The Assistant Airport Duty Manager (AADM) assists the ADM in maintaining safe and efficient operating conditions on the aeronautical area by conducting daily airfield inspections, noting discrepancies, and following up until they are resolved. The AADM implements emergency plans, as needed, trains and supervises junior staff, and, in the absence of the ADM, makes operational decisions pertaining to AOA operations. The AADM performs wildlife hazard management on the overnight tour.

WILDLIFE SUPERVISOR

The Wildlife Supervisor monitors wildlife activity in and around aircraft operating areas. He/she is required to disperse and, if necessary, employ lethal action to mitigate wildlife activity in aircraft operating areas. The Wildlife Supervisor also coordinates with contracted wildlife management personnel on matters involving wildlife hazard management and assists with wildlife surveys, as needed. The Wildlife Supervisor reports to the ADM and AADM.

CHIEF OF DEPARTMENT, PORT AUTHORITY POLICE

The Chief of Department, Port Authority Police oversees all aspects of the Police Department The Chief of Department also oversees compliance with the Incident Command System (ICS) utilized by the Port Authority to manage emergency response and ensure protection of life and property.

POLICE COMMANDING OFFICER

The Police Commanding Officer is the highest ranking police official at the airport. S/he reports to the Chief, Port Authority Police Department, but receives guidance on the utilization of Police resources to address airport concerns from the General Manager, LGA, or designated representative. In cases of incidents involving life/safety, and until such incidents are resolved, the Commanding Officer or designated representative has lead responsibility for Incident Command. S/he is responsible for airport security, vehicle traffic movement, and emergency operations. In connection with these responsibilities, s/he must plan, coordinate and execute all procedures necessary to effect proper control and response, and maintain liaison with Port Authority officials and city agencies, as required. This responsibility entails the assurance of effective performance of police personnel and equipment responding to emergencies, the proper handling and control of public gatherings, the implementation of security arrangements for VIPs, and assuming charge of situations involving bomb threats, sabotage and any other law enforcement related conditions.

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: MAR 3 1 2014

POLICE TOUR COMMANDER

Under the direct supervision of the Commanding Officer, the Tour Cammander is responsible for airport public safety, traffic movement, and any other law enforcement operation delegated by the Commanding Officer. The Tour Commander is the initial designated Incident Commander for all airport emergencies and incidents.

Fire Chief, ARFF

The Fire Chief, who reports to the Chief Security Officer (CSO), is a technical expert and is responsible for personnel matters in accordance with the CBA. The Fire Chief has overall responsibility for developing and delivering standardized ARFF training in coordination with the General Manager of Airport Certification and Safety. The ARFF Fire Chief will oversee the ARFF Training Academy operation. Additionally, the Fire Chief will work closely with the General Manager of Airport Certification and Safety, the Airport General Managers, and the Facility ARFF Captains to ensure that part 139 ARFF requirements are met.

ARFF Captain

The ARFF Captain is the Commanding Officer of the ARFF Unit at LaGuardia Airport. The ARFF Captain is responsible for meeting Part 139 ARFF requirements. The ARFF Captain reports directly to the Manager of Airport Operations.

Captain of the Rescue Training Center

The Captain of the Rescue Training Center reports to the Fire Chief and will develop and implement the ARFF training curriculum to include initial and recurrent training and airport-specific training programs and materials. The Captain of the Rescue Training Center will be responsible for providing completed training records to ARFF Captains at the facilities.

MANAGER, AIRPORT MAINTENANCE

The Manager, Airport Maintenance is responsible to the Manager, Physical Plant & Redevelopment for maintaining the condition of airport facilities to established standards. The Manager, Airport Maintenance maintains a staff of qualified personnel and directs activities of the airport Structural, Electrical, Environmental and Mechanical Maintenance units.

ASSISTANT MANAGER, AIRPORT MAINTENANCE

The Assistant Manager of Airport Maintenance assists the Manager of Airport Maintenance with maintaining airport facilities and assumes overall responsibility of the Maintenance Division in the absence of the Maintenance Manager.

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: MAR 3 1 2014

CHIEF STRUCTURAL SUPERVISOR

The Chief Maintenance Supervisor is responsible to the Manager of Airport Maintenance for airport structural maintenance and landscaping, to include structural maintenance of aircraft operating areas. This includes, but is not limited to, maintaining pavement (asphalt and concrete) in good repair, replacing delineators, and repairing airfield fencing.

CHIEF MECHANICAL SUPERVISOR

The Chief Mechanical Supervisor is responsible to the Manager of Airport Maintenance to maintain the airport's water distribution system (including fire suppression, outfalls and pump houses), sewage lines, and for providing mechanical equipment support for the electrical switch houses.

CHIEF ELECTRICAL SUPERVISOR

The Chief Electrical Supervisor is responsible to the Manager of Airport Maintenance for maintaining all equipment and wiring related to the Airport's electrical systems, to include landside, terminal and airfield lighting (which includes signage systems for the runways, taxiways, the airport beacon and obstruction lights located on the airport). Also maintains the airport's high tension electrical distribution system.

GENERAL MANGER, AIRPORT CERTIFICATION & SAFETY

The General Manager of Airport Certification & Safety has oversight and performs quality control of compliance with Part 139 certification and safety standards at all Port Authority airports. The General Manager of Airport Certification & Safety acts as a principal liaison to the FAA with regard to airport certification matters, provides the airports with standardized policy guidance on Part 139 requirements, and develops and directs associated training and education programs.

MANAGER, AIRPORT CERTIFICATION & SAFETY

The Manager of Airport Certification & Safety reports directly to the General Manager, Airport Certification & Safety and provides compliance and audit information to the Manager, Airport Operations, Security & Services Division. The position monitors compliance with Title 14 CFR Part 139 and associated Advisory Circulars, Cert Alerts and other FAA regulatory guidance, and provides technical oversight for all Part 139 training. The position also audits all ARFF, wildlife, and driver training records for compliance with regulatory requirements.

FEDERAL AVIATION ADMINISTRATION
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DATE: MAR 3 1 2014

PERSONNEL REQUIREMENTS

LGA will comply with the following personnel requirements:

A. Maintain sufficient qualified personnel to comply with the requirements of the ACM and the requirements of Title 14 CFR Part 139.

B. Equip personnel with sufficient resources needed to comply with the requirements of Title 14 CFR Part 139.

C. Train all personnel who access the movement areas and safety areas and perform duties in compliance with the requirements of the ACM and Part 139. This training shall be completed before initial performance of duties. Recurrent training shall be completed at least once every 12 consecutive calendar months thereafter. An example of the personnel training log can be found at the end of this section. The curriculum for initial and recurrent training shall include at least the following areas:

   1) Airport familiarization, including airport marking, lighting and signs system;
   2) Procedures for access to, and operation in, movement areas and safety areas under Section 329;
   3) Airport communications;
   4) Duties required under the Airport Certification Manual and the requirements of Part 139;
   5) Any additional subject areas required under Part 139 Sections 319, 321, 327, 337and 339, as appropriate.

D. Make record of all training completed by each individual in compliance with this section including, at a minimum, a description and date of training received. Such records shall be maintained for 24 consecutive calendar months after completion of training.

E. As appropriate, comply with the following training requirements of Part 139:

   1) Section 319 - Aircraft Rescue and Firefighting: Operational Requirements;
   2) Section 321 - Handling and Storage of Hazardous Substances and Materials;
   3) Section 327 - Self-Inspection Program;
   4) Section 329 - Pedestrian and Ground Vehicles;
   5) Section 337 - Wildlife Hazard Management;
   6) Section 339 - Airport Condition Reporting.

FEDERAL AVIATION ADMINISTRATION
APPROVED: MAR 10 1 2014
DATE:

TRAINING

Training is required under Part 139.303 and Part 139.327 for all personnel who access the movement area and safety areas and perform duties in compliance with the requirements of the Airport Certification Manual. Part 139.327 requires additional training for those personnel who are responsible for the Airport Self-Inspection Program.

Airport Operations Personnel will receive Part 139.303 and 139.327 training in the following areas:

1. 139.303 Personnel – Airport Familiarization, airport markings, lighting, and signing. Airport Communications – including radio communications between air traffic control tower and airport personnel
2. 139.301 Records
3. 139.305/307 Paved Areas & Unpaved Areas
4. 139.309 Safety Areas
5. 139.311 Markings, Lighting and Signing
6. 139.313 Snow and Ice Control
7. 139.315 ARFF Index Determination
8. 139.317 Equipment and Agents
9. 139.319 ARFF Operational Requirements
10. 139.321 Handling and Storage of Hazardous Substances and Materials
11. 139.323 Traffic and Wind Indicators
12. 139.325 Airport Emergency Plan
13. 139.327 Self-Inspection Program
14. 139.329 Pedestrians and Ground Vehicles
15. 139.331 Obstructions
16. 139.333 Protection of NAVAIDS
17. 139.335 Public Protection
18. 139.337 Wildlife Hazard Management
19. 139.339 Airport Condition Reporting
20. 139.341 Identifying, Marking, and Lighting, Construction and Other Unserviceable Areas
21. 139.343 Non Complying Conditions

PA Non-Operations and Non-Police personnel, and contract personnel who access the movement area will receive Part 139.303 training in the following areas:

1. 139.303 Personnel – Airport Familiarization, airport markings, lighting, and signing. Airport Communications – including radio communications between air traffic control tower and airport personnel
2. 139.305/307 Paved Areas & Unpaved Areas
3. 139.309 Safety Areas
4. 139.311 Markings, Lighting and Signing
5. 139.313 Snow and Ice Control
6. 139.323 Traffic and Wind Indicators
7. 139.325 Airport Emergency Plan
8. 139.329 Pedestrians and Ground Vehicles
9. 139.331 Obstructions
10. 139.333 Protection of NAVAIDS
11. 139.335 Public Protection
12. 139.337 Wildlife Hazard Management

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: MAR 3 1 2014

PA Police and ARFF Personnel who access the movement area will receive Part 139.303 training in the following areas:

1. 139.303 Personnel – Airport Familiarization, airport markings, lighting, and signing. Airport Communications – including radio communications between air traffic control tower and airport personnel
2. 139.305/307 Paved Areas & Unpaved Areas
3. 139.309 Safety Areas
4. 139.311 Markings, Lighting and Signing
5. 139.315 ARFF Index Determination
6. 139.317 Equipment and Agents
7. 139.319 ARFF Operational Requirements
8. 139.321 Handling and Storage of Hazardous Substances and Materials
9. 139.323 Traffic and Wind Indicators
10. 139.325 Airport Emergency Plan
11. 139.329 Pedestrians and Ground Vehicles
12. 139.331 Obstructions
13. 139.333 Protection of NAVAIDS
14. 139.335 Public Protection
15. 139.337 Wildlife Hazard Management

FAA personnel who access the movement area will receive Part 139.303 training in the following areas:

1. 139.303 Personnel – Airport Familiarization, airport markings, lighting, and signing. Airport Communications – including radio communications between air traffic control tower and airport personnel
2. 139.305/307 Paved Areas & Unpaved Areas
3. 139.309 Safety Areas
4. 139.311 Markings, Lighting and Signing
5. 139.323 Traffic and Wind Indicators
6. 139.325 Airport Emergency Plan
7. 139.329 Pedestrians and Ground Vehicles
8. 139.331 Obstructions
9. 139.333 Protection of NAVAIDS
10. 139.335 Public Protection

All Tug Operators, Brake Riders, and Mechanics that reposition aircraft utilizing the movement area will be required to undergo Airfield Movement Area Training to receive a DR3 driver endorsement on their LGA airport ID. Airlines will be responsible for training their personnel. This training will consist of initial and annual recurrent training using the Port Authority's curriculum. Airline trainers will receive initial and annual recurrent training from the Port Authority Operations training officer. Training curriculum will include the following:

1. Airfield Safety
2. Vehicle Operating Requirements
3. Rules and Regulations
4. Airport Familiarization
5. Ground Vehicle Communications

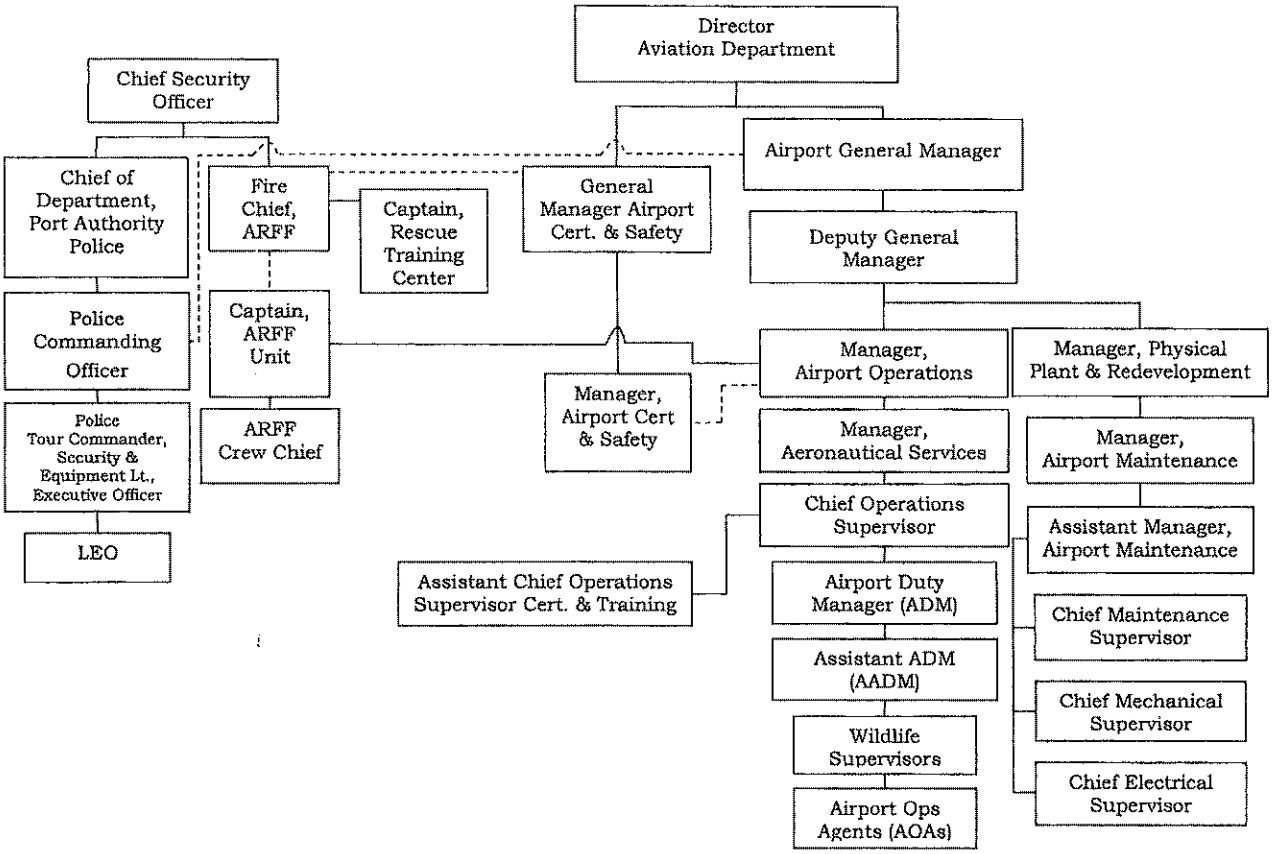
FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: MAR 3 1 2014

Tug Operators, Brake Riders, and Mechanics that reposition aircraft will be under positive ATC control on the movement area and are not covered under the movement area LOA.

All personnel, with the exception of the Port Authority Police and ARFF, will attend a driver training class taught by the Port Authority Operations training officer prior to accessing the movement area. Port Authority Police will attend a driver training class taught by a Port Authority Police training officer prior to accessing the movement area. ARFF personnel will be trained by an ARFF trainer, designated by the ARFF Captain, prior to accessing the movement area. All movement area drivers will receive initial driver training using an FAA approved driver training manual (exhibit added in the back of this section), and initial/annual recurrent refresher kiosk training as outlined above. They will also receive field familiarization prior to accessing the movement area.

Those responsible for the Airport Self-Inspection Program will receive initial driver training as outlined above, Part 139 kiosk training as outlined above, followed by on-the-job training (OJT) which consists of shadowing a more qualified supervisor. Upon completion of OJT, a more senior supervisor will give a day/night check ride. In addition, they will attend an annual 8-hour wildlife training class. Personnel directly responsible for wildlife hazard management will receive initial and annual recurrent pyrotechnic and/or shotgun training by a qualified instructor.

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: MAR 31 2014


Director
Aviation Department
Chief Security Officer
Airport General Manager
Chief of Department, Port Authority Police
Fire Chief, ARFF
Captain, Rescue Training Center
General Manager Airport Cert. & Safety
Deputy General Manager
Police Commanding Officer
Captain, ARFF Unit
Manager, Airport Operations
Manager, Physical Plant & Redevelopment
Manager, Airport Cert & Safety
Police Tour Commander, Security & Equipment Lt., Executive Officer
ARFF Crew Chief
Manager, Aeronautical Services
Manager, Airport Maintenance
Chief Operations Supervisor
Assistant Manager, Airport Maintenance
LEO
Assistant Chief Operations Supervisor Cert. & Training
Airport Duty Manager (ADM)
Chief Maintenance Supervisor
Assistant ADM (AADM)
Chief Mechanical Supervisor
Wildlife Supervisors
Chief Electrical Supervisor
Airport Ops Agents (AOAs)

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FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Mastroy
DATE: MAR 3 1 2014

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FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: MAR 3 1 2014

CHAPTER 5
SNOW REMOVAL

5-1 GENERAL INFORMATION

The decision on removing snow from the EMAS bed shall be made by the appropriate Airport officials, however, in general the same FAA rules apply to the bed as to the rest of the Runway Safety Area. In addition, the effect of snow build-up on the landing light system must be considered.

5-2 USE OF DEICERS

The following types of deicing agents are compatible with use on the EMAS bed:

- 100% propylene glycol
- 100% potassium acetate
- % Mixes of propylene glycol and potassium acetate
- 100% pelletized sodium acetate

If an excessive layer of ice builds up on the bed surface, deicers should be utilized to correct the situation. The bed is not compatible with any type of scraping or other mechanical methods of eliminating the ice.

All of these deicers may leave a light stain on the surface of the bed. There may also be white colored crystals present after the surface is dried. Normally the first heavy rain will wash away all traces with the exception of some discoloration of the surface.

5-3 SNOW BLOWING EQUIPMENT

Use of snow plowing equipment is not compatible with the EMAS bed as this equipment will damage the surface. Snow should be removed using snow blowing equipment. It is critical to protecting the bed surface that no metal or other hard surfaces come in contact with the bed.

It is standard practice for ESCO to incorporate an access ramp for snow blowing equipment into the EMAS bed design if the Airport officials have determined that snow removal operations will be required. Driving any type of vehicle over the Debris Deflector Shield or the side ramps of the bed will cause significant damage to these areas.

It is recommended that the snow blowing equipment be equipped with positive mechanical stops to prevent the snow blower unit from being lowered to the point it will contact the bed surface. The clearance should be set at approximately 1-1/2" to 2".

The snow blowing equipment selected should be equipped with rubber tracks, not tires, and should limit the ground pressure to approximately 3 psi.

When removing snow the unit should be driven at a SLOW, uniform speed and tight turns or hard pivoting of the vehicle MUST be avoided.

CAUTION

Although this type of equipment is compatible with the EMAS bed and can be used without damaging the surface, successful snow removal is still the responsibility of the operator. Failure to exercise care will result in damage occurring.

Successful results have been obtained with the following equipment:

Model HD4520 Posi-Track All-Purpose Crawler with the optional dual stage 73" snowblower.

Tractor manufactured by:

ASV Inc. a Caterpillar Affiliate
840 Lily Lane, Grand Rapids, Michigan
Phone: 800-346-5954
www.posi-track.com

Snow Blower Manufactured by:

Erskine Manufacturing Company
121 Bradley Blvd., Erskine, Minnesota
Phone: 218-687-4045

For additional information refer to the enclosed literature.

ESCO Technical Support is available to assist with evaluating alternate snow blowing equipment if requested to do so by the Airport.

5-4 SNOW BLOWING PROCEDURE

It is recommended to blow the snow off to one or both sides of the runway. Do not blow the snow from the bed onto the runway surface unless there is equipment standing by which can then immediately move the snow off to the side of the runway. Do not blow the snow onto or toward the Localizer system as the blowing snow may knock the Localizer out of alignment or, at a minimum, bury the Localizer and interfere with transmission.

CAUTION

There are steps built into each side and the back of the bed and a Debris Deflector along the front. These areas can not support the Snow Blower operation. Be aware of this situation and leave sufficient clearance between the blower and these obstacles to avoid damaging the bed or tipping the snow blower.

5-4.1 Snow Blowing With Prevailing Wind Condition

Start along the upwind edge of the bed and blow the snow in the downwind direction for the first pass. Reverse direction of travel but continue to blow the snow in the downwind direction. Continue this back and forth travel until all the snow is blown off the downwind edge of the bed.

5-4.2 Snow Blowing In A No Wind Condition

Make an initial pass along the right side of the longitudinal centerline of the bed while blowing the snow outward toward the right side of the bed. After reversing direction of travel, make the second pass along the left side of the longitudinal centerline while blowing the snow outward toward the left side of the bed. Reverse direction again and make the third pass on the right side of the bed while blowing the snow outward. Continue this process of blowing the snow on the right and then the left, gradually widening the cleared area in the center of the bed, until the entire main surface of the bed is cleared. REMEMBER TO AVOID THE STEPS ALONG THE SIDES AND BACK OF THE BED!

FEDERAL AVIATION ADMINSTRATION
APPROVED: Denis O'Donnell
DATE: FEB 25 2010

ENGINEERED ARRESTING SYSTEMS CORPORATION

EMAS ARRESTOR BED LIMITED WARRANTY

ENGINEERED ARRESTING SYSTEMS CORPORATION ("ESCO") warrants to the original purchaser (the "Owner") of the ESCO Engineered Material Arresting System ("EMAS") that, for a period of three (3) years from the date of the Certificate of Final Completion, and subject to the limitations stated herein, the EMAS Arrestor Bed conforms to the product specifications contained in the documents submitted under Contract LGA-124.065, Supplemental Agreement No. 2. The EMAS Arrestor Bed is warranted to comply with FAA Advisory Circular 150/5220. This Warranty may be extended upon mutual agreement between the parties. This Warranty is expressly conditioned on the Owner's satisfying all of the following requirements:

MAINTENANCE: ESCO requires, as a condition of this Warranty, that the Owner enter into a three year maintenance agreement with ESCO to provide quarterly inspections and reports and that the Owner allow ESCO or an ESCO authorized representative to perform maintenance of the EMAS beds as required by quarterly reports and to pay for such maintenance services according to the terms of the maintenance agreement. During the period of this "Warranty, except to the extent otherwise stated in the Warranty, only ESCO or its authorized representatives may perform any modifications or repairs to the EMAS. Any unauthorized modifications or repairs will void the Warranty. Should the Owner fail to enter into and fulfill their terms of the maintenance agreement, the warranty coverage provided herein shall be limited to one year from the date of final completion.

RIGHT OF INSPECTION: The Owner shall provide ESCO with reasonable access to the EMAS, after its installation to allow ESCO to carry out its duties under the Warranty, and to conduct reasonable inspections. As further specified in Exhibit A, reasonable access shall include, without limitation, access during daylight hours, between 1200 Saturday and 1200 Sunday, to permit careful visual assessment of the condition of each of the EMAS installations.

NOTIFICATION: If the Owner believes that it has a claim arising from the failure of the EMAS to conform with this Warranty, the Owner must notify ESCO of the claim, within ten (10) days after discovering the conditions giving rise to the claim, and in any case before the Warranty period has expired. All such notices shall be given by certified mail addressed to **Director of Quality Assurance,** Engineered Arresting Systems Corporation, 2550 Market Street, Aston, PA 19014-3426, USA.

Failure to adhere to any of the conditions stated above shall void this Warranty.

WARRANTY REMEDY

If the Warranty set forth above is breached, ESCO will, at its sole option, either (1) correct the non-conformity at its own cost within a reasonable time after receiving notice of the breach, or (2) replace the non-conforming portion of the EMAS at its own cost within a reasonable time after receiving notice of the breach. The Owner shall give ESCO

FEDERAL AVIATION ADMINSTRATION
APPROVED: Dennis O'Donnell

reasonable access to the EMAS that allows ESCO to perform its warranty obligations on its most cost-effective basis possible. Reasonable access shall include, without limitation, access during daylight hours, between 1200 Saturday and 1200 Sunday.

EXCLUSIONS

ESCO shall not be liable for any damage to the EMAS or other property attributable to any of the following (or any combination thereof):

1. Standing water in and around the EMAS bed,
2. Vehicular traffic,
3. Aircraft traffic in contact with the EMAS bed,
4. Acts of nature, including, but not limited to, lightning, flood, winds in excess of 100 mph, earthquake, hurricane, tornado, hail storm, or impact of objects or other casualty,
5. Repairs or alterations of the EMAS, unless performed in a manner meeting the published ESCO specifications and recommendations in effect at the time of the repair or alteration,
6. Excessive build up of debris in and around the EMAS bed,
7. Impact or contact with other objects, spilled liquids or immersion in liquids (including fuel dropped from over-flying aircraft),
8. Use of the EMAS for purposes other than those for which it is customarily used,
9. Improper maintenance, abuse or other neglect,
10. Exposure to chemicals other than deicers and aircraft engine exhaust,
11. Damage to the EMAS arrestor bed related to or caused by the base surface not being constructed per the drawings and specifications. ESCO must check and accept the base surface prior to the start of EMAS arrestor bed installation.
11. Any subsequent failure of the base surface whether or not originally constructed per the drawings and specifications.

FEDERAL AVIATION ADMINISTRATION
APPROVED: [illegible]
DATE: FEB 25 2010

WARRANTY EXCLUSIVE/LIMITATION OF LIABILITY

THE EXPRESS WARRANTY SET FORTH ABOVE IS EXCLUSIVE AND NO OTHER WARRANTIES OF ANY KIND, WHETHER STATUTORY, ORAL, WRITTEN, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SHALL APPLY. EXCEPT AS PROVIDED IN THE CONTRACTOR INDEMNITY CLAUSE IN CHAPTER V UNDER THE HEADER "INDEMNITY-RISKS ASSUMED" OF THE PA NY&NJ CONTRACT NO. LGA 124.065 (THE "CONTRACT"), THE OWNER'S EXCLUSIVE REMEDIES AND ESCO'S ONLY OBLIGATIONS ARISING OUT OF OR IN CONNECTION WITH DEFECTS OR NONCONFORMITIES IN THE ARRESTOR BEDS THAT ARE DISCOVERED AFTER THE EMAS IS MADE AVAILBLE FOR SERVICE, WHETHER BASED ON WARRANTY, CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, SHALL BE THOSE STATED HEREIN AND SHALL, IN NO EVENT, EXCEED, IN THE AGGREGATE, 1.5 TIMES THE SUBTOTAL FOR ESCO'S WORK ASSIGNMENTS AS IDENTIFIED IN EXHIBIT B TO THE JOINT VENTURE AGREEMENT, WHICH IS ATTACHED AS EXHIBIT C TO THE CONTRACT. ESCO SHALL HAVE NO LIABILITY TO THE OWNER FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. REGARDLESS OF ANY STATUTORY LIMITATION PERIODS, ESCO SHALL NOT BE LIABLE FOR ANY BREACH OF WARRANTY OF WHICH IT IS NOT NOTIFIED AS REQUIRED BEFORE THE WARRANTY PERIOD HAS EXPIRED.

NO WARRANTY MODIFICATIONS

This Warranty may not be modified except in a writing signed by ESCO's President. No representative, employee, or agent of ESCO, or any person, other than the President of ESCO, has the authority to assume for ESCO any additional liability or responsibility in connection with the EMAS or this Warranty.

To ensure registration of this Warranty, please return a signed copy to:

Manager of Quality Assurance
Engineered Arresting Systems Corporation
2239 High Hill Road
Logan Township, NJ 08085
Phone (856) 241-8620
Fax (856) 241-8621

Name (Please Print) of Authorized Airport Individual:_____

Signature: _____ Date: _____

WARRANTY EXTENSION – At the conclusion of this Warranty period, the warranty can be further extended by agreement of the parties.

FEDERAL AVIATION ADMINSTRATION
APPROVED: Denis O'Donnell
DATE: FEB 25 2010

ESCO APPROVED MATERIAL DATA

FOAM BACKER ROD

Closed Cell Polyethylene Foam, Select diameters as appropriate
Name: Sonolastic Backer Rod Number 619 Spec. #ASTM C1330
Mfr: ChemRex Inc.
Sonneborn Building Products
880 Valley Park Drive
Shakopee, MN 55379
Phone: 612-496-6000

COLD APPLIED ASPHALT

Name: #66AF Modified Bitumen Adhesive, Brush Grade Spec. #ASTM D-30A Type III
Mfr: Karnach Corporation
330 Central Avenue
Clark, NJ 07066
Phone: 800-526-4236

VERTICAL SIDE WALL SEALER

Name: Envirolastic Brush Grade, EBG **OR**
Mfr: General Polymers
145 Caldwell Drive
Cincinnati, Ohio 45216
Phone: 513-761-0011

Name: Polyurea Seal 100, XEPL-15
Hand mix, Slow Set, black
Mfr: Specialty Products Inc.
2410 104th St. CT. S., SE D
Lakewood, WA, 98499
Phone: 800-627-0773

EXPANDING FOAM FILLER

Name: "Great Stuff" Minimal Expanding Polyurethane Foam Sealant
Mfr: Dow Chemical Company
1881 West Oak Parkway
Marietta, GA 30062
Phone: 800-800-3626

DEBRIS DEFLECTOR ANCHORS

Name: HVA Adhesive Anchor System
P/N's - HIS-R Internally Threaded Insert 316 SS, 3/8" x 4-1/4", Item No. 00258029
HVU Adhesive Capsule, ½" x 4-1/4", Item No. 00256693
Mfr: Hilti
P.O. Box 21148
Tulsa, Oklahoma 74121
Phone: 800-879-8000

CHEVRON PAINT

Name: Waterborne Pavement Paint per FAA Spec Item P-620
Spec: Federal Specification TT-P-1952D and shall meet ASTM D711 requirements for Type I standard drying time for no pick-up
Color: Yellow #33538 per Federal Standard 595
NOTE: Reflectorized beading shall be applied when required by the Airport Authority.

FEDERAL AVIATION ADMINSTRATION
APPROVED: Denis O'Donnell
DATE: FEB 25 2010

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FEDERAL AVIATION ADMINISTRATION
APPROVED: [illegible]
DATE: 7-17-2012
FAA Approval

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FEDERAL AVIATION ADMINISTRATION

APPROVED: Dennis J. Ciaparano

DATE: 3/24/2014

FAA Approval_____

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FEDERAL AVIATION ADMINISTRATION

APPROVED: Frank J. Delgrand

DATE: 3/24/2014

FAA Approval_____

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY
LA GUARDIA AIRPORT OPERATIONS
AND
FAA AIR TRAFFIC CONTROL TOWER

LETTER OF AGREEMENT

EFFECTIVE: May 11, 2004

SUBJECT: Non-Movement Area Boundary Markings

PURPOSE: Non-movement area boundary markings are used to delineate the movement area, i.e., area under air traffic control, from the non-movement area. Due to the physical geometry at LGA, installation of the non-movement area boundary markings along the terminal buildings and hangar line is impractical. Established procedures for aircraft access to the movement area at these locations are in place and include numbered aircraft start up positions on both the movement and non-movement areas.

RESPONSIBILITIES: All markings shall be maintained in accordance with Advisory Circular 150/5340 –1 (current version) by the Port Authority.

PORT AUTHORITY AIRPORT OPERATIONS PROCEDURE

The Port Authority shall:

Maintain non-movement area boundary markings at the General Aviation aircraft parking area and at Five Towers, in accordance with standards detailed in Advisory Circular 150/5340-1 (current version).

Maintain surface markings at designated start up positions on both the movement and non-movement areas.

FAA AIR TRAFFIC CONTROL TOWER (ATCT) PROCEDURE

The FAA shall:

Advise the Port Authority Airport Duty Manager (call sign "90") of any circumstance or condition which could create a hazard to aircraft transitioning between the non-movement and movement areas or to/from numbered start up positions under ATCT control.

FEDERAL AVIATION ADMINSTRATION
APPROVED: Vincent E. Cammarata
DATE: JAN 27 2005

LIABILITY: The Port Authority of New York and New Jersey and the Federal Aviation Administration expressly agree that with regard to any liability which may arise from this agreement, that each party shall be solely and exclusively liable for the negligence of its own agents, servants, and/or employees, in accordance with applicable law, and that neither party looks to the other to save or hold it harmless for the consequences of any negligence on the part of one of its own agents, servants, and/or employees.

