Form Approved: OMB No. 2120-0034

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

FLIGHT PLAN

FAA USE ONLY) ☐ PILOT BRIEFING ☐ VNR ☐ STOPOVER | TIME STARTED | SPECIALIST INITIALS

1. TYPE: VFR / IFR / DVFR
2. AIRCRAFT IDENTIFICATION
3. AIRCRAFT TYPE/ SPECIAL EQUIPMENT
4. TRUE AIRSPEED — KTS
5. DEPARTURE POINT
6. DEPARTURE TIME — PROPOSED (Z) | ACTUAL (Z)
7. CRUISING ALTITUDE
8. ROUTE OF FLIGHT
9. DESTINATION (Name of airport and city)
10. EST. TIME ENROUTE — HOURS | MINUTES
11. REMARKS
12. FUEL ON BOARD — HOURS | MINUTES
13. ALTERNATE AIRPORT(S)
14. PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE
15. NUMBER ABOARD
16. COLOR OF AIRCRAFT
17. DESTINATION CONTACT/TELEPHONE (OPTIONAL)

CIVIL AIRCRAFT PILOTS. FAR Part 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed $1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVFR flight plans.

FAA Form 7233-1 (8-82)

CLOSE VFR FLIGHT PLAN WITH ______________ FSS ON ARRIVAL

FIGURE 1.—Flight Plan.

VALID 141200Z FOR USE 0900-1500Z. TEMPS NEG ABV 24000

FT	3000	6000	9000	12000	18000	24000	30000	34000	39000
EMI	2807	2715-07	2728-10	2842-13	2867-21	2891-30	751041	771150	780855
ALB	0210	9900-07	2714-09	2728-12	2656-19	2777-28	781842	760150	269658
PSB		1509+04	2119+01	2233-04	2262-14	2368-26	781939	760850	780456
STL	2308	2613+02	2422-03	2431-08	2446-19	2461-30	760142	782650	760559

FIGURE 2.—Winds and Temperatures Aloft Forecast.

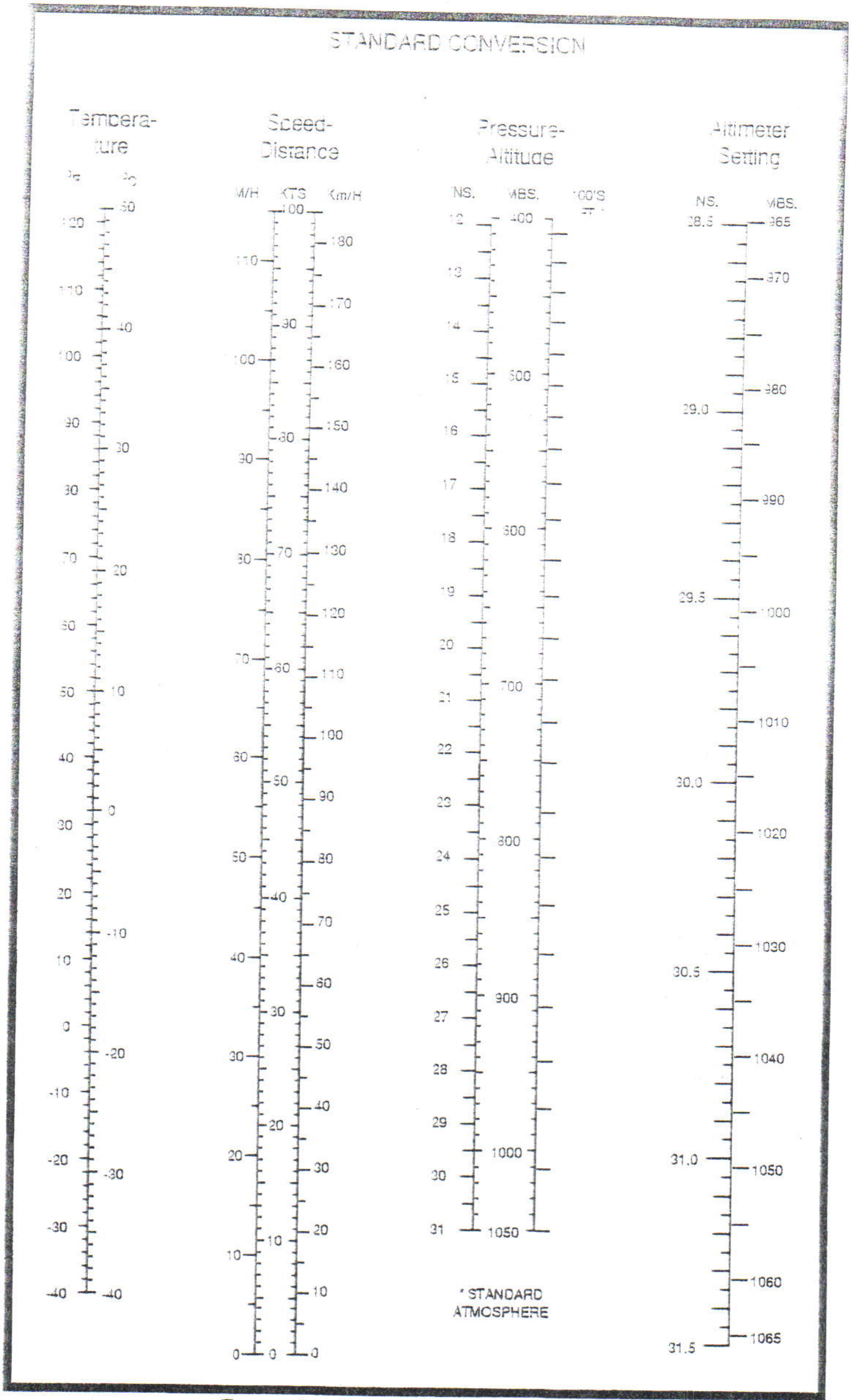

FIGURE 3.—Standard Conversion Chart.

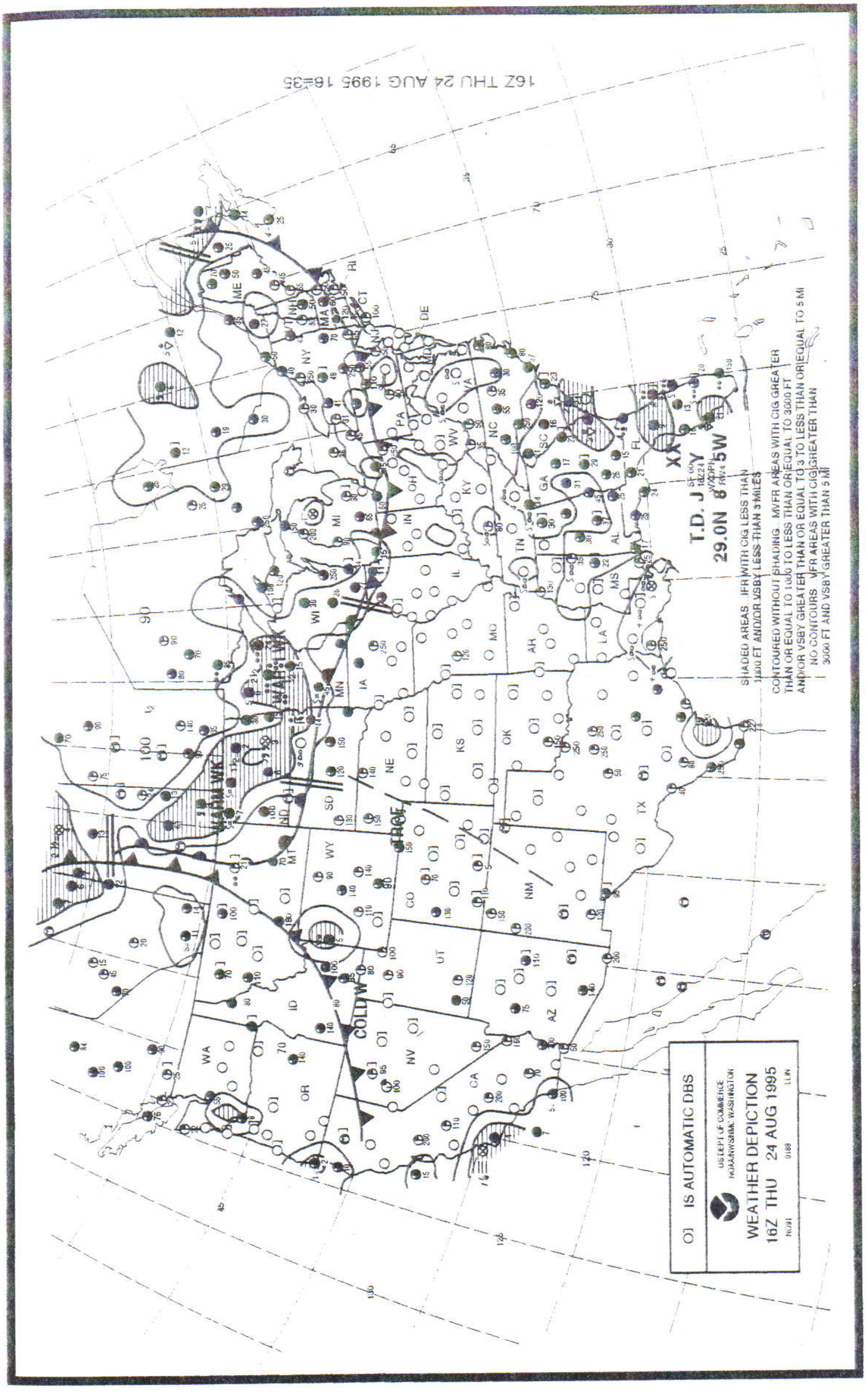

FIGURE 4.—Weather Depiction Chart.

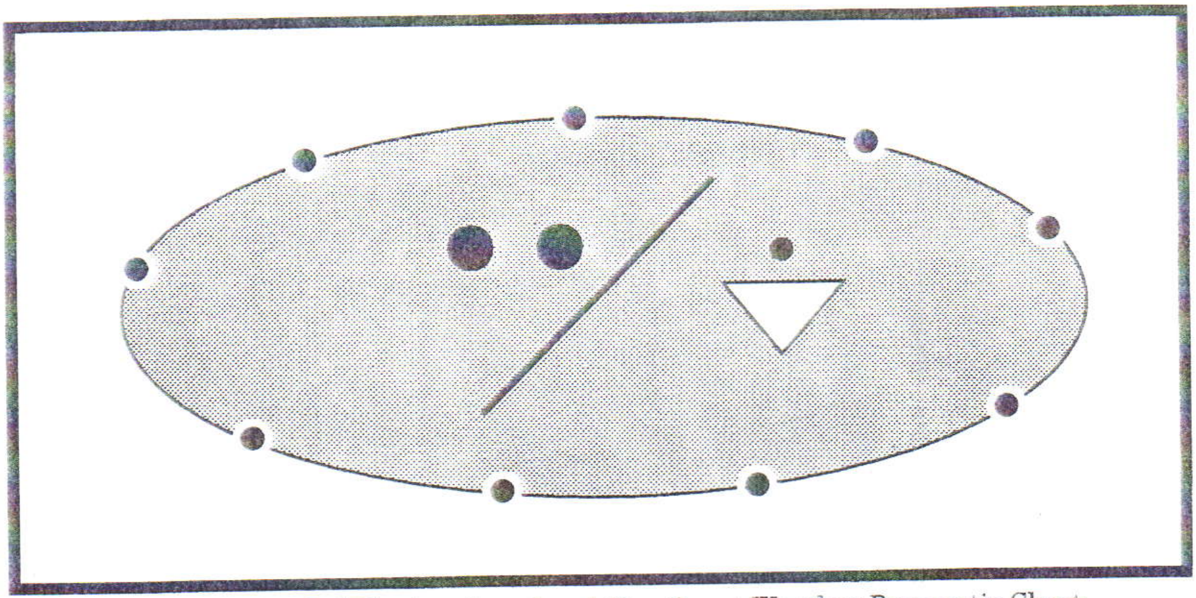

FIGURE 5.—Symbol Used on Low-Level Significant Weather Prognostic Chart.

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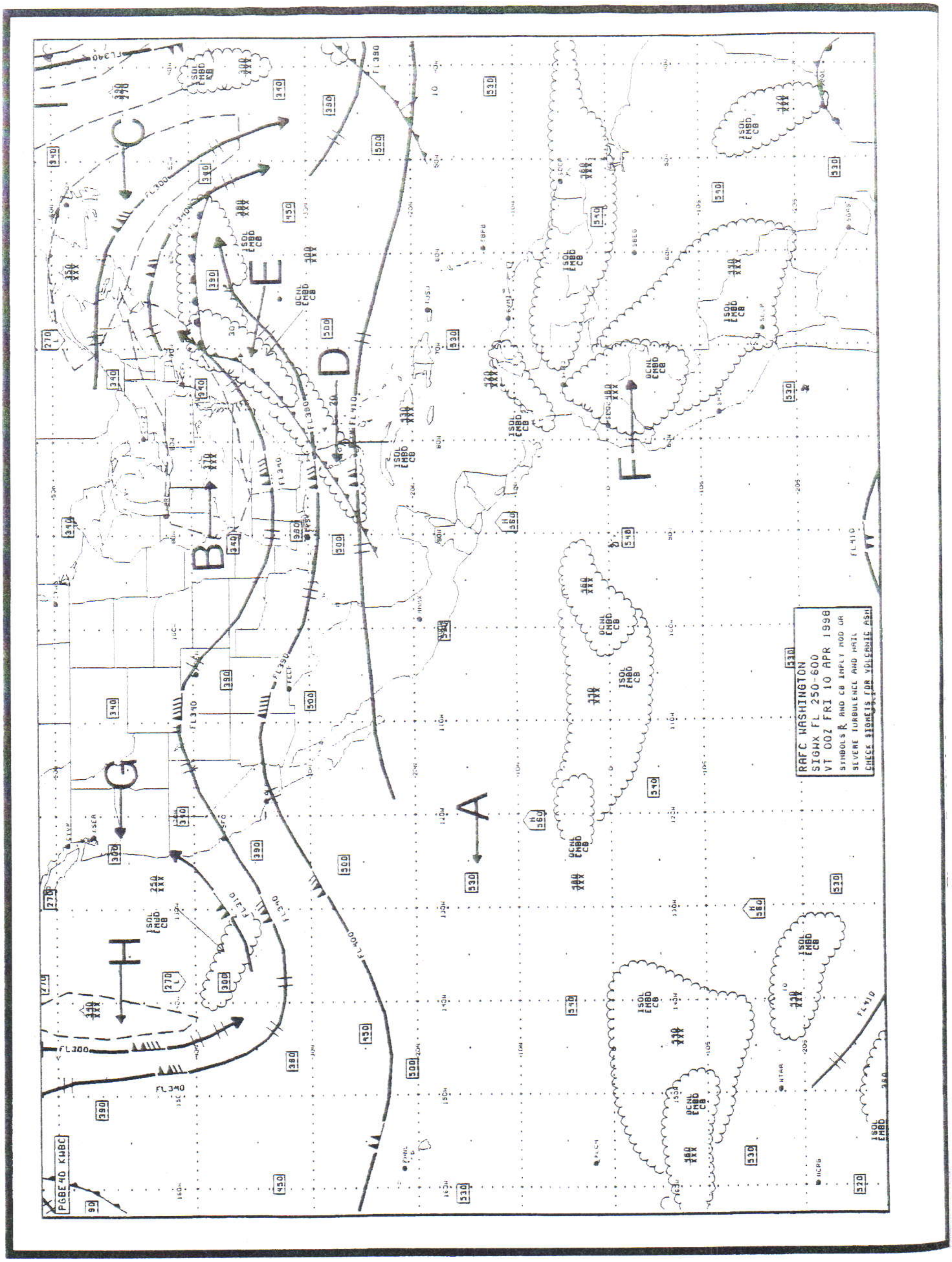
Appendix 2


RAFC WASHINGTON
SIGWX FL 250-600
VT 00Z FRI 10 APR 1998
SYMBOLS R AND CB IMPLY MOD OR SEVERE TURBULENCE AND HAIL
CHECK SIGMETS FOR VOLCANIC ASH
PGBE40 KWBC
A
B
C
D
E
F
G
H

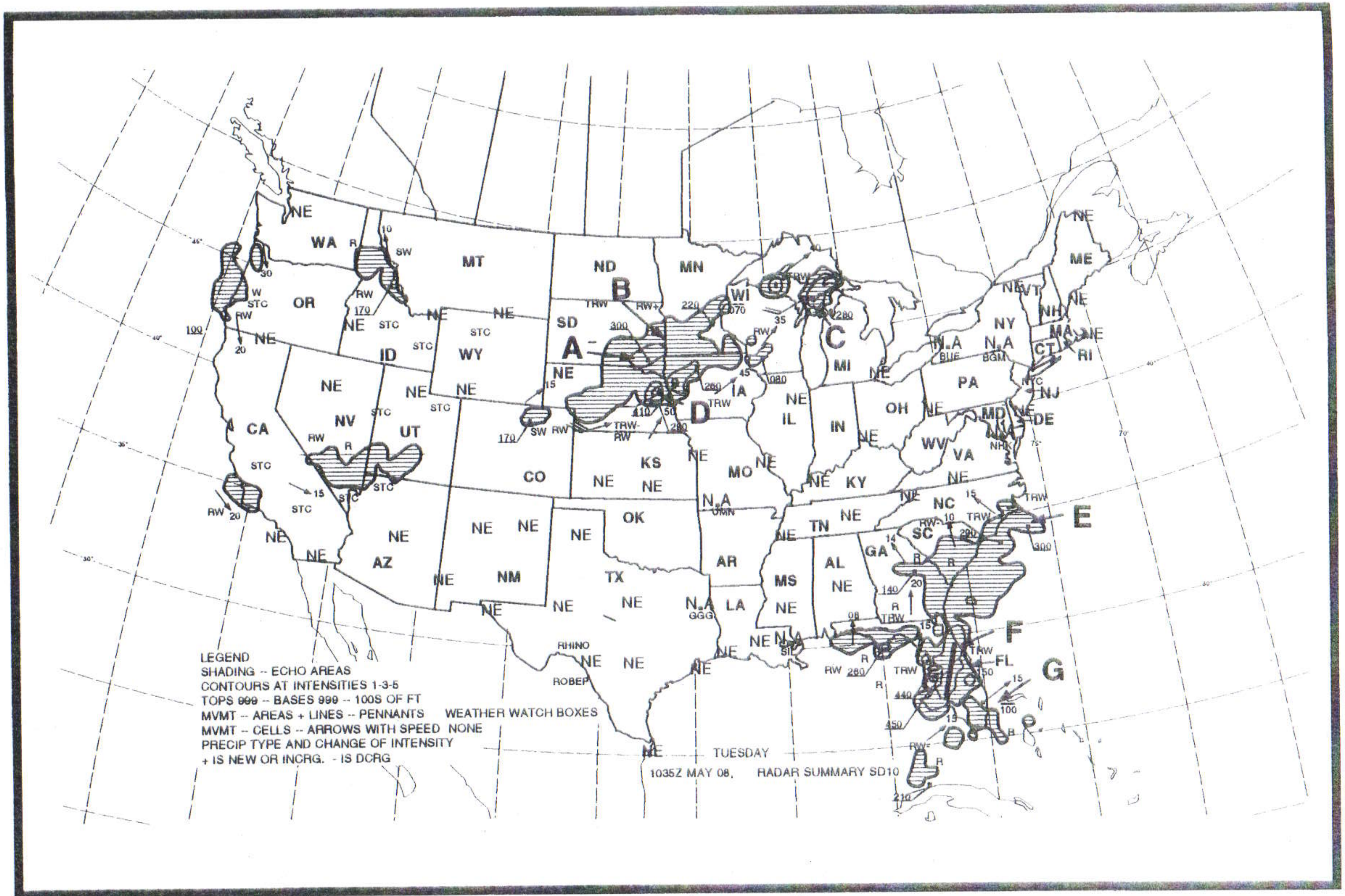


FIGURE 8.—Radar Summary Chart.

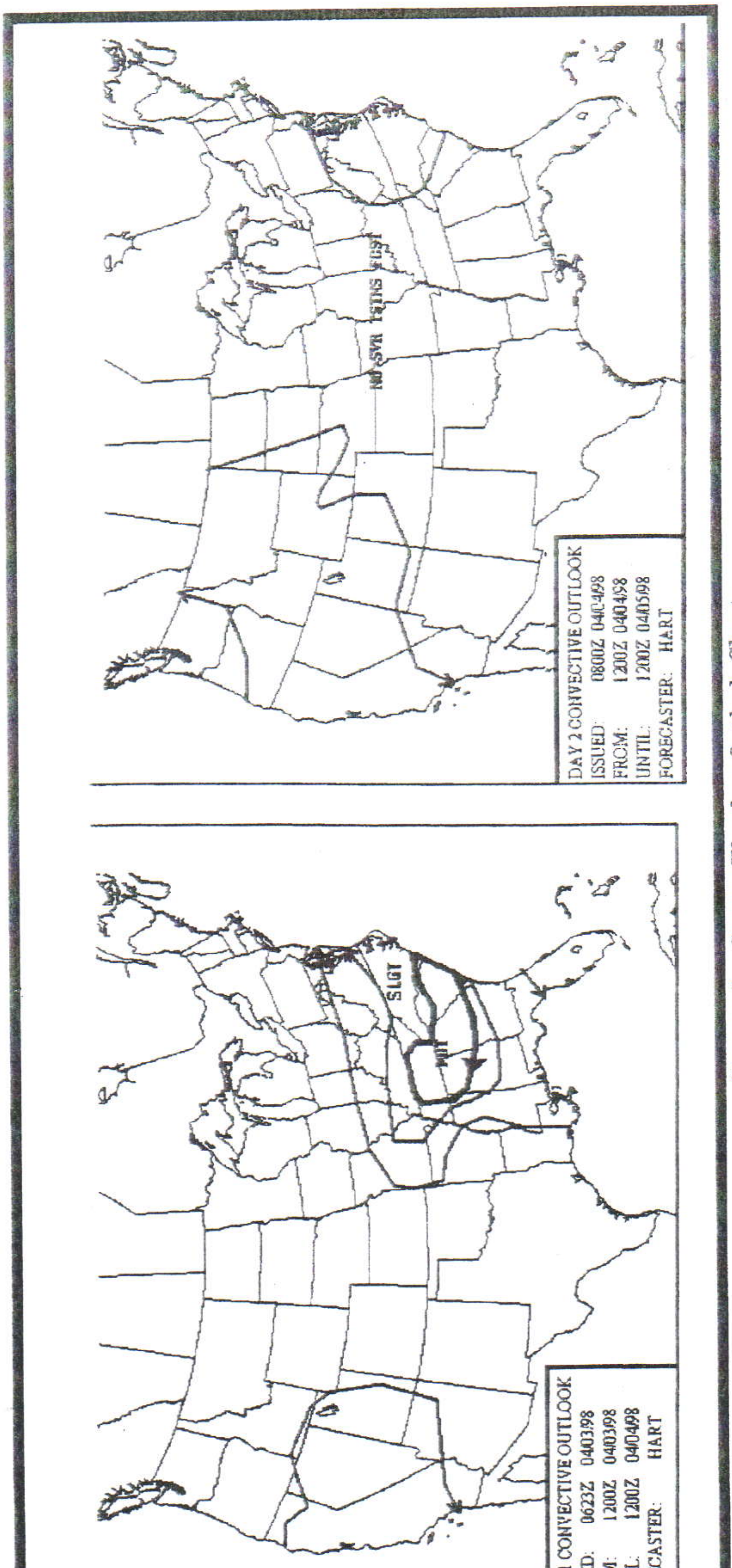


FIGURE 9.—Severe Weather Outlook Charts.

FIGURE 10.—Deleted.

FIGURE 11.—Deleted.

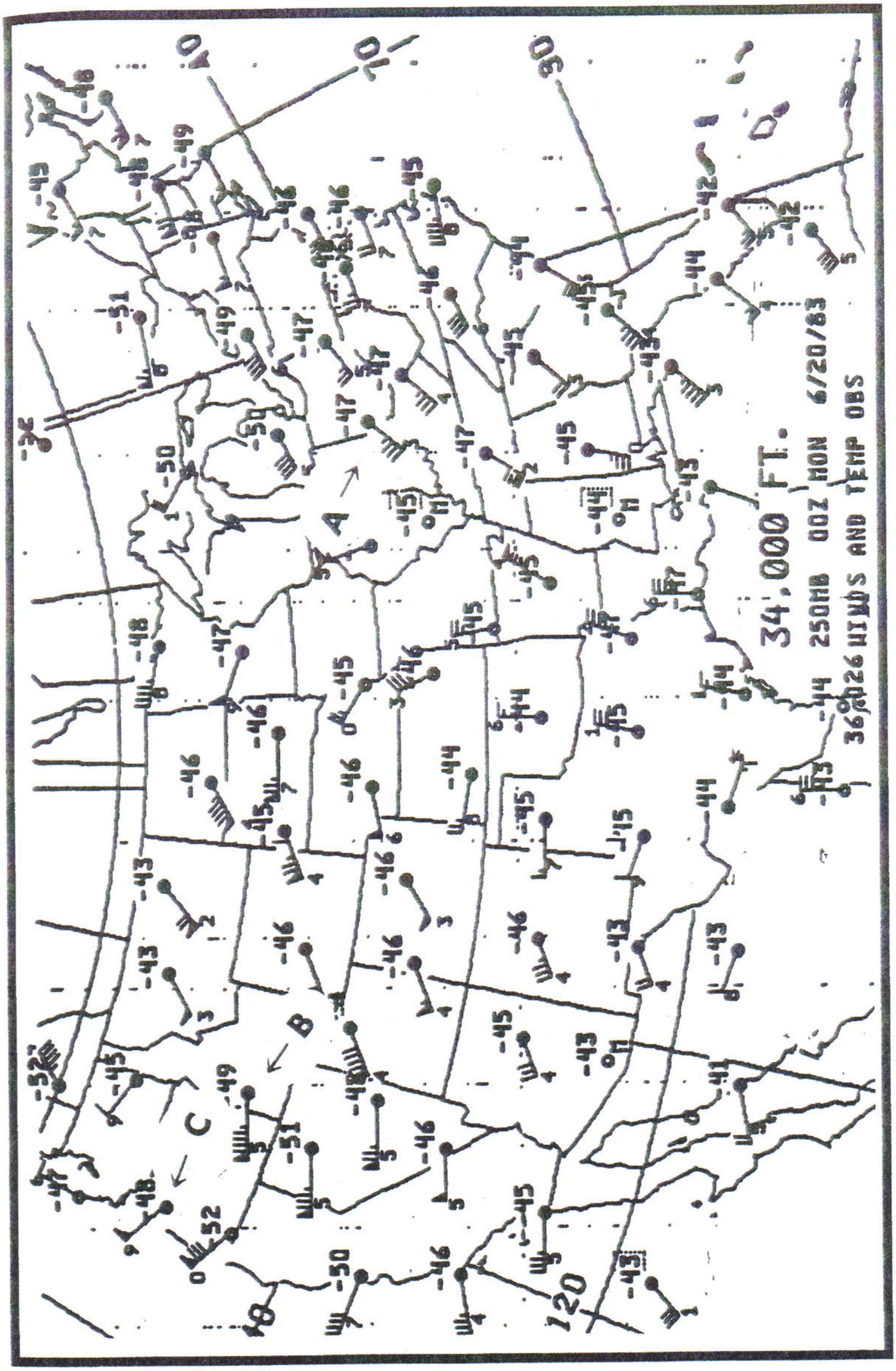


FIGURE 12.—Observed Winds Aloft for 34,000 Feet.

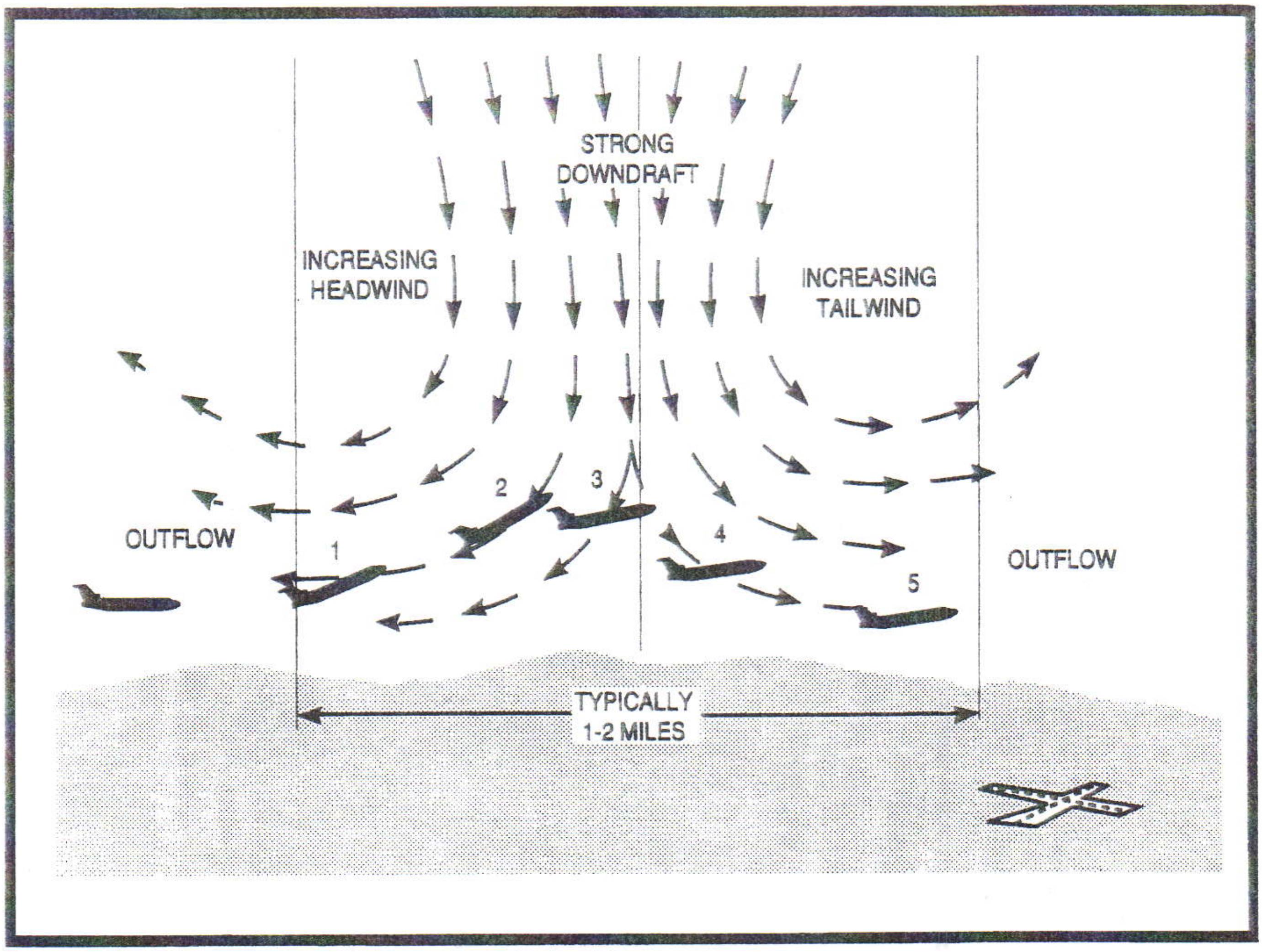


FIGURE 13.—Microburst Section Chart.

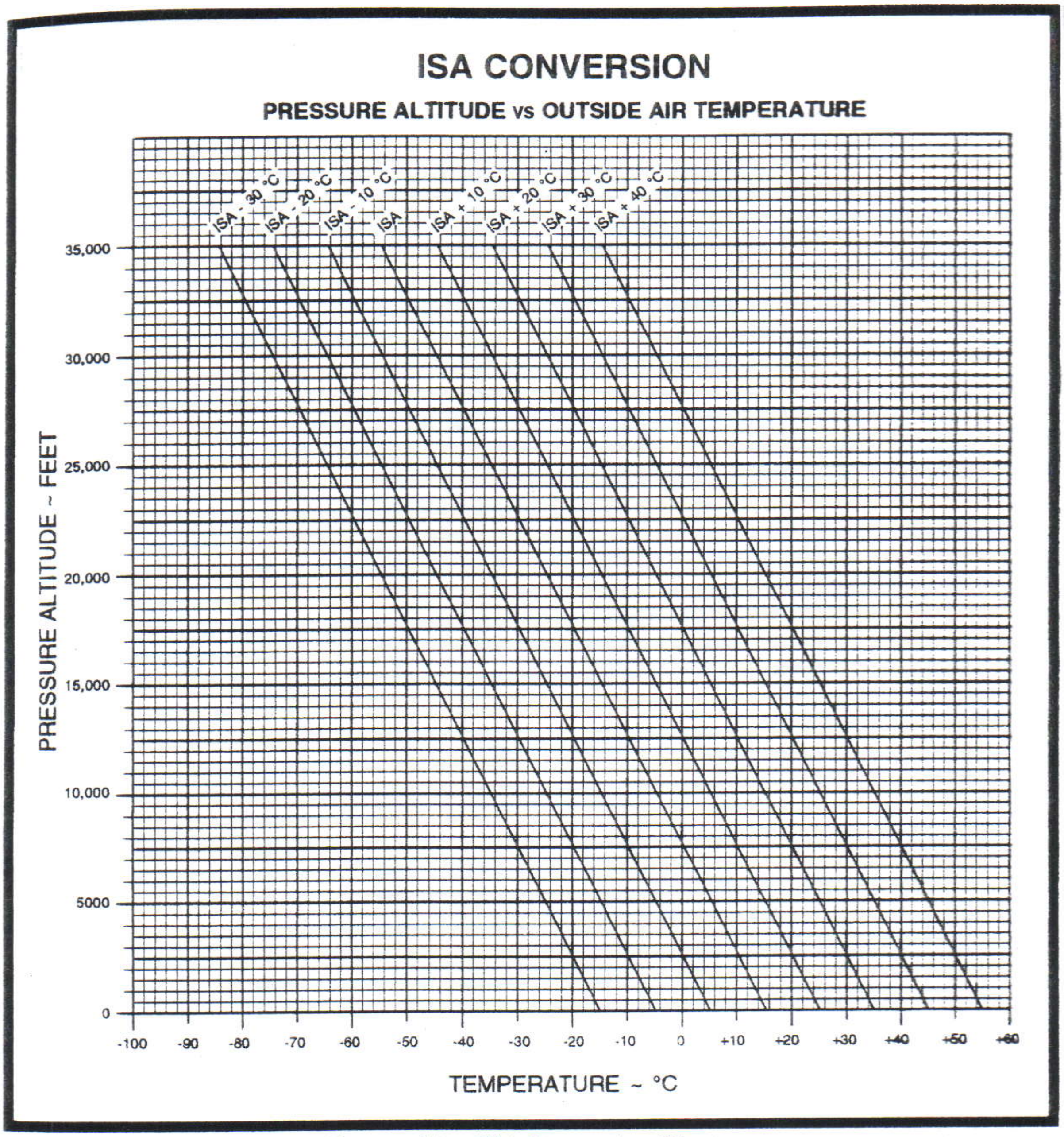


FIGURE 14.—ISA Conversion Chart.

FIGURE 15.—Deleted.

FIGURE 17.—Deleted.

FIGURE 16.—Deleted.

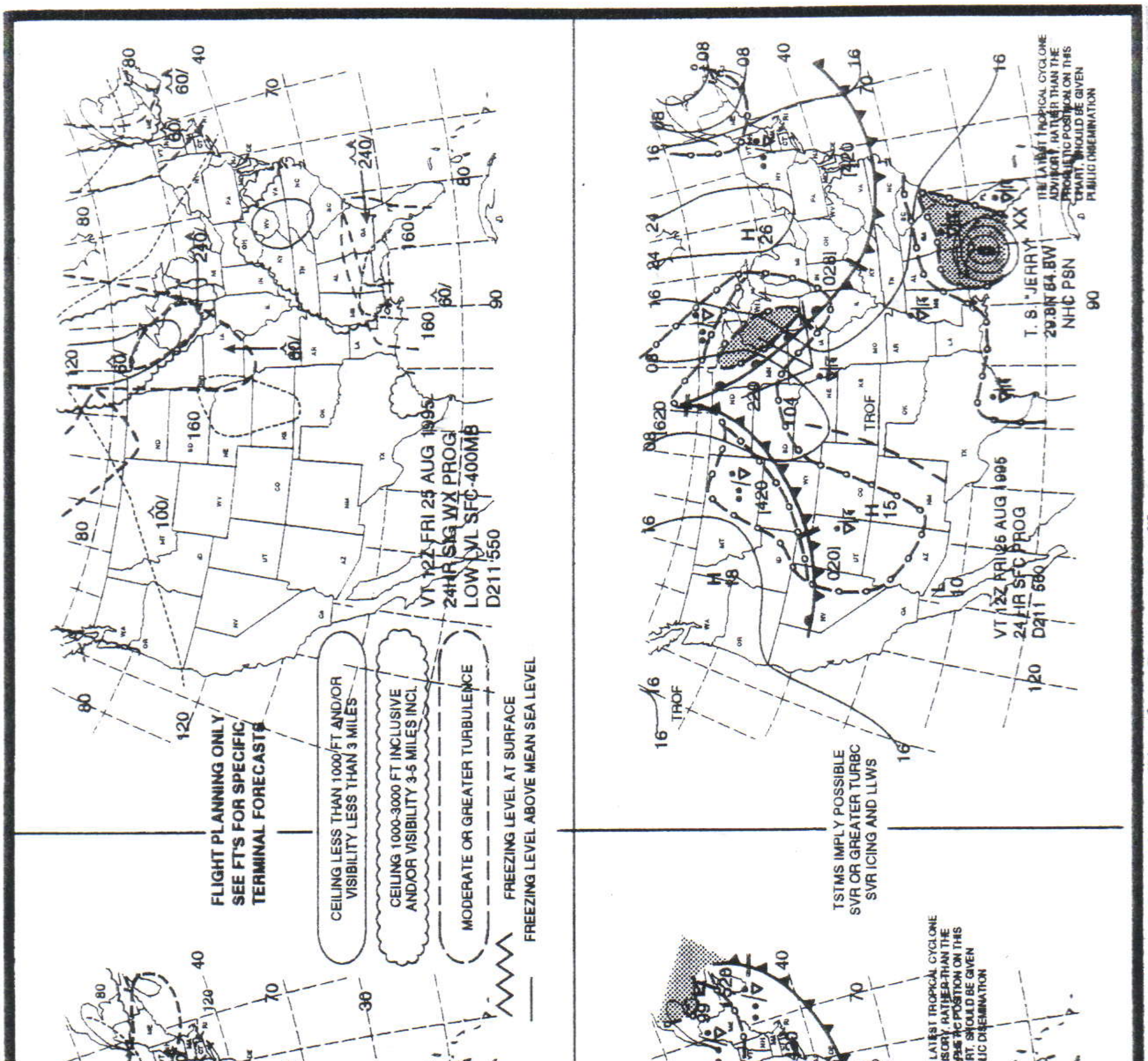


FIGURE 18.—U.S. Low-Level Significant Weather Prognostic Charts.

FIGURE 19.—Deleted.

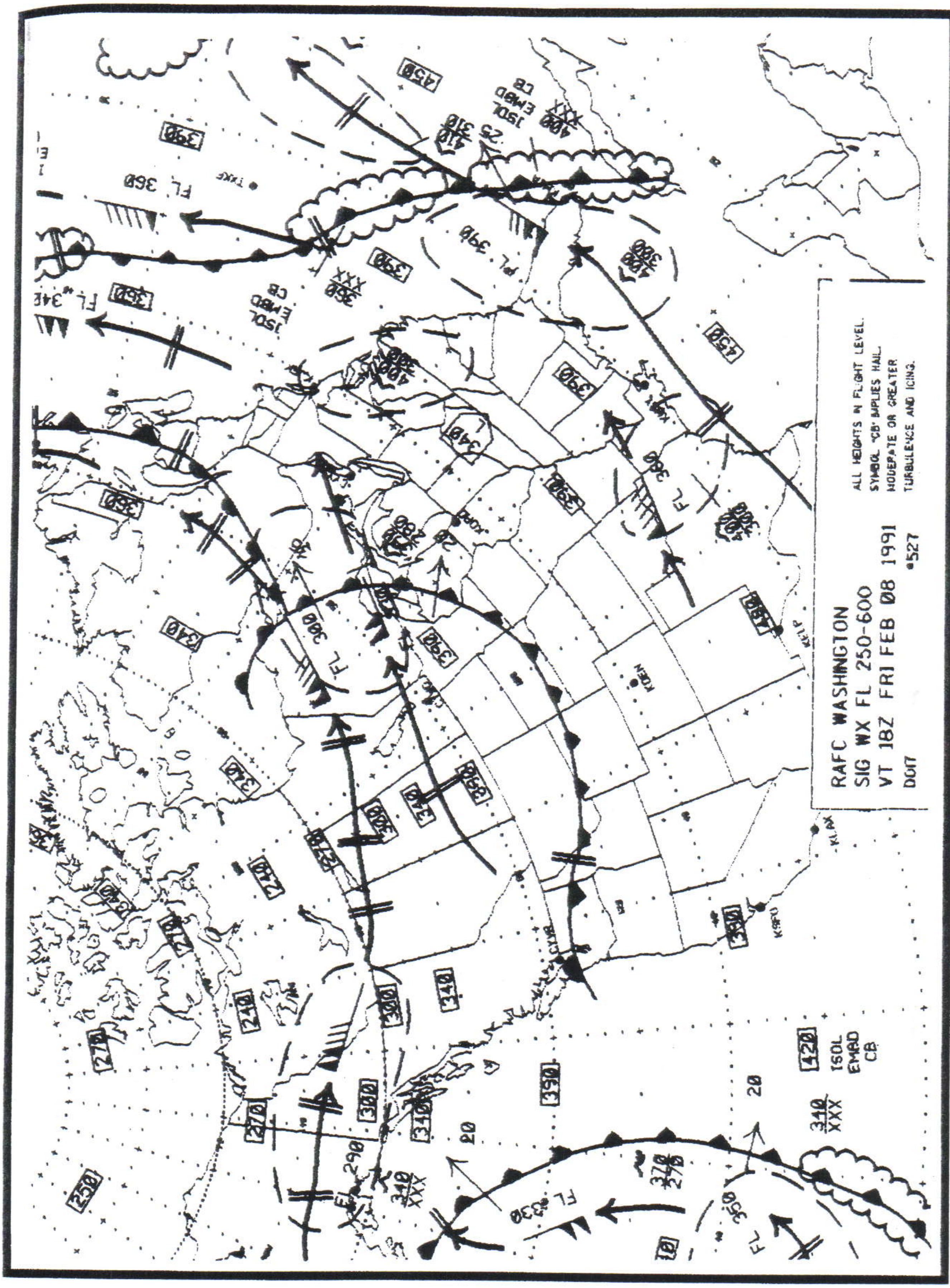


FIGURE 20.—High-Level Significant Weather Prognostic Chart.

Form Approved: OMB No. 2120-0034

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION **FLIGHT PLAN**	(FAA USE ONLY) ☐ PILOT BRIEFING ☐ VNR ☐ STOPOVER	TIME STARTED	SPECIALIST INITIALS

1. TYPE	2. AIRCRAFT IDENTIFICATION	3. AIRCRAFT TYPE/ SPECIAL EQUIPMENT	4. TRUE AIRSPEED	5. DEPARTURE POINT	6. DEPARTURE TIME PROPOSED (Z)	ACTUAL (Z)	7. CRUISING ALTITUDE
VFR							
X IFR							
DVFR	N 123RC	T210N/	175 KTS	GJT			15,000

8. ROUTE OF FLIGHT

JNC9, JNC, V187, MANCA, V211

9. DESTINATION (Name of airport and city)	10. EST. TIME ENROUTE HOURS	MINUTES	11. REMARKS
DRO			

12. FUEL ON BOARD HOURS	MINUTES	13. ALTERNATE AIRPORT(S)	14. PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE / 17. DESTINATION CONTACT/TELEPHONE (OPTIONAL)	15. NUMBER ABOARD
4	30	GJT		2

16. COLOR OF AIRCRAFT	
RED/WHITE/BLUE	CIVIL AIRCRAFT PILOTS. FAR Part 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed $1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVFR flight plans.

FAA Form 7233-1 (8-82) CLOSE VFR FLIGHT PLAN WITH ________________ FSS ON ARRIVAL

AIRCRAFT INFORMATION

MAKE Cessna MODEL T210N

N 123RC Vso 58 ____

AIRCRAFT EQUIPMENT/STATUS**

**NOTE: X= OPERATIVE INOP= INOPERATIVE N/A= NOT APPLICABLE
TRANSPONDER: X (MODE C) X ILS: (LOCALIZER) X (GLIDE SLOPE) X
VOR NO. 1 X (NO. 2) X ADF: X RNAV: X
VERTICAL PATH COMPUTER: N/A DME: X
MARKER BEACON: X (AUDIO) X (VISUAL) X

FIGURE 21.—Flight Plan and Aircraft Information.

Form Approved: OMB No. 2120-0034

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION **FLIGHT PLAN**	(FAA USE ONLY) ☐ PILOT BRIEFING ☐ VNR ☐ STOPOVER	TIME STARTED	SPECIALIST INITIALS

1. TYPE	2. AIRCRAFT IDENTIFICATION	3. AIRCRAFT TYPE/ SPECIAL EQUIPMENT	4. TRUE AIRSPEED	5. DEPARTURE POINT	6. DEPARTURE TIME PROPOSED (Z)	ACTUAL (Z)	7. CRUISING ALTITUDE
VFR							
X IFR							
DVFR	N 123RC	T210N/	175 KTS	DRO			16,000

8. ROUTE OF FLIGHT
V211, MANCA, V187, HERRM, V187, JNC

9. DESTINATION (Name of airport and city)	10. EST. TIME ENROUTE HOURS	MINUTES	11. REMARKS
GJT			

12. FUEL ON BOARD HOURS	MINUTES	13. ALTERNATE AIRPORT(S)	14. PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE / 17. DESTINATION CONTACT/TELEPHONE (OPTIONAL)	15. NUMBER ABOARD
				2

16. COLOR OF AIRCRAFT	CIVIL AIRCRAFT PILOTS. FAR Part 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed $1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVFR flight plans.
RED/WHITE/BLUE	

FAA Form 7233-1 (8-82) CLOSE VFR FLIGHT PLAN WITH ____________ FSS ON ARRIVAL

AIRCRAFT INFORMATION

MAKE Cessna MODEL T210N

N 123RC Vso 58

AIRCRAFT EQUIPMENT/STATUS**

**NOTE: X= OPERATIVE INOP= INOPERATIVE N/A= NOT APPLICABLE
TRANSPONDER: X (MODE C) X ILS: (LOCALIZER) X (GLIDE SLOPE) X
VOR NO. 1 X (NO. 2) X ADF: X RNAV: X
VERTICAL PATH COMPUTER: N/A DME: X
MARKER BEACON: X (AUDIO) X (VISUAL) X

FIGURE 21A.—Flight Plan and Aircraft Information.

FLIGHT LOG

GRAND JUNCTION (GJT) TO DURANGO (DRO)

CHECK POINTS		ROUTE	COURSE	WIND	SPEED-KTS		DIST	TIME		FUEL	
FROM	TO	ALTITUDE		TEMP	TAS	GS	NM	LEG	TOT	LEG	TOT
GJT	JNC	JNC9JNC CLIMB		230 08				X			
	HERRM	V187 15,000	151°		175			:24:0			
	MANCA	V187	151°								
APPROACH & LANDING		V211 DESENT	092°					:18:30			
	DRO										

OTHER DATA:
NOTE: TAKEOFF RUNWAY 29.
MAG VAR, 14° E.

FLIGHT SUMMARY

TIME	FUEL (LB)	
		EN ROUTE
		RESERVE
		MISSED APPR.
		TOTAL

FIGURE 22.—Flight Planning Log.

FLIGHT LOG

DURANGO (DRO) TO GRAND JUNCTION, WALKER FIELD (GJT)

CHECK POINTS FROM	CHECK POINTS TO	ROUTE ALTITUDE	COURSE	WIND TEMP	SPEED-KTS TAS	SPEED-KTS GS	DIST NM	TIME LEG	TIME TOT	FUEL LEG	FUEL TOT
DRO	MANCA	V211 CLIMB	272°	230 08				:14:30			
	HERRM	V187 16,000	333°		174						
	JNC	V187	331°								
APPROACH & LANDING		DESCENT						:12:00			
	GJT										

OTHER DATA:
NOTE: MAG. VAR. 14° E.

FLIGHT SUMMARY

TIME	FUEL (LB)	
		EN ROUTE
		RESERVE
		MISSED APPR.
		TOTAL

FIGURE 22A.—Flight Planning Log.

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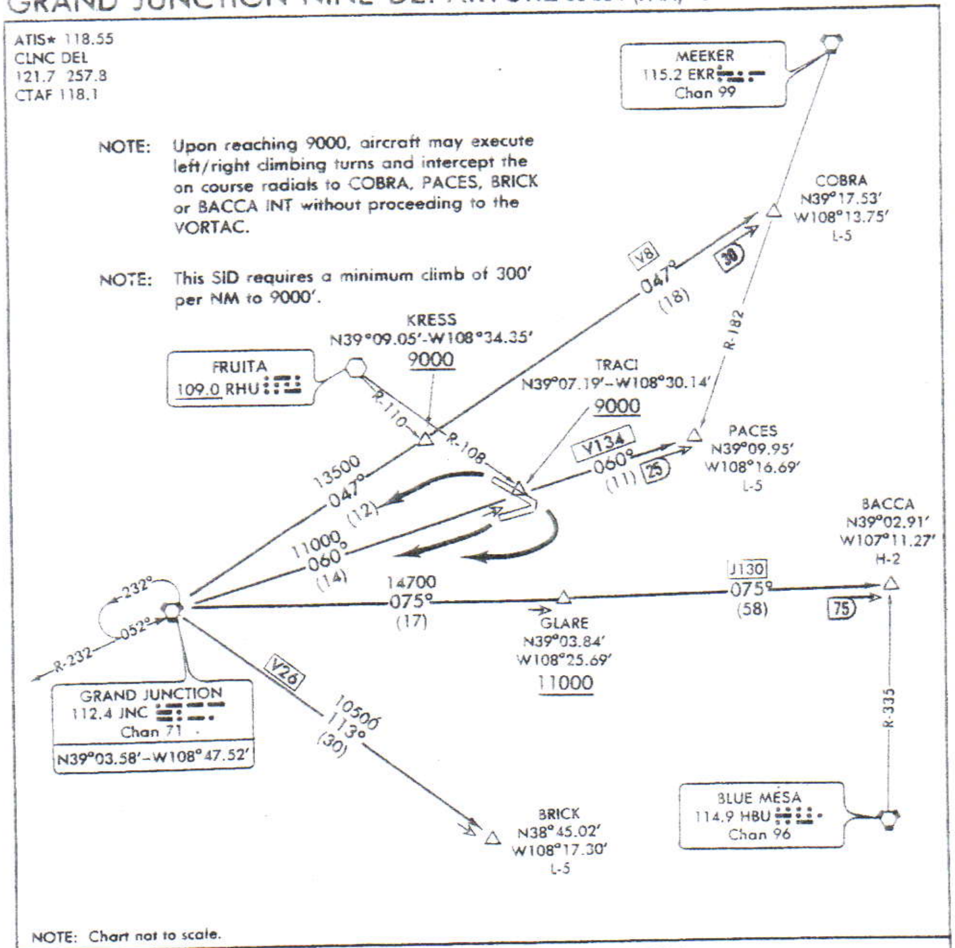
114

(PILOT NAV) (JNC9.JNC) 90347 GRAND JUNCTION/WALKER FIELD

GRAND JUNCTION NINE DEPARTURE SL-634 (FAA) GRAND JUNCTION, COLORADO



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 11 and 22: Right turn direct to JNC VORTAC. Then via (transition) or (assigned route).

TAKE-OFF RUNWAY 29: Left turn direct to JNC VORTAC. Then via (transition) or (assigned route).

BACCA TRANSITION (JNC9.BACCA): From over JNC VORTAC via JNC R-075 to BACCA INT.

BRICK TRANSITION (JNC9.BRICK): From over JNC VORTAC via JNC R-113 to BRICK DME Fix.

COBRA TRANSITION(JNC9.COBRA): From over JNC VORTAC via JNC R-047 to COBRA INT.

PACES TRANSITION (JNC9.PACES): From over JNC VORTAC via JNC R-060 to PACES INT.

GRAND JUNCTION NINE DEPARTURE GRAND JUNCTION, COLORADO

(PILOT NAV) (JNC9.JNC) GRAND JUNCTION/WALKER FIELD

FIGURE 23.—Grand Junction Nine Departure (JNC9.JNC).

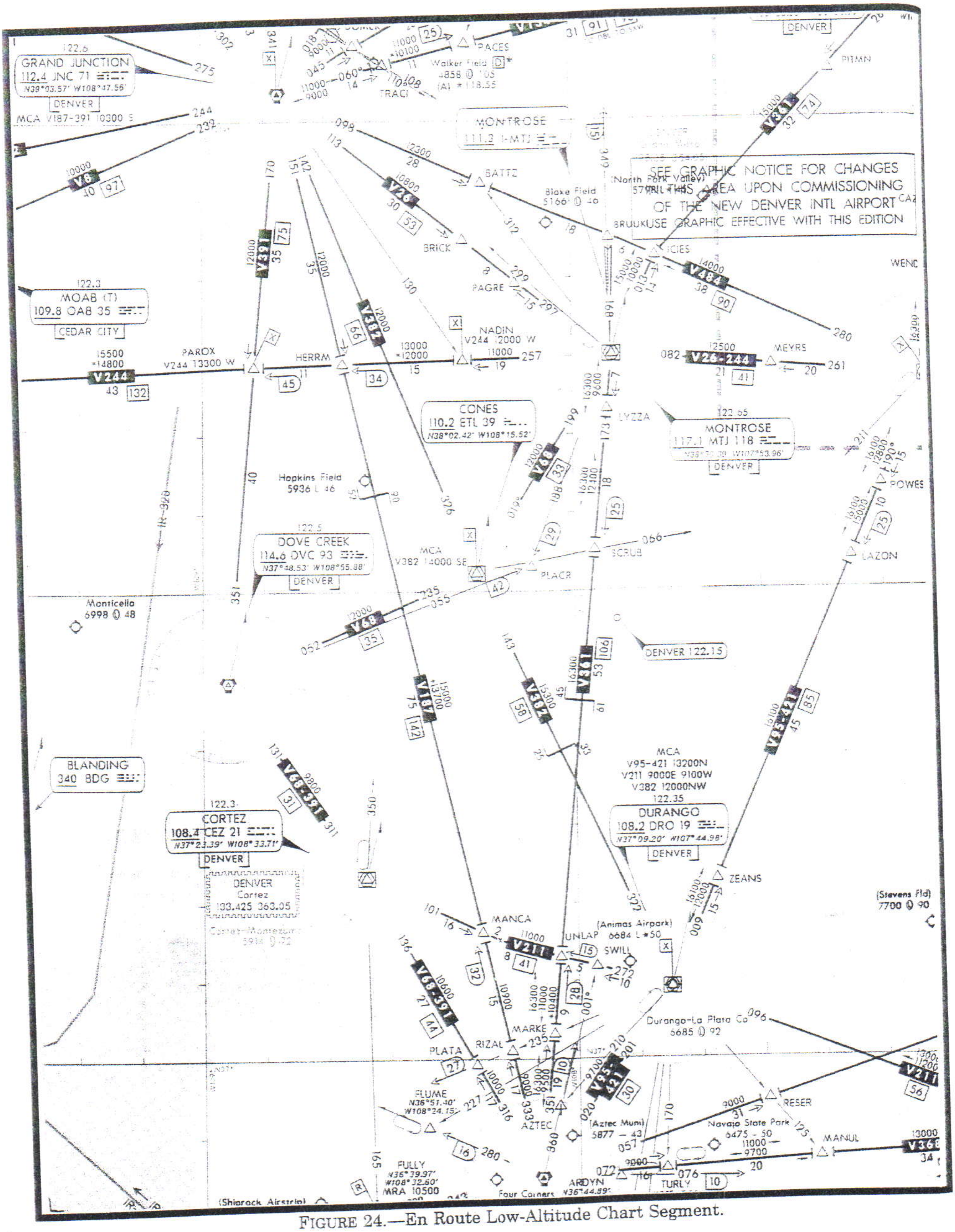
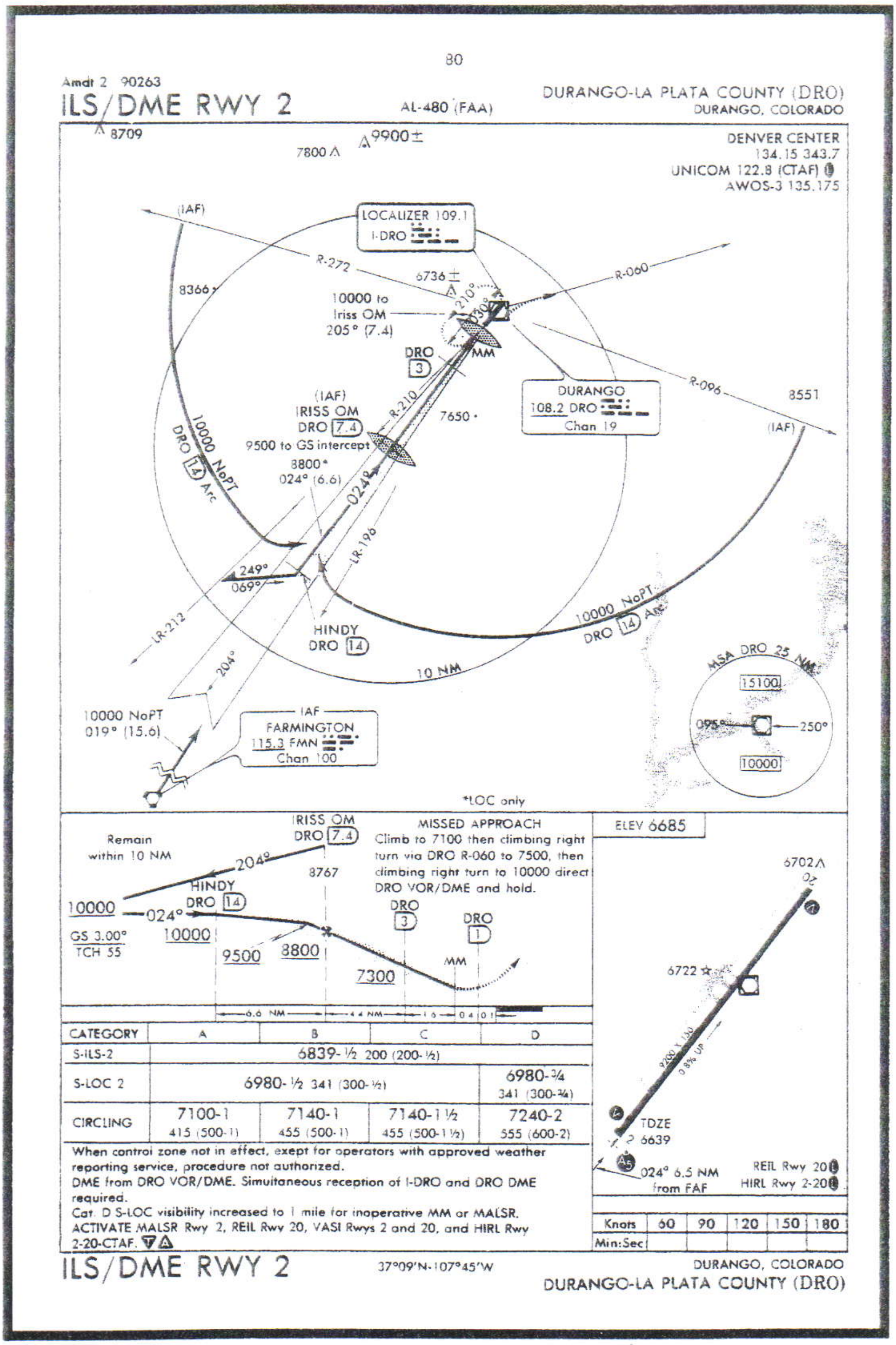


FIGURE 24.—En Route Low-Altitude Chart Segment.



CATEGORY	A	B	C	D
S-ILS-2	6839-½ 200 (200-½)			
S-LOC 2	6980-½ 341 (300-½)			6980-¾ 341 (300-¾)
CIRCLING	7100-1 415 (500-1)	7140-1 455 (500-1)	7140-1½ 455 (500-1½)	7240-2 555 (600-2)

FIGURE 25.—ILS/DME RWY 2.

