OBSTRUCTION DATA SHEET

ODS 171
GOSHEN MUNICIPAL AIRPORT
GOSHEN, INDIANA

DIGITIZED FROM

OC 171
SURVEYED SEPTEMBER 1989
1ST EDITION

PREPARED AND DISTRIBUTED BY
THE NATIONAL OCEAN SERVICE
U.S. DEPARTMENT OF COMMERCE
FOR THE FEDERAL AVIATION ADMINISTRATION

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 Nr. 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 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 FAR-77 approach (including supplemental approaches if present) or primary areas are listed with the associated runway (reference runway). For example, all objects in the Runway 9R approach or primary are listed with Runway 9R. Distances to these objects are computed from both the physical end and threshold of Runway 9R. Objects in the Runway 27L approach or primary are listed with Runway 27L. (Objects in the common 9R/27L primary area are listed with both runways.)

2. All objects not included in "1" above are listed with the Airport Reference Point (ARP).

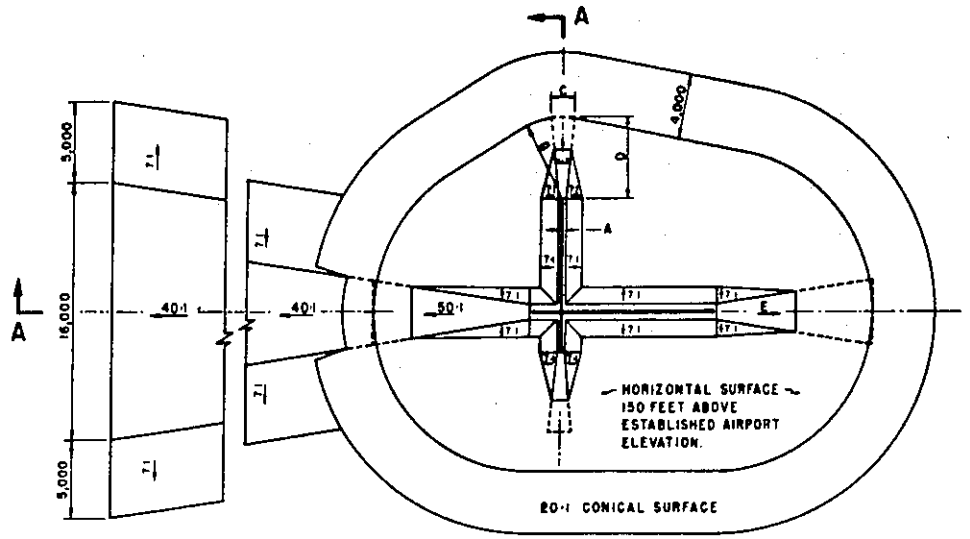
3. Runway configuration and runway lengths, widths, and elevations are presented on the ODS last page.

The FAR-77 imaginary approach surfaces for which the obstruction surveys were performed are coded in the ODS as follows (see footnote 2 on page 3):

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)

