

# OBSTRUCTION DATA SHEET

**ODS 5036  
BOIRE FIELD  
NASHUA, NEW HAMPSHIRE**

**DIGITIZED FROM**

**OC 5036  
SURVEYED 16 JULY 1992  
5TH EDITION**

**HORIZONTAL DATUM NAD83  
VERTICAL DATUM NGVD29**



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## OBSTRUCTION DATA SHEET

The Obstruction Data Sheet (ODS) provides digital obstruction and runway data for use in aircraft arrival and departure planning. This information has been obtained using field survey and photogrammetric methods by the Photogrammetry Branch of the National Ocean Service in accordance with Federal Aviation Regulations Part 77 (FAR-77), "Objects Affecting Navigable Airspace" and FAA No. 405, "Specifications - Airport Obstruction Chart and Related Products."

The ODS is a derivative of the Airport Obstruction Chart (OC). The source OC is indicated on the ODS cover. All objects, both obstructing and nonobstructing, that carry an elevation on the OC are listed in the ODS. The ODS and the OC depict a representation of objects that existed at the time of the OC field survey.

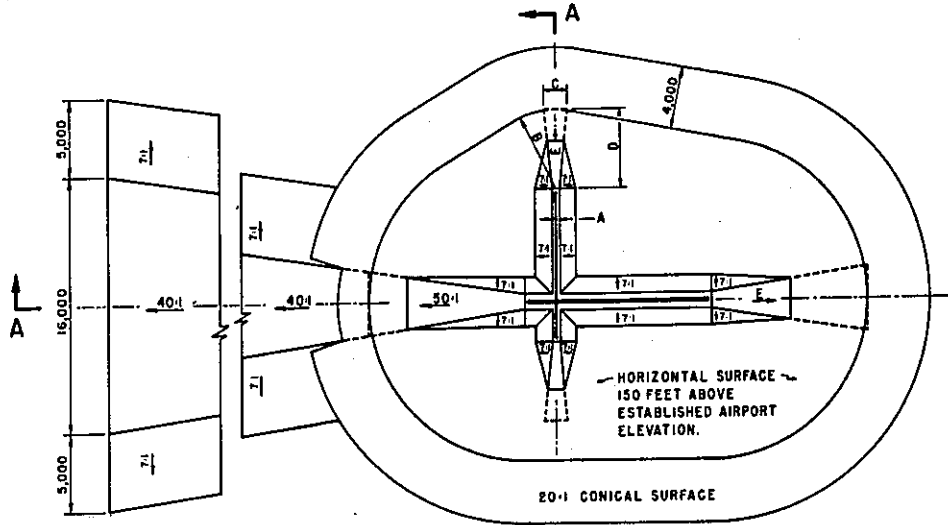
ODS information is arranged as follows:

1. Objects located in an FAR-77 approach or primary and listed with the associated runway (reference runway).
2. All objects not included in "1" above are listed with the Airport Reference Point (ARP).
3. Runway configuration and runway lengths, widths, and elevations are presented on the ODS last page.

The FAR-77 imaginary approach surfaces for which the obstruction surveys were performed are coded in the ODS as follows:

