Flight Procedure Tracking Form

Action:	Task Type:	Date Open:	Task #:	Request #:
FLIGHT CHECK	SID	03/13/2007	2007031308467301001	20070313084673

Procedure:	Airport ID:	Airport:	Reimbursable #:
SID NUBLE (RNAV) ONE PORTLAND ME KPWM	KPWM	PORTLAND INTL JETPORT	

City:	ST:	GPS #:	Estimated Chart Date:	FICO #:
PORTLAND	ME		07/26/2012	

Fac ID:	Fac. Type:	Specialist:
	Proc D	PETER GUIMOND

Procedure Review

	Rec'd	Rel'd	Full Name	Comments
Lead:	01/17/2012	04/06/2012	DONALD SMITH	DME / DME
QA:	04/06/2012	04/06/2012	DAVID PUGLISI	
Liaison:	04/06/2012		Alfonso	DME/DME

PT

ESV REQUEST INCLUDED

Procedure Comments: ENROUTE

Remark Type: INFORMATION

pg 2 of 6

PORTLAND, ME PORTLAND INTL JETPORT (KPWM) NUBLE ONE (RNAV) (SID) ENROUTE-YES FC: 5.29.12 PUB: 7.26.12

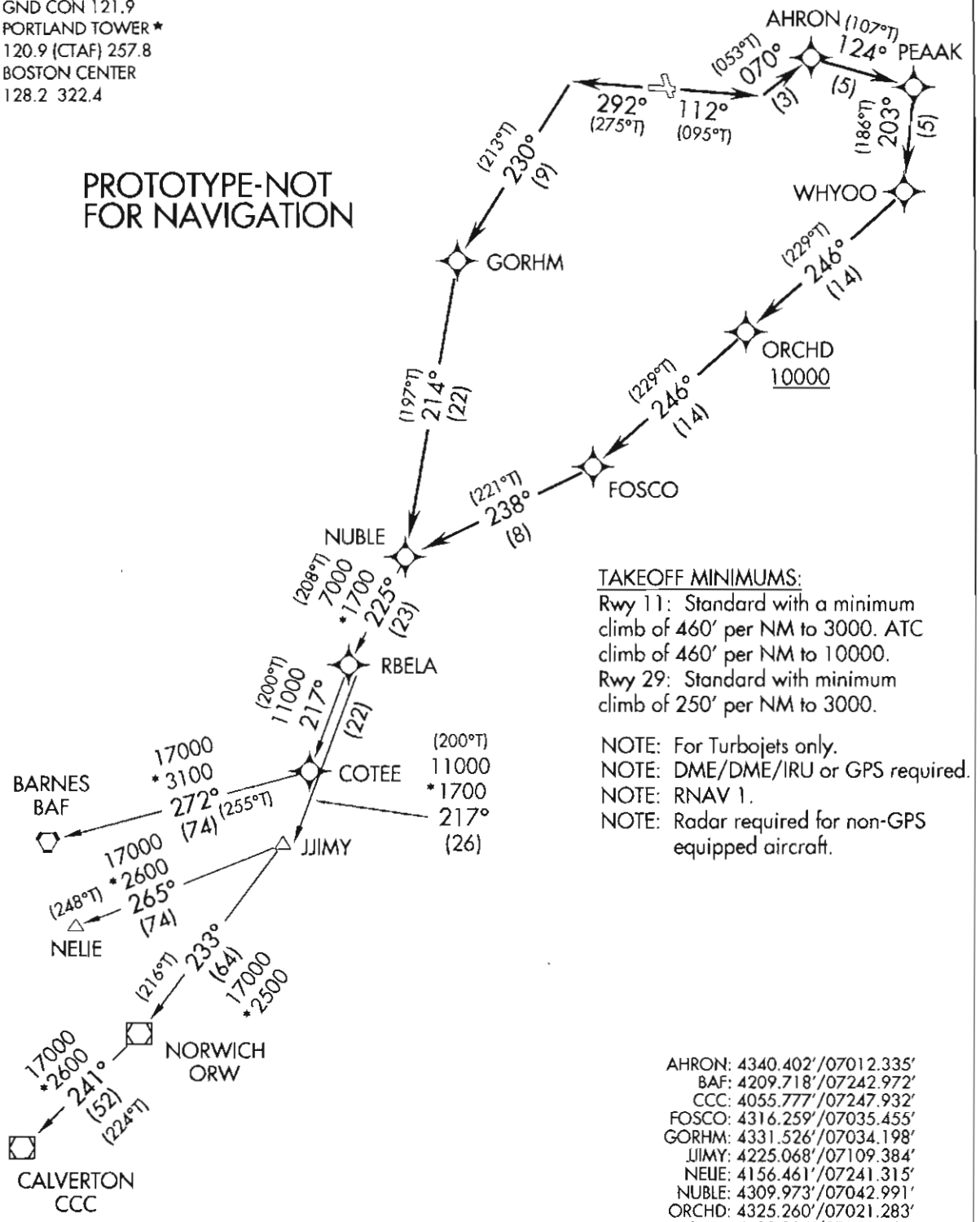
ATTACHED FORMS: ESV REPORTS; 8260-15B; 8260-15C; 8260-2(S): AHRON, ORIG; FOSCO, ORIG; GORHM, ORIG; JJIMY-INT, REV 1; NUBLE, ORIG; ORCHD, ORIG; PEAAK, ORIG; WHYDO, ORIG; (INFO ONLY) BARNES (BAF) VTAC, REV 11; CALVERTON (CCC) VDME, REV 10; COTEE-INT, REV 2; NELIE-INT, REV 6; NORWICH (ORW) VDME, REV 15; RBELA, REV 2.

CONTACT: DON SMITH, AJV-352 LEAD, 405 954.1036:

NUBLE ONE DEPARTURE (RNAV)

ATIS 119.05
CLNC DEL 121.9
GND CON 121.9
PORTLAND TOWER *
120.9 (CTAF) 257.8
BOSTON CENTER
128.2 322.4

PROTOTYPE-NOT FOR NAVIGATION



TAKEOFF MINIMUMS:
Rwy 11: Standard with a minimum climb of 460' per NM to 3000. ATC climb of 460' per NM to 10000.
Rwy 29: Standard with minimum climb of 250' per NM to 3000.

NOTE: For Turbojets only.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: Radar required for non-GPS equipped aircraft.

AHRON: 4340.402'/07012.335'
BAF: 4209.718'/07242.972'
CCC: 4055.777'/07247.932'
FOSCO: 4316.259'/07035.455'
GORHM: 4331.526'/07034.198'
JJIMY: 4225.068'/07109.384'
NELIE: 4156.461'/07241.315'
NUBLE: 4309.973'/07042.991'
ORCHD: 4325.260'/07021.283'
ORW: 4133.384'/07159.961'
PEAAK: 4339.034'/07006.061'
RBELA: 4249.967'/07057.299'
WHYOO: 4334.418'/07006.717'

NOTE: Chart not to scale.

PROTOTYPE-NOT FOR NAVIGATION

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 11: Climb heading 112° to intercept course 070° to AHRON, then on track 124° to PEAAK, then on track 203° to WHYOO, then on track 246° to cross ORCHD at or above 10000, then on depicted route to NUBLE, thence....

TAKEOFF RUNWAY 29: Climb heading 292° to intercept course 230° to GORHM, then on depicted route to NUBLE, thence....

....Maintain 3000 or as assigned by ATC (5000 when tower closed, contact Boston Center). Expect clearance to filed altitude five (5) minutes after departure.

BARNES TRANSITION (NUBLE1.BAF)
CALVERTON TRANSITION (NUBLE1.CCC)
NELIE TRANSITION (NUBLE1.NELIE)

LOST COMMUNICATIONS: If radio contact is not established within 2 minutes after departure, proceed on course via NUBLE RNAV route to requested altitude or 10000, whichever is lower.

TAKEOFF OBSTACLES:
Rwy 11: Trees beginning 983' from DER, 418' left of centerline, up to 59' AGL/73' MSL. Trees beginning 428' from DER, 280' right of centerline, up to 32' AGL/69' MSL. Trees 6037' from DER, 1744' left of centerline, up to 79' AGL/248' MSL. Trees 1.0 NM from DER, 1778' left of centerline, up to 75' AGL/242' MSL.
Rwy 29: Trees beginning 2952' from DER, 1066' left of centerline, up to 85' AGL/200' MSL. Trees beginning 1319' from DER, 509' right of centerline, up to 81' AGL/178' MSL.

ESV Details

Originating Office :	Airspace Docket Number :	Request Type : Establish	
Facility Data			
Chart Name : PEASE	City : PORTSMOUTH	Ident : PSM	State : NH
Type/Class : DME	Frequency : M1199	Reference No.: 11065618	

Expanded Service Volume Data: (Requesting Officer)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude
FAA 060982-007	216	0	43	170	450

Requirement: JJIMY DP ON COTEE 2 DP @ MHT		
Signature: Brody Abraham	Routing Symbol: AJV-311	Date: 06/21/2011

Expanded Service Volume Data: (FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 060982-007	216	0	43	170	450	APPROVE

Requirement/Remarks: JJIMY DP ON COTEE 2 DP @ MHTApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.		
Signature: Cassella Charles	Routing Symbol:	Date: 07/05/2011

Expanded Service Volume Data: (Super FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 060982-007	216	0	43	170	450	APPROVE

Requirement/Remarks: JJIMY DP ON COTEE 2 DP @ MHTApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.		
Signature: CHRISTEIN THOMAS	Routing Symbol:	Date: 07/05/2011

Expanded Service Volume Data: (FIFO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 060982-007	216	0				

Requirement/Remarks:		
Signature:	Routing Symbol:	Date:

ESV Details

Originating Office :	Airspace Docket Number :	Request Type : Establish	
Facility Data			
Chart Name : PEASE	City : PORTSMOUTH	Ident : PSM	State : NH
Type/Class : L-VOR	Frequency : M116.5	Reference No.: 11065617	

Expanded Service Volume Data: (Requesting Officer)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude
FAA 070590-006	216	0	43	170	450

Requirement: JJIMY DP ON COTEE 2 DP @ MHT AIRPORT		
Signature: Brody Abraham	Routing Symbol: AJV-311	Date: 06/21/2011

Expanded Service Volume Data: (FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 070590-006	216	0	43	170	450	APPROVE

Requirement/Remarks: JJIMY DP ON COTEE 2 DP @ MHT AIRPORTApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.		
Signature: Cassella Charles	Routing Symbol:	Date: 07/05/2011

Expanded Service Volume Data: (Super FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 070590-006	216	0	43	170	450	APPROVE

Requirement/Remarks: JJIMY DP ON COTEE 2 DP @ MHT AIRPORTApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.		
Signature: CHRISTEIN THOMAS	Routing Symbol:	Date: 07/05/2011

Expanded Service Volume Data: (FIFO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 070590-006	216	0				

Requirement/Remarks:		
Signature:	Routing Symbol:	Date:

ESV Details

Originating Office :	Airspace Docket Number :	Request Type : Establish	
Facility Data			
Chart Name : BOSTON	City : BOSTON	Ident : BOS	State : MA
Type/Class : DMER	Frequency : M1161	Reference No.: 12018543	

Expanded Service Volume Data: (Requesting Officer)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude
FAA 701360-013	28	33	71	48	190

Requirement: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR, NUBLE SID AND HSKEL SID		
Signature: COOK DAVE	Routing Symbol:	Date: 01/18/2012

Expanded Service Volume Data: (FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 701360-013	28	33	71	48	190	APPROVE

Requirement/Remarks: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR, NUBLE SID AND HSKEL SIDAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.		
Signature: Cassella Charles	Routing Symbol:	Date: 01/18/2012

Expanded Service Volume Data: (Super FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 701360-013	28	33	71	48	190	APPROVE

Requirement/Remarks: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR, NUBLE SID AND HSKEL SIDAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.		
Signature: CHRISTEIN THOMAS	Routing Symbol:	Date: 01/19/2012

Expanded Service Volume Data: (FIFO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 701360-013	28	33				

Requirement/Remarks:		
Signature:	Routing Symbol:	Date:

ESV Details

Originating Office :	Airspace Docket Number :	Request Type : Establish	
Facility Data			
Chart Name : BOSTON	City : BOSTON	Ident : BOS	State : MA
Type/Class : DMER	Frequency : M1161	Reference No.: 12018544	

Expanded Service Volume Data: (Requesting Officer)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude
FAA 701360-014	36	44	77	53	190

Requirement: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR, NUBLE SID AND HSKEL SID		
Signature: COOK DAVE	Routing Symbol:	Date: 01/18/2012

Expanded Service Volume Data: (FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 701360-014	36	44	77	53	190	APPROVE

Requirement/Remarks: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR, NUBLE SID AND HSKEL SIDAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.		
Signature: Cassella Charles	Routing Symbol:	Date: 01/18/2012

Expanded Service Volume Data: (Super FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 701360-014	36	44	77	53	190	APPROVE

Requirement/Remarks: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR, NUBLE SID AND HSKEL SIDAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.		
Signature: CHRISTEIN THOMAS	Routing Symbol:	Date: 01/19/2012

Expanded Service Volume Data: (FIFO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 701360-014	36	44				

Requirement/Remarks:		
Signature:	Routing Symbol:	Date:

ESV Details

Originating Office :	Airspace Docket Number :	Request Type : Establish	
Facility Data			
Chart Name : MANCHESTER	City : MANCHESTER	Ident : MHT	State : NH
Type/Class : DMER	Frequency : M1178	Reference No.: 12018538	

Expanded Service Volume Data: (Requesting Officer)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude
FAA 780514-006	30	70	66	35	120

Requirement: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR AND NUBLE SID		
Signature: COOK DAVE	Routing Symbol:	Date: 01/18/2012

Expanded Service Volume Data: (FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 780514-006	30	70	66	35	120	APPROVE

Requirement/Remarks: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR AND NUBLE SIDAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.		
Signature: Cassella Charles	Routing Symbol:	Date: 01/23/2012

Expanded Service Volume Data: (Super FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 780514-006	30	70	66	35	120	APPROVE

Requirement/Remarks: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR AND NUBLE SIDAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.		
Signature: CHRISTEIN THOMAS	Routing Symbol:	Date: 01/24/2012

Expanded Service Volume Data: (FIFO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 780514-006	30	70				

Requirement/Remarks:		
Signature:	Routing Symbol:	Date:

ESV Details

Originating Office :	Airspace Docket Number :	Request Type : Establish	
Facility Data			
Chart Name : CONCORD	City : CONCORD	Ident : CON	State : NH
Type/Class : TACR	Frequency : M1163	Reference No.: 12018540	

Expanded Service Volume Data: (Requesting Officer)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude
FAA 698138-005	54	105	63	40	170

Requirement: MITIGATE CRITICAL DME ON CDOGG STAR AND SCOGS STAR		
Signature: COOK DAVE	Routing Symbol:	Date: 01/18/2012

Expanded Service Volume Data: (FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 698138-005	54	105	63	40	170	APPROVE

Requirement/Remarks: MITIGATE CRITICAL DME ON CDOGG STAR AND SCOGS STARAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.		
Signature: Cassella Charles	Routing Symbol:	Date: 01/18/2012

Expanded Service Volume Data: (Super FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 698138-005	54	105	63	40	170	APPROVE

Requirement/Remarks: MITIGATE CRITICAL DME ON CDOGG STAR AND SCOGS STARAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.		
Signature: CHRISTEIN THOMAS	Routing Symbol:	Date: 01/19/2012

Expanded Service Volume Data: (FIFO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 698138-005	54	105				

Requirement/Remarks:		
Signature:	Routing Symbol:	Date:

ESV Details

Originating Office :	Airspace Docket Number :	Request Type : Establish	
Facility Data			
Chart Name : LAWRENCE	City : LAWRENCE	Ident : LWM	State : MA
Type/Class : DME	Frequency : M1159	Reference No.: 12018541	

Expanded Service Volume Data: (Requesting Officer)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude
FAA 031653-001	36	57	66	35	190

Requirement: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR AND NUBLE SID		
Signature: COOK DAVE	Routing Symbol:	Date: 01/18/2012

Expanded Service Volume Data: (FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 031653-001	36	57	66	35	190	APPROVE

Requirement/Remarks: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR AND NUBLE SIDAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.		
Signature: Cassella Charles	Routing Symbol:	Date: 01/18/2012

Expanded Service Volume Data: (Super FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 031653-001	36	57	66	35	190	APPROVE

Requirement/Remarks: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR AND NUBLE SIDAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.		
Signature: CHRISTEIN THOMAS	Routing Symbol:	Date: 01/19/2012

Expanded Service Volume Data: (FIFO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 031653-001	36	57				

Requirement/Remarks:		
Signature:	Routing Symbol:	Date:

ESV Details

Originating Office :	Airspace Docket Number :	Request Type : Establish	
Facility Data			
Chart Name : LAWRENCE	City : LAWRENCE	Ident : LWM	State : MA
Type/Class : DME	Frequency : M1159	Reference No.: 12018542	

Expanded Service Volume Data: (Requesting Officer)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude
FAA 031653-002	20	41	70	50	190

Requirement: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR AND NUBLE SID

Signature: COOK DAVE	Routing Symbol:	Date: 01/18/2012

Expanded Service Volume Data: (FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 031653-002	20	41	70	50	190	APPROVE

Requirement/Remarks: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR AND NUBLE SIDAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.

Signature: Cassella Charles	Routing Symbol:	Date: 01/18/2012

Expanded Service Volume Data: (Super FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 031653-002	20	41	70	50	190	APPROVE

Requirement/Remarks: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR AND NUBLE SIDAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.

Signature: CHRISTEIN THOMAS	Routing Symbol:	Date: 01/19/2012

Expanded Service Volume Data: (FIFO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 031653-002	20	41				

Requirement/Remarks:

Signature:	Routing Symbol:	Date:

ESV Details

Originating Office :	Airspace Docket Number :	Request Type : Establish	
Facility Data			
Chart Name : MARCONI	City : NORTH TRURO	Ident : LFV	State : MA
Type/Class : DMER	Frequency : M1181	Reference No.: 12018539	

Expanded Service Volume Data: (Requesting Officer)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude
FAA 931480-001	346	17	95	40	180

Requirement: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR AND NUBLE SID

Signature: COOK DAVE	Routing Symbol:	Date: 01/18/2012

Expanded Service Volume Data: (FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 931480-001	346	17	95	60	180	RESTRICT

Requirement/Remarks: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR AND NUBLE SIDRESTRICTED. INADEQUATE COVERAGE AT ALT (MIN)/(MAX)=

Signature: Cassella Charles	Routing Symbol:	Date: 01/18/2012

Expanded Service Volume Data: (FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 931480-001	346	17	95	60	180	RESTRICT

Requirement/Remarks: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR AND NUBLE SIDRESTRICTED. INADEQUATE COVERAGE AT ALT (MIN)/(MAX)=

Signature: Cassella Charles	Routing Symbol:	Date: 01/18/2012

Expanded Service Volume Data: (Super FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 931480-001	346	17	95	60	180	RESTRICT

Requirement/Remarks: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR AND NUBLE SIDRESTRICTED. INADEQUATE COVERAGE MIN ALT FL=6,000 FT

Signature: CHRISTEIN THOMAS	Routing Symbol:	Date: 01/19/2012

Expanded Service Volume Data: (Super FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 931480-001	346	17	95	60	180	RESTRICT

Requirement/Remarks: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR AND NUBLE SIDRESTRICTED. INADEQUATE COVERAGE MIN ALT FL=6,000 FT

Signature: CHRISTEIN THOMAS	Routing Symbol:	Date: 01/19/2012

ESV Details

Originating Office :	Airspace Docket Number :	Request Type : Establish	
Facility Data			
Chart Name : PEASE	City : PORTSMOUTH	Ident : PSM	State : NH
Type/Class : DME	Frequency : M1199	Reference No.: 12018545	

Expanded Service Volume Data: (Requesting Officer)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude
FAA 060982-008	36	69	51	27	120

Requirement: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR AND NUBLE SID		
Signature: COOK DAVE	Routing Symbol:	Date: 01/18/2012

Expanded Service Volume Data: (FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 060982-008	36	69	51	27	120	APPROVE

Requirement/Remarks: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR AND NUBLE SIDAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.		
Signature: Cassella Charles	Routing Symbol:	Date: 01/18/2012

Expanded Service Volume Data: (Super FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 060982-008	36	69	51	27	120	APPROVE

Requirement/Remarks: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR AND NUBLE SIDAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.		
Signature: CHRISTEIN THOMAS	Routing Symbol:	Date: 01/19/2012

Expanded Service Volume Data: (FIFO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 060982-008	36	69				

Requirement/Remarks:		
Signature:	Routing Symbol:	Date:

ESV Details

Originating Office :	Airspace Docket Number :	Request Type : Establish	
Facility Data			
Chart Name : PEASE	City : PORTSMOUTH	Ident : PSM	State : NH
Type/Class : DME	Frequency : M1199	Reference No.: 12018546	

Expanded Service Volume Data: (Requesting Officer)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude
FAA 060982-009	356	41	46	40	190

Requirement: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR AND NUBLE SID

Signature: COOK DAVE	Routing Symbol:	Date: 01/18/2012

Expanded Service Volume Data: (FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 060982-009	356	41	46	40	190	APPROVE

Requirement/Remarks: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR AND NUBLE SIDAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.

Signature: Cassella Charles	Routing Symbol:	Date: 01/18/2012

Expanded Service Volume Data: (Super FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 060982-009	356	41	46	40	190	APPROVE

Requirement/Remarks: MITIGATE CRITICAL DME ON CDOGG STAR, SCOGS STAR AND NUBLE SIDAPPROVED. PEND. FLIGHT CHK/INSPECT @ THE REQ. DIST. AND MIN ALT.