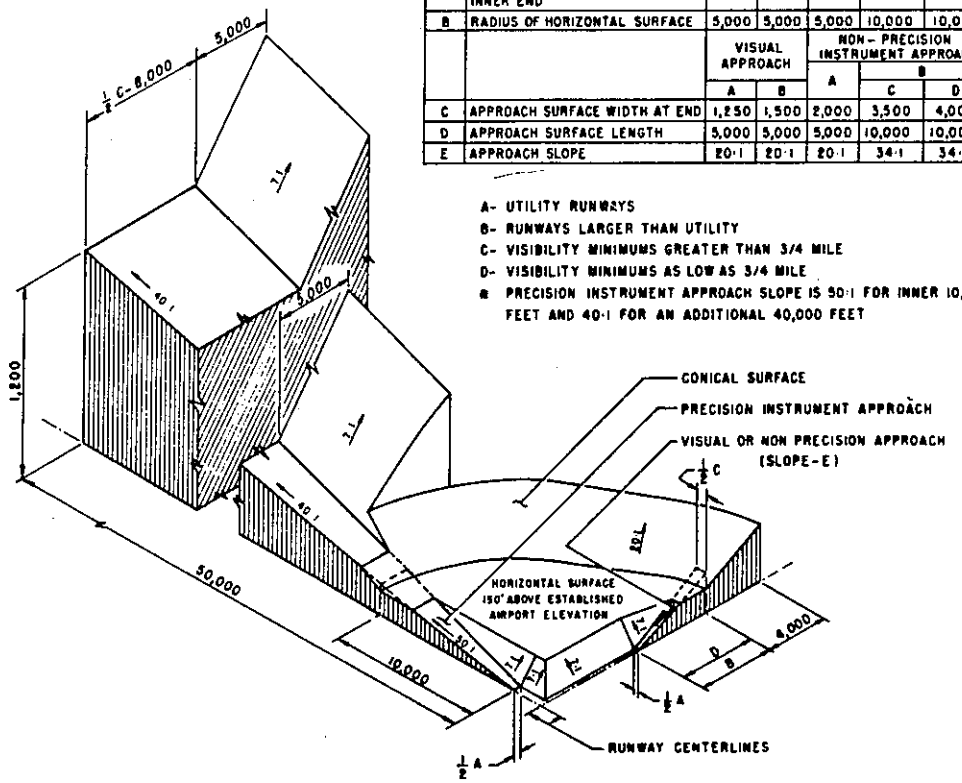
FAR-77 imaginary surface dimensions are defined on page 2 of this report.

Primary surface width is determined by the widest approach at the two approach/primary interfaces for that runway.



DIM	ITEM	DIMENSIONAL STANDARDS (FEET)					
		VISUAL RUNWAY		NON-PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT RUNWAY
		A	B	A	B		
					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	B		
					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

ANNOTATION OF ODS DATA FORMAT

OC XXXX

AIRPORT ELEVATION XXXX

X^{1}	X^{2} XXXX/XXXX^{3}	XXXXXX.XXX^{4}	XXXXXXX.XXX^{4}	XXXXXXX^{5}	XXXX/XXXX^{6}	XXXXXX.XXX^{7}	XXXXXXX.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}
XXXXXXXXXX		XXXXXX.XXX	XXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX
XXXXXXXXXX		XXXXXX.XXX	XXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX

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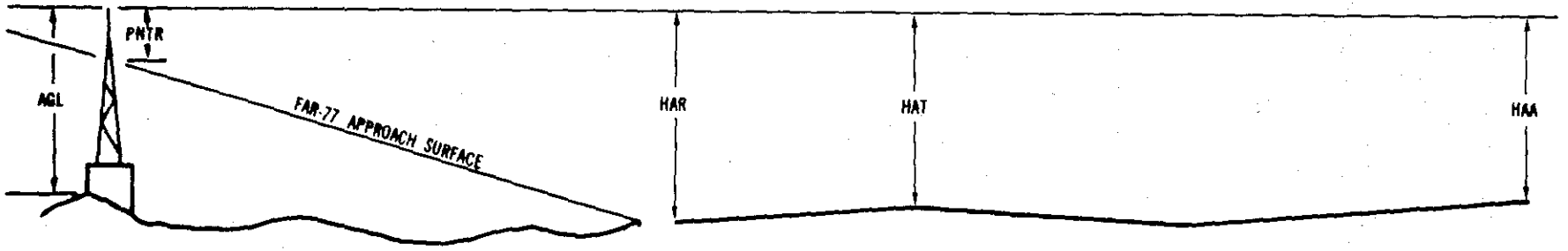
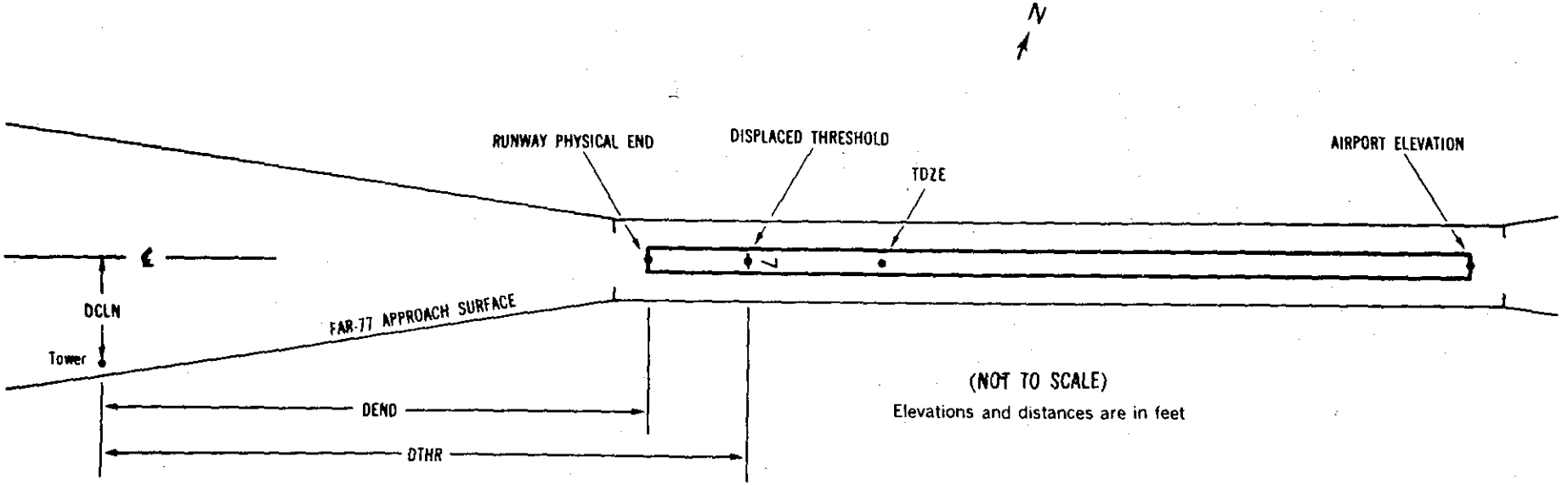




(NOT TO SCALE)

Elevations and distances are in feet

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 area 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] Reference runway approach physical end elevation/touchdown zone elevation

[4] Latitude and longitude of reference runway approach physical end

[5] Reference runway geodetic azimuth reckoned clockwise from south

[6] Reference runway displaced threshold elevation/touchdown zone elevation

[7] Latitude and longitude of reference runway displaced threshold

[8] Accuracy Code:

Horizontal	Vertical
1 = 20	A = 2
2 = 40	B = 5
	C = 20

[9] Mean Sea Level (MSL) elevation 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). AGLs are provided only for those objects appearing on the OC that are equal to, or greater than, 200 feet AGL. AGL accuracy is ±10 feet.

[11] HAA - Height above airport
HAR - Height above reference runway approach physical end
HAT - Height above reference runway touchdown zone elevation

[12] DEND - Distance along reference runway centerline from point perpendicular to object to reference runway approach physical end
DTHR - Distance along reference runway centerline from point perpendicular to object to reference runway 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 object is in primary area on roll-out side of zero distance point.

[13] PNTR - Penetration of indicated FAR-77 approach or primary surface (see footnote 2).

