OBSTRUCTION DATA SHEET

ODS 978
McALESTER MUNICIPAL AIRPORT
McALESTER, OKLAHOMA

DIGITIZED FROM

OC 978
SURVEYED MARCH 1988
6TH 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).

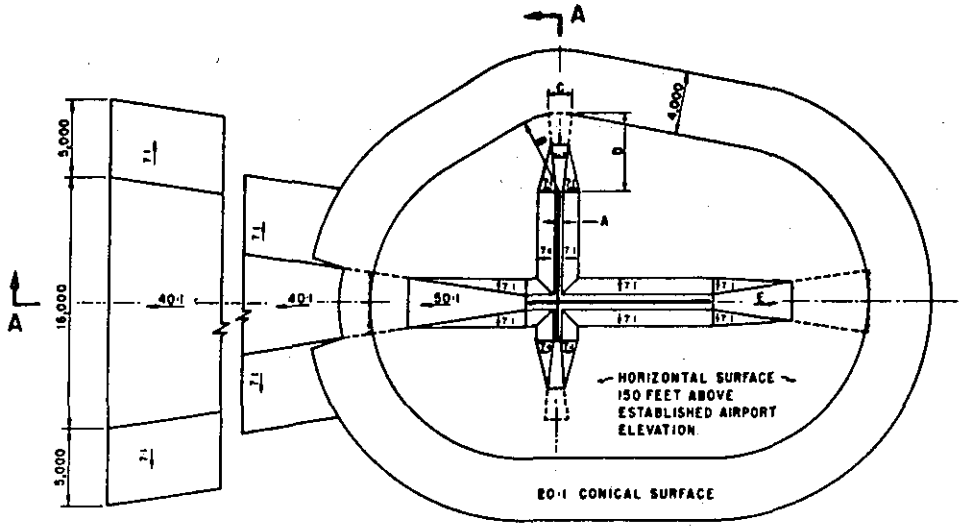
3. Runway configuration and runway lengths, widths, and elevations are presented on the ODS last page.

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)

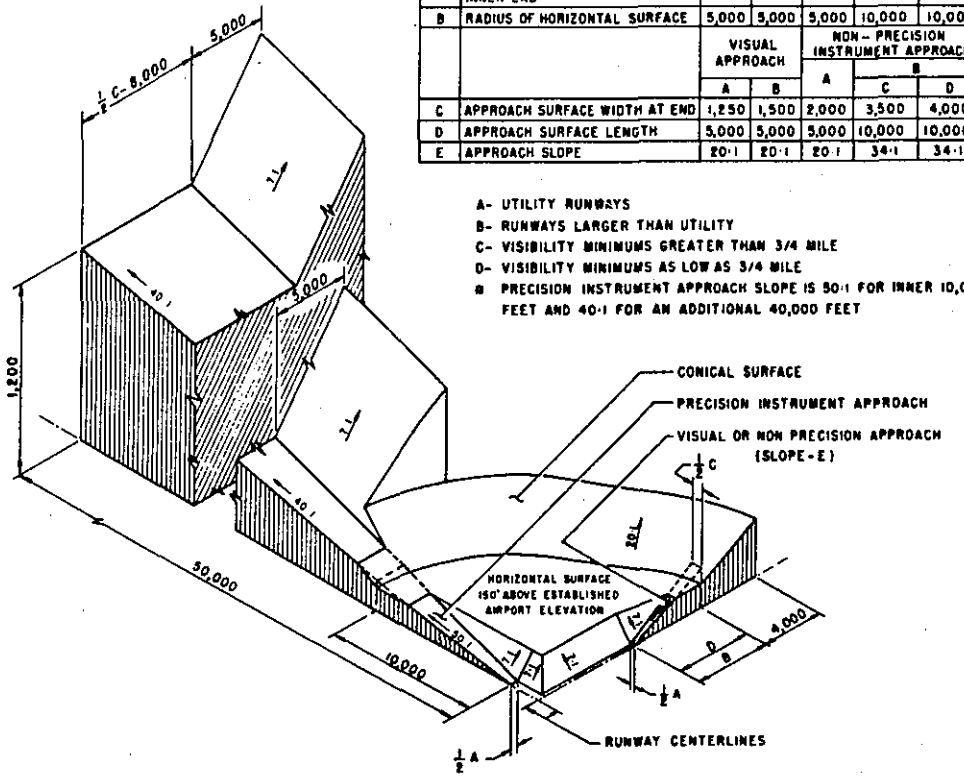
FAR-77 imaginary surface dimensions are defined on page 2 of this report.

