

AIRPORT DIRECTORY—CHICAGO AREA

CITY	AIRPORT	NORTH	EAST	ALT.	Dist (Miles)	SL (Miles/Hours)
Aurora	Aurora Muni	17152	16233	706		
Bloomington	Bloomington Normal	18583	16245	875		
Champaign (Urban)	University of Illinois Willard	16400	16465	754	•	21100.1
Chicago	Chicago Midway	17156	16628	619	•	
Chicago	Chicago O'Hare Intl	17243	16578	667	•	
Chicago	Lansing Muni	17049	16697	614		
Chicago	Merrill C. Meigs	17189	16671	592		
Chicago Blue Island	Howel	17100	16627	600		
Chicago Schaumburg	Schaumburg Air Park	17247	16515	795		
Chicago West Chicago	DuPage	17213	16466	757		
Danville	Vermilion Co	16471	16885	695		
Dwight	Dwight	16874	16404	630		
Frankfort	Frankfort	17025	16596	775		
Gibson City	Gibson City Muni	16964	16461	759		
Joliet	Joliet Park District	17038	16490	582		
Kankakee	Greater Kankakee	16846	16597	625	•	
Maree	Sanger	16980	16545	786		
Morris	Morris Muni	17004	16413	588		
New Lenox	New Lenox-Howell	17025	16571	745		
Paxton	Paxton	16578	16507	786		
Plainfield	Clow Intl	17116	16602	670		
Romeoville	Lewis University	17281	16518	672		
Urbana	Frasca Field	16448	16482	736		

North and east coordinates align with orthogonal coordinate grid overlaid on Lambert conformal conic projection.

LEGEND

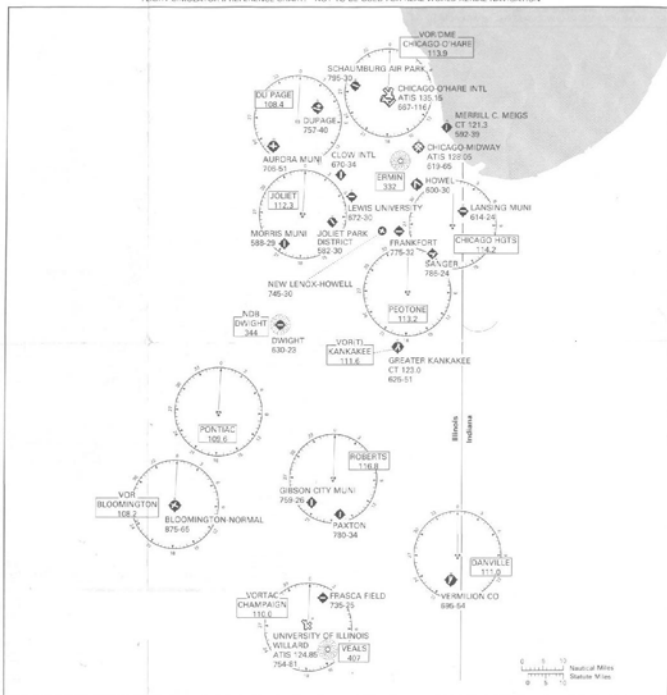
	Civil Public use airport
	Restricted Private-Nonpublic use airport, having emergency use or landmark value
	Rotating light in operation, sunset to sunrise
SANTA MONICA ATIS 118.15 175.50	Airport Name Advisory Frequency (if available) Elevation (feet) — Length (hundreds of feet)
 NAME FREQUENCY	VOR
 NAME FREQUENCY	VORTAC (Distance Measuring Equipment Aboard)
 NAME FREQUENCY	VOR/DME
 NAME FREQUENCY	Non Directional Beacon
 NAME FREQUENCY	If VOR fails directly on an airport, only the airport symbol will be shown. The VOR facility type is shown at the top of the box.

AIRPORT NAME ABBREVIATIONS

CO	County
FLD	Field
INTL	International
MUNI	Municipal
JPVT	Private Airport (prior permission before landing)

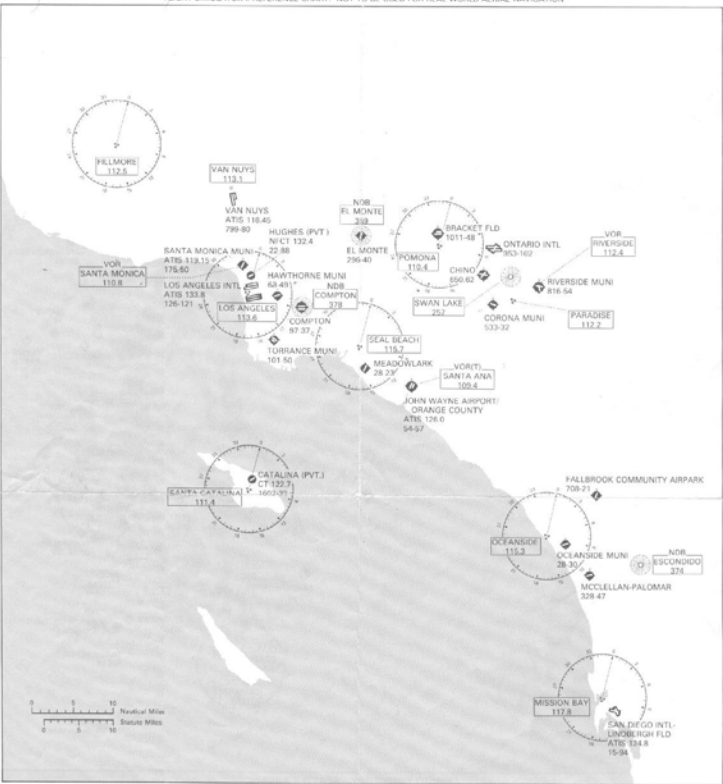
CHICAGO AREA CHART

FLIGHT SIMULATOR II REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION



LOS ANGELES AREA CHART

FLIGHT SIMULATOR II REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION

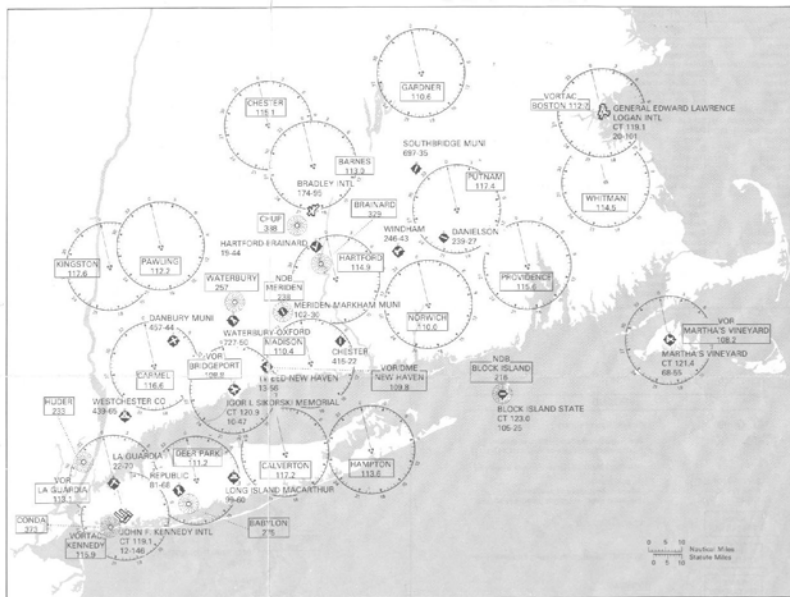


AIRPORT DIRECTORY—LOS ANGELES AREA

CITY	AIRPORT	NORTH	EAST	ALT.	☐ (feet)	ILS (MHz/Class)
Carlsbad	McClellan-Palomar	14931	6112	326		
Catalina	(PVT)	15149	5744	1602		
Chino		15319	6079	850		
Compton	Compton	15,334	5859	97		
Corona	Corona Muni	15280	6083	533		
El Monte	El Monte	15397	5962	296		
Fallbrook	Fallbrook Community Airpark	15023	6344	708		
Hawthorne	Hawthorne Muni	15356	5831	63		
Huntington Beach	Meadowlark	15244	5911	28		
LaVerne	Brackett Fld	15370	6028	1011		
Los Angeles	Hughes (PVT)	15386	5808	22	*	
Los Angeles	Los Angeles Intl	15374	5905	126	*	
Oceanside	Oceanside Muni	14974	6095	28		
Ontario	Ontario Intl	15347	6009	952		
Riverside	Riverside Muni	15280	6141	816		
San Diego	San Diego Intl—Lindbergh Fld	14761	6102	15	*	
Santa Ana	John Wayne Airport					
	Orange County	15211	5961	54		
Santa Monica	Santa Monica Muni	15402	5759	175	*	
Torrance	Torrance Muni	15306	5815	101		
Van Nuys	Van Nuys	15498	5811	799	*	16R/113.3

North and east coordinates are listed at -19° (counterclockwise) to compensate for orthogonal coordinate grid overlaid on Lambert conformal conic projection.

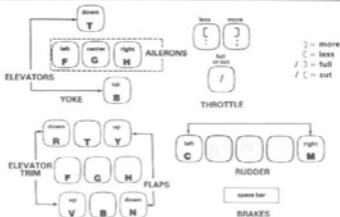
NEW YORK AND BOSTON AREA CHART

 FLIGHT SIMULATOR B REFERENCE CHART
 NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION

AIRPORT DIRECTORY—NEW YORK AND BOSTON AREA

CITY	AIRPORT	NORTH	EAST	ALT.	ILS #alt/freq	CITY	AIRPORT	NORTH	EAST	ALT.	ILS #alt/freq
Block Island	Block Island State	17352	21749	105	*	Martas Vineyard	Martas Vineyard	17490	22043	68	* 24 138.7
Boston	General Edward Lawrence Logan Intl	17899	21853	20	*	Meriden	Meriden Markham Muni	17447	21327	102	
Bridgeport	Ignatius Sikorski Memorial	17287	21249	32	*	New Haven	Tweed-New Haven	17339	21322	13	
Chester	Chester	17424	21434	416		New York	John F. Kennedy Intl	17034	21065	12	*
Danbury	Danbury Muni	17360	21120	457		New York	La Guardia	17031	21026	22	
Danielson	Danielson	17617	21607	339		Oxford	Waterbury-Oxford	17422	21239	727	
Farmingdale	Republic	17089	21177	81		Southbridge	Southbridge Muni	17733	21543	697	
Hartford	Hartford-Brainard	17561	21371	19		White Plains	Westchester Co	17226	21065	439	
Islip	Long Island MacArthur	17132	21278	99		Wilmanic	Windham	17573	21521	246	
						Windsor Locks	Bradley Intl	17438	21361	134	

 North and east coordinates are centered at
 +10° (clockwise) to compensate for
 orthogonal coordinate grid overlaid on
 Lambert conformal conic projection.

CM-FS2 FLIGHT REFERENCE CARD



FLIGHT CONTROLS

CARB HEAT — ctrl H, >>> for fuel; toggles carb heat on and off

MAGNETOS — ctrl M, 1 off

ctrl M, 2 right

ctrl M, 3 left

ctrl M, 4 both

ctrl M, 5 start

MIXTURE — ctrl M, - full lean (lean cutoff)

ctrl M, - rich (proper flight mixture)

FUEL TANK SELECT — ctrl F, < left tank

ctrl F, > right tank

ENGINE

COM RADIO — ctrl C, >>> increase high digits (<<< for decrease)

ctrl C, ctrl C, >>> increase low digits

NAV RADIO — ctrl N, 1 select NAV 1 for frequency changes

ctrl N, 2 select NAV 2

ctrl N, >>> increase high digits on selected NAV radio (<<< for decrease)

ctrl N, ctrl N, >>> increase low digits

ADF — ctrl A, >>> ctrl A 1, 2, or 3 times to select digits 1, 2, or 3

VOR OBS — ctrl V, 1 select VOR OBS 1

ctrl V, 2 select VOR OBS 2

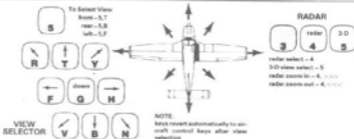
ctrl V, >>> increase bearing (<<< for decrease)

TRANSPONDER — press ctrl T once, two, three, or four times (rapidly) to select digits 1, 2, 3, or 4

ctrl T, >>> increase digit (<<< for decrease)

NOTE: ctrl X is treated as ctrl T

RADIOS



VIEWS

ctrl L - lights

ctrl B - altim adjust

ctrl D - heading indicator adjust

ctrl Z - save mode library to disk

ctrl X - read mode library from disk

E - go into edit mode

P - pause (toggles between pause and run)

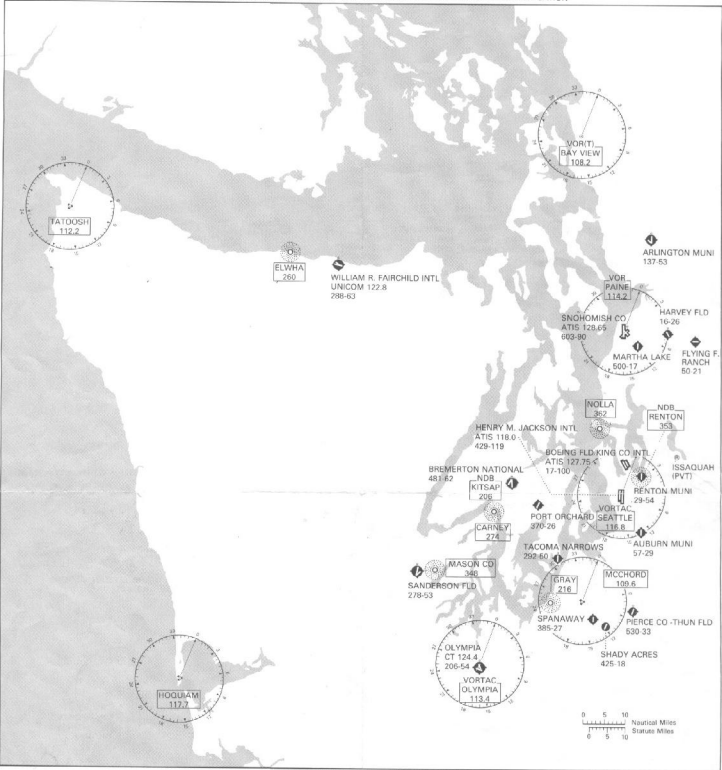
+ - read mode from library (reset simulator)

S - save current flight parameters to mode library

MISC

SEATTLE AREA CHART

FLIGHT SIMULATOR II REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION



AIRPORT DIRECTORY—SEATTLE AREA

CITY	AIRPORT	NORTH	EAST	ALT.	\overline{M} (ft)	ILS (freq./freq.)
Alderwood Manor	Martha Lake	21502	6670	500		
Arlington	Arlington Muni	21616	6737	137		
Auburn	Auburn Muni	21290	6586	67		
Bremerton	Bremerton National	21407	6470	481		
Everett	Snohomish Co.	21525	6665	603	*	16/109.3
Issaquah	Issaquah	21362	6668	500	*	
Monroe	Flying F. Ranch	21481	6738	50	*	
Olympia	Olympia	21218	6343	206	*	
Puyallup	Pierce Co.-Thun Fld	21206	6634	530		
Port Angeles	William R. Fairchild Intl.	21740	6375	288	*	
Port Orchard	Port Orchard	21373	6483	370		
Renton	Renton Muni	21361	6612	79		
Seattle	Boeing Fld King Co Intl	21376	6506	17	*	
Seattle	Henry M. Jackson Intl. (Seattle-Tacoma Intl)	21343	6684	429		
Shelton	Sanderson Fld.	21353	6316	278		
Snohomish Co. (Paine Fld)	see Everett					
Snohomish	Harvey Fld	21505	6711	16		
Spanaway	Shady Acres	21201	6501	425		
Spanaway	Spanaway	21215	6491	385		
Tacoma	Tacoma Narrows	21300	6480	292		

North and east coordinates are canted at ~21° (counterclockwise) to compensate for orthogonal coordinate grid overlaid on Lambert conformal conic projection.

Abilene (VOR)

13431N 12205E
freq. 113.7

Abilene

13384N 12269E
alt. 1791

RWY 17-35	7199 X 147
RWY 17-35	7196 X 147
RWY 4-22	3683 X 98



Acton (VOR)

13330N 13014E
freq. 110.6

Ada (NDB)

14331N 13461E
freq. 302

Ada

14318N 13445E
alt. 1007

RWY 17-35	4998 X 98
RWY 12-30	3102 X 49



Amarillo (VOR)

14729N 11708E
freq. 117.2

Amarillo Int'l

14687N 11686E
 RWY 4-22 13500 X 298
 RWY 13-31 5405 X 49



Ardmore, Downtown Ardmore

14055N 13260E
 alt. 843
 RWY 17-35 4998 X 72



Antlers (NDB)

14042N 13808E
 freq. 391

Antlers

14033N 13790E
 alt. 574
 RWY 17-35 3299 X 59



Ardmore

14115N 13303E
 alt. 761
 RWY 8-26 7222 X 147
 RWY 12-30 7199 X 147
 RWY 4-22 7038 X 147
 RWY 17-35 6878 X 147



Arbuckle (NDB)

14054N 13271E
 freq. 284

Ardmore (VOR)

14089N 13260E
 freq. 116.7

Big Spring (VOR)

13460N 11604E
 freq. 114.3

Blue Ridge (VOR)

13659N 13521E
 freq. 114.9

Borger (VOR)

14943N 11828E
 freq. 108.6

Borger, Hutchinson Co.

14876N 11824E
alt. 3054

RWY 17-35 6297 X 98
RWY 3-21 3895 X 98



Bowie

13836N 13013E
alt. 1102

RWY 17-35 3617 X 59



Breckenridge (NDB)

13510N 12575E
freq. 245

Breckenridge, Stephens Co.

13495N 12569E
alt. 1282

RWY 17-35 4598 X 98
RWY 4-22 2374 X 49
RWY 13-31 2374 X 49



Bridgeport (VOR)

13683N 13008E
freq. 116.5

Brownwood (VOR)

13125N 12506E
freq. 108.6

Burns Flat (VOR)

14605N 12571E
freq. 110

Canadian, Hemphill Co.

14918N 12178E
alt. 2385

RWY 4-22 4099 X 72
RWY 0-18 2997 X 29



Childress (VOR)

14271N 12142E
freq. 117.6

Childress

14289N 12145E
alt. 1952

RWY 4-22 5999 X 147
RWY 8-26 5999 X 147
RWY 13-31 5999 X 147
RWY 17-35 4496 X 72



Clarendon (NDB)

14530N 11952E
freq. 281

Clarendon

14515N 11965E
alt. 2831

RWY 1-19 3696 X 59



Clinton - Sherman

14636N 12575E
alt. 1922

RWY 17-35 13500 X 147
RWY 17-35 5192 X 72



Coleman (NDB)

13121N 12337E
freq. 385

Corsicana (NDB)

13079N 13487E
freq. 396

Cushing (NDB)

14809N 13462E
freq. 242

Cushing

14820N 13447E
alt. 915

RWY 17-35 5198 X 98



Dallas, Addison

13535N 13324E
alt. 643

RWY 15-33 7196 X 98



Dallas, Dallas Love

13485N 13316E
alt. 485

RWY 13-31 8796 X 147
RWY 13-31 7750 X 147
RWY 0-18 6146 X 147



Dallas, Meachan

13489N 13127E
alt. 708

RWY 16-34 7458 X 147
RWY 9-27 4050 X 98
RWY 16-34 3998 X 72



Dallas, Redbird

13414N 13302E
alt. 659

RWY 13-31 5421 X 147
RWY 17-35 3798 X 147



Dallas-Ft.Worth (VOR)

13497N 13264E
freq. 117

Dallas-Ft.Worth Reg.

13510N 13248E
alt. 604

RWY 17-35 11384 X 147
RWY 17-35 11384 X 196
RWY 0-18 11384 X 196
RWY 0-18 11384 X 147
RWY 13-31 8997 X 196



Duncan (VOR)

14189N 12997E
freq. 111

Durant (NDB)

13953N 13531E
freq. 359

Durant, Eaker

13945N 13516E
alt. 699

RWY 17-35 4998 X 98
RWY 12-30 2997 X 72



Eastland

13363N 12588E
alt. 1469

RWY 17-35 4054 X 59



El Reno (NDB)

14671N 13009E
freq. 335

El Reno, Mustang

14649N 12998E
alt. 1414

RWY 17-35 4198 X 59



Farley (NDB)

13333N 11268E
freq. 326

Gainesville (NDB)

13870N 13233E
freq. 330

Gainesville

13840N 13220E
alt. 833

RWY 4-22 4749 X 147
RWY 12-30 4654 X 147
RWY 8-26 4598 X 147
RWY 17-35 4495 X 98



Graham (NDB)

13664N 12717E
freq. 335

Graham

13649N 12709E
alt. 1122

RWY 3-21 4198 X 72
RWY 17-35 3325 X 49



Grindstone Mountain (NDB)

13843N 13022E
freq. 356

Guthrie (VOR)

14014N 12097E
freq. 112.4

Guthrie

14790N 13219E
alt. 1073

RWY 16-34 2997 X 49



Haskell (NDB)

13737N 12297E
freq. 407

Haskell

13731N 12296E
alt. 1624

RWY 0-18 3197 X 49



Hemphill CO. (NDB)

14938N 12177E
freq. 400

Henryetta (NDB)

14577N 13714E
freq. 267

Henryetta

14562N 13696E
alt. 850

RWY 17-35 3499 X 49



Hudson (NDB)

13435N 13440E
freq. 248

Hudson Muni.

13432N 13426E
alt. 446

RWY 17-35 3998 X 49



Hobart (VOR)

14439N 12605E
freq. 111.8

Hobart

14479N 12610E
alt. 1565

RWY 3-21 5297 X 147
RWY 12-30 5297 X 147
RWY 17-35 5277 X 147



Hyman (VOR)

13337N 11725E
freq. 110.4

Kingfisher (VOR)

14810N 13023E
freq. 114.7

Holdenville (NDB)

14450N 13557E
freq. 411

Holdenville

14437N 13542E
alt. 863

RWY 17-35 3250 X 98
RWY 13-31 3197 X 98



Lamesa (NDB)

13642N 11468E
freq. 338

Lamesa

13639N 11476E
alt. 2998

RWY 16-34 4198 X 72
RWY 7-25 2141 X 49



Lawton (VOR)

14254N 12823E
freq. 109.4

Logan Co. (NDB)

14808N 13231E
freq. 326

Lubbock (VOR)

14053N 11522E
freq. 109.2

Lubbock

14024N 11563E
alt. 3280

RWY 17-35 11499 X 147
RWY 8-26 7999 X 147
RWY 17-35 2866 X 72



McAlester (VOR)

14329N 13781E
freq. 112

McAlester

14332N 13762E
alt. 771

RWY 1-19 5598 X 98



McKinney (NDB)

13621N 13433E
freq. 311

McKinney

13616N 13419E
alt. 581

RWY 17-35 3998 X 72



Midland (VOR)

13338N 11320E
freq. 114.8

Millsap (VOR)

13468N 12902E
freq. 117.7

Mineral Wells (NDB)

13497N 12883E
freq. 266

Mineral Wells

13495N 12875E
alt. 964

RWY 13-31 4323 X 98
RWY 17-35 4198 X 98



Norman (NDB)

14550N 13187E
freq. 260

Norman, Max Westheimer

14535N 13175E
alt. 1181

RWY 13-31 2997 X 59
RWY 17-35 1797 X 78



Oklahoma City (VOR)

14645N 13090E
freq. 115

Oklahoma City, Will Rogers World

14500N 13139E
alt. 1296

RWY 17-35 9800 X 147
RWY 17-35 9797 X 147
RWY 12-30 6527 X 147
RWY 17-35 2974 X 72



Okmulgee (VOR)

14699N 13777E
freq. 112.2

Old Rip (NDB)

13355N 12592E
freq. 410

Pampa (NDB)

14836N 11955E
freq. 368

Pampa, Perry Lefors

14818N 11959E
alt. 3244

RWY 17-35 5497 X 98
RWY 5-23 4496 X 72



Paris (VOR)

13748N 13864E
freq. 113.6

Paris, Cox

13787N 13850E
alt. 548

RWY 17-35 5999 X 147
RWY 3-21 4624 X 147
RWY 13-31 4621 X 147



Plainview (VOR)

14216N 11587E
freq. 112.9

Plainview, Hale Co.

14238N 11627E
alt. 3372

RWY 4-22 5195 X 98
RWY 13-31 3998 X 98



Powell (NDB)

13094N 13480E
freq. 344

Quitman (VOR)

13458N 13876E
freq. 114

Redbird (NDB)

13415N 13314E
freq. 287

Sayre (VOR)

14669N 12424E
freq. 115.2

Scotland (NDB)

13951N 12769E
freq. 344

Scurry (VOR)

13302N 13504E
freq. 112.9

Shawn (NDB)

13999N 12794E
freq. 296

Shawnee (NDB)

14580N 13382E
freq. 227

Shawnee

14564N 13368E
alt. 1079

RWY 17-35 4198 X 147



Stephenville (NDB)

13254N 12819E
freq. 223

Sulphur Springs (VOR)

13600N 13820E
freq. 109

Sweetwater (NDB)

13451N 11984E
freq. 275

Tahlequah (NDB)

14781N 14069E
freq. 215

Tahlequah

14763N 14067E
alt. 872

RWY 17-35 3197 X 59



Witchita Falls (VOR)

14039N 12735E
freq. 112.7

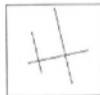
Witchita Falls

14024N 12764E
alt. 1014RWY 15-33 13097 X 298
RWY 15-33 8796 X 147
RWY 17-35 6999 X 147

Tulsa (VOR)

14917N 13821E
freq. 114.4

Tulsa Int'l

14913N 13778E
alt. 676RWY 17-35 9997 X 196
RWY 8-25 7694 X 147
RWY 17-35 5497 X 147

Tuscola (VOR)

13322N 12211E
freq. 111.6

weetwater

13448N 11987E
alt. 2385RWY 16-34 5841 X 72
RWY 3-21 5648 X 147

DALLAS - FT. WORTH SECTIONAL

- 1 Amarillo Int'l
- 2 Borger, Hutchinson Co.
- 3 Pampa, Perry Lefors
- 4 Clarendon
- 5 Canadian, Hefphill Co.
- 6 Childress
- 7 Hobart
- 8 Clinton - Sherman
- 9 El Reno, Mustang
- 10 Guthrie
- 11 Oklahoma City, Will Rogers World
- 12 Norman, Max Westheimer
- 13 Shawnee
- 14 Cushing
- 15 Holdenville
- 16 Henryetta
- 17 Tulsa Int'l
- 18 Tahlequah
- 19 McAlester
- 20 Ada
- 21 Antlers
- 22 Wichita Falls
- 23 Lubbock
- 24 Plainview, Hale Co.
- 25 Lamesa
- 26 Haskell
- 27 Westwater
- 28 Abilene
- 29 Eastland
- 30 Breckenridge, Stephens Co.
- 31 Graham
- 32 Bowie
- 33 Gainesville
- 34 Ardmore
- 35 Ardmore, Downtown Ardmore
- 36 Paris, Cox
- 37 Durant, Eaker
- 38 McKinney
- 39 Mineral Wells
- 40 Hudson Muni.
- 41 Dallas, Redbird
- 42 Dallas, Addison
- 43 Dallas, Dallas-Ft. Worth Reg.
- 44 Dallas, Mescham
- 45 Dallas, Dallas Love

The
Scenario disks

1+2

LEGEND

frequency NDB
name
396
Omax

frequency VOR Needle points to magnetic north
name
113.7
Victoria

24 Airport Layout Diagram (runway lengths are 3 times scale length)

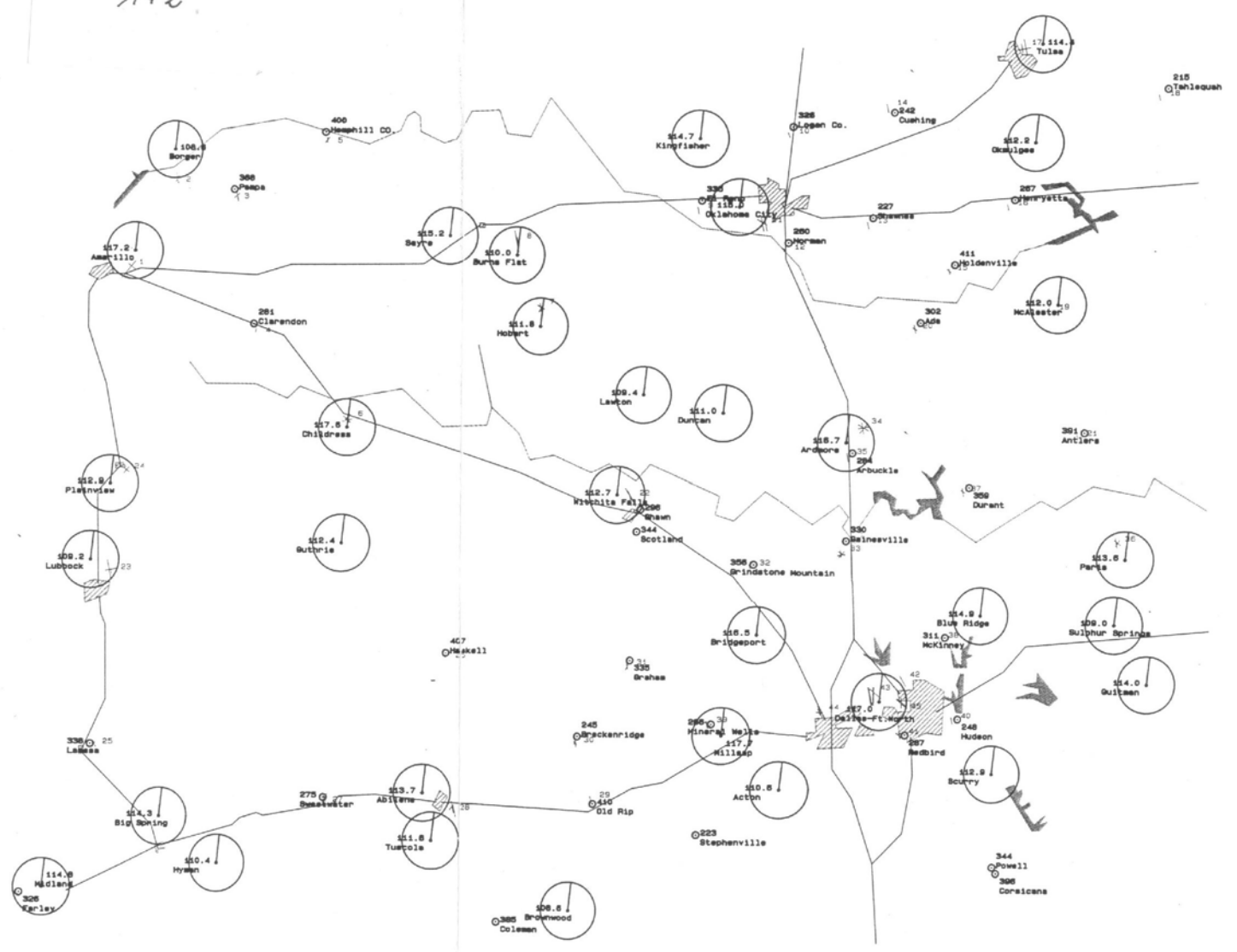
Roads

Rivers

Lakes, Reservoirs, Dams

City or Metropolitan Area

50 nautical miles



Acton (VOR)

13330N 13014E
freq. 110.6

Alexandria (VOR)

12581N 14901E
freq. 116.1

Alexandria, Esler Reg.

12624N 14989E
alt. 112

RWY 8-26 5995 X 147
RWY 14-32 5598 X 147



Andrau (NDB)

12042N 13663E
freq. 269

Baton Rouge (VOR)

12202N 15323E
freq. 116.5

Baton Rouge, Ryan

12216N 15381E
alt. 72

RWY 4-22 6897 X 147
RWY 13-31 5795 X 147



Bay City (NDB)

11728N 13521E
freq. 344

Bay City

11729N 13544E
alt. 45

RWY 13-31 5116 X 72



Beaumont (VOR)

12064N 14275E
freq. 114.5

Beaumont / Port Arthur, Jefferson Co.

12065N 14288E
alt. 16

RWY 12-30 6750 X 147
RWY 16-34 5070 X 147



Beaumont

12128N 14221E
alt. 30

RWY 12-30 3598 X 59



Cherokee Co. (NDB)

12956N 13916E
freq. 263

College Station (VOR)

12460N 13400E
freq. 113.3

College Station, Easterwood

12441N 13443E
alt. 318

RWY 10-28 5159 X 147
RWY 16-34 5146 X 147
RWY 4-22 5146 X 147



Corsicana (NDB)

13079N 13487E
freq. 395

Corsicana

13065N 13509E
alt. 446

RWY 14-32 4998 X 147



Crocket (NDB)

12720N 13819E
freq. 356

Crockett, Houston Co.

12709N 13838E
alt. 351

RWY 2-20 3257 X 49



Eagle Lake

12019N 13404E
alt. 184

RWY 17-35 3427 X 49
RWY 12-30 2833 X 42



Daisetta (VOR)

12198N 14046E
freq. 116.9

Dallas-Ft.Worth (VOR)

13497N 13264E
freq. 117

David Hooks (NDB)

12210N 13698E
freq. 521

De Ridder, Beauregard Parish

12421N 14578E
alt. 203

RWY 0-18 5497 X 98
RWY 9-27 4495 X 147



Ellington (VOR)

11969N 13822E
freq. 111

Esler (VOR)

12656N 14975E
freq. 108.8

Galveston (NDB)

11827N 13966E
freq. 296

Galveston (NDB)

11833N 13960E
freq. 206

Galveston, Scholes

11806N 13935E
alt. 7

RWY 17-35 5999 X 147
RWY 13-31 5999 X 147



Eagle Lake (VOR)

12045N 13385E
freq. 108.6

Goodhue (NDB)

12130N 14212E
freq. 368

Hobby (VOR)

11993N 13781E
freq. 117.6

Hodge (NDB)

13003N 14854E
freq. 256

Houston Intercontinental

12137N 13786E
alt. 98

RWY 14-32 11998 X 147
RWY 8-26 9400 X 147
RWY 14-32 6035 X 98
RWY 13-31 1981 X 72



Houston, Andrau

12037N 13686E
alt. 79

RWY 16-34 4749 X 49
RWY 11-29 2997 X 49



Houston, Hobby

11989N 13799E
alt. 46

RWY 4-22 7599 X 147
RWY 13-31 7599 X 147
RWY 17-35 5999 X 147
RWY 13-31 5149 X 98



Houston, Hooks Mem.

12176N 13717E
alt. 151

RWY 17-35 6999 X 98
RWY 17-35 3998 X 39



Hudson (NDB)

13435N 13440E
freq. 248

Humble (VOR)

12128N 13770E
freq. 116.6

Huntsville (NDB)

12485N 13721E
freq. 308

B - HOUSTON

Huntsville

12476N 13741E
alt. 367

RWY 0-18 4998 X 98



Kountze - Silsbee, Hawthorne Fld.

12242N 14217E
alt. 75

RWY 13-31 3798 X 72



Industry (VOR)

12185N 13310E
freq. 110.2

Lafayette (VOR)

12077N 15050E
freq. 110.8

Jacksonville, Cherokee Co.

12943N 13933E
alt. 676

RWY 13-31 4998 X 72



Lafayette Reg.

12096N 15064E
alt. 43RWY 3-21 7648 X 147
RWY 10-28 5398 X 147
RWY 1-19 5067 X 147

Jasper (NDB)

12508N 14311E
freq. 344

Lake Charles (VOR)

12116N 14625E
freq. 113.4

Jasper Co. - Bell Fld.

12473N 14324E
alt. 223

RWY 17-35 4149 X 68



Lake Charles

12112N 14594E
alt. 16RWY 15-33 5497 X 147
RWY 5-23 4398 X 98

10 - HOUSTON

Lakeside (NDB)

12084N 13637E
freq. 249

Lee Co. (NDB)

12301N 13166E
freq. 385

Leona (VOR)

12664N 13597E
freq. 110.8

Lufkin (VOR)

12626N 14066E
freq. 112.1

Lufkin, Angelina Co.

12649N 14075E
alt. 289

RWY 15-33 4513 X 98
RWY 7-25 4398 X 98



Mansfield (NDB)

12984N 14466E
freq. 414

Mansfield, Desoto Parish

12271N 14478E
alt. 325

RWY 3-21 5067 X 147
RWY 0-18 5067 X 72



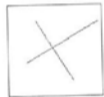
Nacogdoches (NDB)

12832N 14084E
freq. 391

Nacogdoches, East Texas Reg.

12796N 14105E
alt. 371

RWY 6-24 4198 X 147
RWY 15-33 3598 X 72



Natchez (VOR)

12696N 15354E
freq. 110

Natchez-Adams Co., Hardy-Anders Fld

12683N 15365E
alt. 272

RWY 13-31 5297 X 147
RWY 17-35 4998 X 147



Natchitoches (NDB)

12810N 14698E
freq. 407

Natchitoches

12798N 14707E
alt. 118

RWY 16-34 4073 X 147
RWY 7-25 3998 X 147



Navasota (VOR)

12305N 13518E
freq. 115.9

New Iberia, Acadiana

12025N 15087E
alt. 23

RWY 16-34 7999 X 196



Opelousas, St.Landry Parish

12257N 15026E
alt. 72

RWY 17-35 4549 X 98
RWY 5-23 4047 X 98



Palacios (VOR)

11654N 13341E
freq. 117.3

Palacios

11643N 13384E
alt. 16

RWY 8-26 4998 X 147
RWY 13-31 4998 X 147
RWY 17-35 4998 X 147



Palestine (NDB)

12936N 13730E
freq. 375

Palestine

12924N 13750E
alt. 423

RWY 8-26 3998 X 72
RWY 17-35 3998 X 72



Parish (NDB)

12392N 14567E
freq. 385

Pine (NDB)

12470N 14307E
freq. 332

Polk (VOR)

12544N 14626E
freq. 108.4

Port Lavaca (NDB)

11628N 13191E
freq. 515

Port Lavaca, Calhoun Co.

11631N 13217E
alt. 33

RWY 14-32 3998 X 72



Powell (NDB)

13094N 13480E
freq. 344

Quitman (VOR)

13458N 13876E
freq. 114

Redbird (NDB)

13415N 13314E
freq. 287

Robinson (NDB)

12874N 13187E
freq. 400

Rockport (NDB)

11404N 13044E
freq. 391

Sabine Pass (VOR)

11954N 14250E
freq. 115.4

Scholes (VOR)

11840N 13871E
freq. 112.8

Scurry (VOR)

13302N 13504E
freq. 112.9

Temple (VOR)

12763N 13043E
freq. 110.4

Tomball (NDB)

12189N 13696E
freq. 408

Victoria (VOR)

11746N 13091E
freq. 109

Waco (VOR)

12955N 13122E
freq. 115.3

16 - HOUSTON

White Lake (VOR)

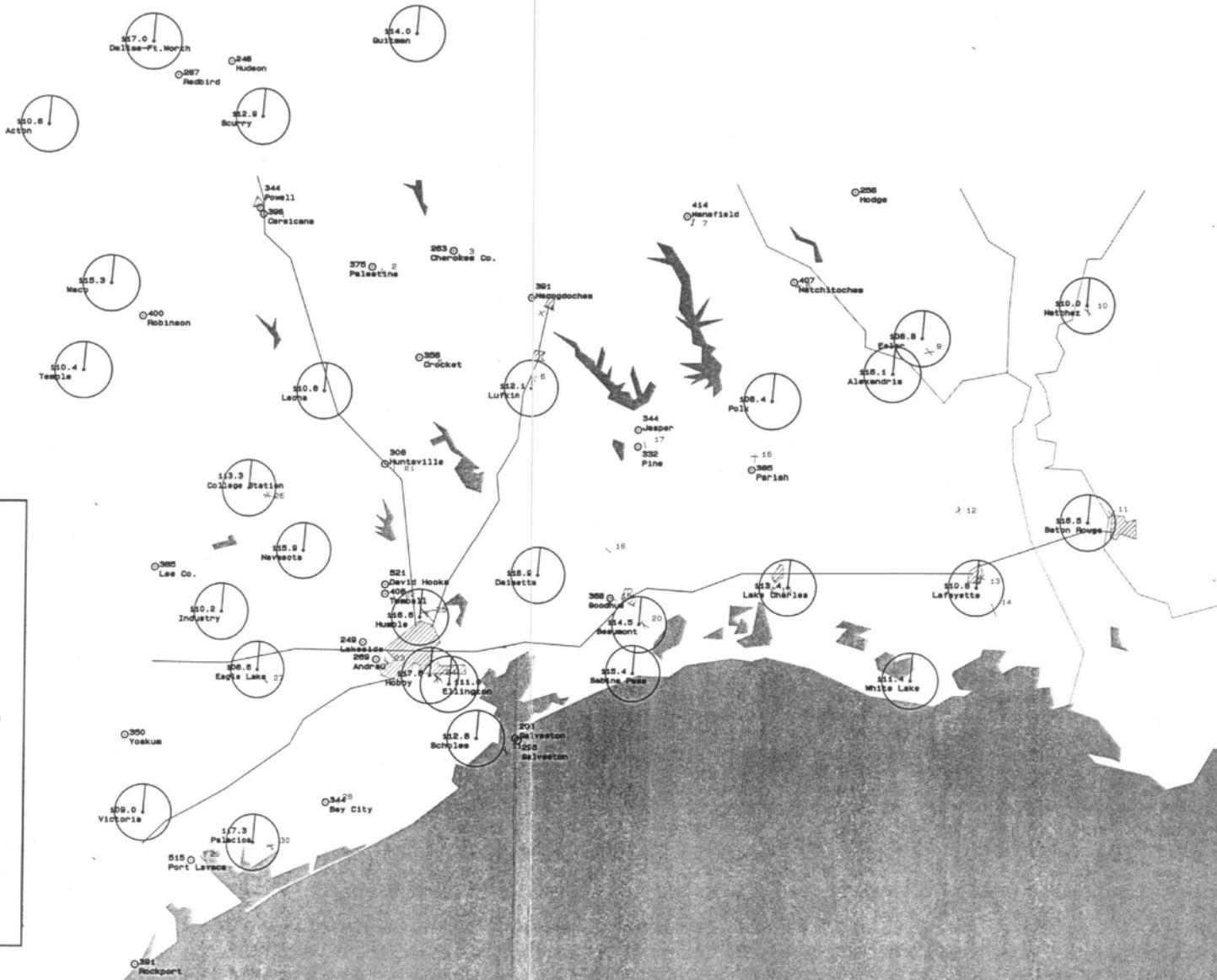
11878N 14881E
freq. 111.4

Yoakum (NDB)

11926N 13065E
freq. 350

HOUSTON SECTIONAL

- 1 Corsicana
- 2 Palestine
- 3 Jacksonville, Cherokee Co.
- 4 Nacogdoches, East Texas Reg.
- 5 Crockett, Houston Co.
- 6 Lufkin, Angelina Co.
- 7 Mansfield, DeSoto Parish
- 8 Natchitoches
- 9 Alexandria, Esler Reg.
- 10 Natchez-Adams Co., Hardy-Anders Fld
- 11 Baton Rouge, Ryan
- 12 Opelousas, St. Landry Parish
- 13 Lafayette Reg.
- 14 New Iberia, Acadiana
- 15 Lake Charles
- 16 De Ridder, Beauregard Parish
- 17 Jasper Co. - Bell Fld.
- 18 Kountze - Silsbee, Hawthorne Fld.
- 19 Beaumont
- 20 Beaumont / Port Arthur, Jefferson Co.
- 21 Huntsville
- 22 Houston, Hooks Mew.
- 23 Houston, Andrau
- 24 Houston, Hobby
- 25 Houston Intercontinental
- 26 College Station, Easterwood
- 27 Eagle Lake
- 28 Bay City
- 29 Port Lavaca, Calhoun Co.
- 30 Palacios
- 31 Galveston, Scholes



LEGEND

- frequency NDB
- name
- frequency VOR Needle points to magnetic north
- name
- Airport Layout Diagram (runway lengths are 3 times scale length)
- Roads
- Rivers
- Lakes, Reservoirs, Dams
- City or Metropolitan Area

50 nautical miles

Abilene (VOR)

13431N 12205E
freq. 113.7

Acton (VOR)

13330N 13014E
freq. 110.6

Alice (VOR)

11287N 12652E
freq. 114.5

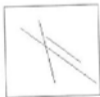
Austin (VOR)

12376N 12896E
freq. 114.5

Austin, Mueller

12376N 12909E
alt. 633

RWY 13-31	7268 X 147
RWY 17-35	5005 X 147
RWY 13-31	3168 X 72



Big Lake, Reagan Co.

12937N 11554E
alt. 2703

RWY 16-34 4027 X 49



Big Spring (VOR)

13460N 11604E
freq. 114.3

Brooks Co. (NDB)

11060N 12589E
freq. 353

Brownsville (VOR)

10475N 12825E
freq. 116.3

Brownsville/South Padre Island Int'l

10476N 12808E
alt. 23

RWY 13-31 7399 X 147
RWY 17-35 5999 X 147
RWY 13-31 2997 X 72



Brownwood (VOR)

13125N 12506E
freq. 108.6

Brownwood

13069N 12508E
alt. 1387

RWY 17-35 5595 X 147
RWY 12-30 4598 X 98



Caprizo Springs, Dimmit Co.

11708N 12014E
alt. 620

RWY 12-30 5297 X 72



Center Point (VOR)

12281N 12306E
freq. 117.5

Coleman (NDB)

13121N 12337E
freq. 385

Coleman

13111N 12349E
alt. 1696

RWY 15-33 3798 X 72



College Station (VOR)

12460N 13400E
freq. 113.3

Conor (NDB)

11313N 12827E
freq. 382

Corpus Christi (VOR)

11338N 12682E
freq. 115.5

Corpus Christi

11283N 12654E
alt. 43

RWY 13-31 7507 X 147
RWY 17-35 6077 X 147



Cotulla (VOR)

11642N 12264E
freq. 115.8

Dallas-Ft.Worth (VOR)

13497N 13264E
freq. 117

Dimmit Co. (NDB)

11703N 11999E
freq. 343

Eagle Lake (VOR)

12045N 13385E
freq. 108.6

Falfurrias, Brooks Co.

11003N 12532E
alt. 112

RWY 17-35 4998 X 72
RWY 14-32 3299 X 68



Farley (NDB)

13333N 11268E
freq. 326

Fort Stockton (VOR)

12923N 10959E
freq. 112.8

Fort Stockton-Pecos Co.

12899N 11008E
alt. 3011

RWY 12-30 7498 X 98



Harlingen (VOR)

10650N 12677E
freq. 108.8

Harlingen, Rio Grande Valley Int'l

10625N 12732E
alt. 36

RWY 17-35 8298 X 147
RWY 17-35 5949 X 147
RWY 8-26 5743 X 147
RWY 13-31 5254 X 147



Honda (NDB)

12039N 12294E
freq. 329

Hondo

12037N 12303E
alt. 928

RWY 8-26 6097 X 147
RWY 13-31 6097 X 147
RWY 17-35 6097 X 147
RWY 4-22 5497 X 147
RWY 17-35 4696 X 147



Hyman (VOR)

13337N 11721E
freq. 110.4

Industry (VOR)

12185N 13310E
freq. 110.2

Junction (VOR)

12603N 12117E
freq. 116

Lampasas (VOR)

12782N 12774E
freq. 112.5

Lampasas

12741N 12752E
alt. 1214

RWY 16-34 3808 X 59



Laredo (VOR)

11234N 12100E
freq. 117.4

Laredo Int'l

11263N 12098E
alt. 508

RWY 17-35 8199 X 147
RWY 17-35 7809 X 147
RWY 14-32 5923 X 147
RWY 9-27 5431 X 147



Laughlin (VOR)

12113N 11688E
freq. 114.4

Lee Co. (NDB)

12301N 13166E
freq. 385

Llano (VOR)

12641N 12513E
freq. 108.2

McAllen (VOR)

10617N 12497E
freq. 109.8

McAllen, Miller Int'l

10621N 12503E
alt. 108

RWY 13-31 7107 X 147
RWY 0-18 2984 X 59



McGregor

12871N 13097E
alt. 590

RWY 17-35 5497 X 147
RWY 4-22 3778 X 55



Midland (VOR)

13338N 11320E
freq. 114.8

Millsap (VOR)

12459N 12902E
freq. 117.7

Mineral Wells (NDB)

13497N 12883E
freq. 266

Mitchell (NDB)

10449N 12824E
freq. 375

Monahans, Hurd Mem.

13180N 11054E
alt. 2614

RWY 12-30 4267 X 72
RWY 1-19 2929 X 72



Navy Corpus (VOR)

11239N 12931E
freq. 114

New Braunfels (NDB)

12136N 12740E
freq. 212

New Braunfels

12137N 12746E
alt. 646

RWY 17-35 5369 X 147
RWY 4-22 5349 X 147
RWY 13-31 5359 X 98



Old Rip (NDB)

13355N 12592E
freq. 410

Palacios (VOR)

11654N 13341E
freq. 117.3

Port Lavaca (NDB)

11628N 13191E
freq. 515

Randolf (VOR)

12065N 12638E
freq. 112.3

Reagan (NDB)

12943N 11536E
freq. 341

Redbird (NDB)

13415N 13314E
freq. 287

Robinson (NDB)

12874N 13187E
freq. 400

Rockport (NDB)

11404N 13044E
freq. 391

Rockport, Arkansas Co.

11402N 13046E
alt. 26

RWY 14-32 5598 X 147
RWY 8-26 4496 X 147
RWY 17-35 4496 X 147



Rocksprings (VOR)

12372N 11903E
freq. 111.2

San Angelo (VOR)

12970N 11923E
freq. 115.1

San Angelo, Mathis

12958N 11926E
alt. 1916

RWY 0-18 6917 X 147
RWY 3-21 5936 X 147
RWY 9-27 4398 X 72



San Antonio (VOR)

12126N 12576E
freq. 116.8

San Antonio Int'l

12083N 12578E
alt. 810

RWY 12-30 8501 X 147
RWY 3-21 7504 X 147
RWY 12-30 5434 X 98



Sanora (NDB)

12638N 11801E
freq. 371

Seguin, Geronimo Fld.

12086N 12760E
alt. 558

RWY 12-30 3667 X 42



Sonora

12533N 11818E
alt. 2139

RWY 0-18 3676 X 72



Stephenville (NDB)

13254N 12819E
freq. 223

Stinson

11999N 12569E
alt. 577

RWY 9-27 4824 X 98
RWY 14-32 4126 X 98



Stonewall (VOR)

12381N 12512E
freq. 113.1

Sweetwater (NDB)

13451N 11984E
freq. 275

Temple (VOR)

12763N 13043E
freq. 110.4

Temple, Draughon-Miller

12732N 13045E
alt. 682

RWY 15-33 6300 X 147
RWY 2-20 4739 X 147



Three Rivers (VOR)

11618N 12637E
freq. 111.4

Tuscola (VOR)

13322N 12211E
freq. 111.5

Uvalde (NDB)

11982N 12073E
freq. 281

Uvalde, Garner

12000N 12084E
alt. 941

RWY 15-33 5247 X 98



Victoria (VOR)

11746N 13091E
freq. 109

Waco (VOR)

12955N 13122E
freq. 115.3

Waco - Madison Cooper

12922N 13134E
alt. 515

RWY 1-19 6596 X 147
RWY 14-32 5897 X 147
RWY 5-23 5497 X 147



Yoakum (NDB)

11926N 13065E
freq. 350

Yoakum Muni.

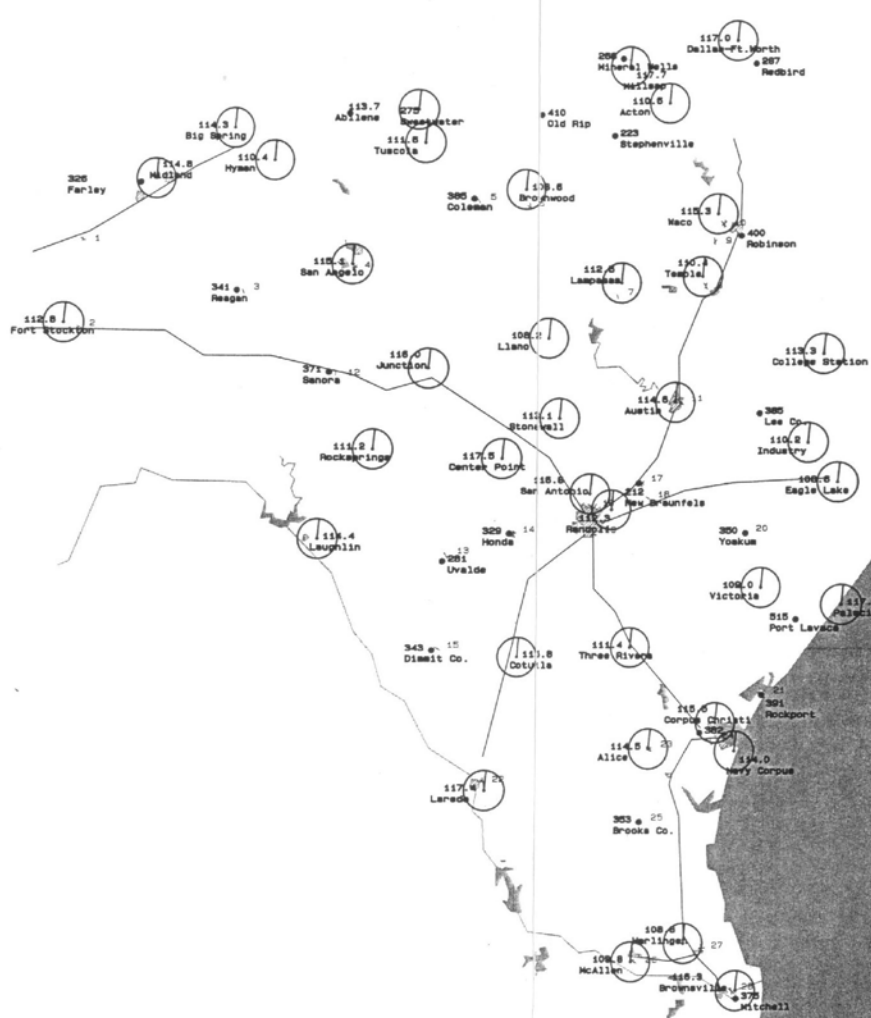
11930N 13064E
alt. 367

RWY 13-31 3447 X 59



SAN ANTONIO AND BROWNSVILLE SECTIONALS

- 1 Monahans, Hurd Mem.
- 2 Fort Stockton-Pecos Co.
- 3 Big Lake, Reagan Co.
- 4 San Angelo, Mathis
- 5 Coleman
- 6 Brownwood
- 7 Lampasas
- 8 Temple, Draughon-Miller
- 9 McGregor
- 10 Waco - Madison Cooper
- 11 Austin, Mueller
- 12 Sonora
- 13 Uvalde, Garner
- 14 Hondo
- 15 Caprizo Springs, Dimmit Co.
- 16 San Antonio Int'l
- 17 New Braunfels
- 18 Seguin, Garconno Fid.
- 19 Stinson
- 20 Yoakum Muni.
- 21 Rockport, Arkansas Co.
- 22 Laredo Int'l
- 23 Alice Int'l
- 24 Corpus Christi
- 25 Falfurrias, Brooks Co.
- 26 McAllen, Miller Int'l
- 27 Harlingen, Rio Grande Valley Int'l
- 28 Brownsville/South Padre Island Int'l



LEGEND

frequency NDB
 396 Onak

name

frequency VOR Needle points to magnetic north
 113.7 Victoria

name

24 Airport Layout Diagram (runway lengths are 3 times scale length)

Roads

Rivers

Lakes, Reservoirs, Dams

City or Metropolitan Area

Alamagordo - White Sands

13805N 10022E
alt. 4198

RWY 3-21 7002 X 147



Albuquerque (VOR)

14796N 9905E
freq. 113.2

Albuquerque Int'l

14782N 9979E
alt. 5353

RWY 8-26 13372 X 298
RWY 17-35 8990 X 196
RWY 3-21 7747 X 147
RWY 12-30 5392 X 147



Albuquerque, Alameda

14847N 9971E
alt. 5097

RWY 17-35 6077 X 78
RWY 10-28 4247 X 59



Albuquerque, Coronado

14841N 10003E
alt. 5281

RWY 17-35 4017 X 59
RWY 3-21 3499 X 39



Artesia

13716N 10568E
alt. 3549

RWY 12-30 5398 X 147
RWY 3-21 6297 X 147
RWY 8-26 6799 X 147



Albuquerque, Double Eagle II

14836N 9919E
alt. 5835

RWY 4-22 7399 X 98



Belen, Alexander

14629N 9867E
alt. 5182

RWY 3-21 4798 X 59



Alpine

12628N 10661E
alt. 4513

RWY 1-19 5999 X 72
RWY 5-23 4821 X 39



Brewster Co. (NDB)

12645N 10682E
freq. 201

Caprizozo

14142N 10116E
alt. 5369

RWY 6-24 4897 X 72



Anton Chico (VOR)

14710N 10537E
freq. 110

Artesia (NDB)

13703N 10575E
freq. 414

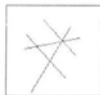
Carlsbad (VOR)

13429N 10622E
freq. 116.3

Carlsbad, Cavern City

13484N 10608E
alt. 3293

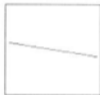
RWY 3-21 7852 X 147
RWY 14-32 5828 X 147
RWY 8-26 5474 X 147
RWY 14-32 4706 X 147



Carlsbad, Seven Rivers

13604N 10565E
alt. 3359

RWY 10-28 3309 X 49



Clovis

14305N 11169E
alt. 4215

RWY 4-22 6199 X 147
RWY 12-30 5697 X 147



Corona (VOR)

14430N 10254E
freq. 115.5

Dalhart (VOR)

14991N 11484E
freq. 112

Dell City

13401N 10244E
alt. 3700

RWY 8-26 4683 X 59



Deming (VOR)

13661N 9389E
freq. 108.6

Deming

13677N 9355E
alt. 4310

RWY 8-26 6605 X 72
RWY 4-22 5598 X 59



El Paso Int'l

13427N 9802E
alt. 3956

RWY 4-22 11010 X 147
RWY 8-26 9006 X 147
RWY 8-26 5490 X 72



El Paso, West Texas

13380N 9838E
alt. 4008

RWY 8-26 4099 X 29



Florida (NDB)

14397N 9797E
freq. 329

Fort Sumner

14393N 10775E
alt. 4166RWY 8-26 4696 X 49
RWY 3-21 5398 X 72

Española

15165N 10251E
alt. 5789

RWY 16-34 4998 X 49



Gallup (VOR)

15128N 9220E
freq. 115.1

Gallup

15129N 9265E
alt. 6468

RWY 6-24 6297 X 98



Eunice

13475N 10984E
alt. 3569

RWY 0-18 3598 X 72



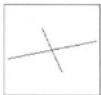
Grants-Milan

14928N 9534E
alt. 6521

RWY 13-31 5297 X 59



Fabens

13285N 9861E
alt. 3660RWY 8-26 4198 X 59
RWY 16-34 2299 X 22

Hatch

13810N 9577E
alt. 4146

RWY 11-29 2929 X 42



Jal

13334N 10094E
alt. 3116

RWY 1-19 3598 X 59
RWY 9-27 2597 X 49



Hobbs (VOR)

13537N 10997E
freq. 111

Hobbs, Lea Co.

13573N 11006E
alt. 3560

RWY 3-21 7396 X 147
RWY 12-30 5999 X 147
RWY 17-35 4995 X 147
RWY 8-26 3509 X 147



Las Cruces (NDB)

13619N 9638E
freq. 299

Las Cruces - Crawford

13632N 9642E
alt. 4454

RWY 4-22 7501 X 98
RWY 12-30 7491 X 147
RWY 8-26 6071 X 98



Holloman (VOR)

13859N 9962E
freq. 108.2

Las Vegas (NM) (VOR)

14952N 10547E
freq. 117.3

Hudspeth (VOR)

13248N 10133E
freq. 115

Las Vegas, NM

14949N 10536E
alt. 6865

Isleta (NDB)

14756N 9967E
freq. 230

RWY 2 20 4996 X 72
RWY 14-32 4706 X 49



Lordsburg

13777N 9007E
alt. 4287

RWY 12-30 4998 X 49



Los Lunas, Mid Valley

14673N 9912E
alt. 4831

RWY 17-35 4359 X 49



Lovington (NDB)

13582N 10970E
freq. 396

Lovington, Lea Co

13695N 10959E
alt. 3975

RWY 3-21 4598 X 72
RWY 12-30 2961 X 49



Marathon (NDB)

12531N 10816E
freq. 388

Marfa (VOR)

12597N 10552E
freq. 115.9

Marfa

12639N 10537E
alt. 4848

RWY 3-21 5297 X 147
RWY 12-30 5297 X 72



Newman (VOR)

13482N 9838E
freq. 112.4

Otto (VOR)

14750N 10217E
freq. 114

Pecos (VOR)

13075N 10789E
freq. 111.8

Pecos City

13040N 10809E
alt. 2617

RWY 9-27 7199 X 147
RWY 13-31 6254 X 98
RWY 0-18 3749 X 147



Pinon (VOR)

13614N 10248E
freq. 110.4

Portales (NDB)

14209N 11064E
freq. 407

Portales

14216N 11052E
alt. 4021

RWY 2-20 5228 X 59
RWY 9-27 2538 X 42



Presidio, Lely Int'l

12348N 10346E
alt. 2932

RWY 17-35 4496 X 72



Roswell (VOR)

13919N 10556E
freq. 116.1

Roswell Industrial

13912N 10575E
alt. 3670

RWY 3-21 12998 X 298
RWY 17-35 9997 X 196
RWY 12-30 7412 X 196



Ruidoso (NDB)

13994N 10183E
freq. 332

Ruidoso

14003N 10181E
alt. 6911

RWY 0-18 5497 X 72



Salt Flat (VOR)

13303N 10255E
freq. 113

Santa Fe (VOR)

14950N 10209E
freq. 110.6

Santa Fe Co.

14993N 10203E
alt. 6344

RWY 2-20 8321 X 147
RWY 15-33 6300 X 147
RWY 10-28 6294 X 98



Santa Rosa

14514N 10660E
alt. 4782

RWY 8-26 4398 X 49



Silver City (VOR)

13862N 9218E
freq. 111.8

Silver City - Grant Co

13870N 9229E
alt. 5442

RWY 8-26 6799 X 98



Socorro (VOR)

14493N 9845E
freq. 116.8

Socorro

14369N 9791E
alt. 4851

RWY 15-33 5844 X 98



Springerville (NDB)

14608N 8939E
freq. 274

St. Johns (VOR)

14704N 9018E
freq. 112.3

Tatum, Lea Co

13821N 11027E
alt. 3985

RWY 5-23 2997 X 72
RWY 12-30 2387 X 49



Texico (VOR)

14317N 11276E
freq. 112.2

Topan (NDB)

13921N 10621E
freq. 305

Truth or Consequences (VOR)

14071N 9591E
freq. 112.7

Truth or Consequences

14059N 9591E
alt. 4861

RWY 13-31 5598 X 72



Tucumcari (VOR)

14655N 11052E
freq. 113.6

Tucumcari

14658N 11038E
alt. 4064

RWY 3-21 7097 X 98
RWY 8-26 4874 X 147



Valtr (NDB)

13446N 9814E
freq. 242

Van Horn (NDB)

12985N 10304E
freq. 233

Van Horn, Culberson Co.