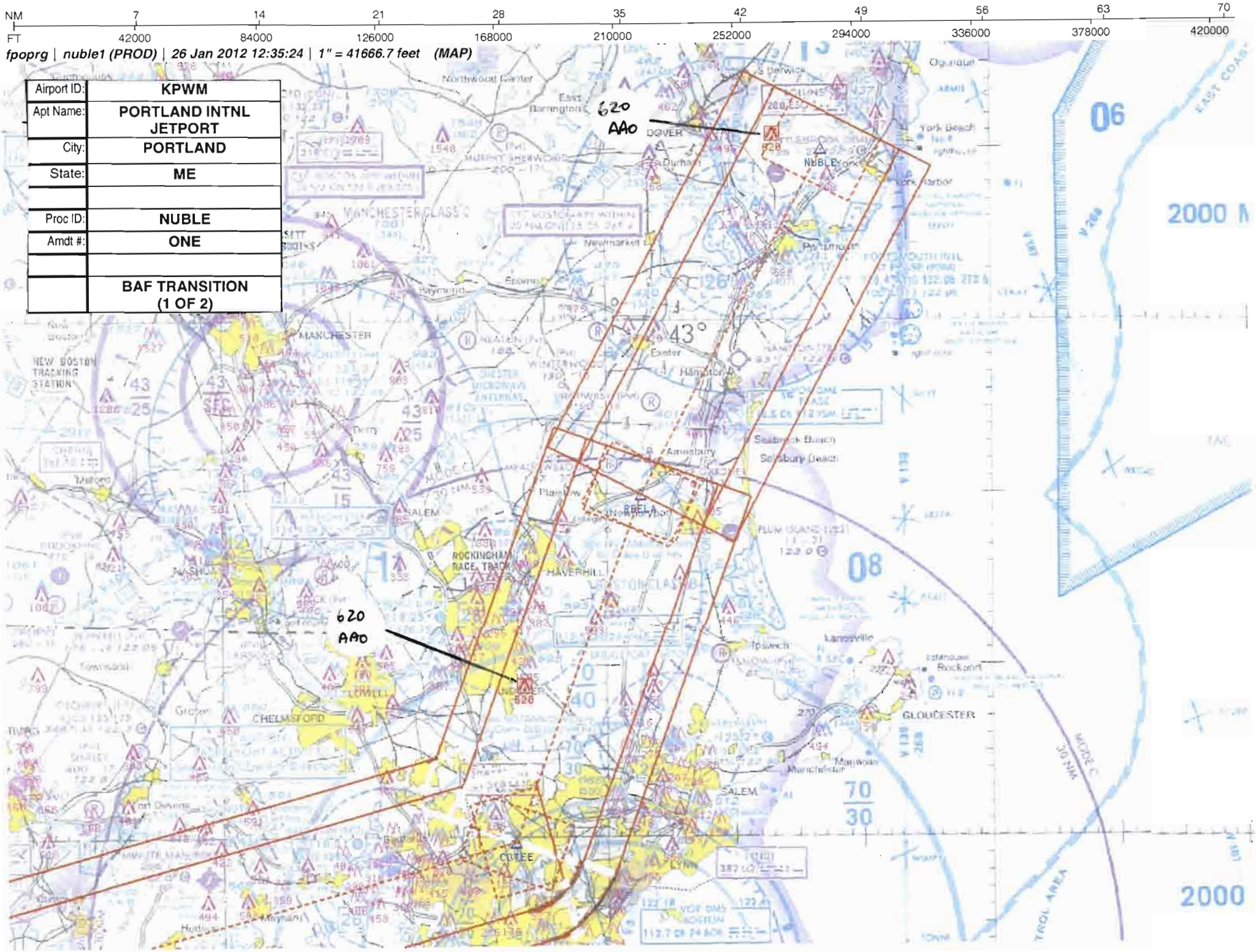
Signature: CHRISTEIN THOMAS	Routing Symbol:	Date: 01/19/2012

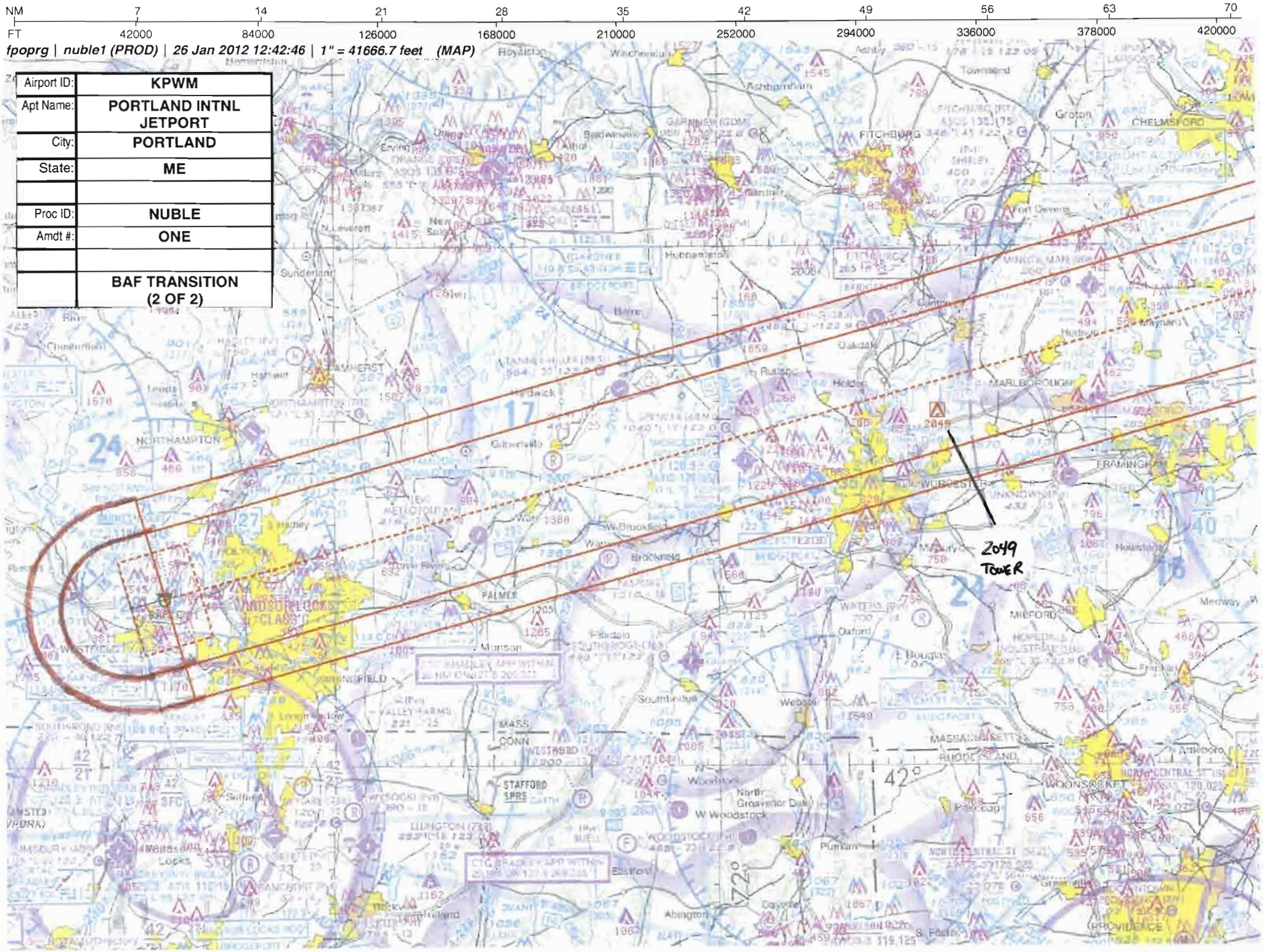
Expanded Service Volume Data: (FIFO)

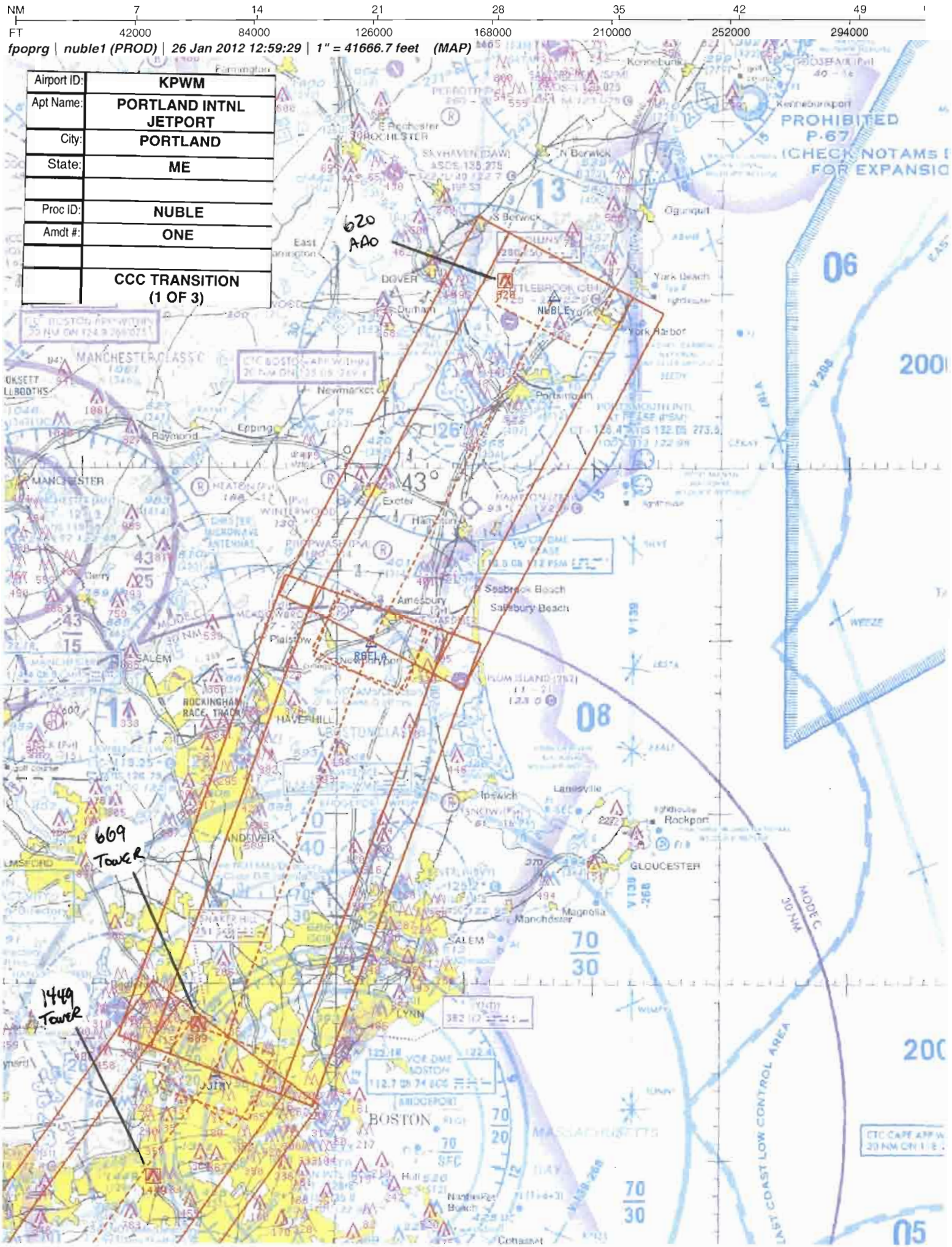
ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 060982-009	356	41				

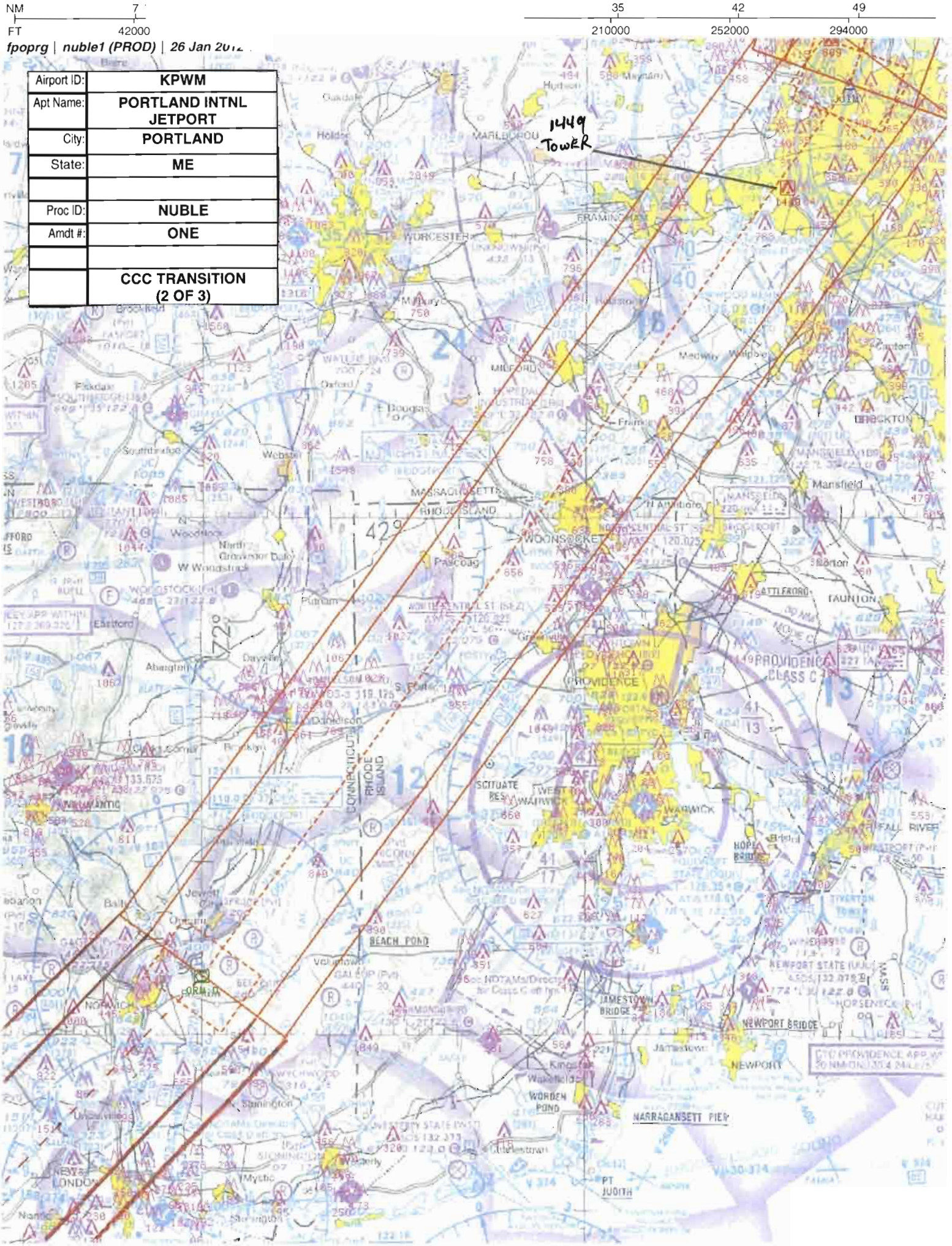
Requirement/Remarks:

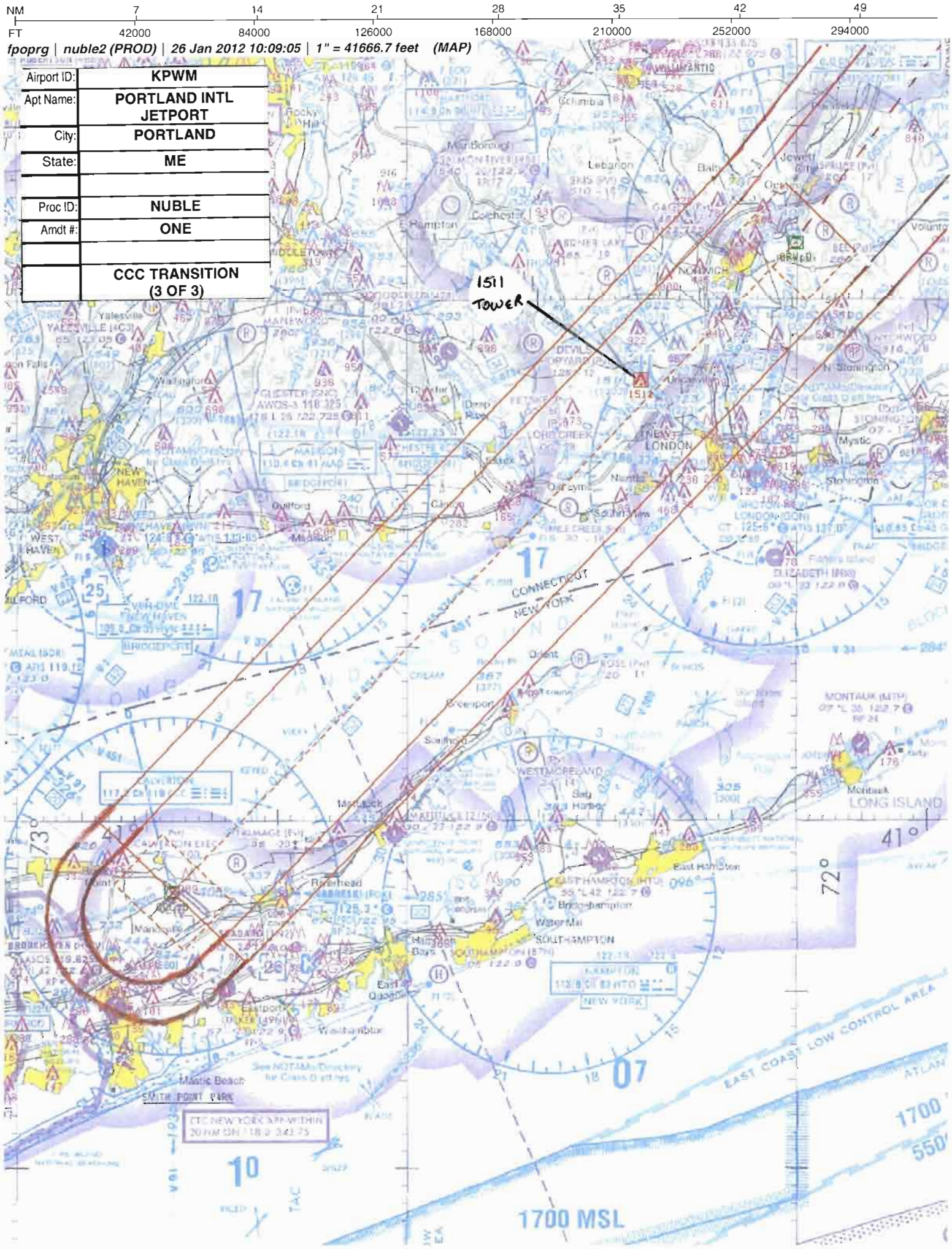
Signature:	Routing Symbol:	Date:

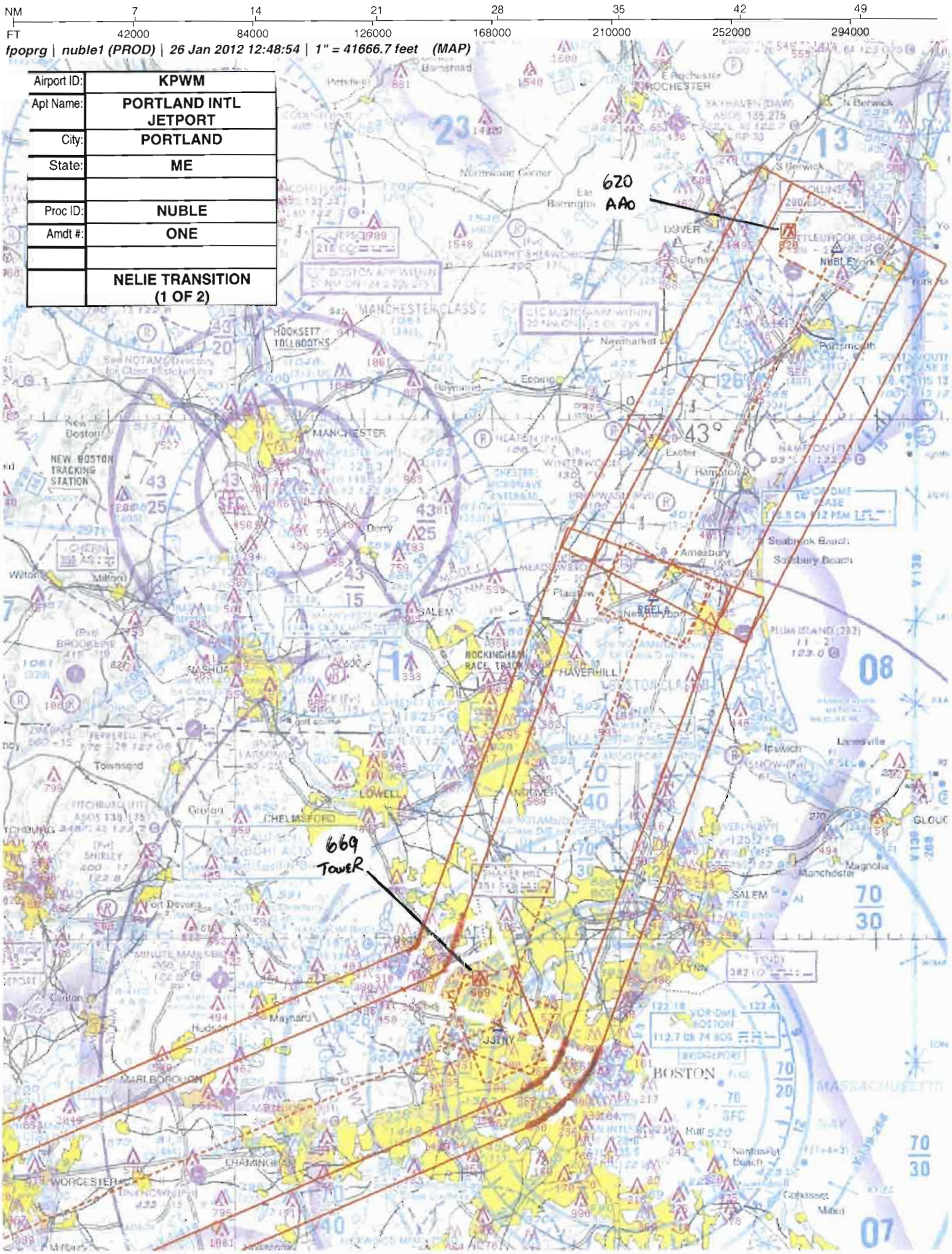

NM 7 14 21 28 35 42 49 56 63 70
FT 42000 84000 126000 168000 210000 252000 294000 336000 378000 420000
fpoprg | nuble1 (PROD) | 26 Jan 2012 12:35:24 | 1" = 41666.7 feet (MAP)
Airport ID: KPWM
Apt Name: PORTLAND INTNL JETPORT
City: PORTLAND
State: ME
Proc ID: NUBLE
Amdt #: ONE
BAF TRANSITION (1 OF 2)
620
AAO
620
AAO
DOVER
MANCHESTER
SALEM
HAVERHILL
LOWELL
CHELMSFORD
GLOUCESTER
Ipswich
Exeter
Hampton
Amesbury
Seabrook Beach
Salisbury Beach
Plaistow
Newmarket
Durham
York Beach
York Harbor
East Barrington
Northwood Center
Epping
Raymond
Derry
Milford
Nashua
Groton
Tewksbury
Andover
Methuen
Lawrence
Manchester
Marblehead
Rockport
Hudson
Maynard
Littleton
Lynn
Wilmington
Burlington
Billerica
Tyngsboro
Dracut
Pelham
Windham
Hampstead
Kingston
Plaistow
ROCKINGHAM RACE TRACK
NEW BOSTON TRACKING STATION
RBELA
NUBLE
PLUM ISLAND
43°
06
08
2000
2000
70
30
MODE C
30 NM
TRAFFIC AREA
EAST COAST

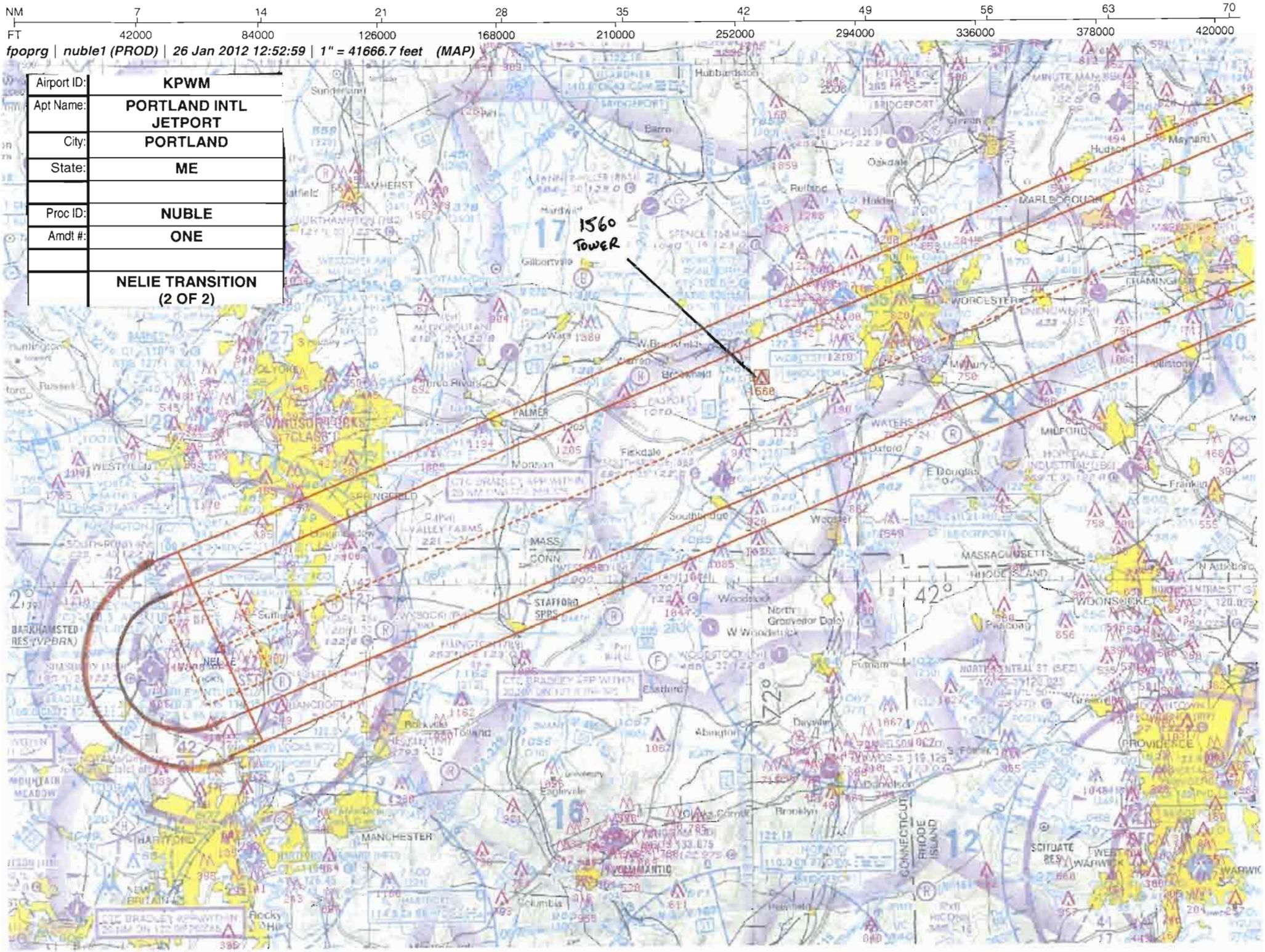

NM 7 14 21 28 35 42 49 56 63 70
FT 42000 84000 126000 168000 210000 252000 294000 336000 378000 420000
fpoprg | nuble1 (PROD) | 26 Jan 2012 12:42:46 | 1" = 41666.7 feet (MAP)
Airport ID: KPWM
Apt Name: PORTLAND INTNL JETPORT
City: PORTLAND
State: ME
Proc ID: NUBLE
Amdt #: ONE
BAF TRANSITION (2 OF 2)
2049
TOWER
42°
72°

