Flight Procedure Tracking Form	Action: FLIGHT CHECK	Task Type: SID	Date Open: 02/28/2012	Task #: 2006071410720503010	Request #: 20060714107205
Procedure: SID NATCA (RNAV) ONE ST. LOUIS MO KSTL		Airport ID: KSTL	Airport: LAMBERT-ST LOUIS INTL		Reimbursable #:
City: ST LOUIS	ST: MO	GPS #:		Estimated Chart Date: 09/20/2012	FICO #:
Fac ID:	Fac. Type:		Specialist: HERMAN ROGERS		

Procedure Review

	Rec'd	Rel'd	Full Name	Comments
Lead:	03/29/2012	06/12/2012	JILL OLSON	
QA:	06/12/2012	06/12/2012	STEVEN SZUKALA	
Liaison:	06/12/2012		MARY MCDONALD	DME/DME; REPLACEMENT - 15B, FIG.

Procedure Comments: ENROUTE **Remark Type:** INFORMATION

ST LOUIS, MO LAMBERT-ST LOUIS INTL (KSTL) NATCA ONE (RNAV) (SID) ENROUTE-YES FC: 7.24.12 PUB: 9.20.12

ATTACHED FORMS: ESV REPORTS; 8260-15B; 8260-15C; 8260-2(S): ANNII, ORIG; BEART, ORIG; DSAPP, ORIG; FUNKE, ORIG; NATCA, ORIG; WOLTR, ORIG; (INFO ONLY) SPINNER (SPI) VTAC, REV 15.

CONTACT: JILL OLSON, AJV-353 LEAD, 405.954.0414
REPLACEMENT PACKAGE TO CORRECTED MEA'S TO MATCH DME/DME PRORUNS. SEE ATTACHED LIST FOR ALL AFFECTED PROCEDURES.

NATCA ONE DEPARTURE (RNAV)

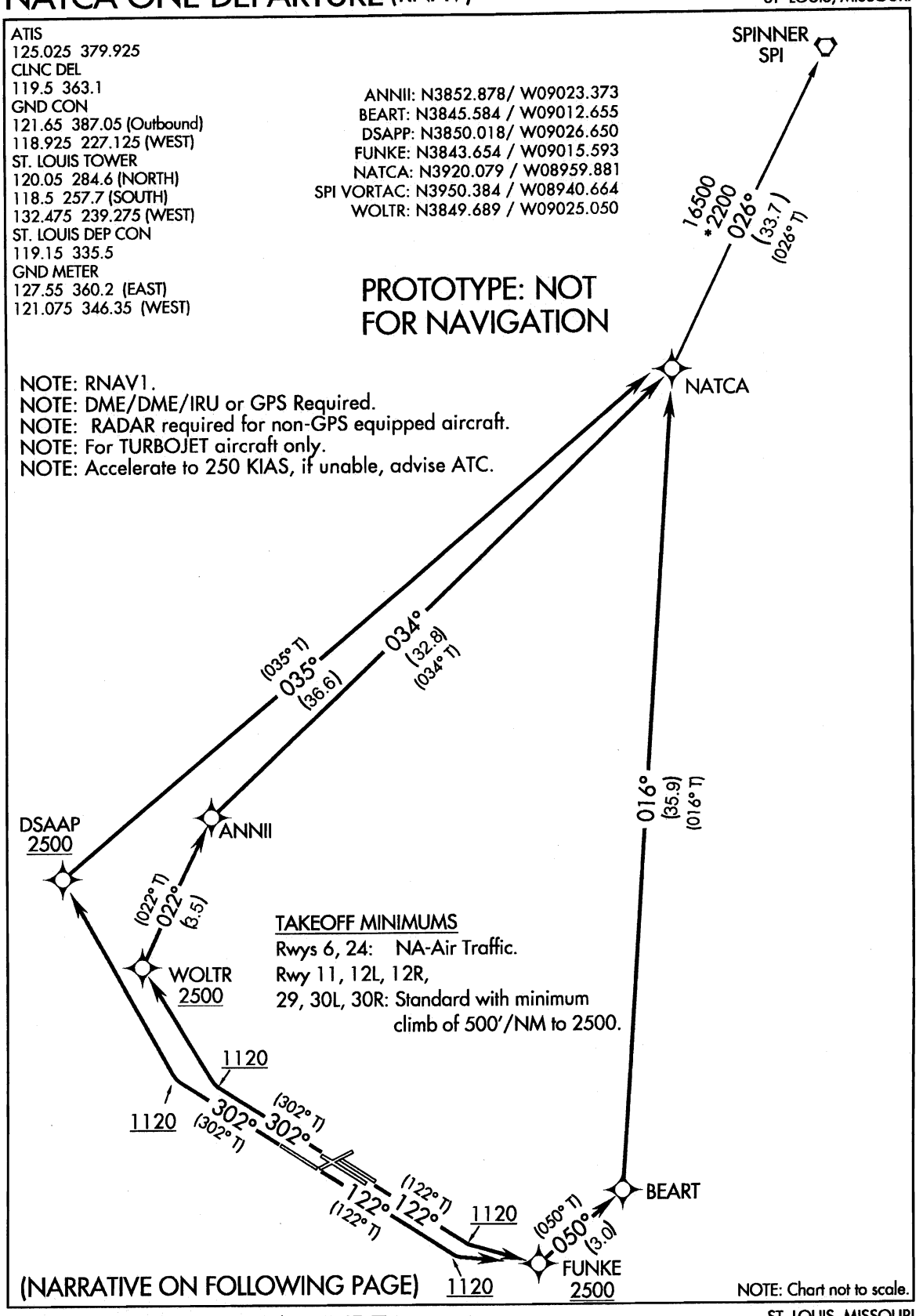
ST LOUIS/LAMBERT-ST LOUIS INTL (STL)
ST LOUIS, MISSOURI

ATIS
125.025 379.925
CLNC DEL
119.5 363.1
GND CON
121.65 387.05 (Outbound)
118.925 227.125 (WEST)
ST. LOUIS TOWER
120.05 284.6 (NORTH)
118.5 257.7 (SOUTH)
132.475 239.275 (WEST)
ST. LOUIS DEP CON
119.15 335.5
GND METER
127.55 360.2 (EAST)
121.075 346.35 (WEST)

ANNII: N3852.878/ W09023.373
BEART: N3845.584 / W09012.655
DSAPP: N3850.018/ W09026.650
FUNKE: N3843.654 / W09015.593
NATCA: N3920.079 / W08959.881
SPI VORTAC: N3950.384 / W08940.664
WOLTR: N3849.689 / W09025.050

PROTOTYPE: NOT FOR NAVIGATION

NOTE: RNAV1.
NOTE: DME/DME/IRU or GPS Required.
NOTE: RADAR required for non-GPS equipped aircraft.
NOTE: For TURBOJET aircraft only.
NOTE: Accelerate to 250 KIAS, if unable, advise ATC.



TAKEOFF MINIMUMS
Rwys 6, 24: NA-Air Traffic.
Rwy 11, 12L, 12R,
29, 30L, 30R: Standard with minimum climb of 500'/NM to 2500.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 11: Climb heading 122° to 1120, then left turn direct FUNKE, cross FUNKE at or above 2500, then on depicted route to NATCA. Thence. . . .
TAKEOFF RWY 12L, 12R: Climb heading 122° to 1120, then left turn direct FUNKE, cross FUNKE at or above 2500, then on depicted route to NATCA. Thence. . . .
TAKEOFF RWY 29: Climb heading 302° to 1120, then right turn direct DSAPP, cross DSAPP at or above 2500, then on depicted route to NATCA. Thence. . . .
TAKEOFF RWY 30L, 30R: Climb heading 302° to 1120, then right turn direct WOLTR, cross WOLTR at or above 2500, then on depicted route to NATCA. Thence. . . .

. . . . (transition). Maintain 5000. Expect filed altitude 10 minutes after departure.

SPINNER TRANSITION (NATCA1.SPI):

TAKEOFF OBSTACLE NOTE:

Rwy 11: Multiple signs, trees, towers, and buildings beginning 2348′ from DER, 205′ left of centerline, up to 219′ AGL/774′ MSL.
Multiple signs, trees, towers, and buildings beginning 2363′ from DER, 489′ right of centerline, up to 114′ AGL/694′ MSL.

Rwy 12L: Tree 1331′ from DER, 667′ right of centerline, 75′ AGL/654′ MSL.

Rwy 12R: Traffic signal and sign beginning 1413′ from DER, 702′ right of centerline, up to 17′ AGL/672′ MSL.
Tree 1930′ from DER, 372′ left of centerline, 67′ AGL/636′ MSL.

Rwy 30L: Multiple trees, poles, and roads beginning 906′ from DER, 600′ left of centerline, up to 84′ AGL/663′ MSL.
OL on LOC 614′ from DER, on centerline, 9′ AGL/558′ MSL.
Multiple trees, poles, roads, terrain, and buildings beginning 283′ from DER, 185′ right of centerline, up to 65′ AGL/684′ MSL.

Rwy 30R: OL on GS 1895′ from DER, 899′ left of centerline, 28′ AGL/587′ MSL.
Multiple OL on buildings, trees, and electrical system beginning 2039′ from DER, 387′ right of centerline, up to 81′ AGL/670′ MSL.

Prototype: Not for Navigation

ESV Details

Originating Office :	Airspace Docket Number :	Request Type : Establish	
Facility Data			
Chart Name : DECATUR	City : DECATUR	Ident : AXC	State : IL
Type/Class : TACR	Frequency : M1206	Reference No.: 10061346	

Expanded Service Volume Data: (Requesting Officer)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude
FAA 774674-011	233	274	70	60	170

Requirement: ESTABLISH AN ESV FOR THE STL SID NATCA.

Signature: Mallett Gary	Routing Symbol: AJV-C2	Date: 06/07/2010

Expanded Service Volume Data: (FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 774674-011	233	274	70	60	170	APPROVE

Requirement/Remarks: ESTABLISH AN ESV FOR THE STL SID NATCA.Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

Signature: NASSR NASHAAT	Routing Symbol:	Date: 06/11/2010

Expanded Service Volume Data: (Super FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 774674-011	233	274	70	60	170	APPROVE

Requirement/Remarks: ESTABLISH AN ESV FOR THE STL SID NATCA.Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

Signature: CHRISTEIN THOMAS	Routing Symbol:	Date: 06/22/2010

Expanded Service Volume Data: (FIFO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 774674-011	233	274				

Requirement/Remarks:

Signature:	Routing Symbol:	Date:

ESV Details

Originating Office :	Airspace Docket Number :	Request Type : Establish	
Facility Data			
Chart Name : ST LOUIS	City : SAINT LOUIS	Ident : STL	State : MO
Type/Class : TACR	Frequency : M1208	Reference No.: 10061348	

Expanded Service Volume Data: (Requesting Officer)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude
FAA 704271-036	26	53	70	60	170

Requirement: ESTABLISH AN ESV FOR THE STL SID NATCA.