12989N 10312E
alt. 3956

RWY 3-21 5999 X 98
RWY 7-25 5999 X 118
RWY 17-35 5999 X 124



Wink (VOR)

13225N 10944E
freq. 112.1

Wink, Winkler

13183N 10951E
alt. 2818

RWY 13-31 4496 X 98
RWY 4-22 3499 X 98



Zuni (VOR)

14934N 9070E
freq. 113.4

Zuni Pueblo, Black Rock

14953N 9223E
alt. 6455


RWY 7-25 4798 X 49

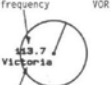



ALBUQUERQUE AND EL PASO SECTIONALS


- 1 Gallup
- 2 Zuni Pueblo, Black Rock
- 3 Grants-Milan
- 4 Albuquerque, Double Eagle II
- 5 Albuquerque, Alameda
- 6 Albuquerque, Coronado
- 7 Albuquerque Int'l
- 8 Bolen, Alexander
- 9 Los Lunas, Mid Valley
- 10 Santa Fe Co.
- 11 Espanola
- 12 Las Vegas, NM
- 13 Tucuman
- 14 Clovis
- 15 Jal
- 16 Eunice
- 17 Hobbs, Lea Co.
- 18 Lovington, Lea Co
- 19 Tatum, Lea Co
- 20 Portales
- 21 Fort Sumner
- 22 Santa Rosa
- 23 Socorro
- 24 Lordsburg
- 25 Silver City - Grant Co
- 26 Deming
- 27 Truth or Consequences
- 28 Hatch
- 29 Las Cruces - Crawford
- 30 Alamogordo - White Sands
- 31 Ruidoso
- 32 Caprizozo
- 33 Roswell Industrial
- 34 Artesia
- 35 Carlsbad, Seven Rivers
- 36 Carlsbad, Cavern City
- 37 El Paso Int'l
- 38 El Paso, West Texas
- 39 Fabens
- 40 Dell City
- 41 Van Horn, Culberson Co.
- 42 Pecos City
- 43 Wink, Winkler
- 44 Marfa
- 45 Alpine
- 46 Prestidio, Lely Int'l


LEGEND


frequency NDB
 306 Omak
 name


frequency VOR Needle points to magnetic north
 113.7 Victoria
 name

 24 Airport Layout Diagram (runway lengths are 3 times scale length)

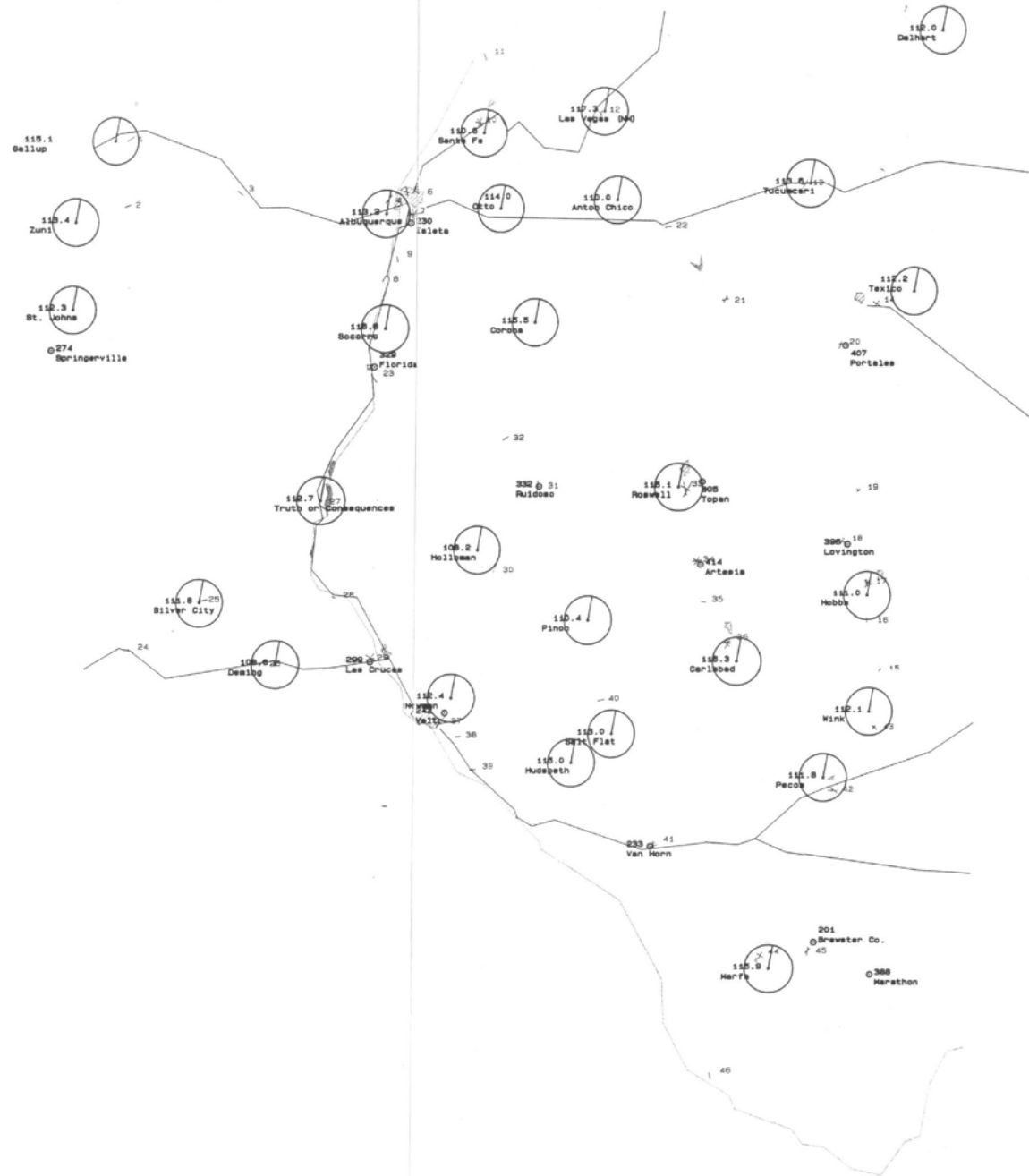
 Roads

 Rivers

 Lakes, Reservoirs, Shoom

 City or Metropolitan Area

50 nautical miles



Ajo

14221N 7505E
alt. 1460

RWY 12-30 3798 X 59



Bard (VOR)

14524N 6902E
freq. 116.8

Blythe (VOR)

14888N 6951E
freq. 117.4

Blythe

14896N 6994E
alt. 397

RWY 8-26 6559 X 147
RWY 17-35 5818 X 147



Brawley

14720N 6639E
alt. 0

RWY 8-26 4444 X 59



Buckeye (VOR)

14631N 7614E
freq. 110.6

Buckeye

14610N 7679E
alt. 1023

RWY 16-34 3499 X 59



Calipatria

14779N 6653E
alt. 0

RWY 8-26 3329 X 36
RWY 12-30 2522 X 36



Casa Grande (VOR)

14302N 7873E
freq. 114.8

Casa Grande

14328N 7947E
alt. 1460

RWY 5-23 5198 X 72



Bullhead City

15521N 7241E
alt. 548

RWY 17-35 5034 X 59



Callexico

14585N 6599E
alt. 0

RWY 8-26 4329 X 72



Chandler (VOR)

14453N 8010E
freq. 113.3

Chandler, Stellar Airpark

14485N 7932E
alt. 1174

RWY 17-35 3998 X 68



Chiriaco Summit

15026N 6659E
alt. 1712

RWY 6-24 4598 X 72



Coolidge Muni.

14286N 8063E
alt. 1588

RWY 5-23 5549 X 147
RWY 17-35 3788 X 147



Douglas Bisbee, Bisbee Douglas Int'l

13506N 8555E
alt. 4159

RWY 17-35 7291 X 147
RWY 8-26 6999 X 147



Flagstaff (VOR)

15236N 8213E
freq. 108.2

Flagstaff, Pulliam

15230N 8224E
alt. 7013

RWY 3-21 6996 X 147



Fort Huachuca, Libby - Sierra Vista

13623N 8308E
alt. 4564

RWY 11-29 5362 X 98
RWY 2-20 4296 X 72



Gallup (VOR)

15128N 9220E
freq. 115.1

Gila Bend (VOR)

14407N 7608E
freq. 116.5

Gila Bend

14416N 7626E
alt. 777

RWY 4-22 3798 X 75



Globe (NDB)

14384N 8365E
freq. 255

Globe - San Carlos

14393N 8375E
alt. 3234

RWY 9-27 4749 X 72



Imperial (VOR)

14614N 6580E
freq. 115.9

Imperial Co.

14662N 6595E
alt. 0

RWY 14-32 5303 X 98



Goffs (VOR)

15576N 7004E
freq. 114.4

Holbrook

15010N 8729E
alt. 5245

RWY 3-21 4739 X 72



Kingman (VOR)

15503N 7445E
freq. 108.8

Kingman

15499N 7463E
alt. 3447

RWY 3-21 6828 X 147
RWY 17-35 6723 X 147



Holtville

14633N 6706E
alt. 59

RWY 8-26 5999 X 147



Lake Havasu

15215N 7218E
alt. 482

RWY 5-23 6432 X 98



Love

15097N 7912E
alt. 5041

RWY 3-21 6707 X 147
RWY 11-29 4405 X 72



Marana, Pinal Airpark

14100N 8052E
alt. 1893

RWY 12-30 6848 X 147
RWY 8-26 6687 X 147



Mesa, Falcon

14535N 8015E
alt. 1394

RWY 4-22 5097 X 98
RWY 4-22 3798 X 72



Mexicali (VOR)

14532N 6665E
freq. 115

Needles (VOR)

15351N 7199E
freq. 115.2

Needles

15364N 7170E
alt. 991

RWY 11-29 4998 X 147
RWY 2-20 4798 X 147



Nogales Int'l

13597N 8102E
alt. 3933

RWY 3-21 5999 X 91



Papago (NDB)

14543N 7912E
freq. 326

Parker (VOR)

15095N 7043E
freq. 117.9

Payson

14833N 8240E
alt. 5156

RWY 6-24 4897 X 59



Peach Springs (VOR)

15617N 7624E
freq. 112

Phoenix (VOR)

14531N 7942E
freq. 115.6

Phoenix - Litchfield

14581N 7785E
alt. 958

RWY 3-21 8498 X 147



Phoenix Int'l (Sky Harbor)

14552N 7914E
alt. 1132

RWY 8-25 10997 X 147
RWY 8-25 10259 X 147



Phoenix, Deer Valley

14664N 7919E
alt. 1476

RWY 7-25 5297 X 98
RWY 7-25 3798 X 72



Prescott (VOR)

15125N 7882E
freq. 114.1

Safford

14092N 8690E
alt. 3175

RWY 8-26 4808 X 98
RWY 12-30 4821 X 98



Scottsdale (NDB)

14618N 7959E
freq. 224

Scottsdale

14620N 7971E
alt. 1509

RWY 3-21 8249 X 72



Searchlight

15671N 7161E
alt. 3405

RWY 16-34 5038 X 68



Sedona (NDB)

15115N 8127E
freq. 334

Sedona

15121N 8152E
alt. 4828

RWY 3-21 5133 X 72



Show Low (NDB)

14712N 8598E
freq. 206

Show Low

14717N 8703E
alt. 6412

RWY 6-24 5999 X 72
RWY 3-21 3919 X 59



Silver City (VOR)

13862N 9218E
freq. 111.8

Springerville (NDB)

14608N 8939E
freq. 274

Springerville

14608N 8931E
alt. 7052

RWY 3-21 5598 X 72



St. Johns (VOR)

14704N 9018E
freq. 112.3

St. Johns

14769N 8948E
alt. 5733

RWY 13-31 5297 X 72
RWY 2-20 3398 X 72



Tucson Int'l

13889N 8159E
alt. 2631

RWY 11-29 12001 X 147
RWY 11-29 9128 X 72
RWY 3-21 6999 X 147



Tuscon, Avra Valley

14048N 8078E
alt. 2024

RWY 3-21 4198 X 72
RWY 12-30 2997 X 72



Whiteriver

14523N 8663E
alt. 5153

RWY 1-19 6268 X 72



Tuscon, Ryan

13932N 8064E
alt. 2414

RWY 6-24 5497 X 72



Wickenburg

14850N 7703E
alt. 2424

RWY 5-23 5047 X 59



Twentynine Palms (VOR)

15216N 6667E
freq. 114.2

Winslow (VOR)

15118N 8509E
freq. 112.6

Twentynine Palms

15238N 6638E
alt. 1906

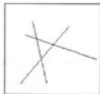
RWY 8-26 5526 X 45
RWY 17-35 3798 X 49



Winslow

15094N 8536E
alt. 4936

RWY 4-22 7494 X 147
RWY 11-29 7101 X 147
RWY 17-35 6248 X 147



16 - PHOENIX

Yuma Int'l

14471N 6916E
alt. 213

RWY 3-21	13297 X 196
RWY 3-21	9236 X 147
RWY 8-26	6143 X 147
RWY 17-35	5707 X 147




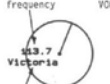






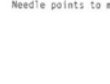





Zuni (VOR)

14934N 9070E
freq. 113.4

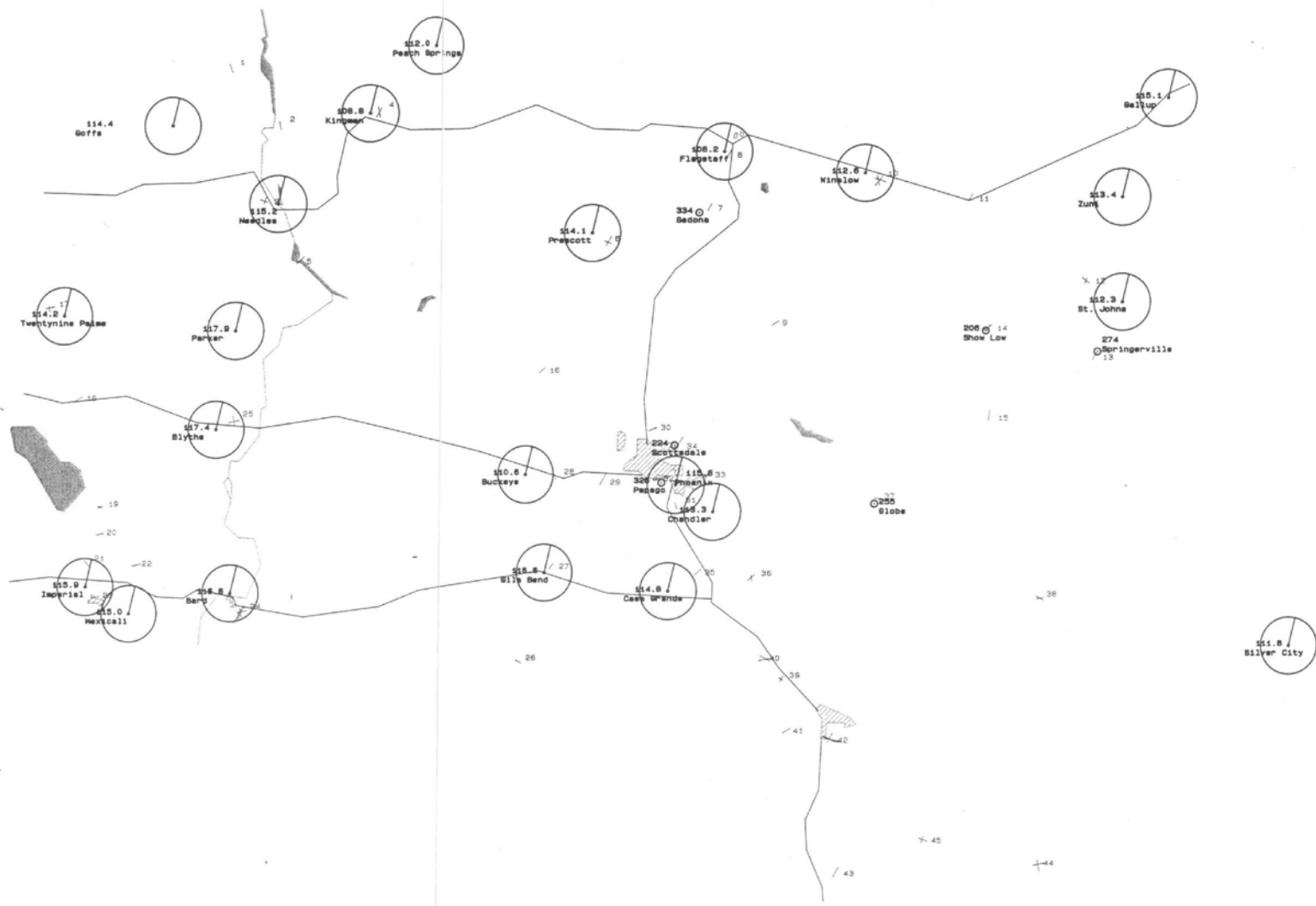
PHOENIX SECTIONAL

- 1 Searchlight
- 2 Bullhead City
- 3 Needles
- 4 Kingman
- 5 Lake Havasu
- 6 Love
- 7 Sedona
- 8 Flagstaff, Pulliam
- 9 Payson
- 10 Winslow
- 11 Holbrook
- 12 St. Johns
- 13 Springerville
- 14 Snow Low
- 15 Whitewater
- 16 Wickenburg
- 17 Twentynine Palms
- 18 Chiricaco Summit
- 19 Calipatria
- 20 Brawley
- 21 Imperial Co.
- 22 Holtville
- 23 Calexico
- 24 Yuma Int'l
- 25 Blythe
- 26 Ajo
- 27 Gila Bend
- 28 Buckeye
- 29 Phoenix - Litchfield
- 30 Phoenix, Deer Valley
- 31 Chandler, Stellar Airpark
- 32 Phoenix Int'l (Sky Harbor)
- 33 Mesa, Falcon
- 34 Scottsdale
- 35 Casa Grande
- 36 Coolidge Muni.
- 37 Globe - San Carlos
- 38 Safford
- 39 Tucson, Avra Valley
- 40 Marana, Pinal Airpark
- 41 Tucson, Ryan
- 42 Tucson Int'l
- 43 Nogales Int'l
- 44 Douglas Bisbee, Bisbee Douglas Int'l
- 45 Fort Huachuca, Libby - Sierra Vista

LEGEND

<p>frequency NDB  name</p> <p>frequency VOR Needle points to magnetic north  name</p> <p> 24 Airport Layout Diagram (runway lengths are 3 times scale length)</p> <p> Roads</p> <p> Rivers</p> <p> Lakes, Reservoirs, Shores</p> <p> City or Metropolitan Area</p>	<p> NDB</p> <p> VOR Needle points to magnetic north</p> <p> 24 Airport Layout Diagram (runway lengths are 3 times scale length)</p> <p> Roads</p> <p> Rivers</p> <p> Lakes, Reservoirs, Shores</p> <p> City or Metropolitan Area</p>
--	--

50 nautical miles



Austin

17495N 7000E
alt. 5730

RWY 12-30 5999 X 147
RWY 0-18 5999 X 147



Beatty (VOR)

16343N 6798E
freq. 114.7

Beatty

16382N 6791E
alt. 3168

RWY 16-34 5628 X 49



Beaver

15548N 8314E
alt. 5852

RWY 13-31 4496 X 72



Boulder City (VOR)

15808N 7328E
freq. 116.7

Boulder City

15811N 7319E
alt. 2460

RWY 3-21 2961 X 59



Cedar City

16361N 8113E
alt. 5622

RWY 2-20 7799 X 147
RWY 8-26 5198 X 59



Bryce Canyon (VOR)

16275N 8396E
freq. 112.8

Bryce Canyon

16278N 8429E
alt. 7587

RWY 3-21 7399 X 147



Coaldale (VOR)

16948N 6619E
freq. 117.7

Daggett (VOR)

15624N 6558E
freq. 113.2

Delta (VOR)

16978N 8512E
freq. 116.1

Delta

17010N 8496E
alt. 4756

RWY 16-34 6008 X 72
RWY 12-30 5933 X 81



Carbon (VOR)

15958N 9123E
freq. 109

Cedar City (VOR)

16389N 8151E
freq. 108.6

Ely (VOR)

17192N 7743E
freq. 110.6

Ely - Yelland

17193N 7729E
alt. 6255

RWY 0-18 5995 X 147
RWY 12-30 4979 X 98



Las Vegas, McCarran

15884N 7234E
alt. 2175

RWY 7-25 12634 X 147
RWY 1-19 9774 X 147
RWY 1-19 4998 X 72



Eureka

17429N 7398E
alt. 5947

RWY 17-35 4778 X 59



Las Vegas, North Las Vegas

15948N 7236E
alt. 2207

RWY 7-25 5001 X 98
RWY 4-22 3256 X 62
RWY 12-30 3122 X 62



Grand Canyon (VOR)

15530N 8249E
freq. 113.1

Las Vegas (Nev) (VOR)

15876N 7241E
freq. 116.9

Las Vegas Henderson

15845N 7227E
alt. 2460

RWY 0-18 4998 X 49



Loa, Wayne Wonderland

16509N 8684E
alt. 7019

RWY 13-31 5897 X 72



Manti - Ephraim

16915N 8781E
alt. 5501

RWY 3-21 4867 X 72



Mercury (NDB)

15193N 7017E
freq. 326

Mercury, Desert Rock

16201N 7008E
alt. 3313

RWY 2-20 7514 X 98



Milford (VOR)

16626N 8236E
freq. 112.1

Milford

16659N 8224E
alt. 5038

RWY 16-34 4998 X 72



Mina (VOR)

17210N 6609E
freq. 115.1

Mormon Mesa (VOR)

16074N 7623E
freq. 114.3

Mt. Pleasant

16987N 8848E
alt. 5829

RWY 2-20 4257 X 72



Nepht

17109N 8743E
alt. 5009

RWY 16-34 4696 X 72



Page (VOR)

15075N 8594E
freq. 117.6

Page

15889N 8577E
alt. 4310

RWY 15-33 5497 X 147



Panaca, Lincoln Co.

16524N 7688E
alt. 4828

RWY 17-35 4618 X 59



Richfield (NDB)

16702N 8580E
freq. 365

Richfield

16708N 8558E
alt. 5278

RWY 1-19 6641 X 72



St. George (VOR)

16140N 7891E
freq. 109.8

St. George

16155N 7875E
alt. 2939

RWY 16-34 6097 X 98



Tonopah (VOR)

16882N 6865E
freq. 117.2

Tonopah Test Range (NDB)

16799N 6911E
freq. 278

Tonopah

16899N 6849E
alt. 5425

RWY 15-33 7160 X 72
RWY 11-29 5949 X 72



Tuba City (VOR)

15517N 8569E
freq. 113.5


Wilson Creek (VOR)


16708N 7765E
freq. 116.3


LAS VEGAS SECTIONAL


- 1 Austin
- 2 Eureka
- 3 Ely - Telland
- 4 Delta
- 5 Neph
- 6 Mt. Pleasant
- 7 Manti - Ephraim
- 8 Richfield
- 9 Loa, Wayne Wonderland
- 10 Beaver
- 11 Milford
- 12 Tonopah
- 13 Slaty
- 14 Mercury, Desert Rock
- 15 Panaca, Lincoln Co.
- 16 Las Vegas, North Las Vegas
- 17 Las Vegas, McCarran
- 18 Las Vegas Henderson
- 19 Boulder City
- 20 St. George
- 21 Cedar City
- 22 Bryce Canyon
- 23 Page


LEGEND


frequency NDB
 **396**
 name
 Oak


frequency VOR Needle points to magnetic north
 **133.7**
 name
 Victoria

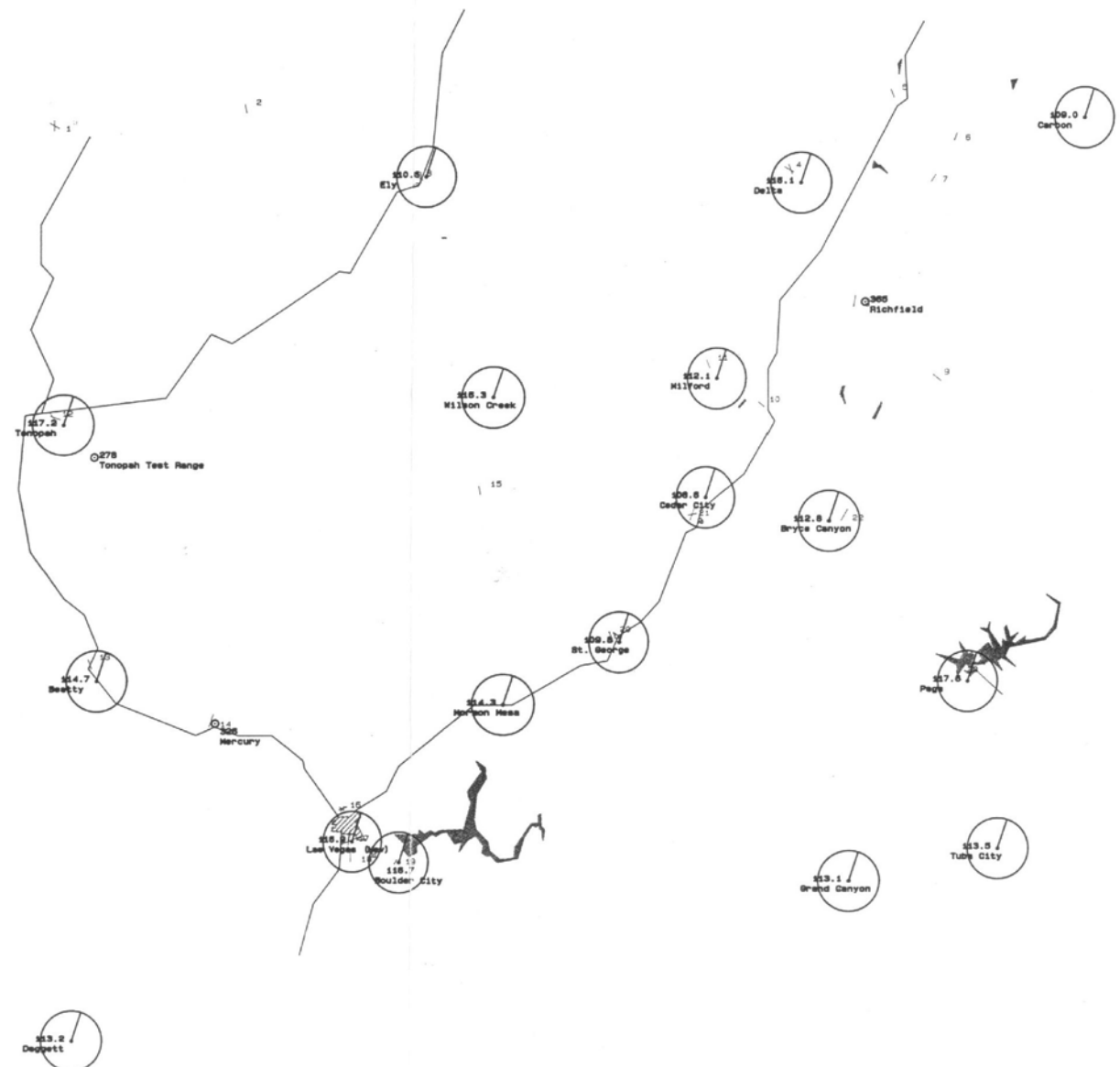
 **24** Airport Layout Diagram (runway lengths are 3 times scale length)

 Roads

 Rivers

 Lakes, Reservoirs, Oceans

 City or Metropolitan Area



50 nautical miles

Apple Valley

15522N 6307E
alt. 3060

RWY 0-18 5497 X 147



Avenal (VOR)

16234N 5480E
freq. 117.1

Bakersfield (VOR)

16079N 5758E
freq. 115.4

Bakersfield, Meadows

16053N 5767E
alt. 489

RWY 12-30 6707 X 147
RWY 12-30 3699 X 72



Banning

15214N 6349E
alt. 2221

RWY 8-26 5198 X 147



2 - LOS ANGELES

Beatty (VOR)

16343N 6798E
freq. 114.7

Burbank - Glendale - Pasadena

15470N 5061E
alt. 774

RWY 15-33 6901 X 147
RWY 7-25 6071 X 147



Camarillo (VOR)

15549N 5607E
freq. 115.8

Camarillo

15553N 5607E
alt. 79

RWY 8-26 6018 X 147



Carlsbad, McClellan - Palomar

14926N 6112E
alt. 328

RWY 6-24 4695 X 147



Chino

15315N 6083E
alt. 649

RWY 3-21 6202 X 147
RWY 8-26 3853 X 147



Compton (NDB)

15333N 5863E
freq. 378

Compton

15336N 5864E
alt. 98

RWY 7-25 3667 X 59
RWY 7-25 3667 X 59



Daggett (VOR)

15624N 6558E
freq. 113.2

Daggett, Barstow - Daggett

15601N 6474E
alt. 1929

RWY 7-25 6399 X 147
RWY 3-21 5149 X 98



Fellows (VOR)

15994N 5449E
freq. 117.5

Fillmore (VOR)

15589N 5696E
freq. 112.5

Gaviota (VOR)

15784N 5302E
freq. 116.5

General Fox (NDB)

15683N 5971E
freq. 282

Goreman (VOR)

15773N 5757E
freq. 116.1

Hemet - Ryan

15155N 6272E
alt. 1512

RWY 5-23 4313 X 98
RWY 4-22 2043 X 29



Inyokern - Kern Co

16030N 6209E
alt. 2457

RWY 15-33 7334 X 147
RWY 2-20 6320 X 72
RWY 10-28 4149 X 147



Julian (VOR)

14862N 6354E
freq. 114

La Verne, Brackett

15376N 6044E
alt. 1010

RWY 8-26 4837 X 72
RWY 8-26 3660 X 72



Lake Hughes (VOR)

15695N 5840E
freq. 108.4

Lancaster, General Fox

15685N 5971E
alt. 2348

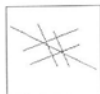
RWY 6-24 4998 X 147



Long Beach

15296N 5885E
alt. 56

RMV 12-30	9997 X 196
RMV 7-25	6189 X 196
RMV 7-25	5418 X 147
RMV 16-34	5021 X 147
RMV 16-34	4253 X 147



Los Angeles Int'l

15379N 5811E
alt. 125

RMV 7-25	12090 X 147
RMV 7-25	11998 X 196
RMV 6-24	10282 X 147
RMV 6-24	8924 X 147



March (VOR)

15184N 6215E
freq. 113.4

Mission Bay (VOR)

14774N 6089E
freq. 117.8

Mojave

15810N 6033E
alt. 2788

RMV 12-30	9597 X 196
RMV 7-25	5917 X 59
RMV 4-22	5198 X 49



Nan Nuys (VOR)

15497N 5816E
freq. 113.1

Oceanside (VOR)

14983N 6074E
freq. 115.3

Ontario Int'l

15343N 6106E
alt. 951

RMV 8-25	10197 X 147
RMV 8-25	10000 X 147
RMV 3-21	4749 X 147



Oxnard

15563N 5567E
alt. 43

RMV 7-25	5949 X 98
----------	-----------



Palm Springs (VOR)

15153N 6489E
freq. 115.5

Palm Springs

15143N 6459E
alt. 449

RWY 12-30 7012 X 147



Palmdale (VOR)

15624N 6010E
freq. 114.5

Palmdale AF

15628N 6003E
alt. 2542

RWY 7-25 12001 X 196
RWY 4-22 11998 X 147



Paradise (VOR)

15276N 6112E
freq. 112.2

Paso Robles (VOR)

16308N 5266E
freq. 114.3

Pettis (NDB)

15318N 6187E
freq. 397

Poggi (VOR)

14679N 6157E
freq. 109.8

Pomona (VOR)

15367N 6041E
freq. 110.4

Porterville (VOR)

16249N 5836E
freq. 109.2

Priest (VOR)

16520N 5389E
freq. 110

Rialto

15352N 6185E
alt. 1437

RWY 6-24 3558 X 72
RWY 17-35 1531 X 59



Riverside (VOR)

15280N 6141E
freq. 112.4

Riverside

15284N 6143E
alt. 817

RWY 9-27 5398 X 98
RWY 16-34 2847 X 49



San Diego Int'l - Lindbergh

14755N 6098E
alt. 15

RWY 9-27 9397 X 196
RWY 13-31 4437 X 72



San Diego, Brown

14666N 6155E
alt. 525

RWY 8-25 7996 X 195
RWY 8-25 3030 X 68



San Diego, Gillespie

14769N 6184E
alt. 384

RWY 9-27 5339 X 98
RWY 17-35 4145 X 98
RWY 9-27 2735 X 59



San Diego, Montgomery

14782N 6125E
alt. 423

RWY 5-23 3401 X 147
RWY 10-28 3398 X 147
RWY 10-28 3398 X 59



San Luis Obispo (NDB)

16114N 5156E
freq. 288

San Luis Obispo (VOR)

16152N 5166E
freq. 112.4

San Luis Obispo

16135N 5202E
alt. 210

RWY 11-29 4798 X 147
RWY 7-25 3260 X 147



Santa Ana (VOR)

15209N 5967E
freq. 109.4

Santa Anna, John Wayne - Orange Co.

15209N 5965E
alt. 52

RWY 1-19 5697 X 147
RWY 1-19 2886 X 72



Santa Barbara (VOR)

15742N 5409E
freq. 114.9

Santa Barbara

15717N 5375E
alt. 10

RWY 7-25 6048 X 147
RWY 15-33 4181 X 98
RWY 15-33 4178 X 72



Santa Catalina (VOR)

15137N 5739E
freq. 111.4

Santa Maria (VOR)

16003N 5209E
freq. 111

Santa Maria

15976N 5222E
alt. 259

RWY 12-30 6297 X 147
RWY 2-20 5267 X 147



Santa Monica

15408N 5805E
alt. 174

RWY 3-21 4985 X 147



Seal Beach (VOR)

15272N 5915E
freq. 115.7

Swan Lake (NDB)

15302N 6112E
freq. 257

Taft - Kern Co

15970N 5601E
alt. 876

RWY 7-25 3968 X 59
RWY 2-20 1639 X 68



Thermal (VOR)

15027N 6560E
freq. 116.2

Thermal

15030N 6561E
alt. 0

RWY 12-30 4998 X 147
RWY 17-35 4998 X 147



Tijuana (VOR)

14646N 6158E
freq. 116.5

Torrance

15311N 5820E
alt. 102

RWY 11-29 4998 X 147
RWY 11-29 2997 X 72



Twentynine Palms (VOR)

15194N 6745E
freq. 114.2

Twentynine Palms

15220N 6691E
alt. 1906

RWY 8-26 5526 X 45
RWY 17-35 3798 X 49



Van Nuys

15488N 5816E
alt. 800

RWY 16-34 7999 X 147
RWY 16-34 3998 X 147



Ventura (VOR)

15507N 5609E
freq. 108.2

Visalia (VOR)

16468N 5815E
freq. 109.4

Big Sur (VOR)

16658N 5071E
freq. 114

Bishop (VOR)

16757N 6331E
freq. 109.6

Casa Diablo (NDB)

16854N 6298E
freq. 260

Chandler (NDB)

16661N 5751E
freq. 344

Chico (VOR)

18158N 5573E
freq. 109.8

Chico

18158N 5567E
alt. 239

RMV 13-31 6723 X 147
RMV 13-31 3004 X 59



Columbia (NDB)

17267N 5759E
freq. 404

Columbia

17269N 5753E
alt. 2116

RWY 17-35 4057 X 72



Fresno Air Terminal

16679N 5795E
alt. 331

RWY 11-29 9220 X 147
RWY 11-29 3899 X 72



Concord (VOR)

17473N 5234E
freq. 117

Friant (VOR)

16786N 5887E
freq. 115.6

Concord, Buchanan

17452N 5221E
alt. 23

RWY 1-19 4710 X 147
RWY 14-32 4598 X 147
RWY 14-32 2797 X 72
RWY 1-19 2765 X 72



Garberville

18514N 5010E
alt. 544

RWY 0-18 3047 X 72



Fresno (VOR)

16722N 5786E
freq. 112.9

Hangtown (VOR)

17590N 5755E
freq. 115.5

Fresno - Chandler Downtown

16671N 5752E
alt. 279

RWY 12-30 3473 X 72
RWY 12-30 3440 X 72



Hazen (VOR)

17712N 6434E
freq. 114.1

Lake Tahoe (VOR)

17720N 5979E
freq. 113.2

Linden (VOR)

17355N 5574E
freq. 114.8

Little River, Mendocino Co.

18174N 4895E
alt. 571

RWY 11-29 5247 X 147



Livermore

17302N 5251E
alt. 397

RWY 7-25 4004 X 98



Lodi, Kingdon

17408N 5460E
alt. 16

RWY 12-30 3998 X 137



Lodi

17447N 5503E
alt. 59

RWY 8-26 3089 X 22
RWY 12-30 2069 X 22



LoveLock (VOR)

17891N 6653E
freq. 116.5

Marysville (VOR)

17845N 5551E
freq. 110.8

Marysville, Yuba Co.

17840N 5550E
alt. 62

RWY 14-32 6005 X 147
RWY 5-23 3279 X 147



Maxwell (VOR)

18012N 5381E
freq. 110

McClellan (VOR)

17648N 5536E
freq. 109.2

Merced (VOR)

16931N 5641E
freq. 114.2

Merced

16980N 5608E
alt. 154

RWY 12-30 5900 X 147



Mina (VOR)

17210N 6609E
freq. 115.1

Minden, Douglas Co.

17584N 6104E
alt. 4717

RWY 16-34 7393 X 147
RWY 12-30 5287 X 147



Modesto (VOR)

17170N 5522E
freq. 114.6

Modesto City

17172N 5518E
alt. 98

RWY 10-28 5910 X 147
RWY 10-28 3450 X 147



Monterey Peninsula

16862N 5069E
alt. 243

RWY 10-28 6596 X 147
RWY 6-24 3998 X 147



Napa Co.

17571N 5187E
alt. 33

RWY 0-18 5930 X 147
RWY 6-24 5005 X 147
RWY 0-18 2499 X 72



Oakland, Metro Oakland Int'l

17367N 5129E
alt. 7

RWY 11-29 9997 X 147
RWY 9-27 6209 X 147
RWY 15-33 3365 X 72
RWY 9-27 5451 X 147



Oroville

18003N 5592E
alt. 200

RWY 1-19 5959 X 147
RWY 12-30 4844 X 147



Porterville

16294N 5898E
alt. 443

RWY 12-30 5999 X 144



Pajar (NDB)

16978N 5131E
freq. 327

Panoche (VOR)

16770N 5440E
freq. 112.6

Placerville

17591N 5748E
alt. 2585

RWY 5-23 4198 X 72



Point Reyes (VOR)

17588N 4975E
freq. 113.7

Priest (VOR)

16520N 5389E
freq. 110

Proberta (NDB)

18340N 5500E
freq. 338

Red Bluff (VOR)

18333N 5500E
freq. 115.7

Red Bluff

18347N 5500E
alt. 348

RWY 15-33 5982 X 147



Reno (VOR)

17793N 6227E
freq. 117.9

Reno Cannon

17788N 6176E
alt. 4412

RWY 16-34 8997 X 147
RWY 7-25 5100 X 147
RWY 16-34 5589 X 72



Reno/Stead

17875N 6169E
alt. 5045

RWY 14-32 8078 X 147
RWY 8-26 7599 X 147



Sacramento (VOR)

17572N 5455E
freq. 115.2

Sacramento Metro

17681N 5477E
alt. 23

RWY 16-34 8596 X 147



Sacramento Exec.

17595N 5482E
alt. 23

RWY 2-20 5500 X 147
RWY 16-34 3483 X 147
RWY 12-30 3834 X 98



Salinas (VOR)

16852N 5163E
freq. 117.3

Salinas

16856N 5161E
alt. 85

RWY 8-25 4992 X 196
RWY 13-31 4824 X 147
RWY 3-21 1197 X 147
RWY 14-32 1899 X 49



San Francisco Int'l

17340N 5061E
alt. 10

RWY 9-27 5339 X 98
RWY 9-27 2735 X 59
RWY 17-35 4145 X 98



San Jose, Reid - Hillview

17158N 5194E
alt. 134

RWY 13-31 3099 X 72
RWY 13-31 3096 X 72



San Jose

17184N 5165E
alt. 56

RWY 12-30 8898 X 147
RWY 12-30 4418 X 147
RWY 11-29 2997 X 39



Santa Rosa (VOR)

17758N 5064E
freq. 113

Santa Rosa, Sonoma Co.

17756N 5066E
alt. 125

RWY 14-32 5113 X 147
RWY 1-19 5001 X 147



Santa Rosa

17711N 5066E
alt. 98

RWY 16-34 6887 X 196



Sausalito (VOR)

17452N 5050E
freq. 116.2

Scaggs Island (VOR)

17567N 5149E
freq. 112.1

South Lake Tahoe, Lake Tahoe

17570N 6016E
alt. 6265

RWY 0-18 8541 X 147



Sparks (NDB)

17875N 6213E
freq. 254

Stockton (VOR)

17276N 5483E
freq. 116

Stockton Metro

17312N 5467E
alt. 30

RWY 11-29 8649 X 147
RWY 11-29 2994 X 72



Visalia

16454N 5831E
alt. 292

RWY 12-30 6553 X 147



Travis (VOR)

17565N 5358E
freq. 116.4

Truckee - Tahoe

17761N 6031E
alt. 5901

RWY 10-28 6399 X 98
RWY 1-19 4647 X 72



Watsonville

16995N 5138E
alt. 161

RWY 1-19 4500 X 147
RWY 8-26 3998 X 147



Williams (VOR)

17886N 5402E
freq. 114.4

Willows-Glenn Co.

18067N 5409E
alt. 138

RWY 13-31 4555 X 98
RWY 16-34 4503 X 147



Ukiah (VOR)

18037N 5004E
freq. 112.3

Visalia (VOR)

16468N 5815E
freq. 109.4

Woodside (VOR)

17233N 5054E
freq. 113.9

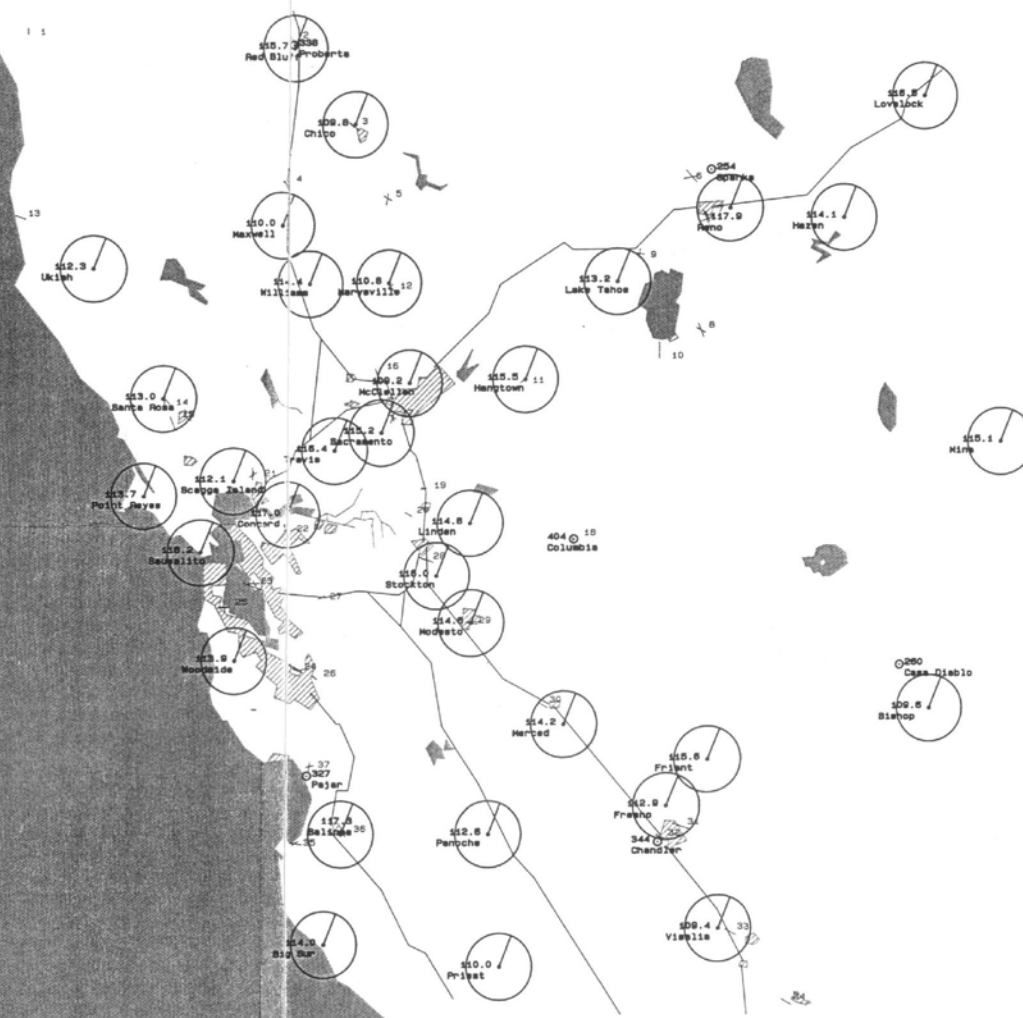
SAN FRANCISCO SECTIONAL

- 1 Carlsville
- 2 Red Bluff
- 3 Chico
- 4 Willows-Glen Co.
- 5 Oroville
- 6 Reno/Stad
- 7 Sono Cannon
- 8 Klamath, Douglas Co.
- 9 Truckee - Tahoe
- 10 South Lake Tahoe, Lake Tahoe
- 11 Placerville
- 12 Marysville, Yuba Co.
- 13 Little River, Mendocino Co.
- 14 Santa Rosa, Sonoma Co.
- 15 Santa Rosa
- 16 Sacramento Metro
- 17 Sacramento Exec.
- 18 Columbia
- 19 Yuba
- 20 Yuba, Klamath
- 21 Yuba Co.
- 22 Colusa, Buchanan
- 23 Oakland, Metro Oakland Int'l
- 24 San Jose
- 25 San Francisco Int'l
- 26 San Jose, Reid, Hillview
- 27 Livermore
- 28 Stockton Metro
- 29 Modesto City
- 30 Merced
- 31 Fresno (A) Terminal
- 32 Fresno - Chandler Downtown
- 33 Visalia
- 34 Porterville
- 35 Monterey Peninsula
- 36 Salinas
- 37 Watsonville

The Scenario disks

3-5

Next comes next week (maybe)



LEGEND

frequency NDB

 name

 frequency VOR Needle points to magnetic north

 name

 Airport Layout Diagram (runway lengths are 3 times scale length)

 Roads

 Rivers

 Lakes, Reservoirs, Dams

 City or Metropolitan Area

50 nautical miles

Amsterdam (NDB)

19644N 9581E
freq. 329

Anaconda

19941N 9104E
alt. 5032

RWY 4-22 4495 X 59



Beaverhead (NDB)

19546N 9114E
freq. 379

Big Timber

19588N 9909E
alt. 4480

RWY 6-24 4647 X 72



Billings (VOR)

19492N 10339E
freq. 114.5

Blackfoot (NDB)

20925N 9521E
freq. 250

Bonners Ferry, Boundary Co.

21286N 8431E
alt. 2332

RWY 2-20 3998 X 72



Bozeman (VOR)

19655N 9578E
freq. 112.2

Bozeman, Gallatin

19658N 9561E
alt. 4458

RWY 12-30 9000 X 147



Butte, Bert Mooney

19819N 9187E
alt. 5553RWY 15-33 8997 X 147
RWY 2-20 5543 X 72
RWY 11-29 5100 X 72

Capitol (NDB)

20061N 9435E
freq. 317

Challis (NDB)

19359N 8519E
freq. 207

Challis

19368N 8516E
alt. 5071

RWY 16-34 4598 X 59



Chester, Liberty Co.

20798N 9883E
alt. 3168

RWY 7-25 3197 X 72



Chinook

20725N 10381E
alt. 2411

RWY 8-26 3899 X 59



Choteau (NDB)

20602N 9497E
freq. 269

Choteau

20597N 9482E
alt. 3946

RWY 5-23 3798 X 59



Conrad (NDB)

20736N 9605E
freq. 293

Conrad

20725N 9569E
alt. 3536

RWY 5-23 4598 X 72



Cody (VOR)

19004N 10129E
freq. 111.8

Cody, Faust Regional

18980N 10081E
alt. 5091

RWY 4-22 7104 X 98



Coppertown (VOR)

19876N 9133E
freq. 111.6

Council (NDB)

19649N 7881E
freq. 274

Cut Bank (VOR)

20927N 9525E
freq. 114.4

Cut Bank

20940N 9504E
alt. 3854

RWY 13-31 5297 X 72
RWY 4-22 5297 X 72
RWY 0-18 3998 X 72



Coeur D'Alene (VOR)

20948N 8164E
freq. 108.8

Coeur D'Alene

20939N 8165E
alt. 2319

RWY 14-32 5398 X 137
RWY 5-23 5398 X 137
RWY 1-19 5398 X 72



Dell Flight Strip

19333N 8989E
alt. 6006

RWY 14-32 4998 X 147



Eureka

21272N 8787E
alt. 2680

RWY 14-32 4017 X 49



Desmet (NDB)

20371N 8835E
freq. 308

Grain (NDB)

20128N 8106E
freq. 280

Dillon (VOR)

19526N 9107E
freq. 113

Grangeville, Idaho Co.

20121N 8131E
alt. 3310

Dillon

19537N 9095E
alt. 5238

RWY 16-34 3998 X 72



RWY 7-25 4496 X 59



Great Falls (VOR)

20385N 9674E
freq. 115.1

Great Falls Int'l

20394N 9674E
alt. 3674

Drummond (VOR)

20167N 9072E
freq. 117.1RWY 3-21 10499 X 147
RWY 16-34 5999 X 147
RWY 7-25 4306 X 147

Eureka (NDB)

21305N 8800E
freq. 392

Hamilton (NDB)

20083N 8753E
freq. 410

Hamilton, Ravalli Co.

20083N 8747E
alt. 3638

RWY 16-34 4198 X 72



Harlowton (NDB)

19840N 10037E
freq. 242

Harlowton, Wheatland Co. at Harlowton

19853N 10012E
alt. 4310

RWY 8-26 4198 X 49



Hauser (NDB)

20033N 9485E
freq. 386

Havre (VOR)

20747N 10256E
freq. 111.8

Havre City Co.

20740N 10232E
alt. 2585

RWY 7-25 5202 X 98



Helena (VOR)

20051N 9429E
freq. 117.7

Helena

20065N 9413E
alt. 3874

RWY 8-26 8997 X 147
RWY 5-23 4598 X 72
RWY 16-34 3152 X 72



Kalispell (VOR)

20915N 8967E
freq. 108.4

Kalispell City

20900N 8914E
alt. 2932

RWY 13-31 3598 X 68



Kalispell, Glacier Park Int'l

20955N 8947E
alt. 2972RWY 1-19 7999 X 147
RWY 11-29 4723 X 147

Lewistown

20084N 10178E
alt. 4166RWY 2-20 5589 X 98
RWY 7-25 5585 X 98
RWY 12-30 4598 X 72

Kellogg, Shoshone Co.

20790N 8311E
alt. 2224

RWY 7-25 5497 X 72



Livingston (VOR)

19555N 9782E
freq. 116.1

Livingston, Mission

19570N 9762E
alt. 4658

RWY 4-22 5697 X 72



Leeds (NDB)

20742N 10277E
freq. 389

Lewiston (VOR)

20371N 7971E
freq. 108.2

Lewistown (NDB)

20098N 10181E
freq. 353

Lewistown (VOR)

20094N 10161E
freq. 112

Manno (NDB)

20361N 7971E
freq. 374

McCall (VOR)

19634N 7954E
freq. 116.2

Missoula (VOR)

20354N 8840E
freq. 112.8

Missoula

20356N 8831E
alt. 3201

RWY 11-29
RWY 7-25

9498 X 147
4805 X 98



Salmon

19586N 8687E
alt. 4044

RWY 16-34

5198 X 59



Mullan Pass (VOR)

20714N 8457E
freq. 117.8

Mullan Pass (VOR)

20714N 8457E
freq. 117.8

Philipsburg, Riddick

20043N 8989E
alt. 5212

RWY 16-34

3598 X 59



Sand Coulee (VOR)

20390N 9743E
freq. 115.3

Sand Poe (NDB)

21145N 8303E
freq. 254

Sandpoint, County - City

21134N 8294E
alt. 2125

RWY 1-19

3942 X 72



Pullman (VOR)

20500N 7877E
freq. 109

Salmon (VOR)

19556N 8620E
freq. 113.5

Shelby (NDB)

20886N 9653E
freq. 347

Shelby

20877N 9636E
alt. 3434

RWY 5-23 4598 X 72



West Yellowstone, Yellowstone

19193N 9469E
alt. 6645

RWY 1-19 8396 X 147



Smith Lake (NDB)

20891N 8874E
freq. 287

Spokane (VOR)

20907N 7890E
freq. 115.5

Townsend

19915N 9524E
alt. 3900

RWY 16-34 4099 X 68



Whitehall (VOR)

19760N 9285E
freq. 113.7

Yellowstone (NDB)

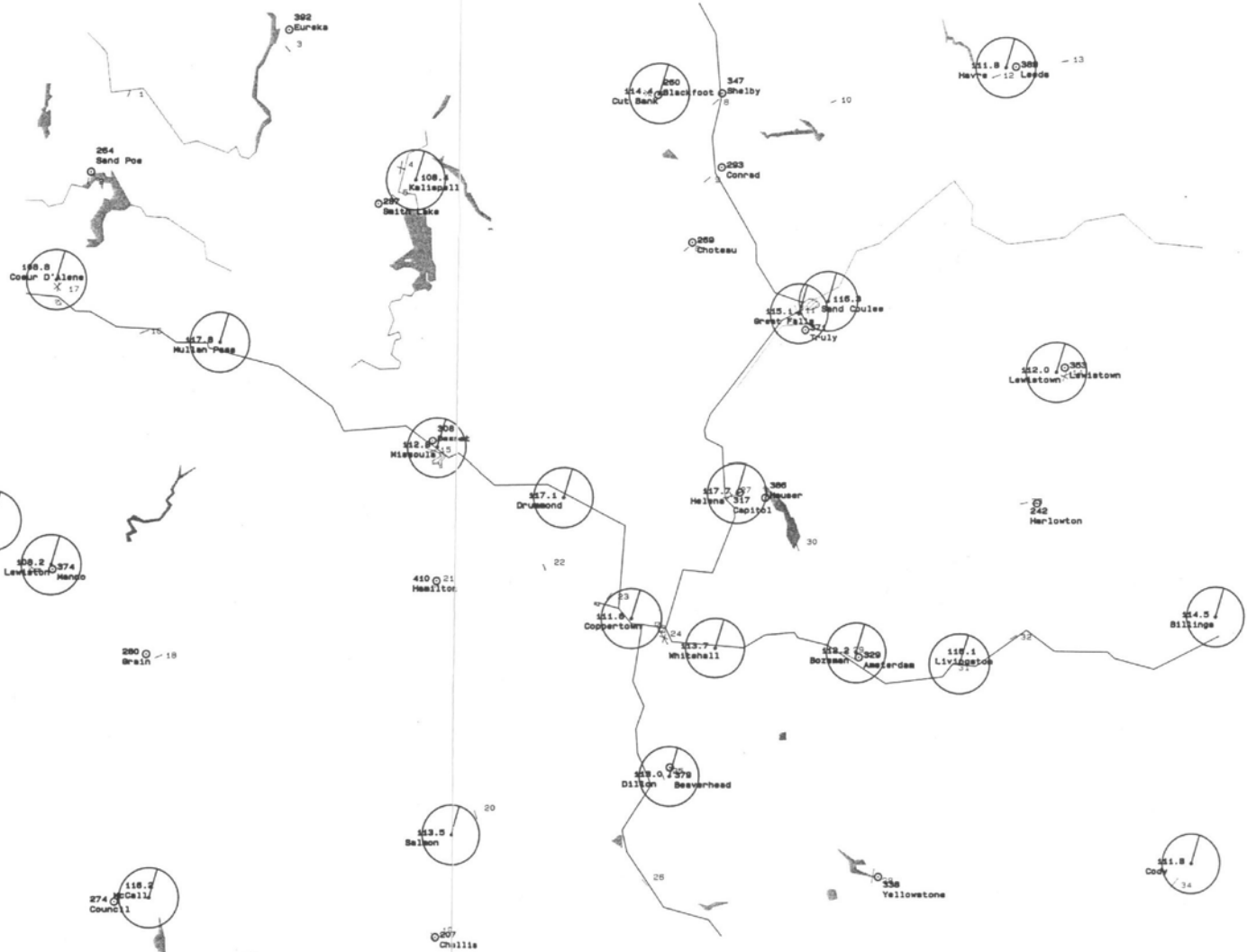
19183N 9479E
freq. 338

Truly (NDB)

20347N 9677E
freq. 371

GREAT FALLS SECTIONAL

- 1 Bonners Ferry, Boundary Co.
- 2 Sandpoint, County - City
- 3 Eureka
- 4 KellsPELL, Glacier Park Int'l
- 5 KellsPELL City
- 6 Choteau
- 7 Cut Bank
- 8 Shelby
- 9 Conrad
- 10 Chester, Liberty Co.
- 11 Great Falls Int'l
- 12 Havre City Co.
- 13 Chinook
- 14 Lewistown
- 15 Missoula
- 16 KellsPELL, Shoshone Co.
- 17 Coeur D'Alene
- 18 Grangeville, Idaho Co.
- 19 Challis
- 20 Salmon
- 21 Hamilton, Ravalli Co.
- 22 Phillipsburg, Riddick
- 23 Asaconda
- 24 Butte, Bert Mooney
- 25 Dillon
- 26 Dell Flight Strip
- 27 Helena
- 28 West Yellowstone, Yellowstone
- 29 Bozeman, Gallatin
- 30 Townsend
- 31 Livingston, Mission
- 32 Big Timber
- 33 Harlowton, Wheatland Co. at Harlowton
- 34 Cody, Faust Regional



LEGEND

frequency NDB



frequency VOR Needle points to magnetic north



name



Airport Layout Diagram (runway lengths are 3 times scale length)

Roads



Rivers



Lakes, Reservoirs, Oceans



City or Metropolitan Area



50 nautical miles

Abeta (NDB)

18912N 5055E
freq. 233

Alkali Lake State

19309N 6624E
alt. 4313

RWY 17-35 6149 X 147



Alturas (NDB)

18716N 6231E
freq. 215

Alturas

18711N 6223E
alt. 4376

RWY 13-31 4296 X 49
RWY 3-21 3457 X 59



Arcata (VOR)

18923N 5058E
freq. 110.2

Arcata

18914N 5062E
alt. 216

RWY 13-31 5995 X 147
RWY 1-19 4496 X 147



Burns

19413N 7000E
alt. 4143

RWY 3-21 5097 X 147
RWY 12-30 5097 X 147



Baker (VOR)

19811N 7453E
freq. 115.3

Bandon State

19799N 5311E
alt. 115

RWY 16-34 2594 X 49



Chiloquin State

19304N 5982E
alt. 4218

RWY 17-35 3732 X 42



Bend

19848N 6408E
alt. 3418

RWY 16-34 3801 X 72



Corvallis (VOR)

20263N 5864E
freq. 108.4

Council (NDB)

19649N 7881E
freq. 274

Crescent City (VOR)

19263N 5145E
freq. 109

Bodey (NDB)

19936N 6503E
freq. 411

Denmark, Cape Blanco State

19724N 5243E
alt. 213

RWY 14-32 5097 X 147



Eureka, Murray

18840N 5029E
alt. 7

RWY 11-29 2997 X 72
RWY 7-25 2027 X 49



Eugene (VOR)

20102N 5826E
freq. 112.9

Eugene, Mahlon Sweet

20081N 5824E
alt. 364

RWY 16-34 6199 X 147
RWY 3-21 5218 X 147



Fort Jones (VOR)

18954N 5530E
freq. 109.6

Fortuna (VOR)

18808N 4955E
freq. 114

Fortuna, Rohnerville

18746N 4984E
alt. 390

RWY 11-29 4024 X 98



Eureka Muni

18847N 4997E
alt. 20

RWY 16-34 2699 X 72



Gold Beach (NDB)

19549N 5194E
freq. 396

Gold Beach

19534N 5197E
alt. 16

RWY 16-34 3197 X 72



Goose (NDB)

18977N 6374E
freq. 278

Grants Pass (NDB)

19460N 5525E
freq. 219

Grants Pass, Josephine Co.

19446N 5524E
alt. 1122

RWY 12-30 3998 X 72



Hayfork

18625N 5273E
alt. 2322

RWY 7-25 4113 X 59



Kimberly (VOR)

19930N 6869E
freq. 115.6

Klamath Falls (VOR)

19120N 5968E
freq. 115.9

Klamath Falls, Kingsley

19113N 5962E
alt. 4093

RWY 14-32 10299 X 147
RWY 7-25 5257 X 147
RWY 0-18 5159 X 196



La Grande (NDB)

20046N 7472E
freq. 296

Lakeview (VOR)

19130N 6393E
freq. 112

Lakeview - Lake Co

18970N 6364E
alt. 4726

RWY 16-34 5297 X 98



Lewiston (VOR)

20346N 7937E
freq. 108.2

Manno (NDB)

20335N 7935E
freq. 374

McCall (VOR)

19634N 7954E
freq. 116.2

McNamara

19252N 5150E
alt. 56

RWY 11-29 5001 X 147
RWY 17-35 5001 X 147



Medford (VOR)

19393N 5660E
freq. 113.6

Medford - Jackson Co.

19334N 5655E
alt. 1332

RWY 14-32 5697 X 147
RWY 9-27 3142 X 147



Merrill (NDB)

19041N 5970E
freq. 347

Montague (NDB)

19033N 5674E
freq. 382

Montague - Yreka Rohrer

19034N 5652E
alt. 2526

RWY 14-32 3358 X 49



Montague, Siskiyou Co.

19043N 5681E
alt. 2634

RWY 17-35 7481 X 147



Newport (VOR)

20407N 5613E
freq. 117.1

North Bend (VOR)

19922N 5433E
freq. 112.1

North Bend

19922N 5414E
alt. 13

RWY 13-31 5044 X 147
RWY 4-22 4611 X 147
RWY 16-34 2299 X 147



Ontario (NDB)

19420N 7659E
freq. 305

Ontario

19408N 7634E
alt. 2188

RWY 14-32 4529 X 98



Pendleton (VOR)

20275N 7250E
freq. 114.7

Prineville

19896N 6527E
alt. 3247

RWY 10-28 4998 X 59
RWY 15-33 3998 X 39



Proberta (NDB)

18342N 5502E
freq. 338

Red Bluff (VOR)

18332N 5500E
freq. 115.7

Redding (VOR)

18508N 5545E
freq. 108.4

Redding Muni.

