Flight Procedure Tracking Form	Action: FLIGHT CHECK	Task Type: GRAPHICAL DP	Date Open: 12/22/2011	Task #: 2011120127194101003	Request #: 20111201271941
Procedure: MANCHESTER SIX MANCHESTER NH KMHT		Airport ID: KMHT	Airport: MANCHESTER		Reimbursable #:
City: MANCHESTER	ST: NH	GPS #:		Estimated Chart Date: 05/31/2012	FICO #:
Fac ID:	Fac. Type: Proc TR	Specialist: PETER GUIMOND			

Procedure Review

	Rec'd	Rel'd	Full Name	Comments
Lead:	12/02/2011	02/15/2012	DONALD SMITH	
QA:	02/15/2012	02/15/2012	STEVEN SZUKALA	
Liaison:	02/15/2012		Terrell	

Procedure Comments: ENROUTE **Remark Type:** INFORMATION

pkg 3 of 3

MANCHESTER, NH MANCHESTER (KMHT) MANCHESTER SIX ENROUTE-YES FC: 4.3.12 PUB: 5.31.12

ATTACHED FORMS: 8260-15B.

CONTACT: DON SMITH, AJV-352 LEAD, 405.954.1036:

PROTOTYPE-NOT
FOR NAVIGATION

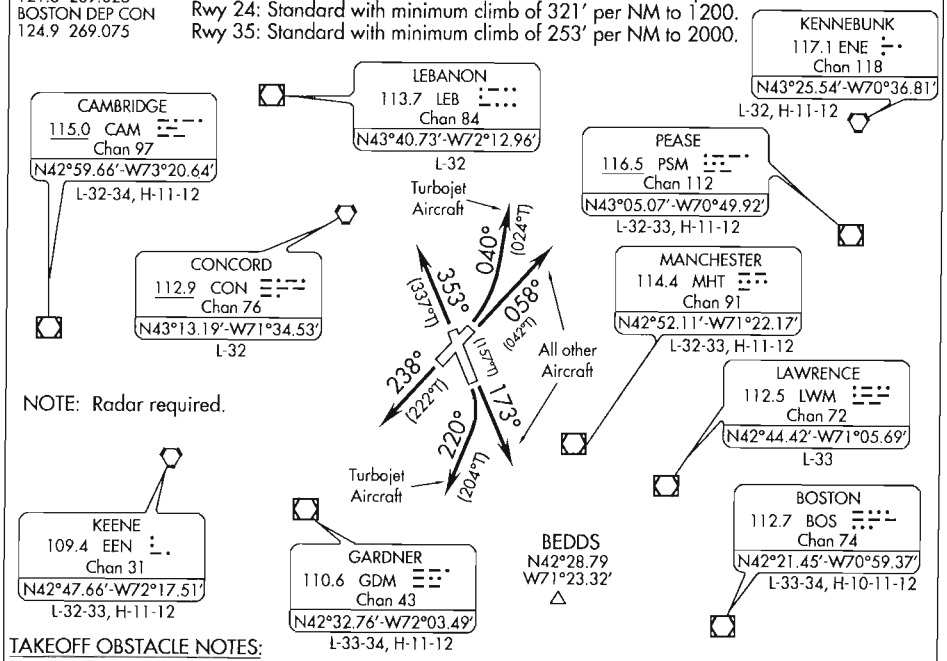
(MHT6.MHT) FIG SL-246 (FAA)

MANCHESTER SIX DEPARTURE

MANCHESTER (MHT)
MANCHESTER, NEW HAMPSHIRE

ATIS 119.55
CLNC DEL
135.9
GND CON
121.9
MANCHESTER TOWER
121.3 239.025
BOSTON DEP CON
124.9 269.075

TAKEOFF MINIMUMS:
Rwy 6: Standard with minimum climb of 206' per NM to 1000, or alternatively, with Standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1900' prior to DER.
Rwy 17: 300-1¼ or Standard with minimum climb of 277' per NM to 600.
Rwy 24: Standard with minimum climb of 321' per NM to 1200.
Rwy 35: Standard with minimum climb of 253' per NM to 2000.



NOTE: Radar required.

TAKEOFF OBSTACLE NOTES:
Rwy 6: Pole and trees beginning 67' from DER, 162' left of centerline, up to 107' AGL/313' MSL. Fence and trees beginning 6' from DER, 90' right of centerline, up to 72' AGL/272' MSL.
Rwy 17: Buildings and trees beginning 1792' from DER, 54' left of centerline, up to 107' AGL/418' MSL. Transmission line tower, poles, buildings and trees beginning 761' from DER, 4' right of centerline, up to 90' AGL/418' MSL. Pole 5563' from DER, 92' left of centerline, 57' AGL/457' MSL.
Rwy 24: Pole and trees beginning 221' from DER, 243' left of centerline, up to 119' AGL/293' MSL. Trees beginning 2556' from DER, 1041' right of centerline, up to 101' AGL/313' MSL.
Rwy 35: Pole and trees beginning 891' from DER, 527' left of centerline, up to 76' AGL/320' MSL. Poles and trees beginning 719' from DER, 558' right of centerline, up to 44' AGL/281' MSL. Trees 5933' from DER, 1950' left of centerline, up to 76' AGL/409' MSL. Trees 1.0 NM from DER, 1581' left of centerline, up to 60' AGL/414' MSL. Trees 1.2 NM from DER, 1946' left of centerline, up to 85' AGL/407' MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 6: TURBOJET AIRCRAFT - Climbing left turn heading 040°, thence . . . .
ALL OTHER AIRCRAFT - Climb heading 058° or as assigned by ATC, thence . . . .
TAKEOFF RWY 17: TURBOJET AIRCRAFT - Climbing right turn heading 220°, thence . . . .
ALL OTHER AIRCRAFT - Climb heading 173° or as assigned by ATC, thence . . . .
TAKEOFF RWY 24: Climb heading 238° or as assigned by ATC, thence . . . .
TAKEOFF RWY 35: Climb heading 353° or as assigned by ATC, thence . . . .

. . . . Expect vectors to assigned Route/Navaid/Fix. Maintain 3000 or as assigned by ATC. Expect clearance to filed altitude /flight level within five (5) minutes after departure.