Signature: Mallett Gary	Routing Symbol: AJV-C2	Date: 06/07/2010

Expanded Service Volume Data: (FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 704271-036	26	53	70	60	170	APPROVE

Requirement/Remarks: ESTABLISH AN ESV FOR THE STL SID NATCA.Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

Signature: BOWERS MIKE	Routing Symbol:	Date: 06/07/2010

Expanded Service Volume Data: (Super FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 704271-036	26	53	70	60	170	APPROVE

Requirement/Remarks: ESTABLISH AN ESV FOR THE STL SID NATCA.Approved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

Signature: CHRISTEIN THOMAS	Routing Symbol:	Date: 06/28/2010

Expanded Service Volume Data: (FIFO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 704271-036	26	53				

Requirement/Remarks:

Signature:	Routing Symbol:	Date:

ESV Details

Originating Office :	Airspace Docket Number :	Request Type : Establish	
Facility Data			
Chart Name : CENTRALIA	City : CENTRALIA	Ident : ENL	State : IL
Type/Class : TACR	Frequency : M1184	Reference No.: 10061350	

Expanded Service Volume Data: (Requesting Officer)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude
FAA 698174-020	310	322	70	60	170

Requirement: ESTABLISH AN ESV FOR THE STL SID NATCA

Signature: Mallett Gary	Routing Symbol: AJV-C2	Date: 06/07/2010

Expanded Service Volume Data: (FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 698174-020	310	322	70	60	170	APPROVE

Requirement/Remarks: ESTABLISH AN ESV FOR THE STL SID NATCAApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

Signature: NASSR NASHAAT	Routing Symbol:	Date: 06/11/2010

Expanded Service Volume Data: (Super FMO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 698174-020	310	322	70	60	170	APPROVE

Requirement/Remarks: ESTABLISH AN ESV FOR THE STL SID NATCAApproved. Pend. Flight Chk/Inspect @ the req. dist. and MIN ALT.

Signature: CHRISTEIN THOMAS	Routing Symbol:	Date: 06/22/2010

Expanded Service Volume Data: (FIFO)

ESV ID	Radial 1	Radial 2	Distance	Minimum Altitude	Maximum Altitude	Action Type
FAA 698174-020	310	322				

Requirement/Remarks:

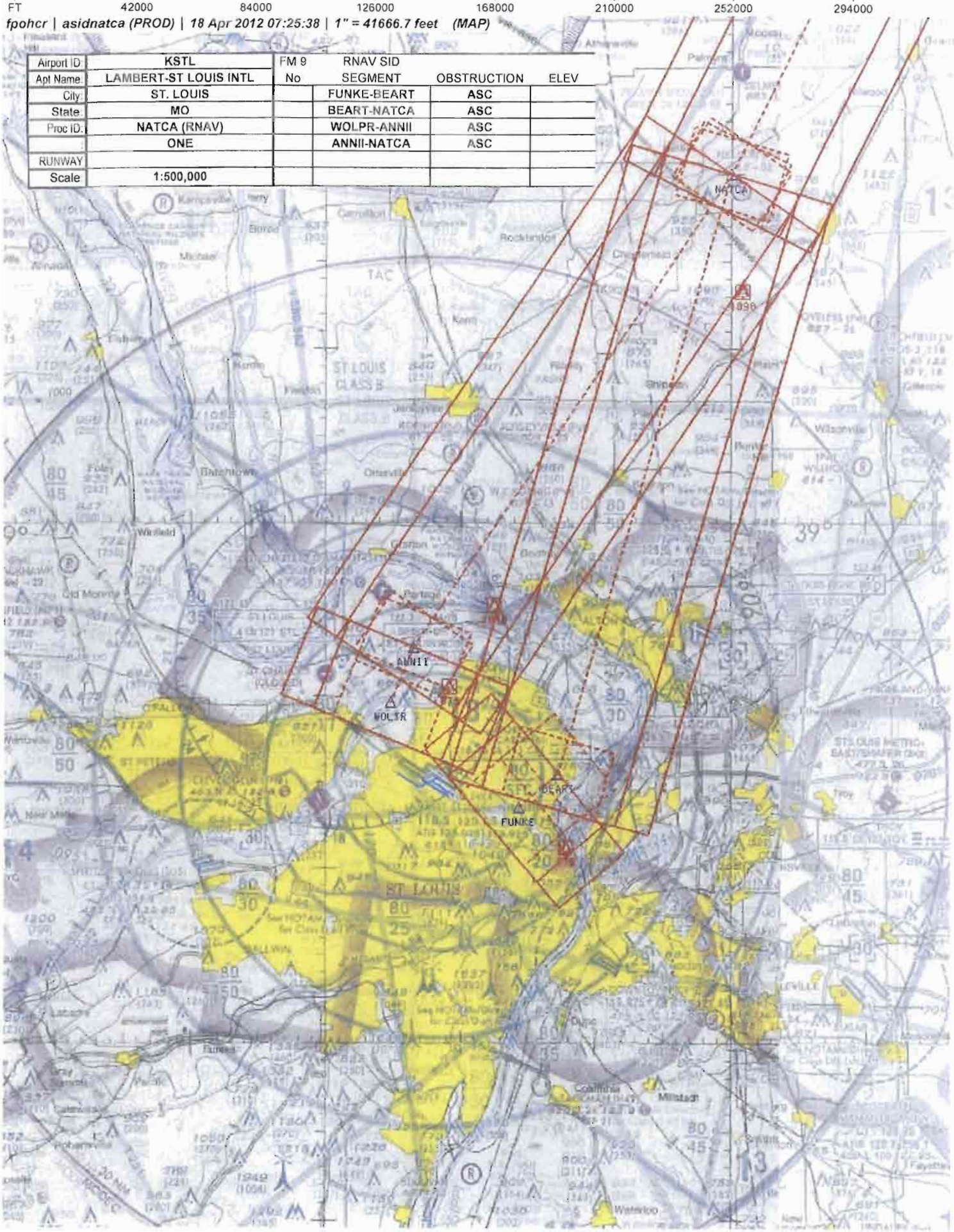
Signature:	Routing Symbol:	Date:

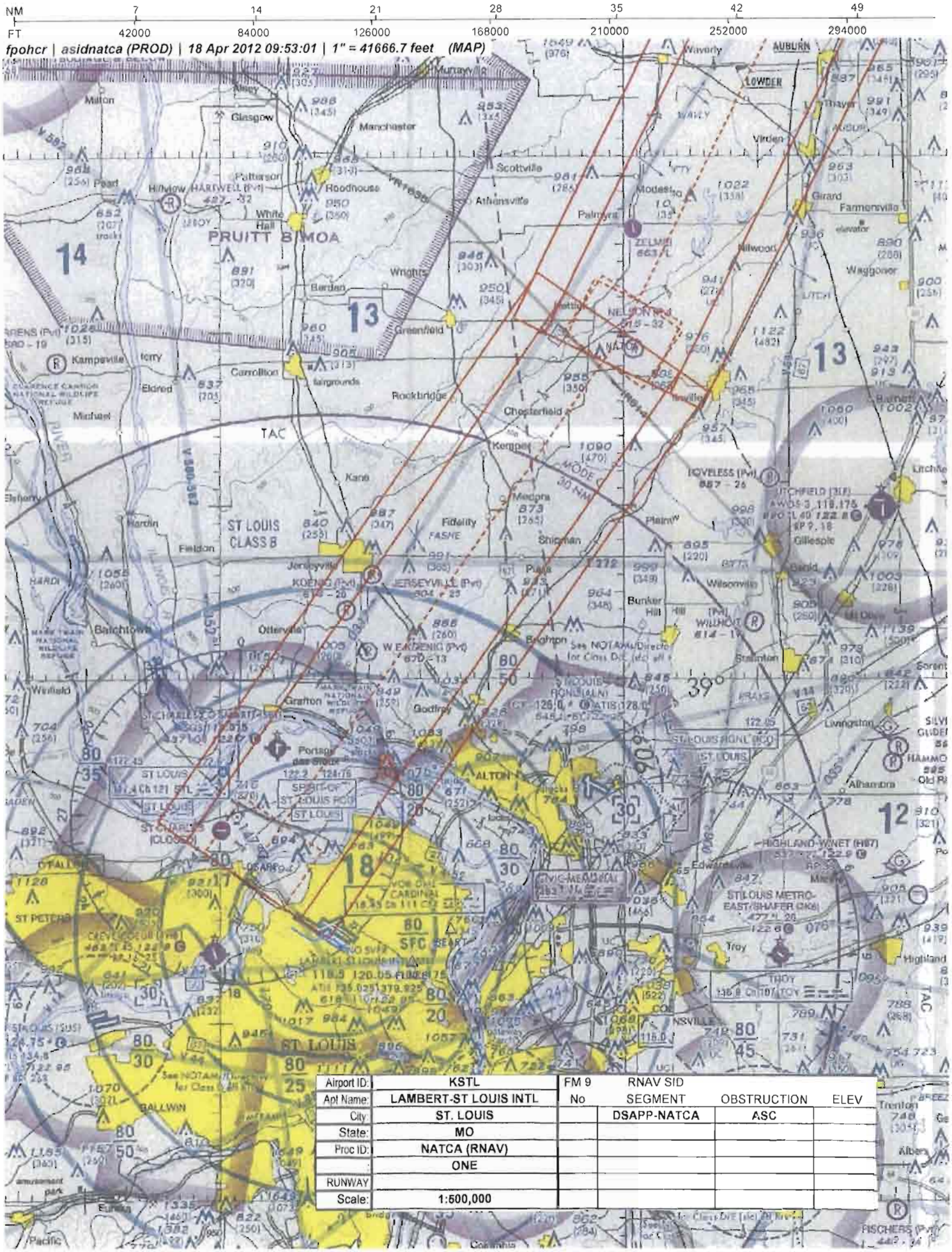
NM 7 14 21 28 35 42 49

FT 42000 84000 126000 168000 210000 252000 294000

fpohcr | asidnatca (PROD) | 18 Apr 2012 07:25:38 | 1" = 41666.7 feet (MAP)

Airport ID:	KSTL	FM 9	RNAV SID		
Apt Name:	LAMBERT-ST LOUIS INTL	No	SEGMENT	OBSTRUCTION	ELEV
City:	ST. LOUIS		FUNKE-BEART	ASC	
State:	MO		BEART-NATCA	ASC	
Proc ID:	NATCA (RNAV)		WOLPR-ANNII	ASC	
	ONE		ANNII-NATCA	ASC	
RUNWAY					
Scale	1:500,000				