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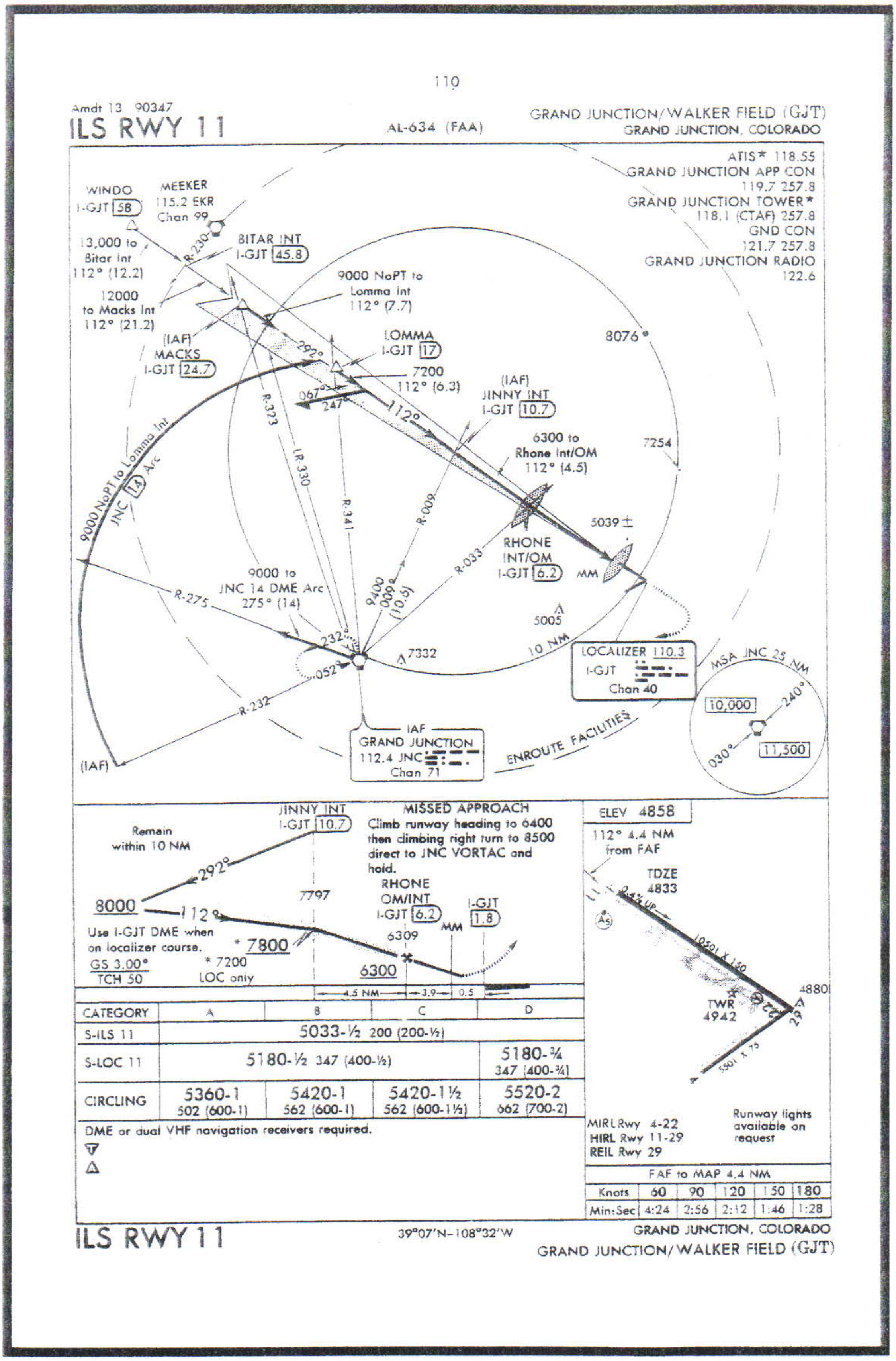

CATEGORY	A	B	C	D
S-ILS 11	5033-½ 200 (200-½)			
S-LOC 11	5180-½ 347 (400-½)			5180-¾ 347 (400-¾)
CIRCLING	5360-1 502 (600-1)	5420-1 562 (600-1)	5420-1½ 562 (600-1½)	5520-2 662 (700-2)

FAF to MAP 4.4 NM					
Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

FIGURE 26.—ILS RWY 11.

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Form Approved: OMB No. 2120-0034

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION **FLIGHT PLAN**	(FAA USE ONLY) ☐ PILOT BRIEFING ☐ STOPOVER	☐ VNR	TIME STARTED	SPECIALIST INITIALS

1. TYPE	2. AIRCRAFT IDENTIFICATION	3. AIRCRAFT TYPE/ SPECIAL EQUIPMENT	4. TRUE AIRSPEED	5. DEPARTURE POINT	6. DEPARTURE TIME PROPOSED (Z)	ACTUAL (Z)	7. CRUISING ALTITUDE
VFR / X IFR / DVFR	N132SM	C 182/	155 KTS	MFR			8,000

8. ROUTE OF FLIGHT
GNATS 1, MOURN, V121 EUG

9. DESTINATION (Name of airport and city)	10. EST. TIME ENROUTE HOURS	MINUTES	11. REMARKS
MAHLON/SWEET FIELD, EUGENE, OR.			INSTRUMENT TRAINING FLIGHT

12. FUEL ON BOARD HOURS	MINUTES	13. ALTERNATE AIRPORT(S)	14. PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE / 17. DESTINATION CONTACT/TELEPHONE (OPTIONAL)	15. NUMBER ABOARD
		N/R		

16. COLOR OF AIRCRAFT	CIVIL AIRCRAFT PILOTS. FAR Part 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed $1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVFR flight plans.

FAA Form 7233-1 (8-82) CLOSE VFR FLIGHT PLAN WITH ____________ FSS ON ARRIVAL

AIRCRAFT INFORMATION

MAKE CESSNA MODEL 182

N 132SM Vso 57

AIRCRAFT EQUIPMENT/STATUS**

**NOTE: X= OPERATIVE INOP= INOPERATIVE N/A= NOT APPLICABLE
TRANSPONDER: X (MODE C) X ILS: (LOCALIZER) X (GLIDE SLOPE) N/A
VOR NO. 1 X (NO. 2) X ADF: X RNAV: N/A
VERTICAL PATH COMPUTER: NA DME: X
MARKER BEACON: (AUDIO) INOP (VISUAL) Inop.

FIGURE 27.—Flight Plan and Aircraft Information.

FLIGHT LOG

MEDFORD - JACKSON CO. AIRPORT TO HAHLON/SWEET FIELD, EUGENE, OR.

CHECK POINTS		ROUTE		WIND	SPEED-KTS		DIST	TIME		FUEL	
FROM	TO	ALTITUDE	COURSE	TEMP	TAS	GS	NM	LEG	TOT	LEG	TOT
MFR	MERLI	GNATS 1 CLIMB	270°		155			:11:0			
	MOURN	V121 8000	333°			AVER. 135					
	RBG	V121 8000	287°								
	OTH	V121 8000	272°								
	EUG	APPROACH	026°								
APPROACH & LANDING		DESCENT						:10:0			
	SWEET FIELD										

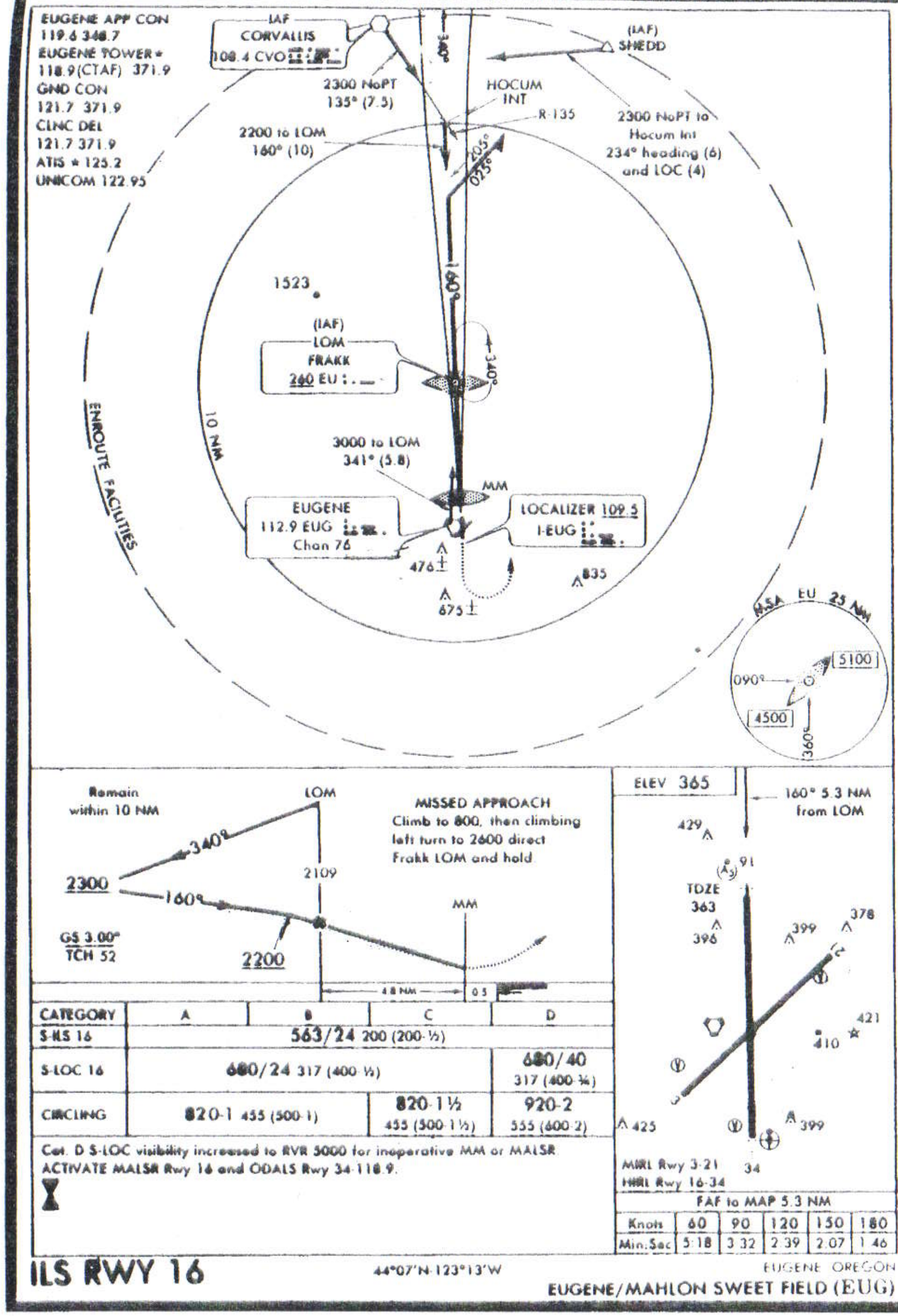
OTHER DATA:
NOTE:

MAG. VAR. 20° E.
AVERAGE G.S. 135 KTS. FOR GNATS 1 DEPARTURE CLIMB.

FLIGHT SUMMARY

TIME	FUEL (LB)	
		EN ROUTE
		RESERVE
		MISSED APPR.
		TOTAL

FIGURE 28.—Flight Planning Log.



EUGENE

§ **MAHLON SWEET FLD** (EUG) 7 NW GMT-8(-7DT) 44°07'19"N 123°13'03"W — KLAMATH FALLS H-1A, L-1B IAP

365 B S4 **FUEL** 100LL, JET A OX 1, 2, 3, 4 TPA—1165(800) CFR Index B

RWY 16-34: H6202X150 (ASPH-PFC) S-155, D-190, DT-300 HIRL

RWY 16: MALSR. **RWY 34:** ODALS. VASI(V4L)—GA 3.0°TCH 54'

RWY 03-21: H5221X150 (ASPH) S-60, D-68, DT-105 MIRL

RWY 03: VASI(V4L)—GA 3.0°TCH 50.4'. Trees. **RWY 21:** VASI(V4L)—GA 3.0°TCH 53.2'. Trees.

AIRPORT REMARKS: Attended continuously, phone 503-687-5431 between 0100-1600Z‡ CAUTION — migratory waterfowl and other birds in vicinity. ACTIVATE MALSR Rwy 16 and ODALS Rwy 34—118.9. MIRL Rwy 03-21 unavailable when twr clsd. CLOSED to unscheduled air carrier operations with more than 30 passenger seats during twr closure except PPR call arpt manager 503-687-5430. Taxiways F and G closed to Part 121 opns. Terminal apron available to scheduled air carriers and flights with prior permission. Control Zone effective continuously.

COMMUNICATIONS: CTAF 118.9 **ATIS** 125.2 (1400-0800Z‡) **UNICOM** 122.95

PORTLAND FSS (PDX) LC 688-8411. NOTAM FILE EUG.

EUGENE RCO 122.3 122.1R 112.9T (PORTLAND FSS)

Ⓡ **EUGENE APP/DEP CON** 119.6 (280°-090°) 120.2 (091°-279°) (1400-0800Z‡)

Ⓡ **SEATTLE CENTER APP/DEP CON** 125.8 (0800-1400Z‡)

EUGENE TOWER 118.9 (1400-0800Z‡) **GND CON/CLNC DEL** 121.7

STAGE II SVC ctc **APP CON** within 25 NM

RADIO AIDS TO NAVIGATION: NOTAM FILE EUG.

EUGENE (H) ABVORTAC 112.9 EUG Chan 76 44°07'16"N 123°13'18"W at fld. 360/20E.

General outlook on TWEB 0600-1300Z‡.

FRAKK NDB (LOM) 260 EU 44°12'47"N 123°13'10"W 179° 5.5 NM to fld.

NDB unusable 190°-270° beyond 11 NM

ILS 109.5 I-EUG RWY 16 LOM FRAKK NDB

ILS unmonitored when tower closed

FIGURE 29.—ILS RWY 16 (EUG) and Excerpt from Airport/Facility Directory.

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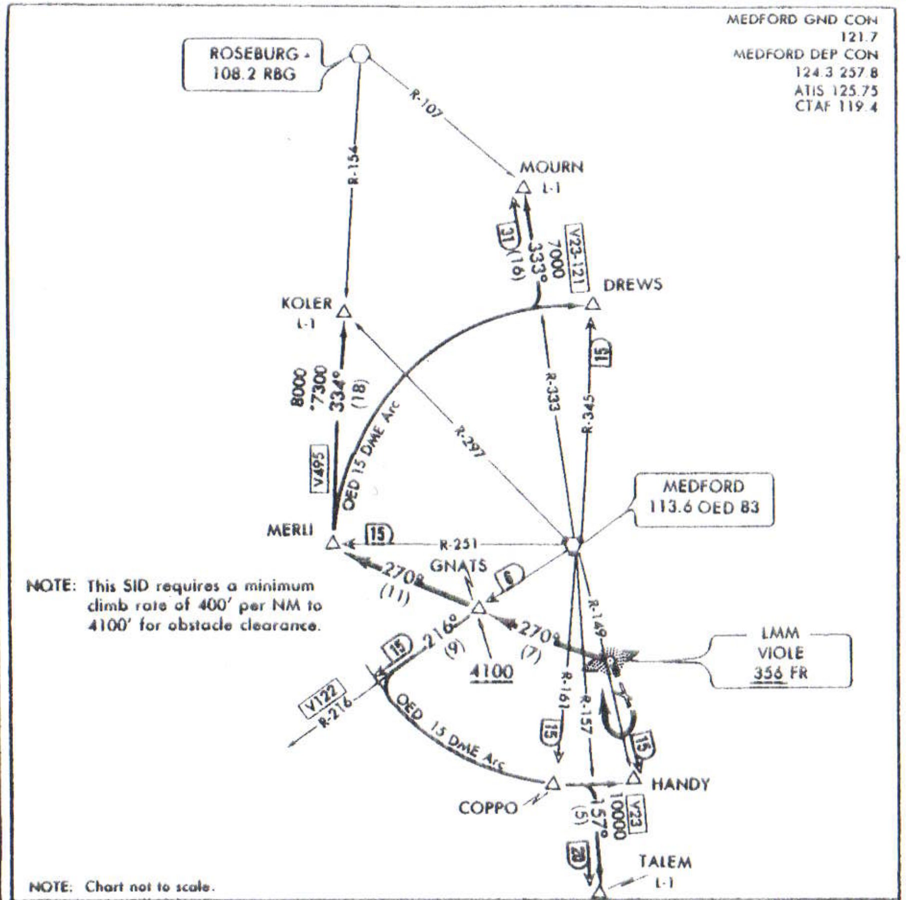


DEPARTURE ROUTE DESCRIPTION

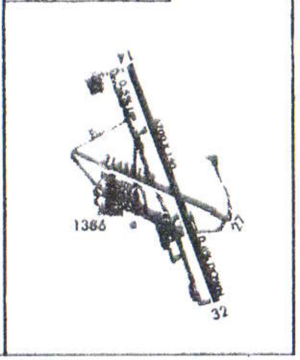
Climb direct to the VIOLE ILS Middle Compass Locator (south take-off turn right), then climb on the 270° magnetic bearing from the LMM to GNATS INT, cross GNATS INT at or above 4100; thence via (transition) or (route).

COPPO TRANSITION (GNATS1.COPPO): Turn left via R-216 to 15 DME Fix, thence turn left via MEDFORD 15 DME Arc to COPPO DME Fix.

KOLER TRANSITION (GNATS1.KOLER): Continue via 270° magnetic bearing from the LMM to MERLI INT, turn right via ROSEBURG R-154 to KOLER INT.

(Continued on next page)

ELEV 1331



GNATS ONE DEPARTURE (GNATS1.GNATS) MEDFORD, OREGON MEDFORD-JACKSON CO

GNATS ONE DEPARTURE (GNATS1.GNATS) MEDFORD-JACKSON CO MEDFORD, OREGON

DEPARTURE ROUTE DESCRIPTION (Continued)

MOURN TRANSITION (GNATS1.MOURN): Continue via 270° magnetic bearing from the LMM to MERLI INT, turn right via MEDFORD 15 DME ARC to intercept V23-121 to MOURN INT.

DREWS TRANSITION (GNATS1.DREWS): Continue via 270° magnetic bearing from the LMM to MERLI INT, turn right via MEDFORD 15 DME ARC to DREWS INT.

TALEM TRANSITION (GNATS1.TALEM): Turn left via MEDFORD R-216 to 15 DME Fix thence turn left via MEDFORD 15 DME ARC to Intercept V23 to TALEM INT.

HANDY TRANSITION (GNATS1.HANDY): Turn left via MEDFORD R-216 to 15 DME Fix, thence turn left via MEDFORD 15 DME Arc to HANDY DME Fix.

GNATS ONE DEPARTURE (GNATS1.GNATS) MEDFORD, OREGON MEDFORD-JACKSON CO

§ **MEDFORD-JACKSON CO** (MFR) 3 N GMT–8(–7DT) 42°22'21"N 122°52'17"W **KLAMATH FALLS**
1331 B S4 **FUEL** 80, 100, 100LL, JET A1 + OX 1, 3 CFR Index B **H-1A, L-1A**
RWY 14-32: H6700X150 (ASPH-PFC) S-200, D-200, DT-400 HIRL 5% up S **IAP**
RWY 14: MALSR. Trees. **RWY 32:** REIL. VASI(V4L)—GA 3.0° TCH 49'. Road.
RWY 09-27: H3145X150 (ASPH) S-50, D-70, DT-108 MIRL
RWY 27: Road.
AIRPORT REMARKS: Attended continuously. CLOSED to unscheduled Part 121 air carriers operation, without prior approval, call 503-776-7222. Night refueling delay sunset-1500Z‡, ctc TOWER. Rwy 09-27 clsd to acft over 12,500 lbs GWT. Rwy 09/27 CLOSED when tower clsd. Rwy lgts 14/32 operate med ints when tower closed. ACTIVATE MALSR 14—119.4. Flocks of large waterfowl in vicinity Nov-May
COMMUNICATIONS: CTAF 119.4 **ATIS** 125.75 **UNICOM** 122.95
NORTH BEND FSS (OTH) LC 773-3256. NOTAM FILE MFR.
RCO 122.65 122.1R 113.6T (NORTH BEND FSS)
APP CON 124.3 (1400-0800Z‡) **DEP CON** 124.3 (1400-0800Z‡)
SEATTLE CENTER APP/DEP CON 125.3 (0800-1400Z‡)
TOWER 119.4 (1400-0800Z‡) **GND CON** 121.7
VFR ADVSY SVC ctc TOWER
RADIO AIDS TO NAVIGATION: NOTAM FILE OTH. VHF/DF ctc Medford TOWER
(H) **ABVORTAC** 113.6 OED Chan 83 42°28'47"N 122°54'43"W 146°6.1 NM to fld. 2080/19E
VORTAC unusable.
160°-165° beyond 35 NM below 8900' 280°-345° beyond 30 NM below 6500'
198°-205° beyond 35 NM below 8500' 345°-360° beyond 35 NM below 6800'
250°-280° beyond 25 NM below 6100'
PUMIE NDB (LOM) 373 MF 42°27'04"N 122°54'44"W 140°4.5 NM to fld. NOTAM FILE MFR
LOM unusable 150°-165° and 260°-265° beyond 5 miles.
VIOLE NDB (LMM) 356 FR 42°23'22"N 122°52'47"W 140°0.5 NM to fld. NOTAM FILE MFR
LMM unusable 305°-335° beyond 10 NM. all altitudes
ILS/DME 110.3 I-MFR Chan 40 Rwy 14 LOM PUMIE NDB. LMM VIOLE NDB. ILS unmonitored when tower closed. Localizer unusable inside threshold.

FIGURE 30.—GNATS One Departure and Excerpt from Airport/Facility Directory.

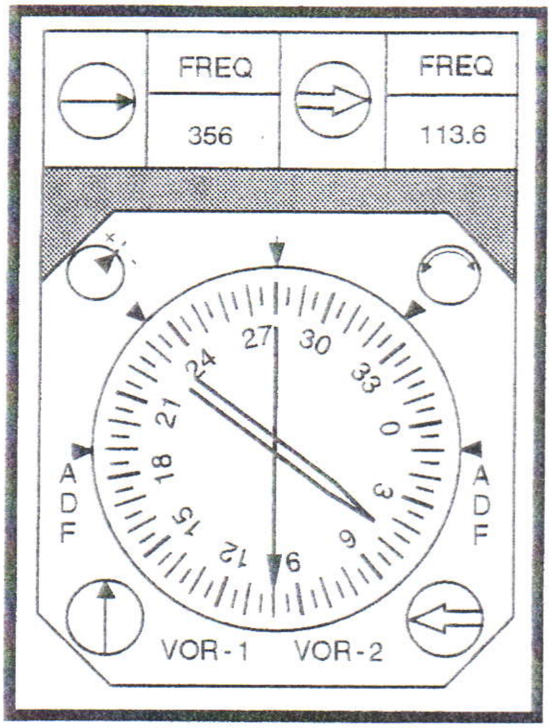


FIGURE 30A.—RMI Indicator.

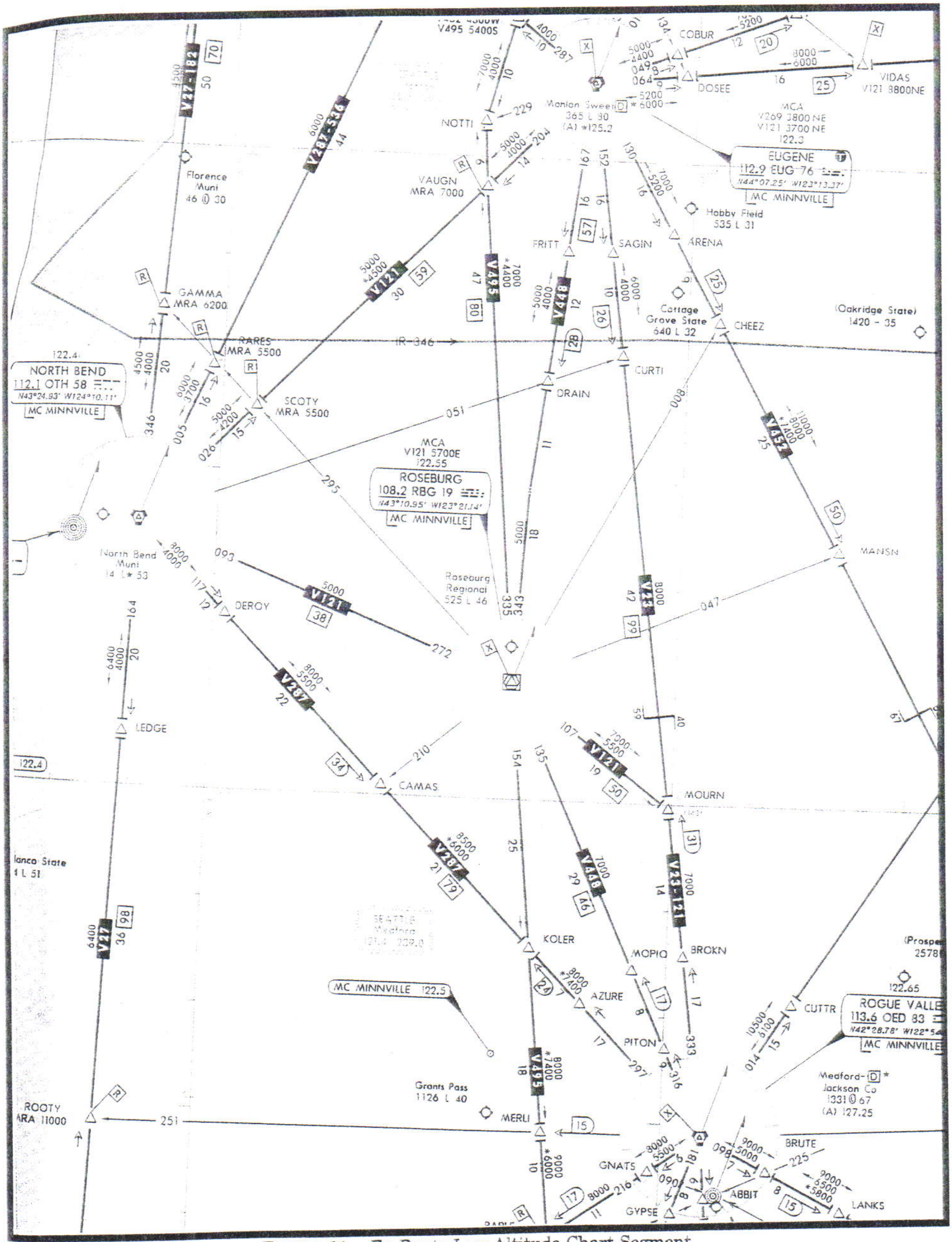


FIGURE 31.—En Route Low-Altitude Chart Segment.

Form Approved: OMB No. 2120-0034

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION **FLIGHT PLAN**	(FAA USE ONLY) ☐ PILOT BRIEFING ☐ STOPOVER	☐ VNR	TIME STARTED	SPECIALIST INITIALS

1. TYPE	2. AIRCRAFT IDENTIFICATION	3. AIRCRAFT TYPE/ SPECIAL EQUIPMENT	4. TRUE AIRSPEED	5. DEPARTURE POINT	6. DEPARTURE TIME PROPOSED (Z)	ACTUAL (Z)	7. CRUISING ALTITUDE
VFR X IFR DVFR	N4078A	PA 31/	180 KTS	HOT			8,000

8. ROUTE OF FLIGHT
HOT V573, TXK, TXK.BUJ3

9. DESTINATION (Name of airport and city)	10. EST. TIME ENROUTE HOURS	MINUTES	11. REMARKS
DALLAS ADDISON AIRPORT DALLAS, TX			

12. FUEL ON BOARD HOURS	MINUTES	13. ALTERNATE AIRPORT(S)	14. PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE / 17. DESTINATION CONTACT/TELEPHONE (OPTIONAL)	15. NUMBER ABOARD
		N/A		2

16. COLOR OF AIRCRAFT
TAN/WHITE

CIVIL AIRCRAFT PILOTS. FAR Part 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed $1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVFR flight plans.

FAA Form 7233-1 (8-82)

CLOSE VFR FLIGHT PLAN WITH ______________ FSS ON ARRIVAL

AIRCRAFT INFORMATION

MAKE Piper MODEL PA-31

N 4078A Vso 74

AIRCRAFT EQUIPMENT/STATUS**

**NOTE: X= OPERATIVE INOP= INOPERATIVE N/A= NOT APPLICABLE
TRANSPONDER: X (MODE C) X ILS: (LOCALIZER) X (GLIDE SLOPE) X
VOR NO. 1 X (NO. 2) X ADF: X RNAV: X
VERTICAL PATH COMPUTER: N/A DME: X
MARKER BEACON: X (AUDIO) X (VISUAL) X

FIGURE 32.—Flight Plan and Aircraft Information.

FLIGHT LOG

HOT SPRINGS, MEMORIAL FIELD TO DALLAS, ADDISON, TX.

CHECK POINTS		ROUTE	COURSE	WIND	SPEED-KTS		DIST	TIME		FUEL	
FROM	TO	ALTITUDE		TEMP	TAS	GS	NM	LEG	TOT	LEG	TOT
HOT	MARKI	V573 CLIMB	221°					:12:00			
	TXK	V573 8000	210°		180						
	TXK BUJ3	BUJ3 8000	272°								
	BUJ3	BUJ3 DESCENT	239°								
APPROACH & LANDING								:10:00			
	DALLAS ADDISON										

OTHER DATA:
NOTE: MAG. VAR. 4° E.

FLIGHT SUMMARY

TIME	FUEL (LB)	
		EN ROUTE
		RESERVE
		MISSED APPR.
		TOTAL

FIGURE 33.—Flight Planning Log.

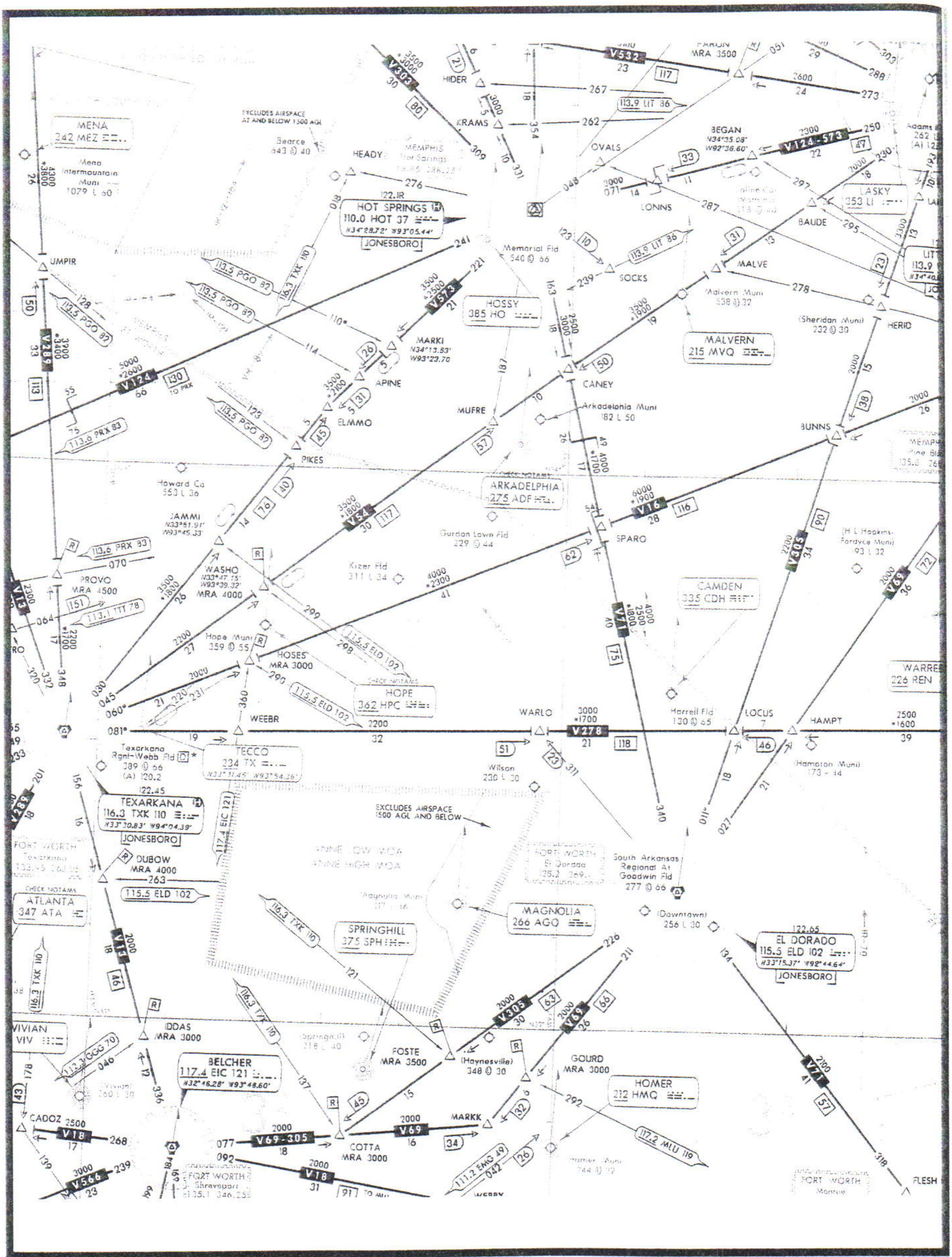


FIGURE 34.—En Route Chart.

ARKANSAS

HOT SPRINGS

MEMORIAL FLD (HOT) 3 SW UTC–6(–5DT) 34°28'41"N 93°05'46"W — **MEMPHIS** **H-4G, L-14E** **IAP**

540 B S4 **FUEL** 100LL, JET A ARFF Index Ltd.

RWY 05-23: H6595X150 (ASPH-GRVD) S-75, D-125, DT-210, DDT-400. HIRL 0.6% up NE

RWY 05: MALSR. Tree. **RWY 23:** REIL. Thld dsplcd 490'. Tree.

RWY 13-31: H4099X150 (ASPH) S-28, D-36, DT-63 MIRL

RWY 13: REIL. Road/Trees. **RWY 31:** Pole.

AIRPORT REMARKS: Attended 1130-0400Z‡. CLOSED to unscheduled air carrier ops with more than 30 passenger seats except PPR, call arpt manager 501-624-3306. Last 500' Rwy 05 CLOSED to takeoffs. Rwy 13-31 fair with extensive loose grvl-pavement debris. ACTIVATE HIRL Rwy 05-23 and MALSR Rwy 05—CTAF. Rwy 23 REIL out of svc indefinitely. Control Zone effective 1200-0400Z‡.

COMMUNICATIONS: CTAF/UNICOM 123.0

JONESBORO FSS (JBR) TF 1-800-WX-BRIEF. NOTAM FILE HOT.

HOT SPRINGS RCO 122.1R 110.0T (LITTLE ROCK FSS)

MEMPHIS CENTER APP/DEP CON: 118.85

RADIO AIDS TO NAVIGATION: NOTAM FILE HOT.

HOT SPRINGS (L) VOR/DME 110.0 HOT Chan 37 34°28'43"N 93°05'26"W at fld. 530/4E.

HOSSY NDB (HW/LOM) 385 HO 34°25'21"N 93°11'22"W 050° 5.7 NM to fld.

ILS/DME 111.5 I-HOT Chan 52 Rwy 05 LOM HOSSY NDB. Unmonitored.

FIGURE 34A.—Airport/Facility Directory (HOT).

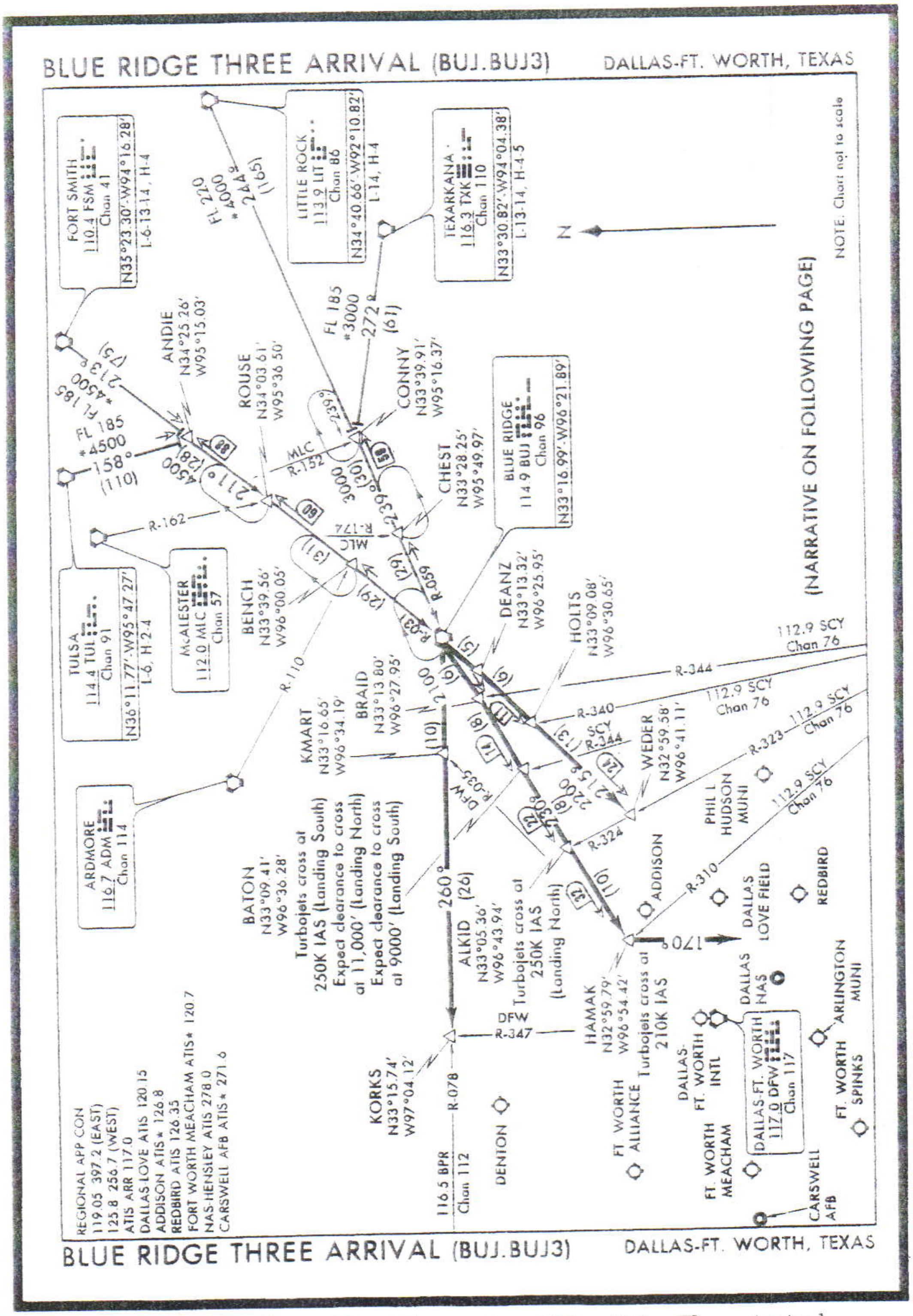


FIGURE 35.—En Route Chart Segment and Blue Ridge Three Arrival.

91094 SL-6039 (FAA)

BLUE RIDGE THREE ARRIVAL (BUJ.BUJ3) DALLAS-FT. WORTH, TEXAS

ARRIVAL DESCRIPTION

FORT SMITH TRANSITION (FSM.BUJ3): From over FSM VORTAC via FSM R-213 and BUJ R-031 to BUJ VORTAC. Thence . . . .
LITTLE ROCK TRANSITION (LIT.BUJ3): From over LIT VORTAC via LIT R-244 and BUJ R-059 to BUJ VORTAC. Thence . . . .
TEXARKANA TRANSITION (TXK.BUJ3): From over TXK VORTAC via TXK R-272 and BUJ R-059 to BUJ VORTAC. Thence . . . .
TULSA TRANSITION (TUL.BUJ3): From over TUL VORTAC via TUL R-158 and BUJ R-031 to BUJ VORTAC. Thence . . . .
TURBOJETS LANDING DALLAS-FT WORTH INTL: (Landing South): From over BUJ VORTAC via BUJ R-230 to HAMAK INT. Expect vectors at BATON INT. (Landing North): From over BUJ VORTAC via BUJ R-230 to HAMAK INT, thence heading 170° for vector to final approach course.
NON-TURBOJETS LANDING DALLAS-FT WORTH INTL: (Landing South): From over BUJ VORTAC via BUJ R-230 to HAMAK INT. Expect vectors at BATON INT. (Landing North): From over BUJ VORTAC via BUJ R-215 to WEDER INT. Expect vectors to final approach course.
ALL AIRCRAFT LANDING DALLAS-LOVE FIELD, ADDISON, REDBIRD, NAS DALLAS, and PHIL L. HUDSON: (Landing South/North): From over BUJ VORTAC via BUJ R-215 to WEDER INT. Expect vectors to final approach course.
ALL AIRCRAFT LANDING MEACHAM, CARSWELL AFB, ALLIANCE, ARLINGTON, DENTON and FT. WORTH SPINKS: (Landing South/North): From over BUJ VORTAC via BUJ R-260 to KORKS INT. Expect vectors to final approach course.

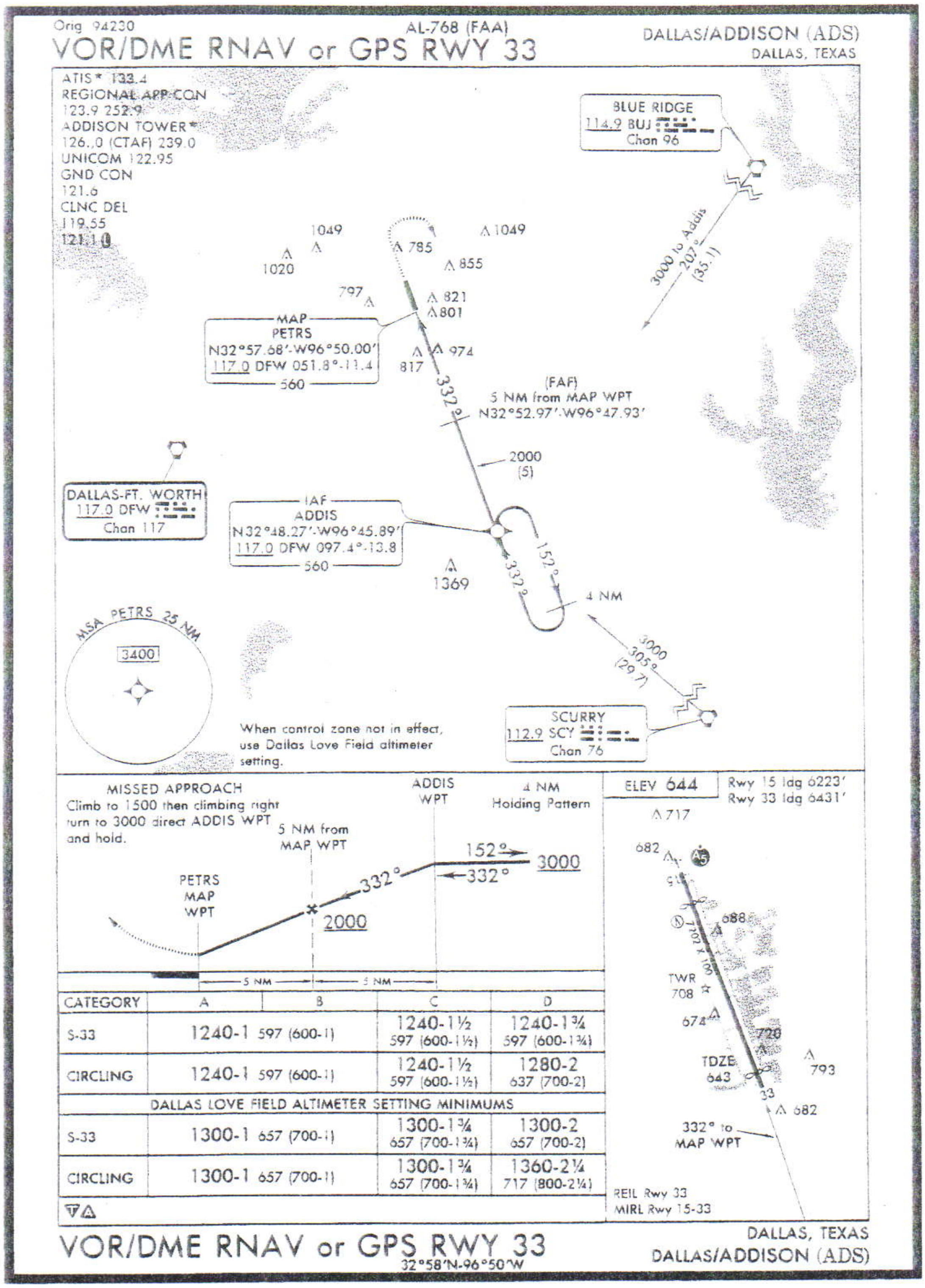
FIGURE 35A.—Blue Ridge Three Arrival Description.

TEXAS 145

DALLAS

ADDISON (ADS) 9 N UTC–6(–5DT) 32°58'06"N 96°50'10"W — DALLAS-FT. WORTH
643 B S4 **FUEL** 100LL, JET A — H-2K, 4F, 5B, L-13C, A
RWY 15-33: H7201X100 (ASPH) S-80, D-100, DT-160 MIRL — IAP
RWY 15: MALSR. VASI(V4R)—GA 3.0°TCH 51'. Thld dsplcd 980'. Ground.
RWY 33: REIL. Thld dsplcd 468'. Road.
AIRPORT REMARKS: Attended continuously. Numerous flocks of birds on and in vicinity of arpt. Use extreme care: numerous 200' AGL buildings within 1 mile East, and South of arpt, transmission towers and water tanks West of arpt. Rwy 33 REIL out of svc indefinitely. ACTIVATE MALSR Rwy 15—CTAF. Rwy limited to maximum gross weight 120,000 pounds. Control Zone effective 1200-0400Z‡.
WEATHER DATA SOURCES: LAWRS
COMMUNICATIONS: CTAF 121.1 **ATIS** 126.8 (1200-0400Z‡) **UNICOM** 122.95
FORT WORTH FSS (FTW) TF 1-800-WX-BRIEF. NOTAM FILE ADS.
Ⓡ **REGIONAL APP CON** 123.9 Ⓡ **REGIONAL DEP CON** 124.3
TOWER 121.1 (1200-0400Z‡) **GND CON** 121.6 **CLNC DEL** 119.55
RADIO AIDS TO NAVIGATION: NOTAM FILE DAL.
LOVE (L) VORW/DME 114.3 LUE Chan 90 32°50'51"N 96°51'42"W 002° 7.4 NM to fld. 490/08E.
BRONS NDB (LOM) 407 AD 33°02'40"N 96°52'13"W 153° 4.9 NM to fld.
ILS/DME 110.1 I-ADS Chan 38 Rwy 15. LOM BRONS NDB. Unmonitored when tower closed.
ILS 110.1 I-TBQ Rwy 33 LOC only. Unmonitored when twr clsd.

FIGURE 36.—Excerpt from Airport/Facility Directory.



CATEGORY	A	B	C	D
S-33	1240-1 597 (600-1)		1240-1½ 597 (600-1½)	1240-1¾ 597 (600-1¾)
CIRCLING	1240-1 597 (600-1)		1240-1½ 597 (600-1½)	1280-2 637 (700-2)
DALLAS LOVE FIELD ALTIMETER SETTING MINIMUMS				
S-33	1300-1 657 (700-1)		1300-1¾ 657 (700-1¾)	1300-2 657 (700-2)
CIRCLING	1300-1 657 (700-1)		1300-1¾ 657 (700-1¾)	1360-2¼ 717 (800-2¼)

FIGURE 36A.—RNAV RWY 33 (ADS).

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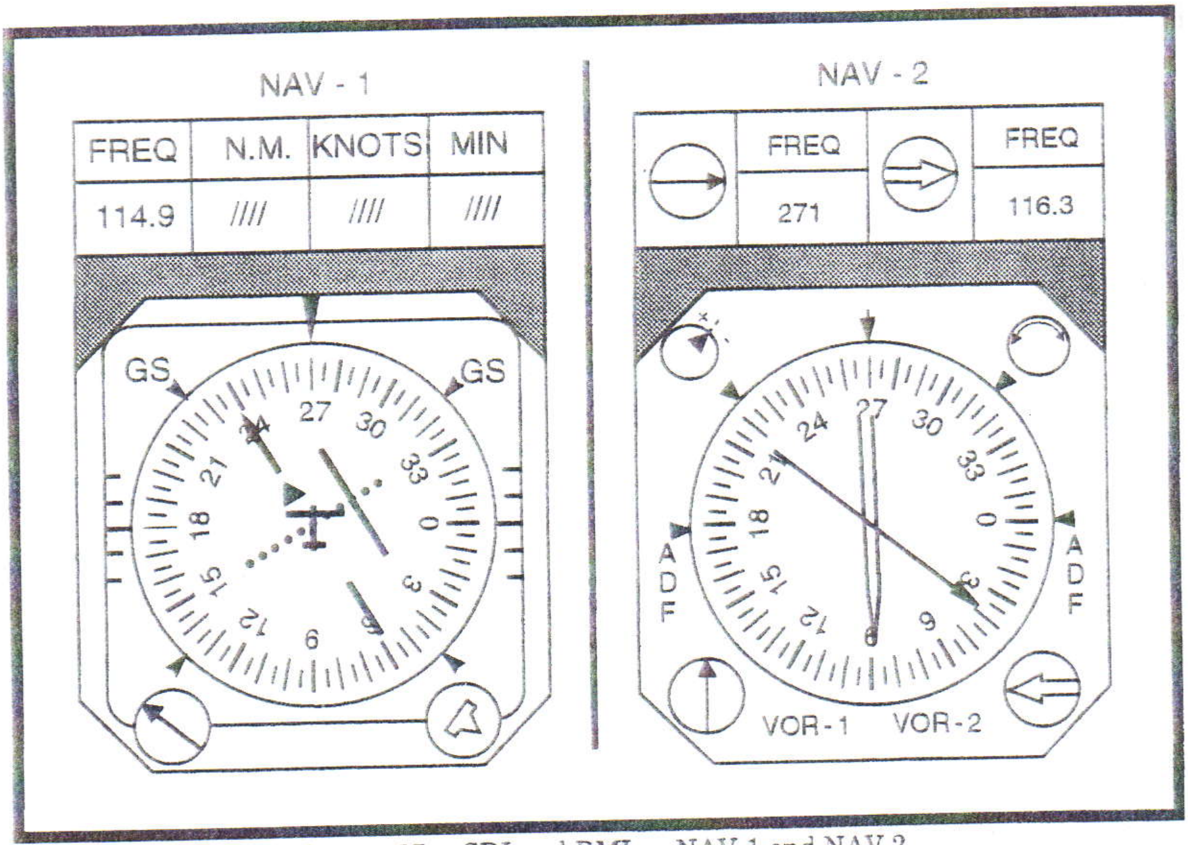

FIGURE 37.—CDI and RMI — NAV 1 and NAV 2.

Form Approved: OMB No. 2120-0034

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION **FLIGHT PLAN**	(FAA USE ONLY) ☐ PILOT BRIEFING ☐ VNR ☐ STOPOVER	TIME STARTED	SPECIALIST INITIALS

1. TYPE	2. AIRCRAFT IDENTIFICATION	3. AIRCRAFT TYPE/ SPECIAL EQUIPMENT	4. TRUE AIRSPEED	5. DEPARTURE POINT	6. DEPARTURE TIME PROPOSED (Z)	ACTUAL (Z)	7. CRUISING ALTITUDE
VFR							
X IFR							
DVFR	N4321P	C402/	156 KTS	BGS			11000

8. ROUTE OF FLIGHT: DIRECT BGS, V16 ABI, ABI.AQN2

9. DESTINATION (Name of airport and city)	10. EST. TIME ENROUTE HOURS	MINUTES	11. REMARKS
DALLAS FT. WORTH DFW			

12. FUEL ON BOARD HOURS	MINUTES	13. ALTERNATE AIRPORT(S)	14. PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE / 17. DESTINATION CONTACT/TELEPHONE (OPTIONAL)	15. NUMBER ABOARD
		N/A		2

16. COLOR OF AIRCRAFT	
RED/BLUE/WHITE	CIVIL AIRCRAFT PILOTS. FAR Part 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed $1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVFR flight plans.

FAA Form 7233-1 (8-82) CLOSE VFR FLIGHT PLAN WITH ________________ FSS ON ARRIVAL

AIRCRAFT INFORMATION

MAKE Cessna MODEL 402C

N 4321P Vso 71

AIRCRAFT EQUIPMENT/STATUS**

**NOTE: X= OPERATIVE INOP= INOPERATIVE N/A= NOT APPLICABLE
TRANSPONDER: X (MODE C) X ILS: (LOCALIZER) X (GLIDE SLOPE) X
VOR NO. 1 X (NO. 2) X ADF: X RNAV: X
VERTICAL PATH COMPUTER: N/A DME: X
MARKER BEACON: X (AUDIO) X (VISUAL) X

FIGURE 38.—Flight Plan and Aircraft Information.

FLIGHT LOG

BIG SPRING McMAHON-WRINKLE TO DALLAS FT. WORTH (DFW)

CHECK POINTS		ROUTE	COURSE	WIND	SPEED-KTS		DIST	TIME		FUEL	
FROM	TO	ALTITUDE		TEMP	TAS	GS	NM	LEG	TOT	LEG	TOT
21XS	BGS	DIRECT CLIMB	DIRECT					:06:0			
	LORAN	V16 11,000	075°								
	ABI	V16 11,000	076°		156						
	COTTN	DIRECT 11,000	087°								
	AQN	AQN2	075°								
	CREEK	AQN2	040°								
APPROACH & LANDING		RADAR VEC-						:08:0			
	DFW AIRPORT	DESCENT									

OTHER DATA:
NOTE: MAG. VAR. 11° E.
(STAR) ACTON TWO ARRIVAL (AQN2)

FLIGHT SUMMARY

TIME	FUEL (LB)	
		EN ROUTE
		RESERVE
		MISSED APPR.
		TOTAL

BIG SPRING McMAHON-WRINKLE (21XS) 2SW UTC-6(-5DT).
32°12'45"N101°31"17"W
2572 B S4FUEL 100LL, JET A
RWY 17-35: H8803X100 (ASPH-CONC) S-44, D-62, DDT-101 MIRL
RWY 17:SSALS.PVASI(ASPH)-GA3.0°TCH 41'.
RWY 06-24:H4600X75(ASPH) MIRL
RWY 24:PVASI(PSIL)-GA3.55°TCH31'. P-line.
AIRPORT REMARKS: Attended 1400-2300Z . For fuel after hours call 915-263-3958. ACTIVATE MIRL Rwy 06-24 and Rwy 17-35, SSALS Rwy 17 and PVASI Rwy 17 and 24-CTAF.
COMMUNICATIONS:CTAF/UNICOM 122.8
SAN ANGELOSFSS (SJT) TF 1-800-WX-BRIEF. NOTAM FILE SJT.
RCO 122.4(SAN ANGELOFSS)
FORT WORTH CENTER APP/DEP CON 133.7
RADIO AIDS TO NAVIGATION: NOTAM FILE SJT.
(L) VORTACW 144.3 BGS Chan 90 32°23'08"N 101°10.5NM to fld. 2670/11E.

DALLAS-FT. WORTH
H-21, 5A, L-13A, 15B
IAP

EXCERPT FROM AIRPORT/FACILITY DIRECTORY (21 XS)

FIGURE 39.—Flight Log and Excerpt from Airport/Facility Directory (21 XS).

HELENA REGIONAL (HLN) 2 NE UTC-7(-6DT) 46°36'25"N 111°58'55"W — GREAT FALLS
3873 B S4 FUEL 100LL, JET A OX 1,3 AOE ARFF Index B — H-1C, L-9B
RWY 09-27: H9000X150 (ASPH-PFC) S-100, D-160, DT-250 HIRL — IAP
RWY 09: VASI(V4L)—GA 3.0°TCH 45'. Ground. RWY 27: MALSR. VASI(V4L)—GA 3.0°TCH 55'. Rgt tfc.
RWY 05-23: H4599X75 (ASPH-PFC) S-21, D-30
RWY 05: Road. RWY 23: Fence. Rgt tfc.
RWY 16-34: H2979X75 (ASPH) S-21, D-30 MIRL
RWY 34: Ground. Rgt tfc.
AIRPORT REMARKS: Attended 1200-0800Z‡. East 2400' Taxiway C and first 900' Rwy 27 not visible from tower. Prior permission for unscheduled FAR 121 operations. Call 406-442-2821. AOE, 1 hour prior notice required, phone 449-1569 1500-0000Z‡, 0000-1500Z‡ 449-1024. Twys A;B; high speed and C (between A and D) not available for air carrier use by acft with greater than 30 passenger seats. Rwy 16-34 and Rwy 05-23 (except between Rwy 09-27 and Twy D) not available for air carrier use by acft with greater than 30 passenger seats. When tower closed, ACTIVATE HIRL Rwy 09-27 and MALSR Rwy 27—CTAF, when twr closed MIRL Rwy 16-34 are off. Ldg fee for all acft over 12,500 lbs. NOTE: See SPECIAL NOTICE—Simultaneous Operations on Intersecting Runways.
COMMUNICATIONS: CTAF 118.3 ATIS 120.4 (Mon-Fri 1300-0700Z‡, Sat-Sun 1300-0500Z‡)
UNICOM 122.95
GREAT FALLS FSS (GTF) TF 1-800-WX-BRIEF. NOTAM FILE HLN.
RCO 122.2 122.1R 117.7T (GREAT FALLS FSS)
APP/DEP CON 119.5 (Mon-Fri 1300-0700Z‡, Sat-Sun 1300-0500Z‡)
SALT LAKE CENTER APP/DEP CON 133.4 (Mon-Fri 0700-1300Z‡, Sat-Sun 0500-1300Z‡)
TOWER 118.3 (Mon-Fri 1300-0700Z‡, Sat-Sun 1300-0500Z‡) GND CON 121.9
RADIO AIDS TO NAVIGATION: NOTAM FILE HLN.
(H) VORTAC 117.7 HLN Chan 124 46°36'25"N 111°57'10"W 254° 1.2 NM to fld. 3810/16E.
VORTAC unusable:
006°-090° beyond 25 NM below 11,000' — 091°-120° beyond 20 NM below 16,000'
121°-240° beyond 25 NM below 10,000' — 355°-006° beyond 15 NM below 17,500'
241°-320° beyond 25 NM below 10,000'
CAPITOL NDB (HW) 317 CVP 46°36'24"N 111°56'11"W 254° 1.9 NM to fld.
NDB unmonitored when tower closed.
HAUSER NDB (MHW) 386 HAU 46°34'08"N 111°45'26"W 268° 9.6 NM to fld.
ILS 110.1 I-HLN Rwy 27 ILS unmonitored when tower closed.

Excerpt from Airport/Facility Directory (21 XS)

BIG SPRING McMAHON-WRINKLE (21XS) 2 SW UTC-6(-5DT). — DALLAS-FT WORTH
32°12'45"N 101°31'17"W — H-2I, 5A, L-13A, 15B
2572 B S4 FUEL 100LL, JET A — IAP
RWY 17-35: H8803X100 (ASPH-CONC) S-44, D-62, DDT-101 MIRL
RWY 17: SSALS. PVASI (PSIL)—GA 3.0° TCH 41'.
RWY 06-24: H4600X75 (ASPH) MIRL
RWY 24: PVASI (PSIL)—GA 3.55°TCH 31'. P-line.
AIRPORT REMARKS: Attended 1400-2300Z‡. For fuel after hours call 915-263-3958. ACTIVATE MIRL Rwy 06-24 and Rwy 17-35, SSALS Rwy 17 and PVASI Rwy 17 and 24—CTAF.
COMMUNICATIONS: CTAF/UNICOM 122.8
SAN ANGELO FSS (SJT) TF 1-800-WX-BRIEF. NOTAM FILE SJT.
RCO 122.4 (SAN ANGELO FSS)
FORT WORTH CENTER APP/DEP CON 133.7
RADIO AIDS TO NAVIGATION: NOTAM FILE SJT.
(L) VORTACW 114.3 BGS Chan 90 32°23'08"N 101°29'00"W 180° 10.5 NM to fld. 2670/11E.

FIGURE 39A.—Excerpt from Airport/Facility Directory (21 XS).

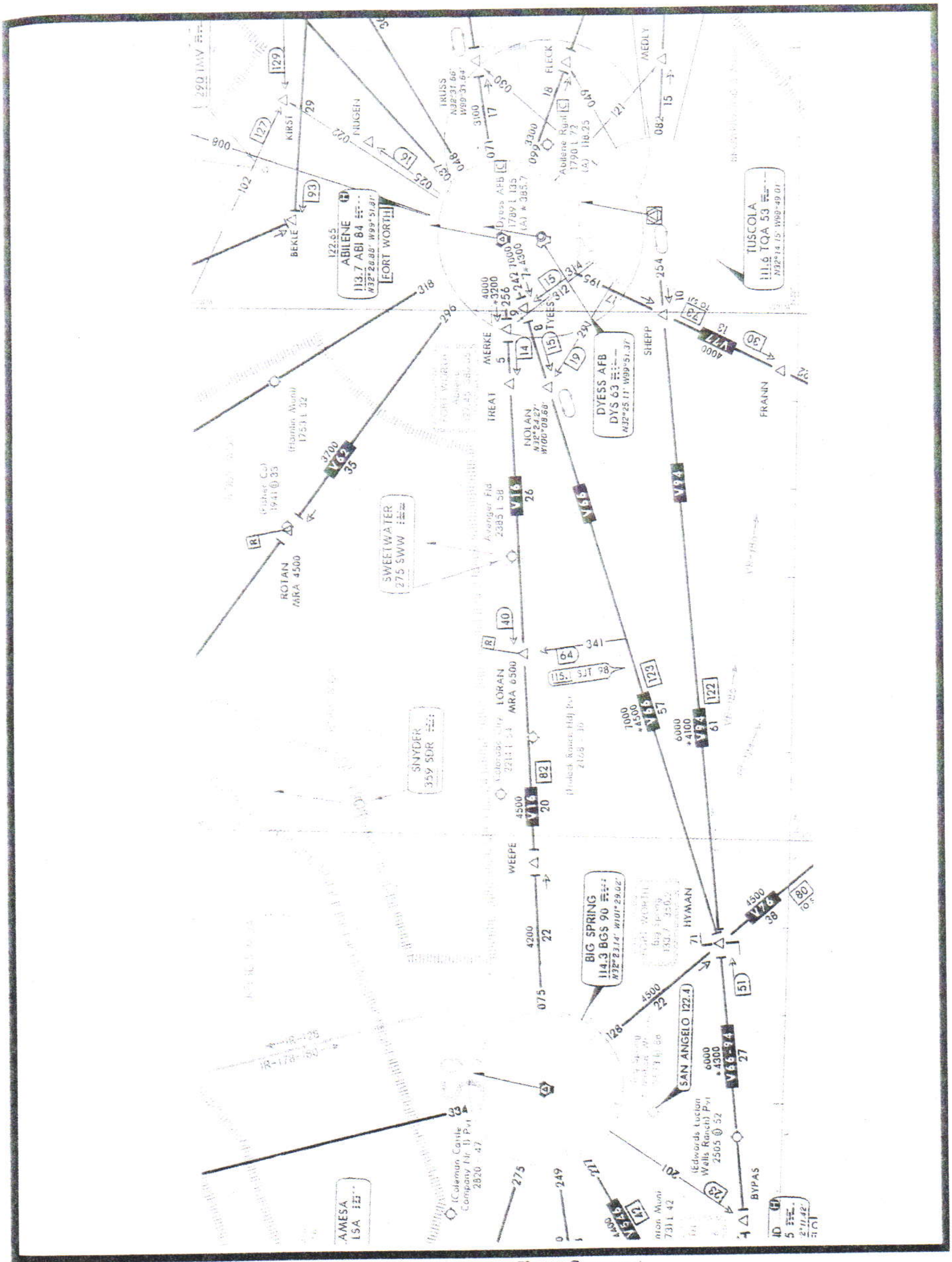

FIGURE 40.—En Route Chart Segment.