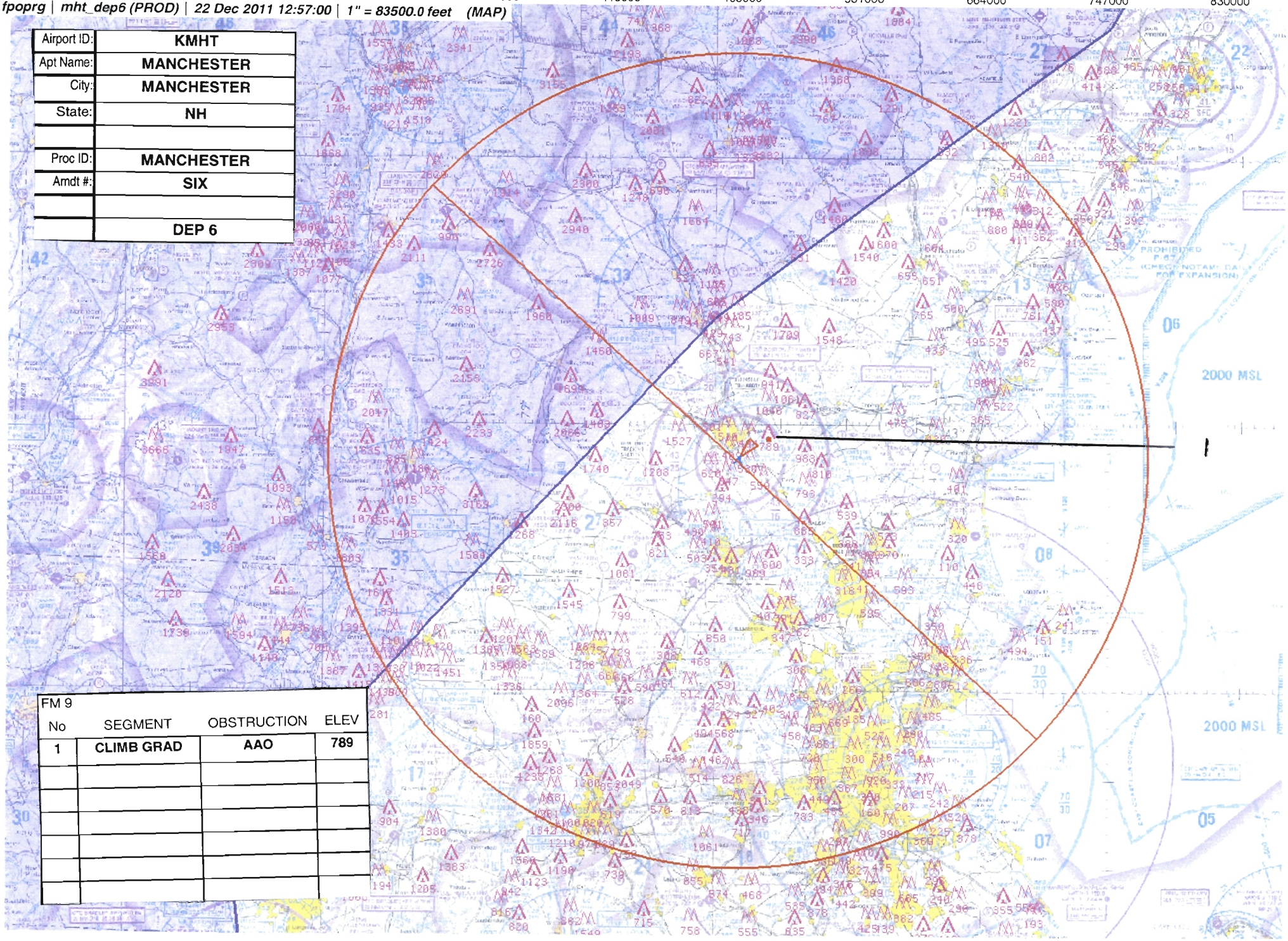
MANCHESTER SIX DEPARTURE
MANCHESTER, NEW HAMPSHIRE
MANCHESTER (MHT)
(MHT6.MHT) FIG

NM 14 28 42 56 70 84 98 112 126 140

FT 83000 166000 249000 332000 415000 498000 581000 664000 747000 830000

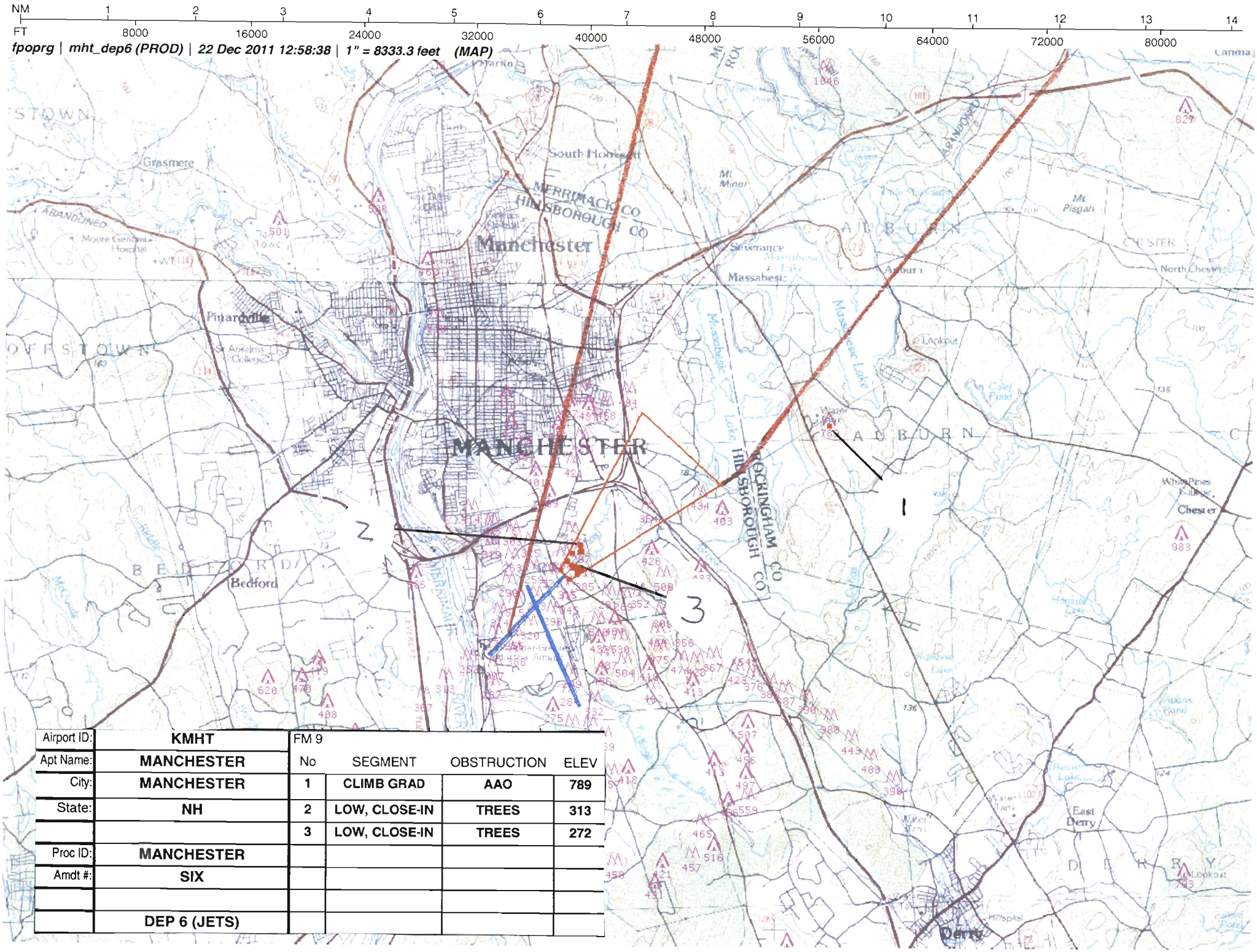
fpoprg | mht_dep6 (PROD) | 22 Dec 2011 12:57:00 | 1" = 83500.0 feet (MAP)

Airport ID:	KMHT
Apt Name:	MANCHESTER
City:	MANCHESTER
State:	NH
Proc ID:	MANCHESTER
Amdt #:	SIX
	DEP 6

