ERAM Radar Associate Software for Flight Data Processing and Radar Interface Requirements (Simulated).

Contractor will develop and provide a flight data processor software program that simulates as many ERAM EDST (Enroute Decision Support Tool) functions as possible.

The Computer Human Interface (CHI) must not contradict nor deviate from the entries made in ERAM/EDST. The expectation is tempered with realistic expectations; this does not have to be a perfect replication of ERAM/EDST, but achieve a training simulation environment where entries made by students result in appearance and functional response that simulates what would happen if it was real. The GPD flight data processing and trial planning should very closely resemble what occurs in ERAM/EDST per the description and appearance portrayed in the CBIs that we have provided.

It is vital that the radar display, position symbols, radar targets and data blocks be precisely the same or as near possible to EDST/DSR appearance. The EDST display and functionality (aircraft list, departure list, special posting area, alert columns, toolbars, voice communication indicators, embedded route text (ERT) and Graphic Plans Display (GPD) must be simulated with as near as possible to EDST employed by FAA and reproduced in similar software designs such as SOLO or SIGNAL.

Lesson Plans 43 and 46 along with the attached power-point files depict the appearance and interaction between flight data processing and radar data processing required for a successful training simulator that we are seeking. The CBIs (Computer Based Instruction) files we have provided depict the operating appearance and performance necessary to conduct medium to high fidelity training replication of EDST and radar interface.

Functionality must include: trajectory modeling, aircraft to aircraft/aircraft to air space conflict probe, FDP to RDP interface, route display, HALO, maneuver start point (probe climb/descent to LOA and normal rate of climb/descent, alert probe up to 20 minutes in the future.

Priority

1. Radar Display (maps, data blocks, lists) must conform to ERAM/DSR appearance as much as possible.

2. EDST Display must also conform in appearance as much as possible.

3. Alert columns must depict conflict probe of aircraft to aircraft and aircraft to airspace conflictions up to 20 minutes in the future.

4. Keyboard entry functionality should be the same as ERAM (Point-out protocol). PVDing a data block must be shown on EDST (Yellow then white).

5. Flight plan amendments and radar inputs should interface, i.e. an altitude amendment in the radar data block must send and show in EDST altitude columns.

6. EDST must provide trial planning of altitude changes. An altitude entry should show either RED/YELLOW or GREEN as trajectory modeling occurs.

7. Airspace is Aero Center, "Jackson Low" (Sector 66). See attached location identifiers that must be in the data base. See attached maps.