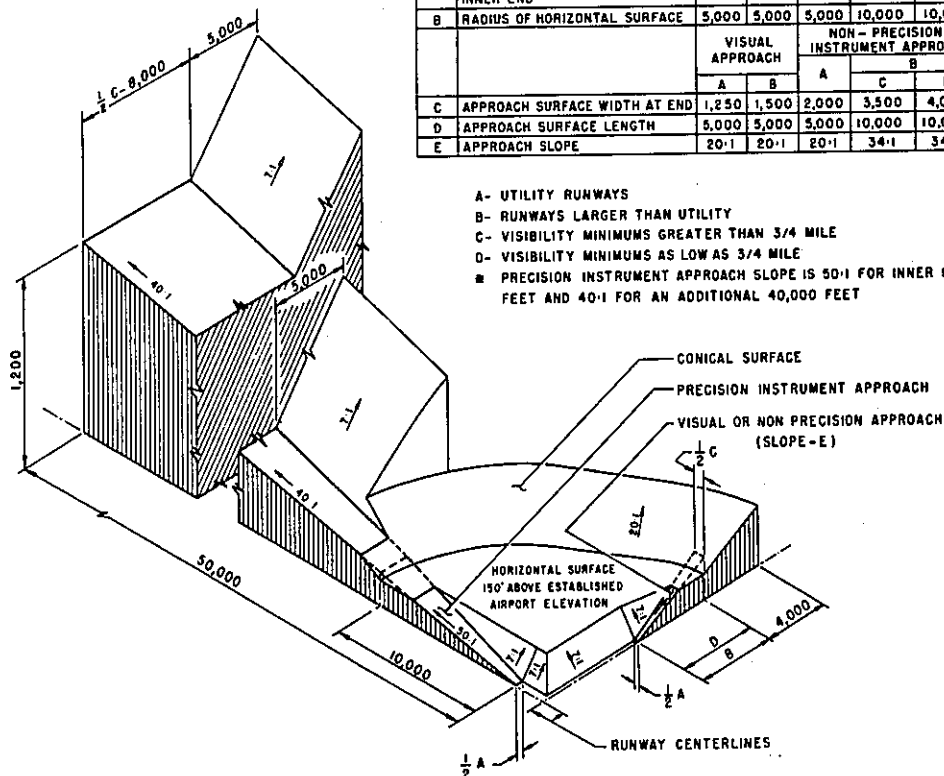
- A(V) ..... Utility runway - visual approach only
- A(NP) .... Utility runway - nonprecision instrument approach
- B(V) ..... Nonutility runway - visual approach only
- C ..... Nonutility runway - nonprecision instrument approach with visibility minimums greater than 3/4 mile
- D ..... Nonutility runway- nonprecision instrument approach with visibility minimums as low as 3/4 mile
- PIR ..... Precision instrument runway
- SUPLC .... Supplemental C underlying a B(V)

FAR-77 imaginary surface dimensions are defined on page 2 of this report.



DIM	ITEM	DIMENSIONAL STANDARDS (FEET)					
		VISUAL RUNWAY		NON-PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT RUNWAY
		A	B	A	C	D	
A	WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	250	500	500	500	1,000	1,000
B	RADIUS OF HORIZONTAL SURFACE	5,000	5,000	5,000	10,000	10,000	10,000
		VISUAL APPROACH		NON-PRECISION INSTRUMENT APPROACH			PRECISION INSTRUMENT APPROACH
		A	B	A	C	D	
C	APPROACH SURFACE WIDTH AT END	1,250	1,500	2,000	3,500	4,000	16,000
D	APPROACH SURFACE LENGTH	5,000	5,000	5,000	10,000	10,000	*
E	APPROACH SLOPE	20:1	20:1	20:1	34:1	34:1	*

- A- UTILITY RUNWAYS
- B- RUNWAYS LARGER THAN UTILITY
- C- VISIBILITY MINIMUMS GREATER THAN 3/4 MILE
- D- VISIBILITY MINIMUMS AS LOW AS 3/4 MILE
- \* PRECISION INSTRUMENT APPROACH SLOPE IS 50:1 FOR INNER 10,000 FEET AND 40:1 FOR AN ADDITIONAL 40,000 FEET



