

OBSTRUCTION DATA SHEET

ODS 437
VERO BEACH MUNICIPAL AIRPORT
VERO BEACH, FLORIDA

DIGITIZED FROM

OC 437
SURVEYED FEBRUARY 1993
10TH EDITION

HORIZONTAL DATUM NAD 83
VERTICAL DATUM NGVD 29



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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.

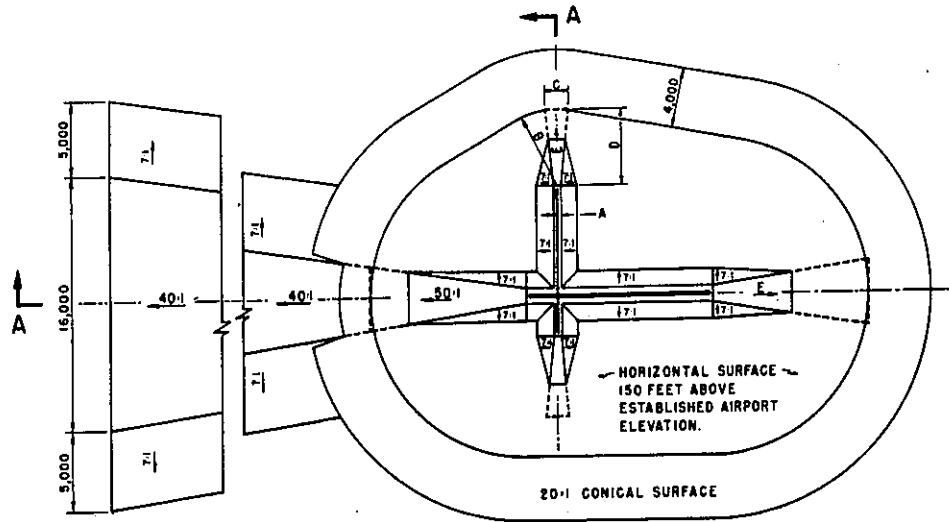
ODS information is arranged as follows:

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:

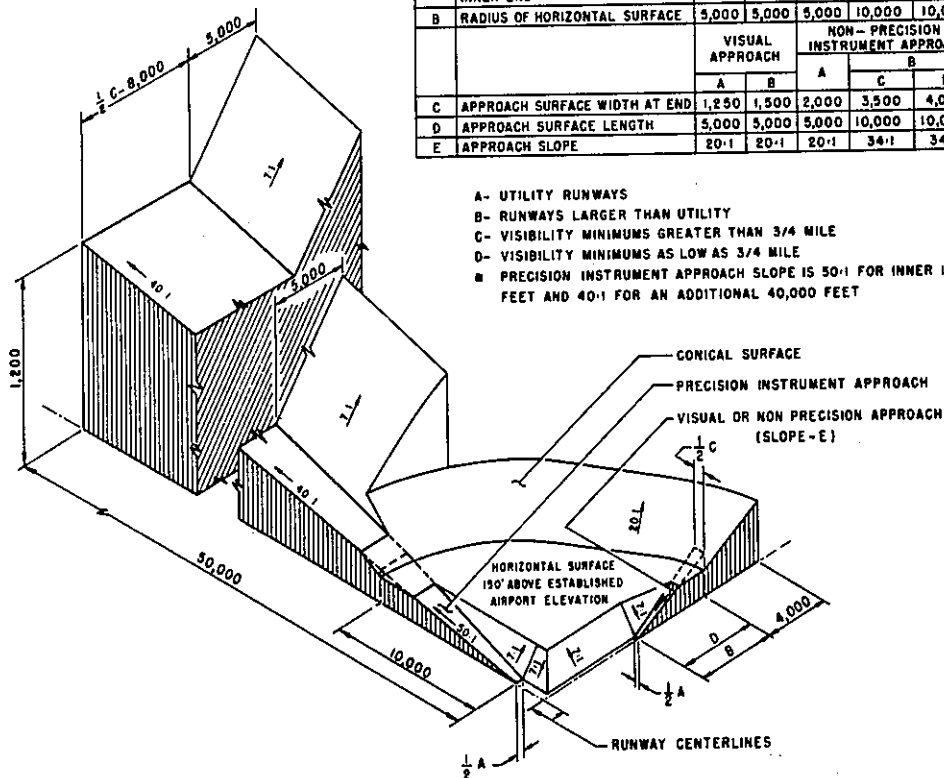
- A(V) Utility runway - visual approach only
- A(NP) ... Utility runway - nonprecision instrument approach
- B(V) Nonutility runway - visual approach only
- C Nonutility runway - nonprecision instrument approach with visibility minimums greater than 3/4 mile
- D Nonutility runway - nonprecision instrument 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	B		
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	B		
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
- 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