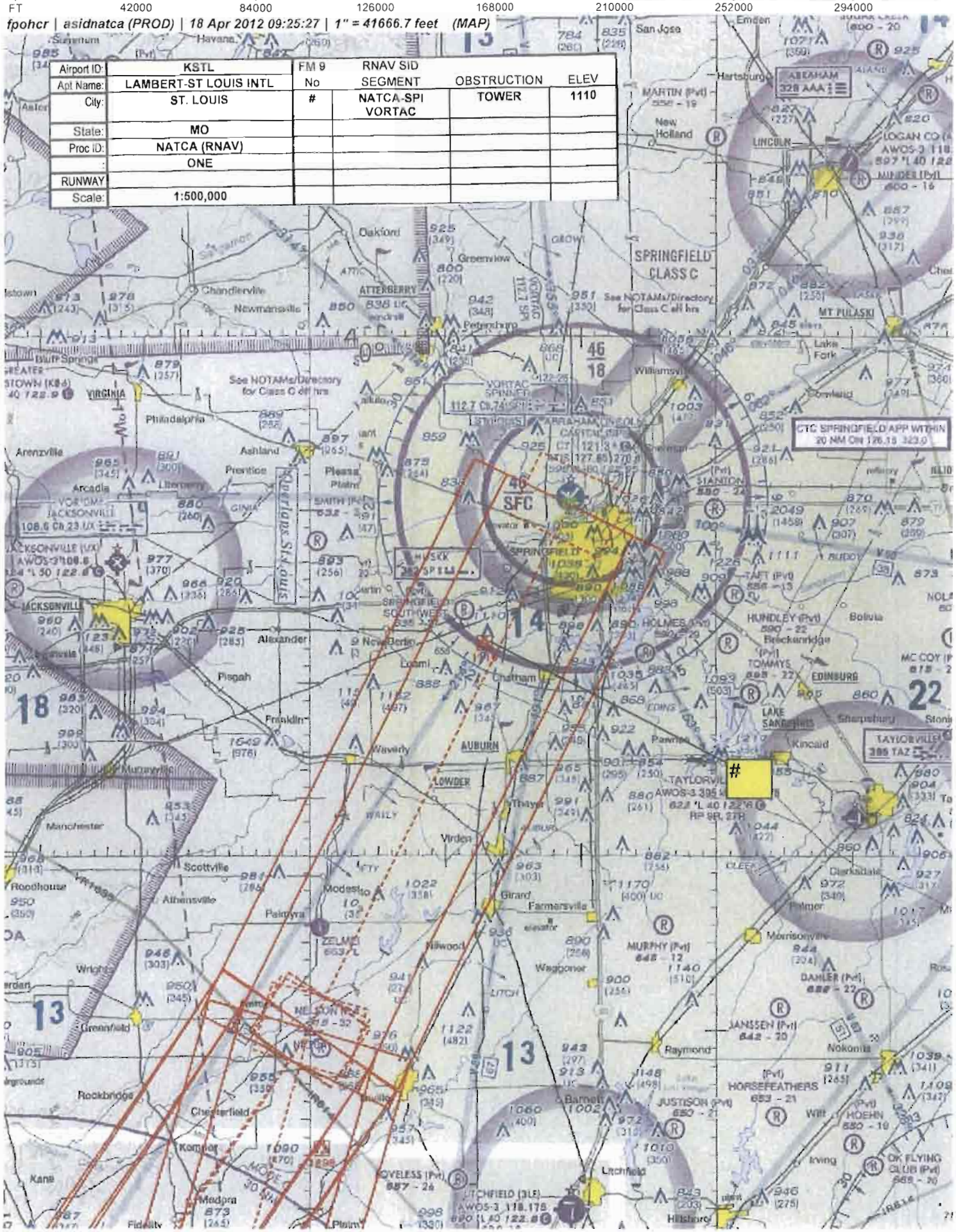

NM 7 14 21 28 35 42 49
FT 42000 84000 126000 168000 210000 252000 294000
fpohcr | asidnatca (PROD) | 18 Apr 2012 09:53:01 | 1" = 41666.7 feet (MAP)
PRUITT B MOA
ST LOUIS CLASS B
TAC
ST. LOUIS
ALTON
Airport ID: KSTL
Apt Name: LAMBERT-ST LOUIS INTL
City: ST. LOUIS
State: MO
Proc ID: NATCA (RNAV)
ONE
RUNWAY
Scale: 1:500,000
FM 9 No
RNAV SID SEGMENT
DSAPP-NATCA
OBSTRUCTION
ASC
ELEV

NM 7 14 21 28 35 42 49

FT 42000 84000 126000 168000 210000 252000 294000

fpohcr | asidnatca (PROD) | 18 Apr 2012 09:25:27 | 1" = 41666.7 feet (MAP)

Airport ID:	KSTL	FM 9	RNAV SID		
Apt Name:	LAMBERT-ST LOUIS INTL	No	SEGMENT	OBSTRUCTION	ELEV
City:	ST. LOUIS	#	NATCA-SPI VORTAC	TOWER	1110
State:	MO				
Proc ID:	NATCA (RNAV)				
:	ONE				
RUNWAY					
Scale:	1:500,000				

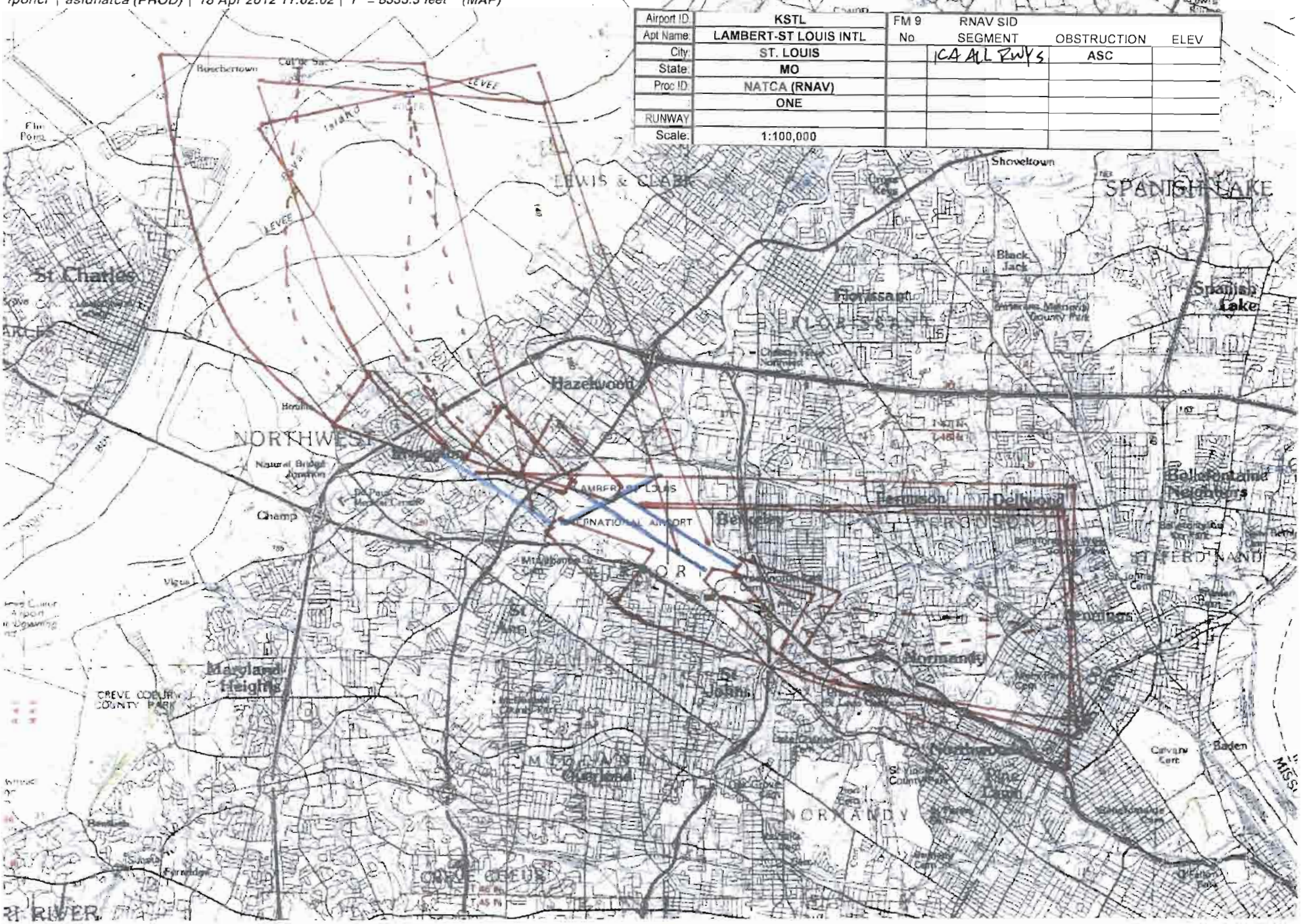


NM 1 2 3 4 5 6 7 8 9 10 11 12 13 14

FT 8000 16000 24000 32000 40000 48000 56000 64000 72000 80000

fpohcr | asidnatca (PROD) | 18 Apr 2012 11:02:02 | 1" = 8333.3 feet (MAP)

		FM 9	RNAV SID		
Airport ID:	KSTL				
Apt Name:	LAMBERT-ST LOUIS INTL	No	SEGMENT	OBSTRUCTION	ELEV
City:	ST. LOUIS		ICA ALL RWYS	ASC	
State:	MO				
Proc ID:	NATCA (RNAV)				
	ONE				
RUNWAY					
Scale:	1:100,000				



U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION

GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statue miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
NATCA	ONE	NATCA1.NATCA	NONE		

TYPE: RNAV SID

DP ROUTE DESCRIPTION:

TAKEOFF RWY 11: CLIMB HEADING 122.17 TO 1120 THEN LEFT TURN DIRECT FUNKE, CROSS FUNKE AT OR ABOVE 2500, THEN ON DEPICTED ROUTE TO NATCA. THENCE...
TAKEOFF RWY 12L, 12R: CLIMB HEADING 122.19 TO 1120 THEN LEFT TURN DIRECT FUNKE, CROSS FUNKE AT OR ABOVE 2500, THEN ON DEPICTED ROUTE TO NATCA. THENCE...
TAKEOFF RWY 29: CLIMB HEADING 302.18 TO 1120 THEN RIGHT TURN DIRECT DSAPP, CROSS DSAPP AT OR ABOVE 2500. THEN ON DEPICTED ROUTE TO NATCA. THENCE...
TAKEOFF RWY 30L: CLIMB HEADING 302.20 TO 1120 THEN RIGHT TURN DIRECT WOLTR, CROSS WOLTR AT OR ABOVE 2500 THEN ON DEPICTED ROUTE TO NATCA. THENCE...
TAKEOFF RWY 30R: CLIMB HEADING 302.21 TO 1120 THEN RIGHT TURN DIRECT WOLTR, CROSS WOLTR AT OR ABOVE 2500 THEN ON DEPICTED ROUTE TO NATCA. THENCE...
...(TRANSITION). MAINTAIN 5000, EXPECT FILED ALTITUDE TEN MINUTES AFTER DEPARTURE.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	Crossing Altitudes/Fixes
SPINNER	NATCA1.SPI	NATCA	SPI VORTAC	TRACK 26.03	33.73	16500	2200	

QUALITY CHECKED

GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statue miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
NATCA	ONE	NATCA1.NATCA	NONE		

PROCEDURAL DATA NOTES/TAKEOFF MINIMUMS:

NOTE: RNAV 1.
NOTE: DME/DME/IRU OR GPS REQUIRED.
NOTE: RADAR REQUIRED FOR NON-GPS EQUIPPED AIRCRAFT.
NOTE: FOR USE BY TURBOJET AIRCRAFT ONLY.
NOTE: ACCELERATE TO 250 KIAS; IF UNABLE, ADVISE ATC.

TAKEOFF MINIMUMS:
RWY 6, 24: NA-AIR TRAFFIC.
RWY 11, 12L, 12R, 29, 30L, 30R: STANDARD WITH MINIMUM CLIMB OF 500 FT PER NM TO 2500.

TAKEOFF OBSTACLES NOTES:

NOTE: RWY 11, MULTIPLE SIGNS, TREES, TOWERS, AND BLDGS BEGINNING 2348 FT FROM DER, 205 FT LEFT OF CENTERLINE, UP TO 219 FT AGL/774 FT MSL. MULTIPLE SIGNS, TREES, TOWERS, AND BLDGS BEGINNING 2363 FT FROM DER, 489 FT RIGHT OF CENTERLINE, UP TO 114 FT AGL/694 FT MSL.

NOTE: RWY 12L, TREE 1331 FT FROM DER, 667 FT RIGHT OF CENTERLINE, 75 FT AGL/654 FT MSL.

