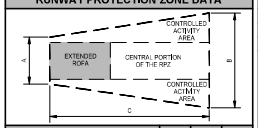
AIRPORT LAYOUT PLAN REVISIONS

REVISION	DESCRIPTION	DATE
A	AirPorts ADDED AIRPORT PLAZA	1/2002
B	AirPorts UPDATED THE BUILDING NUMBERS	6/2002
C	LRS ADDED HOTELS	7/2006
D	LRS ADDED TAXIWAY BRAVO	9/2006
E	LRS ADDED TALON HANGAR 7 AND TAXILANE (MA MODIFICATIONS)	2/2007
F	LRS ADDED NORTHEASTERN HANGARS #3 AND #4 AND PARKING	8/2007
G	LRS ADDED DMAS TO RUNWAYS 14 AND 32	6/2008
H	LRS ADDED STRATOSPHERE AND TWY L MODIFICATIONS	4/2009
I	LRS ADDED RELOCATION OF ATLANTIC FUEL FARM	4/2009
J	LRS ADDED HELIPADS, MALSF, AND BLAST FENCES	11/2010
K	LRS ADDED TALON FUEL FARM AND AUTO PARKING	11/2013
L	LRS UPDATED PROPERTY BOUNDARY LINE, TROOP L HELIPAD, AND RUNWAY 32 END WIND SOCK	11/2013
M	LRS ADDED FUTURE RELOCATION OF HANGARS 2 AND 3, FUTURE RELOCATION OF TAXIWAY G, AND FUTURE SHIFT OF RUNWAY 14-19 AND ASSOCIATED NAVAIDS 412' NORTH, FUTURE DEMOLITION OF THE RUNWAY 1 END BAST PAD AND ADDITION OF FUTURE CROSSOVER TAXIWAY FROM TAXIWAY B TO TAXIWAY G.	3/2015
N	LRS ADDED RELOCATED BEACON LOCATION	3/2016
O	NYSDOT ADDED SAND AND SALT STORAGE STRUCTURE	01/2022
P	RUNWAY 1/19 SHIFT 41'Z NORTHWARD, TAXIWAY G RELOCATION, REMOVAL / RENAMING / RELOCATION OF TAXIWAY STUBS ALONG 1/19, READDENTIFICATION OF HANGARS 2 AND 3 TO REMAIN, VSR AND AOA FENCE REALIGNMENTS, FUTURE GROUP 1 APRON, FUTURE VEHICLE PARKING LOT, AND NEW TAXIWAY G	04/2020
Q	ADCOM ADDED PROPOSED AERONAUTICAL DEVELOPMENT ON BRESLAU PROPERTY	PENDING
R	STRATOSPHERE ADDED PROPOSED DEVELOPMENT AS FOLLOWS: PARCEL A HANGAR AND RAMP, PARCEL B FBO BLDG AND HANGAR, PARCEL C RAMP, PARCEL D RAMP, PARCEL E RAMP AND HANGARS	PENDING
S	RECONSTRUCTION OF TAXIWAY P TO ACCOMMODATE FOR A TDG 3 AIRCRAFT, EDGE LIGHTS, SIGNS, AND MARKINGS RELOCATED ACCORDINGLY.	PENDING
T	RECONSTRUCTION OF TAXIWAY A TO MEET FAA FILLET GEOMETRY STANDARDS & RENAME TAXIWAY DESIGNATIONS	PENDING

RUNWAY PROTECTION ZONE DATA



DIMENSIONS	A	B	C
EXISTING AND FUTURE RUNWAYS 1 AND 32 RPZs	500'	1,010'	1,700
EXISTING RUNWAYS 14 AND 19 DEPARTURE RPZs	500'	1,010'	1,700
EXISTING RUNWAY 14 APPROACH RPZ	1,000	1,510	1,700
EXISTING AND FUTURE RUNWAY 19 APPROACH RPZ	500'	1,010'	1,700