18508N 5545E
alt. 502

RWY 16-34 7002 X 147
RWY 12-30 5061 X 147



Redding Sky Ranch

18514N 5511E
alt. 502

RWY 12-30 2397 X 39



Redding, Benton

18548N 5519E
alt. 718

RWY 15-33 2417 X 78



Redding, Enterprise

18540N 5544E
alt. 581

RWY 16-34 2656 X 42



Redmond (VOR)

19943N 6413E
freq. 117.6

Redmond, Roberts

19909N 6447E
alt. 3077RWY 4-22 7038 X 147
RWY 10-28 6996 X 147

Rome (VOR)

18903N 7217E
freq. 112.5

Rome State

18892N 7188E
alt. 4054

RWY 3-21 5999 X 147



Roseburg (VOR)

19731N 5638E
freq. 108.2

Roseburg

19750N 5653E
alt. 525

RWY 16-34 4598 X 98



Siskiyou Co. (VOR)

19051N 5686E
freq. 110.8

Sisters Eagle Air

19974N 6341E
alt. 3165

RWY 2-20 3548 X 49



14 - KLAMATH FALLS

Sod House (VOR)

18421N 7010E
freq. 114.3

Walla Walla (VOR)

20367N 7490E
freq. 116.4

Wildhorse (VOR)

19427N 7018E
freq. 113.8

Winnemucca (NDB)

18215N 7013E
freq. 375

Winnemucca

18187N 6997E
alt. 4303

RMV 2-20 4998 X 147
RMV 14-32 4998 X 147



KLAMATH FALLS SECTIONAL

- 1 Eugene, Mahlon Sweet
- 2 Sisters Eagle Air
- 3 Bend
- 4 Redmond, Roberts
- 5 Prineville
- 6 Burns
- 7 Ontario
- 8 Rose State
- 9 Alkali Lake State
- 10 Chiloquin State
- 11 Grants Pass, Josephine Co.
- 12 Medford - Jackson Co.
- 13 Roseburg
- 14 North Bend
- 15 Tandon State
- 16 Denmark, Cape Blanco State
- 17 Gold Beach
- 18 McRae
- 19 Nontague - Treka Robner
- 20 Nontague, Siskiyou Co.
- 21 Klamath Falls, Kingsley
- 22 Lakeview - Lake Co.
- 23 Winesburg
- 24 Alturas
- 25 Redding, Benton
- 26 Redding, City Ranch
- 27 Redding Muni.
- 28 Redding, Enterprise
- 29 McKay
- 30 Fortuna, Robersonville
- 31 Fortuna, Murray
- 32 Fortuna Muni
- 33 Arvia

LEGEND

- frequency NDB
- name
- frequency VOR Needle points to magnetic north
- name
- 24 Airport Layout Diagram (runway lengths are 3 times scale length)
- Roads
- Rivers
- Lakes, Reservoirs, Quous
- City or Metropolitan Area

50 nautical miles



Arlington

21619N 6744E
alt. 138

RWY 16-34 5329 X 98
RWY 11-29 2797 X 72



Astoria (VOR)

21017N 5941E
freq. 114

Astoria, Port of Astoria

21009N 5937E
alt. 10

RWY 8-26 5795 X 147
RWY 13-31 5057 X 196
RWY 3-21 3981 X 196



Baker (VOR)

19811N 7453E
freq. 115.3

Bellingham (VOR)

21979N 6763E
freq. 113

Bellingham Int'l

21911N 6748E
alt. 157

RWY 16-34 4998 X 147
RWY 12-30 2181 X 72



Deer Park

21051N 8004E
alt. 2207

RWY 16-34 6097 X 72



Bremerton Nat'l

21414N 6473E
alt. 482

RWY 1-19 6199 X 147
RWY 12-30 2181 X 72



Ellensburg (VOR)

20975N 7025E
freq. 117.9

Ellensburg, Bowers

20986N 7006E
alt. 1765

RWY 7-25 5549 X 147
RWY 11-29 4296 X 147



Burlington, Shagit Reg./Bay View

21772N 6727E
alt. 141

RWY 10-28 5362 X 147
RWY 3-21 5080 X 147



Ephrata (VOR)

21009N 7366E
freq. 112.6

Chehalis Centralia

21114N 6271E
alt. 75

RWY 1-19 4998 X 147
RWY 15-33 4998 X 147



Ephrata

20987N 7332E
alt. 1273

RWY 11-29 7297 X 147
RWY 2-20 6697 X 147



Everett, Snohomish Co

21532N 6670E
alt. 604

RWY 16-34 9006 X 147
RWY 11-29 4946 X 72
RWY 3-21 3726 X 147



Felts

20927N 7989E
alt. 1952

RWY 3-21 4496 X 147
RWY 3-21 3056 X 72



Hoquiam (VOR)

21362N 6002E
freq. 117.7

Kelso (NDB)

20899N 6207E
freq. 256

Kelso - Longview

20882N 6202E
alt. 16

RWY 11-29 4391 X 98



Kitsap (NDB)

21415N 6474E
freq. 206

La Grande (NDB)

20046N 7472E
freq. 296

Laker (NDB)

20601N 6227E
freq. 332

Lewiston (VOR)

20346N 7937E
freq. 108.2

Lewiston - Nez Perce

20358N 7894E
alt. 1437

RWY 8-26 6510 X 147
RWY 11-29 4998 X 98



Lummi (NDB)

21913N 6748E
freq. 385

Manno (NDB)

20335N 7935E
freq. 374

Mason Co (NDB)

21359N 6342E
freq. 348

McChord (VOR)

21245N 6492E
freq. 109.6

Moses Lake, Grant Co

20930N 7370E
alt. 1184

RWY 14-32 13500 X 298
RWY 3-21 9997 X 195
RWY 0-18 3250 X 72
RWY 14-32 3024 X 72



Neah Bay (NDB)

21969N 6139E
freq. 301

Newberg (VOR)

20586N 6051E
freq. 117.4

Newport (VOR)

20407N 5613E
freq. 117.1

Newport

20410N 5615E
alt. 161

RWY 16-34 5077 X 147
RWY 2-20 5077 X 147



Ocean Shores

21386N 6008E
alt. 10

RWY 14-32 2692 X 59



Olympia (VOR)

21226N 6345E
freq. 113.4

Olympia

21226N 6346E
alt. 207

RWY 17-35 5398 X 147
RWY 8-25 4998 X 147



Omak (NDB)

21458N 7502E
freq. 396

Omak

21461N 7505E
alt. 1302

RWY 17-35 4647 X 147



Pendleton

20264N 7276E
alt. 1492

RWY 7-25 6300 X 147
RWY 11-29 5585 X 147
RWY 16-34 4149 X 72



Paine (VOR)

21528N 6668E
freq. 114.2

Pasco (VOR)

20525N 7283E
freq. 108.4

Pasco, Tri Cities

20524N 7282E
alt. 407

RWY 3-21 7698 X 147
RWY 12-30 7698 X 147
RWY 3-21 4427 X 72



Port Angeles, Fairchild Int'l

21752N 6382E
alt. 289

RWY 8-26 5346 X 147
RWY 13-31 3243 X 49



Portland (VOR)

20697N 6226E
freq. 116.6

Portland - Troutdale

20597N 6246E
alt. 36

RWY 7-25 5398 X 147



Pendleton (VOR)

20275N 7250E
freq. 114.7

Portland Hillsboro

20658N 6090E
alt. 203

RWY 12-30 6599 X 147
RWY 2-20 4047 X 147



Quillayute State

21805N 6064E
alt. 194

RWY 4-22 3998 X 72



Portland Int'l

20628N 6194E
alt. 26

RWY 10-28 11010 X 147
RWY 10-28 8003 X 147
RWY 2-20 6999 X 147



Renton (NDB)

21355N 6617E
freq. 353

Renton

21355N 6616E
alt. 30

RWY 15-33 5375 X 196



Pullman (VOR)

20500N 7877E
freq. 109

Pullman - Moscow

20520N 7918E
alt. 1204

RWY 5-23 6730 X 98



Richland

20560N 7237E
alt. 390

RWY 1-19 3998 X 72
RWY 7-25 3991 X 98



Salem, McNary

20413N 5967E
alt. 210

RWY 13-31 5808 X 147
RWY 16-34 5133 X 147



Shelton, Sanderson

21361N 6320E
alt. 279

RWY 17-35 5290 X 147
RWY 5-23 5047 X 98



Seattle (VOR)

21343N 6584E
freq. 116.8

Spokane (VOR)

20907N 7890E
freq. 115.5

Seattle - Tacoma, Henry M. Jackson

21349N 6584E
alt. 430

RWY 16-34 11899 X 147
RWY 15-34 9423 X 147



Spokane Int'l

20923N 7924E
alt. 2371

RWY 3-21 8997 X 147
RWY 7-25 8196 X 147



Seattle, Boeing Fld/King Co

21379N 6599E
alt. 16

RWY 13-31 10000 X 196
RWY 13-31 3709 X 98



Tacoma Narrows

21310N 6482E
alt. 292

RWY 17-35 5001 X 147



Tatoosh (VOR)

21955N 6111E
freq. 112.2

The Dalles (VOR)

20514N 6639E
freq. 112.3

The Dalles

20483N 6604E
alt. 243

RWY 12-30 5097 X 147
RWY 7-25 4647 X 147
RWY 2-20 4405 X 147



Tillamook

20715N 5829E
alt. 36

RWY 13-31 4998 X 147
RWY 1-19 3998 X 147



Toledo - Winlock/Ed Carlson

21012N 6286E
alt. 371

RWY 5-23 4998 X 147



Victoria (VOR)

21993N 6488E
freq. 113.7

Vista

20515N 7249E
alt. 522

RWY 2-20 3489 X 147
RWY 11-29 2997 X 147



Walla Walla (VOR)

20367N 7490E
freq. 116.4

Walla Walla City - Co

20371N 7495E
alt. 1204

RWY 2-20 7186 X 147
RWY 16-34 6596 X 298
RWY 7-25 6448 X 298



Wenatchee (VOR)

21102N 7153E
freq. 111

Wenatchee, Pangborn

21100N 7153E
alt. 1246

RWY 11-29 5497 X 147
RWY 7-25 4345 X 147



16 - SEATTLE

Yakima (VOR)

20787N 6957E
freq. 116

Yakima

20796N 6928E
alt. 1096

RWY 9-27 7599 X 147
RWY 4-22 4290 X 147



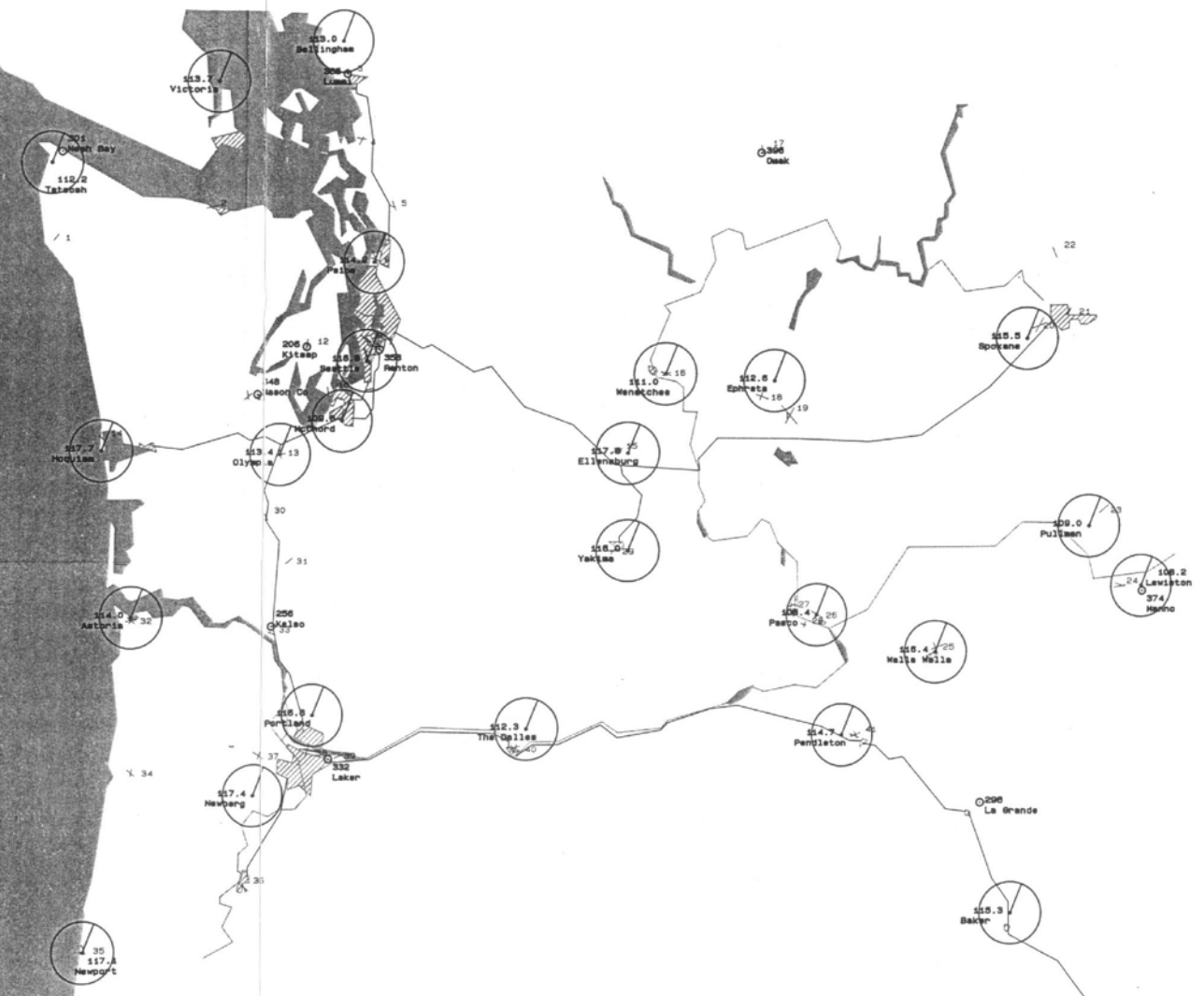
SEATTLE SECTIONAL

- 1 Quillayute State
- 2 Port Angeles, Fairchild Int'l
- 3 Bellingham Int'l
- 4 Burlington, Shaght Reg./Bay View
- 5 Arlington
- 6 Everett, Snohomish Co.
- 7 Brierley
- 8 Seattle - Tacoma, Henry M. Jackson
- 9 Seattle, Boeing Fld/King Co.
- 10 Tacoma Narrows
- 11 Shelton, Sanderson
- 12 Bremerton Nat'l
- 13 Olympia
- 14 Ocean Shores
- 15 Ellensburg, Bowers
- 16 Rosalia, Baborn
- 17 Oak
- 18 Ephrata
- 19 Moses Lake, Grant Co.
- 20 Spokane, Nat'l
- 21 Falls
- 22 Deer Park
- 23 Pullman - Moscow
- 24 Lewiston - Nez Perce
- 25 Walla Walla City - Co.
- 26 Pasco, Tri-Cities
- 27 Vernalis
- 28 Vista
- 29 Rainier
- 30 Chehalis, Centralia
- 31 Toledo - Whitlock/Id. Caribou
- 32 Astoria, Port of Astoria
- 33 Astoria, Longview
- 34 Tillamook
- 35 Newport
- 36 Seaside, Richard
- 37 Portland Hillsboro
- 38 Portland Int'l
- 39 Portland, Troutdale
- 40 The Dalles
- 41 Pendleton

LEGEND

frequency	NDB
name	
frequency	VOR Needle points to magnetic north
name	
	Airport Layout Diagram (runway lengths are 3 times scale length)
	Roads
	Rivers
	Lakes, Reservoirs, Oupens
	City or Metropolitan Area

50 nautical miles



Akron (VOR)

16767N 11508E
freq. 114.4

Alliance (VOR)

17564N 11750E
freq. 111.8

Alliance

17564N 11750E
alt. 3929

RWY 12-30	9200 X 147
RWY 8-25	6340 X 147
RWY 17-35	6310 X 72



Antelope (NDB)

17731N 9745E
freq. 290

Antioch (NDB)

17544N 11759E
freq. 287

Boysen Reservoir (VOR)

18473N 10132E
freq. 117.8

Casper (VOR)

18190N 10728E
freq. 116.2

Casper, Natrona Co Int'l

18125N 10655E
alt. 5346

RWY 3-21 10597 X 147
RWY 12-30 8685 X 147
RWY 7-25 8678 X 147
RWY 16-34 7639 X 147



Chadron (VOR)

17806N 11520E
freq. 113.4

Chadron

17915N 11705E
alt. 3295

RWY 2-20 5999 X 98
RWY 11-29 4401 X 98



Chappell

17130N 11801E
alt. 3680

RWY 12-30 4008 X 42



Cherokee (VOR)

17701N 10207E
freq. 112.2

Cheyenne (VOR)

17301N 11052E
freq. 113.1

Cheyenne

17283N 11046E
alt. 6157

RWY 8-26 9197 X 147
RWY 12-30 6687 X 147
RWY 16-34 4995 X 147



Craig - Moffat

17162N 10118E
alt. 6199

RWY 7-25 5598 X 98



Crazy Woman (VOR)

18585N 10751E
freq. 117.3

Denver (VOR)

16713N 10923E
freq. 117

Deryk (NDB)

18652N 11053E
freq. 380

Douglas (VOR)

17953N 11024E
freq. 108.6

Douglas, Converse Co

17990N 10985E
alt. 4877

RWY 10-26 5064 X 72



Fort Collins Loveland

16990N 10927E
alt. 5015

RWY 15-33 6497 X 98



Fort Collins, Downtown

17051N 10930E
alt. 4935

RWY 11-29 4696 X 49



Fort Morgan

16877N 11313E
alt. 4566

RWY 14-32 5221 X 59



Gill (VOR)

16987N 11082E
freq. 112.8

Gillette (VOR)

18684N 11051E
freq. 114.6

Gillette - Campbell Co

18683N 11051E
alt. 4362

RWY 15-33 7498 X 72
RWY 2-20 5799 X 72



Gordon (NDB)

17860N 11992E
freq. 414

Gordon

17861N 11992E
alt. 3549

RWY 4-22 3899 X 49
RWY 11-29 2299 X 49



Imperial (NDB)

16848N 12041E
freq. 283

Imperial

16848N 12042E
alt. 3273

RWY 13-31 4398 X 98



Greeley - Weld Co

16960N 11051E
alt. 4658

RWY 9-27 6199 X 72



Johno (NDB)

18129N 10624E
freq. 375

Kimball (NDB)

17234N 11416E
freq. 317

Kimball

17235N 11415E
alt. 4913

RWY 11-29 3699 X 72



Hayden (VOR)

17158N 10190E
freq. 115.4

Hayden, Yampa Valley

17137N 10215E
alt. 6596

RWY 10-28 6996 X 98



Hays Center (VOR)

16795N 12266E
freq. 117.7

Kremmling (VOR)

16883N 10427E
freq. 113.8

Laporte (NDB)

17050N 10930E
freq. 387

Laramie (VOR)

17409N 10766E
freq. 117.6

Medicine Bow (VOR)

17641N 10716E
freq. 114.1

Meeker (VOR)

17007N 9949E
freq. 115.2

Meeker

16995N 9959E
alt. 6389

RWY 3-21 4496 X 59



Newcastle (VOR)

18421N 11396E
freq. 108.2

Newcastle, Mondell

18421N 11395E
alt. 4166

RWY 13-31 4696 X 72



Ogallala (NDB)

17116N 12028E
freq. 212

Ogallala, Searle

17116N 12029E
alt. 3280

RWY B-26 4496 X 72
RWY 13-31 3699 X 49



Philip (VOR)

18376N 12225E
freq. 108.4

Philip

18370N 12244E
alt. 2204

RWY 12-30 3998 X 72



Port Morgan (NDB)

16877N 11313E
freq. 338

Ranch (NDB)

18436N 11784E
freq. 254

Rapid City (VOR)

18399N 11803E
freq. 112.3

Rapid City Reg.

18431N 11794E
alt. 3201

RWY 14-32 8598 X 147



Rawlins (VOR)

17699N 10334E
freq. 109.4

Rawlins

17698N 10334E
alt. 6819

RWY 4-22 7006 X 98



Riverton (VOR)

18315N 10050E
freq. 108.8

Riverton Reg.

18314N 10048E
alt. 5524

RWY 10-28 8199 X 147



Rock Springs (VOR)

17728N 9739E
freq. 114.7

Scottsbluff (VOR)

17526N 11523E
freq. 112.6

Scottsbluff

17527N 11485E
alt. 3956

RWY 12-30 8278 X 147
RWY 17-35 8085 X 147
RWY 5-23 7999 X 147



Searle (VOR)

17117N 12026E
freq. 110.2

Sidney (VOR)

17160N 11634E
freq. 115.9

Sidney

17162N 11634E
alt. 4313

RWY 12-30 6599 X 98



Sinclair (NDB)

17689N 10367E
freq. 368

Steamboat Springs, Bob Adams - Routt Co. - Stolport

17128N 10331E
alt. 6878

RWY 14-32 3909 X 98



Thermopolis, Hot Springs - Thermopolis

18549N 10176E
alt. 4579

RWY 1-19 4778 X 98



Torrington

17633N 11319E
alt. 4205

RWY 10-28 5198 X 72
RWY 4-22 2797 X 59



Walden - Jackson Co

17192N 10545E
alt. 8148

RWY 3-21 5897 X 72



Wenz (NDB)

18296N 9618E
freq. 392

Worland (VOR)

18668N 10288E
freq. 114.8

Worland

18661N 10285E
alt. 4244


RWY 16-34 7002 X 98





CHEYENNE SECTIONAL


- 1 Meeker
- 2 Craig - Moffat
- 3 Hayden, Yampa Valley
- 4 Steamboat Springs, Bob Adams - Routt Co. - Stolport
- 5 Walden - Jackson Co
- 6 Fort Collins, Downtown
- 7 Fort Collins Loveland
- 8 Greeley - Weld Co
- 9 Fort Morgan
- 10 Worland
- 11 Thermopolis, Hot Springs - Thermopolis
- 12 Riverton Reg.
- 13 Rawlins
- 14 Casper, Natrona Co Int'l
- 15 Gillette - Campbell Co
- 16 Douglas, Converse Co
- 17 Cheyenne
- 18 Torrington
- 19 Newcastle, Mondell
- 20 Rapid City Reg.
- 21 Phillip
- 22 Chadron
- 23 Scottsbluff
- 24 Kimball
- 25 Sidney
- 26 Alliance
- 27 Gordon
- 28 Chappell
- 29 Ogallala, Searle
- 30 Imperial


LEGEND


frequency NDB

 name


frequency VOR Needle points to magnetic north

 name

 24 Airport Layout Diagram (runway lengths are 3 times scale length)

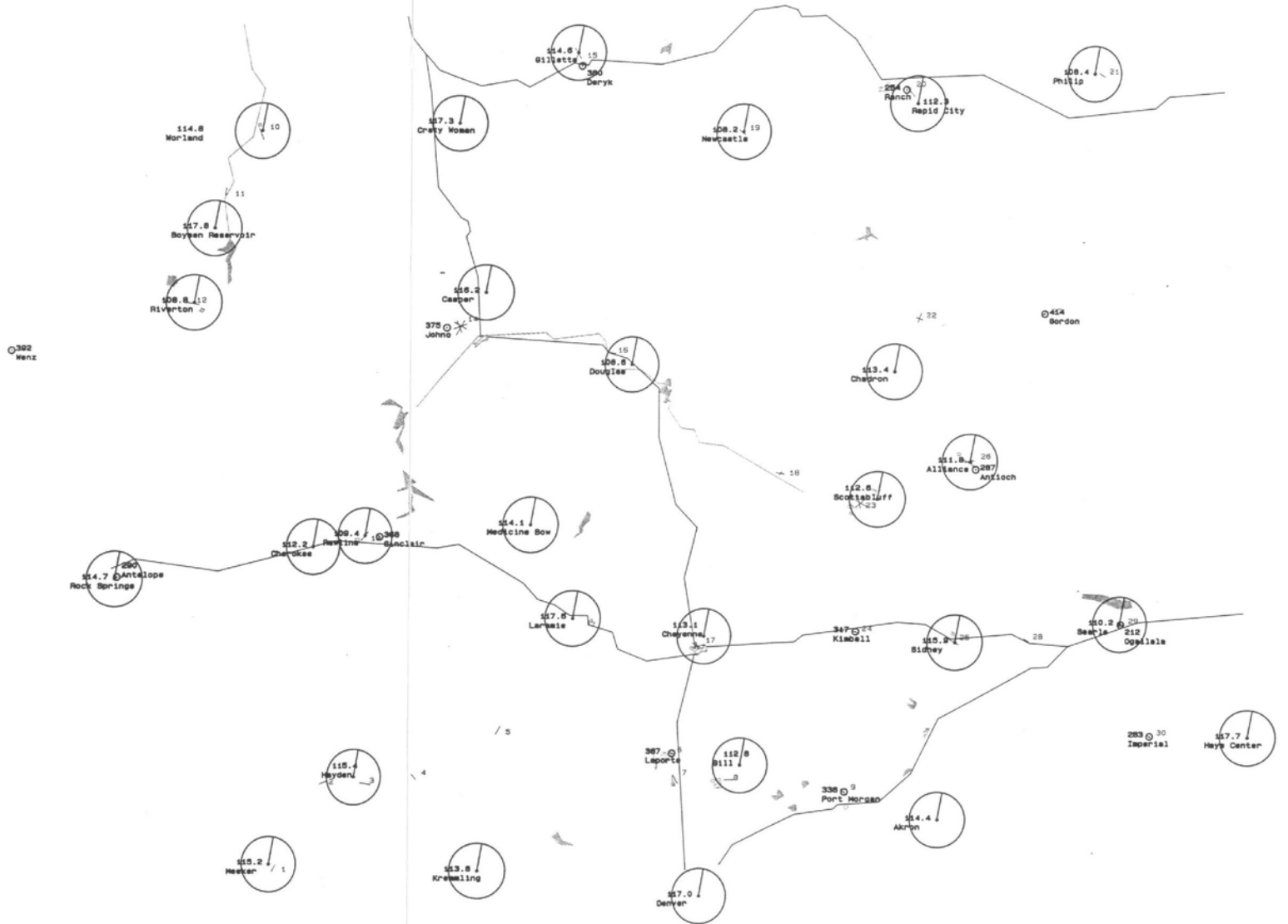
 Roads

 Rivers

 Lakes, Reservoirs, Dams

 City or Metropolitan Area

50 nautical miles



Alamosa (VOR)

15716N 10442E
freq. 113.9

Alamosa - Bergman

15761N 10434E
alt. 7534

RWY 2-20 8498 X 98



Aspen - Pitkin Co, Sardy Fld.

16576N 10225E
alt. 7793

RWY 15-33 7002 X 98



Aztec (NM)

15637N 9647E
alt. 5878

RWY 8-26 4296 X 49
RWY 4-22 2847 X 39



Blanding

16054N 9221E
alt. 5865

RWY 17-35 5999 X 68



Colorado Springs

16279N 10916E
alt. 6173

RWY 17-35 11020 X 147
RWY 12-30 8508 X 147
RWY 3-21 8373 X 147



Canyonlands

16555N 9236E
alt. 4576

RWY 15-33 6897 X 137



Cortez (VOR)

15907N 9514E
freq. 108.4

Cortez - Montezuma Co

15874N 9484E
alt. 5914

RWY 3-21 7202 X 98



Carbon (VOR)

16996N 8986E
freq. 109

Cimarron (VOR)

15298N 10704E
freq. 116.4

Denver (VOR)

16713N 10923E
freq. 117

Colorado Springs (VOR)

16333N 10952E
freq. 112.5

Denver, Arapahoe Co

16615N 10919E
alt. 5871

RWY 16-34 8501 X 98
RWY 16-34 5146 X 75
RWY 10-28 4900 X 59



Denver, Jeffco

16768N 10856E
alt. 5655

RWY 11-29 7494 X 98
RWY 2-20 3598 X 72
RWY 11-29 3998 X 59



Durango - La Plata Co

15752N 9766E
alt. 6685

RWY 2-20 9197 X 147



Denver, Stapleton

16704N 10926E
alt. 5333

RWY 17-35 11998 X 196
RWY 17-35 11499 X 147
RWY 8-26 10003 X 147
RWY 8-26 7924 X 147
RWY 7-25 4860 X 72



Farmington (NM)

15609N 9571E
alt. 5504

RWY 7-25 6701 X 98
RWY 5-23 6500 X 147



Farmington (VOR)

15603N 9618E
freq. 115.3

G111 (VOR)

16987N 11082E
freq. 112.8

Dove Creek (VOR)

16105N 9426E
freq. 114.6

Durango (VOR)

15753N 9770E
freq. 108.2

Grand Junction, Walker

16637N 9671E
alt. 4858

RWY 11-29 10499 X 147
RWY 4-22 5362 X 98



Grand Junction (VOR)

16625N 9577E
freq. 112.4

Gunnison (VOR)

16257N 10113E
freq. 114.9

Hanksville (VOR)

16487N 8892E
freq. 115.9

Hanksville

16487N 8890E
alt. 4444

RWY 8-25 5674 X 72



Kiowa (VOR)

16527N 11082E
freq. 117.5

Kremling (VOR)

16883N 10427E
freq. 113.8

Lake Co

16546N 10411E
alt. 9929

RWY 16-34 5297 X 72



Laporte (NDB)

17050N 10930E
freq. 387

Maxwell (NDB)

15371N 10831E
freq. 284

Meeker (VOR)

17007N 9949E
freq. 115.2

Moab (VOR)

16565N 9232E
freq. 109.8

Monte Vista, San Luis Valley

15809N 10375E
alt. 7610

RWY 1-19 5999 X 49



Montrose (VOR)

16336N 9832E
freq. 108.6

Montrose Co

16333N 9831E
alt. 5760

RWY 12-30 8495 X 98



Pagosa Springs, Stevens

15763N 10015E
alt. 7701

RWY 4-22 5598 X 59



Pueblo (VOR)

16045N 10977E
freq. 116.7

Pueblo

16050N 10953E
alt. 4726

RWY 8-26 10495 X 147
RWY 17-35 8304 X 147
RWY 8-26 4070 X 72
RWY 12-30 8265 X 147



Raton Muni - Crews (NM)

15386N 10850E
alt. 6350

RWY 2-20 5549 X 72
RWY 7-25 4998 X 98



Rifle, Garfield Co

16757N 9970E
alt. 5553

RWY 8-26 5999 X 98



Saguache

16055N 10376E
alt. 7826

RWY 10-28 8039 X 55



Taos (VOR)

15406N 10357E
freq. 117.6

Trinidad (NDB)

15617N 10944E
freq. 329

10 - DENVER

Trinidad, Las Animas Co

15602N 10938E
alt. 5760

RWY 3-21

5493 X 98



DENVER SECTIONAL

- 1 Canyonlands
- 2 Hanksville
- 3 Blanding
- 4 Grand Junction, Walker
- 5 Rifle, Garfield Co.
- 6 Aspen - Pitkin Co. Sardy Fld.
- 7 Lake Co.
- 8 Denver, Jeffco
- 9 Denver, Stapleton
- 10 Denver, Arapahoe Co.
- 11 Colorado Springs
- 12 Pueblo
- 13 Saguache
- 14 Monte Vista, San Luis Valley
- 15 Alamosa - Bergman
- 16 Trinidad, Las Animas Co.
- 17 Pagosa Springs, Stevens
- 18 Durango - La Plata Co.
- 19 Cortez - Montezuma Co.
- 20 Montrose Co.
- 21 Aztec (NM)
- 22 Farmington (NM)
- 23 Raton Muni - Crews (NM)

109.0
Carbon



112.4
Grand Junction



118.5
Colorado Springs



116.7
Pueblo



120
Trinidad
116





117





114
Maxwell


LEGEND


frequency NDB
name
 109.0
Carbon


frequency VOR Needle points to magnetic north
name
 112.4
Grand Junction

 24 Airport Layout Diagram (runway lengths are 3 times scale length)

 Roads

 Rivers

 Lakes, Reservoirs, Oceans

 City or Metropolitan Area

50 nautical miles

Antelope (NDB)

17731N	9745E
freq.	290

Battle Mountain (VOR)

18047N	7135E
freq.	112.2

Bear Lake (NDB)

18196N	9086E
freq.	233

Big Piney (VOR)

18234N	9503E
freq.	116.5

Big Piney

18233N	9507E
alt.	6973

RWY 12-30

4496 X 72



Boise (VOR)

19203N	7768E
freq.	113.3

Boise Air Terminal

19201N 7774E
alt. 2857

RWY 10-28 9761 X 186
RWY 10-28 7399 X 147



Burley

18540N 8373E
alt. 4149

RWY 2-20 4090 X 78
RWY 6-24 4063 X 147



Bonneville (VOR)

17784N 8145E
freq. 112.3

Brigham City (NDB)

17953N 8768E
freq. 294

Brigham City

17964N 8779E
alt. 4225

RWY 16-34 5497 X 72



Cache (NDB)

18070N 8869E
freq. 251

Carbon (VOR)

16996N 8986E
freq. 109

Driggs, Teton Peaks - Driggs

18796N 9331E
alt. 6202

RWY 3-21 5198 X 72



Burley (VOR)

18565N 8352E
freq. 114.1

Dubois (VOR)

19038N 9039E
freq. 116.9

Duchesne

17251N 9155E
alt. 5825

RWY 16-34 5799 X 59



Fort Bridger

17757N 9281E
alt. 7016

RWY 4-22 5077 X 59



Dunoir (VOR)

18773N 9573E
freq. 113.4

Grand Junction (VOR)

16625N 9577E
freq. 112.4

Elko (VOR)

18000N 7523E
freq. 114.5

Hailey, Friedman Mem.

18985N 8341E
alt. 5314

Elko - Harris

18031N 7525E
alt. 5136

RWY 5-23 6399 X 147



RWY 13-31 6599 X 98



Fairfield (VOR)

17425N 8666E
freq. 116.6

Hanksville (VOR)

16487N 8892E
freq. 115.9

Fort Bridger (VOR)

17753N 9272E
freq. 108.6

Idaho Falls (VOR)

18787N 9012E
freq. 109

Idaho Falls, Fanning

18787N 9011E
alt. 4740RWY 2-20 9000 X 147
RWY 16-34 5156 X 147

Kemmerer

17949N 9281E
alt. 7282

RWY 16-34 7015 X 59



Jackpot

18387N 8026E
alt. 5218

RWY 15-33 5198 X 59



Lander Co

18052N 7153E
alt. 4533RWY 3-21 7297 X 147
RWY 12-30 7297 X 147
RWY 6-24 4695 X 49

Jackson (VOR)

18714N 9426E
freq. 108.4

Logan (VOR)

18071N 8875E
freq. 109.8

Jackson Hole

18713N 9425E
alt. 4503

RWY 0-18 6297 X 147



Logan - Cache

18048N 8869E
alt. 4454RWY 17-35 5936 X 147
RWY 10-28 5011 X 98
RWY 5-23 5005 X 147

Lucin (VOR)

18055N 8201E
freq. 113.6

Malad City (VOR)

18272N 8736E
freq. 117.4

Malad City

18242N 8779E
alt. 4503

RWY 16-34 4949 X 59



Mud Lake - West Jefferson Co

18962N 8927E
alt. 4786

RWY 2-20 3299 X 49



Myton (VOR)

17213N 9229E
freq. 117.9

Ogden (VOR)

17835N 8728E
freq. 115.7

Ogden Muni.

17814N 8751E
alt. 4454

RWY 3-21 7297 X 147
RWY 7-25 5598 X 147
RWY 16-34 5349 X 196



Oxyhee

18533N 7558E
alt. 5373

RWY 0-18 6697 X 124



Meeker (VOR)

17007N 9949E
freq. 115.2

Moab (VOR)

16565N 9232E
freq. 109.8

Montrose (VOR)

16336N 9832E
freq. 108.6

Mountain Home (VOR)

18917N 7828E
freq. 114.9

Paris, Bear Lake Co

18194N 9085E
alt. 5927

RWY 10-28 5726 X 147
RWY 16-34 5648 X 147



Provo

17385N 8732E
alt. 4490

RWY 13-31 7094 X 147
RWY 0-18 6933 X 147
RWY 6-24 5592 X 147



Pinedale, Ralph Menz

18296N 9519E
alt. 7085

RWY 13-31 6202 X 98



Rexburg - Madison Co

18896N 9128E
alt. 4858

RWY 17-35 4204 X 72



Pocatello (VOR)

18572N 8758E
freq. 112.6

Pocatello

18588N 8779E
alt. 4448

RWY 3-21 9052 X 147
RWY 16-34 8347 X 298
RWY 7-25 8245 X 298



Rigby

18826N 9071E
alt. 4845

RWY 1-19 3499 X 49



Riverton (VOR)

18315N 10050E
freq. 108.8

Rock Springs (VOR)

17728N 9739E
freq. 114.7

Provo (VOR)

17381N 8728E
freq. 108.4

Rock Springs - Sweetwater Co

17733N 9722E
alt. 6760

RWY 9-27 9997 X 147
RWY 3-21 5221 X 72



Salt Lake City No.2

17575N 8690E
alt. 4608

RWY 16-34 5597 X 98



Roosevelt

17259N 9269E
alt. 5173

RWY 7-25 6497 X 59



Sturgeon (NDB)

18961N 7878E
freq. 333

Sweden (NDB)

18761N 8975E
freq. 350

Tremonton

18047N 8760E
alt. 4333

RWY 17-35 3443 X 72



Salt Lake City (VOR)

17668N 8721E
freq. 116.8

Salt Lake City Int'l

17648N 8719E
alt. 4228

RWY 16-34 12001 X 147
RWY 16-34 9593 X 147
RWY 14-32 5293 X 147



Twin Falls - Sun Valley - Joslin Fld

18582N 8150E
alt. 4152

RWY 7-25 8701 X 147
RWY 12-30 3207 X 98



Twin Falls] (VOR)

18582N 8147E
freq. 115.8

Ustic (NDB)

19222N 7749E
freq. 359

Vernal (VOR)

17258N 9458E
freq. 108.2

Vernal

17287N 9458E
alt. 5274

RWY 16-34 6599 X 147
RWY 7-25 4106 X 59



Wells (VOR)

18078N 7819E
freq. 114.2

Wells, Harriet Fld

18061N 7833E
alt. 5773

RWY 8-26 5497 X 147



Mendover

17807N 8058E
alt. 4241

RWY 3-21 9098 X 147
RWY 12-30 8098 X 147




Wenz (NDB)


18296N 9518E
freq. 392

SALT LAKE CITY SECTIONAL


- 1 Boise Air Terminal
- 2 Twin Falls - Sun Valley - Joslin Fld
- 3 Burley
- 4 Halley, Friedman Mem.
- 5 Pocatello
- 6 Idaho Falls, Fanning
- 7 Mad Lake - West Jefferson Co
- 8 Rexburg - Madison Co
- 9 Rigby
- 10 Driggs, Teton Peaks - Driggs
- 11 Paris, Bear Lake Co
- 12 Malad City
- 13 Jackson Hole
- 14 Pinedale, Ralph Wenz
- 15 Big Piney
- 16 Kemmerer
- 17 Fort Bridger
- 18 Rock Springs - Sweetwater Co
- 19 Owyhee
- 20 Lander Co
- 21 Elko - Harris
- 22 Wells, Harriet Fld
- 23 Jackpot
- 24 Wendover
- 25 Tremonton
- 26 Logan - Cache
- 27 Brigham City
- 28 Ogden Muni.
- 29 Salt Lake City Int'l
- 30 Salt Lake City No.2
- 31 Provo
- 32 Duchesne
- 33 Roosevelt
- 34 Vernal


LEGEND


frequency NOB
 Omak


frequency VOR Needle points to magnetic north
 Victoria


name

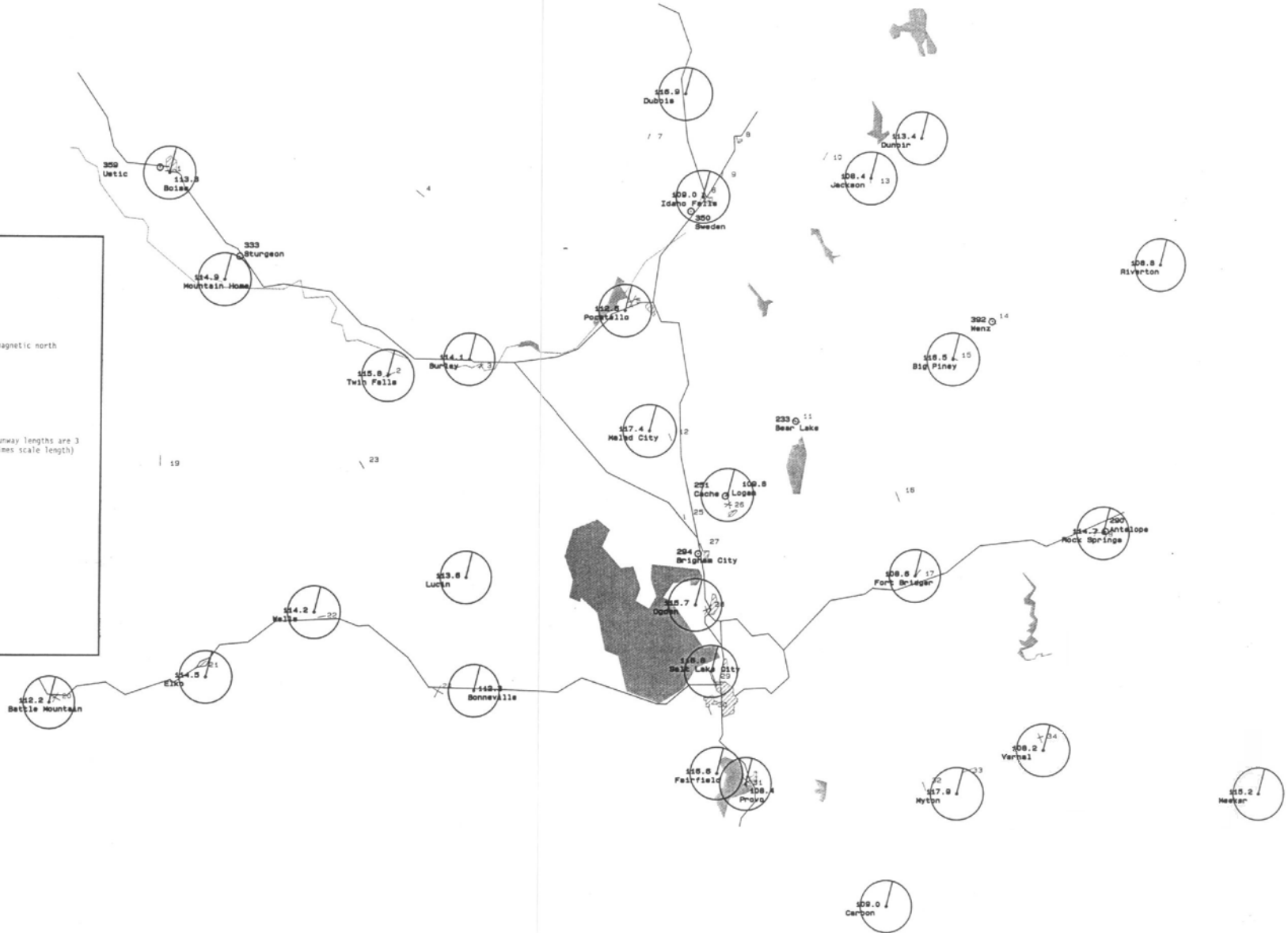
 24 Airport Layout Diagram (runway lengths are 3 times scale length)

 Roads

 Rivers

 Lakes, Reservoirs, Dams

 City or Metropolitan Area



50 nautical miles

Ava, Martin Mem.

15038N 14862E
alt. 1302

RWY 13-31 3598 X 49



Bartlesville (VOR)

15055N 13699E
freq. 117.9

Beatrice (VOR)

16641N 13597E
freq. 110.6

Bilmar (NDB)

15034N 14859E
freq. 341

Brookfield (NDB)

16249N 14780E
freq. 383

Brookfield Mem.

16249N 14782E
alt. 807

RWY 17-35 2997 X 49



Buckhorn (NDB)

15336N 15073E
freq. 391

Butler (VOR)

15634N 14273E
freq. 115.9

Chanute (VOR)

15383N 13874E
freq. 109.2

Chillicothe (NDB)

16267N 14649E
freq. 375

Chillicothe

16266N 14651E
alt. 781

RWY 14-32 3899 X 72



Coffeyville (NDB)

15155N 13862E
freq. 212

Coffeyville

15159N 13868E
alt. 725

RWY 17-35 5871 X 147



Columbia Reg.

15824N 15059E
alt. 889

RWY 2-20 6497 X 147
RWY 13-31 2465 X 72



Concordia (NDB)

16281N 13266E
freq. 335

Cuba Muni.

15492N 15316E
alt. 1023

RWY 0-18 2899 X 49



Dogwood (VOR)

15059N 14792E
freq. 109.4

4 - KANSAS CITY

El Dorado (NDB)

15486N 13461E
freq. 383

El Dorado Muni.

15490N 13466E
alt. 1378

RWY 4-22 4198 X 72



Emporia (VOR)

15685N 13713E
freq. 112.8

Emporia

15704N 13698E
alt. 1207

RWY 0-18 4949 X 98



Emville (NDB)

16642N 14214E
freq. 317

Flippin (VOR)

14739N 14921E
freq. 115.1

Foristell (VOR)

15753N 15476E
freq. 110.8

Forney (VOR)

15357N 15063E
freq. 110

Fort Leavenworth

16121N 14164E
alt. 1597

RWY 15-33 5903 X 98



Fort Leonard Wood

15361N 15061E
alt. 1158

RWY 14-32 6035 X 147



Fort Scott (NDB)

15434N 14162E
freq. 379

Fort Scott

15438N 14166E
alt. 915

RWY 17-35 4496 X 72



Independence

15193N 13799E
alt. 820

RWY 4-22 5497 X 147
RWY 13-31 5497 X 147
RWY 17-35 5497 X 147



Hallsville (VOR)

15951N 15093E
freq. 114.2

Hannibal (NDB)

16206N 15333E
freq. 411

Hannibal

16209N 15335E
alt. 771

RWY 17-35 3899 X 72



Jefferson City (VOR)

15727N 15071E
freq. 110.2

Jefferson City Mem.

15728N 15076E
alt. 548

RWY 12-30 4998 X 98
RWY 8-26 3398 X 72



Johnson Co. (VOR)

15885N 14207E
freq. 113

Johnson Co. Exec.

15890N 14207E
alt. 1092

RWY 17-35 4096 X 72



Harrison (VOR)

14762N 14658E
freq. 112.5

Independence (NDB)

15188N 13794E
freq. 400

Johnson Co. Industrial

15885N 14156E
alt. 1092

RWY 17-35 7337 X 196
RWY 4-22 5218 X 147
RWY 13-31 2797 X 98



Kansas City Int'l

16088N 14227E
alt. 1027

RWY 1-19 10797 X 147
RWY 9-27 9498 X 147



Joplin

15156N 14238E
alt. 981

RWY 13-31 6500 X 147
RWY 4-22 3601 X 72
RWY 0-18 4244 X 98



Kansas City, Fairfax

16016N 14260E
alt. 751

RWY 17-35 7297 X 147
RWY 13-31 5999 X 147



Kansas City (VOR)

16071N 14269E
freq. 112.6

Kansas City Downtown

16002N 14266E
alt. 751

RWY 0-18 6999 X 147
RWY 3-21 5051 X 147



Kansas City, Richards - Gebaur

15885N 14268E
alt. 1092

RWY 0-18 8924 X 147



Kirksville (VOR)

16400N 14959E
freq. 114.6

Lawrence (NDB)

15972N 14051E
freq. 284

Lawrence

15975N 14053E
alt. 833

RWY 14-32 4998 X 98
RWY 1-19 3899 X 72



Manhattan

16074N 13565E
alt. 1056

RWY 3-21 6999 X 147
RWY 13-31 3798 X 98



Lebanon (NDB)

15326N 14883E
freq. 414

Lebanon, Jones Lebanon

15331N 14886E
alt. 1319

RWY 0-18 4998 X 72
RWY 9-27 2374 X 49



Maples (VOR)

15285N 15180E
freq. 113.4

Marshall (NDB)

15962N 14731E
freq. 329

Marshall Mem.

15963N 14733E
alt. 777

RWY 17-35 3899 X 72



Macon (VOR)

16190N 14985E
freq. 112.9

Manhattan (VOR)

16075N 13567E
freq. 110.2

Marysville

16376N 13608E
alt. 1262

RWY 15-33 3007 X 49



McDowell Creek (NDB)

16057N 13579E
freq. 391

McPherson (NDB)

15769N 13194E
freq. 227

Moberly (NDB)

16106N 15002E
freq. 302

Moberly, Omar N. Bradley

16107N 15004E
alt. 855

RWY 13-31 4677 X 98
RWY 5-23 3729 X 81



Mountain View (NDB)

15025N 15192E
freq. 365

Mountain View

15029N 15194E
alt. 1168

RWY 1-19 4696 X 59



Napoleon (VOR)

15981N 14419E
freq. 114

Neosho (VOR)

15015N 14247E
freq. 116.6

Neosho Mem.

15005N 14267E
alt. 1253

RWY 1-19 4998 X 98



Nevada (NDB)

15447N 14325E
freq. 209

Nevada

15452N 14328E
alt. 882

RWY 2-20 5897 X 72
RWY 13-31 2578 X 39



Newton (NDB)

15625N 13321E
freq. 281

Oswego (VOR)

15170N 13992E
freq. 117.6

Ottawa (NDB)

15769N 14022E
freq. 251

Ottawa

15770N 14025E
alt. 964

RWY 17-35 3398 X 49



Parsons (NDB)

15254N 13893E
freq. 293

Parsons, Tri City

15259N 13897E
alt. 899

RWY 17-35 5684 X 98
RWY 4-22 4004 X 98
RWY 13-31 4004 X 98



Pawnee City (VOR)

16586N 13779E
freq. 112.4

Pioneer (VOR)

15054N 13301E
freq. 113.2

Pittsburg (NDB)

15283N 14165E
freq. 365

Pittsburg, Atkinson

15288N 14169E
alt. 948

RWY 3-21 3988 X 72
RWY 16-34 5375 X 98
RWY 10-28 2997 X 95



Quincy (VOR)

16257N 15391E
freq. 113.1

Quincy

16302N 15425E
alt. 768

RWY 4-22 7094 X 147
RWY 0-18 5395 X 147
RWY 13-31 5395 X 147



Razorback (VOR)

14751N 14339E
freq. 116.4

Rolla National

15522N 15200E
alt. 1148

RWY 4-22 5497 X 147
RWY 13-31 5497 X 147



Springfield Reg.

15169N 14624E
alt. 1266

RWY 1-19 7002 X 147
RWY 13-31 5598 X 147



Salina (VOR)

15995N 13241E
freq. 115.3

Sedalia (NDB)

15795N 14729E
freq. 281

Sedalia Mem.

15797N 14730E
alt. 909

RWY 0-18 4998 X 98
RWY 5-23 3598 X 49



St. Joseph (VOR)

16374N 14179E
freq. 108.2

St. Joseph, Rosecrans Mem.

16295N 14178E
alt. 827

RWY 17-35 8058 X 147
RWY 13-31 5999 X 98
RWY 4-22 5097 X 98



Tiger (VOR)

15893N 15010E
freq. 111.2

Springfield (VOR)

15212N 14642E
freq. 116.9

Topeka (VOR)

16034N 13942E
freq. 117.8

Topeka, Billard

16006N 13916E
alt. 879

RWY 13-31 5097 X 147
RWY 17-35 5097 X 147
RWY 4-22 3073 X 98



Whiteman (VOR)

15750N 14590E
freq. 109

Wichita (VOR)

15501N 13202E
freq. 113.8

Topeka, Forbes

15957N 13899E
alt. 1079

RWY 13-31 12818 X 196
RWY 3-21 7999 X 196



Vichy (VOR)

15529N 15218E
freq. 117.7

West Plains (NOB)

14922N 15138E
freq. 335

West Plains

14925N 15141E
alt. 997


RWY 14-32 3207 X 72





KANSAS CITY SECTIONAL


- 1 Marysville
- 2 Manhattan
- 3 Emporia
- 4 Topeka, Forbes
- 5 Topeka, Billard
- 6 St. Joseph, Rosecrans Mem.
- 7 Fort Leavenworth
- 8 Kansas City Int'l
- 9 Kansas City, Fairfax
- 10 Kansas City Downtown
- 11 Johnson Co. Exec.
- 12 Johnson Co. Industrial
- 13 Kansas City, Richards - Gebaur
- 14 Sedalia Mem.
- 15 Marshall Mem.
- 16 Chillicothe
- 17 Brookfield Mem.
- 18 Moberly, Omar N. Bradley
- 19 Columbia Reg.
- 20 Jefferson City Mem.
- 21 Rolla National
- 22 Cuba Muni.
- 23 Quincy
- 24 Hannibal
- 25 Fort Leonard Wood
- 26 Ottawa
- 27 Lawrence
- 28 West Plains
- 29 Mountain View
- 30 Ava, Martin Mem.
- 31 Lebanon, Jones Lebanon
- 32 Springfield Reg.
- 33 Nevada
- 34 Joplin
- 35 Neosho Mem.
- 36 Pittsburg, Alkinson
- 37 Fort Scott
- 38 Parsons, Tri City
- 39 Independence
- 40 Coffeyville
- 41 El Dorado Muni.


LEGEND


frequency NDB
 306
 name Oaak


frequency VOR Needle points to magnetic north
 113.7
 name Victoria

 24 Airport Layout Diagram (runway lengths are 3 times scale length)

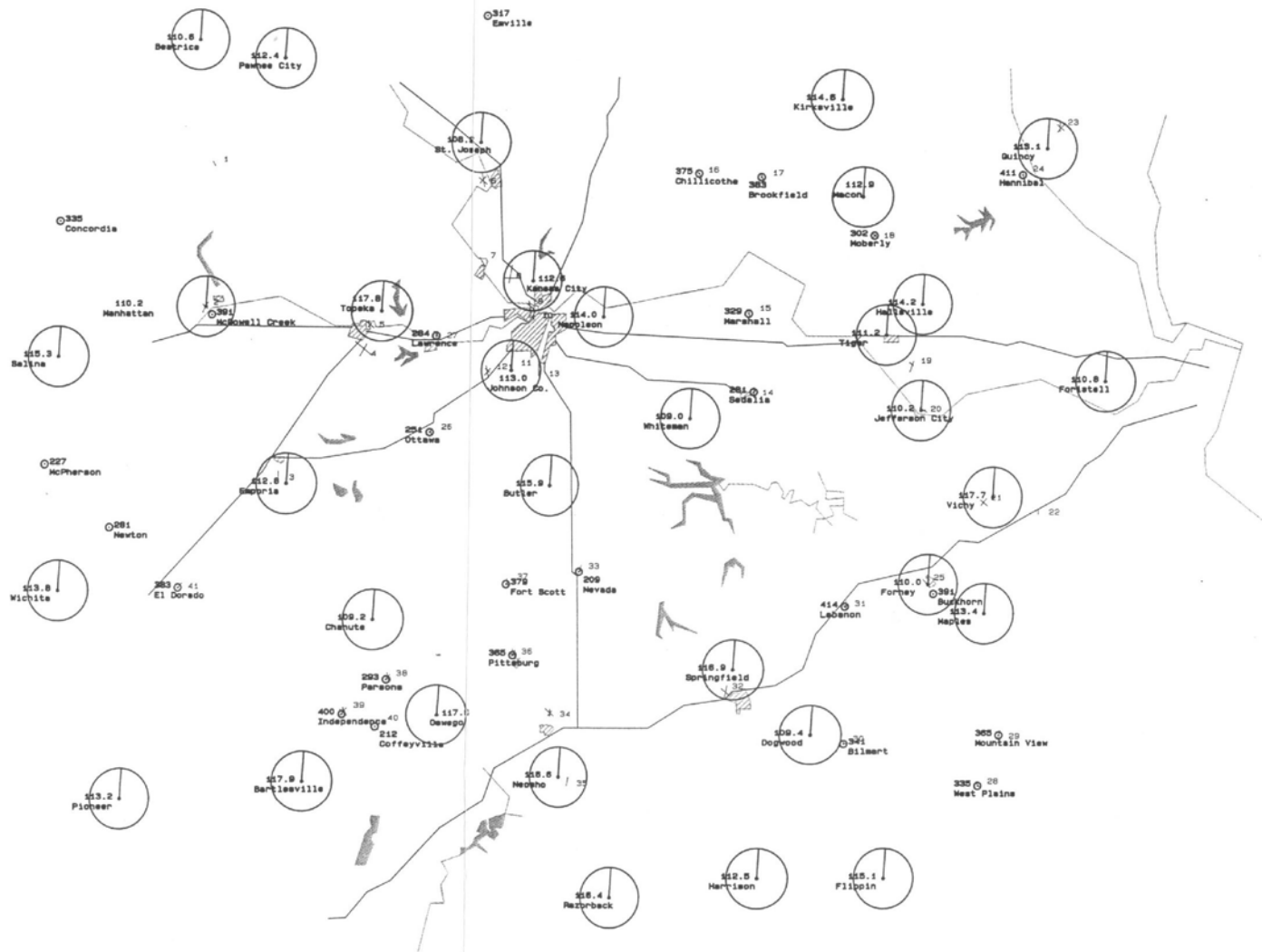
 Roads

 Rivers

 Lakes, Reservoirs, Dams

 City or Metropolitan Area

50 nautical miles



Ainsworth (VOR)

17597N 12617E
freq. 112.7

Ainsworth

17695N 12618E
alt. 2588

RWY 17-35 6799 X 147
RWY 12-30 5497 X 88



Albert Lea (VOR)

18074N 14727E
freq. 109.8

Albert Lea

18074N 14728E
alt. 1256

RWY 16-34 4496 X 98
RWY 4-22 2899 X 72



Amoni (VOR)

16736N 14521E
freq. 116.7

Atlantic (NDB)

17096N 14177E
freq. 365

Atlantic

17098N 14175E
alt. 1164

RWY 12-30 3197 X 72



Broken Bow

17187N 12686E
alt. 2539

RWY 14-32 3745 X 49



Atwood (NDB)

16555N 12157E
freq. 365

Austin (VOR)

18060N 14865E
freq. 108.8

Beatrice (VOR)

16641N 13597E
freq. 110.6

Beatrice

16638N 13598E
alt. 1319

RWY 17-35 5598 X 98
RWY 13-31 4398 X 98



Brookings (VOR)

18374N 13654E
freq. 108.8

Brookings

18374N 13656E
alt. 1637

RWY 12-30 5428 X 98



Burwell (NDB)

17323N 12855E
freq. 362

Burwell, Cram

17322N 12856E
alt. 2181

RWY 15-33 3197 X 49



Broken Bow (NDB)

17188N 12685E
freq. 290

Carroll (NDB)

17369N 14266E
freq. 397

Colby (NDB)

16375N 12128E
freq. 400

Columbus (VOR)

17143N 13430E
freq. 112.2

Columbus

17144N 13434E
alt. 1443

RWY 14-32 5001 X 98



Custer County (VOR)

17210N 12670E
freq. 108.2

Des Moines (VOR)

17100N 14631E
freq. 114.1

Des Moines

17150N 14625E
alt. 958

RWY 12-30 9000 X 147
RWY 5-23 6500 X 147
RWY 12-30 3201 X 98



Emville (NDB)

16542N 14214E
freq. 317

Fairmont (VOR)

18054N 14398E
freq. 110.2

Fairmont

18065N 14400E
alt. 1161

RWY 13-31 5500 X 98
RWY 2-20 3299 X 72



Forest City (NDB)

17881N 14648E
freq. 359

Forest City

17884N 14646E
alt. 1230

RWY 15-33 5799 X 98
RWY 9-27 2699 X 59



Gorin, Wiley

18042N 12693E
alt. 2034

RWY 13-31 3899 X 72



Fort Dodge (VOR)

17614N 14431E
freq. 113.5

Fort Dodge

17590N 14462E
alt. 1158

RWY 6-24 6546 X 147
RWY 12-30 4398 X 98



Grand Island (VOR)

16962N 13103E
freq. 112

Grand Island, Hall Co. Reg.

16954N 13103E
alt. 1847

RWY 4-22 7186 X 147
RWY 17-35 6999 X 147
RWY 13-31 6605 X 147



Fremont (NDB)

17129N 13696E
freq. 287

Fremont

17128N 13697E
alt. 1204

RWY 13-31 3798 X 98
RWY 0-18 2351 X 49



Greenfield (NDB)

17058N 14371E
freq. 338

Greenfield

17059N 14371E
alt. 1364

RWY 13-31 2499 X 49



Gurney

17782N 13455E
alt. 1305

RWY 13-31 6097 X 98
RWY 1-19 3499 X 72



Halfway (VOR)

18300N 14730E
freq. 111.2

Hastings (VOR)

16802N 13050E
freq. 108.8

Hastings

16801N 13050E
alt. 1955

RWY 14-32 5598 X 98
RWY 4-22 4496 X 72



Huron Reg.

18433N 13227E
alt. 1289

RWY 12-30 7199 X 147
RWY 17-35 2997 X 72



Kearney (VOR)

16867N 12857E
freq. 111.2

Kearney

16870N 12866E
alt. 2129

RWY 0-18 7091 X 147
RWY 13-31 5185 X 147



Kirksville (VOR)

16400N 14959E
freq. 114.5

Lee Bird (NDB)

17082N 12335E
freq. 375

Lincoln (VOR)

16906N 13616E
freq. 116.1

Lincoln

16876N 13608E
alt. 1214

RWY 17-35 12900 X 196
RWY 14-32 8619 X 147
RWY 17-35 5497 X 98



Mankato (Kansas) (VOR)

16417N 13075E
freq. 109.8

Mankato (VOR)

18307N 14563E
freq. 110.8

Mankato

18309N 14560E
alt. 1020

RWY 15-33 5398 X 98
RWY 4-22 3998 X 72



Marshall (VOR)

18425N 13971E
freq. 111

Marshall

18427N 13973E
alt. 1178

RWY 12-30 5061 X 98
RWY 2-20 3204 X 72



Maryville

16643N 14211E
alt. 1151

RWY 14-32 3499 X 59
RWY 0-18 1997 X 49



Mason City (VOR)

17820N 14740E
freq. 114.9

Mason City

17849N 14738E
alt. 1214

RWY 17-35 6500 X 147
RWY 12-30 5500 X 147



McCook (VOR)

16689N 12327E
freq. 110

Mitchell (VOR)

18167N 13269E
freq. 109.2

Mitchell

18165N 13270E
alt. 1302

RWY 12-30 6701 X 147
RWY 17-35 5503 X 147



North Platte, Lee Bird Fld

17086N 12332E
alt. 2778

RWY 12-30 7999 X 147
RWY 12-30 6599 X 98
RWY 8-26 4598 X 98
RWY 17-35 4434 X 98



Neola (VOR)

17130N 13980E
freq. 117.1

Newton (VOR)

17249N 14807E
freq. 112.5

Norfolk (VOR)

17378N 13413E
freq. 109.6

Norfolk, Stefan Mem.