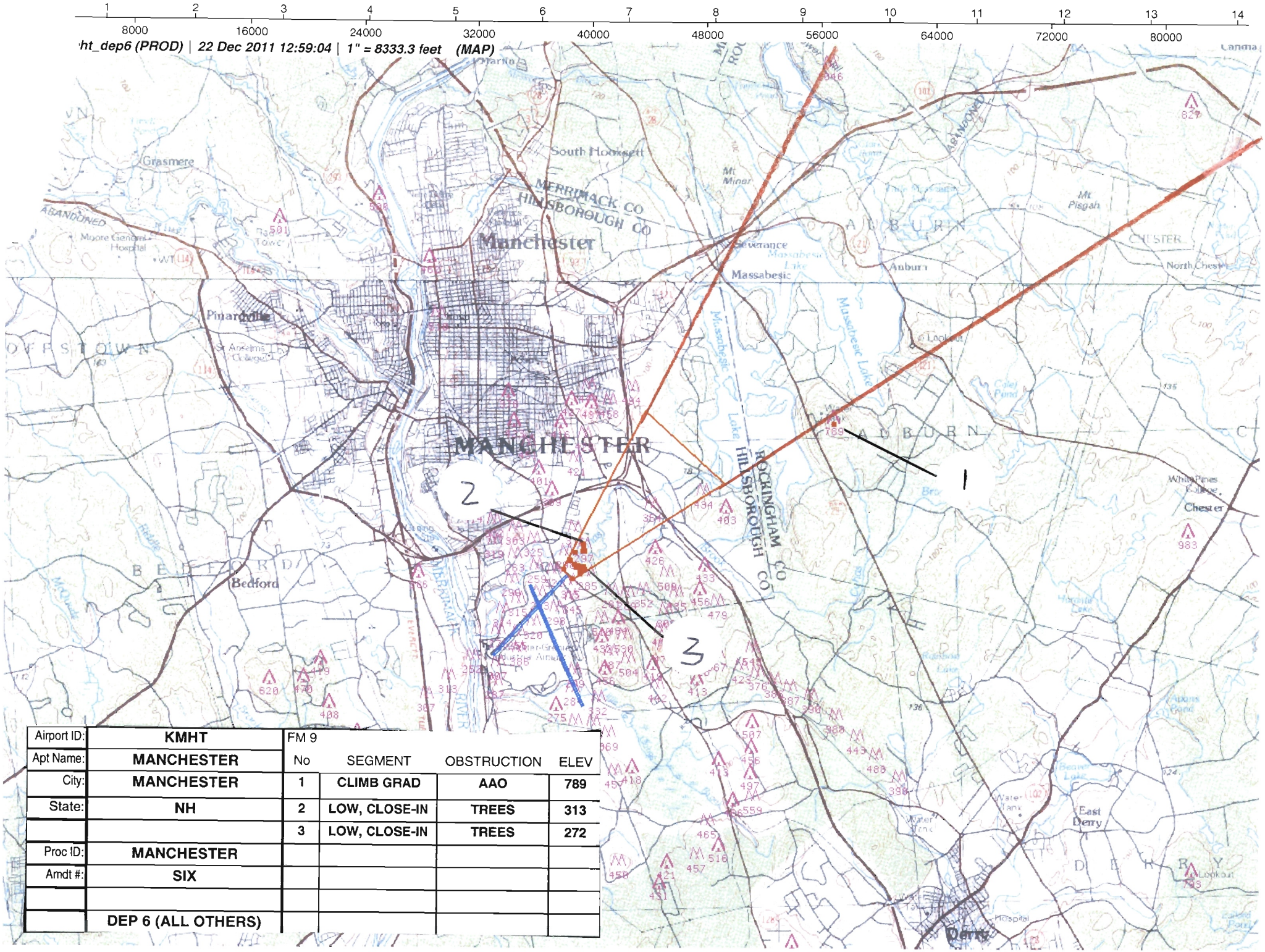


FM 9

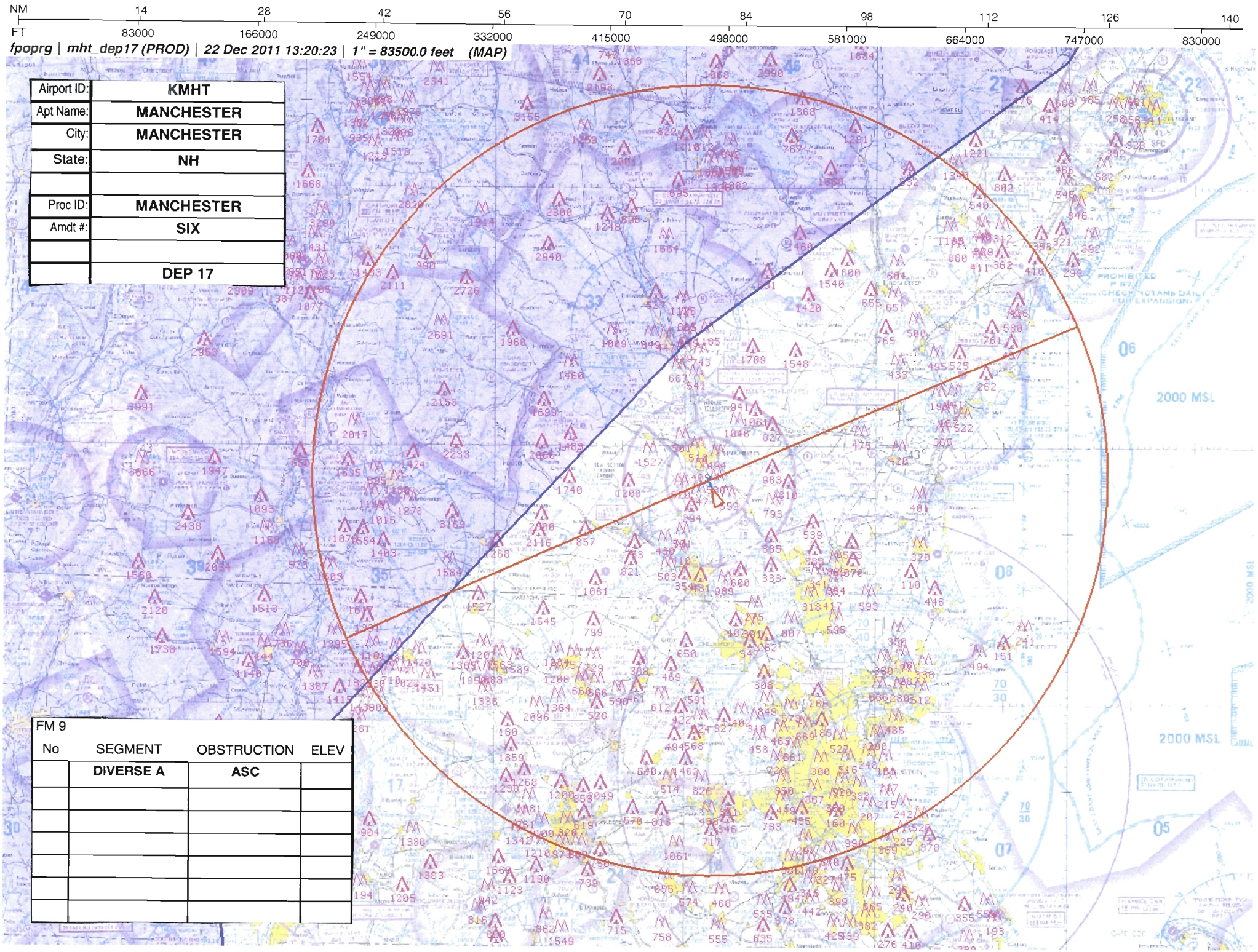
No	SEGMENT	OBSTRUCTION	ELEV
1	CLIMB GRAD	AAO	789