NOTE: RWY 12R, TRAFFIC SIGNAL AND SIGN BEGINNING 1413 FT FROM DER, 702 FT RIGHT OF CENTERLINE, UP TO 17 FT AGL/672 FT MSL. TREE 1930 FT FROM DER, 372 FT LEFT OF CENTERLINE, 67 FT AGL/636 FT MSL.

NOTE: RWY 30L, MULTIPLE TREES, POLES, AND ROADS BEGINNING 906 FT FROM DER, 600 FT LEFT OF CENTERLINE, UP TO 84 FT AGL/663 FT MSL. OL ON LOC 614 FT FROM DER, ON CENTERLINE, 9 FT AGL/558 FT MSL. MULTIPLE TREES, POLES, ROADS, TERRAIN, AND BLDGS BEGINNING 283 FT FROM DER, 185 FT RIGHT OF CENTERLINE, UP TO 65 FT AGL/684 FT MSL.

NOTE: RWY 30R, OL ON GS 1895 FT FROM DER, 899 FT LEFT OF CENTERLINE, 28 FT AGL/587 FT MSL. MULTIPLE OL ON BLDGS, TREES, AND ELECTRICAL SYSTEM BEGINNING 2039 FT FROM DER, 387 FT RIGHT OF CENTERLINE, UP TO 81 FT AGL/670 FT MSL.

CONTROLLING OBSTACLES:

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

REFERENCE MAGVAR: KSTL 00 2000.
DME/DME ASSESSMENT: SAT (RNP 2.0)

QUALITY CHECKED 1

U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION

GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statue miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
NATCA	ONE	NATCA1.NATCA	NONE		

AIRPORTS SERVED:

LAMBERT-ST LOUIS INTL ST LOUIS, MO

COMMUNICATIONS:

ATIS, CLNC DEL, GND CON, GND METER, DEP CON, TOWER

FIXES AND/OR NAVAIDS:

REMARKS:

U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION

GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statue miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
NATCA	ONE	NATCA1.NATCA	NONE		

FLIGHT INSPECTED BY:

REQUIRED EFFECTIVE DATE:

ROUTINE

DEVELOPED BY:

HERMAN ROGERS AJV-353 04/13/2012 ROUTINE

APPROVED BY:

LARRY STROUT AJV-353

COORDINATED WITH:

ATA, ALPA, APA, AOPA, NBAA, STL DEP CON, ZKC

CHANGES:

ORIGINAL.

REASONS:

PER CENTRAL FPT REQUEST.

06/21/2012. THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 04/13/2012.
CHANGED MEA FROM NATCA TO SPI VORTAC FROM 9800 TO 16500.

QUALITY CHECKED

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
NATCA	ONE	NATCA1.NATCA	NONE		

FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
RW11 (AER)	384535.83N/0902435.55W	N	-	-	-	-			
1120 MSL	-	-	-	VA	122.17	-			CG 500 FT/MIN TO 2500
FUNKE	384339.26N/0901535.58W	Y	FB	DF	-	-	AT/ABOVE 2500		LEFT TURN
BEART	384535.04N/0901239.30W	Y	FB	TF	050.00	3.00			
NATCA	392004.75N/0895952.83W	Y	FB	TF	016.04	35.87			
RW12L (AER)	384506.41N/8902158.66W	N	-	-	-	-			
1120 MSL	-	-	-	VA	122.19	-			CG 500 FT/NM TO 2500
FUNKE	384339.26N/0901535.58W	Y	FB	DF	-	-	AT/ABOVE 2500		LEFT TURN
BEART	384535.04N/0901239.30W	Y	FB	TF	050.00	3.00			
NATCA	392004.75N/0895952.83W	Y	FB	TF	016.04	35.87			
RW12R (AER)*	384511.59N/0902239.98W*	N	-	-	-	-			*DISPL THLD (467)
1120 MSL	-	-	-	VA	122.19	-			CG 500 FT/NM TO 2500
FUNKE	384339.26N/0901535.58W	Y	FB	DF	-	-	AT/ABOVE 2500		LEFT TURN
BEART	384535.04N/0901239.30W	Y	FB	TF	050.00	3.00			
NATCA	392004.75N/0895952.83W	Y	FB	TF	016.04	35.87			
RW29 (AER)	384448.46N/0902259.39W	N	-	-	-	-			
1120 MSL	-	-	-	VA	302.18	-			CG 500 FT/NM TO 2500
DSAPP	385001.06N/0902638.98W	Y	FB	DF	-	-	AT/ABOVE 2500		RIGHT TURN
NATCA	392004.75N/0895952.83W	Y	FB	TF	034.62	36.56			
RW30L (AER)*	384417.08N/0902049.42W*	N	-	-	-	-			*DISPL THLD (201)
1120 MSL	-	-	-	VA	302.20	-			CG 500 FT/NM TO 2500
WOLTR	384941.32N/0902503.02W	Y	FB	DF	-	-	AT/ABOVE 2500		RIGHT TURN
ANNII	385252.69N/0902322.37W	Y	FB	TF	022.35	3.45			
NATCA	392004.75N/0895952.83W	Y	FB	TF	033.81	32.76			

QUALITY 3 CHECKED

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
NATCA	ONE	NATCA1.NATCA	NONE		

FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
RW30R (AER)	384418.99N/0902022.51W	N	-	-	-	-			
1120 MSL	-	-	-	VA	302.21	-			CG 500 FT/NM TO 2500
WOLTR	384941.32N/0902503.02W	Y	FB	DF	-	-	AT/ABOVE 2500		RIGHT TURN
ANNII	385252.69N/0902322.37W	Y	FB	TF	022.35	3.45			
NATCA	392004.75N/0895952.83W	Y	FB	TF	033.81	32.76			
NATCA	392004.75N/0895952.83W	Y	-	IF	-	-			NATCA1.SPI
SPI VORTAC	395023.04N/0894039.83W	Y	FB	TF	026.03	33.73			

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
NATCA (RNAV)	ONE	NATCA1.NATCA	NONE		

ARINC PACKET - 424-18 - SID

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAD        SPI   K5011270VTHW N39502304W089403983    N39502304W089403983W0010005862     NARSPINNER

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   ANNII K30    W     N38525269W090232237                     W0010     NAR           ANNII
        SUSAEAENRT   BEART K30    W     N38453504W090123930                     W0011     NAR           BEART
        SUSAEAENRT   DSAPP K30    W     N38500106W090263898                     W0009     NAR           DSAPP
        SUSAEAENRT   FUNKE K30    W     N38433926W090153558                     W0011     NAR           FUNKE
        SUSAEAENRT   NATCA K50    W     N39200475W089595283                     W0013     NAR           NATCA
        SUSAEAENRT   WOLTR K30    W     N38494132W090250302                     W0010     NAR           WOLTR

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KSTLK3ASTL     0     110YHN38445531W090221210E000000618         1800018000C    MNAR    LAMBERT-ST LOUIS INTL

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KSTLK3DNATCA14RW11  010         0        VA                     1222        + 01120     18000
        SUSAP KSTLK3DNATCA14RW11  020FUNKEK3EA0E    010DF                                + 02500
        SUSAP KSTLK3DNATCA14RW11  030BEARTK3EA0E    010TF                     05000030
        SUSAP KSTLK3DNATCA14RW11  040NATCAK5EA0EE   010TF                     01600359
        SUSAP KSTLK3DNATCA14RW12B 010         0        VA                     1222        + 01120     18000
        SUSAP KSTLK3DNATCA14RW12B 020FUNKEK3EA0E    010DF                                + 02500
        SUSAP KSTLK3DNATCA14RW12B 030BEARTK3EA0E    010TF                     05000030
        SUSAP KSTLK3DNATCA14RW12B 040NATCAK5EA0EE   010TF                     01600359
        SUSAP KSTLK3DNATCA14RW29  010         0        VA                     3022        + 01120     18000
        SUSAP KSTLK3DNATCA14RW29  020DSAPPK3EA0E    010DF                                + 02500
        SUSAP KSTLK3DNATCA14RW29  030NATCAK5EA0EE   010TF                     03460366
        SUSAP KSTLK3DNATCA14RW30B 010         0        VA                     3022        + 01120     18000
        SUSAP KSTLK3DNATCA14RW30B 020WOLTRK3EA0E    010DF                                + 02500
        SUSAP KSTLK3DNATCA14RW30B 030ANNIIK3EA0E    010TF                     02240035
        SUSAP KSTLK3DNATCA14RW30B 040NATCAK5EA0EE   010TF                     03380328
        SUSAP KSTLK3DNATCA15      010NATCAK5EA0E       IF                                             18000
        SUSAP KSTLK3DNATCA15      020SPI  K5D 0VE   010TF                     02600337

                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
```

QUALITY CHECKED

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
NATCA (RNAV)	ONE	NATCA1.NATCA	NONE		