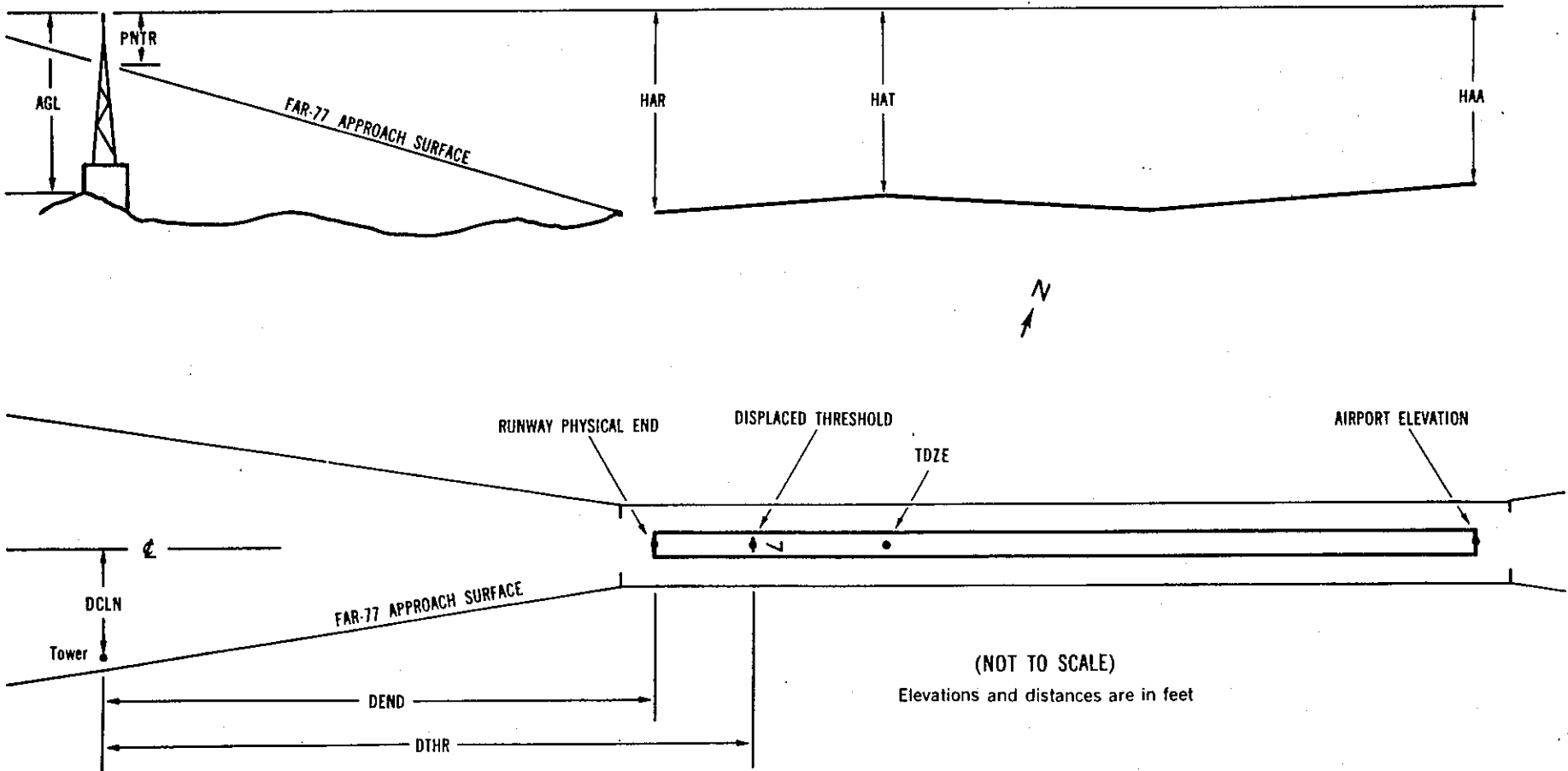
FAR-77 CIVIL AIRPORT
IMAGINARY SURFACES

ANNOTATION OF ODS DATA FORMAT

OC XXXX

AIRPORT ELEVATION XXXX

x ¹	x ²	XXXX/XXXX ³	XXXXXX.XXX ⁴	XXXXXXXX.XXX ⁴	XXXXXXXX ⁵	XXXX/XXXX ⁶	XXXXXX.XXX ⁷	XXXXXXXX.XXX ⁷				
OBJECT	LAT	LONG	A ⁸	ELEV ⁹	AGL ¹⁰	HAR ¹¹	HAT ¹¹	HAA ¹¹	DEND ¹²	DTHR ¹²	DCLN ¹²	PNTR ¹³
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



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 displaced threshold
- 8 Accuracy codes:
- | Horizontal (Ft.) | Vertical (Ft.) |
|------------------|----------------|
| 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 displaced 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 PNTR - Penetration of indicated FAR-77 approach or primary surface (See footnote 2).

OC0437

AIRPORT ELEVATION 25

11L AV 21/ 21 273937.390 -802500.859 1105209.

OBJECT	LAT	LONG	A	EL	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
BUSH	273930.23	-802436.31	1A	26		5	5	1	-2320		111L	6
BUSH	273931.69	-802440.70	1A	27		6	6	2	-1898		108L	7
ANT	273942.17	-802513.40	1A	41		20	20	16	1226		49L	-31
TREE	273941.38	-802520.34	1A	85		64	64	60	1780		248R	-15
TREE	273946.60	-802524.51	1A	90		69	69	65	2318		111L	-37

29R AV 21/ 21 273925.028 -802424.449 2905225.

OBJECT	LAT	LONG	A	EL	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
BUSH	273931.69	-802440.70	1A	27		6	6	2	-1605		108R	7