Leo Prusak
Manager, LaGuardia Airport
FAA Air Traffic Control Tower

FOR Warren D. Kroeppel
General Manager
LaGuardia Airport

FEDERAL AVIATION ADMINISTRATION
APPROVED: Lucille E. Carmine
DATE:
JAN 27 2005

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NOV 8 2005

Original Date: 12/9/04

FAA Approval _____

Revision Date: 11/17/05

U. S. Department
of Transportation

**Federal Aviation
Administration**

New York Airports District Office
600 Old Country Rd, Suite 446
Garden City, New York 11530
Telephone: 516-227-3800
Fax: 516-227-3813

October 21, 2004

Mr. Kevin Bleach, Manager
Aeronautical & Technical Services Division
The Port Authority of NY & NJ
233 Park Ave. South, 9th Floor
New York, NY 10003

RE: **LaGuardia Airport (LGA), Flushing, New York
Approval of Modification of Standards (M.O.S.)**

Dear Mr. Bleach:

Our office, in conjunction with the FAA Eastern Region Safety and Standards Branch (AEA-620) and the FAA Airport Engineering (AAS-100) office in headquarters, have reviewed the following request for Modification of Standards (M.O.S.) for LaGuardia Airport. This M.O.S. has been approved as noted below:

M.O.S. REQUEST: To allow the existing non-standard separation distance of 60 feet between the innermost R/W 22 Touchdown Zone (TDZ) lights. The standard shown in Figure 34 of AC 150/5340-30 is a minimum of 72' separation of the innermost TDZ lights.

APPROVAL to permit a non-standard separation of 60 feet between the innermost R/W 22 Touchdown Zone (TDZ) Lights.

We recognize that these light bases were originally installed in accordance with an early version of FAA AC 150/5340-4, "Installation Details for Runway Centerline and Touchdown Zone Lighting Systems" and that installing new light bases at the standard separation may jeopardize the structural capability of the R/W 13 Deck. We also have noted that the existing R/W 22 TDZ lighting system has provided a safe and efficient visual queuing for pilots for nearly 40 years.

If you have any questions, please contact myself or John Dermody of this office. Thank you.

Sincerely,

Philip Brito
Manager – FAA NYADO

Cc: H. DeGraw – AEA-620
J. Dermody - NYADO

FEDERAL AVIATION ADMINSTRATION
APPROVED: Vincent E. Cannico
DATE: JAN 27 2005

311-16

H. DeGraw
-AEA-620

COPY

U. S. Department
of Transportation

Federal Aviation
Administration

New York Airports District Office
600 Old Country Rd, Suite 446
Garden City, New York 11530
Telephone: 516-227-3800
Fax: 516-227-3813

July 2, 2003

Mr. Kevin Bleach, Manager
Aeronautical & Technical Services Division
The Port Authority of NY & NJ
233 Park Ave. South, 9th Floor
New York, NY 10003

DEC 2 2 2003

RE: **LaGuardia Airport (LGA), Flushing, New York**
Approval of Modification of Standards (M.O.S.)

Dear Mr. Bleach:

Our office, in conjunction with the FAA Eastern Region Safety and Standards Branch (AEA-620) and the FAA Airport Engineering (AAS-100) office in headquarters, have reviewed the following request for Modification of Standards (M.O.S.) for LaGuardia Airport. This M.O.S. has been approved as noted below:

M.O.S. REQUEST: To allow the existing non-standard separation distance of 60 feet between the innermost R/W 13 Touchdown Zone (TDZ) lights for a future commissioning of the TDZ light system. The standard shown in Figure 2 of AC 150/5340-4C is a minimum of 65' separation of the innermost TDZ lights where construction issues prevent a 72' separation.

APPROVAL to permit a non-standard separation of 60 feet between the innermost R/W 13 Touchdown Zone (TDZ) Lights.

We recognize that these light bases were originally installed in accordance with an earlier version of FAA AC 150/5340-4, "Installation Details for Runway Centerline and Touchdown Zone Lighting Systems" and that installing new light bases at the standard separation may jeopardize the structural capability of the R/W 13 Deck. We also have noted that the R/W 22 TDZ lighting system has the same configuration as R/W 13 and has provided a safe and efficient visual queuing for pilots for nearly 40 years.

If you have any questions, please contact myself or John Dermody of this office. Thank you.

Sincerely,

Philip Brito

Philip Brito
Manager – FAA NYADO

311-17

FEDERAL AVIATION ADMINSTRATION
APPROVED: Vincent E. Simmons
DATE: JAN 2 7 2005

Cc: H. DeGraw – AEA-620
J. Dermody - NYADO

AIRPORT CERTIFICATION MANUAL
LaGuardia Airport

FAA EASTERN REGION

MODIFICATION OF AIRPORT DESIGN STANDARDS

Date: September 28, 2010

1. BACKGROUND

1. AIRPORT	2. LOCATION (CITY, STATE)	3. ARPT ID
LGA – LaGuardia Airport	Flushing Queens, New York	LGA
4. AFFECTED RUNWAY/TAXIWAY	5. APPROACH (EACH RUNWAY)	6. [illegible]
TWY A, M, Y, [illegible] and ZA	4/22/13 PIR 31 NPI VISUAL	D - IV

7. [illegible] RUNWAY/TAXIWAY

All D-IV

8. TITLE OF STANDARD BEING MODIFIED

AC 150/5340-1, *Standards for Airport Markings*

9. STANDARD REQUIREMENT

A standard marking identifying an aircraft start-up/release position does not exist.

10. PROPOSED

To allow LGA continued use of the current aircraft start-up/release position marking as identified in Figure 1.

11. EXPLAIN WHY STANDARD [illegible] (FAA ORDER 5300.1G)

AC 150/5340-1, *Standards for Airport Markings*, does not provide guidance for a marking that identifies an aircraft start-up/release location. The FAA has recommended the use of a 'Surface Painted Apron Entrance Point Sign' to identify the 36 start-up/release locations at LGA as depicted in Figure 2.

The Port Authority does not agree with this recommendation for the following reasons.

1. The markings recommended by the FAA identify "Entrances" to an apron and changing the markings to that recommended by the FAA will create confusion and uncertainty on the ramp during the critical transition phase from parking to taxiing, creating a safety issue.
2. The Surface Painted Apron Entrance Point Sign' assists pilots to locate their position along the edges of large continuous apron area serving terminal gates, whereas, the current marking in use at LGA identifies a "position" for the start-up/release point for aircraft crews, ground service personnel, and air traffic controllers (ATC).

12. DISCUSS VIABLE ALTERNATIVES (FAA ORDER 5300.1G)

The Port Authority requests continued use of the yellow start-up/release position marking (see Figure 1), utilized for decades at LGA, provides clear direction to aircraft crewmembers, ground service personnel and air traffic controllers. LGA start-up/release position markings are utilized by ATC for positioning a departing aircraft in the direction of the runway in order expediting taxi operations and minimizing delays.

We would recommend that the FAA strongly consider incorporating into the AC the start-up/release position marking utilized at LGA. The marking design and application has provided a benefit to safe and efficient ground operations at LGA for decades.

FEDERAL [illegible]

APPROVED [illegible]

DATE: 4-19-2012

Original Date: 04/17/12

Revision Date:

FAA Approval_____

FAA EASTERN REGION

MODIFICATION OF AIRPORT DESIGN STANDARDS

LGA's [illegible] marks [illegible] and efficient grou[illegible] the yellow [illegible] shaped design [illegible] LGA [illegible] years in support of this purpose. [illegible] rectangular shape and color provide [illegible] and support crews the direction the aircraft should face for engine start-up/release [illegible] necessary to direct jet blast [illegible] away from personnel and equipment operating [illegible] engine start-ups, which is [illegible] the flight [illegible] of LGA. [illegible] Apron Entrance Point Sign will not prevent [illegible] direction [illegible] procedures will [illegible] have worked well for [illegible] the operating use of the [illegible] marking has enabled ATCT to streamline issuance [illegible] started at the gate. The Port Authority selected [illegible] would be advantageous [illegible] unique marking for this specific purpose, where no [illegible] in the FAA's [illegible] painted markings. The Surface Painted Apron Entrance Point Sign has its own specific purpose of identifying apron areas. By applying the Surface Painted Apron Entrance Point Sign and removing the [illegible] start-up/release position markings, the Port Authority [illegible] blizzard [illegible] none exists today. The Surface Painted Apron Entrance Point Sign would introduce confusion to pilots, ATCT, and ground support crews, particularly those who are familiar with LGA and the start-up/release position markings which have been used for many years. Finally, the Port Authority would incur a significant cost scarifying and repainting the 36 markings currently in place.

ATTACH ADDITIONAL SHEETS AS NECESSARY - INCLUDE SKETCH/PLAN

FEDERAL AVIATION ADMINISTRATION
APPROVED: Marilyn M[illegible]
DATE: 4-19-2012

FAA EASTERN REGION
MODIFICATION OF AIRPORT DESIGN STANDARDS

Date: September 28, 2010 — Page 3 of 5

Start Up Lo[illegible]	LOCATION: LaGuardia Airport	
14. [illegible] Scott Ma[illegible]	15. ORIGINATOR'S ORGANIZATION: Port Authority of New York and New Jersey	16. [illegible] ZIP [illegible]

17. [illegible] with pen/ink changes

18. RECOMMENDATION: Approve	19. SIGNATURE: [signature]	20. DATE: 3/8/11

21. FAA DIVISIONAL REVIEW (AT, AF, FS):

ROUTING SYMBOL	SIGNATURE	DATE	CONCUR	NON-CONCUR
ATO/EA	[signature]	3/17/11	✓	
AJS	[signature]	1/6/11	✓	
AFA	[signature]	4/24/11	✓	

22. AIRPORTS' DIVISION FINAL ACTION:

[ ] UNCONDITIONAL APPROVAL	[ ] CONDITIONAL APPROVAL	[ ] DISAPPROVAL
DATE:	SIGNATURE:	TITLE:

CONDITIONS OF APPROVAL:

FEDERAL AVIATION ADMINISTRATION
APPROVED: [signature]
DATE: 4-19-12

Original Date: 04/17/12

Revision Date:

FAA Approval_____

[illegible] STANDARDS

[illegible] September 20, 20[illegible]

Page 3 of 5

[illegible] Port Authority of New York and New Jersey

October 31, 1995, with [illegible]

18. [illegible]	19. SIGNATURE	20. DATE
[illegible]	[illegible]	[illegible]

[illegible]

		DATE	CONCUR
[illegible]	[illegible]	9/2[illegible]	[illegible]

[illegible]

☐ UNCONDITIONAL APPROVAL ☒ CONDITIONAL APPROVAL ☐ DISAPPROVAL

DATE 9/[illegible]/11

TITLE Manager [illegible]

CONDITIONS OF APPROVAL

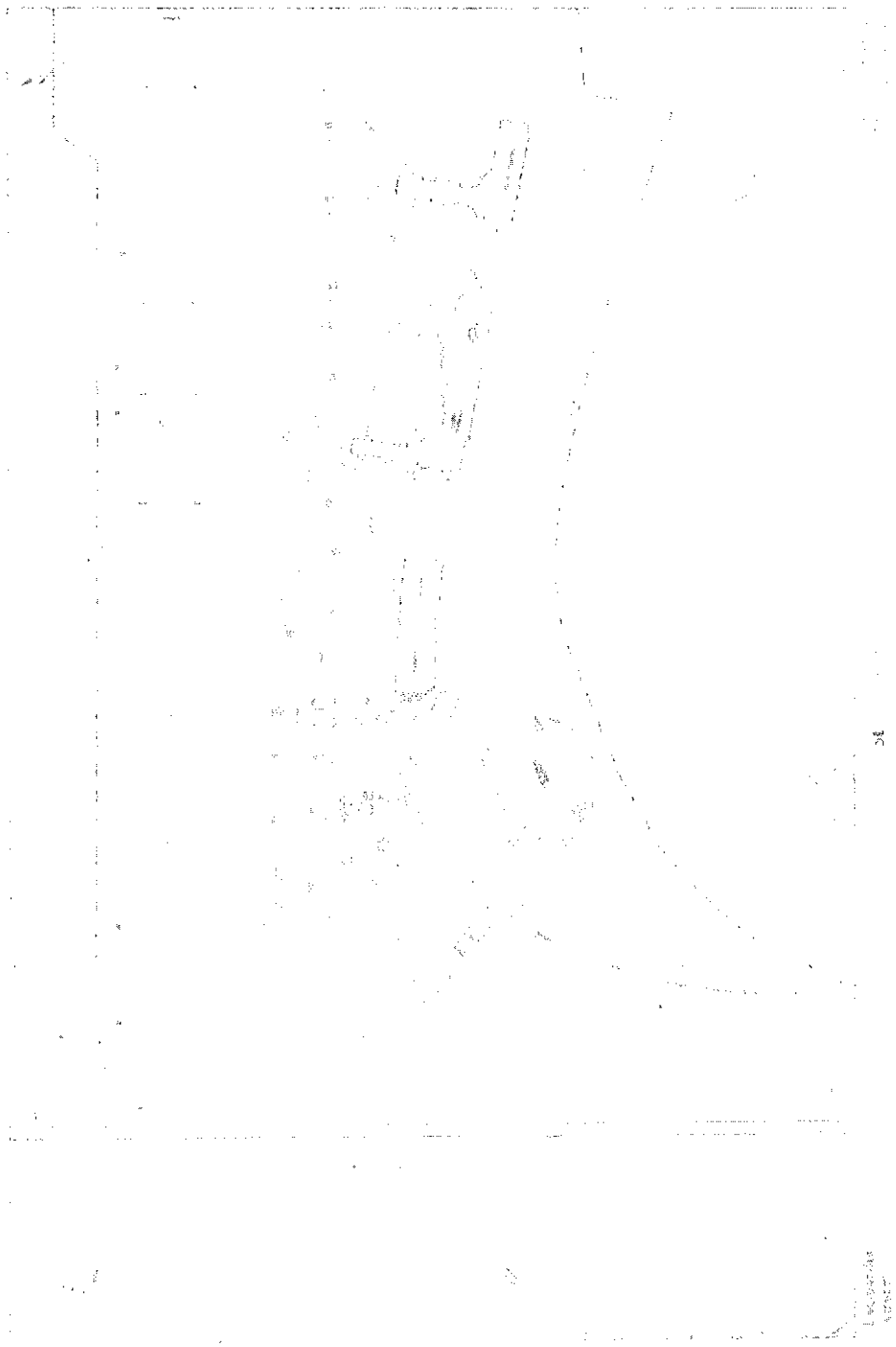
[illegible] AC 150/5340-1 [illegible] A NEW STANDARD [illegible] FOR THE [illegible] A 2-YEAR [illegible] TO [illegible] NEW STANDARD [illegible]

FEDERAL AVIATION AD[illegible]
APPROVED: [illegible]
DATE: 4-19-12

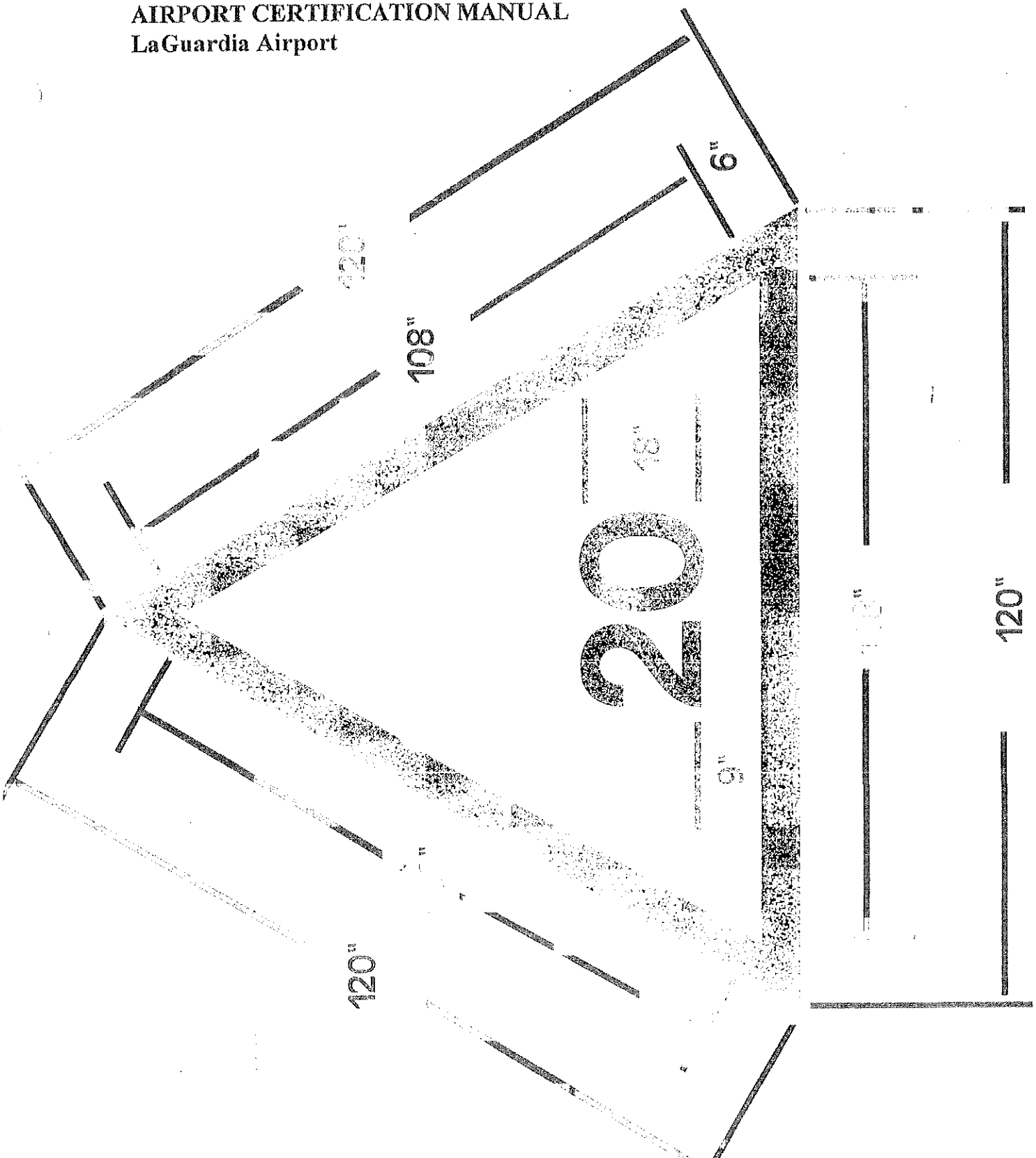
[illegible] established a marking used for start-up/release points. This marking is in the shape [illegible] yellow [illegible] triangle with a numeric indication located below the base of the triangle on the [illegible] illustration [illegible] 1

FEDERAL AVIATION [illegible]
APPROVED: [illegible]
DATE: 4-19-2012

Figure 2



AIRPORT CERTIFICATION MANUAL
LaGuardia Airport



FEDERAL AVIA[illegible]ATION
APPROVED: [illegible]
DATE: 4-19-[illegible]

Original Date: 04/17/12

Revision Date:

FAA Approval

139.313
SNOW AND ICE CONTROL PLAN

LGA will prepare, maintain, and carry out a snow and ice control plan which includes instructions and procedures for:

1) Prompt removal or control as completely as practical, of snow, ice, and slush on each movement area.
2) Positioning snow off the movement area surfaces so all air carrier aircraft propellers, engine pods, rotors, and wing tips will clear any snowdrift and snowbank as the aircraft's landing gear traverses any portion of the movement area.
3) Selection and application of authorized materials for snow and ice control to ensure that they adhere to snow and ice sufficiently to minimize engine ingestion.
4) Timely commencement of snow and ice control operations.
5) Prompt notification of all air carriers using the airport when any portion of the movement area normally available to them is less than satisfactorily cleared for safe operation by their aircraft.

LGA's snow and ice control plan has been written in accordance with the procedures contained in Advisory Circular 150/5200-30, current edition. The Port Authority has established operational procedures, which provide the Airport Operations staff and the ATCT staff with a method for the coordination of measuring, reporting and disseminating to pilots information on runway conditions during winter conditions. These procedures along with a copy of LGA's written snow plan resides in the ADM Office and includes a listing of available snow removal equipment.

Responsibilities and Supervision

The General Manager or his/her designee is responsible for the following:

1) Determining when snow removal or anti-icing operations will begin. This will be based on the evaluation of existing field conditions, present, and forecasted weather
2) Maintaining a constant check of runway conditions during snow or ice storms to determine the presence of snow, ice, or slush and their depth

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Mastney
DATE: 9/25/12

FAA Approval

3) Maintain access for FAA personnel to NAVAID sites
4) Disseminating airport information through NOTAMS
5) Advising ATC of current field conditions and updating "OpsNet" with current conditions for all concerned parties

It is most important that the General Manager or designated representative be provided with the most current information on potential snow conditions so that he/she has sufficient time to assemble the snow crews prior to the start of any snowfall.

Priority Areas

Active runways, their associated taxiways, access for FAA personnel to NAVAID sites, mutual aid access point, including gate operability (Guard Post 3 adjacent to Building 30), and emergency response roadways on the AOA will receive priority. Priority One areas will be addressed first unless weather conditions dictate otherwise. All other areas will be addressed in order of importance. Priority Area Maps are provided as an exhibit at the end of this section.

Snow Removal Program

The snow removal program will be activated by the Port Authority Snow Coordinator when snow begins to accumulate on the movement surface. The runways to be plowed are determined on the basis of wind direction and estimated duration and the wind holding in that particular direction. The associated taxiways are also cleared for a particular runway. Runways and taxiways will be sanded when necessary and the sand utilized will conform to FAA specifications and be free of corrosive salts.

Snow Removal Program

Any drifted or piled snow will be moved off usable runway and taxiway surfaces and positioned off those surfaces in height so regulated that all aircraft propellers engine pods and wingtips will clear snow drifts and snowbanks when the aircraft's most critical landing gear is located at any point along the full strength edge of the runway or taxiway. Snow or snowbank heights will not exceed the following criteria:

6 inches of snow outboard of the runway edge lights
3 feet of snow 33 feet from the edge of the full strength pavement
5 feet of snow 49 feet from the edge of the full strength pavement
10 feet of snow 70 feet from the edge of the full strength pavement

FEDERAL AVIATION ADMINISTRATION
APPROVED: Shelyn Martinez
FAA Approval DATE: 9/28/12

When unable to comply with the requirement, the Port Authority Snow Coordinator shall issue a NOTAM describing existing conditions. Figures 4 - 1 and 4 - 2, from Advisory Circular 150/5200-30 current edition, referencing snow bank heights and critical area criteria, are located at the end of this section.
In the event that the rate of snowfall, together with gusty winds and poor visibility, requires, in view of safety, that airport operations cease, the Port Authority Snow Coordinator will issue the appropriate NOTAM to advise the estimated downtime of the airport and the estimated time of reopening. Concurrent with this, the information will be disseminated to the airlines via the field tape and/or the computerized telephone notification system.

Requirements for Runway Closures

A Letter of Agreement between the Port Authority and LGA ATCT outlines operational procedures for the coordination of closing runways, measuring, reporting, and disseminating information to pilots regarding runway and surface conditions at LGA during adverse weather. A copy of this LOA is located as an exhibit at the end of this section.
LGA utilizes a CFME type friction tester to conduct friction readings when conditions require trend analysis on a frozen or contaminated surface. Mu values will not be reported via NOTAM or provided to ATCT.

Snow Control

The active runways and associated taxiways will receive the highest priority.

1) Brooms may be dispatched to maintain clear centerline lights and markings on runways and/or taxiways.
2) Liquid chemical trucks may be dispatched in an anti-icing mode to prevent snow from accumulating on taxiway surfaces, or in a de-icing mode to break up accumulated snow and ice.
3) Multi-function equipment (combination broom and plow), plows and snow blowers may be used on runways and taxiways.

The snow removal contractor will provide equipment and trained personnel for emergency snow removal operations. This contractor will be advised by the ADM or his/her designee when to commence snow removal operations in designated aeronautical areas.

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
FAA Approval ____ DATE: 9/25/12

Signs and lights will be frequently inspected by the ADM or his/her designee for visibility and should be cleared as appropriate. A NOTAM will be issued for any obscured lights, signs or other non-complying conditions.

Snow removal operations on the airport access roads, parking lots, and services areas will receive lower priority. Because of the importance of the safe movement of passengers and visitors on the airport properties, access roads, parking areas, and sidewalks should be properly plowed and de-iced. This requires different pieces of equipment and different chemicals than used on aircraft movement surfaces and will normally be the responsibility of facility maintenance crews.

Ice Control

A system with snow/ice detection sensors embedded in runway surfaces will be utilized along with physical inspections to monitor the surface condition relating to snow and ice.
Ice control on runways - a combination of solid chemical, currently sodium acetate, and/or sand will be used to create a surface acceptable for aircraft operations.
A Propylene Glycol liquid chemical may be used in both an anti-icing mode and de-icing mode on taxiways.
Sodium chloride, calcium chloride and sodium formate are permissible on automobile roadways. Bridges must receive special attention since icing frequently occurs on those surfaces prior to the adjoining pavement because of cooling from underneath.

Aircraft Deicing

Primary location for aircraft deicing is at the terminal gate positions or ramp parking areas. Available secondary deicing location is the Taxiway "Echo Parking Area" which has a drainage system capable of capturing used deicing fluid.

Advisory Circular Reference

The snow and ice control plan is in accordance with procedure contained in AC 150/5200-30, current edition.
Materials used for snow and ice control are in accordance with the specifications contained in AC 150/5200-30, current edition.

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
FAA Approval ____ DATE: 9/28/12

Vehicles

All snow removal vehicles operating on aircraft movement areas, under the control of the ATCT, are equipped with a two-way radio or are under the direct control of a vehicle so equipped.
All outside contractors employed for snow and ice control operations will be subject to all airport regulations. They will operate under the supervision of the General Manager or his/her designee. At no time will the contractor be permitted to operate equipment beyond the limits of the ramp areas without being cleared by Port Authority Operations and without being accompanied by a radio equipped vehicle.
Facility snow removal equipment is essentially divided into the following categories:

1) Multi-function equipment (combination plow and sweeper)
2) Heavy duty high speed plows
3) High speed rotary equipment
4) A group composed of slower road plows, rotary equipment, sweepers, bulldozers, and chemical tank trucks.

Runways and taxiways may be cleaned by groups made up of equipment from each of these classes. The specific composition of each of these groups will depend entirely on equipment available and the amount and nature of the snow to be removed.

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Mastrogy
FAA Approval_____ DATE: 9/25/12

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FAA Approval

FEDERAL AVIATION ADMINISTRATION

APPROVED: Evelyn Mastroy

DATE: 9/25/12

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FEDERAL AVIATION ADMINISTRATION
APPROVED: Frank J. Lopano
DATE: 3/26/14

FAA Approval_____

139.315
AIRCRAFT RESCUE and FIRE FIGHTING; INDEX DETERMINATION

Index Determination

The Aircraft Rescue & Firefighting (ARFF) Index is determined by a combination of the length of air carrier aircraft and average daily departures of air carrier aircraft. Based on the criteria below, LGA falls into the category of Index C, which includes:

- Aircraft at least 126 feet but less than 159 feet in length
- Five or more average daily departures of air carrier aircraft in this category

Currently, the longest aircraft with five or more daily operations at LGA is the B757-200, which is 155'-3" long. However, the B757-300 and B767 aircraft also operate at LGA, and these aircraft are longer than 159 feet. Port Authority fleet forecasts indicate that operations of aircraft that fall into the Index D category will increase. Based upon the airport's existing and forecast fleet mix and its high density of aircraft operations, LGA maintains a higher Index than required.

LGA maintains ARFF Index D

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: 8/19/2013

Exhibit 319-1

Example
Authorized List – ARFF

THE PORT AUTHORITY OF NY & NJ

MEMORANDUM

Aviation Department

To:	ARFF Captain
From:	Manager, Airport Certification and Safety
Date:	*Insert*
Subject:	**AUTHORIZED ARFF PERSONNEL LIST**
Copy To:	General Manager, Airport Certification and Safety Manager, Airport Operations Fire Chief, ARFF

The listed ARFF personnel are qualified and eligible for assignment to a designated ARFF post in accordance with training received (Basic ARFF, and HRET). Records reviewed document that the training completed is in accordance with Part 139 training requirements. Please note the Authorized List reflects training status only and does not show SIDA ID badge status (current, expired, etc.)

This list, dated *month, date, year*, replaces the prior list dated, *month, date, year*

- HRET indicates High Reach Extendable Turret qualified.
- CFR indicates Certified First Responder

No.	Name	ID	HRET	CFR
1	Last, First	#		
2	Last, First	#		
3	Last, First	#		
4	Last, First	#		
5	Last, First	#		
6	Last, First	#		
7	Last, First	#		

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Mastroy
DATE: MAR 3 1 2014

Exhibit 319-2

THE PORT AUTHORITY OF NY & NJ

MEMORANDUM

Aviation Department

To: ARFF Captain
From: Manager, Airport Certification and Safety
Date: *Insert*
Subject: **ARFF Expiration Dates**
Copy To: General Manager, Airport Certification and Safety
Manager, Airport Operations
Fire Chief ARFF
ARFF Captain, Rescue Training Center

ARFF records show recurrent training is due within the identified period and subject area(s) of Part 139 for the following individuals. **Within five business days** of this dated memo return completed to the Manger, Airport Certification and Safety identifying the scheduled training date(s) for each individual and subject area.