```
SUSAP KSTLK3GRW11    0090011222 N38453583W090243555-0700    +0157000618000059150IIOGZ3
SUSAP KSTLK3GRW12L   0090031222 N38450641W090215866+0800    +0129700528000054150IILDZ3
SUSAP KSTLK3GRW12R   0110191222 N38451159W090223998+0400    +0133200540046754200IILMR1
SUSAP KSTLK3GRW29    0090013022 N38444846W090225939+0700    +0138100556000056150IIRQN1
SUSAP KSTLK3GRW30L   0110193022 N38441708W090204942-0400    +0146300583020158200IIBKY1    IRMKL
SUSAP KSTLK3GRW30R   0090033022 N38441899W090202251-0800    +0152900605000057150IISJW3
```

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
NATCA (RNAV)	ONE	NATCA1.NATCA	NONE		

ARINC SUMMARY - 424-18 - SID

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	RW11		010		VA		FB		122.2()		AA 01120	
	RW11	FUNKE	020		DF		FB	1.0			AA 02500	
	RW11	BEART	030		TF		FB	1.0	050.0()	003.0		
	RW11	NATCA	040		TF		FB	1.0	016.0()	035.9		
	RW12B		010		VA		FB		122.2()		AA 01120	
	RW12B	FUNKE	020		DF		FB	1.0			AA 02500	
	RW12B	BEART	030		TF		FB	1.0	050.0()	003.0		
	RW12B	NATCA	040		TF		FB	1.0	016.0()	035.9		
	RW29		010		VA		FB		302.2()		AA 01120	
	RW29	DSAPP	020		DF		FB	1.0			AA 02500	
	RW29	NATCA	030		TF		FB	1.0	034.6()	036.6		
	RW30B		010		VA		FB		302.2()		AA 01120	
	RW30B	WOLTR	020		DF		FB	1.0			AA 02500	
	RW30B	ANNII	030		TF		FB	1.0	022.4()	003.5		
	RW30B	NATCA	040		TF		FB	1.0	033.8()	032.8		
		NATCA	010		IF		FB					
		SPI	020		TF		FB	1.0	026.0()	033.7		

POINT DATA

WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
SPI	N395023.04	W0894039.83	N3950.384	W08940.664
ANNII	N385252.69	W0902322.37	N3852.878	W09023.373
BEART	N384535.04	W0901239.30	N3845.584	W09012.655
DSAPP	N385001.06	W0902638.98	N3850.018	W09026.650
FUNKE	N384339.26	W0901535.58	N3843.654	W09015.593
NATCA	N392004.75	W0895952.83	N3920.079	W08959.881
WOLTR	N384941.32	W0902503.02	N3849.689	W09025.050
RW11	N384535.83	W0902435.55	N3845.597	W09024.593
RW12L	N384506.41	W0902158.66	N3845.107	W09021.978
RW12R	N384511.59	W0902239.98	N3845.193	W09022.666
RW29	N384448.46	W0902259.39	N3844.808	W09022.990
RW30L	N384417.08	W0902049.42	N3844.285	W09020.824
RW30R	N384418.99	W0902022.51	N3844.317	W09020.375

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW11	00618	59
RW12L	00528	54
RW12R	00540	54
RW29	00556	56
RW30L	00583	58

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
NATCA (RNAV)	ONE	NATCA1.NATCA	NONE		

RW30R 00605 57

RADIO FIX AND HOLDING DATA RECORD

NAME: ANNII **STATE:** MO **COUNTRY:** US

LATITUDE/LONGITUDE: 385252.69N/0902322.37W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	JHART (RNAV)			KSTL	ST LOUIS	MO (US)
DP	NATCA (RNAV)			KSTL	ST LOUIS	MO (US)
DP	TEDDD (RNAV)			KSTL	ST LOUIS	MO (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 09/20/2012

DEVELOPED BY: **DATE:** 04/09/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (STEVE NELSON)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZKC
ATC FACILITY: STL APP CON
OTHER:

QUALITY 3 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: BEART **STATE:** MO **COUNTRY:** US

LATITUDE/LONGITUDE: 384535.04N/0901239.30W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	EEMOS (RNAV)			KSTL	ST LOUIS	MO (US)
DP	KSHEE (RNAV)			KSTL	ST LOUIS	MO (US)
DP	NATCA (RNAV)			KSTL	ST LOUIS	MO (US)
DP	ROTRY (RNAV)			KSTL	ST LOUIS	MO (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 09/20/2012

DEVELOPED BY: **DATE:** 04/09/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (STEVE NELSON)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZKC
ATC FACILITY: STL APP CON
OTHER:

QUALITY 3 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: DSAPP **STATE:** MO **COUNTRY:** US

LATITUDE/LONGITUDE: 385001.06N/0902638.98W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	EEMOS (RNAV)			KSTL	ST LOUIS	MO (US)
DP	JHART (RNAV)			KSTL	ST LOUIS	MO (US)
DP	KSHEE (RNAV)			KSTL	ST LOUIS	MO (US)
DP	NATCA (RNAV)			KSTL	ST LOUIS	MO (US)
DP	ROTRY (RNAV)			KSTL	ST LOUIS	MO (US)
DP	TEDDD (RNAV)			KSTL	ST LOUIS	MO (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 09/20/2012

DEVELOPED BY: **DATE:** 04/09/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (STEVE NELSON)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZKC
ATC FACILITY: STL APP CON
OTHER:

QUALITY 3 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: FUNKE **STATE:** MO **COUNTRY:** US

LATITUDE/LONGITUDE: 384339.26N/0901535.58W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	EEMOS (RNAV)			KSTL	ST LOUIS	MO (US)
DP	JHART (RNAV)			KSTL	ST LOUIS	MO (US)
DP	KSHEE (RNAV)			KSTL	ST LOUIS	MO (US)
DP	NATCA (RNAV)			KSTL	ST LOUIS	MO (US)
DP	ROTRY (RNAV)			KSTL	ST LOUIS	MO (US)
DP	TEDDD (RNAV)			KSTL	ST LOUIS	MO (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 09/20/2012

DEVELOPED BY: **DATE:** 04/09/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (STEVE NELSON)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZKC
ATC FACILITY: STL APP CON
OTHER:

QUALITY 3 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: NATCA **STATE:** IL **COUNTRY:** US

LATITUDE/LONGITUDE: 392004.75N/0895952.83W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	NATCA (RNAV)			KSTL	ST LOUIS	MO (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 09/20/2012

DEVELOPED BY: **DATE:** 05/14/2012 **OFFICE:** AJV-353 **NAME:** HERMAN ROGERS

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZKC
ATC FACILITY: STL APP CON
OTHER:

QUALITY 3 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: WOLTR **STATE:** MO **COUNTRY:** US