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]
XXXXXXXXXXX	XXXXXX.XXX	XXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX
XXXXXXXXXXX	XXXXXX.XXX	XXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX

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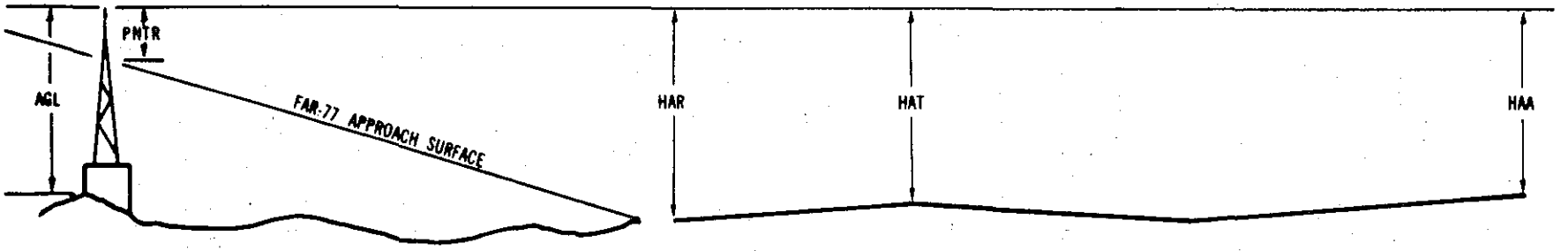
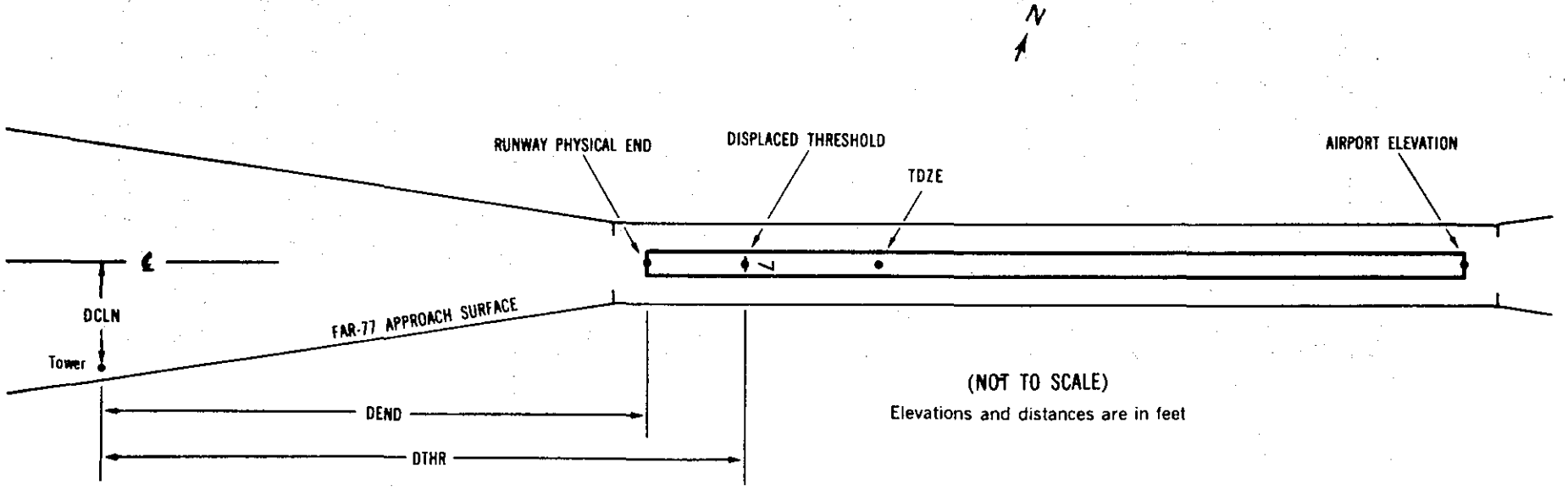




(NOT TO SCALE)

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).