Current Month	**Subject Area**	**Scheduled Training Date**
Last Name, First Name	1, 2, 3	
Last Name, First Name	1, 2, 3	
Last Name, First Name	1, 2, 3	
Last Name, First Name	1, 2, 3	
Last Name, First Name	1, 2, 3	
Last Name, First Name	1, 2, 3	

Next Month	**Subject Area**	**Scheduled Training Date**
Last Name, First Name	1, 2, 3	
Last Name, First Name	1, 2, 3	
Last Name, First Name	1, 2, 3	
Last Name, First Name	1, 2, 3	
Last Name, First Name	1, 2, 3	
Last Name, First Name	1, 2, 3	

Month 3

Last Name, First Name
Last Name, First Name
Last Name, First Name
Last Name, First Name
Last Name, First Name
Last Name, First Name

FAA Approval

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: MAR 3 1 2014

Exhibit 319-3

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FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: MAR 31 2014

Exhibit 319-4

ARFF Training - 14 CFR 139.319(l)
SUMMARY COVER SHEET (dates only)

Employee Name(Printed): _____

Date of Hire: _____

Subject Area and Corresponding Lesson Plan:	YR: Initial or Recurrent Date (circle) Write Month/Date	YR: Recurrent Write Month/Date	YR: Recurrent Write Month/Date
1,1A,1B. Airport Familiarization Runways, taxiways, marking, lighting, signage, Grid maps, movement areas			
2. Aircraft Familiarization Identify aircraft to include doors, emergency exits/slides, types of fuels, aircraft systems			
3. ARFF Personnel Safety Aircraft hazards, communicable diseases, personnel stress, use of protective clothing and SCBA			
4. Emergency Comm. & Alarms Alarm notification, radio frequencies, ATC procedures, hand signals, multiple alarms			
5. Use of Fire hoses,nozzles,turrets, etc. Purpose, location & functions of ea. piece of equipment,adapters, re-supply, agents			
6. Application of extinguishing agents Identify and be able to demonstrate agent application techniques to include portable fire extinguishers			
7. Aircraft Evacuation Aircraft entry, emergency procedures, exit points and procedures to protect the evacuation points, associated hazards			
8. Fire Fighting Operations SOPs for various emergency procedures; rescue paths, protective streams, fuel spills, aircraft wreckage			
9. Adapting Structural equip to ARFF Procedures and methods used to adapt the equipment for ARFF use			
10. Aircraft Cargo Hazards Identify hazards, DOT Emergency Response Guidebook, risk assessment, evacuation, rescue			
11. Familiarization of fire fighters Identify airport prefire plans, SOPs, incident command systems and duties required by the Airport Emergency plan			
12. Live Hot Fire Drill Pit fire w/aircraft mock up or similar device using airport ARFF equipment			
13. HRET (operators/drivers) HRET ARFF vehicle operation, FAA HRET DVD, HRET operation & demonstrate use			
14. Basic Emergency Medical (40 hrs) Bleeding, CPR, shock, primary patient survey, external & internal injuries, burns, triage, moving patients	Date Medical Training Completed_____	Date Medical Training Due_____	

Note 1: Initial Training in all subject areas is required prior to assuming ARFF duties
Note 2: Recurrent training is required for each subject area at least once every 12 consecutive months
Note 3: Training records shall be maintained for 24 consecutive months after completion of training

See Ac 150/5210-17 for full training curriculum

Revised 10/31/13

Exhibit 319-5

ARFF Training 14 CFR 139.319(i)
OFFICIAL RECORD OF TRAINING

Shield No. _____ PA Empl. No. _____

Year A Trainer Names (Printed): Year B Trainer Names (Printed): Year C Trainer Names (Printed):

Command (Circle) EWR JFK LGA TEB _____ _____ _____

Employee Name (Printed) _____ _____ _____

Employee Signature _____ _____ _____

Date of Hire:

Subject Area and Corresponding Lesson Plan:	Year A: Initial or Recurrent Date (circle)			Year B: Recurrent			Year C: Recurrent		
	Mo. / Date	Empl. Initials	Trainer Initials	Mo. / Date	Empl. Initials	Trainer Initials	Mo. / Date	Empl. Initials	Trainer Initials
1,1A,1B. Airport Familiarization Runways, taxiways, marking, lighting, signage, Grid maps, movement areas									
2. Aircraft Familiarization Identify aircraft to include doors, emergency exits/slides, types of fuels, aircraft systems									
3. ARFF Personnel Safety Aircraft hazards, communicable diseases, personnel stress, use of protective clothing and SCBA									
4. Emergency Comm. & Alarms Alarm notification, radio frequencies, ATC procedures, hand signals, multiple alarms									
5. Use of Fire hoses, nozzles, turrets, etc. Purpose, location & functions of all pieces of equipment, adapters, re-stowing, agents									
6. Application of extinguishing agents Identify and be able to demonstrate agent application techniques to include portable fire extinguishers									
7. Aircraft Evacuation Aircraft entry, emergency procedures, exit points and procedures to protect the evacuation points, associated hazards									
8. Fire Fighting Operations SOPs for various emergency procedures; rescue paths, protective streams, fuel spills, aircraft wreckage 9. Adapting Structural equip to ARFF Procedures and methods used to adapt the equipment for ARFF use									
10. Aircraft Cargo Hazards Identify hazards, DOT Emergency Response Guidebook, risk assessment, evacuation, rescue									
11. Familiarization of fire fighters Identify airport prefire plans, SOPs, incident command systems and duties required by the Airport Emergency plan									
12. Live Hot Fire Drill Pit fire w/aircraft mock up or similar device using airport ARFF equipment									
13. HRET (operators/drivers) HRET ARFF vehicle operation, FAA HRET DVD, HRET operation & demonstrate use									

Note 1. Initial training in all subject areas is required prior to assuming ARFF duties
Note 2: Recurrent training is required for each subject area at least once every 12 consecutive months
Note 3. Training records shall be maintained for 24 consecutive months after completion of training

See Ap 139.52-0-17 for full training curriculum

Revised 10/31/13

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: MAR 3 1 2014

Exhibit 319-6

ARFF TRAINING SUBJECT AREA AND CORRESPONDING LESSON PLANS

Lesson Plan 1, Airport Familiarization -

- Lesson Plan #1 (Runways, taxiways, marking, lighting, signage, Grid maps, movement areas)
- Lesson Plan #1A (Airport Rules and Regulations)
- Lesson Plan #1B (Roles of Law Enforcement Personnel)

Lesson Plan 2, Aircraft Familiarization - Identify aircraft to include doors, emergency exits/slides, types of fuels, aircraft systems

Lesson Plan 3, ARFF Personnel Safety - Aircraft hazards, communicable diseases, personnel stress, use of protective clothing and SCBA

Lesson Plan 4, Emergency Communication & Alarms - Alarm notification, radio frequencies, ATC procedures, hand signals, multiple alarms

Lesson Plan 5, Use of Fire Hoses, Nozzles, Turrets, Etc. - Purpose, location & functions of ea. piece of equipment, adapters, re-supply, agents

Lesson Plan 6, Application of Extinguishing Agents - Identify and be able to demonstrate agent application techniques to include portable fire extinguishers

Lesson Plan 7, Aircraft Evacuation - Aircraft entry, emergency procedures, exit points and procedures to protect the evacuation points, associated hazards

Lesson Plan 8, Firefighting Operations - SOPs for various emergency procedures; rescue paths, protective streams, fuel spills, aircraft wreckage

Lesson Plan 9, Adapting Structural Equipment to ARFF - Procedures and methods used to adapt the equipment for ARFF use

Lesson Plan 10, Aircraft Cargo Hazards - Identify hazards, DOT Emergency Response Guidebook, risk assessment, evacuation, rescue

Lesson Plan 11, Familiarization of Firefighters - Identify airport prefire plans, SOPs, incident command systems and duties required by the Airport Emergency plan

Lesson plan 12, Live Hot Fire Drill - Pit fire w/aircraft mock up or similar device using airport ARFF equipment

Lesson Plan 13, HRET (Operators/Drivers) - HRET ARFF vehicle operation, FAA HRET DVD, HRET operation & demonstrate use

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: MAR 3 1 2014

AIRPORT CERTIFICATION MANUAL
LaGuardia Airport

FEDERAL AVIATION ADMINISTRATION

APPROVED: Evelyn Martinez

DATE: MAR 3 1 2014

139.321
HANDLING AND STORAGE OF HAZARDOUS ARTICLES AND MATERIALS

The Port Authority, as operator of the airport, does not directly handle or store any hazardous articles or materials other than on emergency equipment and fuel for its own requirements. Safe storing, dispensing and otherwise handling of fuel, lubricants, compressed gases and hazardous articles or materials on the airport by any airline, tenant, shipper or freight forwarder must conform to the applicable provisions of the Port Authority Airport Rules and Regulations, dated February 2002. Fueling standards by each fueling agent must be in accordance with the applicable fire safety standards contained in Advisory Circular 150/5230-4, current edition and in accordance with the applicable fire safety standards contained in NFPA 407, current edition.

The fueling agent employees are given training and instruction by the fueling agent, which shall address at least each of the following:

1. Bonding
2. Public protection
3. Control of access to storage areas
4. Fire safety in fuel farm and storage areas
5. Fire safety in mobile fuelers, fueling pits and fueling cabinets
6. Training of fueling personnel in fire safety
7. The fire code of the public body having jurisdiction over the airport

One supervisor with each fueling agent will complete an aviation fuel training course in fire safety prior to initial performance of his/her duties or be enrolled in an authorized aviation fuel training course that will be completed within 90 days of initiating duties, and receive recurrent instruction at least every 24 consecutive calendar months.

All other employees who fuel aircraft, accept fuel shipments, or otherwise handle fuel will receive at least on-the-job training in fire safety from a supervisor that attended an approved fuel-training course in fire safety and recurrent instruction at least every 24 consecutive calendar months. Once every 12 consecutive calendar months each airport tenant-fueling agent provides the Port Authority General Manager or his/her designee written confirmation that this required training has been accomplished.

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: 9/28/12

FAA Approval_____

LGA uses a combination of Port Authority Operations, Port Authority Police and contract staff, to ensure compliance with paragraph (b) FAR Part 139.321. The physical facilities of the fueling agent, fire-safety training records and each fueling vehicle are inspected at least once every three months by the contractor as follows:

- Quarterly fire safety inspections for Allied, Servisair and Sheltair fueling vehicles.
- Quarterly fire safety inspection of the Allied Fuel Storage Facility.
- Prepare a quarterly report using FAA-approved inspection sheets. The report is submitted to the Port Authority within one week following the completion of each quarterly inspection.
- When an unsatisfactory condition has been noted, the contractor will notify PA Operations and schedule a follow-up inspection within 7-10 days to ensure that corrective action has been taken to address any discrepancies.
- Review the Allied, Servisair and Sheltair fire-safety training records at least twice a year for the employees assigned to handling and storage of fuel.

Sample copies of the forms used for the fuel farm and mobile vehicle inspections can be found at the end of this section. The Staff ADM maintains inspection records in the Port Authority Staff Office for at least 12 consecutive calendar months. Port Authority personnel, in the course of their normal duties, also perform surveillance of fueling activities on a daily basis to ensure compliance with this section.
The Port Authority requires that each tenant-fueling agent take immediate corrective action whenever it becomes aware of noncompliance with a standard required by paragraph (b) of Part 139.321. The General Manager or his/her designee will immediately notify the Eastern Regional Airports Division Manager when non-compliance is discovered and cannot be accomplished within a reasonable period.

The following fueling agents operate at LGA:

- Allied Aviation Service Company of NY
- SheltAir Aviation Services
- Servisair

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
FAA Approval DATE: 9/25/12

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FEDERAL AVIATION ADMINISTRATION
APPROVED: Frank J. Lepore
DATE: 3/24/2014

FAA Approval_____

FIRE SAFETY INSPECTION
MOBILE TANK TRUCKS

LOCATION: **LaGuardia Airport**
INSPECTION TYPE: **INSPECTOR:**

Vehicle Number							
Fuel Type							
Identification							
Fuel Labels							
No Smoking Signs							
Flammable Signs							
Emergency Shut Off Signs							
Fire Extinguishers							
Condition							
Seals							
Attachment to Vehicle							
Inspection Card							
Bonding Cables							
Clip Condition							
Clip Attachment							
Continuity							
Bonding Lug							
Fuel Hoses							
Condition							
Nozzles							
Fuel Leaks							
Tank							
Connection & Joints							
Valves & Fittings							
Nozzles							
Miscellaneous							
Dome Cover Gasket							
Vehicle Exhaust System							
Fuel Vehicle Parking							
Ignition Sources							
Evidence of Smoking							
Emergency Fuel Shut Offs							
Deadman Controls							
Tires							

S - Satisfactory **U - Unsatisfactory** **R - Remark**

Remarks

[illegible] AVIATION ADMINISTRATION
APPROVED: Vincent E. [illegible]
DATE: JAN 27 2005

FIRE SAFETY INSPECTION

LOADING RACKS & DISPENSING AREAS

OPERATOR: DATE:

TYPE INSPECTION INSPECTOR:

QUARTERLY ☐

FOLLOW-UP ☐

	SAT	UNSAT	REMARKS
FUEL MARKING & LABELS			
NO SMOKING SIGNS			
EMERGENCY SHUT OFF			
DEADMAN CONTROLS			
LEAKS			
BONDING CABLES			
FIRE BOTTLES			
HOSE CONDITION			
IGNITION SOURCES			
EVIDENCE OF SMOKING			

SAT - SATISFACTORY
UNSAT - UNSATISFACTORY

	SAT	UNSAT	REMARKS
FUEL MARKING & LABELS			
NO SMOKING SIGNS			
EMERGENCY SHUT OFF			
DEADMAN CONTROLS			
LEAKS			
HOSE CONDITION			
FIRE BOTTLES			
BONDING CABLES			
IGNITION SOURCES			
EVIDENCE OF SMOKING			

REMARKS:

APPROVED:

DATE: JAN 27 2005

321 – EXHIBIT "C"

Servisair & Shell
Fuel Services

April 2, 2010

Port Authority Operations
LaGuardia Airport
Flushing NY 11371
Attn: Kevin Dauwalter

Dear Kevin,

We received two new intrinsically safe hand held radios yesterday. Servisair Fueling operations is now in compliance with the NFPA, standards for aircraft fuel servicing 2007 edition, Chapter 5.7.6, which states "communications equipment located outside of the cab of the vehicle and used during Fuel servicing operations within 10ft of the fill vent on vent points of aircraft fuel systems shall be listed as intrinsically safe for Class 1, Division, Group O Hazardous (classified) locations in accordance with ANSI/UL 913. Any questions feel free to contact me at any time.

Regards
David Hanrahan
Fueling Manager
Servisair Fuel Services-LGA
Cell # 917-239-6184

Cc: Anthony Baicich Fire Marshall

FEDERAL AVIATION ADMINSTRATION
APPROVED: Annie O'Donnell
DATE:
FEB 24 2011

321 - EXHIBIT "A"

ELVIO FELICIANO
Fuel Farm Supervisor
LaGuardia Airport
Bldg. # 42, Fuel Farm Facility
Flushing, NY 11371
718 476-5583 Phone
718 424-7237 Fax

To whom it may concern:

Effective 02/17/2011 Allied Aviation Services is in full compliance with NFPA 407 Standards for Aircraft Fuel Servicing 2007 Edition, Chapter 5.7.6, Operations, which states; "Communications equipment located outside of the cab of the vehicle and used during aircraft fuel servicing operations within 3m (10ft) of the fill or vent points of Aircraft fuel system shall be listed as Intrinsically Safe for Class I, division I, Group D Hazardous (classified) in accordance with ANSI/UL 913"

Allied Aviation Services policy does not permit the use of hand held radios while performing fueling operations; Allied Aviation Services has two hand held intrinsically safe radios that are kept inside the Fuel Farm and For the use of Supervisors

All Allied Aviation Services' refueling trucks are equipped with permanent base radios mounted inside the cab.

FEDERAL AVIATION ADMINISTRATION
APPROVED:
DATE: FEB 24 2011

321 – EXHIBIT "D"

LGA Safety Report

02/28/10

To: All Line Service Technicians and Supervisors:

Effective immediately, all portable radios (CP-200) are not to be used when fueling an aircraft. This is against Sheltair Safety procedures. All communication to the fuller will be delivered personally by a Supervisor or a Line Service Technician. Failure to follow this "Safety" procedure will be subject to a disciplinary action. If you have any question, please contact.

Cesar Rizik
Operations Manager
Sheltair Aviation Services / LGA
Work: 718-779-4040
Mobile: 347-531-3737

139.323
WIND INDICATORS

LGA provides and maintains six lighted windsocks, located at the following areas:

1) West side of T/W G at T/W DD

2) East side of T/W Z between T/W's A and B

3) South side of T/W Y at T/W AA

4) North side of T/W U at T/W R - This wind indicator is within the runway safety, approximately 235' from the runway 4/22 centerline. A copy of the Modification of Standards for this wind indicator is located at the end of this section.

5) North side of R/W 13 approximately 894' from R/W 13 Threshold - This wind indicator is within the runway safety, approximately 245' from the runway 13/31 centerline. A copy of the Modification of Standards for this wind indicator is located at the end of this section

Wind indicators above are located at a point visible to the pilot while on final approach and prior to takeoff.

6) Between T/W AA and T/W BB, south of T/W D in front of the ARFF Garage – Bldg 137

Wind indicators are inspected daily by the ADM or his/her designee.

A map at the end of this section indicates the location of each windsock.

Each wind cone is provided and maintained in accordance with the applicable sections of AC 150/5340-26, 150/5340-30 and 150/5345-27, current editions.

FEDERAL AVIATION ADMINISTRATION
APPROVED: Frank J. Spinelli
DATE: 3/24/2014

U. S. Department
of Transportation

**Federal Aviation
Administration**

New York Airports District Office
600 Old Country Rd, Suite 446
Garden City, New York 11530
Telephone: 516-227-3812
Fax: 516-227-3813

COPY

October 3,1997

Mr. William A. Fife
General Manager
Aviation Project Management and
Technical Services Division
The Port Authority of NY & NJ
One World Trade Center, Rm. 65E
NY, NY 10048

Dear Mr. Fife:

LGA - Installation of a 10Ft. High Obstruction Lighted Frangible Windsock on the Runway 22 Deck 235Ft., East of the Runway Centerline and 1000Ft. From the Approach End of the Runway - Modification of Airport Design Standards Approval.

Reference is made to your letter dated 8/12/97, requesting our approval for a Modification of Airport Design Standards for the subject installation.

Please be advised that we have reviewed your request in coordination with our Regional Office and it is approved.

If you have any questions, please call at 516-227-3812.

Sincerely,
Original Signed by
Dan Vornea

Dan Vornea,P.E.
Airport Engineer

323-2

FEDERAL AVIATION ADMINSTRATION
APPROVED: Vincent E. Cannio
DATE JAN 27 2005

U.S. Department
of Transportation
**Federal Aviation
Administration**

FILE

New York Airports District Office
600 Old Country Rd, Suite 446
Garden City, New York 11530
Telephone: 516-227-3808
Fax: 516-227-3813

17 February 00

Mr. Kevin Bleach, General Manager
Aviation Technical Service Division
PANY&NJ
One World Trade Center
New York, NY 10048

Re: LaGuardia Airport
Modification of Standards Request
Windsock

Dear Mr. Bleach:

Our office has completed our review of your request for a Modification of Standards for the installation of a windsock within the Runway Safety Area of Runway 13 at LaGuardia Airport.

Please be advised that our office has issued an **unconditional approval** for the following modification of Standards:

> Installation of a 23 foot high windsock (located 894 feet from the threshold of Runway 13 and 245 feet from the runway centerline) within the Runway Safety Area of Runway 13/31.

If you have any questions regarding the above, please contact me at (516)227-3803 or Jennifer Boyes at (516) 227-3808.

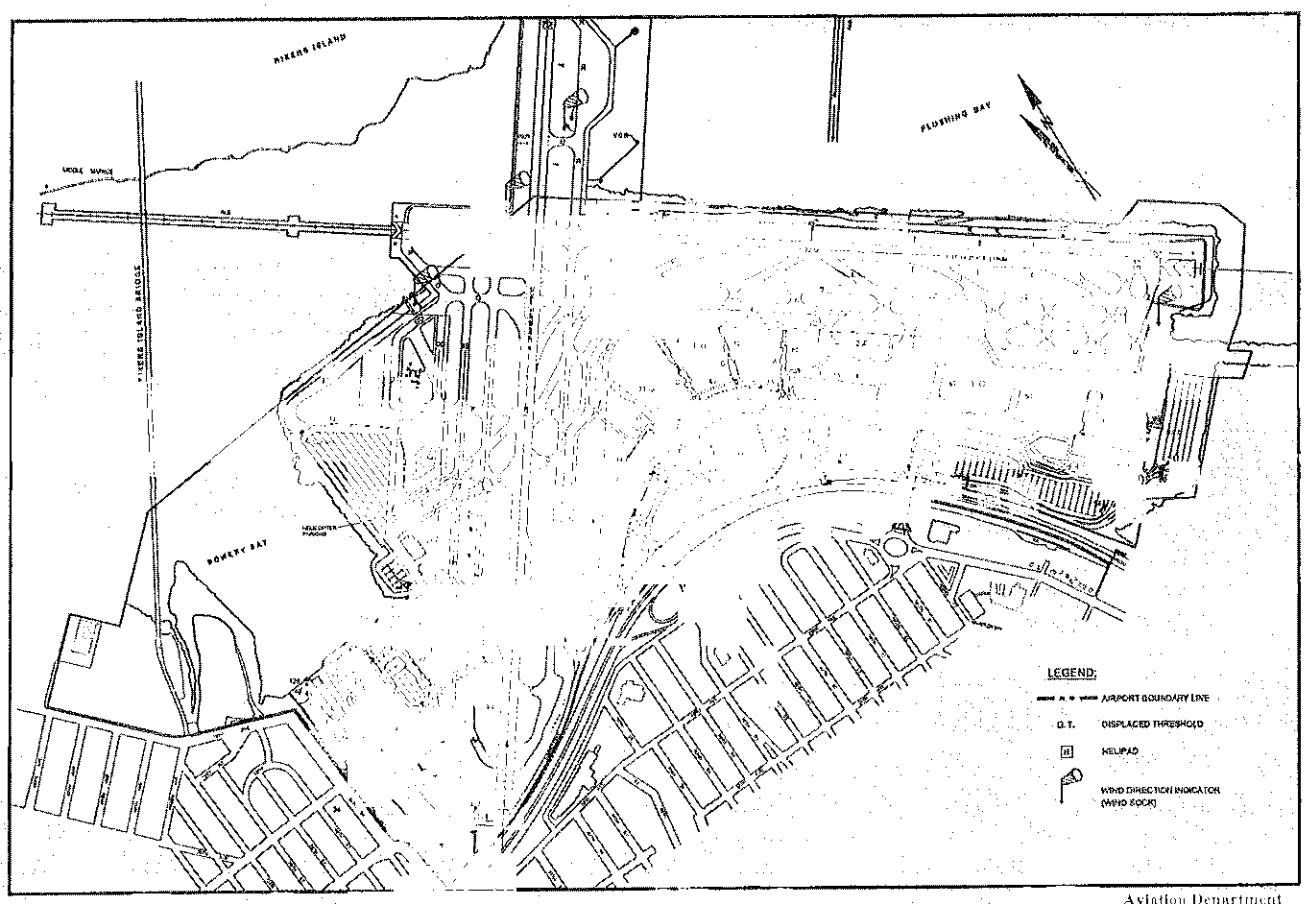
Sincerely,

O/S Brito

Phil Brito
Manager

323-3

FEDERAL AVIATION ADMINSTRATION
APPROVED: Vincent E. Cimino
DATE: JAN 27 2005



LA Guardia
Airport

WIND DIRECTION INDICATORS

Aviation Department
Master and Site Planning

FEDERAL AVIATION ADMINISTRATION

APPROVED:

DATE: 3/24/2014

139.325
AIRPORT EMERGENCY PLAN

The Port Authority Police, Airport Operations Unit and the ARFF Unit at LGA have developed and will maintain an Airport Emergency Plan in compliance with the provisions of Part 139.325. The AEP provides an overview of the airport's approach to emergency operations when dealing with the following situations:

- Aircraft Incidents and Accidents
- Bomb Incidents
- Structural Fires
- Natural Disasters
- Hazardous Materials/Radiological Incidents
- Sabotage, Hijack Incidents and Other Unlawful Interferences with Operations
- Failure of Power for Movement Area Lighting
- Water Rescue Situations
- Crowd Control
- Tank Farm Fire
- Animal Control and Care

A detailed copy of this plan resides in a separate binder. A copy of the plan resides at the Police Garage and Operations Duty Manager's Office. A review of the AEP is conducted at least once every 12 months to ensure that it is current and all parties with whom the plan is coordinated are familiar with their responsibilities. All of the agencies involved in the AEP shall participate in the annual review meeting.

A full-scale exercise of the AEP is conducted at least once every three years.

Advisory Circular Reference

The development of the Airport Emergency Plan is in accordance with Advisory Circular 150/5200-31, Current Edition.

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: MAR 3 1 2014

139.327
SELF-INSPECTION PROGRAM

LGA will be inspected to assure compliance with the self-inspection program according to the following schedule:

1. Daily, except as otherwise required by the ACM.
2. When required by any unusual condition, such as construction activities or meteorological conditions, that may affect safe air carrier operations.
3. Immediately after an accident or incident.

On a daily basis, all facilities listed in Appendix 1 and Appendix 2 of the Airport Safety Self Inspection Advisory Circular 150/5200-18, current edition, are inspected by the ADM or his/her designee for compliance with its listed conditions. A copy of Appendix 1 and 2 can be found at the end of this section.

The ADM or his/her designee uses the Operations Computerized Airport Log (CAL) and/or the Daily Inspection Record to document a Part 139 discrepancy at LGA (sample copies of forms can be found at the end of this section). When necessary, the ADM will issue an appropriate NOTAM advising the FAA and airlines of field conditions that are not in compliance with Part 139. Unless immediate repairs are required, non-complying items will be documented on a Daily Inspection Record and discrepancies forwarded to the appropriate unit.

Daily, the ADM will update OpsNet, reporting all current aeronautical field conditions including any changes that will affect the movement and non-movement areas. OpsNet is also used for rapid dissemination of information as required during emergency situations. Copies of all Daily Inspection Records will be signed by the ADM and retained in the Operations Office, by the Staff ADM, for a minimum of twelve consecutive calendar months.

All personnel perfoming a self-inspection will receive initial and recurrent training every 12 consecutive calendar months in at least the following areas:

- Airport familiarization, including airport signs, marking and lighting.
- Airport emergency plan.
- NOTAM notification procedures.
- Procedures for pedestrians and ground vehicles in movement areas and safety areas.
- Discrepancy reporting procedure.

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Mestney
DATE: 9/28/12

Daily airport self-inspections are conducted in accordance with AC 150/5200-18, current edition. A record of each inspection will be available for 12 consecutive calendar months in the Operations Computerized Airport Log (CAL). Conditions found and corrective action taken will be documented through either the Daily Inspection Record, log entries made in CAL and/or reporting on the Daily Inspection Form (sample can be found at the end of this section). These records will also be maintained by the Operations Staff ADM and be available for 12 consecutive calendar months.

FEDERAL AVIATION ADMINISTRATION

APPROVED: Evelyn Martinez

FAA Approval DATE: 9/28/12

Airport Operations

Regular Inspection

Facility	N/S/U	Remarks
Pavement		
Safety Areas		
Markings		
Signs		
Lighting		
Navigational Aids		
Obstructions		
Fueling		
Snow and Ice		
Construction		
ARFF		
Public Protection		
Wildlife		
Ground Vehicles		
Miscellaneous		

Inspection Completed:	Day Time	Inspector	Night Time	Inspector
Runways:				
Taxiways:				

Log Entered

Entered By

Event Date/Time

Days Open

FEDERAL AVIATION ADMINISTRATION

APPROVED: Frank J. Stopard

DATE: 3/24/2014

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

LAGUARDIA AIRPORT

DAILY INSPECTION RECORD

DAY: ____________________

DATE:____/_____/______

The following items as listed in FAR 139: lighting & markings, pavement, safety areas, signs, emergency equipment, construction, fueling and wildlife were inspected on this date.

The following discrepancies were noted:

____
AIRPORT DUTY MANAGER

Daily Inspectior - 139 Discrepancies

Daily Inspection Form - 139 Discrepancies **Date:** **Day:**

Date	Component	Description/Location	Constr. Outages	Outages (not include ...struction)	NOTAM # (If issued)	Comments
			0	0		

			0	0		

DIF	Component	Description/Location	Const. Outages	Outages	NOTAM #	Comments
			0	0		

Original Date: 12/9/04
Revision Date: 09/25/12

FAA Approval

FEDERAL AVIATION ADMINISTRATION
APPROVED: Jocelyn Mahoney
DATE: 9/25/12

AIRPORT CERTIFICATION MANUAL
LaGuardia Airport

Date	Sign Number	Description/Location	Const. Outages	Outages	NOTAM #	Comments
			0	0		

Date	Component	Description/Location	Const. Outages	Outages	NOTAM #	Comments
			0	0		

Date	Component	Description/Location	Const. Outages	Outages	NOTAM #	Comments
			0	0		

AIRPORT CERTIFICATION MANUAL
LaGuardia Airport

Original Date: 12/9/04
Revision Date: 09/25/12

[illegible] Guidance Signs

Date	Component	Description/Location	Const. Outages	Outages	NOTAM #	Comments
			0	0		

[illegible]

Date	Component	Description/Location	Const. Outages	Outages	NOTAM #	Comments
			0	0		

Other Outages [illegible] / FAR

Date	Component	Description/Location	Const. Outages	Outages	NOTAM #	Comments
Note: Manually input total in these boxes only if FAR 139 outage.		0	0			

ACOS Verification: 10X6_____ 6X2_____ 2X10_____

[illegible]

FAA Approval_____

FEDERAL AVIATION ADMINISTRATION
APPROVED: [illegible]
DATE: 9/28/12

Daily Inspection - 139 Discrepancies

Date	Component	Description/Location	Const. Outages	Outages	NOTAM #	Comments

Pavement

Date	Component	Description/Location	NOTAM # (if applicable)	Comments

Date	Component	Description/Location	NOTAM # (if applicable)	Comments

Other

Date	Component	Description/Location	NOTAM # (if applicable)	Comments

FAA Approval

FEDERAL AVIATION ADMINISTRATION
APPROVED: Philip Martinez
DATE: 9/28/12

FEDERAL AVIATION ADMINSTRATION
APPROVED: Dennis O'Donnell
DATE: FEB 25 2010

CHAPTER 3
INSPECTION REQUIREMENTS

3-1 GENERAL INFORMATION

This chapter provides the inspection requirements of the EMAS system as tabulated data. The inspection requirements are in lieu of an aircraft arrestment. When an arrestment has occurred, follow the instructions in Chapter 2.

3-2 TRAINING

At a convenient time during the installation cycle or immediately following, ESCO will conduct a training seminar for the Airport personnel who will be responsible for inspection and maintenance of the EMAS bed. This training will cover the procedures detailed in this manual to insure that all personnel have a similar understanding of what is required in the way of inspections, how to classify defects, how to repair any problems identified, how to record and report on the problems, and why these efforts are crucial to insuring the long life of the bed.

3-3 LIMITED WARRANTY

The EMAS Bed is provided with a limited warranty against defective parts and labor. A copy of this warranty is included in the back of this Manual. As part of this warranty, ESCO will provide quarterly inspection visits by one of our field service engineers during the warranty period in order to monitor the condition of the bed and to assist the Airport personnel with inspection and maintenance of the EMAS.

3-4 PERIODIC INSPECTIONS

NOTE: Documenting that the inspection and maintenance actions have been performed is a requirement for maintaining FAA part 139 certification. The following Inspection Form Figure #3-1 and EMAS Bed Block Layout Plan include the FAA inspection requirements. The filling out of Form Figure #3-1 is a useful tool for documentation purposes.

3-4.1 EMAS Inspection (Drive-Around)

This inspection consists of *SLOWLY* driving or walking around the perimeter of the bed while visually checking for the types of damage described in Table 3-1 below. This inspection is best performed with two personnel in the vehicle and should take no more than 5 to 10 minutes. It should, at a minimum, be conducted weekly during daylight hours when visibility is good.

Debris Deflector Shields – Visually check for any damage such as dents or flattened sections caused by vehicles or foot traffic. Look for loose or missing installation hardware. If damage is evident, a closer inspection should be performed.

EMAS Bed - Visually check for any damage as described in Table 3-1 below. Check for any debris lying on or around the bed. Check for any water lying on or around the edge of the bed. If any of these conditions exist, a closer inspection should be performed.

Reporting and Repairing – Complete a report, utilizing the form, Figure 3-1, provided in this manual, noting the location and type of damage or unacceptable condition that exists and follow-up by scheduling a repair of the problem.

3-4.2 EMAS Inspection (Walk Through)

This inspection consists of slowly walking the entire bed surface while visually examining the bed for damage as described in Table 3-1 below. This inspection is best performed utilizing two personnel and

should take no more than 45 to 60 minutes. It should, at a minimum, be conducted monthly during daylight hours when visibility is good.

Debris Deflector Shields – Walk along the Debris Deflector and visually check for any damage such as dents or flattened sections caused by vehicle or foot traffic. Look for any missing or loose installation hardware. Check the spacing between the panels. The gap should not exceed ¼". Any larger gap should be covered by aluminum flashing, which can be pop riveted in position. Check the paint finish on the shields for excessive abrasion. A build up of sand or other debris in front of the Debris Deflector is unacceptable and should be removed. Check that the caulking between the Debris Deflector and the first row of blocks is in good condition with no holes or loose areas.

EMAS Bed – Starting at the front of the bed, staying on a single row of blocks, walk across the bed visually checking each block for any damage as described in Table 3-1 below. After completing inspection of the first row, reverse direction and walk back checking the second row of blocks. Continue this process until the entire bed has been inspected. Use the form, Figure 3-2, provided in this manual to track the location and type of damage to any particular block. While checking the bed, also look for any other types of problems that may not be listed in the table, such as a block which appears soft on top, stains on the surface, or areas where water appears to be rising through the surface.

Reporting and Repairing – Complete a report, utilizing the form provided in this manual, noting the location (block number) and type of damage or unacceptable condition that exists and follow-up by scheduling a repair of the problem. If ***ANY*** problem is identified which would require replacement of a top board or an entire block, or ***ANY*** problem which involves a significant area of the bed, contact ESCO immediately for assistance is remedying the problem.