17376N 13413E
alt. 1571

RWY 1-19 5799 X 147
RWY 13-31 5799 X 147



O'neill (VOR)

17619N 13028E
freq. 113.9

O'neill

17619N 13026E
alt. 2030

RWY 13-31 4398 X 72



Oberlin (NDB)

16530N 12319E
freq. 341

Omaha (VOR)

16999N 13950E
freq. 116.3

North Platte (VOR)

17054N 12310E
freq. 117.4

Omaha, Eppley Airfield

17060N 13902E
alt. 984

RWY 14-32 8498 X 147
RWY 17-35 6002 X 147
RWY 14-32 4296 X 72



Ord (NDB)

17249N 12913E
freq. 356

Pawnee City (VOR)

16586N 13779E
freq. 112.4

Phillipsburg (NDB)

16416N 12730E
freq. 368

Pierre (VOR)

18483N 12630E
freq. 112.5

Pierre

18481N 12594E
alt. 1742

RWY 13-31 6887 X 147
RWY 7-25 6884 X 147



Platte Center (NDB)

17165N 13420E
freq. 407

Plattsmouth (NDB)

16910N 13885E
freq. 329

Plattsmouth

16910N 13885E
alt. 1200

RWY 16-34 2997 X 49



Sac City (NDB)

17520N 14213E
freq. 356

Sac City

17522N 14212E
alt. 1250

RWY 0-18 3499 X 59
RWY 14-32 2660 X 42



Salix (NDB)

17512N 13789E
freq. 414

Sioux City (VOR)

17519N 13778E
freq. 116.5

Sioux City

17549N 13759E
alt. 1099

RWY 13-31 8997 X 147
RWY 4-22 6887 X 147
RWY 17-35 6596 X 147



Sioux Falls (VOR)

18089N 13660E
freq. 115

Sioux Falls, Foss

18061N 13669E
alt. 1430

RWY 3-21 8997 X 147
RWY 15-33 6655 X 147
RWY 9-27 3148 X 72



Spencer (VOR)

17862N 14150E
freq. 110

Spencer

17863N 14146E
alt. 1338

RWY 12-30 4998 X 98



St. Joseph (VOR)

16374N 14179E
freq. 108.2

Storm Lake (NDB)

17615N 14128E
freq. 227

Storm Lake

17617N 14127E
alt. 1489

RWY 17-35 4198 X 72
RWY 13-31 3033 X 49



Tekamah (VOR)

17257N 13815E
freq. 108.4

Tekamah

17260N 13816E
alt. 1027

RWY 14-32 2899 X 49



Wagner (NDB)

17864N 13157E
freq. 392

Wagner

17862N 13158E
alt. 1476

RWY 8-26 2997 X 49



Thedford (VOR)

17455N 12358E
freq. 108.6

Thedford, Thomas Co

17446N 12418E
alt. 2821

RWY 8-26 2797 X 49



Wahoo (NDB)

17042N 13672E
freq. 400

Wahoo

17041N 13672E
alt. 1223

RWY 2-20 3499 X 49



Valentine (NDB)

17834N 12448E
freq. 314

Valentine, Miller

17834N 12448E
alt. 2588

RWY 13-31 4998 X 98
RWY 2-20 2797 X 49



Winner (VOR)

18082N 12721E
freq. 112.8

Wolbach (VOR)

17131N 13100E
freq. 114.8

Worthington (VOR)

18073N 14037E
freq. 110.6

Worthington

18077N 14038E
alt. 1574

RWY 11-29	5503 X 147
RWY 17-35	4198 X 98



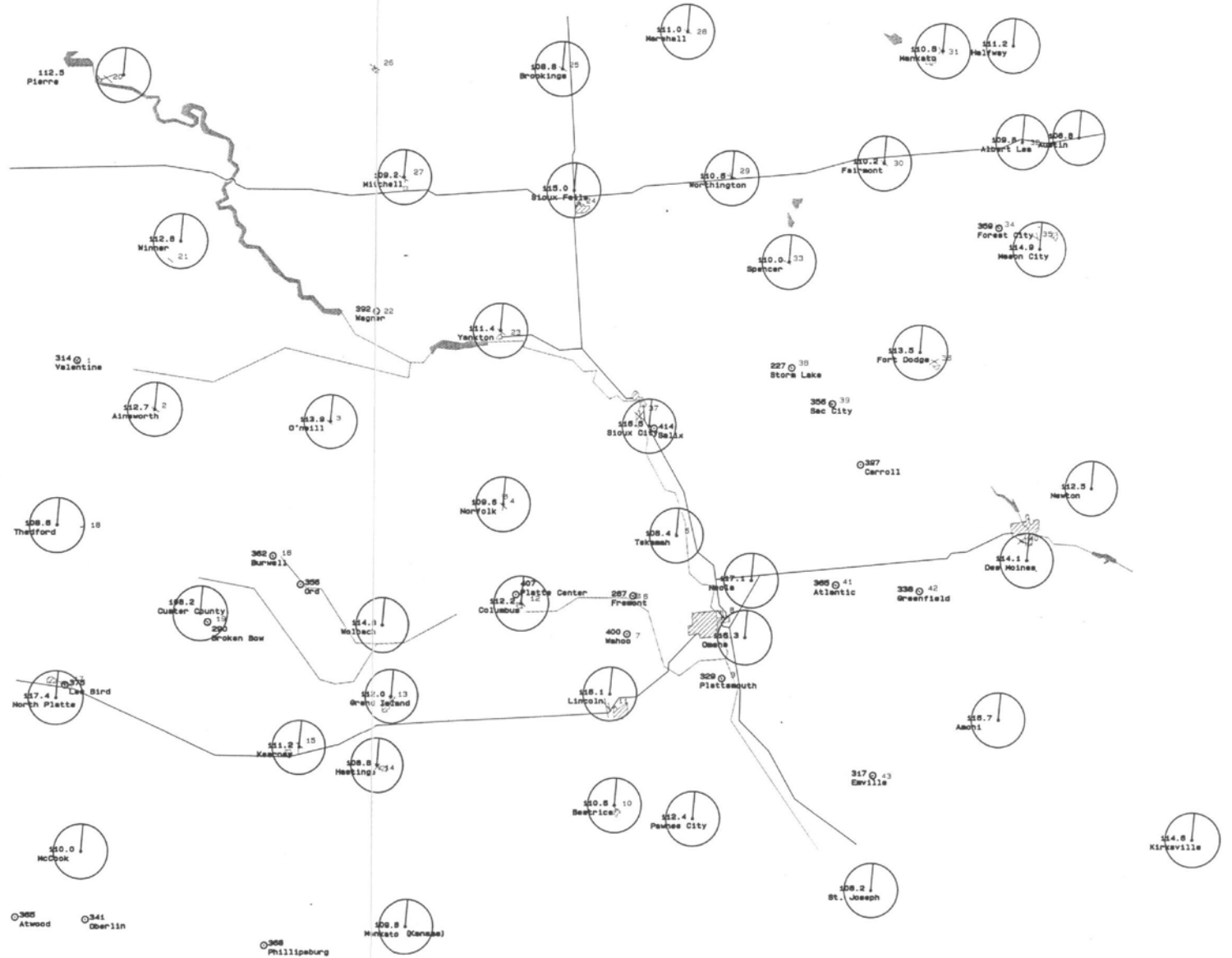
Yankton (VOR)

17784N 13452E
freq. 111.4

OMAHA SECTIONAL

- 1 Valentine, Miller
- 2 Ainsworth
- 3 O'Neill
- 4 Norfolk, Stefan Men.
- 5 Tekamah
- 6 Fremont
- 7 Wahoo
- 8 Omaha, Eppley Airfield
- 9 Plattsmouth
- 10 Beatrice
- 11 Lincoln
- 12 Columbus
- 13 Grand Island, Hall Co. Reg.
- 14 Hastings
- 15 Kearney
- 16 Burwell, Cram
- 17 North Platte, Lee Bird Fld
- 18 Theoford, Thomas Co
- 19 Broken Bow
- 20 Pierre
- 21 Gorin, Wiley
- 22 Wagner
- 23 Gurney
- 24 Sioux Falls, Foss
- 25 Brookings
- 26 Huron Reg.
- 27 Mitchell
- 28 Marshall
- 29 Worthington
- 30 Fairmont
- 31 Mankato
- 32 Albert Lea
- 33 Spencer
- 34 Forest City
- 35 Mason City
- 36 Fort Dodge
- 37 Sioux City
- 38 Storm Lake
- 39 Sac City
- 40 Des Moines
- 41 Atlantic
- 42 Greenfield
- 43 Maryville

Scenario disk
Nr. 6+7



LEGEND

frequency NDB
name
frequency VOR Needle points to magnetic north
name
Airport Layout Diagram (runway lengths are 3 times scale length)
Roads
Rivers
Lakes, Reservoirs, Dams
City or Metropolitan Area

50 nautical miles

Akron (VOR)

16800N 11472E
freq. 114.4

Anthony (VOR)

15270N 12972E
freq. 112.9

Atwood (NDB)

16555N 12157E
freq. 365

Atwood - Rawlins Co

16555N 12156E
alt. 2978

RWY 16-34 3099 X 49



Bear Creek (NDB)

15639N 11782E
freq. 341

Beatrice (VOR)

16541N 13597E
freq. 110.6

Colby (NDB)

16375N 12128E
freq. 400

Colby, Shalz Fld

16376N 12127E
alt. 3182

RWY 17-35 4496 X 72



Concordia (NDB)

16281N 13266E
freq. 335

Concordia, Blosser Muni

16283N 13266E
alt. 1493

RWY 17-35 2997 X 49



Dodge City (VOR)

15647N 12382E
freq. 108.2

Dodge City

15610N 12390E
alt. 2594RWY 14-32 5995 X 98
RWY 2-20 4647 X 98

El Dorado (NDB)

15486N 13461E
freq. 383

Elkhart (NDB)

15375N 11692E
freq. 377

Elkhart Morton Co

15375N 11693E
alt. 3618

RWY 17-35 4897 X 59



Enid - Woodring

14923N 13065E
alt. 1168RWY 17-35 6386 X 147
RWY 2-20 5041 X 72
RWY 12-30 5510 X 108

Fairview (NDB)

14911N 12828E
freq. 246

Fairview

14912N 12829E
alt. 1273

RWY 17-35 3598 X 59



Flagler Avi. Service

16419N 11444E
alt. 4946

RWY 17-35 3899 X 98



Follett (NDB)

15048N 12260E
freq. 407

Follett - Lipscomb

15049N 12261E
alt. 2601

RWY 17-35 4057 X 49



Gage (VOR)

14994N 12338E
freq. 115.6

Gage - Shattuck

14970N 12374E
alt. 2224

RWY 17-35 5434 X 147
RWY 4-22 2699 X 147



Garden City (VOR)

15710N 12139E
freq. 113.3

Garden City

15717N 12142E
alt. 2886

RWY 17-35 5995 X 147
RWY 12-30 4008 X 72



Goodland (VOR)

16392N 11911E
freq. 115.1

Goodland, Renner - Goodland

16384N 11908E
alt. 3654

RWY 12-30 5497 X 98
RWY 5-23 3001 X 49



Great Bend

15816N 12795E
alt. 1893

RWY 11-29 8058 X 147
RWY 17-35 7996 X 147



Gruver (NDB)

15025N 11795E
freq. 359

Gruver

15028N 11797E
alt. 3205

RWY 2-20 4696 X 59



Guymon (NDB)

15228N 11802E
freq. 275

Guymon

15221N 11797E
alt. 3123

RWY 0-18 4296 X 98



Hastings (VOR)

16802N 13050E
freq. 108.8

Hays (VOR)

16045N 12686E
freq. 110.4

Hays

16047N 12686E
alt. 1998

RWY 16-34 5697 X 98



Hill City (VOR)

16256N 12391E
freq. 113.7

Hilyn (NDB)

15821N 12783E
freq. 308

Hugo (VOR)

16253N 11227E
freq. 108.4

Hugoton (NDB)

15418N 11876E
freq. 365

8 - WICHITA

Hugoton

15421N 11878E
alt. 3132

RWY 2-20 3499 X 49
RWY 13-31 2597 X 32



Johnson City, Stanton Co

15625N 11779E
alt. 3323

RWY 17-35 5198 X 68
RWY 8-26 2348 X 68



Hutchinson (VOR)

15625N 13094E
freq. 116.8

Hutchinson

15654N 13123E
alt. 1542

RWY 13-31 6999 X 196
RWY 3-21 5995 X 147
RWY 17-35 4250 X 72



La Junta

15920N 11206E
alt. 4238

RWY 12-30 8272 X 147
RWY 8-26 6848 X 98



Lamar (VOR)

15935N 11497E
freq. 116.9

Lamar

15881N 11487E
alt. 3703

RWY 0-18 6300 X 98
RWY 8-26 4998 X 59



Jetmore

15706N 12431E
alt. 2467

RWY 17-35 4198 X 72



Larned (NDB)

15761N 12712E
freq. 296

Larned - Pawnee Co

15763N 12711E
alt. 2011

RWY 17-35 3548 X 59



Lyons - Rice Co

15785N 13013E
alt. 1692

RWY 17-35 2997 X 49



Leoti, Mark Hoard Mem.

15978N 11967E
alt. 3303

RWY 17-35 3158 X 42
RWY 8-25 2459 X 45



Manhattan (VOR)

16075N 13567E
freq. 110.2

Mankato (Kansas) (VOR)

16417N 13075E
freq. 109.8

Liberal (VOR)

15348N 12004E
freq. 112.3

Liberal

15349N 12009E
alt. 2886

RWY 17-35 7097 X 147
RWY 12-30 7097 X 147
RWY 3-21 6996 X 147



McCook (VOR)

16689N 12327E
freq. 110

McDowell Creek (NDB)

16057N 13579E
freq. 391

McPherson (NDB)

15769N 13194E
freq. 227

Lyons (NDB)

15786N 13013E
freq. 386

McPherson

15771N 13195E
alt. 1495

RWY 0-18 4198 X 72



Newton (NDB)

15625N 13321E
freq. 281

Newton City Co

15626N 13322E
alt. 1528

RWY 17-35 6999 X 98



Meade (NDB)

15418N 12225E
freq. 389

Meade

15420N 12226E
alt. 2529

RWY 17-35 3398 X 49



Oakley (NDB)

16231N 12186E
freq. 380

Oakley

16232N 12185E
alt. 3044

RWY 17-35 3798 X 49



Medford (NDB)

15100N 13096E
freq. 371

Medford

15101N 13097E
alt. 1092

RWY 17-35 2997 X 59



Oberlin (NDB)

16530N 12319E
freq. 341

Oberlin

16532N 12319E
alt. 2690

RWY 17-35 3798 X 49



Pratt

15532N 12801E
alt. 1952

RWY 17-35 5497 X 98
RWY 11-29 3899 X 72



Phillipsburg (NDB)

16416N 12730E
freq. 368

Phillipsburg

16431N 12719E
alt. 1906

RWY 13-31 3798 X 59



Salina (VOR)

15995N 13241E
freq. 115.3

Salina

15957N 13231E
alt. 1273

RWY 17-35 13329 X 298
RWY 12-30 8993 X 147
RWY 4-22 3627 X 147



Pioneer (VOR)

15054N 13301E
freq. 113.2

Pratt (NDB)

15539N 12804E
freq. 356

Scott City

15962N 12123E
alt. 2962

RWY 17-35 4198 X 42



Springfield

15613N 11472E
alt. 4389

RWY 17-35 4933 X 29



St Francis (NDB)

16541N 11910E
freq. 386

St Francis, Cheyenne Co

16558N 11897E
alt. 3411

RWY 13-31 3148 X 49



Superior

16514N 13153E
alt. 1689

RWY 14-32 3699 X 59



Thorp (NDB)

15306N 11451E
freq. 212

Thurman (VOR)

16606N 11427E
freq. 112.9

Tobe (VOR)

16581N 11120E
freq. 115.8

Tribune

15996N 11833E
alt. 3621

RWY 17-35 5120 X 49



Ulysses (NDB)

15607N 11902E
freq. 395

Ulysses

15610N 11904E
alt. 3054

RWY 12-30 5739 X 49
RWY 17-35 5198 X 72



West Woodward (NDB)

15020N 12468E
freq. 329

18 - WICHITA

Wichita (VOR)

15501N 13202E
freq. 113.8

Wichita Mid - Continental

15460N 13250E
alt. 1332

RWY 1-19	10299 X 147
RWY 1-19	7301 X 147
RWY 14-32	6300 X 147



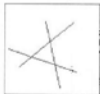
Woodring (VOR)

14919N 13065E
freq. 109

Woodward, West Woodward

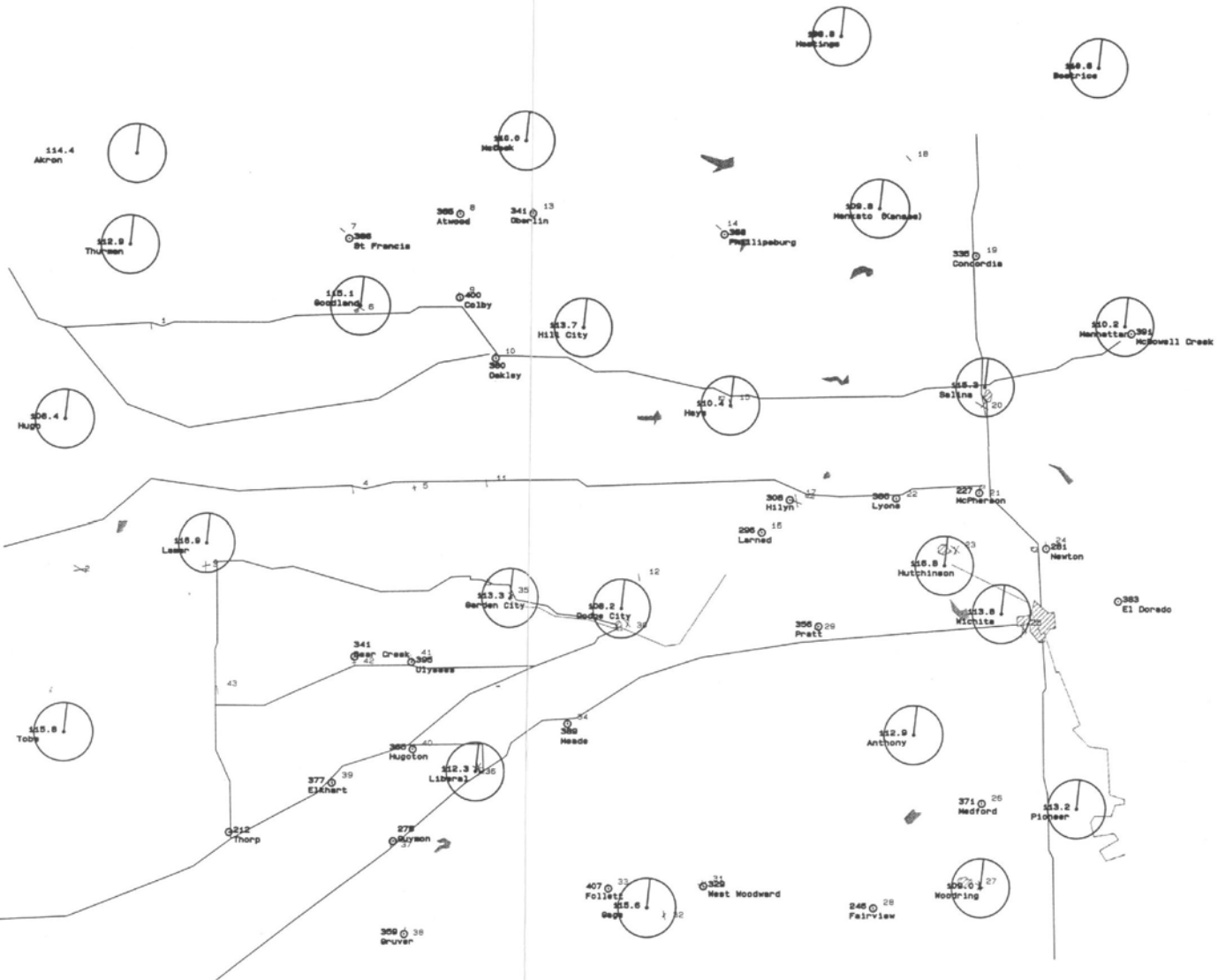
15022N 12469E
alt. 2188

RWY 5-23	5497 X 147
RWY 11-29	5497 X 147
RWY 17-35	5497 X 147



WICHITA SECTIONAL

- 1 Flagler Avl. Service
- 2 La Junta
- 3 Lamar
- 4 Tribune
- 5 Leoti, Mark Hoard Mem.
- 6 Goodland, Remer - Goodland
- 7 St Francis, Cheyenne Co
- 8 Atwood - Rawlins Co
- 9 Colby, Shalz Fld
- 10 Oakley
- 11 Scott City
- 12 Jelmore
- 13 Oberlin
- 14 Phillipsburg
- 15 Hays
- 16 Larned - Pawnee Co
- 17 Great Bend
- 18 Superior
- 19 Concordia, Blosser Muni
- 20 Salina
- 21 McPherson
- 22 Lyons - Rice Co
- 23 Hutchinson
- 24 Newton City Co
- 25 Wichita Mid - Continental
- 26 Medford
- 27 Enid - Woodring
- 28 Fairview
- 29 Pratt
- 30 Dodge City
- 31 Woodward, West Woodward
- 32 Gage - Shattuck
- 33 Follitt - Lipscomb
- 34 Meade
- 35 Garden City
- 36 Liberal
- 37 Guyton
- 38 Gruber
- 39 Elkhart Morton Co
- 40 Hugoton
- 41 Ulysses
- 42 Johnson City, Stanton Co
- 43 Springfield



LEGEND

frequency NDB

 frequency VOR Needle points to magnetic north

 Airport Layout Diagram (runway lengths are 3 times scale length)

 Roads

 Rivers

 Lakes, Reservoirs, Dams

 City or Metropolitan Area

50 nautical miles



Aiken, SC

Aiken Muni

13724N 18819E

alt. 529

RMY 06-24 5000 X 100

RMY 18-36 3800 X 75



Allendale, SC

Allendale Co

13454N 18991E

alt. 160

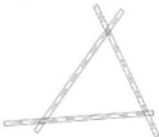
RMY 17-35 3200 X 75



Augusta, GA Bush Field

13599N 18729E
alt. 145

RWY 08-26 6001 X 150
RWY 17-35 8000 X 150



Barnwell, SC Barnwell Co

13564N 18937E
alt. 246

RWY 04-22 5272 X 100
RWY 16-34 5118 X 100



Beaufort, SC MCAS Beaufort

13248N 19211E
alt. 38

RWY 04-22 12200 X 200
RWY 14-32 8000 X 200



Charleston, SC Charleston AFB/Int'l

13448N 19417E
alt. 46

RWY 03-21 7000 X 150
RWY 15-33 9001 X 200



Charleston, SC Charleston Executive

13366N 19462E
alt. 20

RWY 03-21 5000 X 150
RWY 09-27 5000 X 150



Columbia, SC Columbia Metro (F)

13876N 19005E
alt. 236

RWY 05-23 5001 X 150
RWY 11-29 8600 X 150

ATIS 120.15

Charlotte, NC Charlotte / Douglas Int'l (F)

14427N 19030E
alt. 749

RWY 05-23 7501 X 150
RWY 18L-36R 7845 X 150
RWY 18R-36L 10000 X 150

ILS 5
Frequency: 109.5
Heading: 52 degrees
Altitude: 2087 ft. @ LOM

ATIS 121.15

Columbia, SC Conway - Horry Co

13881N 19735E
alt. 35

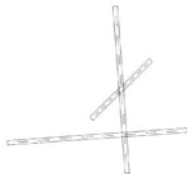
RWY 04-22 3710 X 60



Edenton, NC Edenton Muni

14940N 20524E
alt. 19

RWY 01-19 5600 X 200
RWY 05-23 3700 X 100



Florence, SC Florence City-Co

1400BN 19501E
alt. 147

RWY 09-27 6498 X 150
RWY 18-36 6001 X 150
RWY 05-23 2992 X 150



Fayetteville, NC Fayetteville Muni / Grannis Fld

14386N 19769E
alt. 190

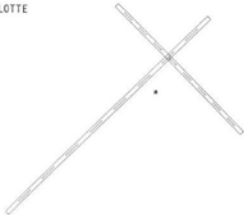
RWY 04-22 7204 X 150
RWY 10-28 4802 X 150



Georgetown, SC Georgetown Co

13653N 19685E
alt. 39

RWY 05-23 5000 X 100
RWY 16-34 4930 X 150
RWY 10-28 4800 X 150



Greensboro, NC Greensboro - High Point - Winston Salem Reg'l

(F) 14829N 19358E
alt. 926

RWY 05-23 10000 X 150
RWY 14-32 6380 X 150

Kinston, NC

Eastern Regional

14589N 20196E
alt. 94

RWY 04-22 6000 X 150
RWY 18-36 5000 X 100
RWY 09-27 2280 X 150



Kingstree, SC Williamsburg Co

13807N 19474E
alt. 68

RWY 14-32 3700 X 75



Lancaster, SC

Lancaster Co

14208N 19069E
alt. 486

RWY 06-24 6000 X 100



Lumberton, NC Lumberton Muni

14214N 19717E
alt. 126

RWY 05-23 5000 X 150
RWY 13-31 5000 X 150

Manteo, NC Dare Co

14923N 20819E
alt. 13

RWY 04-22 3300 X 150
RWY 16-34 3290 X 150
RWY 10-28 3180 X 150



Manning, SC Clarendon Co

13742N 19353E
alt. 104

RWY 01-19 3600 X 75

Mocksville, NC Twin Lakes

14733N 19180E
alt. 820

RWY 09-27 2950 X 50



N Myrtle Beach, SC Grand Strand

(F)

13885N 19876E
alt. 33

RWY 05-23 5996 X 100



Orangeburg, SC

Orangeburg

13666N 19124E
alt. 197

RWY 04-22 4500 X 100



New Bern, NC

Simmons-Nott

14484N 20415E
alt. 19RWY 04-22 4804 X 150
RWY 13-31 4000 X 150

Plymouth, NC

Plymouth Muni

14827N 20475E
alt. 39

RWY 02-20 3700 X 75



Raleigh, NC Raleigh-Durham (F)

14765N 19769E
alt. 437

RWY 05R-23L 7500 X 150
RWY 14-32 4498 X 100



Savannah, GA Savannah Int'l (F)

13078N 19032E
alt. 51

RWY 09-27 9003 X 150
RWY 18-36 7001 X 150



Salisbury, NC Rowan Co

14613N 19151E
alt. 771

RWY 02-20 4200 X 100
RWY 11-29 1900 X 100



Statesboro, GA Statesboro Muni

13224N 18838E
alt. 187

RWY 14-32 5000 X 100
RWY 05-23 4381 X 100



Wallace, NC Henderson

14307N 20094E
alt. 39

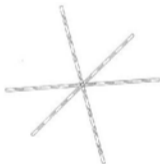
RWY 09-27 4000 X 75



Whiteville, NC Columbus Co

14081N 19853E
alt. 90

RWY 05-23 3700 X 75



Walterboro, SC Walterboro Muni

13441N 19222E
alt. 98

RWY 17-35 5700 X 100

RWY 09-27 5500 X 100

RWY 05-23 5150 X 100



Wilmington, NC New Hanover Co

14108N 20146E
alt. 32

RWY 05-23 7999 X 200

RWY 16-34 7002 X 150



Wilson, NC Wilson Muni

14748N 20059E
alt. 161

RWY 03-21 4500 X 150
RWY 09-27 4500 X 150
RWY 15-33 4500 X 150



Winnsboro, SC Fairfield Co

14019N 18983E
alt. 574

RWY 04-22 3200 X 75

Winston Salem, NC Smith Reynolds

14839N 19258E
alt. 970

RWY 15-33 6655 X 150
RMY 03-21 3938 X 150

Allendale (VOR)

13467N 18967E
freq. 116.7

Barretts Mountain (VOR)

14703N 18907E
freq. 110.8

Charleston (VOR)

13449N 19427E
freq. 113.5

Charlotte (VOR)

14423N 19028E
freq. 110.6

Chesterfield (VOR)

14201N 19283E
freq. 108.2

Columbia (VOR)

13837N 19030E
freq. 114.7

Fayetteville (VOR)

14385N 19771E
freq. 108.8

Florence (VOR)

14038N 19518E
freq. 115.2

Fort Mill (VOR)

14330N 19033E
freq. 112.4

Grand Strand (VOR)

13886N 19859E
freq. 117.6

Greensboro (VOR)

14810N 19345E
freq. 116.2

Kinston (VOR)

14612N 20214E
freq. 109.6

New Bern (VOR)

14484N 20413E
freq. 113.6

Raleigh - Durham (VOR)

14766N 19770E
freq. 117.2

Sandhills (VOR)

14462N 19509E
freq. 111.8

Savannah (VOR)

13103N 19057E
freq. 112.7

24 - CHARLOTTE

Tar River (VOR)

14849N 20142E
freq. 117.8

Vance (VOR)

13688N 19259E
freq. 110.4

Wilmington (VOR)

14145N 20151E
freq. 117

Wright Brothers (VOR)

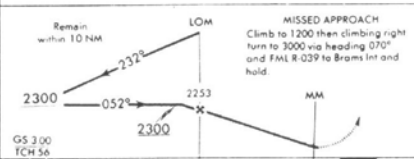
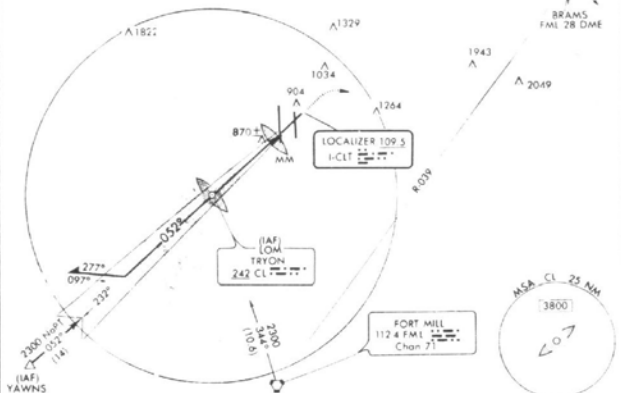
14900N 20845E
freq. 111.6

Amdr 30
ILS RWY 5

AL-78 (FAA)

CHARLOTTE/DOUGLAS INTL (CLT)
 CHARLOTTE, NORTH CAROLINA

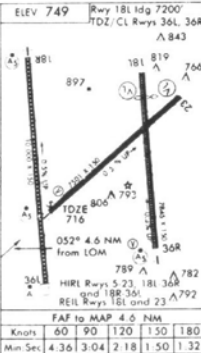
CHARLOTTE APP CON
 125.35 257.2 180°-359°
 126.15 316.7 360°-179°
 CHARLOTTE TOWER
 118.1 257.8
 GND CON 121.9 348.6
 CLNC DEL
 121.4 Δ 2720
 ASR
 ATIS 121.15



MISSED APPROACH
 Climb to 1200 then climbing right
 turn to 3000 via heading 070°
 and FMI R-039 to Brams Int and
 hold.

CATEGORY	A	B	C	D
S-ILS 5	916/24		200 (200-1/2)	
S-LOC 5	1120/24	404 (400-1/2)	1120/40	404 (400-1/2)
CIRCLING	1220-1	471 (500-1)	1220-1 1/2 471 (500-1 1/2)	1300-2 551 (600-2)

Cat. D S-LOC visibility increased to RVR 5000 for inoperative MM.



FAF to MAP 4.6 NM

Knots	60	90	120	150	180
Min Sec	4:36	3:04	2:18	1:50	1:32

ILS RWY 5

35°13'N-80°57'W

CHARLOTTE, NORTH CAROLINA
 CHARLOTTE/DOUGLAS INTL (CLT)

AIRPORT DIRECTORY - CHARLOTTE AREA

CHARLOTTE AREA CHART

FLIGHT SIMULATOR II REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.

CITY	AIRPORT	NORTH	EAST	ALT. F	ILS	
					(Fuel)	(Rev Freq)
Aiken	Aiken Muni	13724	18819	529		
Allendale	Allendale Co.	13454	18991	160		
Augusta	Bush Fld	13599	18729	145		
Barnwell	Barnwell Co.	13564	18937	246		
Beaufort	MCAS Beaufort	13248	19211	38		
Charleston	Charleston AFB(Int'l)	13448	19417	46		
Charleston	Charleston Executive	13366	19462	20		
Charlotte	Douglas Int'l	14427	19030	749		109.5/5
	ATIS 121.5					
Columbia	Columbia Metro	13876	19005	236		
	ATIS 120.15					
Columbia	Conway-Horry Co.	13881	19735	35		
Edenton	Edenton Muni	14940	20524	19		
Fayetteville	Fayetteville Muni/ Grannis Fld	14386	19769	190		
Florence	Florence City-Co.	14008	19501	147		
Georgetown	Georgetown Co.	13653	19685	39		
Greensboro	Greensboro-Highpoint- Winston Salem Reg'l	14829	19358	926		
Kingstree	Williamsburg Co.	13807	19474	68		
Kinston	Eastern Regional	14589	20196	94		
Lancaster	Lancaster Co.	14208	19069	486		
Lumberton	Lumberton Muni	14214	19717	126		
Manning	Clarendon Co.	13742	19353	104		
Manteo	Dare Co.	14923	20819	13		
Mocksville	Twin Lakes	14733	19180	820		
N. Myrtle Beach	Grand Strand	13885	19876	33		
New Bern	Simmons-Nott	14484	20415	19		
Orangeburg	Orangeburg	13666	19124	197		
Plymouth	Plymouth Muni	14827	20475	39		
Raleigh	Raleigh-Durham	14765	19769	437		
Salisbury	Rowan Co.	14613	19151	771		
Savannah	Savannah Int'l	13078	19032	51		
Statesboro	Statesboro Muni	13224	18838	187		
Wallace	Henderson	14307	20094	39		
Walterboro	Walterboro Muni	13441	19222	98		
Whiteville	Columbus Co.	14081	19853	90		
Wilmington	New Hanover	14108	20146	32		
Wilson	Wilson Muni	14748	20059	161		
Winnboro	Fairfield Co.	14019	18983	574		
Winston Salem	Smith Reynolds	14839	19258	970		

LEGEND

Civil-Public use airport
 SANTA MONICA
 ATIS 119.15
 175-50
 Airport Name
 Advisory Frequency (if available)
 Elevation (feet) — Length (hundreds of feet)

NAME
 FREQUENCY VOR

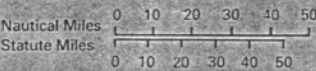
NAME
 FREQUENCY VORTAC (Distance Measuring Equipment Able)

NAME
 FREQUENCY VOR DME

NAME
 FREQUENCY Non Directional Beacon

VOR/DME
 NAME
 FREQUENCY
 If VOR falls directly on an airport, only the airport symbol will be shown. The VOR facility type is shown at the top of the box.

AIRPORT NAME ABBREVIATIONS
 CO County
 FLD Field
 INTL International
 MUNI Municipal



North and east coordinates are canted at + 7° (clockwise) to compensate for orthogonal coordinate grid overlaid on Lambert conformal conic projection.



Alma

Bacon Co.

12789N 18598E
alt. 201

RWY 15-33 5000 x 100



Brooksville Hernando Co

11461N 18702E
alt. 76

RWY 9-27 7000 x 150
RWY 2-20 5000 x 150



Brunswick

Glynco Jetport

12696N 18990E
alt. 26

RWY 7-25 8001 X 150



Camilla - Mitchell Co

12610N 17964E
alt. 171

RWY 8-26 3200 x 60



Brunswick

Malcom McKinnon

12650N 19020E
alt. 20RWY 4-22 5421 x 150'
RWY 15-33 3313 x 100

Cape Canaveral

Cape Canaveral Skid Pad

11519N 19408E
alt. 10

RWY 13-31 10000 x 300



Cape Canaveral

Shuttle Landing Facility

11578N 19355E
alt. 9

RWY 15-33 17000 x 350



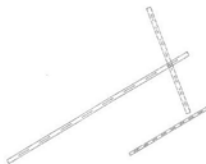
Cordele

Crisp Co - Cordelle

12957N 18119E
alt. 308RWY 4-22 5000 x 100'
RWY 9-27 5000 x 100'

Cross City

Cross City

11950N 18425E
alt. 42RWY 4-22 5000 x 150
RWY 13-31 5000 x 150

Daytona Beach

Daytona Beach Regional

11808N 19210E
alt. 35RWY 6L-24R 7500 x 150
RWY 16-34 4000 x 150
RWY 6R-24L 3197 x 100



Donalsonville

Donalsonville Muni

12511N 17733E
alt. 160

RWY 18-36 5000 x 100
RWY 9-27 4000 x 150



Fitzgerald Fitzgerald Muni

12838N 18314E
alt. 365

RWY 1-19 5000 x 100



Fernandina Beach

Fernandina Beach Muni

12414N 19014E
alt. 15

RWY 4-22 5350 x 100
RWY 13-31 5150 x 150
RWY 8-26 5000 x 150
RWY 17-35 5000 x 150



Gainesville

Gainesville Regional

11993N 18737E
alt. 152

RWY 10-28 7503 x 150
RWY 6-24 4147 x 100



Hazelhurst

Hazelhurst

12937N 18537E
alt. 255

RWY 14-32 4500 x 75

Jacksonville

Jacksonville Intl (F)

12356N 18931E
alt. 30RWY 7-25 8000 x 150
RWY 13-31 7700 x 150

ATIS: 125.85

ILS 13

FREQUENCY: 108.9
HEADING: 134
ALTITUDE: 1629 ft 0 LOM

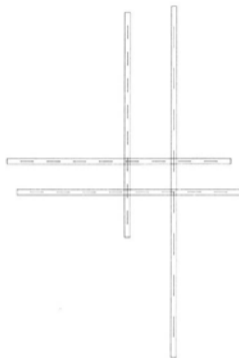


Jacksonville

Jacksonville NAS

12247N 18942E
alt. 22

RWY 9-27 8000 x 200'
RWY 13-31 5977 x 200'



Jacksonville

Cecil Field NAS

12238N 18861E
alt. 80

RWY 18L-36R 12500 x 200
RWY 9L-27R 8000 x 200
RWY 9R-27L 8000 x 200
RWY 18R-36L 8000 x 200



Jacksonville

Craig Muni

12298N 19004E
alt. 41RWY 13-31 4007 x 100
RWY 4-22 4001 x 100

Jesup - Wayne Co.

12809N 18828E
alt. 108

RWY 10-28 3800 x 75



Jacksonville

Herlong

12260N 18892E
alt. 87RWY 7-25 4000 x 100
RWY 11-29 4000 x 100

Moultrie

Moultrie Muni

12564N 18129E
alt. 294RWY 4-22 5127 x 150
RWY 16-34 3878 x 75

Moultrie

Spence

12591N 18166E
alt. 292

RWY 14-32 8000 x 150



Ocala Muni (Taylor Fld)

11773N 18769E
alt. 90RWY 18-36 5007 x 150'
RWY 8-26 3009 x 50'

Orlando

Orlando Intl

11466N 19139E
alt. 96RWY 18R-36L 12004 x 300
RWY 18L-36R 12004 x 200



Ormond Beach Muni

11857N 19184E
alt. 29

RWY 8-26 4000 x 100
RWY 17-35 3695 x 100



St Augustine

12137N 19080E
alt. 10

RWY 6947 x 150
RWY 2600 x 75
RWY 2700 x 60



Perry - Foley

12132N 18237E
alt. 45

RWY 12-30 5013 x 150
RWY 6-24 4900 x 150
RWY 18-36 4900 x 150

Tallahassee

12257N 17942E
alt. 81

RWY 9R-27L 8000 x 150
RWY 18-35 6066 x 150
RWY 9L-27R 3328 x 100

Tallahassee Muni (F)



Thomasville

Thomasville Muni

12483N 18102E
alt. 264

RWY 4-22 5000 x 100
RWY 14-32 5000 x 150



Valdosta Regional

12446N 18332E
alt. 204

RWY 17-35 6302 x 150
RWY 3-21 5596 x 100
RWY 12-30 3628 x 75



Tifton

Henry Tift Myers

12712N 18239E
alt. 355

RWY 15-33 4994 x 120
RWY 9-27 3805 x 95
RWY 3-21 3389 x 75

Waycross-Ware Co

12667N 18645E
alt. 142

RWY 18-36 5042 x 150
RWY 13-31 5012 x 100
RWY 4-22 5035 x 100

Alma (VOR)

12788N 18591E
freq. 115.1

Brooksville (NDB)

11463N 18701E
freq. 278

Brunswick (VOR)

12606N 19005E
freq. 109.8

Caidy (NDB)

12472N 18003E
freq. 338

Camilla (NDB)

12610N 17965E
freq. 369

Cape Canaveral (NDB)

11515N 19429E
freq. 313

Cross City (VOR)

11933N 18447E
freq. 112

Deland (NDB)

11753N 19131E
freq. 201

Dinns (NDB)

12343N 18890E
freq. 344

Donalsonville (NDB)

12512N 17735E
freq. 352

Gainesville (VOR)

11939N 18706E
freq. 116.2

Geiger Lake (NDB)

11562N 19315E
freq. 375

Herlong (NDB)

12261N 18893E
freq. 332

Homerville (NDB)

12576N 18511E
freq. 209

Jacksonville (VOR)

12299N 19003E
freq. 114.5

Kissimmee (NDB)

11415N 19099E
freq. 329

Lakeland (VOR)

11251N 18885E
freq. 116

Leesburg (NDB)

11631N 18934E
freq. 335

Melbourne (VOR)

11358N 19399E
freq. 110

Ocala (VOR)

11773N 18768E
freq. 113.7

Orlando (VOR)

11527N 19127E
freq. 112.2

Ormond Beach (VOR)

11859N 19185E
freq. 112.6

Patten (NDB)

12510N 18123E
freq. 245

Sanford (NDB)

11629N 19156E
freq. 408

Satellite (NDB)

11355N 19383E
freq. 257

Savannah (VOR)

13103N 19057E
freq. 112.7

St Augustine (VOR)

12140N 19073E
freq. 109.4

St Johns (NDB)

12322N 19045E
freq. 305

St. Petersburg (VOR)

11203N 18631E
freq. 116.4

Tallahassee (VOR)

12326N 17928E
freq. 117.5

Taylor (VOR)

12340N 18607E
freq. 112.9

Taylor (VOR)

12342N 18505E
freq. 112.9

24 - JACKSONVILLE

Tift Myers (VOR)

12712N 18235E
freq. 112.5

Valdosta (VOR)

12402N 18332E
freq. 110.4

Vidalia (NDB)

13076N 18622E
freq. 372

Wakul (NDB)

12227N 17938E
freq. 379

Waycross (VOR)

12672N 18581E
freq. 110.2

Wynds (NDB)

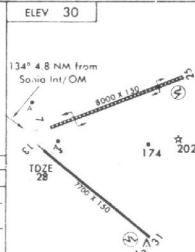
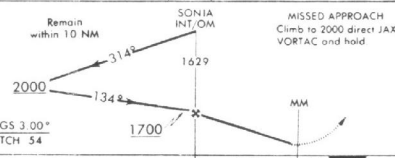
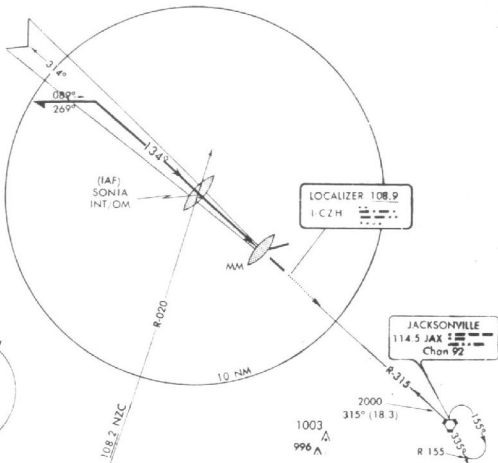
11986N 18777E
freq. 269

Amdt 3
ILS RWY 13

AL-5570 (FAA)

JACKSONVILLE INTERNATIONAL (JAX)
JACKSONVILLE, FLORIDA

JACKSONVILLE APP CON
119.0 335.6
JACKSONVILLE TOWER
118.3 317.7
GND CON
121.9 348.6
CLNC DEL
119.5 348.6
ASR
ATIS 125.85



CATEGORY	A	B	C	D
S-ILS 13		228-1/2	200 (200-1/2)	
S-LOC 13	380-1/2	352 (400-1/2)		380-3/4 352 (400-3/4)
CIRCLING	500-1	470 (500-1)	500-1-1/2 470 (500-1-1/2)	580-2 550 (600-2)

Cat. D S-LOC visibility increased 1/4 mile for inoperative MM.

REIL Rwy 31
TDZ/CL Rwy 7
MIRL Rwy 7-25
MIRL Rwy 13-31

FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

ILS RWY 13

30° 30' N-81° 41' W

JACKSONVILLE, FLORIDA
JACKSONVILLE INTERNATIONAL (JAX)

AIRPORT DIRECTORY - JACKSONVILLE AREA

CITY	AIRPORT	NORTH	EAST	ALT. F	ILS	
					(Fuel)	(Pay/Freq)
Alma	Bacon Co.	12789	18598	201		
Brooksville	Hernando Co.	11461	18702	76		
Brunswick	Glynco Jetport	12696	18990	26		
Brunswick	Malcom Mckinnon	12650	19020	20		
Camilla	Mitchell Co.	12610	17964	171		
Cape Canaveral	Canaveral Skid Pad	11519	19408	10		
Cape Canaveral	Shuttle Landing Facility	11578	19355	9		
Cordele	Crisp Co. - Cordele	12957	18119	308		
Cross City	Cross City	11950	18425	42		
Daytona Beach	Daytona Beach Regional	11808	19210	35		
Donalsonville	Donalsonville Muni	12511	17733	160		
Fernandina Beach	Fernandina Beach Muni	12414	19014	15		
Fitzgerald	Fitzgerald Muni	12838	18314	365		
Gainesville	Gainesville Regional	11993	18737	152		
Hazelhurst	Hazelhurst	12937	18537	255		
Jacksonville	Jacksonville Int'l	12356	18931	30		108.9/13
ATIS 125.85						
Jacksonville	Jacksonville NAS	12247	18942	22		
Jacksonville	Cecil Field NAS	12238	18861	80		
Jacksonville	Craig Muni	12298	19004	41		
Jacksonville	Herlong	12260	18892	87		
Jesup	Wayne Co.	12809	18828	108		
Moultrie	Moultrie Muni	12564	18129	294		
Moultrie	Spence	12591	18166	292		
Ocala (Taylor)	Ocala Muni (Taylor)	11773	18769	90		
Orlando	Orlando Int'l	11466	19139	96		
Ormond Beach	Ormond Beach Muni	11857	19184	29		
Perry	Foley	12132	18237	45		
St. Augustine	St. Augustine	12137	19080	10		
Tallahassee	Tallahassee Muni	12257	17942	81		
Thomasville	Thomasville Muni	12483	18102	264		
Tifton	Henry Tift Myers	12712	18239	355		
Valdosta	Valdosta Regional	12446	18332	204		
Waycross	Ware Co.	12667	18645	142		

LEGEND

- Civil-Public use airport
- Restricted/Private-Nonpublic use airport, having emergency use or landmark value

SANTA MONICA
 ATIS 119.15
 175-50

Airport Name
 Advisory Frequency (if available)
 Elevation (feet) — Length (hundreds of feet)

NAME FREQUENCY VOR

NAME FREQUENCY VORTAC (Distance Measuring Equipment Able)

NAME FREQUENCY VOR/DME

NAME FREQUENCY Non Directional Beacon

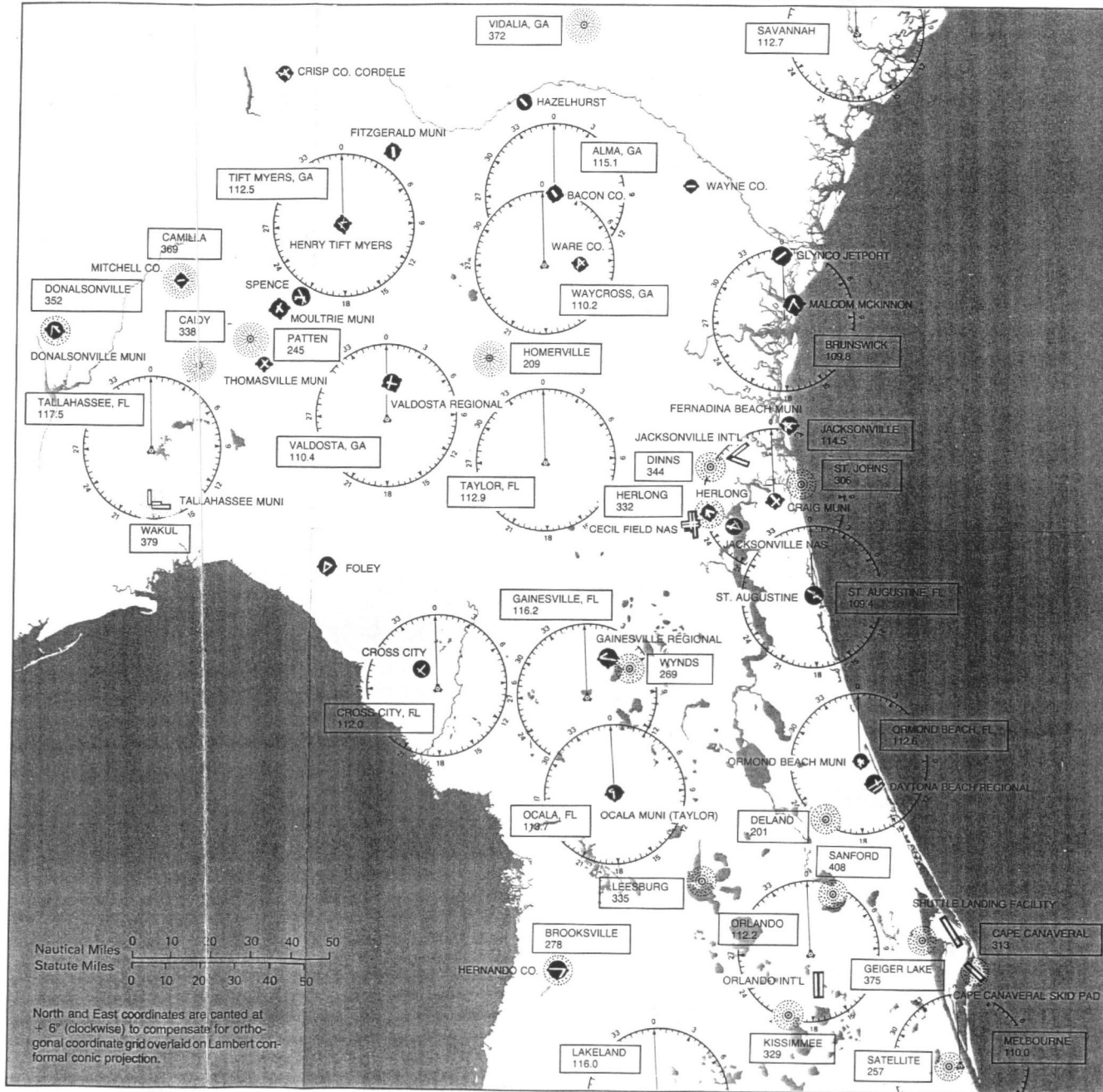
VOR/DME NAME FREQUENCY If VOR falls directly on an airport, only the airport symbol will be shown. The VOR facility type is shown at the top of the box.

AIRPORT NAME ABBREVIATIONS

CO	County
FLD	Field
INTL	International
MUNI	Municipal
(PVT)	Private Airport (prior permission before landing)

JACKSONVILLE AREA CHART

FLIGHT SIMULATOR II REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.





Ft Lauderdale, Ft Lauderdale Exec

10532N 19650E
alt. 14

RWY 8-26	6001 x 100
RWY 13-31	3999 x 100



Ft Myers, Page Fld

10651N 18984E
alt. 18

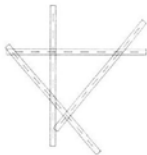
RWY 5-23	6401 x 150
RWY 13-31	4997 x 150



Ft Myers, SW Florida Regional

10634N 19027E
alt. 31

RWY 6-24 8400 x 150



Ft Pierce, St Lucie Co Intl

11083N 19528E
alt. 24

RWY 9-27	5000 x 200
RWY 4-22	5000 x 200
RWY 14-32	5000 x 100
RWY 18-36	5000 x 200



Frostproof, River Ranch Resort

11184N 19200E
alt. 55

RWY 16-34 4950 x 75



Homestead General

10223N 19528E
alt. 9

RWY 18-36 4000 x 100
RWY 9-27 3000 x 75



Immokalee, Immokalee

10599N 19167E
alt. 37

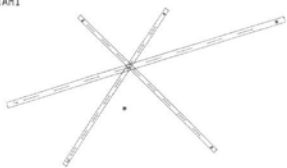
RWY 4-22 5000 x 150
RWY 9-27 5000 x 150
RWY 18-36 5000 x 150



Key West, Key West Intl

9779N 19085E
alt. 4

RWY 9-27 4800 x 100



Key West, NAS Key West (F)

9790N 19114E
alt. 6

RWY 7-25 10000 x 200
RWY 3-21 7000 x 150
RWY 13-31 7000 x 150



La Belle, La Belle

10732N 19147E
alt. 18

RWY 14-32 3810 x 50



Lakeland, Lakeland Muni

11254N 18885E
alt. 142

RWY 9-27 6000 x 150
RWY 13-31 5002 x 150
RWY 5-23 5000 x 150



Lake Wales, Lake Wales Muni

11220N 19039E
alt. 125

RWY 6-24 4000 x 100
RWY 17-35 4000 x 100



Marathon

9873N 19356E
alt. 6

RWY 7-25 5000 x 100



Marco Island, Marco

10402N 19075E
alt. 6

RWY 17-35 5008 x 100

Miami, Miami Intl (F)

10357N 19615E
alt. 10

RWY 9R-27L 13002 x 150
RWY 9L-27R 10502 x 200
RWY 12-30 9501 x 150

ILS 27R

FREQUENCY: 109.1
HEADING: 270
ALTITUDE: 1369 ft. @ LOM



Miami, Opa Locka West (F)

10419N 19561E
alt. 8

RWY 9-27 3000 x 150
RWY 18-36 3000 x 150

Naples, Naples Muni

10468N 19028E
alt. 9

RWY 4-22 5000 x 150
RWY 13-31 5000 x 100



Miami, Tamiami

10288N 19569E
alt. 10

RWY 9L-27R 5002 x 150
RWY 9R-27L 4999 x 150
RWY 13-31 4001 x 150

Okeechobee, Okeechobee Co

10970N 19354E
alt. 34

RWY 4-22 5000 x 150
RWY 13-31 4000 x 100



Pahokee, Palm Beach Co Glades

10770N 19429E
alt. 17

RWY 17-35 4620 x 75
RWY 7-25 1617 x 100



Pompano Beach, Pompano Beach Airpark

10558N 19674E
alt. 20

RWY 14-32 4420 x 150
RWY 5-23 4000 x 150
RWY 10-28 3500 x 100

Punta Gorda, Charlotte Co

10791N 18922E
alt. 25

RWY 3-21 5000 x 150
RWY 9-27 5000 x 150
RWY 15-33 4800 x 150



St Petersburg-Clearwater Intl

11205N 18630E
alt. 11

RWY 17L-35R	7989 x 150
RWY 4-22	5500 x 150
RWY 9-27	5165 x 150
RWY 17R-35L	4000 x 75



Sarasota, Sarasota-Bradenton

10983N 18696E
alt. 28

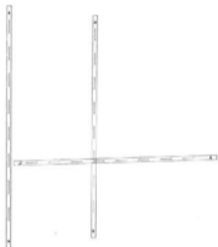
RWY 14-32	7003 x 150
RWY 4-22	5004 x 150



Sebring, Sebring Airport and Industrial Park

11041N 19160E
alt. 63

RWY 18-36	5190 x 300
RWY 14-32	5190 x 300



Tampa, MacDill AFB

11186 18704
alt. 14

RWY 4-22 11420 x 250



Tampa, Tampa Int'l (F)

11240N 1869CE
alt. 27

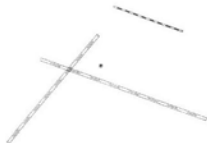
RWY 18R-36L 11000 x 150
RWY 18L-36R 8300 x 150
RWY 9-27 6998 x 150

Venice, Venice Muni

10845N 18748E
alt. 19

RWY 4-22 5000 x 150
RWY 13-31 5000 x 150

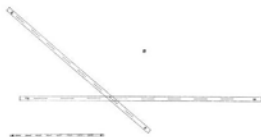




Vero Beach, Vero Beach Muni (F)

11154N 19505E
alt. 25

RWY 11R-29L 7180 x 100
RWY 4-22 4975 x 100
RWY 11L-29R 2637 x 50



West Palm Beach, Palm Beach Int'l (F)

10746N 19662E
alt. 19

RWY 9L-27R 7989 x 150
RWY 13-31 6930 x 150
RWY 9R-27L 3152 x 75

ATIS: 123.75

ILS 9L

FREQUENCY: 109.3
HEADING: 96
ALTITUDE: 1906 ft @LOM



Winter Haven, Bartow Muni

11241N 18979E

alt. 128

RWY 5-23 5000 x 100

RWY 9-27 5000 x 150



Congo Town

9749N 20746E

alt. 15

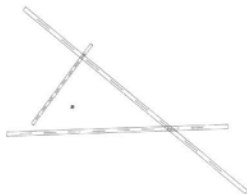
RWY 10-28 5000 x 100

Freeport Int'l (F)

10737N 20209E

alt. 7

RWY 6-24 11000 x 150



Grand Bahama Aux AF

10782N 20338E
alt. 9

RWY 6-24 7200 x 150



Nassau Int'l (F)

10136N 20749E
alt. 10

RWY 13-31 11000 x 150
RWY 9-27 8000 x 150
RWY 4-22 2700 x 100



Marsh Harbour

10783N 20830E
alt. 10

RWY 9-27 5000 x 150

South Bimini

10350N 20020E
alt. 10

RWY 9-27 5000 x 150



Treasure Cay

10871N 20702E
alt. 11

RWY 13-31 7000 x 150

Bimini (VOR)

10350N 20011E
freq. 116.7

Biscayne Bay (VOR)

10306N 19668E
freq. 117.1

Cape Canaveral (NDB)

11515N 19429E
freq. 313

Cook (NDB)

10356N 19596E
freq. 365

Deland (NDB)

11753N 19131E
freq. 201

Fish Hook (NDB)

9774N 19073E
freq. 332

Fort Pierce (NDB)

11083N 19528E
freq. 275

Freeport (NDB)

10719N 20184E
freq. 209

Freeport (VOR)

10735N 20210E
freq. 113.2

Ft Lauderdale (VOR)

10477N 19662E
freq. 111.4

Ft Myers (VOR)

10553N 18982E
freq. 117.6

Ft Pierce (NDB)

11084N 19529E
freq. 275

Ft. Lauderdale (VOR)

10478N 19663E
freq. 111.4

Ft. Myers (VOR)

10552N 18983E
freq. 117.6

Geiger Lake (NDB)

11562N 19315E
freq. 375

Key West (VOR)

9791N 19067E
freq. 113.5

Kissimmee (NDB)

11415N 19099E
freq. 329

La Belle (VOR)

10759N 19159E
freq. 110.4

Lakeland (VOR)

11251N 18885E
freq. 116

Leesburg (NDB)

11631N 18934E
freq. 335

Marathon (NDB)

9863N 19340E
freq. 260

Marsh Harbour (NDB)

10783N 20831E
freq. 351

Melbourne (VOR)

11346N 19407E
freq. 110

Miami (NDB)

10345N 19582E
freq. 322

Miami (VOR)

10422N 19547E
freq. 115.9

Nassau (VOR)

10133N 20759E
freq. 112.7

OCALA ,FL (VOR)

11770N 18767E
freq. 113.7

Orlando (VOR)

11527N 19127E
freq. 112.2

Pahokee (VOR)

10772N 19430E
freq. 112.4

Palm Beach (VOR)

10742N 19667E
freq. 115.7

Perrine (NDB)

10287N 19543E
freq. 266

Plantation (NDB)

10503N 19636E
freq. 242

Punta Gorda (VOR)

10791N 18924E
freq. 110.2

Rubin (NDB)

10743N 19619E
freq. 356

Sanford (NDB)

11629N 19156E
freq. 408

Sarasota (VOR)

10985N 18695E
freq. 115.2

Satellite (NDB)

11334N 19381E
freq. 257

Sebring (NDB)

11041N 19156E
freq. 382

St. Petersburg (VOR)

11203N 18631E
freq. 116.4

Treasure Cay (NDB)

10847N 20741E
freq. 233

30 - MIAMI

Treasure Cay (VOR)

10867N 20710E
freq. 112.9

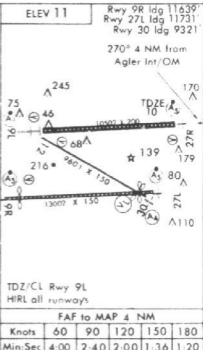
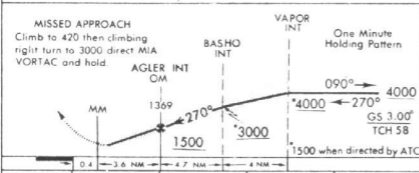
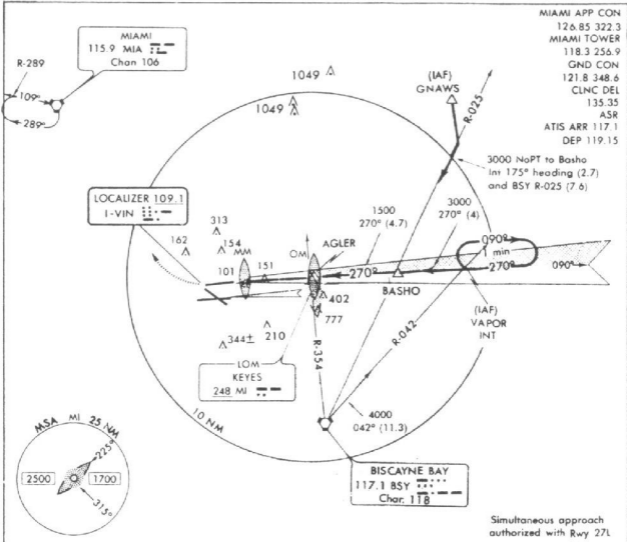
Vero Beach (VOR)

11162N 19478E
freq. 117.3

Amdt 10
ILS RWY 27R

AL-257 (FAA)

MIAMI INTERNATIONAL (MIA)
MIAMI, FLORIDA



CATEGORY	A	B	C	D
S-ILS 27R		210-½	200 (200-½)	
S-LOC 27R	460-½	450 (500-½)	460-¾ 450 (500-¾)	460-1 450 (500-1)
CIRCLING	NA			

ILS RWY 27R

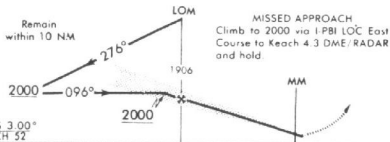
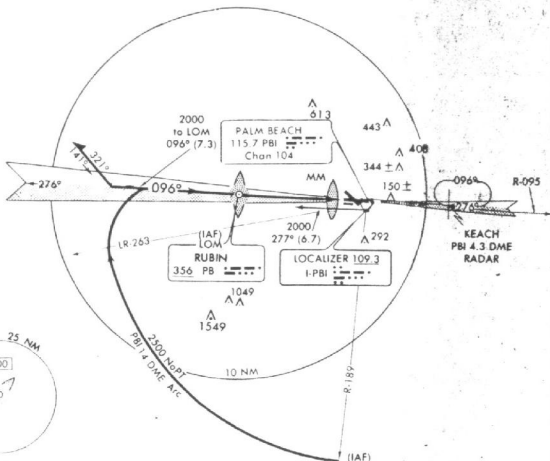
25°48'N - 80°17'W

MIAMI, FLORIDA
MIAMI INTERNATIONAL (MIA)

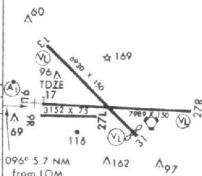
Amdt 21
ILS RWY 9L

WEST PALM BEACH/PALM BEACH INTL (PBI)
AL-449 (FAA)
WEST PALM BEACH, FLORIDA

PALM BEACH APP CON
124.6 317.4
PALM BEACH TOWER
119.1 257.8
GND CON
121.9
CLNC DEL
121.6
ASR
ATIS 123.75



ELEV 19 Rwy 31 Idg 6502'



REIL Rwy 13, 27R and 31
MIRL Rwy 13-31
HIRL Rwy 9L 27R

FAF to MAP 5.7 NM					
Knots	60	90	120	150	180
Min. Sec	5:42	3:48	2:51	2:17	1:54

CATEGORY	A		B		C		D	
	1	2	1	2	1	2	1	2
S-ILS 9L	217/24 200 (200-1/2)							
S-LOC 9L	480/24	463 (500-1/4)	480/40	463 (500-1/4)	480/50	463 (500-1)		
CIRCLING	480-1	461 (500-1)	500-1 1/2	481 (500-1 1/2)	660-2	641 (700-2)		

ILS RWY 9L

26°41'N-80°06'W

WEST PALM BEACH, FLORIDA
WEST PALM BEACH/PALM BEACH INTL (PBI)

AIRPORT DIRECTORY - MIAMI AREA

CITY	AIRPORT	NORTH	EAST	ALT. F	ILS (Ray/Freq)
Ft Lauderdale	Ft Lauderdale Exec	10532	19650	14	
Ft Myers	Page Fld	10651	18984	18	
Ft Myers	SW Florida Regional	10634	19027	31	
Ft Pierce	St. Lucia Co. Int'l	11083	19528	24	
Frostproof	River Ranch Resort	11184	19200	55	
Homestead	Homestead General	10223	19528	9	
Immokalee	Immokalee	10599	19167	37	
Key West	Key West Int'l	9779	19085	4	
Key West	NAS Key West	9790	19114	6	
La Belle	La Belle	10732	19147	18	
Lakeland	Lakeland Muni	11254	18885	142	
Lake Wales	Lake Wales Muni	11220	19039	125	
Marathon	Marathon	9873	19356	6	
Marco Island	Marco	10402	19075	6	
Miami	Miami Int'l	10357	19615	10	* 109.1/27R
Miami, Hialeah	Opa Locka West	10419	19561	8	
Miami	Tamiami	10288	19569	10	
Naples	Naples Muni	10468	19028	9	
Okeechobee	Okeechobee Co.	10970	19354	34	
Pahokee	Palm Beach Co. Glades	10770	19429	17	
Pompano Beach	Pompano Beach Airpark	10558	19674	20	
Punta Gorda	Charlotte Co.	10791	18922	25	
St. Petersburg	Clearwater Int'l	11205	18630	11	
Sarasota	Sarasota-Bradenton	10983	18696	28	
Sebring	Sebring Airport/Ind. Park	11041	19160	63	
Tampa	Tampa Int'l	11240	18690	27	
Tampa	MacDill AFB	11186	18704	14	
Venice	Venice Muni	10845	18748	19	
Vero Beach	Vero Beach Muni	11154	19505	25	
West Palm Beach	West Palm Beach Int'l	10746	19662	19	* 109.3/9L
	ATIS 123.75				
Winter Haven	Bartow Muni	11241	18979	128	

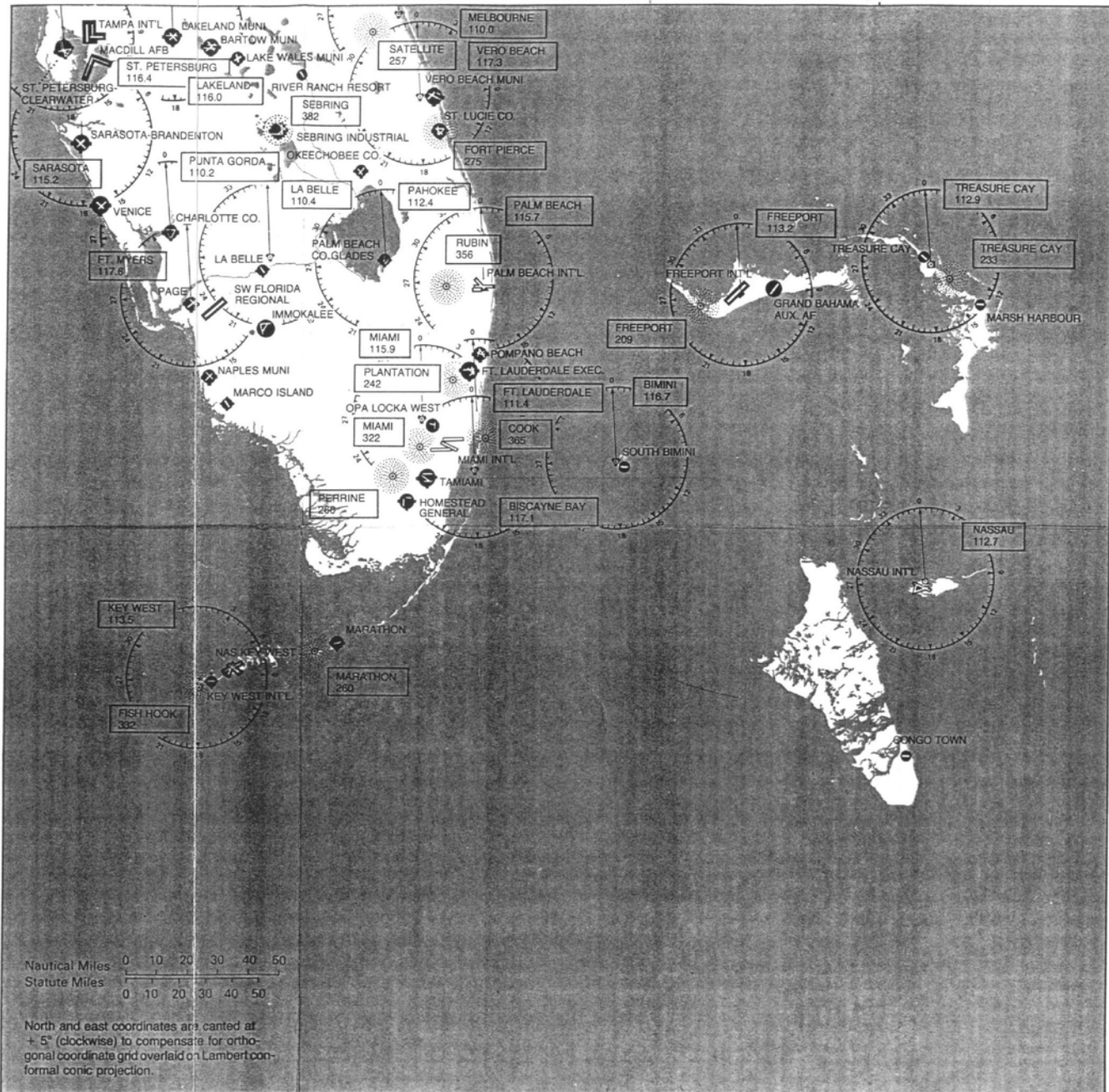
BAHAMAS				
Congo	Congo Town	9749	20746	15
Freeport	Freeport Int'l	10737	20209	7
Grand Bahama	Grand Bahama Aux AF	10782	20338	9
Marsh Harbour	Marsh Harbour	10783	20830	10
Nassau	Nassau Int'l	10136	20749	10
South Bimini	South Bimini	10350	20020	10
Treasure Cay	Treasure Cay	10871	20702	11

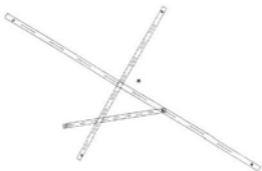
LEGEND

	Civil-Public use airport
	Airport Name Advisory Frequency (if available) Elevation (feet) — Length (hundreds of feet)
	VOR
	VORTAC (Distance Measuring Equipment Able)
	VOR/DME
	Non Directional Beacon
	If VOR falls directly on an airport, only the airport symbol will be shown. The VOR facility type is shown at the top of the box.