Airport ID:	KMHT	FM 9			
Apt Name:	MANCHESTER	No	SEGMENT	OBSTRUCTION	ELEV
City:	MANCHESTER	1	CLIMB GRAD	AAO	789
State:	NH	2	LOW, CLOSE-IN	TREES	313
		3	LOW, CLOSE-IN	TREES	272
Proc ID:	MANCHESTER				
Amdt #:	SIX				
	DEP 6 (JETS)				



Airport ID:	KMHT	FM 9			
Apt Name:	MANCHESTER	No	SEGMENT	OBSTRUCTION	ELEV
City:	MANCHESTER	1	CLIMB GRAD	AAO	789
State:	NH	2	LOW, CLOSE-IN	TREES	313
		3	LOW, CLOSE-IN	TREES	272
Proc ID:	MANCHESTER				
Amdt #:	SIX				
	DEP 6 (ALL OTHERS)				



Airport ID:	KMHT
Apt Name:	MANCHESTER
City:	MANCHESTER
State:	NH
Proc ID:	MANCHESTER
Amdt #:	SIX
	DEP 17

FM 9

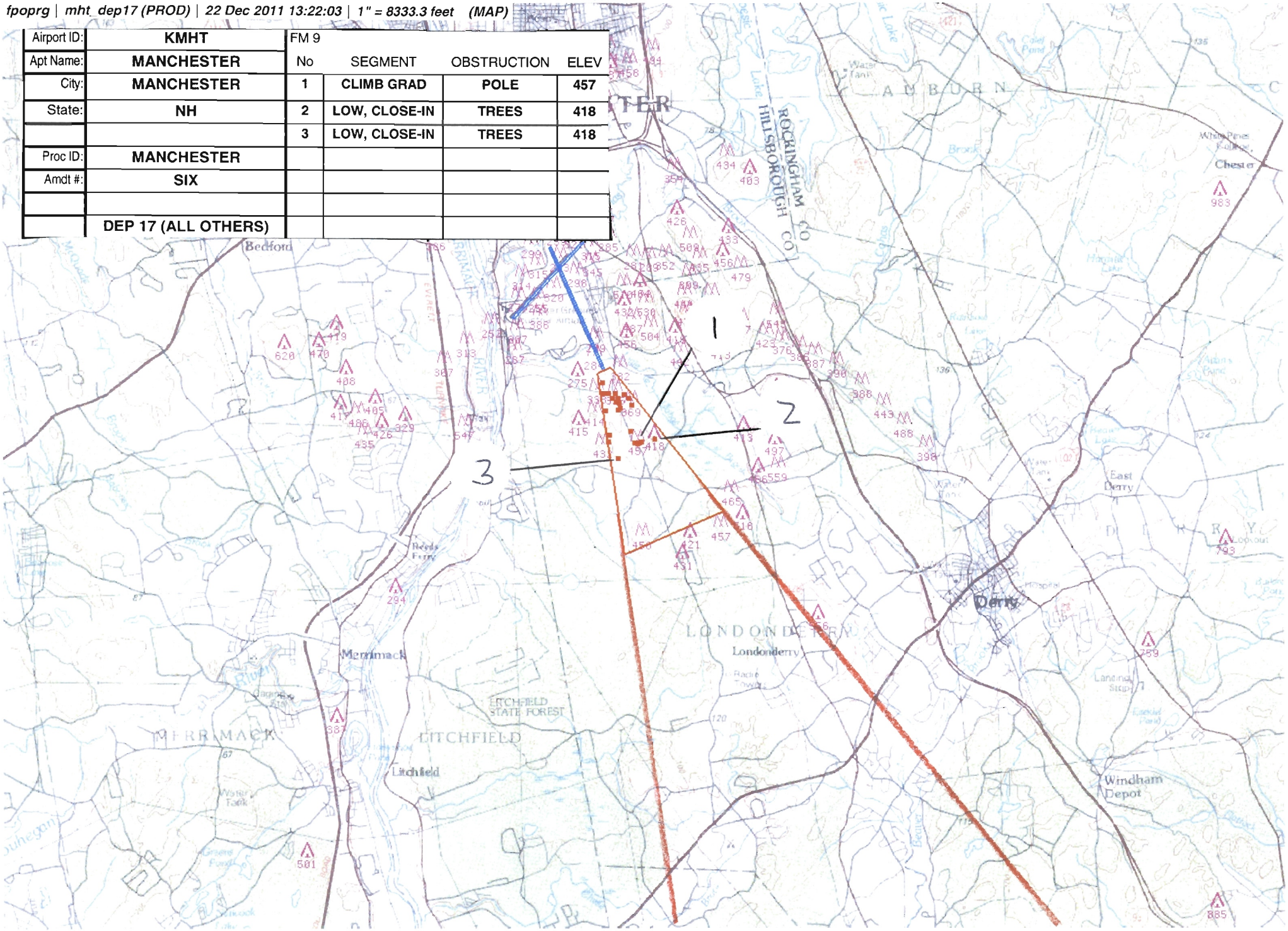
No	SEGMENT	OBSTRUCTION	ELEV
	DIVERSE A	ASC	

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 | mht_dep17 (PROD) | 22 Dec 2011 13:22:03 | 1" = 8333.3 feet (MAP)

		FM 9			
Airport ID:	**KMHT**				
Apt Name:	**MANCHESTER**	No	SEGMENT	OBSTRUCTION	ELEV
City:	**MANCHESTER**	1	**CLIMB GRAD**	**POLE**	**457**
State:	**NH**	2	**LOW, CLOSE-IN**	**TREES**	**418**
		3	**LOW, CLOSE-IN**	**TREES**	**418**
Proc ID:	**MANCHESTER**				
Amdt #:	**SIX**				
	DEP 17 (ALL OTHERS)				