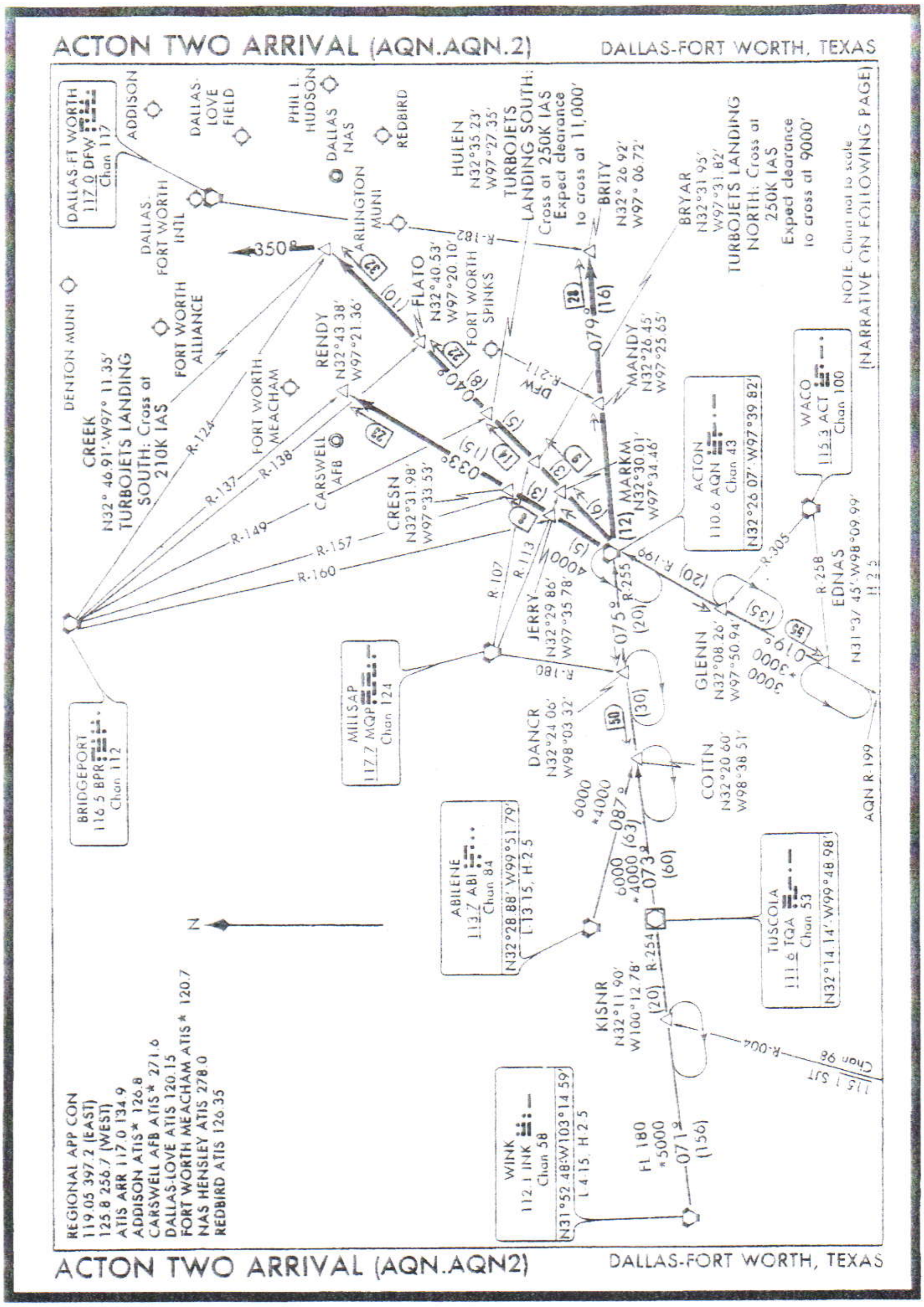

FIGURE 41.—ACTON Two Arrival.

ACTON TWO ARRIVAL (AQN.AQN2)

DALLAS-FORT WORTH, TEXAS

ARRIVAL DESCRIPTION

ABILENE TRANSITION (ABI.AQN2): From over ABI VORTAC via ABI R-087 and AQN R-255 to AQN VORTAC. Thence . . . .
EDNAS TRANSITION (EDNAS.AQN2): From over EDNAS INT via AQN R-199 to AQN VORTAC. Thence . . . .
WINK TRANSITION (INK.AQN2): From over INK VORTAC via INK R-071, TQA R-254, TQA R-073 and AQN R-255 to AQN VORTAC. Thence . . . .
TURBOJETS LANDING DALLAS-FT. WORTH INTL, MEACHAM, CARSWELL AFB, DENTON, ALLIANCE: (Landing South): From over AQN VORTAC via AQN R-040 to CREEK INT, thence heading 350° for vector to final approach course. (Landing North): From over AQN VORTAC via AQN R-040 to CREEK INT. Expect vectors at BRYAR INT.
NON-TURBOJETS LANDING DALLAS-FT. WORTH INTL, MEACHAM, CARSWELL AFB, DENTON, ALLIANCE: (Landing South): From over AQN VORTAC via AQN R-033 to RENDY INT. Expect vectors to final approach course. (Landing North): From over AQN VORTAC via AQN R-040 to CREEK INT. Expect vector at BRYAR INT.
TURBOJETS LANDING DALLAS-LOVE FIELD and ADDISON: (Landing South): From over AQN VORTAC via AQN R-040 to CREEK INT, thence heading 350° for vector to final approach course. (Landing North): From over AQN VORTAC via AQN R-079 to BRITY INT. Expect vector to final approach course.
NON-TURBOJETS LANDING DALLAS-LOVE FIELD and ADDISON: (Landing South/North): From over AQN VORTAC via AQN R-079 to BRITY INT. Expect vector to final approach course.
ALL AIRCRAFT LANDING FORT WORTH SPINKS, ARLINGTON, NAS DALLAS, REDBIRD, and PHIL L. HUDSON: (Landing South/North): From over AQN VORTAC via AQN R-079 to BRITY INT. Expect vectors to final approach course.

FIGURE 41A.—ACTON Two Arrival Description.

TEXAS

DALLAS-FORT WORTH INTL (DFW) 12 NW UTC-6(-5DT)32°53'47"N 97°02'28"W DALLAS-FT. WORTH
603 B FUEL 100LL, JET A OX 1, 3 LRA ARFF Index E H-2K, 4F, 5B, L-13C, A
RWY 17L-35R: H11,388X150 (CONC-GRVD) S-120, D-200, DT-600, DDT-850 HIRL CL IAP
RWY 17L: ALSF2. TDZ. RWY 35R: MALSR. TDZ.
RWY 17R-35L: H11,388X200 (CONC-GRVD) S-120, D-200, DT-600, DDT-850 HIRL CL
RWY 17R: MALSR. TDZ. RWY 35L: TDZ. VASI(V6L).
RWY 18R-36L: H11,388X150(CONC-GRVD) S-120, D-200, DT-600, DDT-850 HIRL CL
RWY 18R: ALSF2. TDZ RWY 36L: MALSR. TDZ
RWY 18L-36R: H11,387X200 (CONC-GRVD) S-120, D-200, DT-600, DDT-850 HIRL CL
RWY 18L: MALSR. TDZ. RWY 36R: TDZ. VASI(V6L).
RWY 13R-31L: H9300X150(CONC-GRVD) S-120, D-220, DT-600, DDT-850 HIRL CL
RWY 13R: MALSR. TDZ. RWY 31L: TDZ.
RWY 13L-31R: H9000X200 (CONC-GRVD) S-120, D-200, DT-600, DDT-850 HIRL CL 0,5% up NW
RWY 13L: TDZ. VASI(V6L)—Upper GA 3.25° TCH 93'. Lower GA 3.0° TCH 47'. RWY 31R: MALSR. TDZ.
RWY 18S-36S: H4000X100 (CONC)

AIRPORT REMARKS: Attended continuously. Rwy 18S–36S CLOSED indefinitely. Arpt under construction, men and equipment in movement areas. Partial outages of arpt lgt circuits will occur daily. Prior Permission Required from arpt ops for General Aviation acft to proceed to airline terminal gate except to General Aviation Facility. Rwy 18S-36S located on taxiway G. 4000' long 100' wide restricted to prop acft 12,500 lbs. & below and stol acft daylight VFR plus IFR departures. Prior permission required from the primary tenant airlines to operate within central terminal area. CAUTION: proper minimum clearance may not be maintained within the central terminal area. Landing fee. Helipad H1 on apt 104X104 (CONC) Heliport located at Twy G and Twy 24 intersection, daylight VFR. Clearways 500X1000 each end Rwy 17L–35R, Rwy 17R–35L, Rwy 18L–36R and Rwy 18R–36L. Flight Notification Service (ADCUS) available.

WEATHER DATA SOURCES: LLWAS.

COMMUNICATIONS: ATIS 117.0 134.9 (ARR) 135.5 (DEP) UNICOM 122.95
FORT WORTH FSS (FTW) LC 429–6434, TF 1-800-WX-BRIEF. NOTAM FILE DFW
(R) REGIONAL APP CON 119.05(E) 119.4(E) 125.8(W) 132.1(W)
REGIONAL TOWER 126.55 (E) 124.15 (W) GND CON 121.65 133.15(E) 121.8 (W) CLNC DEL 128.25 127.5
(R) REGIONAL DEP CON 118.55 (E) 124.25 (WEST) 127.75 (NORTH–SOUTH)
TCA: See VFR Terminal Area chart.

RADIO AIDS TO NAVIGATION: NOTAM FILE DFW.
(H) VORTACW 117.0 DFW Chan 117 32°51'57"N 97°01'40"W at fld. 560/08E.
VOR Portion unusable 045°-050° all altitudes and distances, 350–100° beyond 30 NM below 2100'.
ISSUE NDB (LOM) 233 PK 32°47'35"N 97°01'49"W 348° 6.2 NM to fld.
JIFFY NDB (LOM) 219 FL 32°59'44"N 97°01'46"W 179° 6.0 NM to fld.
ILS/DME 109.5 I-LWN Chan 32 Rwy 13R.
ILS/DME 109.1 I-FLQ Chan 28 Rwy 17L. LOM JIFFY NDB.
ILS 111.5 I-JHZ Rwy 17R. LOM JIFFY NDB.
ILS 111.3 I-CIX Rwy 18L.
ILS/DME 111.9 I-VYN Chan 56 Rwy 18R.
ILS 110.9 I-RRA Rwy 31R.
ILS/DME 109.1 I-PKQ Chan 28 Rwy 35R. LOM ISSUE NDB.
ILS/DME 111.9 I-BXN Chan 56 Rwy 36L.

FIGURE 42.—ILS-1 RWY 36L, Dallas-Fort Worth Intl.

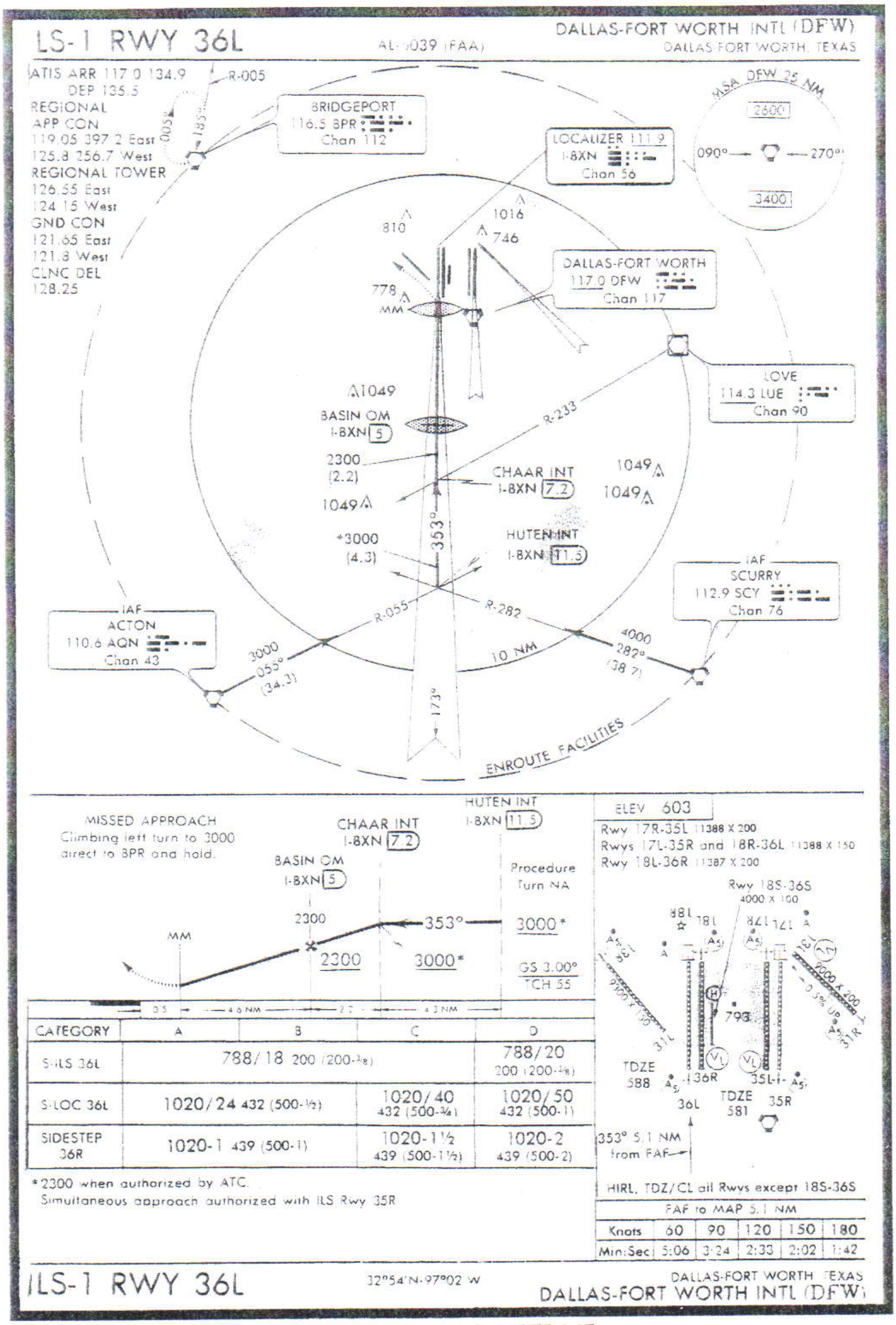

FIGURE 42A.—ILS RWY 36L.

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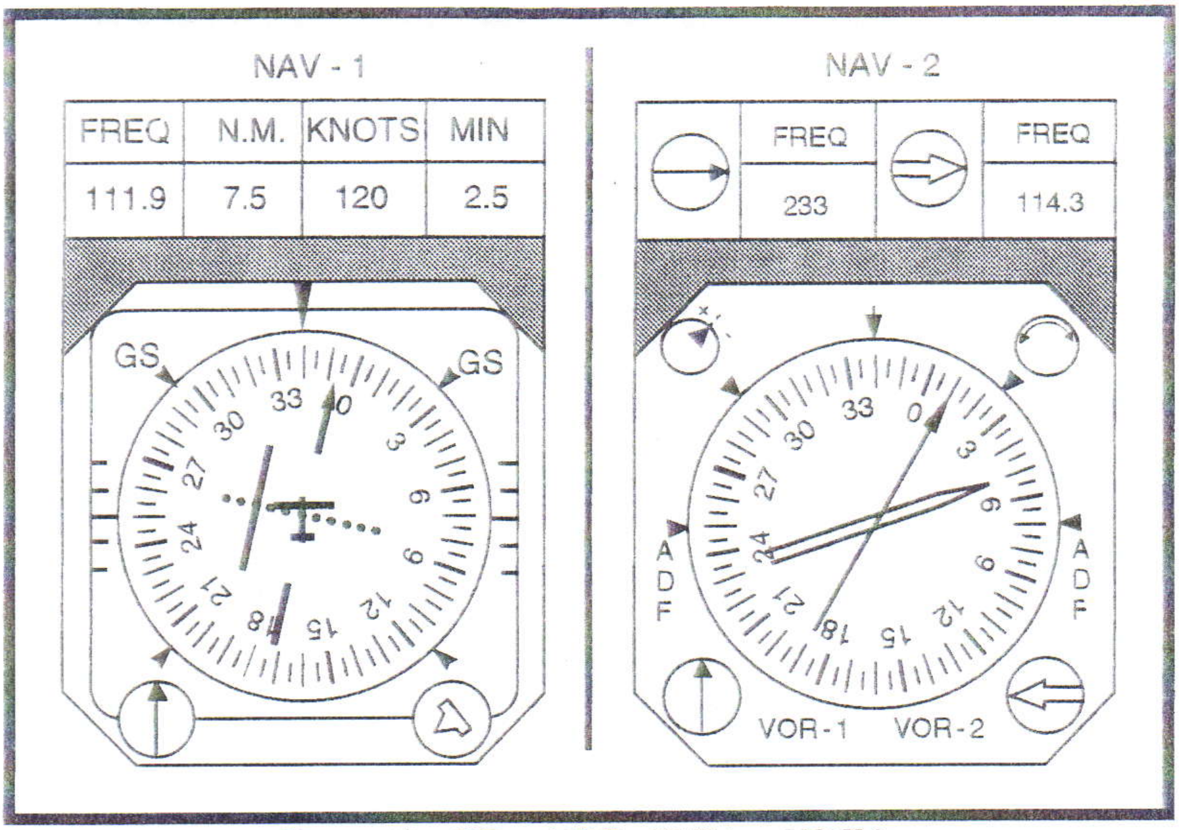


FIGURE 43.—CDI and RMI – NAV 1 and NAV 2.

Form Approved: OMB No. 2120-0034

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION **FLIGHT PLAN**	(FAA USE ONLY) ☐ PILOT BRIEFING ☐ STOPOVER	☐ VNR	TIME STARTED	SPECIALIST INITIALS

1. TYPE	2. AIRCRAFT IDENTIFICATION	3. AIRCRAFT TYPE/ SPECIAL EQUIPMENT	4. TRUE AIRSPEED	5. DEPARTURE POINT	6. DEPARTURE TIME PROPOSED (Z)	ACTUAL (Z)	7. CRUISING ALTITUDE
VFR X IFR DVFR	N3678A	PA31/	180 KTS	YKM			12000

8. ROUTE OF FLIGHT
GROMO 2, HITCH, V468 BTG, DIRECT

9. DESTINATION (Name of airport and city)	10. EST. TIME ENROUTE HOURS	MINUTES	11. REMARKS
PORTLAND INTL. AIRPORT PDX			INSTRUMENT TRAINING FLIGHT

12. FUEL ON BOARD HOURS	MINUTES	13. ALTERNATE AIRPORT(S)	14. PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE / 17. DESTINATION CONTACT/TELEPHONE (OPTIONAL)	15. NUMBER ABOARD
		N/A		2

16. COLOR OF AIRCRAFT	
GOLD/WHITE	CIVIL AIRCRAFT PILOTS. FAR Part 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed $1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVFR flight plans.

FAA Form 7233-1 (8-82)   CLOSE VFR FLIGHT PLAN WITH ________________ FSS ON ARRIVAL

AIRCRAFT INFORMATION

MAKE Piper   MODEL PA-31

N 3678A   Vso 77

AIRCRAFT EQUIPMENT/STATUS**

**NOTE: X= OPERATIVE INOP= INOPERATIVE N/A= NOT APPLICABLE
TRANSPONDER: X (MODE C) X ILS: (LOCALIZER) X (GLIDE SLOPE) X
VOR NO. 1 X (NO. 2) X ADF: X RNAV: X
VERTICAL PATH COMPUTER: N/A DME: X
MARKER BEACON: X (AUDIO) INOP (VISUAL) X

FIGURE 44.—Flight Plan and Aircraft Information.

FLIGHT LOG

YAKIMA AIR TERMINAL TO PORTLAND, INTL.

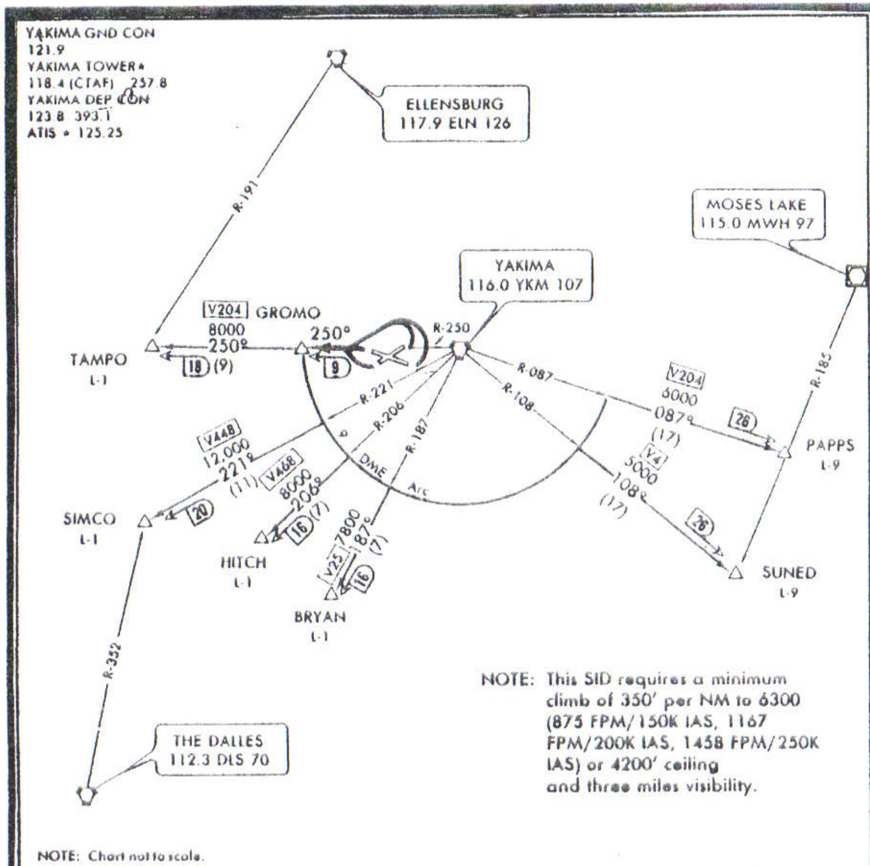
CHECK POINTS		ROUTE	COURSE	WIND	SPEED-KTS		DIST	TIME		FUEL	
FROM	TO	ALTITUDE		TEMP	TAS	GS	NM	LEG	TOT	LEG	TOT
YKM	HITCH	GROMO 2 CLIMB	206°					:10.			
	VOR C.O.P.	V468 12,000	206°		180						
	BTG	V468 12,000	234°								
	PDX	DIRECT	160°								
APPROACH & LANDING								:13.			
	PDX AIRPORT										

OTHER DATA:
NOTE: MAG. VAR. 20° E.

FLIGHT SUMMARY

TIME	FUEL (LB)	
		EN ROUTE
		RESERVE
		MISSED APPR.
		TOTAL

FIGURE 45.—Flight Planning Log.



NOTE: This SID requires a minimum climb of 350′ per NM to 6300 (875 FPM/150K IAS, 1167 FPM/200K IAS, 1458 FPM/250K IAS) or 4200′ ceiling and three miles visibility.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 22: Turn right thence . . . .
TAKE-OFF RUNWAY 4, 9: Turn left thence . . . .
TAKE-OFF RUNWAY 27: Climb runway heading thence . . . .

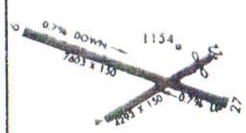
. . . .intercept and proceed via YKM R-250 to the GROMO DME FIX (YKM R-250/9), thence via (assigned transition).

TAMPO TRANSITION (GROMO2.TAMPO): From GROMO DME Fix via V204 to TAMPO INT.

NOTE: Climb in holding pattern east of TAMPO INT, right turns, 250° inbound to 8000′ before proceeding on course.

(Continued on next page)

ELEV 1095



GROMO TWO DEPARTURE (PILOT NAV)
(GROMO2.GROMO)

YAKIMA, WASHINGTON
YAKIMA AIR TERMINAL

(GROMO2.GROMO)
GROMO TWO DEPARTURE (PILOT NAV)

YAKIMA AIR TERMINAL
YAKIMA, WASHINGTON

DEPARTURE ROUTE DESCRIPTION
(Continued)

SIMCO TRANSITION (GROMO2.SIMCO): From over GROMO DME Fix via 9 DME Arc and V448 to SIMCO INT. NOTE: Climb in holding pattern NE of SIMCO INT, right turns, 221° inbound to 12000 feet before proceeding on course.

HITCH TRANSITION (GROMO2.HITCH): From over GROMO DME Fix via 9 DME Arc and V468 to HITCH DME Fix. NOTE: Climb in holding pattern NE of HITCH DME Fix, right turns, 206° inbound to 8000 feet before proceeding on course.

BRYAN TRANSITION (GROMO2.BRYAN): From over GROMO DME Fix via 9 DME Arc and V25 to BRYAN DME Fix.

SUNED TRANSITION (GROMO2.SUNED): From over GROMO DME Fix via 9 DME Arc and V4 to SUNED INT.

PAPPS TRANSITION (GROMO2.PAPPS): From over GROMO DME Fix via 9 DME Arc and V204 to PAPPS INT.

GROMO TWO DEPARTURE (PILOT NAV)
(GROMO2.GROMO)

YAKIMA, WASHINGTON
YAKIMA AIR TERMINAL

§ **YAKIMA AIR TERMINAL** (YKM) 3 S GMT−8(−7DT) 46°34′06″N 120°32′33″W — SEATTLE
1095 B S4 FUEL 80, 100, 100LL, JET A OX 1, 3 CFR Index A — H-1A, L-1C, 8A
RWY 09-27: H7603X150 (ASPH-PFC) S-95, D-110, DT-175 HIRL .6% up NW — IAP
RWY 09: VASI(V4L)—GA 3.0° TCH 50′. Antenna. RWY 27: MALSR. Trees.
RWY 04-22: H4293X150 (ASPH) S-70, D-80, DT-120 MIRL
RWY 04: Trees RWY 22: VASI(V2L)—GA 3.03° TCH 61′. Thld dsplcd 469′. Tree.
AIRPORT REMARKS: Attended continuously. CLOSED 0600-1400Z‡ to Part 121 non-scheduled operations and Part 121 scheduled charters operations without prior approval, call (509) 575-6150/6014. Bird hazard. ACTIVATE MALSR Rwy 27—118.4.
COMMUNICATIONS: CTAF 118.4 ATIS 125.25 (1400-0600Z‡) UNICOM 122.95
SEATTLE FSS (SEA) LC 965-1840 NOTAM FILE YKM
RCO 122.5 122.1R 116.0T (SEATTLE FSS)
APP/DEP CON 123.8 (1400-0600Z‡) SEATTLE CENTER APP/DEP CON 132.6 (0600-1400Z‡)
TOWER 118.4 (1400-0600Z‡) GND CON 121.9
VFR ADVSY SVC 123.8
RADIO AIDS TO NAVIGATION:
(H) VORTAC 116.0 YKM Chan 107 46°34′14″N 120°26′36″W 244° 3.6 NM to fld. 980/21E
DME portion unusable:

350°-065° beyond 20 NM below 9000′	025°-065° beyond 15 NM below 8000′
115°-135° beyond 25 NM below 7000′	135°-150° beyond 30 NM below 7500′
195°-230° beyond 22 NM below 8000′	300°-325° beyond 29 NM below 9000′
325°-335° beyond 20 NM below 9000′	335°-350° beyond 25 NM below 10,000′

VOR portion unusable:

350°-080° beyond 25 NM below 9000′	025°-035° beyond 5 NM below 10,000′
080°-105° beyond 35 NM below 6000′	105°-107° beyond 25 NM below 6000′
109°-135° beyond 25 NM below 6000′	135°-180° beyond 30 NM below 7500′
195°-225° beyond 30 NM below 8500′	305°-335° beyond 30 NM below 9000′

DONNY NDB (LOM) 371 YK 46°31′33″N 120°22′16″W 269° 7 NM to fld
ILS 110.1 I-YKM Rwy 27 LOM DONNY NDB. ILS unmonitored when tower closed. Localizer unusable inside threshold.

FIGURE 46.—GROMO Two Departure and Excerpt from Airport/Facility Directory.

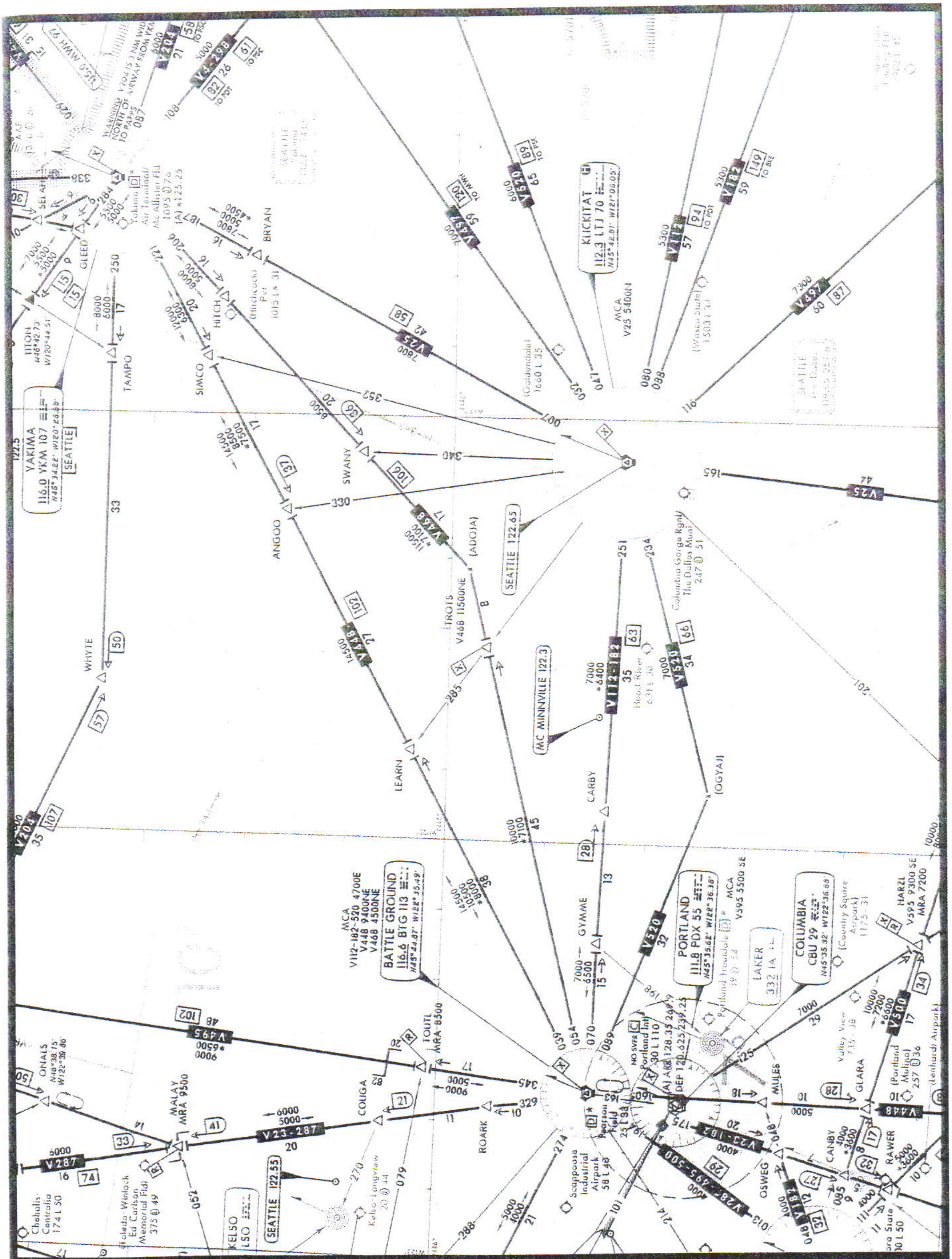


FIGURE 47.—En Route Chart Segment.

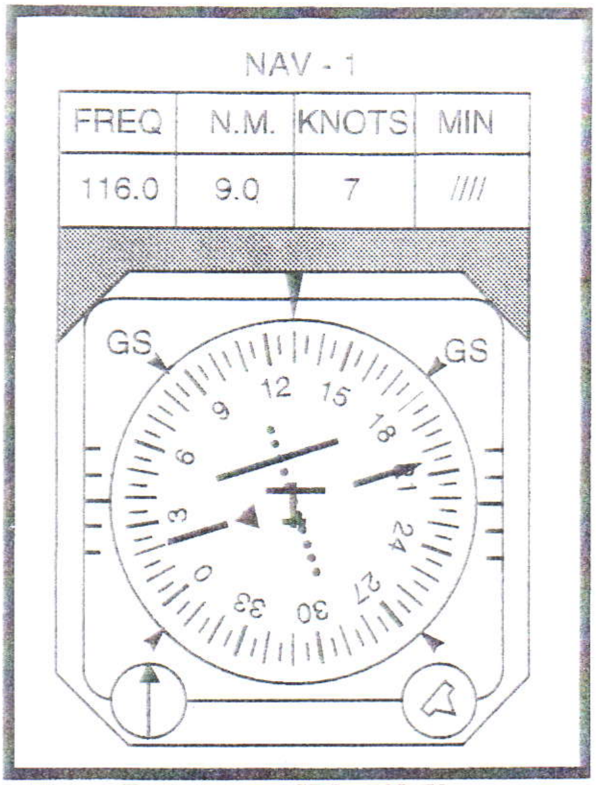


FIGURE 48.—CDI — NAV 1.

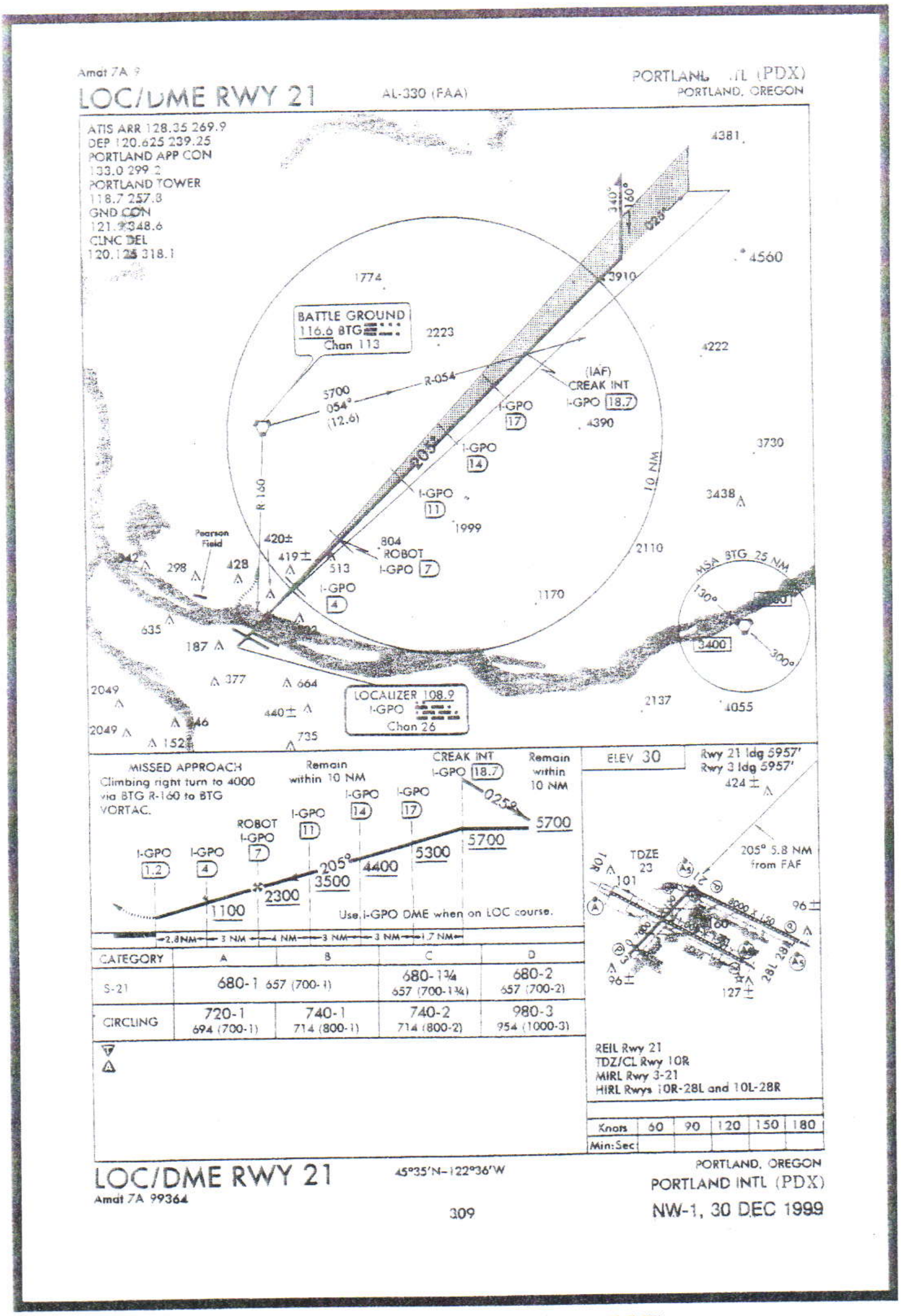


FIGURE 49.—LOC/DME RWY 21 (PDX).

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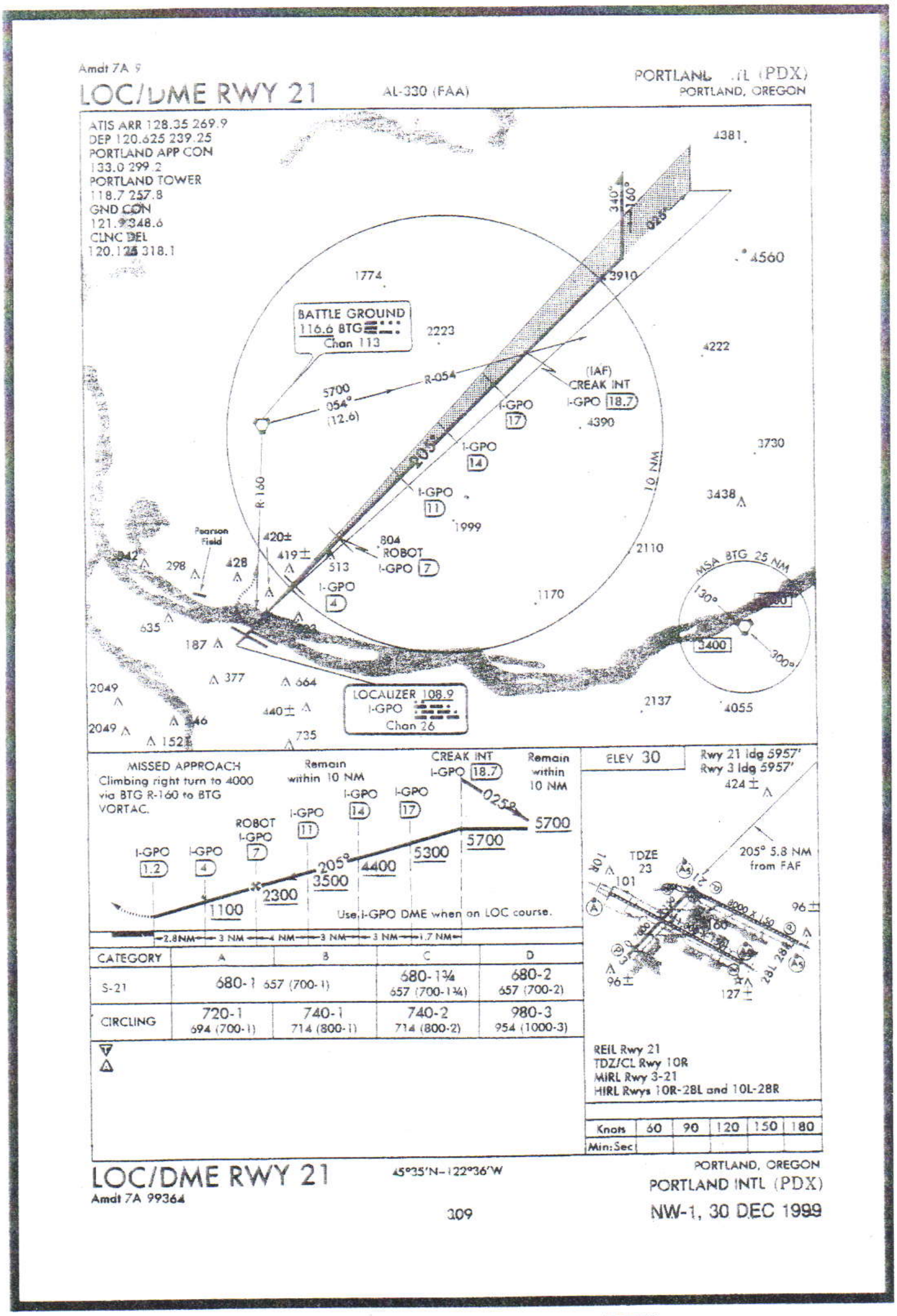

FIGURE 49.—LOC/DME RWY 21 (PDX).

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Form Approved: OMB No. 2120-0026

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION **FLIGHT PLAN**	(FAA USE ONLY) ☐ PILOT BRIEFING ☐ STOPOVER	☐ VNR	TIME STARTED	SPECIALIST INITIALS

1. TYPE	2. AIRCRAFT IDENTIFICATION	3. AIRCRAFT TYPE/ SPECIAL EQUIPMENT	4. TRUE AIRSPEED	5. DEPARTURE POINT	6. DEPARTURE TIME PROPOSED (Z)	ACTUAL (Z)	7. CRUISING ALTITUDE
VFR X IFR DVFR	N2468	A36/	158 KTS	SBA			8000

8. ROUTE OF FLIGHT
HABUTI GVO, V27 MQO, V113 PRB

9. DESTINATION (Name of airport and city)	10. EST. TIME ENROUTE HOURS	MINUTES	11. REMARKS
PASO ROBLES MUNI PRB			IFR TRAINING FLIGHT

12. FUEL ON BOARD HOURS	MINUTES	13. ALTERNATE AIRPORT(S)	14. PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE / 17. DESTINATION CONTACT/TELEPHONE (OPTIONAL)	15. NUMBER ABOARD
		N/A		2

16. COLOR OF AIRCRAFT
GOLD/WHITE

CIVIL AIRCRAFT PILOTS. FAR Part 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed $1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVFR flight plans.

FAA Form 7233-1 (8-82)

CLOSE VFR FLIGHT PLAN WITH ____________ FSS ON ARRIVAL

AIRCRAFT INFORMATION

MAKE Beechcraft MODEL A-36

N 2468 Vso 52

AIRCRAFT EQUIPMENT/STATUS**

**NOTE: X= OPERATIVE INOP= INOPERATIVE N/A= NOT APPLICABLE
TRANSPONDER: X (MODE C) X ILS: (LOCALIZER) X (GLIDE SLOPE) X
VOR NO. 1 X (NO. 2) X ADF: X RNAV: X
VERTICAL PATH COMPUTER: N/A DME: X
MARKER BEACON: X (AUDIO) X (VISUAL) INOP

FIGURE 50.—Flight Plan and Aircraft Information.

FLIGHT LOG

SANTA BARBARA MUNI TO PASO ROBLES MUNI

CHECK POINTS		ROUTE		WIND	SPEED-KTS		DIST	TIME		FUEL	
FROM	TO	ALTITUDE	COURSE	TEMP	TAS	GS	NM	LEG	TOT	LEG	TOT
SBA	HABUT	HABUT 1 CLIMB	253°					:08:00			
	GVO	163°R 8000	343°		158						
	MQO	V27 8000	306°								
	PRB	V113	358°								
APPROACH & LANDING		DESCENT						:10:00			
	PRB AIRPORT										

OTHER DATA:
NOTE: MAG. VAR. 16° E.

FLIGHT SUMMARY

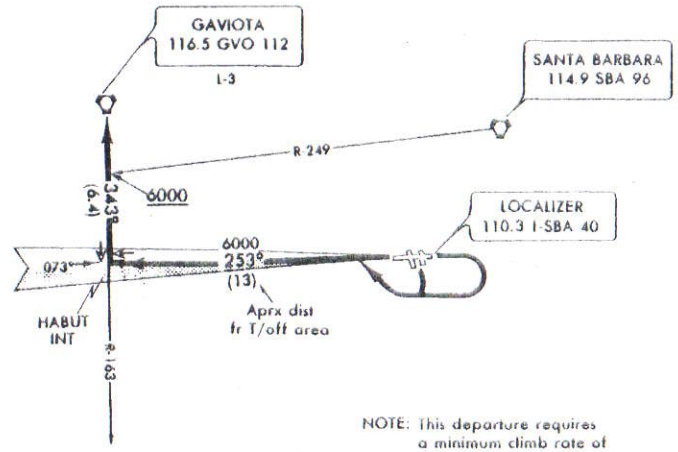
TIME	FUEL (LB)	
		EN ROUTE
		RESERVE
		MISSED APPR.
		TOTAL

FIGURE 51.—Flight Planning Log.

HABUT ONE DEPARTURE (HABUT1.GVO)

SANTA BARBARA MUNI
SANTA BARBARA, CALIFORNIA

SANTA BARBARA GND CON
121.7
SANTA BARBARA TOWER ★
119.7 242.4
SANTA BARBARA DEP CON
120.55 321.4
ATIS ★ 125.1



NOTE: This departure requires a minimum climb rate of 385′ per NM to 6000

NOTE: IFR departure Rwys 33L/R not authorized.

NOTE: Chart not to scale

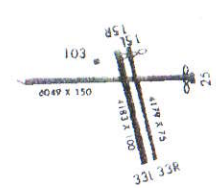
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 7: Maintain runway heading to at least 650′, then turn right, thence intercept and climb westbound via I-SBA localizer west course to HABUT INT, thence via GVO R-163 to GVO VORTAC. Cross SBA R-249 at or above 6000′.

TAKE-OFF RUNWAY 15: Maintain runway heading to at least 310′, then turn right, thence intercept and climb westbound via I-SBA localizer west course to HABUT INT, thence via GVO R-163 to GVO VORTAC. Cross SBA R-249 at or above 6000′.

(Continued on next page)

ELEV 10



HABUT ONE DEPARTURE (HABUT1.GVO)

SANTA BARBARA, CALIFORNIA
SANTA BARBARA MUNI

HABUT ONE DEPARTURE (HABUT1.GVO)

SANTA BARBARA MUNI
SANTA BARBARA, CALIFORNIA

DEPARTURE ROUTE DESCRIPTION
(Continued)

TAKE-OFF RUNWAY 25: Climb westbound via I-SBA localizer west course to HABUT INT, thence via GVO R-163 to GVO VORTAC. Cross SBA R-249 at or above 6000′.

HABUT ONE DEPARTURE (HABUT1.GVO)

SANTA BARBARA, CALIFORNIA
SANTA BARBARA MUNI

§ **SANTA BARBARA MUNI** (SBA) 7 W GMT-8(-7DT) 34°25′34″N 119°50′22″W — **LOS ANGELES H-2F, L-3B IAP**
10 B S4 **FUEL** 80, 100, 100LL, JET A OX 1, 2, 3, 4 TPA—See Remarks
CFR Index C
RWY 07-25: H6049X150 (ASPH-GRVD) S-110, D-160, DT-245 HIRL
RWY 07: MALSR. Tree. Rgt tfc **RWY 25:** VASI(V4L)—GA 3.0°TCH 46′. Thld dsplcd 324′. Road
RWY 15R-33L: H4183X100 (ASPH) S-48, D-63, DT-100 MIRL
RWY 15R: REIL. Pole. **RWY 33L:** Road. Rgt tfc
RWY 15L-33R: H4179X75 (ASPH) S-35, D-41, DT-63
RWY 15L: Thld dsplcd 225′. Tree. **RWY 33R:** Pole. Rgt tfc
AIRPORT REMARKS: Attended 1330-0600Z‡. Fee after hours. Numerous flocks of birds on and in vicinity of arpt. TPA—1000(990) small acft, 1500(1490) large acft. Pure jet touch/go or low approaches prohibited.
COMMUNICATIONS: CTAF 119.7 **ATIS** 125.1 (1430-0600Z‡) **UNICOM** 122.95
SANTA BARBARA FSS (SBA) on arpt 123.65, 122.3, 122.2, 122.1R, 116.5T LD (805) 967-2305. DL NOTAM FILE SBA.
Ⓡ **APP CON** 125.4 (1430-0600Z‡) Ⓡ **DEP CON** 120.55 (1430-0600Z‡)
Ⓡ **LOS ANGELES CENTER APP/DEP CON** 128.05 (0600-1430Z‡)
TOWER 119.7 (1430-0600Z‡) **GND CON** 121.7
VFR ADVSY SVC ctc TOWER
RADIO AIDS TO NAVIGATION: NOTAM FILE SBA. VHF/DF ctc SANTA BARBARA FSS
(H) ABVORTAC 114.9 SBA Chan 96 34°30′34″N 119°46′12″W 198°5.6 NM to fld. 3620/16E.
GAVIOTA (L) VORTAC 116.5 GVO Chan 112 34°31′53″N 120°05′24″W 099°14.0 NM to fld. 2620/16E.
ILS/DME 110.3 I-SBA Chan 40 Rwy 07

CALIFORNIA

VOR RECEIVER CHECK POINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt Gnd AB/ALT	Azimuth from Fac Mag	Dist from Fac N.M.	Check Point Description
Sacramento (Sacramento Executive)	115.2/SAC	A/1000	015		Over apch end rwy 02
Salinas (Salinas Muni)	117.3/SNS	G	247		0.4 NM on Compass rose
Santa Ana (John Wayne Airport/Orange County)	109.4/SNA	G	186		On runup pad rwy 01R
Santa Barbara	114.9/SBA	A/2000	277	11	Over Lake Cachuma Dam spillway
Santa Barbara (Santa Barbara Muni)	114.9/SBA	G	200	5.9	On runup area end rwy 15

FIGURE 52.—HABUT One Departure and Excerpt from Airport/Facility Directory.

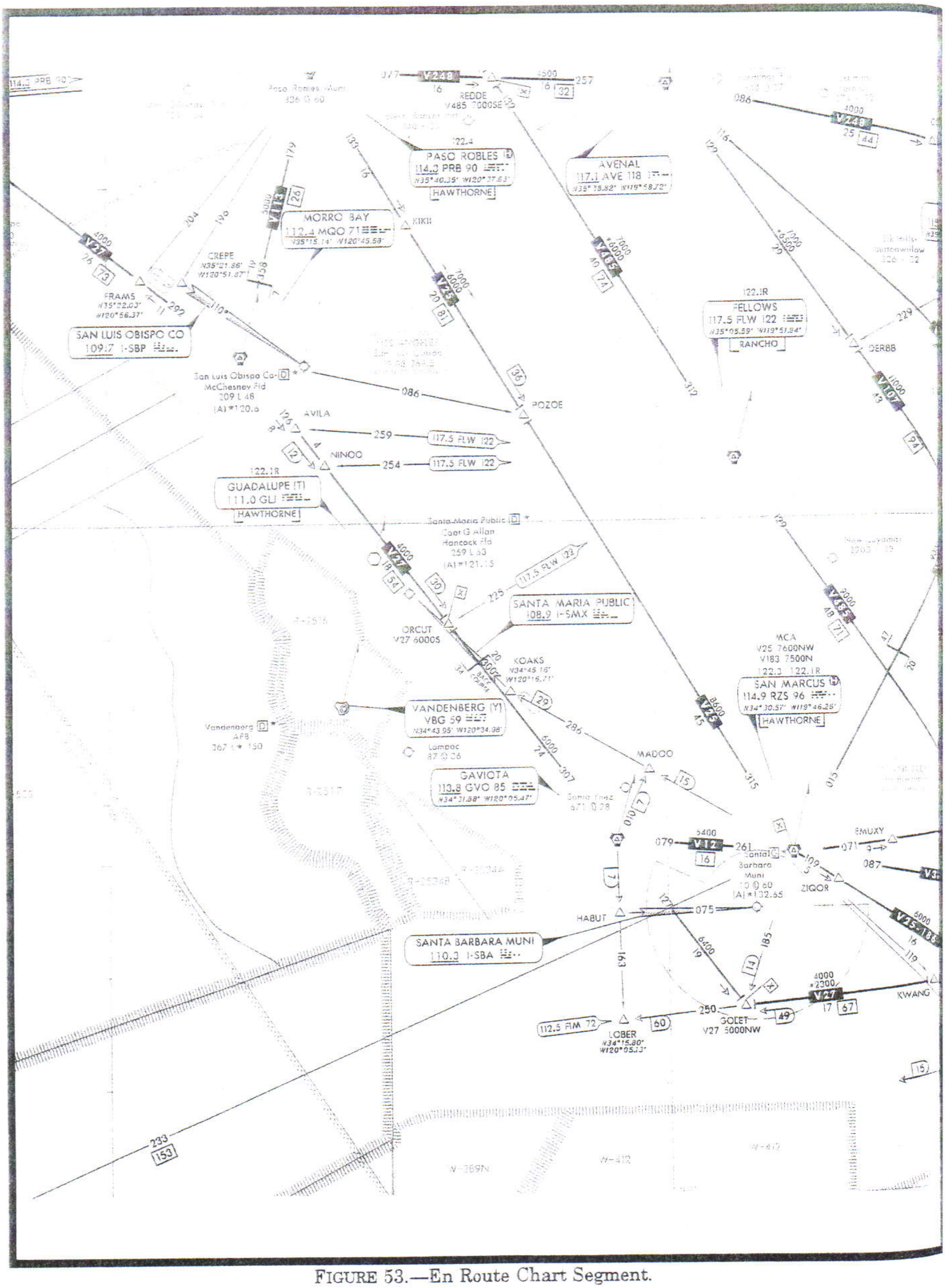


FIGURE 53.—En Route Chart Segment.

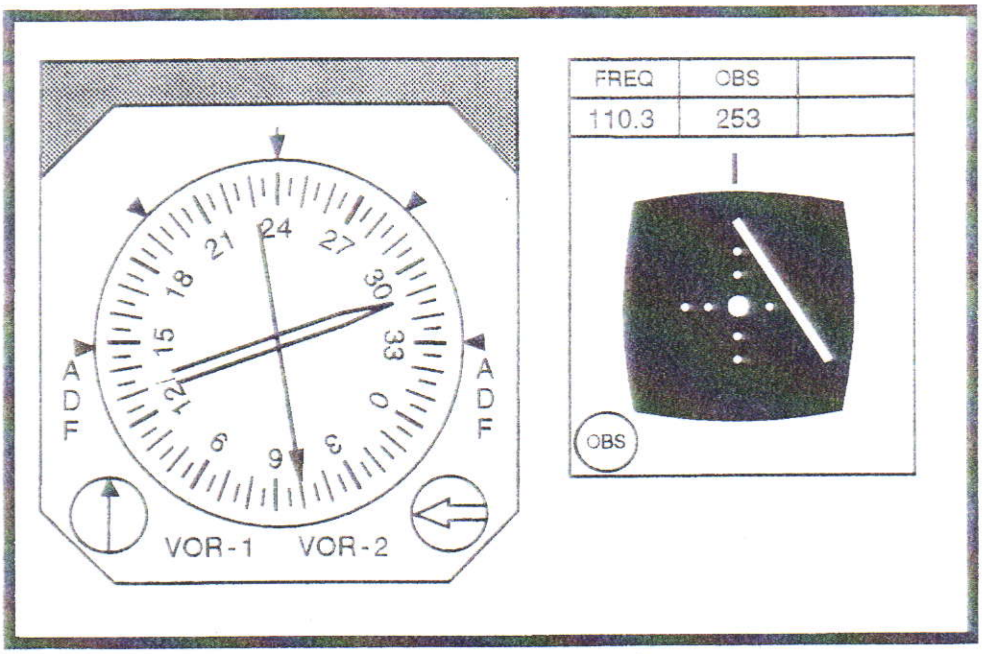


FIGURE 54.—RMI and CDI Indicators.

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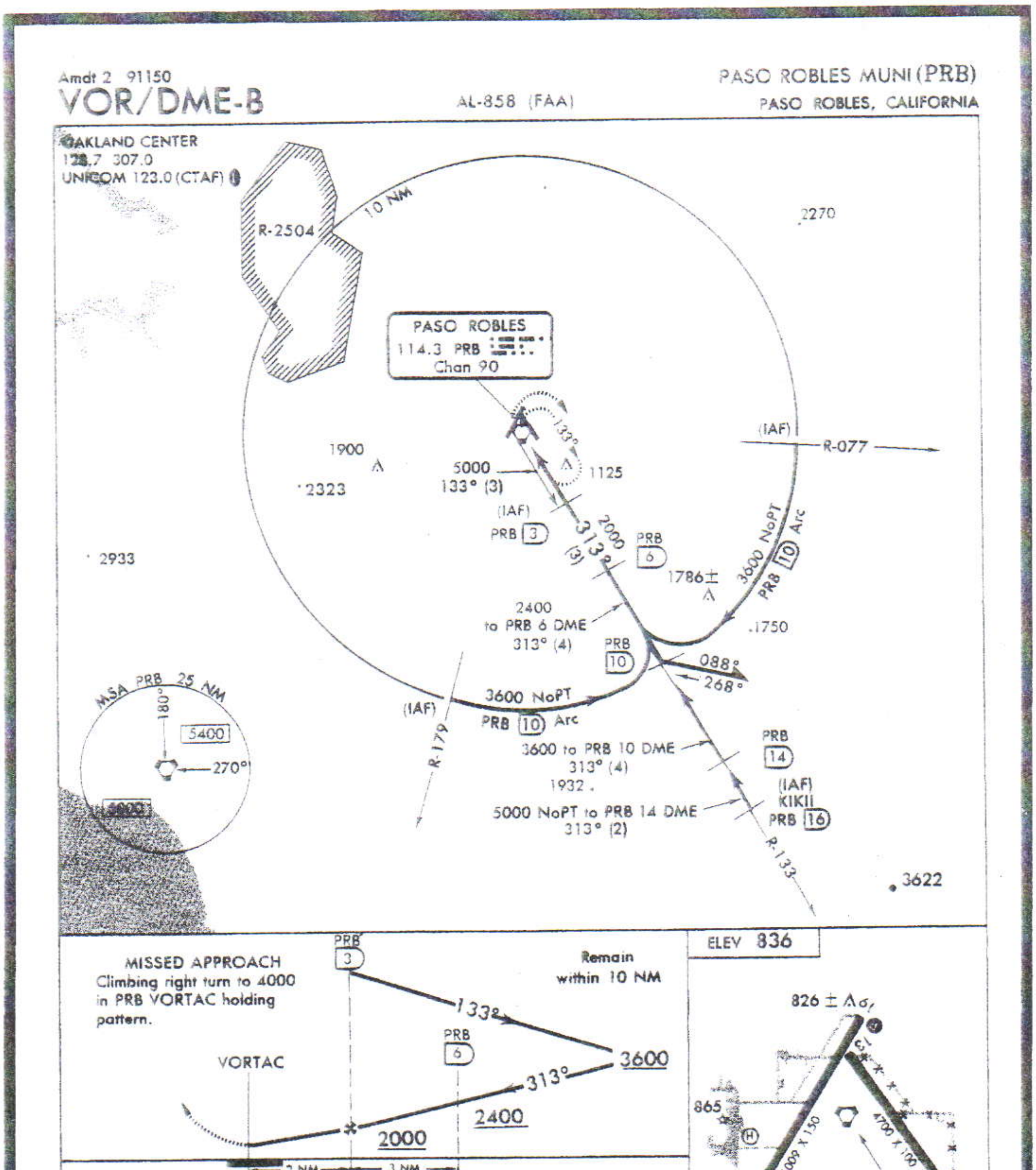


CATEGORY	A	B	C	D
CIRCLING	1440-1 604 (700-1)		1440-1¾ 604 (700-1¾)	1440-2 604 (700-2)

Knots	60	90	120	150	180
Min:Sec					

FIGURE 55.—VOR/DME-B (PRB).

Form Approved: OMB No. 2120-0034

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION **FLIGHT PLAN**	(FAA USE ONLY) ☐ PILOT BRIEFING ☐ VNR ☐ STOPOVER	TIME STARTED	SPECIALIST INITIALS

1. TYPE	2. AIRCRAFT IDENTIFICATION	3. AIRCRAFT TYPE/ SPECIAL EQUIPMENT	4. TRUE AIRSPEED	5. DEPARTURE POINT	6. DEPARTURE TIME PROPOSED (Z)	ACTUAL (Z)	7. CRUISING ALTITUDE
VFR							
X IFR							
DVFR	N12193	BH 206/	110 KTS	EASTERWOOD FIELD			7000

8. ROUTE OF FLIGHT
DIRECT CLL, V15 TNV, V571 IAH, DIRECT

9. DESTINATION (Name of airport and city)	10. EST. TIME ENROUTE HOURS	MINUTES	11. REMARKS
WILLIAM P HOBBY AIRPORT HOUSTON, TX			

12. FUEL ON BOARD HOURS	MINUTES	13. ALTERNATE AIRPORT(S)	14. PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE / 17. DESTINATION CONTACT/TELEPHONE (OPTIONAL)	15. NUMBER ABOARD
		N/A		2

16. COLOR OF AIRCRAFT
TAN/GOLD/WHITE

CIVIL AIRCRAFT PILOTS. FAR Part 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed $1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVFR flight plans.

FAA Form 7233-1 (8-82)

CLOSE VFR FLIGHT PLAN WITH ____________ FSS ON ARRIVAL

AIRCRAFT INFORMATION

MAKE Bell MODEL 206L

N 12193 Vso N/A

AIRCRAFT EQUIPMENT/STATUS**

**NOTE: X= OPERATIVE INOP= INOPERATIVE N/A= NOT APPLICABLE
TRANSPONDER: X (MODE C) X ILS: (LOCALIZER) X (GLIDE SLOPE) X
VOR NO. 1 X (NO. 2) X ADF: X RNAV: X
VERTICAL PATH COMPUTER: N/A DME: X
MARKER BEACON: X (AUDIO) X (VISUAL) X

FIGURE 56.—IFR Flight Plan and Aircraft Information.

FLIGHT LOG

EASTERWOOD FIELD TO WILLIAM P HOBBY AIRPORT

CHECK POINTS		ROUTE	COURSE	WIND	SPEED-KTS		DIST	TIME		FUEL	
FROM	TO	ALTITUDE		TEMP	TAS	GS	NM	LEG	TOT	LEG	TOT
EASTER WOOD	CLL	DIRECT CLIMB	DIRECT					:05:			
	TNV	V15 7000	127°		110		27				
	IAH	V571 7000	110°				42				
	HUB	DIRECT 7000	161°				18				
APPROACH & LANDING								:15:			
	HOBBY AIRPORT										

OTHER DATA:
NOTE: MAG. VAR. 6° E.

FLIGHT SUMMARY

TIME	FUEL (LB)	
		EN ROUTE
		RESERVE
		MISSED APPR.
		TOTAL

FIGURE 57.—Flight Planning Log.