MIAMI AREA CHART

FLIGHT SIMULATOR II REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.

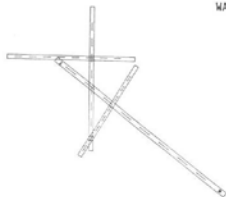
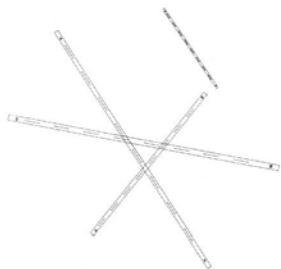




Atlantic City, NJ Atlantic City (F)

16507N 20982E
alt. 76

RWY 13-31 10000 X 180
RWY 04-22 6144 X 150



Baltimore, MD Martin State

16367N 20376E
alt. 24

RWY 14-32 7000 X 180

Baltimore, MD Baltimore - Washington Int'l

16296N 20300E
alt. 146

RWY 15R-33L 9519 X 150
RWY 10-28 9452 X 200
RWY 04-22 6005 X 150
RWY 15L-33R 3199 X 75

ILS 33L
Frequency: 111.7
Heading: 332 degrees
Altitude: 1465 ft. @ LOM



Berlin, NJ Camden-Burlington Co

16650N 20854E
alt. 138

RWY 05-23 2590 X 50



Cambridge, MD Cambridge-Dorchester

1605CN 20550E
alt. 20

RWY 16-34 4000 X 75



Elizabeth City, NC Elizabeth City CGAS

15055N 20632E
alt. 12

RWY 10-28 7219 X 150
RWY 01-19 4518 X 150



Dover - Cheswold, DE Delaware Airpark

16362N 20563E
alt. 55

RWY 09-27 3484 X 50



Emporia, VA

Emporia Muni

15197N 20146E
alt. 126

RWY 15-33 5009 X 100



Frederick, MD

Frederick Muni

16366N 20052E
alt. 305

RWY 01-19 4000 X 100
RWY 05-23 3800 X 100

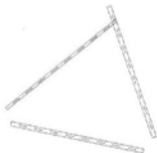


Lancaster, PA

Lancaster

16714N 20374E
alt. 403

RWY 08-26 5398 X 150



Georgetown, DE

Sussex Co.

16141N 20770E
alt. 51

RWY 04-22 5000 X 150
RWY 13-31 2325 X 50



Manassas, VA

Manassas

16063N 20046E
alt. 193

RWY 16L-34R 5700 X 100
RWY 16R-34L 3703 X 100



Midland, VA Warrenton-Fauquier

16000N 19984E
alt. 325

RWY 14-32 4106 X 60
RWY 06-24 2090 X 40



Newport News, VA Patrick Henry Int'l (F)

15419N 20469E
alt. 43

RWY 07-25 8003 X 150
RWY 02-20 6526 X 150



Newport News, VA Langley AFB

15406N 20519E
alt. 11

RWY 07-25 10000 X 150



Norfolk, VA Chambers Field

15347N 20553E
alt. 27

RWY 01-19 4300 X 250
RWY 10-28 8350 X 200



Norfolk, VA Norfolk Int'l

15333N 20584E
alt. 27

RWY 05-23 9000 X 150
RWY 14-32 4876 X 150

ILS 23
Frequency 109.1
Heading 227 degrees
Altitude 1700 ft. @ 5.0 DME

Orange, VA Orange Co

15840N 19878E
alt. 454

RWY 07-25 3200 X 75



Petersburg, VA Petersburg Muni

15398N 20117E
alt. 194

RWY 05-23 5000 X 150
RWY 14-32 3060 X 50



Philadelphia, PA Philadelphia Int'l (F)

16651N 20733E
alt. 21

RWY 09L-27R 9500 X 150
RWY 09R-27L 10500 X 200
RWY 17-35 5460 X 150

ILS 9R
Frequency: 109.3
Heading: 85 degrees
Altitude: 1856 ft. @ LOM

ATIS 133.40



Philadelphia, PA Northeast Philadelphia (F)

16751N 20801E
alt. 121

RWY 06-24 7000 X 150
RWY 15-33 5000 X 150



Richmond, VA Byrd Int'l

15549N 20169E
alt. 168

RWY 16-34 8999 X 150
RWY 02-20 6607 X 150
RWY 07-25 5316 X 100

ILS 16
Frequency: 110.7
Heading: 156 degrees
Altitude: 2461 ft. @ LOM

ATIS 119.15



Salisbury, MD

Salisbury - Wicomico Co

15985N 20741E
alt. 51

RWY 05-23 5000 X 150
RWY 14-32 5500 X 150

ILS 32
Frequency: 108.7
Heading: 316 degrees
Altitude: 1953 ft. @ LOM



Suffolk, VA

Suffolk

15226N 20456E
alt. 72

RWY 07-25 5000 X 100
RWY 15-33 3250 X 150



Trenton, NJ

Mercer Co.

16R49N 20854E
alt. 213

RWY 06-24 6006 X 150
RWY 16-34 4800 X 150
RWY 11-29 2999 X 150



Virginia Beach, VA Oceana NAS

15307N 20649E
alt. 22

RWY 05L-23R 8000 X 150
RWY 05R-23L 12000 X 200
RWY 14L-32R 8000 X 150
RWY 14R-32L 8000 X 200



Washington, DC Andrews AFB

16127N 20255E
alt. 281

RWY 01L-19R 9300 X 200
RWY 01R-19L 9755 X 150



Washington, DC Washington Nat'l

16135N 20192E
alt. 16

RWY 03-21 4905 X 150
RWY 15-33 5189 X 200
RWY 18-36 6069 X 150



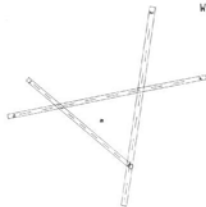
Washington, DC Dulles Int'l (F)

16163N 20055E
alt. 313

RWY 01L-19R 11501 X 150
RWY 01R-19L 11500 X 150
RWY 11L-29R 3080 X 75
RWY 12-30 10001 X 150

ILS 1R
Frequency: 110.1
Heading: 10 degrees
Altitude: 1847 ft. @ LOM

ATIS 134.85



Wilmington, DE Greater Wilmington - New Castle Co (F)

16552N 20627E
alt. 80

RWY 01-19 7002 X 200
RWY 09-27 7165 X 150
RWY 14-32 5004 X 150

Woodbridge, VA Woodbridge

16058N 20109E
alt. 276

RWY 01-19 2250 X 45

Andrews AFB (VOR)

16126N 20255E
freq. 113.1

Armel (VOR)

16157N 20047E
freq. 113.5

Atlantic City (VOR)

16506N 20983E
freq. 108.6

Baltimore (VOR)

16292N 20302E
freq. 115.1

Brooke (VOR)

15904N 20116E
freq. 111.8

Cape Charles (VOR)

15536N 20630E
freq. 112.2

Casanova (VOR)

16014N 19928E
freq. 116.3

Cedar Lake (VOR)

16522N 20848E
freq. 115.2

York, PA

York

16601N 20199E
alt. 486

RWY 16-34 4190 X 100

Cofield (VOR)

15079N 20382E
freq. 114.4

Coyle (VOR)

16666N 21009E
freq. 113.4

Dupont (VOR)

16552N 20627E
freq. 114

Elizabeth City (VOR)

15053N 20629E
freq. 112.5

Flat Rock (VOR)

15537N 19995E
freq. 113.3

Franklin (VOR)

15219N 20317E
freq. 110.6

Frederick (VOR)

16366N 20054E
freq. 109

Gordonsville (VOR)

15734N 19859E
freq. 115.6

Hagerstown (VOR)

16469N 19881E
freq. 109.8

Harrisburg (VOR)

16736N 20130E
freq. 112.5

Hopewell (VOR)

15479N 20248E
freq. 112

Kenton (VOR)

15366N 20684E
freq. 111.4

Lancaster (VOR)

16715N 20377E
freq. 117.3

Lawrenceville (VOR)

15228N 20003E
freq. 112.9

Martinsburg (VOR)

16335N 19898E
freq. 112.1

Middle River (VOR)

16368N 20376E
freq. 116.6

Modena (VOR)

16652N 20592E
freq. 113.2

Norfolk (VOR)

15332N 20585E
freq. 116.9

Patuxent (VOR)

15922N 20440E
freq. 117.6

Pottstown (VOR)

16787N 20612E
freq. 116.5

Richmond (VOR)

15549N 20169E
freq. 114.1

Salisbury (VOR)

15987N 20738E
freq. 114.5

Sea Isle (VOR)

16339N 20931E
freq. 114.8

Shawnee (VOR)

16220N 19811E
freq. 115.3

Tar River (VOR)

14849N 20142E
freq. 117.8

Washington (VOR)

16139N 20194E
freq. 111

Waterloo (VOR)

16199N 20910E
freq. 112.6

Westminster (VOR)

16416N 20182E
freq. 117.9

Woodstown (VOR)

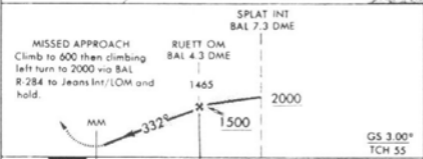
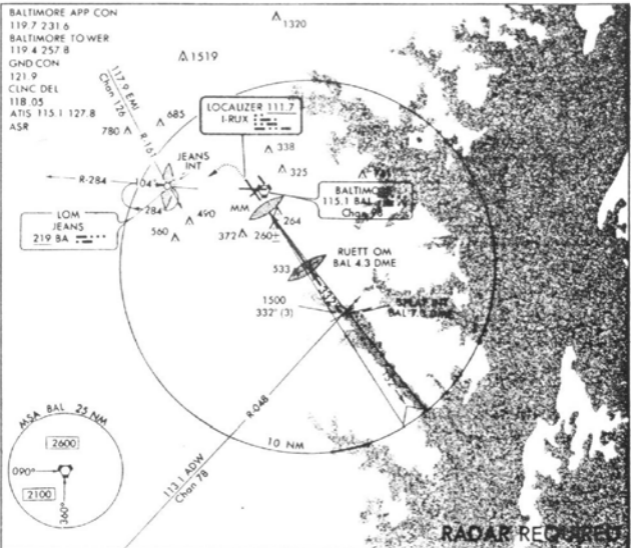
16548N 20731E
freq. 112.8

ILS RWY 33L

AL-804 (FAA)

BALTIMORE-WASHINGTON INTL (BWI)
BALTIMORE, MARYLAND

BALTIMORE APP CON
119.7 231.6
BALTIMORE TOWER
119.4 257.8
GND CON
121.9
CLNC DEL
118.05
ATIS 115.1 127.8
ASR



CATEGORY	A	B	C	D
S-ILS 33L		342-1/2	200 (200-1/2)	
S-LOC 33L		520-1/2	378 (400-1/2)	520-3/4 378 (400-1/4)
CIRCLING	640-1	494 (500-1)	640-1 1/2 494 (500-1 1/2)	760-2 614 (700-2)

CAT D S-LOC visibility increased 1/4 mile for inoperative MM.

▽
△

ELEV 146 Rwy 15L Idg 2659'

MIRL Rwy 15L-33R

332° 4 NM from Ruett OM BAL 4.3 DME

TDZ/CL Rwy 10
REIL Rwys 4, 22, and 33R
HIRL Rwys 10-28, 15R 33L and 4-22

FAF to MAP 4 NM

Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

ILS RWY 33L

39°10'N 76°40'W

BALTIMORE, MARYLAND
BALTIMORE-WASHINGTON INTL (BWI)

Amdt 4
ILS RWY 23

AL-291 (FAA)

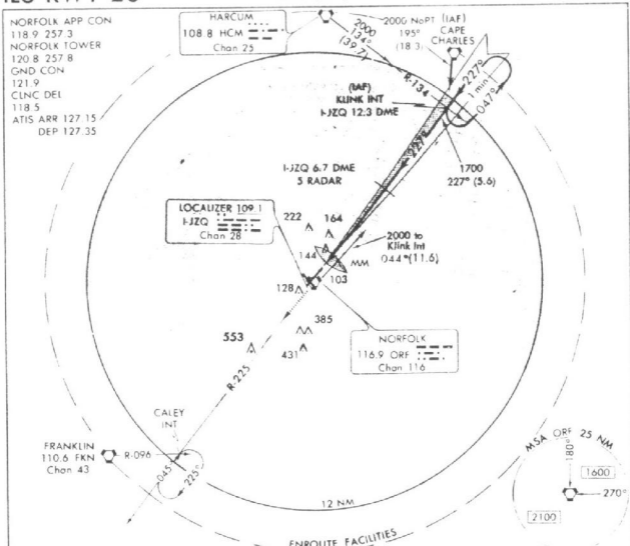
NORFOLK INTERNATIONAL (ORF)
 NORFOLK, VIRGINIA

NORFOLK APP CON
 118.9 257.3
 NORFOLK TOWER
 120.8 257.8
 GND CON
 121.9
 CLNC DEL
 118.5
 ATIS ARR 127.15
 DEP 127.35

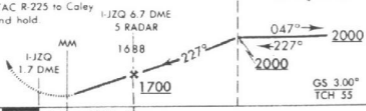
HARCUM
 108.8 HCM
 Chan 25

LOCALIZER 109.1
 I-JZQ
 Chan 28

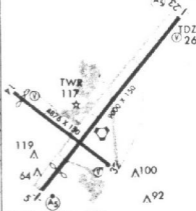
NORFOLK
 116.9 ORF
 Chan 116



MISSED APPROACH
 Climb to 2000 via ORF
 VORTAC R-225 to Caley
 Int and hold.



ELEV 27
 227° 5 NM
 Rwy 14 Idg 4664'
 Rwy 5 Idg 8000'
 6.7 DME/5 RADAR



CATEGORY	A	B	C	D
S-ILS 23		321- $\frac{3}{4}$	295 (300- $\frac{3}{4}$)	
S-LOC 23		400- $\frac{3}{4}$	374 (400- $\frac{3}{4}$)	
CIRCLING	460-1	480-1	540-1 $\frac{1}{2}$	580-2
	433 (500-1)	453 (500-1)	513 (600-1 $\frac{1}{2}$)	553 (600-2)

DME or radar required
 Inoperative table does not apply.
 S-LOC Cats. A, B, C, increase visibilities $\frac{1}{4}$ mile, Cat D $\frac{1}{2}$ mile, for inoperative
 MALSR.
 S-LOC Cat. D increase visibility $\frac{1}{4}$ mile for inoperative MM.

FAF to MAP 5 NM

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

ILS RWY 23

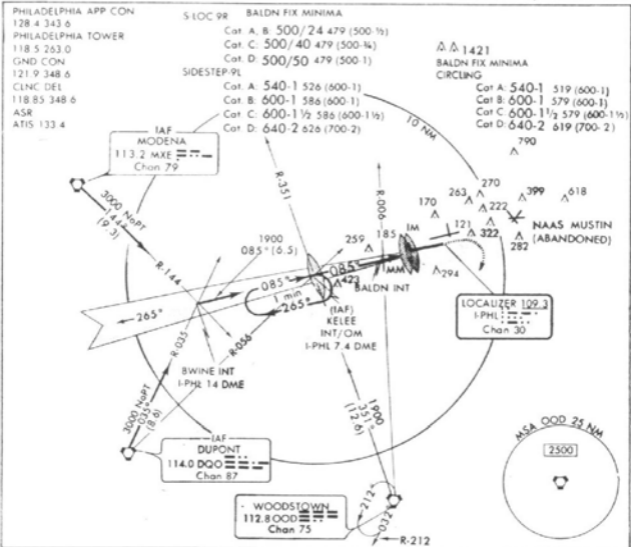
36°54'N - 76°12'W

NORFOLK, VIRGINIA
 NORFOLK INTERNATIONAL (ORF)

Amdt 5
ILS RWY 9R

AL-320 (FAA)

PHILADELPHIA INTERNATIONAL (PHL)
 PHILADELPHIA, PENNSYLVANIA



One Minute Holding Pattern	KELEE INT/OM I-PHL 7.4 DME			
	1856			
MISSED APPROACH	Climb to 1500, then climbing right turn to 2000 direct OOD VORTAC and hold.			
	BALDN INT MM IM I-PHL 1.9 DME			
GS 3.00° TCH 56	1900 ← 265°			
	1900 → 085°			
CATEGORY	A	B	C	D
	5-LS 9R	221/18 200 (200-1/2)		221/20 200 (200-1/2)
S-LOC 9R	680/24 659 (700-1/2)	680/60 659 (700-1 1/2)	680-1 1/2 659 (700-1 1/2)	680-2 659 (700-2)
SIDESTEP RWY 9L	680-1 666 (700-1)	680-1 1/4 666 (700-1 1/4)	680-2 666 (700-2)	680-2 666 (700-2)
CIRCLING	680-1 659 (700-1)	680-1 1/4 659 (700-1 1/4)	680-2 659 (700-2)	680-2 659 (700-2)

ELEV 21

Rwy 17-35 5460 X 150

GS 3.00° TCH 56

REIL Rwy 9L and 35
 TDZ/CL Rwy 9R
 HIRL Rwy 9L 27R, 9R 27L and 17-35

FAF to MAP 5.5 NM

Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

ILS RWY 9R

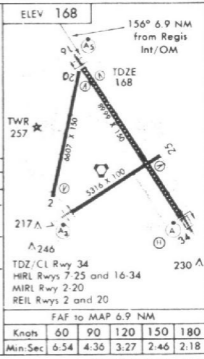
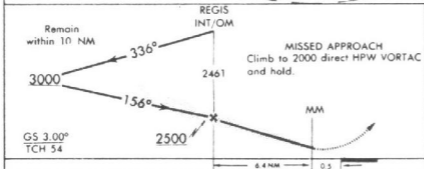
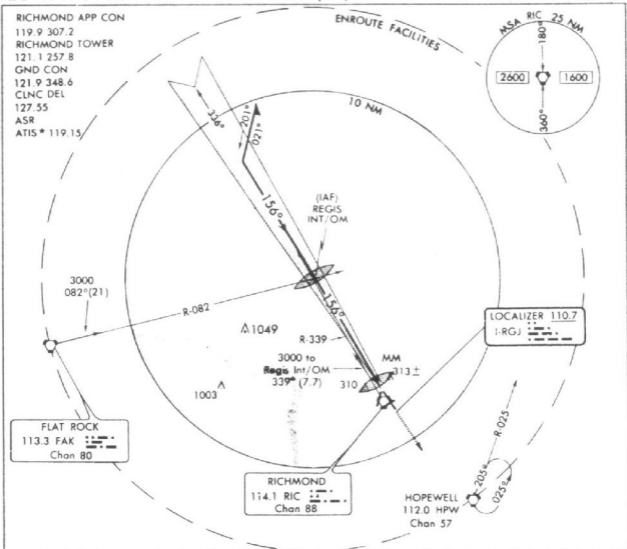
39°52'N - 75°15'W

PHILADELPHIA, PENNSYLVANIA
 PHILADELPHIA INTERNATIONAL (PHL)

Amdt 6
ILS RWY 16

AL-347 (FAA)

RICHMOND INTL (BYRD FIELD) (RIC)
RICHMOND, VIRGINIA



CATEGORY	A	B	C	D
S-ILS 16	368/24		200 (200-½)	
S-LOC 16	740/24	572 (600-½)	740/50 572 (600-1)	740/60 572 (600-1½)
CIRCLING	740-1	572 (600-1)	740-1½ 572 (600-1½)	740-2 572 (600-2)

FAF to MAP 6.9 NM

Knph	60	90	120	150	180
Min:Sec	6:54	4:36	3:27	2:46	2:18

ILS RWY 16

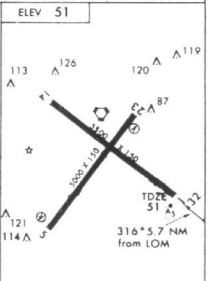
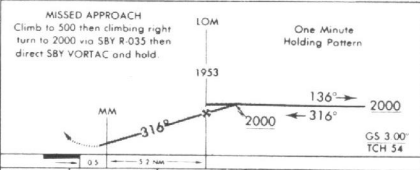
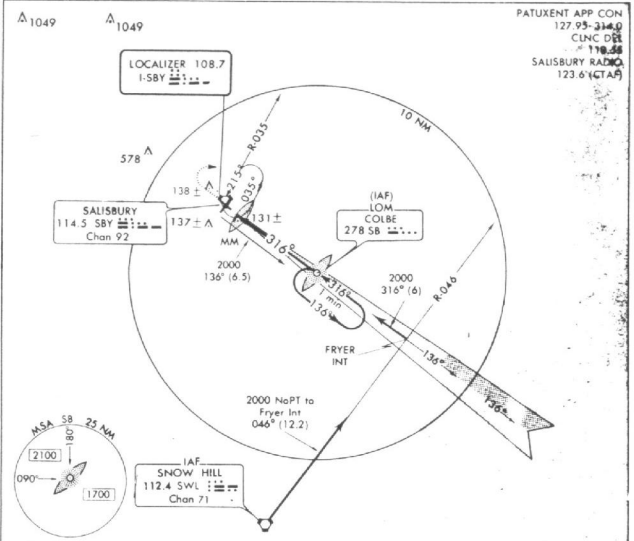
37°30'N - 77°19'W

RICHMOND, VIRGINIA
RICHMOND INTL (BYRD FIELD) (RIC)

Amdt 4
ILS RWY 32

SALISBURY-WICOMICO COUNTY REGIONAL (SBY)
 AL-977 (FAA)
 SALISBURY, MARYLAND

PATUXENT APP CON
 127.95-314.0
 CLNC DBL
 119.58
 SALISBURY RADIO
 123.6 (CTAF)



CATEGORY	A	B	C	D
S-ILS 32	251-1/2 200 (200-1/2)			
S-LOC 32	380-1/2 329 (400-1/2)		380-3/4 329 (400-3/4)	
CIRCLING	440-1 389 (400-1)	520-1 469 (500-1)	520-1 1/2 469 (500-1 1/2)	620-2 569 (600-2)

Cat. D S-LOC visibility increased 1/4 mile for inoperative MALS or MM

REIL Rwy 5, 14 and 23
 MRL Rwy 5-23 and 14-32

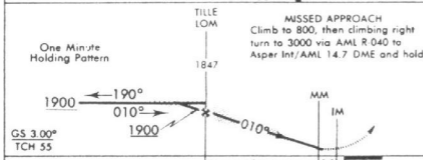
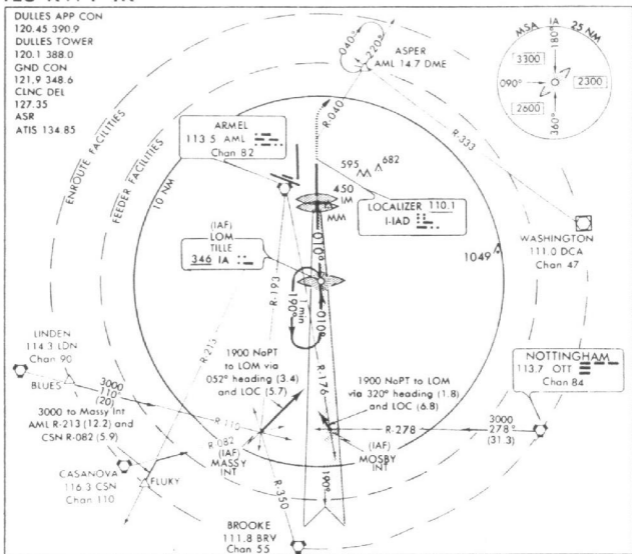
FAF to MAP 5.7 NM					
Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

ILS RWY 32

Amdt 17
ILS RWY 1R

AL-5100 (FAA)

WASHINGTON/DULLES INTL (IAD)
WASHINGTON, D.C



CATEGORY	A	B	C	D
S-ILS 1R	513/18	200 (200-1/2)		513/20 200 (200-1/2)
S-LOC 1R	680/24	367 (400-1/2)		680/40 367 (400-1/2)
CIRCLING	800-1	487 (500-1)	820-1 1/2 507 (600-1 1/2)	880-2 567 (600-2)

Cat. D S-LOC visibility increased to RVR 5000 for inoperative MM.



FAF to MAP 4.6 NM

Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32

ILS RWY 1R

38° 57' N - 77° 27' W

WASHINGTON, D.C
WASHINGTON/DULLES INTL (IAD)

AIRPORT DIRECTORY - WASHINGTON AREA

CITY	AIRPORT	NORTH	EAST	ALT. F	ILS	
					(Fuel)	(Rwy/Freq)
Atlantic City	Atlantic City Int'l	16507	20982	76	.	
Baltimore	Washington Int'l	16296	20300	146		111.7/33L
Baltimore	Martin State	16367	20376	24		
Berlin	Camden-Burlington Co.	16650	20854	138		
Cambridge	Cambridge-Dorchester	16050	20550	20		
Dover-Cheswold	Delaware Airpark	16362	20663	56		
Elizabeth City	Elizabeth City	15055	20632	12		
Emporia	Emporia Muni	15197	20146	126		
Frederick	Frederick Muni	16366	20052	305		
Georgetown	Sussex Co.	16141	20770	51		
Lancaster	Lancaster	16714	20374	403		
Manassas	Manassas	16063	20046	193		
Midland	Warrenton-Fauquier	16000	19984	325		
Newport News	Langley AFB	15406	20519	11		
Newport News	Patrick Henry Int'l	15419	20469	43		
Norfolk	Chambers Field	15347	20553	27		
Norfolk	Norfolk Int'l	15333	20584	27		109.1/23
Orange	Orange Co.	15840	19878	454		
Petersburg	Petersburg Muni	15398	20117	194		
Philadelphia	Philadelphia Int'l	16651	20733	21		* 109.3/9R
	ATIS 133.40					
Philadelphia	Northeast Philadelphia	16751	20801	121		
Richmond	Byrd Int'l	15549	20169	168		110.7/16
	ATIS 119.15					
Salisbury	Salisbury-Wicomico Co.	15985	20741	51		108.7/32
Suffolk	Suffolk	15226	20456	72		
Trenton	Mercer Co.	16849	20854	213		
Virginia Beach	Oceana NAS	15307	20649	22		
Washington	Andrews AFB	16127	20255	281		
Washington	Washington Int'l	16135	20192	16		
Washington	Dulles Int'l	16163	20055	313		* 110.1/1R
	ATIS 134.85					
Wilmington	Greater Wilmington-New Castle Co.	16552	20627	80		
Woodbridge	Woodbridge	16058	20109	276		
York	York	16601	20199	486		

LEGEND



Civil-Public use airport



Restricted/Private-Nonpublic use airport, having emergency use or landmark value

SANTA MONICA
ATIS 119.15
175-50

Airport Name
Advisory Frequency (if available)
Elevation (feet) — Length (hundreds of feet)

NAME
FREQUENCY

VOR

NAME
FREQUENCY

VORTAC (Distance Measuring Equipment Able)

NAME
FREQUENCY

VOR/DME

NAME
FREQUENCY

Non Directional Beacon

VOR/DME
NAME
FREQUENCY

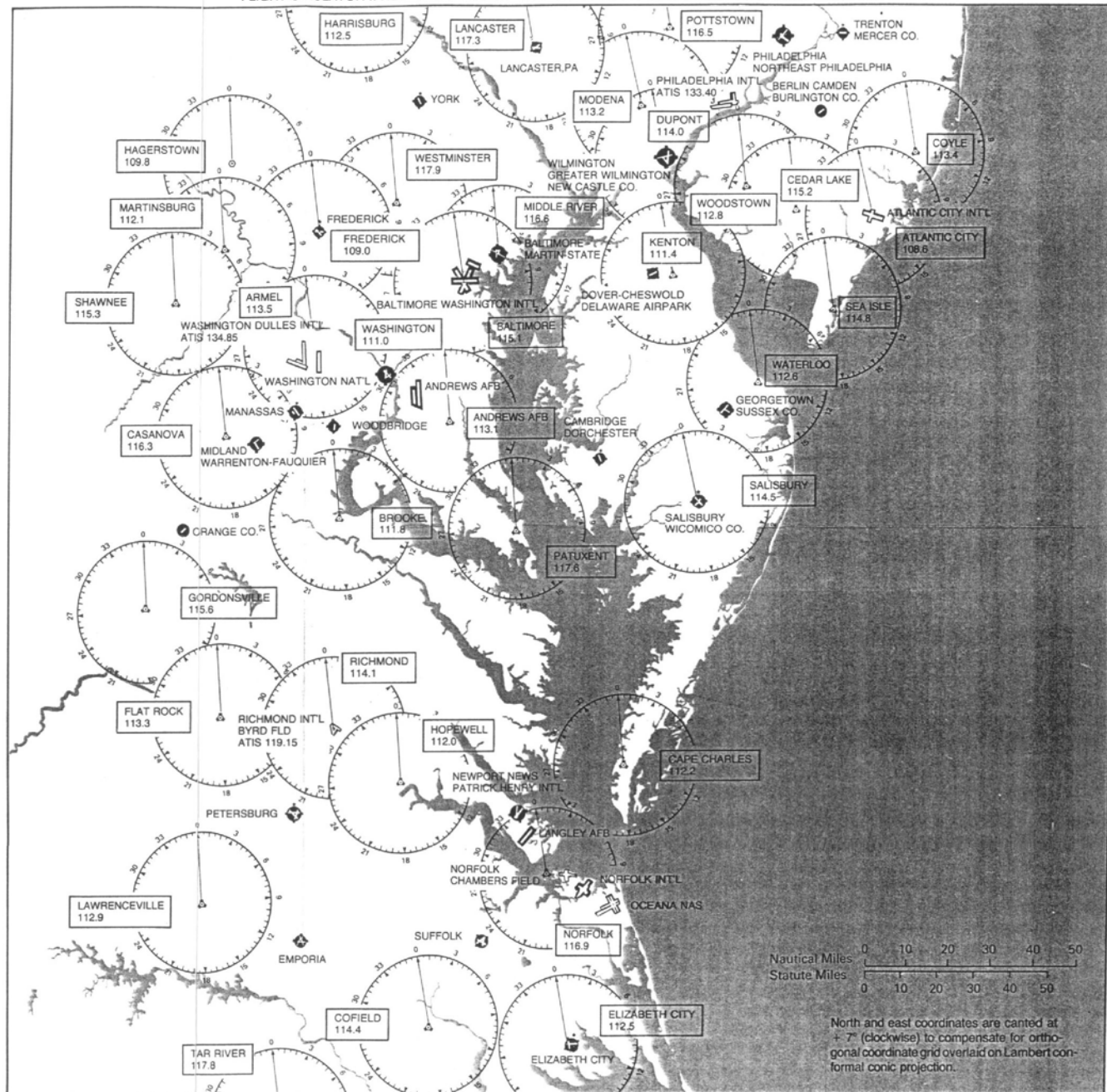
If VOR falls directly on an airport, only the airport symbol will be shown. The VOR facility type is shown at the top of the box.

AIRPORT NAME ABBREVIATIONS

CO	County
FLD	Field
INTL	International
MUNI	Municipal
(PVT)	Private Airport (prior permission before landing)

WASHINGTON AREA CHART

FLIGHT SIMULATOR II REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.



North and east coordinates are canted at +7° (clockwise) to compensate for orthogonal coordinate grid overlaid on Lambert conformal conic projection.

Aurora

17152N 16393E
alt. 705

RWY 9-27 5100 X 100
RWY 18-36 3205 X 75



Badger, WI (VOR)

17732N 16459E
freq. 116.4

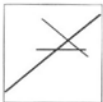
Battle Creek (VOR)

17402N 17415E
freq. 109.4

Battle Creek/W.K. Kellogg Reg. (BTL) (F)

17402N 17418E
alt. 954

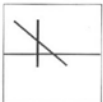
RWY 13-31 4835 X 100
RWY 9-27 4025 X 150
RWY 5-23 10005 X 150



Benton Harbor, MI

17311N 17046E
alt. 643

RWY 9-27 5110 X 100
RWY 18-36 2500 X 100
RWY 13-31 3660 X 100



Bloomington - Normal, IL (F)

16593N 16246E
alt. 876

RWY 11-29 6900 X 150
RWY 3-21 3730 X 100



Bloomington, IL (VOR)

16593N 16242E
freq. 108.2

Bloomington, IN (VOR)

16024N 17012E
freq. 110.2

Boiler, IN (VOR)

16632N 16852E
freq. 115.6

Bradford, IL (VOR)

16890N 16042E
freq. 114.7

Burlington, IA (VOR)

16709N 15604E
freq. 111.4

Capital (CAP) (VOR)

16337N 16020E
freq. 112.7

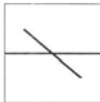
Cappy, WI (MK) (NDB)

17605N 16570E
freq. 410

Cedar Rapids Muni (CID) (F)

17209N 15355E
alt. 863

RWY 9-27 7000 X 150
RWY 13-31 5455 X 150



Cedar Rapids, IA (VOR)

17208N 15330E
freq. 117.6

Champaign, IL (VOR)

16397N 16464E
freq. 110

Champaign-Urbana/Univ. Of IL - Willard (CMI) (F)

16400N 16465E
alt. 754

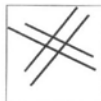
RWY 4-22 5300 X 150
RWY 18-36 5300 X 150
RWY 14-32 8105 X 150



Chicago Midway (MDW) (F)

17156N 16628E
alt. 620

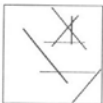
RWY 4-22 6100 X 150
RWY 4-22 5510 X 150
RWY 12-30 6520 X 150
RWY 12-30 5080 X 150



Chicago - O'Hare Intl (ORD) (F)

17244N 16578E
alt. 666

RWY 14-32 13005 X 200
RWY 14-32 10005 X 150
RWY 9-27 10145 X 150
RWY 9-27 7415 X 150
RWY 4-22 8070 X 150
RWY 4-22 7400 X 150
RWY 18-36 5340 X 150



Chicago-O Hare, IL (VOR)

17247N 16580E
freq. 113.9

Chicago/Schaumburg

17247N 16515E
alt. 794

RWY 10-28 3000 X 40



Chicago Heights, IL (VOR)

17042N 16687E
freq. 114.2

Chicago Merrill C. Meigs

17188N 16671E
alt. 590

RWY 18-36 3950 X 100



Clew Intl (Plainfield)

17116N 16502E
alt. 669

RWY 18-36 3375 X 55



Connersville, IN (NDB)

16279N 17493E
freq. 275

Danville, IL (DNR)

16471N 16685E
alt. 692

RWY 3-21 5400 X 100
RWY 16-34 4005 X 100



Danville, IL (VOR)

16511N 16695E
freq. 111

Davenport, IA (VOR)

17131N 15757E
freq. 113.8

Dayton, OH (VOR)

16427N 17731E
freq. 114.5

Deana (NDB)

17240N 16535E
freq. 350

Decatur, IL (VOR)

16269N 16276E
freq. 117.2

Dells, WI (VOR)

17920N 15997E
freq. 115.1

Du Page

17213N 16466E
alt. 758

RWY 10-28 4005 X 80
RWY 15-33 3405 X 100
RWY 4-22 1505 X 100



Dubuque Muni (F)

17422N 15684E
alt. 1076

RWY 13-31 6500 X 150
RWY 18-36 4900 X 150



Dubuque, IA (VOR)

17421N 15684E
freq. 115.8

Dupage, IL (VOR)

17202N 16433E
freq. 108.4

Dwight (NDB)

16874N 16406E
freq. 344

Eau Claire, WI (VOR)

18520N 15480E
freq. 1129

Elkhart Muni, IN

17140N 17192E
alt. 777

RWY 9-27 5490 X 75
RWY 17-35 4005 X 75



Ermin (NDB)

17127N 16600E
freq. 332

Fond du Lac Co. WI

18004N 16382E
alt. 810

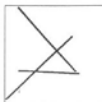
RWY 9-27 3605 X 75
RWY 18-36 5000 X 75



Fort Wayne Muni (Boer Field) (FWA) (F)

16834N 17463E
alt. 804

RWY 5-23 9000 X 150
RWY 14-32 8505 X 150
RWY 9-27 5995 X 150



Frankfort

17025N 16596E
alt. 774

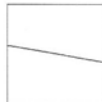
RWY 9-27 3175 X 55



Frasca Fld

16448N 16482E
alt. 735

RWY 10-28 2555 X 30



Ft. Wayne, IN (VOR)

16834N 17464E
freq. 117.8

Galesburg, IL (VOR)

16791N 15760E
freq. 109.8

Galesburg

16792N 15760E
alt. 764

RWY 2-20 5795 X 150
RWY 10-28 3605 X 100



Gibson City, IL

16594N 16461E
alt. 758

RWY 18-36 2595 X 30



Goshen, IN (VOR)

17059N 17176E
freq. 113.7

Grand Rapids, MI (VOR)

17611N 17330E
freq. 110.2

Grand Rapids/Kent Co Intl (GRR) (F)

17643N 17321E
alt. 794

RWY 8-26 10000 X 150
RWY 18-36 3400 X 100
RWY 8-26 3920 X 75



Green Bay, WI (VOR)

18354N 16485E
freq. 117

Grisson, IN (VOR)

16677N 17146E
freq. 116.5

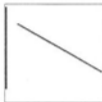
Horlick, WI (VOR)

17569N 16601E
freq. 117.7

Howell (Chicago/Blue Island)

17100N 16627E
alt. 600

RWY 12-30 3060 X 40
RWY 18-36 2600 X 35



Indianapolis, IN (VOR)

16316N 17085E
freq. 116.3

Iowa City Muni, IA

17101N 15405E
alt. 663

RWY 17-35 4300 X 150
RWY 12-30 3905 X 150
RWY 6-24 3995 X 150



Jackson, MI (VOR)

17368N 17669E
freq. 109.6

Jacksonville, IL (VOR)

16284N 15816E
freq. 108.6

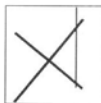
Janesville, WI (VOR)

17483N 16195E
freq. 113.4

Janesville/Rock Co.

17509N 16213E
alt. 807

RWY 13-31 5400 X 150
RWY 4-22 6700 X 150
RWY 18-36 5000 X 75



Joliet, IL (VOR)

17056N 16449E
freq. 112.3

Joliet

17038N 16490E
alt. 581

RWY 12-30 2975 X 100



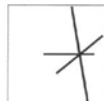
Kalamazoo (VOR)

17364N 17325E
freq. 109

Kalamazoo Co (AZO) (F)

17364N 17325E
alt. 872

RWY 17-35 6500 X 150
RWY 5-23 4005 X 150
RWY 9-27 3355 X 150



Kankakee, IL (IKK) (F)

16846N 16597E
alt. 626

RWY 4-22 5985 X 100
RWY 16-34 3205 X 75



Kedzi (NDB)

17135N 16648E
freq. 248

Keeler, MI (VOR)

17326N 17139E
freq. 116.6

Kirkville, MO (VOR)

16472N 15051E
freq. 114.6

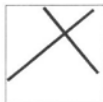
Knox, IN (VOR)

16967N 16981E
freq. 108.8

Kokomo Muni, IN

16626N 17190E
alt. 830

RWY 5-23 5205 X 150
RWY 14-32 4005 X 150



Kokomo, IN (VOR)

16625N 17189E
freq. 109.8

La Crosse (VOR)

18056N 15526E
freq. 108.4

La Crosse, WI (F)

18057N 15527E
alt. 653

RWY 3-21 5300 X 150
RWY 13-31 5300 X 150
RWY 18-36 8535 X 150



Lansing, MI (VOR)

17592N 17584E
freq. 110.8

Lansing

17052N 16697E
alt. 613

RWY 9-27 2435 X 80
RWY 18-36 2325 X 80



Lawrenceville, IL (VOR)

15855N 16696E
freq. 113.5

Lewis Univ.

17081N 16518E
alt. 672

RWY 9-27 3000 X 55



Litchfield, MI (VOR)

17309N 17574E
freq. 111.2

Lone Rock, WI (VOR)

17812N 15880E
freq. 112.8

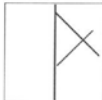
Madison, WI (VOR)

17731N 16119E
freq. 108.6

Madison/Dane Co Reg. - Truax Fld (F)

17729N 16119E
alt. 863

RWY 5-23 4700 X 100
RWY 14-32 5845 X 150
RWY 18-36 9040 X 150



Manitowoc Co. WI

18159N 16633E
alt. 649

RWY 7-25 3345 X 100
RWY 17-35 9005 X 100



Marion, IN (VOR)

16617N 17301E
freq. 108.6

Marshalltown, IA

17315N 14974E
alt. 974

RWY 12-30 5000 X 100
RWY 18-36 3800 X 55



Mattoon (MTO) (VOR)

16158N 16465E
freq. 109.4

Mcguire, OH (VOR)

16246N 17796E
freq. 110

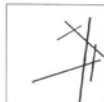
Midwest, OH (VOR)

16182N 17939E
freq. 112.9

Milwaukee/General Mitchell Fld

17651N 16572E
alt. 679

RWY 7-25 8010 X 150
RWY 1-19 9690 X 200
RWY 1-19 4185 X 150
RWY 6-24 3165 X 100
RWY 13-31 5875 X 150



Milwaukee/Lawrence J. Timmerman

17720N 16530E
alt. 745

RWY 15-33 4110 X 75
RWY 4-22 3205 X 75



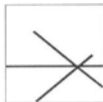
Moline, IL (VOR)

16965N 15704E
freq. 114.4

Moline/Quad City (MLI) (F)

17011N 15736E
alt. 590

RWY 13-31 6005 X 150
RWY 5-23 4915 X 150
RWY 9-27 6510 X 150



Morris Muni

17004N 16413E
alt. 587

RWY 18-36 2900 X 60



Muncie (VOR)

16512N 17412E
freq. 114.4

Muncie/Delaware Co-Johnson Fld (F)

16514N 17411E
alt. 938

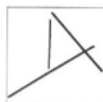
RWY 14-32 6500 X 150
RWY 2-20 4200 X 100



Muskegon Co (F)

17760N 17093E
alt. 626

RWY 6-24 6500 X 150
RWY 0-18 3205 X 100
RWY 14-32 5000 X 150



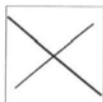
Muskegon, MI (VOR)

17760N 17156E
freq. 115.2

New Lenox-Howell

17025N 16571E
alt. 745

RWY 13-31 2860 X 55
RWY 5-23 2375 X 35



Newton, IA (VOR)

17194N 14919E
freq. 112.5

Nodine, MN (VOR)

18089N 15469E
freq. 117.9

Northbrook, IL (VOR)

17341N 16557E
freq. 113

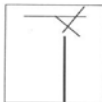
Oshkosh, WI (VOR)

18097N 16365E
freq. 111.8

Oshkosh/Wittman Field (OSH) (F)

18093N 16364E
alt. 804

RWY 9-27 6170 X 100
RWY 13-31 3210 X 100
RWY 18-36 6700 X 150
RWY 4-22 3425 X 100



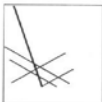
Ottumwa, IA (VOR)

16855N 15153E
freq. 111.6

Pal-Waukege

17294N 16575E
alt. 646

RWY 16-34 5140 X 100
RWY 6-24 2035 X 40
RWY 6-24 3655 X 55
RWY 12-30 4450 X 55
RWY 12-30 3230 X 40



Patterson, OH (VOR)

16346N 17848E
freq. 115.2

Paxton, IL

16576N 16507E
alt. 777

RWY 18-36 3405 X 55



Peoria, IL (VOR)

16676N 15965E
freq. 115.2

Peoria/Greater Peoria (PIA) (F)

16670N 16000E
alt. 659

RWY 13-31 8005 X 150
RWY 4-22 6005 X 150



Peotone, IL (VOR)

16937N 16618E
freq. 113.2

Polo, IL (VOR)

17239N 16066E
freq. 111.2

Pontiac, IL (VOR)

16742N 16316E
freq. 109.6

Port City, IA (VOR)

16990N 15541E
freq. 108.8

Pullman, MI (VOR)

17465N 17141E
freq. 112.1

Racine/Horlick-Racine WI

17569N 16601E
alt. 672

RWY 4-22 6555 X 100
RWY 14-32 4825 X 100



Richmond (RID) (VOR)

16306N 17605E
freq. 110.6

Roberts, IL (VOR)

16637N 16500E
freq. 116.8

Robinson, IL (VOR)

15963N 16679E
freq. 108.4

Rochester, MN (F)

18084N 15143E
alt. 1319

RWY 13-31 7530 X 150
RWY 2-20 5195 X 150



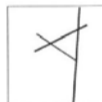
Rockford, IL (VOR)

17342N 16164E
freq. 110.8

Rockford/Greater Rockford (RFD) (F)

17328N 16199E
alt. 735

RWY 6-24 5000 X 150
RWY 12-30 4100 X 100
RWY 0-18 8200 X 150



Rosewood, OH (VOR)

16549N 17842E
freq. 117.5

Sanger (Monee)

16980N 16646E
alt. 784

RWY 5-23 2385 X 35
RWY 9-27 2305 X 35



Sheboygan Co. Mem. WI

18001N 16580E
alt. 748

RWY 13-31 3995 X 75
RWY 3-21 5000 X 100



Sheboygan, WI (NDB)

17998N 16580E
freq. 254

Shelbyville, IN (VOR)

16240N 17280E
freq. 112

South Bend (VOR)

17157N 17089E
freq. 1154

South Bend/Michiana Reg. (F)

17129N 17090E
alt. 790

RWY 9-27 7100 X 150
RWY 6-24 3080 X 100
RWY 18-36 4250 X 100



Springfield, OH (VOR)

16358N 17916E
freq. 1132

St. Louis (STL) (VOR)

15894N 15729E
freq. 1174

Terre Haute, IN (VOR)

16168N 16809E
freq. 1153

Timmerman, WI (VOR)

17720N 16529E
freq. 1125

Troy, IL (VOR)

15840N 15920E
freq. 116

Vandalia (VLA) (VOR)

15992N 16173E
freq. 1143

Veals (NDB)

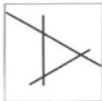
16368N 16496E
freq. 407

26 - CHICAGO

Waterloo Muni (ALO)

17506N 15151E
alt. 872

RWY 6-24	5405 X 150
RWY 18-36	5405 X 150
RWY 12-30	8405 X 150



Waterloo, IA (VOR)

17506N 15152E
freq. 112.2

Waukesha Co. WI

17689N 16468E
alt. 932

RWY 10-28	4200 X 100
RWY 18-36	3605 X 75



Waukon, IA (VOR)

17817N 15439E
freq. 116.6

White Cloud, MI (VOR)

17948N 17251E
freq. 117.6

Wolf Lake, IN (VOR)

16946N 17351E
freq. 110.4

AIRPORT DIRECTORY - CHICAGO AREA CHART

CITY	AIRPORT	NORTH	EAST	ALT _{FUEL} ILS	ATIS	VASI
Aurora	Aurora	17152	18393	705		
Battle Creek	W.K. Kellogg Reg (BTL)	17402	17418	954	110.5/23	127.25 31.5
Benton Harbor	Benton Harbor	17311	17046	843		
Bloomington	Bloomington-Normal	16593	16246	876		
Cedar Rapids	Cedar Rapids Muni (CID)	17209	15355	863		
Champaign	Frasca Fld	16448	16482	732		
Champaign-Urbana	Univ. of IL-Willard (CMI)	16400	16465	754	109.1/32	124.85 22.32
Chicago	O'Hare Int (ORD)	17244	16578	666	109.7/14	135.15 14R,32L
Chicago	Merrill C. Meigs	17186	16671	590		121.3
Chicago	Midway (MDW)	17156	16628	620	111.5/4R	128.05 4R,22L,4L,22R,13R,31L,13L,31R
Chicago	Shauamburg	17247	16515	794		
Clow	Clow Int (Plainfield)	17116	16502	689		
Danville	Danville (DNV)	16471	16685	692		
Du Page	Du Page	17213	16466	758		
Dubuque	Dubuque Muni	17422	15684	1076		
Elkhart	Elkhart Muni	17140	17192	777		
Fond du Lac	Fond du Lac Co.	18004	16382	810		
Fort Wayne	Fort Wayne Muni (Baer Field) (FWA)	16834	17463	804	109.9/32	121.25 23
Frankfort	Frankfort	17025	16596	774		
Galesburg	Galesburg	16792	15780	784		
Gibson City	Gibson City	16594	16461	758		
Grand Rapids	Kent Co. Int (GRR)	17643	17321	794	108.3/8R	118.85 8L,18
Howell	Howell (Chicago/Blue Island)	17100	16627	600		
Iowa City	Iowa City Muni	17101	15405	663		
Janesville	Rock County	17509	16213	807		
Joliet	Joliet	17038	16490	581		
Kalamazoo	Kalamazoo Co (AZO)	17363	17325	872		
Kankakee	Kankakee (KK)	16846	16597	626	123.0	
Kokomo	Kokomo Muni	16626	17190	830		
La Crosse	La Crosse	18057	15527	653		
Lansing	Lansing	17050	16687	613		
Lewis	Lewis Univ.	17081	16518	672		
Madison	Dane Co Reg.-Traux Fld	17729	16119	863		
Manitowoc	Manitowoc Co.	18159	16633	649		
Marshalltown	Marshalltown	17319	14974	974		
Milwaukee	General Mitchell Fld	17651	16572	679		
Milwaukee	Lawrence J. Timmerman	17720	16530	745		
Moline	Quad City (MLI)	17011	15736	590	110.5/9	120.65 13.31,5,23,27
Morris	Morris Muni	17004	16413	587		
Muncie	Delaware Co-Johnson Fld	16514	17411	938		
Muskegon	Muskegon Co.	17760	17093	626		
New Lenox	Howell	17025	16571	745		
Oshkosh	Wittman Fld (OSH)	18093	16364	804	110.5/36	125.8 9.18
Pal-Waukee	Pal-Waukee	17254	16575	646		
Paxton	Paxton	16578	16507	777		
Peoria	Greater Peoria (PIA)	16670	16000	659	126.1	13.4,22
Racine	Horlick-Racine	17569	16801	672		
Rochester	Rochester	18084	15143	1319		
Rockford	Greater Rockford (RFD)	17328	16199	735		
Sanger	Sanger (Monee)	16980	16646	784		
Sheboygan	Sheboygan Co Mem.	18001	16580	748		
South Bend	Michiana Reg.	17129	17090	790		
Waterloo	Waterloo Muni (ALO)	17506	15151	872	120.65	6.24,18,36
Waukesha	Waukesha Co.	17689	16468	932		

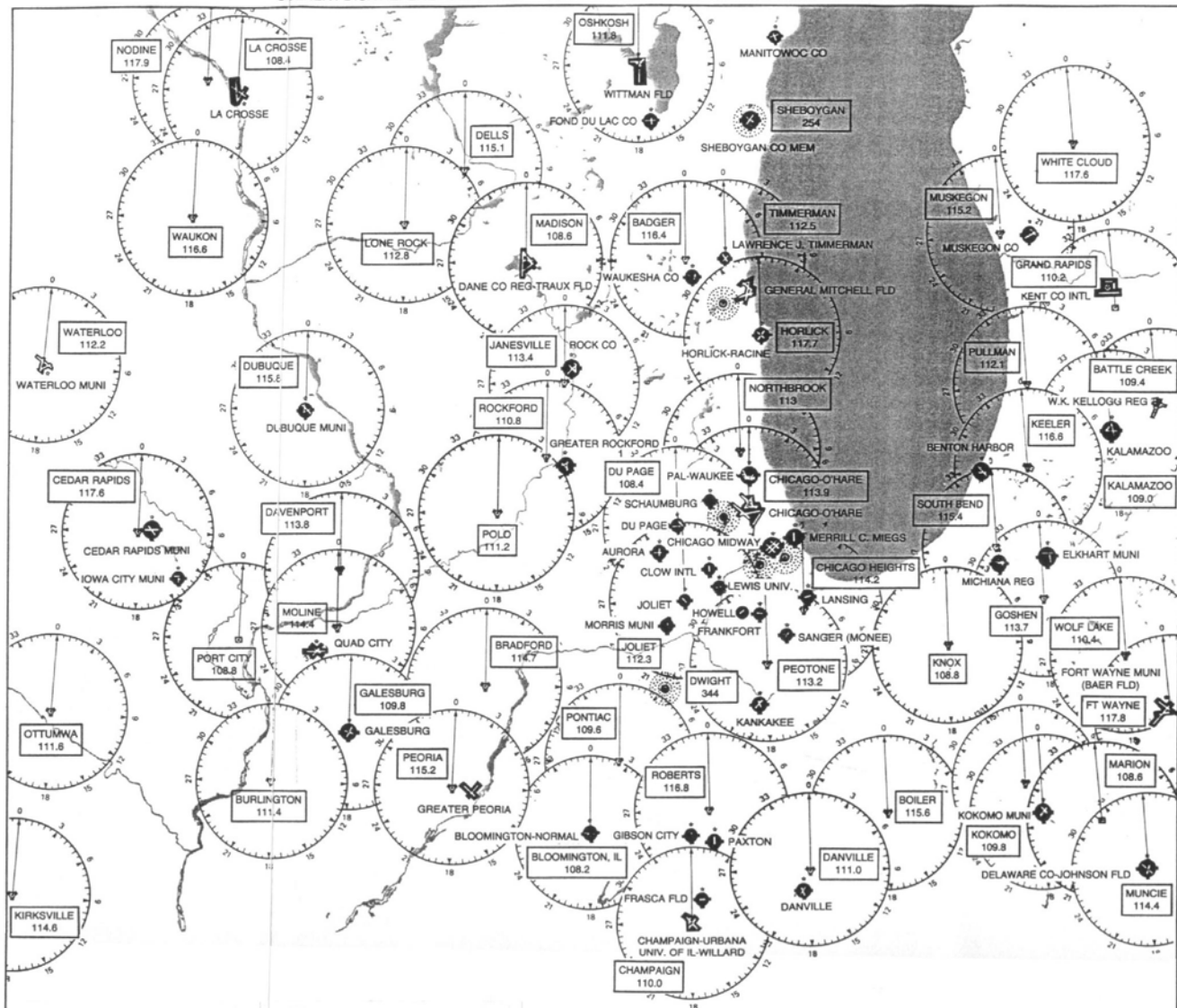
LEGEND

- Civil-Public use airport
- Restricted/Private-Nonpublic use airport, having emergency use or landmark value
- Rotating light in operation, sunset to sunrise
- SANTA MONICA**
ATIS 119.15
175-50
- Airport Name
- Advisory Frequency (if available)
- Elevation (feet) — Length (hundreds of feet)

- NAME FREQUENCY ○ VOR
- NAME FREQUENCY ▽ VORTAC (Distance Measuring Equipment Able)
- NAME FREQUENCY ○ VOR/DME
- NAME FREQUENCY ○ Non Directional Beacon

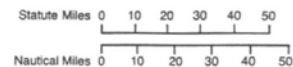
CHICAGO AREA CHART

SCENERY DISK REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.