ISOMETRIC VIEW OF SECTION A-A

FAR-77 CIVIL AIRPORT  
IMAGINARY SURFACES

## EXPLANATION OF FOOTNOTES

- 1 Data block identifier. If a runway number is entered (reference runway), this data block will contain data pertinent to the reference runway and to objects in the FAR-77 approach and primary areas of the reference runway. If ARP is entered, this data block will contain the ARP position and data relative to all objects not in an FAR-77 approach or primary area.
- 2 For the reference runway, the lowest FAR-77 approach surface for which an obstruction survey was performed. (More than one surface may be surveyed).
- 3 Elevation at approach end of reference runway/touchdown zone elevation
- 4 Latitude and longitude at approach end of reference runway
- 5 Geodetic azimuth of reference runway reckoned from north
- 6 Elevation at reference runway displaced threshold/touchdown zone elevation
- 7 Latitude and longitude at reference runway displace threshold
- 8 Accuracy codes:           Horizontal       Vertical  
                                   1 = 20            A = 2  
                                   2 = 40            B = 5  
   C = 20
- 9 Elevation above mean sea level (MSL) at top of object. This value includes 15 feet added to noninterstate roads, 17 feet added to interstate roads, and 23 feet added to railroad tracks.
- 10 Height above ground level (AGL). AGL's are provided only for manmade objects appearing on the OC and equal to or greater than 200 feet AGL. AGL accuracy is 10 feet.
- 11 HAA - Height above airport  
 HAR - Height above approach end of reference runway  
 HAT - Height above reference runway touchdown zone elevation
- 12 DEND - Distance along reference runway centerline from point nearest to object (perpendicular) to approach end of runway  
 DTHR - Distance along reference runway centerline from point nearest to object (perpendicular) to displace threshold  
 DCLN - Distance left (L) or right (R) of reference runway centerline as observed facing forward in a landing aircraft
- A negative value for DEND or DTHR indicates that object is in primary on roll-out side of zero distance point.
- 13 PTNR - Penetration of indicated FAR-77 approach or primary surface (See footnote 2).