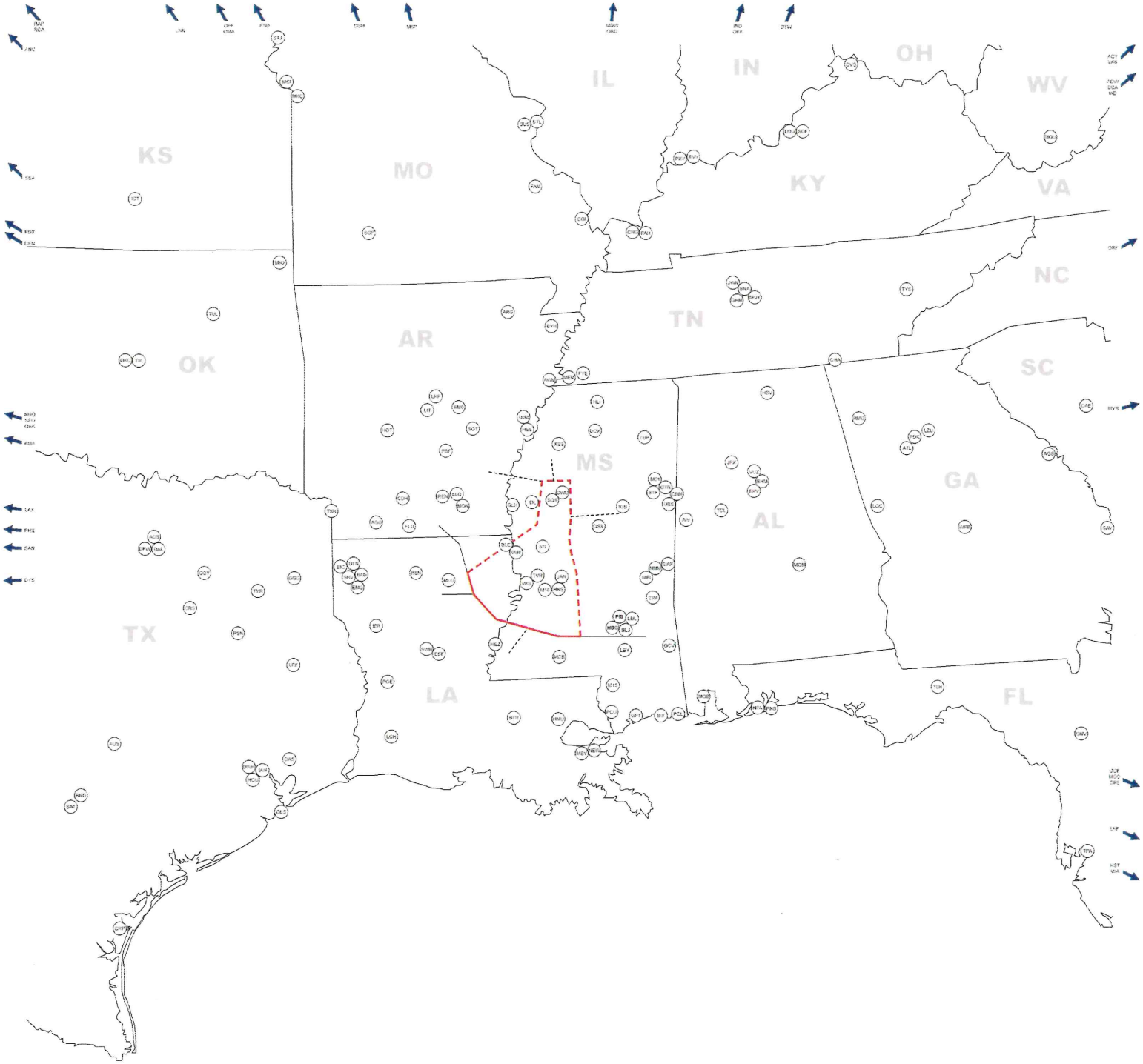
UAA En Route Identifiers

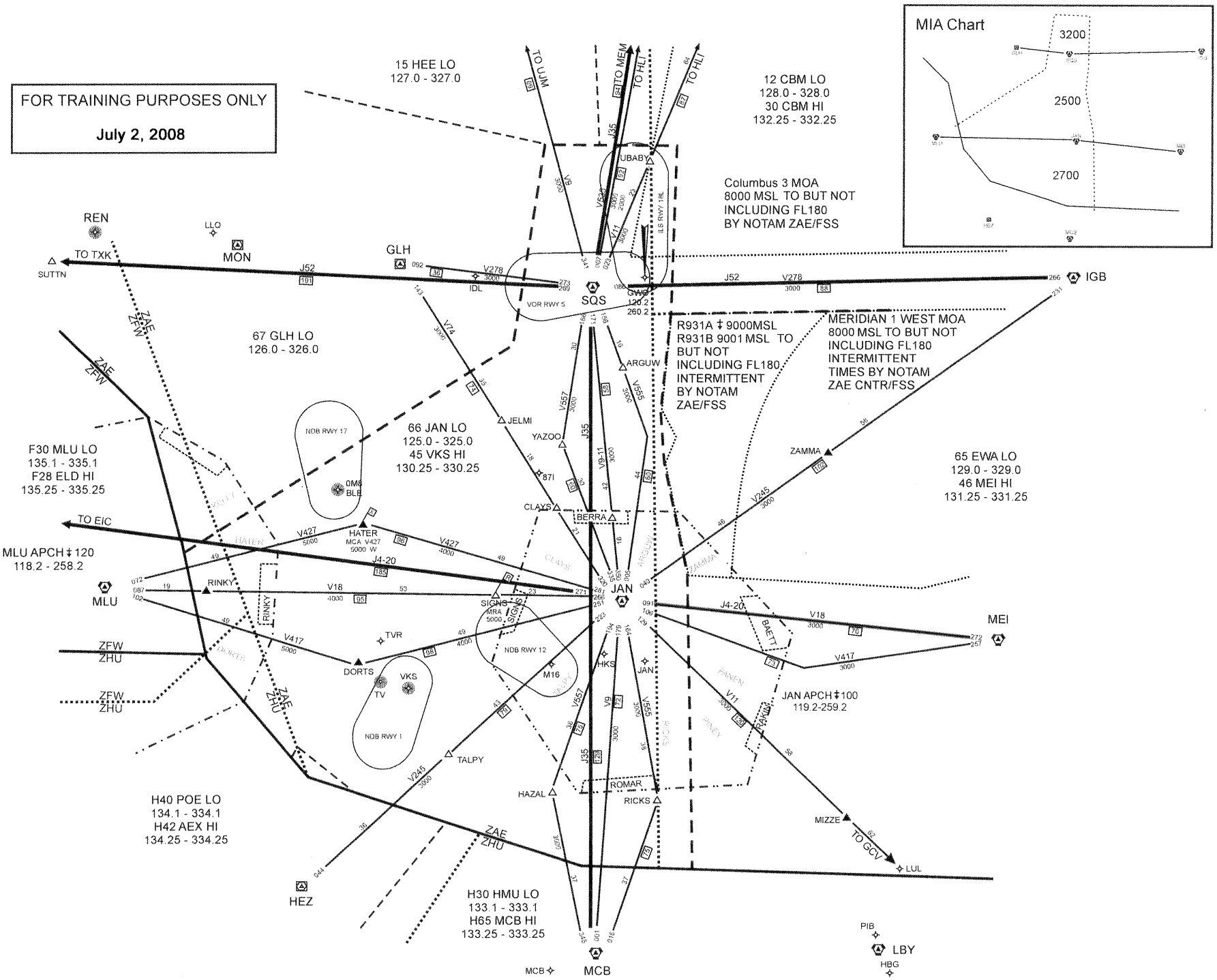
0M8	Byerley Airport, LA
87I	Yazoo County, MS
KABI	Abilene Vortac, TX
KABQ	Albuquerque, NM
KADW	Andrews AFB, MD
KAEX	Alexandria, LA
KAMA	Amarillo, TX
KATL	Atlanta, GA
KAUS	Austin, TX
KBAD	Barksdale AFB, LA
KBHM	Birmingham, AL
KBIX	Keesler AFB, MS
BLE	Lake Providence NDB, LA
KBNA	Nashville, TN
KBPT	Beaumont, TX
KBTR	Baton Rouge, LA
KCAE	Columbia, SC
KCBM	Columbus AFB, MS
CEW	Crestview VORTAC, FL
KCGI	Cape Girardeau, MO
KCHA	Chattanooga, TN
KCLL	College Station, TX
KCLT	Charlotte, NC
CME	Chisum VORTAC, NM
CNG	Cunningham VORTAC, KY
KCOF	Patrick AFB, FL
CQY	Cedar Creek VORTAC, TX
KCVG	Cincinnati, KY (Covington Airport)
KDAL	Dallas Love Field, TX
DAS	Daisetta VORTAC, LA
KDEN	Denver (International Airport), CO
KDFW	DFW Airport, TX
KDTN	Shreveport Downtown Airport, LA
KDYR	Dyersburg, TN
EIC	Belcher VORTAC, LA
KEKY	Bessemer, AL
KELD	El Dorado, AR
EMG	Elm Grove VORTAC, LA
KESF	Esler Regional Airport, LA