*Scenario disk This is the cert.
Nr. 9+11 I am searching
San Francisco Nr. 8,10+12.
Hawaii
Japan*

North and east coordinates are canted at 0° (clockwise) to compensate for orthogonal coordinate grid overlaid on Lambert conformal conic projection



Appleton (APE) (VOR)

16507N 18293E
freq 116.7

Ashland - Boyd County, KY (I28)

15812N 18258E
alt 544

RWY 10-28 5605 X 100



Azalea Park (AZS), VA (NDB)

15726N 19747E
freq 336

Beckley (BKW) (VOR)

15529N 18874E
freq 117.7

Beckley, Raleigh County Memorial (BKW)

15531N 18874E
alt 2503

RWY 1-19 6750 X 150
RWY 10-28 5000 X 100



Beltsire (AIR) (VOR)

16500N 18883E
freq 117.1

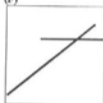
Bluefield (BLF) (VOR)

15324N 18870E
freq. 110

Bristol/Johnson/Kingsport, Tri-City Reg (TRI) (F)

14935N 18486E
alt. 1519

RWY 5-23 8000 X 150
RWY 9-27 4450 X 150



Bruny, OH (AT) (NDB)

16358N 17764E
freq. 315

Charleston (HVQ) (VOR)

15753N 18631E
freq. 117.4

Charleston, Yeager (CRW)

15768N 18690E
alt. 981

RWY 5-23 6305 X 150
RWY 15-33 4750 X 150



Charlottesville-Albemarle, VA (CHO)

15784N 19764E
alt. 640

RWY 3-21 6005 X 150



Cincinnati (LUK), OH (NDB)

16065N 17789E
freq. 335

Cincinnati (CVG) (VOR)

15994N 17661E
freq. 117.3

Circleville (CYO), OH (NDB)

16225N 18184E
freq. 366

Circleville, Pickaway County Memorial (CYO)

16223N 18184E
alt. 686

RWY 1-19 4350 X 75



Clarksburg (CKB) (VOR)

16189N 19097E
freq. 112.6

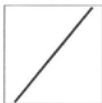
Clarksburg / Benedum, WV (CKB) (F)

16211N 19110E
alt. 1204RWY 3-21 5195 X 150
RWY 13-31 2900 X 75

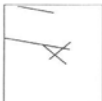
Columbus, Bolton Field (214)

16385N 18121E
alt. 905

RWY 4-22 5205 X 100



Columbus, Port Columbus Intl (CMH) (F)

16425N 18204E
alt. 817RWY 10-28 10700 X 150
RWY 10-28 6005 X 150
RWY 13-31 5000 X 150
RWY 5-23 4480 X 150

Connersville, IN (NDB)

16275N 17507E
freq. 275

Cumberland (CBE), MD (NDB)

16417N 19586E
freq. 317

Cumberland, Cumberland Muni (CBE)

16401N 19581E
alt. 777RWY 5-23 5055 X 150
RWY 10-28 3505 X 150

Danville (DAN) (VOR)

15075N 19540E
freq. 113.1

Danville Regional (DAN)

15078N 19540E
alt. 571RWY 2-20 2000 X 150
RWY 6-24 4500 X 150
RWY 13-31 4050 X 100

Dayton, OH (VOR)

16425N 17753E
freq. 114.5

Delaney (DYQ), TN (NDB)

14777N 18326E
freq. 263

Dublin, New River Valley (PSK)

15270N 19054E
alt. 2106

RWY 6-24 6200 X 150



Galax / Hillsville, Twin County (HLX)

15103N 19019E
alt. 2699

RWY 18-36 4200 X 60



Elkins (EKN) (VOR)

16054N 19172E
freq. 114.2

Glade Spring (GZG), VA (VOR)

15091N 18582E
freq. 110.2

Elkins-Randolph Co, WV (EKN)

16050N 19253E
alt. 1988RWY 14-32 4550 X 150
RWY 5-23 4500 X 150

Greenville Municipal (GCY)

14797N 18351E
alt. 1614

RWY 5-23 6300 X 100



Falmouth, KY (VOR)

15836N 17785E
freq. 117

Greensboro, NC (GSO) (VOR)

14825N 19344E
freq. 116.2

Frankfort, KY (VOR)

15626N 17593E
freq. 109.4

Greensboro, Piedmont Triad Intl (GSO) (F)

14850N 19352E
alt. 925RWY 5-23 10000 X 150
RWY 14-32 6385 X 150

Henderson (HNN) (VOR)

15920N 18530E
freq. 115.9

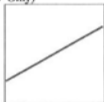
Holston Mtn (HMV) (VOR)

14922N 18579E
freq. 114.6

Hot Springs, Ingalls Fld, VA (HSP) (IBM FS3 Only)

15649N 19304E
alt. 3792

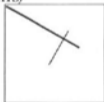
RWY 6-24 5605 X 100



Huntington, Tri-State / Walker-Long Field (HTS)

15738N 18367E
alt. 827

RWY 12-30 6510 X 150
RWY 3-21 3005 X 60



Huntt, WV (HT) (NDB)

15751N 18331E
freq. 226

Indianhead (IHD) (VOR)

16533N 19367E
freq. 108.2

Kessel (ESL), WV (VOR)

16227N 19526E
freq. 110.8

Knoxville (TYS), TN (VOR)

14662N 18001E
freq. 116.4

Lewisburg, Greenbriar Valley (LWB)

15589N 19118E
alt. 2303

RWY 4-22 7010 X 150



Lexington (HYK), KY (VOR)

15546N 17763E
freq. 112.6

Liberty (LJB), NC (VOR)

14724N 19485E
freq. 113

Livingston (LVT) (VOR)

14937N 17555E
freq. 108.4

London (LOZ) (VOR)

15149N 17907E
freq. 1161

Louisville (IIU), KY (VOR)

15586N 17388E
freq. 114.8

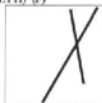
Lynchburg (LYH) (VOR)

15372N 19541E
freq. 109.2

Lynchburg, Lynchburg Muni - Glenn Field (LYH) (F)

15406N 19550E
alt. 938

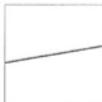
RWY 3-21 5800 X 150
RWY 17-35 3990 X 150



Marion / Wytheville, Mountain Empire (SA1)

15142N 18832E
alt. 2552

RWY 8-26 4500 X 75



Martinsburg (MRB), WV (VOR)

16341N 19896E
freq. 112.1

Martinsville (MTV) (VOR)

15076N 19306E
freq. 109

Martinsville, Blue Ridge (MTV)

15076N 19304E
alt. 928

RWY 12-30 5000 X 75



Mcquire, OH (VOR)

16246N 17812E
freq. 110

Midwest (MXQ), OH (VOR)

16165N 17917E
freq. 112.9

Mocca, TN (TR) (NDB)

14962N 18514E
freq. 299

Montebello, VA (MOL) (VOR)

15655N 19554E
freq. 114.4

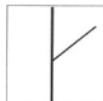
Morgantown (MGW) (VOR)

1630N 1922E
freq. 111.6

Morgantown Muni-Hart Field, WV (MGW)

1637N 1920E
alt. 1246

RWY 18-36 5205 X 150
RWY 5-23 3000 X 100



Mount Airy - Surry County (MWK)

1498N 1912E
alt. 1214

RWY 18-36 3905 X 75



Newcombe (ECB) (VOR)

1563N 1825E
freq. 110.4

Newcomerstown (CTW), OH (VOR)

1657N 1866E
freq. 111.8

Onida (MW) (NDB)

1624N 1778E
freq. 223

Parkersburg (JPU) (VOR)

1623N 1872E
freq. 108.6

Parkersburg, Wood Co - Wilson Fld (PKB)

1619N 1870E
alt. 859

RWY 3-21 6785 X 150
RWY 10-28 4005 X 150



Patterson (FFO), OH (VOR)

1634N 1786E
freq. 115.2

Pulaski (PSK) (VOR)

1524N 1904E
freq. 116.8

Rainelle (RNL), WV (VOR)

1562N 1897E
freq. 116.6

Richmond (RID), IN (VOR)

1630N 1760E
freq. 110.6

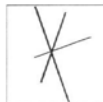
Roanoke (ROA), VA (VOR)

15382N 19257E
freq. 109.4

Roanoke Reg / Woodrum Fld (ROA)

15375N 19287E
alt. 1178

RWY 15-34 9000 X 150
RWY 2-20 6605 X 150
RWY 7-25 5315 X 100



Rosewood (ROD), OH (VOR)

16539N 17867E
freq. 117.5

Snowbird (SOT), TN (VOR)

14617N 18279E
freq. 108.8

South Boston (SBV), VA (VOR)

15133N 19646E
freq. 110.4

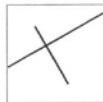
Springfield (SGH), OH (VOR)

16364N 17928E
freq. 113.2

Springfield-Beckley Muni, OH (SGH)

16364N 17929E
alt. 1053

RWY 6-24 9000 X 150
RWY 15-33 5500 X 150



Sumie, OH (CM) (NDB)

16429N 18240E
freq. 391

West Jefferson, Ashe County ((NC67)

14943N 18826E
alt. 3172

RWY 9-27 4300 X 75



Wheeling (HLG), WV (VOR)

16615N 18958E
freq. 112.2

Wheeling Ohio Co (HLG)

16574N 18934E
alt. 1197

RWY 3-21 5000 X 150
RWY 16-34 4500 X 150



White Sulphur Springs (SSU) (VOR)

15550N 19161E
freq. 108.4

Wilmington, Airborne Airpark (ILN)

16167N 17915E
alt. 1073

RWY 4-22 9000 X 150



Winston Salem, Smith Reynolds (INT)

14856N 19252E
alt. 971

RWY 15-33 6555 X 150
RWY 3-21 3935 X 150



Wise, Lonesome Pine

15147N 18423E
alt. 2680

RWY 6-24 4705 X 100



Woodrum (ODR) (VOR)

15374N 19285E
freq. 114.9

Yellow Bud (XUB), OH (VOR)

16226N 18185E
freq. 112.5

York (YRK), KY (VOR)

15844N 18211E
freq. 112.8

Zanesville (ZZV) (VOR)

16437N 18531E
freq. 111.4

AIRPORT DIRECTORY - CINCINNATI AREA

CITY	AIRPORT	NORTH	EAST	ALT
Ashland	Boyd Co., KY (I28)	15812	18298	544
Beckley	Raleigh County Mem. (BKW)	15531	18874	2503
Bristol/Johnson/Kingsport	Tri-City Reg (TRI)	14935	18486	1519
Charleston	Yeager (CRW)	15768	18690	981
Charlottesville	Albemarle, VA (CHO)	15784	19764	640
Circleville	Pickaway County Mem. (CYO)	16223	18184	686
Clarksburg	Benedum, WV (CKB)	16211	19110	1204
Columbus	Bolton Field (214)	16385	18121	905
Columbus	Port Columbus Intl (CMH)	16429	18204	817
Cumberland	Cumberland Muni (CBE)	16401	19581	777
Danville	Danville Regional (DAN)	15078	19540	571
Dublin	New River Valley (PSK)	15270	19054	2106
Elkins	Randolph Co., WV (EKN)	16050	19253	1988
Galax/Hillsville	Twin County (HLX)	15103	19019	2699
Greenville	Greenville Municiple (GCY)	14797	18351	1614
Greensboro	Piedmont Triad Intl (GSO)	14850	19352	925
Hot Springs	Ingalls Field, VA (HSP)	15649	19304	3792
Huntington	Tri-State/Walker-Long Fld. (HTS)	15738	18367	827
Lewisburg	Greenbriar Valley (LWB)	15589	19118	2303
Lynchburg	Lynchburg Muni/Glenn Fld. (LYH)	15406	19550	938
Marion/Wytheville	Mountain Empire (5A1)	15142	18832	2552
Martinsville	Blue Ridge (MTV)	15076	19304	928
Morgantown	Muni-Hart Field, WV (MGW)	16370	19200	1246
Mount Airy	Surry County (MWK)	14986	19124	1214
Parkersburg	Wood County/Wilson Fld. (PKB)	16191	18705	859
Roanoke	Reg./Woodrum Fld. (ROA)	15375	19287	1178
Springfield	Beckley Muni, OH (SGH)	16364	17929	1053
West Jefferson	Ashe County (NC67)	14943	18826	3172
Wheeling	Ohio County (HLG)	16574	18934	1197
Wilmington	Airborne Airpark (ILN)	16167	17915	1073
Winston Salem	Smith Reynolds (INT)	14856	19252	971
Wise	Lonesome Pine	15147	18423	2680

LEGEND

- Civil-Public use airport
- Restricted/Private-Nonpublic use airport, having emergency use or landmark value
- Rotating light in operation, sunset to sunrise

SANTA MONICA Airport Name
ATIS 119.15 Advisory Frequency (if available)
175-50 Elevation (feet) — Length (hundreds of feet)

NAME FREQUENCY VOR

NAME FREQUENCY VORTAC (Distance Measuring Equipment Able)

NAME FREQUENCY VOR/DME

NAME FREQUENCY Non Directional Beacon

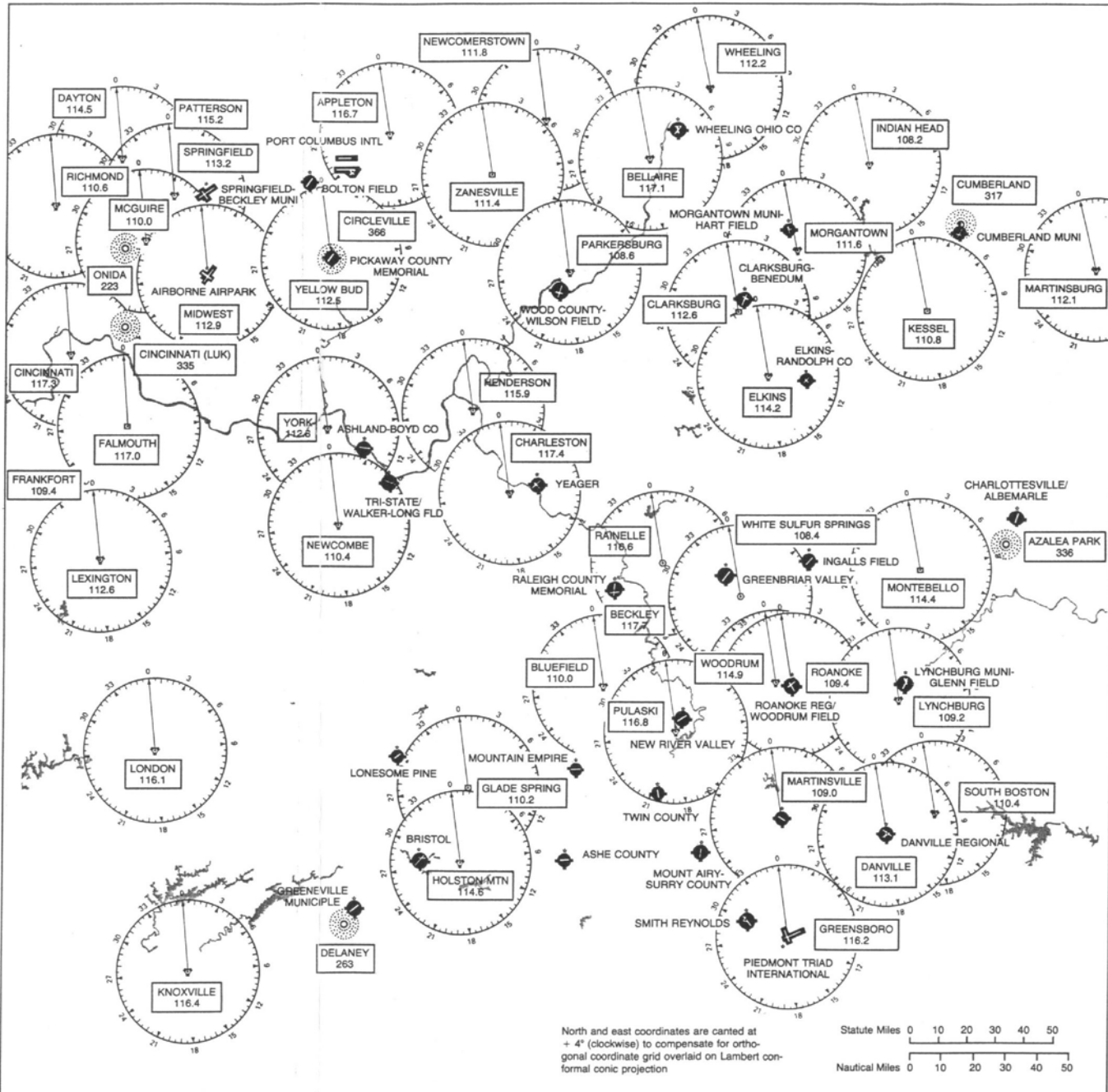
VOR/DME NAME FREQUENCY If VOR falls directly on an airport, only the airport symbol will be shown. The VOR facility type is shown at the top of the box.

AIRPORT NAME ABBREVIATIONS

CO	County
FLD	Field
INTL	International
MUNI	Municipal
(PVT)	Private Airport (prior permission before landing)

CINCINNATI AREA CHART

SCENERY DISK REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.



North and east coordinates are canted at + 4° (clockwise) to compensate for orthogonal coordinate grid overlaid on Lambert conformal conic projection

Statute Miles 0 10 20 30 40 50
 Nautical Miles 0 10 20 30 40 50

Alton/St Louis, St Louis Regional (ALN)

1906N 15875E
alt. 544

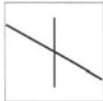
RWY 11-29 6495 X 100
RWY 17-35 5105 X 100



Anderson, Anderson Muni (AID)

16449N 17342E
alt. 918

RWY 12-30 5400 X 100
RWY 18-36 3400 X 75



Appleton (APE) (VOR)

16507N 18283E
freq. 116.7

Bardstown, Samuels Fld (BRY)

15462N 17419E
alt. 663

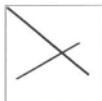
RWY 2-20 4005 X 75



Bedford, Virgil I Grissom Muni (BFR)

15894N 17084E
alt. 728

RWY 13-31 4500 X 100
RWY 6-24 3105 X 75



Bowling Green - Warren County (BWG)

15085N 17118E
alt. 548

RWY 3-21 6500 X 150
RWY 12-30 3955 X 150



Bloomington, IL (VOR)

16593N 16242E
freq. 108.2

Bloomington, IN (VOR)

16023N 17022E
freq. 110.2

Bloomington, Monroe Co (BMG)

16022N 17021E
alt. 846

RWY 17-35 5205 X 150
RWY 6-24 3815 X 100



Boiler, IN (VOR)

16632N 16852E
freq. 115.6

Bowling Green (BWG) (VOR)

15070N 17110E
freq. 117.9

Bowman, KY (VOR)

15641N 17355E
freq. 112.2

Bruny, OH (AT) (NDB)

16353N 17765E
freq. 315

Burlington, IA (VOR)

16709N 15604E
freq. 111.4

Cahokia-St Louis, St Louis Downtown - Parks (CPS)

15771N 15833E
alt. 413

RWY 12-30 5500 X 100
RWY 12-30 3800 X 75
RWY 4-22 2805 X 75



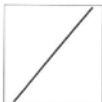
Camden Point, Cape Girardeau Muni (CGI)

15179N 16035E
alt. 341RWY 10-28 6500 X 150
RWY 2-20 3995 X 100

Campbell, AAF

14954N 16756E
alt. 571

RWY 4-22 11805 X 200



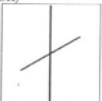
Cape Girardeau (CGI) (VOR)

15179N 16034E
freq. 112.9

Capital (CAP) (VOR)

16357N 16021E
freq. 112.7

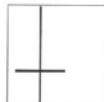
Carbondale/Murphysboro, Southern Illinois (MDH)

15417N 16143E
alt. 410RWY 18-36 5800 X 100
RWY 6-24 4095 X 100

Central City, KY (VOR)

15258N 16836E
freq. 109.8

Centralia Muni (ENL)

15738N 16195E
alt. 535RWY 18-36 5000 X 75
RWY 9-27 2575 X 150

Centralia, IL (VOR)

15691N 16177E
freq. 115

Champaign, IL (VOR)

16397N 16464E
freq. 110

Cincinnati (CVG) (VOR)

15994N 17661E
freq. 117.3

Cincinnati Muni Arpt Lunken Fld (LUK) (F)

16034N 17757E
alt. 482

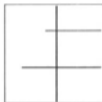
RWY 2-20 6100 X 150
RWY 6-24 5140 X 100
RWY 2-20 3820 X 100



Cincinnati, Greater Cincinnati Intl (CVG) (F)

16008N 17674E
alt. 892

RWY 18-36 9500 X 150
RWY 9-27 7800 X 150
RWY 9-27 5500 X 150



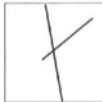
Clarksville (CKV) (VOR)

14927N 16780E
freq. 110.6

Clarksville, Outlaw Fld (CKV)

14928N 16780E
alt. 551

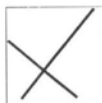
RWY 17-35 6005 X 100
RWY 5-23 4005 X 100



Columbus (BAK)

16081N 17260E
alt. 656

RWY 4-22 6405 X 150
RWY 13-31 5000 X 150



Connersville, IN (NDB)

16279N 17507E
freq. 275

Connersville, Mettel Feild (CEV)

16279N 17509E
alt. 866

RWY 18-36 5000 X 75



Corning Muni (4M9)

14830N 15661E
alt. 292

RWY 18-36 4300 X 60



Cunningham, KY (VOR)

15082N 16292E
freq. 113.1

Danville, IL (VOR)

16511N 16695E
freq. 111

Dayton, Dayton General Airport South (MGY)

16247N 17812E
alt. 925

RWY 2-20 5000 X 100
RWY 9-27 2880 X 100



Dayton, James M Cox Dayton Intl (DAY)

16378N 17805E
alt. 961

RWY 6-24 9500 X 150
RWY 18-36 7000 X 150
RWY 6-24 7000 X 150



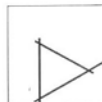
Dayton, OH (VOR)

16427N 17731E
freq. 1145

Decatur (DEC)

16310N 16267E
alt. 679

RWY 6-24 6495 X 150
RWY 12-30 5300 X 150
RWY 18-36 5300 X 150



Decatur, IL (VOR)

16269N 16276E
freq. 1172

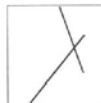
Dyersburg (DVR) (VOR)

14663N 16124E
freq. 1168

Dyersburg Muni (DVR)

14654N 16089E
alt. 338

RWY 4-22 5000 X 100
RWY 16-34 4005 X 75



Effingham Co Mem (IH2)

15982N 16381E
alt. 587

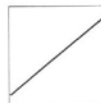
RWY 11-29 4500 X 75
RWY 1-19 3400 X 60



Elizabethtown (EKX)

15404N 17276E
alt. 774

RWY 5-23 5000 X 75



Evansville Dress Regional (EVV)

15546N 16727E
alt. 417

RWY 4-22 8025 X 150
RWY 18-36 5080 X 150
RWY 9-27 3505 X 100



Falmouth, KY (VOR)

15836N 17785E
freq. 117

Farmington Regional (FAM)

15410N 15744E
alt. 945

RWY 2-20 3975 X 60



Farmington, MO (VOR)

15378N 15807E
freq. 115.7

Foristell, MO (FTZ) (VOR)

15819N 15563E
freq. 110.8

Fort Knox, KY (VOR)

15491N 17258E
freq. 109.6

Fort Wayne, IN (VOR)

16834N 17455E
freq. 117.8

Frankfort, Capital City (FFT)

15632N 17612E
alt. 804

RWY 6-24 5005 X 100



Frankfort, KY (VOR)

15632N 17610E
freq. 109.4

Ft Knox, Godman AAF

15491N 17259E
alt. 754

RWY 15-33 5000 X 150
RWY 18-36 5205 X 150



Galesburg, IL (VOR)

16791N 15760E
freq. 109.8

Gallatin, Sumner Co Regional (M33)

14832N 17130E
alt. 584

RWY 17-35 5000 X 75



Hopkinsville - Christian Co (IM8)

15030N 16763E
alt. 554

RWY 8-26 5000 X 75



Glasgow Muni (GLW)

15119N 17276E
alt. 715

RWY 7-25 4005 X 75



Huntt, WV (HT) (NDB)

15751N 18331E
freq. 226

Indianapolis Intl (IND) (F)

16273N 17126E
alt. 797RWY 4-22 10005 X 150
RWY 13-31 7605 X 150
RWY 4-22 3700 X 75

Graham, TN (GHM) (VOR)

14578N 16752E
freq. 111.6

Grissom, IN (VOR)

16677N 17146E
freq. 116.5

Indianapolis, IN (VOR)

16312N 17096E
freq. 116.3

Hamilton - Farfield (HAO)

16145N 17714E
alt. 630

RWY 11-29 5440 X 80



Indianapolis, Indianapolis Terry (I52)

16409N 17132E
alt. 922

RWY 18-36 5165 X 75



Indianapolis, Mount Comfort (MQJ)

16333N 17254E
alt. 863

RWY 7-25 5900 X 100
RWY 16-34 3905 X 75



Jacksonville Muni (JXJ)

16287N 15816E
alt. 623

RWY 13-31 5000 X 75
RWY 4-22 3230 X 305



Jacksonville, IL (VOR)

16284N 15816E
freq. 108.6

Kirksville, MO (VOR)

16472N 15051E
freq. 114.6

Knox, IN (VOR)

16967N 16981E
freq. 108.8

Kokomo, IN (VOR)

16625N 17189E
freq. 109.8

Lawrenceville - Vincennes Intl (LWV)

15851N 16696E
alt. 430

RWY 9-27 5205 X 150
RWY 18-36 5205 X 150



Lawrenceville, IL (VOR)

15855N 16696E
freq. 113.5

Lebanon, Lebanon - Warren Co (I68)

16190N 17804E
alt. 889

RWY 18-36 4005 X 65



Lexington (HYK), KY (VOR)

15546N 17763E
freq. 112.6

Lexington, Blue Grass (LEX) (F)

15574N 17717E
alt. 981

RWY 4-22 7010 X 150
RWY 8-26 3505 X 150



Livingston (LVT) (VOR)

14941N 17555E
freq. 108.4

Livingston (LVT)

14862N 17506E
alt. 1371

RWY 3-21 4005 X 75



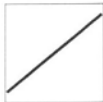
London (LOZ) (VOR)

15149N 17907E
freq. 116.1

London - Corbin Arpt - Magee Fld (LOZ)

15173N 17919E
alt. 1214

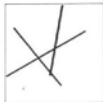
RWY 5-23 6005 X 150



Louisville, Bowman Fld (LOU)

15640N 17355E
alt. 548

RWY 6-24 4310 X 80
RWY 1-19 3380 X 100
RWY 14-32 3535 X 80



Louisville, KY (VOR)

15586N 17388E
freq. 114.8

Louisville, Standiford Fld (SDF) (F)

15618N 17331E
alt. 495

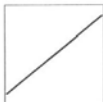
RWY 1-19 10000 X 150
RWY 11-29 7250 X 150



Madisonville Muni (210)

15243N 16776E
alt. 440

RWY 5-23 5000 X 75



Malden Muni (MAW)

14915N 15888E
alt. 259

RWY 4-22 5000 X 100
RWY 13-31 5000 X 80
RWY 18-36 5000 X 100



Marion (MWA) (VOR)

15408N 16222E
freq. 110.4

Marion, IN (VOR)

16617N 17301E
freq. 108.6

Marion, Williamson Co Regional (MWA)

15407N 16224E
alt. 472

RWY 2-20 6500 X 150
RWY 11-29 3800 X 100



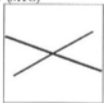
Mattoon (MTO) (VOR)

16157N 16463E
freq. 109.4

Mattoon - Charleston, Coles County Memorial (MTO)

16157N 16465E
alt. 722

RWY 11-29 6500 X 150
RWY 6-24 5800 X 100



Mayfield Graves Co (M25)

14986N 16373E
alt. 525

RWY 18-36 4625 X 100



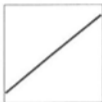
Mcguire, OH (VOR)

16246N 17811E
freq. 110

Middletown, Hook Fld Muni (MWO)

16217N 17756E
alt. 649

RWY 5-23 6100 X 100



Midwest, OH (VOR)

16182N 17999E
freq. 112.9

Mocca, TN (TR) (NDB)

14962N 18514E
freq. 299

Mt Vernon - Outland (MVN)

15662N 16275E
alt. 479

RWY 5-23 6500 X 150
RWY 15-33 3150 X 100



Mt Vernon, IL (VOR)

15681N 16294E
freq. 113.8

Muncie, IN (VOR)

16512N 17412E
freq. 114.4

Mystic, KY (VOR)

15485N 17148E
freq. 108.2

Nabb, IN (VOR)

15792N 17343E
freq. 112.4

Nashville (BNA) (VOR)

14716N 17038E
freq. 114.1

Nashville, John C. Tune (JWN)

14740N 16973E
alt. 492

RWY 1-19 5000 X 100



Nashville, Nashville Metropolitan (BNA) (F)

14718N 17039E
alt. 600

RWY 13-31 8805 X 150
RWY 2-20 7705 X 150
RWY 2-20 4305 X 150



New Hope, KY (EWO) (VOR)

15386N 17373E
freq. 110.8

Onida (MW) (NDB)

16216N 17734E
freq. 223

Ottumwa, IA (VOR)

16855N 15153E
freq. 111.6

Owensboro - Daviess Co (OWB)

15410N 16852E
alt. 407

RWY 17-35 6500 X 150
RWY 5-23 3700 X 100



Owensboro, KY (OWB) (VOR)

15411N 16852E
freq. 108.6

Paducah, Barkley Regional (PAH)

1511N 16307E
alt. 410

RWY 4-22 6500 X 150
RWY 14-32 4005 X 150



Patterson, OH (FFO) (VOR)

16345N 17863E
freq. 115.2

Peoria, IL (VOR)

16676N 15965E
freq. 115.2

Peotone, IL (VOR)

16937N 16618E
freq. 113.2

Perryville (K02)

15455N 15936E
alt. 371

RWY 1-19 5500 X 100



Pocket City, IN (PXV) (VOR)

15491N 16648E
freq. 113.3

Pontiac, IL (VOR)

16742N 16316E
freq. 109.6

Poplar Bluff, Earl Fields Mem (POF)

14990N 15774E
alt. 331

RWY 18-36 4005 X 100



Richmond (RID) (VOR)

16307N 17605E
freq. 110.6

Richmond Muni (RID)

16309N 17604E
alt. 1141

RWY 6-24 5205 X 150
RWY 15-33 5015 X 150
RWY 10-28 3615 X 150



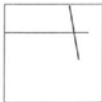
Roberts, IL (VOR)

16637N 16800E
freq. 116.8

Robinson Muni (RSV)

15963N 16680E
alt. 462

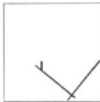
RWY 9-27 5100 X 75
RWY 17-35 3400 X 75



Seymour, Freeman Muni (SER)

15937N 17259E
alt. 584

RWY 4-22 5500 X 150
RWY 13-31 5500 X 150
RWY 18-36 1000 X 150



Robinson, IL (VOR)

15963N 16679E
freq. 108.4

Shelbyville, IN (VOR)

16240N 17280E
freq. 112

Rosewood, OH (VOR)

16549N 17842E
freq. 117.5

Skeston Memorial Muni (SKK)

15038N 16037E
alt. 315

RWY 2-20 5500 X 100



Samsville, IL (VOR)

15732N 16529E
freq. 116.6

Snyrna (MQY)

14673N 17096E
alt. 544

RWY 14-32 8035 X 150
RWY 1-19 5545 X 150



Scott AFB

15755N 15940E
alt. 453

RWY 14-32 7040 X 150



Springfield, Capital (SPI)

16314N 16002E
alt. 597

RWY 4-22 8000 X 150
RWY 12-30 5300 X 150
RWY 18-36 5300 X 150



Springfield, OH (VOR)

16358N 17916E
freq. 113.2

Springfield-Beckley Muni, OH (SGH)

16364N 17929E
alt. 1073

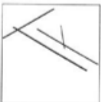
RWY 7-25 5000 X 75
RWY 4-22 9000 X 150



St Louis, Lambert - St Louis Intl (STL) (F)

15844N 15773E
alt. 604

RWY 12-30 11020 X 200
RWY 12-30 9000 X 150
RWY 6-24 7605 X 150
RWY 17-35 3015 X 75



St Louis, Spirit of St Louis (SUS)

15811N 15674E
alt. 462

RWY 8-26 7000 X 150
RWY 8-26 3800 X 75



St. Louis (STL) (VOR)

15894N 15729E
freq. 117.4

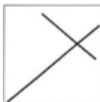
Sumie, OH (CM) (NDB)

16432N 18243E
freq. 391

Terre Haute, Hulman Regional (HUF)

16152N 16791E
alt. 584

RWY 5-23 9020 X 150
RWY 13-31 5300 X 150



Terre Haute, IN (VOR)

16168N 16809E
freq. 115.3

Troy, IL (VOR)

15840N 15920E
freq. 116

Union City, Everett - Stewart (UCY)

14817N 16237E
alt. 341

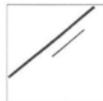
RWY 1-19 5000 X 100



Wolf Lake, IN (VOR)

16946N 17351E
freq. 110.4

Wright-Patterson AFB

16348N 17867E
alt. 823RWY 5-23 12605 X 305
RWY 5-23 4750 X 150

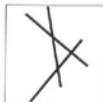
Vandalia (VLA) (VOR)

15992N 16173E
freq. 114.3

Walnut Ridge (ARG) (VOR)

14706N 15554E
freq. 114.5

Walnut Ridge Regional (ARG)

14711N 15563E
alt. 276RWY 4-22 5000 X 150
RWY 13-31 5000 X 150
RWY 17-35 5000 X 150

Waverly, Humphreys Co (0MS)

14708N 16671E
alt. 745

RWY 3-21 4005 X 75

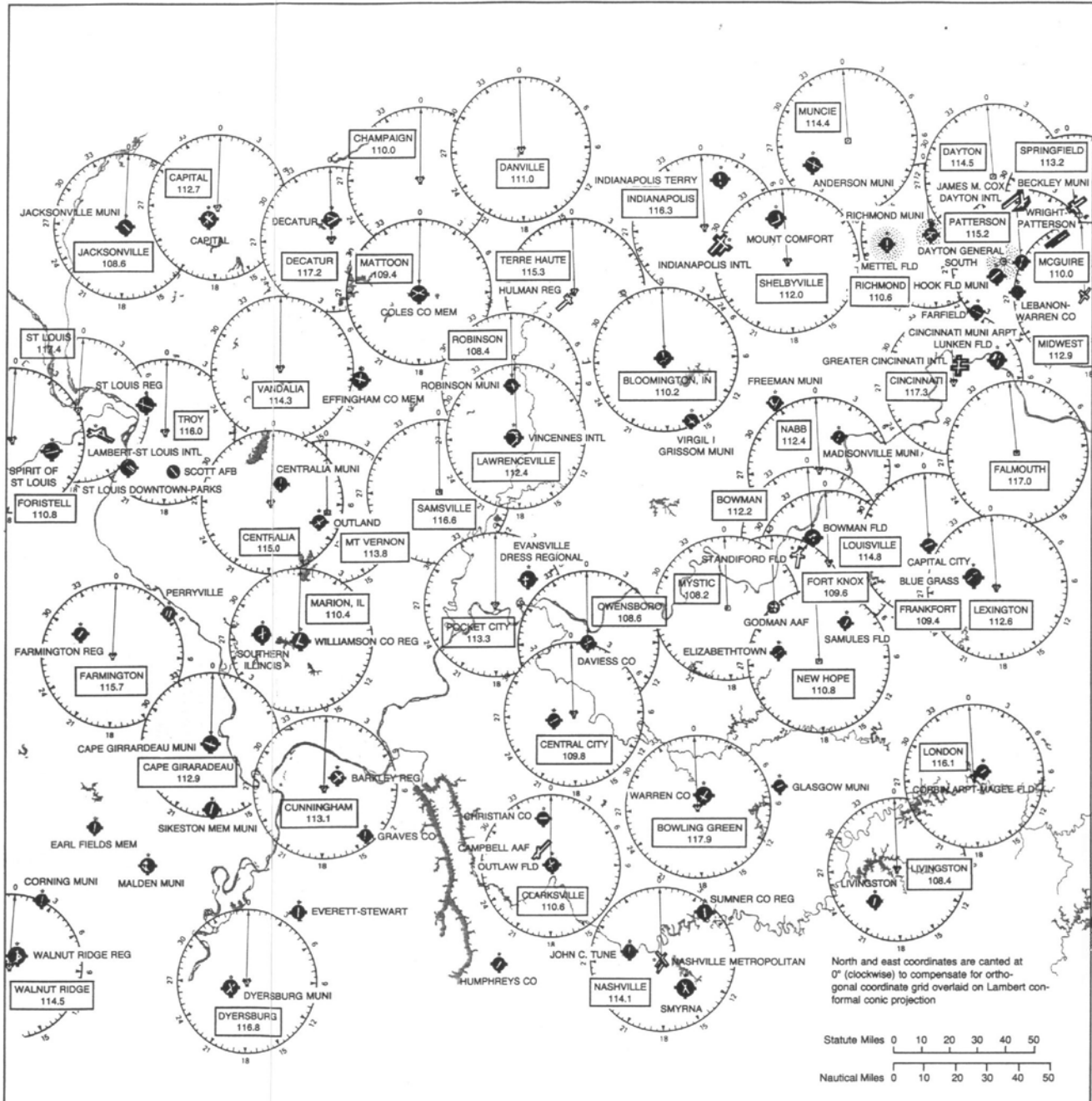


AIRPORT DIRECTORY - ST LOUIS AREA CHART

ST LOUIS AREA CHART

SCENERY DISK REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.

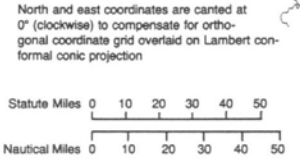
CITY	AIRPORT	NORTH	EAST	ALT _{MSL}	ILS	ATIS	VASI
Alton/St Louis	St Louis Regional (ALN)	15905	15875	544			
Anderson	Anderson Muni (AID)	16449	17342	918			
Bardstown	Samules Fld (BRY)	15462	17419	663			
Bedford	Virgil I Grissom Muni (BFR)	15994	17064	728			
Bellefonte	Scott AFB	15755	15940	453			
Bloomington	Monroe Co. (BMG)	18022	17021	846			
Bowling Green	Warren County (BWG)	15085	17118	548			
Cahokia-St Louis	St Louis Downtown - Parks (CPS)	15771	15833	413			
Camden Point	Cape Girardeau Muni (CGI)	15179	16053	341			
Campbell	Campbell AAF	14954	16756	571			
Carbondale	Southern Illinois (MDH)	15417	16143	410			
Mauphysboro							
Centralla	Centralla Muni (ENL)	15738	16195	535			
Cincinnati	Cincinnati Muni Arpt	16034	17757	482	* 110.9/20L	2R,20L,20R,6,24	
Cincinnati	Greater Cincinnati Intl (CVG)	16008	16764	892	* 111.9/9R	135.3 27R,27L,18	
Clarksville	Outlaw Fld (CKV)	14928	16780	551			
Connersville	Mettel Fld (CEV)	16279	17509	866			
Corning	Corning Muni (4MS)	14830	15661	292			
Dayton	Dayton General Arpt South (MGY)	16247	17812	925			
Dayton	James M Cox Dayton Intl (DAY)	16378	17805	961			
Decatur	Decatur (DEC)	10310	16287	679			
Dyersburg	Dyersburg Muni (DYR)	14654	16089	338			
Effingham	Effingham Co Mem. (1H2)	15982	16381	587			
Elizabethtown	Elizabethtown (EIOK)	15404	17276	774			
Evansville	Evansville Dress Regional (EVV)	15546	16727	417			
Farmington	Farmington Regional (FAM)	15410	15744	845			
Frankfort	Capital City (FFT)	15633	17612	804			
Fr Knox	Godman AAF	15491	17259	754			
Gallatin	Sumner Co Regional (M33)	14832	17130	584			
Glasgow	Glasgow Muni (GLW)	15119	17276	715			
Hamilton	Farfield (HAC)	16145	17714	630			
Hopkinsville	Christian County (1M8)	15030	16783	554			
Indianapolis	Indianapolis Intl (IND)	16273	17126	797	* 109.3/4L	125.35 13	
Indianapolis	Indianapolis Terry (I52)	16409	17132	922			
Indianapolis	Mount Comfort (IMJ)	16333	17254	863			
Jacksonville	Jacksonville Muni (LJK)	16287	15818	623			
Lawrenceville	Vincennes Intl (LWV)	15851	16696	430			
Lebanon	Lebanon - Warren Co. (I68)	16190	17804	889			
Lexington	Blue Grass (LEX)	15574	17717	961	* 110.1	126.3 4,22	
Livingston	Livingston (LTV)	14862	17506	1371			
London	Corbin Arpt-Magee Fld (LOZ)	15173	17919	1214			
Louisville	Bowman Fld (LOU)	15640	17355	548			
Louisville	Standiford Fld (SDP)	15618	17331	495	* 110.3/1	118.15 19	
Madisonville	Madisonville Muni (2IC)	15243	16776	440			
Malden	Malden Muni (MAW)	14915	15888	259			
Marion	Williamson Co Regional (MWA)	15407	16224	472			
Mattoon	Coles Co Mem. (MTC)	16157	16465	722			
Charleston							
Mayfield	Mayfield Graves Co. (M25)	14986	16373	525			
Midketown	Hook Fld Muni (MWC)	16217	17756	949			
Mt Vernon	Outland (MVN)	15662	16275	479			
Nashville	John C. Tune (JWN)	14740	16973	492			
Nashville	Nashville Metropolitan (BNA)	14718	17039	600	* 109.9/2L	120.0 13,20R,2R,20L	
Owensboro	Davies Co. (OWB)	15410	16852	407			
Paducah	Barkley Regional (PAH)	15111	16307	410			
Perryville	Perryville (KO2)	15455	15936	371			
Poplar Bluff	Earl Fields Mem. (POF)	14990	15774	331			
Richmond	Richmond Muni (RID)	16309	17604	1141			
Robinson	Robinson Muni (RSV)	15963	16680	482			
Seymour	Freeman Muni (SER)	15937	17259	584			
Sikeston	Memorial Muni (SIK)	15038	16037	315			
Smyrna	Smyrna (MQY)	14673	17096	544			
Springfield	Capital (SPI)	16314	16002	597			
Springfield	Beckley Muni (SGH)	16364	17929	1073			
St Louis	Lambert-St Louis Intl (STL)	15644	15773	604	* 111.3/30R	12L,30R	
St Louis	Spirit of St Louis (SUS)	15611	15674	462			
Terre Haute	Hulman Regional (HUP)	16152	16791	584			
Union City	Everett - Stewart (UCY)	14817	16237	341			
Walnut Ridge	Walnut Ridge Regional (ARG)	14711	15563	276			
Waverly	Humphreys Co. (OM5)	14708	16671	745			
Wright-Patterson	Wright-Patterson AFB	16348	17867	823			



LEGEND

- Civil-Public use airport
- Restricted/Private-Nonpublic use airport, having emergency use or landmark value
- Rotating light in operation, sunset to sunrise
- SANTA MONICA**
ATIS 119.15
175-50
- Airport Name**
Advisory Frequency (if available)
Elevation (feet) — Length (hundreds of feet)

NAME	VOR
FREQUENCY	



Akron (VOR)

16968N	18742E
freq.	114.4

Akron, OH Akron Fulton Intl

16931N	18661E
alt. 1069	

RWY 7-25	6356 X 150
RWY 1-19	2335 X 98



Akron, OH Akron-Canton Regional

16880N	18672E
alt. 1227	

RWY 1-19	6395 X 150
RWY 14-32	5602 X 150
RWY 5-23	5602 X 150



Alma, MI Gratiot

17845N	17560E
alt. 754	

RWY 9-27	4998 X 72
RWY 18-36	3201 X 72



Alpena (VOR)

18642N	17857E
freq.	108.8

Appleton (VOR)

16516N 18324E
freq. 116.7

Ash, Ont. (VOR)

17962N 19024E
freq. 115

Ashtabula, PA Ashtabula

17274N 18879E
alt. 922

RWY 8-26 5202 X 98



Au Sable (VOR)

18371N 17948E
freq. 116.1

Bad Axe, MI Huron Co.

18079N 18082E
alt. 764

RWY 3-21 3503 X 72



Beaver Falls, PA

Beaver County

16850N 19021E
alt. 1253

RWY 10-28 4500 X 98



Bellaire (VOR)

16510N 18915E
freq. 117.1

Bradford (VOR)

17349N 19547E
freq. 116.6

Bradford, PA

Bradford Regional

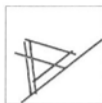
17357N 19538E
alt. 2142

RWY 14-32 6800 X 150
RWY 5-23 4500 X 98



Brantford, ONT

Brantford

17870N 18931E
alt. 813RWY 5-23 4998 X 98
RWY 11-29 2597 X 98
RWY 11-29 2597 X 98
RWY 17-35 2597 X 98
RWY 17-35 2597 X 98
RWY 5-23 2459 X 98

Bryan, OH

William Co.

17046N 17660E
alt. 731

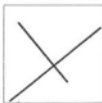
RWY 7-25 5005 X 72



Buffalo (VOR)

17836N 19478E
freq. 116.4

Buffalo, NY Greater Buffalo Intl

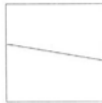
17841N 19450E
alt. 725RWY 5-23 8101 X 150
RWY 14-32 5379 X 150

Carlisle, PA

Carlisle

16723N 20104E
alt. 515

RWY 10-28 4008 X 39



Centralia, ONT

Huron Airpark

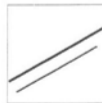
17897N 18558E
alt. 823RWY 10-28 5011 X 150
RWY 16-34 4401 X 150
RWY 4-22 3201 X 150

Clarion (VOR)

17043N 19309E
freq. 112.9

Cleveland, OH

Burke Lakfront

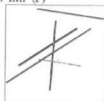
17133N 18571E
alt. 584RWY 6-24 6199 X 150
RWY 6-24 5202 X 98

Cleveland, OH

17078N 18518E
alt. 790

RWY 10-28	6015 X 150
RWY 10-28	3785 X 72
RWY 6-24	6245 X 196
RWY 6-24	9000 X 150
RWY 0-18	6409 X 150

Cleveland Hopkins Intl (F)

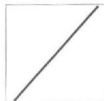


Coshocton, OH

16609N 18558E
alt. 977

RWY 4-22 4113 X 72

Richard Downing

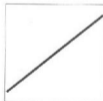


Cleveland, OH

17159N 18633E
alt. 879

RWY 5-23 5103 X 98

Cuyahoga County

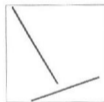


Detroit, MI

17485N 18115E
alt. 626

RWY 15-33 5090 X 98
RWY 7-25 4027 X 98

Detroit City

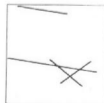


Columbus, OH

16441N 18229E
alt. 813

RWY 10-28	6002 X 150
RWY 10-28	10699 X 150
RWY 13-31	4998 X 150
RWY 5-23	4480 X 150

Columbus Intl



Detroit, MI

17396N 18013E
alt. 640

RWY 3-21 10502 X 196
RWY 3-21 9997 X 150
RWY 9-27 8698 X 196
RWY 3-21 8501 X 196

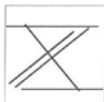
Detroit Metro Wayne Co.



Detroit, MI Willow Run

1738N 17954E
alt. 715

RWY 5-23 7524 X 150
RWY 5-23 6658 X 157
RWY 9-27 7294 X 157
RWY 9-27 6514 X 157
RWY 14-32 6914 X 157



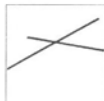
Elmira (VOR)

17548N 20039E
freq. 113.7

Elmira, NY Corning Regional

17583N 20081E
alt. 954

RWY 6-24 6999 X 150
RWY 10-28 5195 X 150



Dryer (VOR)

17049N 18423E
freq. 113.6

Du Bois, PA Du Bois-Jefferson County

17079N 19487E
alt. 1817

RWY 7-25 5503 X 98



Erie (VOR)

17387N 18999E
freq. 110.8

Erie, PA Erie Intl

17422N 19030E
alt. 731

RWY 6-24 6500 X 150
RWY 10-28 3601 X 150
RWY 2-20 3529 X 150



Dunkirk, NY Dunkirk Muni

17630N 19300E
alt. 692

RWY 6-24 4998 X 98
RWY 15-33 4001 X 98



Findlay, OH Findlay

16863N 17942E
alt. 813

RWY 7-25 6002 X 98
RWY 18-36 6002 X 98



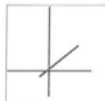
Flint (VOR)

17708N 17867E
freq. 116.9

Flint, MI Bishop

17707N 17864E
alt. 781

RWY 18-36 7845 X 150
RWY 9-27 7196 X 150
RWY 5-23 4290 X 150



Franklin, PA Chess-Lamberton

17129N 19165E
alt. 1528

RWY 2-20 5202 X 150
RWY 11-29 3699 X 98



Ft. Wayne, IN (VOR)

16821N 17445E
freq. 117.8

Gaylord (VOR)

18595N 17532E
freq. 109.2

Geneseo (VOR)

17836N 19771E
freq. 108.2

Gladwin, MI Gladwin

18133N 17610E
alt. 777

RWY 9-27 4696 X 72



Goderich, ONT Goderich

18101N 18479E
alt. 702

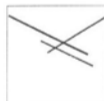
RWY 10-28 5162 X 72



Hamilton, ONT Hamilton Civic

17894N 19060E
alt. 781

RWY 12-30 5188 X 150
RWY 12-30 8003 X 196
RWY 6-24 6002 X 150



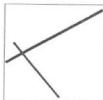
Harrisburg (VOR)

16754N 20152E
freq. 112.5

Houghton Lake (VOR)

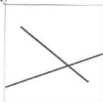
18311N 17555E
freq. 111.6

Jackson, MI Jackson County Reynolds

17391N 17654E
alt. 1000RWY 6-24 5346 X 150
RWY 14-32 3803 X 98

Jamestown, NY

Chautauqua County

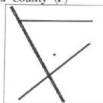
17484N 19321E
alt. 1725RWY 7-25 5300 X 98
RWY 13-31 4500 X 98

Johnstown (VOR)

16710N 19552E
freq. 113

Johnstown, PA

Johnstown-Cambria County (F)

16711N 19551E
alt. 2283RWY 15-33 5484 X 150
RWY 5-23 4467 X 98
RWY 9-27 3693 X 98

Kleinburg (VOR)

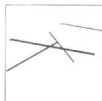
18235N 19108E
freq. 114.5

Lansing (VOR)

17584N 17569E
freq. 110.8

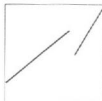
Lansing, MI

Capital City

17614N 17608E
alt. 859RWY 10-28 7248 X 150
RWY 6-24 4998 X 118
RWY 10-28 3601 X 72
RWY 14-32 3299 X 72

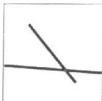
Latrobe, PA

Westmoreland County

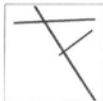
16668N 19367E
alt. 1161RWY 5-23 5503 X 98
RWY 3-21 3594 X 72

Lima, OH

Lima Allen Co.

16728N 17833E
alt. 977RWY 9-27 5149 X 150
RWY 14-32 3995 X 150

London, ONT London

17802N 18683E
alt. 912RWY 15-33 8796 X 196
RWY 9-27 6297 X 196
RWY 5-23 3175 X 150

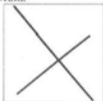
London, Ont. (VOR)

17801N 18683E
freq. 117.2

Mansfield, OH

16811N 18321E
alt. 1296RWY 14-32 9000 X 150
RWY 5-23 6796 X 150

Mansfield Lahm Muni.



Marlette, MI Marlette

17875N 18064E
alt. 895RWY 9-27 3798 X 72
RWY 1-19 3503 X 72

Meadville, PA

17227N 19041E
alt. 1404

RWY 7-25

Port Meadville

4099 X 72



Midland (VOR)

18517N 19056E
freq. 112.8

Montour (VOR)

16735N 19100E
freq. 112

Mt. Pleasant, MI

17975N 17536E
alt. 754

RWY 9-27

Mt. Pleasant

4998 X 98



Niagara Falls, NY

17905N 19374E
alt. 590RWY 10-28
RWY 10-28
RWY 6-24

Niagara Falls Intl

9124 X 150
3975 X 72
5051 X 150

Oshawa, ONT Oshawa

18256N 19351E
alt. 459RWY 8-26 2650 X 150
RWY 12-30 3476 X 150
RWY 4-22 2669 X 150

Peck (VOR)

17855N 18182E
freq. 114

Phillipsburgh, PA Mid-State

16980N 19769E
alt. 1948RWY 16-34 5713 X 98
RWY 6-24 5005 X 98

Phillipsburg (VOR)

17001N 19795E
freq. 115.5

Pittsburgh, PA Allegheny County

16684N 19195E
alt. 1253RWY 10-28 6500 X 150
RWY 13-31 3824 X 98
RWY 5-23 2532 X 98

Pittsburgh, PA

16679N 19106E
alt. 1200

RWY 13-31

Campbell

5011 X 72



Pittsburgh, PA

16733N 19094E
alt. 1204RWY 10-28 10502 X 150
RWY 10-28 11499 X 196
RWY 10-28 8629 X 150
RWY 14-32 8095 X 150

Greater Pittsburgh Intl (F)

Pontiac, MI

17587N 17979E
alt. 981RWY 9-27 6199 X 150
RWY 9-27 3247 X 72
RWY 4-22 2453 X 72
RWY 18-36 1843 X 52

Oakland-Pontiac



Port Huron, MI

17715N 18251E
alt. 649RWY 4-22
RWY 10-28

St. Clair Co. Intl.

5103 X 98
2445 X 72

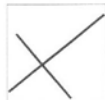
Portland, IN Portland Muni.

16601N 17522E
alt. 925

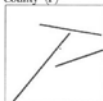
RWY 9-27 4001 X 72



Saginaw, MI Tri City

17948N 17747E
alt. 669RWY 5-23 8003 X 150
RWY 14-32 5503 X 150

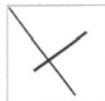
Rochester, NY Rochester-Monroe County (F)

17960N 19774E
alt. 558RWY 4-22 8003 X 150
RWY 10-28 5497 X 150
RWY 7-25 4401 X 150

Salem (VOR)

17472N 17929E
freq. 114.3

Sarnia, ONT Sarnia

17756N 18320E
alt. 594RWY 14-32 5097 X 98
RWY 5-23 2991 X 150

Rosewood (VOR)

16543N 17839E
freq. 117.5

Saginaw (VOR)

17946N 17747E
freq. 112.9

Sebewaing, MI

18042N 17934E
alt. 584

RWY 18-36 2177 X 52



Saginaw, MI Browne

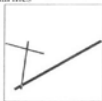
17908N 17819E
alt. 600RWY 9-27 3503 X 72
RWY 5-23 3102 X 59

St. Catharines, ONT

17936N 19301E
alt. 321

RWY 6-24 4998 X 150
RWY 1-19 2499 X 72
RWY 11-29 2000 X 72

St. Catharines



Tiverton (VOR)

16662N 18466E
freq. 116.5

Toledo, OH Toledo Express (F)

17109N 17882E
alt. 686

RWY 7-25 8698 X 150
RWY 16-34 5595 X 150



Toronto (VOR)

18126N 19127E
freq. 113.3

Toronto, ONT

18216N 19208E
alt. 649

RWY 15-33 3752 X 98
RWY 3-21 2578 X 78

Buttonville



Toronto, ONT

18165N 19133E
alt. 649

RWY 15-33
RWY 9-27

Downsview

6999 X 196
3161 X 150



Toronto, ONT

18116N 19208E
alt. 253

RWY 8-26
RWY 6-24
RWY 15-33

Toronto Island

4001 X 150
2997 X 150
2997 X 150



Versailles, OH

16498N 17679E
alt. 1007

RWY 9-27

Darke County

3803 X 72



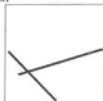
Waterloo, ONT

18012N 18910E
alt. 1040

RWY 7-25
RWY 14-32

Waterloo-Wellington

5202 X 150
4099 X 150



Waterville (VOR)

17054N 17941E
freq. 113.1

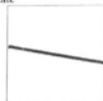
Wellsboro, PA

17377N 19941E
alt. 1899

RWY 10-28

Grand Canyon State

2099 X 72



Wellsville, NY

17514N 19728E
alt. 2122

RWY 10-28

Wellsville-Tarantine

4900 X 72



Weston, WV

16586N 18963E
alt. 1197

RWY 3-21

RWY 16-34

RWY 9-27

Wheeling Ohio County

4998 X 150

4493 X 150

3220 X 98



Warton (VOR)

18551N 18647E
freq. 117.7

Williamsport, PA

17187N 20124E
alt. 528

RWY 9-27

RWY 15-33

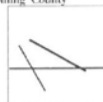
RWY 12-30

Williamsport-Lycoming County

6448 X 150

3503 X 98

4277 X 150



Willoughby, OH

17214N 18657E
alt. 626

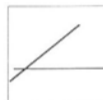
RWY 9-27

RWY 5-23

Lost Nation

4998 X 98

4867 X 98



Windsor (VOR)

17419N 18176E
freq. 113.8

Youngstown (VOR)

17082N 18906E
freq. 109

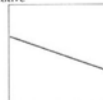
Youngstown, OH

16963N 18868E
alt. 997

RWY 11-29

Youngstown Executive

4172 X 59



24 - DETROIT

Youngstown, OH

17080N 18908E
alt. 1197

RWY 14-32
RWY 5-23
RWY 1-19

Youngstown Muni.

7491 X 180
4985 X 150
3719 X 98

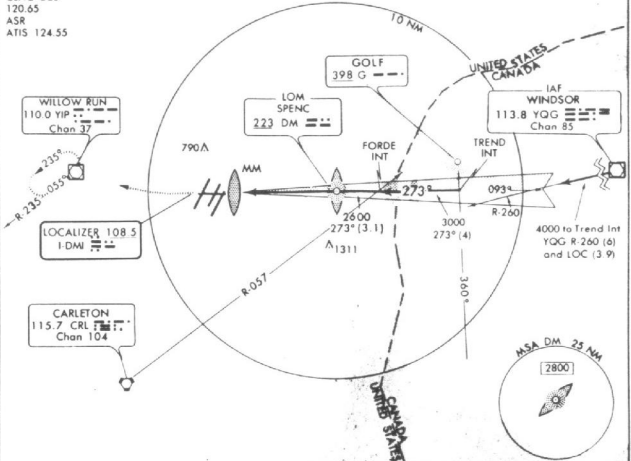


Amdt 6
ILS RWY 27

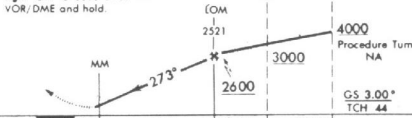
DETROIT METROPOLITAN WAYNE COUNTY (DTW)
 AL-119 (FAA)
 DETROIT, MICHIGAN

DETROIT APP CON
 124.05 363.2
 METRO TOWER
 118.4 287.1
 GND CON
 121.8
 CLNC DEL
 120.65
 ASR
 ATIS 124.55

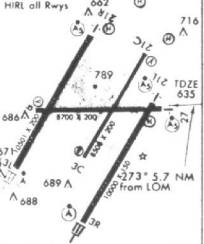
△ 1749



MISSED APPROACH
 Climb to 1100, then climbing right turn to 3000 direct YIP VOR/DME and hold.



ELEV 639
 REIL Rwy 3C, 9 and 21C
 TDZ/CL Rwy 3L and 3R
 RAIL Rwy 21C
 HIRL all Rwy



CATEGORY	A	B	C	D
S-ILS 27	835-1/2		200 (200-1/2)	
S-LOC 27	980-1/2	345 (400-1/2)		980-3/4 345 (400-3/4)
CIRCLING	1100-1	461 (500-1)	1100-1 1/2 461 (500-1 1/2)	1200-2 561 (600-2)

Cat D S-LOC visibility increased 1/4 mile for inoperative MM.



FAF to MAP 5.7 NM

Knots	60	90	120	150	180
Min Sec	5:42	3:48	2:51	2:17	1:54

ILS RWY 27

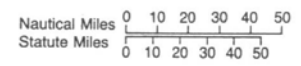
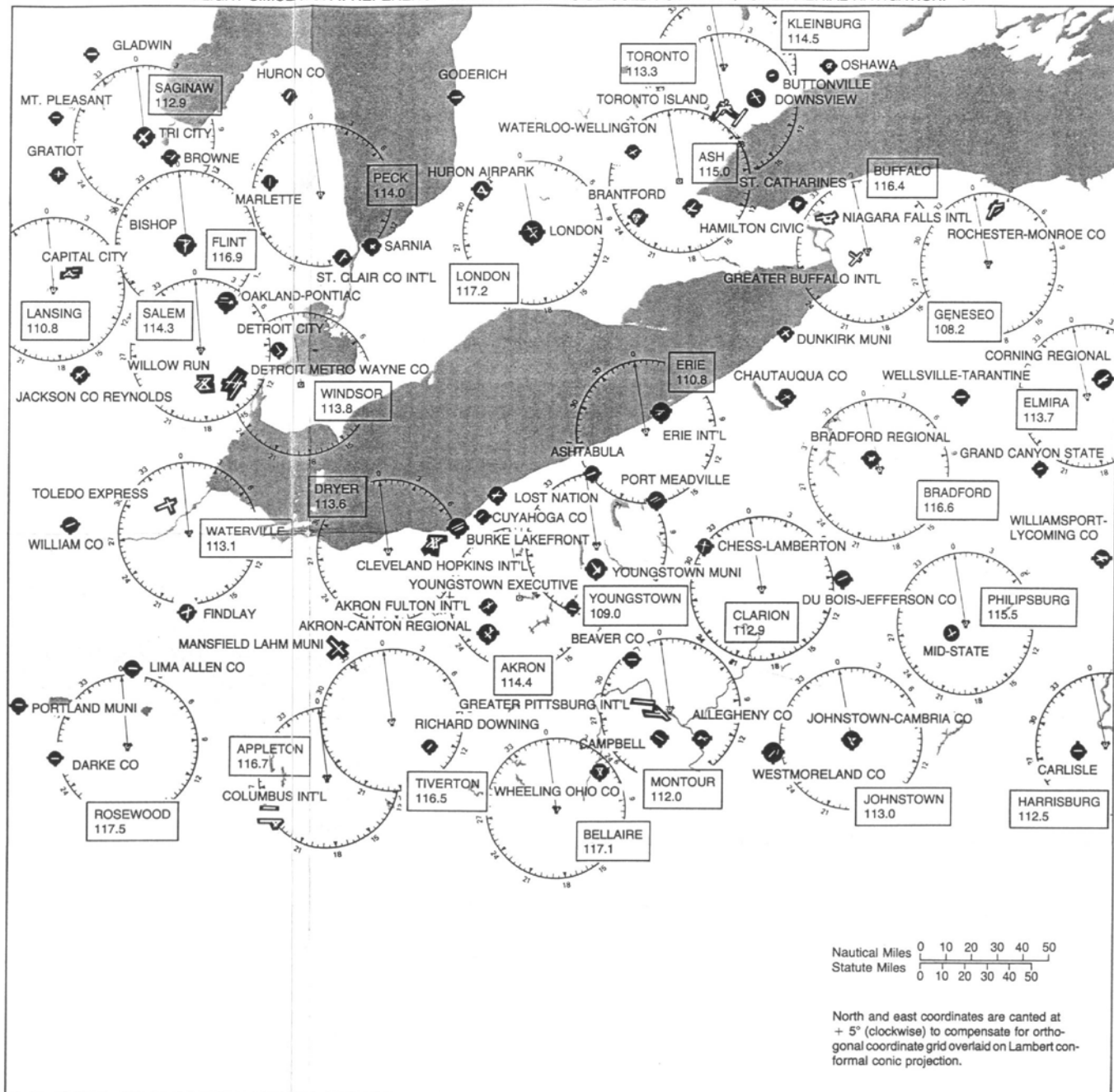
42°13'N - 83°21'W
 DETROIT, MICHIGAN
 DETROIT METROPOLITAN WAYNE COUNTY (DTW)

AIRPORT DIRECTORY - DETROIT AREA

DETROIT AREA CHART

FLIGHT SIMULATOR II REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.