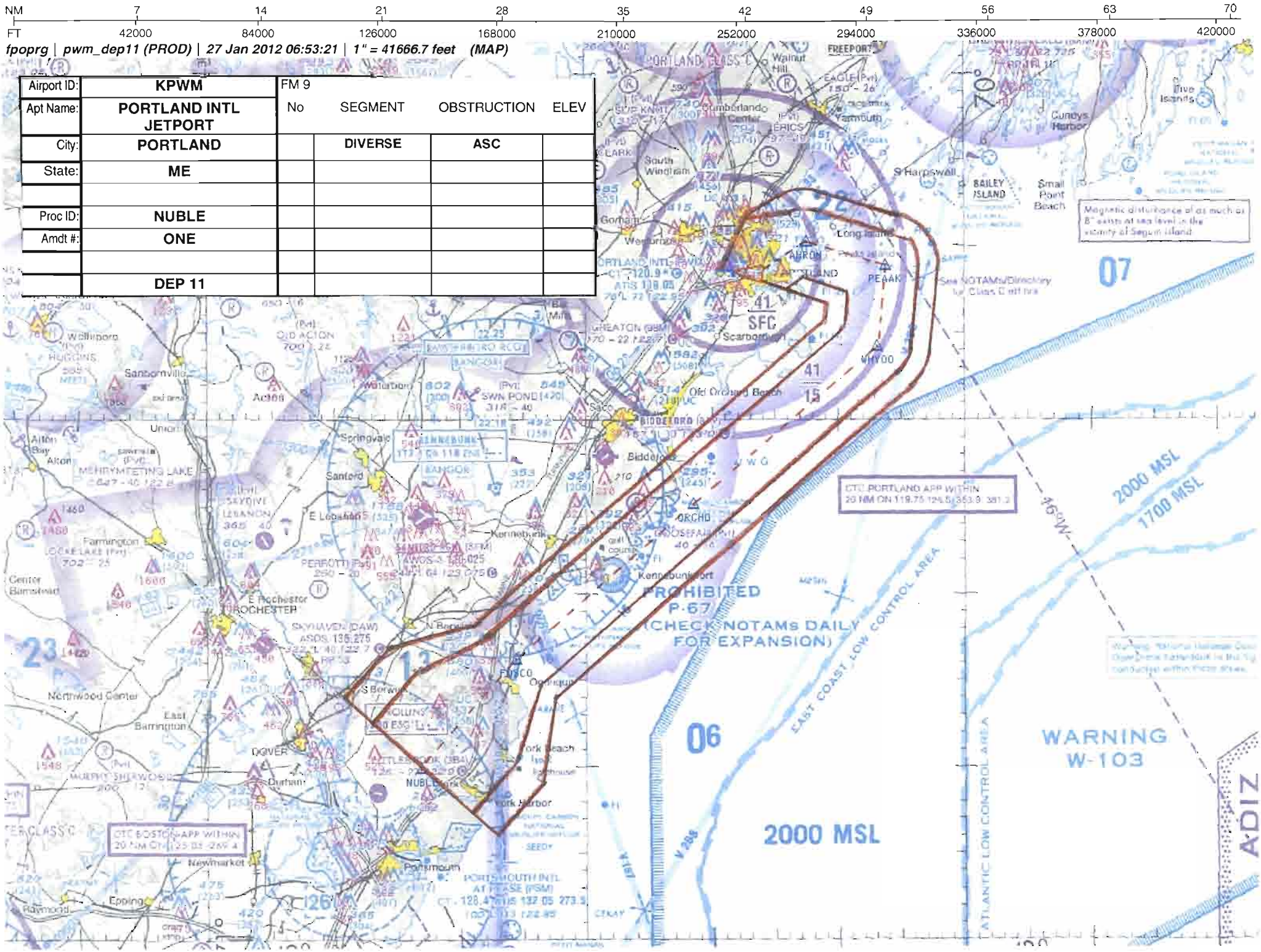

NM 7 14 21 28 35 42 49
FT 42000 84000 126000 168000 210000 252000 294000
fpoprg | nuble1 (PROD) | 26 Jan 2012 12:59:29 | 1" = 41666.7 feet (MAP)
Airport ID: KPWM
Apt Name: PORTLAND INTNL JETPORT
City: PORTLAND
State: ME
Proc ID: NUBLE
Amdt #: ONE
CCC TRANSITION (1 OF 3)
620 APO
669 Tower
1449 Tower
NUBLE
RBELA
PROHIBITED P-67
CHECK NOTAMs FOR EXPANSIO
BOSTON
MANCHESTER
PORTSMOUTH
LAST COAST LOW CONTROL AREA

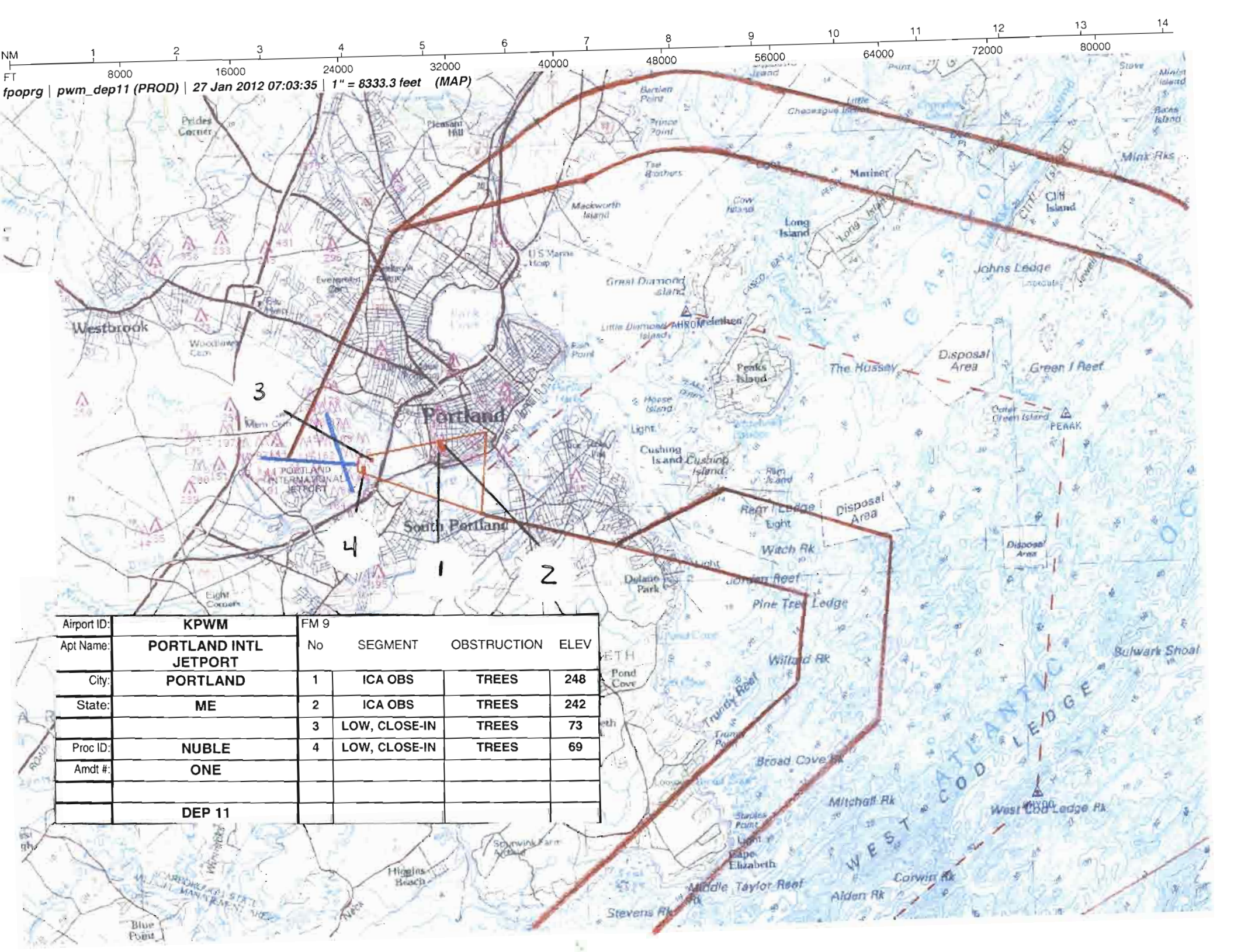

NM 7
FT 42000
35 42 49
210000 252000 294000
fpoprg | nuble1 (PROD) | 26 Jan 2012
Airport ID: KPWM
Apt Name: PORTLAND INTNL JETPORT
City: PORTLAND
State: ME
Proc ID: NUBLE
Amdt #: ONE
CCC TRANSITION (2 OF 3)
1449
TOWER
PROVIDENCE
CLASS C
BEACH POND
WORDEN POND
NARRAGANSETT PIER
NEWPORT
NEWPORT BRIDGE
JAMESTOWN BRIDGE
WORCESTER
MILFORD
BROCKTON
TAUNTON
FALL RIVER
WARWICK
NEW LONDON
MASSACHUSETTS
RHODE ISLAND
CONNECTICUT
42°
72°

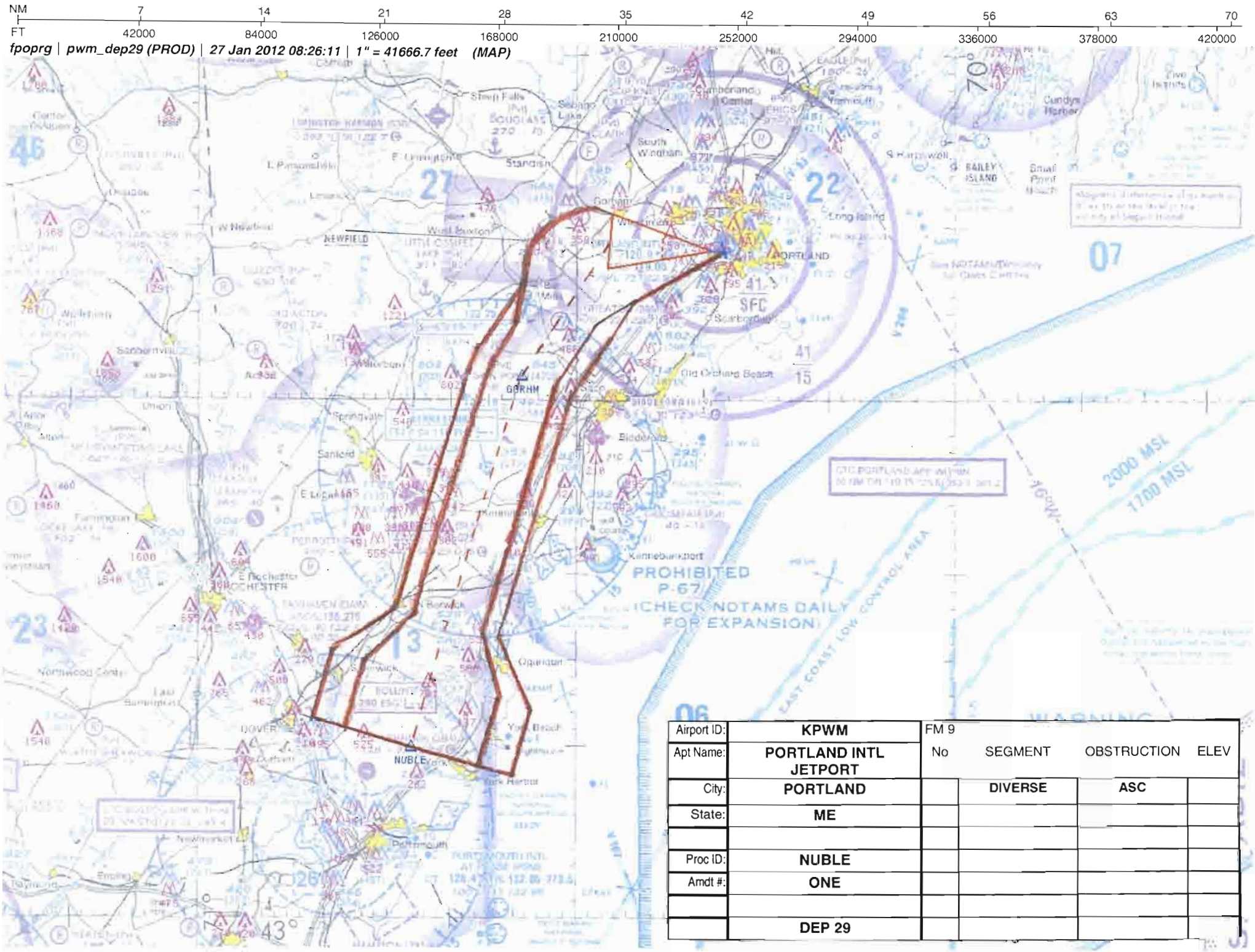

NM 7 14 21 28 35 42 49
FT 42000 84000 126000 168000 210000 252000 294000
fpoprg | nuble2 (PROD) | 26 Jan 2012 10:09:05 | 1" = 41666.7 feet (MAP)
Airport ID: KPWM
Apt Name: PORTLAND INTL JETPORT
City: PORTLAND
State: ME
Proc ID: NUBLE
Amdt #: ONE
CCC TRANSITION (3 OF 3)
1511 TOWER
CONNECTICUT
NEW YORK
LONG ISLAND
EAST COAST LOW CONTROL AREA
1700 MSL


NM 7 14 21 28 35 42 49
FT 42000 84000 126000 168000 210000 252000 294000
fpoprg | nuble1 (PROD) | 26 Jan 2012 12:48:54 | 1" = 41666.7 feet (MAP)
Airport ID: KPWM
Apt Name: PORTLAND INTL JETPORT
City: PORTLAND
State: ME
Proc ID: NUBLE
Amdt #: ONE
NELIE TRANSITION (1 OF 2)
620
AAO
669
TOWER
MANCHESTER
NEW BOSTON TRACKING STATION
LOWELL
SALEM
HAVERHILL
ROCKINGHAM RACE TRACK
BOSTON
MARLBOROUGH
WORCESTER
Amesbury
Seabrook Beach
Salisbury Beach
Exeter
Hampton
Portsmouth
Newburyport
Ipswich
Lawrence
Manchester
Gloucester
Nantucket Beach
Cohasset
Milton
Townsend
Groton
Clinton
Maynard
Hudson
Framingham
Millbury
Milford
Wilton
Derry
Epping
Raymond
Durham
Dover
Rochester
Somersworth
Berwick
Kittery
Eliot
Barrington
Northwood Center
Pittsfield
Barnstead
Hooksett Toll Booths
New Boston
Merrimack
Nashua
Brookline
Pepperell
Shirley
Fitchburg
Chelmsford
Ayer
Devens
Shaker Hill
Lynn
Hull
Bridgewater
Braintree
Weymouth
Plaistow
Brela
Plum Island
Nubble
Kittery
Dover
Durham
Exeter
Hampton
Amesbury
Salisbury Beach
Seabrook Beach
Ipswich
Lawrence
Manchester
Gloucester
Nantucket Beach
Cohasset
Milton
Townsend
Groton
Clinton
Maynard
Hudson
Framingham
Millbury
Milford
Wilton
Derry
Epping
Raymond
Durham
Dover
Rochester
Somersworth
Berwick
Kittery
Eliot
Barrington
Northwood Center
Pittsfield
Barnstead
Hooksett Toll Booths
New Boston
Merrimack
Nashua
Brookline
Pepperell
Shirley
Fitchburg
Chelmsford
Ayer
Devens
Shaker Hill
Lynn
Hull
Bridgewater
Braintree
Weymouth
Plaistow
Brela
Plum Island

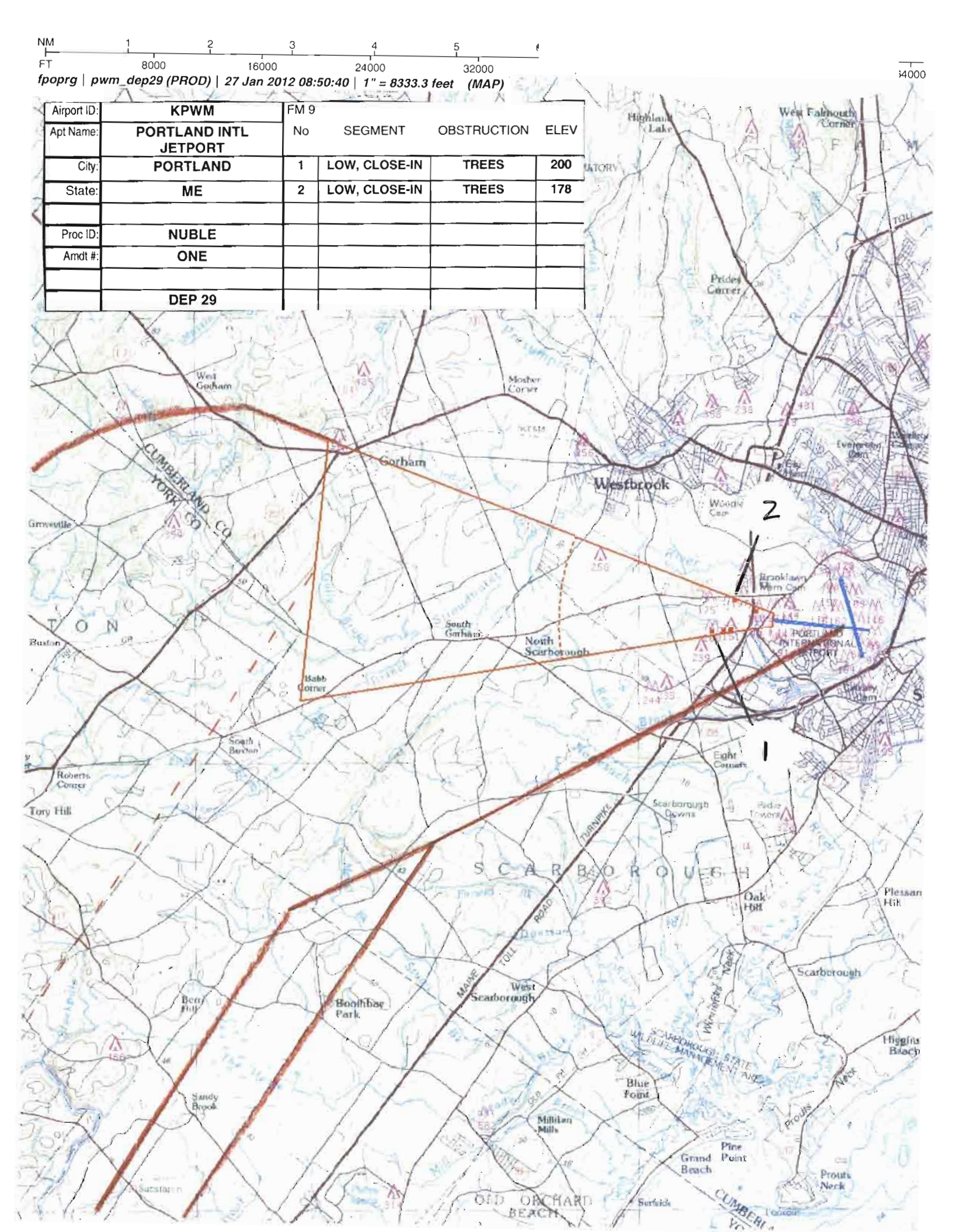

NM 7 14 21 28 35 42 49 56 63 70
FT 42000 84000 126000 168000 210000 252000 294000 336000 378000 420000
fpoprg | nuble1 (PROD) | 26 Jan 2012 12:52:59 | 1" = 41666.7 feet (MAP)
Airport ID: KPWM
Apt Name: PORTLAND INTL JETPORT
City: PORTLAND
State: ME
Proc ID: NUBLE
Amdt #: ONE
NELIE TRANSITION (2 OF 2)
1560 TOWER
1668
MANCHESTER
PROVIDENCE
WORCESTER
MILFORD
PALMER
STAFFORD SPRS
NELIE


NM 7 14 21 28 35 42 49 56 63 70
FT 42000 84000 126000 168000 210000 252000 294000 336000 378000 420000
fpoprg | pwm_dep11 (PROD) | 27 Jan 2012 06:53:21 | 1" = 41666.7 feet (MAP)
Airport ID: KPWM
Apt Name: PORTLAND INTL JETPORT
City: PORTLAND
State: ME
Proc ID: NUBLE
Amdt #: ONE
DEP 11
FM 9
No SEGMENT OBSTRUCTION ELEV
DIVERSE
ASC
PORTLAND CLASS C
FREEPORT
Wallingford
Cumberland Center
Yarmouth
Cousins Harbor
Five Islands
South Windham
S Harpswell
BAILEY ISLAND
Small Point Beach
Magnetic disturbance of as much as 8° exists at sea level in the vicinity of Seguin Island
Gorham
Westbrook
Long Island
AARON
PEAAK
See NOTAMs/Directory for Class E airspace
07
41
SFC
Scarborough
WHYOO
Old Orchard Beach
Saco
BIDDEFORD
Biddeford
15
Wellsboro
Sanbornville
Alton Bay
Alton
Union
Springvale
Sanford
E Lebanon
Kennebunk
Kennebunkport
ORCHD
CTC PORTLAND APP WITHIN 20 NM ON 119.75 124.5 353.9 381.2
2000 MSL
1700 MSL
PROHIBITED P-67 (CHECK NOTAMs DAILY FOR EXPANSION)
EAST COAST LOW CONTROL AREA
ATLANTIC LOW CONTROL AREA
WARNING W-103
06
2000 MSL
ADIZ
Farmington
Center Barnstead
E Rochester
ROCHESTER
Northwood Center
East Barrington
DOVER
Durham
York Beach
York Harbor
NUBLE
CTC BOSTON APP WITHIN 20 NM ON 125.05 269.4
Newmarket
Epping
Raymond
Portsmouth
PORTSMOUTH INTL AT PEASE (PSM)
23
12
126


NM 1 2 3 4 5 6 7 8 9 10 11 12 13 14
FT 8000 16000 24000 32000 40000 48000 56000 64000 72000 80000
fpoprg | pwm_dep11 (PROD) | 27 Jan 2012 07:03:35 | 1" = 8333.3 feet (MAP)
Portland
South Portland
Westbrook
PORTLAND INTERNATIONAL JETPORT
3
4
1
2
Airport ID: KPWM
Apt Name: PORTLAND INTL JETPORT
City: PORTLAND
State: ME
Proc ID: NUBLE
Amdt #: ONE
DEP 11
FM 9
No SEGMENT OBSTRUCTION ELEV
1 ICA OBS TREES 248
2 ICA OBS TREES 242
3 LOW, CLOSE-IN TREES 73
4 LOW, CLOSE-IN TREES 69



Airport ID:	KPWM	FM 9			
Apt Name:	PORTLAND INTL JETPORT	No	SEGMENT	OBSTRUCTION	ELEV
City:	PORTLAND		DIVERSE	ASC	
State:	ME				
Proc ID:	NUBLE				
Amdt #:	ONE				
	DEP 29				


NM 1 2 3 4 5
FT 8000 16000 24000 32000
fpoprg | pwm_dep29 (PROD) | 27 Jan 2012 08:50:40 | 1" = 8333.3 feet (MAP)
Airport ID: KPWM
Apt Name: PORTLAND INTL JETPORT
City: PORTLAND
State: ME
Proc ID: NUBLE
Amdt #: ONE
DEP 29
FM 9
No SEGMENT OBSTRUCTION ELEV
1 LOW, CLOSE-IN TREES 200
2 LOW, CLOSE-IN TREES 178
Gorham
Westbrook
South Portland
Scarborough
West Scarborough
Cumberland County
York County
2
1

U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION

GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
NUBLE	**ONE**	**NUBLE1.NUBLE**	**NONE**		

TYPE: RNAV SID

DP ROUTE DESCRIPTION:

TAKEOFF RWY 11: CLIMB HEADING 112.30 TO INTERCEPT COURSE 069.97 TO AHRON, THEN ON TRACK 123.68 TO PEAAK, THEN ON TRACK 202.90 TO WHYOO, THEN ON TRACK 246.27 TO CROSS ORCHD AT OR ABOVE 10000, THEN ON DEPICTED ROUTE TO NUBLE, THENCE...

TAKEOFF RWY 29: CLIMB HEADING 292.32 TO INTERCEPT COURSE 230.08 TO GORHM, THEN ON DEPICTED ROUTE TO NUBLE, THENCE...

...MAINTAIN 3000 OR AS ASSIGNED BY ATC (5000 WHEN TOWER CLOSED, CONTACT BOSTON CENTER). EXPECT CLEARANCE TO FILED ALTITUDE FIVE (5) MINUTES AFTER DEPARTURE.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	Crossing Altitudes/Fixes
BARNES	NUBLE1.BAF	NUBLE	RBELA	TRACK 224.78	22.59	7000	1700	
		RBELA	COTEE	TRACK 216.76	21.52	11000	1700	
		COTEE	BAF VORTAC	TRACK 271.84	73.84	17000	3100	
CALVERTON	NUBLE1.CCC	NUBLE	RBELA	TRACK 224.78	22.59	7000	1700	
		RBELA	JJIMY	TRACK 216.79	26.44	11000	1700	
		JJIMY	ORW VOR/DME	TRACK 233.42	63.96	17000	2500	
		ORW VOR/DME	CCC VOR/DME	TRACK 241.18	52.17	17000	2600	
NELIE	NUBLE1.NELIE	NUBLE	RBELA	TRACK 224.78	22.59	7000	1700	
		RBELA	JJIMY	TRACK 216.79	26.44	11000	1700	
		JJIMY	NELIE	TRACK 264.81	74.09	17000	2600	

PROCEDURAL DATA NOTES/TAKEOFF MINIMUMS:

NOTE: FOR TURBOJETS ONLY.
NOTE: DME/DME/IRU OR GPS REQUIRED.
NOTE: RNAV 1.
NOTE: RADAR REQUIRED FOR NON-GPS EQUIPPED AIRCRAFT.