LATITUDE/LONGITUDE: 384941.32N/0902503.02W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	EEMOS (RNAV)			KSTL	ST LOUIS	MO (US)
DP	JHART (RNAV)			KSTL	ST LOUIS	MO (US)
DP	KSHEE (RNAV)			KSTL	ST LOUIS	MO (US)
DP	NATCA (RNAV)			KSTL	ST LOUIS	MO (US)
DP	ROTRY (RNAV)			KSTL	ST LOUIS	MO (US)
DP	TEDDD (RNAV)			KSTL	ST LOUIS	MO (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 09/20/2012

DEVELOPED BY: **DATE:** 04/09/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (STEVE NELSON)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: CEN
ARTCC: ZKC
ATC FACILITY: STL APP CON
OTHER:

QUALITY 3 CHECKED

RADIO FIX AND HOLDING DATA RECORD

INFO ONLY

NAME: SPINNER VORTAC **STATE:** IL **COUNTRY:** US

LATITUDE/LONGITUDE: 395023.04N/0894039.83W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	SPINNER	SPI	VORTAC	H							45000

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	SW	SPI	VORTAC	216.00	036.00	R	1		2200	6000	4	5

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	TOWER (17-000148)	394815.00N/0892740.00W	2049	3D
1	200	TOWER (17-001249)	394159.00N/0894655.00W	1110	5E

HOLDING RESTRICTIONS:
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3100.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	CARDS			KALN	ALTON/ST LOUIS	IL (US)
DP	TURBO			KALN	ALTON/ST LOUIS	IL (US)
DP	CARDS			KBLV	BELLEVILLE	IL (US)
DP	CARDS			KCPS	CAHOKIA/ST LOUIS	IL (US)
DP	ROCKY			KEYE	INDIANAPOLIS	IN (US)
DP	ROCKY			KHFY	INDIANAPOLIS	IN (US)
DP	ROCKY			KIND	INDIANAPOLIS	IN (US)
DP	ROCKY			KMQJ	INDIANAPOLIS	IN (US)
DP	ROCKY			KTYQ	INDIANAPOLIS	IN (US)
DP	ROCKY			KUMP	INDIANAPOLIS	IN (US)
DP	ROCKY			KGEZ	SHELBYVILLE	IN (US)
DP	LAKES			KFLV	FORT LEAVENWORTH	KS (US)
DP	LAKES			KIXD	OLATHE	KS (US)
DP	LAKES			KOJC	OLATHE	KS (US)
DP	LAKES			KMCI	KANSAS CITY	MO (US)
DP	LAKES			KMKC	KANSAS CITY	MO (US)
DP	LAKES			KSTJ	ST JOSEPH	MO (US)
DP	CARDS			KSTL	ST LOUIS	MO (US)
DP	TURBO			KSTL	ST LOUIS	MO (US)
DP	CARDS			KSUS	ST LOUIS	MO (US)
DP	TURBO			KSUS	ST LOUIS	MO (US)
EN ROUTE	J101					(US)
EN ROUTE	J137					(US)
EN ROUTE	J35					(US)
EN ROUTE	J80					(US)
EN ROUTE	V129					(US)
EN ROUTE	V173					(US)
EN ROUTE	V233					(US)
EN ROUTE	V50					(US)
EN ROUTE	V67					(US)
EN ROUTE	V69					(US)
EN ROUTE	V9					(US)
IAP	RNAV (GPS) RWY 12			KDEC	DECATUR	IL (US)
IAP	RNAV (GPS) RWY 13			KIJX	JACKSONVILLE	IL (US)
IAP	RNAV (GPS) RWY 22			KIJX	JACKSONVILLE	IL (US)
IAP	RNAV (GPS) RWY 31			KIJX	JACKSONVILLE	IL (US)
IAP	NDB RWY 21			KAAA	LINCOLN	IL (US)
IAP	RNAV (GPS) RWY 3			KAAA	LINCOLN	IL (US)
IAP	VOR RWY 3			KAAA	LINCOLN	IL (US)
IAP	HI-ILS OR LOC RWY 22			KSPI	SPRINGFIELD	IL (US)
IAP	HI-ILS OR LOC/DME RWY 4			KSPI	SPRINGFIELD	IL (US)
IAP	HI-VOR/DME OR TACAN RWY 22			KSPI	SPRINGFIELD	IL (US)
IAP	HI-VOR/DME OR TACAN RWY 4			KSPI	SPRINGFIELD	IL (US)
IAP	ILS OR LOC RWY 04			KSPI	SPRINGFIELD	IL (US)
IAP	ILS OR LOC RWY 22			KSPI	SPRINGFIELD	IL (US)
IAP	ILS OR LOC RWY 31			KSPI	SPRINGFIELD	IL (US)
IAP	VOR/DME RWY 13			KSPI	SPRINGFIELD	IL (US)
IAP	VOR/DME RWY 22		1	KSPI	SPRINGFIELD	IL (US)
IAP	VOR/DME RWY 31			KSPI	SPRINGFIELD	IL (US)
IAP	VOR/DME RWY 4			KSPI	SPRINGFIELD	IL (US)
IAP	NDB RWY 18			KTAZ	TAYLORVILLE	IL (US)

QUALITY 3 CHECKED

IAP	RNAV (GPS) RWY 18	KTAZ	TAYLORVILLE	IL (US)
STAR	MOTIF	KMDW	CHICAGO	IL (US)
STAR	BRADFORD	KORD	CHICAGO	IL (US)
STAR	MOTIF	KGYY	GARY	IN (US)
STAR	BRAYMER	KFLV	FORT LEAVENWORTH	KS (US)
STAR	BRAYMER	KIXD	OLATHE	KS (US)
STAR	BRAYMER	KOJC	OLATHE	KS (US)
STAR	BRAYMER	KMCI	KANSAS CITY	MO (US)
STAR	BRAYMER	KMKC	KANSAS CITY	MO (US)
STAR	BRAYMER	KLXT	LEE'S SUMMIT	MO (US)
STAR	BRAYMER	KGPH	MOSBY	MO (US)
STAR	BRAYMER	KSTJ	ST JOSEPH	MO (US)
STAR	RIVERS	KSTL	ST LOUIS	MO (US)
STAR	VANDALIA	KSTL	ST LOUIS	MO (US)

REQUIRED CHARTING: DP, STAR, MILITARY IAP, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 15 **DATE OF REVISION:** 06/03/2010

REASON FOR REVISION:
1. COORDINATES UPDATED, PLOTTED POSITION CHANGED BY 1.28 FEET.
2. MOVED REMARK, UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 3100, TO HOLDING RESTRICTIONS.
3. ADDED REMARK, PRECIPITOUS TERRAIN EVALUATION COMPLETED.
4. CHANGED PAT 1 AND UPN OBSTACLE NUMBERS TO NEW FEDERAL OBSTACLE NUMBERS.
5. DELETED PAT 2 AND 3.

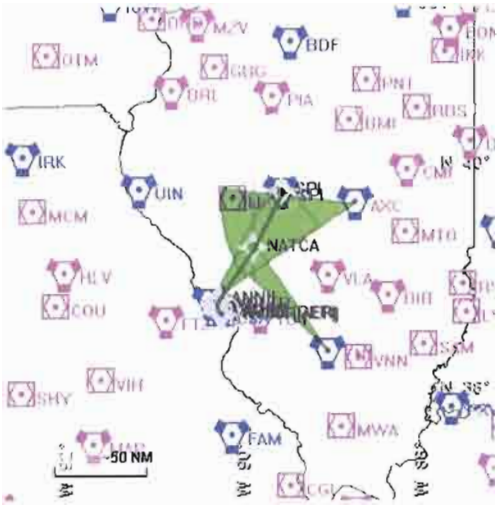
DEVELOPED BY: **DATE:** 09/17/2009 **OFFICE:** AVN-101 **NAME:** EUGENE NEWTON (DAVID SAUER)

APPROVED BY: **DATE:** 05/26/2010 **OFFICE:** AVN-120 **NAME:** SUE CRUMB

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZKC
ATC FACILITY: SPI APP CON, SPI ATCT
OTHER:

QUALITY 3 CHECKED



Name:	enanders
Project Name:	
Software:	RNAV-Pro™
Version:	2.35
Date/Time:	2/19/2012 1:31:23 PM
Input File:	NATCA RW30R SPI 2012...
Databases:	AVNIS Date: 08/26/2011
	NFD Date: 07/02/2009
	DTED® (MAX) Date: 2002

Results Summary:

Flyability	✔	**Please Check Flyability Results**
DME/DME	✔	
Radars	✔	
Comms	?	
TERPS	?	

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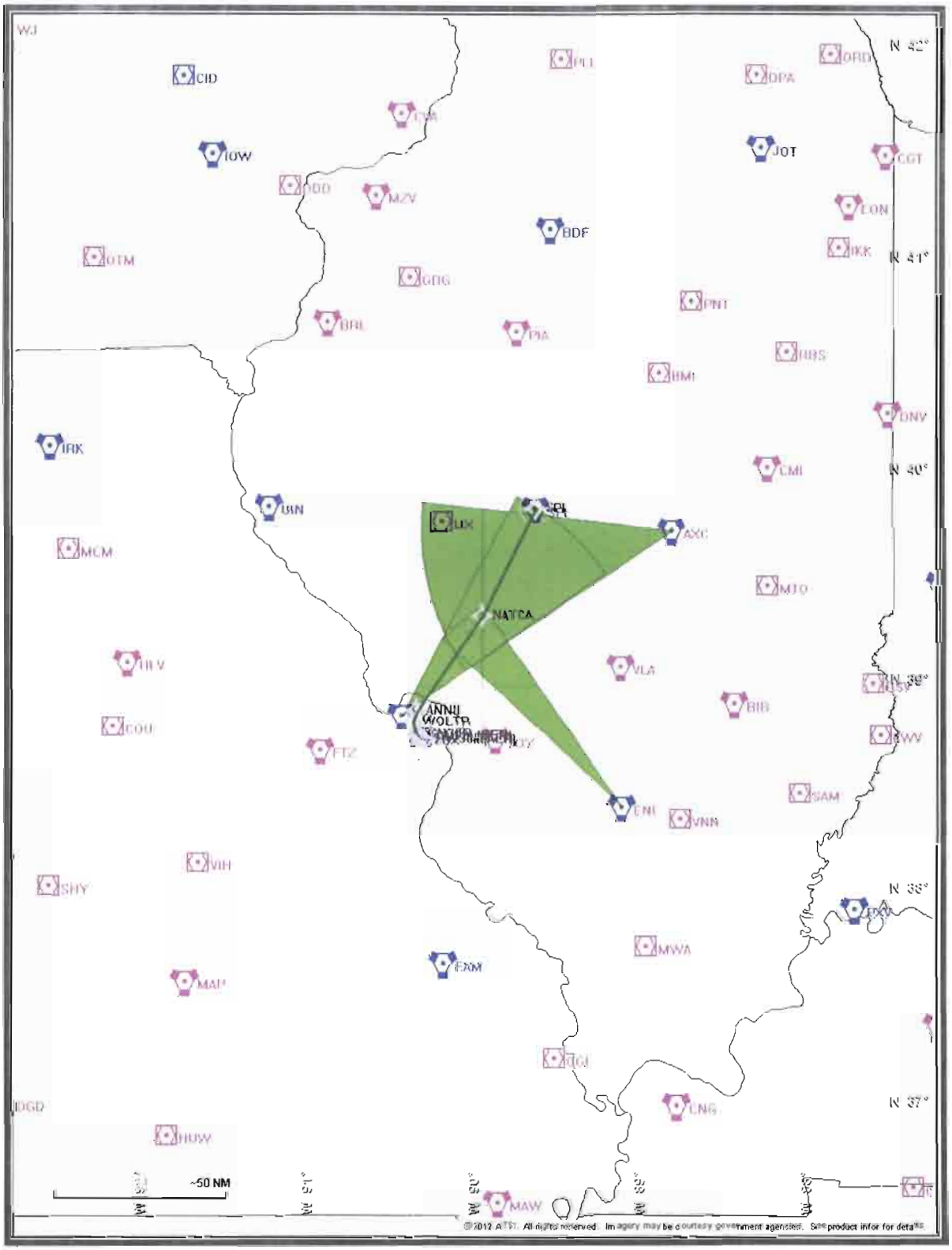
CID
IOW
JOT
CGT
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BDF
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OTM
PNT
BRL
BMI
DNV
IRK
CMI
BIN
AXC
MCM
MTO
NATCA
VLA
BIB
COU
FTZ
SAM
VNN
VIH
SHY
MWA
MAF
LNG
HUW
N 42°
N 41°
N 40°
N 39°
N 38°
N 37°
~50 NM

Flight Plan

Return To Summary

Name	Type	Lat/Lon	Alt [Ft]	VNAV Mode	IAS [Kts]	Turn Type	Leg Type
RW30R(...	WP	N 38° 44' 18.99" W 90° 20' 22.51"	604.5	VNAV	0.0	Fly Over	TF
RW12L(...	WP	N 38° 45' 6.41" W 90° 21' 58.66"	563.3	VNAV	130.0	Fly Over	VA
GH30R	WP	N 38° 45' 44.26" W 90° 23' 15.48"	1120.0	VNAV	145.0	Fly Over	DF