RUNWAY DATA TABLE

DESCRIPTION	RUNWAY 1-19 EXISTING RWY 1	RUNWAY 1-19 EXISTING RWY 19	RUNWAY 1-19 FUTURE RWY 1	RUNWAY 1-19 FUTURE RWY 19	RUNWAY 14-32 EXISTING RWY 14	RUNWAY 14-32 EXISTING RWY 32	RUNWAY 14-32 FUTURE RWY 14	RUNWAY 14-32 FUTURE RWY 32
RUNWAY END COORDINATES (NAD 83)	N 40° 43' 15.29" W 073° 24' 51.34"	N 40° 44' 12.79" W 073° 24' 32.36"	N 40° 43' 22.30" W 073° 24' 51.41"	N 40° 44' 19.80" W 073° 24' 32.44"	N 40° 44' 04.98" W 073° 25' 16.25"	N 40° 43' 13.29" W 073° 24' 12.55"	SAME	SAME
DISPLACED THRESHOLD LENGTH	N/A	769'	N/A	N/A	670'	N/A	SAME	SAME
DISPLACED THRESHOLD COORDINATES (NAD83)	N/A	N 40° 44' 04.09" W 073° 24' 50.22"	N/A	N/A	N 40° 44' 00.19" W 073° 25' 11.72"	N/A	SAME	SAME
APPROACH VISIBILITY MINIMUMS (AOL-SM)	CAT A-D: 400 - 1	CAT A-C: 500 - 1 CAT D: 500+2	SAME	SAME	CAT A-D: 700 - 1	CAT A-D: 500-1	SAME	SAME
OFR PART 77 CATEGORY	NP (C)	NP(C)	NP (C)	NP(C)	PIR	NP(C)	SAME	SAME
APPROACH SURFACE SLOPE	34:1	34:1	34:1	34:1	50:1	34:1	SAME	SAME
RUNWAY LENGTH X WIDTH	5,516' X 150'		5,516' X 150'		6,833' X 150'		SAME	
PAVEMENT TYPE	ASPHALT - GROOVED		ASPHALT - GROOVED		ASPHALT - GROOVED		SAME	
PAVEMENT DESIGN STRENGTH (LBS)	45,000 SW, 90,000 DW		45,000 SW, 90,000 DW		45,000 SW, 90,000 DW		SAME	
RUNWAY LIGHTING	MIRL		MIRL		MIRL		SAME	
RUNWAY MARKING	NON-PRECISION	NON-PRECISION	NON-PRECISION	NON-PRECISION	PRECISION	PRECISION	SAME	SAME
EFFECTIVE GRADIENT (%)	0.3%		SAME		-0.2%		SAME	
MAXIMUM GRADE (%)	-		-		-		SAME	
RUNWAY LINE OF SIGHT VIOLATIONS	NONE		NONE		NONE		SAME	
WIND COVERAGE	13 KNOT CROSSWIND 95.53% IMC / 95.63% AW		SAME		13 KNOT CROSSWIND 94.44% IMC / 94.49% AW		SAME	
VISUAL APPROACH AIDS	PAPI-4R, REILs	PAPI-4L, REILs	PAPI-4L, REILs	PAPI-4L, REILs	MALSF, PAPI-4L	PAPI-4L, REILs	SAME	SAME
INSTRUMENT APPROACH AIDS	RNAV (GPS), NDB	RNAV (GPS)	GPS	GPS	RNAV, ILS/LOC	RNAV (GPS)	SAME	SAME
AIRPORT REFERENCE CODE (ARC)	D-II		D-II		D-II		SAME	
CRITICAL AIRCRAFT	GULFSTREAM IV		GULFSTREAM IV		GULFSTREAM IV		SAME	
RUNWAY SAFETY AREA (RSA) DIM.	400' WIDE X 578' BEYOND RWY 1 END 400' WIDE X 1,000' BEYOND RWY 19 END		400' WIDE X 1,000' BEYOND RWY 1 END 400' WIDE X 1,000' BEYOND RWY 19 END		400' WIDE X 1,000' BEYOND RWY 14 END 500' WIDE X 324' BEYOND RWY END		400' WIDE X 1,000' BEYOND RWY 14 END 500' WIDE X 324' BEYOND RWY END	
RUNWAY OBJECT FREE AREA (ROFA) DIM.	400' WIDE X 1,000' BEYOND RWY 1 END 400' WIDE X 1,000' BEYOND RWY 19 END		400' WIDE X 1,000' BEYOND RWY 1 END 400' WIDE X 1,000' BEYOND RWY 19 END		400' WIDE X 1,000' BEYOND RWY 14 END 800' WIDE X 324' BEYOND RWY END		400' WIDE X 1,000' BEYOND RWY 14 END 800' WIDE X 324' BEYOND RWY END	
OBSTACLE FREE ZONE (OFZ) DIM.	400' WIDE X 200' BEYOND RW 1 END 400' WIDE X 200' BEYOND RW 19 END		400' WIDE X 200' BEYOND RWY 1 END 400' WIDE X 200' BEYOND RWY 19 END		400' WIDE X 200' BEYOND RWY 14 END 400' WIDE X 200' BEYOND RWY END		SAME	
RUNWAY END ELEVATIONS (MSL)	61.0' (HIGH POINT)	61.0' (LOW POINT)	61.0' (LOW POINT)	61.0' (HIGH POINT)	77.6'	61.0' (LOW POINT)	SAME	SAME
DISPLACED THRESHOLD ELEVATIONS (MSL)	N/A	77.6'	N/A	N/A	77.4	N/A	SAME	SAME
TOUCHDOWN ZONE ELEVATIONS (MSL)	71.7'	77.6'	73.1'	81.0'	77.4'	67.8	SAME	SAME