BUSH	273930.23	-802436.31	1A	26		5	5	1	-1184		111R	6
FENCE	273922.70	-802415.51	1A	27		6	6	2	835		67R	-26
LIGHT	273920.34	-802408.24	1A	54		33	33	29	1530		77R	-33

11R C 24/ 24 273928.268 -802542.942 1103629.

OBJECT	LAT	LONG	A	EL	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
ROAD (N)	273931.93	-802553.62	1A	41		17	17	16	1029		8L	-8
TREE	273935.65	-802603.11	1A	76		52	52	51	1960		59L	0
TREE	273938.49	-802601.96	1A	76		52	52	51	1964		365L	0
TREE	273934.06	-802604.50	1A	81		57	57	56	2020		134R	3
TREE	273937.65	-802609.47	1A	91		67	67	66	2566		47L	-3

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AIRPORT ELEVATION 25

29L C 21/ 23 273902.832 -802426.998 2903704.

OBJECT	LAT	LONG	A	EL	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	273859.10	-802404.92	1A	57		36	34	32	1991		347R	-17
POLE	273852.29	-802407.14	1A	66		45	43	41	2046		367L	-9
VENT ON BLDG	273853.05	-802402.64	1A	53		32	30	28	2398		153L	-33
TREE	273853.59	-802353.09	1A	76		55	53	51	3183		200R	-33

4 SUPLC 25/ 25 273858.768 -802536.004 361028.

OBJECT	LAT	LONG	A	EL	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	273844.73	-802541.77	1A	83		58	58	58	1451		418R	22
TREE	273844.96	-802543.56	1A	76		51	51	51	1527		275R	12
TREE	273844.72	-802551.85	1A	78		53	53	53	1986		313L	1
TREE	273840.39	-802552.81	1A	85		60	60	60	2390		124L	-4