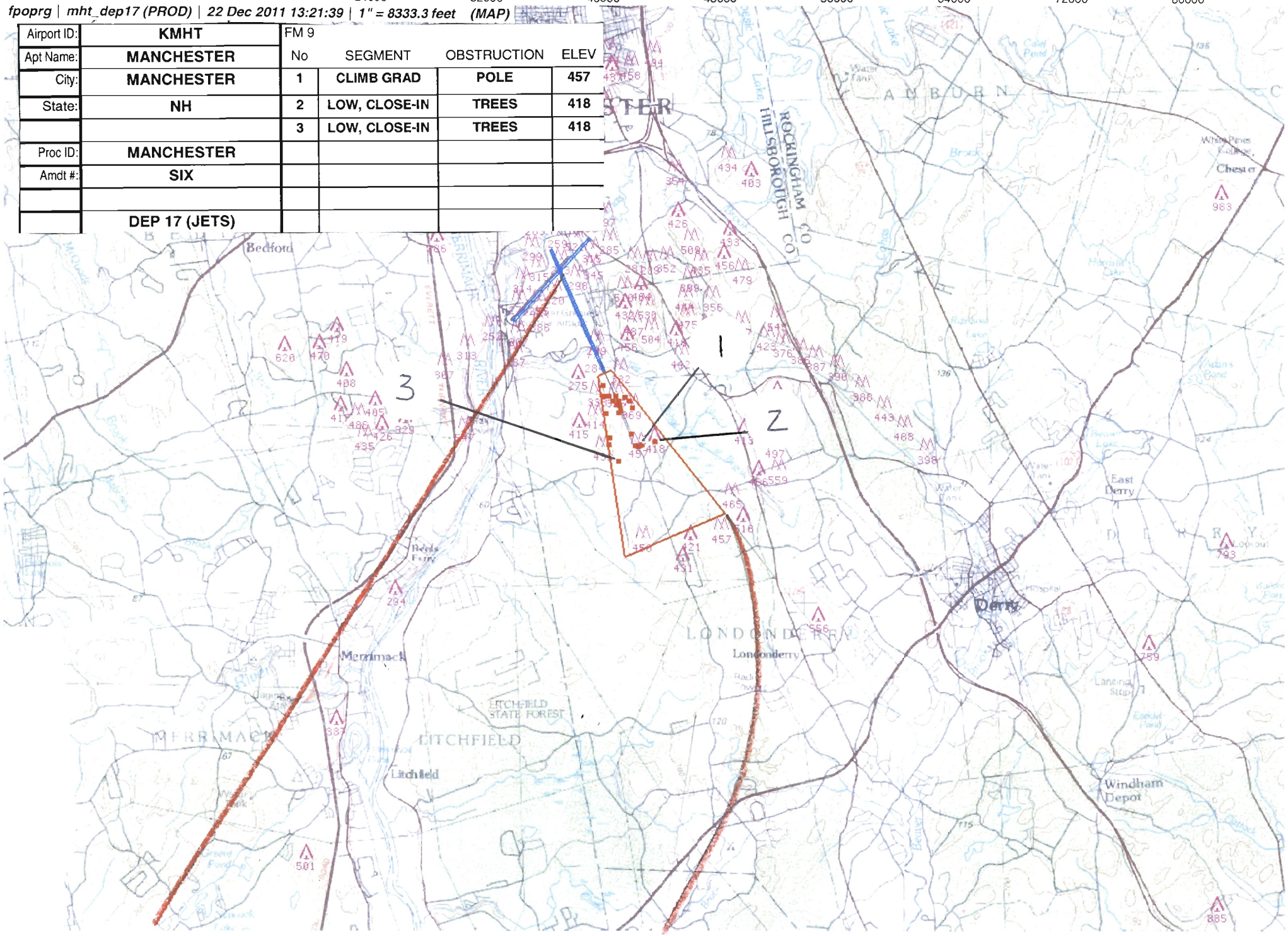


NM 1 2 3 4 5 6 7 8 9 10 11 12 13 14

FT 8000 16000 24000 32000 40000 48000 56000 64000 72000 80000

fpoprg | mht_dep17 (PROD) | 22 Dec 2011 13:21:39 | 1" = 8333.3 feet (MAP)

		FM 9			
Airport ID:	**KMHT**				
Apt Name:	**MANCHESTER**	No	SEGMENT	OBSTRUCTION	ELEV
City:	**MANCHESTER**	1	CLIMB GRAD	POLE	457
State:	**NH**	2	LOW, CLOSE-IN	TREES	418
		3	LOW, CLOSE-IN	TREES	418
Proc ID:	**MANCHESTER**				
Amdt #:	**SIX**				
	DEP 17 (JETS)				

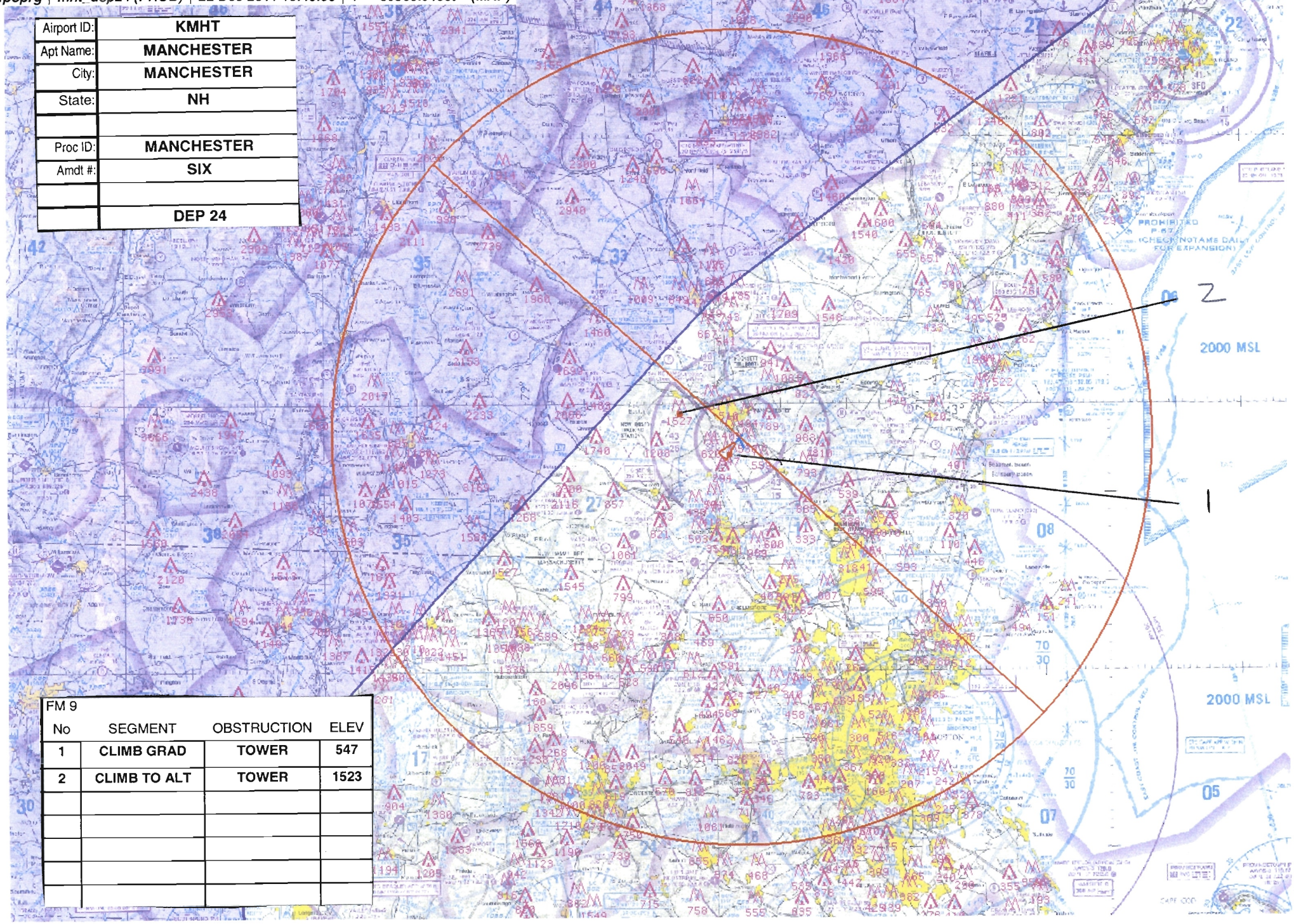


NM 14 28 42 56 70 84 98 112 126 140

FT 83000 166000 249000 332000 415000 498000 581000 664000 747000 830000

fpoprg | mht_dep24 (PROD) | 22 Dec 2011 13:43:50 | 1" = 83500.0 feet (MAP)