140 **TEXAS**

COLLEGE STATION

EASTERWOOD FLD (CLL) 3 SW UTC–6(–5DT) 30°35′18″N 96°21′49″W **HOUSTON**
320 B S4 **FUEL** 100LL, JET A OX 2 ARFF Index A H-2K, 5B, L-17A
RWY 16-34: H7000X150 (ASPH–GRVD) S-70, D-90, DT-150 MIRL IAP
RWY 16: VASI(V4R)—GA 3.0°TCH 51′. Tree. **RWY 34:** MALSR.
RWY 10-28: H5160X150 (CONC) S-27, D-50, DT-87 MIRL
RWY 10: VASI(V4L)—GA 3.0°TCH 50′. Tree. **RWY 28:** REIL VASI(V4L)—GA 3.0° TCH 54′. Tree.
RWY 04-22: H5149X150 (CONC) S-27, D-50, DT-87
RWY 04: Tree. **RWY 22:** Tree.
AIRPORT REMARKS: Attended 1200-0500Z‡. CAUTION: deer on rwys. CAUTION: Rwy 10-28 taxiway B and taxiway E have uneven surfaces. Birds on and in vicinity of arpt. MIRL Rwy 10–28 preset medium ints when twr clsd, to increase ints and ACTIVATE MIRL Rwy 16–34 and MALSR Rwy 34—CTAF. CLOSED to unscheduled air carrier ops with more than 30 passenger seats except 24 hours PPR call, arpt manager 409–845–4811. Rwy 04–22 day VFR ops only. Itinerant acft park North of twr, overnight parking fee. Ldg fee scheduled FAR 135 and all FAR 121 ops. For fuel after hours PPR call 409–845–4811/823 –0690 or ctc Texas A and M University police 409–845–2345; late ngt fee. Rwy 16–34 grvd except south 200′. Rwy 04–22 deteriorating and vegetation growing through cracks. NOTE: See SPECIAL NOTICE—Simultaneous Operations on intersecting Runways.
COMMUNICATIONS: CTAF 118.5 **ATIS** 126.85 (1200–0400Z‡) **UNICOM** 122.95
MONTGOMERY COUNTY FSS (CXO) TF 1–800–WX–BRIEF. NOTAM FILE CLL.
COLLEGE STATION RCO 122.65 122.2 (MONTGOMERY COUNTY FSS).
Ⓡ **HOUSTON CENTER APP/DEP CON:** 120.4
TOWER: 118.5 (1200-0400Z‡) (VFR only) **GND CON:** 121.7
RADIO AIDS TO NAVIGATION: NOTAM FILE CLL. VHF/DF ctc FSS
COLLEGE STATION (L) VORTACW 113.3 CLL Chan 80 30°36′17″N 96°25′13″W 100° 3.1 NM to fld. 370/08E. **HIWAS.**
ROWDY NDB (LOM) 260 CL 30°29′36″N 96°20′16″W 341° 5.9 NM to fld.
ILS 111.7 I-CLL Rwy 34 LOM ROWDY NDB. ILS unmonitored when twr closed.

COLLEGE STATION

30°36′17″N 96°25′13″W NOTAM FILE CLL. **HOUSTON**
(L) **VORTACW** 113.3 CLL Chan 80 100° 3.1 NM to Easterwood Fld. 370/08E. **HIWAS.** H-2K, 5B, L-17A
RCO 122.65 122.2 (MONTGOMERY COUNTY FSS)

VOR RECEIVER CHECK

259

TEXAS

VOR RECEIVER CHECK POINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Check Point Description
Abilene (Abilene Regional)	113.7/ABI	A/2800	047	10.1	Over silos in center of Ft Phantom Lake.
Alice (Alice International)	114.5/ALI	G	270	0.5	On twy N of hangar.
Amarillo (Amarillo Internationl)	117.2/AMA	G	210	4.5	On east runup pad Rwy 22
Austin (Robert Mueller Muni)	114.6/AUS	G	118	0.6	On runup area on twy to Rwy 31L.
Beaumont (Jefferson County)	114.5/BPT	G	310	1.0	On runup area for Rwy 12
Big Spring (Big Spring McMahon-Wrinkle)	114.3/BGS	A/3500	107	10.5	Over red and white water tank.
Borger (Hutchinson Co)	108.6/BGD	G	175	6.7	On intersecting twy in front of terminal.
Brownsville (Brownsville/South Padre Island Intl)	116.3/BRO	G	248	3.2	On NE corner of parking ramp.
Brownwood (Brownwood Muni)	108.6/BWD	A/2600	169	6.2	Over rotating bcn.
Childress (Childress Muni)	117.6/CDS	G	353	3.7	At intersection of edge of ramp at center twy.
College Station (Easterwood Field)	113.3/CLL	G	097	3.2	On W edge of parking ramp
Corpus Christi (Corpus Christi Intl)	115.5/CRP	A/1100	187	7.5	Over grain elevator.
Corpus Christi (San Patricio County)	115.5/CRP	A/1000	318	9.5	Over rotating beacon on arpt.
Daisetta (Liberty Muni)	116.9/DAS	A/1200	195	7.5	Over hangar S of arpt.
Dalhart (Dalhart Muni)	112.0/DHT	G	170	3.9	On SE corner of main r[illegible]
Eagle Lake (Eagle Lake)	116.4/ELA	A/1200	180	4.5	Over water tank 0.4 NM [illegible]

FIGURE 58.—Excerpts from Airport/Facility Directory.

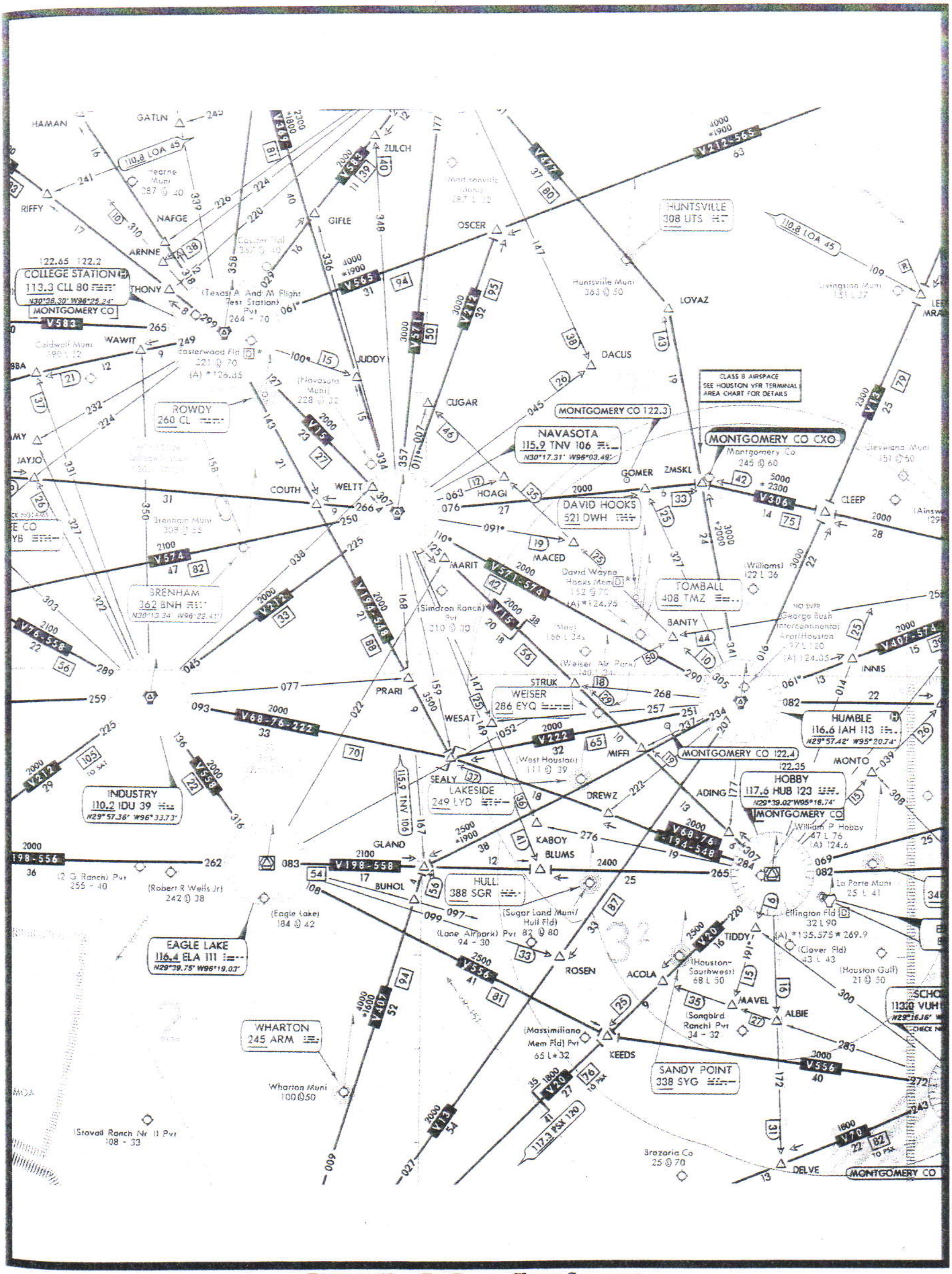


FIGURE 59.—En Route Chart Segment.

172 TEXAS

WILLIAM P. HOBBY (HOU) 8 SE UTC–6(–5DT) 29°38'43"N 95°16'43"W **HOUSTON**
47 B S4 FUEL 100, JET A OX 1, 2, 3, 4 LRA ARFF Index C **H-5B, L-17B**
IAP
RWY 04-22: H7602X150 (CONC-GRVD) S-75, D-200, DT-400 HIRL CL
RWY 04: MALSR. TDZ. **RWY 22:** MALS. VASI(V4L)—GA 3.0° TCH 52'. Pole.
RWY 12R-30L: H7601X150 (ASPH-GRVD) S-75, D-195, DT-220 HIRL CL
RWY 12R: MALSR. VASI(V4R)—GA 3.0°TCH 49'. Thld dsplcd 1032'. Pole.
RWY 30L: REIL. Thld dsplcd 200'. Road.
RWY 17-35: H6000X150 (CONC-ASPH-GRVD) S-75, D-121, DT-195 MIRL
RWY 17: VASI(V4L)—GA 3.0°TCH 38'. Antenna. **RWY 35:** VASI(V4R)—GA 3.0°TCH 41'. Building.
RWY 12L-30R: H5149X100 (CONC–GRVD) S-30, D-45, DT-80 MIRL
RWY 12L: VASI(V4L)—GA 3.0°TCH 52' **RWY 30R:** Antenna.
AIRPORT REMARKS: Attended continuously. Arpt CLOSED to acft with wing span over 117' except 24 hours PPR, call arpt manager 713–643–4597. CAUTION: numerous birds on and in vicinity of arpt. CAUTION to larger acft: W ramp twy centerline to parked acft on W side only 68'. W ramp twy centerline to edge of adjacent svc vehicle road on W side only 48'. PPR to taxi to main terminal bldg, call 713–643–4597. Flight Notification Service (ADCUS) available. NOTE: See SPECIAL NOTICE—Simultaneous Operations on intersecting Runways.
WEATHER DATA SOURCES: LLWAS.
COMMUNICATIONS: **ATIS** 124.6 **UNICOM** 122.95
MONTGOMERY COUNTY FSS (CXO) TF 1–800–WX–BRIEF. NOTAM FILE HOU.
HOBBY RCO 122.35 (MONTGOMERY COUNTY FSS)
Ⓡ **HOUSTON APP CON** 120.8 (South) 124.35 (West) 120.05(North and East)
HOBBY TOWER 118.7 **HOUSTON GND CON** 121.9 **CLNC DEL** 125.45 **PRE-TAXI CLNC** 125.45
Ⓡ **HOUSTON DEP CON** 120.8 (South) 123.8 (West) 119.7 (North and East)
ARSA ctc **APP CON**
RADIO AIDS TO NAVIGATION: NOTAM FILE HOU.
HOBBY (H) VORW/DME 117.6 HUB Chan 123 29°39'00"N 95°16'44"W at fld. 50/06E.
TUTTE NDB (LOM) 395 HU 29°35'20"N 95°20'25"W 038° 4.7 NM to fld.
ILS/DME 111.3 I-PRQ Chan 50 Rwy 12R.
ILS/DME 109.9 I-HUB Chan 36 Rwy 04 LOM TUTTE NDB. BC unusable beyond 25° SE of centerline.
ILS/DME 111.3 I-UPU Chan 50 Rwy 30L

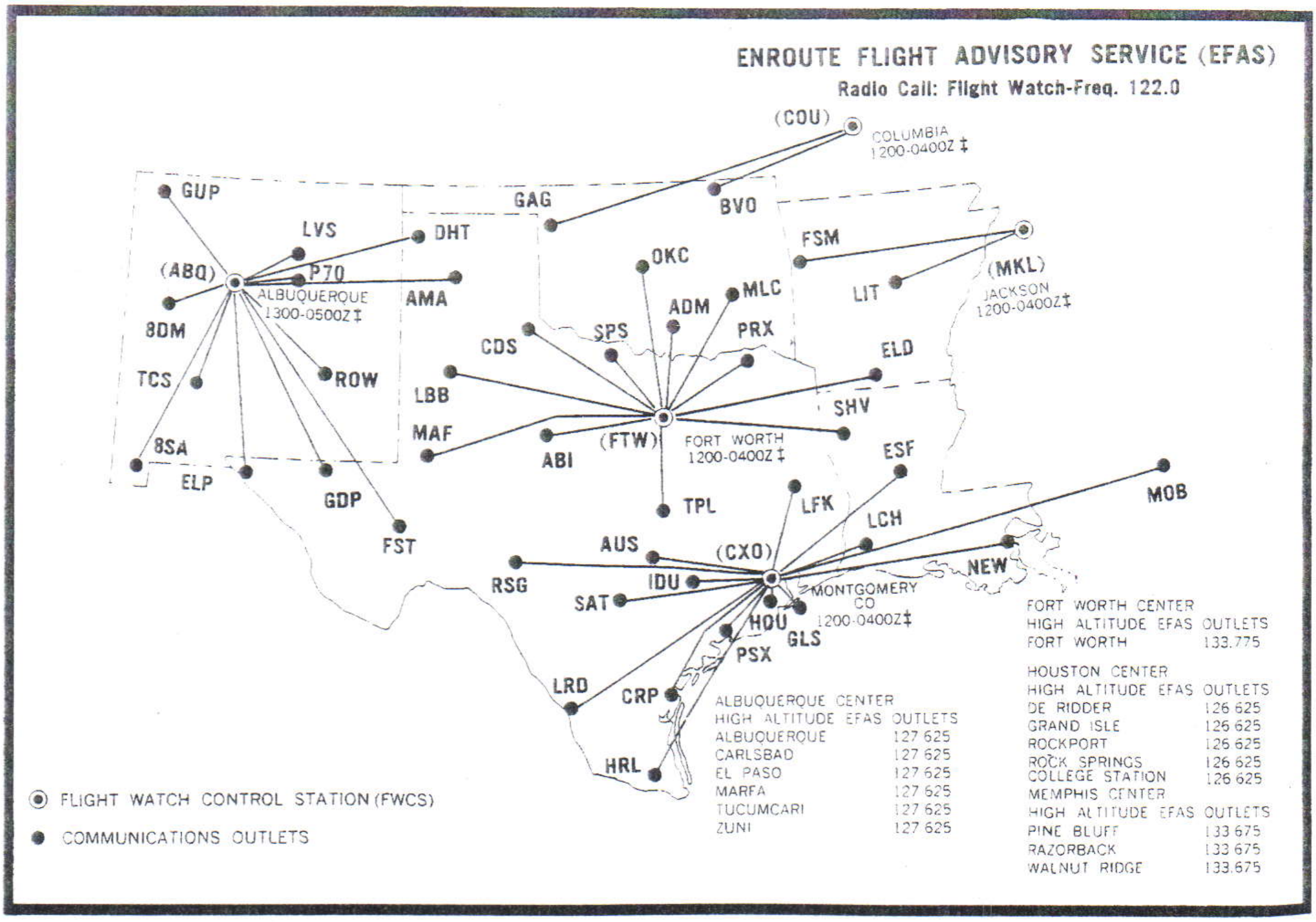
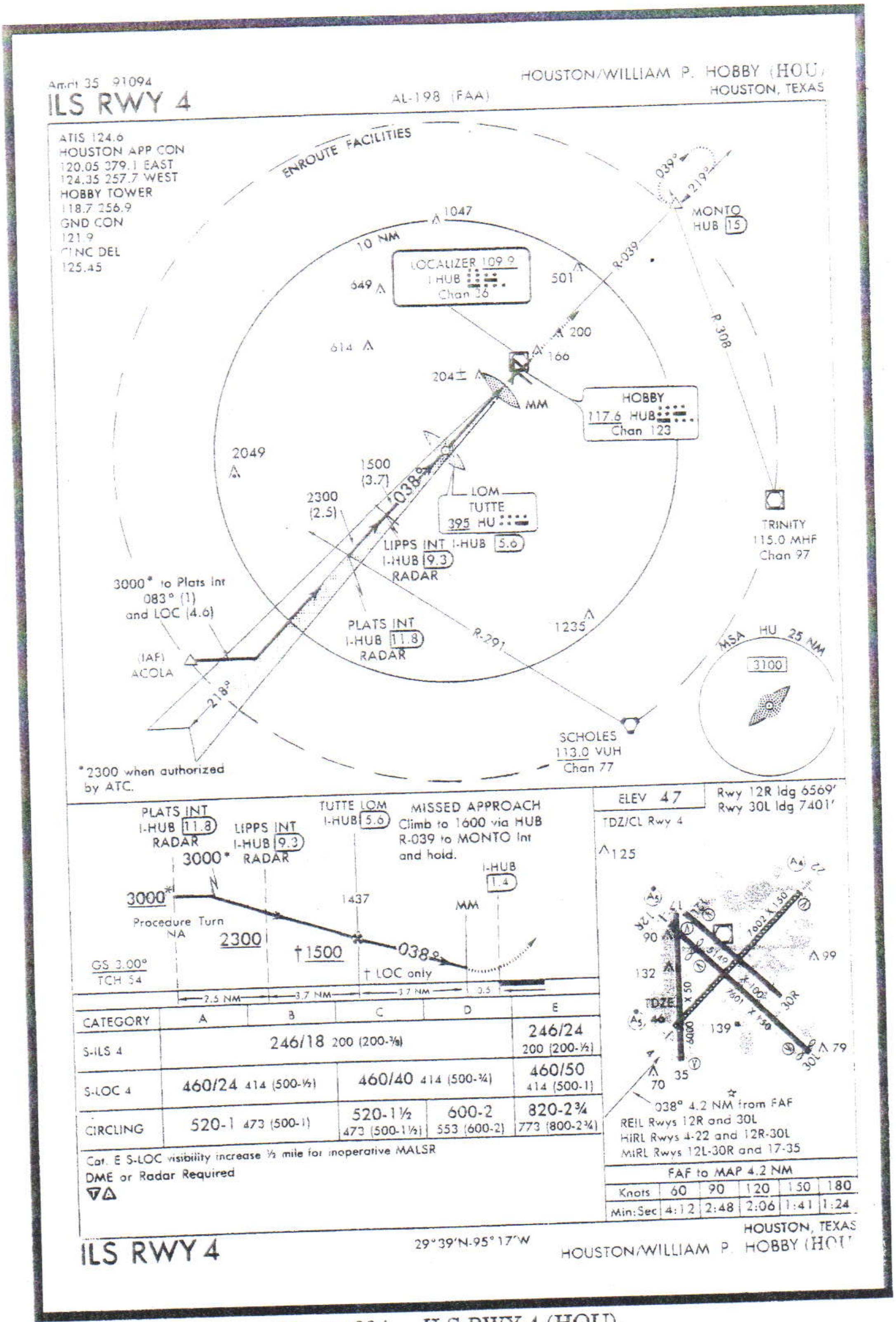


FIGURE 60.—Airport/Facility Directory and Enroute Flight Advisory Service (EFAS).



CATEGORY	A	B	C	D	E
S-ILS 4	246/18 200 (200-⅜)				246/24 200 (200-½)
S-LOC 4	460/24 414 (500-½)		460/40 414 (500-¾)		460/50 414 (500-1)
CIRCLING	520-1 473 (500-1)		520-1½ 473 (500-1½)	600-2 553 (600-2)	820-2¾ 773 (800-2¾)

Cat. E S-LOC visibility increase ½ mile for inoperative MALSR
DME or Radar Required

FAF to MAP 4.2 NM

Knots	60	90	120	150	180
Min:Sec	4:12	2:48	2:06	1:41	1:24

ILS RWY 4 29°39'N-95°17'W HOUSTON/WILLIAM P. HOBBY (HOU) HOUSTON, TEXAS

FIGURE 60A.—ILS RWY 4 (HOU).

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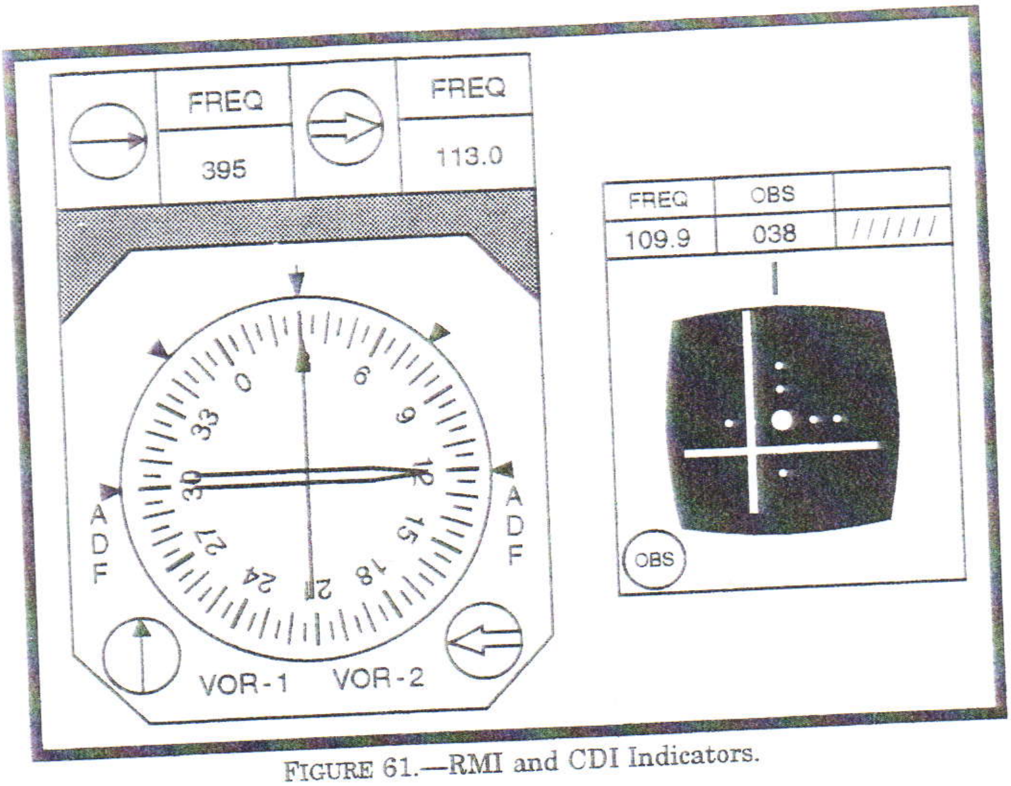


FIGURE 61.—RMI and CDI Indicators.

Form Approved: OMB No. 2120-0034

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION **FLIGHT PLAN**	(FAA USE ONLY) ☐ PILOT BRIEFING ☐ VNR ☐ STOPOVER	TIME STARTED	SPECIALIST INITIALS

1. TYPE	2. AIRCRAFT IDENTIFICATION	3. AIRCRAFT TYPE/ SPECIAL EQUIPMENT	4. TRUE AIRSPEED	5. DEPARTURE POINT	6. DEPARTURE TIME PROPOSED (Z)	ACTUAL (Z)	7. CRUISING ALTITUDE
VFR X IFR DVFR	N321JL	HU369/	105 KTS	LFT			5000

8. ROUTE OF FLIGHT
DIRECT LFT, V552 TBD

9. DESTINATION (Name of airport and city)	10. EST. TIME ENROUTE HOURS	MINUTES	11. REMARKS
HOUMA TERREBONNE LA (HUM)			

12. FUEL ON BOARD HOURS	MINUTES	13. ALTERNATE AIRPORT(S)	14. PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE / 17. DESTINATION CONTACT/TELEPHONE (OPTIONAL)	15. NUMBER ABOARD
		N/A		2

16. COLOR OF AIRCRAFT	
ORANGE/BLACK/WHITE	CIVIL AIRCRAFT PILOTS. FAR Part 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed $1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVFR flight plans.

FAA Form 7233-1 (8-82) CLOSE VFR FLIGHT PLAN WITH ______________ FSS ON ARRIVAL

AIRCRAFT INFORMATION

MAKE Hughes MODEL 369

N 321JL Vso N/A

AIRCRAFT EQUIPMENT/STATUS**

**NOTE: X= OPERATIVE INOP= INOPERATIVE N/A= NOT APPLICABLE
TRANSPONDER: X (MODE C) X ILS: (LOCALIZER) X (GLIDE SLOPE) X
VOR NO. 1 X (NO. 2) X ADF: X RNAV: X
VERTICAL PATH COMPUTER: N/A DME: X
MARKER BEACON: X (AUDIO) X (VISUAL) X

FIGURE 62.—Flight Plan and Aircraft Information.

FLIGHT LOG

LAFAYETTE REGIONAL TO HOUMA TERREBONNE (HUM)

CHECK POINTS		ROUTE	COURSE	WIND	SPEED-KTS		DIST	TIME		FUEL	
FROM	TO	ALTITUDE		TEMP	TAS	GS	NM	LEG	TOT	LEG	TOT
LFT AIRPORT	LFT VOR	DIRECT CLIMB						:05:0			
	HATCH	V552 5000	114°		105						
	GRICE	V552 5000	116°								
	TBD	V552 5000	116°								
APPROACH & LANDING		DESCENT	117°					:10:0			
	HUM AIRPORT										

OTHER DATA:
NOTE: MAG. VAR. 6° E.

FLIGHT SUMMARY

TIME	FUEL (LB)	
		EN ROUTE
		RESERVE
		MISSED APPR.
		TOTAL

FIGURE 63.—Flight Planning Log.

LOUISIANA

VOR RECEIVER CHECK POINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Check Point Description
Baton Rouge (Baton Rouge Metro, Ryan)	116.5/BTR	A/1500	063	7.7	Over water tank W side of arpt.
Downtown	108.6/DTN	A/1500	290	10	Over white water tower
Esler (Esler Regional)	108.8/ESF	G	151	3.5	On ramp in front of admin bldg.
Hammond (Hammond Muni)	109.6/HMU	G	342	6	On twy W side app end Rwy 18.
Lafayette (Lafayette Regional)	110.8/LFT	A/1000	340	25	Over rotating beacon
Lake Charles (Lake Charles Muni)	113.4/LCH	A/1000	253	6.2	Over rotg bcn on atct.
Monroe (Monroe Muni)	117.2/MLU	G	209	0.9	On ramp SE of atct.
Natchez (Concordia Parish)	110.0/HEZ	A/1000	247	10.5	Over hangar NW end of field.
New Orleans (Lakefront)	113.2/MSY	A/1000	081	7.7	Over lakefront atct.
Ruston	112.8/RSN	A/2000	343	14	Over hwy & RR crossing at Dubash.
Shreveport (Shreveport Downtown)	108.6/DTN	G	307	5	On runup area N side of rwy 14.
Shreveport (Shreveport Regional)	117.4/SHV	A/1200	175	19.3	Over old terminal building.
Tibby (Thibodaux Muni)	112.0/TBD	A/1000	006	5.0	Over railroad bridge off apch end rwy 26.
	112.0/TBD	A/1000	117	10.0	Over intersection of rwys 17-35 and 12-30

LAFAYETTE REGIONAL (LFT) 2 SE GMT–6(–5DT) 30°12′14″N 91°59′16″W — **HOUSTON** H-4F, L-17C IAP

42 B S4 **FUEL** 100LL, JET A OX 1 CFR Index B

RWY 03-21: H7651X150 (ASPH-GRVD) S-75, D-170, DT-290 HIRL

RWY 03: REIL. VASI(V4L)—GA 3.0°TCH 35′. Tree.

RWY 21: MALSR. VASI(V4L)—GA 3.0°TCH 44′. Tree.

RWY 10-28: H5401X150 (ASPH) S-85, D-110, DT-175 MIRL

RWY 10: REIL (out of svc indefinitely). VASI(V4L)—GA 3.0° TCH 35.33′. Tree.

RWY 28: REIL. VASI(V4L)—GA 3.0° TCH 55′. Thld dsplcd 202′. Tree.

RWY 01-19: H5069X150 (ASPH) S-25, D-45

RWY 01: VASI(V4R)—GA 3.0°TCH 50′. Tree.

AIRPORT REMARKS: Attended continuously. Rwy 01-19 closed to air carriers. ACTIVATE MALSR Rwy 21—118.5.

COMMUNICATIONS: CTAF 118.5 **ATIS** 120.5 Opr 1200-0500Z‡ **UNICOM** 122.95

LAFAYETTE FSS (LFT) on arpt. 122.35, 122.2, 122.1R, 110.8T LD 318-233-4952 NOTAM FILE LFT.

Ⓡ **APP/DEP CON** 121.1 (011°-190°) 124.0 (191°-010°) (1200-0400Z‡)

HOUSTON CENTER APP/DEP CON 133.65 (0400-1200Z‡)

TOWER 118.5, 121.35 (Helicopter ops) (1200-0400Z‡) **GND CON** 121.8 **CLNC DEL** 125.55

STAGE III ctc **APP CON** within 25 NM below 7000′

RADIO AIDS TO NAVIGATION: NOTAM FILE LFT. VHF/DF ctc LAFAYETTE FSS

(L) VORTAC 110.8 LFT Chan 45 30°08′45″N 91°59′00″W 344°3.0 NM to fld. 40/06E

LAFFS NDB (LOM) 375 LF 30°17′21″N 91°54′29″W 215° 5.8 NM to fld

LAKE MARTIN NDB (MHW) 362 LKM 30°11′33″N 91°52′58″W 270°5.2 NM to fld

ILS/DME 109.5 I-LFT Chan 32 Rwy 21 LOM LAFFS NDB. Unmonitored when twr clsd.

ASR

FIGURE 64.—Excerpt from Airport/Facility Directory (LFT).

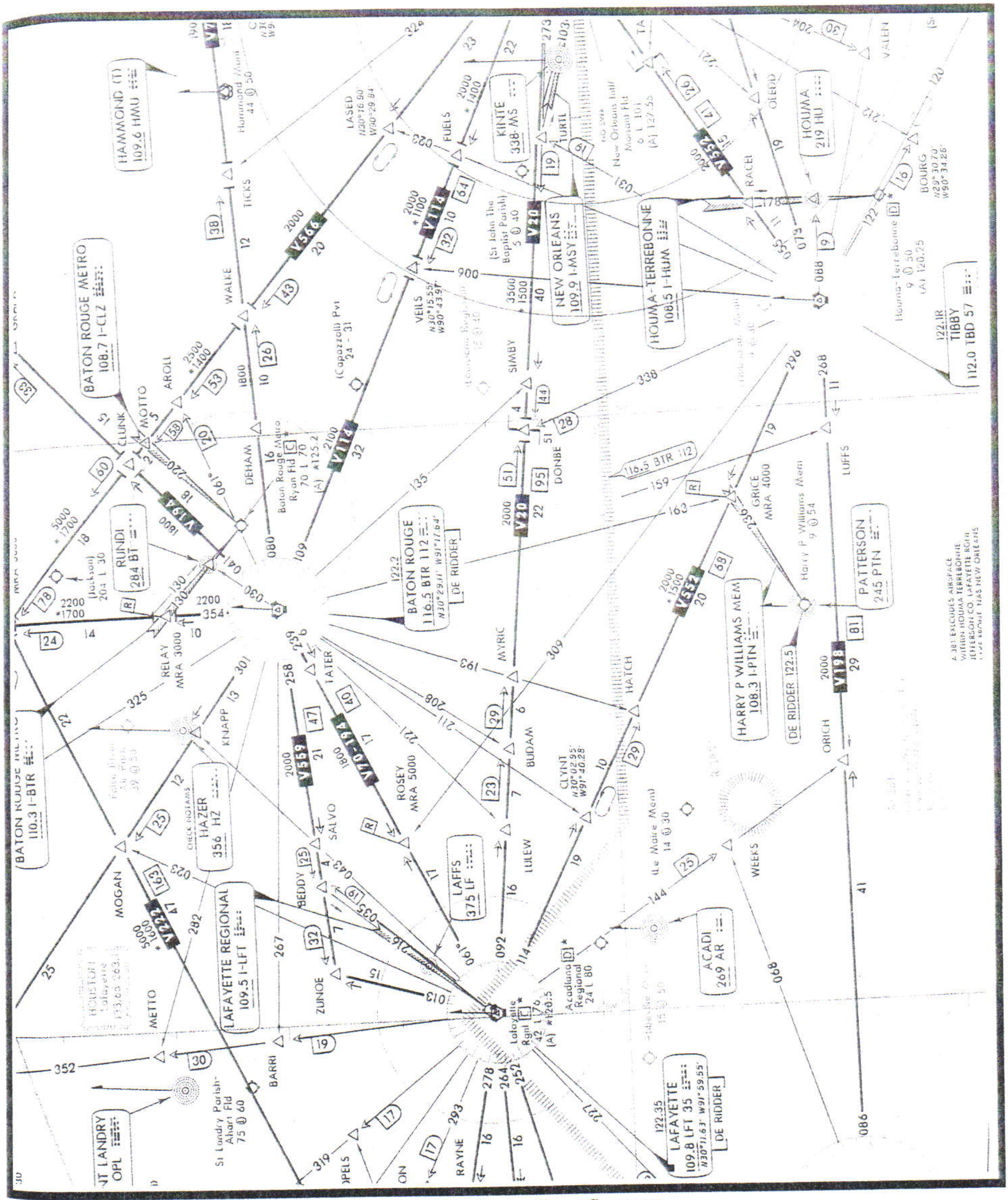


FIGURE 65.—En Route Chart Segment.

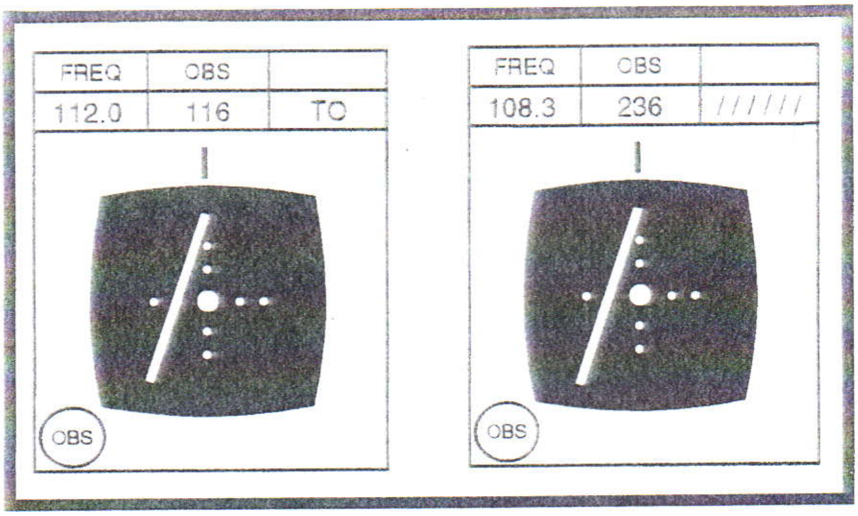


FIGURE 66.—CDI and OBS Indicators.

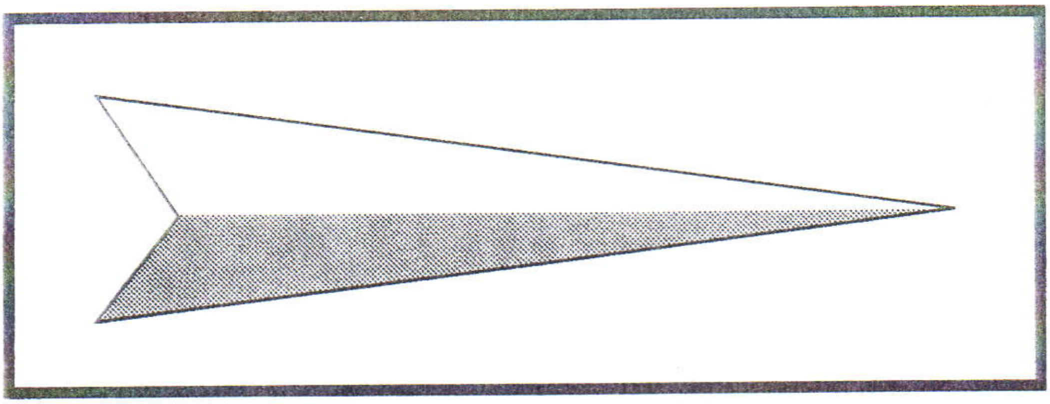
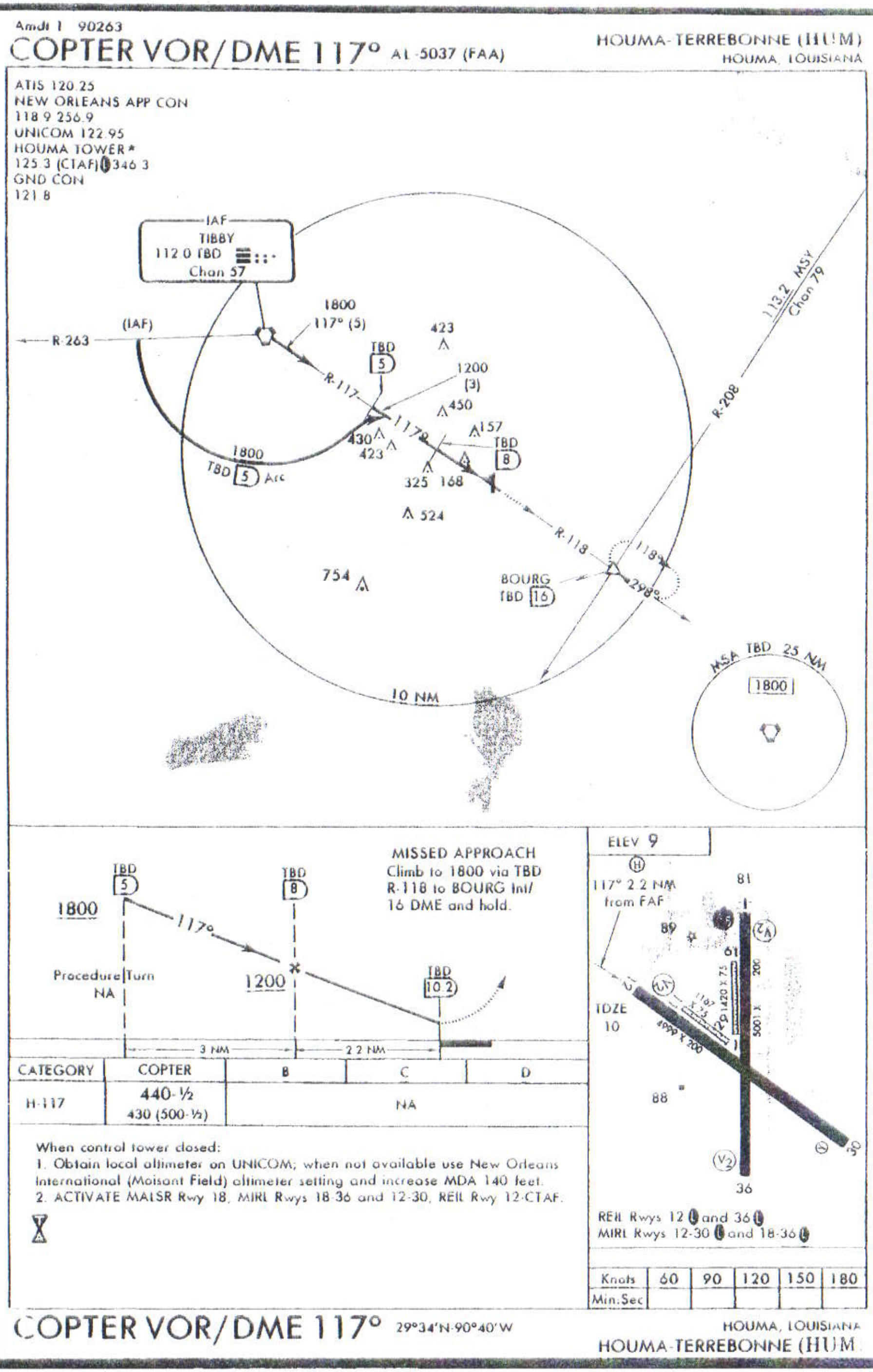


FIGURE 67.—Localizer Symbol.



HOUMA-TERREBONNE (HUM) 3 SE UTC-6(-5DT) 29°34'04"N 90°39'38"W — NEW ORLEANS H-5C, L-17° IAP

9 B S4 **FUEL** 100LL, JET A OX 1, 4 TPA—(See Remarks)

RWY 18-36: H5001X200 (CONC) S-50, D-70, DT-137 MIRL

RWY 18: MALSR. PVASI(PSIL)—GA 3.0°TCH 52'. Tree. **RWY 36:** REIL. PVASI(PSIL)—GA 3.0°TCH 39'. Tree.

RWY 12-30: H4999X200(CONC) S-50, D-70, DT-137 MIRL

RWY 12: REIL. PVASI(PSIL)—GA 3.0°TCH 42'. **RWY 30:** VASI(V2L)—GA 3.0°TCH 39'.

RWY 01-19: 1420X75 (TURF)

RWY 11-29: 1167X75 (TURF)

AIRPORT REMARKS: Attended dawn-dusk. Birds on and in vicinity of arpt. Extensive helicopter ops south thru west of arpt. Rwy 01–19 and Rwy 11–29 soft and unusable when wet. Rwy 01–19 marked with white tires. Rwy 11–29 marked with white tires. Rwys 12–30 and 18–36 Sfc skid resistance fair to poor when wet. Oxygen avbl by prior request 504-876-0584. TPA—1009'(1000'), turbine powered 1509' (1500'). ACTIVATE MIRL Rwy 12–30 and Rwy 18–36 and MALSR Rwy 18 and REIL Rwy 12 and Rwy 36—CTAF. Control Zone effective 1200-0300Z‡.

WEATHER DATA SOURCES: LAWRS

COMMUNICATIONS: CTAF 125.3 **ATIS** 120.25 **UNICOM** 122.95

DE RIDDER FSS (DRI) TF 1-800-WX-BRIEF. NOTAM FILE HUM.

TIBBY RCO 122.1R 112.0T (DE RIDDER FSS)

Ⓡ **NEW ORLEANS APP/DEP CON** 118.9

TOWER 125.3 (1200-0300Z‡) **GND CON** 121.8 **CLNC DEL** 118.35

RADIO AIDS TO NAVIGATION: NOTAM FILE DRI.

TIBBY (L) VORTAC 112.0 TBD Chan 57 29°39'51"N 90°49'44"W 117° 10.5 NM to fld. 10/06E.

NDB (LOM) 219 HU 29°39'47"N 90°39'34"W 177° 5.7 NM to fld. NOTAM FILE HUM.

ILS 108.5 I-HUM RWY 18 LOM HOUMA NDB.

FIGURE 68.—COPTER VOR DME-117 Degrees (HUM).

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Form Approved: OMB No. 2120-0034

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION **FLIGHT PLAN**	(FAA USE ONLY) ☐ PILOT BRIEFING ☐ VNR ☐ STOPOVER	TIME STARTED	SPECIALIST INITIALS

1. TYPE	2. AIRCRAFT IDENTIFICATION	3. AIRCRAFT TYPE/ SPECIAL EQUIPMENT	4. TRUE AIRSPEED	5. DEPARTURE POINT	6. DEPARTURE TIME PROPOSED (Z)	ACTUAL (Z)	7. CRUISING ALTITUDE
VFR							
X IFR				GREENWOOD LAKE			
DVFR	N2142S	C172/	128 KTS	4N1			5000

8. ROUTE OF FLIGHT

DIRECT SHAFF INT., V213 HELON INT., V58 JUDDS INT., JUDDS2

9. DESTINATION (Name of airport and city)	10. EST. TIME ENROUTE HOURS	MINUTES	11. REMARKS
BRADLEY INTL. BDL			INSTRUMENT TRAINING FLIGHT

12. FUEL ON BOARD HOURS	MINUTES	13. ALTERNATE AIRPORT(S)	14. PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE / 17. DESTINATION CONTACT/TELEPHONE (OPTIONAL)	15. NUMBER ABOARD
		N/A		2

16. COLOR OF AIRCRAFT

BROWN/TAN/WHITE

CIVIL AIRCRAFT PILOTS. FAR Part 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed $1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVFR flight plans.

FAA Form 7233-1 (8-82)

CLOSE VFR FLIGHT PLAN WITH ____________ FSS ON ARRIVAL

AIRCRAFT INFORMATION

MAKE Cessna MODEL 172

N 2142S Vso 33

AIRCRAFT EQUIPMENT/STATUS**

**NOTE: X= OPERATIVE INOP= INOPERATIVE N/A= NOT APPLICABLE
TRANSPONDER: X (MODE C) X ILS: (LOCALIZER) X (GLIDE SLOPE) X
VOR NO. 1 X (NO. 2) X ADF: X RNAV: N/A
VERTICAL PATH COMPUTER: N/A DME: X
MARKER BEACON: X (AUDIO) INOP (VISUAL) X

FIGURE 69.—Flight Plan and Aircraft Information.

FLIGHT LOG

GREENWOOD LAKE (4N1) TO BRADLEY INTL. (BDL)

CHECK POINTS		ROUTE	COURSE	WIND	SPEED-KTS		DIST	TIME		FUEL	
FROM	TO	ALTITUDE		TEMP	TAS	GS	NM	LEG	TOT	LEG	TOT
4N1	SHAFF	DIRECT CLIMB	350°					:08:0			
	HELON	V213 5000	029°		128						
	IGN	V58 5000	102°								
		JUDDS2	112°								
	JUDDS	JUDDS2	100°								
	BRISS	JUDDS2	057°								
APPROACH & LANDING								:12:0			
	BDL INTL										

OTHER DATA:
NOTE: MAG. VAR. 14° W.

FLIGHT SUMMARY

TIME	FUEL (LB)	
		EN ROUTE
		RESERVE
		MISSED APPR.
		TOTAL

FIGURE 70.—Flight Planning Log.

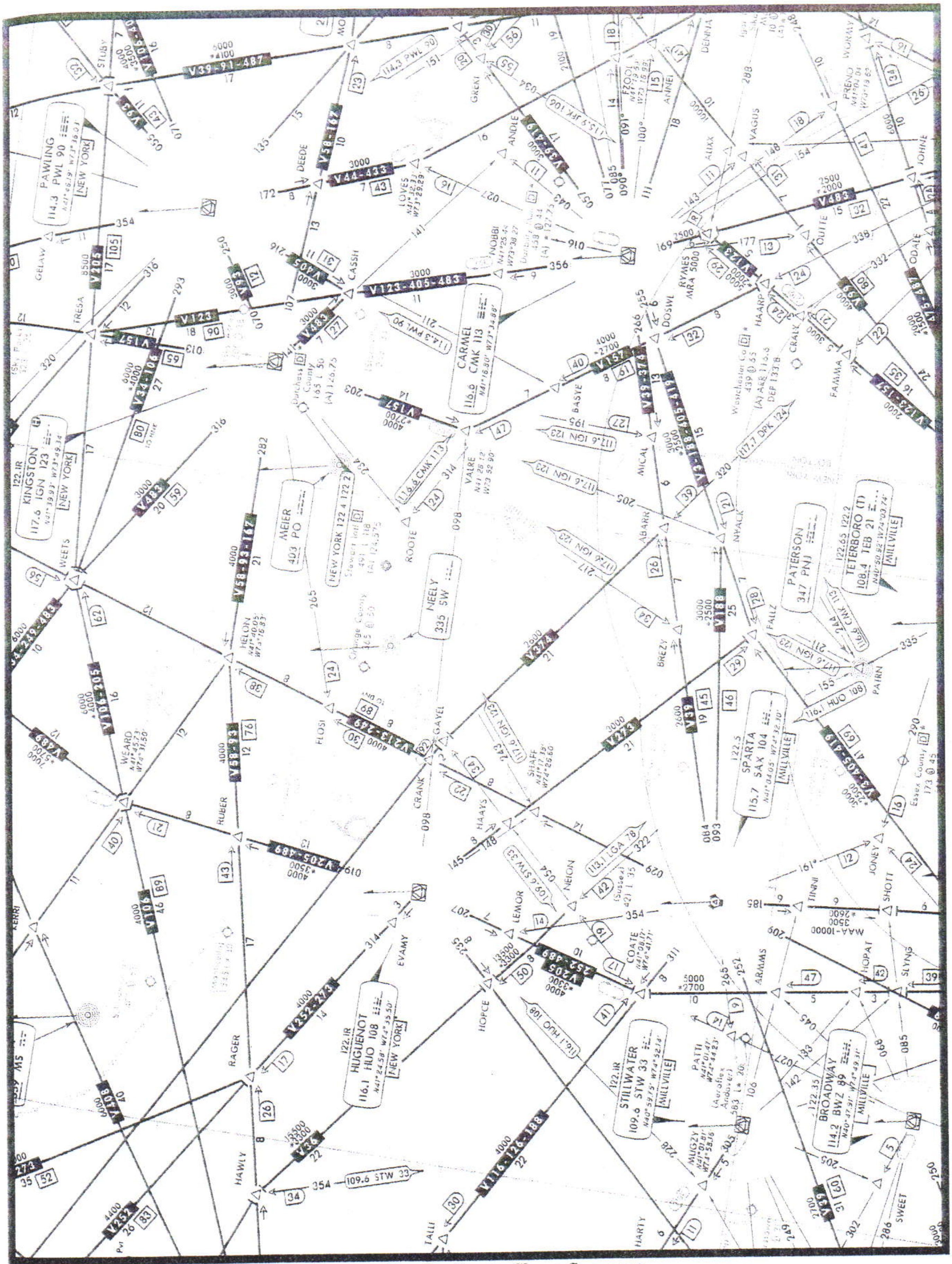


FIGURE 71.—En Route Chart Segment.

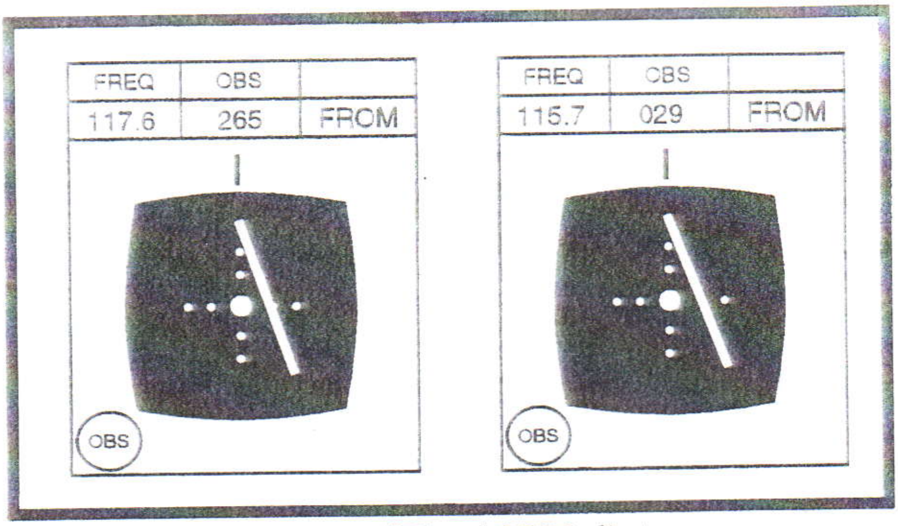


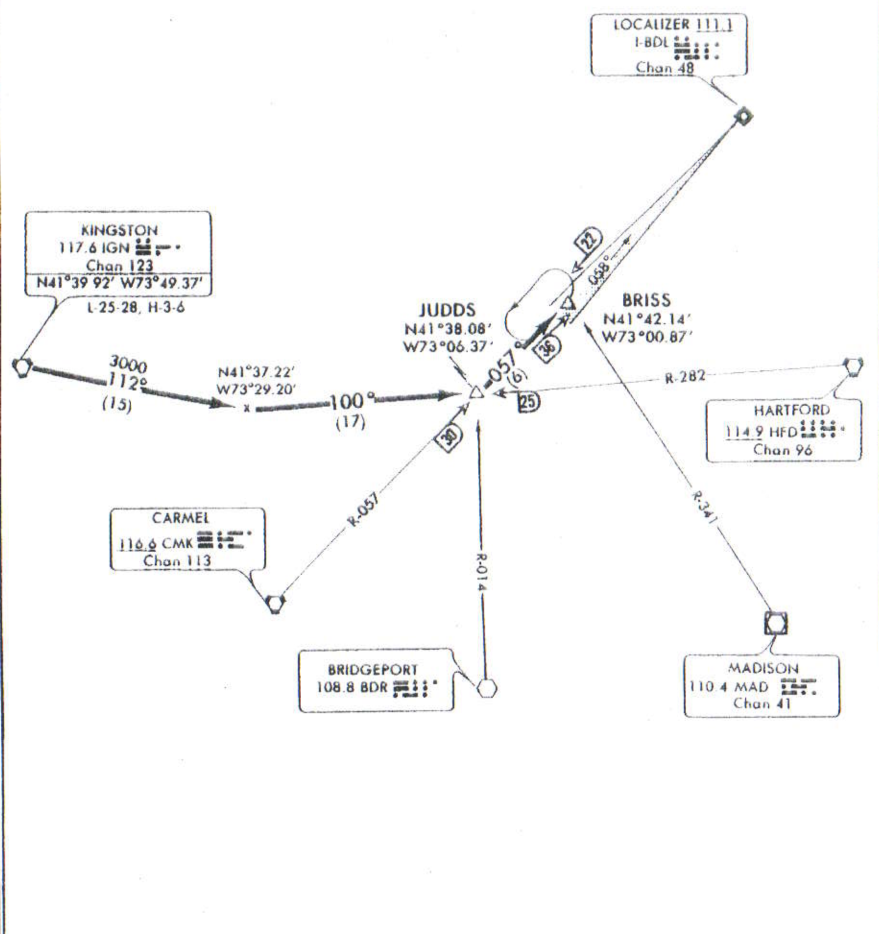
FIGURE 71A.—CDI and OBS Indicators.

91150 ST-460 (FAA)

JUDDS TWO ARRIVAL (IGN.JUDDS2)

BRADLEY INTERNATIONAL
WINDSOR LOCKS, CONNECTICUT

ATIS 118.15



NOTE: Chart not to scale

From over IGN VORTAC via R-112 and HFD R-282 to JUDDS INT; then via CMK R-057 to BRISS INT. Expect radar vectors to final approach course.

JUDDS TWO ARRIVAL (IGN.JUDDS2)

WINDSOR LOCKS, CONNECTICUT
BRADLEY INTERNATIONAL

CONNECTICUT

WINDSOR LOCKS

BRADLEY INTL (BDL) 3 W UTC-5(-4DT) 41°56'20"N 72°41'01"W — NEW YORK
174 B S4 **FUEL** 100LL, JET A OX 1, 2, 3, 4 TPA—See Remarks — H-3D, 6J, L-25C, 28I
LRA ARFF Index D — IAP

RWY 06-24: H9502X200 (ASPH-GRVD) S-200, D-200, DT-350, DDT-710 HIRL CL
RWY 06: ALSF2 TDZ. Trees. **RWY 24:** MALSR. VASI(V4L)—GA 3.0°TCH 56'
RWY 15-33: H6846X200 (ASPH) S-200, D-200, DT-350 HIRL
RWY 15: REIL. VASI(V4L)—GA 3.5°TCH 59'. Trees. **RWY 33:** MALSF. VASI(V4R)—GA 3.0°TCH 59'. Trees
RWY 01-19: H5141X100 (ASPH) S-60, D-190, DT-328 MIRL
RWY 01: Building. **RWY 19:** Trees.

AIRPORT REMARKS: Attended continuously. Rwy 01–19 restricted to ldg and tkf with maximum tkf gross weight of 73,000 pounds. This restriction does not apply to acft emergency. Numerous birds frequently on or in vicinity of arpt. Portions of taxiway Alpha not visible from tower. TPA—1174(1000) light acft, 1874(1700) heavy acft. Landing fee for business, corporate and revenue producing aircraft. 24 hours ARFF level D svc avbl. 24 hours PPR for unscheduled air carrier ops with more than 30 passenger seats call arpt manager 203–627–3001/3008. This does not include delayed regularly schedule air carrier ops or diversions. Rwy 15 REIL out of svc indefinitely. Flight Notification Service (ADCUS) available. NOTE: See SPECIAL NOTICE—Simultaneous Operations on Intersecting Runways.

WEATHER DATA SOURCES: LLWAS.

COMMUNICATIONS: **ATIS** 118.15 **UNICOM** 122.95
BRIDGEPORT FSS (BDR) TF 1–800–WX–BRIEF. NOTAM FILE BDL.
WINDSOR LOCKS RCO 122.3 (BRIDGEPORT FSS)
Ⓡ **BRADLEY APP CON** 125.8 (within 20 miles)
Ⓡ **BRADLEY DEP CON** 121.05 (South) 125.35 (North and West) 123.95 (Northeast)
TOWER 120.3 **GND CON** 121.9 **CLNC DEL** 121.75
ARSA ctc **APP CON**

RADIO AIDS TO NAVIGATION: NOTAM FILE BDL.
(T) **VORTACW** 109.0 BDL Chan 27 41°56'27"N 72°41'21"W at fld. 165/14W.
VOR portion unusable 090°–103° beyond 24 NM below 5000' 104°–170° beyond 10 NM below 6000'
260°–290° beyond 15 NM below 6000'
DME portion unusable:
040°–085° beyond 13 NM below 2000'
130°–150° beyond 10 NM below 3000'
170°–195° beyond 14 NM below 3000'
250°–290° beyond 18 NM below 6000'
CHUPP NDB (LOM) 388 BD 41°52'38"N 72°46'00"W 058° 5.2 NM to fld.
ILS/DME 111.1 I-BDL Chan 48 Rwy 06. LOM CHUPP NDB.
ILS/DME 108.55 I-IKX Chan 22Y Rwy 33.
ILS/DME 111.1 I-MYQ Chan 48 Rwy 24.

FIGURE 72.— JUDDS TWO ARRIVAL.

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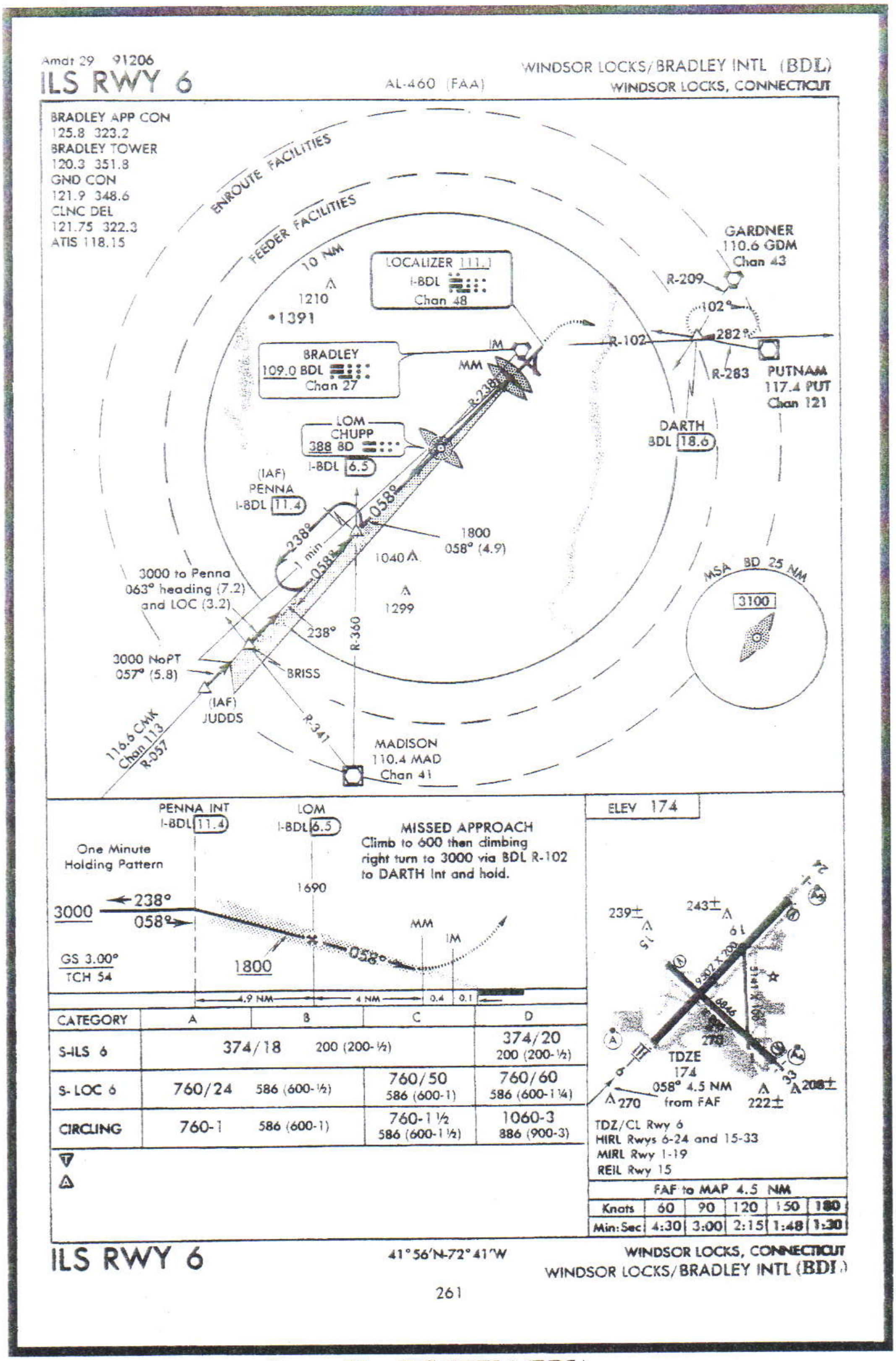

FIGURE 73.—ILS RWY 6 (BDL).