TAKEOFF MINIMUMS:
RWY 11, STANDARD WITH MINIMUM CLIMB OF 460 FT PER NM TO 3000. ATC CLIMB OF 460 FT PER NM TO 10000.
RWY 29, STANDARD WITH MINIMUM CLIMB OF 250 FT PER NM TO 3000.

QUALITY CHECKED

GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
NUBLE	**ONE**	**NUBLE1.NUBLE**	**NONE**		

TAKEOFF OBSTACLES NOTES:

NOTE: RWY 11, TREES BEGINNING 983 FT FROM DER, 418 FT LEFT OF CENTERLINE, UP TO 59 FT AGL/73 FT MSL. TREES BEGINNING 428 FT FROM DER, 280 FT RIGHT OF CENTERLINE, UP TO 32 FT AGL/69 FT MSL. TREES 6037 FT FROM DER, 1744 FT LEFT OF CENTERLINE, UP TO 79 FT AGL/248 FT MSL. TREES 1.0 NM FROM DER, 1778 FT LEFT OF CENTERLINE, UP TO 75 FT AGL/242 FT MSL.
NOTE: RWY 29, TREES BEGINNING 2952 FT FROM DER, 1066 FT LEFT OF CENTERLINE, UP TO 85 FT AGL/200 FT MSL. TREES BEGINNING 1319 FT FROM DER, 509 FT RIGHT OF CENTERLINE, UP TO 81 FT AGL/178 FT MSL.

CONTROLLING OBSTACLES:

RWY 11: 248 FT MSL TREES 433850.16N/0701632.42W. 242 FT MSL TREES 433850.27N/0701629.07W.

LOST COMMUNICATIONS PROCEDURES:

IF RADIO CONTACT NOT ESTABLISHED WITHIN 2 MINUTES AFTER DEPARTURE, PROCEED ON COURSE VIA NUBLE RNAV ROUTE TO REQUESTED ALTITUDE OR 10000, WHICHEVER IS LOWER.

ADDITIONAL FLIGHT DATA:

REFERENCE MAG VAR: KPWM 17W EPOCH YEAR: 95. DME/DME ASSESSMENT: SAT (RNP 2.0).
RECOMMENDED NAVAID: ENE VORTAC (17W).

AIRPORTS SERVED:

PORTLAND INTL JETPORT	PORTLAND, ME

COMMUNICATIONS:

ATIS, CLEARANCE DELIVERY, GROUND CONTROL, TOWER, PWM DEP CON, ZBW

FIXES AND/OR NAVAIDS:

QUALITY CHECKED

U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION

GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
NUBLE	**ONE**	**NUBLE1.NUBLE**	**NONE**		

REMARKS:

THE RNAV PRO EVALUATIONS REQUIRE A DME/DME/IRU ALTITUDE OF 3600 MSL AT PEAKK AND GORHM DUE TO LIMITED NAVAIDS IN THE AREA. ATC OPERATIONAL REQUIREMENTS REQUIRE THE INITIAL CLIMB TO BE PUBLISHED NO HIGHER THAN 3000 MSL FOR AIRSPACE AND TRAFFIC SEPARATION. ONCE AIRBORNE, AIRCRAFT ARE NORMALLY ASSIGNED HIGHER ALTITUDES. ATC WILL PROVIDE RADAR MONITORING AND NAVIGATIONAL ASSISTANCE AS NEEDED IF TRAFFIC DOES NOT PERMIT AN IMMEDIATE CLIMB ABOVE 3000 MSL.

FLIGHT INSPECTED BY:

REQUIRED EFFECTIVE DATE:

ROUTINE

DEVELOPED BY:

PETER GUIMOND AJV-352 2/11/2012

APPROVED BY:

DARRYEL ADAMS AJV-352

COORDINATED WITH:

ATA, ALPA, APA, AOPA, NBAA, ZBW, PWM APP CON, PWM ATCT, ARPT MGR

CHANGES:

ORIGINAL.

REASONS:

EASTERN FPT REQUEST.

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
NUBLE	ONE	NUBLE1.NUBLE	NONE		

FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
RW11 (AER)	433845.10N/0701933.86W	N	-	-	-	-			
	433829.88N/0701548.85W	-	-	VI	095.30	2.73			CG 460 FT/NM TO 3000. ATC CG 460 FT/NM TO 10000.
AHRON	434024.11N/0701220.12W	Y	FB	CF	052.97	3.16			RECOMMENDED NAVAID: ENE VORTAC
PEAAK	433902.02N/0700603.67W	Y	FB	TF	106.68	4.76			
WHYOO	433425.08N/0700643.02W	Y	FB	TF	185.90	4.64			
ORCHD	432515.59N/0702116.99W	Y	FB	TF	229.27	14.01	AT/ABOVE 10000		
FOSCO	431615.56N/0703527.32W	Y	FB	TF	229.05	13.71			
NUBLE	430958.36N/0704259.47W	Y	FB	TF	221.28	8.36			
RW29 (AER)	433838.52N/0701756.37W	N	-	-	-	-			
	433915.99N0702716.35W	-	-	VI	275.32	6.80			CG 250 FT/NM TO 3000
GORHM	433131.56N/0703411.86W	Y	FB	CF	213.08	9.23			RECOMMENDED NAVAID: ENE VORTAC
NUBLE	430958.36N/0704259.47W	Y	FB	TF	196.63	22.48			
NUBLE	430958.36N/0704259.47W	Y	-	IF	-	-			NUBLE1.BAF
RBELA	424957.99N/0705717.96W	Y	FB	TF	207.78	22.59			
COTEE	422942.23N/0710707.92W	Y	FB	TF	199.76	21.52			
BAF VORTAC	420943.06N/0724258.31W	Y	FB	TF	254.84	73.84			
NUBLE	430958.36N/0704259.47W	Y	-	IF	-	-			NUBLE1.CCC
RBELA	424957.99N/0705717.96W	Y	FB	TF	207.78	22.59			
JJIMY	422504.09N/0710923.06W	Y	FB	TF	199.79	26.44			
ORW VOR/DME	413323.05N/0715957.67W	Y	FB	TF	216.42	63.96			
CCC VOR/DME	405546.62N/0724755.89W	Y	FB	TF	224.18	52.17			
NUBLE	430958.36N/0704259.47W	Y	-	IF	-	-			NUBLE1.NELIE
RBELA	424957.99N/0705717.96W	Y	FB	TF	207.78	22.59			
JJIMY	422504.09N/0710923.06W	Y	FB	TF	199.79	26.44			
NELIE	415627.64N/0724118.88W	Y	FB	TF	247.81	74.09			

QUALITY 1 CHECKED

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
NUBLE (RNAV)	ONE	NUBLE1.NUBLE	NONE		

ARINC PACKET - 424-18 - SID

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAD        BAF   K6011300VTL  N42094305W072425832    N42094305W072425832W0140002671     NARBARNES
        SUSAD        CCC   K6011720VDLW N40554662W072475589    N40554662W072475589W0130000851     NARCALVERTON
        SUSAD        ENE   K6011710VTH  N43253242W070364869    N43253242W070364869W0170001922     NARKENNEBUNK
        SUSAD        ORW   K6011000VDL  N41332305W071595767    N41332305W071595767W0140003101     NARNORWICH

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   AHRON K60    W     N43402411W070122012                    W0158     NAR           AHRON
        SUSAEAENRT   COTEE K60    C   B N42294223W071070792                    W0150     NAR           COTEE
        SUSAEAENRT   FOSCO K60    W     N43161556W070352732                    W0155     NAR           FOSCO
        SUSAEAENRT   GORHM K60    W     N43313156W070341186                    W0156     NAR           GORHM
        SUSAEAENRT   JJIMY K60    C   B N42250409W071092306                    W0150     NAR           JJIMY
        SUSAEAENRT   NELIE K60    C   H N41562764W072411888                    W0141     NAR           NELIE
        SUSAEAENRT   NUBLE K60    W     N43095836W070425947                    W0154     NAR           NUBLE
        SUSAEAENRT   ORCHD K60    W     N43251559W070211699                    W0157     NAR           ORCHD
        SUSAEAENRT   PEAAK K60    W     N43390202W070060367                    W0158     NAR           PEAAK
        SUSAEAENRT   RBELA K60    W   H N42495799W070571796                    W0152     NAR           RBELA
        SUSAEAENRT   WHYOO K60    W     N43342508W070064302                    W0158     NAR           WHYOO

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KPWMK6APWM     0     072YHN43384620W070183340W017000076         1800018000C    MNAR    PORTLAND INTL JETPORT

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KPWMK6DNUBLE14RW11  010         0       VI                    1123                    18000
        SUSAP KPWMK6DNUBLE14RW11  020AHRONK6EA0E    010CF ENE K6      0670023207000032D
        SUSAP KPWMK6DNUBLE14RW11  030PEAAKK6EA0E    010TF                 12370048
        SUSAP KPWMK6DNUBLE14RW11  040WHYOOK6EA0E    010TF                 20290046
        SUSAP KPWMK6DNUBLE14RW11  050ORCHDK6EA0E    010TF                 24630140    + 10000
        SUSAP KPWMK6DNUBLE14RW11  060FOSCOK6EA0E    010TF                 24610137
        SUSAP KPWMK6DNUBLE14RW11  070NUBLEK6EA0EE   010TF                 23830084
        SUSAP KPWMK6DNUBLE14RW29  010         0       VI                    2923                    18000
        SUSAP KPWMK6DNUBLE14RW29  020GORHMK6EA0E    010CF ENE K6      0346006323010092D
        SUSAP KPWMK6DNUBLE14RW29  030NUBLEK6EA0EE   010TF                 21360225
        SUSAP KPWMK6DNUBLE16BAF   010NUBLEK6EA0E      IF                                        18000
        SUSAP KPWMK6DNUBLE16BAF   020RBELAK6EA0E    010TF                 22480226
        SUSAP KPWMK6DNUBLE16BAF   030COTEEK6EA0E    010TF                 21680215
```

QUALITY 1 CHECKED

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
NUBLE (RNAV)	ONE	NUBLE1.NUBLE	NONE		

```
SUSAP KPWMK6DNUBLE16BAF   040BAF  K6D 0VE   010TF                    27180738
SUSAP KPWMK6DNUBLE16CCC   010NUBLEK6EA0E       IF                                  18000
SUSAP KPWMK6DNUBLE16CCC   020RBELAK6EA0E    010TF                    22480226
SUSAP KPWMK6DNUBLE16CCC   030JJIMYK6EA0E    010TF                    21680264
SUSAP KPWMK6DNUBLE16CCC   040ORW   K6D 0V    010TF                    23340640
SUSAP KPWMK6DNUBLE16CCC   050CCC   K6D 0VE   010TF                    24120522
SUSAP KPWMK6DNUBLE16NELIE 010NUBLEK6EA0E       IF                                  18000
SUSAP KPWMK6DNUBLE16NELIE 020RBELAK6EA0E    010TF                    22480226
SUSAP KPWMK6DNUBLE16NELIE 030JJIMYK6EA0E    010TF                    21680264
SUSAP KPWMK6DNUBLE16NELIE 040NELIEK6EA0EE   010TF                    26480741