CITY	AIRPORT	NORTH	EAST	ALT. F (Feet)	ILS (Rwy/Freq)
Akron, OH	Akron Fulton Intl	16931	18661	1069	
Akron, OH	Akron-Canton Regional	16880	18672	1227	
Alma, MI	Gratiot	17845	17560	754	
Ashtabula, PA	Ashtabula	17274	18879	922	
Bad Axe, MI	Huron Co	18079	18082	764	
Beaver Falls, PA	Beaver Co	16850	19021	1253	
Bradford, PA	Bradford Regional	17357	19538	2142	
Brantford, Ont.	Brantford	17870	18931	813	
Bryan, OH	William Co	17046	17660	731	
Buffalo, NY	Greater Buffalo Int'l	17841	19450	725	
Carlisle, PA	Carlisle	16723	20104	515	
Centralia, Ont.	Huron Airpark	17897	18558	823	
Cleveland, OH	Burke Lakefront	17133	18571	584	
Cleveland, OH	Cleveland Hopkins Intl	17078	18518	790	
Cleveland, OH	Cuyahoga Co	17159	18633	879	
Columbus, OH	Columbus Intl	16441	18229	813	
Coshocton, OH	Richard Downing	16609	18558	977	
Detroit, MI	Detroit City	17485	18115	626	
Detroit, MI	Detroit Metro Wayne Co	17396	18013	640	27/108.5
ATIS 124.55					
Detroit, MI	Willow Run	17398	17954	715	
Du Bois, PA	Du Bois-Jefferson Co	17079	19487	1817	
Dunkirk, NY	Dunkirk Muni	17630	19300	692	
Elmira, NY	Corning Regional	17583	20081	954	
Erie, PA	Erie Intl	17422	19030	731	
Findlay, OH	Findlay	16863	17942	813	
Flint, MI	Bishop	17707	17864	781	
Franklin, PA	Chess-Lamberton	17129	19165	1528	
Gladwin, MI	Gladwin	18133	17610	777	
Goderich, Ont.	Goderich	18101	18479	702	
Hamilton, Ont.	Hamilton Civic	17894	19060	781	
Jackson, MI	Jackson Co. Reynolds	17391	17654	1000	
Jamestown, NY	Chautauqua Co	17484	19321	1725	
Johnstown, PA	Johnstown-Cambria Co	16711	19551	2283	
Lansing, MI	Capital City	17614	17608	859	
Latrobe, PA	Westmoreland Co	16668	19367	1161	
Lima, OH	Lima Allen Co	16728	17833	977	
London, Ont.	London	17802	18683	912	
Mansfield, OH	Mansfield Lahm Muni	16811	18321	1296	
Marlette, MI	Marlette	17875	18064	895	
Meadville, PA	Port Meadville	17227	19041	1404	
Mt. Pleasant, MI	Mt. Pleasant	17975	17536	754	
Niagara Falls, NY	Niagara Falls Int'l	17905	19374	590	
Oshawa, Ont.	Oshawa	18256	19351	459	
Philipsburgh, PA	Mid-State	16980	19769	1948	
Pittsburgh, PA	Allegheny Co	16684	19195	1253	
Pittsburgh, PA	Campbell	16679	19106	1200	
Pittsburgh, PA	Greater Pittsburg Intl	16733	19094	1204	28/108.9
ATIS 127.25					
Pontiac, MI	Oakland-Pontiac	17587	17979	981	
Port Huron, MI	St. Clair Co. Intl	17715	18251	649	
Portland, IN	Portland Muni	16601	17522	925	
Rochester, NY	Rochester-Monroe Co	17960	19774	558	
Saginaw, MI	Tri City	17948	17747	669	
Sarnia, Ont.	Sarnia	17756	18320	594	
Sebewaing, MI	Sebewaing	18042	17934	584	
St. Catharines, Ont.	St. Catharines	17936	18301	321	
Toledo, OH	Toledo Express	17109	17882	686	
Toronto, Ont.	Buttonville	18216	19208	253	
Toronto, Ont.	Downsview	18165	19183	649	
Toronto, Ont.	Toronto Island	18116	19208	253	
Versailles, OH	Darke Co	16498	17679	1007	
Waterloo, Ont.	Waterloo-Wellington	18012	18910	1040	
Wellsboro, PA	Grand Canyon State	17377	19941	1899	
Wellsville, NY	Wellsville-Tarantine	17514	19728	2122	
Weston, WV	Wheeling Ohio Co	16586	18963	1197	
Williamsport, PA	Wmsport-Lycoming Co	17187	20124	528	
Willoughby, OH	Lost Nation	17214	18657	626	
Youngstown, OH	Youngstown Executive	16963	18868	997	
Youngstown, OH	Youngstown Muni	17050	18908	1197	



North and east coordinates are canted at + 5° (clockwise) to compensate for orthographic coordinate grid overlaid on Lambert conformal conic projection.

Alpena (VOR)

18642N	17887E
freq.	108.8

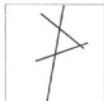
Alpena, MI

18639N	17885E
alt. 689	

RWY 1-19
RWY 7-25
RWY 13-31

Phelps Collins

9000 X 150
5031 X 150
5031 X 150

**Ash, Ont. (VOR)**

17962N	19024E
freq.	115

Au Sable (VOR)

18371N	17948E
freq.	116.1

Cochill (VOR)

18617N	19636E
freq.	115.1

Earlton, Ont.

19858N	18902E
alt. 797	

RWY 7-25

Earlton

6002 X 150



Flint (VOR)

17708N 17867E
freq. 116.9

Gaylord (VOR)

18595N 17532E
freq. 109.2

Gaylord, MI

Otsego Co

18595N 17533E
alt. 1328

RWY 9-27 4998 X 98
RWY 0-18 2997 X 72



Gladwin, MI

Gladwin

18133N 17610E
alt. 777

RWY 9-27 4696 X 72



Houghton Lake (VOR)

18311N 17555E
freq. 111.6

Houghton Lake, MI

Roscommon Co

18311N 17557E
alt. 1151

RWY 9-27 4001 X 72



Killaloe (VOR)

19061N 19666E
freq. 115.6

Kleinburg (VOR)

18235N 19108E
freq. 114.5

London, Ont. (VOR)

17801N 18683E
freq. 117.2

Manitoulin, Ont.

Gore Bay

19008N 18163E
alt. 636

RWY 11-29 4900 X 98



Midland (VOR)

18517N 19056E
freq. 112.8

North Bay (VOR)

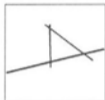
19295N 19081E
freq. 115.4

North Bay, Ont.

19295N 19085E
alt. 1214

RWY 8-26 9997 X 196
RWY 13-31 6002 X 150
RWY 18-36 4473 X 150

North Bay (F)



Oscoda, MI

18374N 17949E
alt. 626

RWY 6-24 11801 X 301

Wurtsmith AFB



Peck (VOR)

17855N 18182E
freq. 114

Pellston (VOR)

18863N 17534E
freq. 111.8

Pellston, MI

18863N 17493E
alt. 722

RWY 14-32 6514 X 150
RWY 5-23 5392 X 150

Emmet Co



Pembroke, Ont.

19159N 19761E
alt. 528

RWY 17-35 4998 X 98

Pembroke



Saginaw (VOR)

17946N 17747E
freq. 112.9

Sault Ste Marie, MI

19236N 17605E
alt. 715

RWY 14-32 4001 X 98

Sault Saint Marie



Sault Ste Marie, Ont. Sault Ste Marie

19232N 17564E
alt. 1689

RWY 4-22 6002 X 196
RWY 11-29 6002 X 196



Saulte Ste Marie, MI Chippewa Co Intl

19132N 17583E
alt. 800

RWY 16-34 7202 X 196



Stirling (VOR)

18506N 19703E
freq. 113.5

Sudbury (VOR)

19371N 18666E
freq. 112.3

Sudbury, Ont. Sudbury (F)

19368N 18667E
alt. 1141

RWY 4-22 6599 X 196
RWY 12-30 4998 X 196



Toronto (VOR)

18126N 19127E
freq. 113.3

Val D' Or (VOR)

20127N 19468E
freq. 113.7

Val D' Or, Que.

20077N 19483E
alt. 1105

RWY 0-18

Val D' Or (F)

9997 X 196



Warton (VOR)

18551N 18647E
freq. 117.7

Warton, Ont.

18550N 18645E
alt. 728

RWY 5-23

Warton

4919 X 150



8 - LAKE HURON

Amdr 2

ILS RWY 28L

PITTSBURGH/GREATER PITTSBURGH INTL (PIT)
AL-570 (FAA) PITTSBURGH, PENNSYLVANIA

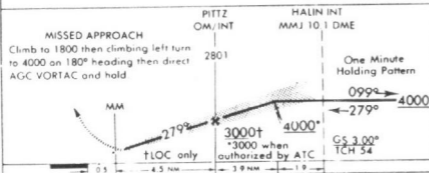
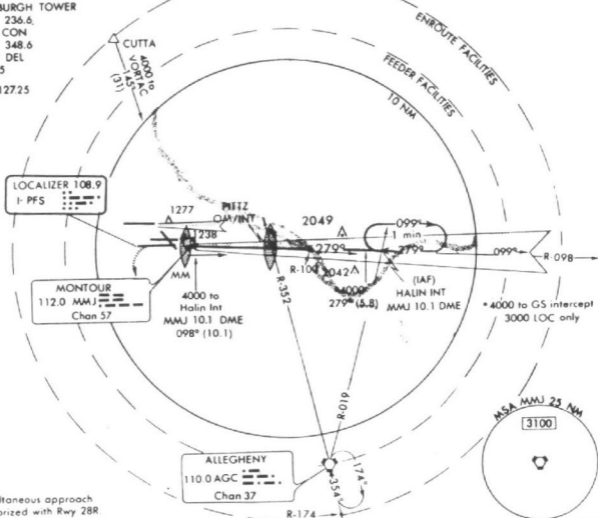
PITTSBURGH APP CON
123.95 360.8
PITTSBURGH TOWER
119.1 236.6
GND CON
121.9 348.6
CLNC DEL
126.75
ASR
ATIS 127.25

LOCALIZER 108.9
I-PFS

MONTOUR
112.0 MMJ
Chan 37

ALLEGHENY
110.0 AGC
Chan 37

Simultaneous approach
authorized with Rwy 28R.



ELEV 1203 Rwy 28C Idg 8049'



CATEGORY	A	B	C	D	E
S-ILS 28L	1326/18 200 (200-1/2)			1326/20 200 (200-1/2)	1326/24 200 (200-1/2)
S-LOC 28L	1620/24 494 (500-1/2)	1620/40 494 (500-3/4)	1620/50 494 (500-1)	1620/60 494 (500-1-1/2)	
SIDESTEP RWY 28C	1620/50 484 (500-1)		1620-1-1/2 484 (500-1-1/2)	1620-2 484 (500-2)	
CIRCLING	1700-1 497 (500-1)		1700-1-1/2 497 (500-1-1/2)	1760-2 557 (600-2)	

TDZ/Cl Rwys 10L and 28L
HIRL Rwys 10L 28R, 10C 28C
10R-28L and 14-32

Cat E, S-LOC 28L, increase visibility 1/2 mile for inoperative MALSR.

FAF to MAP 5 NM

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

ILS RWY 28L




40° 29' N 80° 14' W
PITTSBURGH, PENNSYLVANIA
PITTSBURGH/GREATER PITTSBURGH INTL (PIT)

AIRPORT DIRECTORY - LAKE HURON AREA

CITY	AIRPORT	NORTH	EAST	ALT.		ILS
				F	(Fuel)	
Alpena, MI	Phelps Collins	18639	17885	689		
Earlton, Ont.	Earlton	19858	18902	797		
Gaylord, MI	Otsego Co	18595	17533	1328		
Houghton Lake, MI	Roscommon Co	18311	17557	1151		
Manitowlin, Ont.	Gore Bay	19008	18163	636		
North Bay, Ont.	North Bay	19295	19085	1214		
Oscoda, MI	Wurtsmith AFB	18374	17949	626		
Pellston, MI	Emmet Co	18836	17493	722		
Pembroke, Ont.	Pembroke	19159	19761	528		
Sault Ste Marie, MI	Sault Saint Marie	19236	17605	715		
Sault Ste Marie, Ont.	Sault Ste Marie	19232	17564	1689		
Sault Ste Marie, MI	Chippewa Co Intl	19132	17583	800		
Sudbury, Ont.	Sudbury	19368	18667	1141		
Val D' Or, Que.	Val D' Or	20077	19483	1105		
Warton, Ont.	Warton	18550	18645	728		

North and east coordinates are canted at + 5° (clockwise) to compensate for orthogonal coordinate grid overlaid on Lambert conformal conic projection.

LEGEND

-  Civil-Public use airport
-  Restricted/Private-Nonpublic use airport, having emergency use or landmark value
-  Rotating light in operation, sunset to sunrise
- SANTA MONICA** Airport Name
- ATIS 119.15** Advisory Frequency (if available)
- 175-50** Elevation (feet) — Length (hundreds of feet)

 **NAME FREQUENCY** VOR

 **NAME FREQUENCY** VORTAC (Distance Measuring Equipment Able)

 **NAME FREQUENCY** VOR/DME

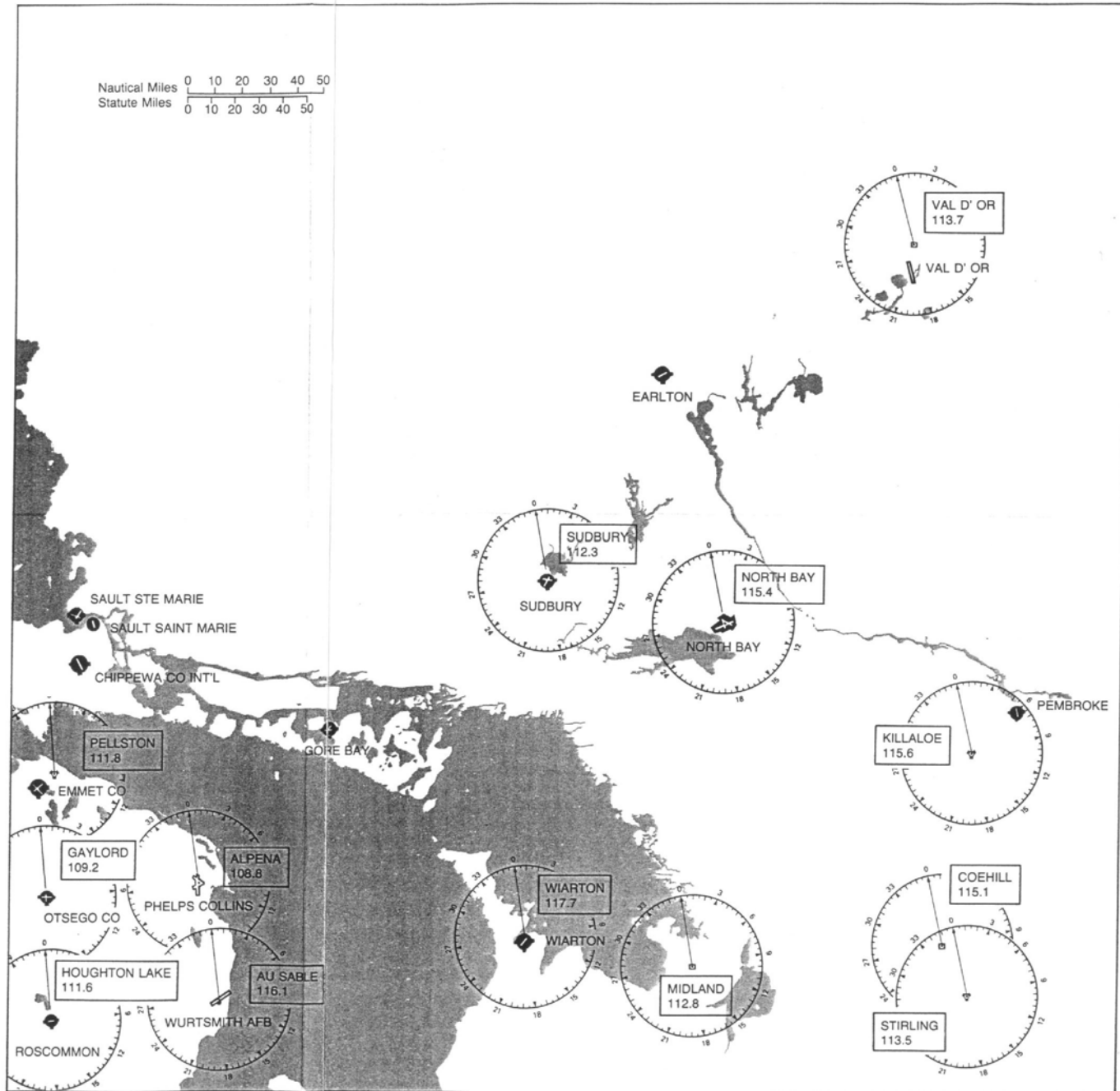
 **NAME FREQUENCY** Non Directional Beacon

VOR/DME NAME FREQUENCY
If VOR falls directly on an airport, only the airport symbol will be shown. The VOR facility type is shown at the top of the box.

AIRPORT NAME ABBREVIATIONS
 CO County
 FLD Field
 INTL International
 MUNI Municipal
 (PVT) Private Airport (prior permission before landing)

LAKE HURON AREA CHART

FLIGHT SIMULATOR II REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.



SubLOGIC Scenery Disks are grouped by aeronautical sectional. Each SD covers a geographical region of the United States, generally comprised of three sectionals:



WEST

- 1 Dallas-Ft. Worth
Houston
San Antonio
Brownsville
- 2 Phoenix
Albuquerque
El Paso
- 3 San Francisco
Los Angeles
Las Vegas
- 4 Klamath Falls
Seattle
Great Falls
- 5 Salt Lake City
Cheyenne
Denver
- 6 Omaha
Wichita
Kansas City

EAST

- 7 Washington
Charlotte
Jacksonville
Miami
- 8 Memphis
Atlanta
New Orleans
- 9 Chicago
St. Louis
Cincinnati
- 10 Billings
Twin Cities
Green Bay
- 11 Lake Huron
Detroit
- 12 Halifax
Montreal
New York

In addition to twelve regional Scenery Disks, a number of STAR Scenery Disks are also available. A STAR Scenery Disk covers a small area with a relatively dense amount of scenery. These disks are mainly intended for visual flight (sight-seeing). They include buildings and landmarks, as well as detailed renditions of the major airports in the area.

Reading a Sectional Directory

Below is a sample listing from a sectional directory with a description of the information provided. All available airports and radio-nav aids for a given sectional are listed alphabetically. Radio transmitters that border a sectional are also available on neighboring sectionals, so you can cross sectional boundaries when instrument flying.

1 - 2 - ALBUQUERQUE AND EL PASO - 2

2 - Alpine

4 - 12628N 10661E - 3
5 - alt. 4513

7 - RWY 1-19 - 6 - 5999 X 72
RWY 5-23 - 8 - 4821 X 35



3 - Anton Chico (VOR) - 10

4 - 14710N 10537E - 3
10 - freq. 113

3 - Artesia (NDB) - 10

4 - 13703N 10575E - 3
10 - freq. 414

- | | |
|----|---------------------------|
| 1 | Page number |
| 2 | Sectional name |
| 3 | Airport name |
| 4 | North coordinate |
| 5 | East coordinate |
| 6 | Altitude in feet |
| 7 | Runway Designator, number |
| 8 | Runway dimensions in feet |
| 9 | Radio Aid name |
| 10 | Radio Aid type designator |
| 11 | Radio Aid frequency |

Notice that the vertical sides of the airport map align with magnetic north. Magnetic north is the direction you are pointing when your magnetic compass reads 0. Each sectional map's VOR needles point toward magnetic north. The sides of the map align with true north. This is consistent with NOAA sectionals.

U.S. Scenery Disk areas are grouped as follows:



- | | |
|--|--|
| <p>WEST</p> <p>1. Dallas-Ft. Worth
Houston
San Antonio
Brownsville</p> <p>2. Phoenix
Albuquerque
El Paso</p> <p>3. San Francisco
Los Angeles
Las Vegas</p> <p>4. Klamath Falls
Seattle
Great Falls</p> <p>5. Salt Lake City
Cheyenne
Denver</p> <p>6. Omaha
Wichita
Kansas City</p> | <p>EAST</p> <p>7. Washington
Charlotte
Jacksonville
Miami</p> <p>8. Memphis
Atlanta
New Orleans</p> <p>9. Chicago
St. Louis
Cincinnati</p> <p>10. Billings
Twin Cities
Green Bay</p> <p>11. Lake Huron
Detroit</p> <p>12. Halifax
Montreal
New York</p> |
|--|--|

Scenery Disks for other areas of the world are also available. Japan Scenery Disk covers the area from Tokyo to Osaka in great detail. "Western European Tour" Scenery Disk provides detailed scenery covering southern Great Britain, northern France, and southern West Germany, with a side trip to Red Square in Moscow! San Francisco Scenery Disk covers the Bay area in great detail, and is designed primarily for local area sightseeing.

Scenery Disks are available in 5-1/4" and/or 3-1/2" disk format for most computer systems. Contact SubLOGIC for information on which scenery areas and disk formats are currently available for your system.

Reading a Sectional Directory

Below is a sample listing from a sectional directory with a description of the information provided. All available airports and radio-nav aids for a given sectional are listed alphabetically. Radio transmitters that border a sectional are also available on neighboring sectionals, so you can cross sectional boundaries when instrument flying.

① — 24 - CHICAGO — ②

③ — Sheboygan Co. Mem. WI

④ — 1800N 1680E — ⑤
⑥ — alt. 748

⑦ — RWY 13-31 3995 X 75 — ⑧
RWY 3-21 5000 X 100

⑨ — Sheboygan, WI (NDB) — ⑩

⑪ — 1798N 1650E
freq. 254

⑬ — Shelbyville, IN (VOR) — ⑭

⑮ — 1624N 1720E
freq. 112



- | | |
|----|---------------------------|
| 1 | Page number |
| 2 | Sectional name |
| 3 | Airport name |
| 4 | North coordinate |
| 5 | East coordinate |
| 6 | Altitude in feet |
| 7 | Runway Designator, number |
| 8 | Runway dimensions in feet |
| 9 | Radio Aid name |
| 10 | Radio Aid type designator |
| 11 | Radio Aid frequency |

Notice that the vertical sides of the airport map align with magnetic north. Magnetic north is the direction you are pointing when your magnetic compass reads 0. Each sectional map's VOR needles point toward magnetic north. The sides of the map align with true north. This is consistent with NOAA sectionals.

Reading a STAR SD Sectional Directory

This Star SD sectional directory lists all available airports in alphabetical order, followed by all radio-nav aids. Each airport includes a detailed diagram of the airport as it appears on the disk. Airport and radio-nav aid listings are organized as follows:

①—2 - ALBUQUERQUE AND EL PASO—②

(Airport Diagram)

③—Alpine

④—12628N 10661E—⑤
⑥—alt. 4513
⑦—RWY 1-19 ⑧—5999 X 72
RWY 5-23 4821 X 39

③—Anton Chico (VOR)—⑩

④—14710N 10537E—⑤
⑪—freq. 110

③—Artesia (NDB)—⑩

④—13703N 10575E—⑤
⑪—freq. 414

1	Page number
2	Sectional name
3	Airport name
4	North coordinate
5	East coordinate
6	Altitude in feet
7	Runway Designator, number
8	Runway dimensions in feet
9	Radio Aid name
10	Radio Aid type designator
11	Radio Aid frequency

The vertical sides of each airport diagram align with magnetic north. Magnetic north is the direction you are pointing when your magnetic compass reads 0. Each sectional map's VOR needles point toward magnetic north. The sides of the map align with true north. This is consistent with NOAA sectionals.

Using a Scenery Disk with Flight Simulator II

Load Flight Simulator II in the usual way. When the program has finished loading, enter the simulator's program editor as described in your operating manual and set the NORTH and EAST coordinates of the airport you've chosen from the directory for the region you'd like to explore (set ALTITUDE to 0). Exit the editor, remove the FSII disk and insert the appropriate Scenery Disk. Next, press CTRL E and wait for a menu to appear. This menu page lists the names of the sectionals included on the Scenery Disk. Press any key to exit, and you should find yourself at the airport you've selected. If no scenery is visible, go into radar mode and zoom out to determine your approximate location. You may be able to zoom all the way out and view the entire continental United States database, complete with rivers, highways, coastlines, and the Great Lakes. This default database display indicates that you are not within the boundaries of the sectionals included on your disk. Re-enter the program editor and double-check your coordinates, making sure that both NORTH and EAST coordinates are correct.

When you find yourself at the airport you've selected, it may be a good idea to save your position to a User Mode (see User Mode Library in the FSII Pilot's Operating Handbook). This way, if you crash, you will be returned to the selected airport. Otherwise you will be returned to a preset location (above Lake Michigan) in the default USA database.

Crossing a Sectional Boundary

When you fly over a sectional boundary, one of two things will occur. If the neighboring sectional is also included on your Scenery Disk, that sectional will load and you will have to switch to the appropriate new map and directory provided. If the neighboring sectional is not available on your disk, a common default USA database will load. This default database allows you to zoom out (in radar mode) to view the major geographical features of the United States.

If you have another Scenery Disk containing the appropriate sectional, you can switch disks and press CTRL E to log-in the new disk. After a brief load, the names of the new sectionals available on this disk will be displayed. Press any key to exit and return to Flight Simulator II.

IMPORTANT - If you want to change Scenery Disks or go back to the scenery on the FS2 disk, you must log-in the new disk by pressing CTRL E. If you do not log-in the new disk, you will not get the new scenery and you will risk causing a disk load error.

Using a Scenery Disk with Microsoft Flight Simulator (IBM PC Versions)

Load Flight Simulator in the usual way. When you want to switch to a Scenery Disk, remove the Flight Simulator disk and insert the appropriate Scenery Disk. Press CTRL E. This will log-in the disk. A message will appear on the screen identifying the names of the sectional areas contained on the disk.

The first Scenery Disk log-in automatically checks to see if you have the most recent version of Flight Simulator. If you don't, the program updates Flight Simulator in memory. When this happens, your flight coordinates are set back to the Chicago area. This will only happen on the first Scenery Disk log-in of the session. After the first log-in, your flight coordinates and conditions will carry over as you change Scenery Disks while flying.

After logging in the first Scenery Disk, you can fly or slew through all of the scenery on the disk. You can freely exchange Scenery Disks as you fly to new areas. Press CTRL E to log-in the new area when you switch disks. If you fail to log-in a new Scenery Disk after inserting it, it will be automatically logged in when the disk is accessed. The log-in message will appear after every manual or automatic log-in.

Using the Microsoft Flight Simulator Disk as a Scenery Disk

The Flight Simulator disk contains all of the usual scenery for the Chicago, Seattle, Los Angeles, and New York areas. You can insert this disk and log it in as you would any other Scenery Disk to fly in these areas. This applies to Jet as well as Flight Simulator.

Special Note for IBM PC Flight Simulator Version 2.0

Very few copies of Version 2.0 exist. You most likely have Version 2.1, 2.10, 2.10a, 2.12, or a later version of Microsoft Flight Simulator. Look on the disk label near the serial number area, or look on the first menu page when loading Flight Simulator. If you have Version 2.0, insert the Scenery Disk and press ESC instead of CTRL E for the first log-in of the session. After this first log-in, press CTRL E as usual to log-in new Scenery Disks. Also, never re-insert the Version 2.0 disk to use the Chicago, Seattle, Los Angeles, or New York scenery; you must re-boot Version 2.0 to return to these areas. Version 2.0 also cannot be used as a Scenery Disk for Jet.

Tandy 1000/1200/2000 Flight Simulator

Scenery Disks are compatible with the Tandy 1000/1200/2000 version of Flight Simulator. With this version, always make sure to log-in a new Scenery Disk by pressing CTRL E once the disk has been inserted. No auto-load is available on this version, and failure to log-in a new disk can cause unpredictable results when the disk is accessed after an unlogged disk change.

Special Note for Compaq 286 Users

The 1.2Mbyte floppy drives in the Compaq Deskpro 286 computer cause disk-read errors when using Scenery Disks with SubLOGIC Jet or Microsoft Flight Simulator. Here is the reason why, and how to get around it:

PROBLEM - Whenever you remove a disk from the floppy drive by turning the release lever, the diskette springs out of the drive. This spring action triggers a switch in the drive that informs the disk read/write software that you have just changed the disk. The software assumes that you are about to insert a new disk, and switches to 1.2Mbyte read mode from whatever mode it happens to be in. Jet, Flight Simulator, Scenery Disks (and many other manufacturers programs) are on 360K disks, and a read error results when the Compaq 286 tries to read them as 1.2Mbyte disks.

You can verify this for yourself using the Microsoft Flight Simulator. Boot the disk, then enter and exit the editor several times (ESC key) just to see that everything is functioning properly. Then pop the disk out of the drive, re-insert it, and try to get back into the program editor. You will get a disk read error.

SOLUTION - You can avoid this problem by tricking the disk drive into thinking that you haven't changed disks. Do this by holding the disk in place with your finger while releasing the disk-release lever. **DON'T LET THE DISK POPOUT OF THE DRIVE.** Then manually remove the disk and insert a Scenery Disk (or Flight Simulator as scenery for Jet). The computer will never know that you changed the disk, and everything should work fine. Remember - if you let the disk pop itself out of the drive, the switch will be activated and the drive will go into 1.2Mbyte mode, thus creating errors.

Jet Users

Scenery Disks are compatible with SubLOGIC Jet. Follow the instructions in your Jet manual for loading a Scenery Disk. Jet has no automatic log-in feature, so always make sure you return to the Jet startup menu page before inserting a new Scenery disk. Changing Scenery Disks in the middle of a Jet flight can cause unpredictable results when the disk is accessed after a disk change.

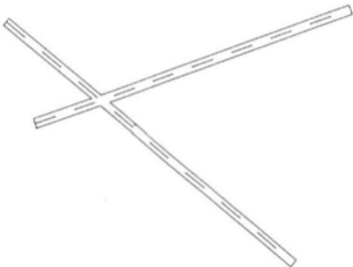
Conclusion

As of this writing there are no fuel or repair facilities available on regular Scenery Disks (although they do occur on STAR Scenery Disks). To refuel, just land at an airport and enter the program editor. Your tanks will be filled and repairs will be made when you exit the editor.

We intend to periodically update and improve our Scenery Disks to include more airports, radio aids, and scenery details as recommended by users. If you know of an airport (or any other detail) that should be included on future versions of these Scenery Disks, please drop us a line and include the required information **ON A SEPARATE SHEET OF PAPER** (so we can store it in our files). Here's what we need to know:

Airports:	NAME, CITY, & STATE LATITUDE, LONGITUDE, & ALTITUDE HEADING, LENGTH, & WIDTH of each runway
Buildings, objects:	NAME, CITY, & STATE LATITUDE, LONGITUDE, & DIMENSIONS

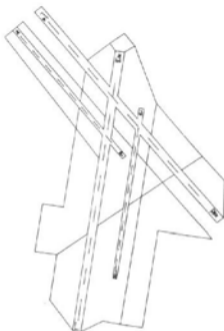
Pictures and postcards are also welcome, especially aerial views. If you're unable to determine the latitude and longitude for the object or airport in question, please provide a description of where the object can be located on a map. All customer correspondence is read and answered (when appropriate). And please; remember to include any scenery suggestions or information on a **SEPARATE** page of your letter.



Alameda NAS

17402N 5102E
alt. 13

RWY 7-25	7200 X 200
RWY 13-31	8000 X 200



Concord, Buchanan Fld. (F)

17449N 5214E
alt. 23

RWY 1L-19R	4712 X 150
RWY 14L-32R	4601 X 150
RWY 14R-32L	2800 X 75
RWY 1R-19L	2766 X 75

ATIS: 124.7

Antioch

17407N 5295E
alt. 185

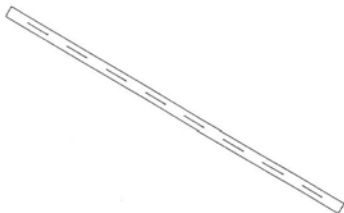
RWY 9-27 2480 X 33



Fremont

17226N 5177E
alt. 4

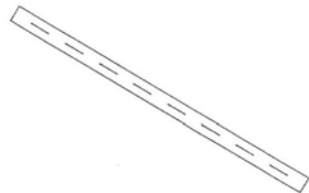
RWY 13-31 2310 X 40



Half Moon Bay

17312N 5004E
alt. 57

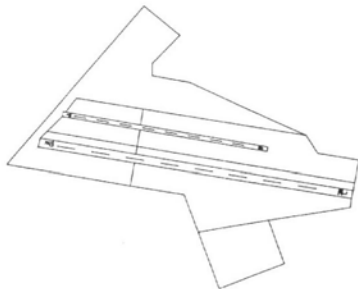
RWY 12-30 5000 X 150



Hamilton Army

17534N 5082E
alt. 3

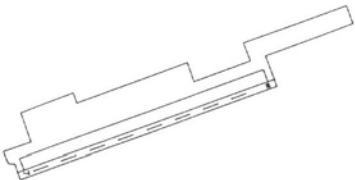
RWY 12-30 8000 X 400



Hayward Air Terminal

17329N 5145E
alt. 47

RWY 10R-28L	5159 X 150
RWY 10L-28R	3536 X 75



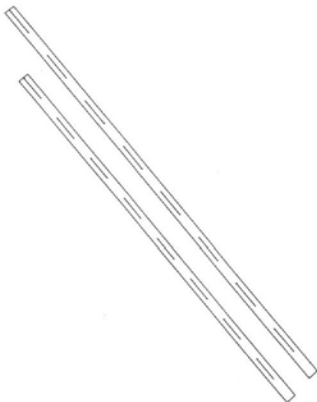
Livermore (F)

17304N 5247E
alt. 397

RMV 7-25 4005 X 100

ILS 25

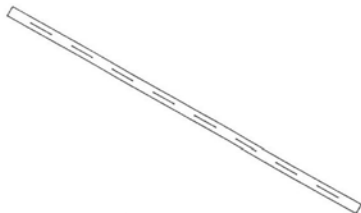
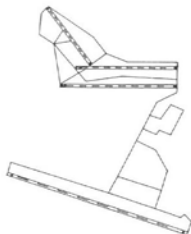
FREQUENCY: 110.5
HEADING: 255 degrees
ALTITUDE: 2162 ft. @LOM



Moffett NAS

17220N 5134E
alt. 34

RMV 14L-32R 9200 X 200
RMV 14R-32L 8120 X 200



Oakland Int'l (F)

17365N 5124E
alt. 7

RWY 11-29	10000 X 150
RWY 9R-27L	6212 X 150
RWY 15-33	3366 X 75
RWY 9L-27R	5453 X 150

ATIS: 128.5 or 125.0 (north fie

ILS 11

FREQUENCY: 111.9
HEADING: 113 degrees
ALTITUDE: 1722 ft. @LOM

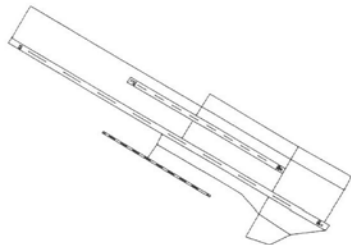
ILS 29

FREQUENCY: 108.7
HEADING: 293 degrees
ALTITUDE: 1552 ft. @LOM

Palo Alto

17245N 5119E
alt. 5

RWY 12-30 2500 X 65



San Jose Int'l

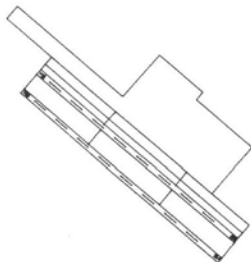
17185N 5164E
alt. 56

RWY 12R-30L	8899 X 150
RWY 12L-30R	4419 X 150
RWY 11-29	3000 X 40

ATIS: 114.1

ILS 12R

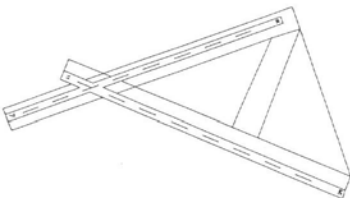
FREQUENCY:	111.1
HEADING:	123 degrees
ALTITUDE:	1798 ft. @LOM



San Jose, Reid - Hillview

17160N 5194E
alt. 133

RWY 13L-31R	3101 X 75
RWY 13R-31L	3099 X 75



Tracy Muni (F)

17258N 5366E
alt. 192

RWY 7-25 3418 X 75
RWY 11-29 3680 X 100

Concord (VOR)

17473N 5234E
freq. 117

Oakland (VOR)

17365N 5124E
freq. 116.8

Pajar (NDB)

16978N 5131E
freq. 327

Pigeon Point (NDB)

17166N 4988E
freq. 286

Point Reyes (VOR)

17588N 4975E
freq. 113.7

Reiga (NDB)

17287N 5292E
freq. 374

Sacramento (VOR)

17572N 5456E
freq. 115.2

San Francisco (VOR)

17340N 5060E
freq. 115.8

18 - 'STAR' SAN FRANCISCO

San Jose (VOR)

17185N	5164E
freq.	114.1

Sausalito (VOR)

17452N	5050E
freq.	116.2

Scaggs Island (VOR)

17567N	5149E
freq.	112.1

Travis (VOR)

17565N	5358E
freq.	115.4

Woodside (VOR)

17233N	5054E
freq.	113.9

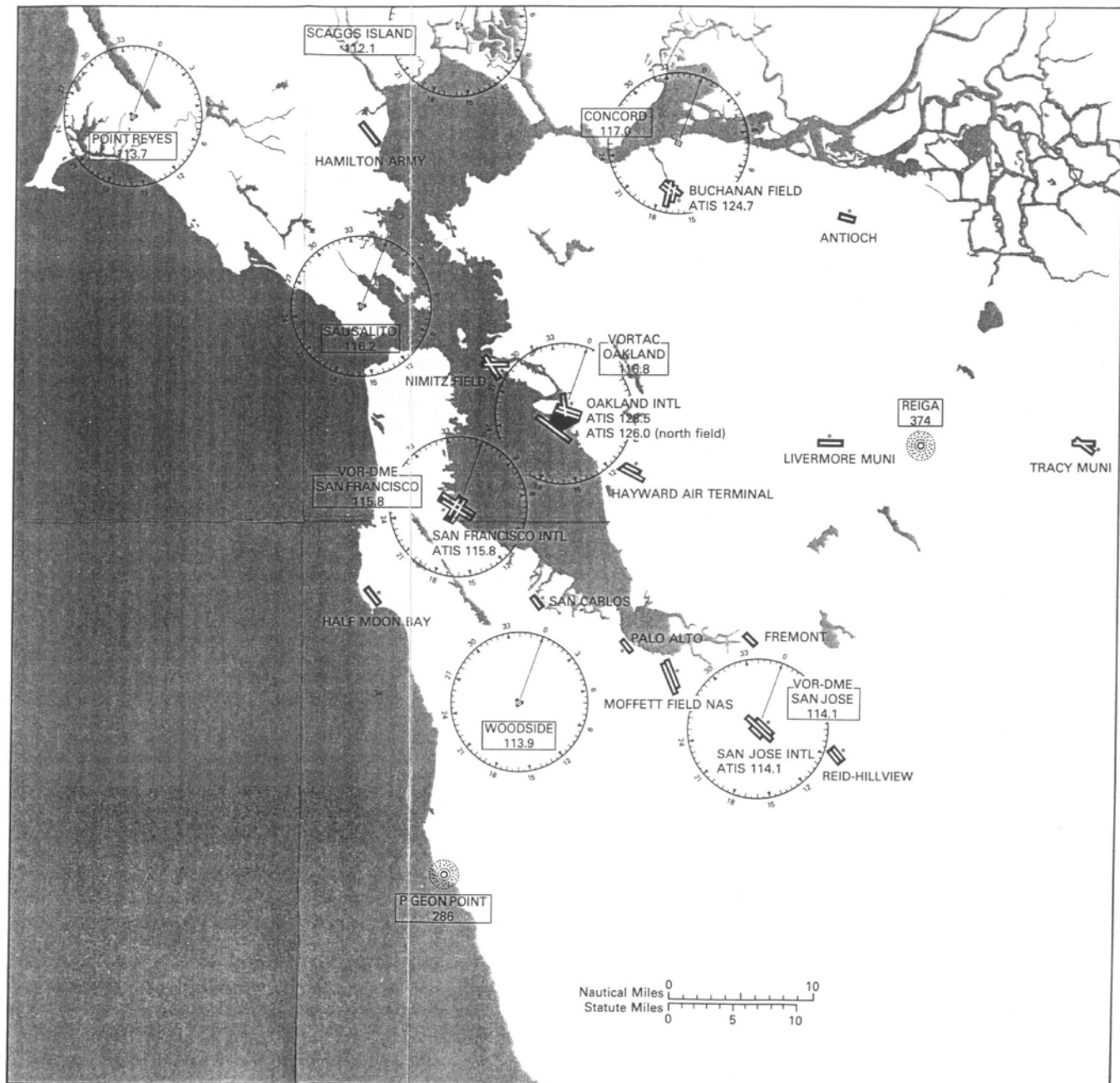
AIRPORT DIRECTORY—SAN FRANCISCO AREA

SAN FRANCISCO AREA CHART

FLIGHT SIMULATOR II REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.

CITY	AIRPORT	NORTH	EAST	ALT.	ILS (Day/Night)
Alameda NAS	Nimitz Field	17402	5102	13	
Antioch	Antioch	17407	5295	185	
Concord	Buchanan Field	17449	5214	23	*
Fremont	Fremont	17226	5177	4	
Half Moon Bay	Half Moon Bay	17312	5004	67	
Hayward	Hayward Air Terminal	17329	5145	47	
Livermore	Livermore Muni	17304	5247	397	* 25/110.5
Mountain View	Moffett Field NAS	17220	5134	34	
Oakland	Oakland Intl	17365	5124	7	* 11/111.9 29/108.7
Palo Alto	Palo Alto	17245	5119	5	
San Carlos	San Carlos	17281	5084	2	
San Francisco	San Francisco Intl	17340	5060	10	* 28L/109.5 19L/108.9 12R/111.1
San Jose	San Jose Intl	17185	5164	56	
San Jose	Reid-Hillview	17160	5194	133	
San Rafael	Hamilton Army	17534	5082	3	
Tracy	Tracy Muni	17258	5366	192	*

North and east coordinates are canted at -20° (clockwise) to compensate for orthogonal coordinate grid overlaid on Lambert conformal conic projection.



LEGEND



Civil-Public use airport



Restricted/Private-Nonpublic use airport, having emergency use or landmark value



Rotating light in operation, sunset to sunrise

SANTA MONICA
ATIS 119.15
175-50

Airport Name
Advisory Frequency (if available)
Elevation (feet) — Length (hundreds of feet)

NAME
FREQUENCY



VOR

NAME
FREQUENCY



VORTAC (Distance Measuring Equipment Able)

NAME
FREQUENCY



VOR-DME

NAME
FREQUENCY



Non Directional Beacon

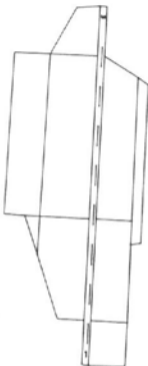
VOR-DME
NAME
FREQUENCY

If VOR falls directly on an airport, only the airport symbol will be shown. The VOR facility type is shown at the top of the box.

AIRPORT NAME ABBREVIATIONS

CO	County
FLD	Field
INTL	International
MUNI	Municipal
(PVT)	Private Airport (prior permission before landing)





Atsugi

18118N 32707E

Alt. 205

RWY 1-19

8000 X 150

ILS 1

FREQUENCY: 111.3

HEADING: 7

ALTITUDE: 1500 @ 4.1 DME



Gifu

17714N 31890E
Alt. 128

RWY 10-28 8860 X 150

Hamamatsu

17584N 32274E
Alt. 151

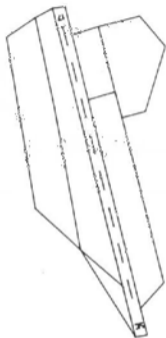
RWY 9-27 8366 X 197



Hyakuri

18542N 32874E
Alt. 104

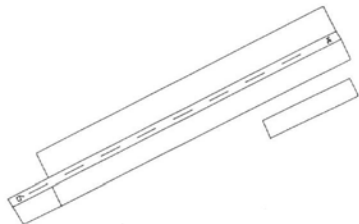
RWY 3-21 8860 X 150



Iruma

18262N 32619E
Alt. 299

RWY 17-35 6562 X 148



Komatsu

18042N 31572E
Alt. 18

RWY 6-24 8860 X 150

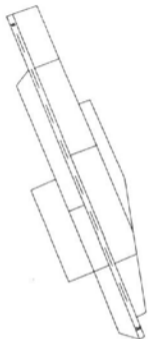
ILS 6

FREQUENCY: 110.1
HEADING: 61
ALTITUDE: 1084 @ 3.7 DME

Matsumoto

18170N 32090E
Alt. 2155

RWY 18-36 4920 X 100



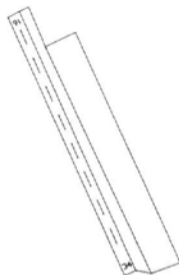
Nagoya

17669N 31932E
Alt. 52

RWY 16-34 9000 X 150

ILS 34

FREQUENCY: 111.7
HEADING: 339
ALTITUDE: 2312 @ 8.4 DME



New Tokyo Int'l (Narita)

18375N 32940E
Alt. 139

RWY 16-34 13123 X 200

ILS 16

FREQUENCY: 111.1
HEADING: 156
ALTITUDE: 1461 @ 3.9 DME

ILS 34

FREQUENCY: 111.9
HEADING: 336
ALTITUDE: 1678 @ 4.5 DME



Shimofusa

18334N 32819E
Alt. 98

RWY 18-36 7380 X 200

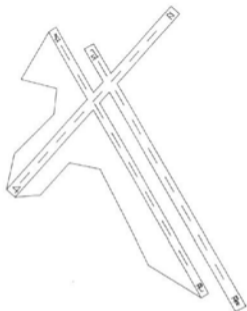
ILS 18

FREQUENCY: 109.1
HEADING: 186
ALTITUDE: 1998 @ 6.3 DME

Osaka Int'l

17267N 31528E
Alt. 49

RWY 14L-32R 6000 X 150
RWY 14R-32L 9840 X 200



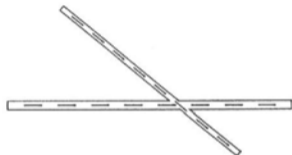
Tokyo Int'l (Haneda)

18201N 32787E
Alt. 12

RWY 4-19 8200 X 150
RWY 15L-33R 10335 X 200
RWY 15R-33L 9840 X 150

ILS 33R

FREQUENCY: 110.9
HEADING: 332
ALTITUDE: 2966 @ 10.5 DME



Yao

17220N 31616E
Alt. 33

RWY 9-27 4890 X 150
RWY 13-31 3940 X 100



Yokota

18217N 32618E
Alt. 457

RWY 18-36 11000 X 200

ILS 36

FREQUENCY: 109.7
HEADING: 357
ALTITUDE: 2114 @ 7 DME

Aichi (NDB)

17633N 31976E
freq. 397

Akeno (NDB)

17347N 31988E
freq. 380

Ami (VOR)

18451N 32839E
freq. 116

Atsugi (NDB)

18119N 32711E
freq. 265

Chigasaki (NDB)

18055N 32712E
freq. 236

Choshi (VOR)

18427N 33082E
freq. 113.6

Daigo (NDB)

18765N 32751E
freq. 225

Daigo (VOR)

18754N 32749E
freq. 115.3

Eda (NDB)

18172N 32716E
freq. 357

Fukui (NDB)

17930N 31549E
freq. 400

Goboh (VOR)

16876N 31573E
freq. 116.9

Hamamatsu (NDB)

17580N 32272E
freq. 229

Hamamatsu (VOR)

17580N 32272E
freq. 114.7

Handeda (VOR)

18202N 32787E
freq. 116.5

Hotaka (NDB)

18216N 32062E
freq. 387

Hyakuri (NDB)

18547N 32877E
freq. 366

Hyakuri (VOR)

18546N 32873E
freq. 113.3

Itami (NDB)

17276N 31516E
freq. 205

Iwaki (VOR)

19002N 32866E
freq. 117.7

Kawakado (NDB)

18289N 32578E
freq. 251

Komatsu (NDB)

18048N 31571E
freq. 234

Komatsu (VOR)

18043N 31569E
freq. 112

Kowa (NDB)

17467N 32025E
freq. 325

Kowa (VOR)

17455N 32042E
freq. 113.5

Kumagaya (NDB)

18372N 32530E
freq. 240

Kushimoto (NDB)

16789N 31875E
freq. 275

Kushimoto (VOR)

16792N 31879E
freq. 112.9

Matsumoto (VOR)

18167N 32095E
freq. 117.6

Miyakejima (NDB)

17594N 32995E
freq. 260

Miyakejima (VOR)

17602N 32970E
freq. 117.8

Miyazu (VOR)

17503N 31318E
freq. 112.6

Moriya (VOR)

18382N 32785E
freq. 114

Nagoya (NDB)

17666N 31933E
freq. 360

Nagoya (VOR)

17671N 31928E
freq. 114.2

Nanki-Shirahama (NDB)

16816N 31698E
freq. 394

Narita (VOR)

18376N 32940E
freq. 117.3

Nasu (VOR)

18720N 32643E
freq. 114.8

Nikko (NDB)

18579N 32643E
freq. 389

Onjuku (VOR)

18151N 33049E
freq. 115.7

Osaka (NDB)

17247N 31588E
freq. 340

Osaka (VOR)

17270N 31541E
freq. 113.9

Oshima (NDB)

17813N 32830E
freq. 216

Oshima (VOR)

17812N 32830E
freq. 113.1

Oshima Airport (NDB)

17843N 32800E
freq. 392

Otsu (NDB)

17436N 31631E
freq. 368

Otsu (VOR)

17416N 31620E
freq. 117.1

Rankin (NDB)

18131N 32677E
freq. 379

Sakura (NDB)

18338N 32890E
freq. 350

Sakura (VOR)

18366N 32901E
freq. 112.7

Sekiyado (VOR)

18391N 32727E
freq. 117

Shinoda (NDB)

17153N 31584E
freq. 219

Shinoda (VOR)

17155N 31587E
freq. 112.3

Shizuhamu (VOR)

17696N 32452E
freq. 109.2

Tachikawa (NDB)

18251N 32630E
freq. 330

Tateyama (NDB)

18003N 32927E
freq. 373

Tateyama (VOR)

17986N 32942E
freq. 112.5

22 - JAPAN

Tokushima (VOR)

16897N	31367E
freq.	114.9

Tottori (NDB)

17391N	30998E
freq.	349

Toyama (NDB)

18250N	31774E
freq.	354

Yao (NDB)

17217N	31618E
freq.	386

Yokosuka (NDB)

18041N	32806E
freq.	270

Yokosuka (VOR)

18060N	32787E
freq.	116.2

Zama (NDB)

18156N	32659E
freq.	401

APPROACH CHARTS

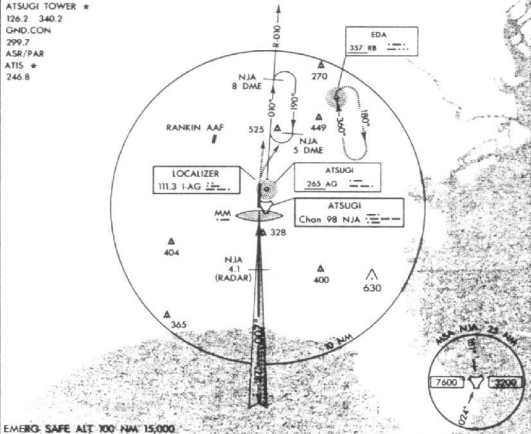
厚木飛行場

ATSUGI (RJTA)

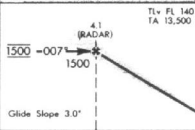
AYASE, HONSHU I., JAPAN

ILS

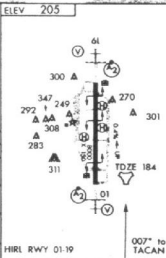
YOKOTA APP CON
123.8 367.0
ATSUGI TOWER *
126.2 340.2
GND. CON
299.7
ASR/PAR
ATIS *
246.8



EMERG. SAFE ALT 700' NM 15,000'



MISSED APPROACH
MISSED APPROACH No. 1
Climb to 800 heading 007°, then climb to 2000 via R-010, proceed to 8 DME and hold.
MISSED APPROACH No. 2
Climb to 2000 heading 007°, proceed to RB NDB and hold.



CATEGORY	A	B	C	D
S-ILS 01	377/730m 193 (200-800m)		377/1220m 193 (200-1200m)	
S-LOC 01	660/1220m 476 (500-1200m)		660/1520m 476(500-1600m)	660/1830m 476(500-2000m)
CIRCLING*	660-1600m 455(500-1600m)	700-1600m 495(500-1600m)	720-2400m 515(600-2400m)	760-3200m 555(600-3200m)
S-PAR 01	405/730m 221 (200-800m) GS 3.0°		405/1220m 221 (200-1200m) GS 3.0°	

*Circling NA E of Rwy 01/19.

ILS

35°27'N-139°27'E

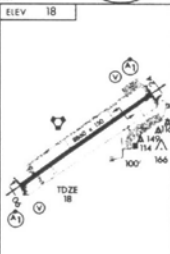
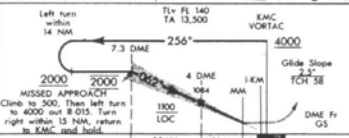
AYASE, HONSHU I., JAPAN

ATSUGI (RJTA)

VOR/ILS RWY 06

KOMATSU APP CON
120.1 261.2
KOMATSU TOWER
126.2 236.8
GND CON
275.8
ASR/PAR

CAUTION:
Rapidly rising high terrain
east and south of runway
GS Not usable below 280 MSL



CATEGORY	A	B	C	D	E
S-ILS 06	330-1400m		312	(400-1400m)	
S-LOC 06	420-1200m 402 (500-1200m)		420-1600m 402 (500-1600m)		420-2000m 402(500-2000m)
CIRCLING 06	500-1600m 482 (500-1600m)		500-2000m 482(500-2000m)	500-2400m 482(500-2400m)	800-4400m 782(800-4400m)
S-PAR 06	300/1220m		282	(300-1200m) GS 2.5°	

Knots	90	120	150	180	200
Min/Sec	2:28	1:51	1:29	1:14	1:07

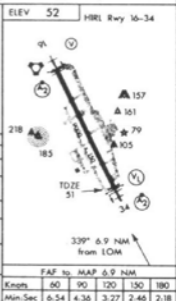
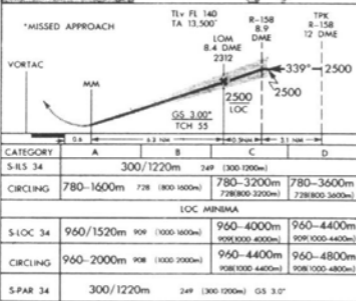
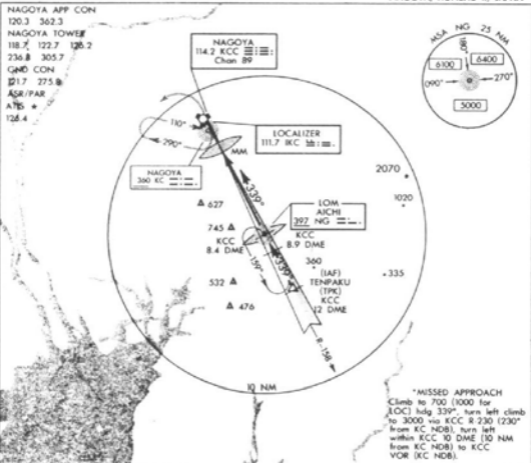
VOR/ILS RWY 06

36°23'N 136°25'E

ILS RWY 34

名古屋空港
NAGOYA (RJNN)
NAGOYA, HONSHU I., JAPAN

NAGOYA APP CON
120.3 362.3
NAGOYA TOWER
118.7 122.7 126.2
236.8 305.7
GND CON
121.7 275.8
ASR/PAR
ATIS +
126.4



ILS RWY 34

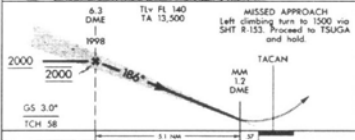
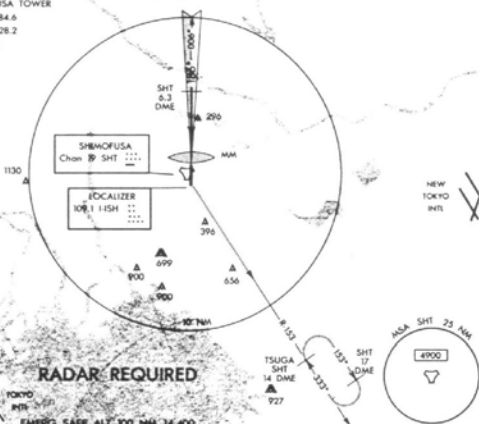
35°15'N-136°56'E

NAGOYA, HONSHU I., JAPAN
NAGOYA (RJNN)

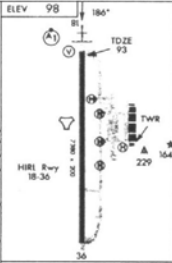
ILS RWY 18

TOKYO APP CON
128.0 261.2
SHIMOFUSA TOWER
138.3 284.6
126.2 228.2
ASR/PAR

CAUTION: False GS info
left of SHR R-011 inbd
to Loc.



CATEGORY	A	B	C	D
S-RS	330-1000m		237 (300-1000m)	
S-LOC	680/1200m 587 (600-1200m)		680/1400m 587 (600-1400m)	680/2300m 587 (600-2300m)
CIRCLING	680/1600m 582 (600-1600m)		680/2400m 582 (600-2400m)	680/3200m 582 (600-3200m)



FAP to MAP 5.1 NM

Knots	60	90	120	150	180
Min/Sec	5:06	3:24	2:33	2:02	1:42

ILS RWY 18

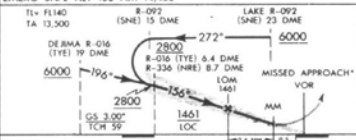
35°48'N-140°0'E

ILS RWY 16

NARITA APP CON
124.4 125.8 261.2
NARITA TOWER
118.2 122.7
126.2 236.8
GND CON
121.8 121.9
ATIS 128.2



EMERG SAFE ALT 100 NM 14,400



CATEGORY	A	B	C	D
S.B.S 16	330/730m	200	(200-800m)	
S.LOC 16	480/1220m	350	(400-1200m)	
CIRCLING	640-1600m	501 (600-1600m)	640-2400m	700-3200m
			501(600-2400m)	561(600-3200m)



HIRL RWY 16-34

FAF to MAP 3.9 NM					
Knots	60	90	120	150	180
Min.Sec	3.54	2.36	1.57	1.33	1.18

ILS RWY 34

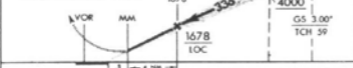
NARITA APP CON
124.4 125.8 261.2
NARITA TOWER
118.2 122.7
126.2 236.8
GND CON
121.8 121.9
ATIS 128.2

Knots	60	120	180	240	300
V/V(ftpm)	286	572	858	1144	1430

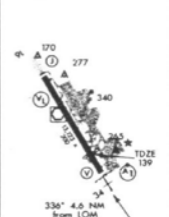
* Required by ATC until reaching 2800'



MISSED APPROACH
At DH climb on 336° turn right at 7 DME of "NRE" VOR, or at above 2800 to "CVC" VORTAC, then "CVC" R-149 to 7 DME and hold at 6000. Contact NARITA APP CON.



ELEV 139
HIREL Rwy 16-34



CATEGORY	A	B	C	D
S-ILS-34	339/730m	200	(200-800m)	
S-LOC-34	540/1220m	401	(500-1200m)	
CIRCLING	640-1600m	SOI (600-1600m)	640-2400m	SOI (600-2400m)
			700-3200m	SOI (600-3200m)

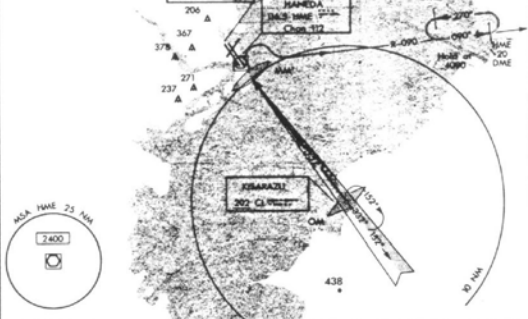
FAF to MAP 4.6 NM				
Knots	60	90	120	180
Min.Sec.	4:36	3:04	2:18	1:50

ILS RWY 34

35°45'N-140°23'E

ILS RWY 33R

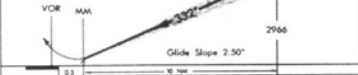
TOKYO APP CON
126.0 261.2
TOKYO TOWER
126.2 236.8
GND CON
121.7
CLNC DEL
121.8
ATIS
128.8



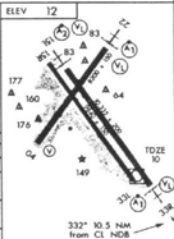
MISSED APPROACH
At MM, climb to 500
on 332°, then right turn,
climb to 4000 on R-090
to 20 DME FIX and hold.