EWA	Kewanee VORTAC, MS
KFSM	Fort Smith, AR
FUZ	Ranger VORTAC, TX
GCV	Greene County VORTAC, MS
KGGG	Gregg County East Texas Regional Airport, TX
GHM	Graham VORTAC, TN
KGLH	Greenville, MS
KGPT	Gulf Port, MS
KGTR	Golden Triangle, MS
KGWO	Greenwood, MS
KHBG	Hattiesburg, MS
KHEZ	Natchez, MS
KHKS	Hawkins Field, MS
KJVW	John Bell Williams, MS
HLI	Holly Springs VORTAC, MS
HMU	Hammond VOR, LA
KHOT	Hot Springs, AR
KHOU	Houston Hobby, TX
KIAH	George Bush Intercontinental, TX
KICT	Wichita, KS
IGB	Bigbee VORTAC, MS
KIND	Indianapolis, IN
IRW	Will Rogers VORTAC, OK
KJAN	Jackson, MS
KJAX	Jacksonville, FL
KLAX	Los Angeles, CA
LBY	Eaton VORTAC, MS
LCH	Lake Charles, LA
KLFK	Lufkin, TX
KLFT	Lafayatte, LA
KLGC	LaGrange, GA
KLIT	Little Rock, AR
KLLQ	Monticello, AR
KLRF	Little Rock AFB, AR
M13	Pearl River Airport, MS
M41	Holly Springs Airport, MS
KMCB	McComb, MS
KMCI	Kansas City International, MO
KMCO	Orlando International, FL
KMEI	Meridian, MS
KMEM	Memphis, TN
KMGM	Montgomery, AL
KMIA	Miami, FL