# ANNOTATION OF ODS DATA FORMAT

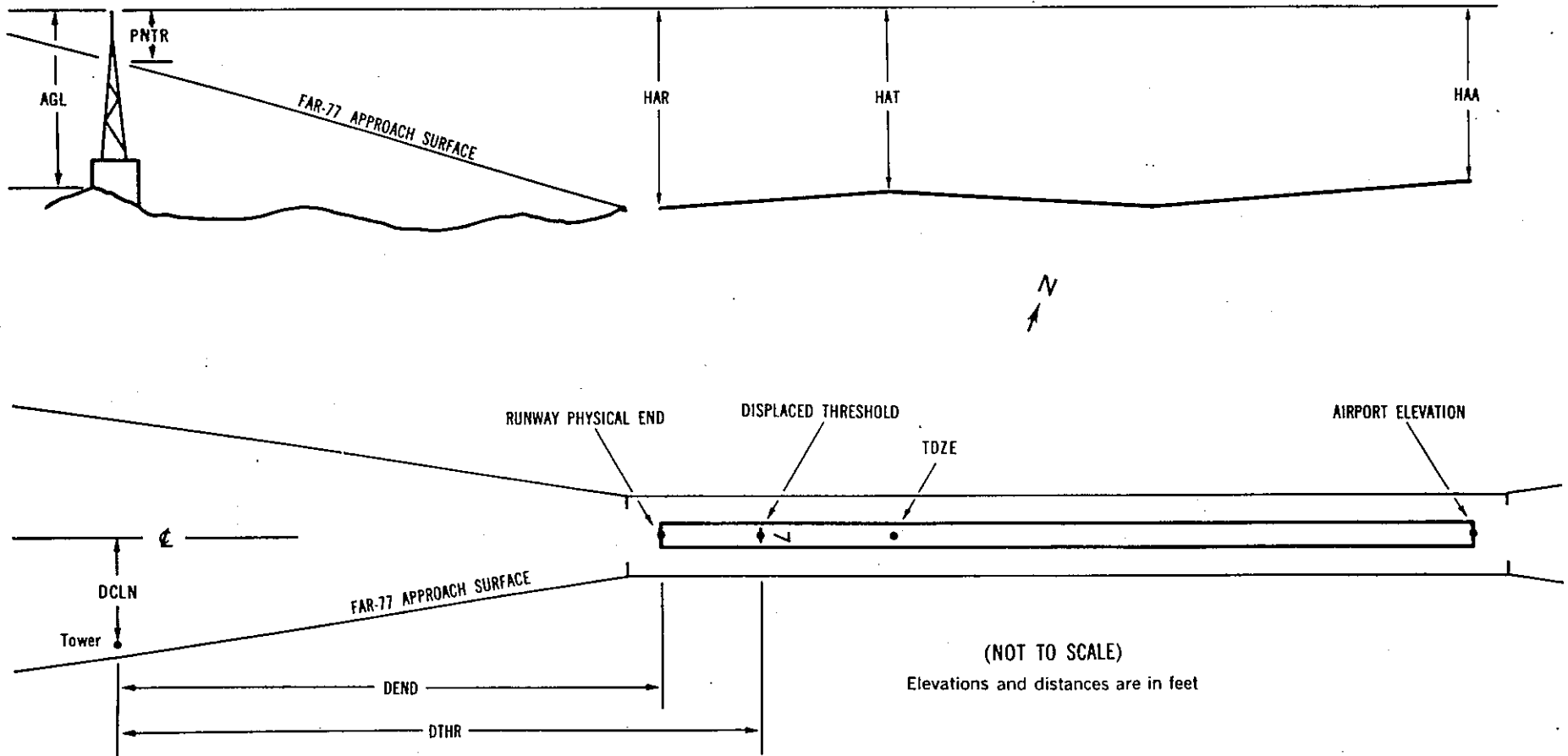
OC XXXX

AIRPORT ELEVATION XXXX

X<sup>1</sup> X<sup>2</sup> XXXX/XXXX<sup>3</sup> XXXXXX.XXX<sup>4</sup> XXXXXXXX.XXX<sup>4</sup> XXXXXXXX<sup>5</sup> XXXX/XXXX<sup>6</sup> XXXXXX.XXX<sup>7</sup> XXXXXXXX.XXX<sup>7</sup>

OBJECT	LAT	LONG	A <sup>8</sup>	ELEV <sup>9</sup>	AGL <sup>10</sup>	HAR <sup>11</sup>	HAT <sup>11</sup>	HAA <sup>11</sup>	DEND <sup>12</sup>	DTHR <sup>12</sup>	DCLN <sup>12</sup>	PNTR <sup>13</sup>
XXXXXXXXXXXX	XXXXXX.XXX	XXXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX
XXXXXXXXXXXX	XXXXXX.XXX	XXXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX

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AIRPORT ELEVATION 200

14 PIR 200/ 200 424709.023 -713124.238 1224202.

OBJECT	LAT	LONG	A	EL	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
REIL	424638.73	-713022.63	1A	190		-10	-10	-10	-5523		98R	3
OL ON REIL	424640.34	-713021.25	1A	192		-8	-8	-8	-5522		94L	5
TREE	424700.61	-713058.28	1A	224		24	24	24	-2089		329L	31
TREE	424702.98	-713104.22	1A	208		8	8	8	-1587		291L	14
GROUND	424658.35	-713110.33	1A	196		-4	-4	-4	-1456		349R	2
OL ON GS	424705.77	-713110.43	1A	227		27	27	27	-1044		280L	31
GROUND	424702.50	-713119.31	1A	200		0	0	0	-666		357R	3
TREE	424708.52	-713130.08	1A	213		13	13	13	339		279R	10
TREE	424714.58	-713128.46	1A	213		13	13	13	569		303L	6
TREE	424708.15	-713136.56	1A	227		27	27	27	726		570R	17
TREE	424719.99	-713141.66	1A	244		44	44	44	1693		233L	14
TREE	424716.20	-713145.62	1A	248		48	48	48	1734		250R	17
TREE	424725.07	-713142.59	1A	256		56	56	56	2029		628L	20
TREE	424720.66	-713146.94	1A	245		45	45	45	2061		77L	8
TREE	424726.31	-713148.33	1A	270		70	70	70	2457		502L	25
TREE	424717.54	-713202.72	1A	285		85	85	85	2880		824R	32
TREE	424721.39	-713204.35	1A	290		90	90	90	3193		562R	30
TREE	424728.83	-713201.38	1A	287		87	87	87	3413		191L	23
TREE	424726.30	-713208.04	1A	296		96	96	96	3693		292R	26