Tl v FL 140
TA 13.500

CL OM
3000



CATEGORY	A	B	C	D
S-ILS 33R	208/730m		198	(200-800m)
S-LOC 33R	640/1220m	630 (700-1200m)	640/1830m 630(700-2000m)	640-2400m 630(700-2400m)
CIRCLING	640-1600m	628 (700-1600m)	640-2800m 628(700-2800m)	640-3200m 628(700-3200m)

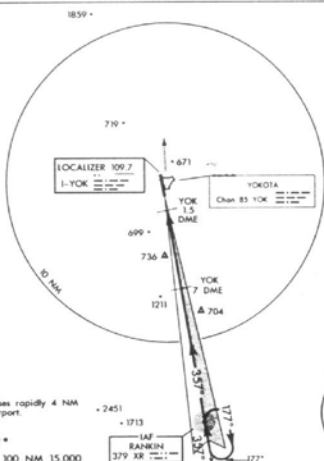


HIRL Rwy's 15L-33R, 04-22

FAF to MAP 10.0 NM					
Knots	60	90	120	150	180
Min. Sec	10:00	6:40	5:00	4:00	3:20

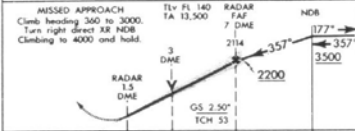
ILS-1 RWY 36

YOKOTA APP CON 1859 *
 118.3 270.6
 YOKOTA TOWER 120.3 315.8
 GND CON 133.2 308.6
 CLNC DEL 133.2 308.6
 ASR/PAR 128.4 281.0
 ATIS *



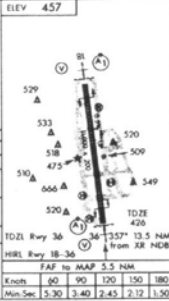
CAUTION: Terrain rises rapidly 4 NM W of airport.

EMERG SAFE ALT 100 NM 15,000



CATEGORY	A	B	C	D
S-ILS 36	630/18	204 (200-1/2)	630/24	204 (200-1/2)
S-LOC 36	1000/50	574 (600-1)	1000/60	574 (600-1 1/2)
CIRCLING*	1000-1	543 (600-1)	1000-1 1/2	1020-2
S-PAR 36	526/16	100 (100-1/4)	GS 2.5°	

*Circling not authorized E of Rwy 18-36.



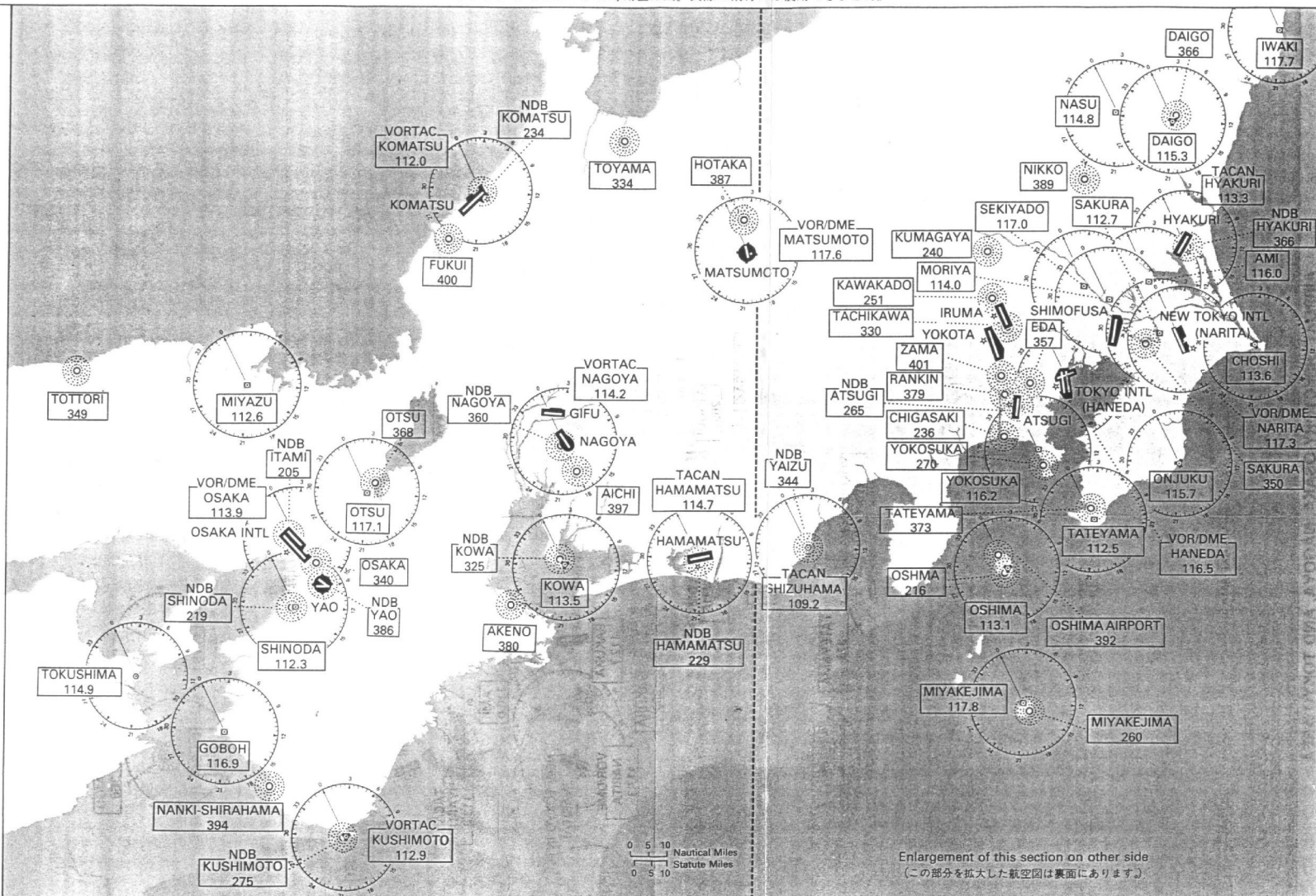
FAF to MAP 5.5 NM					
Knots	60	90	120	150	180
Min Sec	5:30	3:40	2:45	2:12	1:50

ILS-1 RWY 36

35°45'N-139°21'E

OSAKA, NAGOYA, AND TOKYO AREA CHART

フライト シミュレータ専用空路図。実際の飛行には使用できません。



AIRPORT DIRECTORY-OSAKA, NAGOYA, AND TOKYO AREA

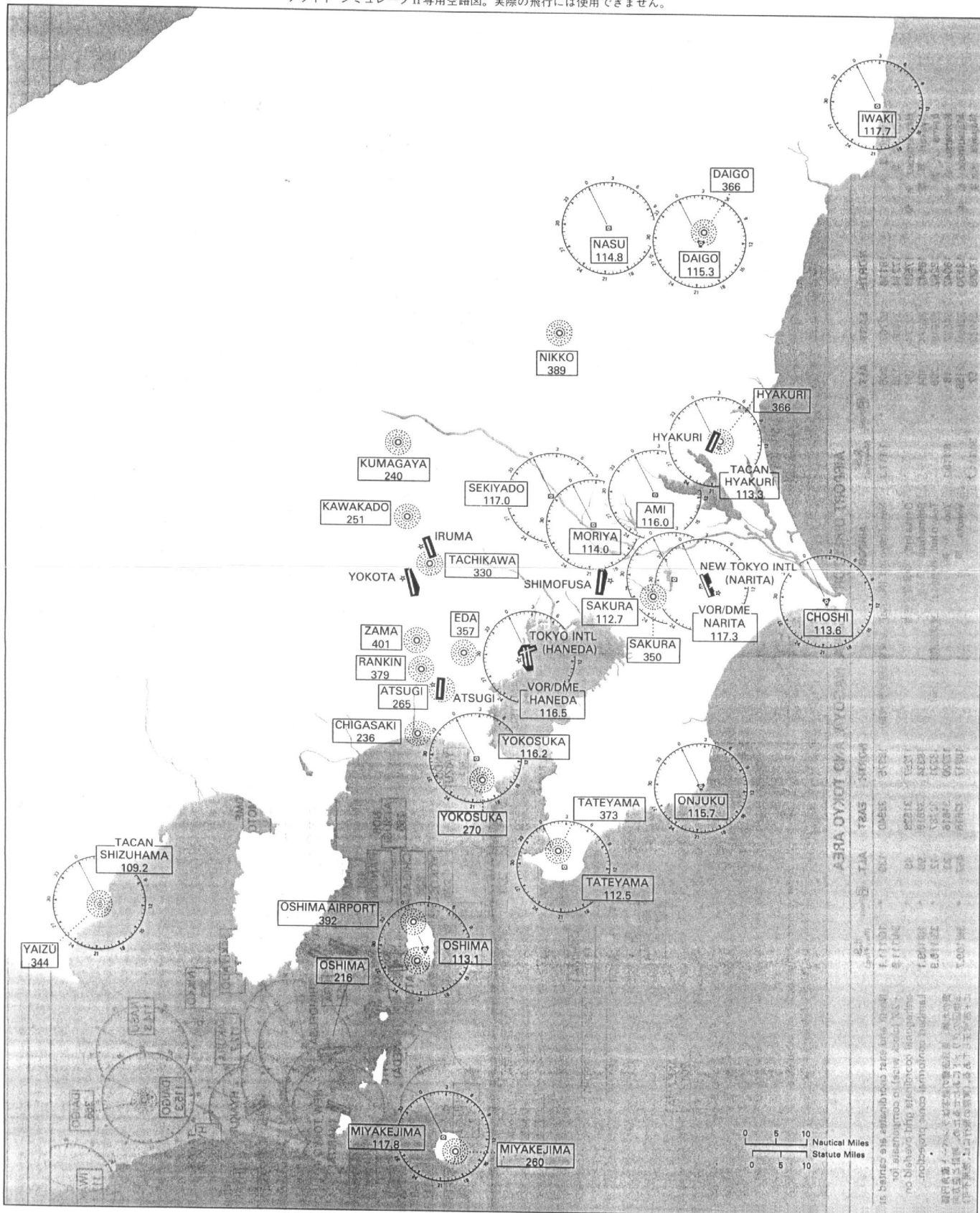
AIRPORT	NORTH	EAST	ALT.	(Fuel)	ILS (Rwy/Freq.)	AIRPORT	NORTH	EAST	ALT.	(Fuel)	ILS (Rwy/Freq.)
Atsugi 厚木	18118	32707	205	*	1/111.3	New Tokyo Intl. (Narita) 新東京国際空港(成田)	18375	32940	139	*	16/111.1
Gifu 岐阜	17714	31890	128								
Hamamatsu 浜松	17584	32274	151			Osaka Intl. 大阪国際空港	17267	31528	49	*	34/111.9
Hyakuri 百里	18542	32874	104			Shimofusa 下総	18334	32819	98	*	18/109.1
Iruma 入間	18262	32619	299	*		Tokyo Intl. (Haneda) 東京国際空港(羽田)	18201	32787	12	*	33/110.9
Komatsu 小松	18042	31572	18		6/110.1	Yao 八尾	17220	31616	33		
Matsumoto 松本	18170	32090	2155			Yokota 横田	18217	32618	457	*	36/109.7
Nagoya 名古屋	17669	31932	52		34/111.7						

North and east coordinates are canted at +26° (clock wise) to compensate for orthogonal coordinate grid overlaid on Lambert conformal conic projection.

表の北緯、東経座標の数字はランバート直角円錐法地図のグリッドにあわせるため、時計と逆方向に+26°修正してある。(実際の飛行には、使用不可)

ENLARGED SECTION OSAKA, NAGOYA, AND TOKYO AREA CHART

フライト シミュレータII専用空路図。実際の飛行には使用できません。



AIRPORT DIRECTORY-OSAKA, NAGOYA, AND TOKYO AREA

AIRPORT	NORTH	EAST	ALT.	Fuel	ILS (Rwy/Freq)
Atsugi 厚木	18118	32707	205	*	1/111.3
Hyakuri 百里	18542	32874	104	*	
Iruma 入間	18262	32619	299	*	
New Tokyo Intl. (Narita) 新東京国際空港(成田)	18375	32940	139	*	16/111.1 34/111.9
Shimofusa 下総	18334	32819	98	*	18/109.1
Tokyo Intl. (Haneda) 東京国際空港(羽田)	18201	32787	12	*	33/110.9
Yokota 横田	18217	32618	457	*	36/109.7

North and east coordinates are canted at +26° (clock wise) to compensate for orthogonal coordinate grid overlaid on Lambert conformal conic projection.

表の北緯、東経座標の数字はランバート直角円錐法地図のグリッドにあわせるため、時計と逆方向に+26°修正してある。(実際の飛行には、使用不可)

Introduction to "Western European Tour" Scenery Disk

Scenery Disk Design and Tool Development by Michael Woodley
Scenery Design by Loren Kirkwood

Maps by Michelle Maase & Ken Ruminski

"Western European Tour" includes the airports, radio nav-aids, and scenery details for large portions of Great Britain, France, and West Germany. Several airports (and a few surprises) can also be found outside the three main detailed scenery areas, along with additional radio transmitters provided to aid in long-range navigation and cross-country flight. This Scenery Disk has enough generic cross-country scenery and highly-detailed (sight-seeing) scenery areas to keep you flying for a long time. The scenery was developed using the same documentation that pilots would use to navigate these areas. The following notes and recommendations will help you to explore these new scenery areas.

Southern Great Britain

Detailed airports include Bournemouth, Cardiff, Heathrow (London), Luton, and Norwich.

City of Interest: London

Parliament	-	18659N	13743E
Westminster Abbey			
Tower Bridge	-	18661N	13759E
Tower of London			
Buckingham Palace	-	18660N	13742E
Hyde Park with Serpentine Pond			
Post Office Tower			
St. Paul's Cathedral			
City lights at dusk and night			
Thames River			

Stonehenge Site - 18570N 13245E

Chalk Figures (prehistoric and recent)

Whipsnade Lion	-	18817N	13657E
Uffington White Horse	-	18743N	13369E
Westbury White Horse	-	18633N	13209E
Long Man of Wilmington	-	18365N	13788E

Lighthouse beacons along South England coast

Note to 68000 FS2 Users: After loading the Atari ST/Amiga Flight Simulator II (or Macintosh Microsoft Flight Simulator) program, you start out on Oakland Runway 27R. When you log-in the "Western European Tour" Scenery Disk you will automatically be transported to Heathrow Airport in London. You may return to Heathrow any time after this by selecting the prerecorded situation for Oakland 27R from the SITUATION menu.

Northern France

Detailed airports include Caen, Le Touquet, Lille, and Charles de Gaulle (Paris).

City of Interest: Paris

Arc de Triomphe	-	17437N	14254E
Sacre Coeur Cathedral	-	17441N	14269E
Montmartre Hill			
Eiffel Tower	-	17430N	14254E
Tour Montparnasse	-	17423N	14261E
Concorde Obelisk	-	17433N	14261E
Louvre Museum	-	17430N	14266E
Notre Dame Cathedral	-	17426N	14269E
Ile St. Louis (island in the river)			
Seine River			
City lights at dusk and night			
Bois de Boulogne (park)			
Bois de Vincennes (park)			
Jardin du Luxembourg (park)			
Place des Invalides (park)			
Champ de Mars (park)			
Pere Lachaise Cemetery			

Southern West Germany

Detailed airports include Frankfurt and Neubiberg.

City of Interest: Munich

Olympiaturm Tower	-	17028N	16832E
Olympic Grounds (park)			
Hauptbahnhof	-	17015N	16835E
Frauenkirche	-	17014N	16839E
Residenz	-	17015N	16841E
Deutsches Museum	-	17011N	16842E
Isar River with islands			
Theresienwiese beer garden (park)			

Englischer Garten (park)
Hofgarten (park)

City of Interest: Nurnberg

Fernmeldeturm Tower - 17553N 16676E
Pegnitz River with parks

City of Interest: Stuttgart

Fernsehturm Tower - 17269N 16172E
Schlossgarten (park)
Two adjacent mountains

City of Interest: Frankfurt

Fernmeldeturm Tower - 17854N 16030E
Palmengarten (park)
Opera House - 17845N 16034E
Cathedral - 17841N 16040E
Skyline buildings
Zoologischer Garten (park)
Three mountains (northwest of city)

City of Interest: Strasbourg, France

Rhein River and canals
Jardin Botanique (park)
Orangerie (park)
Three mountains (southwest of city)

Europe

Included is a map of Europe that shows the radio aids located outside of the three main detailed scenery areas. Use these radio aids to navigate between areas.

Several additional Europe scenery details are also available. Helsinki (Finland) Airport is located at:

22508N 19462E

This airport includes refueling facilities.

The city of Moscow is also accurately located inside Russia. While we could have listed the exact city coordinates, we thought it might be more interesting for you to try and locate Moscow for yourself (see following). City scenery includes the Kremlin Wall and park, "Red Square", several other parks, a river, and several small lakes.

Nurnberg to Helsinki

It's just possible to fly from Nurnberg, West Germany to Helsinki, Finland with a full load of fuel. Start out at Nurnberg Airport:

17586N 16691E

Take off and turn to a heading of 36 degrees. Level out at 5,000 feet, then cut your airspeed to 120 knots to conserve fuel. Your magnetic compass heading will tend to drift as you fly east, so be sure to keep yourself on a constant 36-degree heading. Also, make sure to keep your airspeed at or below 120 knots; if you fly any faster than this, you will probably run out of fuel and splash into the Baltic Sea before reaching Finland!

Keep your eyes open and start scanning the horizon for Helsinki Airport as soon as you cross over into Finland. The airport is approximately 20 minutes inland from the coast and is the only scenery detail in the entire country, so it should be relatively easy to locate if you fly anywhere near it. With any luck you should be able to find and land at Helsinki Airport with about twenty minutes of fuel left in your tanks.

The flight from Nurnberg to Helsinki takes about six hours at 120 knots, gear up, flaps off, at an altitude of 5,000 feet.

Helsinki to Moscow

Your success in flying nonstop from Nurnberg all the way to Helsinki, Finland on a single tank of fuel has won you much notoriety, and strengthened your resolve to attempt an even greater feat: a secret, unauthorized solo flight from Helsinki to Moscow, deep in the Russian heartland.

After refueling your aircraft, you find yourself sitting on the runway and cleared for takeoff from Helsinki Airport at coordinates:

22508N 19462E

Take off and turn to a heading of 130 degrees. No radio nav-aid information is available for this flight, but you've determined that if you stay on this heading you should come near enough to Moscow for you to see and identify it visually. Your magnetic compass will tend to fluctuate as you fly from west to east, so make sure you maintain a 130-degree heading.

The flight from Helsinki to Moscow should take about three and one half hours at 135 knots, gear up, flaps off, at an altitude of 5,000 feet.

Find Moscow's Red Square (the Easy Way)

You've landed your airplane in a remote area of western Russia:

21739N 22124E

and have taken some time to relax and wander the countryside. Presently you arrive at a nearby village, where the friendly townstolk inform you that you are very near Moscow and, of course, you shouldn't pass up this opportunity to see the nation's capital. The villagers assure you that the people of Moscow are very friendly and will warmly welcome someone who has made such a long flight to visit them. They also suggest that perhaps you could land in Red Square near the Kremlin.

Neither you nor they have any radio nav-aid information, but they tell you that if you take off and follow a southeast heading you should be able to spot the city on the horizon in a matter of minutes. You thank them for their hospitality and climb back into your plane to depart. The trip to Moscow from this location should take about 45 minutes at 130 knots, gear up, flaps off, at an altitude of about 5,000 feet. Good luck!

Above all else, explore! A lot of work went into this project. We hope that you enjoy the results as much as we do!

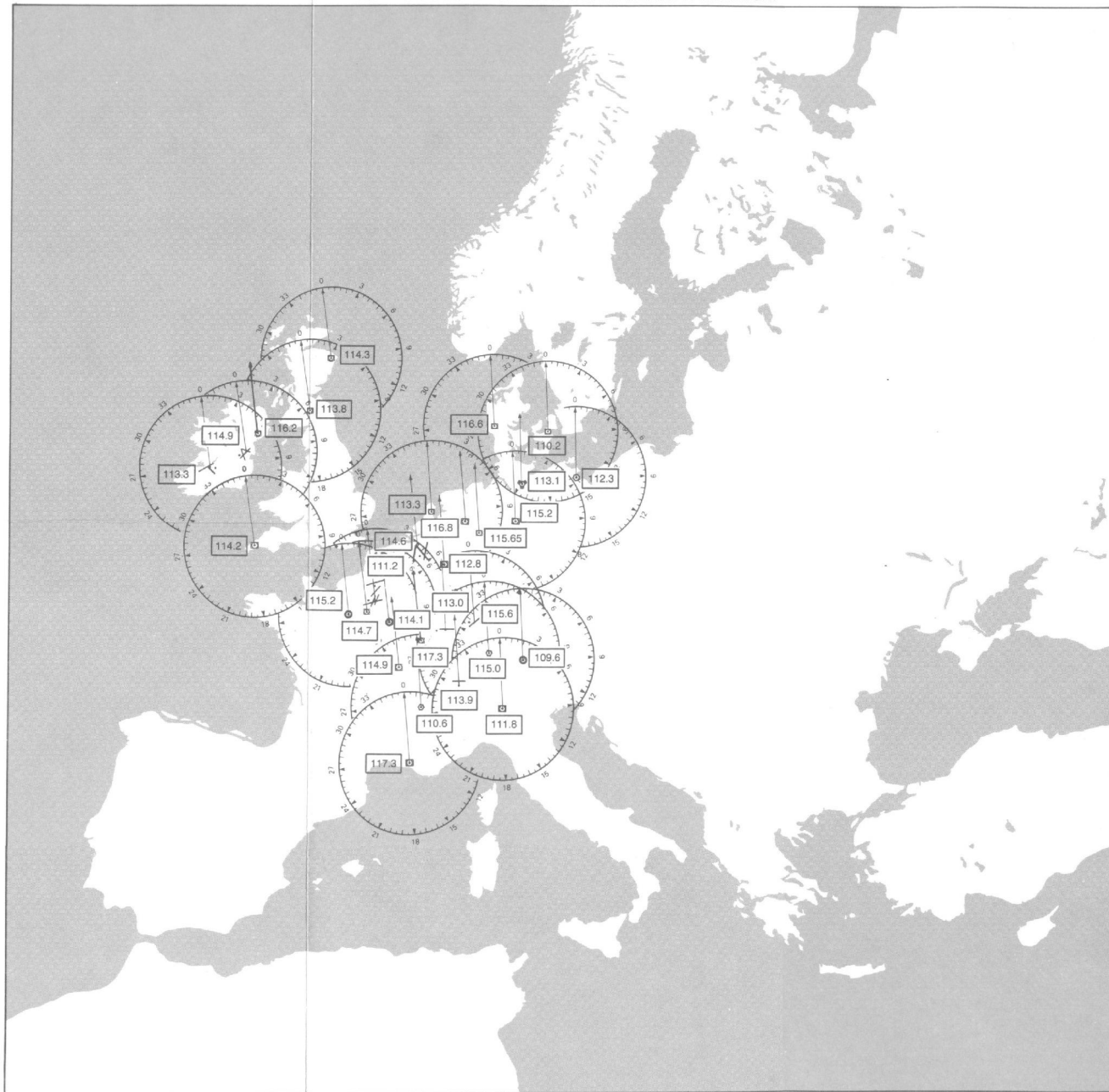
Special thanks to Dave Robins and British Airways AERAD for providing documentation used in the development of this Scenery Disk.

RADIO-NAVIGATION - EUROPE AREA

VOR	FREQUENCY
ABERDEEN, UK	114.3
AUTUN, FRANCE	114.9
BELFAST, UK	116.2
BERLIN (TEGEL), GERMANY	112.3
BRAY SUR SEINE, FRANCE	114.1
BRUSSELS, BELGIUM	114.6
CHARTRES, FRANCE	115.2
DUBLIN, IRELAND	114.9
EPINAL, FRANCE	113.0
HAMBURG, GERMANY	113.1
HAMM, GERMANY	115.65
KEMPTEN, SWITZERLAND	109.6
LANDS END, UK	114.2
LEINE, GERMANY	115.2
LA TOUR DU PIN, FRANCE	110.6
MARTIGUES, FRANCE	117.3
OLNO, BELGIUM	112.8
ORLY, FRANCE	111.2
RAMBOUILLET, FRANCE	114.7
REKKEN, NETHERLANDS	116.8
RINGO, DENMARK	110.2
ROLAMPONT, FRANCE	117.3
ST. PREX, SWITZERLAND	113.9
SHANNON, IRELAND	113.3
SPIJKERBOOR, NETHERLANDS	113.3
STRASBOURG, FRANCE	115.6
TALLA, UK	113.8
TREZZO, ITALY	111.8
VESTA, DENMARK	116.6
ZURICH EAST, SWITZERLAND	115.0

EUROPE RADIO-NAVIGATION CHART

NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.



LEGEND

NAME FREQUENCY	⊙	VOR
NAME FREQUENCY	◡	VORTAC (Distance Measuring Equipment Able)
NAME FREQUENCY	◻	VOR/DME

Abbeville (VOR)

17997N 14192E
freq. 116.6

Abbeville

17998N 14192E
alt. 220

RWY 3-21 5247 X 163



Amiens

17862N 14333E
alt. 197

RWY 12-30 4132 X 85



Autun, France (VOR)

16519N 14723E
freq. 114.9

Beauvais

17692N 14235E
alt. 358

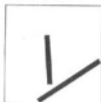
RWY 13-31 7970 X 170
RWY 5-23 3627 X 150



Berck-Sur-Mer

18127N 14142E
alt. 30

RWY 6-24 2951 X 196
RWY 18-36 1967 X 196



Bernay / St. Martin

17598N 13776E
alt. 551

RWY 10-28 3017 X 327
RWY 17-35 2787 X 327



Berry Head (VOR)

18339N 12804E
freq. 112.7

Boulogne (VOR)

18203N 14240E
freq. 113.8

Bray sur Seine, France (VOR)

17205N 14519E
freq. 114.1

Bretigny

17316N 14253E
alt. 269

RWY 5-23 9839 X 327
RWY 12-30 5739 X 196



Brussels, Belgium (VOR)

18233N 14929E
freq. 114.6

Caen (F)

17673N 13497E
alt. 256

RWY 13-31 5431 X 180
RWY 6-24 3870 X 98



Caen (VOR)

17657N 13550E
freq. 115.4

Calais

18348N 14272E
alt. 10

RWY 7-25 4992 X 150



Cambrai (VOR)

17987N 14561E
freq. 112.6

Chartres (VOR)

17315N 13860E
freq. 115.2

Chartres

17285N 14011E
alt. 508

RWY 10-28 2755 X 150



Chatillon (VOR)

17509N 14631E
freq. 117.6

Cherbourg

17927N 13245E
alt. 456

RWY 11-29 8003 X 150



Costa, Belgium (VOR)

18445N 14641E
freq. 111.8

Coulommiers (VOR)

17397N 14458E
freq. 112.9

Deauville (VOR)

17699N 13721E
freq. 110.2

Deauville

17730N 13680E
alt. 479

RWY 12-30 6887 X 150



Detling (VOR)

18555N 13921E
freq. 117.3

Diekirch, Luxembourg (VOR)

17759N 15339E
freq. 114.4

Dieppe (VOR)

17930N 13998E
freq. 115.8

Dieppe

17915N 13970E
alt. 344

RWY 13-31 2689 X 196



Dover (VOR)

18474N 14110E
freq. 114.95

Epinal, France (VOR)

17118N 15280E
freq. 113

Evreux (VOR)

17542N 13659E
freq. 112.4

Goodwood (VOR)

18415N 13546E
freq. 114.75

Hamm, Germany (VOR)

18588N 15800E
freq. 115.65

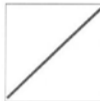
Lands end (VOR)

18341N 12224E
freq. 114.2

Le Havre

17804N 13672E
alt. 312

RWY 5-23 6887 X 131



Le Mans

17125N 13607E
alt. 194

RWY 3-21 4624 X 98



Le Touquet (F)

18165N 14159E
alt. 36

RWY 14-32 7379 X 131
RWY 7-25 3935 X 131



Lille (F)

18138N 14562E
alt. 157

RWY 8-26 9269 X 150
RWY 2-20 4263 X 98



London (VOR)

18665N 13657E
freq. 113.6

Lydd (VOR)

18421N 13979E
freq. 114.05

Mantes (VOR)

17508N 14032E
freq. 112

Midhurst (VOR)

18492N 13593E
freq. 114

Montdidier (VOR)

17722N 14344E
freq. 113.6

Montmedy, France (VOR)

17579N 15052E
freq. 109.4

Monts d'Arree, France (VOR)

17445N 12597E
freq. 112.5

Nicky, Belgium (VOR)

18346N 14855E
freq. 117.4

Ockham (VOR)

18590N 13651E
freq. 115.3

Olno, Belgium (VOR)

18085N 15245E
freq. 112.8

Orly (VOR)

17368N 14270E
freq. 111.2

Paris, Charles De Gaulle (F)

17490N 14331E
alt. 387

RWY 9-27 11807 X 150
RWY 10-28 11860 X 150

Paris, Le Bourget

17471N 14299E
alt. 216

RWY 7-25 8003 X 150
RWY 2-20 6999 X 150
RWY 8-26 3503 X 131



Paris, Orly

17372N 14266E
alt. 292

RWY 7-25 11971 X 150
RWY 2-20 7871 X 196
RWY 8-26 10889 X 150



Pontoise (VOR)

17540N 14195E
freq. 111.6

Rambouillet (VOR)

17352N 14157E
freq. 114.7

Reims (VOR)

17571N 14772E
freq. 112.3

Rolanpont, France (VOR)

16953N 15048E
freq. 117.3

Rouen

17697N 13970E
alt. 515

RWY 5-23 4099 X 98



Scaford (VOR)

18345N 13770E
freq. 117

Southampton (VOR)

18346N 13770E
freq. 113.35

Strasbourg (VOR)

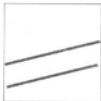
17172N 15717E
freq. 115.6

I2 - NORTHERN FRANCE

Toussus-Le -Noble

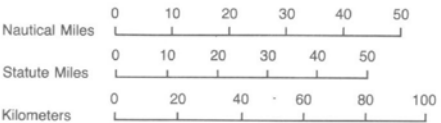
17390N 14194E
alt. 538

RWY 8-26	3607 X 98
RWY 8-26	3443 X 98



AIRPORT DIRECTORY - NORTHERN FRANCE

CITY	AIRPORT	NORTH	EAST	ALT. F	ILS
				(Feet)	(Ray/Freq)
Abbeville	Abbeville	17998	14192	220	
Amiens	Glisy	17862	14333	197	
Beauvais	Tille	17692	14235	358	
Berck-Sur-Mer	Berck-Sur-Mer	18127	14142	30	
Bernay	St. Martin	17598	13776	551	
Bretigny	Bretigny	17316	14253	269	
Caen	Carpiquet	17673	13497	256	*
Calais	Dunkerque	18348	14272	10	
Chartres	Champhol	17285	14011	508	
Cherbourg	Maupertus	17927	13245	456	
Deauville	St. Gatien	17730	13680	479	
Dieppe	St. Aubin	17915	13970	344	
Le Havre	Octeville	17804	13672	312	
Le Mans	Arnage	17125	13607	194	
Le Touquet	Paris-Plage	18165	14159	36	*
Lille	Lesquin	18138	14562	157	*
Paris	Charles De Gaulle	17490	14331	387	* 28/109.1
Paris	ATIS 128.00				
Paris	Le Bourget	17471	14299	216	
Paris	Orly	17372	14266	292	
Rouen	Boos	17697	13970	515	
Toussus-Le-Noble	Toussus-Le-Noble	17390	14194	538	



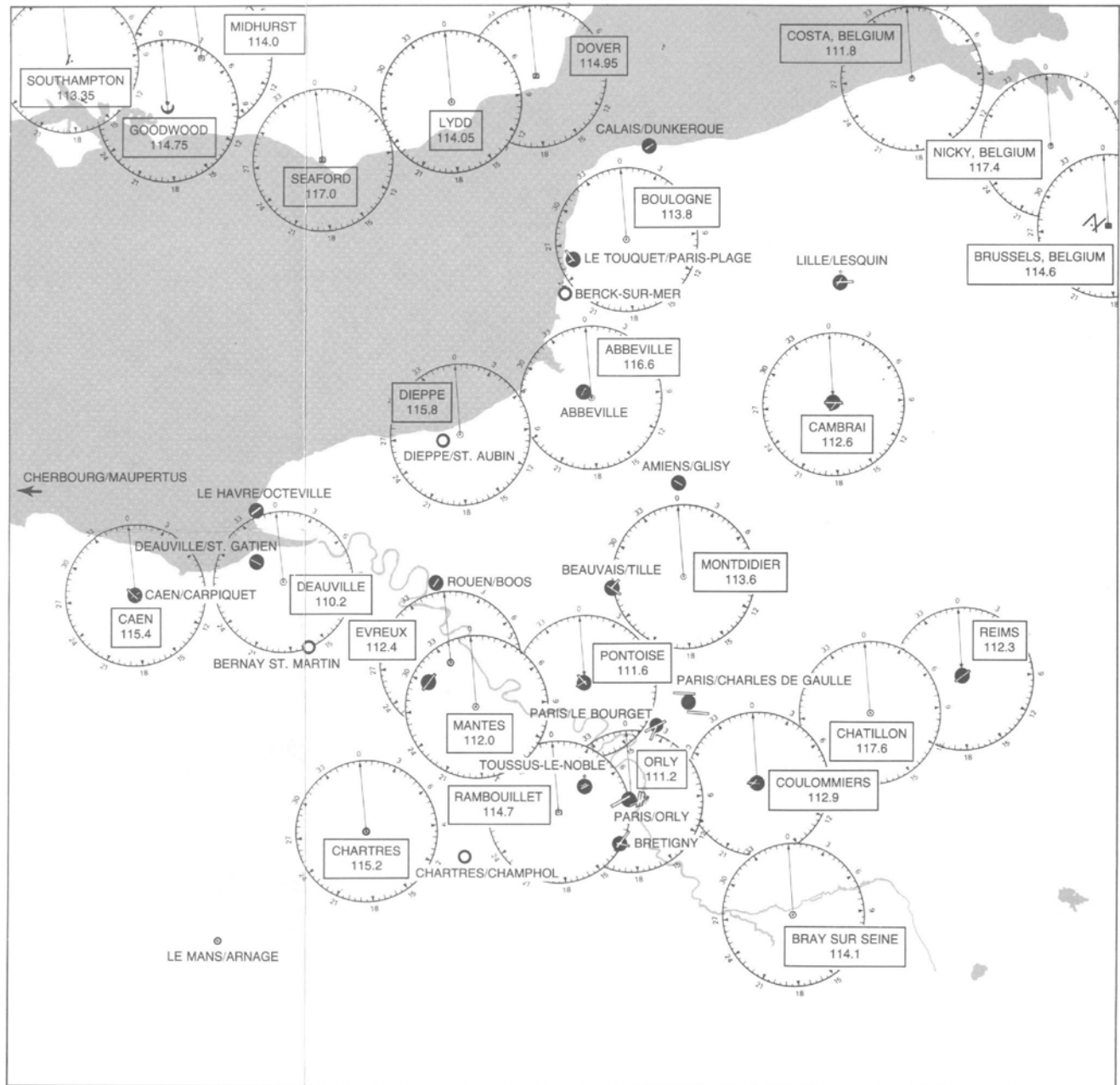
North and east coordinates are canted at approximately 5° (clockwise) to compensate for orthogonal coordinate grid overlaid on Lambert conformal conic projection.

LEGEND

- Civil-Public use airport
- Restricted/Private-Nonpublic use airport, having emergency use or landmark value
- Airport Name
- Advisory Frequency (if available)
- Elevation (feet) — Length (hundreds of feet)
- VOR
- VORTAC (Distance Measuring Equipment Able)
- VOR/DME
- Non Directional Beacon
- If VOR falls directly on an airport, only the airport symbol will be shown. The VOR facility type is shown at the top of the box.

ENLARGED SECTION NORTHERN FRANCE AREA CHART

NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.



Allenberg (VOR)

17466N 16733E
freq 111.2

Augsburg Mulhausen

17132N 16657E
alt. 1512

RWY 7-25 4198 X 98



Baden-Backen/Oos

17289N 15883E
alt. 403

RWY 4-22 4198 X 98
RWY 4-22 3279 X 98



Bayreuth (VOR)

17795N 16838E
freq 110.6

Berlin (Tegel), Germany (VOR)

18893N 17217E
freq 112.3

Brussels, Belgium (VOR)

18233N 14929E
freq 114.6

Charlie (VOR)

17760N 16135E
freq. 115.5

Diekirch, Luxembourg (VOR)

17759N 15339E
freq. 114.4

Dinkelsbühl (VOR)

17433N 16463E
freq. 117.8

Donaueschingen/Villingen

16943N 15980E
alt. 2227

RWY 18-36 4231 X 65



Egelsbach

17779N 16028E
alt. 384

RWY 9-27 2951 X 85



Epinal, France (VOR)

17118N 15280E
freq. 113

Erding (VOR)

17096N 16943E
freq. 113.6

Erlangen (VOR)

17645N 16713E
freq. 114.9

Frankfurt (F)

17803N 15997E
alt. 364

RWY 7-25 13119 X 196
RWY 7-25 13119 X 150
RWY 18-36 13119 X 150



Frankfurt (VOR)

17818N 16027E
freq. 114.2

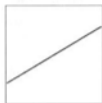
Freistadt, Austria (VOR)

17176N 17541E
freq. 113.5

Friedrichshafen

16813N 16258E
alt. 1364

RWY 6-24 7721 X 98



Hamm, Germany (VOR)

18588N 15800E
freq. 115.65

Karlsruhe

17368N 15935E
alt. 380

RWY 3-21 3115 X 98
RWY 3-21 2623 X 98



Karlsruhe (VOR)

17370N 16006E
freq. 115.95

Kempten (VOR)

16841N 16496E
freq. 109.6

Kitzingen (VOR)

17686N 16451E
freq. 111.4

La Tour du Pin, France (VOR)

15923N 15034E
freq. 110.6

Leine, Germany (VOR)

18750N 16357E
freq. 115.2

Luburg (VOR)

17336N 16213E
freq. 109.2

Mannheim/Neustheim

17572N 15993E
alt. 308

RWY 9-27 3279 X 85
RWY 9-27 2295 X 98



Montmedy, France (VOR)

17575N 15052E
freq. 109.4

Munich (VOR)

17032N 16933E
freq. 112.3

Munich

17016N 16876E
alt. 1738

RWY 7-25 9197 X 196



Neubilberg (F)

16989N 16858E
alt. 1811

RWY 7-25 8003 X 91



Nurnberg (VOR)

17596N 16619E
freq. 117.4

Nurnberg

17586N 16691E
alt. 1046

RWY 10-28 8855 X 150



Otno, Belgium (VOR)

18085N 15245E
freq. 112.8

Rekken, Netherlands (VOR)

18727N 15552E
freq. 116.8

Roding (VOR)

17403N 17095E
freq. 114.7

Rolampont, France (VOR)

16953N 15048E
freq. 117.3

Spijkerboor, Netherlands (VOR)

18913N 15069E
freq. 113.3

St. Prex, Switzerland (VOR)

16330N 15355E
freq. 113.9

Strasbourg (VOR)

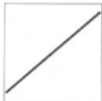
17172N 15717E
freq. 115.6

8 - SOUTHERN WEST GERMANY

Strasbourg

17188N 15734E
alt. 502

RWY 5-23 7871 X 150



Stuttgart

17241N 16176E
alt. 1299

RWY 8-26 8363 X 163



Tango (VOR)

17214N 16189E
freq. 1125

Trezzo, Italy (VOR)

15912N 16248E
freq. 1118

Tulln, Austria (VOR)

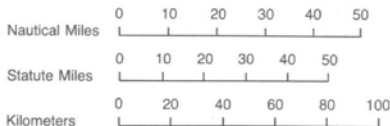
17139N 18069E
freq. 1114

Zurich East, Switzerland (VOR)

16770N 16051E
freq. 115

AIRPORT DIRECTORY - SOUTHERN WEST GERMANY

CITY	AIRPORT	NORTH	EAST	ALT. F (Fuel)	ILS (Rev/Freq)
Augsburg	Mulhausen	17132	16657	1512	
Baden	Baden-Baden/Oos	17289	15893	403	
Donaueschingen	Villingen	16943	15980	2227	
Egelsbach	Egelsbach	17779	16028	384	
Frankfurt	Main	17803	15997	364	25L/110.7
Friedrichshafen	Friedrichshafen	16813	16258	1364	
Karlsruhe	Forchheim	17368	15935	380	
Mannheim	Neustheim	17572	15993	308	
Munich	Munich	17016	16876	1738	
Munich	Neubiberg	16989	16858	1811	
Nurnberg	Nurnberg	17586	16691	1046	
Strasbourg	Entzheim	17188	15734	502	
Stuttgart	Stuttgart	17241	16176	1299	



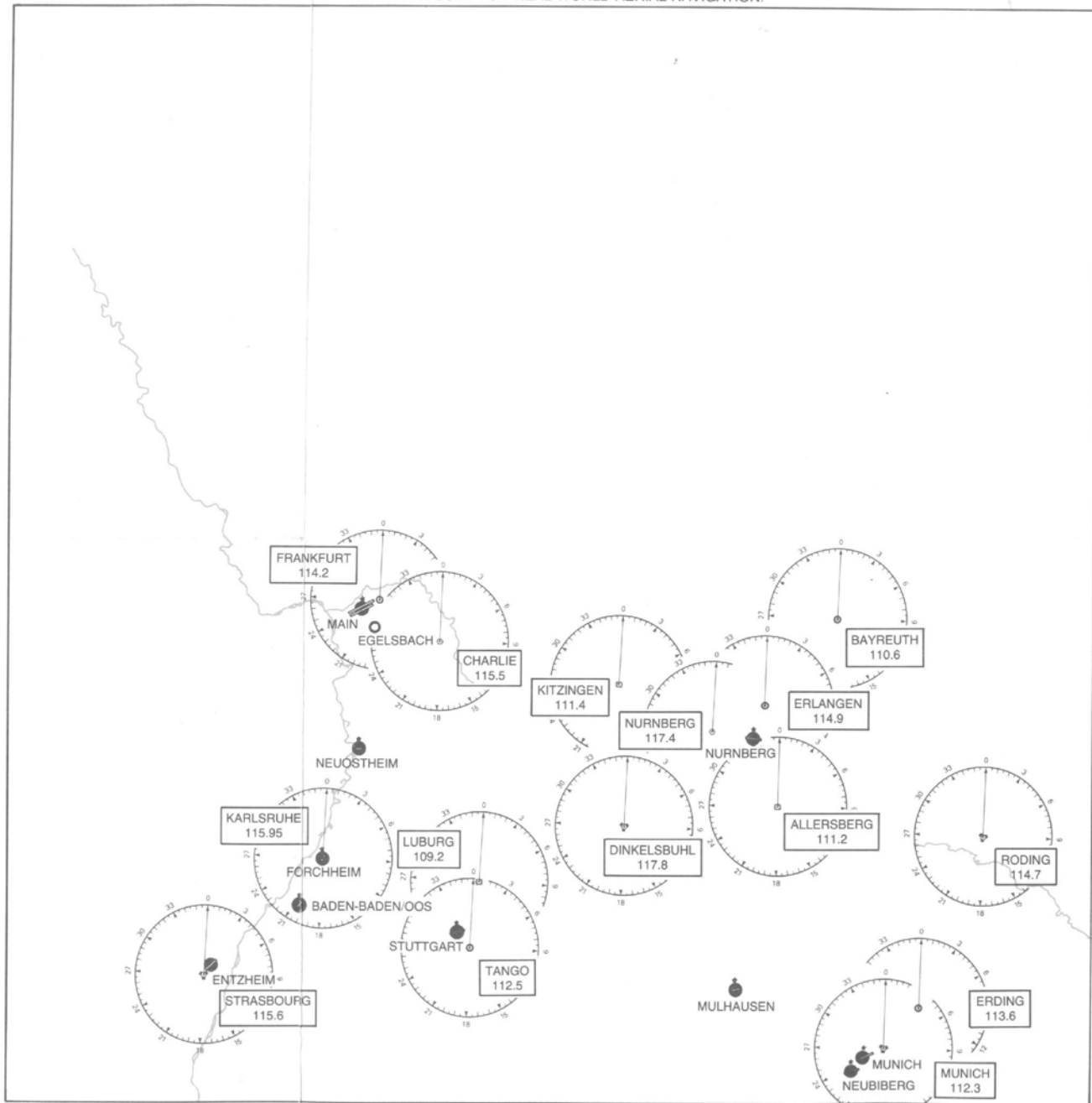
North and east coordinates are canted at less than -3° (clockwise) to compensate for orthogonal coordinate grid overlaid on Lambert conformal conic projection.

LEGEND

	Civil-Public use airport
	Restricted/Private-Nonpublic use airport, having emergency use or landmark value
	Airport Name
	Advisory Frequency (if available)
	Elevation (feet) — Length (hundreds of feet)
	VOR
	VORTAC (Distance Measuring Equipment Able)
	VOR/DME
	Non Directional Beacon
	If VOR falls directly on an airport, only the airport symbol will be shown. The VOR facility type is shown at the top of the box.

ENLARGED SECTION SOUTHERN WEST GERMANY AREA CHART

NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.



SOUTHERN UNITED KINGDOM - 1

Abbeville (VOR)

17997N 14192E
freq. 1166

Belfast, UK (VOR)

20117N 12537E
freq. 1162

Bembridge

18356N 13445E
alt. 56

RWY 12-30 2742 X 72



Berry Head (VOR)

18399N 12804E
freq. 1127

Birmingham Intl

19110N 13388E
alt. 325

RWY 15-33 7399 X 150
RWY 6-24 4316 X 150



Boulogne (VOR)

18203N 14240E
freq. 1138

Bournemouth (Hurn) (F)

18426N 13261E
alt. 36

RWY 8-26 6028 X 150
RWY 17-35 4841 X 150



Bovington (VOR)

18766N 13649E
freq. 113.75

Brecon (VOR)

18871N 12957E
freq. 117.45

Bristol Airport

18709N 13074E
alt. 620

RWY 9-27 6592 X 150
RWY 15-33 3207 X 150



Brussels, Belgium (VOR)

18233N 14929E
freq. 114.6

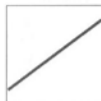
Cambrai (VOR)

17987N 14561E
freq. 112.6

Cambridge

18940N 13857E
alt. 49

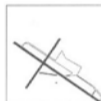
RWY 6-24 6441 X 150



Cardiff (F)

18743N 12912E
alt. 220

RWY 12-30 7721 X 150
RWY 3-21 3667 X 98



Causton (VOR)

18763N 14086E
freq. 114.55

Compton (VOR)

18694N 13463E
freq. 114.35

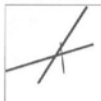
Costa, Belgium (VOR)

18445N 14641E
freq. 111.8

Cranfield

18911N 13649E
alt. 364

RWY 4-22 5930 X 150
RWY 8-26 5989 X 150
RWY 18-36 2033 X 59



Daventry (VOR)

18973N 13532E
freq. 116.4

Deauville (VOR)

17699N 13721E
freq. 110.2

Detling (VOR)

18555N 13921E
freq. 117.3

Diekirch, Luxembourg (VOR)

17759N 15339E
freq. 114.4

Dieppe (VOR)

17930N 13998E
freq. 115.8

Dover (VOR)

18474N 14110E
freq. 114.95

Dublin, Ireland (VOR)

19685N 12334E
freq. 114.9

Exeter

18475N 12846E
alt. 102

RWY 8-26 6828 X 150
RWY 13-31 4395 X 150



Gam (VOR)

19420N 13636E
freq. 112.8

Gloucester / Cheltenham

18896N 13249E
alt. 95

RWY 18-36 2295 X 91
RWY 9-27 4664 X 118
RWY 4-22 3188 X 131



Goodwood (VOR)

18415N 13546E
freq. 114.75

Halfpenny Green

19155N 13264E
alt. 292

RWY 4-22 2099 X 72
RWY 10-28 2492 X 72
RWY 16-34 3863 X 72



Hamm, Germany (VOR)

18588N 15800E
freq. 115.65

Heathrow (F)

18657N 13660E
alt. 79

RWY 10-28 12798 X 150
RWY 10-28 11998 X 150
RWY 5-23 7734 X 150



Honiley (VOR)

19066N 13405E
freq. 112.9

Ipswich

18837N 14108E
alt. 128

RWY 8-26 3417 X 341
RWY 14-32 2984 X 301



Lambourne (VOR)

18710N 13823E
freq. 115.6

Lands end (VOR)

18341N 12224E
freq. 114.2

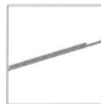
London (VOR)

18668N 13657E
freq. 113.6

London - Gatwick

18517N 13709E
alt. 203

RWY 8-26 8416 X 150
RWY 8-26 10364 X 150



Luton (F)

18822N 13703E
alt. 525

RWY 8-26 7084 X 150
RWY 18-36 2282 X 131
RWY 6-24 1285 X 85



Lydd (VOR)

18421N 13979E
freq. 114.05

Lydd

18402N 13992E
alt. 10

RWY 4-22 4933 X 118



Manston

18549N 14116E
alt. 177

RWY 11-29 9026 X 196



Midhurst (VOR)

18492N 13593E
freq. 114

Montdidier (VOR)

17722N 14344E
freq. 113.6

Nicky, Belgium (VOR)

18346N 14855E
freq. 117.4

Norwich (F)

19102N 14160E
alt. 118

RWY 4-22 6002 X 150
RWY 9-27 6041 X 150



Ockham (VOR)

18590N 13651E
freq. 115.3

Otmo, Belgium (VOR)

18088N 15245E
freq. 112.8

Oxford

18840N 13458E
alt. 269

RWY 2-20 3850 X 72
RWY 12-30 2492 X 91



Pole Hill, UK (VOR)

19627N 13391E
freq. 112.1

Rekken, Netherlands (VOR)

18727N 15552E
freq. 116.8

Scaford (VOR)

18345N 13770E
freq. 117

Shannon, Ireland (VOR)

19567N 11619E
freq. 1133

Shoreham

18391N 13666E
alt. 7

RWY 3-21 2702 X 59



Southampton (VOR)

18346N 13770E
freq. 11335

Southampton

18477N 13397E
alt. 43

RWY 2-30 5648 X 118



Southend

18663N 13960E
alt. 49

RWY 6-24 5261 X 118
RWY 15-33 3712 X 91



Spijkerboor, Netherlands (VOR)

18913N 15069E
freq. 1133

Stu (VOR)

19066N 12529E
freq. 1131

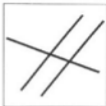
Talla, UK (VOR)

20408N 13209E
freq. 1138

BARBERS POINT

13384N 60862E
alt. 33

RWY 11-29 8410 X 200
RWY 4-22 8335 X 200
RWY 4-22 8335 X 200

**BARKING SANDS PMRF**

13695N 60174E
alt. 16

RWY 16-34 6010 X 150

**BRADSHAW (BSF) (NDB)**

12724N 61872E
freq. 339

DILLINGHAM

13496N 60810E
alt. 16

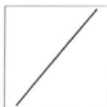
RWY 8-26 9000 X 75



FORD ISLAND ALF

13409N 60905E
alt. 16

RWY 4-22 4005 X 55



GENERAL LYMAN FLD, HILO (F)

12707N 62094E
alt. 39

RWY 8-26 9800 X 150
RWY 3-21 5605 X 150



HAIKU

13661N 60315E
alt. 384

RWY 6-24 2400 X 75



HANA

13165N 61694E
alt. 75

RWY 8-26 3610 X 100



HI 23

13671N 60318E
alt. 479

RWY 7-25 2000 X 75



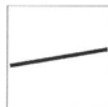
HILO (ITO) (VOR)

12711N 62112E
freq. 116.9

HONOKAA

12864N 61907E
alt. 1440

RWY 8-26 1800 X 75



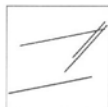
HONOLULU (HNL) (VOR)

13394N 60879E
freq. 114.8

HONOLULU INTL (F)

13388N 60916E
alt. 13

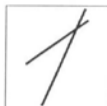
RWY 8-26 12360 X 150
RWY 8-26 12000 X 200
RWY 4-22 9000 X 150
RWY 4-22 6950 X 150



KAHULUI, MAUI (F)

13205N 61525E
alt. 52

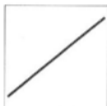
RWY 2-20 6995 X 150
RWY 5-23 4995 X 150



KALAUPAPA

13339N 61307E
alt. 26

RWY 5-23 2685 X 55



KAMUELA (MUE) (VOR)

12830N 61841E
freq. 113.3

KANEHOHE BAY (NGF) (NDB)

13443N 60985E
freq. 265

KANEHOHE BAY MCAS

13443N 60984E
alt. 16

RWY 4-22 7770 X 200



KAPALUA WEST MAUI

13236N 61427E
alt. 256

RWY 2-20 3000 X 75



KEAHOLE, KAILU KONA (F)

12716N 61690E
alt. 43

RWY 17-35 6500 X 150



KOKO HEAD (CKH) (VOR)

13367N 61011E
freq. 113.9

KONA (IAI) (VOR)

12675N 61698E
freq. 115.7

LANAI (LNY) (VOR)

13152N 61309E
freq. 117.7

LANAI, LANAI CITY

13162N 61318E
alt. 1309

RWY 3-21 5000 X 150



LIHUE (LIH) (VOR)

13671N 60352E
freq. 113.5

LIHUE, KAUAI (F)

13673N 60349E
alt. 148

RWY 17-35 6500 X 150
RWY 3-21 6005 X 150



MAUI (OGG) (VOR)

13209N 61525E
freq. 114.3

MAUNA KEA HONOLII

12730N 62058E
alt. 1401

RWY 7-25 1800 X 75



MCGREGOR POINT (MPH) (NDB)

13157N 61487E
freq. 353

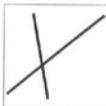
MOLOKAI (MKK) (VOR)

13311N 61226E
freq. 116.1

MOLOKAI

13317N 61254E
alt. 453

RWY 5-23 4495 X 100
RWY 17-35 3115 X 100



MOUNTAIN VIEW

12636N 62076E
alt. 1499

RWY 5-23 1800 X 75



PAHOA (POA) (NDB)

12634N 62129E
freq. 332

PELEAU

12789N 62048E
alt. 1089
RWY 7-25 2100 X 75



PORT ALLEN, KAUAI

13642N 60245E
alt. 23
RWY 9-27 2450 X 60



PRINCEVILLE

13774N 60313E
alt. 358
RWY 5-23 3400 X 75



SOUTH KAUAI (SOK) (VOR)

13643N 60275E
freq. 115.4

UPOLU (UPP) (VOR)

12912N 61768E
freq. 112.3

UPOLU

12939N 61763E
alt. 95
RWY 7-25 3800 X 75



WAIMEA-KOHALA

12830N 61841E
alt. 2670
RWY 4-22 5195 X 100



WAIPUNELEI

12822N 62002E
alt. 1361
RWY 11-29 2100 X 75



WHEELER (HHI) (NDB)

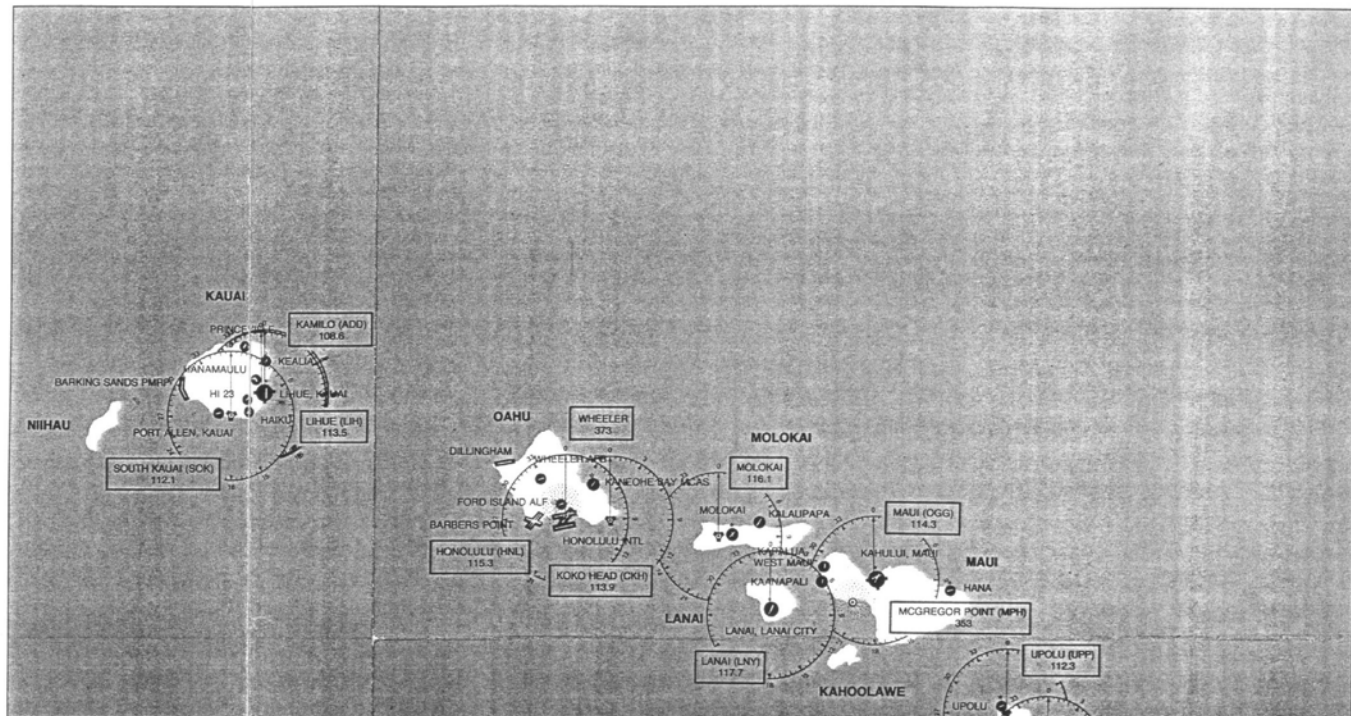
13453N 60875E
freq. 373

AIRPORT DIRECTORY - HAWAII AREA CHART

HAWAII AREA CHART

NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.

AIRPORT	ISLAND	NORTH	EAST	ALT	FUEL ILS	ATIS	VASI
Barbers Point	Oahu	13384N	60862E	33			
Barking Sands PMRF	Kauai	13695N	60174E	16			
Dillingham	Oahu	13496N	60810E	16			
Ford Island ALF	Oahu	13409N	60905E	16			
General Lyman Fld	Hawaii	12707N	62094E	39	110.70/26	126.4	8,26,3
Haiku	Kauai	13661N	60315E	384			
Hana	Maui	13165N	61694E	75			
HI 23	Kauai	13671N	60318E	479			
Honokaa	Hawaii	12864N	61907E	1440			
Honolulu Intl	Oahu	13388N	60916E	13	109.50/8L	127.9	8R,26L,4L, 26R,4R,22L
Kahului	Maui	13205N	61525E	52	110.10/2	128.6	2,20.5
Kalaupapa	Molokai	13339N	61307E	26			
Kaneohe Bay MCAS	Oahu	13443N	60984E	16			
Kapalua West Maui	Maui	13236N	61427E	16			
Kaunaloa	Hawaii	12716N	61690E	43	109.70/17	127.4	17,35
Lanai	Lanai	13162N	61318E	1309			
Lihue	Lihue, Kauai	13673N	60349E	148	110.90/35	127.2	17,35,3,21
Mauna Kea Honolii	Hawaii	12730N	62058E	1401			
Molokai	Molokai	13317N	61254E	453		128.2	
Mountain View	Hawaii	12636N	62076E	1499			
Peleau	Hawaii	12789N	62048E	1089			
Port Allen, Kauai	Kauai	13642N	60245E	23			
Princeville	Kauai	13774N	60313E	358			
Upolu	Hawaii	12939N	61783E	95			
Waimea-Kohala	Hawaii	12830N	61841E	2670			
Waipunaieai	Hawaii	12822N	62002E	1361			



LEGEND



Civil-Public use airport



Restricted/Private-Nonpublic use airport, having emergency use or landmark value



Rotating light in operation, sunset to sunrise

SANTA MONICA
ATIS 119.15
175-50

Airport Name
Advisory Frequency (if available)
Elevation (feet) — Length (hundreds of feet)

NAME
FREQUENCY



VOR

NAME
FREQUENCY



VORTAC (Distance Measuring Equipment Able)

NAME
FREQUENCY



VOR/DME

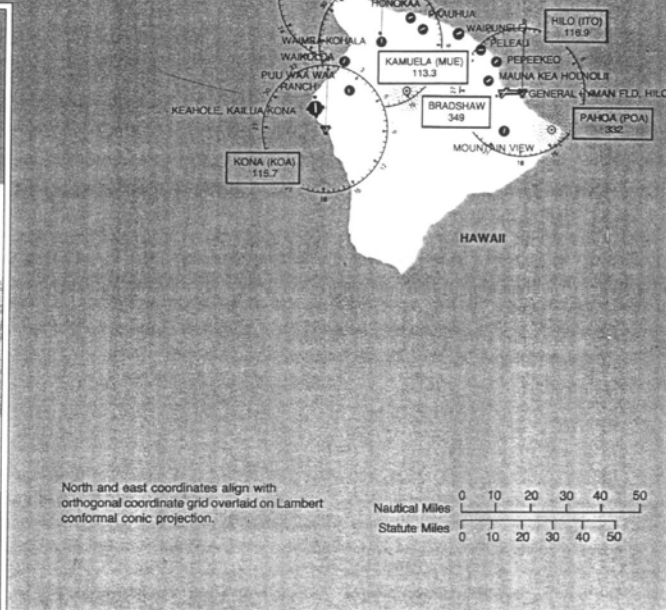
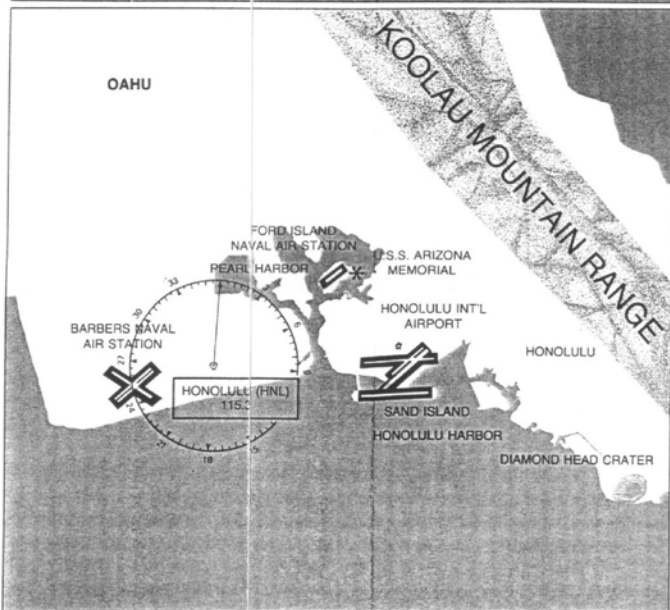
NAME
FREQUENCY



Non Directional Beacon

VOR/DME
NAME
FREQUENCY

If VOR falls directly on an airport, only the airport symbol will be shown. The VOR facility type is shown at the top of the box.



North and east coordinates align with orthogonal coordinate grid overlaid on Lambert conformal conic projection.