Airport ID:	KMHT
Apt Name:	MANCHESTER
City:	MANCHESTER
State:	NH
Proc ID:	MANCHESTER
Amdt #:	SIX
	DEP 24



FM 9

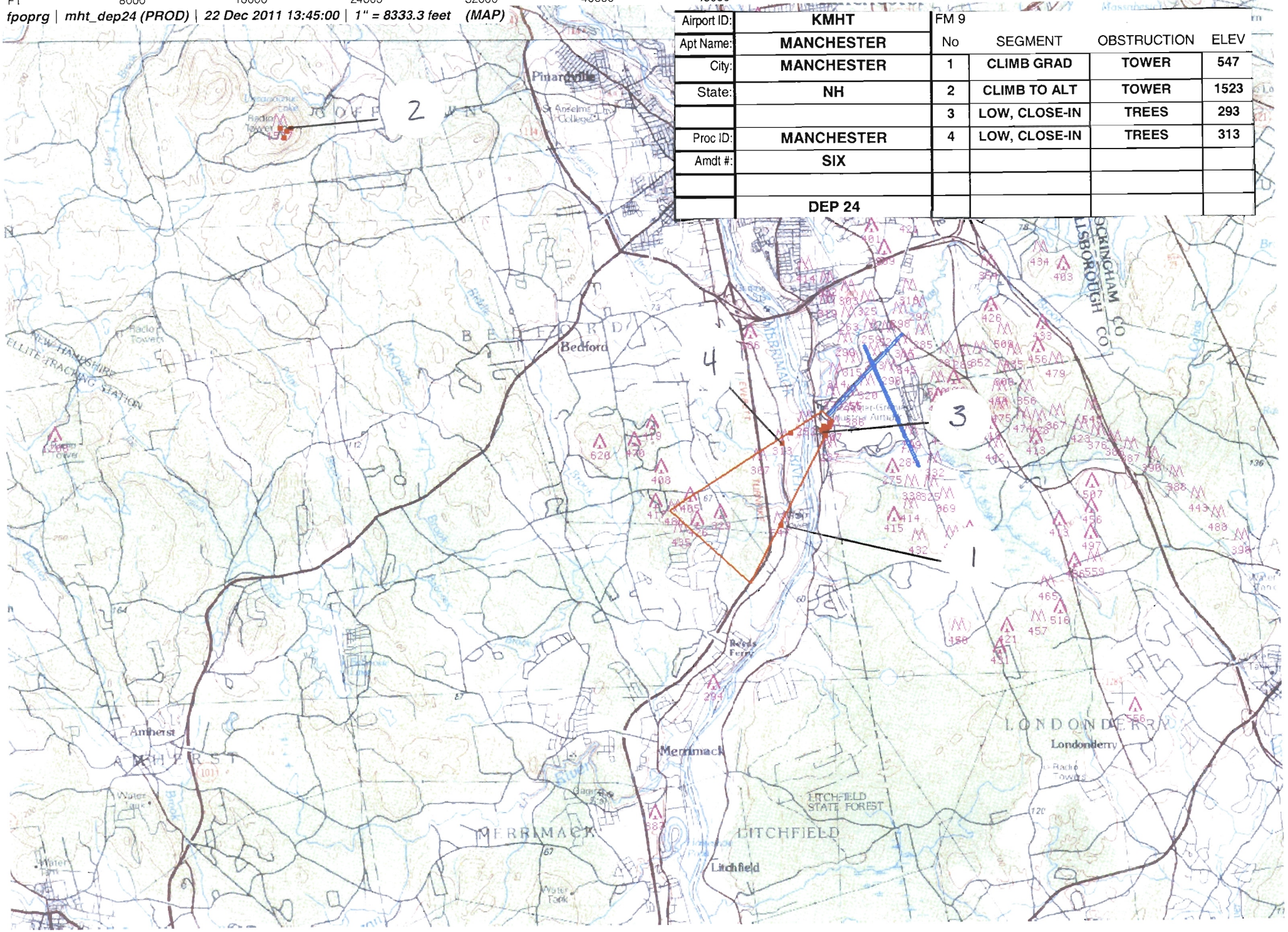
No	SEGMENT	OBSTRUCTION	ELEV
1	CLIMB GRAD	TOWER	547
2	CLIMB TO ALT	TOWER	1523

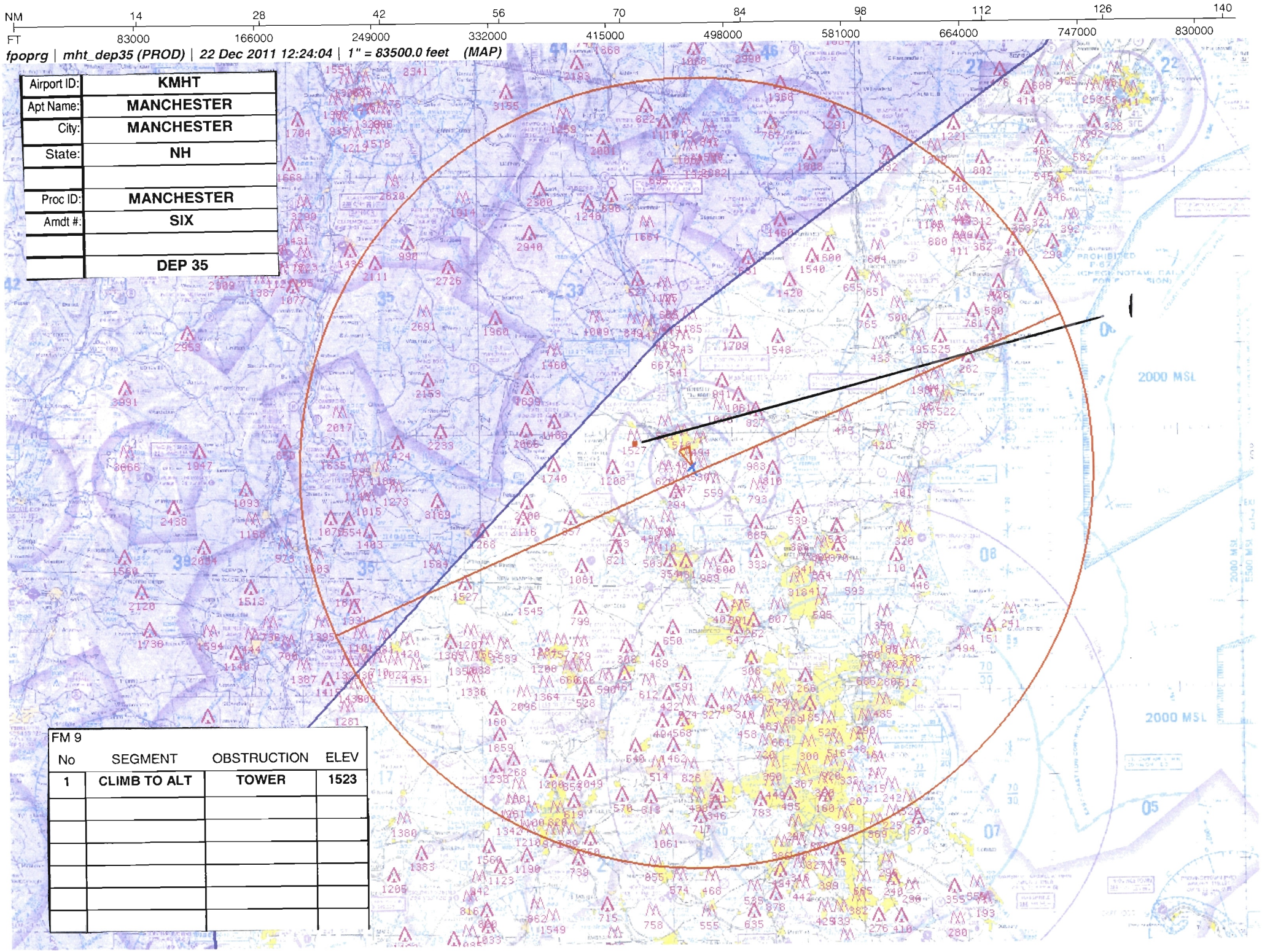
NM 1 2 3 4 5 6 7 8 9 10 11 12 13 14

FT 8000 16000 24000 32000 40000 48000 56000 64000 72000 80000

fpoprg | mht_dep24 (PROD) | 22 Dec 2011 13:45:00 | 1" = 8333.3 feet (MAP)

		FM 9			
Airport ID:	KMHT				
Apt Name:	MANCHESTER	No	SEGMENT	OBSTRUCTION	ELEV
City:	MANCHESTER	1	CLIMB GRAD	TOWER	547
State:	NH	2	CLIMB TO ALT	TOWER	1523
		3	LOW, CLOSE-IN	TREES	293
Proc ID:	MANCHESTER	4	LOW, CLOSE-IN	TREES	313
Amdt #:	SIX				
	DEP 24				

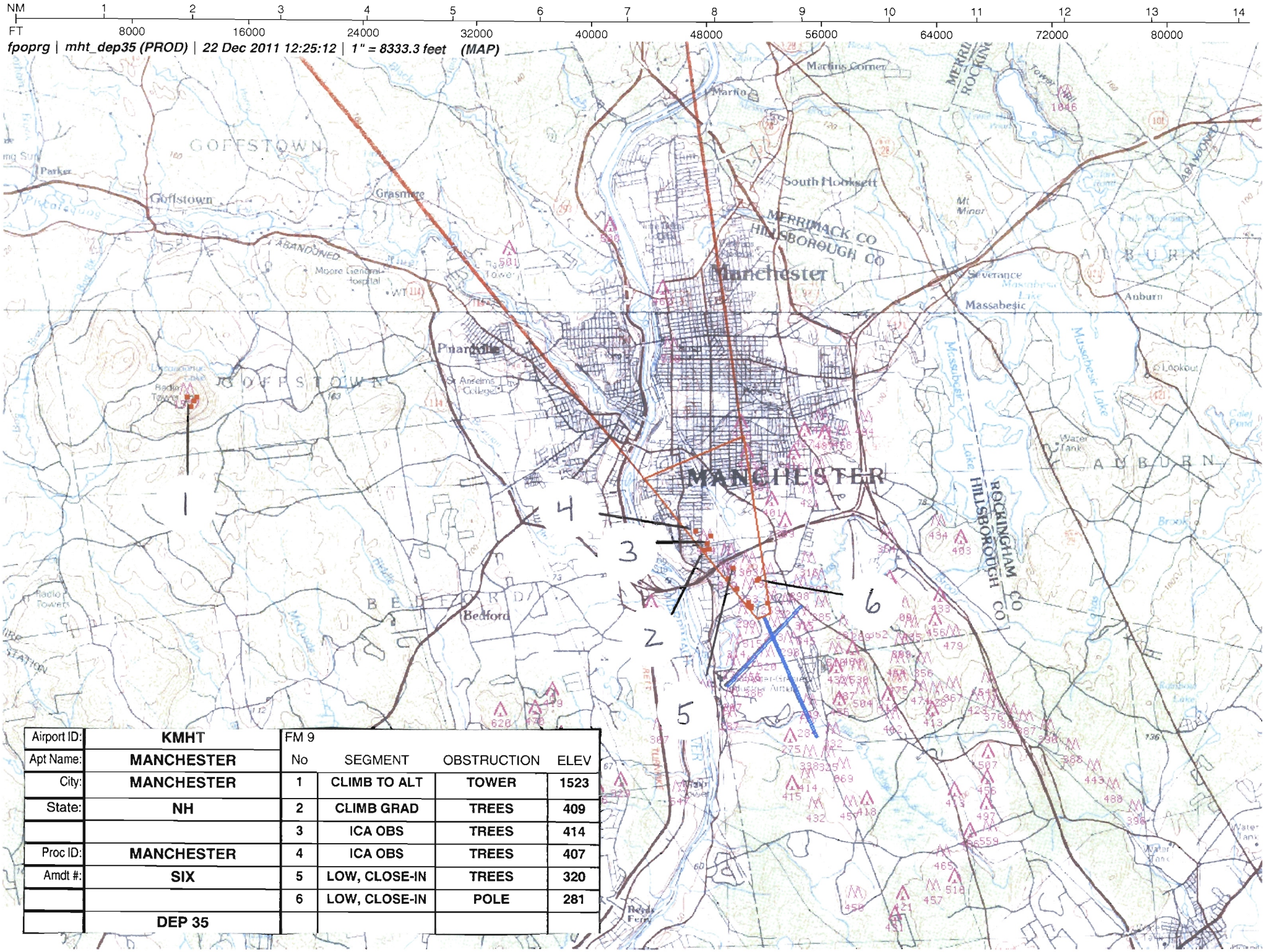




Airport ID:	KMHT
Apt Name:	MANCHESTER
City:	MANCHESTER
State:	NH
Proc ID:	MANCHESTER
Amdt #:	SIX
	DEP 35

FM 9

No	SEGMENT	OBSTRUCTION	ELEV
1	CLIMB TO ALT	TOWER	1523