OC0171

AIRPORT ELEVATION 827

9 C 819/825 413130.777N 08548 6.159W 2691731

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
POST	413128.88	0854659.82	1A	831		12	6	4	-5043		254R	4
WINDSOCK	413129.47	0854707.08	1A	836		17	11	9	-4492		187R	9
OL ON GLIDE SLOPE	413135.20	854713.13	1A	877		58	52	50	-4039		400L	50
DAYMARKER	413133.51	0854724.10	1A	826		7	1	-1	-3202		238L	0
SIGN	413129.37	0854734.32	1A	824		5	-1	-3	-2420		172R	1
WIND TEE	413128.98	0854738.96	1A	823		4	-2	-4	-2066		207R	2
SIGN	413129.35	0854744.13	1A	822		3	-3	-5	-1674		165R	3
POST	413128.46	0854749.60	1A	822		3	-3	-5	-1257		250R	4
DAYMARKER	413133.06	0854750.08	1A	818		-1	-7	-9	-1226		216L	0
OL ON LOCALIZER	413130.72	0854812.07	1A	826		7	1	-1	450		0R	0
ROAD (N)	413130.64	0854814.39	1A	834		15	9	7	626		6R	2
IRRIGATION SYSTEM	413135.73	0854814.81	1A	842		23	17	15	652		510L	10
TREE	413129.14	0854847.18	1A	899		80	74	72	3122		127R	-6
TREE	413132.44	0854848.56	1A	898		79	73	71	3223		208L	-10

AIRPORT ELEVATION 827

27 PIR 827/827 413131.382N 08547 0.451W 0891815

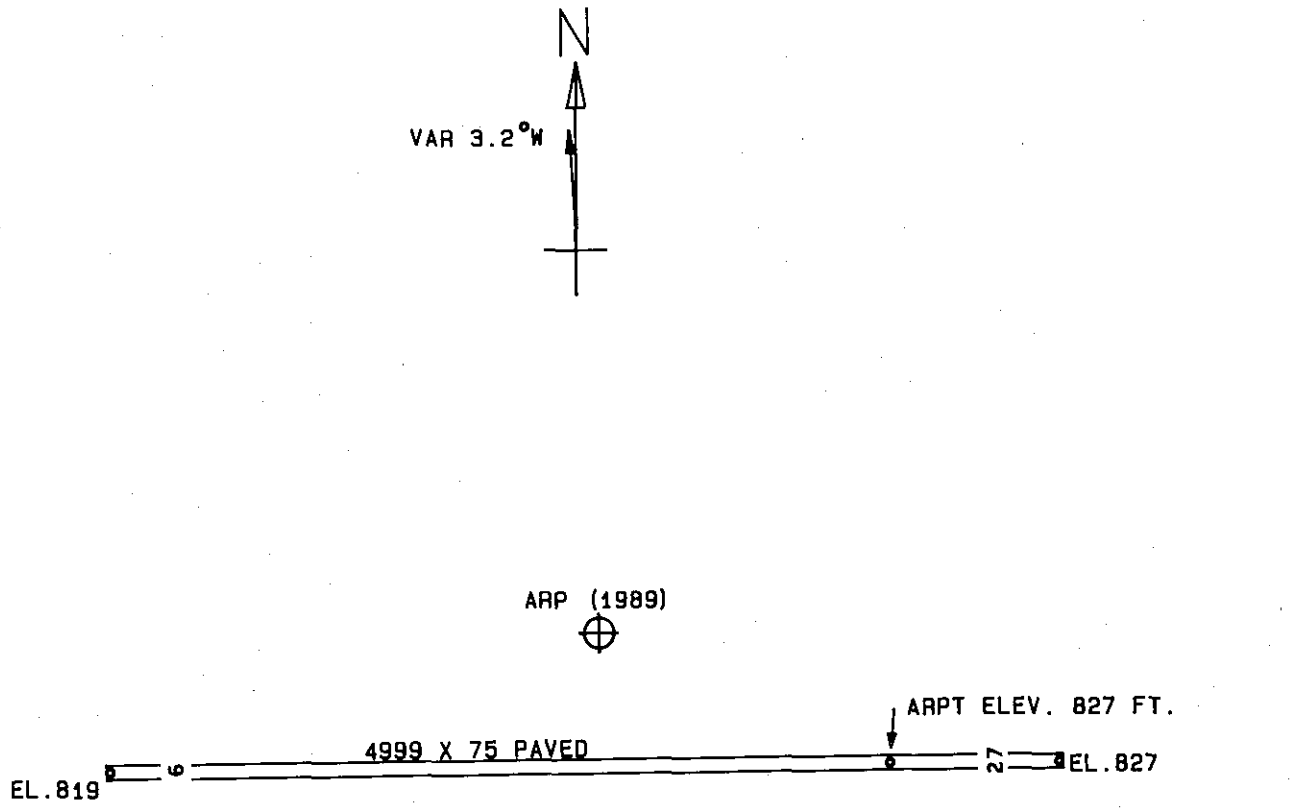
OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
DAYMARKER	413133.06	0854750.08	1A	818		-9	-9	-9	-3773		216R	0
POST	413128.46	0854749.60	1A	822		-5	-5	-5	-3742		250L	4
SIGN	413129.35	0854744.13	1A	822		-5	-5	-5	-3325		165L	3
WIND TEE	413128.98	0854738.96	1A	823		-4	-4	-4	-2932		207L	2
SIGN	413129.37	0854734.32	1A	824		-3	-3	-3	-2579		172L	1
DAYMARKER	413133.51	0854724.10	1A	826		-1	-1	-1	-1796		238R	0
OL ON GLIDE SLOPE	413135.22	0854713.13	1A	877		50	50	50	-959		400R	50