22 SUPLC 22/ 24 273938.535 -802503.346 2161043.

OBJECT	LAT	LONG	A	EL	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	273955.55	-802452.11	1A	71		49	47	46	1983		199R	-3
TREE	274002.20	-802446.33	1A	92		70	68	67	2832		176R	-7
TREE	274001.99	-802442.76	1A	100		78	76	75	3004		96L	-4

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AIRPORT ELEVATION 25

ARP 273920.007 -802504.651

OBJECT	LAT	LONG	A	EL	AGL	HAA	MAG	BEARING	DISTANCE
OL ON LTD WSK	273911.39	-802504.91	1A	44		19	18545		871
OL ON LTD WSK	273915.89	-802455.06	1A	44		19	11957		957
OL ON AMOM	273918.33	-802452.62	1A	44		19	10305		1095
ANT ON OL ATCT	273921.58	-802450.05	1A	95		70	8719		1322
TREE	273939.44	-802452.25	1A	57		32	3348		2257
TREE	273930.20	-802528.57	1A	80		55	29946		2384
TREE	273918.30	-802533.20	1A	70		45	27020		2573
POLE	273945.42	-802515.52	1A	53		28	34321		2746
TREE	273931.23	-802535.11	1A	69		44	29640		2964
ANT	273948.23	-802515.91	1A	74		49	34438		3025
BUSH	273929.00	-802431.26	1A	27		2	7722		3137
TREE	273920.47	-802427.84	1A	81		56	9323		3310
BUSH	273927.16	-802425.41	1A	34		9	8237		3602
TREE	273920.20	-802424.45	1A	74		49	9353		3615
TREE	273927.88	-802424.19	1A	41		16	8152		3724
TREE	273921.24	-802548.24	1A	81		56	27601		3922
APBN	273914.10	-802419.59	1A	75		50	10234		4095
TREE	273937.76	-802545.80	1A	90		65	30003		4112
TREE	273927.34	-802416.92	1A	56		31	8424		4355
POLE	273919.37	-802415.44	1A	43		18	9501		4426
POLE	273905.17	-802417.47	1A	45		20	11338		4500
TREE	273857.71	-802549.84	1A	125		100	24512		4646
TREE	273937.71	-802553.39	1A	83		58	29623		4733
POLE	273842.42	-802536.88	1A	99		74	22133		4775
TREE	273844.36	-802540.29	1A	84		59	22552		4821
TREE	273938.53	-802556.07	1A	81		56	29613		4988
LIGHT	273922.61	-802409.23	1A	54		29	9110		4991
TANK	273907.34	-802408.80	1A	73		48	10829		5182
TREE	273928.58	-802601.63	1A	73		48	28347		5197
SPIRE	273851.82	-802412.26	1A	61		36	12520		5505
TREE	273846.80	-802555.80	1A	88		63	23806		5693