                1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------------------------
SUSAP KPWMK6GRW11     0072001123 N43384510W070193386-0500     -0003200076000059150IIPWM3
SUSAP KPWMK6GRW29     0072002923 N43383852W070175637+0500     -0013300042000050150IIGCS1
```

QUALITY 1 CHECKED

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
NUBLE (RNAV)	ONE	NUBLE1.NUBLE	NONE		

ARINC SUMMARY - 424-18 - SID

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	RW11		010		VI		FB		112.3()			
	RW11	AHRON	020		CF		FB	1.0	070.0()	003.2		
	RW11	PEAAK	030		TF		FB	1.0	123.7()	004.8		
	RW11	WHYOO	040		TF		FB	1.0	202.9()	004.6		
	RW11	ORCHD	050		TF		FB	1.0	246.3()	014.0	AA 10000	
	RW11	FOSCO	060		TF		FB	1.0	246.1()	013.7		
	RW11	NUBLE	070		TF		FB	1.0	238.3()	008.4		
	RW29		010		VI		FB		292.3()			
	RW29	GORHM	020		CF		FB	1.0	230.1()	009.2		
	RW29	NUBLE	030		TF		FB	1.0	213.6()	022.5		
	BAF	NUBLE	010		IF		FB					
	BAF	RBELA	020		TF		FB	1.0	224.8()	022.6		
	BAF	COTEE	030		TF		FB	1.0	216.8()	021.5		
	BAF	BAF	040		TF		FB	1.0	271.8()	073.8		
	CCC	NUBLE	010		IF		FB					
	CCC	RBELA	020		TF		FB	1.0	224.8()	022.6		
	CCC	JJIMY	030		TF		FB	1.0	216.8()	026.4		
	CCC	ORW	040		TF		FB	1.0	233.4()	064.0		
	CCC	CCC	050		TF		FB	1.0	241.2()	052.2		
	NELIE	NUBLE	010		IF		FB					
	NELIE	RBELA	020		TF		FB	1.0	224.8()	022.6		
	NELIE	JJIMY	030		TF		FB	1.0	216.8()	026.4		
	NELIE	NELIE	040		TF		FB	1.0	264.8()	074.1		

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	BAF	N420943.05	W0724258.32	N4209.718	W07242.972
	CCC	N405546.62	W0724755.89	N4055.777	W07247.932
	ENE	N432532.42	W0703648.69	N4325.540	W07036.812
	ORW	N413323.05	W0715957.67	N4133.384	W07159.961
	AHRON	N434024.11	W0701220.12	N4340.402	W07012.335
	COTEE	N422942.23	W0710707.92	N4229.704	W07107.132
	FOSCO	N431615.56	W0703527.32	N4316.259	W07035.455
	GORHM	N433131.56	W0703411.86	N4331.526	W07034.198
	JJIMY	N422504.09	W0710923.06	N4225.068	W07109.384
	NELIE	N415627.64	W0724118.88	N4156.461	W07241.315
	NUBLE	N430958.36	W0704259.47	N4309.973	W07042.991
	ORCHD	N432515.59	W0702116.99	N4325.260	W07021.283
	PEAAK	N433902.02	W0700603.67	N4339.034	W07006.061
	RBELA	N424957.99	W0705717.96	N4249.967	W07057.299
	WHYOO	N433425.08	W0700643.02	N4334.418	W07006.717
	RW11	N433845.10	W0701933.86	N4338.752	W07019.564

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
NUBLE (RNAV)	ONE	NUBLE1.NUBLE	NONE		

RW29	N433838.52	W0701756.37	N4338.642	W07017.940

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW11	00076	59
RW29	00042	50

QUALITY 1 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: AHRON **STATE:** ME **COUNTRY:** US

LATITUDE/LONGITUDE: 434024.11N/0701220.12W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	HSKEL (RNAV)			KPWM	PORTLAND	ME (US)
DP	NUBLE (RNAV)			KPWM	PORTLAND	ME (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 07/26/2012

DEVELOPED BY: **DATE:** 01/26/2012 **OFFICE:** AJV-352 **NAME:** PETER GUIMOND

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZBW
ATC FACILITY: PWM APP CON
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: FOSCO **STATE:** ME **COUNTRY:** US

LATITUDE/LONGITUDE: 431615.56N/0703527.32W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	NUBLE (RNAV)			KPWM	PORTLAND	ME (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 07/26/2012

DEVELOPED BY: **DATE:** 01/26/2012 **OFFICE:** AJV-352 **NAME:** PETER GUIMOND

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZBW
ATC FACILITY: PWM APP CON
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: GORHM **STATE:** ME **COUNTRY:** US

LATITUDE/LONGITUDE: 433131.56N/0703411.86W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	NUBLE (RNAV)			KPWM	PORTLAND	ME (US)
STAR	SCOGS (RNAV)			KPWM	PORTLAND	ME (US)

REQUIRED CHARTING: DP, STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 07/26/2012

DEVELOPED BY: **DATE:** 01/26/2012 **OFFICE:** AJV-352 **NAME:** PETER GUIMOND

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZBW
ATC FACILITY: PWM APP CON
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: JJIMY **STATE:** MA **COUNTRY:** US

LATITUDE/LONGITUDE: 422504.09N/0710923.06W **TYPE:** WP, INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	PEASE	PSM	VOR/DME	L	215.84	199.84	42.48	42.48		17000	45000
2	BOSTON	BOS	VOR/DME	H	312.09	296.09	8.26	8.26		17000	45000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
PSM	VOR/DME	R-216	43	17000	45000

REMARKS:
BOSTON (FAC 2) AND PEASE (FAC 1) USED TO ESTABLISH FIX COORDINATES
MRA 17000 PER ATC REQUEST

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	NUBLE (RNAV)			KPWM	PORTLAND	ME (US)
DP	PPORT (RNAV)			KMHT	MANCHESTER	NH (US)

REQUIRED CHARTING: DP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 07/26/2012

REASON FOR REVISION:
1. ADDED INT AND DME TO FIX TYPE.
2. DELETED CURRENT FAC 1 (COTEE).
3. ADDED NEW FAC 1 (PSM) AND NEW FAC 2 (BOS).
4. ADDED ESV DATA.
5. UPDATED FIX USE.

DEVELOPED BY: **DATE:** 04/02/2012 **OFFICE:** AJV-352 **NAME:** PETER GUIMOND

APPROVED BY: **DATE:** **OFFICE:** AJV-311 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZBW
ATC FACILITY: BOS APP CON
OTHER:

QUALITY CHECKED 1

RADIO FIX AND HOLDING DATA RECORD

NAME: NUBLE **STATE:** ME **COUNTRY:** US

LATITUDE/LONGITUDE: 430958.36N/0704259.47W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	NUBLE (RNAV)			KPWM	PORTLAND	ME (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 07/26/2012

DEVELOPED BY: **DATE:** 01/26/2012 **OFFICE:** AJV-352 **NAME:** PETER GUIMOND

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZBW
ATC FACILITY: PWM APP CON
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: ORCHD **STATE:** ME **COUNTRY:** US

LATITUDE/LONGITUDE: 432515.59N/0702116.99W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	NUBLE (RNAV)			KPWM	PORTLAND	ME (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 07/26/2012

DEVELOPED BY: **DATE:** 01/26/2012 **OFFICE:** AJV-352 **NAME:** PETER GUIMOND

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZBW
ATC FACILITY: PWM APP CON
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: PEAAK **STATE:** ME **COUNTRY:** US

LATITUDE/LONGITUDE: 433902.02N/0700603.67W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	NUBLE (RNAV)			KPWM	PORTLAND	ME (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 07/26/2012

DEVELOPED BY: **DATE:** 01/26/2012 **OFFICE:** AJV-352 **NAME:** PETER GUIMOND

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZBW
ATC FACILITY: PWM APP CON
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: WHYOO **STATE:** ME **COUNTRY:** US

LATITUDE/LONGITUDE: 433425.08N/0700643.02W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	NUBLE (RNAV)			KPWM	PORTLAND	ME (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 07/26/2012

DEVELOPED BY: **DATE:** 01/26/2012 **OFFICE:** AJV-352 **NAME:** PETER GUIMOND

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZBW
ATC FACILITY: PWM APP CON
OTHER:

QUALITY CHECK

RADIO FIX AND HOLDING DATA RECORD

NAME: BARNES VORTAC **STATE:** MA **COUNTRY:** US

INFO ONLY

LATITUDE/LONGITUDE: 420943.06N/0724258.31W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	BARNES	BAF	VORTAC	L							45000

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	E	BAF	VORTAC	094.75	274.75	L	1-1 1/2		4000	45000	4	29

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	265	AAO	421309.00N/0730339.00W	2051	4E
1	200	AAO	421110.00N/0724741.50W	1341	2C

REASON FOR NONSTANDARD HOLDING:
PAT 1 AIR TRAFFIC CONTROL SECTOR BOUNDARIES

HOLDING RESTRICTIONS:
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3400.
PAT 1 FOR ALTERNATE MISSED APPROACH HOLDING.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	ILS OR LOC RWY 24	KBDL	WINDSOR LOCKS	CT (US)
1	ILS RWY 24 (SA CAT II)	KBDL	WINDSOR LOCKS	CT (US)
1	ILS RWY 24 (SA CAT I)	KBDL	WINDSOR LOCKS	CT (US)

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BRADLEY			KBDL	WINDSOR LOCKS	CT (US)
DP	HANSCOM			KBED	BEDFORD	MA (US)
DP	BEVERLY			KBVY	BEVERLY	MA (US)
DP	BLZZR (RNAV)			KBOS	BOSTON	MA (US)
DP	LOGAN			KBOS	BOSTON	MA (US)
DP	REVSS (RNAV)			KBOS	BOSTON	MA (US)
DP	WYLYY (RNAV)			KBOS	BOSTON	MA (US)
DP	LAWRENCE			KLWM	LAWRENCE	MA (US)
DP	STEWY			KACK	NANTUCKET	MA (US)
DP	NORWOOD			KOWD	NORWOOD	MA (US)
DP	NUBLE (RNAV)			KPWM	PORTLAND	ME (US)
DP	COTEE (RNAV)			KMHT	MANCHESTER	NH (US)
EN ROUTE	J77		1			(US)
EN ROUTE	J80					(US)
EN ROUTE	Q406					(US)
EN ROUTE	Q448					(US)
EN ROUTE	Q480					(US)
EN ROUTE	V106					(US)
EN ROUTE	V146					(US)
EN ROUTE	V292					(US)
EN ROUTE	V405					(US)
IAP	COPTER ILS OR LOC RWY 6		1	KBDL	WINDSOR LOCKS	CT (US)
IAP	ILS OR LOC RWY 24		1	KBDL	WINDSOR LOCKS	CT (US)
IAP	ILS OR LOC RWY 33		1	KBDL	WINDSOR LOCKS	CT (US)
IAP	ILS RWY 24 (SA CAT I)		1	KBDL	WINDSOR LOCKS	CT (US)
IAP	ILS RWY 24 (SA CAT II)		1	KBDL	WINDSOR LOCKS	CT (US)
IAP	ILS RWY 6 (CAT II)		1	KBDL	WINDSOR LOCKS	CT (US)
IAP	ILS RWY 6 (CAT III)		1	KBDL	WINDSOR LOCKS	CT (US)
IAP	RNAV (RNP) Z RWY 6			KBDL	WINDSOR LOCKS	CT (US)
IAP	VOR-A			K7B2	NORTHAMPTON	MA (US)
IAP	VOR/DME-B			K7B2	NORTHAMPTON	MA (US)
IAP	ILS OR LOC RWY 5			KCEF	SPRINGFIELD/CHICOPEE	MA (US)
IAP	HI-TACAN RWY 20	1		KBAF	WESTFIELD/SPRINGFIELD	MA (US)
IAP	ILS OR LOC RWY 20			KBAF	WESTFIELD/SPRINGFIELD	MA (US)
IAP	VOR OR TACAN RWY 2			KBAF	WESTFIELD/SPRINGFIELD	MA (US)
IAP	VOR RWY 20			KBAF	WESTFIELD/SPRINGFIELD	MA (US)
IAP	RNAV (GPS) RWY 11			KORH	WORCESTER	MA (US)
STAR	NOBBI			KDXR	DANBURY	CT (US)
STAR	VALRE			KDXR	DANBURY	CT (US)
STAR	STELA			KHFD	HARTFORD	CT (US)

QUALITY CHECKED

STAR	STELA	KBDL	WINDSOR LOCKS	CT (US)
STAR	SWEDE	KBDL	WINDSOR LOCKS	CT (US)
STAR	HYPER (RNAV)	KIAD	WASHINGTON	DC (US)
STAR	STELA	KCEF	SPRINGFIELD/CHICOPEE	MA (US)
STAR	STELA	KBAF	WESTFIELD/SPRINGFIELD	MA (US)
STAR	STELA	KORH	WORCESTER	MA (US)
STAR	POPPP	KMHT	MANCHESTER	NH (US)
STAR	FLOSI (RNAV)	KEWR	NEWARK	NJ (US)
STAR	SHAFF	KEWR	NEWARK	NJ (US)
STAR	NOBBI	KLGA	NEW YORK	NY (US)
STAR	NOBBI	KHPN	WHITE PLAINS	NY (US)
STAR	VALRE	KHPN	WHITE PLAINS	NY (US)
STAR	HYPER (RNAV)	KCJR	CULPEPER	VA (US)
STAR	HYPER (RNAV)	KEZF	FREDERICKSBURG	VA (US)
STAR	HYPER (RNAV)	KFRR	FRONT ROYAL	VA (US)
STAR	HYPER (RNAV)	KJYO	LEESBURG	VA (US)
STAR	HYPER (RNAV)	KHEF	MANASSAS	VA (US)
STAR	HYPER (RNAV)	KNYG	QUANTICO	VA (US)
STAR	HYPER (RNAV)	KRMN	STAFFORD	VA (US)
STAR	HYPER (RNAV)	KHWY	WARRENTON	VA (US)
STAR	HYPER (RNAV)	KOKV	WINCHESTER	VA (US)
STAR	HYPER (RNAV)	KMRB	MARTINSBURG	WV (US)

REQUIRED CHARTING: DP, STAR, MILITARY IAP, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 11 **DATE OF REVISION:** 05/31/2012

REASON FOR REVISION:
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 01/09/2012 **OFFICE:** AJV-311 **NAME:** ERIC POWELL

APPROVED BY: **DATE:** **OFFICE:** AJV-311 **NAME:** RAY NUSSEAR

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZBW
ATC FACILITY: BDL APP CON
OTHER: BAF ATCT, HQ AFRC/DOVA

RADIO FIX AND HOLDING DATA RECORD

NAME: CALVERTON VOR/DME **STATE:** NY **COUNTRY:** US

INFO ONLY

LATITUDE/LONGITUDE: 405546.62N/0724755.89W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	CALVERTON	CCC	VOR/DME	L							17500

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	E	CCC	VOR/DME	084.50	264.50	L	1-1 1/2		2000	24000	4	19
2	E		WP	085.50	265.50	L		4	2000	6000	4	6
3	E		WP	085.00	265.00	L		4	2000	10000	4	10

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (36-001229)	405118.39N/0724610.32W	824	5D
2	200	TOWER (36-001229)	405118.39N/0724610.32W	824	5D
3	200	TOWER (36-001229)	405118.39N/0724610.32W	824	5D

REASON FOR NONSTANDARD HOLDING:
PAT 1 AIR TRAFFIC - AIRSPACE
PAT 2 ATC REQUEST
PAT 3 ATC REQUEST

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
PAT 1 ALSO USED FOR CHARTED ENROUTE OFF AIRWAY HOLDING BY ATC.
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	COASTAL			KHFD	HARTFORD	CT (US)
DP	COASTAL			KBDL	WINDSOR LOCKS	CT (US)
DP	COASTAL			KCEF	SPRINGFIELD/CHICOPEE	MA (US)
DP	COASTAL			KBAF	WESTFIELD/SPRINGFIELD	MA (US)
DP	NUBLE (RNAV)			KPWM	PORTLAND	ME (US)
DP	COTEE (RNAV)			KMHT	MANCHESTER	NH (US)
DP	LONG ISLAND			KISP	NEW YORK	NY (US)
EN ROUTE	V16					(US)
EN ROUTE	V451					(US)
EN ROUTE	V46					(US)
EN ROUTE	V91					(US)
IAP	ILS RWY 6		1	KBDR	BRIDGEPORT	CT (US)
IAP	RNAV (GPS) RWY 29			KBDR	BRIDGEPORT	CT (US)
IAP	VOR RWY 6			KBDR	BRIDGEPORT	CT (US)
IAP	ILS OR LOC RWY 2			KHVN	NEW HAVEN	CT (US)
IAP	VOR RWY 2			KHVN	NEW HAVEN	CT (US)
IAP	VOR-A			KHVN	NEW HAVEN	CT (US)
IAP	RNAV (GPS) X RWY 10			KHTO	EAST HAMPTON	NY (US)
IAP	VOR-A			KHTO	EAST HAMPTON	NY (US)
IAP	ILS OR LOC RWY 24		1	KISP	NEW YORK	NY (US)
IAP	ILS OR LOC RWY 6		1	KISP	NEW YORK	NY (US)
IAP	RNAV (GPS) RWY 15R		2	KISP	NEW YORK	NY (US)
IAP	RNAV (GPS) RWY 24		2	KISP	NEW YORK	NY (US)
IAP	RNAV (GPS) RWY 33L		2	KISP	NEW YORK	NY (US)
IAP	RNAV (GPS) RWY 6		2	KISP	NEW YORK	NY (US)
IAP	ILS OR LOC RWY 6	1		KHWV	SHIRLEY	NY (US)
IAP	RNAV (GPS) RWY 15		2	KHWV	SHIRLEY	NY (US)
IAP	RNAV (GPS) RWY 33		2	KHWV	SHIRLEY	NY (US)
IAP	VOR RWY 6			KHWV	SHIRLEY	NY (US)
IAP	COPTER RNAV (GPS) 190			K87N	SOUTHAMPTON	NY (US)
IAP	COPTER ILS OR LOC RWY 24		1	KFOK	WESTHAMPTON BEACH	NY (US)
IAP	ILS OR LOC RWY 24		1	KFOK	WESTHAMPTON BEACH	NY (US)
IAP	TACAN RWY 24			KFOK	WESTHAMPTON BEACH	NY (US)
IAP	BOUNO			KHPN	WHITE PLAINS	NY (US)
IAP	RICED			KHPN	WHITE PLAINS	NY (US)
STAR	DEER PARK			KBDL	WINDSOR LOCKS	CT (US)
STAR	KRANN (RNAV)			KBOS	BOSTON	MA (US)
STAR	NORWICH			KBOS	BOSTON	MA (US)
STAR	DEER PARK			KCEF	SPRINGFIELD/CHICOPEE	MA (US)
STAR	DEER PARK			KBAF	WESTFIELD/SPRINGFIELD	MA (US)

QUALITY CHECKED

STAR	SCOGS (RNAV)		KPWM	PORTLAND	ME (US)
STAR	PARCH (RNAV)	3	KFRG	FARMINGDALE	NY (US)
STAR	ROBER	1	KFRG	FARMINGDALE	NY (US)
STAR	LOVES		KISP	NEW YORK	NY (US)
STAR	NELIE (RNAV)		KISP	NEW YORK	NY (US)
STAR	PARCH (RNAV)	3	KJFK	NEW YORK	NY (US)
STAR	ROBER	1	KJFK	NEW YORK	NY (US)
STAR	NELIE (RNAV)		KFOK	WESTHAMPTON BEACH	NY (US)