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Form Approved: OMB No. 2120-0034

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION **FLIGHT PLAN**	(FAA USE ONLY) ☐ PILOT BRIEFING ☐ STOPOVER	☐ VNR	TIME STARTED	SPECIALIST INITIALS

1. TYPE	2. AIRCRAFT IDENTIFICATION	3. AIRCRAFT TYPE/ SPECIAL EQUIPMENT	4. TRUE AIRSPEED	5. DEPARTURE POINT	6. DEPARTURE TIME PROPOSED (Z)	ACTUAL (Z)	7. CRUISING ALTITUDE
VFR							
X IFR							
DVFR	N242T	C310/	160 KTS	HLN			11000

8. ROUTE OF FLIGHT
STAKK2, V365 BZN, V86

9. DESTINATION (Name of airport and city)	10. EST. TIME ENROUTE HOURS	MINUTES	11. REMARKS
LOGAN INTL. AIRPORT (BIL)			

12. FUEL ON BOARD HOURS	MINUTES	13. ALTERNATE AIRPORT(S)	14. PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE / 17. DESTINATION CONTACT/TELEPHONE (OPTIONAL)	15. NUMBER ABOARD
		N/A		2

16. COLOR OF AIRCRAFT
RED/BLACK/WHITE

CIVIL AIRCRAFT PILOTS. FAR Part 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed $1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVFR flight plans.

FAA Form 7233-1 (8-82)

CLOSE VFR FLIGHT PLAN WITH ________________ FSS ON ARRIVAL

AIRCRAFT INFORMATION

MAKE Cessna   MODEL 310R

N 242T   Vso 72

AIRCRAFT EQUIPMENT/STATUS**

**NOTE: X= OPERATIVE INOP= INOPERATIVE N/A= NOT APPLICABLE
TRANSPONDER: X (MODE C) X ILS: (LOCALIZER) X (GLIDE SLOPE) INOP
VOR NO. 1 X (NO. 2) X ADF: X RNAV: N/A
VERTICAL PATH COMPUTER: N/A DME: X
MARKER BEACON: X (AUDIO) X (VISUAL) X

FIGURE 74.—Flight Plan and Aircraft Information.

FLIGHT LOG

HELENA REGIONAL AIRPORT TO BILLINGS LOGAN INTL.

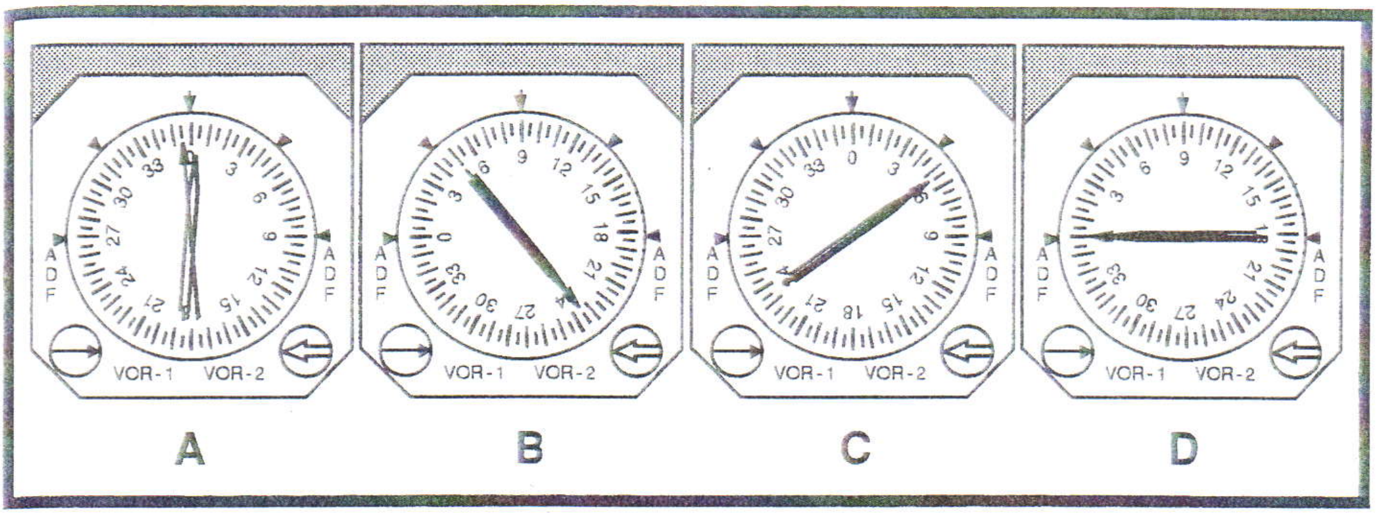
CHECK POINTS FROM	TO	ROUTE / ALTITUDE	COURSE	WIND / TEMP	SPEED-KTS TAS	GS	DIST NM	TIME LEG	TIME TOT	FUEL LEG	FUEL TOT
HLN	VESTS	STAKK2 CLIMB	103°					:15:0			
	BZN	V365 11000	140°		160						
	LVM	V86 11000	110° / 063°								
	REEPO	V86 11000	067°								
	BIL	V86	069°								
APPROACH & LANDING								:15:0			
	LOGAN INTL										

OTHER DATA:
NOTE: MAG. VAR. 18° E.

FLIGHT SUMMARY

TIME	FUEL (LB)	
		EN ROUTE
		RESERVE
		MISSED APPR.
		TOTAL

FIGURE 75.—Flight Planning Log.



HELENA REGIONAL (HLN) 2 NE UTC–7(–6DT) 46°36'25"N 111°58'55"W GREAT FALLS
3873 B S4 FUEL 100LL, JET A OX 1,3 AOE ARFF Index B H-1C, L-9B
RWY 09-27: H9000X150 (ASPH-PFC) S-100, D-160, DT-250 HIRL IAP
RWY 09: VASI(V4L)—GA 3.0°TCH 45'. Ground. RWY 27: MALSR. VASI(V4L)—GA 3.0°TCH 55'. Rgt tfc.
RWY 05-23: H4599X75 (ASPH-PFC) S-21, D-30
RWY 05: Road. RWY 23: Fence. Rgt tfc.
RWY 16-34: H2979X75 (ASPH) S-21, D-30 MIRL
RWY 34: Ground. Rgt tfc.
AIRPORT REMARKS: Attended 1200-0800Z‡. East 2400' Taxiway C and first 900' Rwy 27 not visible from tower. Prior permission for unscheduled FAR 121 operations, Call 406-442-2821. AOE, 1 hour prior notice required, phone 449–1569 1500–0000Z‡, 0000–1500Z‡ 449–1024. Twys A;B; high speed and C (between A and D) not available for air carrier use by acft with greater than 30 passenger seats. Rwy 16–34 and Rwy 05–23 (except between Rwy 09–27 and Twy D) not available for air carrier use by acft with greater than 30 passenger seats. When tower closed, ACTIVATE HIRL Rwy 09–27 and MALSR Rwy 27—CTAF, when twr closed MIRL Rwy 16–34 are off. Ldg fee for all acft over 12,500 lbs. NOTE: See SPECIAL NOTICE—Simultaneous Operations on Intersecting Runways.
COMMUNICATIONS: CTAF 118.3 ATIS 120.4 (Mon-Fri 1300–0700Z‡, Sat-Sun 1300–0500Z‡)
UNICOM 122.95
GREAT FALLS FSS (GTF) TF 1-800-WX-BRIEF. NOTAM FILE HLN.
RCO 122.2 122.1R 117.7T (GREAT FALLS FSS)
APP/DEP CON 119.5 (Mon–Fri 1300–0700Z‡, Sat–Sun 1300–0500Z‡)
SALT LAKE CENTER APP/DEP CON 133.4 (Mon–Fri 0700–1300Z‡, Sat–Sun 0500–1300Z‡)
TOWER 118.3 (Mon–Fri 1300–0700Z‡, Sat-Sun 1300–0500Z‡) GND CON 121.9
RADIO AIDS TO NAVIGATION: NOTAM FILE HLN.
(H) VORTAC 117.7 HLN Chan 124 46°36'25"N 111°57'10"W 254° 1.2 NM to fld. 3810/16E.
VORTAC unusable:
006°-090° beyond 25 NM below 11,000' 091°-120° beyond 20 NM below 16,000'
121°-240° beyond 25 NM below 10,000' 355°-006° beyond 15 NM below 17,500'
241°-320° beyond 25 NM below 10,000'
CAPITOL NDB (HW) 317 CVP 46°36'24"N 111°56'11"W 254° 1.9 NM to fld.
NDB unmonitored when tower closed.
HAUSER NDB (MHW) 386 HAU 46°34'08"N 111°45'26"W 268° 9.6 NM to fld.
ILS 110.1 I-HLN Rwy 27 ILS unmonitored when tower closed.

VOR RECEIVER CHECK

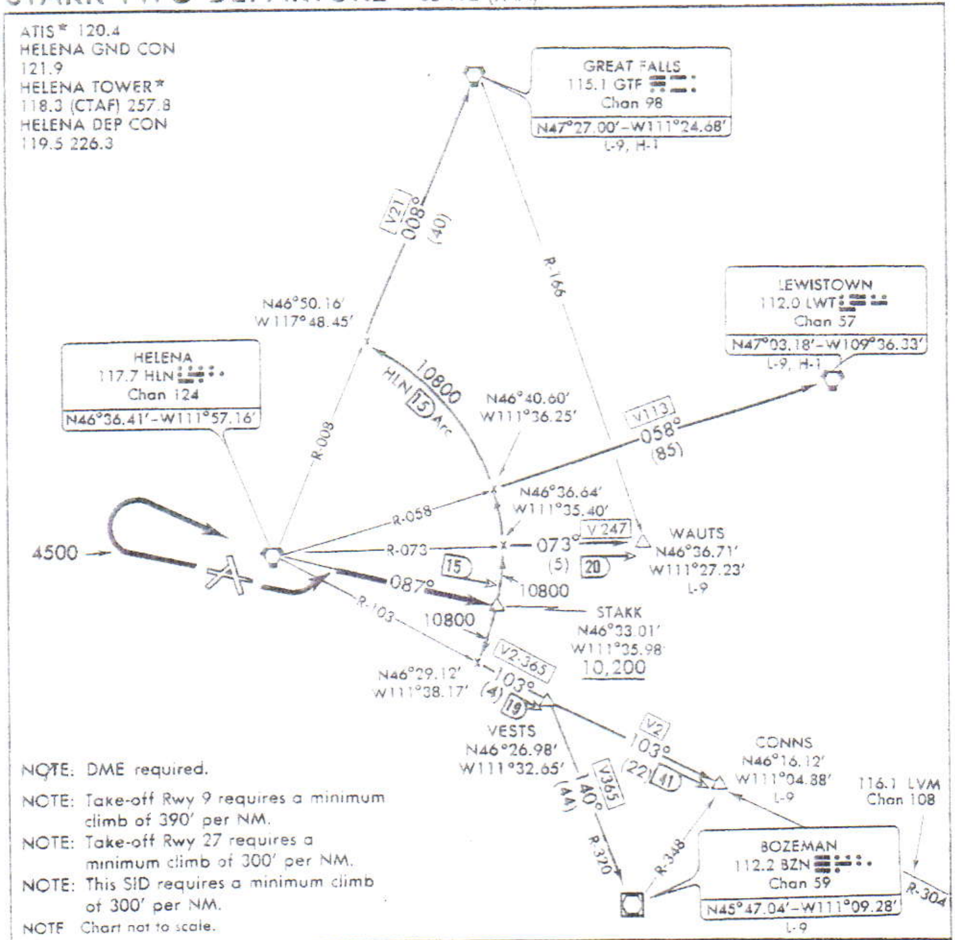
Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Check Point Description
Helena (Helena Regional)	117.7/HLN	G	237	0.7	On Twy E midway between Twy C and Rwy 27.
Kalispell (Glacier Park Intl)	108.4/FCA	A/4000	316	6.4	Over apch end Rwy 29.
Lewistown (Lewistown Muni)	112.0/LWT	A/5200	072	5.4	Over apch end Rwy 07.
Livingston	116.1/LVM	A/6500	234	5.5	Over northern most radio twr NE of city.
Miles City (Frank Wiley Field)	112.1/MLS	G	036	4.2	On twy leading to Rwy 30.
Missoula (Missoula Intl)	112.8/MSO	G	340	0.6	On edge of ramp in front of Admin Building.

FIGURE 76.— VOR Indications and Excerpts from Airport/Facility Directory (HLN).

122

(PILOT NAV) (STAKK2.STAKK) 91038
STAKK TWO DEPARTURE SL-192 (FAA)

HELENA REGIONAL
HELENA, MONTANA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 9: Climbing left turn to intercept HLN R-087 to cross STAKK INT at or above 10,200'. Thence via transition.

TAKE-OFF RUNWAY 27: Climb on runway heading to 4500' then climbing right turn direct HLN VORTAC. Continue climb on HLN R-087 to cross STAKK INT at or above 10,200'. Thence via transition.

BOZEMAN TRANSITION (STAKK2.BZN): From over STAKK INT via 15 DME Arc and V365 to BZN VOR/DME.

CONNS TRANSITION (STAKK2.CONNS): From over STAKK INT via 15 DME Arc and V2 to CONNS INT.

GREAT FALLS TRANSITION (STAKK2.GTF): From over STAKK INT via 15 DME Arc and V21 to GTF VORTAC.

LEWISTOWN TRANSITION (STAKK2.LWT): From over STAKK INT via 15 DME Arc and V113 to LWT VORTAC.

WAUTS TRANSITION (STAKK2.WAUTS): From over STAKK INT via 15 DME Arc and V247 to WAUTS INT.

STAKK TWO DEPARTURE
(PILOT NAV) (STAKK2.STAKK)

HELENA, MONTANA
HELENA REGIONAL

FIGURE 77.— STAKK TWO DEPARTURE.

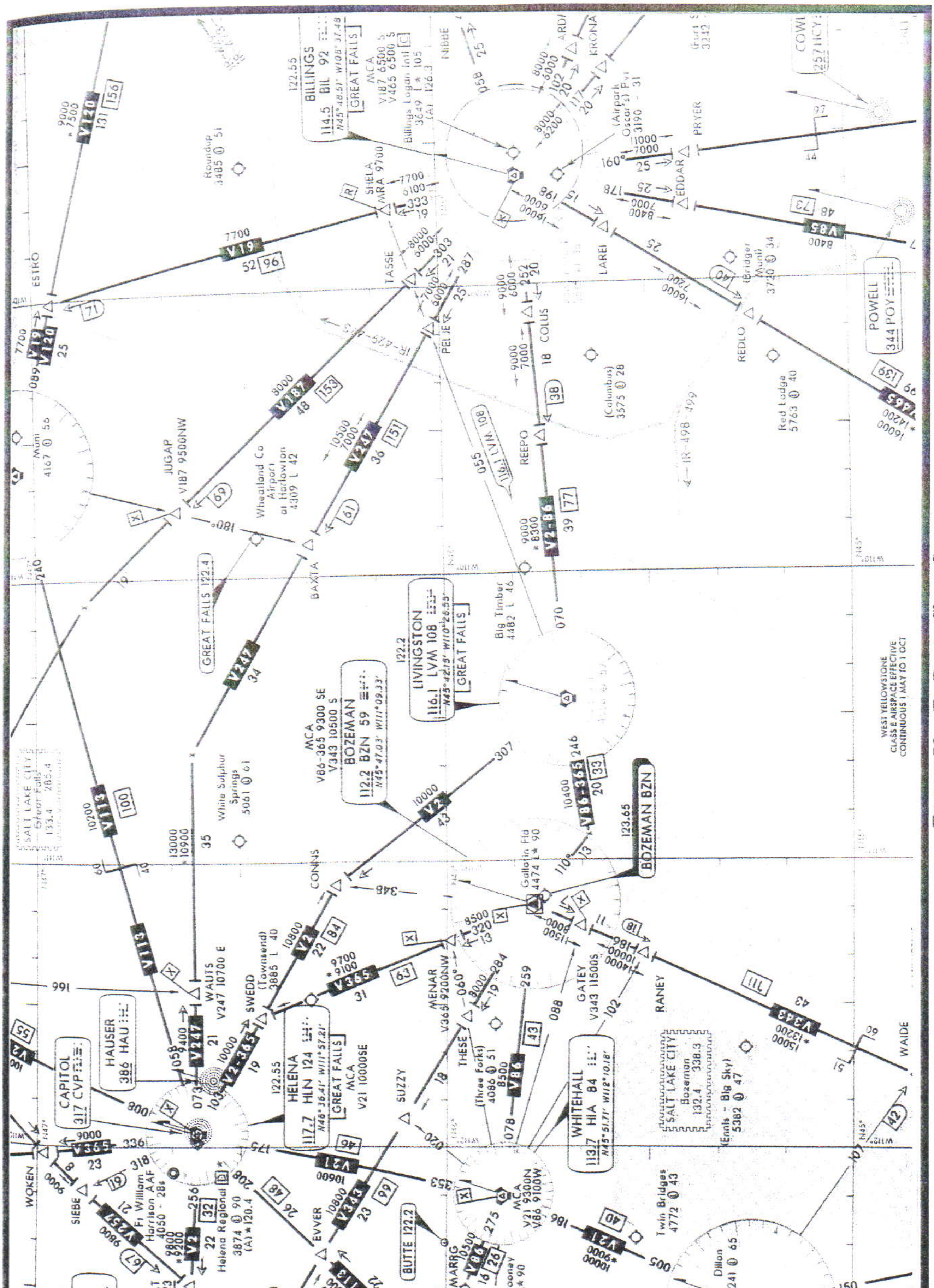


FIGURE 78.—En Route Chart Segment.

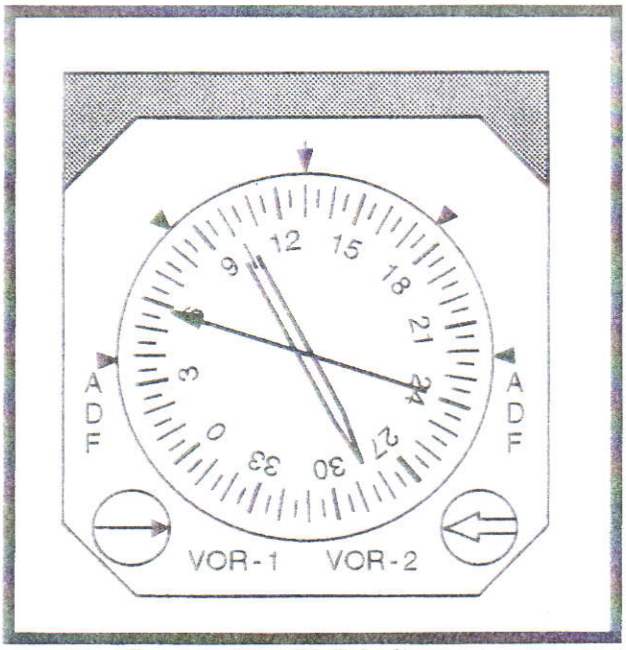
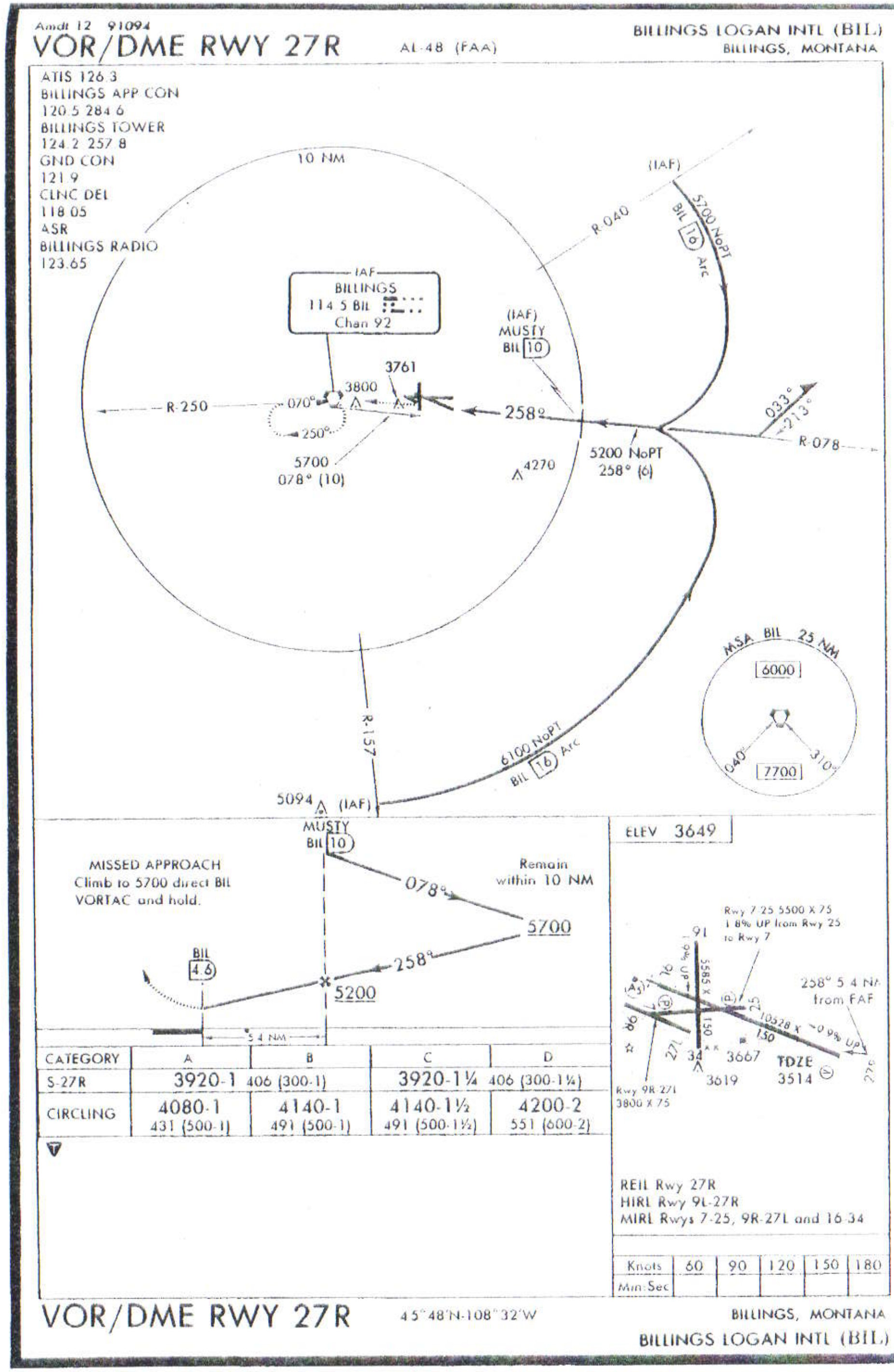


FIGURE 79.—RMI Indicator.



CATEGORY	A	B	C	D
S-27R	3920-1 406 (300-1)		3920-1¼ 406 (300-1¼)	
CIRCLING	4080-1 431 (500-1)	4140-1 491 (500-1)	4140-1½ 491 (500-1½)	4200-2 551 (600-2)

BILLINGS LOGAN INTL (BIL) 2 NW UTC-7(-6DT) 45°48'30"N 108°32'36"W — BILLINGS H-1C, L-9C IAP

3649 B S4 FUEL 80, 100LL, JET A, MOGAS OX 1, 2, 3, 4 LRA ARFF Index C

RWY 09L-27R: H10528X150 (ASPH-PFC) S-130, D-170, DT-285, DDT-555 for DC-10-40, DDT-710 for B747-100 HIRL 0.9% up NW

RWY 09L: MALSR. **RWY 27R:** REIL. VASI(V4L)—GA 2.75° TCH 50'. Ground.

RWY 16-34: H5585X150 (ASPH) S-55, D-70 MIRL 1.9% up S

RWY 34: Fence.

RWY 07-25: H5500X75 (ASPH-PFC) S-12 MIRL

RWY 07: PAPI(P4L)—GA 3.0° TCH 27'. Ground. **RWY 25:** PAPI(P4R)—GA 3.0° TCH 35'

RWY 09R-27L: H3800X75 (ASPH-AFSC) S-12 MIRL

AIRPORT REMARKS: Attended continuously. 180° turns Rwy 09L-27R by acft over 25000 lbs prohibited. Taxiway E CLOSED to the airline apron. Rwy 09R-27L restricted to aircraft weighing 13,000 pounds maximum gross certificated landing weight or less. For MIRL Rwys 09R-27L, and 16-34, and 07-25 HIRL Rwy 09L-27R and MALSR Rwy 09L ctc twr or FSS. Flight Notification Service (ADCUS) available. NOTE: See SPECIAL NOTICE—Simultaneous Operations on Intersecting Runways.

WEATHER DATA SOURCES: LLWAS.

COMMUNICATIONS: ATIS 126.3 UNICOM 122.95

BILLINGS FSS (BIL) on arpt. 123.65 122.2 122.1R LD 406-259-4545. NOTAM FILE BIL.

®APP/DEP CON 120.5 (South) 119.2 (North) 114.5T

TOWER 124.2 GND CON 121.9 CLNC DEL 118.05 PRE TAXI CLNC 121.9

STAGE III SVC ctc APP CON 20 NM out

RADIO AIDS TO NAVIGATION: NOTAM FILE BIL.

(H) VORTAC 114.5 BIL Chan 92 45°48'31"N 108°37'26"W 073° 3.4 NM to fld. 3800/17E.

LOCKWOOD NDB (HW) 400 LKO 45°46'03"N 108°23'30"W 274° 6.8 NM to fld.

SAIGE NDB (LOM) 251 BI 45°51'08"N 108°41'37"W 096° 6.8 NM to fld.

ILS 110.3 I-BIL Rwy 09L LOM SAIGE NDB.

FIGURE 80.—VOR/DME RWY 27R and Airport/Facility Directory (BIL).

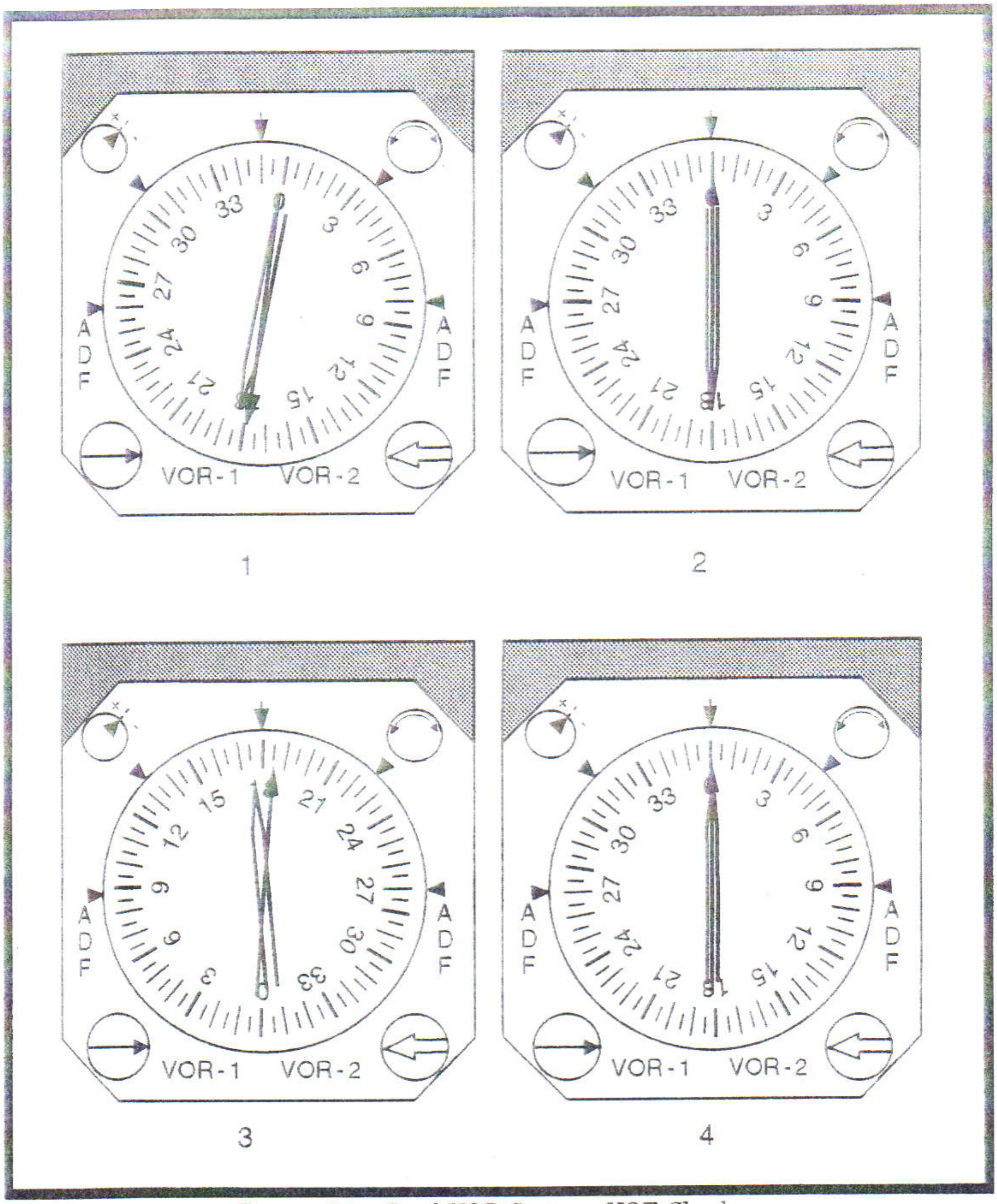


FIGURE 81.—Dual VOR System, VOT Check.

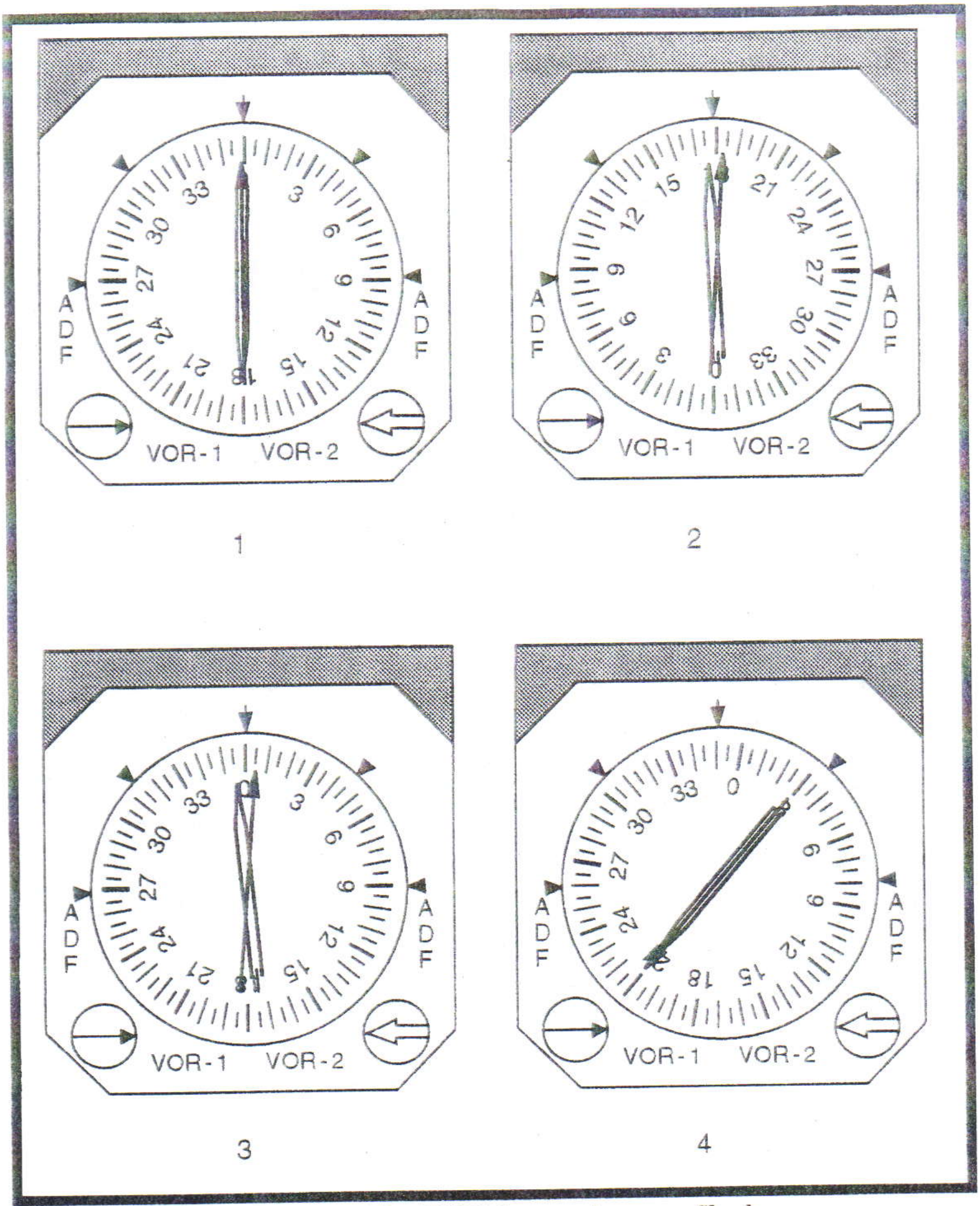


FIGURE 82.—Dual VOR System, Accuracy Check.

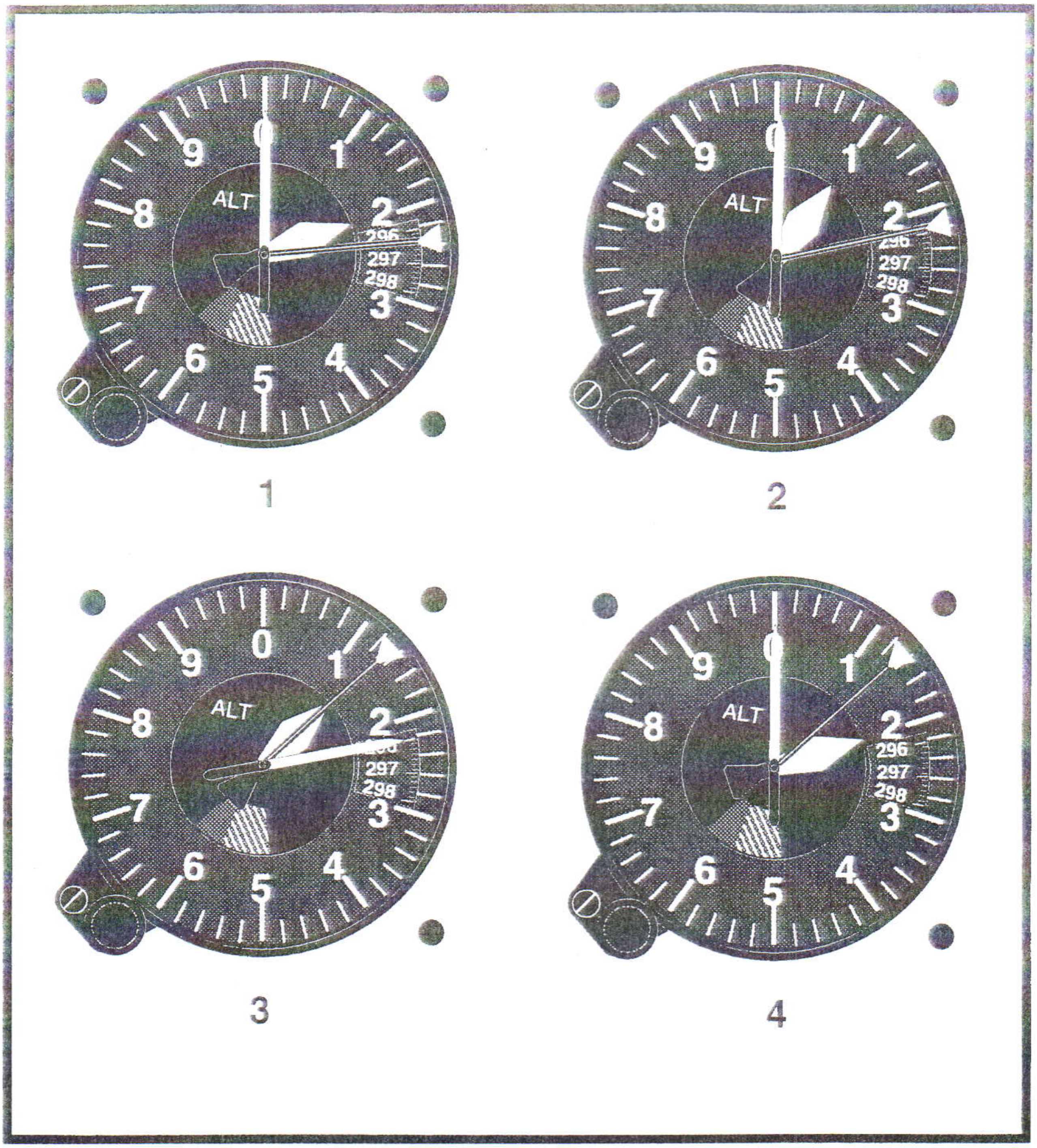


FIGURE 83.—Altimeter/12,000 Feet.

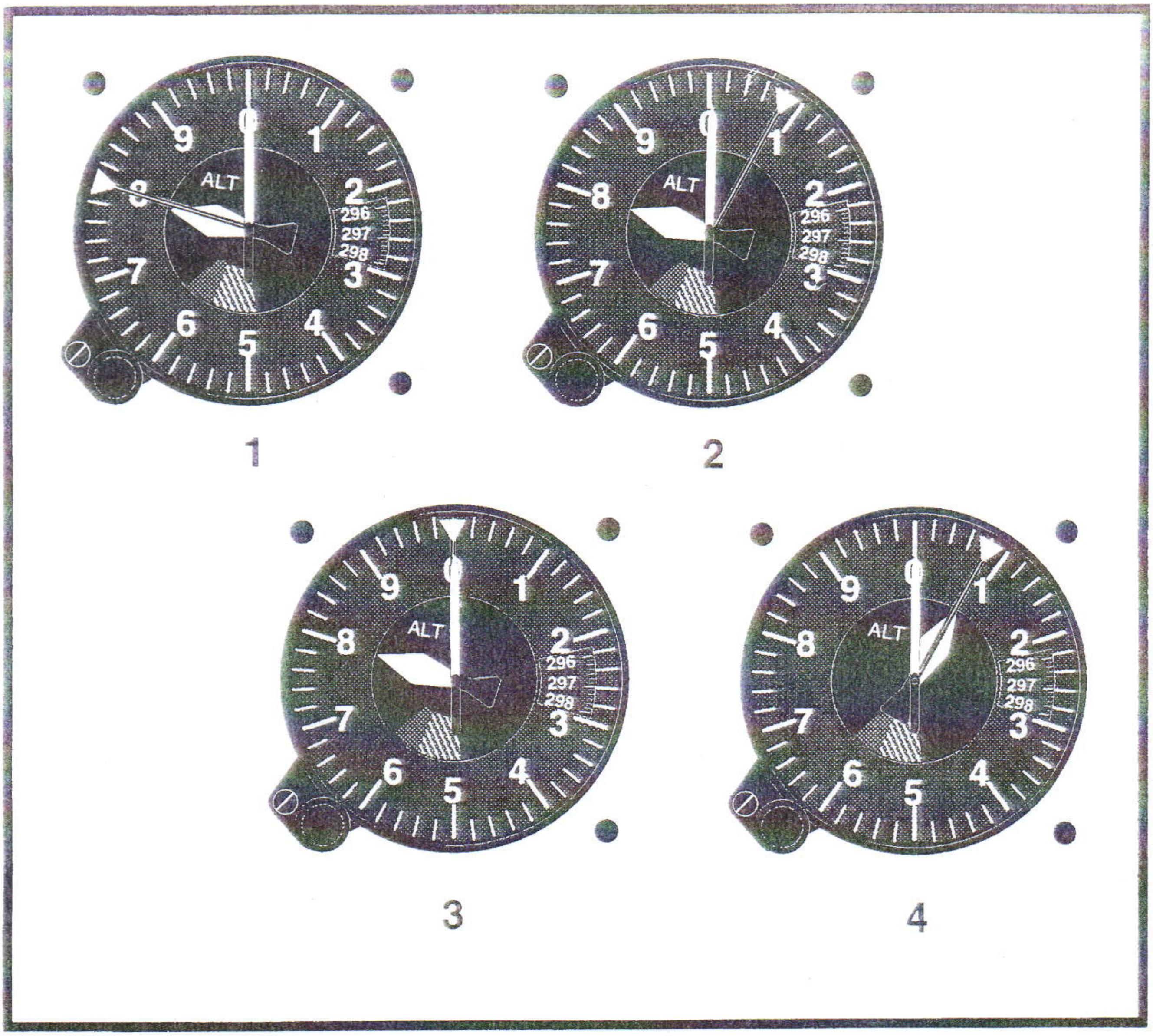
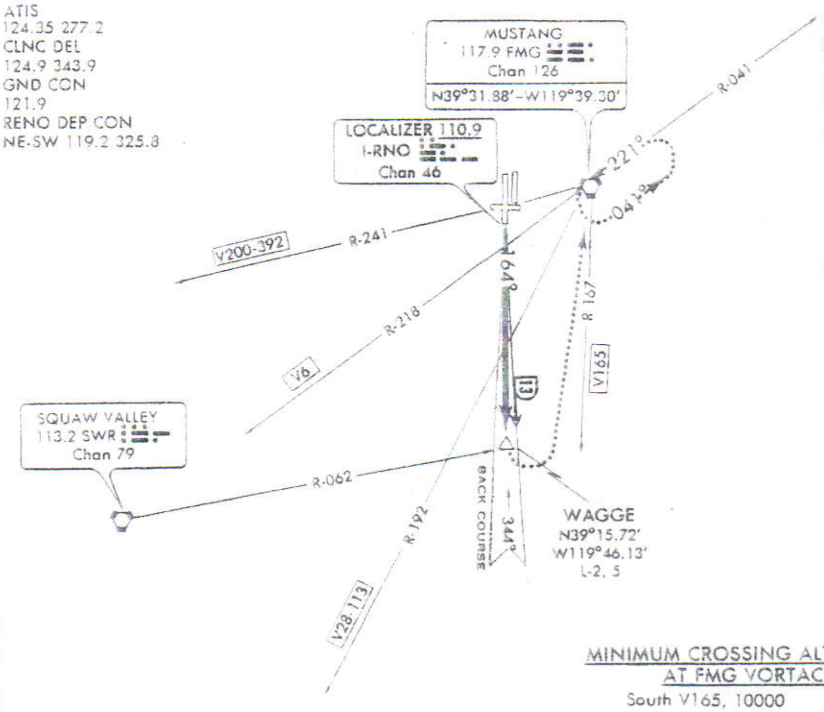


FIGURE 84.—Altimeter/8,000 Feet.

(VECTOR) (WASH2.WAGGE) 91094
WASHOE TWO DEPARTURE SL-346 (FAA)

RENO CANNON INTL
RENO, NEVADA

ATIS
124.35 277.2
CLNC DEL
124.9 343.9
GND CON
121.9
RENO DEP CON
NE-SW 119.2 325.8



MINIMUM CROSSING ALTITUDES
AT FMG VORTAC

South V165, 10000
Southwest V28-113, 10500
Southwest V200-392, 10000
Southwest V6, 12000

NOTE: Minimum climb rate at 400′ per NM to 9000′ required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 16L/R: Climb via I-RNO Localizer south course to WAGGE INT then via radar vectors to assigned route.
LOST COMMUNICATIONS: If not in contact with departure control within one minute after takeoff, or if communications are lost before reaching 9000′, continue climb via I-RNO localizer south course to WAGGE INT, turn left, proceed direct FMG VORTAC. Cross FMG VORTAC at or above MCA, thence via assigned route or climb in holding pattern northeast on FMG R-041, left turns to cross FMG VORTAC at or above MCA for assigned route.

WASHOE TWO DEPARTURE
(VECTOR) (WASH2.WAGGE)

RENO, NEVADA
RENO CANNON INTL

FIGURE 85.—WASHOE TWO DEPARTURE.

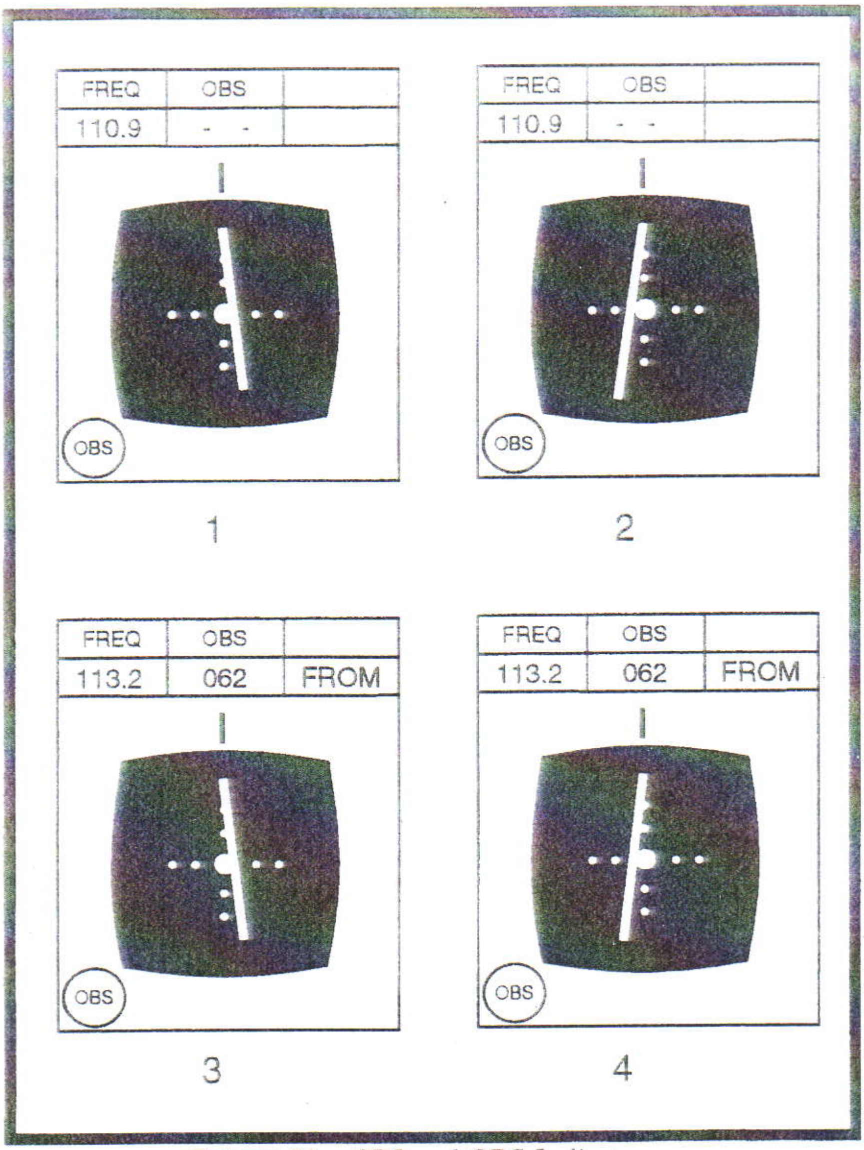
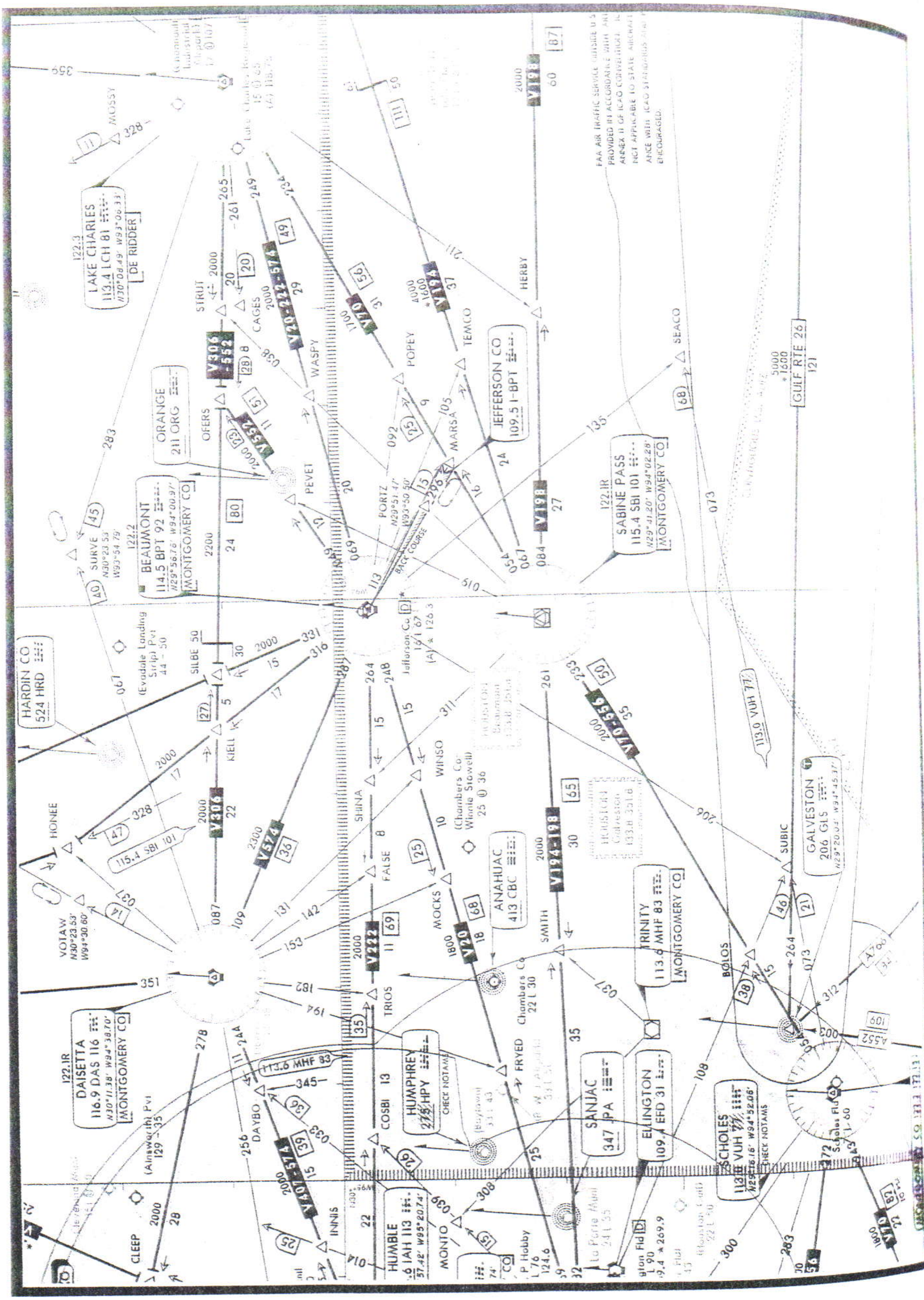


FIGURE 86.—CDI and OBS Indicators.


LAKE CHARLES
113.4 LCH 81
DE RIDDER
ORANGE
211 ORG
BEAUMONT
114.5 BPT 92
MONTGOMERY CO
JEFFERSON CO
109.5 I-BPT
SABINE PASS
115.4 SBI 101
HARDIN CO
524 HRD
DAISETTA
116.9 DAS 116
ANAHUAC
413 CBC
TRINITY
113.6 MHF 83
HUMPHREY
275 HPY
CHECK NOTAMS
SANJAC
347 JPA
ELLINGTON
GALVESTON
206 GLS
SCHOLES
HUMBLE
GULF RTE 26
FAA AIR TRAFFIC SERVICE OUTSIDE U.S.
PROVIDED IN ACCORDANCE WITH ANNEX 11 OF ICAO CONVENTION.
NOT APPLICABLE TO STATE AIRCRAFT.
ENCOURAGED.

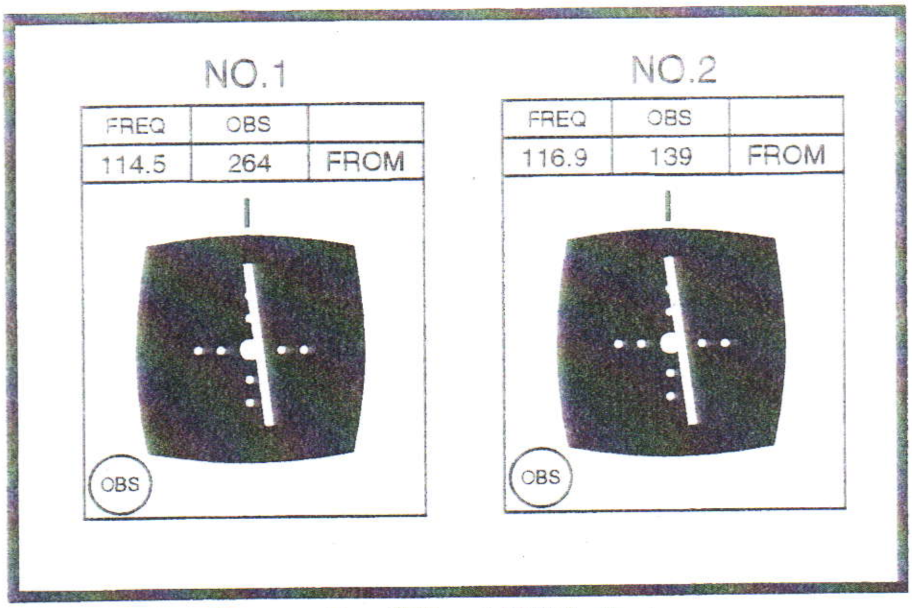


FIGURE 88.—CDI and OBS Indicators.

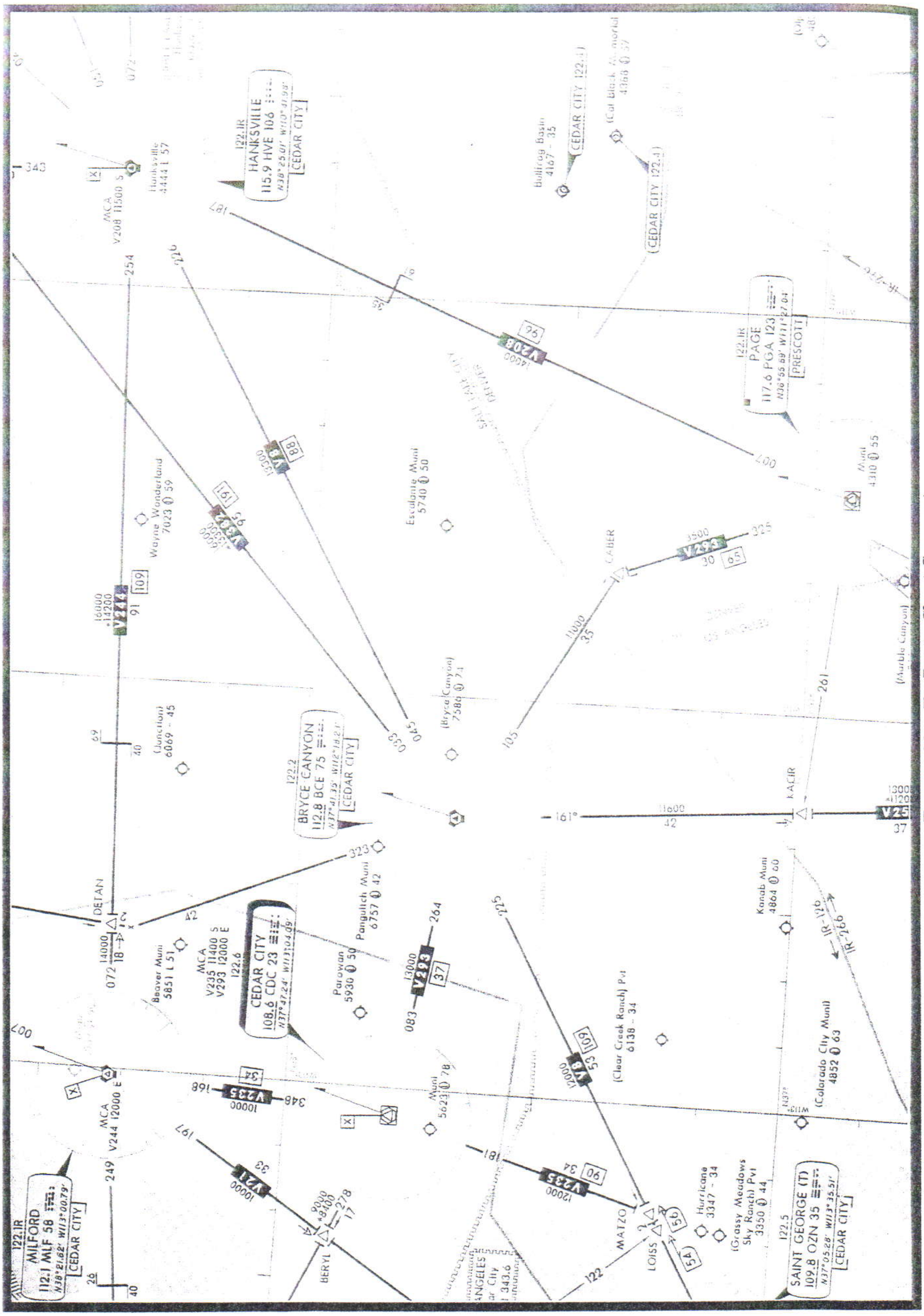


FIGURE 89.—En Route Chart Segment.

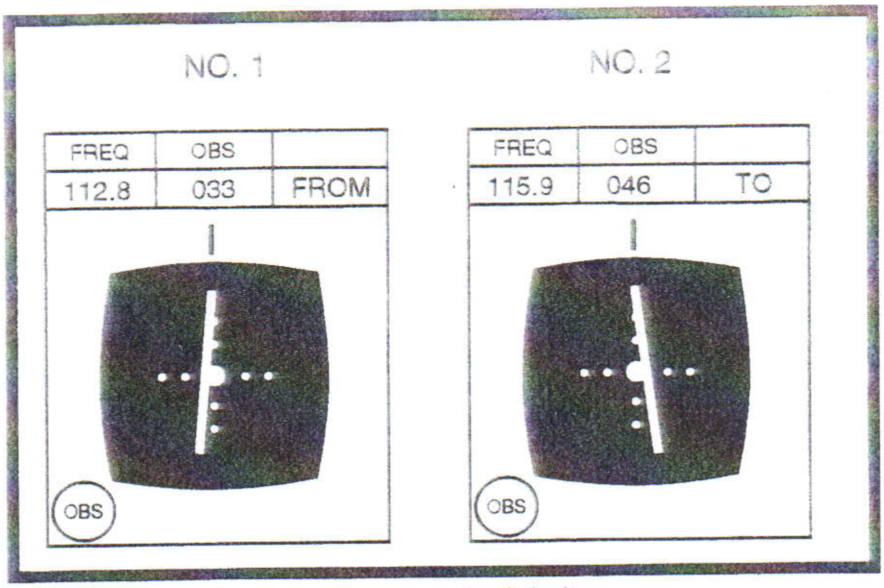


FIGURE 90.—CDI/OBS Indicators.

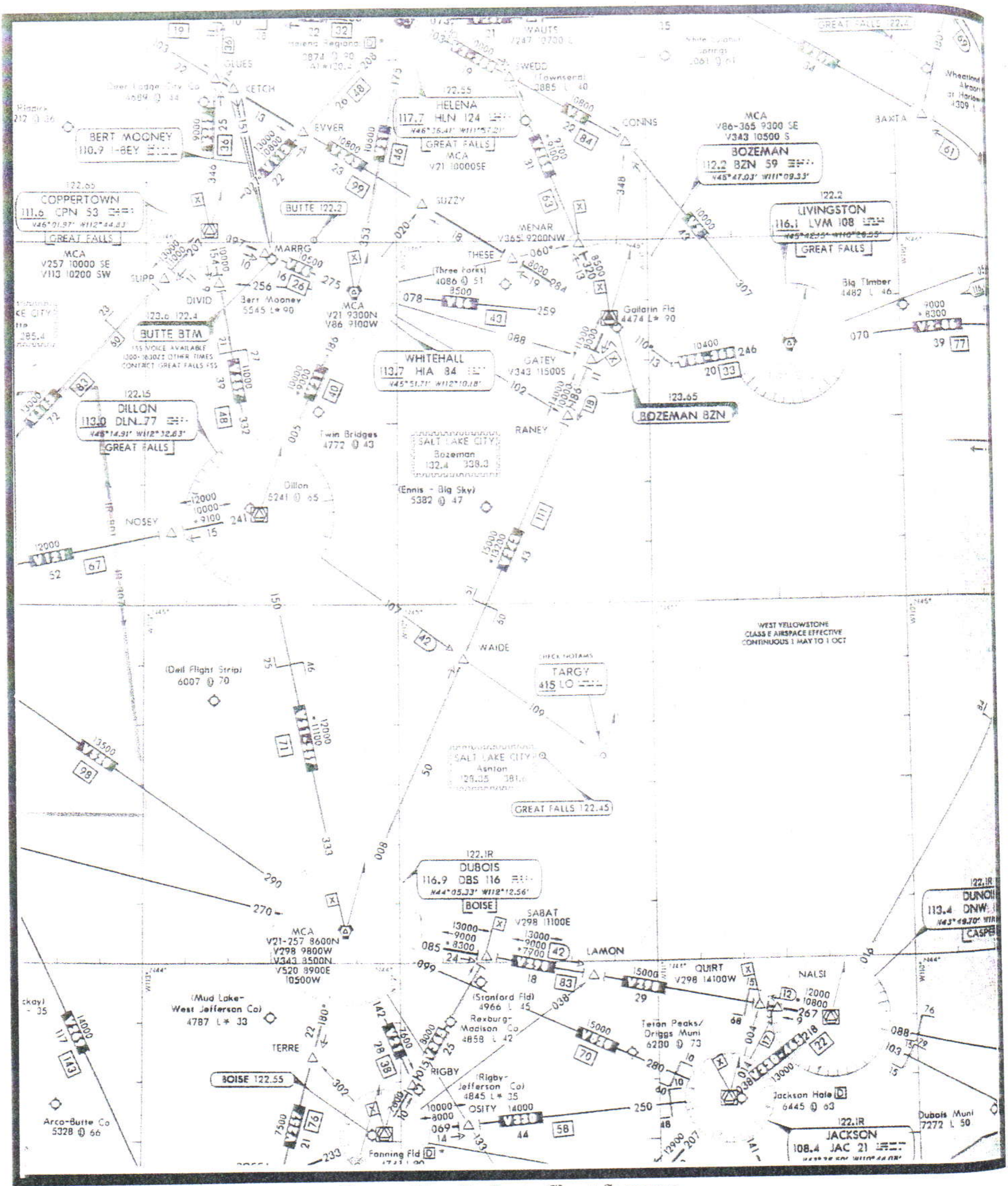


FIGURE 91.—En Route Chart Segment.