FEDERAL AVIATION ADMINSTRATION
APPROVED: Dennis O'Donnell
DATE: FEB 25 2010

TABLE 3-1

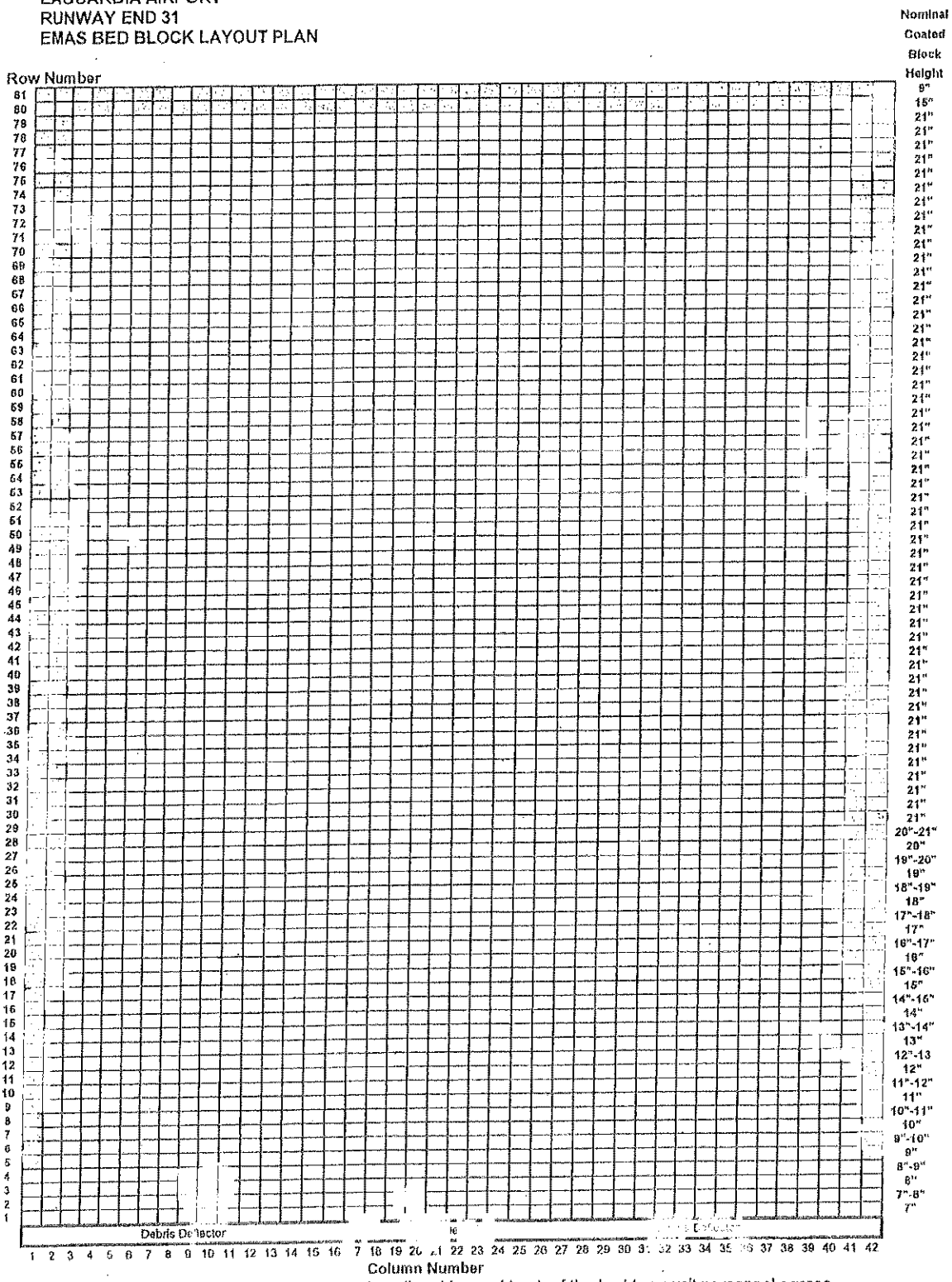
Problem	Remedy
Lifting or missing caulk	Trim away loose caulking, if required clean area with soap and water to remove any dirt, allow area to dry thoroughly, inspect and replace backer rod as needed, reapply approved caulking
Surface cracks or cuts less than 1/8" deep	Repaint using approved polyurethane paint
Severe cracks or cuts (from more than 1/8" deep to completely through the Top Cement Board)	Clean away all lose debris, trim lose threads from scrim, (DO NOT PULL ON THREADS); fill crack completely to slightly above top surface with approved caulking. Flatten and smooth caulk overlapping both edges approximately 1" to insure good adhesion and prevent water penetration.
Gaps between debris deflector panels greater than 1/4"	Cover gap with aluminum flashing pop riveted in position
Minor depressions, surface indentations where the Top Cement Board has not been cracked or penetrated	This problem does not require repair. If the surface is cracked or cut, repair as described for that condition
Severe depressions	Depending on severity of the damage this may be repairable or the block may need replacement. Refer to paragraph 4-3.2.
Holes	Depending on severity of the damage this may be repairable or the block may need replacement. Refer to paragraph 4-3.2.
Top Cement Board on the block is loose along the side or the entire board is lifting	Depending on the cause of the problem, the Top Cement Board or the entire block will require replacement. Refer to paragraph 4-3.4.
Abrasion attack caused by sand or gravel blown against the bed by wind or jet blast	Depending on severity of the damage this may be repairable, it may require replacement of the top board, or the block may need replacement. Refer to paragraph 4-3.3.
Chemical attack: The polyurethane top coating	Damage from these chemicals will include

and scrim material will be attacked by concentrated (15%) solutions of harsh chemicals. EMAS materials have only "fair" resistance to solvents (like benzene, toluene, carbon tetrachloride, etc.) or weak acid solutions (like sulfuric, nitric, chloric, flouric, etc.) or weak alkaline solutions (like sodium hydroxide, ammonia, etc.). If exposed to any solutions of this type the surface must be washed off immediately. The coating is resistant to water, standard deicers, and jet fuel.	staining, softening of the surface coating, dissolving of the surface coating, and dissolving of the scrim material. All damage, except staining will result in loss of water resistant properties of the top coating. Attempt to identify the chemical involved in the spill. Contact ESCO if there is a question regarding the reaction of the spilled chemical with the top coating. The Top Cement Board or the block will require replacement. Refer to paragraph 4-3.4.
Crushed block	This category is for damage more excessive than "Holes" as described above. This will require replacement of the block. Refer to paragraph 4-3.5.
Damage to vertical side walls	Refer to paragraph 4-3.6.
Damage to Debris Deflector Shields	Refer to paragraph 4-3.7.
Clogged vents	Remove debris from the vents by using a shop or a leaf vacuum. Blowing the debris into the bed will lead to a build-up which will prevent proper drainage of water from under the bed.
If there are Light standards in the bed, check that the seals are not loose and are properly sealed to blocks	Carefully remove damaged caulk then reattach seals using ESCO approved sealant.
Check that delineators are in place and firmly attached.	Repair or replace as necessary.
Check for any block which has heaved upward, settled lower, or otherwise moved in position.	If this condition is found, contact ESCO immediately as this problem is generally caused by movement of the underlying pavement, and may be a first indication of a more severe support surface problem.

FEDERAL AVIATION ADMINISTRATION
APPROVED: [illegible]
DATE: FEB 25 2010

LAGUARDIA AIRPORT
RUNWAY END 31
EMAS BED BLOCK LAYOUT PLAN

FIGURE 3-2



*The light grey shaded blocks are the steps along the sides and back of the bed to permit personnel egress.

TO RUNWAY

Note: Always identify the subject block by row and by column number when reporting on bed problems, damage, or repair actions.
example: block # row 22, col. 27

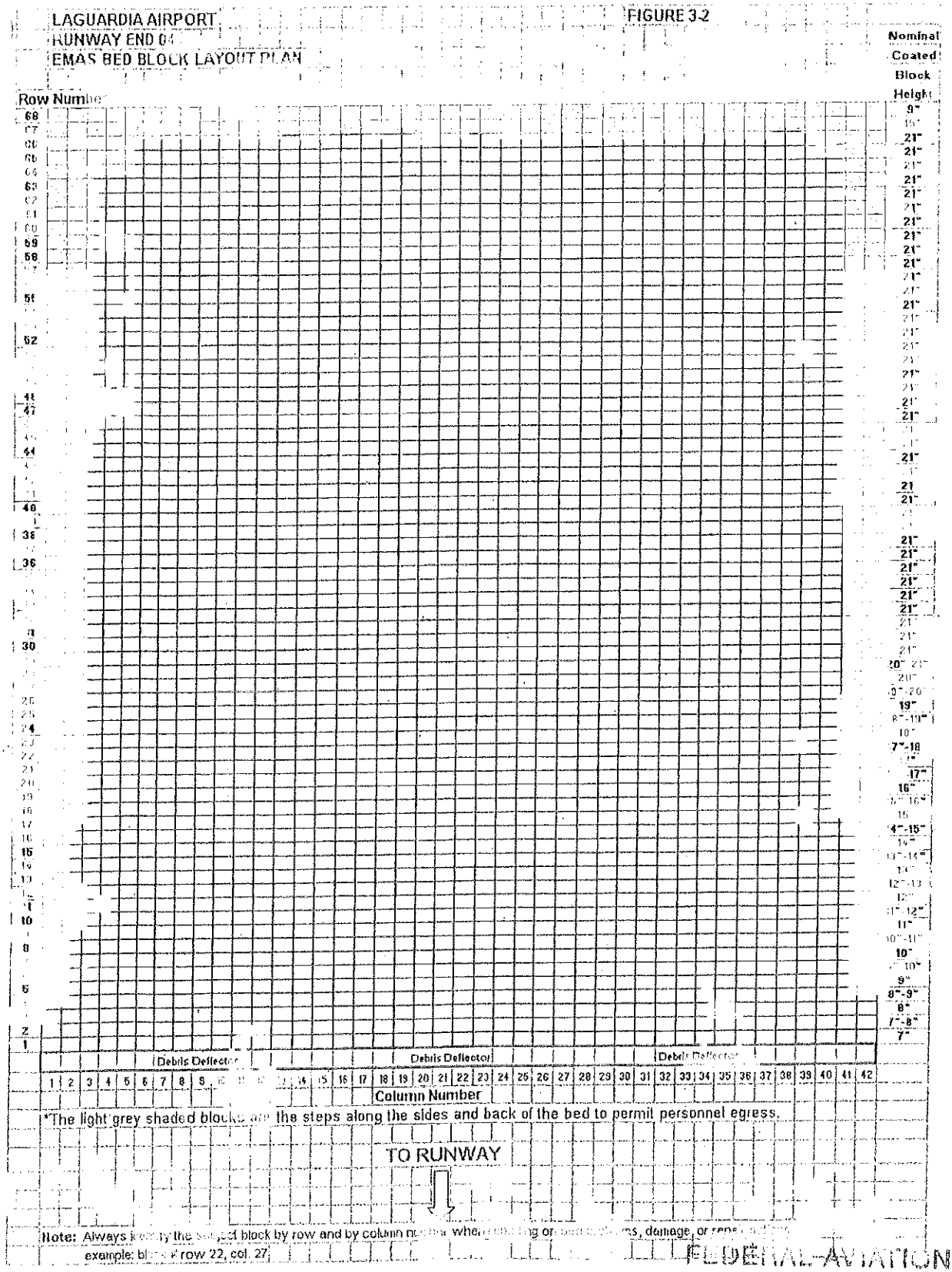
FEDERAL AVIATION ADMINISTRATION
APPROVED:
DATE:

LAGUARDIA AIRPORT

RUNWAY END 04

EMAS BED BLOCK LAYOUT PLAN

FIGURE 3-2



*The light grey shaded blocks are the steps along the sides and back of the bed to permit personnel egress.

Note: Always identify the subject block by row and by column number when ordering or discussing repairs, damage, or replacement.
example: block at row 22, col. 27.

FEDERAL AVIATION ADMINISTRATION
APPROVED:
DATE: JUN 1 5 2000

139.329
PEDESTRIANS AND GROUND VEHICLES

The Port Authority limits access to movement areas and safety areas only to those pedestrians and ground vehicles necessary for airport operations. These include the following types of vehicles/personnel:

- Airport owned vehicles (Operations, Non-Operations Staff, Police) equipped with an ATCT and Operations radio and equipped with a roof top beacon(s)
- FAA Airway Facilities vehicles authorized for maintenance of FAA equipment
- Air carrier aircraft tug operators, brake riders and mechanics.

All other individuals who need access to the movement areas are escorted by qualified personnel. All personnel that have unescorted access to the movement and safety areas are required to complete the airport ground vehicle training program.

Training under FAR Part 139.303 and FAR Part 139.327 is for all personnel who access the movement area and safety areas and perform duties in compliance with the requirements of the Airport Certification Manual. FAR Part 139.327 requires additional training for those responsible for the Airport Self-Inspection Program.

All personnel having movement area access will receive training in FAR Part 139.329 in the following areas:

1. Limiting access to the movement and safety areas for only those necessary to airport operations.
2. Training on procedures for the safe and orderly access to, and operation in the safety and movement areas by pedestrians and ground vehicles, including provisions identifying the consequences for non-compliance with the procedures by an employee, tenant, or contractor.
3. Ensure that each pedestrian and ground vehicle is controlled by one of the following:

    a. Two-way communication between pedestrian, vehicle, and tower.
    b. An escort with two way radio communications with the tower accompanying any pedestrian or vehicle without a radio.
    c. Measures authorized by the Administrator for controlling pedestrians and vehicles such as signs, signals, guards, when radios are not operationally practical.

The Port Authority will conduct Part 139 initial/refresher training, gearing sections toward each work group as appropriate.

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The LGA Airport Master Security Plan has been approved under TSR 1542 regarding the security of the air operations area. Security fencing, signing and points of entry are defined in detail in the Master Security Plan and offer safeguards against inadvertent entry of persons, vehicles, and large domestic animals. Blast fencing is installed at selected locations to protect the public. Fencing and all points of entry are inspected on a regular basis and all deficiencies noted are promptly reported for corrective action.

All PONYA plated vehicles are restricted to the service road and ramp areas except authorized Port Authority vehicles, governmental vehicles and certain other vehicles authorized by the Port Authority General Manager or his/her designee. Specific approval for entry onto runways and taxiways must be obtained from the FAA. At LGA, a Letter of Agreement is in place allowing authorized vehicles to enter the movement area without prior contact with the ATCT. A copy of this letter can be found at the end of this section. A description and date of any incident or accident in the movement areas and safety areas involving air carrier aircraft, a ground vehicle or pedestrian will be retained and will be available for inspection at the PA Operations Staff Office for 12 consecutive calendar months from the date of the accident or incident.

The Port Authority (Operations and Police) will issue Breach of Rules citations to vehicle operators for noncompliance with Port Authority Rules and Regulations regarding ground vehicle operation in the aeronautical areas. The consequence of issuance of Breach of Rules may vary based on individual circumstances; progressive fines and disciplinary actions may be imposed on employees who violate Port Authority security and safety regulations. Fines and disciplinary action will be charged or carried out for violations of airport security and safety/moving vehicle regulations as follows:

- $25.00 Fine on the first occurrence, and employee must attend Airport Security/Safety Training.
- $100.00 Fine on the second occurrence, and employee must attend Airport Security/Safety Training along with a company supervisor, and AOA ID card or driving privileges will be suspended until training is completed.
- On a third occurrence, for a security violation, Airport ID will be revoked for up to two years. For a safety/moving violation, AOA driving privileges will be suspended for six months.

Remedial training is also scheduled to be given by PA Operations Supervisors where warranted. If the individual is a repeat offender and the Port Authority Airport Operations, Security and Services Division feels that the severity of the infraction warrants it, further action will be taken, including denial of AOA driver privilege. The PA Airport Operations, Security and Services Division will maintain records of each individual in compliance with this section for 24 consecutive months after termination of an individual's access to movement and safety areas.

Ground vehicle operation procedures on the movement areas are in accordance with the applicable sections of AC 150/5210-20, current edition. Ground vehicles operating on the movement areas are marked and lighted in accordance with the applicable sections of AC 150/5210-5, current edition.

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APPROVED: Evelyn Martinez

FAA Approval _____ DATE: 9/25/12

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FEDERAL AVIATION ADMINISTRATION

APPROVED: Evelyn Martinez

DATE: 9/28/12

Original Date: 12/9/04

FAA Approval_____

Revision Date: 09/24/12

LETTER OF AGREEMENT

GROUND VEHICLE ACCESS TO THE AIRPORT MOVEMENT AREA

The Port Authority of New York and New Jersey
LaGuardia Airport Operations

And

The Federal Aviation Administration
LaGuardia Airport Air Traffic Control Tower

EFFECTIVE: October 9, 2013

1. **PURPOSE.** This agreement establishes procedures for the issuance of authorization by The Port Authority of New York and New Jersey (PANYNJ) and the Federal Aviation Administration (FAA) LaGuardia Airport (LGA) Air Traffic Control Tower (ATCT) for ground vehicle access to and movement on the Airport Movement Area (AMA).

2. **CANCELLATION.** This agreement, which adds procedures to access FAA navigation facilities (Section 5, paragraph c.(4)), supersedes and cancels the Letter of Agreement between the PANYNJ and ATCT dated March 5, 2010 addressing the same subject.

3. **RESPONSIBILITIES.** The PANYNJ shall establish, in accordance with this agreement, procedures for vehicular access to the AMA and shall provide suitable training in such procedures to all airport employees authorized by the PANYNJ and the FAA to enter the AMA.

4. **DEFINITIONS.** The Airport Movement Area (AMA) consists of all runways, taxiways, and other areas of the airport that aircraft use for taxiing, takeoff and landing, including associated safety areas, exclusive of aircraft loading ramps and parking areas. All vehicles and pedestrians operating on the AMA are subject to the control of ATC.

5. **PORT AUTHORITY PROCEDURES.**

   The PANYNJ shall:

   a. In concert with the FAA, issue authorization for access to the AMA only to persons operating ground vehicles necessary for airport operations. All other vehicles must use the perimeter road(s) for transition.

   b. Establish procedures and training for persons authorized to enter the AMA. The training shall, as a minimum, cover procedures for the safe and orderly access to, and operation on, the AMA by ground vehicles, and include provisions to identify the consequences of non-compliance with the procedures.

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c. Establish requirements that all vehicles requiring access to or needing to cross any active runway shall be in direct communications with ATC, or be escorted by a vehicle that is in direct communications with ATC.

(1) All vehicles shall advise ATC prior to proceeding to a runway. All runway crossings shall be coordinated on Ground Control frequency, with the exception of runway inspections/sweeps and East Point Path crossings, which shall be coordinated on Local Control frequency.

(2) Vehicle operators shall not, without coordinating with ATC, approach a runway or occupy a taxiway where it might impede aircraft access to or egress from any runway. This includes run-up block areas and taxiways at the arrival and departure ends of the runway.

(3) PANYNJ Police and Emergency vehicles shall only be authorized to cross runway(s) in response to a known, coordinated emergency or security event, or for required training.

(4) No vehicle shall enter the paved access road that leads to the FAA navigation facilities at the south end of Taxiway AA (due west of the approach end of Runway 4) without ATC approval.

d. Establish procedures that ground vehicles operating on the AMA shall:

(1) have an operating rotating beacon; and

(2) be capable of two-way radio communication with ATC, or

(3) be accompanied by an escort vehicle meeting the requirements of d.(1) and d.(2) above.

e. Establish procedures that vehicle operators or their escorts operating on taxiways and non-active runways within the AMA shall monitor the appropriate FAA ATC frequency.

f. Establish procedures that vehicle operators or their escorts operating on active runways within the AMA shall monitor the appropriate FAA ATC frequency, immediately confirm when the vehicle(s) are clear of the active runway and, upon request, provide the FAA with an estimated runway occupancy time.

g. Establish procedures that vehicles which lose radio contact with ATC while on an active runway shall exit the runway and notify the FAA immediately.

h. Establish procedures that pilots of aircraft that have been pushed back onto a movement area shall call for taxi clearance only after the tug operator has cleared the active taxiway and has repositioned the tug to the non-movement area.

i. Establish procedures that vehicle operators, permitted by PANYNJ and the FAA to enter or transition the AMA without direct approval from ATC, shall give way to all aircraft. However, this shall in no way permit such vehicles to enter or cross an active runway without direct clearance from ATC.

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j. Establish procedures that vehicular access to the AMA is kept to a minimum and encourage the use of the East Point Path, perimeter or service roads to the maximum extent possible. Runway sweeps shall be pre-coordinated with the Tower so as to be conducted when operationally advantageous.

k. Establish procedures to provide for the operators of Airport Maintenance vehicles working on closed or active runways during night-time or low visibility conditions shall so advise ATCT and request ATCT to secure (turn-off) or adjust the runway edge lights and centerline lights as needed.

l. At the request of the FAA, make available for inspection any record of accidents or incidents on the AMA involving aircraft and/or ground vehicles.

6. **FAA PROCEDURES.** The FAA shall:

a. Advise the Port Authority Airport Duty Manager of any circumstance or condition which may affect or create a hazard to ground vehicles operating on any part of the AMA or make vehicular travel on the AMA, or any designated part thereof, undesirable or prohibited.

b. Consistent with the safe operation of aircraft and vehicles on the AMA, and upon request therefore, issue clearances to vehicles to enter and operate on the AMA and, as workload permits, issue traffic advisories as necessary to such vehicles.

c. Report to the PANYNJ any observed failure of a vehicle operating on the AMA to comply with PANYNJ and/or FAA rules, regulations or procedures regarding vehicular operations on the AMA.

d. Make available to the PANYNJ all records and reports of incidents or infractions of PANYNJ and/or FAA rules and procedures by vehicles on the AMA.

7. **LIABILITY.** The Port Authority of New York and New Jersey and the Federal Aviation Administration covenant and expressly agree that, with regard to any liability which may arise from operations within the AMA, each party shall be solely and exclusively liable for the negligence of its own agents, servants, and/or employees, in accordance with applicable law, and that neither party looks to the other to save or hold it harmless for the consequences of any negligence on the part of one of its own agents, servants, and/or employees.

Edward J. McKenna
Air Traffic Manager, LGA Tower
Federal Aviation Administration

Thomas L. Bosco
General Manager
LaGuardia Airport

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APPROVED:
DATE: 3/24/2014

LaGuardia Airport

WILDLIFE HAZARD MANAGEMENT PLAN

The Port Authority of New York and New Jersey
LaGuardia Airport
Flushing, New York 11371

March 2014

FEDERAL AVIATION ADMINISTRATION
APPROVED:
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INTRODUCTION

LaGuardia Airport (LGA) has been operated by the Port Authority of New York and New Jersey (PANYNJ) since June 1947. The airport is surrounded on three sides by water and is proximate to Rikers Island, North Brother Island, South Brother Island, and several other off-airport bird attractants. Many species of birds use nearby habitats to forage, live, molt, and nest. Gulls (*Larus* spp.) and waterfowl species present the largest hazard to flight operations at LGA.

This Wildlife Hazard Management Plan (WHMP) documents efforts to be taken by LGA to reduce the risk of bird strikes by mitigating on- and off-airport wildlife attractants and employing various means to manage wildlife populations.

LGA's most recent Wildlife Hazard Assessment (WHA) was conducted by the United States Department of Agriculture (USDA) from October 1, 2009 to September 30, 2010. Since the WHA, a continued monitoring program has been in place.

In response to the threat posed by aircraft striking wildlife and in accordance with 14 CFR Part 139.337(f), the airport has developed a Wildlife Hazard Management Plan. The WHMP outlines the airport's procedures, activities, and responsibilities associated with reducing wildlife hazards at LGA. As detailed in the WHMP, LGA monitors wildlife activity on and around the airport through community programs and analysis of depredation and wildlife strike history. These data are used to ensure that LGA's WHMP properly addresses wildlife hazards.

AUTHORITY – 14 CFR Part 139.337(f)(1)

The individuals having authority and responsibility for implementing each aspect of the plan.

The persons and departments responsible for implementing the airport's WHMP include staff from LGA's Airport Operations and Facility Maintenance divisions, and the Aviation Department Aviation Technical Services unit, as follows:

Manager, Airport Operations, Security & Services Division

The Airport Operations Manager has overall responsibility for ensuring compliance with all 14 CFR Part 139 requirements involving airport operations. The Airport Operations Manager:

- oversees development and implementation of the LGA WHMP;
- Notifies the Wildlife Biologist of all pertinent changes to airport, Port Authority, or FAA policies and procedures;
- has the authority to issue Notices to Airmen (NOTAMs) when necessary.

Manager, Aeronautical Services

The Aeronautical Services Manager reports directly to the Airport Operations Manager, who has assigned to the Aeronautical Services Manager responsibility for compliance with all 14 CFR Part 139 requirements pertaining to airside operations, to include wildlife hazard management. The Aeronautical Services Manager:

- coordinates with the Wildlife Biologist and the Chief Operations Supervisor to ensure that the LGA WHMP is appropriately implemented and that the airport remains in

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compliance with all federal, state, and local wildlife laws and regulations and Port Authority policies.

Port Authority Wildlife Biologist

The Wildlife Biologist coordinates with the Managers of Airport Operations and Aeronautical Services for all 14 CFR Part 139 regulations having to do with wildlife management (14 CFR Part 139.337). The Wildlife Biologist:

- has the signatory authority for all Federal, State, and local wildlife permits;
- monitors and assists the airport in development and implementation of the wildlife management program, to include providing direction, technical expertise, training recommendations and guidance to airport staff performing wildlife management;
- administers all contracts involving wildlife management and research;
- evaluates current wildlife programs and makes recommendations for improvements, to include developing new wildlife hazard management goals;
- is the airport's liaison to all Federal, State, and local agencies having wildlife regulatory authority, to include those agencies that issue wildlife management permits;
- reviews the airport's WHMP after triggering wildlife strikes (defined in 14 CFR 139.337) and coordinates with airport management, USDA, and the FAA to determine if a wildlife hazard assessment is warranted;
- coordinates reviews and updates of the LGA WHMP in accordance with requirements of 14 CFR Part 139.

Chief of Operations

The Chief of Operations reports directly to the Airport Operations Manager and is responsible for:

- ensuring compliance with all 14 CFR Part 139 regulations;
- coordinating with the Wildlife Biologist and other responsible parties to ensure compliance with all 14 CFR Part 139.337 regulations;
- issuing NOTAMs when necessary;
- serves as Firearms Custodian in accordance with the New York City Shotgun/Rifle Organization Certificate.

Airport Duty Manager

The Airport Duty Manager reports directly to the Chief of Operations and is responsible for:

- supervising day-to-day airport operations activities and all Airport Operations field employees carrying out such activities, to include overseeing the Wildlife Supervisor and other Operations and Maintenance field personnel assigned responsibility for implementation of the LGA WHMP;
- conducting runway sweeps, supervising and directing subordinate staff responsible for non-lethal and lethal wildlife management activities, responding to wildlife strikes, and dispersing wildlife when necessary;
- keeping all direct and contract wildlife management employees apprised of current airport conditions, including expected or unexpected events that may affect airport operations;
- issuing NOTAMs when necessary.

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Staff Airport Duty Manager for Part 139 Compliance

The Staff Airport Duty Manager reports directly to the Chief of Operations and is responsible for:

- maintaining the airport's Airport Certification Manual (ACM), including section 139.337 and the WHMP;
- assisting in supervising wildlife management contractors;
- ensuring that all wildlife management staff receive initial and annual recurrent training in wildlife management and the use of pyrotechnics and firearms;

Assistant Airport Duty Manager

The Assistant Airport Duty Manager reports directly to the Airport Duty Manager and is responsible for:

- monitoring day-to-day activities of airside airport operations and supervising the Wildlife Supervisors;
- conducting runway bird sweeps, performing nonlethal and lethal wildlife management activities, and responding to wildlife strikes when there is no Wildlife Supervisor on duty;
- issuing NOTAMs when necessary.

Wildlife Supervisor

The Wildlife Supervisor reports directly to the Assistant Airport Duty Manager. The Wildlife Supervisor is responsible for:

- conducting day-to-day wildlife hazard management activities to reduce the threat of wildlife strikes using lethal and nonlethal methods;
- conducting continuous wildlife patrols to monitor, move, and control wildlife in active airport areas;
- investigating reported wildlife strikes to aircraft and submitting reports to the FAA Wildlife Strike Database;
- mitigating wildlife attractants or reporting attractants to the Assistant Airport Duty Manager for mitigation and following-up until resolved;
- notifying the Assistant Airport Duty Manager of wildlife strike hazards or wildlife hazard management activities that may impact aircraft safety and recommending the issuance of a NOTAM.

Staff Wildlife Supervisor

The Staff Wildlife Supervisor reports directly to the Staff Airport Duty Manager for Part 139 Compliance and is responsible for:

- helping to monitor certain wildlife management activities at the airport, such as: depredation, permit compliance, and wildlife strike reporting;
- maintaining airport wildlife management staff training records;
- monitoring and restocking equipment and supplies of ammunition and pyrotechnics;
- Assisting the USDA Biologist with special projects.

Maintenance Group Supervisor

The Maintenance Group Supervisor reports directly to the Chief Maintenance Supervisor and supervises direct Facility Maintenance staff. Facility Maintenance is responsible for:

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- managing grass at a height of 6"-10" where conditions allow or at a height directed by the Operations wildlife management staff for grass in the Airport Operations Area (AOA);
- trimming or removing shrubs and trees on the airport;
- removing trash and debris from airside and landside areas;
- coordinating with wildlife hazard management staff to conduct facility maintenance projects for the purpose of reducing or controlling wildlife and minimizing wildlife attractants.

USDA Wildlife Biologist

The USDA Wildlife Biologist reports to the Port Authority Wildlife Biologist, but also coordinates with Operations personnel and is responsible for:

- conducting routine wildlife surveys;
- reporting findings and unusual wildlife observations to Airport Operations staff and the Port Authority Wildlife Biologist;
- using findings from surveys, assessments, research and publications to recommend improvements to the LGA WHMP;
- coordinating with Airport Operations and the Port Authority Wildlife Biologist to interface with off-airport property owners and business operators regarding mitigation of wildlife hazards to aircraft;
- employing appropriate wildlife control methods when hazardous wildlife are detected during routine surveys or observations;
- serving as an informational resource to airport operations on wildlife related topics;
- assisting the wildlife management staff with projects as requested.

USDA Wildlife Specialist

The USDA Wildlife Specialist works at LGA on a part-time basis and reports to the USDA Wildlife Biologist and is responsible for:

- assisting Port Authority staff and the USDA Wildlife Biologist as requested;
- reporting findings and unusual wildlife observations to Airport Operations staff and the Port Authority Wildlife Biologist and the USDA Wildlife Biologist;
- employing appropriate wildlife control methods when hazardous wildlife are detected during routine surveys or observations;
- assisting the wildlife management staff with projects as requested.

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PRIORITIZED ACTIONS – 14 CFR Part 139.337(f)(2)

Prioritized actions as identified in the Wildlife Hazard Assessment, with target dates for initiation and completion.

Wildlife Population Management – 14 CFR Part 139.337(f)(2)(i)

Rikers Island Wildlife Control

As part of the airport's continued monitoring program, routine surveys are conducted on Rikers Island and the area is also monitored from airport property during AOA surveys and routine patrols by operations staff.

In an effort to reduce threats posed by the Rikers Island goose and gull populations, goose and gull egg addling and goose removals are conducted on an annual basis. Goose removals began in 2004 in an effort to reduce the number of resident geese in the area. A gull egg-addling program was implemented in 2009.

These programs will be continued as necessary, with input from and through coordination with the Port Authority, USDA-Wildlife Services, and the NYC Department of Correction.

Target Date for Completion:
Ongoing/Annual March-July

New York City Goose Population Management

In August 2009, The Port Authority of NY & NJ signed a Memorandum of Understanding (MOU) with the City of New York to reduce the threat that resident Canada geese pose to aviation at LGA, EWR, and JFK. In June 2010, the MOU was updated and expanded to include off-airport land use management. Unless terminated sooner by either party, the MOU remains in effect until December 31, 2050 or until the Port Authority's airport lease with the City expires. Under the MOU, the City and Port Authority have agreed to contract with USDA-Wildlife Services on an annually-renewable basis to remove Canada geese from certain public areas within New York City. The Port Authority, in conjunction with the City of New York and members of the New York City Airports Wildlife Hazard Management Steering Committee, will continue to monitor and address resident Canada goose populations inhabiting the areas within a five-mile radius of LGA. Through meetings of the Steering Committee, the Port Authority anticipates working with the City and neighboring landowners to extend this program into the foreseeable future.

The City and the Port Authority receive annual reports to summarize the removals and continued monitoring of the removal sites. These reports are reviewed by the Port Authority Wildlife Biologist to help determine the effectiveness of the program.

Target Date for Completion:
Ongoing/Population management is conducted annually during the months of June/July

Barn Swallow Nest Control

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Barn swallows nest under the elevated deck structures of runways 13 and 22. Nests and eggs will be removed annually. In 2012, PANYNJ investigated various habitat modification projects that may eliminate or reduce barn swallow nesting in these areas. Remnant wooden slats are removed when work is performed under the deck structures to help reduce structures conducive to nesting.

Target Date for Completion:
Ongoing/Nest removals are conducted in May/June

Pigeon and Starling Population Management

LGA has implemented a trapping program to control pigeons and starlings. Traps have been placed at strategic locations around the airport. In addition to trapping pigeons and starlings, an air rifle is utilized to remove nuisance pigeons from within Hangar 7 and the parking garage.