REQUIRED CHARTING: DP, STAR, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 10 **DATE OF REVISION:** 05/31/2012

REASON FOR REVISION:
UPDATED LATITUDE FROM 405546.64 TO 405546.62 TO REFLECT NEW SURVEY INFORMATION.

DEVELOPED BY: **DATE:** 01/25/2012 **OFFICE:** AJV-352 **NAME:** STEVE BRUMMETT

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZBW, ZNY
ATC FACILITY: NY APP CON
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

INFO ONLY

NAME: COTEE **STATE:** MA **COUNTRY:** US

LATITUDE/LONGITUDE: 422942.23N/0710707.92W **TYPE:** WP, INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	MANCHESTER	MHT	VOR/DME	L	168.57	153.57	25.00	25.00		3000	45000
2	PEASE	PSM	VOR/DME	L	215.82	199.82		37.56		3000	45000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
MHT	VOR/DME	R-169	25	18000	45000
PSM	VOR/DME	R-216	38	18000	45000

HOLDING: **HOLDING TYPE OF ACTION:** ESTABLISH

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	N	MHT	VOR/DME	168.57	168.57	R	1		3000	6000	6	7

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (25-000611)	423914.00N/0711300.00W	807	5D

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
LAT/LONG PROVIDED BY ATC.
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	NUBLE (RNAV)			KPWM	PORTLAND	ME (US)
DP	COTEE (RNAV)			KMHT	MANCHESTER	NH (US)
IAP	ILS OR LOC RWY 33L	1, 2	1	KBOS	BOSTON	MA (US)
IAP	ILS RWY 33L (SA CAT I)	1, 2	1	KBOS	BOSTON	MA (US)
IAP	ILS RWY 33L (SA CAT II)	1, 2	1	KBOS	BOSTON	MA (US)

REQUIRED CHARTING: DP, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2 **DATE OF REVISION:** 12/15/2011

REASON FOR REVISION:
1. DELETED FAC 3, RBELA.
2. ADDED FAC 1 AND 2 DIST FROM FAC IN NM.
3. CHANGED FAC 1 AND 2 MRA FROM 17000 TO 3000.
4. REFORMATED ESV INFORMATION.
5. ADDED IAP TO REQUIRED CHARTING.
6. ADDED PAT 1.
7. ADDED REMARK, PRECIPITOUS TERRAIN EVALUATION COMPLETED.
8. ADDED HOLDING RESTRICTION, HOLDING LIMITED TO ESTABLISHED PATTERN.
9. UPDATED FIX USE.

DEVELOPED BY: **DATE:** 04/27/2011 **OFFICE:** AJV-352 **NAME:** DONALD SMITH (DAVID SAUER)

APPROVED BY: **DATE:** 10/24/2011 **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: EST
ARTCC: ZBW
ATC FACILITY: BOS APP CON, BOS ATC
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: NELIE **STATE:** CT **COUNTRY:** US

LATITUDE/LONGITUDE: 415627.64N/0724118.88W **TYPE:** WP, INT, DME

INFO ONLY

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	BOSTON	BOS	VOR/DME	H	268.34	252.34	79.84	79.84		18000	45000
2	CARMEL	CMK	VOR/DME	L	057.09	045.09		56.44		18000	45000
3	HAMPTON	HTO	VORTAC	H	357.81	344.81		63.55		18000	45000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
CMK	VOR/DME	R-057	57	18000	45000

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

REMARKS:
BOSTON (FAC 1) AND CARMEL (FAC 2) AND HAMPTON (FAC 3) USED TO ESTABLISH FIX COORDINATES
FIX MOVED MORE THAN 1 NM.
NAME RETAINED PER ATC REQUEST DUE TO OPERATIONAL ADVANTAGE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	HANSCOM			KBED	BEDFORD	MA (US)
DP	BEVERLY			KBVY	BEVERLY	MA (US)
DP	LOGAN			KBOS	BOSTON	MA (US)
DP	PATSS (RNAV)			KBOS	BOSTON	MA (US)
DP	WYLYY (RNAV)			KBOS	BOSTON	MA (US)
DP	LAWRENCE			KLWM	LAWRENCE	MA (US)
DP	NORWOOD			KOWD	NORWOOD	MA (US)
DP	NUBLE (RNAV)			KPWM	PORTLAND	ME (US)
DP	COTEE (RNAV)			KMHT	MANCHESTER	NH (US)
EN ROUTE	J75	1, 2, 3				(US)
EN ROUTE	T212					(US)
EN ROUTE	T255					(US)
EN ROUTE	T300					(US)
STAR	WIPOR (RNAV)			KEWB	NEW BEDFORD	MA (US)
STAR	FLOSI (RNAV)			KEWR	NEWARK	NJ (US)
STAR	NELIE (RNAV)			KISP	NEW YORK	NY (US)
STAR	NELIE (RNAV)			KFOK	WESTHAMPTON BEACH	NY (US)
STAR	WIPOR (RNAV)			KUUU	NEWPORT	RI (US)
STAR	WIPOR (RNAV)			KOQU	NORTH KINGSTOWN	RI (US)
STAR	WIPOR (RNAV)			KSFZ	PAWTUCKET	RI (US)
STAR	WIPOR (RNAV)			KPVD	PROVIDENCE	RI (US)

REQUIRED CHARTING: DP, STAR, CONTROLLER, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 6 **DATE OF REVISION:** 05/31/2012

REASON FOR REVISION:
ADDED DME TO FIX TYPE.
FIX MOVED 1.11NM NE.
UPDATED FAC 1, FAC 2, AND FAC 3 VALUES.
UPDATED CMK ESV.
UPDATED FIX USE AND REMARKS.
ADDED STAR TO REQUIRED CHARTING.

DEVELOPED BY: **DATE:** 11/28/2011 **OFFICE:** AJV-352 **NAME:** KELLY DEAN

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZBW
ATC FACILITY: BOS APP CON
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: NORWICH VOR/DME **STATE:** CT **COUNTRY:** US

INFO ONLY

LATITUDE/LONGITUDE: 413323.05N/0715957.67W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	NORWICH	ORW	VOR/DME	L							17500

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	S	ORW	VOR/DME	158.00	338.00	R	1		2600	6000	4	5
2	SW	ORW	VOR/DME	238.00	058.00	L	1-1 1/2		2500	17500	4	16
3	S		WP	158.00	338.00	R		4	2600	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (09-000114)	412739.00N/0715544.00W	793	1D
2	200	TOWER (09-000073)	413113.00N/0721001.00W	1000	2D
3	200	TOWER (09-000114)	412739.00N/0715544.00W	793	1D

REASON FOR NONSTANDARD HOLDING:
PAT 2 ATC REQUEST

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS
PAT 2 USED FOR KGON ILS OR LOC RWY 5 ALTERNATE MISSED APPROACH

REMARKS:
ORW VOR/DME CHARTED ON HIGH ENROUTE FOR REFERENCE ONLY.
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BRADLEY			KBDL	WINDSOR LOCKS	CT (US)
DP	NUBLE (RNAV)			KPWM	PORTLAND	ME (US)
DP	COTEE (RNAV)			KMHT	MANCHESTER	NH (US)
EN ROUTE	V130					(US)
EN ROUTE	V14					(US)
EN ROUTE	V16		2			(US)
EN ROUTE	V308					(US)
EN ROUTE	V475					(US)
IAP	ILS OR LOC RWY 5		2	KGON	GROTON/NEW LONDON	CT (US)
IAP	RNAV (GPS) RWY 23			KGON	GROTON/NEW LONDON	CT (US)
IAP	VOR RWY 23			KGON	GROTON/NEW LONDON	CT (US)
IAP	VOR RWY 5			KGON	GROTON/NEW LONDON	CT (US)
IAP	LDA RWY 2			KHFD	HARTFORD	CT (US)
IAP	VOR OR GPS-A			KHFD	HARTFORD	CT (US)
IAP	RNAV (GPS) RWY 27		3	KIJD	WILLIMANTIC	CT (US)
IAP	RNAV (GPS) RWY 9			KIJD	WILLIMANTIC	CT (US)
IAP	VOR-A		1	KIJD	WILLIMANTIC	CT (US)
IAP	ILS OR LOC RWY 33			KBDL	WINDSOR LOCKS	CT (US)
IAP	RNAV (GPS) RWY 33			KBDL	WINDSOR LOCKS	CT (US)
IAP	ILS OR LOC RWY 16			KOQU	NORTH KINGSTOWN	RI (US)
IAP	VOR RWY 34			KOQU	NORTH KINGSTOWN	RI (US)
IAP	LOC RWY 5			KSFZ	PAWTUCKET	RI (US)
IAP	RNAV (GPS) RWY 5			KSFZ	PAWTUCKET	RI (US)
IAP	VOR-A			KSFZ	PAWTUCKET	RI (US)
IAP	VOR-B			KSFZ	PAWTUCKET	RI (US)
IAP	ILS OR LOC RWY 23			KPVD	PROVIDENCE	RI (US)
IAP	ILS OR LOC RWY 5			KPVD	PROVIDENCE	RI (US)
IAP	ILS OR LOC/DME RWY 34			KPVD	PROVIDENCE	RI (US)
IAP	ILS RWY 5 (CAT II)			KPVD	PROVIDENCE	RI (US)
IAP	ILS RWY 5 (CAT III)			KPVD	PROVIDENCE	RI (US)
IAP	RNAV (GPS) RWY 5			KPVD	PROVIDENCE	RI (US)
IAP	VOR RWY 34			KPVD	PROVIDENCE	RI (US)
IAP	VOR RWY 5			KPVD	PROVIDENCE	RI (US)
IAP	VOR/DME RWY 16			KPVD	PROVIDENCE	RI (US)
IAP	VOR/DME RWY 23			KPVD	PROVIDENCE	RI (US)
IAP	VOR/DME RWY 34			KPVD	PROVIDENCE	RI (US)
IAP	LOC RWY 07			KWST	WESTERLY	RI (US)
STAR	DREEM (RNAV)			KBED	BEDFORD	MA (US)
STAR	GRAYM			KBED	BEDFORD	MA (US)
STAR	DREEM (RNAV)			KBVY	BEVERLY	MA (US)
STAR	GRAYM			KBVY	BEVERLY	MA (US)
STAR	KRANN (RNAV)			KBOS	BOSTON	MA (US)

QUALITY CHECKED

STAR	NORWICH		KBOS	BOSTON	MA (US)
STAR	OOSHN (RNAV)		KBOS	BOSTON	MA (US)
STAR	SCUPP		KBOS	BOSTON	MA (US)
STAR	WOONS	2	KBOS	BOSTON	MA (US)
STAR	GRAYM		KFIT	FITCHBURG	MA (US)
STAR	DREEM (RNAV)		KLWM	LAWRENCE	MA (US)
STAR	GRAYM		KLWM	LAWRENCE	MA (US)
STAR	WOONS		K1B9	MANSFIELD	MA (US)
STAR	WOONS		KGHG	MARSHFIELD	MA (US)
STAR	DEEPO (RNAV)		KACK	NANTUCKET	MA (US)
STAR	NEWBE		KACK	NANTUCKET	MA (US)
STAR	WIPOR (RNAV)		KEWB	NEW BEDFORD	MA (US)
STAR	WOONS		KOWD	NORWOOD	MA (US)
STAR	NELIE (RNAV)		KISP	ISLIP	NY (US)
STAR	NELIE (RNAV)		KFOK	WESTHAMPTON BEACH	NY (US)
STAR	WIPOR (RNAV)		KUUU	NEWPORT	RI (US)
STAR	WIPOR (RNAV)		KOQU	NORTH KINGSTOWN	RI (US)
STAR	WIPOR (RNAV)		KSFZ	PAWTUCKET	RI (US)
STAR	WIPOR (RNAV)		KPVD	PROVIDENCE	RI (US)

REQUIRED CHARTING: DP, STAR, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 15 **DATE OF REVISION:** 05/31/2012

REASON FOR REVISION:
1. DELETED PAT 4.
2. CHANGED FAC 1 MAA FROM 45000 TO 17500.
3. UPDATED FIX USE.

DEVELOPED BY: **DATE:** 11/29/2011 **OFFICE:** AJV-352 **NAME:** DAVID SAUER

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZBW, ZNY
ATC FACILITY: PVD & NYC APP CON
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: RBELA **STATE:** MA **COUNTRY:** US

LATITUDE/LONGITUDE: 424957.99N/0705717.96W **TYPE:** WP

INFO ONLY

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	NUBLE (RNAV)			KPWM	PORTLAND	ME (US)
DP	COTEE (RNAV)			KMHT	MANCHESTER	NH (US)

REQUIRED CHARTING: DP, CONTROLLER, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2 **DATE OF REVISION:** 05/31/2012

REASON FOR REVISION:
DELETED FAC 1.

DEVELOPED BY: **DATE:** 12/23/2011 **OFFICE:** AJV-352 **NAME:** PETER GUIMOND

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZBW
ATC FACILITY: BOS APP CON
OTHER:

QUALITY CHECKED

Name:	bellabonaj
Project Name:	Replaced BUXTO WP NAME with GORHM
Software:	RNAV-Pro™
Version:	2.35
Date/Time:	1/26/2012 8:38:39 AM
Input File:	PWM NUBLE1 SID RW11 ...
Databases:	AVNIS Date: 08/26/2011 NFD Date: 07/02/2009 DTED® (MAX) Date: 2002

Results Summary:

Flyability	**Please Check Flyability Results**
DME/DME	
Radars	
Comms	
TERPS	

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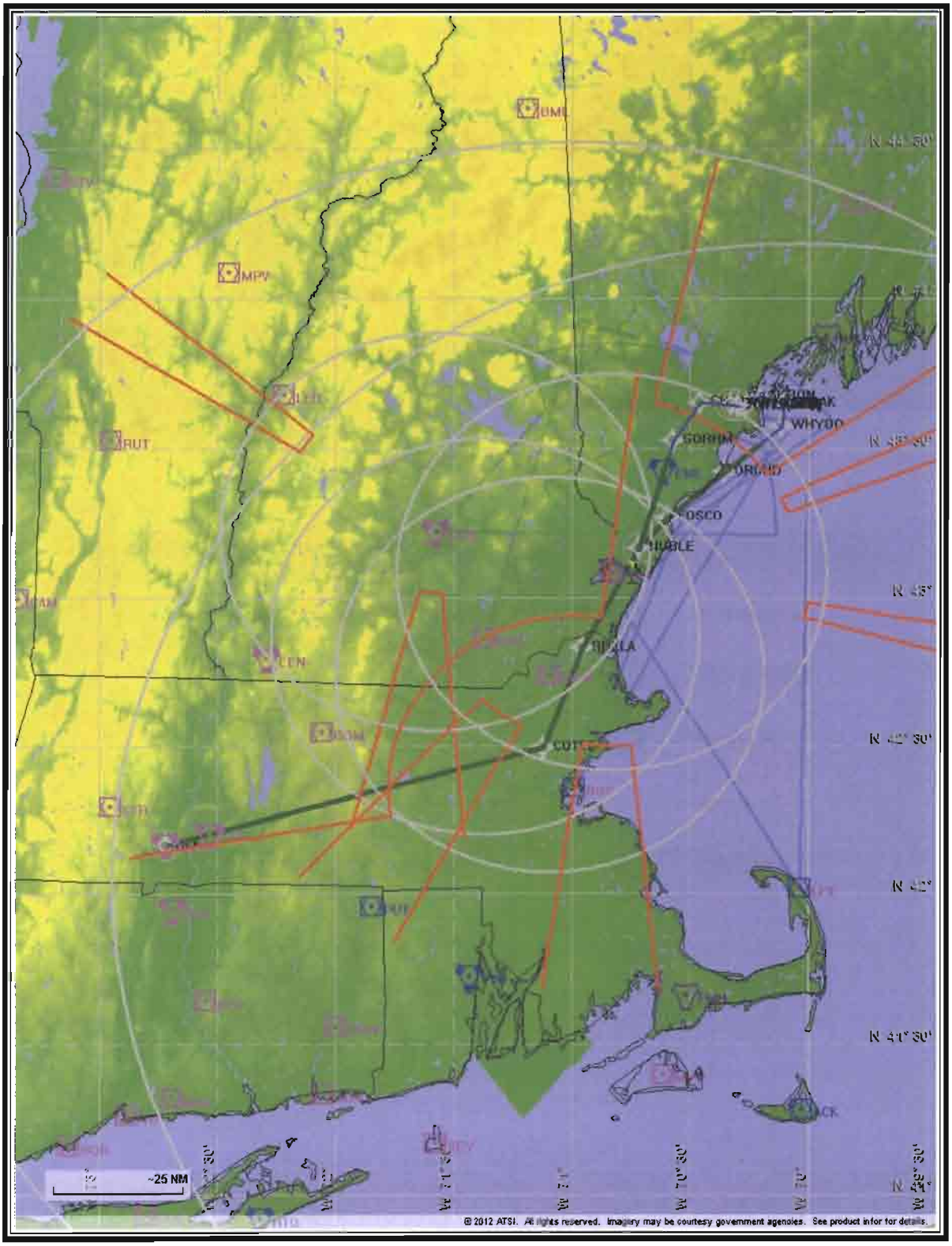
WHYDO
GORHM
OSCO
~25 NM
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Flight Plan

Return To Summary

Name	Type	Lat/Lon	Alt [Ft]	VNAV Mode	IAS [Kts]	Turn Type	Leg Type
RW11(A...	WP	N 43° 38' 45.10" W 70° 19' 33.86"	75.6	VNAV	0.0	Fly By	TF
RW29(D...	WP	N 43° 38' 38.52" W 70° 17' 56.37"	77.2	VNAV	130.0	Fly Over	VI
GH11:	WP	N 43° 38' 29.82" W 70° 15' 48.72"	575.0	VNAV	145.0	Fly By	CF - 53.0°
AHRON	WP	N 43° 40' 24.11" W 70° 12' 20.12"	1800.0	VNAV	180.0	Fly By	TF
PEAAK	WP	N 43° 39' 2.02" W 70° 6' 3.67"	3600.0	VNAV	180.0	Fly By	TF
WHYOO	WP	N 43° 34' 25.08" W 70° 6' 43.02"	4000.0	VNAV	180.0	Fly By	TF
ORCHD	WP	N 43° 25' 15.59" W 70° 21' 16.99"	6000.0	VNAV	180.0	Fly By	TF
FOSCO	WP	N 43° 16' 15.56" W 70° 35' 27.32"	7000.0	VNAV	210.0	Fly By	TF
NUBLE	WP	N 43° 9' 58.36" W 70° 42' 59.47"	7000.0	VNAV	210.0	Fly By	TF
RBELA	WP	N 42° 49' 57.99" W 70° 57' 17.96"	7000.0	VNAV	240.0	Fly By	TF
COTEE	WP	N 42° 29' 42.23" W 71° 7' 7.92"	11000.0	VNAV	270.0	Fly By	TF
BAF	WP	N 42° 9' 43.06" W 72° 42' 58.31"	17000.0	VNAV	270.0	Fly Over	TF

Flyability

Return To Summary

Settings:

Flight Type: Departure
Selected Airport: KPWM
Aircraft Category: Cat D
Climb Gradient:

Table:

300.0 Ft/NM up to **6500.0 Ft MSL**
250.0 Ft/NM up to **10000.0 Ft MSL**

Ground Speeds:

Departure: **120.0 Kts** out to **10.0 NM**
Table:

200.0 Kts up to **11000.0 Ft.**
240.0 Kts up to **18000.0 Ft.**
260.0 Kts up to **24000.0 Ft.**
340.0 Kts up to **99900.0 Ft.**

Wind Settings: *None assigned*
Descent During a Turn: Allowed
VNAV Mode: Flight Plan

ALTITUDE at Fly-By WP AHRON too low.

ALTITUDE at Fly-By WP PEAAK too low.

ALTITUDE at Fly-By WP ORCHD too high.

ALTITUDE at Fly-By WP FOSCO too high.

ALTITUDE at Fly-By WP NUBLE too high.

ALTITUDE at Fly-By WP RBELA too high.

Flight Track comes into contact with terrain. Minimum AGL along route was -45.79 Ft.
Flight Track contacted terrain (DTED lvl 0 max) between AER and DER or within 2/3 NM of DER.

DME/DME

Return To Summary

Settings:

RNP: 2.0
Flight Mode: Manual
Line of Sight (DTED Level 0 Max): Evaluated
DME Restrictions: Evaluated
Inertial Drift: Enabled
Initial Drift: 0.165 NM
INS Drift Rate: 8.000 NM/Hour
Range Mode: OSV
Co-Frequencies: Evaluated
RNP Edges: Evaluated
Min DME Range: 3.0 NM
Allowed Gap Length: 4.0 NM
DME Types: VOR/DME , VORTAC , TACAN , and User
DME Include Angles: 30 to 150
Critical DMEs: Allowed
DoD Facilities: Not included
Foreign Facilities: Not included
Low & Terminal DMEs: Included
Flight Check DMEs: Selected
Higher Altitudes: Evaluated
Near Maximum Altitude: Evaluated
Minimum MSL DMEs Avail: 5990 Ft.

Total Number of DMEs Used: 15

Maximum DME Error: 1.392 NM.

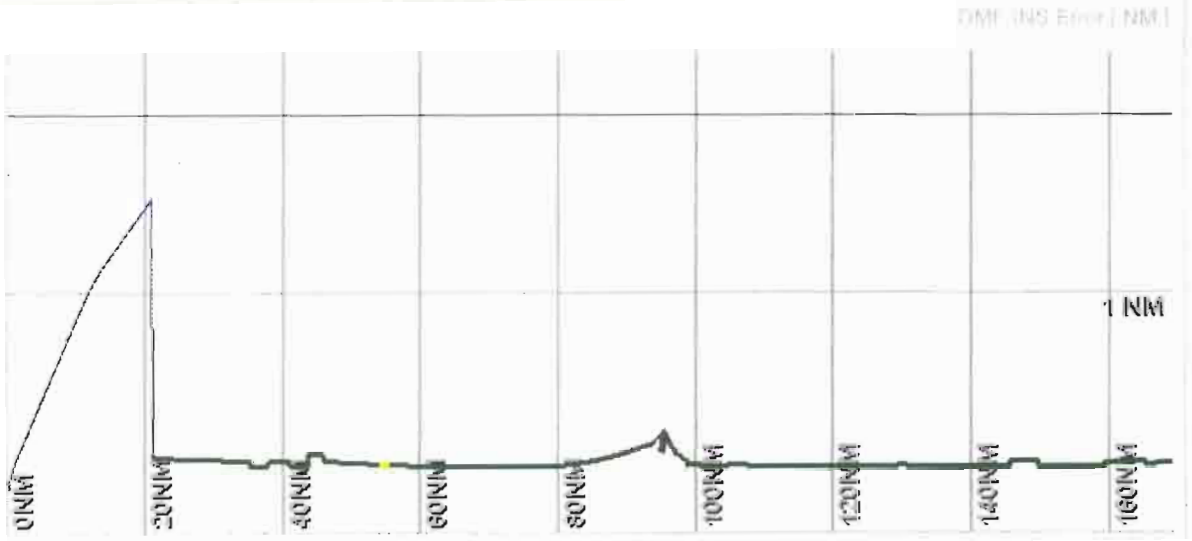
No Critical DMEs were found.

Available DMEs: ENE, PSM, LFV, CON, BOS, LWM, MHT, GDM, PUT, EEN, BAF, HTO, PVD, CTR, HFD, HUO

Foreign DMEs within range: VLV, YFC, YJN, YQB, YQI, YSC, YSJ, YUL, YOW, UTR

DME/DME (Continued.)

Return To Summary



DME/DME (Continued.)

Return To Summary

DMEs Used

#	Name	Lat/Lon	Range	Source	Critical	Err. [NM]	Status	Time	Distance
1	LFV	N 42° 1' 1.88" W 70° 2' 14.04"	H + ESV	User	NO	1.469	Enabled	19.0 %	18.7 %
2	ENE	N 43° 25' 32.42" W 70° 36' 48.69"	H	Database	NO	1.392	Enabled	12.8 %	12.6 %
3	CON	N 43° 13' 11.23" W 71° 34' 31.63"	L + ESV	User	NO	1.392	Enabled	15.7 %	15.5 %
4	LWM	N 42° 44' 25.50" W 71° 5' 41.43"	L + ESV	User	NO	1.392	Enabled	7.8 %	8.6 %
5	PSM	N 43° 5' 4.06" W 70° 49' 55.15"	L + ESV	User	NO	1.392	Enabled	14.1 %	13.9 %
6	MHT	N 42° 52' 6.70" W 71° 22' 10.31"	L + ESV	User	NO	1.392	Enabled	29.0 %	30.2 %
7	BOS	N 42° 21' 26.82" W 70° 59' 22.37"	H + ESV	User	NO	1.392	Enabled	18.4 %	21.1 %
8	GDM	N 42° 32' 45.42" W 72° 3' 29.48"	L	Database	NO	1.392	Enabled	9.1 %	10.8 %
9	PUT	N 41° 57' 19.66" W 71° 50' 38.74"	H	Database	NO	1.392	Enabled	7.4 %	8.7 %
10	EEN	N 42° 47' 39.40" W 72° 17' 30.40"	L	Database	NO	1.392	Enabled	8.2 %	9.7 %
11	BAF	N 42° 9' 43.06" W 72° 42' 58.31"	L	Database	NO	1.392	Enabled	6.9 %	8.2 %
12	PVD	N 41° 43' 27.64" W 71° 25' 46.67"	H	Database	NO	1.392	Enabled	0.9 %	1.0 %
13	CTR	N 42° 17' 28.75" W 72° 56' 57.82"	L	Database	NO	1.392	Enabled	6.0 %	7.1 %
14	HTO	N 40° 55' 8.38" W 72° 19' 0.14"	H	Database	NO	1.392	Enabled	4.9 %	5.8 %
15	HFD	N 41° 38' 27.98" W 72° 32' 50.70"	L	Database	NO	1.392	Enabled	1.9 %	2.2 %

Flight Check DME Selection

Distance [NM]	Selected DMEs					Alternate
0.0						
1.2						
2.5	ENE					
5.5	ENE					
10.1	ENE	PSM				
14.4	ENE	PSM	LFV	CON	BOS	
29.1	ENE	PSM	LFV	CON	LWM	BOS

DME/DME (Continued.)

Return To Summary

Flight Check DME Selection (Continued.)

Distance [NM]	Selected DMEs					Alternate
42.5	ENE	PSM	LFV	CON	MHT	LWM
50.7	ENE	PSM	LFV	CON	MHT	LWM
60.8	ENE	BOS	LWM	CON	MHT	PSM