OC5036

AIRPORT ELEVATION 200

32 C 187/ 193 424639.669 -713022.179 3024244.

OBJECT	LAT	LONG	A	EL	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
GROUND	424702.50	-713119.31	1A	200		13	7	0	-4834		357L	3
OL ON GS	424705.77	-713110.43	1A	227		40	34	27	-4455		280R	31
GROUND	424658.35	-713110.33	1A	196		9	3	-4	-4044		349L	2
TREE	424702.98	-713104.22	1A	208		21	15	8	-3913		291R	14
TREE	424700.61	-713058.28	1A	224		37	31	24	-3411		329R	31
OL ON REIL	424640.34	-713021.25	1A	192		5	-1	-8	22		94R	5
REIL	424638.73	-713022.63	1A	190		3	-3	-10	23		98L	3
TREE	424634.41	-713020.43	1A	216		29	23	16	397		378L	24
TREE	424632.97	-713018.67	1A	223		36	30	23	587		429L	25
OL ON LOC	424636.46	-713015.41	1A	195		8	2	-5	600		OR	-3
ROD ON OL POLE	424633.61	-713014.17	1A	224		37	31	24	834		194L	19
TREE	424629.92	-713015.81	1A	248		61	55	48	933		573L	40
POLE	424637.54	-713006.02	1A	217		30	24	17	1130		470R	3
ROD ON OL POLE	424630.74	-713009.78	1A	240		53	47	40	1267		261L	22
ROD ON OL POLE	424627.40	-713005.11	1A	253		66	60	53	1743		357L	21
TREE	424627.65	-713002.81	1A	259		72	66	59	1873		243L	23
TREE	424632.19	-712953.84	1A	274		87	81	74	2187		505R	29
TREE	424629.29	-712956.07	1A	258		71	65	58	2206		169R	12



AIRPORT ELEVATION 200

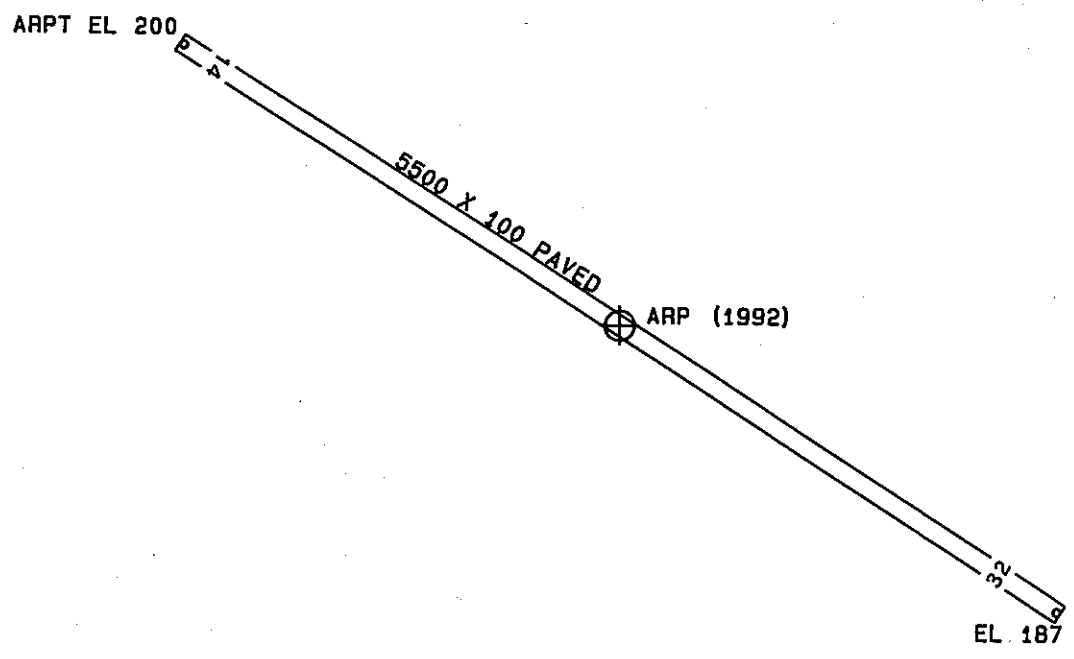
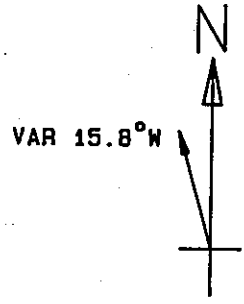
ARP 424654.347 -713053.206