Airport ID:	KMHT	FM 9			
Apt Name:	MANCHESTER	No	SEGMENT	OBSTRUCTION	ELEV
City:	MANCHESTER	1	CLIMB TO ALT	TOWER	1523
State:	NH	2	CLIMB GRAD	TREES	409
		3	ICA OBS	TREES	414
Proc ID:	MANCHESTER	4	ICA OBS	TREES	407
Amdt #:	SIX	5	LOW, CLOSE-IN	TREES	320
		6	LOW, CLOSE-IN	POLE	281
	DEP 35				

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 statue miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
MANCHESTER	**SIX**		**FIVE**	**15 JAN 09**	

TYPE: SID

DP ROUTE DESCRIPTION:

TAKEOFF RWY 6: TURBOJET AIRCRAFT - CLIMBING LEFT TURN HEADING 040.00, THENCE... **ALL OTHER AIRCRAFT** - CLIMB HEADING 058.42 OR AS ASSIGNED BY ATC, THENCE...
TAKEOFF RWY 17: TURBOJET AIRCRAFT - CLIMBING RIGHT TURN HEADING 220.00, THENCE... **ALL OTHER AIRCRAFT** - CLIMB HEADING 172.52 OR AS ASSIGNED BY ATC, THENCE...
TAKEOFF RWY 24: CLIMB HEADING 238.43 OR AS ASSIGNED BY ATC, THENCE...
TAKEOFF RWY 35: CLIMB HEADING 352.53 OR AS ASSIGNED BY ATC, THENCE...