73.4	PSM	BOS	LWM	CON	MHT	ENE
94.3	PSM	BOS	LWM	GDM	MHT	
104.5	PUT	BOS	LWM	GDM	MHT	EEN
128.0	PUT	BOS	BAF	GDM	EEN	PVD
145.7	CTR	PVD	HTO	GDM	EEN	BOS
155.7	CTR	HFD	HTO	BOS	EEN	PVD

Inertial Drift Segments

#	Start Location	End Location	Length [NM]
1	N 43° 38' 45.10" W 70° 19' 33.86"	N 43° 30' 38.19" W 70° 12' 44.50"	20.8
	VOR: ENE	Available from N 43° 38' 45.10" W 70° 19' 33.86" to N 43° 30' 38.19" W 70° 12' 44.50"	
	VOR: PSM	Available from N 43° 32' 22.67" W 70° 9' 57.93" to N 43° 30' 38.19" W 70° 12' 44.50"	
2	N 42° 31' 0.86" W 71° 6' 30.02"	N 42° 30' 11.10" W 71° 6' 55.86"	0.9
	VOR: BOS	Available from N 42° 31' 0.86" W 71° 6' 30.02" to N 42° 30' 11.10" W 71° 6' 55.86"	
	VOR: LWM	Available from N 42° 31' 0.86" W 71° 6' 30.02" to N 42° 30' 11.10" W 71° 6' 55.86"	
	VOR: MHT	Available from N 42° 31' 0.86" W 71° 6' 30.02" to N 42° 30' 11.10" W 71° 6' 55.86"	
	VOR: PSM	Available from N 42° 31' 0.86" W 71° 6' 30.02" to N 42° 30' 11.10" W 71° 6' 55.86"	

DME/DME (Continued.)

Return To Summary

User DMEs

#	Name	Lat/Lon	Range	Elevation [Ft]	Frequency	Replaces:	Status
1	MHT	N 42° 52' 6.70" W 71° 22' 10.31"	L	470.5	114.40	MHT	Used
		ESV: Bearing [True]: 15.0° to 55.0° Bearing [Mag]: 30.0° to 70.0°			Arc Distance: Out to 66.0 NM Altitude: 3500.0 to 12000.0 Ft.		
2	LFV	N 42° 1' 1.88" W 70° 2' 14.04"	H	150.8	114.70	LFV	Used
		ESV: Bearing [True]: 330.0° to 1.0° Bearing [Mag]: 346.0° to 17.0°			Arc Distance: Out to 95.0 NM Altitude: 6000.0 to 18000.0 Ft.		
3	CON	N 43° 13' 11.23" W 71° 34' 31.63"	L	714.5	112.90	CON	Used
		Restriction: Bearing [True]: 175.0° to 195.0° Bearing [Mag]: 190.0° to 210.0°			Distance: Beyond 12.0 NM Altitude: Below 4000.0 Ft.		
		Restriction: Bearing [True]: 303.0° to 311.0° Bearing [Mag]: 318.0° to 326.0°			Distance: Beyond 30.0 NM Altitude: Below 12000.0 Ft.		
		ESV: Bearing [True]: 39.0° to 90.0° Bearing [Mag]: 54.0° to 105.0°			Arc Distance: Out to 63.0 NM Altitude: 4000.0 to 17000.0 Ft.		
4	LWM	N 42° 44' 25.50" W 71° 5' 41.43"	L	302.2	112.50	LWM	Used
		ESV: Bearing [True]: 21.0° to 42.0° Bearing [Mag]: 36.0° to 57.0°			Arc Distance: Out to 66.0 NM Altitude: 3500.0 to 19000.0 Ft.		
		ESV: Bearing [True]: 5.0° to 26.0° Bearing [Mag]: 20.0° to 41.0°			Arc Distance: Out to 70.0 NM Altitude: 5000.0 to 19000.0 Ft.		
5	BOS	N 42° 21' 26.82" W 70° 59' 22.37"	H	20.0	112.70	BOS	Used
		Restriction: Bearing [True]: 261.0° to 8.0° Bearing [Mag]: 277.0° to 24.0°			Distance: Beyond 35.0 NM Altitude: Below 2500.0 Ft.		
		ESV: Bearing [True]: 12.0° to 17.0° Bearing [Mag]: 28.0° to 33.0°			Arc Distance: Out to 71.0 NM Altitude: 4800.0 to 19000.0 Ft.		
		ESV: Bearing [True]: 20.0° to 28.0° Bearing [Mag]: 36.0° to 44.0°			Arc Distance: Out to 77.0 NM Altitude: 5300.0 to 19000.0 Ft.		

DME/DME (Continued.)

Return To Summary

User DMEs (Continued.)

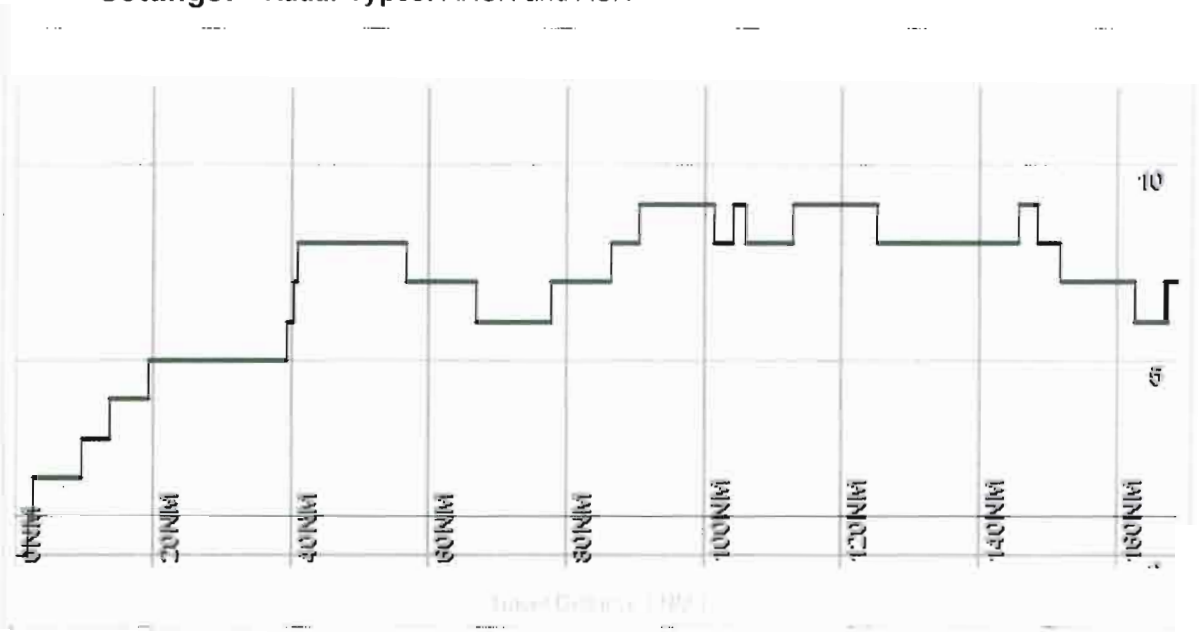
#	Name	Lat/Lon	Range	Elevation [Ft]	Frequency	Replaces:	Status
6	PSM	N 43° 5' 4.06" W 70° 49' 55.15"	L	99.3	116.50	PSM	Used

Restriction:	Bearing [True]: 13.0° to 55.0° Bearing [Mag]: 29.0° to 71.0°	Distance: Beyond 35.0 NM Altitude: Below 2500.0 Ft.
Restriction:	Bearing [True]: 64.0° to 69.0° Bearing [Mag]: 80.0° to 85.0°	Distance: Beyond 35.0 NM Altitude: Below 2500.0 Ft.
Restriction:	Bearing [True]: 99.0° to 104.0° Bearing [Mag]: 115.0° to 120.0°	Distance: Beyond 37.0 NM Altitude: Below 2500.0 Ft.
Restriction:	Bearing [True]: 174.0° to 189.0° Bearing [Mag]: 190.0° to 205.0°	Distance: Beyond 35.0 NM Altitude: Below 2500.0 Ft.
Restriction:	Bearing [True]: 209.0° to 224.0° Bearing [Mag]: 225.0° to 240.0°	Distance: Beyond 35.0 NM Altitude: Below 2500.0 Ft.
ESV:	Bearing [True]: 20.0° to 53.0° Bearing [Mag]: 36.0° to 69.0°	Arc Distance: Out to 51.0 NM Altitude: 2700.0 to 12000.0 Ft.
ESV:	Bearing [True]: 340.0° to 25.0° Bearing [Mag]: 356.0° to 41.0°	Arc Distance: Out to 46.0 NM Altitude: 4000.0 to 19000.0 Ft.

Radar Analysis

Return To Summary

Settings: **Radar Types:** ARSR and ASR



Name:	bellabonaj
Project Name:	_RBELA wp correction
Software:	RNAV-Pro™
Version:	2.35
Date/Time:	1/23/2012 7:04:19 PM
Input File:	PWM NUBLE1 SID RBELA...
Databases:	AVNIS Date: 08/26/2011
	NFD Date: 07/02/2009
	DTED® (MAX) Date: 2002

Results Summary:

Flyability	✓
DME/DME	✓
Radars	✓
Comms	?
TERPS	?

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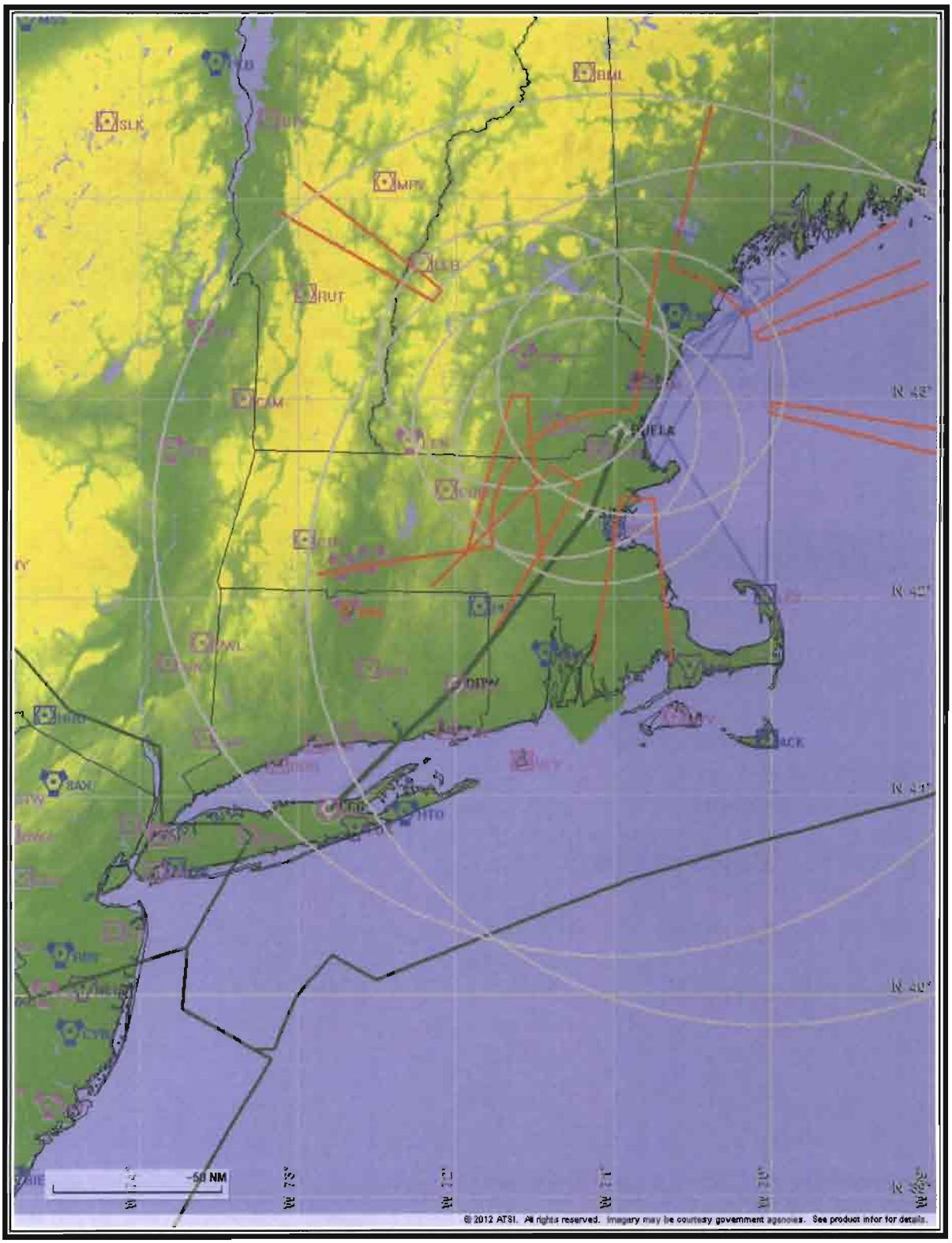
SLK
MPV
RUT
BELA
DOV
DTW
HTO
SAX
50 NM
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Flight Plan

Return To Summary

Name	Type	Lat/Lon	Alt [Ft]	VNAV Mode	IAS [Kts]	Turn Type	Leg Type
RBELA	WP	N 42° 49' 57.99" W 70° 57' 17.96"	7000.0	VNAV	240.0	Fly By	TF
JJIMY	WP	N 42° 25' 4.09" W 71° 9' 23.06"	11000.0	VNAV	270.0	Fly By	TF
ORW	WP	N 41° 33' 23.05" W 71° 59' 57.70"	17000.0	VNAV	270.0	Fly By	TF
CCC	WP	N 40° 55' 46.62" W 72° 47' 55.89"	17000.0	VNAV	270.0	Fly Over	TF

Flyability

Return To Summary

Settings:

Flight Type: Arrival/Approach
Aircraft Category: Cat D
Climb Gradient:

Table:
300.0 Ft/NM up to **6500.0 Ft MSL**
250.0 Ft/NM up to **10000.0 Ft MSL**

Ground Speeds:

Table:
200.0 Kts up to **11000.0 Ft.**
240.0 Kts up to **18000.0 Ft.**
260.0 Kts up to **24000.0 Ft.**
340.0 Kts up to **99900.0 Ft.**

Wind Settings: *None assigned*
Descent During a Turn: Allowed
VNAV Mode: Flight Plan

Entire track is fly-able

DME/DME

Return To Summary

Settings:

RNP: 2.0
Flight Mode: Manual
Line of Sight (DTED Level 0 Max): Evaluated
DME Restrictions: Evaluated
Inertial Drift: Enabled
Initial Drift: 0.558 NM
INS Drift Rate: 8.000 NM/Hour
Range Mode: OSV
Co-Frequencies: Evaluated
RNP Edges: Evaluated
Min DME Range: 3.0 NM
Allowed Gap Length: 4.0 NM
DME Types: VOR/DME , VORTAC , TACAN , and User
DME Include Angles: 30 to 150
Critical DMEs: Allowed
DoD Facilities: Not included
Foreign Facilities: Not included
Low & Terminal DMEs: Included
Flight Check DMEs: Selected
Higher Altitudes: Evaluated
Near Maximum Altitude: Evaluated

Total Number of DMEs Used: 17

Maximum DME Error: 0.433 NM.

No Critical DMEs were found.

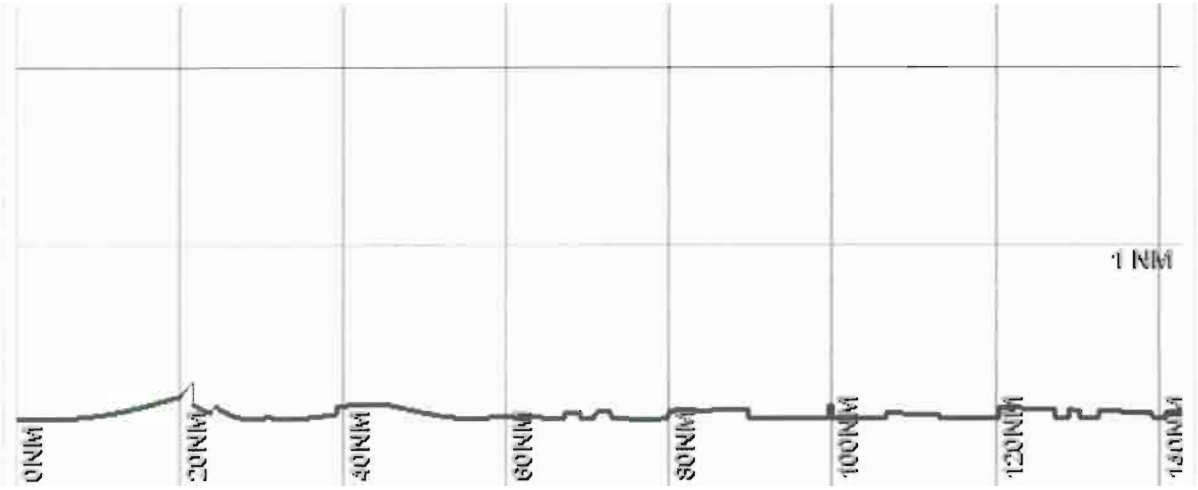
Available DMEs: MHT, CON, LWM, BOS, PSM, ENE, PUT, PVD, ORW, HTO, ACK, LFV, HFD, SEY, MAD, JFK, CCC, BDR, SAX, HUO, DPK, RBV

Disabled DMEs: BDL

Foreign DMEs within range: VLV, YJN, YQB, YQI, YSC, YUL

DME/DME (Continued.)

Return To Summary



DME/DME (Continued.)

Return To Summary

DMEs Used

#	Name	Lat/Lon	Range	Source	Critical	Err. [NM]	Status	Time	Distance
1	MHT	N 42° 52' 6.70" W 71° 22' 10.31"	L + ESV	User	NO	0.809	Enabled	21.9 %	19.9 %
2	BOS	N 42° 21' 26.82" W 70° 59' 22.37"	H + ESV	User	NO	0.609	Enabled	21.0 %	20.9 %
3	PSM	N 43° 5' 4.06" W 70° 49' 55.15"	L + ESV	User	NO	0.939	Enabled	16.9 %	14.7 %
4	LWM	N 42° 44' 25.50" W 71° 5' 41.43"	L + ESV	User	NO	0.433	Enabled	4.7 %	4.5 %
5	PVD	N 41° 43' 27.64" W 71° 25' 46.67"	H	Database	NO	0.847	Enabled	21.0 %	21.8 %
6	PUT	N 41° 57' 19.66" W 71° 50' 38.74"	H	Database	NO	0.433	Enabled	29.7 %	30.9 %
7	ORW	N 41° 33' 23.05" W 71° 59' 57.67"	L	Database	NO	0.538	Enabled	4.1 %	4.2 %
8	HTO	N 40° 55' 8.38" W 72° 19' 0.14"	H	Database	NO	0.537	Enabled	13.4 %	13.9 %
9	ACK	N 41° 16' 54.79" W 70° 1' 36.16"	H	Database	NO	0.433	Enabled	9.5 %	9.8 %
10	HFD	N 41° 38' 27.98" W 72° 32' 50.70"	L	Database	NO	0.433	Enabled	24.6 %	25.6 %
11	LFV	N 42° 1' 1.88" W 70° 2' 14.04"	H + ESV	User	NO	0.433	Enabled	0.0 %	0.0 %
12	SEY	N 41° 10' 2.77" W 71° 34' 33.91"	L	Database	NO	0.433	Enabled	1.9 %	2.0 %
13	JFK	N 40° 37' 58.40" W 73° 46' 17.00"	H	Database	NO	0.433	Enabled	4.4 %	4.6 %
14	CCC	N 40° 55' 46.64" W 72° 47' 55.89"	L	Database	NO	0.433	Enabled	1.2 %	1.3 %
15	MAD	N 41° 18' 49.81" W 72° 41' 31.89"	L	Database	NO	0.433	Enabled	6.0 %	6.3 %
16	BDR	N 41° 9' 38.50" W 73° 7' 28.19"	L	Database	NO	0.433	Enabled	4.9 %	5.1 %
17	SAX	N 41° 4' 3.16" W 74° 32' 17.93"	H	Database	NO	0.433	Enabled	11.2 %	11.6 %

Flight Check DME Selection

Distance [NM]	Selected DMEs					Alternate
0.0	BOS	MHT	LWM	CON	PSM	ENE
25.9	BOS	MHT	LWM	PUT	PVD	
47.0	BOS	HTO	ORW	PUT	PVD	LFV
67.2	ACK	HTO	HFD	PUT	PVD	BOS

DME/DME (Continued.)

Return To Summary

Flight Check DME Selection (Continued.)

Distance [NM]	Selected DMEs					Alternate
90.0	ACK	HTO	HFD	PUT	SEY	PVD
102.8	BDR	HTO	HFD	JFK	ORW	MAD
116.6	BDR	HTO	HFD	SAX	CCC	ORW
130.2	MAD	HTO	HFD	SAX	PUT	PVD

Inertial Drift Segments

#	Start Location	End Location	Length [NM]
1	N 42° 31' 1.68" W 71° 6' 30.47"	N 42° 29' 40.05" W 71° 7' 9.93"	1.4
	VOR: BOS	Available from N 42° 31' 1.68" W 71° 6' 30.47" to N 42° 29' 40.05" W 71° 7' 9.93"	
	VOR: LWM	Available from N 42° 31' 1.68" W 71° 6' 30.47" to N 42° 29' 40.05" W 71° 7' 9.93"	
	VOR: MHT	Available from N 42° 31' 1.68" W 71° 6' 30.47" to N 42° 29' 40.05" W 71° 7' 9.93"	
	VOR: PSM	Available from N 42° 31' 1.68" W 71° 6' 30.47" to N 42° 29' 40.05" W 71° 7' 9.93"	
2	N 42° 27' 34.45" W 71° 8' 10.57"	N 42° 26' 59.91" W 71° 8' 27.24"	0.6
	VOR: BOS	Available from N 42° 27' 34.45" W 71° 8' 10.57" to N 42° 26' 59.91" W 71° 8' 27.24"	
	VOR: LWM	Available from N 42° 27' 34.45" W 71° 8' 10.57" to N 42° 26' 59.91" W 71° 8' 27.24"	
	VOR: MHT	Available from N 42° 27' 34.45" W 71° 8' 10.57" to N 42° 26' 59.91" W 71° 8' 27.24"	
	VOR: PSM	Available from N 42° 27' 34.45" W 71° 8' 10.57" to N 42° 27' 25.03" W 71° 8' 15.12"	

DME/DME (Continued.)

Return To Summary

User DMEs

#	Name	Lat/Lon	Range	Elevation [Ft]	Frequency	Replaces:	Status
1	MHT	N 42° 52' 6.70" W 71° 22' 10.31"	L	470.5	114.40	MHT	Used
		ESV: Bearing [True]: 15.0° to 55.0° Bearing [Mag]: 30.0° to 70.0°			Arc Distance: Out to 66.0 NM Altitude: 3500.0 to 12000.0 Ft.		
2	LFV	N 42° 1' 1.88" W 70° 2' 14.04"	H	150.8	114.70	LFV	Used
		ESV: Bearing [True]: 330.0° to 1.0° Bearing [Mag]: 346.0° to 17.0°			Arc Distance: Out to 95.0 NM Altitude: 6000.0 to 18000.0 Ft.		
3	CON	N 43° 13' 11.23" W 71° 34' 31.63"	L	714.5	112.90	CON	Not Used
		Restriction: Bearing [True]: 175.0° to 195.0° Bearing [Mag]: 190.0° to 210.0°			Distance: Beyond 12.0 NM Altitude: Below 4000.0 Ft.		
		Restriction: Bearing [True]: 303.0° to 311.0° Bearing [Mag]: 318.0° to 326.0°			Distance: Beyond 30.0 NM Altitude: Below 12000.0 Ft.		
		ESV: Bearing [True]: 39.0° to 90.0° Bearing [Mag]: 54.0° to 105.0°			Arc Distance: Out to 63.0 NM Altitude: 4000.0 to 17000.0 Ft.		
4	LWM	N 42° 44' 25.50" W 71° 5' 41.43"	L	302.2	112.50	LWM	Used
		ESV: Bearing [True]: 21.0° to 42.0° Bearing [Mag]: 36.0° to 57.0°			Arc Distance: Out to 66.0 NM Altitude: 3500.0 to 19000.0 Ft.		
		ESV: Bearing [True]: 5.0° to 26.0° Bearing [Mag]: 20.0° to 41.0°			Arc Distance: Out to 70.0 NM Altitude: 5000.0 to 19000.0 Ft.		
5	BOS	N 42° 21' 26.82" W 70° 59' 22.37"	H	20.0	112.70	BOS	Used
		Restriction: Bearing [True]: 261.0° to 8.0° Bearing [Mag]: 277.0° to 24.0°			Distance: Beyond 35.0 NM Altitude: Below 2500.0 Ft.		
		ESV: Bearing [True]: 12.0° to 17.0° Bearing [Mag]: 28.0° to 33.0°			Arc Distance: Out to 71.0 NM Altitude: 4800.0 to 19000.0 Ft.		
		ESV: Bearing [True]: 20.0° to 28.0° Bearing [Mag]: 36.0° to 44.0°			Arc Distance: Out to 77.0 NM Altitude: 5300.0 to 19000.0 Ft.		

DME/DME (Continued.)

Return To Summary

User DMEs (Continued.)

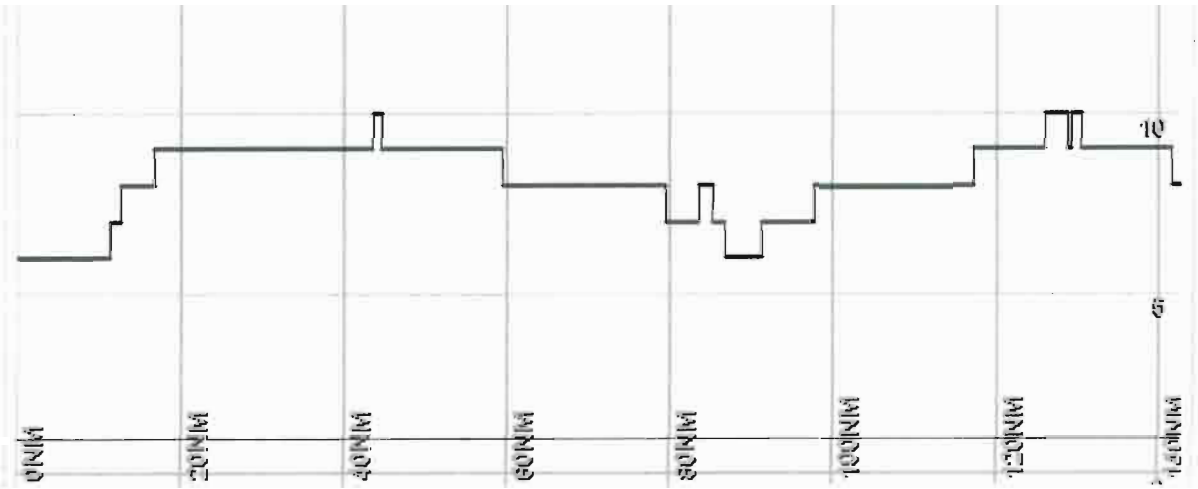
#	Name	Lat/Lon	Range	Elevation [Ft]	Frequency	Replaces:	Status
6	PSM	N 43° 5' 4.06" W 70° 49' 55.15"	L	99.3	116.50	PSM	Used

Restriction:	Bearing [True]: 13.0° to 55.0° Bearing [Mag]: 29.0° to 71.0°	Distance: Beyond 35.0 NM Altitude: Below 2500.0 Ft.
Restriction:	Bearing [True]: 64.0° to 69.0° Bearing [Mag]: 80.0° to 85.0°	Distance: Beyond 35.0 NM Altitude: Below 2500.0 Ft.
Restriction:	Bearing [True]: 99.0° to 104.0° Bearing [Mag]: 115.0° to 120.0°	Distance: Beyond 37.0 NM Altitude: Below 2500.0 Ft.
Restriction:	Bearing [True]: 174.0° to 189.0° Bearing [Mag]: 190.0° to 205.0°	Distance: Beyond 35.0 NM Altitude: Below 2500.0 Ft.
Restriction:	Bearing [True]: 209.0° to 224.0° Bearing [Mag]: 225.0° to 240.0°	Distance: Beyond 35.0 NM Altitude: Below 2500.0 Ft.
ESV:	Bearing [True]: 20.0° to 53.0° Bearing [Mag]: 36.0° to 69.0°	Arc Distance: Out to 51.0 NM Altitude: 2700.0 to 12000.0 Ft.
ESV:	Bearing [True]: 340.0° to 25.0° Bearing [Mag]: 356.0° to 41.0°	Arc Distance: Out to 46.0 NM Altitude: 4000.0 to 19000.0 Ft.

Radar Analysis

Return To Summary

Settings: **Radar Types:** ARSR and ASR



Name:	bellabonaj
Project Name:	_RBELA wp correction
Software:	RNAV-Pro™
Version:	2.35
Date/Time:	1/23/2012 7:30:39 PM
Input File:	PWM NUBLE1 SID RBELA...
Databases:	AVNIS Date: 08/26/2011
	NFD Date: 07/02/2009
	DTED® (MAX) Date: 2002

Results Summary:

Flyability	✓
DME/DME	✓
Radars	✓
Comms	?
TERPS	?

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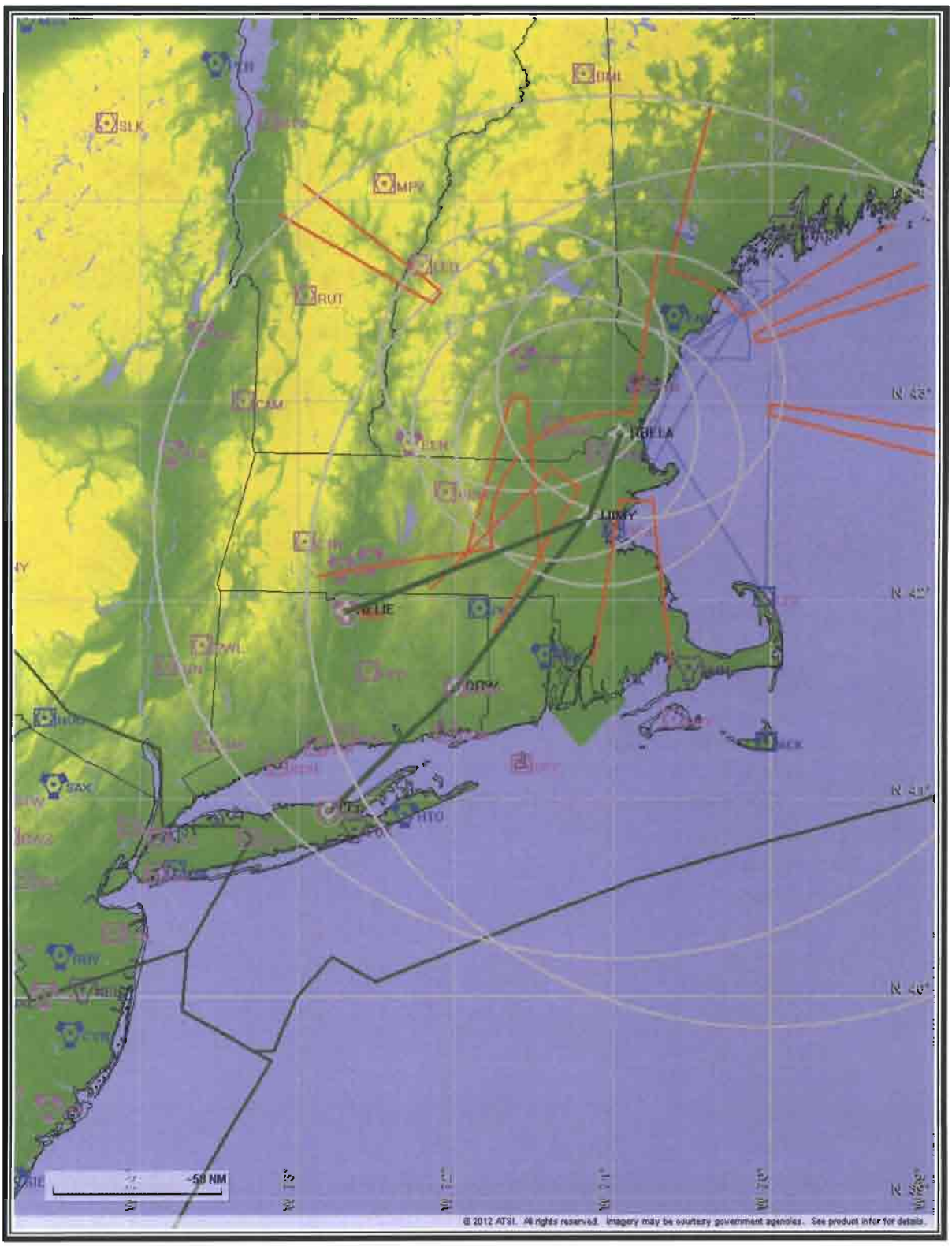
BLK
MPV
RUT
CON
RBELA
LUMMY
HTO
~50 NM
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Flight Plan

Return To Summary

Name	Type	Lat/Lon	Alt [Ft]	VNAV Mode	IAS [Kts]	Turn Type	Leg Type
RBELA	WP	N 42° 49' 57.99" W 70° 57' 17.96"	7000.0	VNAV	240.0	Fly By	TF
JJIMY	WP	N 42° 25' 4.09" W 71° 9' 23.06"	11000.0	VNAV	270.0	Fly By	TF
NELIE	WP	N 41° 56' 27.64" W 72° 41' 18.88"	17000.0	VNAV	270.0	Fly Over	TF

Flyability

Return To Summary

Settings:

Flight Type: Arrival/Approach
Aircraft Category: Cat D
Climb Gradient:

Table:

300.0 Ft/NM up to **6500.0 Ft MSL**
250.0 Ft/NM up to **10000.0 Ft MSL**

Ground Speeds:

Table:

200.0 Kts up to **11000.0 Ft.**
240.0 Kts up to **18000.0 Ft.**
260.0 Kts up to **24000.0 Ft.**
340.0 Kts up to **99900.0 Ft.**

Wind Settings: *None assigned*
Descent During a Turn: Allowed
VNAV Mode: Flight Plan

Entire track is fly-able

DME/DME

Return To Summary

Settings:

RNP: 2.0
Flight Mode: Manual
Line of Sight (DTED Level 0 Max): Evaluated
DME Restrictions: Evaluated
Inertial Drift: Enabled
Initial Drift: 0.558 NM
INS Drift Rate: 8.000 NM/Hour
Range Mode: OSV
Co-Frequencies: Evaluated
RNP Edges: Evaluated
Min DME Range: 3.0 NM
Allowed Gap Length: 4.0 NM
DME Types: VOR/DME , VORTAC , TACAN , and User
