

OBSTRUCTION DATA SHEET

ODS 709
UNIVERSITY OF ILLINOIS - WILLARD AIRPORT
CHAMPAIGN - URBANA, ILLINOIS

DIGITIZED FROM

OC 709
SURVEYED SEPTEMBER 1991
9TH EDITION



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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 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:

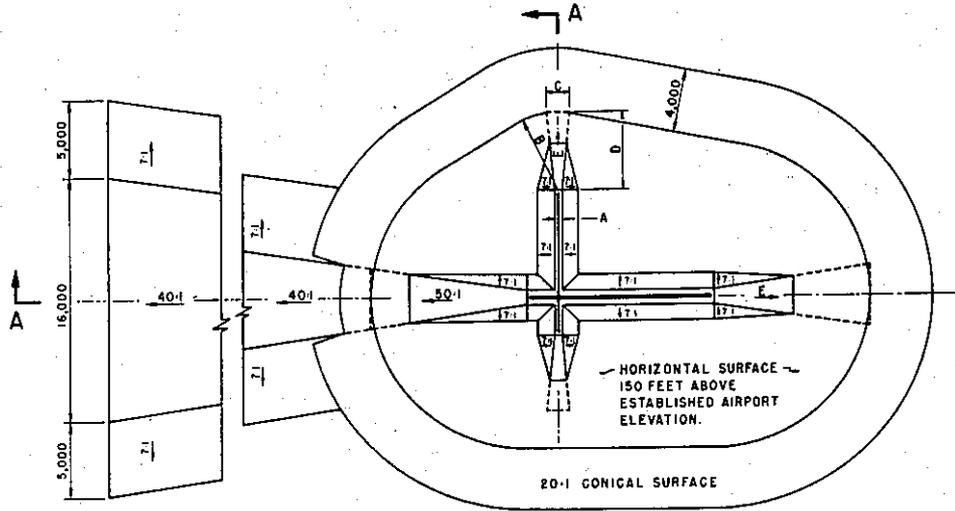
1. Objects located in FAR-77 approach (including supplemental approaches if present) or primary areas are listed with the associated runway (reference runway). For example, all objects in the Runway 9R approach or primary are listed with Runway 9R. Distances to these objects are computed from both the 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):

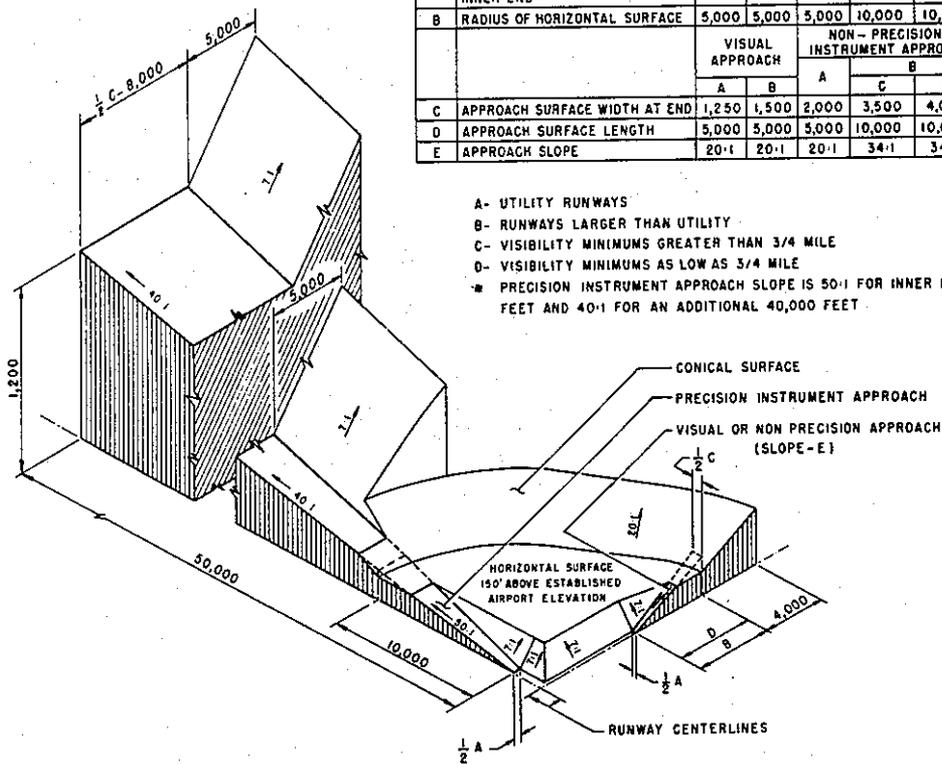
A(V) Utility runway - visual approach only
 A(NP) Utility runway - nonprecision instrument approach
 B(V) Nonutility runway - visual approach only
 C Nonutility runway - nonprecision instrument approach with
 visibility minimums greater than 3/4 mile
 D Nonutility runway - nonprecision instrument approach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