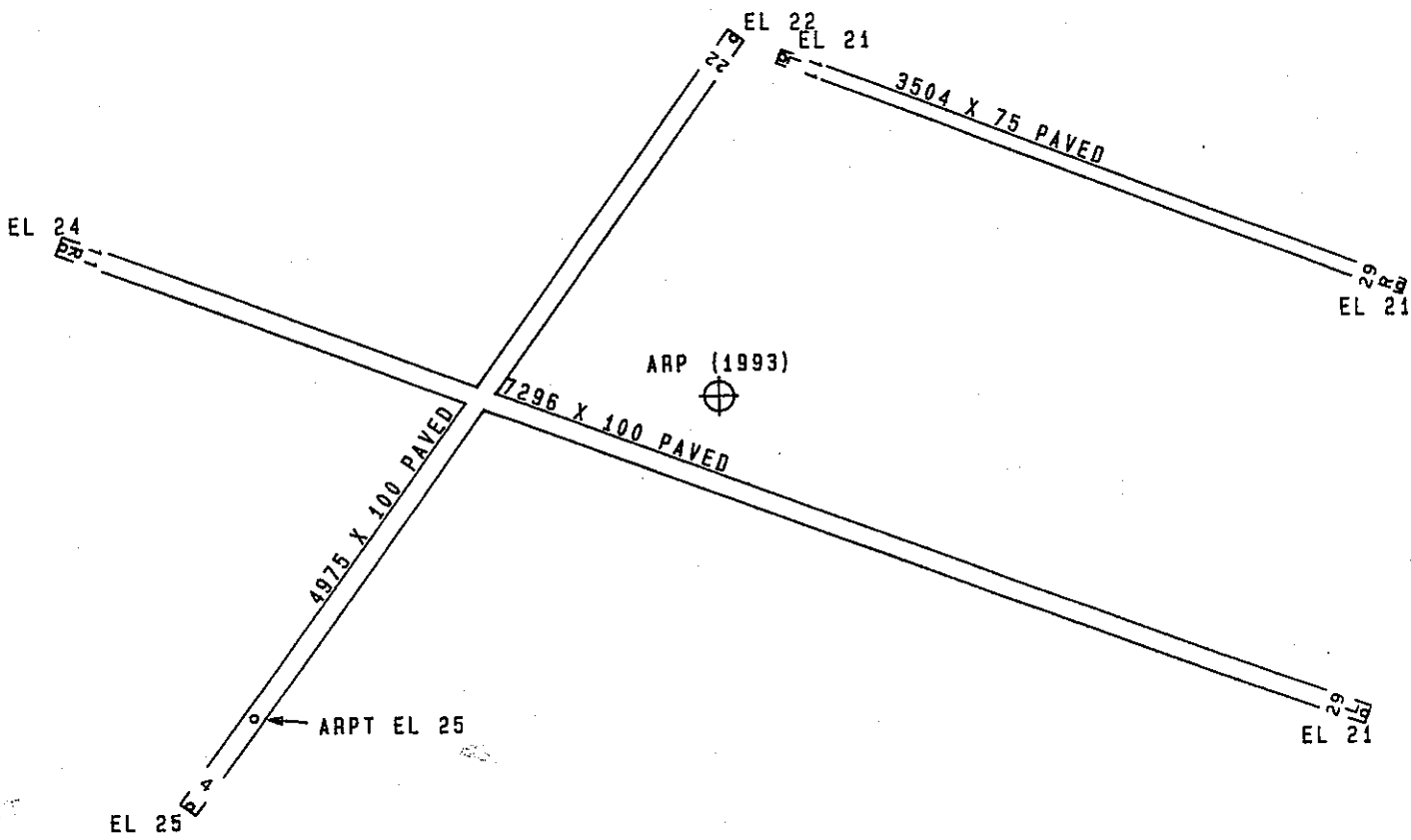
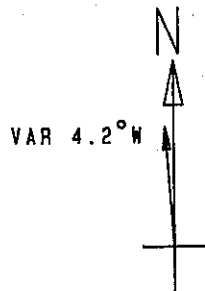
OC0437

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AIRPORT ELEVATION 25

ARP 273920.007 -802504.651

OBJECT	LAT	LONG	A	EL	AGL	HAA	MAG BEARING	DISTANCE
TREE	273900.10	-802400.47	1A	70		45	11323	6112
OL ANT	273931.43	-802339.48	1A	168		143	8537	7745
OL ON TANK	274041.91	-802445.51	1B	175		150	1557	8449
ANT ON TANK	274040.13	-802434.73	1B	175		150	2235	8528
ANT	273828.37	-802348.49	1B	173		148	13128	8608
ANT ON OL TWR	273759.84	-802414.37	1B	188		163	15500	9273
ROD ON MCWV TWR	273806.56	-802355.10	1B	182		157	14403	9702
TANK	273807.34	-802654.53	1A	185		160	23736	12309
ANT ON OL MCWV TWR	273731.89	-802335.09	1A	219	204	194	14746	13567
STACK	273759.92	-802238.99	1A	206	202	181	12552	15395



TOUCHDOWN ZONE RUNWAY ELEVATION	
11L	21
29R	21
11R	24
29L	23
4	25
22	24

VERO BEACH MUNICIPAL AIRPORT
 VERO BEACH, FLORIDA
 (NOT TO SCALE)
 (ELEVATIONS AND DISTANCES IN FEET)