AIRPORT DATA TABLE

AIRPORT DATA	EXISTING	FUTURE
AIRPORT ELEVATION (MSL)	80.3'	81.0'
AIRPORT REFERENCE POINT (NAD 83)		
LATITUDE	N 40° 43' 45.57"	N 40° 43' 45.29"
LONGITUDE	W 073° 24' 48.28"	W 73° 24' 48.28"
MEAN MAX. TEMPERATURE OF HOTTEST MONTH	86.1° F (AUGUST)	SAME
AIRPORT TERMINAL AREA NAVAIDS	NDB, GPS (RNAV)	SAME
MAGNETIC VARIATION	13.0° 12' W (± 0° 2'E/ YEAR	CHANGE 0° 2'E/ YEAR
DATE OF MAGNETIC VARIATION	2017	N/A
NPIAS SERVICE LEVEL	RELIEVER	SAME
STATE EQUIVALENT SERVICE ROLE	GENERAL AVIATION	SAME
COMBINED WIND COVERAGE (NCDC- COVERAGE (BSLP, N.Y. (1987-1996)		
ALL WEATHER	98.87% (13 KNOTS)	SAME
IMC	98.63% (13 KNOTS)	SAME
AIRPORT REFERENCE CODE	D-III	SAME
TAXIWAY OBJECT FREE AREA WIDTH (ADG-III)	131'	SAME
TAXILANE OBJECT FREE AREA WIDTH (ADG-III)	115'	SAME
TAXIWAY SAFETY AREA WIDTH (ADG-II)	79'	SAME
RUNWAY / TAXIWAY HOLD LINE DISTANCE	RW 14-32: 250'± RW 1-19: 200'±	SAME
TAXIWAY LIGHTING	MITL	SAME
TAXIWAY MARKING	TRACKING CENTERLINE	SAME

EXISTING BUILDING TABLE

NO.	EXISTING BUILDINGS	NO.	EXISTING BUILDINGS
2	HANGAR	52	CORPORATE HANGAR #1 (S)
3	HANGAR	53	CORPORATE HANGAR #2 (N)
4	HANGAR	54	STORAGE HANGAR
5	ABANDONED WAREHOUSE & OFFICES	56-58	STORAGE HANGARS
7	STRATOSPHERE HANGAR	59-65	STRONG BOX HANGARS
13	FORMER MAINTENANCE OFFICES (ABANDONED)	66-70	T-HANGARS
31	CORPORATE HANGAR AND OFFICES	71	CORPORATE T-HANGAR ROW #3
32	AVIATION SCHOOL	72	CORPORATE T-HANGAR ROW #4
33	AVIATION SCHOOL	100	AIRPORT TERMINAL ADMIN, MAINT,
34	AVIATION SCHOOL/CLUB, SVCS,		OPERATIONS OFFICES
35	HOTEL	101	FAA ATCT & ADMIN. OFFICES
36	HOTEL	103	STATE POLICE
40	US PUMP HOUSE	106	MITAL PROCESSING
41	CORPORATE HANGAR AND OFFICES	108	SEWERAGE PLANT - ABANDONED
42	AIRCRAFT RENTALS & CHARTER SCHOOL	109	FMR. BUILDING #26 (ABAND., WAREHOUSE)
43	CORPORATE HANGAR	110	FMR. BUILDING #37 (ABAND., SCRAP YARD)
44	CORPORATE HANGAR	111	FMR. BUILDING #34 (ABAND., BANK)
45	CORPORATE HANGAR	112	CORPORATE HANGAR
50	HANGAR (S)		
51	FBO TERMINAL		