Target Date for Completion:
Ongoing

Commensal Rodent Management

In 2012, a survey was conducted to assess the commensal rodent population. Following the survey, a commensal rodent removal program was implemented. Additional rodent surveys will be conducted as determined necessary.

Target Date for Completion:
Ongoing with continuous monitoring

Wildlife Monitoring

Routine wildlife surveys are conducted at locations on and off the airport. Results are summarized in monthly and annual reports.

Target Date for Completion:
Ongoing/Commence October 2010

Habitat Modification – 14 CFR Part 139.337(f)(2)(ii)

Perching Structures

Currently, anti-perching devices have been installed on various structures around the airport. LGA will expand its anti-perching program to install anti-perching devices on other structures determined to attract perching birds. Depending on structure configuration, location, height and proximity to NAVAIDS or electrical devices, several varieties of anti-perching devices are available for installation on these structures. To prevent interference with navigational radio frequencies, specially designed, nonmetallic anti-perching devices may be installed on FAA equipment within the AOA.

Light poles located throughout the parking lots were identified as a common perching location for gulls in the WHA. LGA will explore different anti-perching devices for these structures in and coordinate installation with redevelopment projects.

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The WHA indicated that the FAA lighting structure on the approach end of RWY 13 is a significant perching site for birds during certain times of the year. An anti-perching system was installed on this system in 2012.

The signs on hangars 1, 3, and 5 were identified as perching sites in the WHA. The tenant of those hangars has been notified of the hazard and recommendations have been made to install anti-perching devices on the signs, cover the signs with netting, or have the signs removed completely. LGA will continue to work with the tenant to ensure that this hazard is addressed.

The WHA also identified old pier pilings (only exposed during low tide) in Flushing Bay that provide perching sites for gulls and cormorants. In 2014, PANYNJ will begin the permitting process to have these pilings removed.

Between 2011 and 2013, the Port Authority worked with a vendor to modify the style of the taxiway delineators/edge markers. The vendor developed a prototype delineator with an anti-perching cap. In 2013, this style of delineator was approved by the FAA. In the future, anti-perching type delineators will be installed on the airfield.

Target Date for Completion: Ongoing

Taxi Holds

The Port Authority maintains "Do not feed the birds" signs installed at all taxi hold lots and continue to distribute informational leaflets (in multiple languages) when necessary. In 2012, lids were placed on the trash cans in the taxi holds to prevent scavenging.

Target Date for Completion: Ongoing & continuous

Turf/Vegetation Management and Landscaping

All new airport tree and shrub plantings will comply with criteria set forth in the Port Authority Engineering Department publication entitled *Aviation Landscape and Sustainable Design Criteria*. Specifically, fruiting trees and conifers will not be planted on the airport. Existing fruit trees and conifers that create a hazard will be removed. Specific grass seed specifications can be found in Engineering Document Division 2 Section 02930, *Seeding C-Specification*.

LGA maintains its grass at an approximate height of 6-10 inches, as recommended by FAA Advisory Circulars. In areas prone to grazing by geese, LGA employs various methods of habitat modification, such as using alternative grass varieties, fertilization reduction, and/or reshaping of lawn areas.

Target Date for Completion: Ongoing & continuous

Temporary Standing Water

When operationally feasible, large puddles that are attracting wildlife shall be removed by any means necessary. Grading, paving, cleanout, or installation of drains may be necessary to eliminate the problem. Areas of repeated ponding have been identified and addressed. In 2012, ponding areas near the approach of RWY 4 were regraded and weep holes were installed in the

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22 deck to prevent ponding. New problem areas will be reported to the Aeronautical Services Manager and Facility Maintenance or engineering staff.

Wildlife Supervisors carry large push brooms in their vehicles that allow them to disperse small areas of ponding.

Target Date for Completion:
Ongoing with continuous monitoring

Airport Buildings

All new buildings be designed to prevent ponding on roof surfaces and to reduce nesting and perching habitat for gulls and other birds by featuring as few flat surfaces, voids, and ledges as possible. Birds shall be denied access to buildings by filling in holes or gaps in walls, windows, and doors and by keeping hangar and garage doors closed when not in use. Once birds begin perching or nesting in or on a building, steps shall be taken to permanently alter the site to exclude birds. When necessary, birds may be removed through trapping or shooting.

Target Date for Completion:
Ongoing

Airport Construction

Construction projects will be kept as neat as possible to avoid attracting birds. Food waste will be disposed of in closed trash containers and care will be taken to avoid creating sources of fresh water, such as empty drums, buckets, wheelbarrows, and other potential water collectors and containers. Contractors will be briefed by the Resident Engineers office about bird hazards at the airport and how to avoid them, including the restriction against feeding birds.

The Port Authority Wildlife Biologists shall review airport construction plans to address wildlife concerns and ensure best wildlife hazard mitigation practices

Target Date for Completion: Ongoing

Trash, Debris, & Feeding

Port Authority Air Terminal Rules and Regulations prohibit feeding and watering of animals on airport property (except for police dogs, animals under control of their owner, or animals used for wildlife control programs), require all offal, garbage, debris or refuse to be cleaned up immediately and all containers for such to be kept covered. Airport Operations personnel strictly enforce Port Authority Air Terminal Rules and Regulations pertaining to housekeeping standards. These rules are provided to all airport tenants and are available on the Port Authority's web site.

In 2012, LGA placed lids on all garbage cans in the taxi holds. Any uncovered trash can will be covered in order to meet the standards set forth in the Port Authority Air Terminal Rules and Regulations.

Target Date for Completion: Ongoing

Insect Control

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Insect control procedures are implemented by the Maintenance Division as necessary. Insecticides are applied as needed to control grasshoppers or other insects.

Target Date for Completion: Ongoing

Land Use Changes – 14 CFR Part 139.337(f)(2)(iii)

Wildlife management staff actively manage on-airport land use to mitigate existing wildlife attractants and prevent the introduction of new wildlife attractants. LGA also monitors wildlife attractants located off-airport within a five-mile radius of the AOA. Furthermore, through a Port Authority Memorandum of Understanding (MOU) with New York City and participation on the New York City Airports Wildlife Hazard Management Task Force, LGA works with various state, city, and local governmental agencies (for a list of participants, see § RESOURCES – 14 CFR Part 139.337(f)(4)) to manage off-airport land uses, in accordance with Advisory Circular 150/5200-33, to prevent the introduction of new wildlife attractants and to mitigate existing attractants. The MOU addresses strategies for public communication and outreach, land use practices, and removal of Canada geese.

Certain off-airport sites have been identified as possibly harboring off-airport wildlife attractants.

Off-airport Mudflats

The WHA identified the off-airport mudflats at the approach of RWY 31 (that are exposed during low-tide) as an attractant for species of gulls and shorebirds. This property is owned by the New York City Parks Department and is not within the jurisdiction of LaGuardia Airport or the Port Authority. On April 27, 2013, the Port Authority sent a letter to NYC Parks Department to notify them of potential hazards caused by the property and to request that they investigate the issue and coordinate with the airport to develop a long-term solution. The Port Authority will continue to work with the New York City Wildlife Hazard Management Steering Committee and Wildlife Hazard Taskforce to address this issue. It should be noted that implementation of long-term solutions may be the responsibility of the landowner. As a short-term solution, wildlife staff monitor this area closely and address bird activity with nonlethal or lethal control. This area is also regularly surveyed during the airport's continued monitoring program. In 2013, the Port Authority worked with USDA-WS to review data collected during the WHA. If the data collected from the WHA is inconclusive, we will develop and implement a more intensive survey protocol to document wildlife use of the area during low-tide and high-tide. Potential solutions, like dredging, may make the area more attractive to hazardous species of waterfowl (Canada geese, etc).

Ferry Point Park and Golf Course

Ferry Point Park is located in the Bronx approximately 2.5 miles from LaGuardia. This park is operated by the New York City Department of Parks and Recreation and/or their concessionaires. Wildlife management activities on this site are the responsibility of the property's operators. Representatives from the Department of Parks and Recreation attend the New York City Airport's Wildlife Hazard Management Task Force and are subject to the conditions of the Memorandum of Understanding (MOU) with New York City (see below).

North Shore Marine Trash Transfer Station

The North Shore Marine Trash Transfer Station is also monitored from airport property. If wildlife hazards are observed as a result of this facility, NYC Department of Sanitation will be contacted. The facility is expected to become operational in the summer of 2014. The Port Authority has reviewed and commented on a draft WHMP that has been developed for the facility.

Other Off-airport Locations

Other sites that are routinely monitored as part of the Wildlife Monitoring Program include:

- Flushing Meadows Corona Park
- Fort Totten
- Wards and Randall's Islands
- Rikers Island

Target Date for Completion: Ongoing, the Steering Committee meets as needed

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PERMITS – 14 CFR Part 139.337(f)(3)

Requirements for and, where applicable, copies of local, State, and Federal wildlife control permits.

Wildlife Permits

Copies of the depredation permits are carried with all personnel conducting wildlife control on the airport.

Federal Permits

In accordance with Title 50, Code of Federal Regulations Part 10 (50 CFR 10), Title 50, Code of Federal Regulations Part 13 (50 CFR 13), and Title 50, Code of Federal Regulations Part 21 (50 CFR 21) the airport is required to obtain a Federal permit to take migratory birds. This depredation permit is renewed annually through the Region 5 United States Fish & Wildlife Service (USFWS) office.

In accordance with depredation permit requirements, LGA files a report of the species taken under the permit at the time of renewal or expiration of the permit. The report contains the species taken, the dates the species were taken, how many of each species were taken, the number of nests and eggs destroyed, and the final disposition of the carcass (buried, incinerated, or donated to permitted individuals or agencies). The annual report and the permit renewal form must be returned to USFWS no later than 30 days prior to the expiration of the permit. Copies of the report must also be sent to New York Department of Environmental Conservation (NYSDEC) Special Licenses Unit in Albany, New York.

In 2014, LGA submitted an application to the United States Fish and Wildlife Service for a Bald Eagle Harassment Permit. This permit will allow the airport to use nonlethal control methods to harass bald eagles.

State Permits

In accordance with New York Environmental Conservation Law Section 11-0521, Section 11-0505, Title 6, New York State Codes, Rules, and Regulations Part 175, and Title 6, New York State Codes, Rules, and Regulations Part 182, New York State requires the airport to obtain a permit to take migratory birds. The depredation license is renewed annually and is only valid in conjunction with a valid Federal depredation permit.

Upon expiration or along with a request for renewal, a final report detailing all activities conducted under this permit is filed with the NYSDEC Special Licenses Unit in Albany, New York. This permit also authorizes the airport to harass migratory birds, including State-listed threatened and endangered species (it does not include Federally-listed threatened and endangered species).

The airport maintains an Airport Air Strike Hazard Permit that is issued by the NYSDEC Special Licenses Unit, which allows the airport to depredate or harass nuisance wildlife when they become a threat to aircraft and airport safety. Nuisance wildlife includes "all wildlife except threatened and endangered species, species of special concern, and migratory birds requiring

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federal and/or state permits and licenses." This Airport Air Strike Hazard permit is continuous until revoked. An annual report must be filed by January 1st each year to document the number and species taken.

City Permits

The City of New York requires a permit to trap pigeons within city limits. The Port Authority is exempt from this City requirement on airport property.

Pesticide Permits & Regulations

These permits are maintained by the Maintenance Department or by contractors who apply any pesticides.

Firearm Permits

All firearms used for wildlife control are registered with New York City. The airport has designated a firearm custodian, as described in the New York City Shotgun/Rifle Organization Certificate. The firearms custodian is responsible for the control of all firearms in the custody of the airport's wildlife management staff.

ATF Explosives

As a government agency, PANYNJ is exempt from ATF requirements to maintain an explosives permit to use pyrotechnics. However, PANYNJ is still required to abide by the ATF storage requirements for Class C explosives.

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RESOURCES – 14 CFR Part 139.337(f)(4)

Identification of resources that the certificate holder will provide to implement the plan.

Personnel

Wildlife management at LGA is primarily the responsibility of Airport Operations. Full-time wildlife management staff is comprised of the Wildlife Supervisors and Assistant Airport Duty Managers. Other staff trained in wildlife management include Airport Duty Managers serving in both tour and staff positions. In addition, personnel serving in other Airport Operations tour and staff positions may maintain currency in wildlife management training and licensing, to include landside staff such as Landside Duty Managers, Parking Lot/Roadway Supervisors, and Security Supervisors. A Wildlife Biologist and part-time Wildlife Specialist are provided to the airport through a Cooperative Service Agreement with USDA, APHIS-Wildlife Services.

Wildlife Hazard Task Force

The Port Authority created a Wildlife Hazard Task Force consisting of representatives from regional and national non-governmental organizations (NGO's) and governmental agencies. Expert members come from diverse backgrounds, including aviation, community and government relations, environmental and wildlife conservation, environmental engineering, legal affairs, and wildlife management. The role of the task force is to provide the best scientific and technical recommendations to help the airports and surrounding landowners mitigate wildlife hazards, and to ensure that the strategies being employed at the airports are effective, humane, and sufficient. The task force also provides a forum for participants to share their organization's plans that might have an impact on the airports.

New York City Airports Wildlife Hazard Management Steering Committee

The Port Authority and the New York City Mayor's Office created the New York City Airports Wildlife Hazard Management Steering Committee to coordinate efforts and develop regional policies to mitigate wildlife hazards and help implement community-level wildlife management strategies, such as goose population management within the City of New York, land-use practices to prevent introduction of wildlife attractants within a 5-mile radius of the airport, and public communication and outreach. Other agencies invited to participate in the steering committee include USDA, NYSDEC, NYCDEP, NYC Parks & Recreation, National Park Service (NPS), USFWS, Nassau County, and such other members as deemed appropriate by PANYNJ and the City. Members are asked to represent the interests of their agency to ensure that cooperative solutions are reached.

Other Airport Outreach

LGA continues to educate the airline community about wildlife related topics through various meetings. These meetings may include chief pilot's meetings, snow briefings, FOD working groups, station manager's meetings, etc. The purpose of this outreach is to inform the airport community about wildlife issues at LGA and remind them of their role in reducing wildlife hazards at the airport.

Equipment & Supplies

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Wildlife management staff keep wildlife control equipment and supplies in storage facilities located within the Operations Offices on the 1st floor of the Central Terminal Building and in Building 301, located on the AOA. Firearms and ammunition are secured in fire-resistant firearm safes. Equipment and supplies include:

Pyrotechnics
Pyrotechnic launchers
Pyrotechnics safe
Day boxes for pyrotechnics
Shotguns and ammunition
Firearm and launcher cleaning supplies
Laughing and herring gull distress call tapes
Animal carriers
Heavy-duty leather & Kevlar-lined gloves
Catchpole
Binoculars
Wildlife strike collection kits
Wildlife identification field guides
Starling and pigeon traps
Euthanization chamber
Animal handling tongs
Green laser
Clay target launcher and targets

Patrol vehicles are equipped with radios to communicate with Airport Operations and FAA Air Traffic Control Tower (ATCT). A freezer and miscellaneous supplies for handling bird strikes (latex gloves, antibacterial hand wipes, plastic bags, labels, etc.) are available to the wildlife staff. Additional supplies and equipment are purchased as needed.

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WILDLIFE CONTROL PROCEDURES – 14 CFR Part 139.337(f)(5)

Procedures to be followed during air carrier operations.

Assignment of Duties – 14 CFR Part 139.337(f)(5)(i)

Designation of personnel responsible for implementing the procedures.
The section on AUTHORITY – 14 CFR Part 139.337(f)(1) designates personnel responsible for implementing wildlife management procedures. The Airport Operations Manager oversees the airport's wildlife management program and all wildlife control activities at LGA. The Airport Duty Manager directs day-to-day activities. The Port Authority Wildlife Biologist recommends hazard management programs and special projects. Wildlife management staff conduct wildlife patrols, respond to wildlife hazards and wildlife strikes, and oversee the airside activities of all contract employees. All activities that are conducted on the AOA are coordinated through the Airport Duty Manager. Wildlife management staff will log all wildlife strikes and wildlife control activity into the airport's computerized operations log system (CALS).

Inspections – 14 CFR Part 139.337(f)(5)(ii)

Provisions to conduct inspections of the aircraft movement areas and other areas critical to successfully manage known wildlife hazards before air carrier operations begin.

The Wildlife Supervisors and/or Assistant Airport Duty Managers perform continuous inspections of the AOA 24-hours per day, 7-days per week, 365-days per year monitoring and managing potential wildlife hazards to flight. The Airport Duty Managers conduct runway inspections at least once per tour. During the runway inspections, the Airport Duty Manager will search for carcasses from any unreported wildlife strikes. The Assistant Airport Duty Manager conducts inspections of the taxiway system and will search for carcasses on the taxiways, runways and runway safety areas. Parking Lot/Roadway Supervisors inspect landside areas for wildlife hazards to flight. Additional inspections are conducted as needed.

Additionally, Operations staff will search for any wildlife-related problem, such as the presence of attractants, and either rectify the problem immediately or report it to the Airport Duty Manager or Assistant Airport Duty Manager.

Wildlife Hazard Control Measures – 14 CFR Part 139.337(f)(5)(iii)

Before conducting any wildlife control activities for the first time, staff must receive the required Part 139.337(f)(7) training and read and understand all conditions for control in the airport's wildlife permits. Wildlife staff must attend annual recurrent wildlife training and read all new or updated permits when they are issued to ensure that staff is familiar with the most current permit conditions.

Bird Control

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- Harassment

Harassment is generally the first step in controlling bird hazards. Wildlife Management staff will use pyrotechnics, distress calls, or other legal, nonlethal methods to disperse the hazard. Care is taken to disperse birds away from the active runway; this is conducted between aircraft movements whenever possible. If harassment methods are ineffective, lethal control may be used.

New York State listed threatened and endangered species and species of special concern may be harassed using nonlethal control methods only (exception: up to 10 osprey may be taken per year). Federally listed threatened and endangered species may not be harassed or depredated without prior approval from USFWS.

- Capture

Traps may be used to capture starlings, house sparrows, red-winged blackbirds, brown-headed cowbirds, mourning doves, and pigeons. Trapped birds are euthanized and disposed of in accordance with the airport's depredation permit. Any non-target birds that are captured are immediately released. In accordance with state permits, the airport is only authorized to trap and relocate snowy owls. Other raptor species may not be trapped and relocated.

- Lethal Control

Wildlife Management staff will use lethal control when nonlethal control efforts have failed to produce the desired results, when there is an immediate threat to aircraft safety, or as part of a specific depredation program. Birds not specifically listed on the airport's federal depredation permit may be taken if the bird presents an immediate hazard to aircraft. All lethal takes must be reported to the Assistant Chief Operations Supervisor, who will notify the Wildlife Biologist who will file a written report of the emergency take to USFWS and NYDEC within 72 hours. **Threatened, endangered, and species of special concern are excluded from this emergency take clause and may not be killed under any circumstances. Special authorization allows LGA to remove up to 10 osprey (a species of special concern) each year.**

Some circumstances may require birds to be depredated even before harassment methods are attempted. Because of the substantial threats posed by gulls, immediate lethal control will be considered. Nonlethal control methods can be effective in dispersing gulls, however, gulls may be persistent. Lethal control will be used regularly to reinforce the nonlethal control techniques.

LGA has a zero-tolerance policy for geese. Lethal control will be employed immediately in areas where firearms can be safely used. Geese will not be allowed to land or sit on the airport and dispersal or depredation is the first priority.

Mute swans, which when mature weigh approximately 20-24 lbs., pose a significant hazard to aircraft and will be depredated immediately when within shotgun range. When lethal removal is not possible, pyrotechnics or other nonlethal methods will be used.

All depredated birds are disposed of in accordance with the airport's depredation permits. **The carcasses of all threatened endangered, and species of special concern must be saved and turned over to the New York State Department of Environmental Conservation.**

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Mammal Control

Since very few hazardous species of mammal inhabit the airport, mammal management is not a regular component of LGA's wildlife program. However, the wildlife staff are trained to respond to mammal-related hazards and LGA maintains the necessary permits to trap or depredate mammals that create hazards for the airport.

- Harassment

Mammals may be harassed using any available, legal method.

- Capture

The NYS DEC Air Strike Air Hazard Permit allows the Wildlife Staff to trap and depredate hazardous mammals (except deer) with box, cage, foothold, and/or body-gripping traps. These animals must be euthanized and may not be removed or relocated from airport property.

- Lethal Control

Nuisance mammals (including deer) may be shot in accordance with the airport's state Airport Air Strike Hazard Permit.

Domestic animals will be captured and returned to their owners. If absolutely necessary, domestic animals may be shot. Shooting is appropriate only when all other non-lethal methods have been attempted to capture the animal and aircraft safety is threatened, or when a dog or other domestic animal is acting aggressively towards people or exhibits symptoms of rabies.

All depredated mammals will be disposed of in accordance with the airport's Airport Air Strike Hazard Permit.

Air Traffic Control Communication – 14 CFR Part 139.337(f)(5)(iv)

Procedures to communicate/for communicating between personnel conducting wildlife control or observing wildlife hazards and the air traffic control tower.

Procedures & Training

In accordance with the Letter of Agreement (LOA) with the FAA ATCT, ATCT must be contacted prior to entering an active runway or runway safety area at LGA. ATCT is notified when wildlife control activities may impact aircraft or their flight path. When birds are present in large numbers adjacent to active runways, the Wildlife Supervisor will contact the Airport Duty Manager or Assistant Airport Duty Manager and describe the hazard with as much detail as possible. The Airport Duty Manager or Assistant Airport Duty Manager will make a determination as to the severity of the situation and whether to issue a NOTAM or to close the runway.

Additionally, the ATCT has agreed to:

- Notify Port Authority Operations whenever wildlife that may present a potential threat to aircraft operations is observed on or in the vicinity of the airport. Potential threats can include apparent trends towards an increase in wildlife activity on or in the vicinity of LaGuardia Airport, to include wildlife activity at the College Point Marine Waste Transfer Station and at the Rikers Island shore area in close proximity to the AOA.

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- Notify the Port Authority Operations of all wildlife strikes reported to ATCT.
- Coordinate with Port Authority Operations for possible condition reporting through the NOTAM process when flocks of birds are witnessed to persistently remain on or in the near vicinity of the airport movement area.

ATCT will be notified of special wildlife projects that may impact their operations. Notification may be made in writing or verbally.

Wildlife management staff receive initial training in proper ATCT radio procedures during on-the-job training and AOA driver training. Recurrent radio procedures training is provided via Part 139 computer kiosk training.

Equipment

All PANYNJ and USDA airside vehicles are equipped with two-way radios to communicate directly with FAA ATCT. Vehicles are also equipped with amber roof lights to make them more conspicuous to ATCT and flight crew personnel. All Wildlife Supervisor, Assistant Airport Duty Manager, and Airport Duty Manager vehicles are equipped with pyrotechnics. All Wildlife Supervisor vehicles are equipped with firearms.

REVIEW OF WILDIFE HAZARD MANAGEMENT PLAN – 14 CFR Part 139.337(f)(6

Procedures to review and evaluate the wildlife hazard management plan every 12 consecutive months or following an event described in 14 CFR Part 139.337 (b)(1), (b)(2), and (b)(3).

The WHMP will be reviewed once every 12 consecutive months by representatives of all of the staff offices responsible for implementing the WHMP. Upon completion of the annual WHMP review, the airport will complete an annual review report detailing the results of the review and a list of attendees and review coordinator. The report will be submitted to FAA. Following a triggering event, the WHMP will be reviewed monthly by the Wildlife Biologist and a report on the details of the event(s) kept on file. If necessary, the WHMP will be revised based on this review.

Management Plan Effectiveness – 14 CFR Part 139.337(f)(6)(i)

The plan's effectiveness in dealing with known wildlife hazards on and in the airport's vicinity.

The effectiveness of the airport's WHMP will be evaluated on a continual basis by the Port Authority Wildlife Biologist, during the annual review of the plan, and after triggering wildlife strikes. The Port Authority Wildlife Biologist will provide an annual summary of wildlife strikes, wildlife depredation, significant events, and relevant data from any wildlife surveys. Past surveys will be used to evaluate specific trends during the period the surveys were conducted. Data from these surveys will be used to identify the active migratory seasons for certain species so that LGA wildlife staff can be better prepared to manage the species. In addition, the Port Authority Wildlife Biologist will review and summarize all relevant reports related to wildlife management activities at LGA, including the annual reports of the goose

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management programs conducted by New York City and the Port Authority. The Port Authority Wildlife Biologist will also share information from the Wildlife Hazard Task Force, New York City Airports Wildlife Hazard Management Steering Committee, and Birdstrike USA/Canada Meeting. Changes in wildlife permits will also be discussed.

Aspects to Reevaluate – 14 CFR Part 139.337(f)(6)(ii)

Aspects of the wildlife hazard assessment that will be reevaluated.

The Wildlife Biologist will identify changes in bird species through monitoring surveys, strike records, and wildlife control activities. The Wildlife Biologist will modify the WHMP as needed to most effectively manage new and existing wildlife hazards.

A new wildlife hazard assessment will be conducted if there is a noticeable increase in damaging wildlife strikes despite wildlife control measures or significant changes in habitat or land use that are not monitored with existing wildlife monitoring or surveys.

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TRAINING – 14 CFR Part 139.337(f)(7)

A training program conducted by a qualified airport wildlife biologist to provide airport personnel with the knowledge and skills needed to successfully carry out the wildlife hazard management plan required by paragraph (d) of this section.

Airport Operations, Security & Services Division (AOSSD)

Staff responsible for implementing the WHMP, listed below, must take initial and annual recurrent training in wildlife hazard management. This mandatory training, which is taught by a qualified airport wildlife biologist, is based on the airport's WHMP, the WHA, and other topics as recommended in FAA Advisory Circular 150/5200-36, and must be completed initially before the individual can participate in wildlife hazard management and again on a recurrent basis every 12 consecutive months thereafter. Some of the topics covered include: bird identification; methods to reduce wildlife attractants and mitigate wildlife hazards on and off airport property; the laws associated with wildlife control; permitting requirements; wildlife dispersal techniques, including the use of electronic distress calls, pyrotechnics, and other means; depredation record keeping; techniques used for prey-base reductions; effective use of firearms and pyrotechnics, including hands-on training with stationary and moving targets; and strike reporting requirements.

The following AOSSD staff at LGA receive initial and recurrent Wildlife Management training:

- Manager, Airport Operations, Security & Services Division
- Manager, Aeronautical Services
- Chief of Operations
- Airport Duty Managers
- Staff Airport Duty Managers for Part 139 Compliance
- Assistant Airport Duty Managers
- Wildlife Supervisors
- Staff Wildlife Supervisors
- Structural Maintenance Supervisor for Landscaping

AOSSD personnel authorized to use firearms and pyrotechnics receive initial and annual recurrent safety training conducted by either a licensed National Rifle Association (NRA) instructor or other qualified individual. Training consists of classroom and hands-on field instruction on the basic use and safety of firearms and pyrotechnics.

AOSSD staff serving in the following positions receive initial and annual recurrent training in the use of pyrotechnics:

- Airport Duty Manager
- Assistant Airport Duty Manager
- Wildlife Supervisor

AOSSD staff serving in the following positions receive initial and annual recurrent training in the basic use of firearms:

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- Assistant Airport Duty Manager
- Wildlife Supervisor

All newly appointed supervisors receive 4-6 weeks of on-the-job training for their position, which, in addition to a review of the topics above, includes airport familiarization, proper ATCT communications techniques and driver training, use of the NOTAM system, Airport Certification Manual (ACM) familiarization, and review of Operations Procedures and Letters of Agreement.

In addition, newly appointed wildlife supervisors receive on-the-job training from senior staff members and/or the Wildlife Biologist. The topics and length of this training varies based on the experience level of the new employee, but will last for a minimum of 5 days. The training will conclude once the new employee has demonstrated an ability to independently perform all wildlife management job functions.

Other LGA Personnel

LGA Maintenance staff, including at least the Maintenance Group Supervisor, who have responsibilities under the WHMP, attend the initial and annual recurring wildlife hazard management training and also receive wildlife hazard awareness training annually as part of their annual Part 139 computerized kiosk recurrent training requirement.

Other airport staff not responsible for implementing the WHMP will receive wildlife hazard awareness training as part of their 14 CFR Part 139 training. This training is conducted via a computerized kiosk training system.

Resident Engineers receive wildlife hazard awareness training annually as part of their annual 14 CFR Part 139 (kiosk) training and also coordinate with Airport Operations Staff on projects as needed.

Contractors

USDA Wildlife Services staff assigned to the airport receive initial 14 CFR Part 139 training, including Airport Movement Area driver training and LGA wildlife hazard management training. They also must complete annual recurrent 14 CFR Part 139 training, which is conducted using a computerized training kiosk system. USDA-Wildlife Services provides its employees who work at airports with a training course in wildlife hazard management as required by the FAA.

Contractors hired to conduct annual wildlife training will meet the requirements of a qualified biologist per FAA Advisory Circular 150/5200-36.

Records

All initial and recurrent training in Wildlife Management, pyrotechnics and firearms is documented in a database kept on file in the Operations Certification Office, located on the third floor of the Central Terminal Building in Room #3801.

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Appendix A – Wildlife Control Computer Logs

These forms will be completed by the Wildlife Staff in the field. GPS locations can also be assigned to each entry. Staff also have the ability to attach photographs to each report.

Wildlife Control Form

Enter date and time in the Event Date Time field (above)

Airport:

Species (Dominant):

Action Taken

Observed: # Harassed: # Eggs:

Depredated/Euthanized: # Nest:

Trapped: # Relocated: # Released on site:

Other Species (Optional)

Species (Secondary):

Observed: # Harassed:

Depredated/Euthanized:

Trapped:

Method: # Pyros/Ammo Used:

Method #2: # Pyros/Ammo Used:

Duration of Control:

Location:

Other Comments:

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Wildlife Tour Summary

(To be completed by the wildlife supervisor and wildlife agent once per tour)

Airport:

Tour:

RWY	Time(s) of inspection

Select times when low or no wildlife activity was observed*

Time Period	Condition
☐ 00:00 - 01:59	
☐ 02:00 - 03:59	
☐ 04:00 - 05:59	
☐ 06:00 - 07:59	
☐ 08:00 - 09:59	
☐ 10:00 - 11:59	
☐ 12:00 - 13:59	
☐ 14:00 - 15:59	
☐ 16:00 - 17:59	
☐ 18:00 - 19:59	
☐ 20:00 - 21:59	
☐ 22:00 - 23:59	

☐ Firearms Cleaned

☐ Pyro Launcher Cleaned

*Periods of low or no wildlife activity are defined as periods of time when no wildlife control actions are required.

Noteworthy observations, runway inspections, and other comments:

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Wildlife Strike Form

FAA Confirmation Number:

Name of Carrier	Aircraft Make/Model	Engine Make/Model

Aircraft Registration	Enter Time and Date of Strike in Event Data Time Field (See Form Header)

Flight Number	Wildlife/Bird Remains
	☐ Collected ☐ Sent to Smithsonian

Airport (Name/#)	Runway Used	Location if in Route and/or Distance from Airport (nearest town/distance & bearing/Airport)

Height (AGL)	Speed (AS)
ft	kts

Phase of Flight	Parts of Aircraft Struck	S	D	(Cont)	S	D
	A. Radome	☐	☐	H. Propeller	☐	☐
	B. Windshield	☐	☐	I. Wing/Rotor	☐	☐
	C. Nose	☐	☐	J. Fuselage	☐	☐
	D. Engine #1	☐	☐	K. Landing Gear	☐	☐
	E. Engine #2	☐	☐	L. Tail	☐	☐
	F. Engine #3	☐	☐	M. Lights	☐	☐
	G. Engine #4	☐	☐	N. Other	☐	☐
	☐ Bird(s) Ingested (Check for Yes)			If "Other" Explain		

Effect on Flight	Sky Condition	Precipitation
Other		

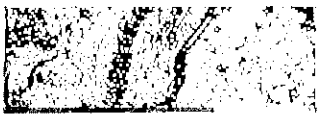
Bird/Other Wildlife Species	Number Seen and/or Struck			Size of Bird(s)
	Number	Seen	Struck	
(Only include confirmed identifications. Speculations, such as pilot comments, should be included in the remarks section below.)	1	☐	☐	
	2-10	☐	☐	
	11-100	☐	☐	

Did Warned of Bird/Wildlife?	Yes

Remarks

Aircraft time out of service	Estimated cost of repairs or replacement ($US)	Estimated other costs ($US) (e.g., reverse load, fuel, and lodging or rescheduling, etc.)
hours		

Reported By	Title	Date Reported
		3/15/2014
Email	Phone	



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Appendix B – Permits

Federal Permit

FEDERAL FISH AND WILDLIFE PERMIT

WITHIN THE PROPERTY BOUNDARIES OF LA GUARDIA AIRPORT, FLUSHING, NY
TEL: 718-533-3482

D. You are authorized to take, transport, possess, and transport the migratory birds specified below to relieve or prevent injurious situations threatening public safety. All take must be done as part of an integrated wildlife damage management program that emphasizes nonlethal management techniques. You may not use this authority for solutions in which migratory birds are merely causing a nuisance.