UAA En Route Identifiers

KMLU	Monroe, LA
KMOB	Mobile, AL
MON	Monticello VOR, AR
KMSY	Louis Armstrong, LA
KNEW	Lake Front Airport, LA
KNMM	Navy Meridian, MS
KNPA	Navy Pensacola, FL
KOFF	Offutt AFB, NE
KOKC	Will Rogers Airport, OK
KOMA	Omaha, NE
KORD	Chicago O'Hare, IL
KORL	Orlando Executive, FL
KPAH	Paducah, KY
KPBF	Pine Bluff, AR
KPDK	Dekalb-Peachtree Airport, GA
KPDX	Portland, OR
KPHX	Phoenix, AZ
KPNS	Pensacola Gulf Coast Airport, FL
KPOE	Fort Polk, LA
KPRN	Greenville, AL
PXV	Pocket City VORTAC, IN
KRMG	Rome, GA
KRSN	Ruston, LA
KSAT	San Antonio, TX
KSDF	Louisville (Standiford Airport), KY
KSGF	Springfield, MO
KSGT	Stuttgart, AR
KSHV	Shreveport, LA
KSLC	Salt Lake City, UT
SQS	Sidon VORTAC, MS
KSTF	Starkville, MS
KSTL	Lambert Field (St. Louis), MO
KSUS	Spirit of St. Louis, MO
SWB	Sawmill VOR/DME, LA
KTCL	Tuscaloosa, AL
KTIK	Tinker AFB, OK
KTLH	Tallahassee, FL
KTNP	Twenty-nine Palms Airport, CA
KTPA	Tampa International, FL
KTUL	Tulsa, OK
KTUP	Tupelo, MS
KTXK	Texarkana, AR
KTYR	Tyler, TX
KUBS	Lowndes County Airport, MS
KUCY	Union City, TN
UJM	Marvell VOR/DME, AR
KUOX	Oxford, MS
VHP	Brickyard VORTAC, IN
KVKS	Vicksburg, MS
VUZ	Vulcan VORTAC, AL
KWRB	Warner-Robins AFB, GA
KWRI	McGuire AFB, NJ