ISOMETRIC VIEW OF SECTION A-A

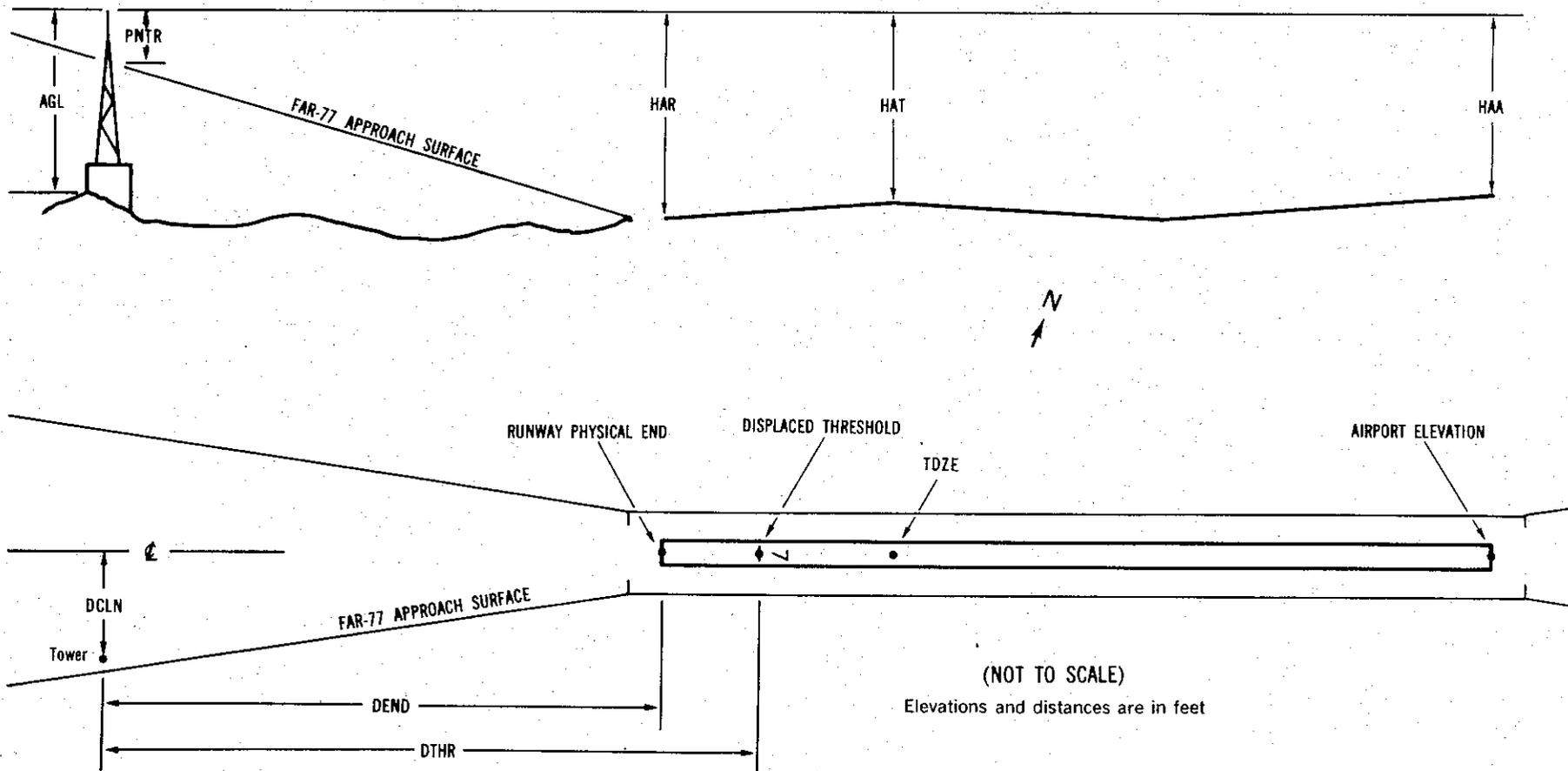
FAR-77 CIVIL AIRPORT
IMAGINARY SURFACES

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
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 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).

OC0709

AIRPORT ELEVATION 754

4L C 750/750 400203.414N 0881657.129W 2210409

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
BUSH	400156.57	0881706.35	1A	762		12	12	8	994		86L	-11

22R C 746/749 400242.903N 0881612.355W 0410438

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	400252.32	0881558.82	1A	776		30	27	22	1410		167L	-6
TREE	400253.65	0881555.40	1A	787		41	38	33	1687		279L	-3

14R C 754/754 400250.401N 08817 8.435W 3153605

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
ROD ON OL TRANSMISSOMETER	400155.53	0881607.89	1A	761		7	7	7	-7262		520R	14
ROD ON OL GLIDE SLOPE	400157.95	0881608.81	1A	780		26	26	26	-7037		399R	34
ROD ON OL TRANSMISSOMETER	400157.72	0881609.52	1A	760		6	6	6	-7015		455R	14
ANTENNA ON BUILDING	400300.56	0881716.81	1A	766		12	12	12	1190		254L	-17
OL ON LOCALIZER	400258.86	0881719.21	1A	752		-2	-2	-2	1198		0L	-31

32L PIR 749/749 400153.201N 0881555.583W 1353652

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
ROD ON OL TRANSMISSOMETER	400157.72	0881609.52	1A	760		11	11	6	-1085		455L	14
ROD ON OL GLIDE SLOPE	400157.95	0881608.81	1A	780		31	31	26	-1063		399L	34
ROD ON OL TRANSMISSOMETER	400155.53	0881607.89	1A	761		12	12	7	-838		520L	14
BUILDING	400143.40	0881550.42	1A	759		10	10	5	989		407L	-6

OC0709

AIRPORT ELEVATION 754

18 SUPLC 752/753 400249.342N 0881656.076W 3592404

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
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*** NO OBSTRUCTIONS ***