(1) The following may be lethally taken, by means of shooting:
(a) 200 of each: Atlantic brant, Canada goose, Double-crested cormorants, Mourning Doves and Barn Swallows;
(b) 500 of each: Ring-billed, Laughing, Great Black-backed and Herring Gulls;
(c) 100 of each: Mallards, American Black Duck;
(d) 25 of each: Ruddy Duck and Killdeer;
(e) 10 Osprey and Great Egret;
(f) 5 of each: 5 Great Blue Herons.

(2) The following active nests (including eggs) may be destroyed, including by egg oiling or addling:
(a) 200 Barn swallows;
(b) 50 Killdeer;
(c) 3 of each: Mallards and American Black Duck nests.

ANNUAL REPORT DUE WITH NEXT RENEWAL FORM
USFWS Forms can be found at: http://www.fws.gov/migratorybirdpermits/permits.html

State restrictions: Peregrine falcons and other bird species are listed as Endangered/ Threatened by New York State law and therefore may not be taken, unless otherwise authorized by the New York Department of Environmental Conservation.

E. You are authorized in emergency situations only to take, trap, or relocate any migratory birds, nests and eggs, including species that are not listed in Condition D (except bald eagles, golden eagles, or endangered or threatened species) when the migratory birds, nests, or eggs are posing a direct threat to human safety. A direct threat to human safety is one which involves a threat of serious bodily injury or a risk to human life.

You must report any emergency take activity to your migratory bird permit issuing office (Hadley, MA, by fax to: 413-253-8424), within 72 hours after the emergency take action. Your report must include the species and number of birds taken, method, and a complete description of the circumstances warranting the emergency action.

F. You are authorized to salvage and temporarily possess migratory birds found dead or taken under this permit for: (1) disposal, (2) transfer to the U.S. Department of Agriculture, (3) diagnostic purposes, (4) purposes of training airport personnel, (5) donation to a public charity (those suitable for human consumption), or (6) donation to a public scientific or educational institution as defined in 50 CFR 10.12. Any dead bald eagles or golden eagles salvaged must be reported within 48 hours to the National Eagle Repository at (303) 287-2110 and to the migratory bird permit issuing office by fax to 413-253-8424. The Repository will provide directions for shipment of these specimens.

G. You may not salvage and must immediately report to U.S. Fish and Wildlife Service Office of Law Enforcement any dead or injured migratory birds that you encounter that appear to have been poisoned, shot, electrocuted, have collided with individual power generation equipment, or were otherwise killed or injured as the result of external criminal activity. See USFWS OLE website information below.

H. You may use the following methods of take: (1) other firearms used by USDA only; (2) nets; (3) registered animal drugs (excluding nicarbazin), pesticides and repellents; (4) falconry abatement; and (5) legal lethal and live traps (excluding solo traps). Birds caught live may be euthanized or transported and released to another site approved by the appropriate State wildlife agency, if required. When using firearms, you may use rifles or air rifles to shoot only birds when you determine that the use of a shotgun is inadequate to resolve the injurious situation. You may use paint ball guns to haze birds or deter birds only when other methods of hazing are ineffective.

Anyone who takes migratory birds under the authority of this permit must follow the American Veterinary Medical Association Guidelines on Euthanasia when euthanization of a bird is necessary.
(http://www.avma.org/issues/animal_welfare/euthanasia.pdf)

I. You may temporarily possess and stabilize sick and injured migratory birds and immediately transport them to a federally licensed rehabilitator for care.

J. The following subpermittees are authorized: Supervisory staff of the Port Authority of NY & NJ.
In addition, any other person who is (1) employed by or under contract to you for the activities specified in this permit, or (2) otherwise designated a subpermittee by you in writing, may exercise the authority of this permit.

K. You and any subpermittee(s) must comply with the attached Standard Conditions for Migratory Bird Depredation Permits. These standard conditions are a continuation of your permit conditions and must remain with your permit.

For suspected illegal activity, immediately contact USFWS Law Enforcement at: Valley Stream, NY: 516-825-3928

FEDERAL AVIATION ADMINISTRATION

APPROVED: [signature]

DATE: 3/24/2014

Standard Conditions
Migratory Bird Depredation Permits
50 CFR 21.41

All of the provisions and conditions of the governing regulations at 50 CFR part 13 and 50 CFR part 21.41 are conditions of your permit. Failure to comply with the conditions of your permit could be cause for suspension of the permit. The standard conditions below are a continuation of your permit conditions and must remain with your permit. If you have questions concerning these conditions, refer to the regulations, or, if necessary, contact your migratory bird permit issuing office. For copies of the regulations and forms, or to obtain contact information for your issuing office, visit http://www.fws.gov/migratorybirds/depredationpermits.html.

1. To minimize the lethal take of migratory birds, you are required to humanely apply nonlethal methods of harassment in conjunction with lethal control.
   [Note: Explosive Pest Control Devices (EPCDs) are regulated by the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF). If you plan to use EPCDs, you require a Federal explosives permit, unless you are covered under 27 CFR 555.141. Information and contacts may be found at http://www.atf.gov/explosives/pest-control-explosives-faq.html.]

2. Shotguns used to take migratory birds can be no larger than 10-gauge and must be fired from the shoulder. You must use nontoxic shot listed in 50 CFR 20.21(j).

3. You may not use blinds, pits, or other means of concealment, decoys, duck calls, or other devices to lure or entice migratory birds into gun range.

4. You are not authorized to take, capture, harass, or disturb bald eagles or golden eagles, or species listed as threatened or endangered under the Endangered Species Act found at 50 CFR 17, without additional authorization.

   For a list of threatened and endangered species in your state, visit the U.S. Fish and Wildlife Service's Threatened and Endangered Species System (TESS) at http://ecos.fws.gov/tess_public/.

5. If you encounter a migratory bird with a Federal band issued by the U.S. Geological Survey Bird Banding Laboratory, Laurel, MD, report the band number to 1-800-327-BAND or http://www.reportband.gov.

6. This permit does not authorize take or release of any migratory birds, nests, or eggs on federal lands without additional prior written authorization from the applicable Federal agency, or on State lands or other public or private property without prior written permission or permits from the landowner or custodian.

7. Unless otherwise specified on the face of your permit, migratory birds, nests, or eggs taken under this permit must be tagged over to the U.S. Department of Agriculture for official purposes, or
   (a) donated to a public educational or scientific institution as defined by 50 CFR 10, or
   (b) completely destroyed by burial or incineration, or
   (c) with prior approval from the permit issuing office, donated to persons authorized by permit or regulation to possess them.

8. A subpermittee is an individual to whom you have provided written authorization to conduct work as a part of the permitted activities in your absence. Subpermittees must be at least 18 years of age. As the permittee, you are legally responsible for ensuring that your subpermittees are adequately trained and adhere to the terms of your permit. You are responsible for maintaining current records of who you have designated as a subpermittee, including copies of designation letters you have provided.

9. You and any subpermittees must carry a legible copy of this permit, including its Standard Conditions, and display it upon request whenever you are exercising its authority.

10. You must maintain records as required in 50 CFR 13.46 and 50 CFR 21.41. All records relating to the permitted activities must be kept at the location indicated in writing by you to the migratory bird permit issuing office.

11. Acceptance of this permit authorizes the U.S. Fish and Wildlife Service to inspect any wildlife held, and to inspect or copy any permits, books, or records required to be kept by the permit and controlling regulations.

12. You may not conduct the activities authorized by this permit if doing so would violate the laws of the applicable State, county, municipal or tribal government or any other applicable law.

MBPD - 03/2011

FEDERAL AVIATION ADMINISTRATION

APPROVED: [signature]

DATE: 3/24/2014

State Permit

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Depredation Licenses - Airport # 44

LICENSE

Under the Environmental Conservation Law (ECL)

Licensee and Facility Information

License Issued To:
LAURA C FRANCOEUR
THE PORT AUTHORITY OF NY AND NJ,
ATTN: LAURA FRANCOEUR
225 PARK AVE., SOUTH 8-1209
NEW YORK, NY 10003

(718) 244-3775
COUNTY: QUEENS
REGION: 2

Facility:
LAGUARDIA AIRPORT
GRAND CENTRL PKWY

QUEENS, NY

DEC Contact Information

DIVISION OF FISH, WILDLIFE AND MARINE RESOURCES
SPECIAL LICENSES UNIT
625 BROADWAY, ALBANY, NEW YORK 12233-4752
PHONE: (518) 402-8885 FAX: (518) 402-8925
WEBSITE: www.dec.state.ny.us

License Authorizations

Depredation Licenses - Airport
License # 44

New License Effective Date: 4/21/2013 Expiration Date: 3/31/2014

NYSDEC Approval

By acceptance of this license, the licensee agrees that the license is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this license.

License Regulations

6 NYCRR Part 182

Issued License Page 1 of 4

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Depredation Licenses - Airport # 44

ECL 11-0535
6 NYCRR Part 175
ECL 11-0521
ECL 11-0505 (5)

DEPREDATION LICENSES - AIRPORT - LICENSE CONDITIONS

1. DEPA – Authorization for Non-lethal Control Methods: The licensee is authorized to use department approved non-lethal control methods on migratory birds, including state listed endangered or threatened species or species of special concern (6 NYCRR Part 182), that are creating or will create a hazard to human health or safety at LaGuardia Airport Queens County, New York.

2. DEPA – Authorization for Lethal Control Methods: The licensee is authorized to use lethal control methods (pursuant to take limits and methods provided by Federal License MS719527-1) on migratory birds, except endangered or threatened species or species of special concern (6 NYCRR Part 182), when non-lethal control methods have failed to deter birds from entering LaGuardia Airport airspace or when immediate removal of birds is required to protect human health or safety.

3. DEPA - Authorization for Lethal Control Methods Exception: The licensee is authorized to take no more than 10 Osprey (Pandion haliaeetus) on airport grounds when non-lethal control measures have failed and the animal has landed on a runway in use or poses a direct threat to human safety.

4. DEPA – Federal Emergency Authorization with Exception: The licensee is authorized in emergency situations only to take, using shotguns not larger than 10 gauge any migratory bird, (except bald eagles, golden eagles or endangered or threatened species with the exception of 10 Osprey (Pandion haliaeetus) listed in Condition DEPA – Authorization for Lethal Control Methods Exception) when the migratory birds, are posing a direct threat to human safety. A direct threat to human safety is one which involves a threat of serious bodily injury or a risk to human life.

5. DEPA – Control Measures: Control measures shall include non-lethal methods designed to frighten migratory birds from the authorized location(s).

6. DEP – ALL – License not Valid Without Federal Permit: This license is not valid without a corresponding Federal Permit from the US Fish and Wildlife Service. The licensee shall comply with all terms and conditions of the Federal Permit.

7. DEPA – Training Requirement Prior to Use of Lethal Control Methods: Only persons who have received training in species identification and wildlife control techniques within the previous two (2) years are authorized to use lethal control methods pursuant to this license.

8. DEPA – No Take of Non - Target Species: This license does not authorize the taking of any non-target species. In the event such species are taken, the licensee shall cease activities and contact the New York State Department of Environmental Conservation's Regional Wildlife Manager at:

Regional Wildlife Manager
NYSDEC REGION 2 HEADQUARTERS

Issued License Page 2 of 4

FEDERAL AVIATION ADMINISTRATION
APPROVED: [signature]
DATE: 3/24/2014

47-40 21ST ST
LONG ISLAND CITY, NY11101 -5407

9. DEPA – Retrieval and Disposal of Carcasses: The licensee shall attempt to retrieve birds shot or found dead on the property and properly dispose of the carcasses by donation to public, scientific and or educational institutions, or by prompt burial and/or incineration.

10. DEPA – Reporting Endangered or Threatened Species Found Dead: The licensee shall immediately freeze and hold the carcasses of any endangered or threatened species found dead, and shall notify the NYSDEC Endangered Species Unit (518) 402-8369 within three (3) business days of finding the carcass.

11. DEP –ALL – Designated Agent: The licensee may designate agents to conduct activities authorized by this license. Such designations shall be made in writing by sending a list with the name and address of the person(s) the licensee wishes to designate as an agent to the NYSDEC Special Licenses Unit at the address listed on the front of this license. This list shall be current and on file at the NYSDEC Special Licenses Unit. The licensee is responsible for all actions taken by designated agents under this license.

12. DEPA – Reporting Requirement - Regional Manager: The licensee shall file a written annual report prior to the expiration date of this license. Such annual report shall contain: a) name of the licensee, b) license number, c) number of birds shot or found dead on the property by species, d) any band numbers or other marking present on birds shot or found dead, and e) number of individuals shooting. The licensee shall send this report to:

Regional Wildlife Manager
NYSDEC REGION 2 HEADQUARTERS
47-40 21ST ST
LONG ISLAND CITY, NY11101 -5407

The licensee shall consult with the Regional Wildlife Manager as deemed appropriate.

13. DEP – ALL – Licensee Shall Submit copies of Federal Reports: The licensee shall submit copies of all reports required under their Federal Permit to the NYS DEC Special Licenses Unit at the address listed on the front of this license prior to the expiration of this license.

GENERAL CONDITIONS – Apply to ALL Authorized Licenses

1. GC – Licensee Shall Read All Conditions: The licensee shall read all license conditions prior to conducting any activities authorized pursuant to this license.

2. GC – License is Not Transferrable: This license is non transferrable and is valid only for the person identified as the licensee.

3. GC – Licensee Responsible for Federal, State or Local Permits/Licenses: The licensee is responsible for obtaining any and all necessary, corresponding Federal, State or local permits or licenses prior to conducting any activity authorized pursuant to this license.

4. GC – Reasons for Revocation: This license may be revoked for any of the following reasons:

i. licensee provided materially false or inaccurate statements in his or her application, supporting documentation or on required reports;
ii. failure by the licensee to comply with any terms or conditions of this license;

iii. licensee exceeds the scope of the purpose or activities described in his or her application for this license;
iv. licensee fails to comply with any provisions of the NYS Environmental Conservation Law, any other State or Federal laws or regulations of the department directly related to the licensed activity;
v. licensee submits a check, money order or voucher for this license or application for this license that is subsequently returned to the department for insufficient funds or nonpayment after the license has been issued.

5. GC – Licensee Shall Carry Copy of License: The licensee shall carry a copy of this license or a document provided by the department, if relevant, when conducting activities pursuant to this license.

6. GC – Licensee Shall Notify of Change of Address: The licensee shall notify the Special Licenses Unit in writing, by mail or email, within five (5) days of the official change of residence.

7. GC – Licensee is Liable for Designated Agents: If designated agents are authorized pursuant to this license, the licensee shall be liable and responsible for any activities conducted by designated agents pursuant to this license or any actions by designated agents resulting from activities authorized by this license.

8. GC – Licensee Renewal: The licensee shall submit a written request for the renewal of this license prior to the expiration date listed on the license. The licensee shall include accurate and complete copies of any required reports with their renewal request. This renewal paperwork shall be sent to:

NYSDEC
Special Licenses Unit
625 Broadway
Albany, NY 12233-4752.

This license is deemed expired on the date of expiration listed on the license.

NOTIFICATION OF OTHER LICENSEE OBLIGATIONS

MN – Licensee is Liable
The licensee shall be liable and responsible for any activities conducted under the authority of this license or any actions resulting from activities authorized by the license.

MN – Access by Law Enforcement
The licensee shall allow representatives of the NYS DEC Division of Law Enforcement to enter the licensed premises to inspect his or her operations and records for compliance with license conditions.

Trespassing Prohibited
This license is not a license to trespass. The licensee shall obtain permission from the appropriate landowner/land manager prior to conducting activities authorized pursuant to this license.

FEDERAL AVIATION ADMINISTRATION
APPROVED: [signature]
DATE: 3/24/2014

State Air Strike Hazard Permit

New York State Department of Environmental Conservation
Division of Fish, Wildlife and Marine Resources
Bureau of Wildlife
[illegible]
Phone: [illegible] - FAX: [illegible]
Website: [illegible]

AIRPORT AIR STRIKE HAZARD PERMIT
Issued pursuant to Environmental Conservation Law [illegible]

[illegible]	[illegible]	TELEPHONE NUMBER
[illegible]	Port Authority of New York & New Jersey	718-533-3102

[illegible]
LaGuardia Airport, Hangar 2-7, Flushing, NY 11371
attn D. Sierra

The permittee and any person employed by, or acting under authorization of the permittee may kill or scare nuisance wildlife at any time when it becomes a threat to aircraft and airport safety and/or operations as stipulated below:

A. Nuisance wildlife, for the purposes of this permit, means all wildlife except threatened and endangered species, species of special concern, and migratory birds requiring federal and/or state permits and licenses.

B. The permittee is authorized to use: (1) firearms to kill nuisance wildlife and/or (2) audio/visual scare devices such as shell crackers, live ammunition, air guns, falconry and trained dogs to repel nuisance wildlife.

C. The permittee is authorized to capture and kill nuisance wildlife (except deer) by using box, cage, foothold, and/or body-gripping traps.

D. Nuisance wildlife may not be removed or relocated from the site.

E. All carcasses shall be disposed of by burial or incineration, unless otherwise directed (see Special Conditions, if any).

F. This permit must be carried and displayed whenever exercising the authority granted herein.

G. Any shooting, trapping or killing must be entered on the Daily Log (enclosed with your permit) on the date of occurrence.

H. This permit is continuous until revoked. Date of issuance is: December 31, 2009

I. The operating period for this permit is [illegible] to December 31. The permittee is required to [illegible] by January 1 of each year to the Bureau of Wildlife [illegible] the species, date taken, sex, and disposition of each animal taken [illegible] under the authority of this permit.

J. This permit is [illegible] applicable local, state and/or federal laws/regulations and [illegible] in K.

K. Special Conditions:

1. Only persons who have received training in species identification and wildlife control techniques within the past two (2) years are authorized to use lethal control methods pursuant to this permit.

2. The permittee shall develop and implement a wildlife control plan consistent with FAA requirements. This plan shall include but not be limited to vegetation management, insect control, solid waste management, stormwater control and landscape management. The approved plan shall be submitted to the Department upon acceptance by the FAA.

3. List of New York State endangered, threatened and species of special concern is attached.

Joseph J. Pane
Principal Fish & Wildlife Biologist

December 31, 2009
Date

FEDERAL AVIATION ADMINISTRATION
APPROVED: Frank J. Lopano
DATE: 3/24/2014

LETTER OF AGREEMENT

WILDLIFE HAZARD MANAGEMENT

The Port Authority of New York and New Jersey
LaGuardia Airport

and

The Federal Aviation Administration
LaGuardia Airport Air Traffic Control Tower

EFFECTIVE: June 1, 2013

1. **PURPOSE:** This Letter of Agreement (LOA) defines responsibilities and procedures to be used by the Port Authority of New York and New Jersey LaGuardia Airport (LGA) Operations and Federal Aviation Administration (FAA) LGA Air Traffic Control Tower (ATCT) to mitigate wildlife hazards to aviation in support of the LGA Wildlife Hazard Management Plan.

2. **BACKGROUND:** Wildlife strikes pose a significant threat to aircraft operating on and near the airport. Timely communication about wildlife hazards among flight crews, FAA ATCT, and LGA Operations can reduce the threat posed by wildlife and help sustain safe aircraft operations at LGA.

3. **CANCELLATION:** This Agreement supersedes the previous version dated June 11, 2010 and shall remain in effect until cancelled or superseded.

4. **DEFINITIONS:**

Air Operations Area (AOA): Any area of the airport used or intended to be used for landing, takeoff, or surface maneuvering of aircraft, including such paved areas or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to associated runway, taxiways, or apron.

Wildlife Strike ("Strike"): Occurs when an aircraft and wildlife collide with each other. Strikes may be reported by flight or ground crews, witnessed or assumed based upon carcasses found within the runway or taxiway environment and/or animal remains and/or damage is found on aircraft.

Wildlife: Any wildlife animal including, without limitation, any wildlife mammal, bird, reptile, fish, amphibian, mollusk, crustacean, arthropod, coelenterate, or other invertebrate, including any part, product, egg, or offspring thereof. As used in this LOA, wildlife also includes feral and domestic animals out of the control of their owners.

FEDERAL AVIATION ADMINISTRATION

APPROVED: Frank J. Aquino

DATE: 3/24/2014

5. PROCEDURES & RESPONSIBILITIES:

LGA Operations and ATCT agree to comply with the following procedures to mitigate wildlife hazards observed by either Party or reported by aircraft flight or ground crews.

a) ATCT shall:

1) Notify LGA Operations whenever wildlife that may present a potential threat to aircraft operations is observed on or in the vicinity of the airport. Potential threats can include apparent trends toward an increase in wildlife activity on or near the airport, including wildlife activity at the North Shore Marine Transfer Station and the portion of the Rikers Island shore area visible from the AOA.

2) Notify LGA Operations of all wildlife strikes reported to ATCT by flight crews or others.

3) Coordinate with LGA Operations, as appropriate, regarding airfield condition reporting through the Automatic Terminal Information Service (ATIS) when flocks of birds are observed and persistently remain on or in the vicinity of the AOA.

b) LGA Operations shall:

1) Immediately notify ATCT of any imminent wildlife threats to aircraft operations.

2) Notify ATCT before using pyrotechnics or firearms that may cause disruption to aircraft operations.

3) When notified by ATCT of wildlife activity that poses a potential threat to aircraft operations, take action to mitigate the threat via harassment, depredation or, as appropriate, by issuing a Notice to Airmen (NOTAM).

4) Request from ATCT clearance to conduct a runway inspection following wildlife strikes that have occurred on the airport.

Agreed:

Ed McKenna
Manager, LGA ATCT
Federal Aviation Administration

Thomas L. Bosco
General Manager
LaGuardia Airport

FEDERAL AVIATION ADMINISTRATION
APPROVED:
DATE: 3/24/2014

Appendix F – NY City/Airports WHMP Memorandum of Understanding

[illegible] and [illegible] at Under[illegible]
[illegible] the City of New York and
The Port Au[illegible] of New York and New Jersey
For Wildlife Hazard Management:

[illegible] Port Au[illegible] of New York and New [illegible] ("Port Authority") is [illegible] for the operation and [illegible] of LaGuardia [illegible] ("LGA") and John F. Kennedy International Airport ([illegible] located in the New York [illegible] (the "City") [illegible] (collectively "the Parties"); and

WHEREAS, the Federal Aviation Administration ("FAA") has determined that birds and other wildlife are a serious threat to public safety [illegible]

WHEREAS, the National Transportation Safety Board has reported that on January 15, 2009 [illegible] Airways Flight [illegible] collided with birds and experienced [illegible] which were ingested in the Hudson River following take-off from LGA, resulting in [illegible] and

WHEREAS, studies have shown that approximately 90 percent of all wildlife [illegible] occur at or near airports when aircraft are below altitudes of 3,000 feet [illegible] wildlife strikes at these elevations are especially dangerous because aircraft are operating at high speeds and are close to or on the ground; and

WHEREAS, aircraft wildlife strikes [illegible] and local [illegible] of aviation [illegible] facilities, and globally, they have [illegible] human fatalities and destroyed [illegible] Weller, [illegible] wildlife strikes to civil [illegible] U.S. [illegible] Report No. 15 [illegible] (USA); and

WHEREAS, [illegible], while every effort should be made to [illegible] wildlife [illegible] attention should be focused on [illegible] that pose the greatest [illegible] by FAA [illegible] facilities and/or a qualified [illegible] employed

WHEREAS, [illegible] recently released 1990-2008 FAA-USDA wildlife reports (See [illegible] *Wildlife Strikes to Civil Aviation*) are the most hazardous birds [illegible] with [illegible] the United States due to this [illegible] serve [illegible] New York City [illegible]

WHEREAS, FAA Advisory Circular 150/5200-33 recommends land use and wildlife hazard management [illegible] within a [illegible] from the edge of any [illegible] Airport Operations Area (AOA) to eliminate any [illegible] that may [illegible] hazards to wildlife [illegible] into a [illegible] and

FEDERAL AVIATION ADMINSTRATION
APPROVED: Carolyn Martinez
DATE: 10/11/10

Original Date: 08/20/2010

Revision Date:

FAA Approval: _____

WHEREAS, the Port Authority and the City agree that efforts should be undertaken to reduce wildlife hazards within 5 miles of JFK and LGA, and or other airports as deemed appropriate to provide aviation safety.

NOW THEREFORE the City and the Port Authority agree to the following:

1. Purpose

The purpose of this Memorandum of Understanding (MOU) is to establish a structure to assist [illegible] procedures for minimizing wildlife hazards in and the City in New York City [illegible] vicinity of LGA and JFK while protecting the environment, [illegible] resources.

2. New York City Airports Wildlife Hazard Management Steering Committee

The City and the Port Authority agree that the New York City Airports Wildlife Hazard Management Steering Committee, in 2009 to coordinate the [illegible] of several [illegible] and [illegible] wildlife hazards to [illegible] New York [illegible] will be convened from time to [illegible] agree by the City [illegible] Airports [illegible] planned direct actions [illegible] any other party.

3. Scope of Cooperation and Coordination

The Parties

(a) Agree to develop interagency coordination procedures.
(b) Agree that the activity of most concern includes, but is not limited to, responses to known wildlife hazards.
(c) Agree that "wildlife" are those animals, as identified and listed in FAA databases, that are involved in aircraft wildlife strikes. The term "wildlife" also refers to feral animals and domesticated animals not under the control of their owners.
(d) Agree to focus on off-airport habitats adjacent to the airport on or near JFK and LGA, as determined on an ongoing basis by the Steering Committee.
(e) Agree that whenever a significant aircraft [illegible] or a potential [illegible] one is identified, a Party may initiate action with [illegible] upon request to evaluate the situation and develop [illegible] to reduce the identified strike probability. The agency [illegible] work [illegible] actively to deter [illegible] and should be done in the [illegible] the vicinity to reduce potential strikes involving that species.

4. Public Communication and Outreach

(a) Agree that appropriate press representative(s) be designated to address inquiries by news media and the public at large.

FEDERAL AVIATION ADMINSTRATION
APPROVED: Evelyn Martinez
DATE: 10/1/10

Original Date: 08/20/2010

Revision Date:

FAA Approval: _____

(b) Agree that the City and the Port Authority will work with State and [illegible] on coordinated, targeted outreach to [illegible] with [illegible] a particularly high wildlife hazard.

(c) Agree that the City and the Port Authority will work with State and [illegible] partners to identify the appropriate point of contact for [illegible] land [illegible] with wildlife hazard concerns, and agree that the City will route all inquiries to that agency.

5. Land use practices

(a) The City and the Port Authority will continue to coordinate and advise on wildlife hazard mitigation efforts in New York City to increase aviation safety to the [illegible] possible.

(b) The Parties [illegible] Port Authority on land use [illegible] on properties within the vicinity of [illegible] and [illegible].

(c) The Parties [illegible] appropriate future agreements, or [illegible] to [illegible] but not limited to, leases for [illegible] occupancy [illegible] properties owned by the City in the vicinity of LGA and [illegible] provisions that require the occupant to tenant to adopt practices that [illegible] of those animals [illegible] wildlife whose presence would be a potential [illegible] to [illegible]

6. Removal of Canada Geese

(a) Removal of Geese from City-Owned Property

The City and the United States Department of Agriculture – Animal and Plant Health Inspection Service – Wildlife Services (USDA, APHIS-WS) have executed an intergovernmental agreement, as amended on June 9, 2010, pursuant to which USDA, APHIS-WS has agreed to remove resident Canada geese from select City-owned properties. The agreement provides that the City agrees to reimburse USDA, APHIS-WS for its actual expenses. The Port Authority agrees to reimburse the City for its payments to USDA, APHIS-WS in the total amount of: (1) one half of the total [illegible] the payments made by the City to USDA, APHIS-WS pursuant to the above agreement, or (2) $45,535.00, whichever amount is smaller. The Port Authority agrees to make such payment upon presentation of copies of all invoices submitted to the City by USDA, APHIS-WS pursuant to that agreement, with proof of approval and payment of said invoices by the City to:

Mr. Julio Perdiz
Manager
Aviation Technical Services
The Port Authority of New York and New Jersey
225 Park Avenue South, 9th Floor
New York, N.Y. 10003

(b) Disposal costs

FEDERAL AVIATION ADMINSTRATION
APPROVED: Evelyn Martinez
DATE: 10/1/10

Original Date: 08/20/2010

Revision Date:

FAA Approval: _____

The City agrees to reimburse the Port Authority for one half of the total payments made by the Port Authority to a contractor or contractors engaged to dispose of solid waste resulting from the actions of USDA, APHIS-WS as set forth in Section 6 (b) in the total amount of: (1) one half of the total amount of the payments made by the Port Authority to a contractor or contractors, or (2) $8,000, whichever amount is smaller. The City agrees to make such payment upon presentation of copies of all invoices submitted by said contractor or contractors, with proof of approval and payment of said invoices by the Port Authority to:

Christopher A. Nadareski
Section Chief, Wildlife Studies
Department of Environmental Protection
465 Columbus Avenue
Valhalla, New York 10595

7. Miscellaneous

(a) The term of this MOU shall commence immediately and shall terminate upon the earlier of the completion of the activities of the New York City Airports Wildlife Hazard Management Steering Committee, or the termination of this MOU as set forth herein or as subsequently agreed to by the parties, or December 31, 2050, the end of the term of the lease agreement between the City and the Port Authority under which the Port Authority operates LaGuardia Airport and John F. Kennedy International Airport.

(b) Nothing in this MOU shall prevent either party from entering into separate agreements with any other organization or individual for the purpose of providing wildlife damage management services exclusive of those provided for under this agreement.

(c) Nothing in this MOU is intended to relieve either party of its obligations with respect to wildlife hazards and/or maintenance of a safe flying environment.

(d) This MOU is based on evolving information, may be revised periodically without public notice, and may be amended at any time by mutual agreement of the parties in writing. It may be terminated at any time by mutual agreement of the parties in writing, or by one party provided that party notifies the other in writing at least 90 days prior to effecting such action. In the event of termination, the Port Authority agrees to reimburse the City for half the amounts paid to USDA, APHIS-WS for services performed up to the date of termination.

CITY OF NEW YORK:

BY: [illegible] Date [illegible]
Cas He[illegible]
Dire[illegible]
New York, N.Y. 10007

FEDERAL AVIATION ADMINSTRATION
APPROVED: Evelyn Mastriny
DATE: 10/1/10

Original Date: 08/20/2010

Revision Date:

FAA Approval: _____

Appendix F – NY City/Airports WHMP Memorandum of Understanding

THE PORT AUTHORITY OF NEW YORK AND N[illegible]

BY [illegible] Date

[illegible] M. B[illegible]

[illegible]r

Aviation Department

The Port Authority of New York and New Jersey

225 Park Avenue South, 9th Floor

New York, N.Y. 10003

FEDERAL AVIATION ADMINISTR[illegible]

APPROVED: [illegible]

DATE: 10/1/10

Original Date: 08/20/2010

Revision Date:

FAA Approval: _____

139.339
AIRPORT CONDITION REPORTING

Reporting Airport Conditions

The Airport Duty Manager or his/her designee is authorized to issue Airport Condition Reports to the FAA Air Traffic Control Tower, the official NOTAM disseminating agency (currently NOTAM Manager – FAA's direct-entry, web based digital NOTAM system), and LGA air carriers. A sample copy of the Airport Condition Report (NOTAM) form is included at the end of this section.

Airport Condition Reporting System

The procedures for issuing the Airport Conditions Reports are as follows:

- The Airport Duty Manager or his/her designee will advise the FAA Air Traffic Control Tower via fax, telephone, or radio when issuing NOTAMs as outlined in an LOA located at the end of this section.
- The Airport Duty Manager or his/her designee may also notify air carriers, airport users, and tenants via OpsNet and/or the High Speed Notification System.

A current listing of personnel authorized to issue Airport Condition Reports is provided to the NOTAM disseminating agency Office. Due to the sensitivity of this information, it has not been included in this manual. A copy resides in LGA Chief Operations Supervisor's office.