OC0978

AIRPORT ELEVATION 770

1 D 741/755 345230.323N 0954711.248W 2002237

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
LIGHT STANDARD	345323.01	0954643.27	1A	777		36	22	7	-5805		331R	7
OL POLE	345324.18	0954650.52	1A	780		39	25	10	-5706		277L	10
OL HOPPER	345323.29	0954653.00	1A	795		54	40	25	-5550		440L	25
LIGHT STANDARD	345320.46	0954644.43	1A	787		46	32	17	-5530		330R	17
TREE	345322.58	0954654.12	1A	787		46	32	17	-5449		502L	18
LIGHT STANDARD	345318.17	0954644.16	1A	775		34	20	5	-5321		431R	6
LIGHT STANDARD	345317.56	0954645.59	1A	778		37	23	8	-5221		341R	10
TREE	345319.46	0954655.28	1A	773		32	18	3	-5120		483L	5
TREE	345315.59	0954644.51	1A	794		53	39	24	-5066		495R	27
TREE	345312.07	0954646.25	1A	790		49	35	20	-4681		482R	25
GROUND	345313.53	0954656.84	1A	774		33	19	4	-4513		396L	10
ROAD (N)	345307.50	0954649.64	1A	773		32	18	3	-4150		379R	11
FENCE	345301.89	0954652.70	1A	766		25	11	-4	-3530		337R	8
OL WINDSOCK	345257.12	0954655.35	1A	786		45	31	16	-3001		298R	31
OL ANEMOMETER	345255.24	0954654.75	1A	776		35	21	6	-2840		411R	21
HANGAR	345257.84	0954705.49	1A	770		29	15	0	-2775		519L	16
GROUND	345240.74	0954712.37	1A	748		7	-7	-22	-955		455L	3
FENCE POST	345240.12	0954712.78	1A	746		5	-9	-24	-884		465L	1
GROUND	345232.11	0954707.97	1A	741		0	-14	-29	-264		193R	-1
OL POLE	345219.95	0954720.75	1A	771		30	16	1	1259		377L	-1
OL POLE	345217.83	0954720.70	1A	779		38	24	9	1458		298L	1
TREE	345212.16	0954721.36	1A	800		59	45	30	2015		150L	6
OL POLE	345210.14	0954719.03	1A	800		59	45	30	2138		103R	2
OL POLE	345210.11	0954721.36	1A	806		65	51	36	2208		78L	6
TREE	345208.61	0954725.70	1A	814		73	59	44	2477		364L	6
TREE	345132.70	0954729.47	1A	905		164	150	135	5990		605R	-6
TREE	345132.30	0954731.69	1A	913		172	158	143	6092		445R	-1
OL POLE	345128.20	0954738.00	1A	933		192	178	163	6664		97R	2
OL POLE	345128.67	0954739.88	1A	934		193	179	164	6674		67L	3
TREE	345113.29	0954746.24	1A	927		186	172	157	8316		22L	-53