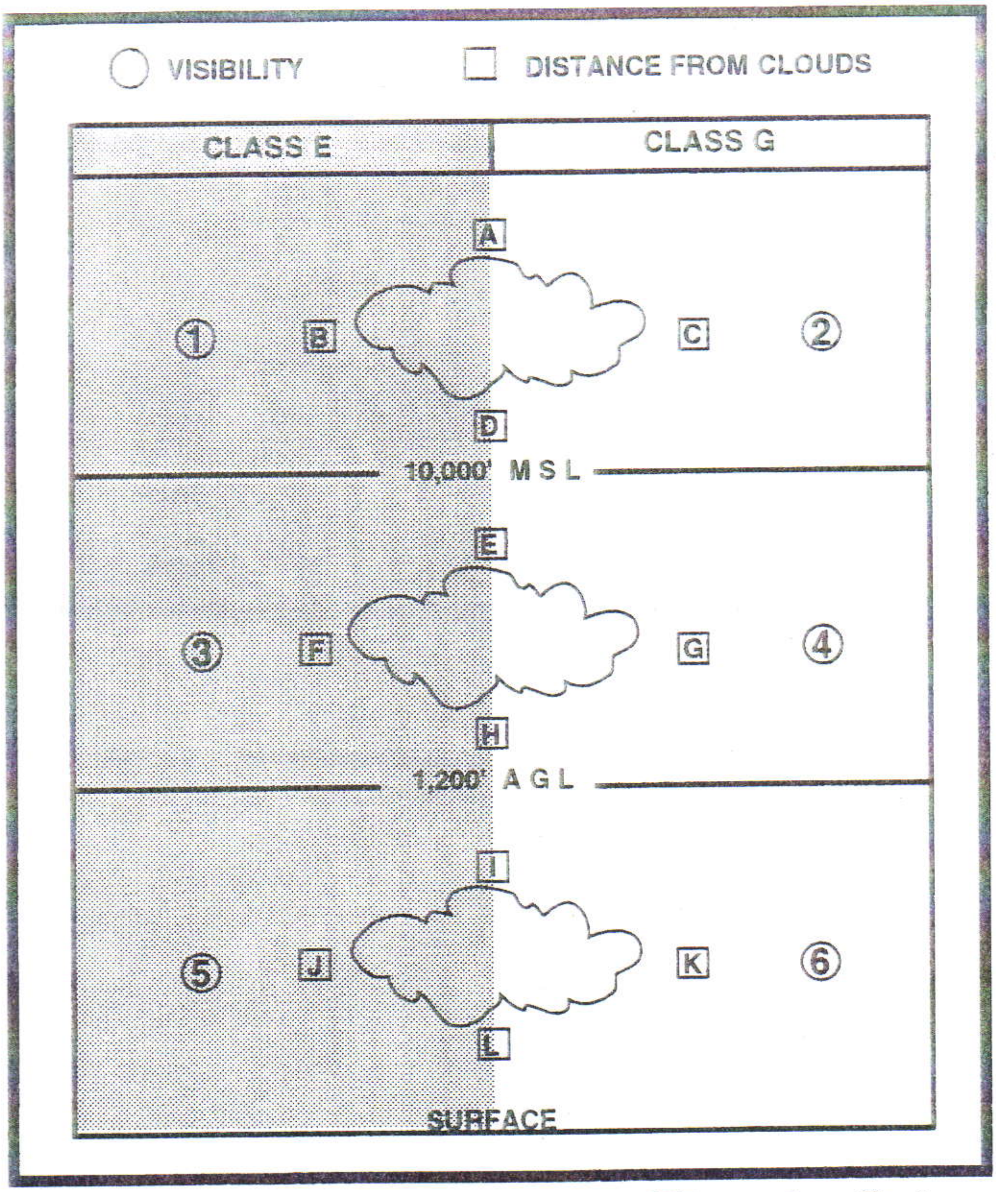


FIGURE 92.—Minimum In-Flight Visibility and Distance from Clouds.

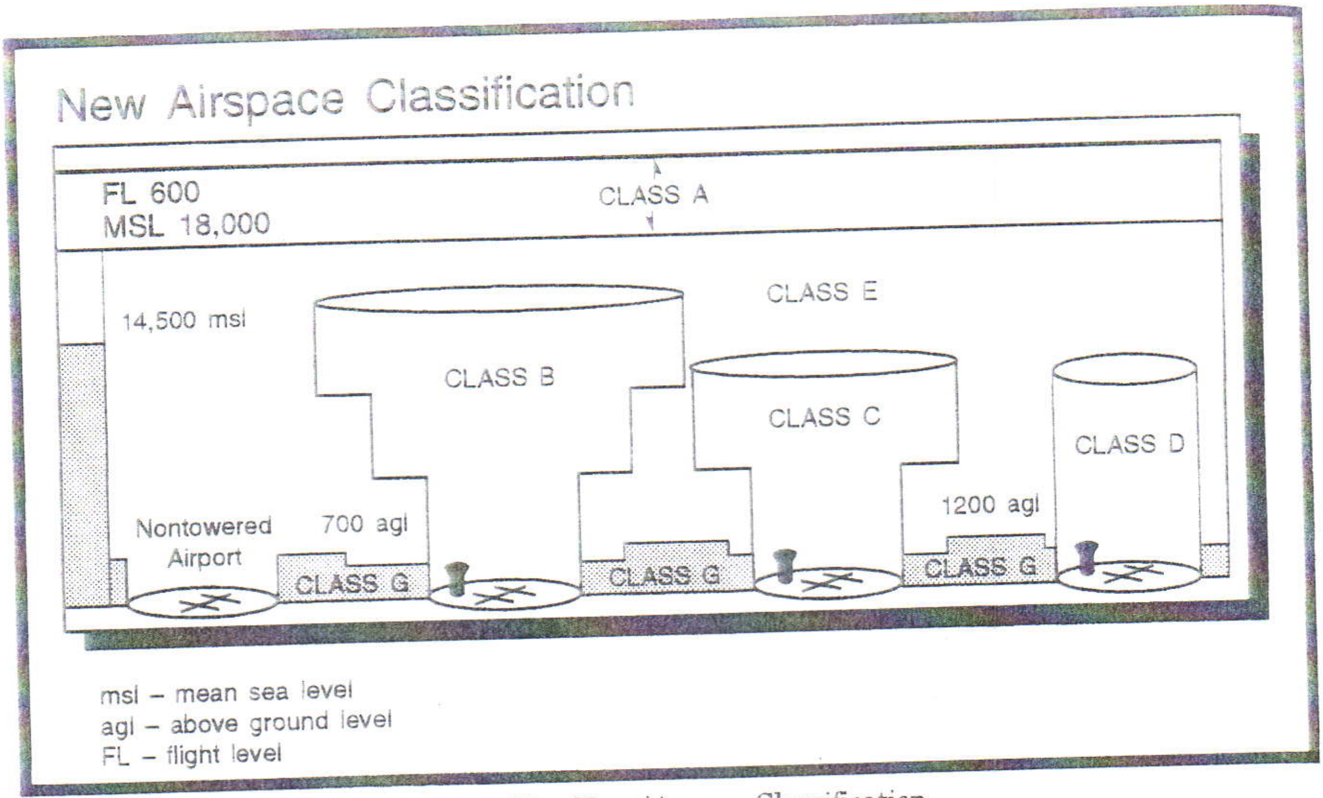
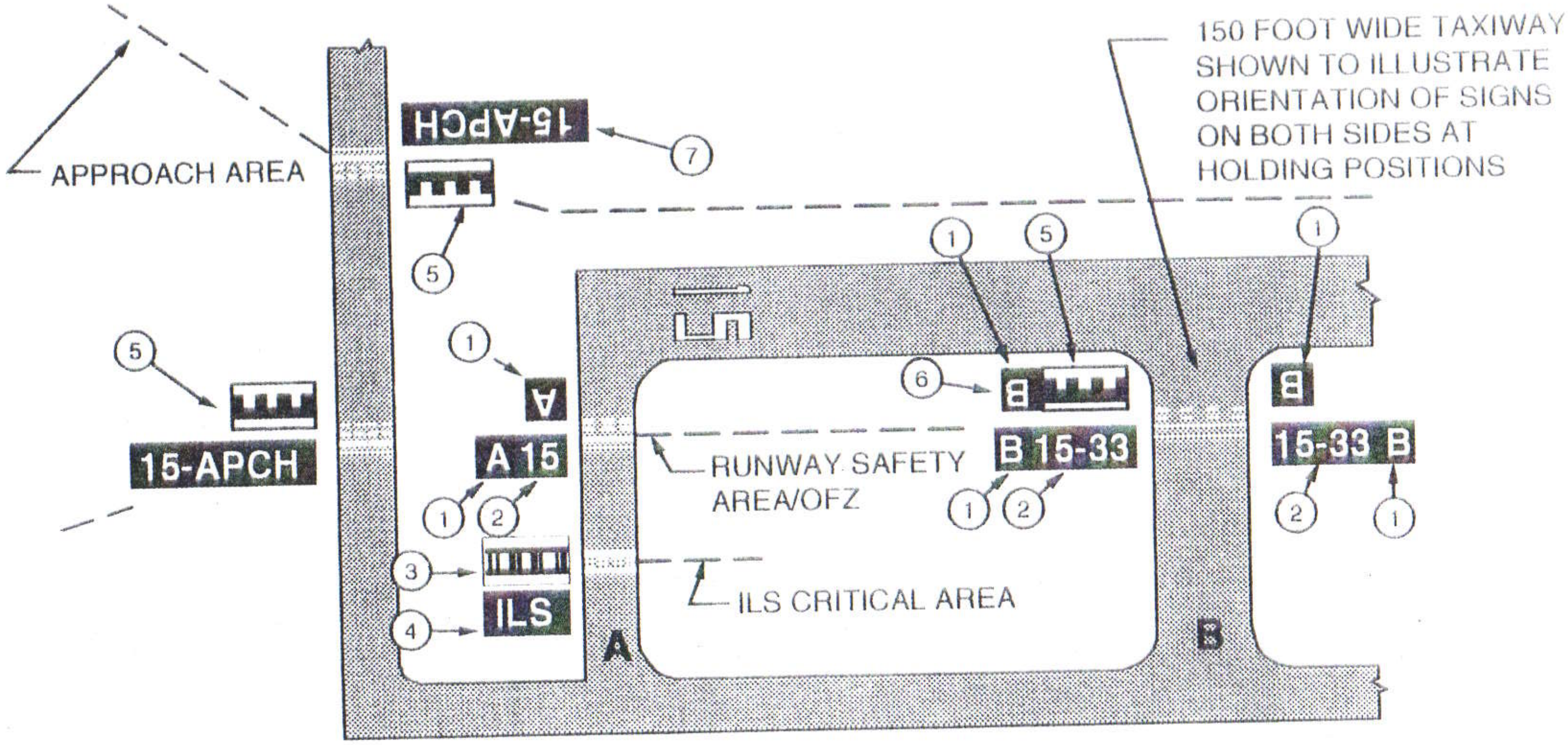


FIGURE 93.—New Airspace Classification.



1. TAXIWAY LOCATION AIGN
2. HOLDING POSITION SIGN
3. ILS CRITICAL AREA BOUNDARY SIGN
4. ILS HOLDING POSITION SIGN
5. RUNWAY SAFETY AREA/OFT AND RUNWAY APPROACH AREA BOUNDARY SIGN
6. TAXIWAY LOCATION SIGN - OPTIONAL, DEPENDING ON OPERATIONAL NEED
7. HOLDING POSITION SIGN FOR APPROACH AREAS

FIGURE 94.—Application Examples for Holding Positions.

FREQ	N.M.	KNOTS	MIN
115.0	60.0	180	20.0

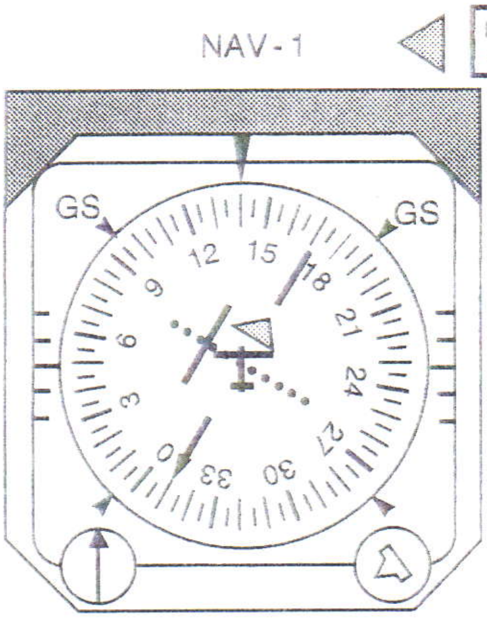


FIGURE 95.—No. 1 and No. 2 NAV Presentation.

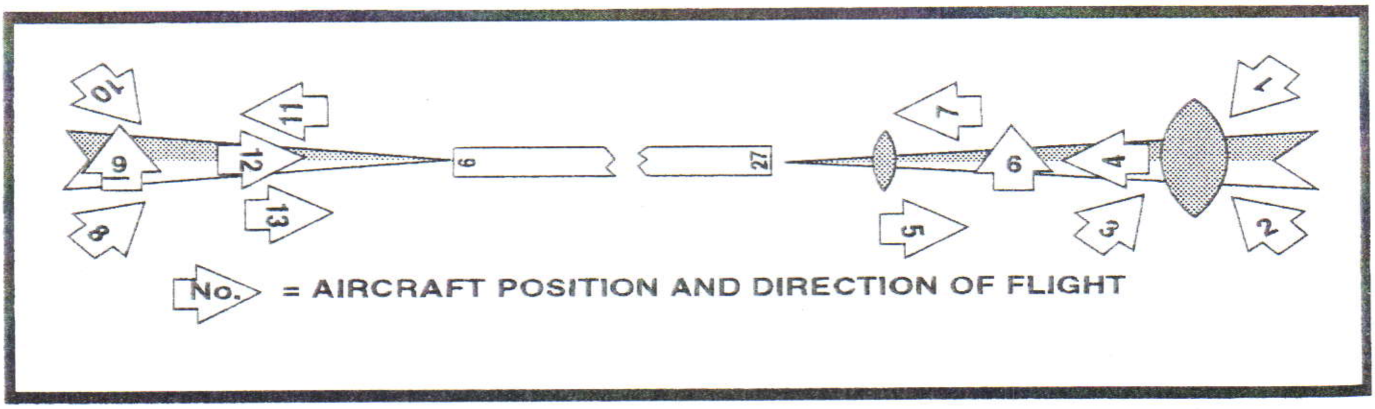


FIGURE 96.—Aircraft Position and Direction of Flight.

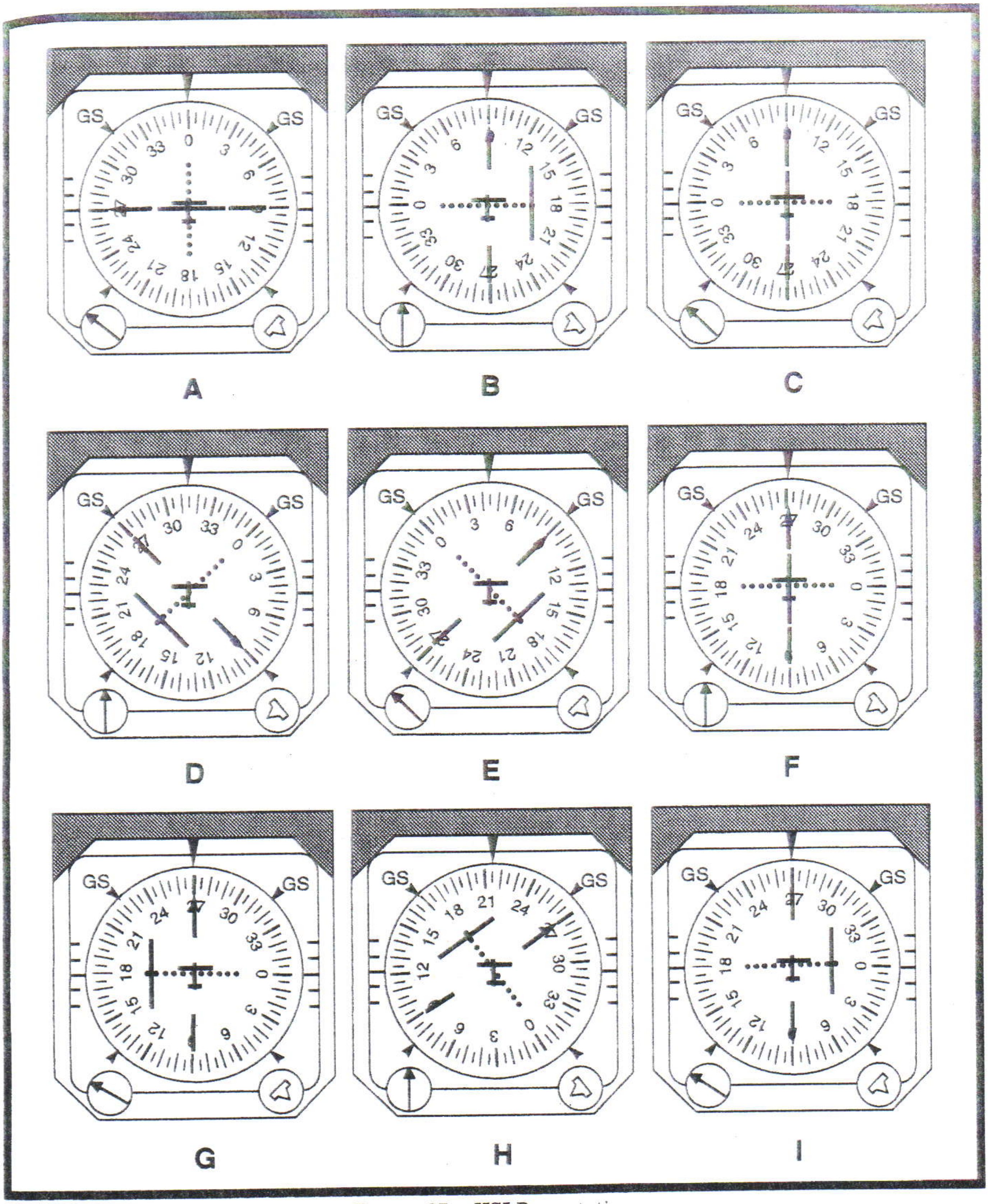


FIGURE 97.—HSI Presentation.

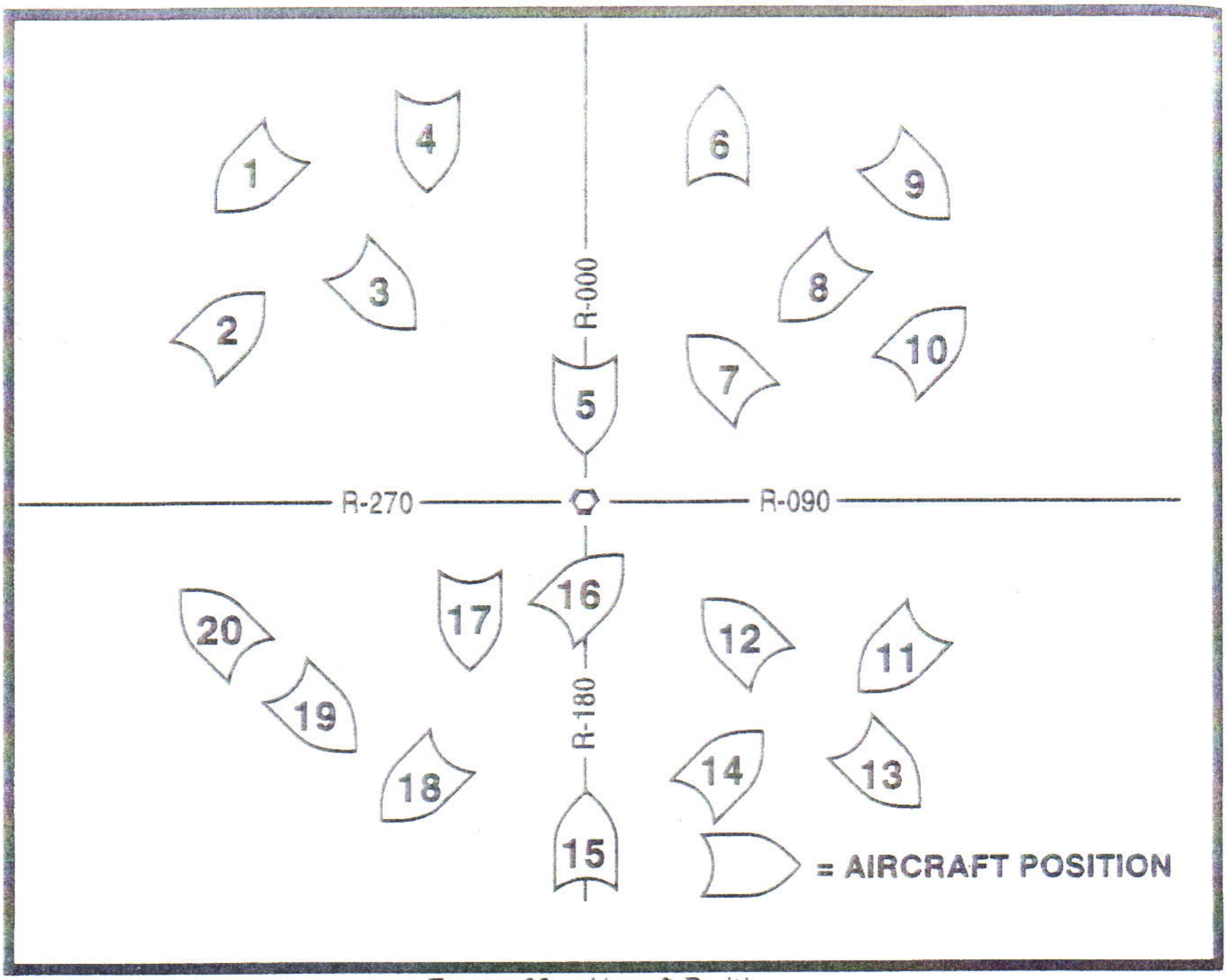


FIGURE 98.—Aircraft Position.

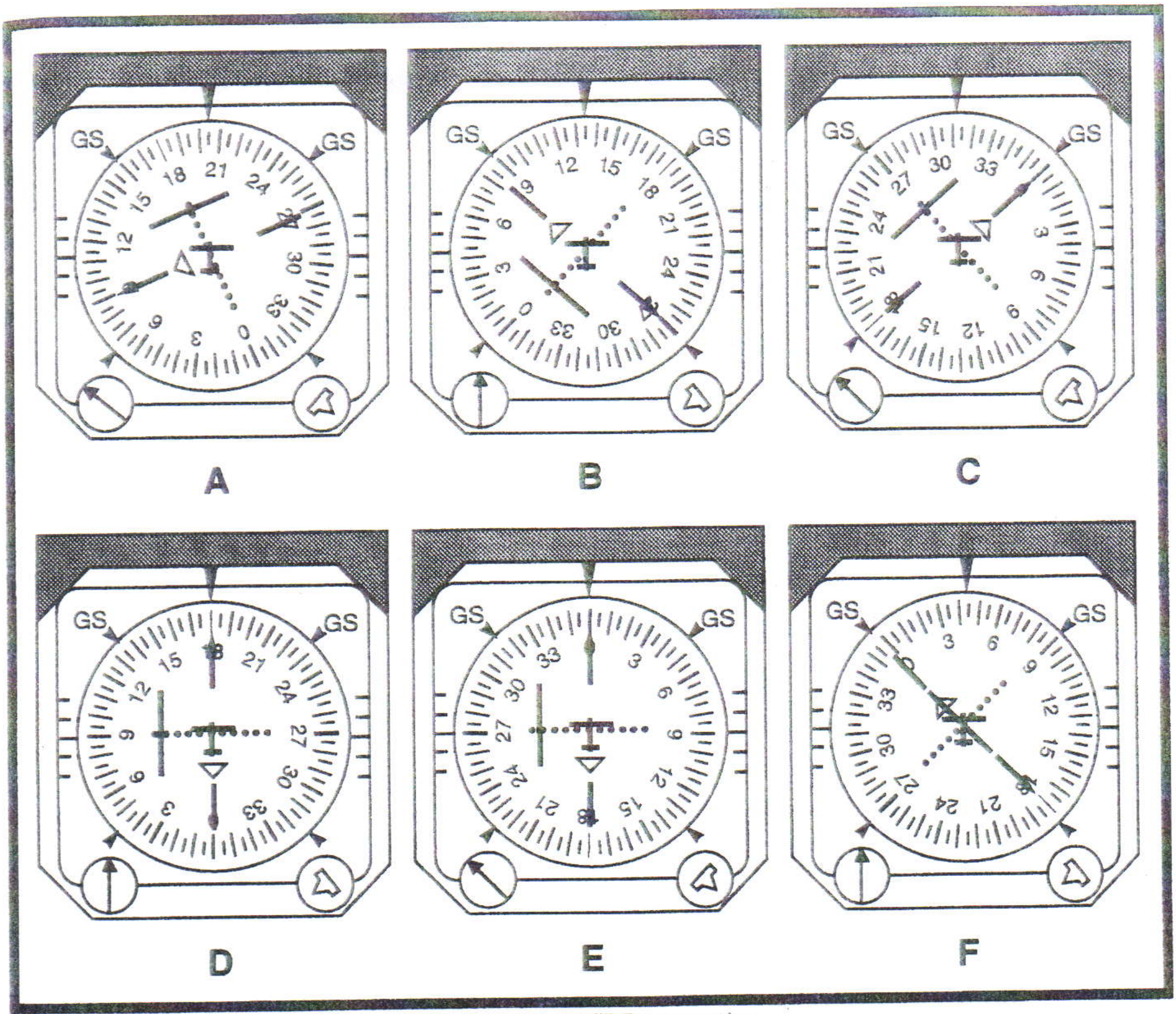


FIGURE 99.—HSI Presentation.

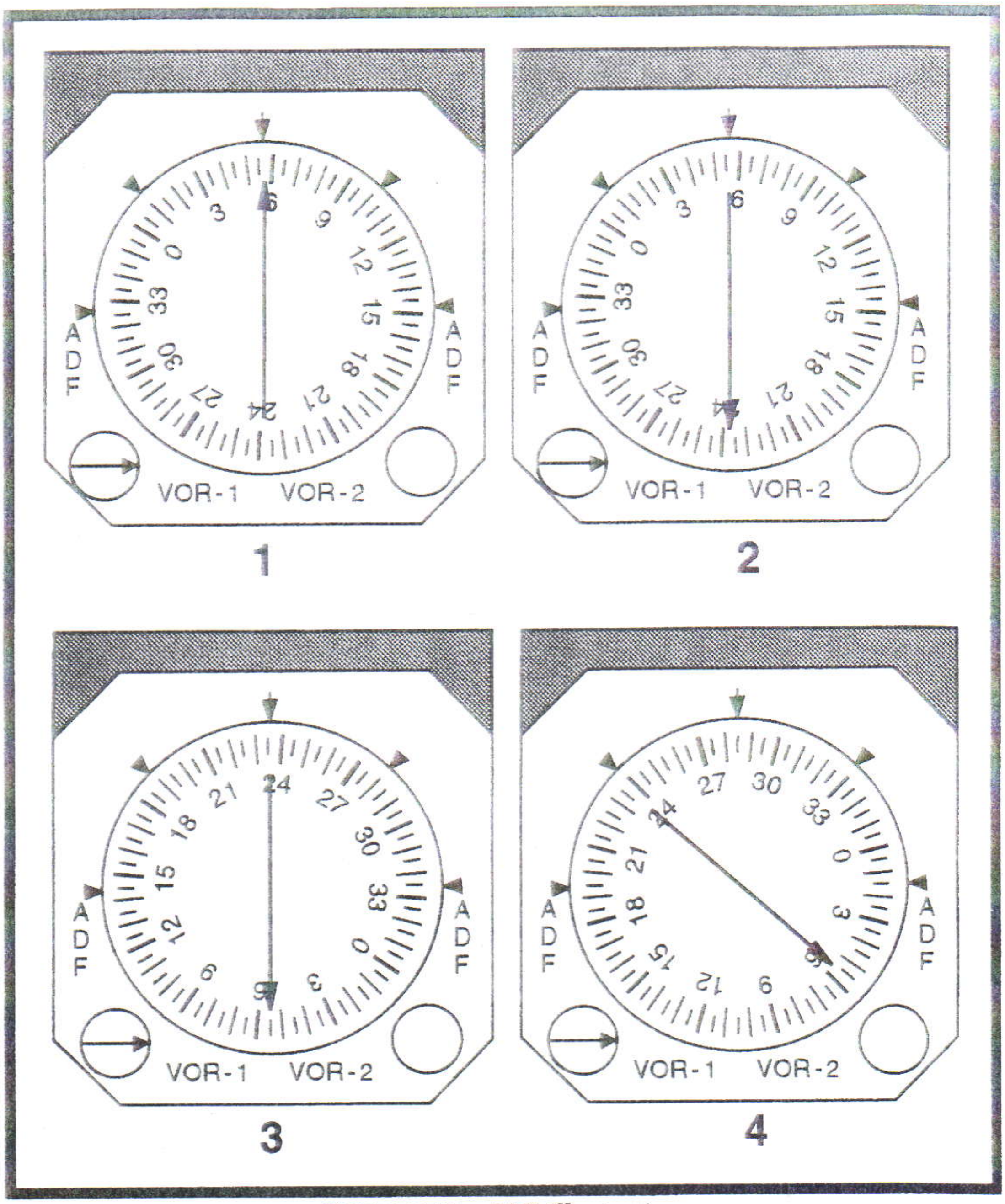


FIGURE 100.—RMI Illustrations.

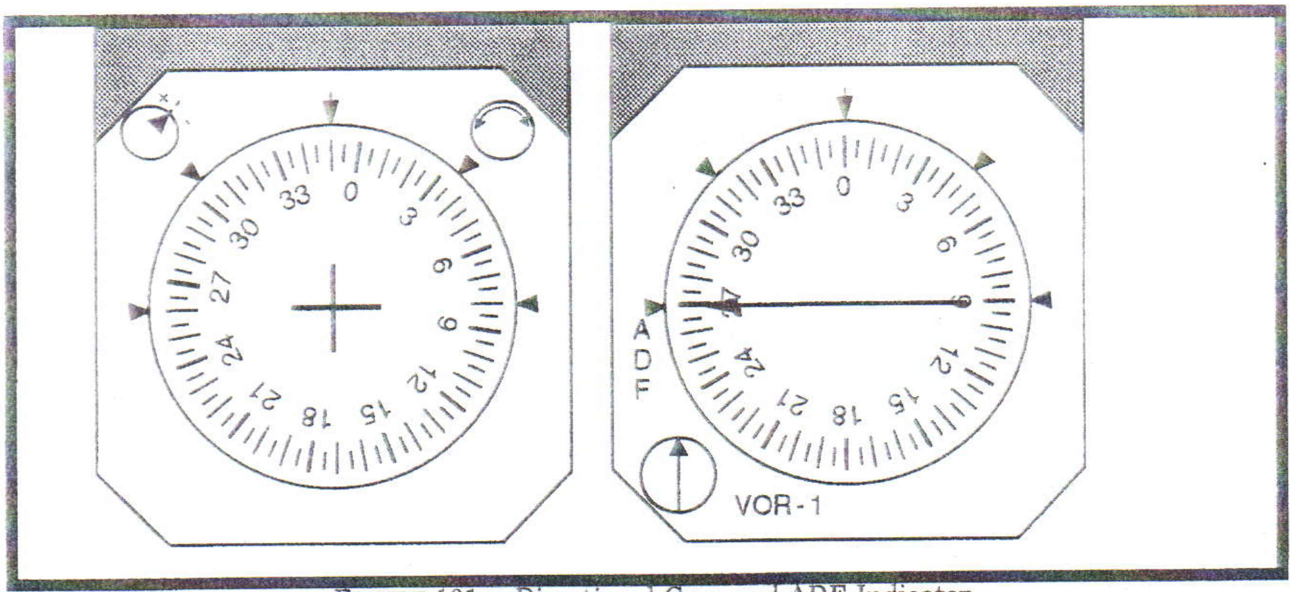


FIGURE 101.—Directional Gyro and ADF Indicator.

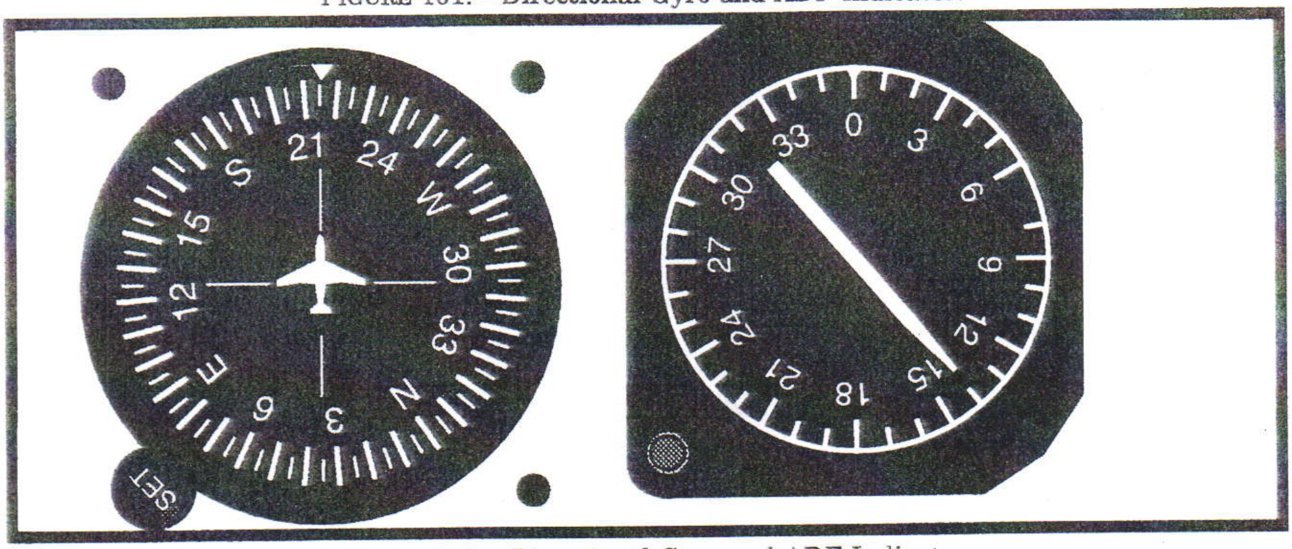


FIGURE 102.—Directional Gyro and ADF Indicator.

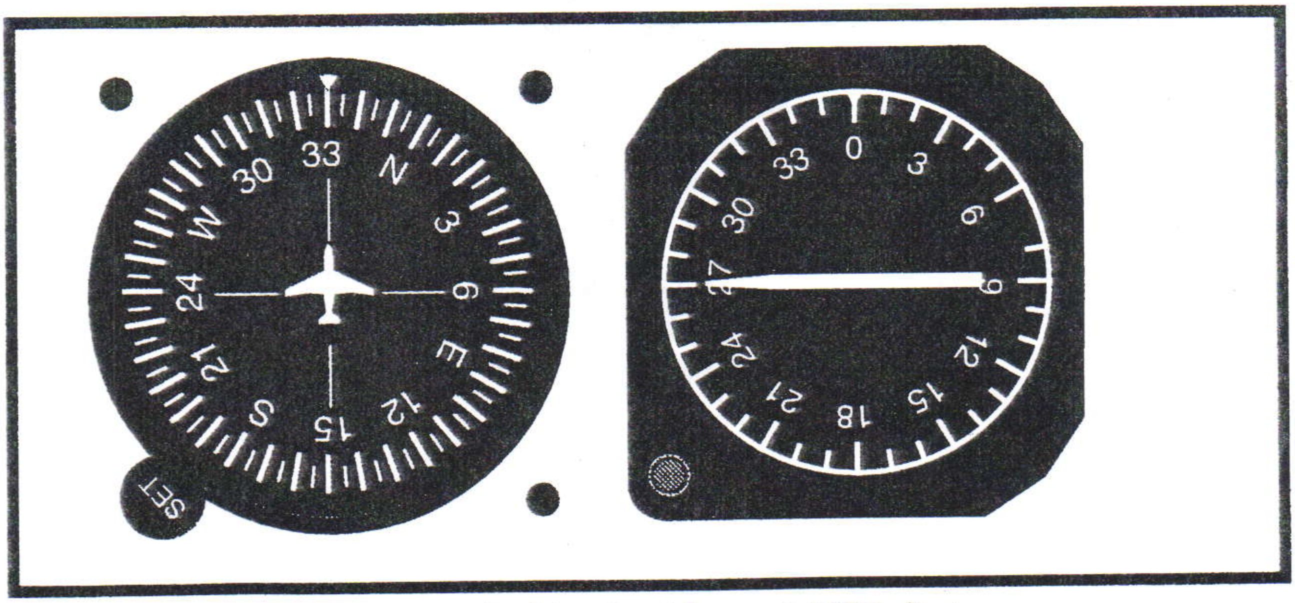


FIGURE 103.—Directional Gyro and ADF Indicator.

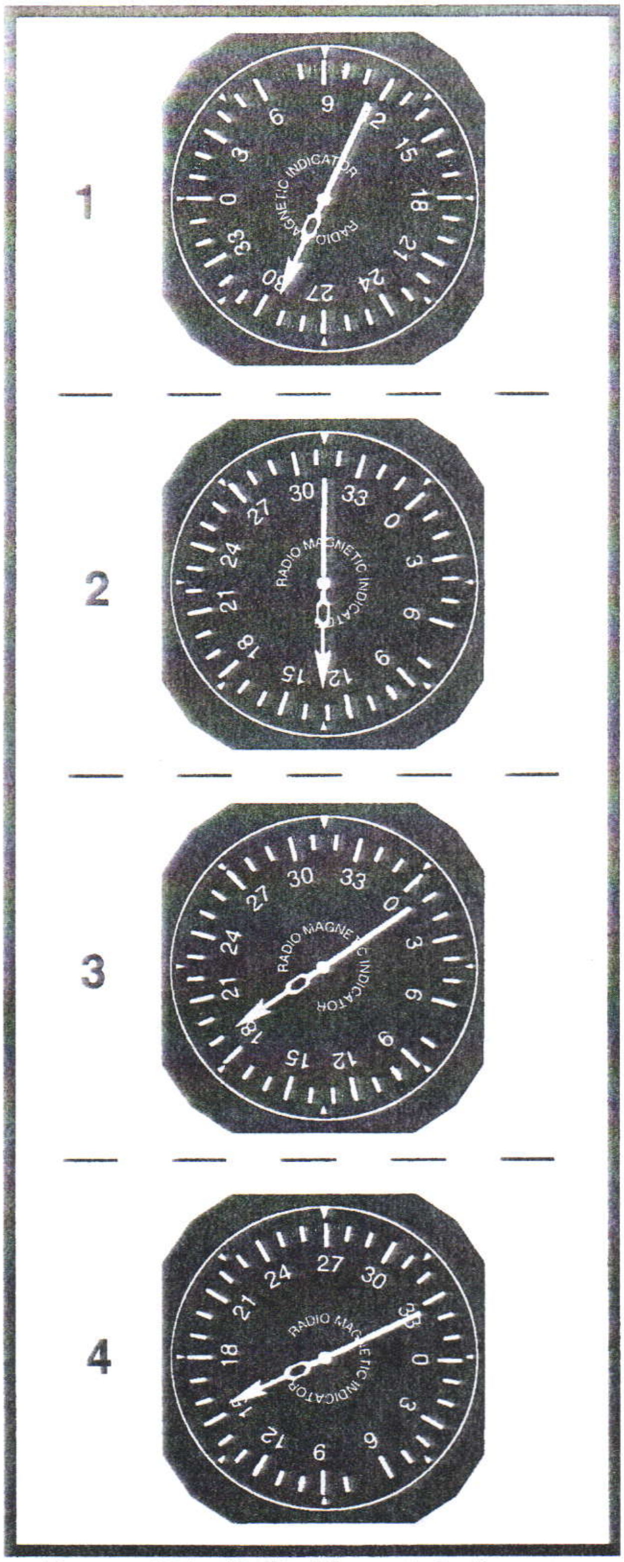


FIGURE 104.—Radio Magnetic Indicator.

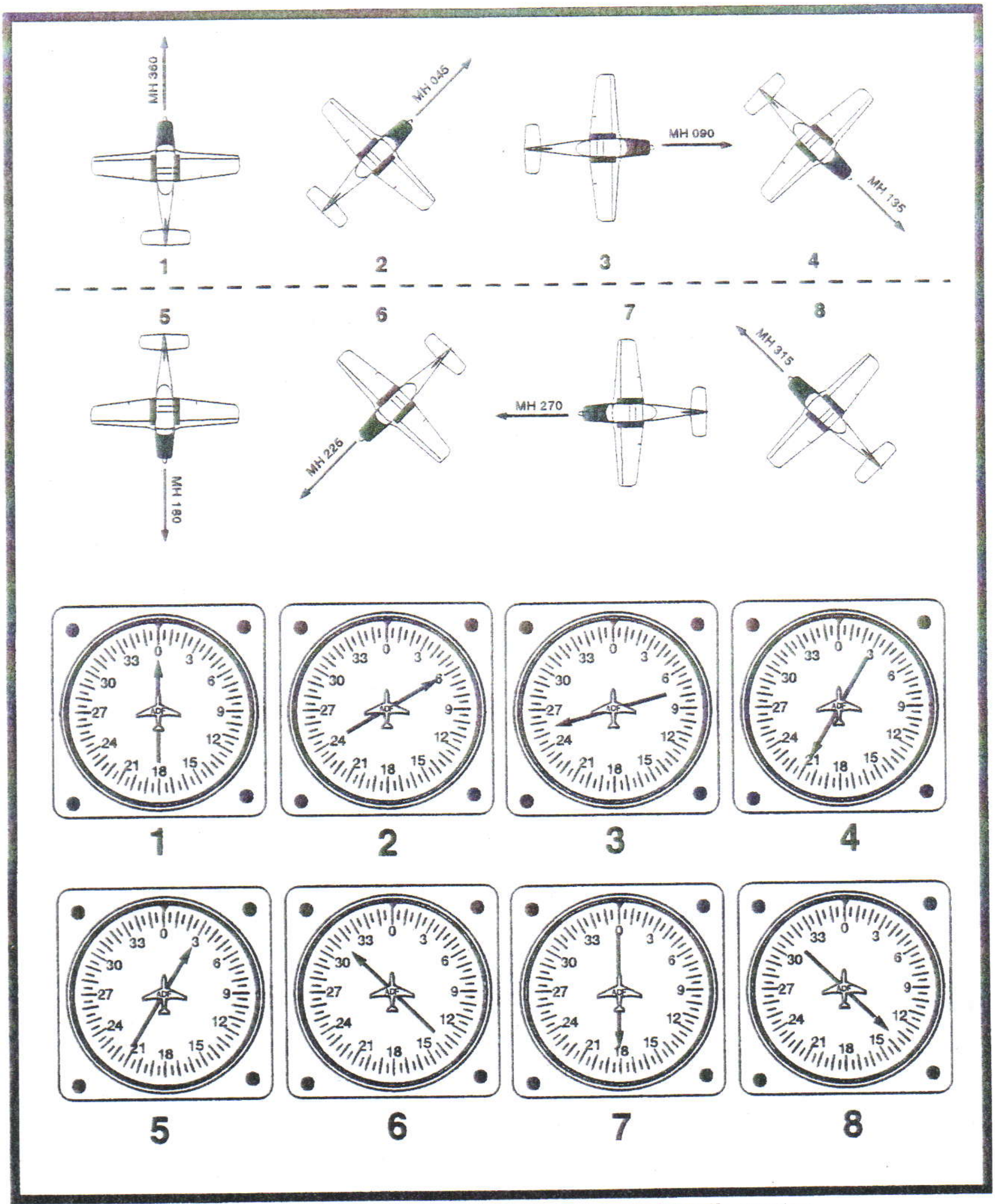


FIGURE 105.—Aircraft Magnetic Heading and ADF Illustration.

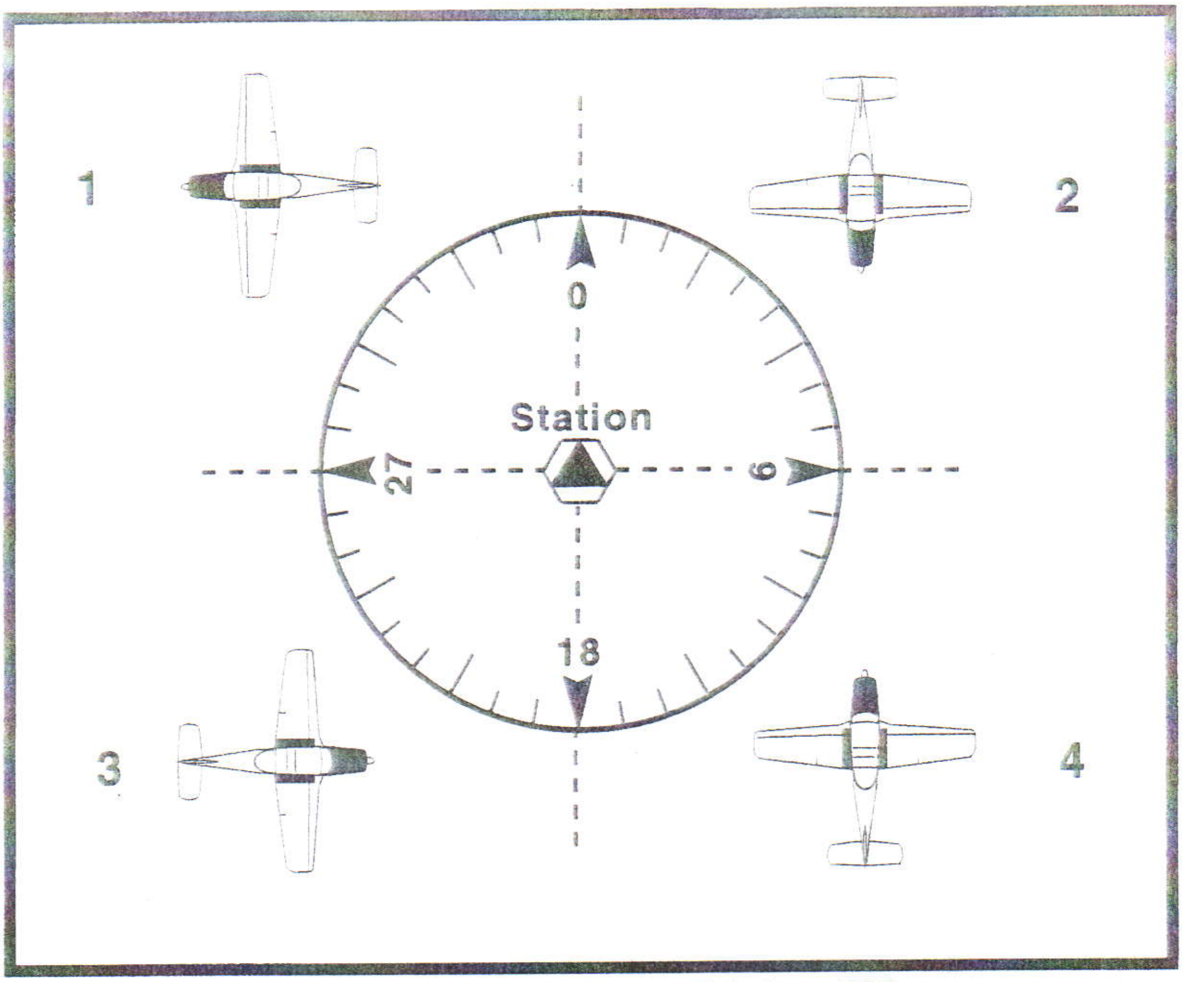


FIGURE 106.—Aircraft Location Relative to VOR.

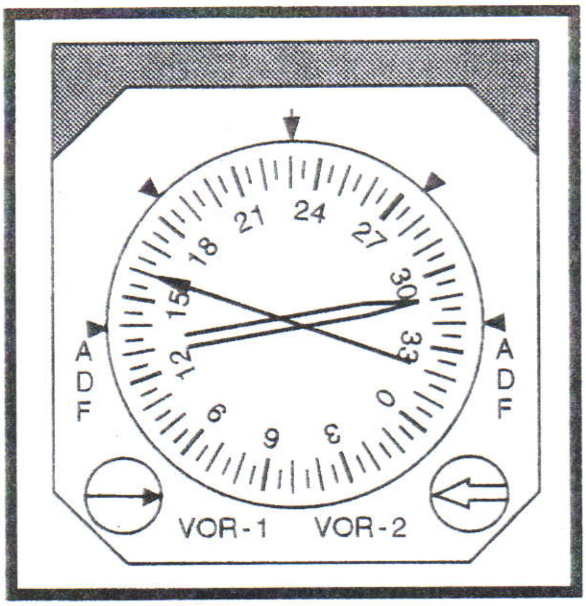


FIGURE 107.—RMI — DME — ARC Illustration Wind Component.

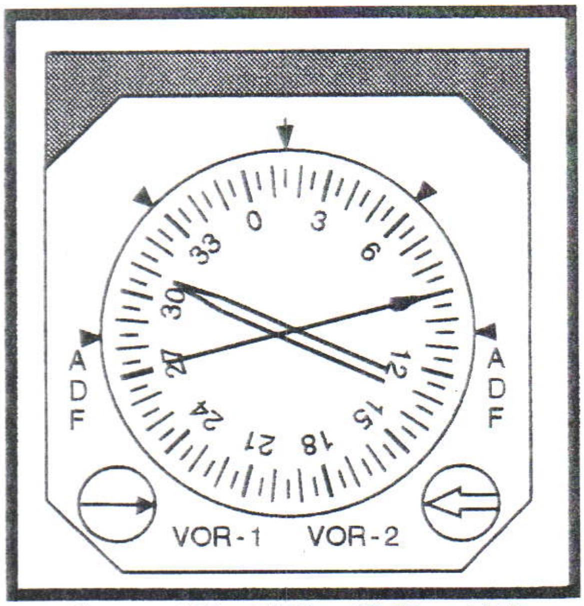


FIGURE 108.—RMI — DME — ARC Illustration Wind Component.

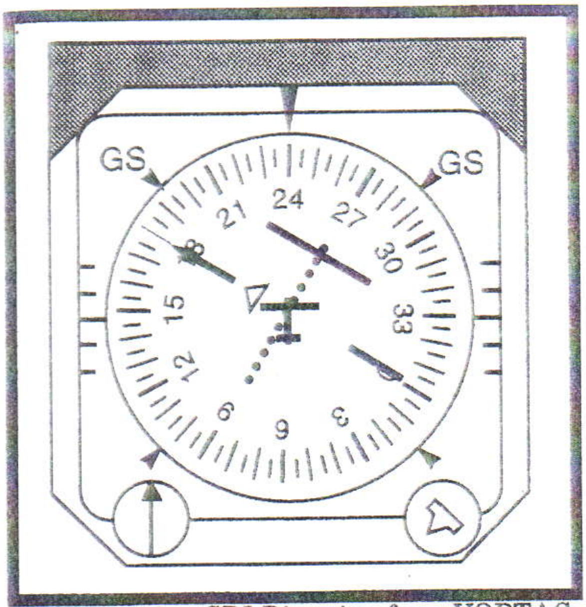


FIGURE 109.—CDI Direction from VORTAC.

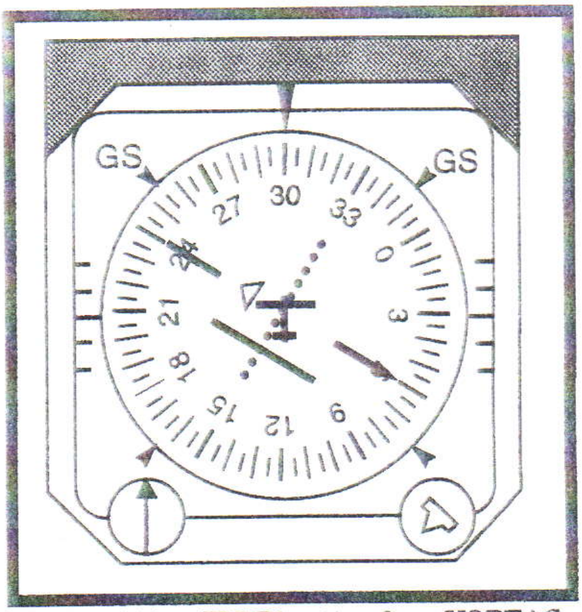


FIGURE 110.—CDI Direction from VORTAC.

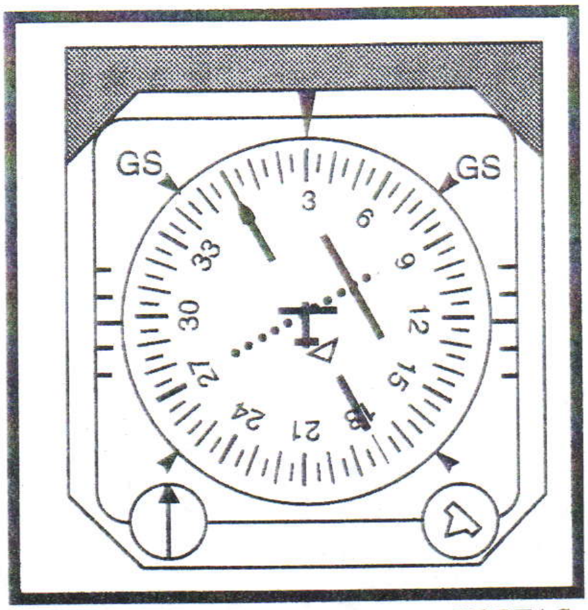


FIGURE 111.—CDI Direction from VORTAC.

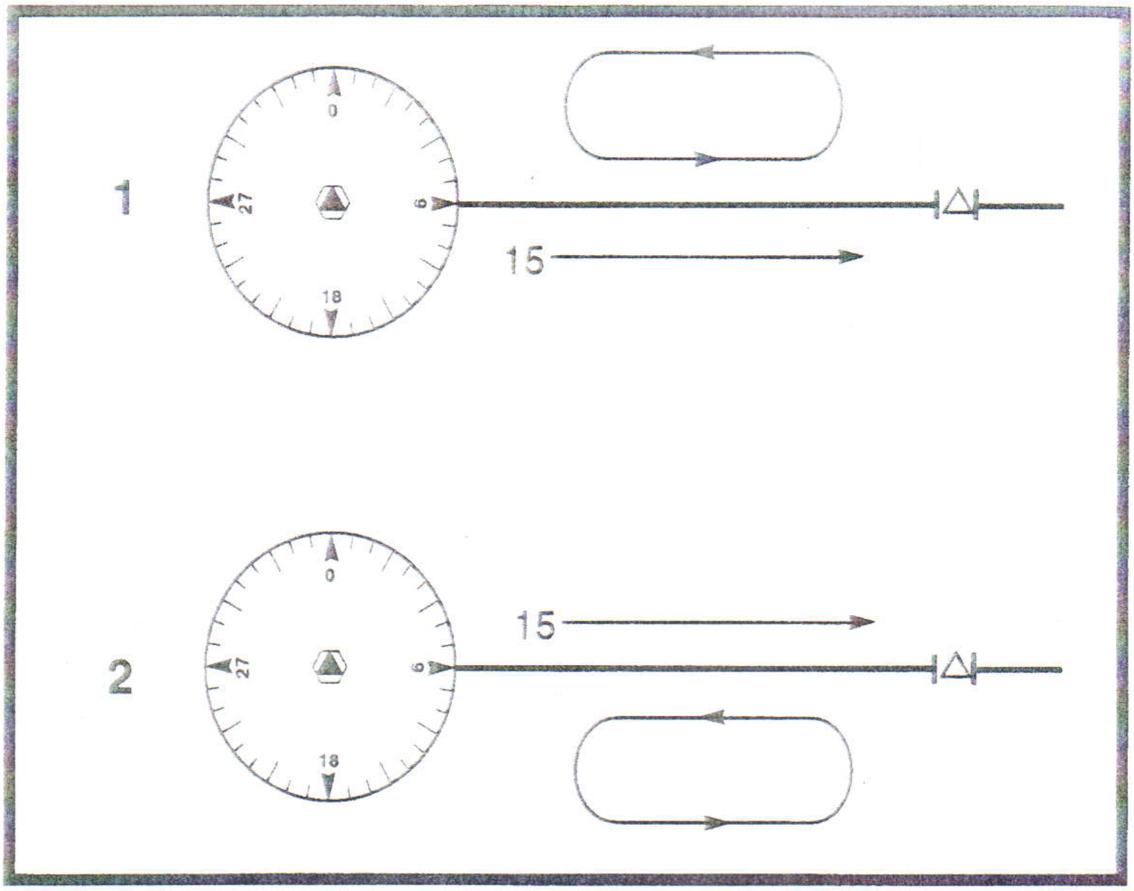


FIGURE 112.—Holding Entry Pocedure.

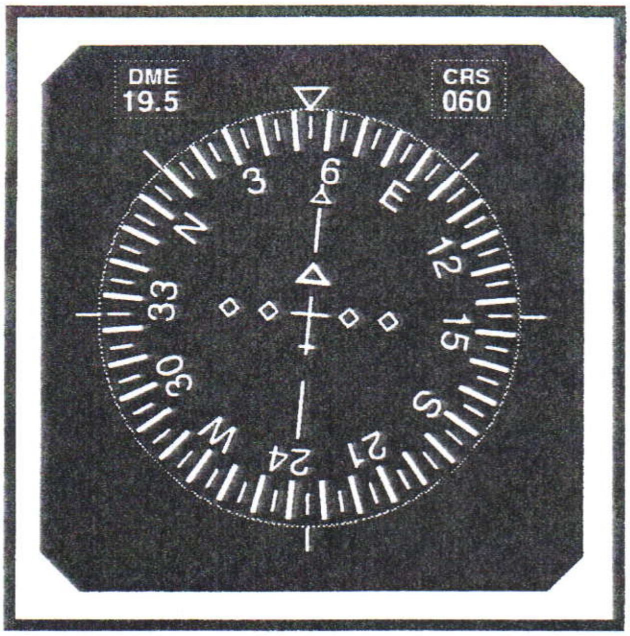


FIGURE 113.—Aircraft Course and DME Indicator.

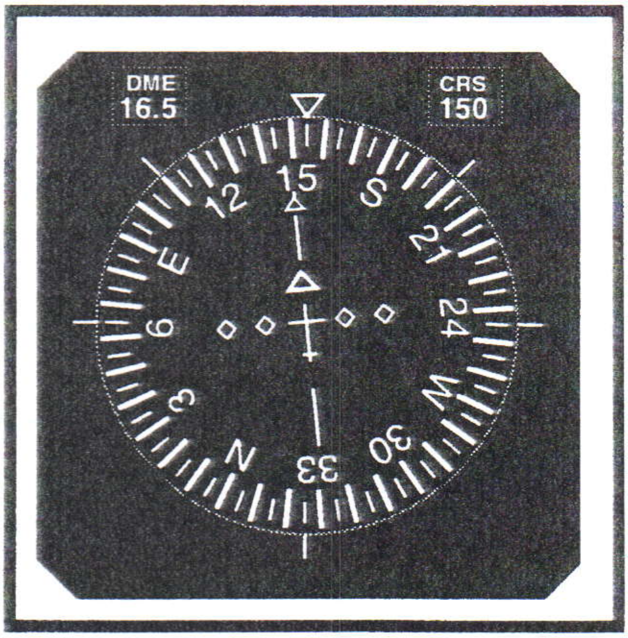


FIGURE 114.—Aircraft Course and DME Indicator.

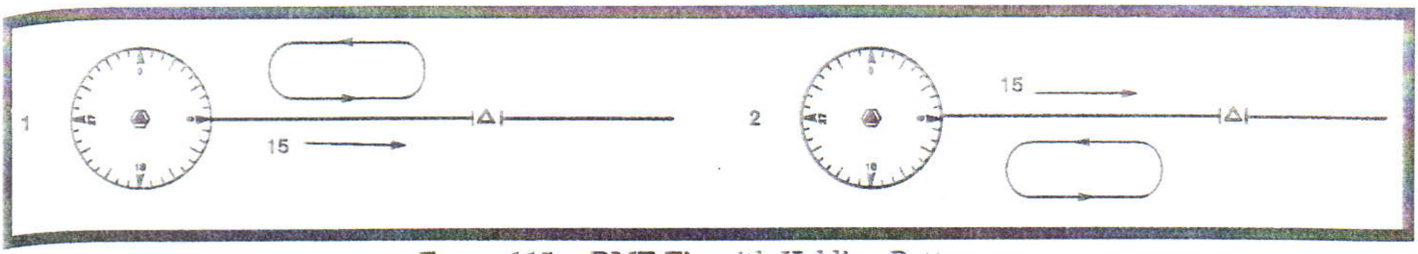


FIGURE 115.—DME Fix with Holding Pattern.

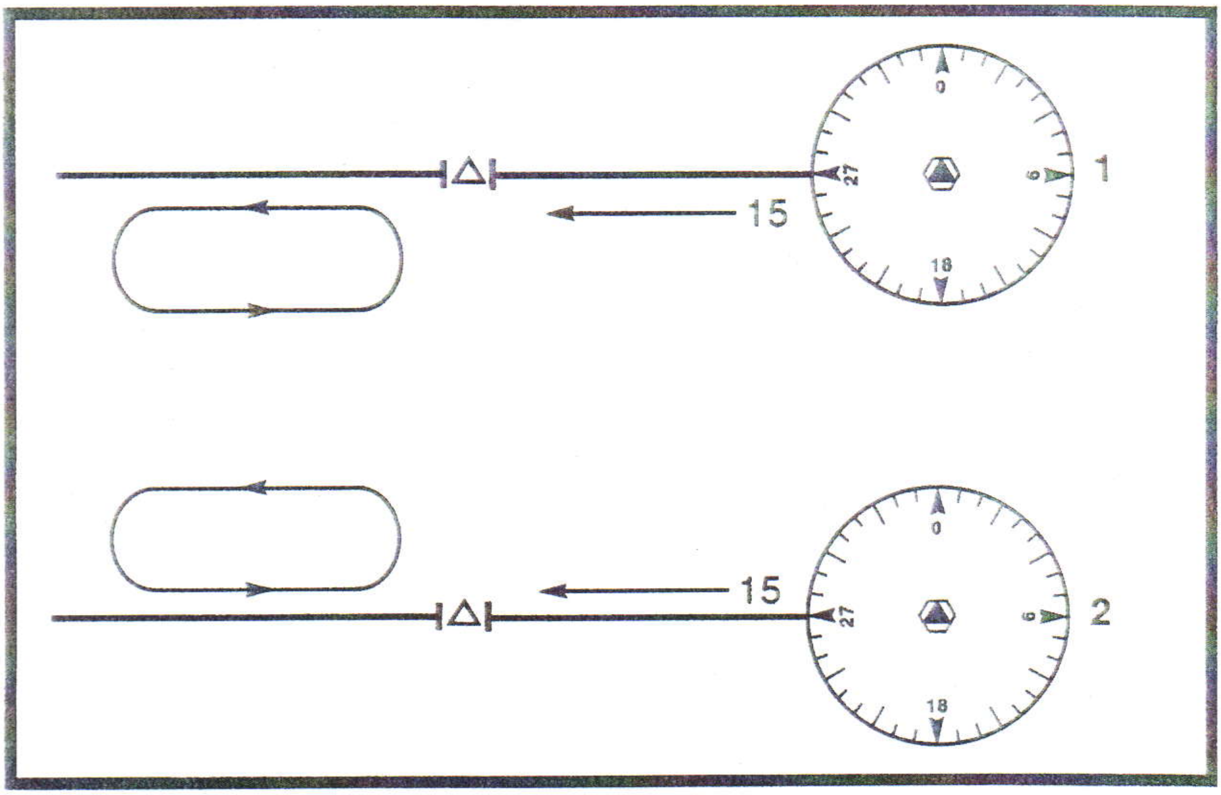


FIGURE 116.—Holding Entry Procedure.