Conditions Requiring a Surface Condition Report

The following airport conditions that may affect the safe operation of air carriers shall be disseminated to the official NOTAM disseminating agency, or disseminated locally to the FAA Air Traffic Control Tower and air carriers if official NOTAM disseminating agency does not accept the condition for NOTAM distribution:

(1) Construction or maintenance activity on movement areas, safety areas, or loading ramps and parking areas

(2) Surface irregularities on movement areas, safety areas, or loading ramps and parking areas

(3) Snow, ice, slush, water or other contaminents on movement areas or loading ramps and parking areas

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APPROVED: Evelyn Martinez
DATE: 9/28/12

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(4) Snow piled or drifted on or near movement areas in such a height that all air carrier aircraft propellers, engine pods, rotors, and wingtips may not clear the snowdrift or snow banks as the aircraft's landing gear traverses any full strength portion of the movement area

(5) Object on the movement area or safety areas contrary to Section 309

(6) Malfunction of any required lighting system, holding position signs, or ILS critical area signs

(7) Unresolved wildlife hazards in accordance with Section 337

(8) Non-availability of any required rescue and firefighting capability required in Sections 317 and 319

(9) Any other conditions that may otherwise adversely affect the safe operations of air carriers

Records

The Airport Duty Manager or his/her designee shall prepare and keep, for at least 12 consecutive calendar months, a record of NOTAM dissemination of airport condition information to air carriers. The records will be maintained in the Computerized Airport Log (CAL) and/or in the NOTAM Manager database.

NOTAM's are issued in accordance with AC 150/5200-28, current edition.

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FAA Approval DATE: 9/28/12

LETTER OF AGREEMENT

NOTIFICATION PROCESS WHEN USING NOTAM MANAGER

The Port Authority of New York and New Jersey
LaGuardia Airport Operations

and

The Federal Aviation Administration
LaGuardia Air Traffic Control Tower

EFFECTIVE: October 1, 2012

1. **PURPOSE:** This agreement identifies responsibilities for notifying the Federal Aviation Administration (FAA) LaGuardia Air Traffic Control Tower (ATCT) when Surface Area Notices to Airmen (NOTAMs) created by the Airport are issued or cancelled via the FAA Digital NOTAM System.

2. **CANCELLATION:** This agreement does not cancel any other agreements between LaGuardia Airport (LGA) and the LGA Air Traffic Control Tower (ATCT) pertaining to NOTAMs.

3. **SCOPE:** The procedures herein standardize issuance of surface NOTAMs by the Airport via the FAA Digital NOTAM System and define the NOTAM notification process between the Airport and LGA ATCT.

4. **DEFINITION:** For the purposes of this agreement:
   - The Airport means the Airport Operations Duty Manager or designee.
   - NOTAM Manager means the FAA's direct-entry, Web-based Digital NOTAM System.

5. **RESPONSIBILITIES:** As required by Title 14 CFR 139 and the NOTAM Manual (JO 7930.2), the Airport is responsible for observing and reporting via NOTAM the condition of movement areas and other surface areas associated with the Airport. Surface Area NOTAMs include Aerodrome, Runway, Taxiway, Apron, Ramp, Services and Obstruction NOTAMs.

6. **EFFECTIVE DATE and TERM:** The effective date of this agreement will be the activation date of NOTAM Manager at this airport. This agreement shall remain in effect until cancelled or superseded.

7. **NOTAM:** Under the current, legacy NOTAM system, the Airport contacts Lockheed Martin Flight Service (LMFS) to create and cancel Surface Area NOTAMs. LMFS is responsible for the classification, accuracy, format, and dissemination of NOTAM information from the Airport and for cancelling NOTAMs when notified to do so by the Airport. LMFS is also responsible for notifying the affected ATC facility when issuing and cancelling NOTAMs.

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DATE: 9/28/12

8. **DIRECT-ENTRY DIGITAL NOTAM:** Effective upon the activation date of NOTAM Manager at LGA, the Airport will no longer use LMFS for processing NOTAMs, but will instead use FAA Web-based software (NOTAM Manager) to directly enter Surface Area NOTAMs into the United States NOTAM System (USNS).

9. **NOTIFICATION:** When the Airport generates or cancels a NOTAM using the FAA's Digital NOTAM system, the Airport shall notify LGA ATCT by telephone, facsimile (fax) or radio.

10. **FAILURE OF THE DIRECT-ENTRY NOTAM SYSTEM:** If there is a failure of the Digital NOTAM system, the Airport will continue to notify LGA ATCT whenever it issues or cancels a surface NOTAM, regardless of the NOTAM system used.

Ed McKenna
Air Traffic Manager
LaGuardia Air Traffic Control Tower
Federal Aviation Administration

Thomas L. Bosco
General Manager
LaGuardia Airport
Port Authority of NY & NJ

FEDERAL AVIATION ADMINISTRATION
APPROVED: Evelyn Martinez
DATE: 9/28/12

LaGuardia Airport - Operations Log

Log Entered

Entered By:

Event Date/Time

Days Open

ISSUED:
Date:

CANCELLED

Received By:

Time:

L Tower OPS SUP

FSS NOTAM #:

Z A.F.S.S. ENTER

Component:

Condition:

Reason:

Effective Period: START STOP

Sent By:

OPS Sup

Tower

L L A.F.S.S.

Z Z

Entered By

Memo

End of Report

FEDERAL AVIATION ADMINSTRATION
APPROVED: Vincent E. Cimino
DATE: JAN 2 7 2005

139.341
IDENTIFYING, MARKING AND LIGHTING CONSTRUCTION & OTHER UNSERVICEABLE AREAS

Responsibilities

The ADM has responsibility for planning, scheduling and coordinating construction activity on aeronautical operating areas (AOA) in accordance with AC 150/5370-2, current edition. Where practical, the ADM will assign a qualified representative from Port Authority Operations to serve as a Site Safety Observer, (SSO), on construction sites within the aeronautical movement area, (AMA), to ensure operational safety in and around the perimeter of the site and to maintain the integrity of the protected AOA surfaces.

At LGA, the Resident Engineer's staff is responsible for monitoring construction activity on the airport to prevent interruption of utilities.

Marking and Lighting

LGA shall mark and, if appropriate, light constructions sites and activities in a manner acceptable to the Administrator and in accordance with AC 150/5340-1 and AC 150/5370-2, current editions, as follows:

1) Each construction area and unserviceable area that is on or adjacent to any:
   a) movement area or any other area of the airport on which air carrier aircraft may be operated;
   b) Each item of construction equipment and each construction roadway, which may affect the safe movement of aircraft on the airport.
2) Any area adjacent to a NAVAID that, if traversed, could cause derogation of the signal or the failure of the NAVAID.

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APPROVED: Evelyn Martinez
DATE: 9/25/12

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Construction Equipment/Marking

All construction equipment operated on the AOA shall be equipped with a flashing yellow beacon and/or an orange and white checkered flag in accordance with AC 150/5370-2, current edition, and remain under positive escort while operating on the AOA. Safe operation of construction equipment on aeronautical areas is the responsibility of the ADM or designated representative through the Resident Engineer. No construction equipment shall be parked or operated within the RSA of an active runway or ILS critical area unless the runway is closed to air carrier operations or prior coordination to work within the ILS critical area has been made with the FAA.

Unserviceable Areas

Low mass barricades and/or reflective orange traffic cones supplemented with either steady burning or flashing red lights will be used to separate all construction/maintenance areas from the AMA.

For construction projects that require a temporarily closure of a runway, LGA shall incorporate the use of a lighted X in accordance with AC 150/5370-2 and AC150/5345-55, current editions. The lighted X will be used during both night and daytime operations and shall be placed at each end of the runway facing the approach.

Protection of Utilities and NAVAIDS

Special attention is given to avoid disruption to utilities that serve NAVAIDS and other air traffic facilities. Where applicable, a Construction Safety and Phasing Plan (CSPP) will be developed for each project prior to start of construction. The CSPP will incorporate procedures for marking out and protecting power supplies and underground utilities. Utility plans for airfield utilities are maintained on file in the Resident Engineer's Office. Prior to any construction project, pre-construction meetings are scheduled to review all utility plans with the purpose of avoiding damage to existing utilities, cables, wires, conduits, pipelines or other underground facilities.

Condition Reporting

Information concerning closed, hazardous construction areas, unserviceable areas or facilities will be disseminated to all air carriers, FAA, and other users of the airport utilizing the NOTAM system in accordance with AC 150/5200-28, current edition, OPSnet, the Operations High-Speed Notification System, and/or memoranda.

139.343
NONCOMPLYING CONDITIONS

Airport Operations shall inform the Airport Manager of any condition which he/she feels warrants closing of all or a portion of the airport to air carrier traffic. The Airport Manager shall decide the severity of the condition and necessity for closing and shall take appropriate actions and notify the FAA and air carriers accordingly. Should, in the Airport Manager's opinion, any areas of the airport be deemed unsafe for air carrier operations, it shall be so marked by Airport Operations. The air carriers will be so notified by the Airport Manager or his/her designee.

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possess migratory birds. Permits must be renewed annually through the Region 5 United States Fish & Wildlife Service (USFWS) office in Hadley, Massachusetts.

The Wildlife Biologists (PANYNJ) must complete a report of the species taken under the permit at the time of renewal or expiration of the depredation permit. The report must contain the species taken, the dates the species were taken, how many of each species were taken, the number of nests and eggs destroyed, and the final disposition of the carcass (buried, incinerated, or donated to permitted individuals or agencies). The annual report and the permit renewal form must be returned to USFWS no later than 30 days prior to the expiration of the permit. Copies of these reports must also be sent to NJDEP Division of Fish and Wildlife.

2. *Federal Fish & Wildlife Permit - Bald Eagle Depredation*
TEB has a bald eagle depredation permit to disperse eagles using nonlethal methods. This permit is renewed every five years.

An annual report detailing any activities conducted under the eagle depredation permit must be submitted to USFWS and NJDEP by the Wildlife Biologists (PANYNJ).

3. *Federal Fish & Wildlife Permit - Special Purpose Possession*
The Port Authority maintains a salvage permit that allows the airports to possess migratory birds for educational purposes. This permit expires every three (3) years and requires an annual report.

4. *Federal Fish & Wildlife Permit - Canada Goose Nest & Egg Permit*
The Port Authority maintains a permit that allows the airports to remove Canada goose nest and eggs on the properties listed between March 1 – June 30. An annual report of activities is required by October 30 and the permit is renewed annually.

NJ State Wildlife Permits

1. *NJ State Fish & Wildlife Permit - Depredation Control Permit*
In accordance with the New Jersey Administrative Code and the New Jersey Statutes Annotated (Title 23) the airport has obtained a permit to take or harass migratory birds and nongame birds. The permit must be renewed annually and is only valid in conjunction with valid federal permits. Upon expiration or along with a request for renewal, the Port Authority Biologist issues a final report detailing all activities conducted under this permit to the NJDEP Division of Fish and Wildlife.

2. *NJ State Fish & Wildlife Permit - Special Wildlife Management Permit*
The airport maintains a permit issued by the NJDEP Division of Fish and Wildlife that permits the trapping and removal of certain mammals and non-migratory game birds (mute swans, ringed necked pheasant, and wild turkey). The Port Authority Biologists must renew this permit annually and must submit an annual report to NJDEP Division of Fish and Wildlife.

3. *NJ State Dept. of Health & Senior Services – Pigeon Depredation Letter of Permission*
The New Jersey Department of Health and Senior Services (NJDHSS) have regulatory authority over pigeon management in New Jersey under NJSA 23:4-55 and 26:2-86. The Port Authority has been issued a letter of permission from NJDHSS that allows the airport to remove pigeons and their nests and eggs. This permit is valid until revoked. An annual report is due to NJDHSS at the end of each permission period.

4. *NJ State Fish & Wildlife Permit – Salvage Permits (Migratory Bird and Nongame Wildlife and Mammals)*
The NJDEP has issued two permits to the Port Authority of New York and New Jersey for Teterboro Airport (TEB) and Newark Liberty International Airport (EWR) that allows the airports to salvage and possess migratory birds and non-migratory game birds and mammals. These permits expire annually and are maintained in conjunction with federal salvage permits issued to John F. Kennedy International Airport (JFK) that cover all Port Authority of New York & New Jersey airports.

   Copies of the depredation permits are carried with all personnel conducting wildlife control on the airport.

Pesticide Permits & Regulations
The use of pesticides in NJ is conducted pursuant to the NJ Pesticide Control Regulations (New Jersey Administrative Code Title 7 Chapter 30), which is administered by the NJ Department of Environmental Protection (DEP), Pesticide Control Program (PCP). These permits are maintained by the contractors who apply these pesticides.

Firearm Permits
PANYNJ and AvPORTS require all Airport Operations staff that are authorized to use firearms at the airport to obtain a New Jersey State Firearms Purchaser Identification Card. These permits are obtained through a New Jersey State Police Department. Non-New Jersey residents must obtain this card through the New Jersey State Police Department.

RESOURCES
Identification of resources that the certificate holder will provide to implement the plan.

Personnel
The Airport Operations Department (AvPORTS) is primarily responsible for wildlife management. Wildlife contractors, including USDA WS, also assist the airport with wildlife management. PANYNJ contracts with USDA WS for consulting and technical, operational, and research assistance at TEB including wildlife monitoring, goose population management, and starling, pigeon, and small mammal trapping.

Equipment & Supplies
The Airport Operations staff keeps wildlife control equipment and supplies at Hangar 1. Firearms, pyrotechnics, and ammunition are secured in firearm safes. Equipment and supplies include:

- Pyrotechnics
- Pyrotechnic launchers
- Shotguns and ammunition
- Firearm and pyrotechnic launcher cleaning supplies
- Pigeon, starling, and mammal traps
- Animal graspers (like snake tongs)
- Cachpole (noose)
- Binoculars
- Wildlife strike collection kits (latex gloves, DNA cards, cotton swabs, alcohol wipes)
- Wildlife strike supplies (plastic bags, labels, hand wipes, etc.)
- Wildlife identification field guides
- Heavy-duty freezer

WILDLIFE CONTROL PROCEDURES

Procedures to be followed during air carrier operations.

Assignment of Duties

The Airport Operations Department is staffed 24 hours, 7 days a week and the available staff responsible for wildlife control is as follows:

A Shift (7:00 A.M. – 3:00 P.M.) 1 Airport Operations Supervisor 2 Airport Operations Coordinators*	**B Shift (3:00 P.M. – 11:00 P.M.)** 1 Airport Operations Supervisor 2 Airport Operations Coordinators*
C Shift (11:00 P.M. – 7:00 A.M.) 2 Airport Operations Coordinators* 1 Airport Operations Supervisor	

** A minimum of 1 Airport Operations Supervisor and 2 Airport Operations Coordinators will be on duty at all times.*

Generally, the Manager of Operations & Security (PANYNJ), Wildlife Biologists (PANYNJ), Manager of Airport Operations (AvPORTS), Assistant Manager of Airport Operations (AvPORTS), and the Manager of Construction, Wildlife and Security (AvPORTS) are available during normal business hours. These schedules may vary depending on special projects and the needs of the airport.

The Wildlife Biologists (PANYNJ) will direct the overall management of all wildlife control activities and will review and monitor all wildlife activities and strike reports.

The Airport Operations Supervisors (AvPORTS) will conduct daily runway sweeps, respond to wildlife strikes, supervise contract employees, and conduct wildlife patrols. The Operations Staff will enter all wildlife strikes and wildlife control activity (species, numbers, type of activity conducted, and location) into the airport's computerized operations log by the end of each shift (Appendix A).

Inspections

A minimum of two runway sweeps will be conducted each day (morning and night). During the runway sweeps, the Operations Staff will search for carcasses from any unreported wildlife strikes. Additional runway sweeps will be conducted as needed.

During wildlife patrols, the Airport Operations Supervisors (AvPORTS) and Airport Operations Coordinators (AvPORTS) disperse or depredate birds and other wildlife that are creating or may create a hazard to aircraft. Additionally, staff will search for any wildlife-related problem, such as the presence of attractants and either rectify the problem or report it to the Manager of Construction, Wildlife and Security (AvPORTS).

Wildlife Hazard Control Measures

Before conducting any wildlife control activities for the first time, staff must read and understand all conditions for control in the airport's wildlife permits. Staff must read all new or updated permits when they are issued to ensure that staff is familiar with the most current permit conditions.

Bird Control

- Harassment

Airport Operations staff will use pyrotechnics or other legal non-lethal methods to disperse wildlife hazards. If initial harassment methods are ineffective, assistance may be obtained from additional operations or wildlife contract staff or lethal control (see below) may be used. **New Jersey State listed threatened and endangered species may be harassed using nonlethal control methods only. Federally listed threatened and endangered species may not be harassed without prior approval from USFWS.** Bald eagles may be harassed using nonlethal methods only. Pyrotechnics may not be shot directly at eagles and eagles may not be disturbed at active nest sites.

Pyrotechnics will be stored in the firearms safe when not in use and stored in the ammo box while on patrol. Protective eyewear and earplugs will be worn and pyros will be loaded and fired from outside the vehicle.

Gulls, European starlings, Canada geese, and mallards will be aggressively harassed using pyrotechnics or other hazing methods; lethal control may also be used by trained staff as necessary. **Airport Operations staff will maintain a zero tolerance policy for geese and gulls and will not allow geese to land or sit on airport property.** Within the AOA, lethal control of geese and gulls will be the first priority and harassment will be used when lethal control is not feasible.

- Capture

European starlings, house sparrows, red-winged blackbirds, brown-headed cowbirds, or pigeons can be trapped and euthanized. When used, traps must be checked at least once per day and food and water must be available in the trap for captured birds. Birds will be euthanized and disposed of in accordance with the airport's depredation permits. Any non target birds must be immediately released from the trap. Nets, boxes, or blankets may also be used to capture injured birds.

Under some circumstances, some raptor species and ring-necked pheasants may also be trapped and relocated from the airport, in accordance with the applicable permits. Food and water are not required in raptor traps because they will be checked frequently. All raptors are relocated a

significant distance from TEB and outside the 5-mile radius of other airports. Relocated raptors that return to the airport may be euthanized according to the airport's depredation permits. Pheasants may only be relocated under an agreement with Pheasants Forever and NJDEP.

- Lethal Control

Airport Operations staff may use lethal control when non-lethal control efforts have failed to disperse wildlife or when there is an immediate threat to aircraft safety. Lethal control consists of shooting, euthanasia by cervical dislocation, or egg addling. Lethal control will be conducted within the AOA only, unless otherwise authorized by the NJDEP Division of Fish and Wildlife. All depredated birds should be disposed of in accordance with the airport's depredation permits.

Geese will be depredated whenever present in the AOA, unless shooting is unsafe or not feasible. When lethal control cannot be used, geese will be aggressively harassed using nonlethal methods.

Gulls and mallards will also be targeted for lethal control. Shooting gulls acts as a deterrent to gulls flying over the airport and may reinforce non-lethal control methods. Mallards often become immune to non-lethal control methods and require lethal control to reinforce nonlethal methods.

Canada goose eggs will be oiled, addled, and/or destroyed in accordance with the airport's depredation permits to prevent the eggs from hatching. Once eggs have been destroyed, Staff must re-check nests regularly to make sure that no re-nesting has occurred. Mallard, barn swallow, killdeer, and other bird nests and eggs will also be destroyed under the airport's permits (these may require the use of the emergency take clause). Pigeon and starling nests and eggs will be destroyed at any time. The Wildlife Biologists (PANYNJ) will coordinate with NJDEP for nest and egg control of any threatened, endangered, or species of special concern.

Birds, nests, or eggs taken under the emergency take clause of the federal depredation permit must be reported to the Wildlife Biologists (PANYNJ), who must file a written report of the emergency take to USFWS within 72 hours. **Threatened and endangered birds are excluded from this emergency take clause and may not be killed under any circumstances.**

Mammal Control

- Harassment

Mammals can be harassed using any available legal method; however, capture or lethal controls are more effective for mammal control.

- Capture

Catchpoles, nets, and live traps can be used to capture mammals, particularly feral and domestic cats and dogs. Traps are checked at least once per day and will not be left open in extreme heat or cold. Airport Operations staff will contact the local animal control shelter to arrange for pick up of any stray dogs or cats. Severely injured wildlife may be taken to a veterinarian or wildlife rehabilitator for medical care.

- Lethal Control

Mammals such as cottontail rabbits, woodchucks, skunks, opossums, muskrat, red or gray fox, raccoon, coyotes, and white-tailed deer will be trapped and/or shot in accordance with the airport's depredation permit. Shooting of dogs or cats is appropriate only when aircraft safety is threatened or when the animal is acting aggressively towards people or exhibits symptoms of rabies.

All mammal depredations will be recorded by date, species and number and disposed of in accordance with the airport's airport depredation permit.

Communication with Air Traffic Control Tower

Procedures & Training

Airport Operations Staff will receive initial training in proper radio procedures during on-the-job training and driver training. Recurrent training is provided via Part 139 computer kiosk training.

The ATCT must be contacted prior to entering an active runway or runway safety area at TEB. The Airport Operations Supervisor will notify the ATCT when wildlife control activities may impact aircraft or their flight path. If wildlife hazards are present on or adjacent to active runways, the Airport Operations Supervisor (AvPORTS) will coordinate with the air traffic control tower, and if necessary, suspend arriving or departing air traffic until the hazard is eliminated.

Airport Operations staff will eliminate or mitigate the wildlife hazard and/or issue a NOTAM. If aircraft operations were suspended, staff will immediately contact ATCT to resume aircraft operations upon completion of wildlife hazard efforts.

ATCT will be notified of special projects such as spotlight surveys or large roost dispersals. Notification will be made in writing or verbally over the telephone.

TEB and AvPORTS Management staff will work with TEB ATCT Management staff to develop a procedure for runway sweeps when ATC is changing traffic flows. In the event of significant bird activity or a reported bird strike, the ATCT will inform the Airport Operations Supervisor (AvPORTS) who will respond accordingly.

Equipment

All vehicles driven within the AOA are equipped with radios to communicate directly with FAA ground control, FAA tower control, and TEB Airport Operations. Vehicles are also equipped with amber strobe lights on the roof to aid in visibility from the ATCT. Vehicles without radios will only be allowed in the AOA under escort by a vehicle with proper radio equipment and lights. All Airport Operations Supervisor and Airport Operations Coordinator vehicles are equipped with pyrotechnics.

REVIEW OF WILDLIFE HAZARD MANAGEMENT PLAN
Procedures to review and evaluate the wildlife hazard management plan every 12 consecutive months or following a triggering event.

The WHMP will be reviewed once every 12 consecutive calendar months by representatives from all PANYNJ and AvPORTS staff responsible for implementing the WHMP. Upon completion of the annual WHMP review, the airport will complete an annual review report detailing the results of the review, a list of attendees, and review coordinator. The report will be submitted to FAA. Following a triggering event, the WHMP will be reviewed monthly by the Wildlife Biologist and a report on the details of the event(s) kept on file. If necessary, the WHMP will be revised based on this review.

Management Plan Effectiveness
The plan's effectiveness in dealing with known wildlife hazards on and in the airport's vicinity.

The effectiveness of the airport's WHMP will be evaluated on a continual basis by the Wildlife Biologists (PANYNJ) and during the annual review of the plan. The Wildlife Biologists (PANYNJ) will provide an annual summary of wildlife strikes, wildlife depredation, significant events, and data from any wildlife surveys. In addition, the Wildlife Biologists (PANYNJ) will review and summarize all relevant reports related to wildlife management activities at or around TEB. The Wildlife Biologists (PANYNJ) will also share information from the Bird Strike Committee USA and/or Canada Conference.

Aspects to Reevaluate
Aspects of the wildlife hazards described in the wildlife hazard assessment that should be reevaluated.

The Wildlife Biologists (PANYNJ) will identify changes in bird or mammal species through monitoring surveys, strike records, or wildlife control activities. The Wildlife Biologists (PANYNJ) will modify the WHMP as needed to address wildlife hazards.

A new wildlife hazard assessment will be conducted if there is noticeable increase in damaging wildlife strikes despite wildlife control measures or significant changes in habitat or land use that are not monitored with existing wildlife monitoring or surveys.

TRAINING
A training program conducted by a qualified wildlife damage management biologist to provide airport personnel with the knowledge and skills needed to successfully carry out the wildlife hazard management plan required by paragraph (d) of this section.

Airport Operations Staff

Staff members (specified in the Authority section of this WHMP) responsible for implementing the WHMP must take initial and annual recurrent training in wildlife management taught by a qualified wildlife damage management biologist or trainer who meets FAA requirements for teaching wildlife management training as per FAA Advisory Circular 150/5200-36. This mandatory training is based on the airport's WHMP and WHA and other topics as mentioned in FAA Advisory Circular 150/5200-36 and must be taken every 12 consecutive calendar months. Additionally, the Wildlife Biologists and/or other trained Wildlife Staff are available to accompany staff members on field inspections and routine patrols to instruct wildlife control procedures or to help with wildlife identification.

Airport Operations staff that attend the training in wildlife hazard management are provided with a bird identification field guide. Airport Operations staff is required to keep a copy in their vehicle for reference while on duty.

Airport Operations staff authorized to use firearms and pyrotechnics receive initial and recurrent safety training to use these tools. Airport Operations Supervisors (AvPORTS), Assistant Manager of Airport Operations (AvPORTS), and Manager of Construction, Wildlife and Security (AvPORTS) positions receive firearms training. Firearm training will be conducted by a National Rifle Association (NRA) certified instructor. Initial firearm training will consist of classroom and field training for a minimum of 4 hours. Recurrent training will be conducted in the field for a minimum of 30 minutes during which staff must demonstrate that they are familiar with the handling of the firearm and are able to shoot. Self-study will also be encouraged for additional instruction.

Airport Operations staff, including those authorized in the use of firearms, are also trained in the use of pyrotechnics. Pyrotechnic training may be conducted through on-the-job or classroom training or a combination of the two.

The Assistant Airport Manager (AvPORTS), Manager of Construction, Wildlife and Security Airport (AvPORTS), and Airport Operations Supervisors (AvPORTS) must obtain a New Jersey Firearms Purchaser Identification Card within their first six months in that position.

The Wildlife Biologists (PANYNJ) will attend the Bird Strike Committee USA and/or Canada conference at least once every three years to maintain their [illegible] certification.

Other TEB Personnel

The Airport Maintenance Manager attends mandatory annual wildlife hazard management training. The rest of TEB Airport Maintenance staff receive wildlife hazard awareness training annually as part of their annual 14 CFR 139 (kiosk) training.

Resident Engineers receive wildlife hazard awareness training annually as part of their annual 14 CFR 139 (kiosk) training and also coordinate with Airport Operations Staff on projects as needed.

APPENDIX A – WILDLIFE CONTROL/WILDLIFE STRIKE/FOUR REPORT COMPUTER LOGS

These forms will be completed by the Wildlife Staff in the field. Staff have the ability to attach photographs to each report

Wildlife Control Form

Enter date and time in the Event Date Time field (above)

Species

Species (Unknown)

Action Taken

Scared # Harassed # Eggs

Lethally Euthanized # Dead

Trapped # Relocated # Released on site

Other Species Captured

Species (Secondary)

Scared # Released

Lethally Euthanized

Trapped

Method

Method 2

Location

Other Comments

Pyro/Aerosol Used

Pyro/Aerosol Used

APR 2 4 2014

APPENDIX A – WILDLIFE CONTROL/WILDLIFE STRIKE/TOUR REPORT COMPUTER LOGS

Wildlife Strike Form

APR 2 4 2014

Tour Report

Wildlife Tour Summary

Airport:

Tour:

APPENDIX B - PERMITS

Federal Fish and Wildlife Permit (Migratory Birds)
Federal Fish and Wildlife Permit (Eagle Depredation)
State Depredation Control Permit (Migratory Birds)
State Special Wildlife Management Permit (Mammals)
Federal Fish and Wildlife Salvage Permit (Migratory Birds)
State Salvage Permit (Migratory Birds)
State Salvage Permit (Mammals)
Letter of Permission, New Jersey Department of Health and Senior Services (Pigeons)
Canada Goose Nest and Eggs Permit (USFWS)

APR 2 4 2014

APPENDIX B

FEDERAL FISH AND WILDLIFE PERMIT - MIGRATORY BIRD [illegible]

FEDERAL FISH AND WILDLIFE PERMIT

TETERBORO AIRPORT
ATTN: JEFF KOLODZINSKI
225 PARK AVE 7TH FLOOR
NEW YORK, NY
U.S.A.

MB872505.0

NAME AND TITLE OF PRINCIPAL OFFICER: JEFF KOLODZINSKI
SENIOR WILDLIFE BIOLOGIST

DESIGNATION: AI

WITHIN THE PROPERTY BOUNDARIES OF TETERBORO AIRPORT, TETERBORO, NJ

D. You are authorized to [illegible] temporarily possess, and transport the migratory birds specified below to relieve or prevent injurious situations impacting public safety. All take must be done as part of an integrated wildlife damage management program that emphasizes nonlethal management techniques. You may not use this authority for situations in which migratory birds are merely causing a nuisance.

(1) The following may be lethally taken:

(a) 100 of each: Canada goose, Mourning Doves, Ring-billed Gulls
(b) 25 of each: Great Blue Herons, Wood Ducks, American Coot
(c) 50 of each: Herring, Great black-backed Gull, Laughing gulls, American Black duck, Great egret, Barn Swallows, Least Sandpipers,
(d) 10 of each: Turkey vultures and Black vultures, American robin, Double-crested cormorants,
(e) 150 Mallards
(f) 20 Tree swallows
(g) 60 Killdeer

(2) The following active nests (including eggs) may be destroyed:
(a) up to 30 nests of Mallards and

ANNUAL REPORT DUE WITH NEXT RENEWAL FORM

NJ STATE CO-SIGNATURE REQUIRED: DATE: 2/28/14

CHIEF, MIGRATORY BIRD [illegible] - REGION 5

DATE 07/24/2014

APR 2 4 2014

APPENDIX B
(Continued)

(b) up to 15 nests of Killdeer (and any eggs contained therein) within the airport boundaries.

(3) The following may be live-trapped and relocated.
(a) 25 American Kestrels and Red-tailed Hawks
Alternatively authorized to kill these birds, when relocation is not possible.

State restrictions: Peregrine Falcons are listed as Endangered by New Jersey State Law and therefore may not be taken. Other bird species are protected under New Jersey State Endangered Species Law and may not be taken in accordance with State law, unless otherwise authorized by the New Jersey Division of Fish, Game and Wildlife.

E. You are authorized in emergency situations only to take, trap or relocate any migratory birds, nests and eggs, including species that are not listed in Condition (except bald eagles, golden eagles, or other listed or threatened species) when the migratory birds, nests, or eggs are posing a direct threat to human safety. A direct threat to human safety is defined as involves a threat of serious bodily injury or a risk to human life.

You must report any emergency take activity to your migratory bird permit issuing office Hadley, NJ at 413-253-8424(fax), within 72 hours after the emergency take action. Your report must include the species and number of birds taken, method, and a complete description of the circumstances warranting the emergency action.

F. You are authorized to salvage and temporarily possess migratory birds found dead or taken under this permit for: (1) disposal; (2) transfer to the U.S. Department of Agriculture; (3) diagnostic purposes; (4) purposes of training airport personnel; (5) donation to a public charity (those suitable for human consumption); or (6) donation to a public scientific or educational institution as defined in 50 CFR 10.12. Any dead bald eagles or golden eagles salvaged must be reported within 48 hours to the National Eagle Repository at (303) 287-2110 and to the migratory bird permit issuing office at 413-253-8424(fax). The Repository will provide directions for shipment of those specimens.

G. You may not salvage and must immediately report to U.S. Fish and Wildlife Service Law Enforcement any migratory birds that appear to have been poisoned, shot, electrocuted, have collided with industrial power generation equipment, or were otherwise injured as the result of potential criminal activity.

H. You may use the following methods of take: (1) Shotguns (1a) other types of firearms by USDA/APHIS-Wildlife Services only; (2) nets; (3) registered animal drugs (excluding mecarbazin) pesticides and repellents; (4) falconry abatement; and (5) legal lethal and live traps (excluding pole traps). Birds caught live may be euthanized or transported and relocated to another site approved by the appropriate State wildlife agency, if required. When using firearms, you may use rifles or air rifles to shoot any bird when you determine that the use of a shotgun is inadequate to resolve the injurious situation. The use of any of the above techniques is at your discretion for each situation.

I. You may temporarily possess and stabilize sick and injured migratory birds and immediately transport them to a federally licensed rehabilitator for care.

J. The following subpermittees are authorized: Employees of Teterboro Airport, Port Authority of NY and NJ, USDA/APHIS-Wildlife Services and Erin Dresteprand. In addition, any other person who is (1) employed by or under contract to you for the activities specified in this permit or (2) otherwise designated a subpermittee by you in writing, may exercise the authority of this permit.