... EXPECT VECTORS TO ASSIGNED ROUTE/NAVAID/FIX. MAINTAIN 3000 OR AS ASSIGNED BY ATC. EXPECT CLEARANCE TO FILED ALTITUDE/FLIGHT LEVEL WITHIN 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

PROCEDURAL DATA NOTES/TAKEOFF MINIMUMS:

NOTE: RADAR REQUIRED.
TAKEOFF MINIMUMS:
RWY 6, STANDARD WITH MINIMUM CLIMB OF 206 FT PER NM TO 1000, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1900 FT PRIOR TO DER.
RWY 17, 300-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 277 FT PER NM TO 600.
RWY 24, STANDARD WITH MINIMUM CLIMB OF 321 FT PER NM TO 1200.
RWY 35, STANDARD WITH MINIMUM CLIMB OF 253 FT PER NM TO 2000.

TAKEOFF OBSTACLES NOTES:

NOTE: RWY 6, POLE AND TREES BEGINNING 67 FT FROM DER, 162 FT LEFT OF CENTERLINE, UP TO 107 FT AGL/313 FT MSL. FENCE AND TREES BEGINNING 6 FT FROM DER, 90 FT RIGHT OF CENTERLINE, UP TO 72 FT AGL/272 FT MSL.
NOTE: RWY 17, BUILDINGS AND TREES BEGINNING 1792 FT FROM DER, 54 FT LEFT OF CENTERLINE, UP TO 107 FT AGL/418 FT MSL. TRANSMISSION LINE TOWER, POLES, BUILDINGS, AND TREES BEGINNING 761 FT FROM DER, 4 FT RIGHT OF CENTERLINE, UP TO 90 FT AGL/418 FT MSL. POLE 5563 FT FROM DER, 92 FT LEFT OF CENTERLINE, 57 FT AGL/457 FT MSL.
NOTE: RWY 24, POLE AND TREES BEGINNING 221 FT FROM DER, 243 FT LEFT OF CENTERLINE, UP TO 119 FT AGL/293 FT MSL. TREES BEGINNING 2556 FT FROM DER, 1041 FT RIGHT OF CENTERLINE, UP TO 101 FT AGL/313 FT MSL.
NOTE: RWY 35, POLE AND TREES BEGINNING 891 FT FROM DER, 527 FT LEFT OF CENTERLINE, UP TO 76 FT AGL/320 FT MSL. POLES AND TREES BEGINNING 719 FT FROM DER, 558 FT RIGHT OF CENTERLINE, UP TO 44 FT AGL/281 FT MSL. TREES 5933 FT FROM DER, 1950 FT LEFT OF CENTERLINE, UP TO 76 FT AGL/409 FT MSL. TREES 1.0 NM FROM DER, 1581 FT LEFT OF CENTERLINE, UP TO 60 FT AGL/414 FT MSL. TREES 1.2 NM FROM DER, 1946 FT LEFT OF CENTERLINE, UP TO 85 FT AGL/407 FT MSL.

QUALITY 4 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 statue miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
MANCHESTER	**SIX**		**FIVE**	**15 JAN 09**	

CONTROLLING OBSTACLES:

RWY 6: 789 FT MSL AAO 425822.72N/0712137.11W.
RWY 17: 457 FT MSL POLE 425416.52N/0712501.99W.
RWY 24: 547 FT MSL TOWER 425426.98N/0712740.95. 1523 FT MSL TOWER 425854.70N/0713519.50W..
RWY 35: 409 FT MSL TREES 425716.44N/0712718.29W. 414 FT MSL TREES 425720.64N/0712715.36W. 407 FT MSL TREES 425729.22N/0712725.78W. 1523 FT MSL TOWER 425854.70N/0713519.50W.

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

AIRPORTS SERVED:

MANCHESTER — MANCHESTER, NH

COMMUNICATIONS:

ATIS, CLEARANCE DEL, GROUND CONTROL, TOWER, BOS DEP CON

FIXES AND/OR NAVAIDS:

GDM VOR/DME, BOS VOR/DME, CAM VOR/DME, LEB VOR/DME, LWM VOR/DME, MHT VOR/DME, PSM VOR/DME, CON VORTAC, EEN VORTAC, ENE VORTAC, BEDDS

QUALITY 4 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 statue miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
MANCHESTER	**SIX**		**FIVE**	**15 JAN 09**	

REMARKS:

1. RWY 6 AND RWY 35 CLIMB GRADIENTS ESTABLISHED TO ENSURE DIVERSE 40:1 CONTROLLING OBSTACLES ARE MITIGATED SHOULD ATC ASSIGN WORST CASE HEADING.
2. RWY 24 CLIMB GRADIENT MITIGATES 547 MSL TOWER (36-000006). ENABLES ATC TO USE DESIRED TAKEOFF COURSE VICE AIRPORT 8260-15A WHICH USES OFFSET COURSE TO ACCOUNT FOR 2007 FLIGHT INSPECTION RECOMMENDATION TO INCREASE SAFETY MARGIN FOR LIGHT AIRCRAFT ENCOUNTERING CROSS WIND CONDITIONS.

FLIGHT INSPECTED BY:

REQUIRED EFFECTIVE DATE:

ROUTINE

DEVELOPED BY:

PETER GUIMOND AJV-352 12/30/2011

APPROVED BY:

DARRYEL ADAMS AJV-352

COORDINATED WITH:

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

CHANGES:

1. AMENDED RWY 6 TAKEOFF MINIMUMS TO INCLUDE RWY REDUCTION OPTION.
2. AMENDED RWY 24 TAKEOFF MINIMUMS FROM STANDARD WITH MINIMUM CLIMB OF 320 FT PER NM TO 900 TO STANDARD WITH MINIMUM CLIMB OF 321 FT PER NM TO 1200.
3. AMENDED TAKEOFF OBSTACLE NOTES FOR ALL RUNWAYS.

REASONS:

1. IAW AFS MEMORANDUM. CONTROLLING OBSTACLE PENETRATES 40:1 SURFACE BY LESS THAN 35 FEET.
2. NEW OBSTACLE STUDY. HIGHER CLIMB TO ALTITUDE ACCOUNTS FOR WORST CASE HEADING TO THE 1523 FT MSL TOWER.
3. NEW OBSTACLE STUDY. STANDARDIZES NOTES WITH PENDING COTEE THREE (RNAV) DEPARTURE AND TAKEOFF MINS AND OBSTACLE DP, AMDT 10.

QUALITY 4 CHECKED