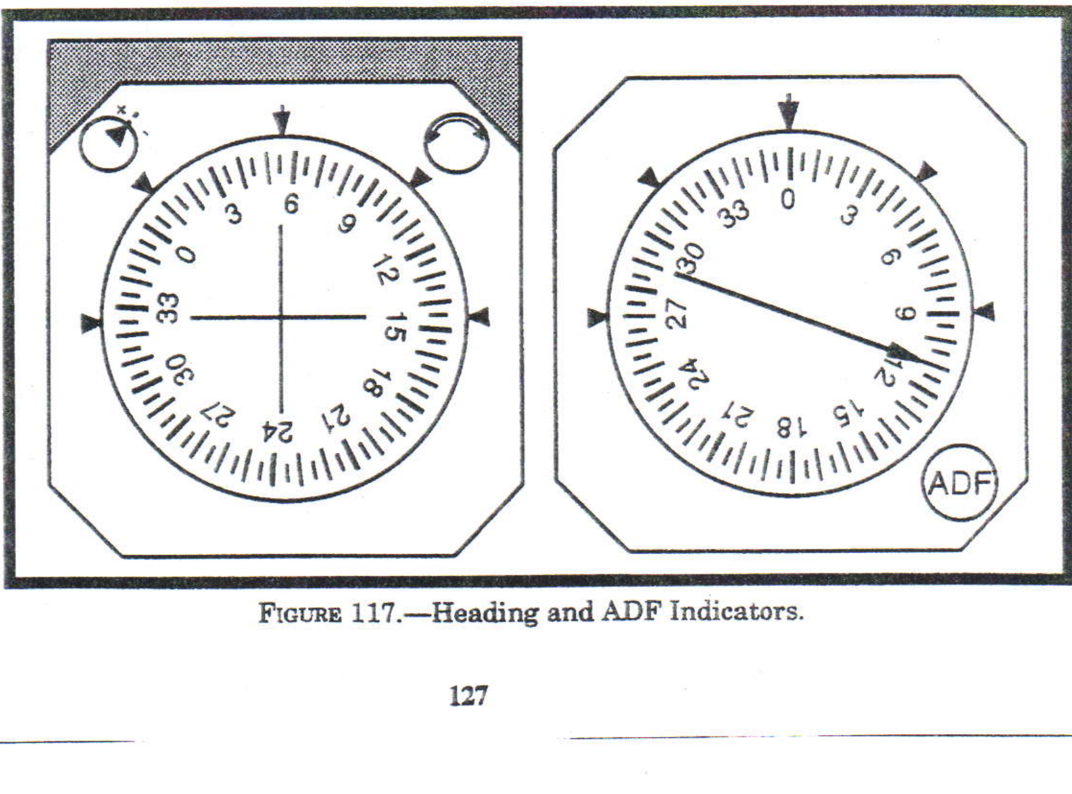


FIGURE 117.—Heading and ADF Indicators.

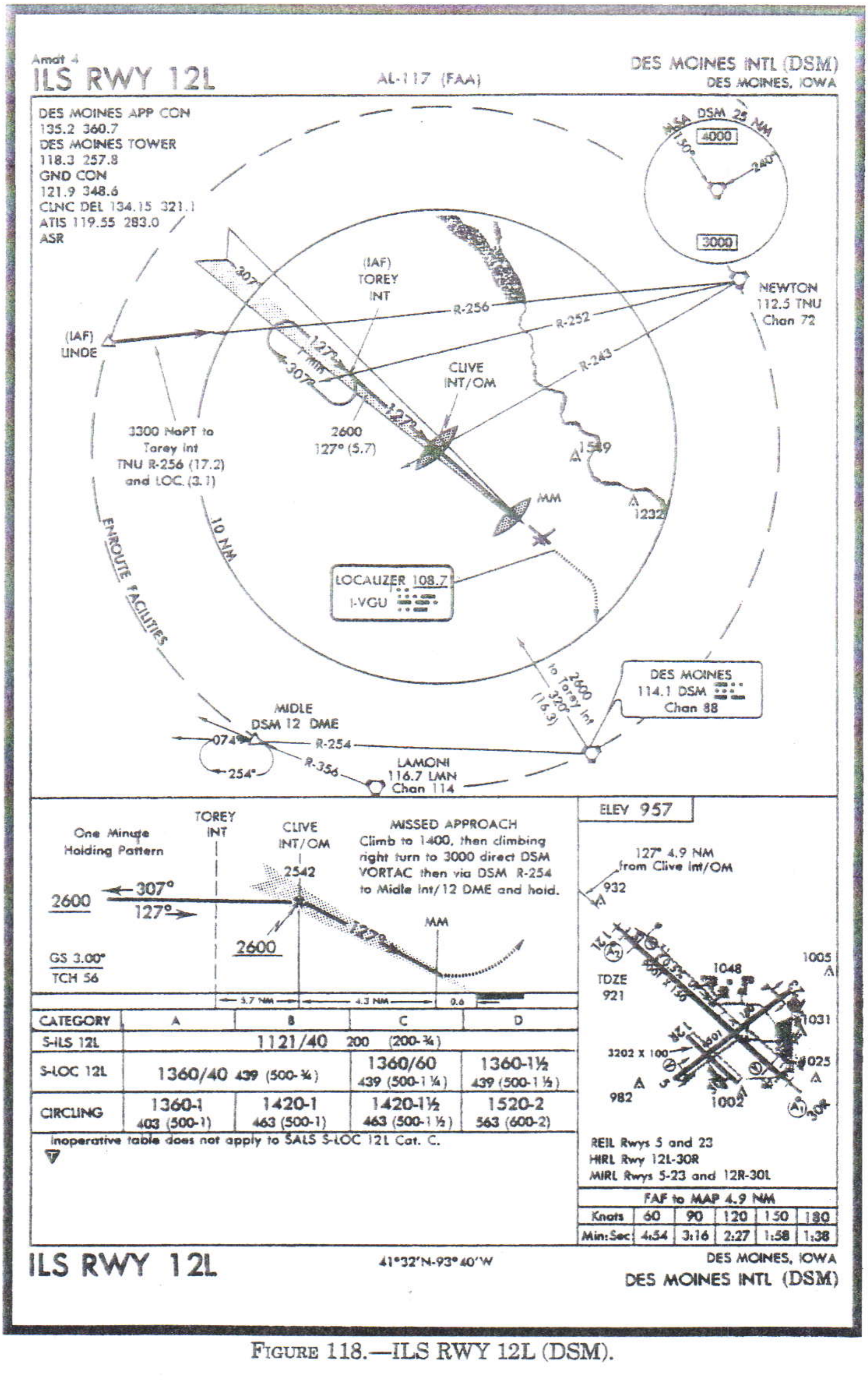


FIGURE 118.—ILS RWY 12L (DSM).

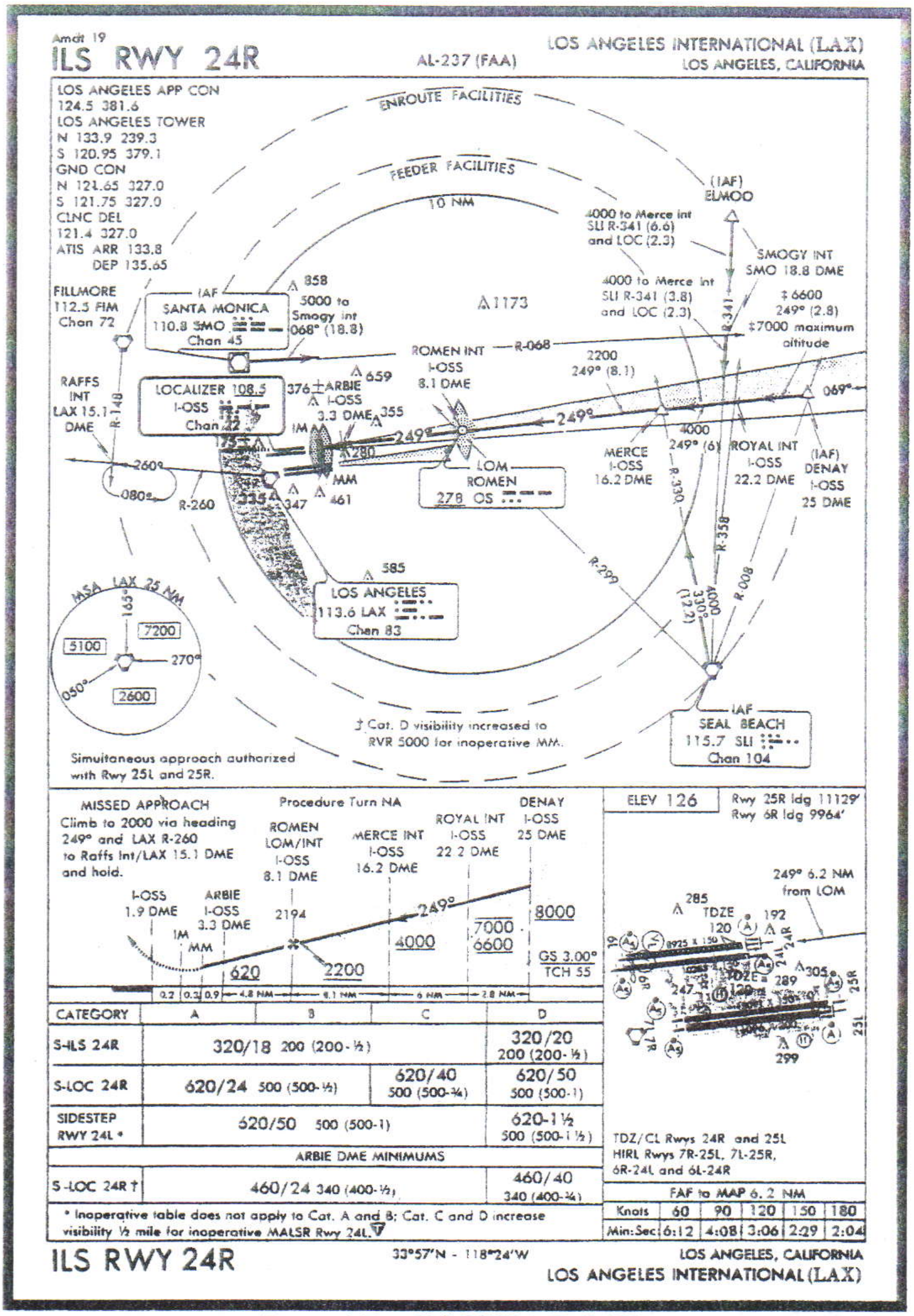


FIGURE 119.—ILS RWY 24R (LAX).

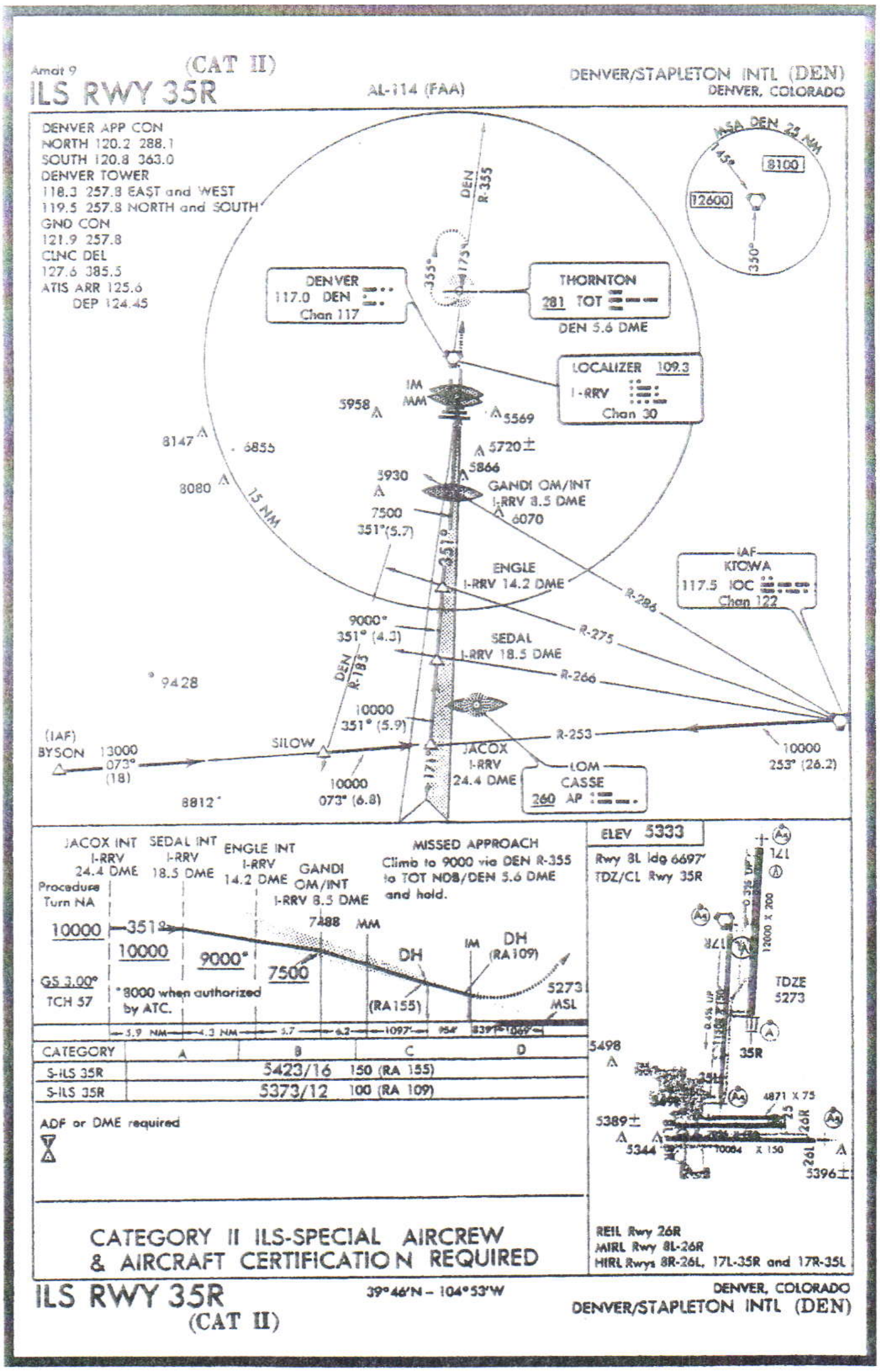


FIGURE 120.—ILS RWY 35R (DEN).

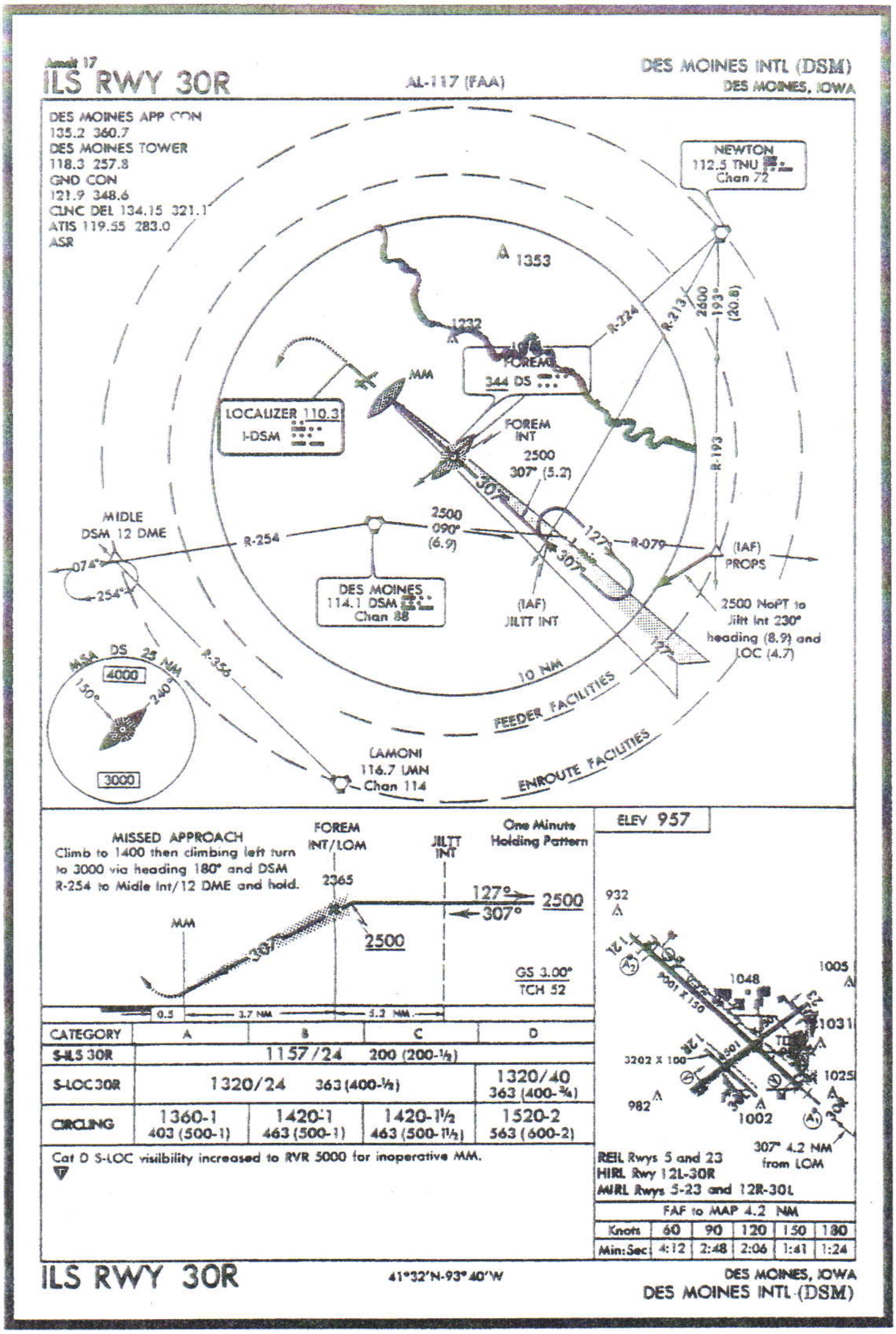


FIGURE 121.—ILS RWY 30R (DSM).

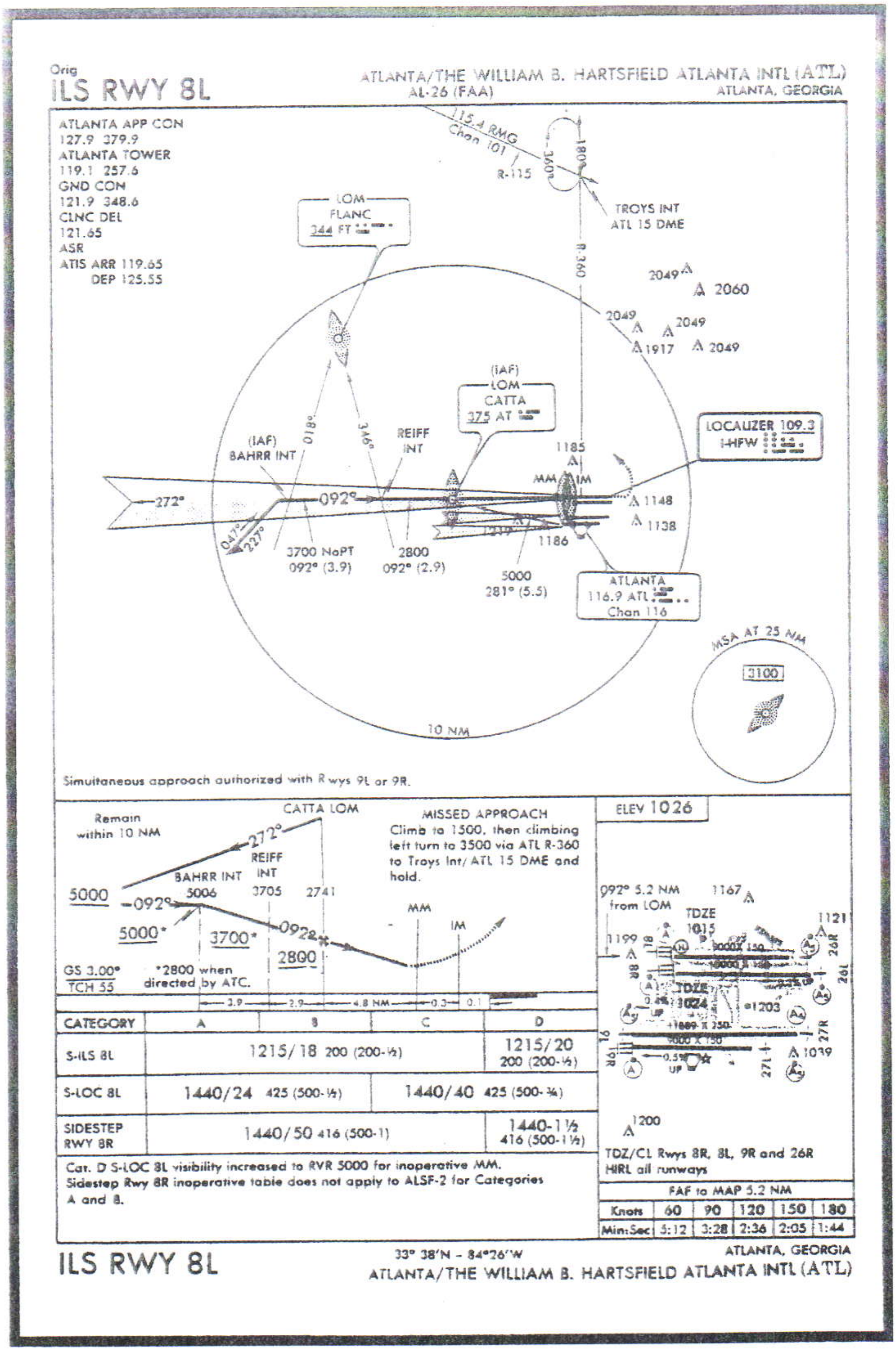


FIGURE 122.—ILS RWY 8L (ATL).

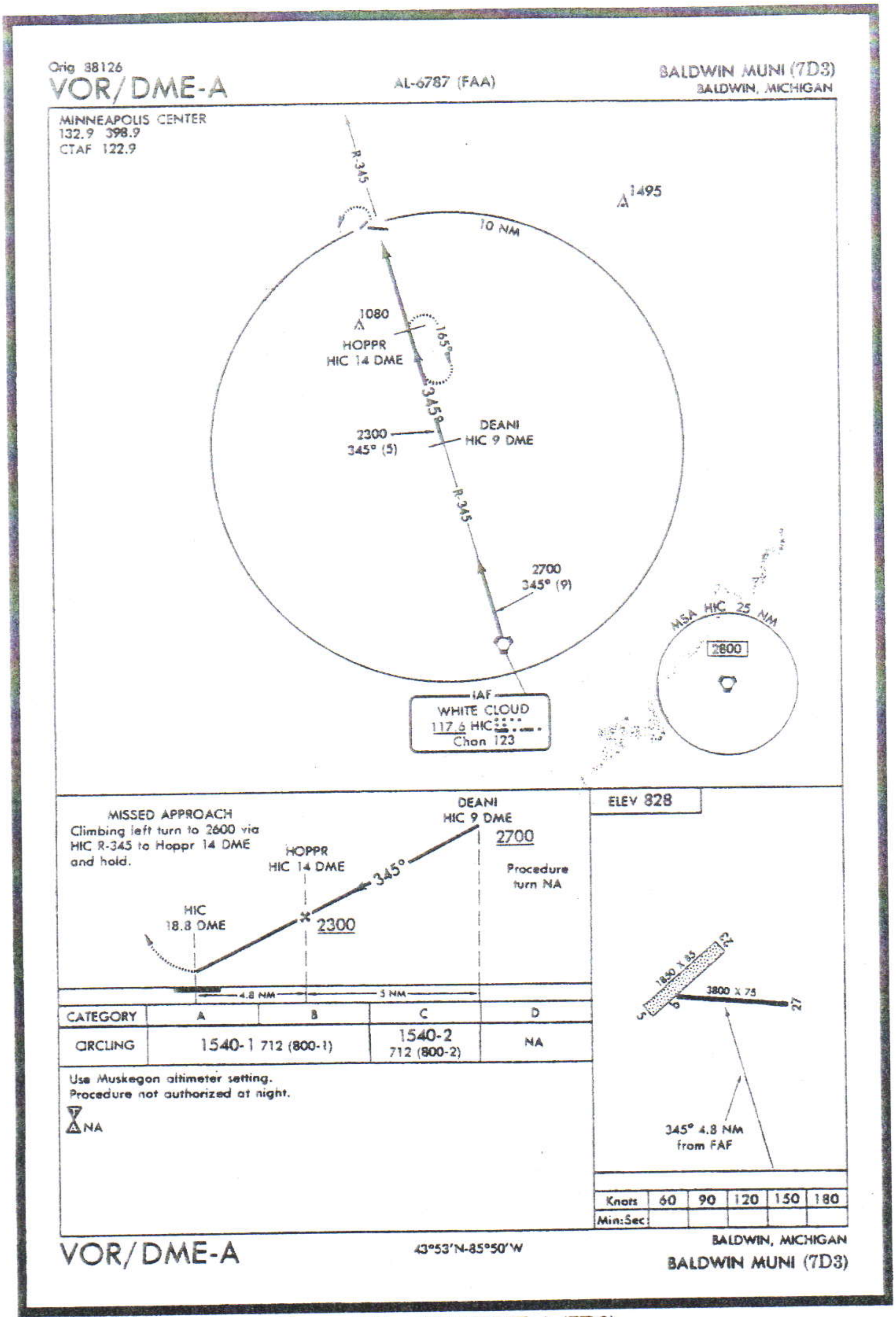


FIGURE 123.—VOR/DME-A (7D3).

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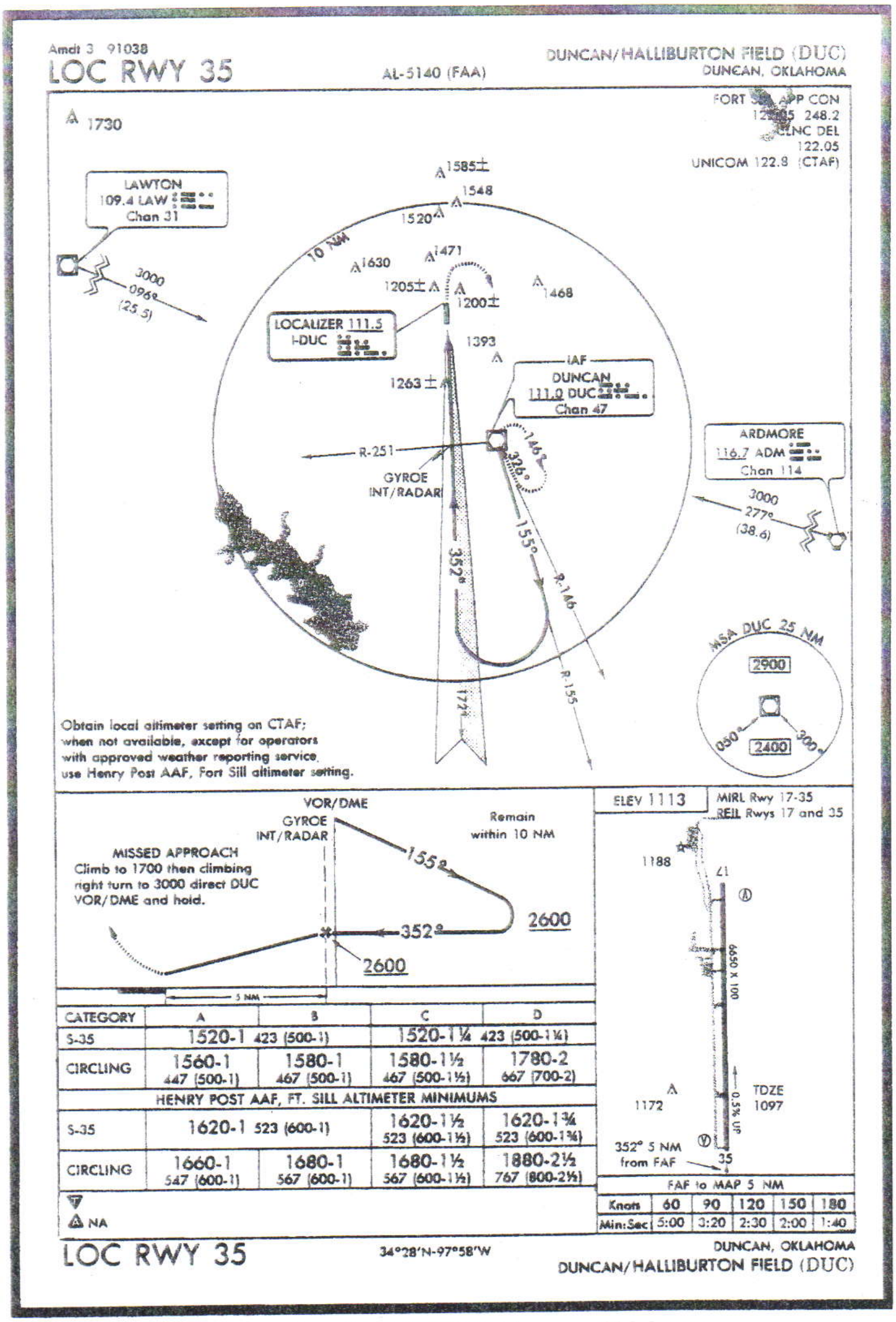

CATEGORY	A	B	C	D
S-35	1520-1 423 (500-1)		1520-1¼ 423 (500-1¼)	
CIRCLING	1560-1 447 (500-1)	1580-1 467 (500-1)	1580-1½ 467 (500-1½)	1780-2 667 (700-2)
HENRY POST AAF, FT. SILL ALTIMETER MINIMUMS				
S-35	1620-1 523 (600-1)		1620-1½ 523 (600-1½)	1620-1¾ 523 (600-1¾)
CIRCLING	1660-1 547 (600-1)	1680-1 567 (600-1)	1680-1½ 567 (600-1½)	1880-2½ 767 (800-2½)

A NA

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

FIGURE 124.—LOC RWY 35, Duncan, Oklahoma.

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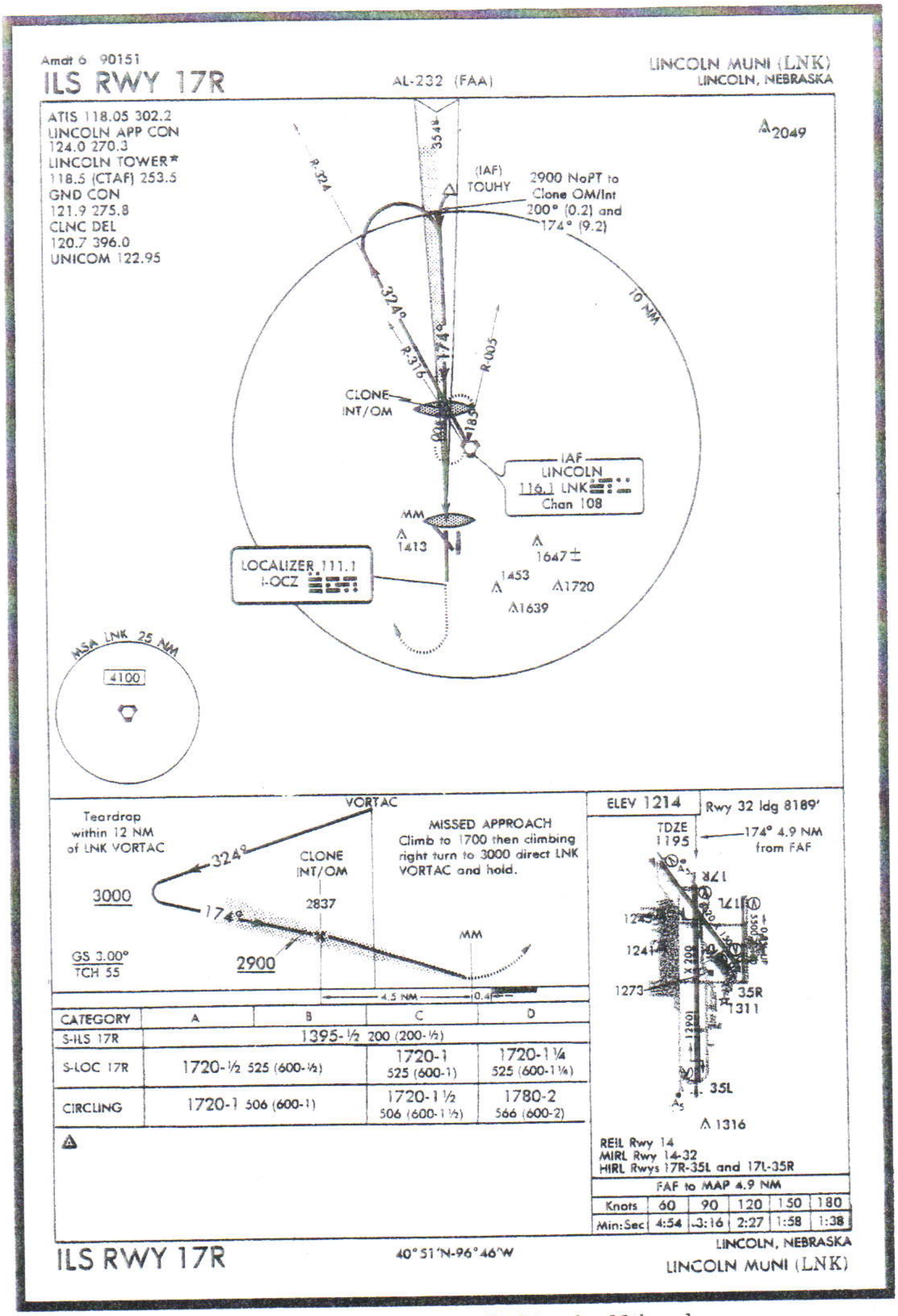

FIGURE 125.—ILS RWY 17R, Lincoln, Nebraska.

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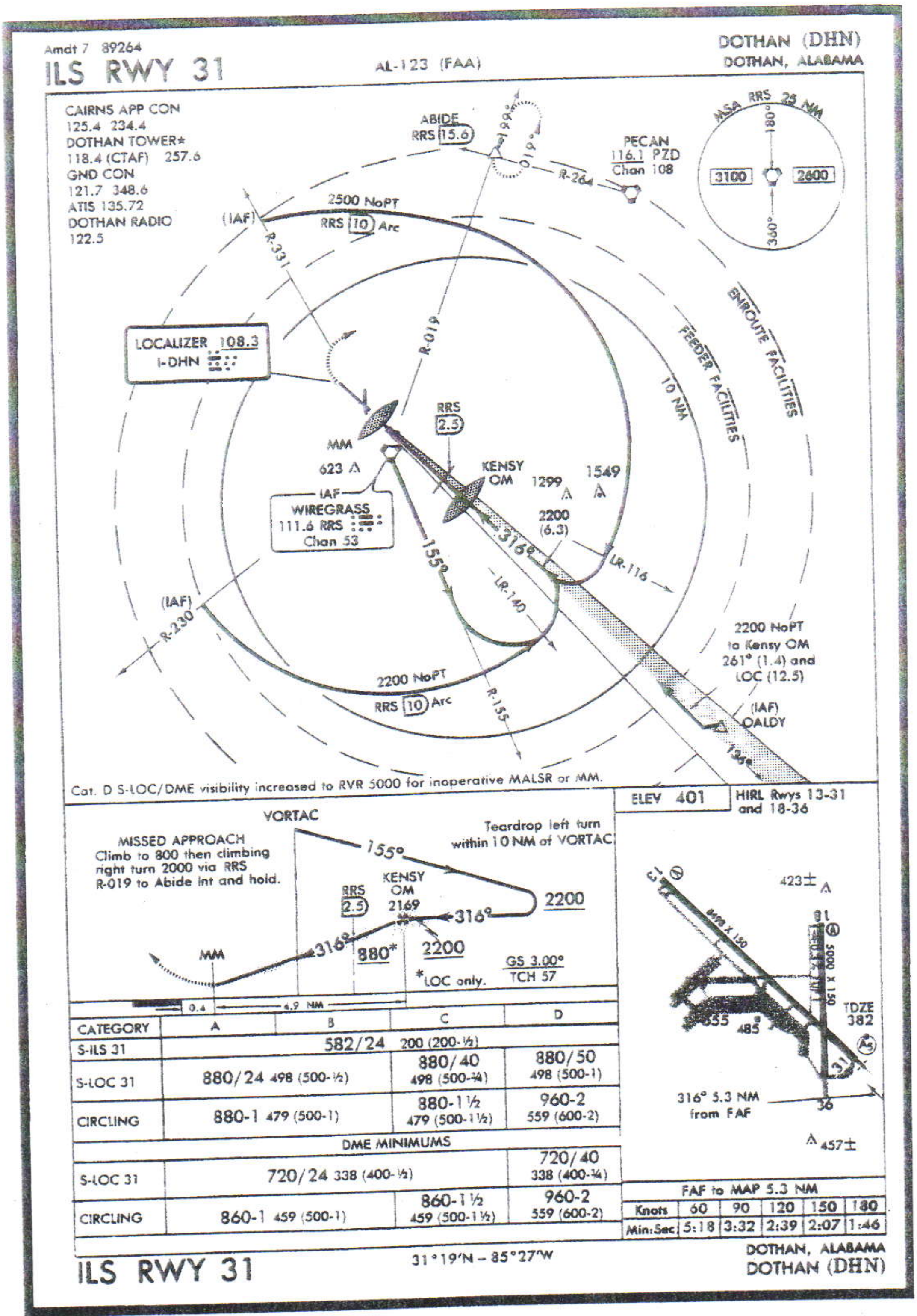

FIGURE 126.—ILS RWY 31, Dothan, Alabama.

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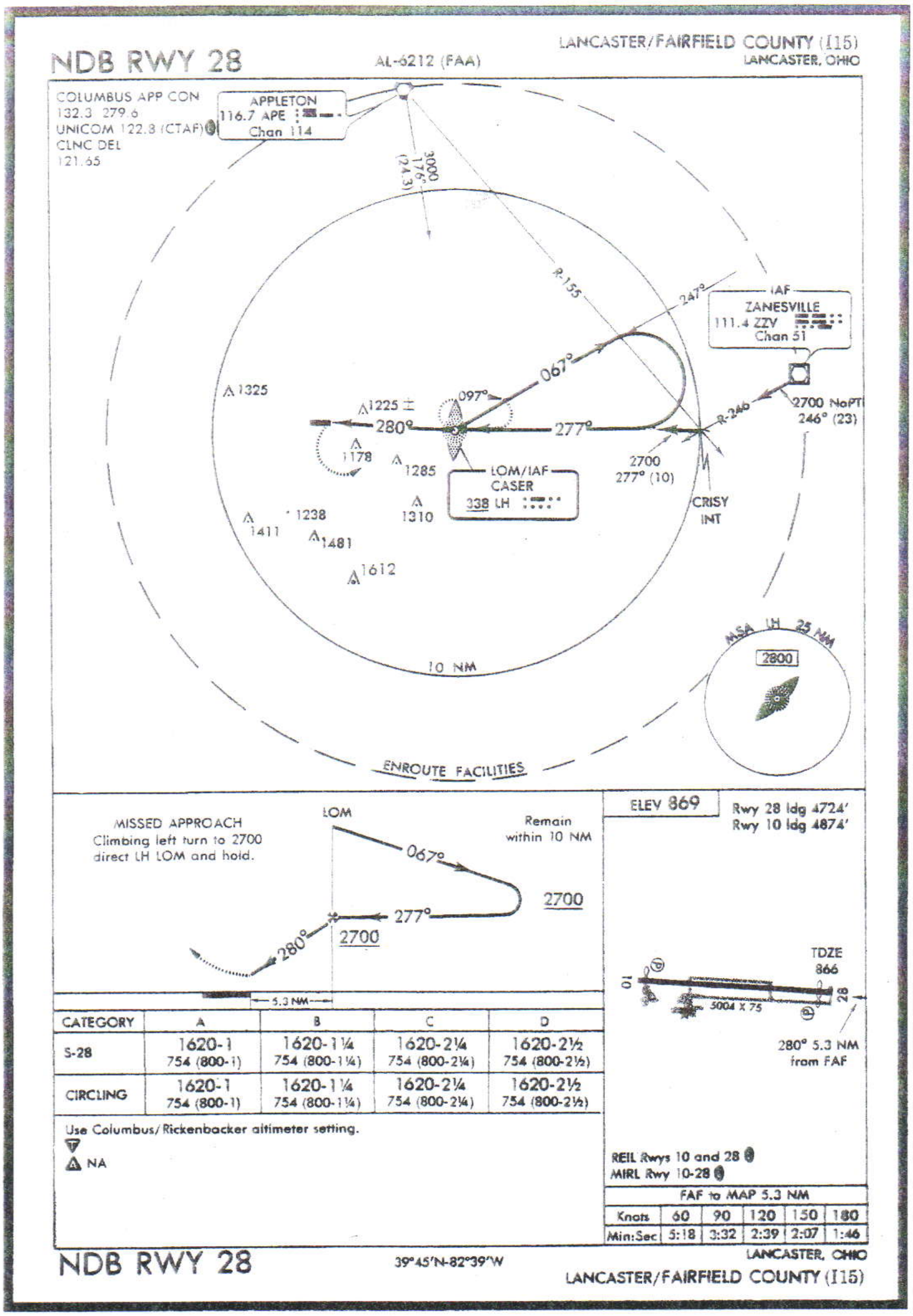

FIGURE 127.—NDB RWY 28, Lancaster/Fairfield County.

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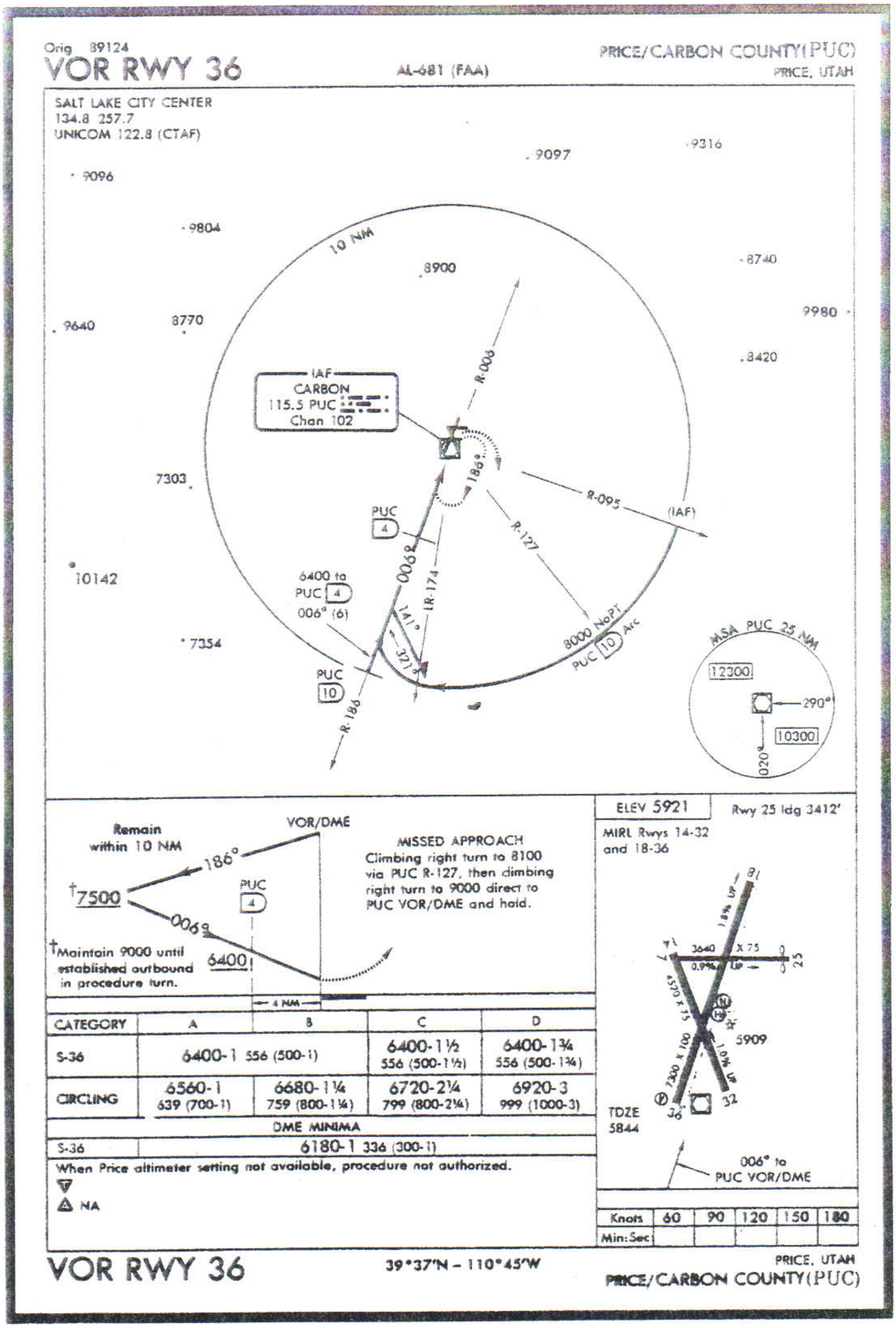

FIGURE 128.—VOR RWY 36 (PUC).

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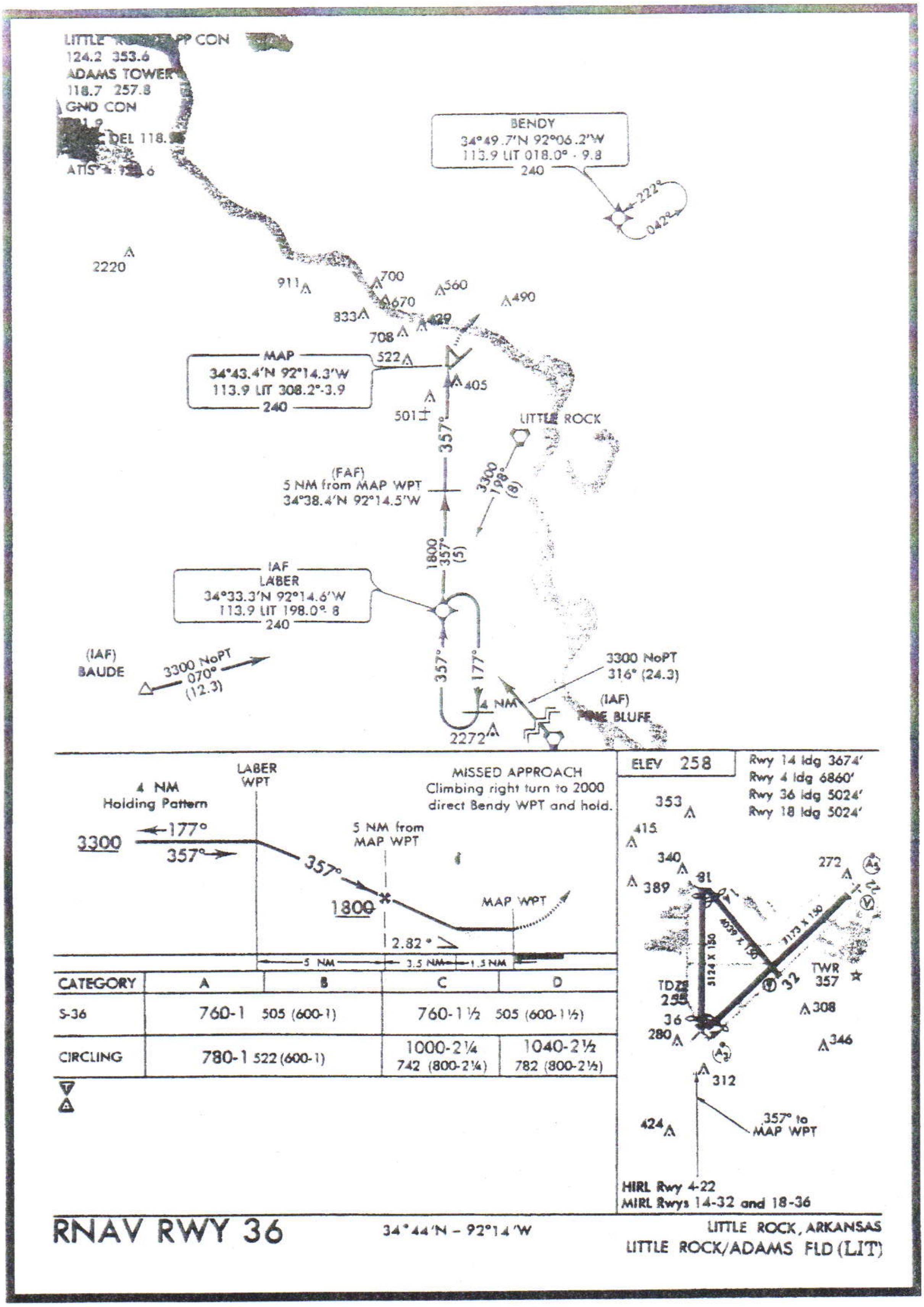

FIGURE 129.—RNAV RWY 36 (LIT).

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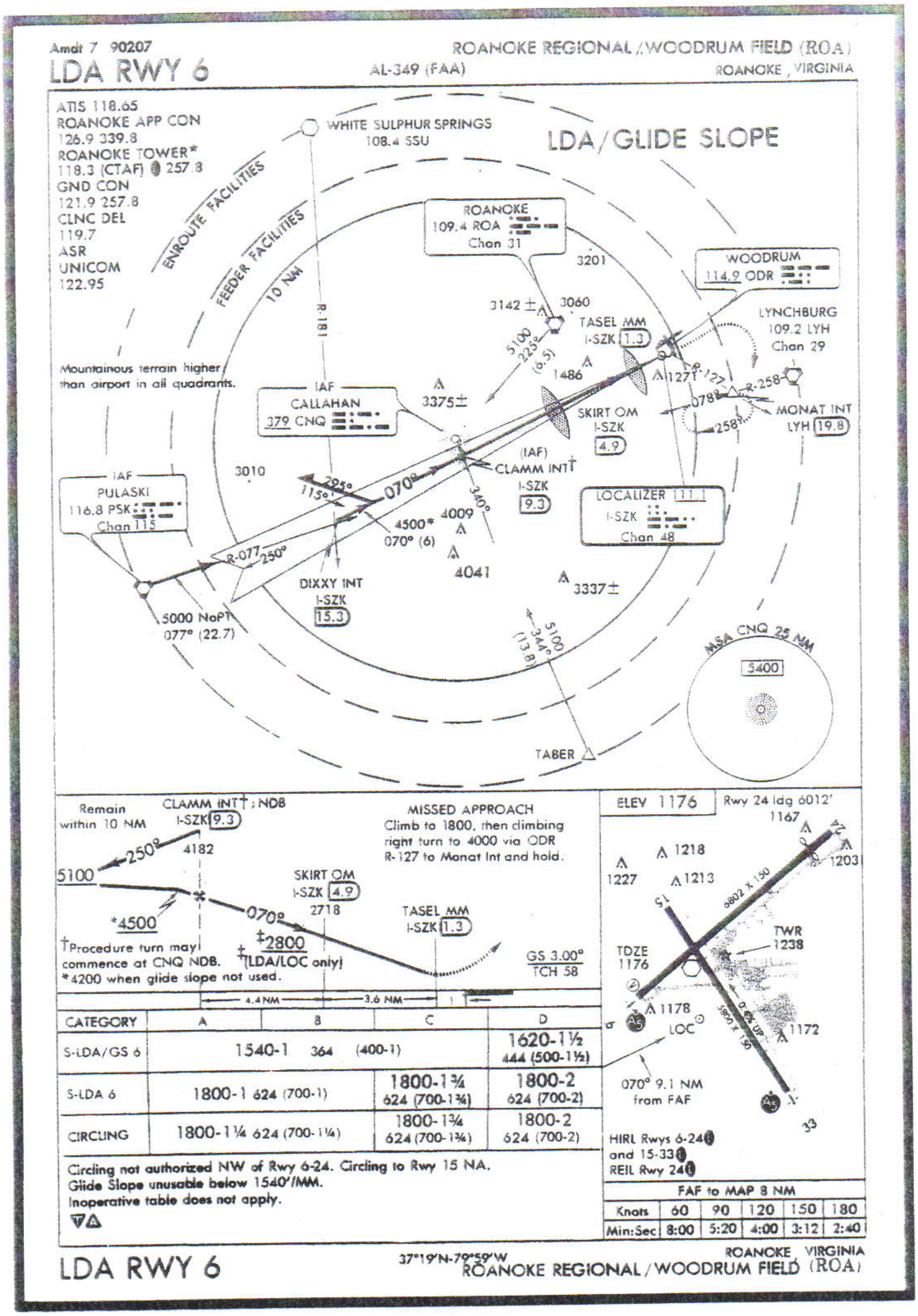
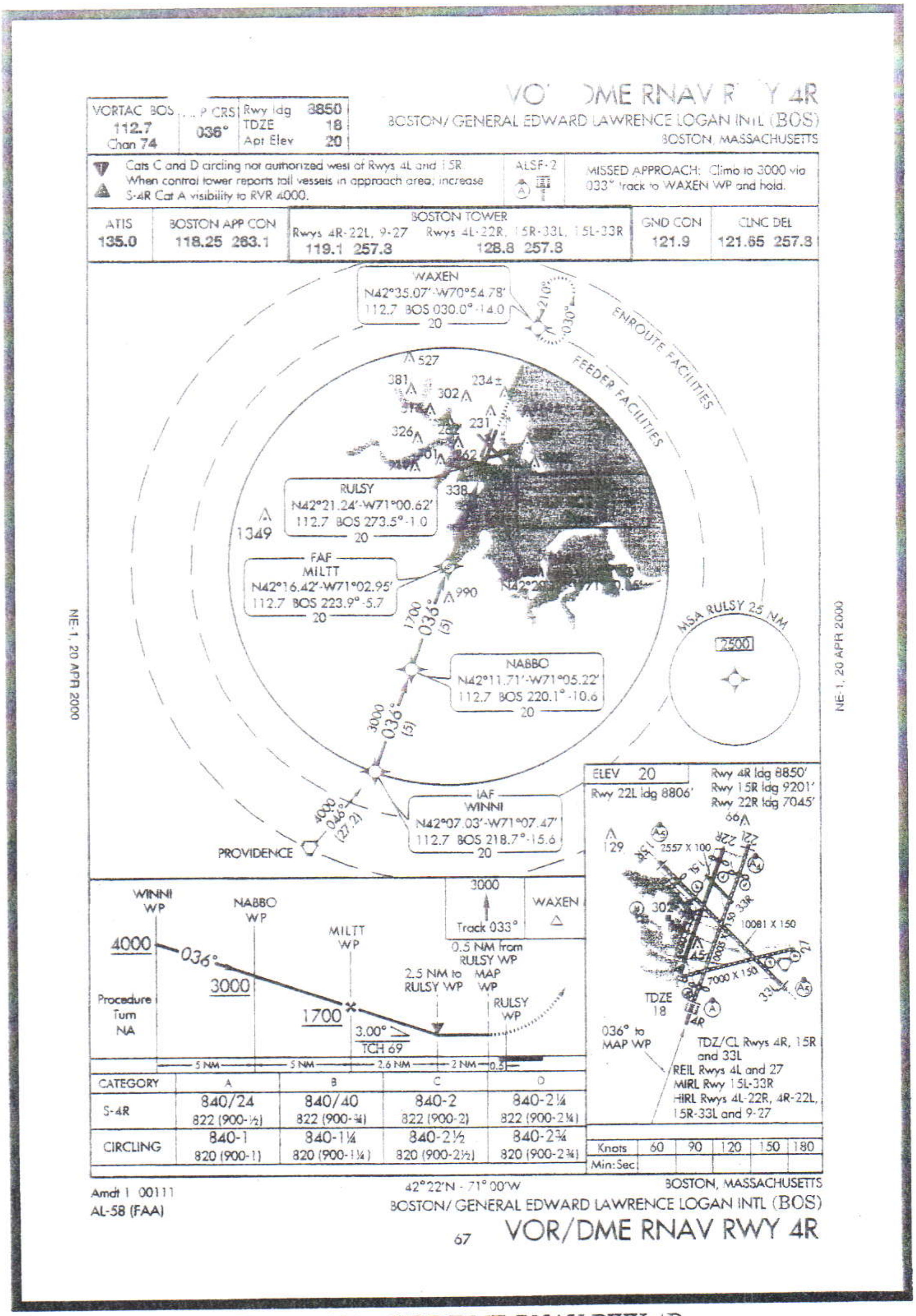


CATEGORY	A	B	C	D
S-LDA/GS 6	1540-1 364 (400-1)			1620-1½ 444 (500-1½)
S-LDA 6	1800-1 624 (700-1)		1800-1¾ 624 (700-1¾)	1800-2 624 (700-2)
CIRCLING	1800-1¼ 624 (700-1¼)		1800-1¾ 624 (700-1¾)	1800-2 624 (700-2)

FAF to MAP 8 NM					
Knots	60	90	120	150	180
Min:Sec	8:00	5:20	4:00	3:12	2:40

FIGURE 130.—LDA RWY 6 (ROA).



CATEGORY	A	B	C	D
S-4R	840/24 822 (900-½)	840/40 822 (900-¾)	840-2 822 (900-2)	840-2¼ 822 (900-2¼)
CIRCLING	840-1 820 (900-1)	840-1¼ 820 (900-1¼)	840-2½ 820 (900-2½)	840-2¾ 820 (900-2¾)

FIGURE 131.—VOR/DME RNAV RWY 4R.

Figure 132.—Deleted.

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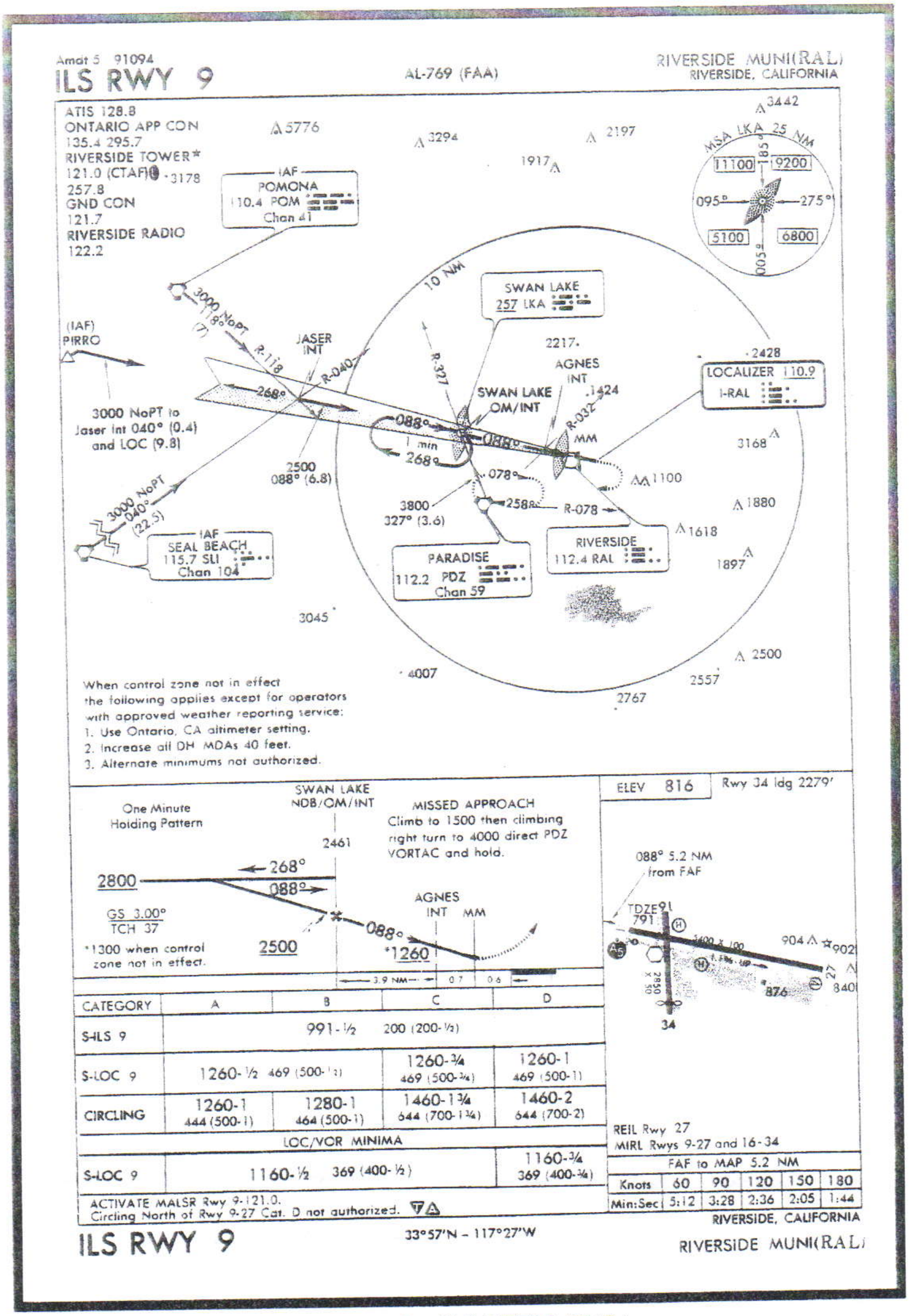

FIGURE 133.—ILS RWY 9 (RAL).