K. You and any subpermittees must comply with the attached Standard Conditions for Migratory Bird Depredation Permits. These standard conditions are a continuation of your permit conditions and must remain with your permit.

L. A "No Feeding Policy" must be in place.

For Canada Geese Egg Addling or Nest Destruction you MUST register each year between January 1 and June 30 at: https://epermits.fws.gov/eRCGR. You must return to website and report your take before October 31 each year.

For suspicious illegal activity, immediately contact USFWS Law Enforcement at: Elizabeth, NJ 908-787-1321

APR 2 4 2014

APPENDIX B
(Continued)

Standard Conditions
Migratory Bird Depredation Permits
50 CFR 21.41

All of the provisions and conditions of the governing regulations at 50 CFR part 22 and 50 CFR part 21.41 are conditions of your permit. Failure to comply with the conditions of your permit could be cause for suspension of the permit. The standard conditions below are a continuation of your permit conditions and must remain with your permit. If you have questions regarding these conditions, refer to the regulations or, if necessary, contact your migratory bird permit issuing office. For copies of the regulations and forms, and to obtain contact information for your issuing office, visit: http://www.fws.gov/migratorybirds/mbpermits.html

1. To minimize the lethal take of migratory birds, you are required to continually apply non-lethal methods of harassment in conjunction with lethal control.
   [Note: Explosive Pest Control Devices (EPCDs) are regulated by the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF). If you plan to use EPCDs, you require a federal explosives permit, unless you exempt under 27 CFR 555.141. Information and contacts may be found at http://www.atf.gov/explosives/faq/pest-control.htm.]

2. [illegible] used to take migratory birds can be no larger than 10-gauge and must be fired from the shoulder. You must use nontoxic shot listed in 50 CFR 20.21(j).

3. You may not use blinds, pits, or other means of concealment, decoys, duck calls, or other devices to lure or entice migratory birds into your range.

4. You are not authorized to take, capture, harass, or disturb bald eagles or golden eagles, or species listed as threatened or endangered under the Endangered Species Act found in 50 CFR 17, without additional authorization.

   For a list of threatened and endangered species in your state, visit the U.S. Fish and Wildlife Service's Threatened and Endangered Species System (TESS) at http://www.fws.gov/endangered

5. If you encounter a migratory bird with a Federal band issued by the U.S. Geological Survey Bird Banding Laboratory, Laurel, MD, report the band number to 1-800-327-BAND or http://www.[illegible]d.gov.

6. This permit does not authorize take or release of any migratory birds, nests, or eggs on Federal lands without additional prior written authorization from the applicable Federal agency, or on State lands or other public or private property without prior written permission or permits from the landowner or custodian.

7. Unless otherwise specified on the face of the permit, migratory birds, nests, or eggs taken under this permit must be:
   (a) turned over to the U.S. Department of Agriculture for official purposes, or
   (b) donated to a public educational or scientific institution as defined by 50 CFR 10, or
   (c) completely destroyed by burial or incineration, or
   (d) with prior approval from the permit issuing office, donated to persons authorized by permit or regulation to possess them.

(page 1 of 2)

APR 2 3 2014

APPENDIX B
(Continued)

8. A subpermittee is an individual to whom you have provided written authorization to conduct some or all of the permitted activities in your absence. Subpermittees must be at least 18 years of age. As the permittee, you are legally responsible for ensuring that your subpermittees are adequately trained and adhere to the terms of your permit. You are responsible for maintaining current records of who you have designated as a subpermittee, including copies of designation letters you have provided.

9. You and any subpermittees must carry a legible copy of this permit, including these Standard Conditions, and display it upon request whenever you are exercising its authority.

10. You must maintain records as required in 50 CFR 13.46 and 50 CFR 21.7. All records relating to the permitted activities must be kept at the location indicated in writing by you to the migratory bird permit issuing office.

11. Acceptance of this permit authorizes the U.S. Fish and Wildlife Service to inspect any wildlife held, and to audit or copy any permits, books, or records required to be kept by the permit and governing regulations.

12. You may not conduct the activities authorized by this permit if doing so would violate the laws of the applicable State, county, municipal or tribal government or any other applicable law.

(DPRD - 12/3/2011)

(page 2 of 2)

APR 24 2014

APPENDIX B

FEDERAL FIELD AND WILDLIFE PERMIT - BALD EAGLE DEPREDATION

Within the property boundaries of Teterboro Airport, Teterboro, NJ

endangering

PAGE 1 OF 2

ANNUAL REPORT DUE 1/31 EACH YEAR PER STANDARD CONDITION (J)

APPENDIX B

[illegible] WILDLIFE PERMIT – BALD EAGLE [illegible] ACTION
(continued)

[illegible] ns/3

[illegible] and shall include:

(a) Locations of control activities affecting bald eagles. Locations shall be noted using digital maps and by referencing a common coordinate system (e.g., latitude/longitude, universal transverse mercator system, etc.);
(b) Non-lethal scare devices and scare tactics used to move or disperse bald eagles;
(c) An estimate of the number of bald eagles affected;
(d) Methods used to reduce attraction of bald eagles to airport property.

[illegible] *main with your permit.*

[illegible] USFWS [illegible] at Elizabeth, NJ 908-757-[illegible]

PAGE 2 OF 2

APR 2 4 2014

APPENDIX B
[illegible] WILDLIFE PERMIT - SPECIAL PURPOSE [illegible]

[illegible] Valle[illegible]

APPENDIX B
(Continued)

NEW JERSEY DIVISION OF
Fish and Wildlife

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF FISH & WILDLIFE
WILDLIFE PERMITS UNIT
Exotic & Nongame Wildlife Permits
26 Route 173 West
Hampton NJ 08827

BOB MARTIN
Commissioner

PHONE: (908) 735-5450 - FAX: 908-735-5689
E-mail Address: EXOTICPERMITS@dep.state.nj.us

DEPREDATION CONTROL PERMIT

In conjunction with Federal Fish and Wildlife Depredation at Airports Permit Numbers **MB671079-0,** expiring 02/28/2015; **MB822595-0**, expiring 02/28/2015; Eagle Depredation Permit Number **MB58308A-1**, expiring 10/31/2016 and Eagle Depredation Permit Number **MB13586B-0**, expiring 07/31/2018, State authorization is granted to:

PORT AUTHORITY OF NY & NJ
Jeff Kolodzinski
225 Park Ave South, 9th Floor
New York, NY 10003

Valid for use by permittee named above and any person who is under the direct control of, or who is employed by the permittee, only to the extent necessary to carry out their work for the purposes authorized herein.

SPECIAL CONDITIONS:

1. Per Federal Fish and Wildlife Permits listed above and the Department of the Interior, Fish and Wildlife Service, Migratory Bird Permit Office, Standard Conditions Migratory Bird Depredation Permits 50 CFR 21.41 and Standard Conditions – Eagle Depredation Permits 50 CFR 22.23.
2. Authorized to take mute swans and migratory birds to reduce threats to aircraft and human safety, as defined on Federal Permit. All takes must be done as part of an Integrated Wildlife Damage Management Program, using appropriate non-lethal management techniques. Non-lethal tools should be used to the extent appropriate in an effort to minimize lethal takes.
3. Depredation control under this permit may only take place at the Newark Liberty International Airport, Newark NJ, Teterboro Airport, Teterboro, NJ and the New Jersey Marine Terminals in Elizabeth and Jersey City, NJ.
4. Eagle depredation may only take place within the boundaries of Teterboro Airport and Newark Liberty International Airport and *ALL* conditions listed on the federal permit must be strictly adhered to.
5. Authorized to use non-lethal scare devices, scare tactics or frightening devices to move and disperse NJ Endangered and Threatened bird species that are endangering human safety due to a high risk of a serious bird strike to landing and departing aircraft. Authorized to use air horns, pyrotechnics, and drive vehicles with horns as necessary to scare NJ Endangered and Threatened bird species. Pyrotechnics must not be shot directly at the birds.
6. Raptor species may be captured and relocated in accordance with the corresponding Federal Fish and Wildlife Depredation at Airports Permits (mentioned above). Raptors that are trapped on the airport may be surrendered to the Raptor Trust. The Raptor Trust will determine the timing and location for release of any adult or young birds that are surrendered to them. Prior to relocating any raptors during the nesting season, efforts will be made to determine if raptors are nesting on the airport. If raptor eggs/young are present, effort must be made to collect the eggs and/or young and transport them to the Raptor Trust to be raised until fledging.
7. Lethal control for Snowy Owls should only be used in emergency situations and/or after non-lethal methods have failed to provide the necessary safety to air traffic.
8. Shotguns are the only firearm that may be used for lethal control.

FEDERAL AVIATION ADMINISTRATION APPROVED
JUL 21 2014

Fish and Wildlife

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION

BOB MARTIN
Commissioner

DIVISION OF FISH & WILDLIFE
WILDLIFE PERMITS UNIT
Exotic & Nongame Wildlife Permits
26 Route 173 West
Hampton NJ 08827

PHONE: (908) 735-5450 - FAX: 908-735-5689
E-mail Address: EXOTICPERMITS@dep.state.nj.us

DEPREDATION CONTROL PERMIT

SUBPERMITTEES: Port Authority/Newark Liberty Airport Operations personnel, Teterboro Airport Operations personnel, USDA APHIS Wildlife Services personnel.

NJ PERMIT VALID ONLY WITH CURRENT, CORRESPONDING FEDERAL FISH & WILDLIFE DEPREDATION PERMITS.

Carry and display this permit on request when conducting any activity authorized herein.

All carcasses collected under this permit must be promptly destroyed by burying or incineration.

An annual report MUST be submitted to the US FEDERAL FISH & WILDLIFE SERVICE and the NJ DIVISION of FISH & WILDLIFE by January 31 for the preceding calendar year ending December 31.

DATE ISSUED: JANUARY 13, 2014 – **Amended February 28, 2014 – Amended July 1, 2014**
THIS PERMIT EXPIRES: DECEMBER **31, 2014**
FEE PAID: $22.00

David Chanda

DIRECTOR, DIVISION OF FISH & WILDLIFE

FEDERAL AVIATION
ADMINISTRATION
APPROVED
DATE JUL 21 2014

APPENDIX K
(Continued)

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF FISH AND WILDLIFE
PO BOX 400
TRENTON, NEW JERSEY 08625-0400
TEL: # (609) 292-2965

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

BOB MARTIN
Commissioner

2014 Special Wildlife Management Permit
for Airport Safety at Newark Liberty International Airport
and Teterboro Airport
January 8, 2014
Amended August 26, 2014

This permit certifies that the NJ Division of Fish and Wildlife has authorized:

The Port Authority of NY & NJ
JF Kennedy International Airport
Building 145, Second Floor
Jamaica NY 11430

and the 51 airport employees and agents listed in the August 29, 2014 letter from the Port Authority of NY & NJ, who have received annual training in wildlife hazard management and firearms safety, to destroy white-tailed deer, rabbit, muskrat, woodchuck, red fox, grey fox, raccoon, skunk, opossum, coyote, turkey or ring-necked pheasant which are present on or near airport runways and pose a significant hazard to safe airport operations at Newark Liberty International Airport, located in Newark NJ, and at Teterboro Airport, located in Teterboro NJ.

Conditions:

Each agent must be in possession of the permit or a copy of the permit at all times when attempting to shoot or trap deer, rabbit, muskrat, woodchuck, fox, raccoon, skunk, opossum, coyote, turkey or ring-necked pheasant.

Persons other than the listed agents may assist by holding lights, driving a vehicle or other ways, but are prohibited from handling or shooting firearms. Shooting from vehicles of any description is prohibited.

Agents may use 10, 12, 16 or 20 gauge shotguns to remove mammals and non-migratory game birds covered under this permit. USDA employees only may use .223 or .243 caliber center-fire rifles, or 10, 12, 16, or 20 gauge shotguns loaded with rifled slugs or 10 or 12 gauge buckshot, to shoot deer. Other airport employees may use 10, 12, 16, or 20 gauge shotguns loaded with rifled slugs or 10 or 12 gauge buckshot, to shoot deer. Coyote and fox may be removed by any shot larger than #4 shot or with a .22 caliber rifle. Other mammals and non-migratory game birds may be removed by any shot larger than #7 ½ shot or with a .22 caliber rifle.

Deer may be trapped in clover and corral traps and euthanized using .22 magnum rim-fire rifle and/or center-fire rifles not less than .223 caliber. Clover and corral traps must be checked at least once per day. Trapped white-tailed deer may not be relocated.

FEDERAL AVIATION
ADMINISTRATION
APPROVED
DATE SEP - 8 2014

Any traps used for muskrat, skunk and opossum must be checked, tended and maintained at least once in every 24 hours. All traps must bear a tag with the name and address, or trapped id number, of the person maintaining the trap.

Conibears set for muskrat must be completely submerged underwater, and in tidal waters the traps shall be completely submerged at mean high tide. No conibear trap with a jaw spread larger than six inches shall be set at any time.

Snares must be constructed of aircraft cable or crucible wire measuring 1/32, 3/64 or 1/16 inches in diameter, equipped with a swivel and set within 50 feet of the mean high water line. All traps must be equipped with a stop to prevent the average the average loop diameter from exceeding 4 inches. All such traps must be set so that the distance between the ground/walking surface to the top of the loop does not exceed 7 inches.

Snares used in trapping coyote must be constructed of aircraft cable or crucible wire measuring 5/64 to 1/8 inches in diameter and be equipped with a swivel. No body gripping snare shall be set, used or maintained wit a loop diameter average greater than twelve inches, or with the distance between the ground or walking surface to the top of the loop greater than twenty-four inches, and must be equipped with a stop six inches from the end to restrict loop closure to no less than six inches in circumference.

The permittee must conform to all Federal and State statutes and local ordinances pertaining to the discharge of firearms. The possession or discharge of a loaded firearm within 450 ft. of a building or school playground is prohibited. The discharge of a firearm upon or across any state, county or municipal road or highway is prohibited.

The permit must be exhibited to any person requesting visual inspection thereof. Division representatives must be provided access to property to monitor use of this permit.

Disposal of the carcasses by burial shall be the responsibility of the permittee. No deer, rabbit, raccoon, skunk, opossum, muskrat, woodchuck, fox, turkey, coyote or ring-necked pheasant destroyed under this permit shall be sold or bartered. A record of the number of wildlife killed by date, gender and disposition of those animals shall be recorded. The permittee agrees to submit a report to the Division of Fish and Wildlife within 14 days of the expiration date of this permit indicating the number, date and disposition of wild animals destroyed under this permit. NJ Airport possession seals numbered 0361-0370 should be affixed to the deer prior to removal of the deer from any of the three airports.

Shooting is permitted 24-hours per day, seven days per week for deer, rabbit, muskrat, woodchuck, fox, turkey, coyote and pheasant. Trapped fox, raccoon, woodchuck, coyote, skunk, opossum or muskrat may be euthanized 24 hours per day, seven days per week.

This permit does not permit the relocation of live-trapped white-tailed deer, rabbit, muskrat, woodchuck, red fox, grey fox, raccoon, skunk, opossum, coyote or turkey.

FEDERAL AVIATION
ADMINISTRATION
APPROVED:
DATE: SEP - 8 2014

Ring-necked pheasants may be live-trapped in baited traps. All traps must bear a durable name tag. All traps must be checked at least once in every 24 hours. Ari Elinsky and Teresa Ombrelio are authorized to tend traps. The following sub-permittees are authorized to relocate birds:

Ken DeMatteo, 213 North Hope Chapel Road, Jackson NJ 08527
Angel Hernandez 26 North Western Way, Hopatcong 07843-1581
Mike Mazur 86 Bennett Ave, Cedar Grove 07009-1720
Joe Fuardo, 103 Garry Terr, Secaucus 07094
Billy Cooper ,508 Pine Street, Lakehurst 08733
Chuck Ransiear, 13 Banta Ave, Garfield NJ 07026
Paul (Skip) Deckman, 131 Marine St, Tuckerton NJ 08087

A copy of this permit must be carried by all persons involved with trapping and relocating pheasants. This permit may be revoked at any time by the Division of Fish and Wildlife.

The permittee shall assume all of the liability for any damages or injury caused while attempting to kill wild animals listed on this permit and shall keep, save and hold the Division, the Department and the State of New Jersey harmless in connection with the issuance of, and activities taken pursuant to, the permit.

A representative of the Division of Fish and Wildlife has investigated this complaint and has determined that conditions exist which warrant a special wildlife management permit.

This permit expires December 31, 2014.

Authority: NJAC 7:25-5.32 et. seq.

David Chanda

David Chanda, Director

cc. NJ Div. Fish and Wildlife, Northern District Law Enforcement Office, Hampton NJ

FEDERAL AVIATION
ADMINISTRATION
APPROVED BY
DATE: SEP - 8 2014

APPENDIX K
STATE DEPT. OF HEALTH & SENIOR SERVICES
DEPREDATION LETTER OF PERMIT

State of New Jersey
DEPARTMENT OF HEALTH

/ 2012

Jeff Kolodzinski
Wildlife Biologist
The Port Authority of NY and NJ
John F. Kennedy International Airport
Building 145, Second Floor
Jamaica, NY 11430

Dear Mr. Kolodzinski

The Department of Health (DOH) is in receipt of your pigeon depredation report dated May 9, 2011 and your request for an extension for the approval for these activities. This report is in follow-up to the agreement dated June 14, 2010, which allows the Port Authority of New York and New Jersey (PANYNJ) to conduct pigeon depredation activities at Newark Liberty International Airport and Teterboro Airport in order to reduce the risk to air travel presented by these birds. It allows PANYNJ to conduct these activities with the permission of the Commissioner of Health, as per the terms delineated by N.J.S.A. 26:2-56.

Background: In correspondence to the Department of Health (DOH) dated November 6, 2009, the PANYNJ referred to a November 6th request to the DOH made by the U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS) for a legal opinion on the intent of State laws that protect pigeons and their nests and eggs and whether those laws apply to management actions to protect human safety, and requested a similar consideration for PANYNJ. Ms. Wendy Anderson, USDA APHIS WS cited the following facts in support of a request for a variance from the State to be able to respond to human safety threats involving pigeons in an effective and efficient manner:

1) Currently, WS wildlife biologists assist more than 200 civil and military airports across the nation, including 18 in New Jersey, in identifying and reducing wildlife hazards.
2) Wildlife strikes cause more than 600,000 hours of aircraft downtime costing the U.S. civil aviation industry in excess of $625 million every year.
3) Birds account for roughly 98% of all aircraft collisions with wildlife.
4) The pigeon is an exotic species that was introduced to the U.S. from Europe over 100 years ago.

APR 24 2014

APPENDIX B
(Continued)

APPENDIX B
(Continued)

APPENDIX B
(Continued)

APPENDIX B

NJ STATE FISH & WILDLIFE SALVAGE PERMIT [illegible]
NONRESIDENT WILDLIFE

PERMIT NO: SB 2014020
NONRESIDENT

Fish and Wildlife

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF FISH & WILDLIFE
WILDLIFE PERMITTING
Focus & Navigate Wildlife Permits
[illegible]
Hampton NJ 08827

PHONE: (908) 735-8188 - FAX: 908-735-8088
Email Address: FOCUS.PERMITS@dep.state.nj.us

BOB MARTIN
Commissioner

SALVAGE FOR MIGRATORY BIRDS PERMIT

In conjunction with Federal Fish and Wildlife Depredation at Airports Permit Number MB671079-0, expiring 07/28/2013 and Federal Fish and Wildlife Special Purpose Possession-Dead Migratory Birds for Educational Use permit Number MB949755-0, expiring 03/31/2016, State authorization is granted to:

PORT AUTHORITY OF NY & NJ
Jeff Kolodzinski
225 Park Ave South, 9th Floor
New York, NY 10003

Permittee is authorized to salvage, receive, possess, and transport DEAD migratory birds in which the permittee had no part in the killing or death thereof, for scientific and/or educational purposes.

Specimens to be maintained at Newark Liberty International Airport, Newark NJ and Teterboro Airport, Teterboro NJ.

SPECIAL CONDITIONS:

1. Per Federal Fish & Wildlife Permit, listed above and the Department of the Interior, Fish and Wildlife Service, Migratory Bird Permit Office, Standard Conditions for Special Purpose 50 CFR 21.22.
2. Specimens to be used for training course for wildlife personnel. Species may not be killed specifically for this purpose. Specimens that were dispatched under the guidelines of current year NJ Depredation Control Permit may be used for training course.

NEW JERSEY'S SALVAGE PERMIT NOT VALID WITHOUT CURRENT, CORRESPONDING FEDERAL PERMIT.

SUBPERMITTEES: Port Authority/Newark Liberty Airport Operations personnel, Teterboro Airport Operations [illegible]

[illegible] does not authorize the possession of bald or golden eagles [illegible] or endangered.

[illegible] and Use [illegible] permit on request when conducting any activity [illegible] and Local.

Recommended [illegible] USFWS be submitted to the US FEDERAL [illegible] DEPARTMENT and the NJ DIVISION of FISH and WILDLIFE by January 31 for the preceding calendar year ending December 31. Report must include species, total number collected, location, date and final disposition.

DATE ISSUED: JANUARY 13, 2014
THIS PERMIT EXPIRES: DECEMBER 31, 2014
FEE PAID: $7.00

David Chanda
Director, Division of Fish and Wildlife

New Jersey is an Equal Opportunity Employer

[illegible] 2014

APPENDIX B
(Continued)

Fish and Wildlife

PERMIT NO: SW 2014013
NON RESIDENT

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF FISH & WILDLIFE
WILDLIFE MANAGEMENT
Executive & Enforcement Wildlife Permits
2 Spring Lake Road
Chatham, NJ 07928

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

BOB MARTIN
Commissioner

PHONE: (908) 735-5848 FAX: 908 735-5537
E-mail Address: EXOTICPERMITS@dep.state.nj.us

SALVAGE FOR NONGAME WILDLIFE OTHER THAN MIGRATORY BIRDS PERMIT

THIS certifies that the DIVISION of FISH & WILDLIFE has authorized:

PORT AUTHORITY OF NY & NJ
Jeff Kolodzinski
225 Park Ave South, 9th Floor
New York, NY 10003

to salvage, possess and transport accidentally killed or naturally dead wildlife other than migratory game and nonsame birds, endangered wildlife species, white-tailed deer, coyote, black-tailed jackrabbit, beaver, otter or wild turkey. Non-migratory birds (pheasants, quail, ruffed grouse, chukar, etc.) may be possessed under this permit.

Specimens to be maintained at Newark Liberty International Airport, Newark, NJ and Teterboro Airport, Teterboro, NJ.

SPECIAL CONDITIONS: Specimens to be used for training center or HWM personnel. Species may not be killed specifically for this purpose. Specimens that were expired, found or the result of a NJ Depredation Control Permit may be used for training purposes.

PERMIT FEES: Port Authority/Newark Liberty Airport Operations personnel, Teterboro Airport Operations personnel.

Any or the death of an endangered species or the exempt mammals and turkey listed above MUST be immediately reported to the DIVISION of FISH & WILDLIFE.

All specimens found which are tagged, with the State or other scientific research identification, including such as tags or bands, must also be immediately reported to the DIVISION of FISH & WILDLIFE. Final disposition of these specimens will be at the discretion of the DIVISION of FISH & WILDLIFE.

An annual report MUST be submitted to the NEW JERSEY DIVISION of FISH & WILDLIFE by January 31 for the preceding calendar year ending December 31. Reports must include species, total number collected, location, date and final disposition.

DATE ISSUED: JANUARY 13, 2014
THIS PERMIT EXPIRES: DECEMBER 31, 2014
FEE PAID: $7.00

David Chanda
Director, Division of Fish & Wildlife

Printed on Recycled Paper and Recyclable

APR 24 2014

Fish and Wildlife

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Division of Fish and Wildlife
Wildlife Permits Unit
Exotic and Nongame Section
26 Route 173 West
Hampton NJ 08827

PHONE: (908) 735-5650 FAX: (908) 735-5689

Email: EXOTICPERMIT@dep.state.nj.us
www.njfishandwildlife.com

BOB MARTIN
Commissioner

General Conditions for Salvage Permits

In an effort to minimize disturbance during salvage activities in the field, we are definit[illegible]al requirements as part of the conditions of your salvage permit. These conditions [illegible]st the Division of Fish and Wildlife Law Enforcement personnel.

- A photocopy of your current Salvage Permit/Permits and the General Conditions for Salvage Permits must be carried by all permittees and subpermittees while in the field and s[illegible] upon request to authorized personnel while engaged in salvage activities. All [illegible] and general conditions must be strictly adhered to.
- NO UNAUTHORIZED PERSONS should be included in salvage activities. Unauthorized [illegible]s may not take or attempt to take salvage or participate in salvage activities. Only a[illegible]zed permittees for each specific site should conduct salvage activities. Violation of [illegible] conditions could result in penalties, fines and/or possible revocation of your permit.
- Salvage activities for Nongame Migratory Birds, requires a current applicable Federal Fish and Wildlife Permit. Sub-permittees must be listed specifically on the Federal Permit as well as the New Jersey Salvage for Nongame Migratory Bird Permit.
- It is the responsibility of the permittee to obtain prior written permission of the landowner or managing governmental agencies to conduct salvage activities. This must be obtained prior to entrance on any land for salvage activities.
- Observation of illegal salvage activities should be reported to the appropriate Division of Fish and Wildlife Law Enforcement office with as much relevant information as possible (license plate numbers, etc.). Note the following Law Enforcement phone numbers: Northern Region Office: (908) 735-8240; Central Region Office: (609) 259-2120; Southern Region Office: (856) 629-0555.
- All state salvage permits expire December 31 of each calendar year. All salvage activities must be submitted within a maximum of 31 days after expiration of each permit.
- To report any sightings of live Endangered and Threatened Wildlife, go the Division's website. On the home page, click on ENDANGERED and NONGAME SPECIES. Go down to RESOURCES and click on REPORT A SIGHTING OF ENDANGERED and THREATENED SPECIES. For a current list, click on NEW JERSEY ENDANGERED and THREATENED SPECIES list. If you have any questions regarding the ENDANGERED and NONGAME SPECIES section call the phone number at (609) 292-9101.

[SS-SW General Conditions Letter]

U.S. FISH AND WILDLIFE SERVICE
RESIDENT CANADA GOOSE NEST & EGG REGISTRATION
CONFIRMATION

This registration is valid ONLY from March 1 – June 30, 2015 for control activities.

Registration No. RG-04936A

Date of Registration: 1/5/2015

Date Amended: 1/5/2015

Registrant (Landowner) Name: The Port Authority of New York & New Jersey

Registrant Type: Agency

Registrant Address and Contact Information:

225 Park Avenue South, 9th Floor
New York, NY 10003
Telephone: 718-244-3772, Alternate Telephone: 347-839-0031
Primary Contact Name: The Port Authority of New York & New Jersey, Primary Contact Telephone: 718-244-3772
Primary Contact E-mail addresss: jkolodzinski@panyn.gov

Location of Properties where Activity will occur:

1) New York, The Port Authority of New York and New Jersey, 225 Park Avenue South, 9th Floor, New York, NY
2) Essex, New Jersey Marine Terminals, 260 Kellogg St, Newark, NJ
3) Essex , Newark Liberty International Airport, Building 1 - Conrad Road, Newark, NJ
4) Bergen, Teterboro Airport, 90 Moonachie Avenue, Teterboro, NJ
5) Hudson, New Jersey Marine Terminals, 260 Kellogg St, Bayonne, NJ
6) Queens, John F. Kennedy International Airport, Building 145, Second Floor, Jamaica , NY
7) Queens, LaGuardia Airport, Hangar 7 Center, 3rd Floor, Flushing, NY
8) Orange, Stewart International Airport, 1130 First Street, New Windsor, NY
9) Richmond, New York Container Terminals, 300 Western Avenue, Staten Island, NY
10) Union, Port [illegible] Marine Terminal, Elizabeth, NJ

Agent/Employee:

1) The Port Authority of New York & New Jersey
2) The United States Department of Agriculture, Animal & Plant Health Inspection Service - Wildlife Services
3) AFCO AvPORTS Management LLC

Conditions: You and your agents or employees must comply with the Resident Canada Goose Nest & Egg Depredation Order Conditions.

If agents or employees will conduct the nest and egg work on your behalf, you may sign this registration confirmation and provide them a copy as evidence of your authorization to perform the work.

Signature of Registrant (Landowner):

Proceed to Resident Canada Goose Nest & Egg Depredation Order Conditions

Home | Exit

JAN 06 2015

Resident Canada Goose Nest & Egg Depredation Order Conditions

Pursuant to the Migratory Bird Treaty Act and implementing regulations at 50 CFR 21.50 (Depredation order for resident Canada geese nest and eggs), you, as the responsible registrant, are authorized to addle and destroy resident Canada goose (Branta canadensis) nests and eggs subject to the following provisions and conditions:

1. You and your agents or employees may addle or destroy all resident Canada goose eggs in nests found on the property(ies) identified on the registration confirmation. Eggs may be treated by oiling, freezing, shaking, or puncturing and immediately replacing the eggs in the nest, or you may remove, destroy, and dispose of the eggs and nests. Anyone oiling eggs must use 100% corn oil.

2. Destroyed nest material and eggs may be left in the field or disposed of by burial, incineration, or placement in outgoing trash, in accordance with local ordinances. Nests and eggs may not be retained for personal use. No one is authorized to sell, offer for sale, barter, or ship for the purpose of sale or barter nests or eggs taken under the order.

3. You must incorporate nonlethal goose management techniques, such as habitat manipulation or hazing, to the extent you deem appropriate to discourage nesting.

4. You may not take any actions under this depredation order that will adversely affect other migratory birds or species listed under the U.S. Endangered Species Act (ESA). Any take of species protected under the ESA must be immediately reported to the FWS.

5. You may not addle or destroy resident Canada goose nests and eggs if it is unlawful under applicable state, county, municipal, or tribal government laws.

6. REPORTING REQUIREMENT: You must report the month, number and location (county) of nests with eggs destroyed, by October 31 of the registration year. Go to https://epermits.fws.gov/eRCGR to enter your login and password to access the Resident Canada Goose Registration site. From the RCGR homepage, go to Report of Activity to make your entries. (Note: You only need to report the number of nests with eggs that were addled or destroyed. You do not need to report the number of individual eggs addled or destroyed.) A report is required even if no nests and eggs were destroyed. You cannot re-register for future seasons if you have an outstanding report.

Special Conditions to Protect Federally Listed Threatened and Endangered Species

California: If the property is located in California, any control activities of resident Canada geese in areas used by the following species listed under the Endangered Species Act must be done in coordination with the appropriate local FWS field office (see either the list of California and Nevada Operations Field Offices http://www.fws.gov/cno/es/default.cfm to locate the field office nearest to your activities or the California State map indicating the locations of all FWS offices http://www.fws.gov/pacific/visitor/california.html) and in

accordance with standard local op[illegible] for avoiding ad[illegible] effects to the species or its critical habitat

(A) Birds: Light-footed clapper rail, Californiaclapper rail, Yuma clapper rail, California least tern, southwestern willow flycatcher, least Bell's vireo, western snowy plover, California gnatcatcher.

(B) Amphibians: California red-legged frog and California tiger salamander.

(C) Insects: Valley elderberry longhorn beetle and delta green ground beetle.

(D) Crustaceans: Vernal pool fairy shrimp, conservancy fairy shrimp, longhorn fairy shrimp, vernal pool tadpole shrimp, San Diego fairy shrimp, and Riverside fairy shrimp.

(E) Plants: Butte County meadowfoam, large-flowered wooly meadowfoam, Cook's lomatium, Contra Costa goldfields, Hoover's spurge, fleshy owl's clover, Colusa grass, hairy Orcutt grass, Solano grass, Greene's tuctoria, Sacramento Valley Orcutt grass, San Joaquin Valley Orcutt grass, slender Orcutt grass, California Orcutt grass, spreading navarretia, and San Jacinto Valley crownscale.

California or Arizona: If the property is located in California or Arizona, contact the Arizona Ecological Services Office (for the Colorado River and Arizona sites http://www.fws.gov/southwest/es/arizona or the Carlsbad Fish and Wildlife Office (for Salton Sea sites http://www.fws.gov/carlsbad) if control activities are proposed in or around occupied habitats (cattail or cattail bulrush marshes) to discuss the proposed activity and ensure that implementation will not adversely affect clapper rails or their habitats.

Florida : If the property is located in Florida , you may not destroy resident Canada goose nests and eggs within 300 meters of a whooping crane nest.

Mississippi : If the property is located in Mississippi , you may not destroy resident Canada goose nests and eggs within 300 meters of a Mississippi sandhill crane nest.

Thank you for registering. You may amend your registration through June 30. You must report your activities, even if you have "no activity", by October 31.

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