WOLTR	WP	N 38° 49' 41.32" W 90° 25' 3.02"	2500.0	VNAV	180.0	Fly By	TF
ANNII	WP	N 38° 52' 52.69" W 90° 23' 22.37"	3189.1	VNAV	180.0	Fly By	TF
NATCA	WP	N 39° 20' 4.75" W 89° 59' 52.83"	9740.1	VNAV	180.0	Fly By	TF
SPI	WP	N 39° 50' 23.03" W 89° 40' 39.83"	16485.6	VNAV	210.0	Fly Over	TF

Climb Gradient: 500.0 Ft/NM up to 1120.0 Ft MSL

Flyability

Return To Summary

Settings:

Flight Type: Departure
Selected Airport: KSTL
Aircraft Category: Cat D
Climb Gradient: 500.0 Ft/NM up to 1120.0 Ft MSL
Ground Speeds:
Departure: **120.0 Kts** out to **10.0 NM**
Table:
200.0 Kts up to **29000.0 Ft.**
280.0 Kts up to **99900.0 Ft.**
Wind Settings: *None assigned*
Descent During a Turn: Allowed
VNAV Mode: Flight Plan

Flight Track comes into contact with terrain. Minimum AGL along route was -19.95 Ft.
Flight Track contacted terrain (DTED lvl 0 max) between AER and DER or within 2/3 NM of DER.

DME/DME

Return To Summary

Settings:

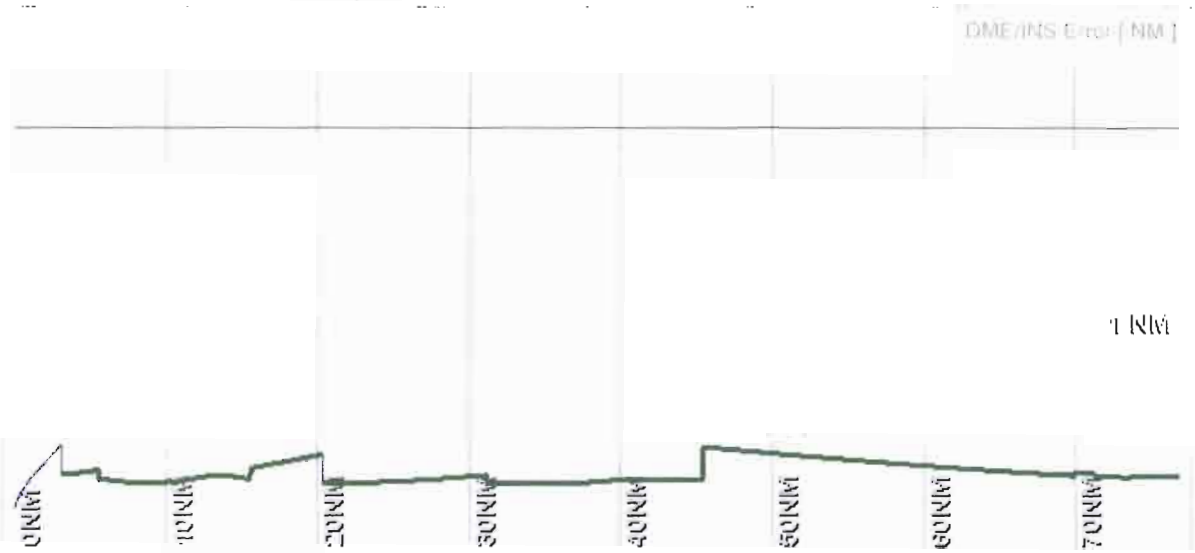
RNP: 2.0
Flight Mode: Manual
Line of Sight (DTED Level 0 Max): Evaluated
DME Restrictions: Evaluated
Inertial Drift: Enabled
Initial Drift: 0.165 NM
INS Drift Rate: 8.000 NM/Hour
Range Mode: OSV
Co-Frequencies: Evaluated
RNP Edges: Evaluated
Min DME Range: 3.0 NM
Allowed Gap Length: 4.0 NM
DME Types: VOR/DME , VORTAC , TACAN , and User
DME Include Angles: 30 to 150
Critical DMEs: Allowed
DoD Facilities: Not included
Foreign Facilities: Not included
Low & Terminal DMEs: Included
Flight Check DMEs: Selected
Higher Altitudes: Evaluated
Near Maximum Altitude: Evaluated
Minimum MSL DMEs Avail: 1773 Ft.

Total Number of DMEs Used: 9

Maximum DME Error: 0.434 NM.

No Critical DMEs were found.

Available DMEs: STL, FTZ, TOY, CSX, ENL, AXC, SPI, UIN, BDF



DME/DME (Continued.)

Return To Summary

DMEs Used

#	Name	Lat/Lon	Range	Source	Critical	Err. [NM]	Status	Time	Distance
1	STL	N 38° 51' 38.48" W 90° 28' 56.52"	H + ESV	User	NO	0.598	Enabled	30.1 %	30.9 %
2	FTZ	N 38° 41' 39.58" W 90° 58' 16.17"	L	Database	NO	0.598	Enabled	22.0 %	17.7 %
3	CSX	N 38° 45' 9.88" W 90° 21' 39.46"	H	Database	NO	0.486	Enabled	20.5 %	17.1 %
4	TOY	N 38° 44' 20.97" W 89° 55' 7.06"	L	Database	NO	0.833	Enabled	22.7 %	25.6 %
5	ENL	N 38° 25' 12.00" W 89° 9' 32.39"	H + ESV	User	NO	0.434	Enabled	10.5 %	11.9 %
6	AXC	N 39° 44' 15.08" W 88° 51' 23.15"	H + ESV	User	NO	1.429	Enabled	37.9 %	42.8 %
7	SPI	N 39° 50' 23.04" W 89° 40' 39.83"	H	Database	NO	0.669	Enabled	28.2 %	31.9 %
8	BDF	N 41° 9' 35.03" W 89° 35' 16.34"	H	Database	NO	0.434	Enabled	6.5 %	7.3 %
9	UIN	N 39° 50' 52.35" W 91° 16' 44.13"	H	Database	NO	0.434	Enabled	5.8 %	6.5 %

Flight Check DME Selection

Distance [NM]	Selected DMEs					Alternate
0.0						
1.5						
2.6	STL	FTZ	CSX	TOY		
6.6	STL	FTZ	CSX	TOY		
10.2	STL	FTZ	CSX	TOY		
25.7	STL	ENL	CSX	TOY	AXC	SPI
42.8	STL	SPI	CSX	TOY	AXC	
64.8	UIN	SPI	ENL	BDF	AXC	STL

Inertial Drift Segments

#	Start Location	End Location	Length [NM]
1	N 38° 44' 18.99" W 90° 20' 22.51"	N 38° 46' 2.45" W 90° 23' 33.64"	3.1
	VOR: CSX	Available from N 38° 44' 18.99" W 90° 20' 22.51" to N 38° 46' 2.45" W 90° 23' 33.64"	
	VOR: FTZ	Available from N 38° 44' 18.99" W 90° 20' 22.51" to N 38° 46' 2.45" W 90° 23' 33.64"	
	VOR: STL	Available from N 38° 44' 18.99" W 90° 20' 22.51" to N 38° 46' 2.45" W 90° 23' 33.64"	
	VOR: TOY	Available from N 38° 44' 18.99" W 90° 20' 22.51" to N 38° 46' 2.45" W 90° 23' 33.64"	

DME/DME (Continued.)

Return To Summary

Inertial Drift Segments (Continued.)

#	Start Location	End Location	Length [NM]
2	N 39° 1' 6.84" W 90° 16' 18.16"	N 39° 1' 9.61" W 90° 16' 15.78"	0.1
	VOR: CSX	Available from N 39° 1' 6.84" W 90° 16' 18.16" to N 39° 1' 9.61" W 90° 16' 15.78"	
	VOR: FTZ	Available from N 39° 1' 6.84" W 90° 16' 18.16" to N 39° 1' 9.61" W 90° 16' 15.78"	
	VOR: STL	Available from N 39° 1' 6.84" W 90° 16' 18.16" to N 39° 1' 9.61" W 90° 16' 15.78"	
	VOR: TOY	Available from N 39° 1' 6.84" W 90° 16' 18.16" to N 39° 1' 9.61" W 90° 16' 15.78"	

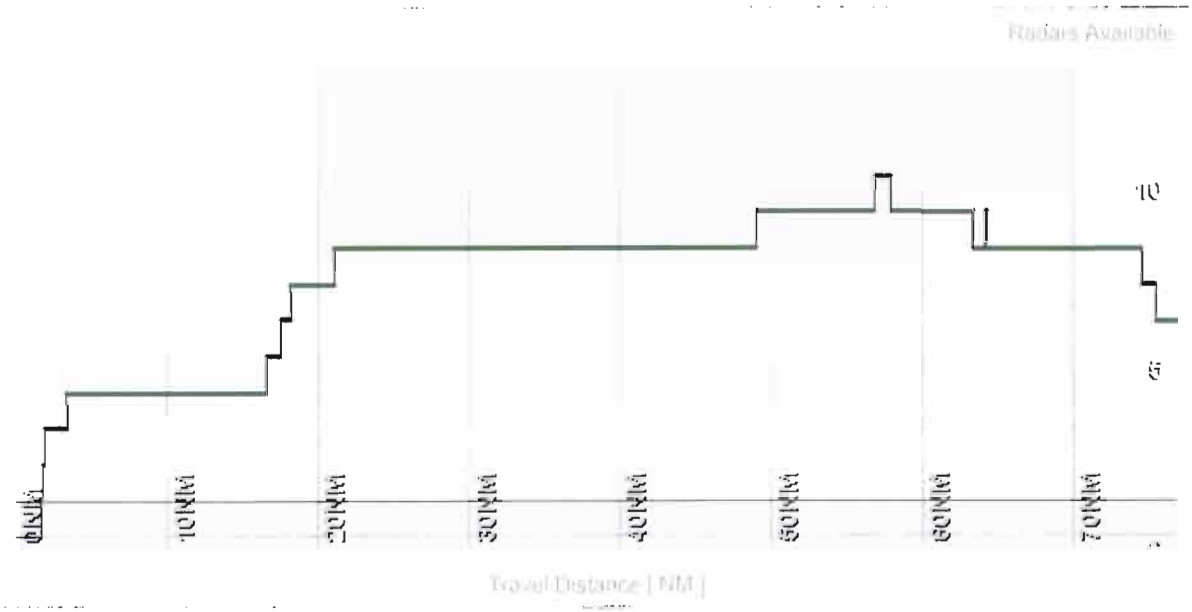
User DMEs

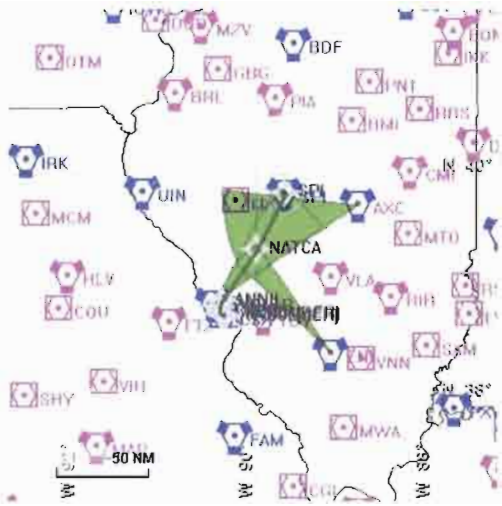
#	Name	Lat/Lon	Range	Elevation [Ft]	Frequency	Replaces:	Status
1	AXC	N 39° 44' 15.08" W 88° 51' 23.15"	H	707.5	117.20	AXC	Used
		ESV: Bearing [True]: 236.0° to 277.0° Bearing [Mag]: 233.0° to 274.0°			Arc Distance: Out to 70.0 NM Altitude: 6000.0 to 17000.0 Ft.		
2	STL	N 38° 51' 38.48" W 90° 28' 56.52"	H	449.5	117.40	STL	Used
		ESV: Bearing [True]: 27.0° to 54.0° Bearing [Mag]: 26.0° to 53.0°			Arc Distance: Out to 70.0 NM Altitude: 6000.0 to 17000.0 Ft.		
3	ENL	N 38° 25' 12.00" W 89° 9' 32.39"	H	545.8	115.00	ENL	Used
		ESV: Bearing [True]: 314.0° to 326.0° Bearing [Mag]: 310.0° to 322.0°			Arc Distance: Out to 70.0 NM Altitude: 6000.0 to 17000.0 Ft.		

Radar Analysis

Return To Summary

Settings: **Radar Types:** ARSR and ASR





Name:	enanders
Project Name:	
Software:	RNAV-Pro™
Version:	2.35
Date/Time:	2/19/2012 1:20:21 PM
Input File:	NATCA RW30L SPI 2012...
Databases:	AVNIS Date: 08/26/2011
	NFD Date: 07/02/2009
	DTED® (MAX) Date: 2002

Results Summary:

Flyability	✔	Please Check Flyability Results
DME/DME	✔	
Radars	✔	
Comms	?	
TERPS	?	

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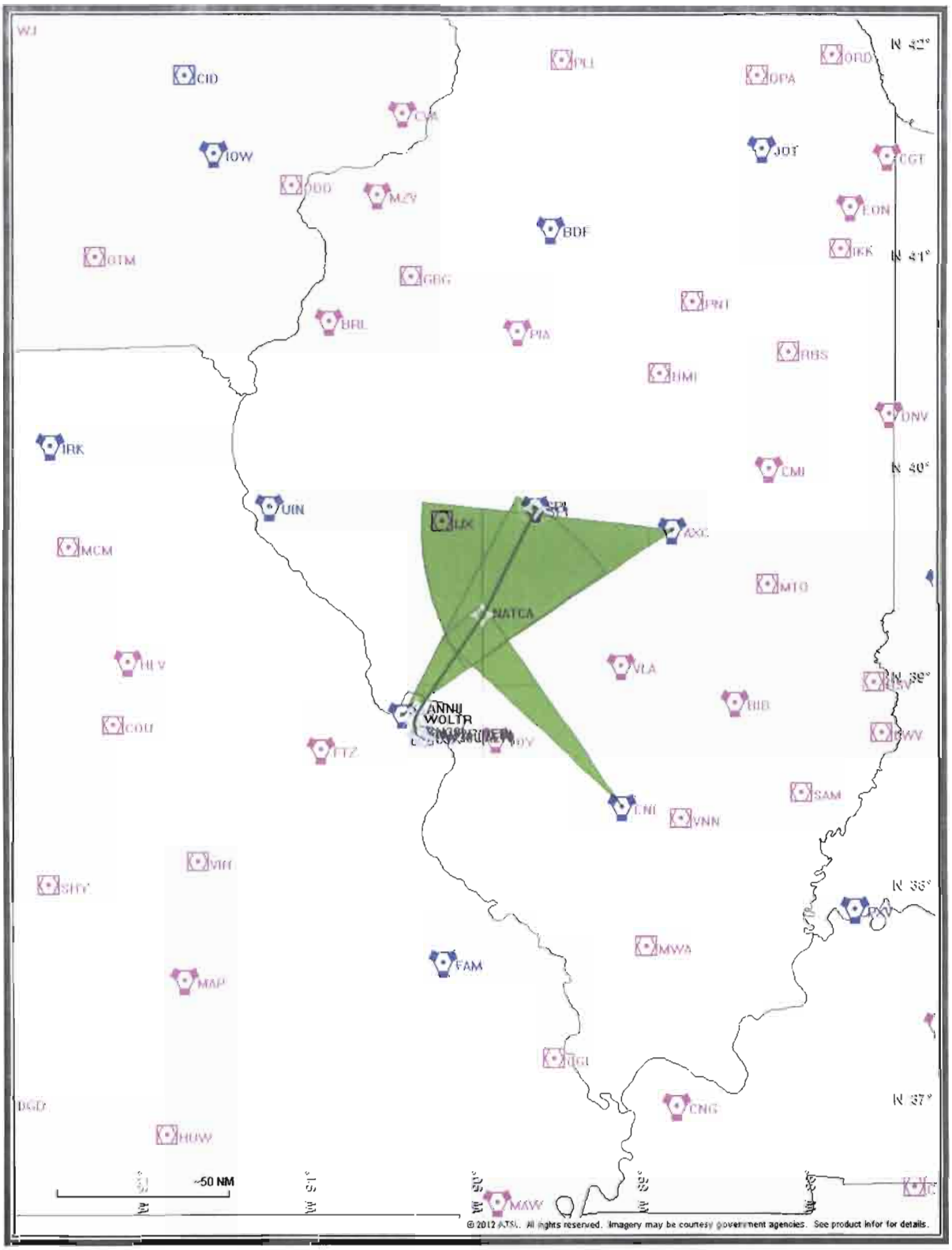
CID
IOW
DDD
MZV
BDF
OTM
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IRK
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MTO
NATCA
VLA
BIB
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FTZ
SAM
VNN
VIH
SHY
MWA
FAM
MAP
CNG
HUW
MAW
N 42°
N 41°
N 40°
N 39°
N 38°
N 37°