DME Include Angles: 30 to 150
Critical DMEs: Allowed
DoD Facilities: Not included
Foreign Facilities: Not included
Low & Terminal DMEs: Included
Flight Check DMEs: Selected
Higher Altitudes: Evaluated
Near Maximum Altitude: Evaluated

Total Number of DMEs Used: 15

Maximum DME Error: 0.433 NM.

No Critical DMEs were found.

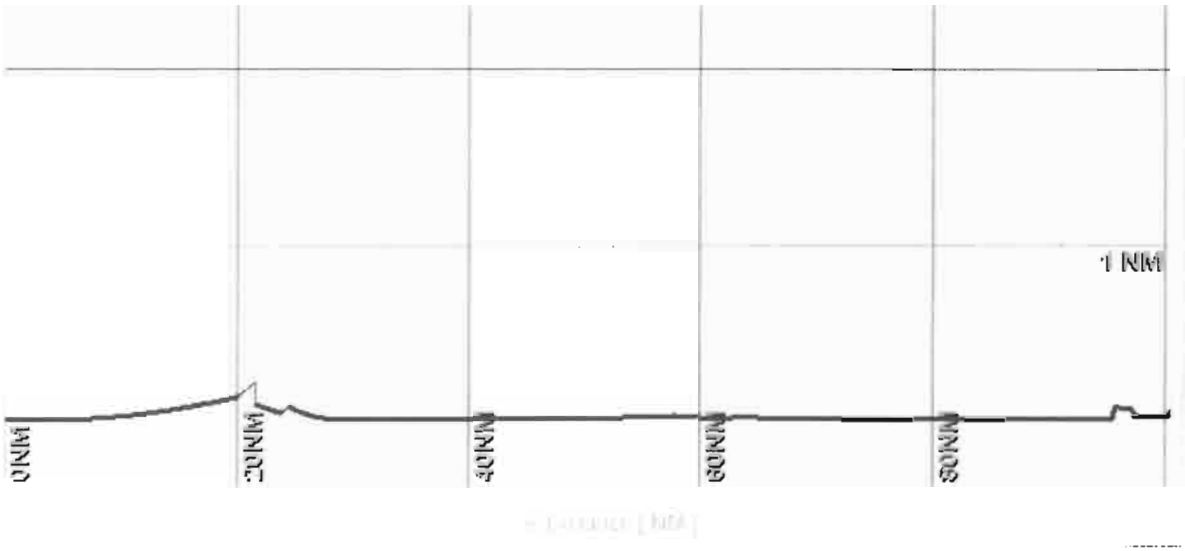
Available DMEs: MHT, CON, LWM, BOS, PSM, ENE, PUT, GDM, PVD, BAF, ORW, HFD, HTO, LFV, CTR, HUO, JFK, SAX

Disabled DMEs: BDL

Foreign DMEs within range: VLV, YJN, YQB, YQI, YSC, YUL

DME/DME (Continued.)

Return To Summary



DME/DME (Continued.)

Return To Summary

DMEs Used

#	Name	Lat/Lon	Range	Source	Critical	Err. [NM]	Status	Time	Distance
1	MHT	N 42° 52' 6.70" W 71° 22' 10.31"	L + ESV	User	NO	0.809	Enabled	26.8 %	24.2 %
2	BOS	N 42° 21' 26.82" W 70° 59' 22.37"	H + ESV	User	NO	0.629	Enabled	34.9 %	35.4 %
3	PSM	N 43° 5' 4.06" W 70° 49' 55.15"	L + ESV	User	NO	0.939	Enabled	23.7 %	20.8 %
4	LWM	N 42° 44' 25.50" W 71° 5' 41.43"	L + ESV	User	NO	0.433	Enabled	15.4 %	15.7 %
5	GDM	N 42° 32' 45.42" W 72° 3' 29.48"	L	Database	NO	0.433	Enabled	27.9 %	29.5 %
6	PVD	N 41° 43' 27.64" W 71° 25' 46.67"	H	Database	NO	0.433	Enabled	12.2 %	12.9 %
7	PUT	N 41° 57' 19.66" W 71° 50' 38.74"	H	Database	NO	0.433	Enabled	13.3 %	14.1 %
8	BAF	N 42° 9' 43.06" W 72° 42' 58.31"	L	Database	NO	0.559	Enabled	22.8 %	24.1 %
9	ORW	N 41° 33' 23.05" W 71° 59' 57.67"	L	Database	NO	0.433	Enabled	5.7 %	6.0 %
10	HTO	N 40° 55' 8.38" W 72° 19' 0.14"	H	Database	NO	0.433	Enabled	0.0 %	0.0 %
11	HFD	N 41° 38' 27.98" W 72° 32' 50.70"	L	Database	NO	0.433	Enabled	9.8 %	10.4 %
12	LFV	N 42° 1' 1.88" W 70° 2' 14.04"	H + ESV	User	NO	0.433	Enabled	0.0 %	0.0 %
13	CTR	N 42° 17' 28.75" W 72° 56' 57.82"	L	Database	NO	0.433	Enabled	0.0 %	0.0 %
14	HUO	N 41° 24' 34.87" W 74° 35' 29.74"	H	Database	NO	0.433	Enabled	1.6 %	1.7 %
15	SAX	N 41° 4' 3.16" W 74° 32' 17.93"	H	Database	NO	0.433	Enabled	0.0 %	0.0 %

Flight Check DME Selection

Distance [NM]	Selected DMEs					Alternate
0.0	BOS	MHT	LWM	CON	PSM	ENE
25.7	BOS	MHT	LWM	PUT	GDM	
40.5	BOS	PVD	LWM	PUT	GDM	MHT
60.0	ORW	PVD	BAF	PUT	GDM	HFD
70.0	ORW	BOS	BAF	PUT	GDM	HFD
87.2	HFD	BOS	BAF	PUT	HUO	PVD

DME/DME (Continued.)

Return To Summary

Inertial Drift Segments

#	Start Location	End Location	Length [NM]
1	N 42° 31' 1.68" W 71° 6' 30.47"	N 42° 29' 40.05" W 71° 7' 9.93"	1.4
	VOR: BOS	Available from N 42° 31' 1.68" W 71° 6' 30.47" to N 42° 29' 40.05" W 71° 7' 9.93"	
	VOR: LWM	Available from N 42° 31' 1.68" W 71° 6' 30.47" to N 42° 29' 40.05" W 71° 7' 9.93"	
	VOR: MHT	Available from N 42° 31' 1.68" W 71° 6' 30.47" to N 42° 29' 40.05" W 71° 7' 9.93"	
	VOR: PSM	Available from N 42° 31' 1.68" W 71° 6' 30.47" to N 42° 29' 40.05" W 71° 7' 9.93"	
2	N 42° 27' 34.45" W 71° 8' 10.57"	N 42° 26' 59.91" W 71° 8' 27.24"	0.6
	VOR: BOS	Available from N 42° 27' 34.45" W 71° 8' 10.57" to N 42° 26' 59.91" W 71° 8' 27.24"	
	VOR: LWM	Available from N 42° 27' 34.45" W 71° 8' 10.57" to N 42° 26' 59.91" W 71° 8' 27.24"	
	VOR: MHT	Available from N 42° 27' 34.45" W 71° 8' 10.57" to N 42° 26' 59.91" W 71° 8' 27.24"	
	VOR: PSM	Available from N 42° 27' 34.45" W 71° 8' 10.57" to N 42° 27' 25.03" W 71° 8' 15.12"	
3	N 42° 12' 24.52" W 71° 50' 44.11"	N 42° 12' 15.27" W 71° 51' 13.91"	0.4
	VOR: BAF	Available from N 42° 12' 24.52" W 71° 50' 44.11" to N 42° 12' 15.27" W 71° 51' 13.91"	
	VOR: BOS	Available from N 42° 12' 24.52" W 71° 50' 44.11" to N 42° 12' 15.27" W 71° 51' 13.91"	
	VOR: CEF	Available from N 42° 12' 24.52" W 71° 50' 44.11" to N 42° 12' 15.27" W 71° 51' 13.91"	
	VOR: GDM	Available from N 42° 12' 24.52" W 71° 50' 44.11" to N 42° 12' 15.27" W 71° 51' 13.91"	
	VOR: ORW	Available from N 42° 12' 24.52" W 71° 50' 44.11" to N 42° 12' 15.27" W 71° 51' 13.91"	
	VOR: PUT	Available from N 42° 12' 24.52" W 71° 50' 44.11" to N 42° 12' 15.27" W 71° 51' 13.91"	
	VOR: PVD	Available from N 42° 12' 24.52" W 71° 50' 44.11" to N 42° 12' 15.27" W 71° 51' 13.91"	

DME/DME (Continued.)

Return To Summary

User DMEs

#	Name	Lat/Lon	Range	Elevation [Ft]	Frequency	Replaces:	Status
1	MHT	N 42° 52' 6.70" W 71° 22' 10.31"	L	470.5	114.40	MHT	Used
		ESV: Bearing [True]: 15.0° to 55.0° Bearing [Mag]: 30.0° to 70.0°			Arc Distance: Out to 66.0 NM Altitude: 3500.0 to 12000.0 Ft.		
2	LFV	N 42° 1' 1.88" W 70° 2' 14.04"	H	150.8	114.70	LFV	Used
		ESV: Bearing [True]: 330.0° to 1.0° Bearing [Mag]: 346.0° to 17.0°			Arc Distance: Out to 95.0 NM Altitude: 6000.0 to 18000.0 Ft.		
3	CON	N 43° 13' 11.23" W 71° 34' 31.63"	L	714.5	112.90	CON	Not Used
		Restriction: Bearing [True]: 175.0° to 195.0° Bearing [Mag]: 190.0° to 210.0°			Distance: Beyond 12.0 NM Altitude: Below 4000.0 Ft.		
		Restriction: Bearing [True]: 303.0° to 311.0° Bearing [Mag]: 318.0° to 326.0°			Distance: Beyond 30.0 NM Altitude: Below 12000.0 Ft.		
		ESV: Bearing [True]: 39.0° to 90.0° Bearing [Mag]: 54.0° to 105.0°			Arc Distance: Out to 63.0 NM Altitude: 4000.0 to 17000.0 Ft.		
4	LWM	N 42° 44' 25.50" W 71° 5' 41.43"	L	302.2	112.50	LWM	Used
		ESV: Bearing [True]: 21.0° to 42.0° Bearing [Mag]: 36.0° to 57.0°			Arc Distance: Out to 66.0 NM Altitude: 3500.0 to 19000.0 Ft.		
		ESV: Bearing [True]: 5.0° to 26.0° Bearing [Mag]: 20.0° to 41.0°			Arc Distance: Out to 70.0 NM Altitude: 5000.0 to 19000.0 Ft.		
5	BOS	N 42° 21' 26.82" W 70° 59' 22.37"	H	20.0	112.70	BOS	Used
		Restriction: Bearing [True]: 261.0° to 8.0° Bearing [Mag]: 277.0° to 24.0°			Distance: Beyond 35.0 NM Altitude: Below 2500.0 Ft.		
		ESV: Bearing [True]: 12.0° to 17.0° Bearing [Mag]: 28.0° to 33.0°			Arc Distance: Out to 71.0 NM Altitude: 4800.0 to 19000.0 Ft.		
		ESV: Bearing [True]: 20.0° to 28.0° Bearing [Mag]: 36.0° to 44.0°			Arc Distance: Out to 77.0 NM Altitude: 5300.0 to 19000.0 Ft.		

DME/DME (Continued.)

Return To Summary

User DMEs (Continued.)

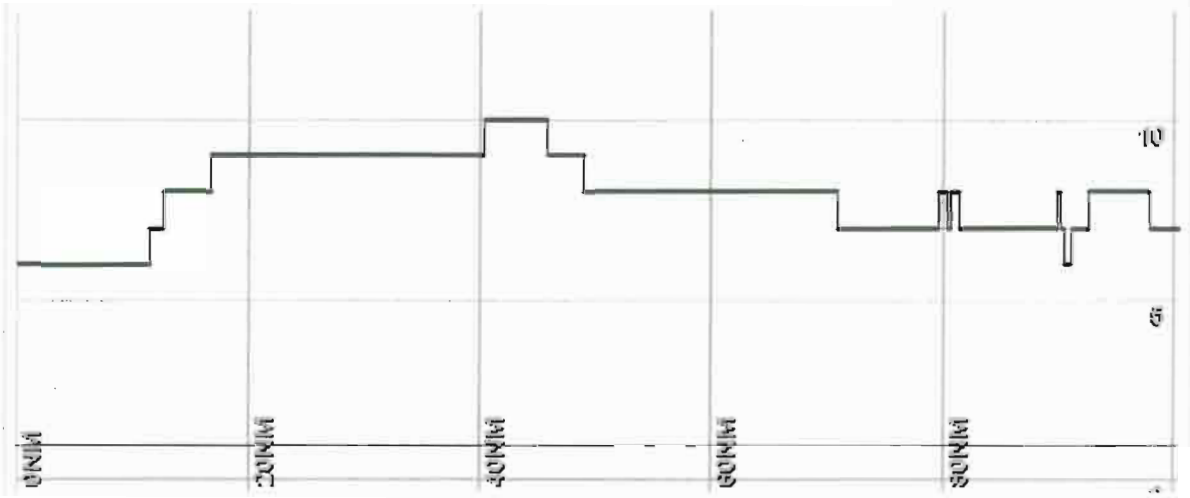
#	Name	Lat/Lon	Range	Elevation [Ft]	Frequency	Replaces:	Status
6	PSM	N 43° 5' 4.06" W 70° 49' 55.15"	L	99.3	116.50	PSM	Used

Restriction:	Bearing [True]: 13.0° to 55.0° Bearing [Mag]: 29.0° to 71.0°	Distance: Beyond 35.0 NM Altitude: Below 2500.0 Ft.
Restriction:	Bearing [True]: 64.0° to 69.0° Bearing [Mag]: 80.0° to 85.0°	Distance: Beyond 35.0 NM Altitude: Below 2500.0 Ft.
Restriction:	Bearing [True]: 99.0° to 104.0° Bearing [Mag]: 115.0° to 120.0°	Distance: Beyond 37.0 NM Altitude: Below 2500.0 Ft.
Restriction:	Bearing [True]: 174.0° to 189.0° Bearing [Mag]: 190.0° to 205.0°	Distance: Beyond 35.0 NM Altitude: Below 2500.0 Ft.
Restriction:	Bearing [True]: 209.0° to 224.0° Bearing [Mag]: 225.0° to 240.0°	Distance: Beyond 35.0 NM Altitude: Below 2500.0 Ft.
ESV:	Bearing [True]: 20.0° to 53.0° Bearing [Mag]: 36.0° to 69.0°	Arc Distance: Out to 51.0 NM Altitude: 2700.0 to 12000.0 Ft.
ESV:	Bearing [True]: 340.0° to 25.0° Bearing [Mag]: 356.0° to 41.0°	Arc Distance: Out to 46.0 NM Altitude: 4000.0 to 19000.0 Ft.

Radar Analysis

Return To Summary

Settings: **Radar Types:** ARSR and ASR



Name:	bellabonaj
Project Name:	Replaced BUXTO WP NAME with GORHM
Software:	RNAV-Pro™
Version:	2.35
Date/Time:	1/26/2012 8:39:15 AM
Input File:	PWM NUBLE1 SID RW29 ...
Databases:	AVNIS Date: 08/26/2011 NFD Date: 07/02/2009 DTED® (MAX) Date: 2002

Results Summary:

Flyability	✓ **Please Check Flyability Results**
DME/DME	✓
Radars	✓
Comms	?
TERPS	?

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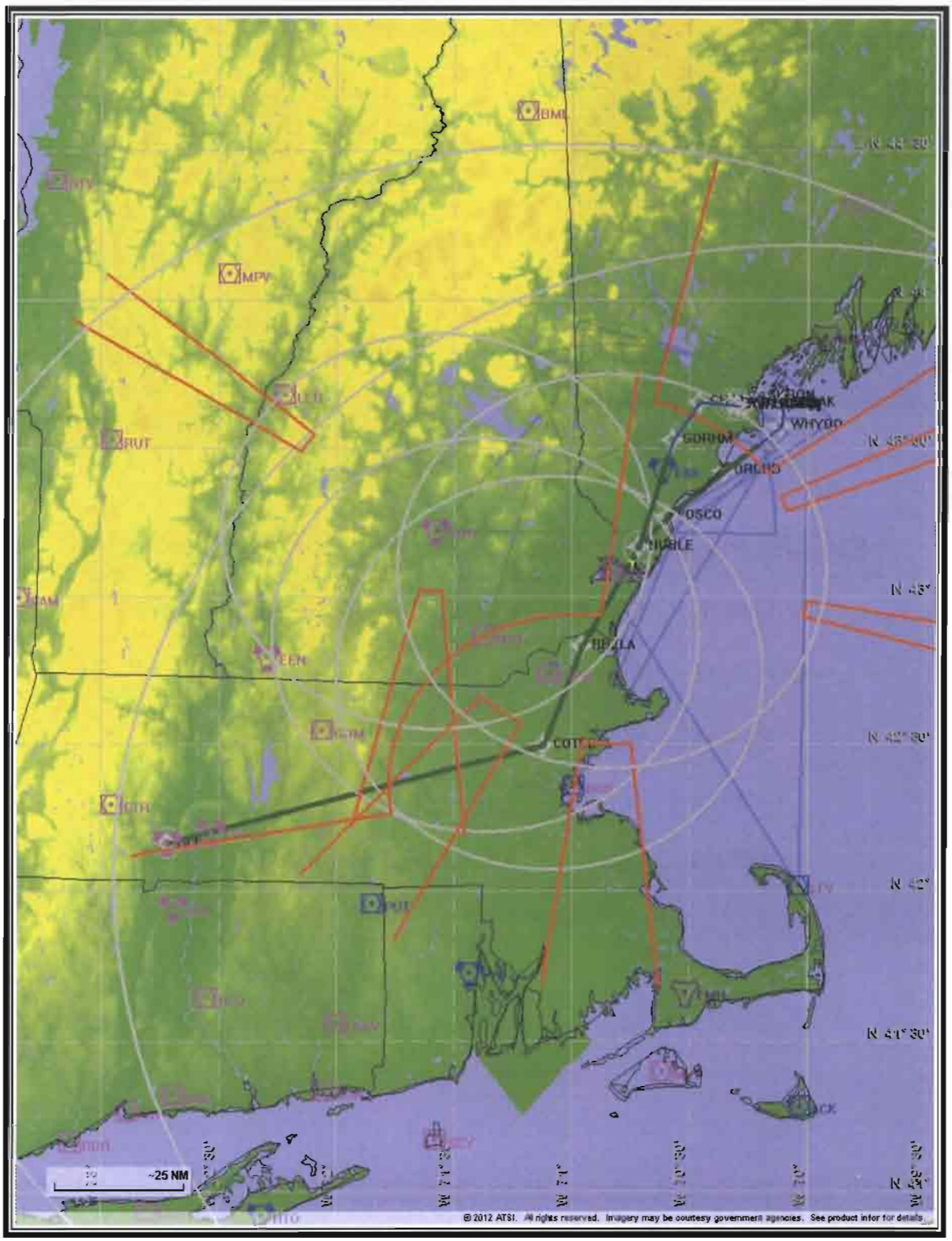
BML
MPV
BUT
GORHM
ORLBO
OSCO
BEDLA
COTTA
~25 NM
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Flight Plan

Return To Summary

Name	Type	Lat/Lon	Alt [Ft]	VNAV Mode	IAS [Kts]	Turn Type	Leg Type
RW29(A...	WP	N 43° 38' 38.52" W 70° 17' 56.37"	42.2	VNAV	0.0	Fly By	TF
RW11(D...	WP	N 43° 38' 45.10" W 70° 19' 33.86"	110.6	VNAV	130.0	Fly Over	VI
GH29:	WP	N 43° 39' 15.94" W 70° 27' 17.76"	575.0	VNAV	145.0	Fly By	CF - 213.0°
GORHM	WP	N 43° 31' 31.56" W 70° 34' 11.86"	3600.0	VNAV	180.0	Fly By	TF
NUBLE	WP	N 43° 9' 58.36" W 70° 42' 59.47"	7000.0	VNAV	180.0	Fly Over	TF

Flyability

Return To Summary

Settings:

Flight Type: Departure
Selected Airport: KPWM
Aircraft Category: Cat D
Climb Gradient:

Table:

300.0 Ft/NM up to **6500.0 Ft MSL**
250.0 Ft/NM up to **10000.0 Ft MSL**

Ground Speeds:

Departure: **120.0 Kts** out to **10.0 NM**
Table:

200.0 Kts up to **11000.0 Ft.**
240.0 Kts up to **18000.0 Ft.**
260.0 Kts up to **24000.0 Ft.**
340.0 Kts up to **99900.0 Ft.**

Wind Settings: *None assigned*
Descent During a Turn: Allowed
VNAV Mode: Flight Plan

ALTITUDE at Fly-By WP GH29: too high.

ALTITUDE at Fly-By WP GORHM too high.

ALTITUDE at Fly-Over WP NUBLE too high.

Flight Track comes into contact with terrain. Minimum AGL along route was -60.17 Ft.
Flight Track contacted terrain (DTED lvl 0 max) between AER and DER or within 2/3 NM of DER.

DME/DME

Return To Summary

Settings:

RNP: 2.0
Flight Mode: Manual
Line of Sight (DTED Level 0 Max): Evaluated
DME Restrictions: Evaluated
Inertial Drift: Enabled
Initial Drift: 0.165 NM
INS Drift Rate: 8.000 NM/Hour
Range Mode: OSV
Co-Frequencies: Evaluated
RNP Edges: Evaluated
Min DME Range: 3.0 NM
Allowed Gap Length: 4.0 NM
DME Types: VOR/DME , VORTAC , TACAN , and User
DME Include Angles: 30 to 150
Critical DMEs: Allowed
DoD Facilities: Not included
Foreign Facilities: Not included
Low & Terminal DMEs: Included
Flight Check DMEs: Selected
Higher Altitudes: Evaluated
Near Maximum Altitude: Evaluated
Minimum MSL DMEs Avail: 5539 Ft.

Total Number of DMEs Used: 5

Maximum DME Error: 1.329 NM.

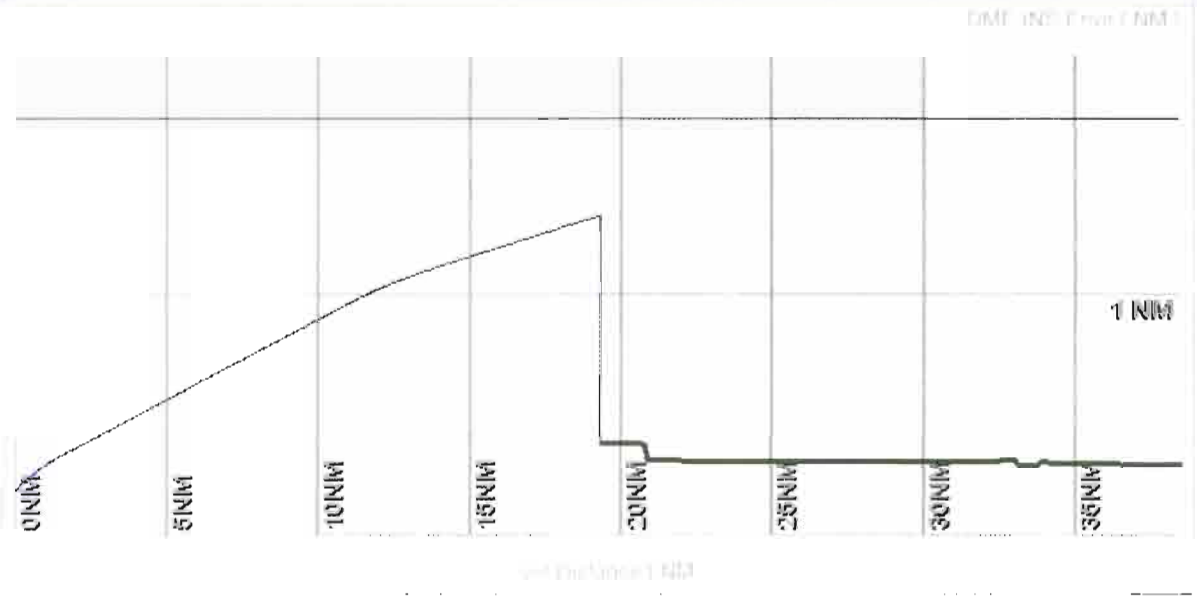
No Critical DMEs were found.

Available DMEs: ENE, PSM, LWM, CON, MHT, LFV

Foreign DMEs within range: VLV, YFC, YJN, YQB, YQI, YSC, YSJ, YUL

DME/DME (Continued.)

Return To Summary



DME/DME (Continued.)

Return To Summary

DMEs Used

#	Name	Lat/Lon	Range	Source	Critical	Err. [NM]	Status	Time	Distance
1	CON	N 43° 13' 11.23" W 71° 34' 31.63"	L + ESV	User	NO	1.392	Enabled	30.0 %	37.7 %
2	PSM	N 43° 5' 4.06" W 70° 49' 55.15"	L + ESV	User	NO	1.329	Enabled	3.2 %	4.0 %
3	LFV	N 42° 1' 1.88" W 70° 2' 14.04"	H + ESV	User	NO	1.329	Enabled	34.8 %	43.8 %
4	ENE	N 43° 25' 32.42" W 70° 36' 48.69"	H	Database	NO	1.125	Enabled	1.6 %	2.0 %
5	MHT	N 42° 52' 6.70" W 71° 22' 10.31"	L + ESV	User	NO	1.329	Enabled	9.7 %	12.1 %

Flight Check DME Selection

Distance [NM]	Selected DMEs					Alternate
0.0						
1.2	ENE					
6.5	ENE	CON	PSM	LWM	MHT	
15.6	ENE	CON	PSM	LWM	LFV	MHT
27.0	ENE	CON	PSM	MHT	LFV	LWM

Inertial Drift Segments

#	Start Location	End Location	Length [NM]
1	N 43° 38' 38.52" W 70° 17' 56.37"	N 43° 28' 23.07" W 70° 35' 29.60"	19.3

VOR: ENE — Available from N 43° 38' 38.52" W 70° 17' 56.37" to N 43° 28' 23.07" W 70° 35' 29.60"

VOR: PSM — Available from N 43° 38' 48.72" W 70° 20' 28.07" to N 43° 28' 23.07" W 70° 35' 29.60"

User DMEs

#	Name	Lat/Lon	Range	Elevation [Ft]	Frequency	Replaces:	Status
1	MHT	N 42° 52' 6.70" W 71° 22' 10.31"	L	470.5	114.40	MHT	Used

ESV: Bearing [True]: 15.0° to 55.0° Bearing [Mag]: 30.0° to 70.0°
Arc Distance: Out to 66.0 NM Altitude: 3500.0 to 12000.0 Ft.

DME/DME (Continued.)

Return To Summary

User DMEs (Continued.)

#	Name	Lat/Lon	Range	Elevation [Ft]	Frequency	Replaces:	Status
2	LFV	N 42° 1' 1.88" W 70° 2' 14.04"	H	150.8	114.70	LFV	Used
		ESV: Bearing [True]: 330.0° to 1.0° Bearing [Mag]: 346.0° to 17.0°			Arc Distance: Out to 95.0 NM Altitude: 6000.0 to 18000.0 Ft.		
3	CON	N 43° 13' 11.23" W 71° 34' 31.63"	L	714.5	112.90	CON	Used
		Restriction: Bearing [True]: 175.0° to 195.0° Bearing [Mag]: 190.0° to 210.0°			Distance: Beyond 12.0 NM Altitude: Below 4000.0 Ft.		
		Restriction: Bearing [True]: 303.0° to 311.0° Bearing [Mag]: 318.0° to 326.0°			Distance: Beyond 30.0 NM Altitude: Below 12000.0 Ft.		
		ESV: Bearing [True]: 39.0° to 90.0° Bearing [Mag]: 54.0° to 105.0°			Arc Distance: Out to 63.0 NM Altitude: 4000.0 to 17000.0 Ft.		
4	LWM	N 42° 44' 25.50" W 71° 5' 41.43"	L	302.2	112.50	LWM	Not Used
		ESV: Bearing [True]: 21.0° to 42.0° Bearing [Mag]: 36.0° to 57.0°			Arc Distance: Out to 66.0 NM Altitude: 3500.0 to 19000.0 Ft.		
		ESV: Bearing [True]: 5.0° to 26.0° Bearing [Mag]: 20.0° to 41.0°			Arc Distance: Out to 70.0 NM Altitude: 5000.0 to 19000.0 Ft.		
5	BOS	N 42° 21' 26.82" W 70° 59' 22.37"	H	20.0	112.70	BOS	Not Used
		Restriction: Bearing [True]: 261.0° to 8.0° Bearing [Mag]: 277.0° to 24.0°			Distance: Beyond 35.0 NM Altitude: Below 2500.0 Ft.		
		ESV: Bearing [True]: 12.0° to 17.0° Bearing [Mag]: 28.0° to 33.0°			Arc Distance: Out to 71.0 NM Altitude: 4800.0 to 19000.0 Ft.		
		ESV: Bearing [True]: 20.0° to 28.0° Bearing [Mag]: 36.0° to 44.0°			Arc Distance: Out to 77.0 NM Altitude: 5300.0 to 19000.0 Ft.		

DME/DME (Continued.)

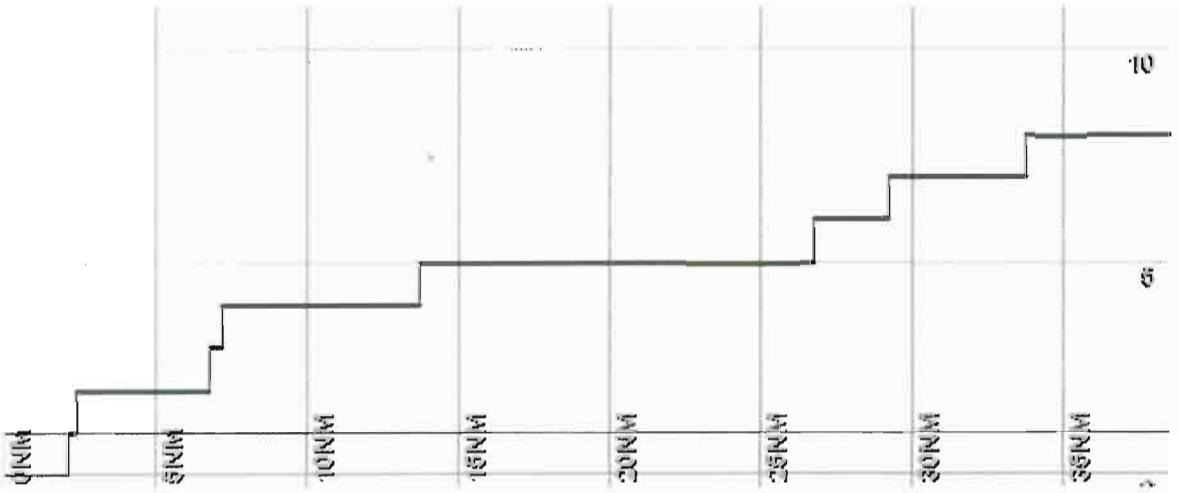
Return To Summary

User DMEs (Continued.)

#	Name	Lat/Lon	Range	Elevation [Ft]	Frequency	Replaces:	Status
6	PSM	N 43° 5' 4.06" W 70° 49' 55.15"	L	99.3	116.50	PSM	Used

Restriction:	Bearing [True]: 13.0° to 55.0° Bearing [Mag]: 29.0° to 71.0°	Distance: Beyond 35.0 NM Altitude: Below 2500.0 Ft.
Restriction:	Bearing [True]: 64.0° to 69.0° Bearing [Mag]: 80.0° to 85.0°	Distance: Beyond 35.0 NM Altitude: Below 2500.0 Ft.
Restriction:	Bearing [True]: 99.0° to 104.0° Bearing [Mag]: 115.0° to 120.0°	Distance: Beyond 37.0 NM Altitude: Below 2500.0 Ft.
Restriction:	Bearing [True]: 174.0° to 189.0° Bearing [Mag]: 190.0° to 205.0°	Distance: Beyond 35.0 NM Altitude: Below 2500.0 Ft.
Restriction:	Bearing [True]: 209.0° to 224.0° Bearing [Mag]: 225.0° to 240.0°	Distance: Beyond 35.0 NM Altitude: Below 2500.0 Ft.
ESV:	Bearing [True]: 20.0° to 53.0° Bearing [Mag]: 36.0° to 69.0°	Arc Distance: Out to 51.0 NM Altitude: 2700.0 to 12000.0 Ft.
ESV:	Bearing [True]: 340.0° to 25.0° Bearing [Mag]: 356.0° to 41.0°	Arc Distance: Out to 46.0 NM Altitude: 4000.0 to 19000.0 Ft.

Radar Analysis

Return To Summary

Settings: **Radar Types:** ARSR and ASR