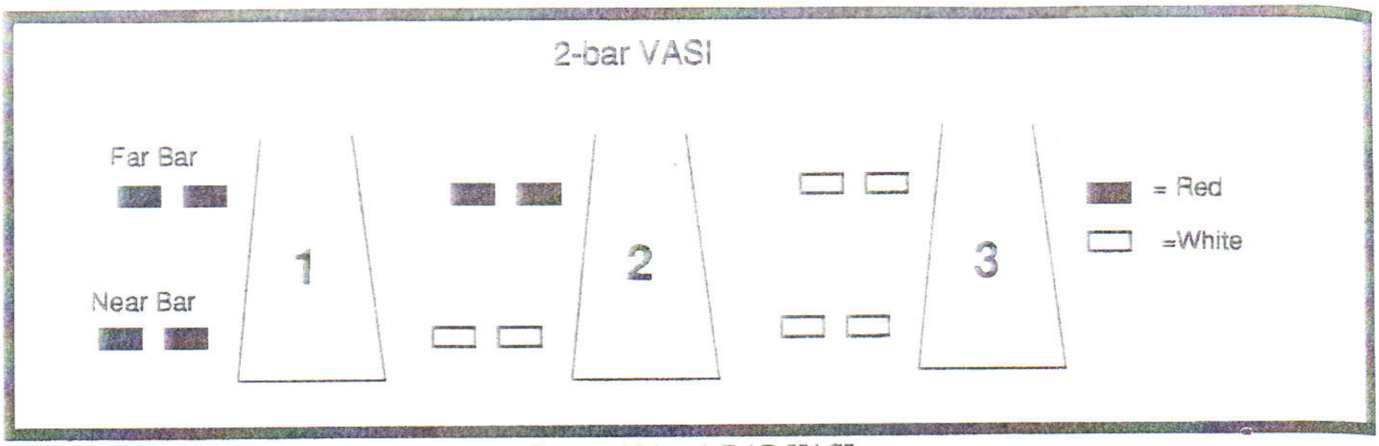

FIGURE 134.—2-BAR VASI.

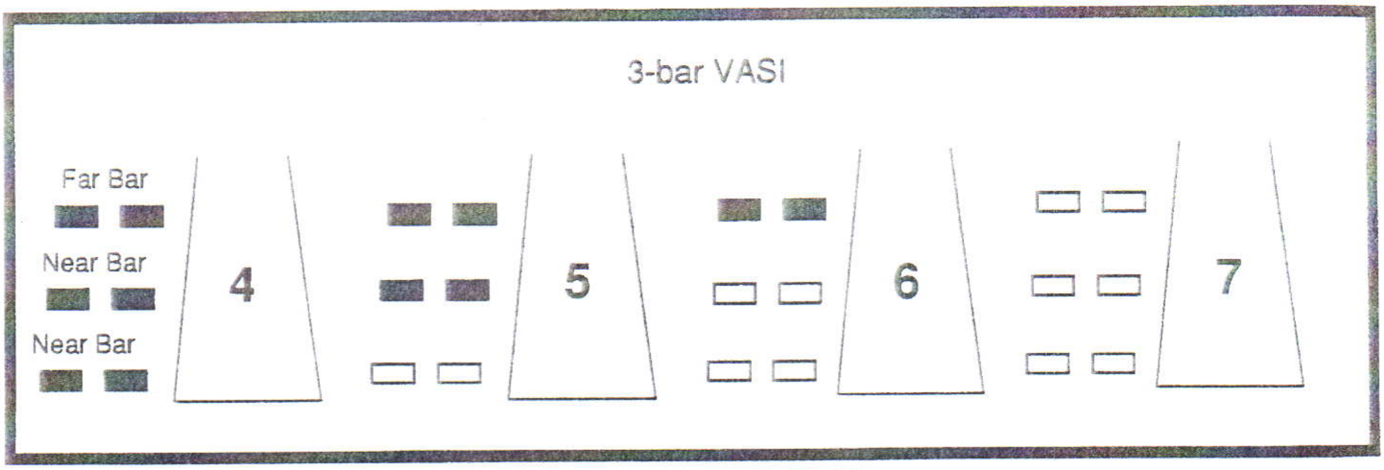

FIGURE 135.—3-BAR VASI.

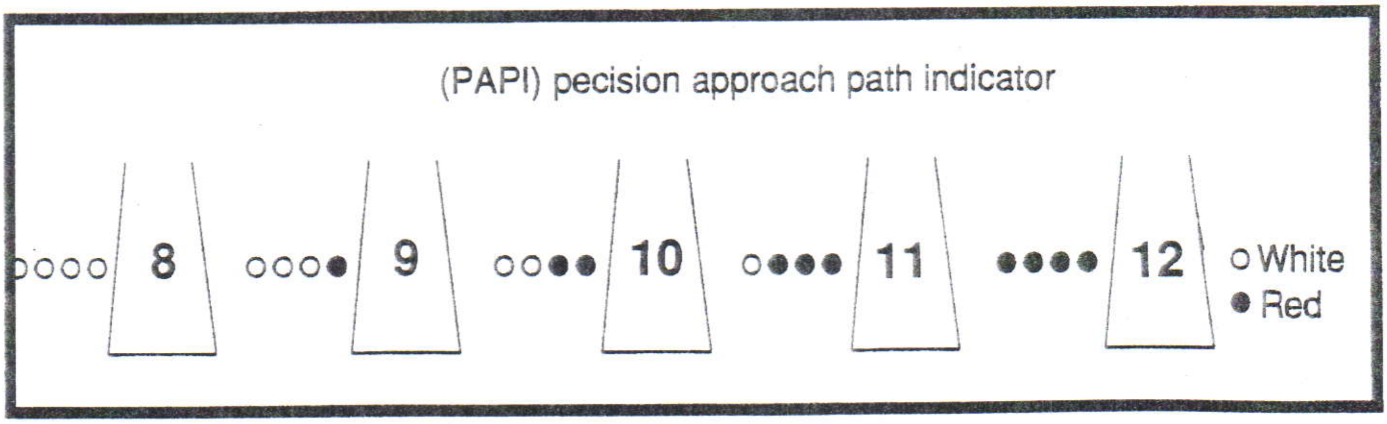

FIGURE 136.—Precision Approach Path Indicator (PAPI).

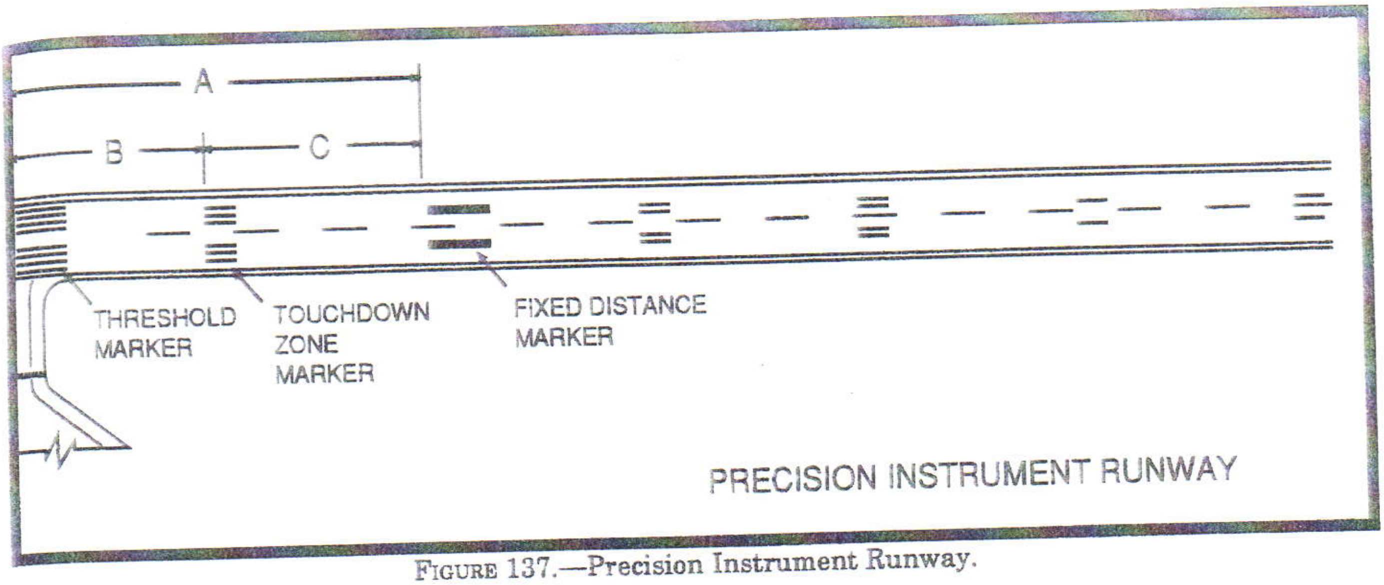

FIGURE 137.—Precision Instrument Runway.

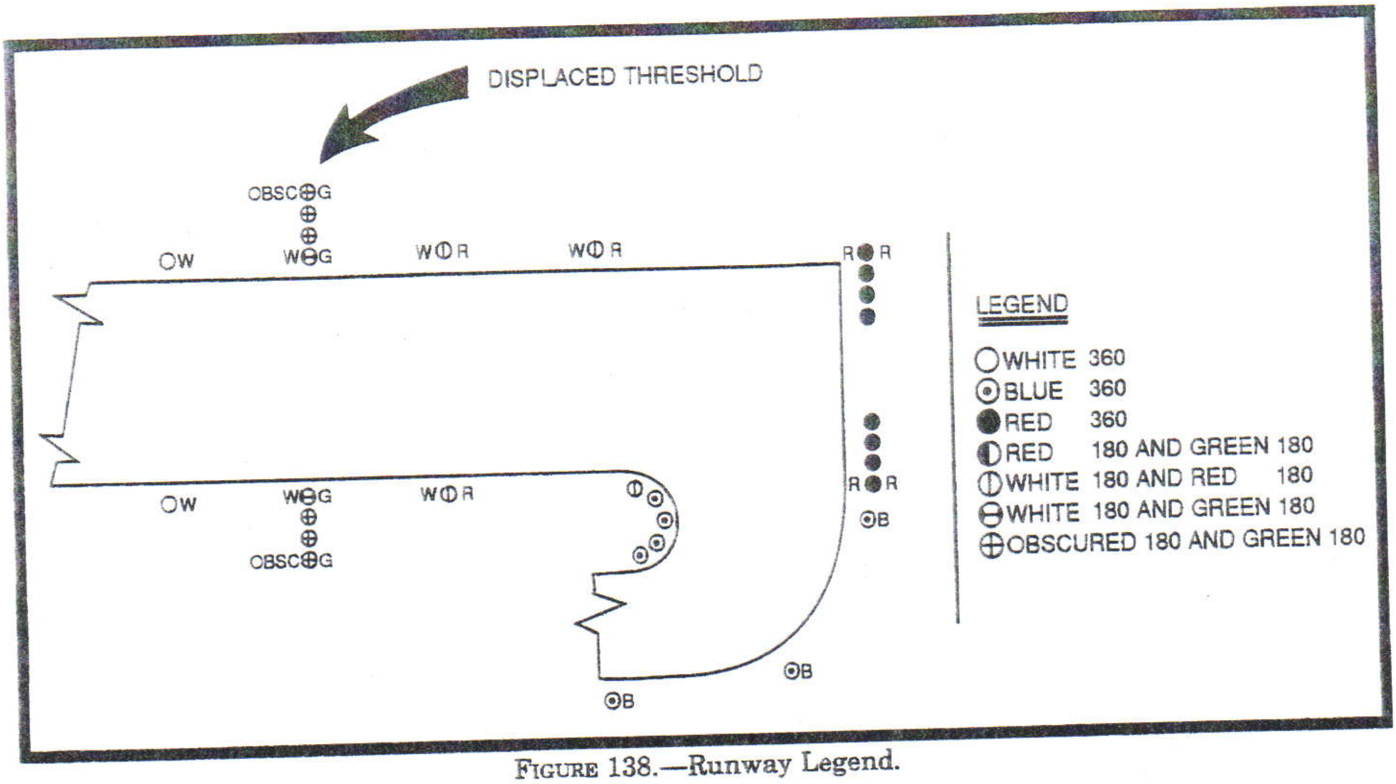

FIGURE 138.—Runway Legend.

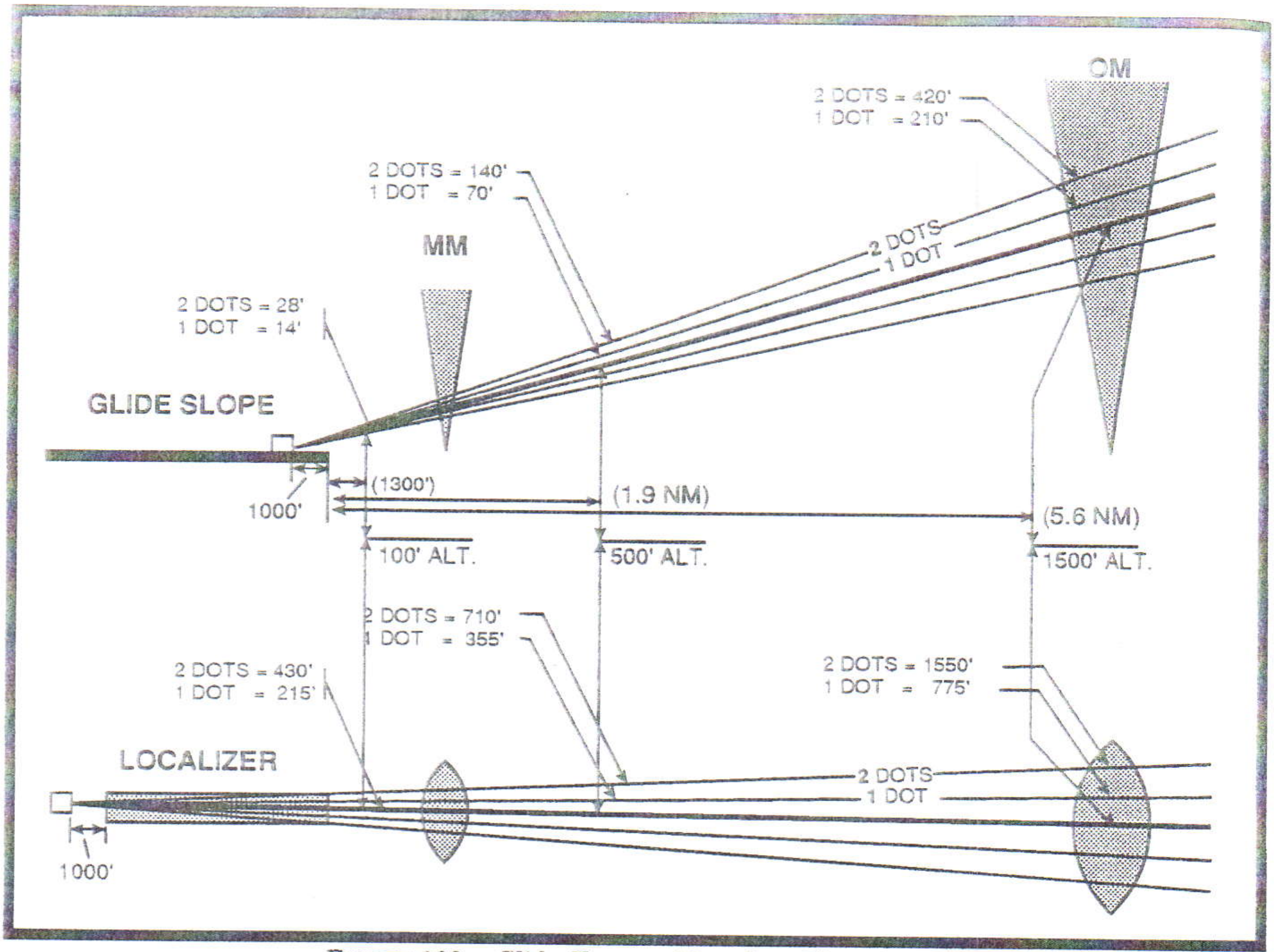

FIGURE 139.—Glide Slope and Localizer Illustration.

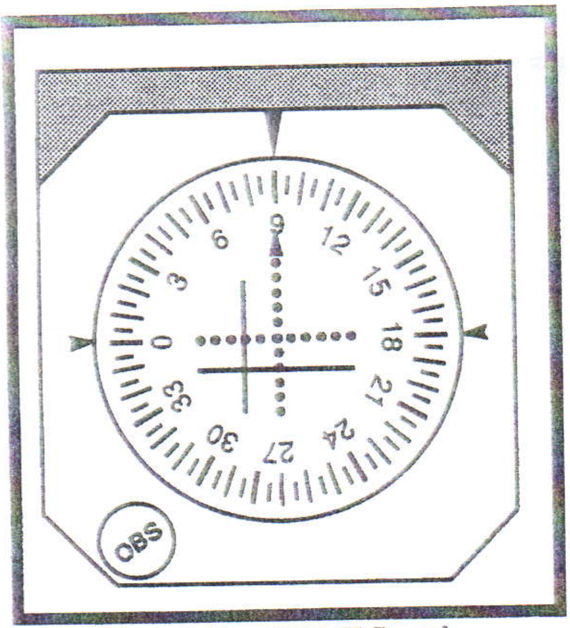

FIGURE 140.—OBS, ILS, and GS Displacement.

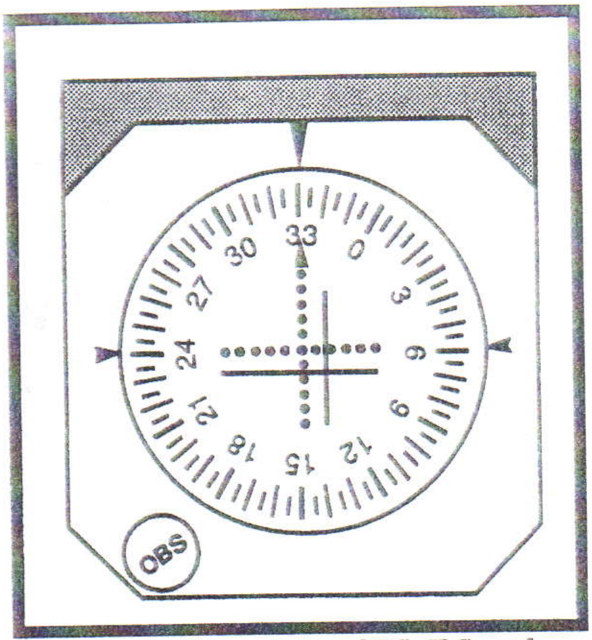

FIGURE 141.—OBS, ILS, and GS Displacement.

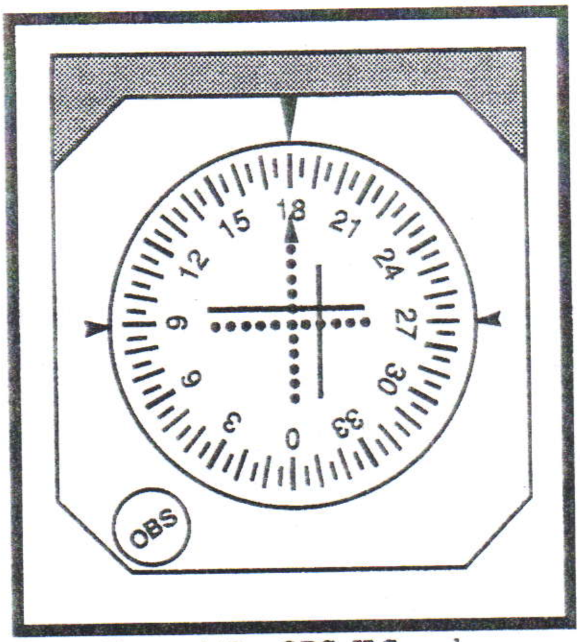

FIGURE 142.—OBS, ILS, and GS Displacement.

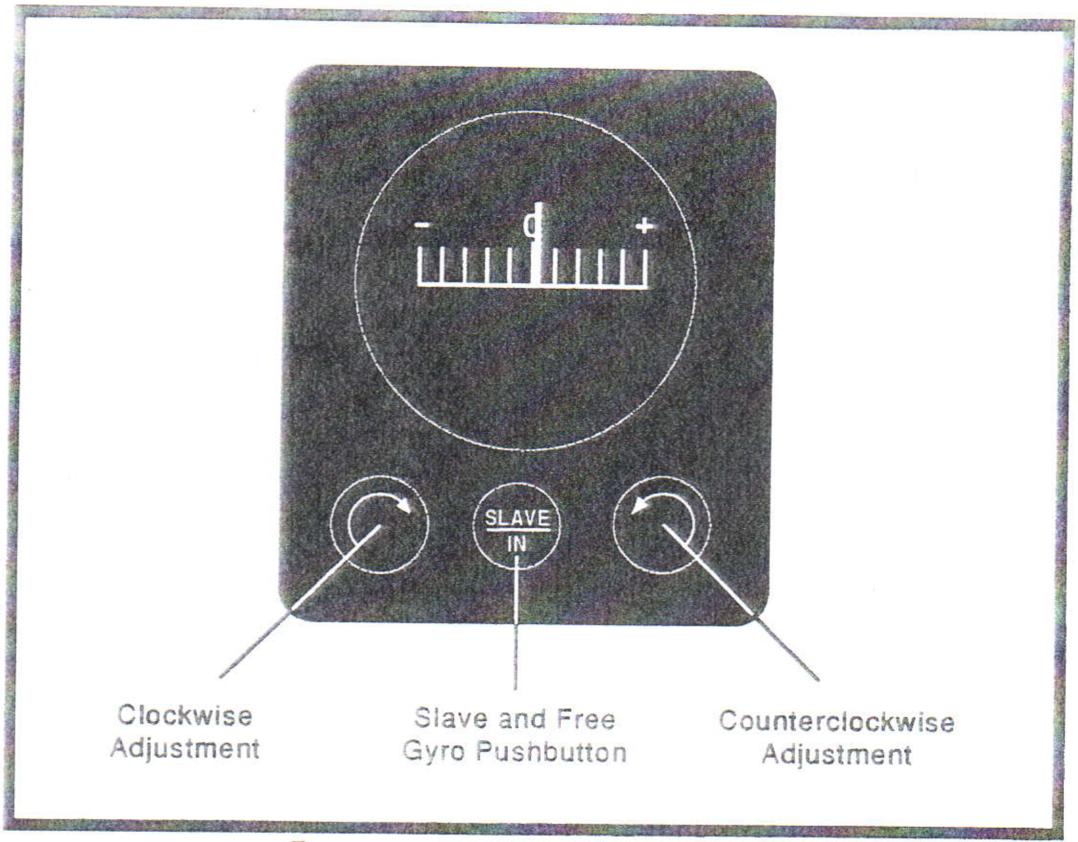

FIGURE 143.—Slaved Gyro Illustration.

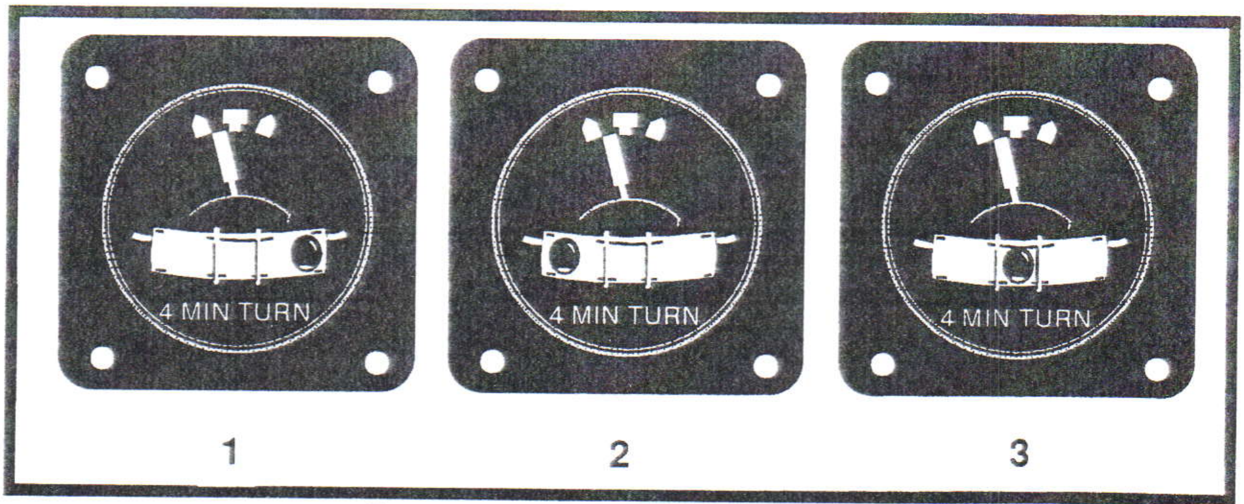

FIGURE 144.—Turn-and-Slip Indicator.

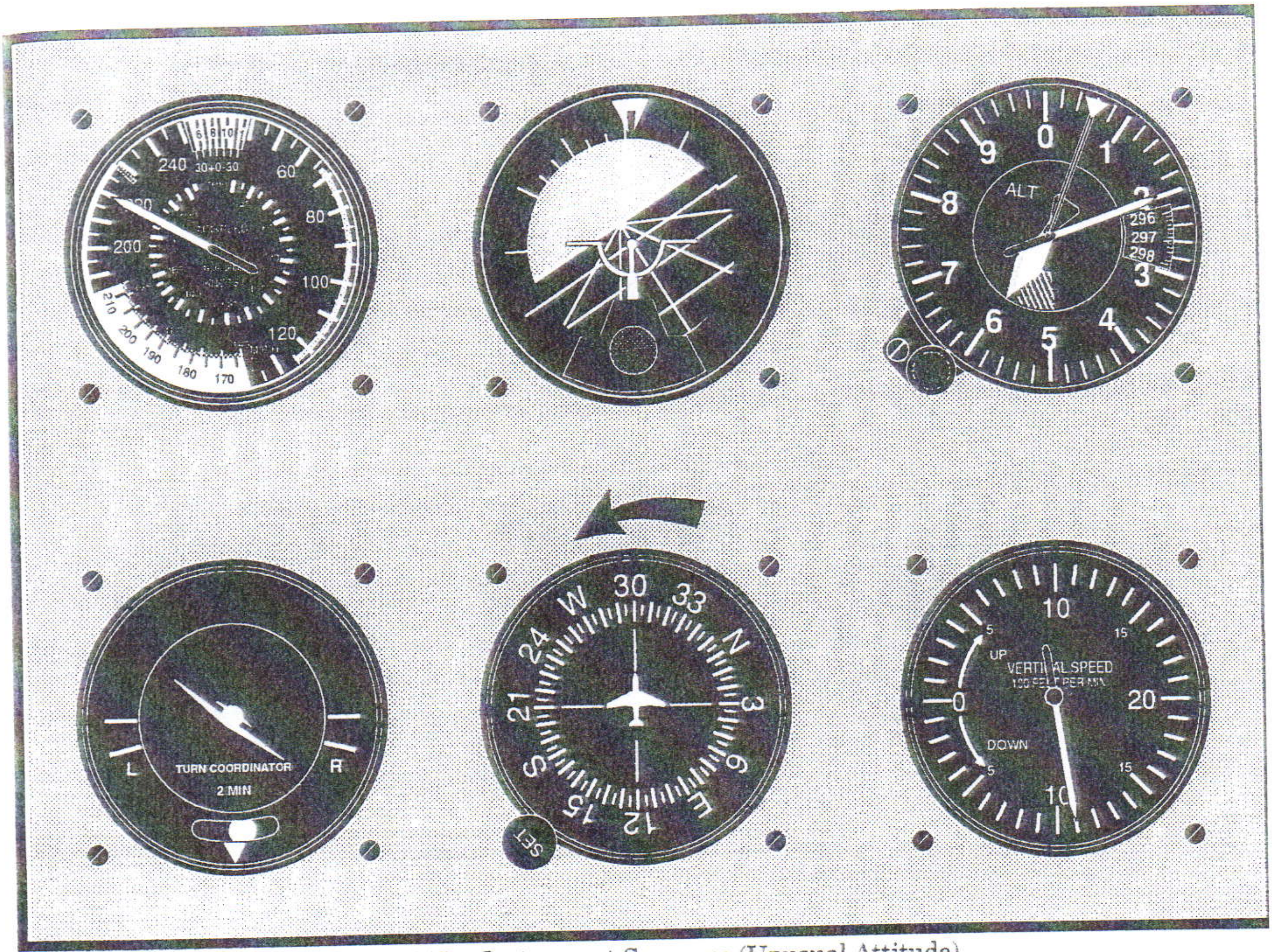

FIGURE 145.—Instrument Sequence (Unusual Attitude).

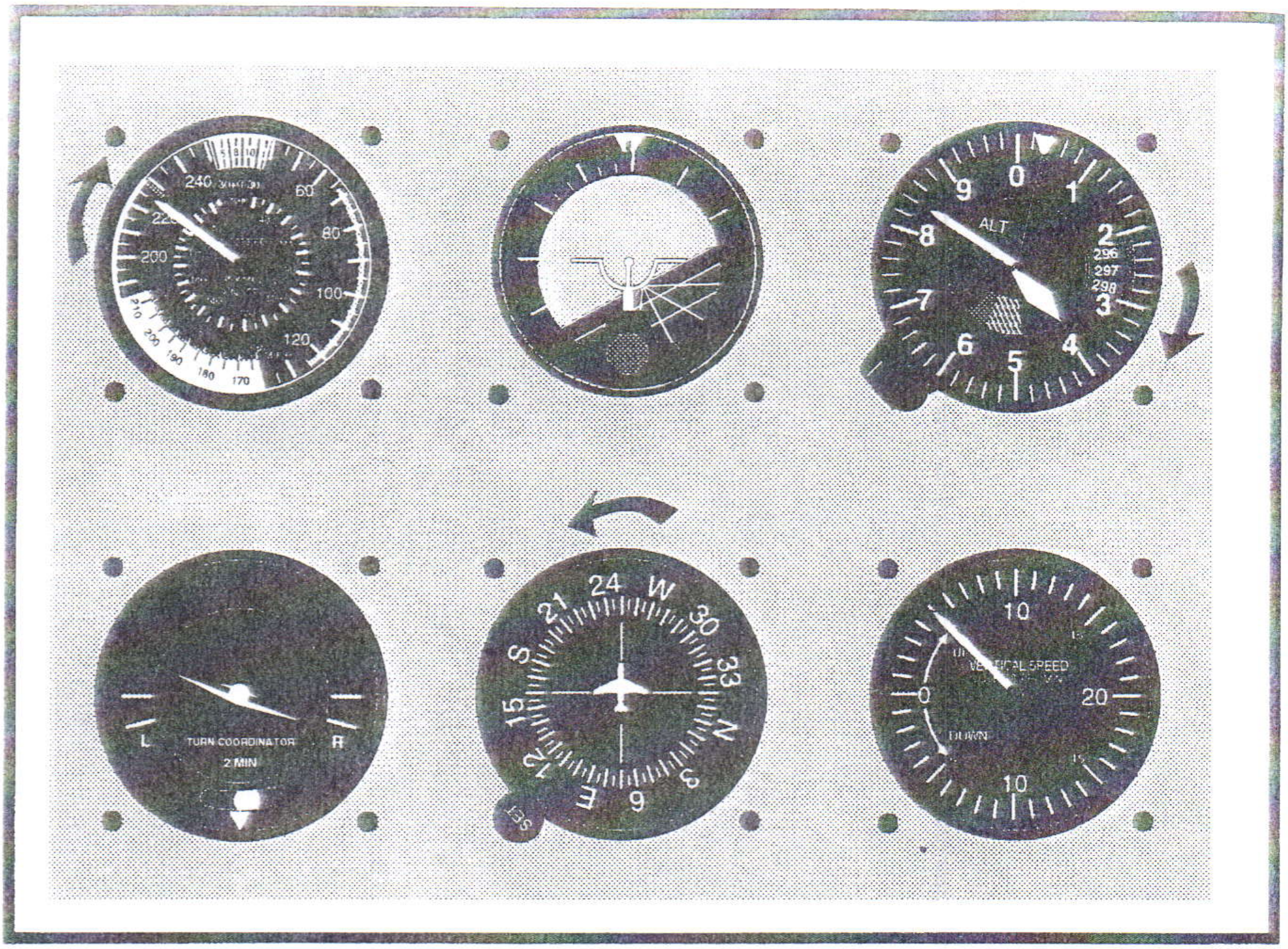

FIGURE 146.—Instrument Sequence (System Failed).

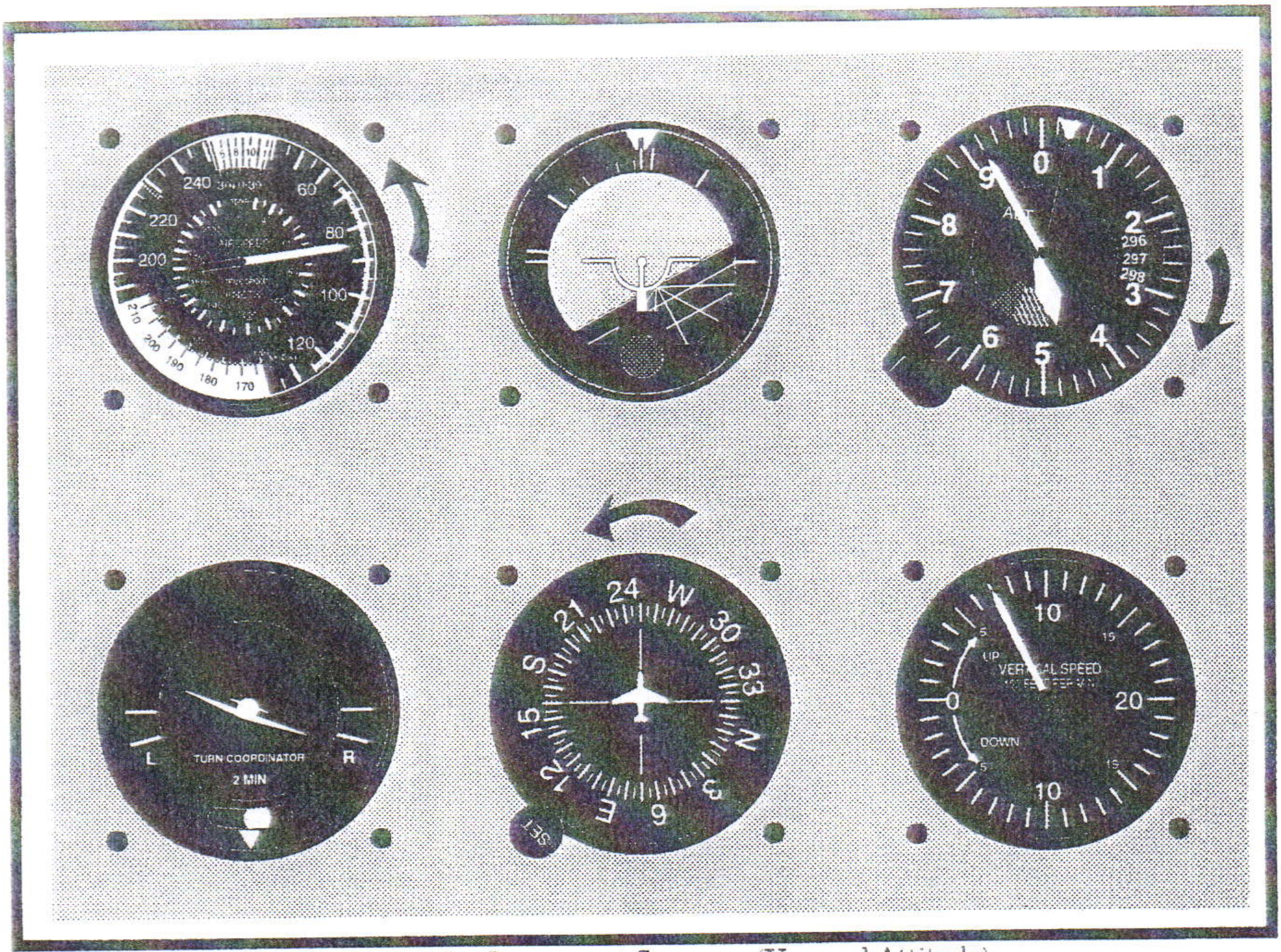

FIGURE 147.—Instrument Sequence (Unusual Attitude).

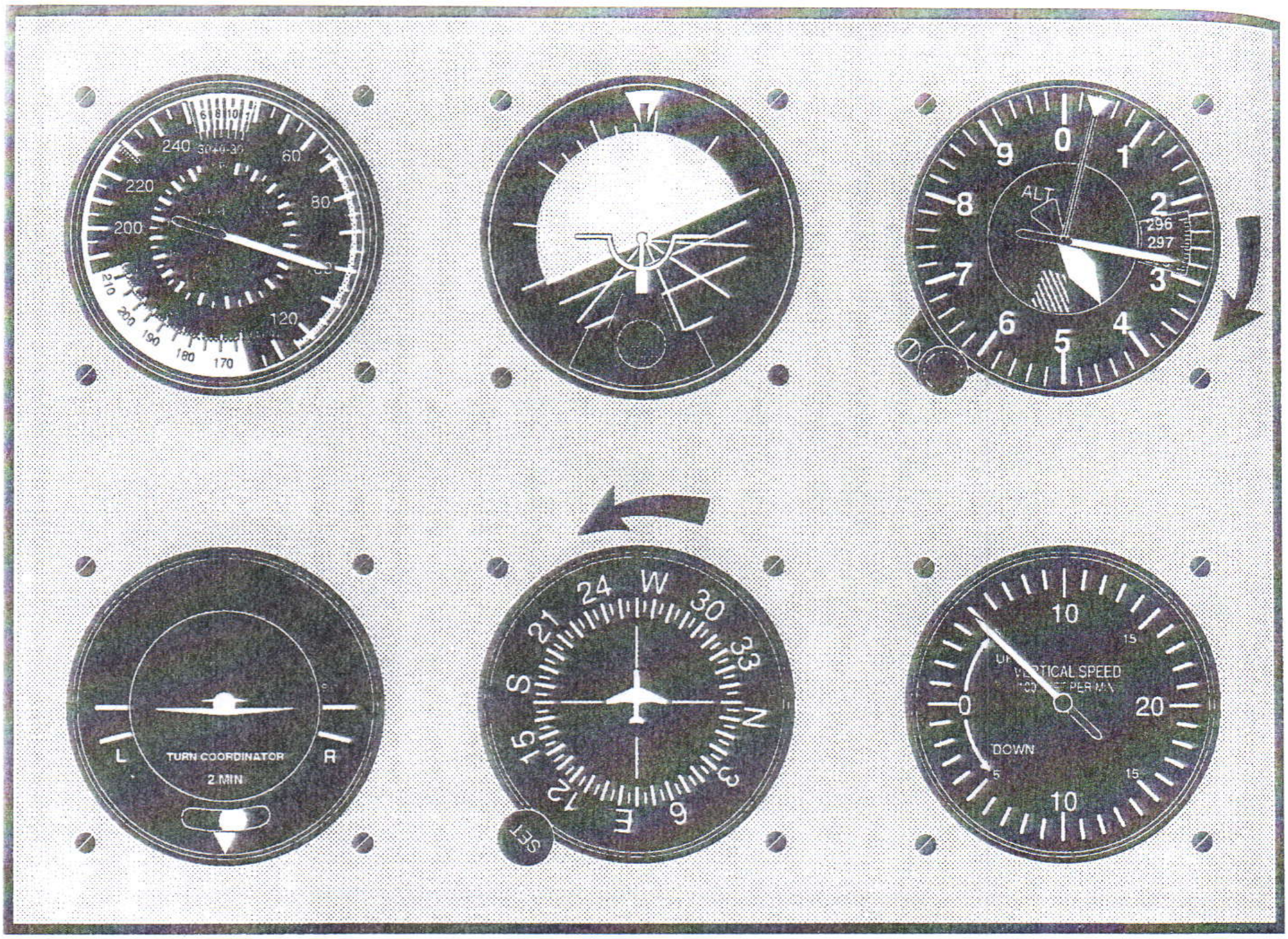

FIGURE 148.—Instrument Interpretation (System Malfunction).

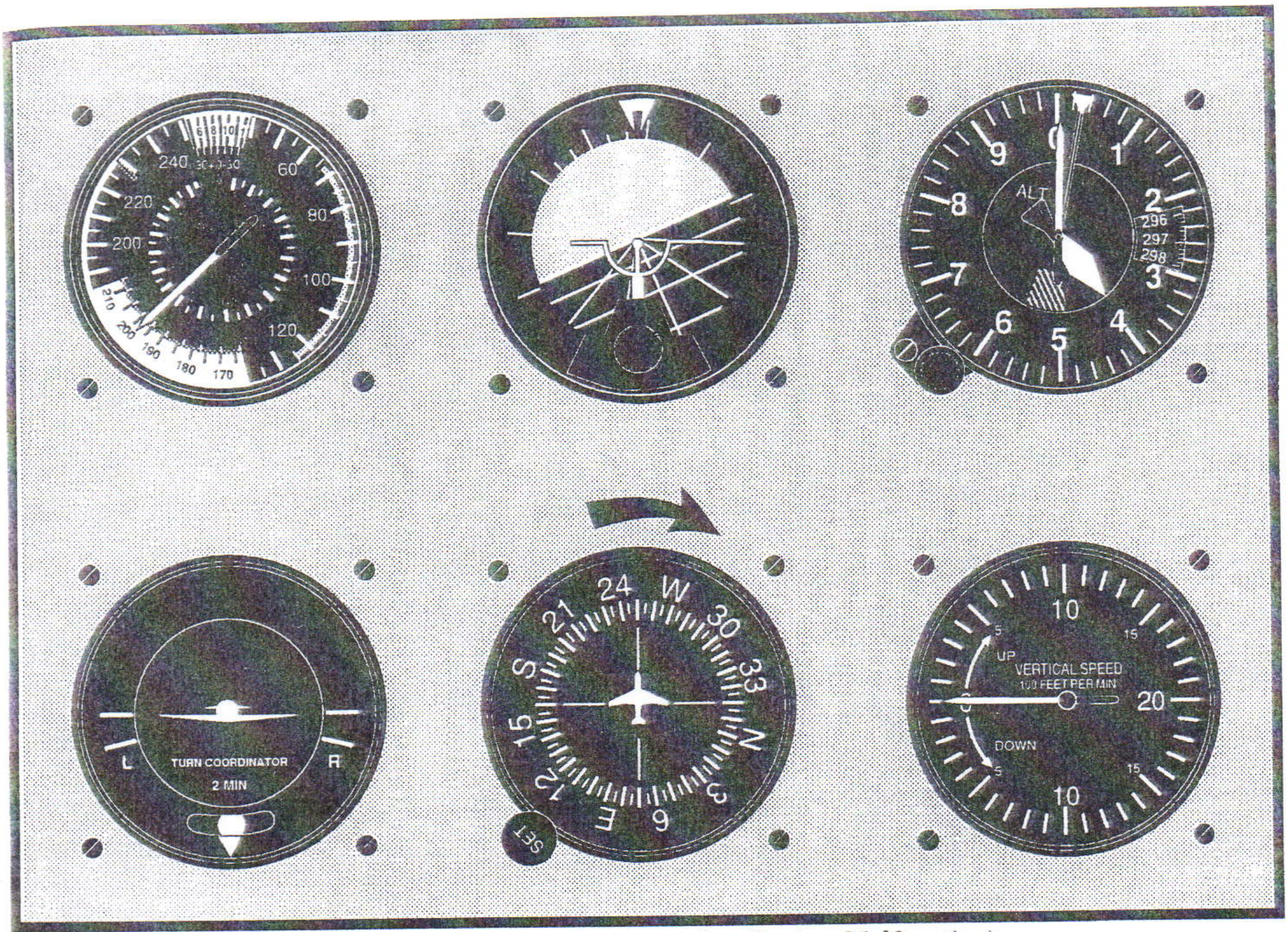

FIGURE 149.—Instrument Interpretation (System Malfunction).

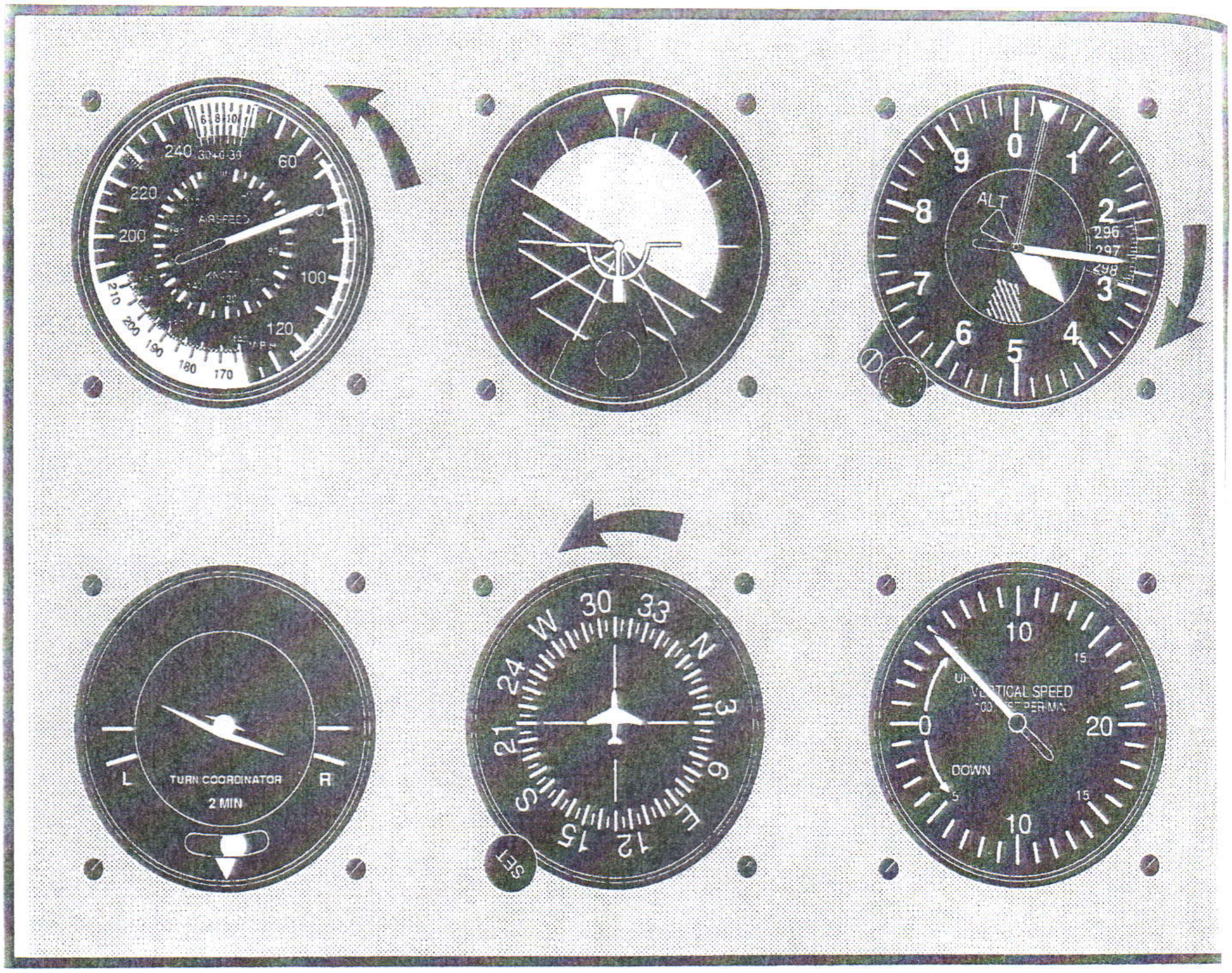

FIGURE 150.—Instrument Interpretation (Instrument Malfunction).

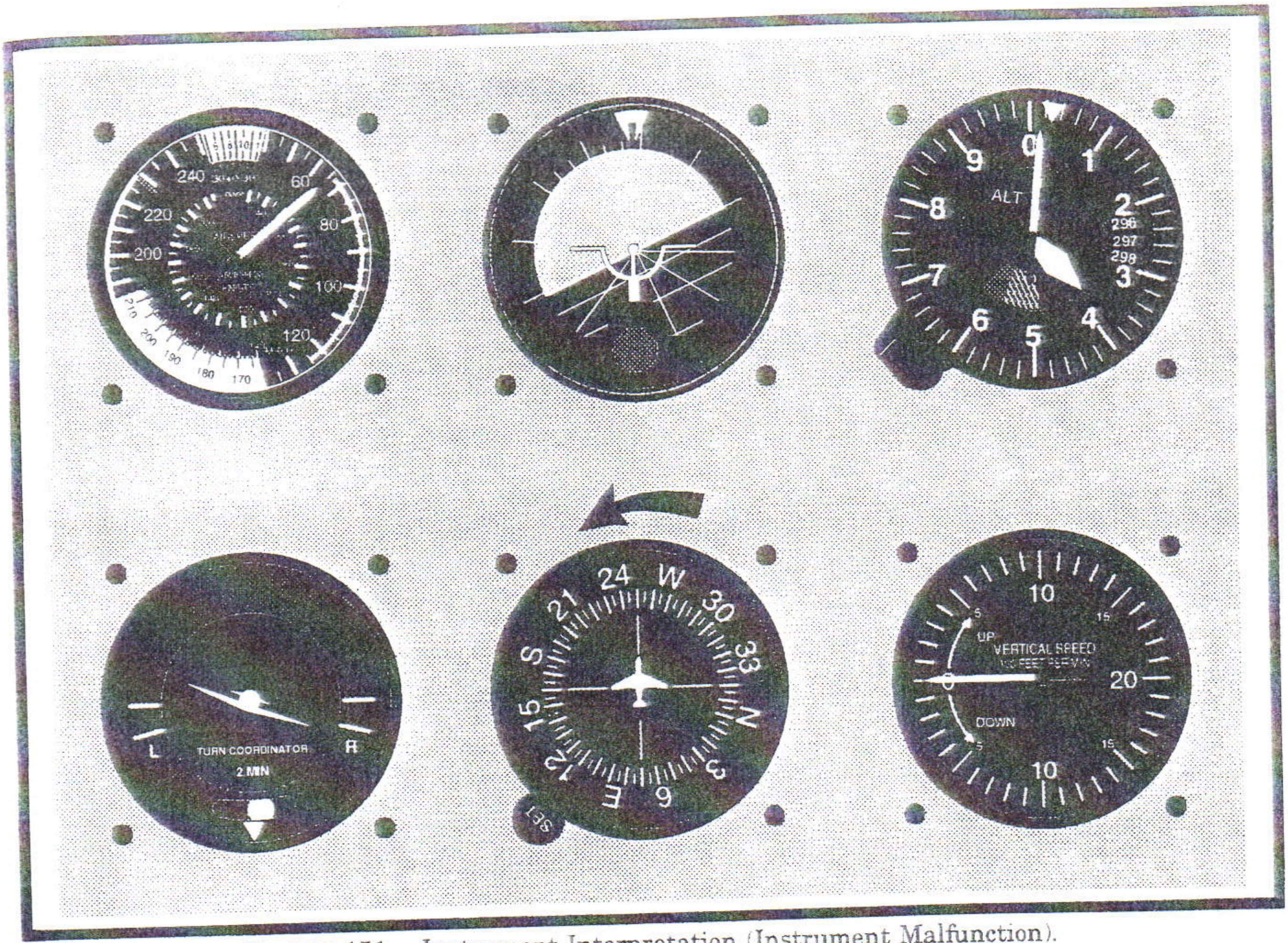

FIGURE 151.—Instrument Interpretation (Instrument Malfunction).

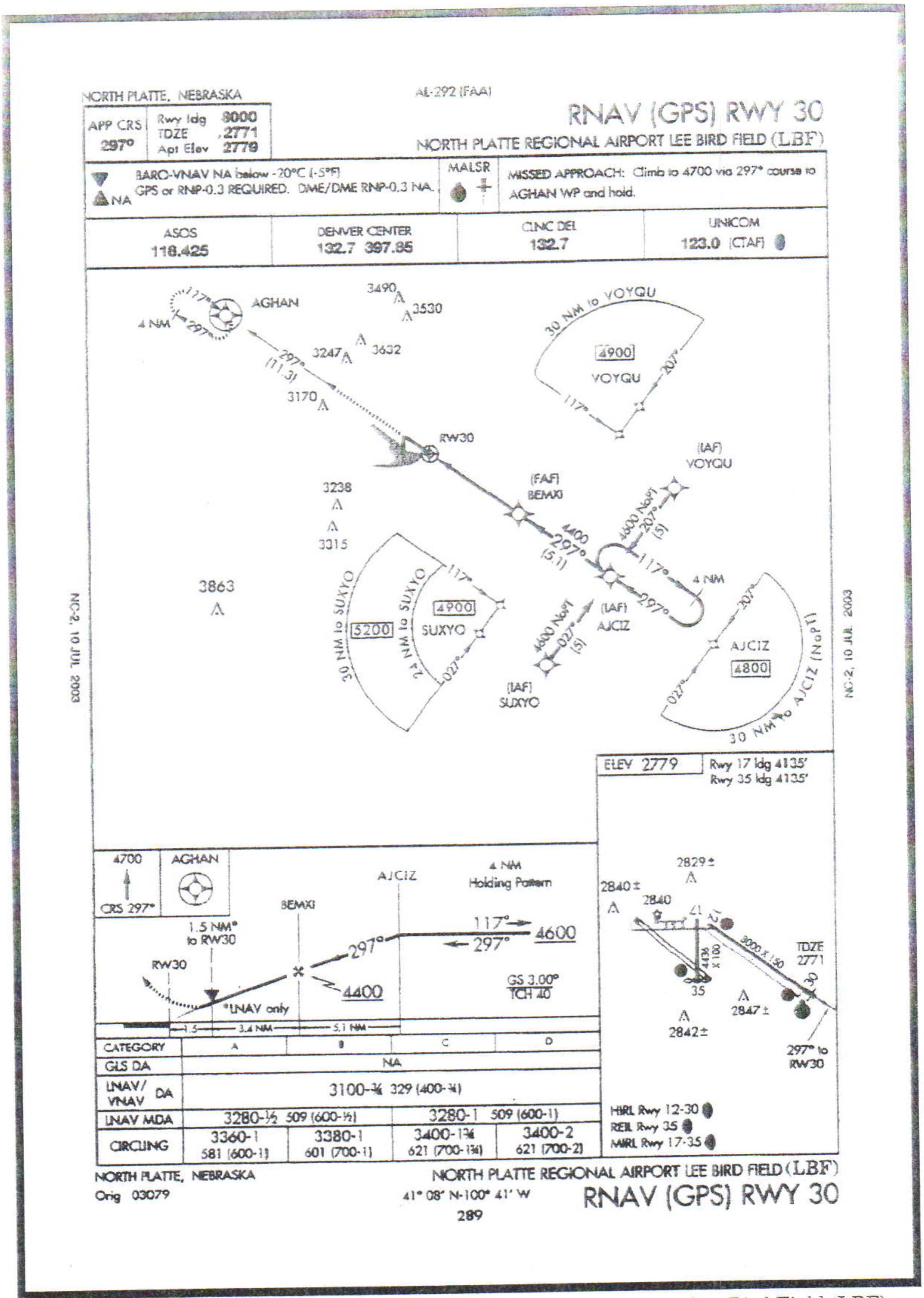

FIGURE 152.—RNAV (GPS) RWY 30, North Plate Regional Airport Lee Bird Field (LBF).

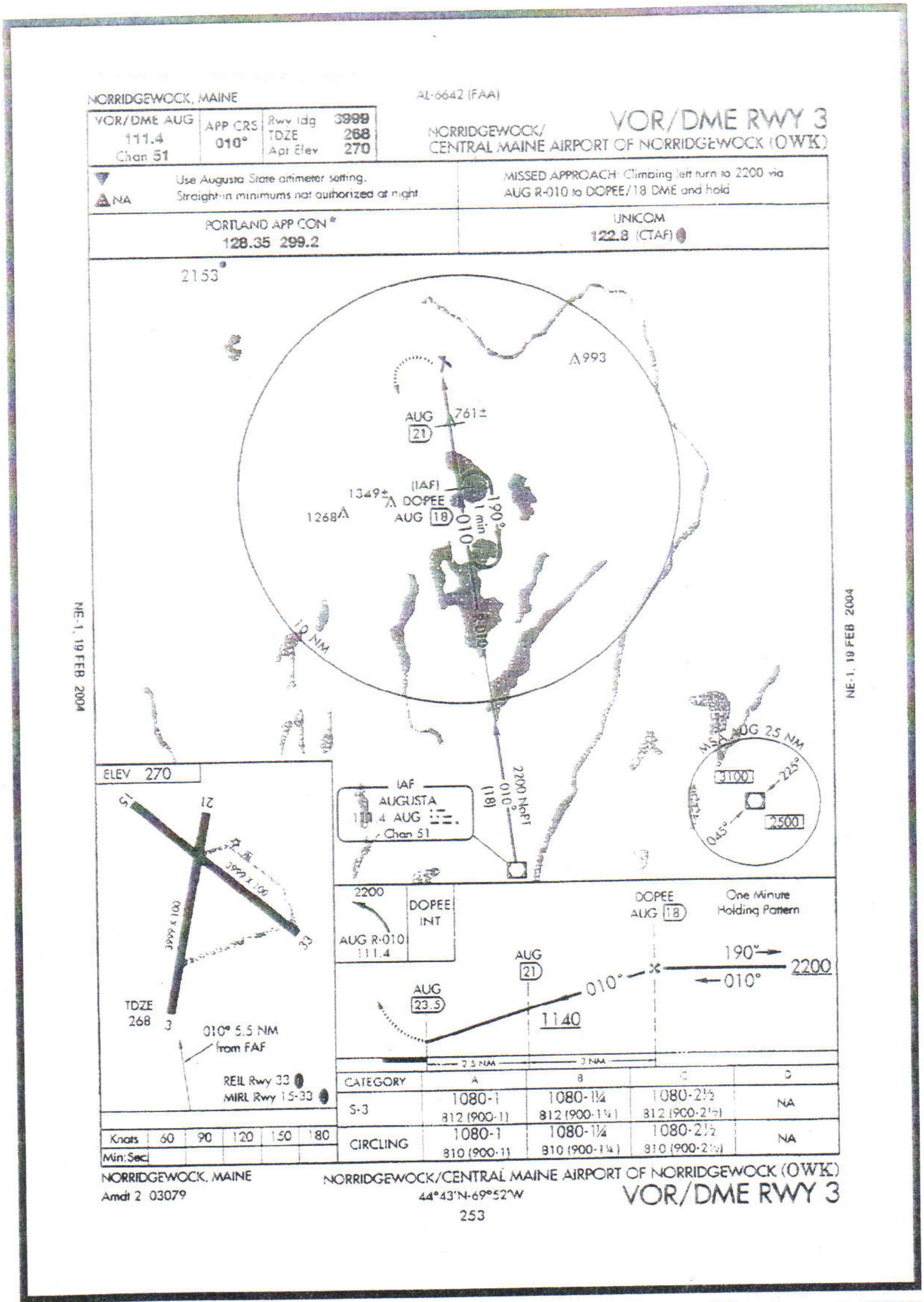

FIGURE 153.—VOR/DME RWY 3, Norridgewock/Central Maine Airport of Norridgewock (OWK).

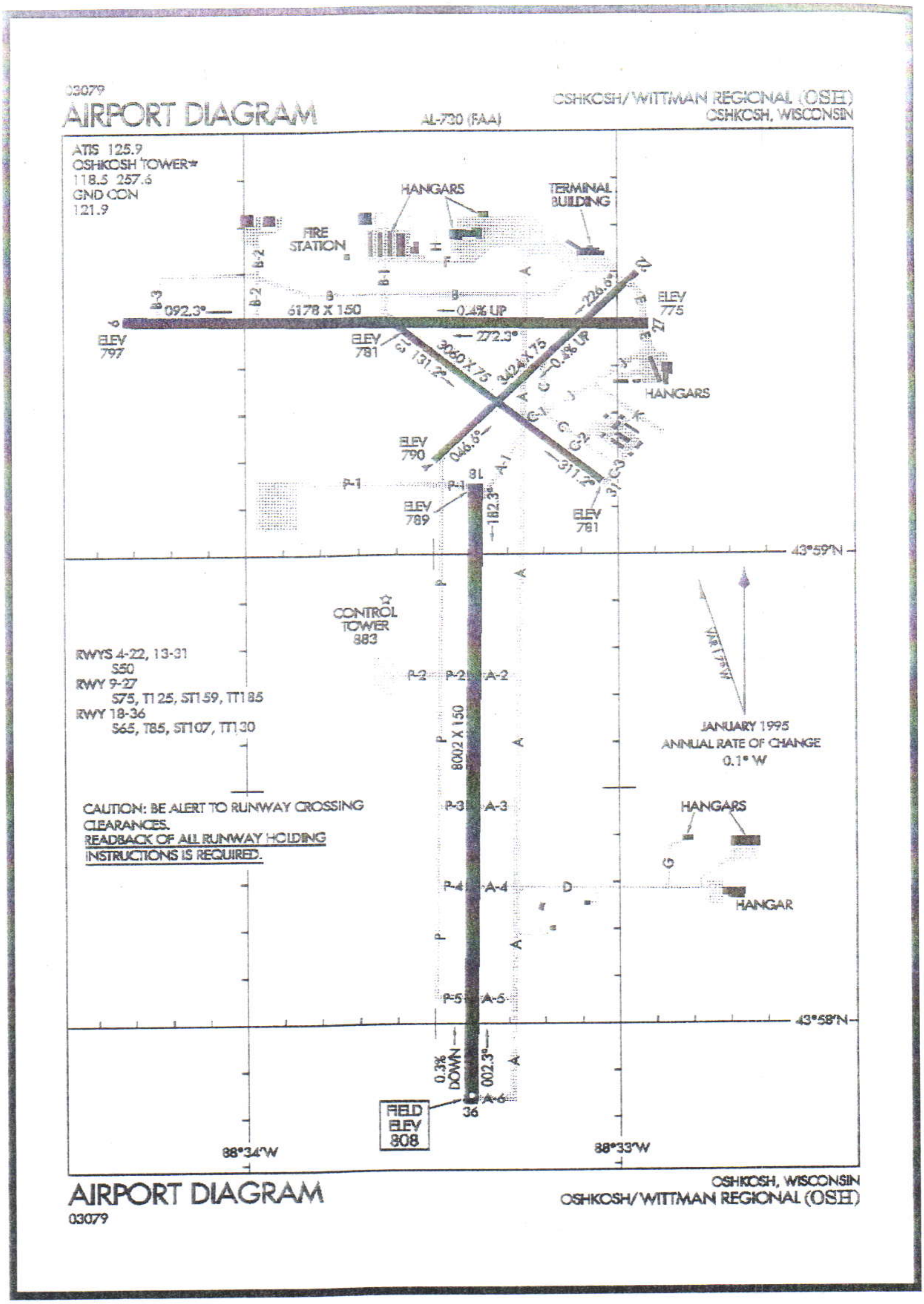

FIGURE 154.—Osh Kosh/Wittman Regional (OSH).