Location Identifiers Map




FOR TRAINING PURPOSES ONLY
July 2, 2008
MIA Chart
3200
2500
2700
15 HEE LO
127.0 - 327.0
12 CBM LO
128.0 - 328.0
30 CBM HI
132.25 - 332.25
Columbus 3 MOA
8000 MSL TO BUT NOT
INCLUDING FL180
BY NOTAM ZAE/FSS
67 GLH LO
126.0 - 326.0
R931A ‡ 9000MSL
R931B 9001 MSL TO
BUT NOT
INCLUDING FL180
INTERMITTENT
BY NOTAM
ZAE/FSS
MERIDIAN 1 WEST MOA
8000 MSL TO BUT NOT
INCLUDING FL180
INTERMITTENT
TIMES BY NOTAM
ZAE CNTR/FSS
66 JAN LO
125.0 - 325.0
45 VKS HI
130.25 - 330.25
F30 MLU LO
135.1 - 335.1
F28 ELD HI
135.25 - 335.25
65 EWA LO
129.0 - 329.0
46 MEI HI
131.25 - 331.25
MLU APCH ‡ 120
118.2 - 258.2
JAN APCH ‡ 100
119.2-259.2
H40 POE LO
134.1 - 334.1
H42 AEX HI
134.25 - 334.25
H30 HMU LO
133.1 - 333.1
H65 MCB HI
133.25 - 333.25
REN
LLO
MON
GLH
TO TXK
SUTTN
IDL
SQS
VOR RWY 5
GWO
120.2
260.2
IGB
TO UJM
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JELMI
YAZOO
CLAYS
BERRA
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HATER
MCA V427
5000 W
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MLU
SIGNS
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M16
TALPY
ROMAR
HAZAL
RICKS
MIZZE
TO GCV
LUL
HEZ
MCB
PIB
LBY
HBG
NDB RWY 17
NDB RWY 12
NDB RWY 1
ILS RWY 18L
ZAE
ZFW
ZHU
ZFW
ZHU
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ZAE
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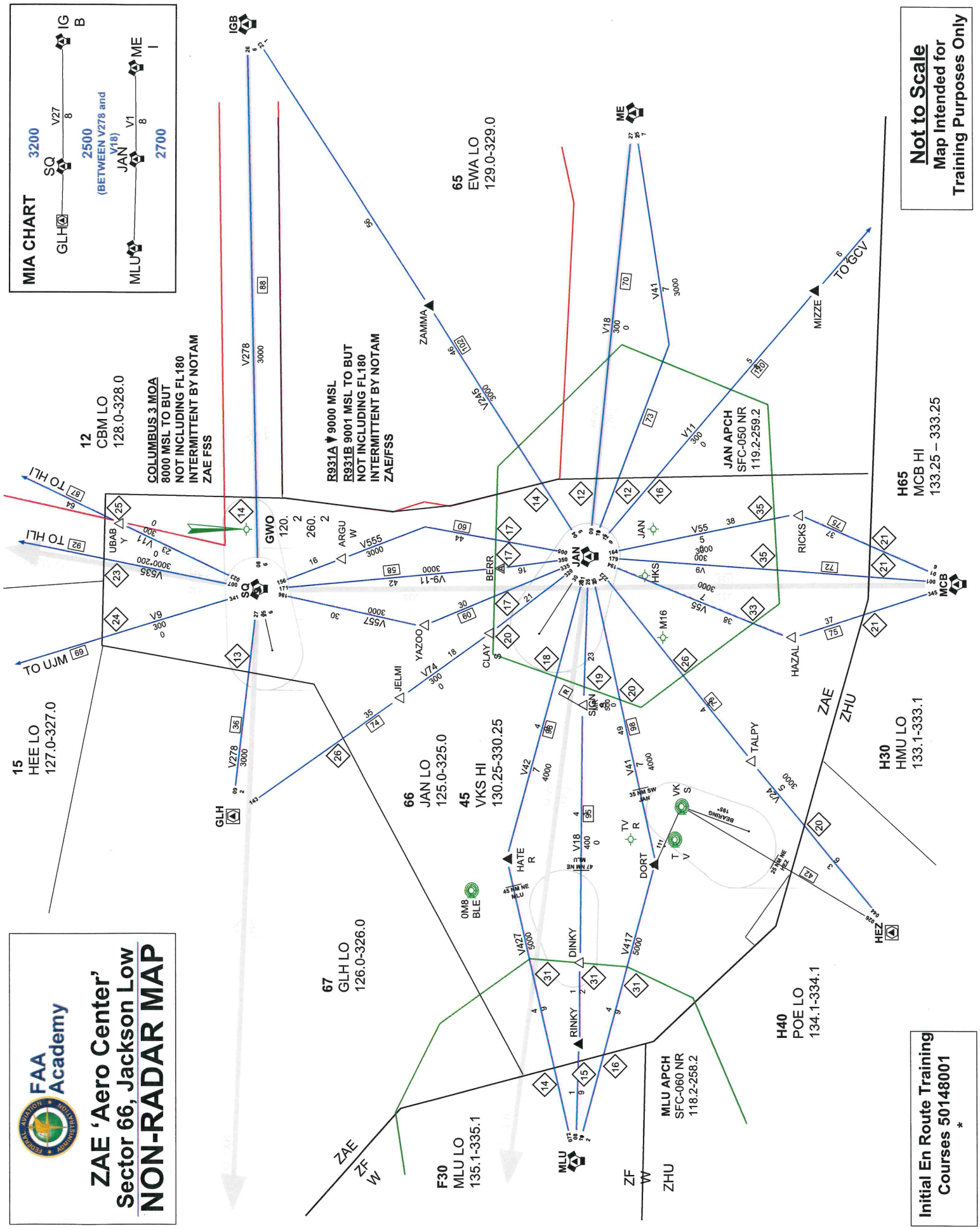
V555
V11
V9
V14
J52
J4-20
J35


MIA CHART
GLH
SQ
3200
V27
8
IGB
2500
(BETWEEN V278 and V18)
MLU
JAN
V1
8
ME
I
2700
Not to Scale
Map Intended for Training Purposes Only
12
CBM LO
128.0-328.0
COLUMBUS 3 MOA
8000 MSL TO BUT
NOT INCLUDING FL180
INTERMITTENT BY NOTAM
ZAE FSS
R931A 9000 MSL
R931B 9001 MSL TO BUT
NOT INCLUDING FL180
INTERMITTENT BY NOTAM
ZAE/FSS
65
EWA LO
129.0-329.0
JAN APCH
SFC-050 NR
119.2-259.2
H65
MCB HI
133.25 – 333.25
15
HEE LO
127.0-327.0
66
JAN LO
125.0-325.0
45
VKS HI
130.25-330.25
H30
HMU LO
133.1-333.1
67
GLH LO
126.0-326.0
H40
POE LO
134.1-334.1
F30
MLU LO
135.1-335.1
MLU APCH
SFC-060 NR
118.2-258.2
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TO UJM
TO GCV
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YAZOO
CLAY
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SIRN
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M16
RICKS
HAZAL
TALPY
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JAN
MCB
GLH
HEZ
MLU
ZAMMA
MIZZE
V278
V245
V18
V41
V11
V555
V9-11
V557
V74
V42
V24
V427
V417
V535
V9
V55
FAA Academy
ZAE 'Aero Center'
Sector 66, Jackson Low
NON-RADAR MAP
Initial En Route Training
Courses 50148001
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