OBJECT	LAT	LONG	A	EL	AGL	HAA	MAG BEARING	DISTANCE
TREE	424659.81	-713051.60	1A	235		35	2759	566
ANT ON OL ATCT	424648.39	-713057.03	1A	258		58	22106	667
OL WINDSOCK ON HANGAR	424650.49	-713102.41	1A	236		36	25610	789
TREE	424702.51	-713055.33	1A	264		64	455	841
TREE	424658.77	-713042.07	1A	258		58	7728	943
TREE	424705.52	-713100.34	1A	262		62	35037	1250
OL ON WSK	424653.30	-713036.30	1A	217		17	11035	1265
TREE	424637.71	-713038.95	1A	261		61	16332	1991
OL HANGAR	424658.56	-713119.31	1A	221		21	29810	1993
OL HGR	424639.30	-713035.50	1A	216		16	15452	2016
TREE	424711.45	-713108.67	1A	270		70	34208	2080
TREE	424649.82	-713025.72	1A	254		54	11824	2101
BUSH	424701.62	-713121.69	1A	213		13	30454	2248
TREE	424711.62	-713114.96	1A	235		35	33257	2385
TREE	424700.63	-713124.51	1A	227		27	30103	2420
ROD ON OL APBN	424633.65	-713026.11	1A	245		45	15150	2911
TREE	424715.40	-713120.12	1A	231		31	33231	2927
TREE	424632.11	-713118.47	1B	365		165	23544	2935
TREE	424704.76	-713131.72	1A	227		27	30557	3059
TREE	424715.94	-713122.11	1A	231		31	33112	3070
TREE	424637.69	-713127.99	1B	395		195	25246	3094
TREE	424722.99	-713037.51	1B	362		162	3746	3127
TREE	424706.83	-713132.85	1A	218		18	30856	3215
ANT ON OL POLE	424724.70	-713035.19	1B	363		163	3924	3353
TREE	424631.53	-713019.81	1A	245		45	14838	3397
TREE	424704.54	-713137.00	1A	250		50	30320	3425
TREE	424719.72	-713123.75	1A	267		67	33414	3433
TREE	424725.43	-713029.50	1B	370		170	4507	3609
TREE	424642.11	-713007.56	1A	258		58	12547	3622
ANT ON OL POLE	424634.49	-713138.93	1B	419		219	25516	3958
TREE	424656.93	-712956.33	1B	357		157	10216	4249

AIRPORT ELEVATION 200

ARP 424654.347 -713053.206

OBJECT	LAT	LONG	A	EL	AGL	HAA	MAG BEARING	DISTANCE
TREE	424624.41	-713133.26	1B	382		182	24022	4256
TREE	424726.91	-713138.60	1A	287		87	33002	4724
TREE	424710.43	-713152.76	1A	291		91	30556	4730
TREE	424633.92	-712950.06	1A	274		74	12929	5143
TREE	424730.37	-713142.06	1A	295		95	33049	5154
TREE	424745.31	-713031.14	1B	405		205	3329	5415
TREE	424608.24	-713208.17	1B	463		263	24557	7283
TREE	424600.54	-713203.27	1B	458		258	23937	7548
ANT ON OL POLE	424609.84	-713215.63	1B	489		289	24933	7622
TREE	424607.60	-713217.36	1B	493		293	24847	7860
TREE	424530.62	-713132.44	1B	448		248	21451	8967
TREE	424546.52	-713230.80	1B	503		303	24228	10007
TREE	424843.14	-713253.25	2C	430		230	33642	14192



TOUCHDOWN ZONE	
RUNWAY ELEVATION	
14	200
32	193

BOIRE FIELD  
 NASHUA, NEW HAMPSHIRE  
 (NOT TO SCALE)  
 (ALL ELEVATIONS IN FEET)