36 SUPLC 750/752 400156.980N 0881655.364W 1792404

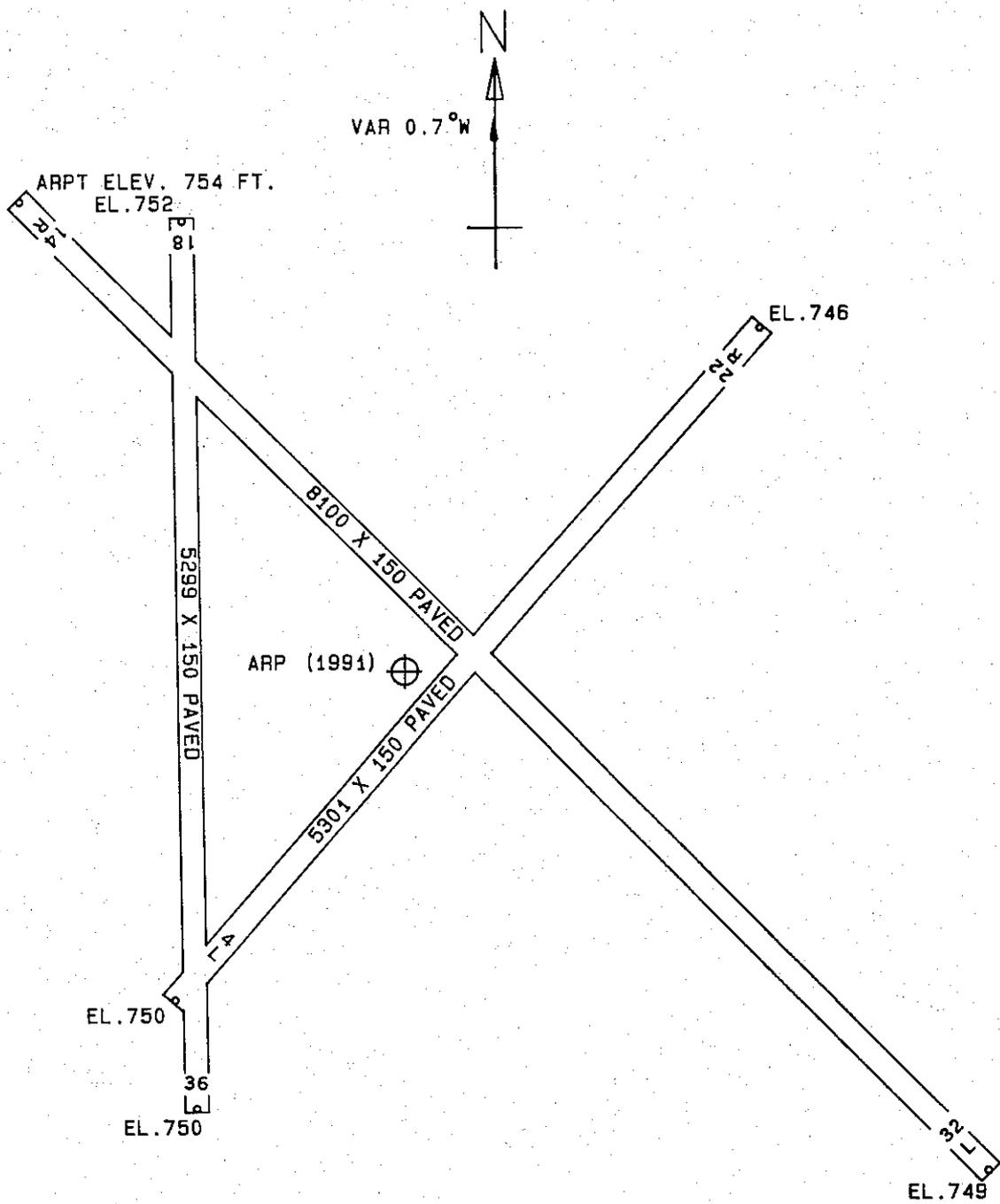
OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
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RADAR REFLECTOR	400152.30	0881655.30	1A	755		5	3	1	474		OR	-3
TREE	400129.46	0881700.09	1A	816		66	64	62	2780		397L	-10

ARP 400222.572N 0881639.501W

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG	BEARING	DISTANCE
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ANEMOMETER	400233.21	0881629.14	1A	766		12	37	32	1344
LIGHTED WINDSOCK	400235.46	0881626.76	1A	766		12	37	55	1638
FLOODLIGHT ON POLE	400222.05	0881615.19	1A	796		42	92	19	1891
OL VORTAC	400204.21	0881633.63	1A	783		29	166	53	1914
ANTENNA & APBN ON OL ATCT	400224.99	0881613.86	1A	825		71	83	42	2010
OL ON REMOTE TRANSMITTER	400240.35	0881601.29	1A	774		20	59	30	3474
TREE	400304.74	0881558.88	1A	808		54	37	13	5309



TOUCHDOWN ZONE RUNWAY ELEVATION	
4L	750
22R	749
14R	754
32L	749
18	753
36	752

UNIVERSITY OF ILLINOIS - WILLARD AIRPORT
 CHAMPAIGN - URBANA, ILLINOIS
 (NOT TO SCALE)