OC0978

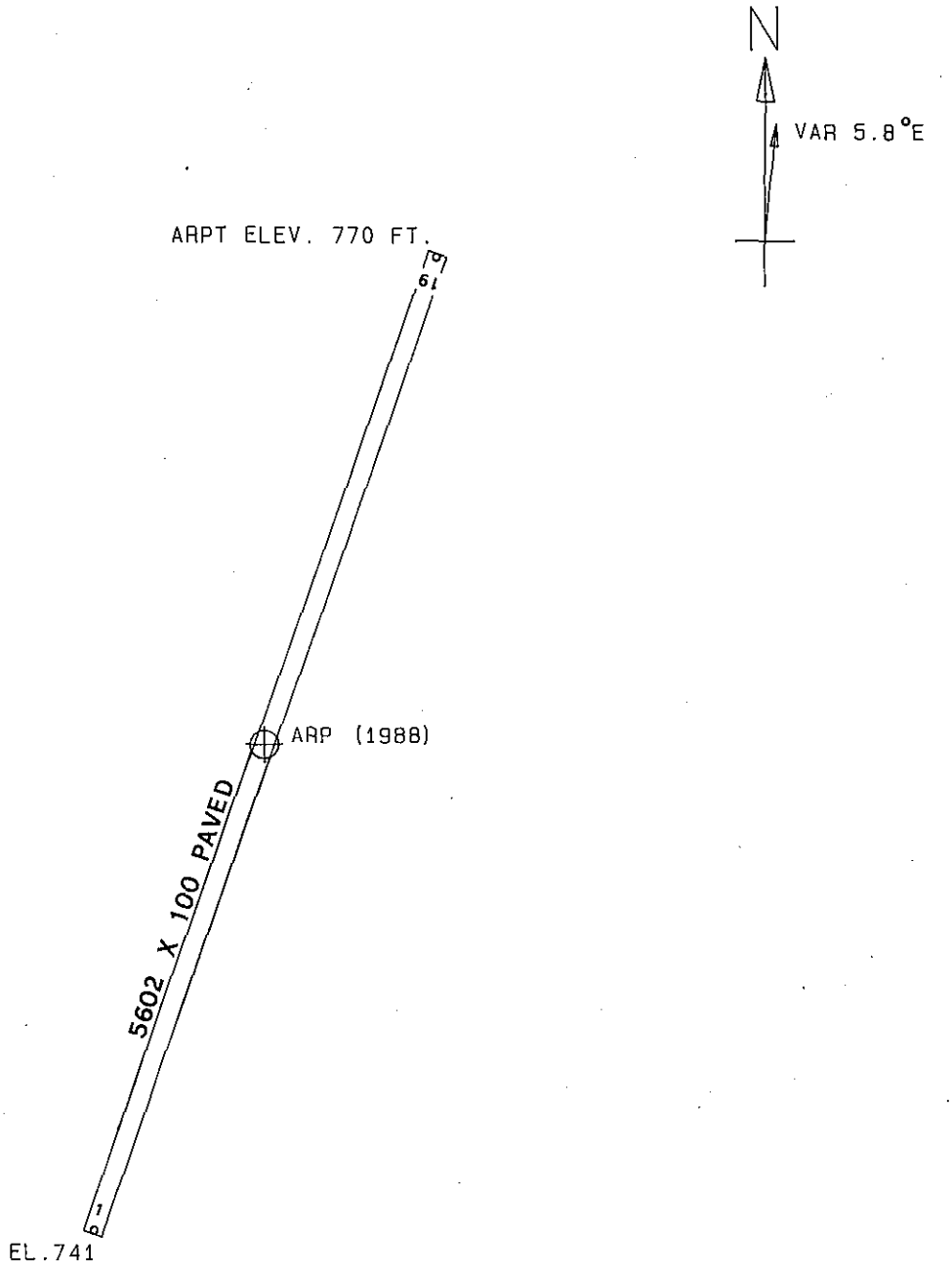
AIRPORT ELEVATION 770

19 C 770/770 345322.261N 0954647.836W 0202251

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
GROUND	345232.11	0954707.97	1A	741		-29	-29	-29	-5337		193L	-1
FENCE POST	345240.12	0954712.78	1A	746		-24	-24	-24	-4718		465R	1
GROUND	345240.74	0954712.37	1A	748		-22	-22	-22	-4647		455R	3
HANGAR	345257.84	0954705.49	1A	770		0	0	0	-2826		519R	16
OL ANEMOMETER	345255.24	0954654.75	1A	776		6	6	6	-2761		411L	21
OL WINDSOCK	345257.12	0954655.35	1A	786		16	16	16	-2601		298L	31
FENCE	345301.89	0954652.70	1A	766		-4	-4	-4	-2072		337L	8
ROAD (N)	345307.50	0954649.64	1A	773		3	3	3	-1452		379L	11
GROUND	345313.53	0954656.84	1A	774		4	4	4	-1089		396R	10
TREE	345312.07	0954646.25	1A	790		20	20	20	-920		482L	25
TREE	345315.59	0954644.51	1A	794		24	24	24	-536		495L	27
TREE	345319.46	0954655.28	1A	773		3	3	3	-481		483R	5
LIGHT STANDARD	345317.56	0954645.59	1A	778		8	8	8	-381		341L	10
LIGHT STANDARD	345318.17	0954644.16	1A	775		5	5	5	-281		431L	6
TREE	345322.58	0954654.12	1A	787		17	17	17	-152		502R	18
LIGHT STANDARD	345320.46	0954644.43	1A	787		17	17	17	-71		330L	17
OL HOPPER	345323.29	0954653.00	1A	795		25	25	25	-52		440R	25
OL POLE	345324.18	0954650.52	1A	780		10	10	10	104		277R	10
LIGHT STANDARD	345323.01	0954643.27	1A	777		7	7	7	203		331L	7
LIGHT STANDARD	345324.20	0954643.10	1A	781		11	11	11	321		302L	7
OL LOCALIZER	345325.41	0954646.41	1A	773		3	3	3	340		0L	-1
ROAD (N)	345328.82	0954644.85	1A	764		-6	-6	-6	708		2L	-21
TREE	345329.35	0954639.02	1A	800		30	30	30	927		439L	9
ROAD (N)	345332.22	0954643.27	1A	782		12	12	12	1076		6L	-14
TREE	345337.72	0954648.00	1A	805		35	35	35	1461		557R	-2
TREE	345337.23	0954636.83	1A	811		41	41	41	1738		332L	-4
POLE	345338.32	0954633.40	1A	828		58	58	58	1940		562L	7