WINDSOCK	413129.47	0854707.08	1A	836		9	9	9	-507		187L	9
POST	413128.88	0854659.82	1A	831		4	4	4	45		254L	4
POLE	413136.08	0854647.53	1A	855		28	28	28	989		464R	12
POLE	413125.37	0854646.77	1A	862		35	35	35	1033		621L	18
TREE	413128.02	0854645.75	1A	865		38	38	38	1114		353L	20
TREE	413134.99	0854645.38	1A	863		36	36	36	1151		351R	17
POLE	413129.83	0854644.84	1A	853		26	26	26	1185		172L	6
TREE	413131.07	0854643.81	1A	860		33	33	33	1265		47L	12
TREE	413139.48	0854601.61	1A	952		125	125	125	4485		766R	39
TREE	413137.05	0854556.95	1A	966		139	139	139	4837		515R	46
TREE	413121.85	0854555.42	1A	933		106	106	106	4934		1024L	11
TRANSMISSION TOWER	413134.88	0854518.57	1A	979		152	152	152	7753		261R	1
TRANSMISSION TOWER	413128.51	0854506.62	1A	992		165	165	165	8655		394L	-4

OC0171

AIRPORT ELEVATION 827

ARP 413137.955N 0854732.300W

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
OL ON WINDSOCK	413125.83	0854735.17	1A	845		18	193 17	1246
OL ON AIRPORT BEACON	413124.24	0854735.05	1A	879		52	191 46	1404
ANTENNA	413123.10	0854739.43	1A	885		58	203 3	1598
FLOODLIGHT	413123.78	0854716.12	1A	860		33	142 34	1890
GRAIN ELEVATOR	413144.19	0854652.13	1A	902		75	81 32	3120
ANTENNA	413123.53	0854645.56	1A	895		68	115 31	3844
TREE	413121.60	0854641.51	1A	927		100	116 23	4203
TREE	413141.43	0854627.80	1A	921		94	89 5	4919
TRANSMISSION TOWER	413211.44	0854635.74	1B	941		114	54 57	5477
TREE	413121.30	0854849.03	1A	904		77	257 6	6075
TREE	413113.11	0854459.89	1B	986		159	105 25	11863



TOUCHDOWN ZONE RUNWAY	ELEVATION
9	825
27	827

GOSHEN MUNICIPAL AIRPORT

GOSHEN, INDIANA

(NOT TO SCALE)