LEGEND

ITEM	EXISTING	FUTURE
AIRPORT PROPERTY LINE		N/A
CONTOURS (USGS - MSL DATUM)		N/A
AIRPORT REFERENCE POINT (ARP)	ARP	N/A
AIRPORT BUILDINGS		
BUILDINGS / STRUCTURES		N/A
NEW TAXIWAY / RUNWAY PAVEMENTS	N/A	
FUTURE AVIATION RELATED DEVELOPMENT AREA	N/A	
RUNWAY SAFETY AREA (RSA)	RSA	N/A
RUNWAY OBJECT FREE AREA (ROFA)	ROFA	N/A
RUNWAY VISIBILITY ZONE (RVZ)	RVZ	N/A

EXISTING DECLARED DISTANCE DATA

RUNWAY	TORA (FT)	TODA (FT)	ASDA (FT)	LDA (FT)
1	5,516'	5,516	5,516'	5,116'
19	5,516'	5,516'	5,516'	5,516'
14	6,833'	6,833'	6,833'	6,157'
32	6,833'	6,833'	6,833'	6,833'

TORA = TAKEOFF RUNWAY AVAILABLE
TODA = TAKEOFF DISTANCE AVAILABLE
ASDA = ACCELERATE-STOP DISTANCE AVAILABLE
LDA = LANDING DISTANCE AVAILABLE

APPROVED MODIFICATIONS TO FAA DESIGN STANDARDS

NO.	STANDARD MODIFIED	FAA STANDARDS	EXISTING CONDITIONS	DATE APPROVED
1	RUNWAY 1-19 OBJECT FREE AREA	OBJECT FREE AREA WIDTH = 800'	RUNWAY OBJECT FREE AREA = 400'	APPROVAL PENDING

SCALE: 1"=400'

400 0 400 800 FEET

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
EASTERN REGION
APPROVED SUBJECTED TO COMMENTS IN LETTER DATED NOV 17 1989
Approved Albert S. Mundy
Manager, NY Airports District Office
Date:
Approval subject to comments and recommendations in letter dated:

NEW YORK STATE DEPARTMENT OF TRANSPORTATION
ALBANY, NEW YORK
Approved Russell B. Vachon
Director, Aviation Division
Date: 11/16/89

ENGINEER/ARCHITECT

NO.	DESCRIPTION	DR.	CHKD.	APPD.	DATE

PROJECT NO. 43701
FILE NAME ALP
DO NOT SCALE DRAWING

Hoyle, Tanner & Associates, Inc. HTA engineers architects planners landscape architects
Five Commerce Park North Bedford, New Hampshire 03102

SCALE: 1"=400' | DATE: AUGUST, 1989 | DES. BY R.J.L. | DR. BY T.W.S. | CHKD. BY R.J.L.

REPUBLIC AIRPORT
FARMINGDALE, NEW YORK

AIRPORT LAYOUT PLAN

DRAWING NO. 2

FILE NAME: V:\DH_Data\Markets\Aviation\Client Information\New York\NYSDOT\FRG – Republic Airport\(3) Airport Layout Plan (ALP)\C-LP-FRG_01-10-2022_R_rev rso.dwg LAYOUT NAME: FRG-ALP-REV-R USER: 5893 PLOTTED: Monday, January 10, 2022 – 4:23pm