TRANSMISSION TR	345354.97	0954642.28	1A	827		57	57	57	3261		718R	-33
WINDMILL	345400.87	0954638.96	1A	841		71	71	71	3916		666R	-38

ARP 345256.292N 0954659.543W

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
HANGAR	345300.48	0954705.00	1A	783		13	307 9	621
TREE	345256.07	0954710.84	1A	794		24	262 51	941
TREE	345259.95	0954649.03	1A	803		33	61 18	951
POLE	345301.67	0954649.69	1A	790		20	50 41	985
TREE	345302.22	0954648.68	1A	805		35	50 41	1085
ANT ON OL RADIO TOWER	345307.27	0954703.71	1A	838		68	336 49	1162
ANT ON OL AIRPORT BEACON	345308.08	0954701.91	1A	835		65	344 47	1208
TREE	345307.94	0954644.06	1A	806		36	41 48	1747
TREE	345235.84	0954716.25	1A	757		-13	208 10	2492
TREE	345318.33	0954642.58	1A	790		20	26 35	2638
BUILDING	345317.34	0954639.30	1A	807		37	32 36	2715
TREE	345231.35	0954721.17	1A	771		1	209 45	3099
TREE	345322.17	0954638.70	1A	807		37	27 46	3140
POLE	345327.29	0954653.71	1A	802		32	3 0	3172
OL POLE	345329.86	0954653.31	1A	809		39	2 54	3433
TREE	345324.73	0954636.96	1A	821		51	27 24	3436
TREE	345226.02	0954721.87	1A	777		7	205 30	3582
TREE	345329.09	0954632.98	1A	839		69	27 55	3986
TREE	345332.61	0954720.68	1B	892		122	328 34	4072
TREE	345221.14	0954724.06	1A	779		9	204 5	4099
TREE	345217.19	0954631.87	1B	936		166	143 57	4577
TREE	345209.94	0954705.53	1A	802		32	180 17	4712
TREE	345209.89	0954709.25	1A	795		25	183 59	4760
TREE	345205.64	0954639.25	1B	977		207	155 56	5393
POLE	345248.89	0954546.32	1B	937		167	91 12	6146
TREE	345239.66	0954814.83	1B	926		156	249 12	6494
TREE	345402.15	0954658.91	1B	1016		246	354 39	6658
TREE	345409.33	0954654.71	1B	1027		257	357 19	7395
OL STANDPIPE	345340.78	0954533.96	1B	940		170	51 57	8430
ROD ON RADIO MAST	345115.51	0954817.80	2A	985	268	215	206 50	12098



TOUCHDOWN ZONE RUNWAY	ELEVATION
1	755
19	770

McALESTER MUNICIPAL AIRPORT

McALESTER, OKLAHOMA

(NOT TO SCALE)