~50 NM
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Flight Plan

Return To Summary

Name	Type	Lat/Lon	Alt [Ft]	VNAV Mode	IAS [Kts]	Turn Type	Leg Type
RW30L(...	WP	N 38° 44' 17.08" W 90° 20' 49.42"	585.8	VNAV	0.0	Fly Over	TF
RW12R(...	WP	N 38° 45' 14.05" W 90° 22' 44.97"	576.6	VNAV	130.0	Fly Over	VA
GH30L	WP	N 38° 45' 51.05" W 90° 24' 0.07"	1120.0	VNAV	145.0	Fly Over	DF
WOLTR	WP	N 38° 49' 41.32" W 90° 25' 3.02"	2500.0	VNAV	180.0	Fly By	TF
ANNII	WP	N 38° 52' 52.69" W 90° 23' 22.37"	3189.1	VNAV	180.0	Fly By	TF
NATCA	WP	N 39° 20' 4.75" W 89° 59' 52.83"	9740.1	VNAV	180.0	Fly By	TF
SPI	WP	N 39° 50' 23.03" W 89° 40' 39.83"	16485.6	VNAV	210.0	Fly Over	TF

Climb Gradient: 500.0 Ft/NM up to 1120.0 Ft MSL

Flyability

Return To Summary

Settings:

Flight Type: Departure
Selected Airport: KSTL
Aircraft Category: Cat D
Climb Gradient: 500.0 Ft/NM up to 1120.0 Ft MSL
Ground Speeds:
Departure: **120.0 Kts** out to **10.0 NM**
Table:
200.0 Kts up to **29000.0 Ft.**
280.0 Kts up to **99900.0 Ft.**
Wind Settings: *None assigned*
Descent During a Turn: Allowed
VNAV Mode: Flight Plan

Flight Track comes into contact with terrain. Minimum AGL along route was -31.97 Ft.
Flight Track contacted terrain (DTED lvl 0 max) between AER and DER or within 2/3 NM of DER.

DME/DME

Return To Summary

Settings:

RNP: 2.0
Flight Mode: Manual
Line of Sight (DTED Level 0 Max): Evaluated
DME Restrictions: Evaluated
Inertial Drift: Enabled
Initial Drift: 0.165 NM
INS Drift Rate: 8.000 NM/Hour
Range Mode: OSV
Co-Frequencies: Evaluated
RNP Edges: Evaluated
Min DME Range: 3.0 NM
Allowed Gap Length: 4.0 NM
DME Types: VOR/DME , VORTAC , TACAN , and User
DME Include Angles: 30 to 150
Critical DMEs: Allowed
DoD Facilities: Not included
Foreign Facilities: Not included
Low & Terminal DMEs: Included
Flight Check DMEs: Selected
Higher Altitudes: Evaluated
Near Maximum Altitude: Evaluated
Minimum MSL DMEs Avail: 1662 Ft.

Total Number of DMEs Used: 9

Maximum DME Error: 0.447 NM.

No Critical DMEs were found.

Available DMEs: STL, FTZ, TOY, CSX, ENL, AXC, SPI, UIN, BDF

DME/DME (Continued.)

Return To Summary

DMEs Used

#	Name	Lat/Lon	Range	Source	Critical	Err. [NM]	Status	Time	Distance
1	STL	N 38° 51' 38.48" W 90° 28' 56.52"	H + ESV	User	NO	0.585	Enabled	29.2 %	30.3 %
2	FTZ	N 38° 41' 39.58" W 90° 58' 16.17"	L	Database	NO	0.585	Enabled	21.8 %	17.6 %
3	CSX	N 38° 45' 9.88" W 90° 21' 39.46"	H	Database	NO	0.486	Enabled	21.2 %	17.5 %
4	TOY	N 38° 44' 20.97" W 89° 55' 7.06"	L	Database	NO	0.831	Enabled	22.7 %	25.6 %
5	ENL	N 38° 25' 12.00" W 89° 9' 32.39"	H + ESV	User	NO	0.447	Enabled	10.5 %	11.9 %
6	AXC	N 39° 44' 15.08" W 88° 51' 23.15"	H + ESV	User	NO	1.432	Enabled	37.8 %	42.9 %
7	SPI	N 39° 50' 23.04" W 89° 40' 39.83"	H	Database	NO	0.669	Enabled	28.1 %	31.9 %
8	BDF	N 41° 9' 35.03" W 89° 35' 16.34"	H	Database	NO	0.447	Enabled	6.4 %	7.3 %
9	UIN	N 39° 50' 52.35" W 91° 16' 44.13"	H	Database	NO	0.447	Enabled	5.7 %	6.4 %

Flight Check DME Selection

Distance [NM]	Selected DMEs					Alternate
0.0						
1.8						
2.9	STL	FTZ	CSX	TOY		
6.7	TOY	FTZ	CSX			
10.2	TOY	FTZ	CSX	STL		
31.1	TOY	ENL	CSX	STL	AXC	SPI
42.8	TOY	SPI	CSX	STL	AXC	
64.8	UIN	SPI	ENL	BDF	AXC	STL

Inertial Drift Segments

#	Start Location	End Location	Length [NM]
1	N 38° 44' 17.08" W 90° 20' 49.42"	N 38° 46' 5.15" W 90° 24' 16.02"	3.3

VOR: CSX — Available from N 38° 44' 17.08" W 90° 20' 49.42" to N 38° 46' 5.15" W 90° 24' 16.02"

VOR: FTZ — Available from N 38° 44' 17.08" W 90° 20' 49.42" to N 38° 46' 5.15" W 90° 24' 16.02"

VOR: STL — Available from N 38° 44' 17.08" W 90° 20' 49.42" to N 38° 46' 5.15" W 90° 24' 16.02"

VOR: TOY — Available from N 38° 44' 17.08" W 90° 20' 49.42" to N 38° 46' 5.15" W 90° 24' 16.02"

DME/DME (Continued.)

Return To Summary

Inertial Drift Segments (Continued.)

#	Start Location	End Location	Length [NM]
2	N 39° 1' 9.03" W 90° 16' 16.27"	N 39° 1' 9.03" W 90° 16' 16.27"	0.0
	VOR: CSX	Available from N 39° 1' 9.03" W 90° 16' 16.27" to N 39° 1' 9.03" W 90° 16' 16.27"	
	VOR: FTZ	Available from N 39° 1' 9.03" W 90° 16' 16.27" to N 39° 1' 9.03" W 90° 16' 16.27"	
	VOR: STL	Available from N 39° 1' 9.03" W 90° 16' 16.27" to N 39° 1' 9.03" W 90° 16' 16.27"	
	VOR: TOY	Available from N 39° 1' 9.03" W 90° 16' 16.27" to N 39° 1' 9.03" W 90° 16' 16.27"	

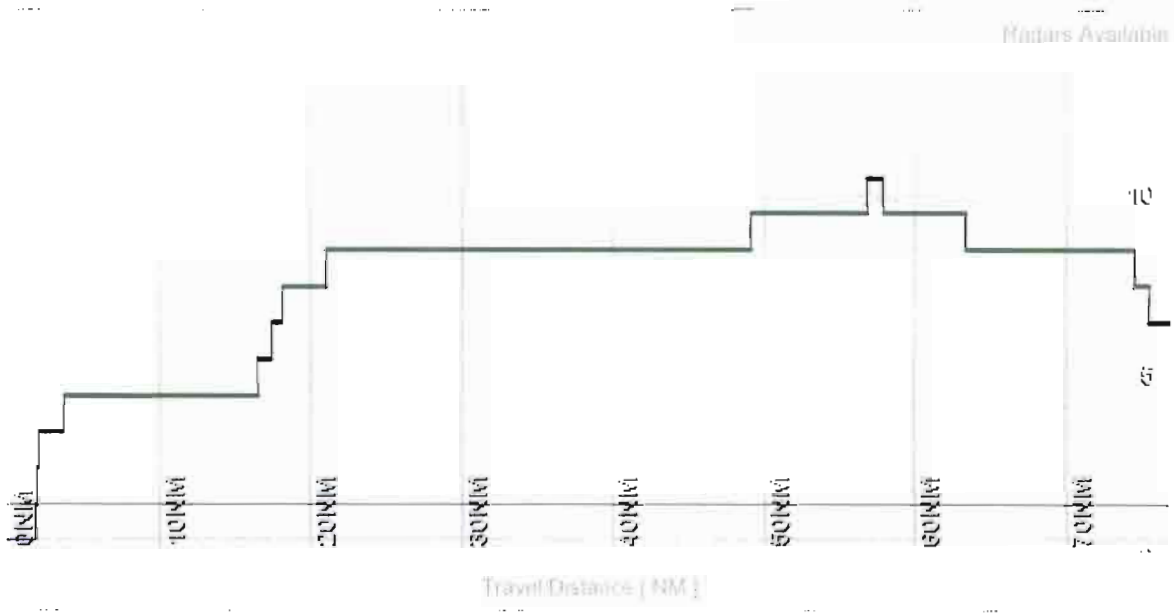
User DMEs

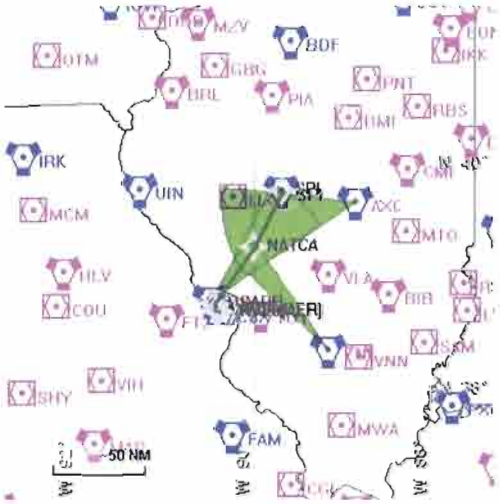
#	Name	Lat/Lon	Range	Elevation [Ft]	Frequency	Replaces:	Status
1	AXC	N 39° 44' 15.08" W 88° 51' 23.15"	H	707.5	117.20	AXC	Used
		ESV: Bearing [True]: 236.0° to 277.0° Bearing [Mag]: 233.0° to 274.0°			Arc Distance: Out to 70.0 NM Altitude: 6000.0 to 17000.0 Ft.		
2	STL	N 38° 51' 38.48" W 90° 28' 56.52"	H	449.5	117.40	STL	Used
		ESV: Bearing [True]: 27.0° to 54.0° Bearing [Mag]: 26.0° to 53.0°			Arc Distance: Out to 70.0 NM Altitude: 6000.0 to 17000.0 Ft.		
3	ENL	N 38° 25' 12.00" W 89° 9' 32.39"	H	545.8	115.00	ENL	Used
		ESV: Bearing [True]: 314.0° to 326.0° Bearing [Mag]: 310.0° to 322.0°			Arc Distance: Out to 70.0 NM Altitude: 6000.0 to 17000.0 Ft.		

Radar Analysis

Return To Summary

Settings: **Radar Types:** ARSR and ASR





Name:	enanders
Project Name:	
Software:	RNAV-Pro™
Version:	2.35
Date/Time:	2/19/2012 1:08:07 PM
Input File:	NATCA RW29 SPI 20120...
Databases:	AVNIS Date: 08/26/2011
	NFD Date: 07/02/2009
	DTED® (MAX) Date: 2002

Results Summary:

Flyability	✔	Please Check Flyability Results
DME/DME	✔	
Radars	✔	
Comms		
TERPS		

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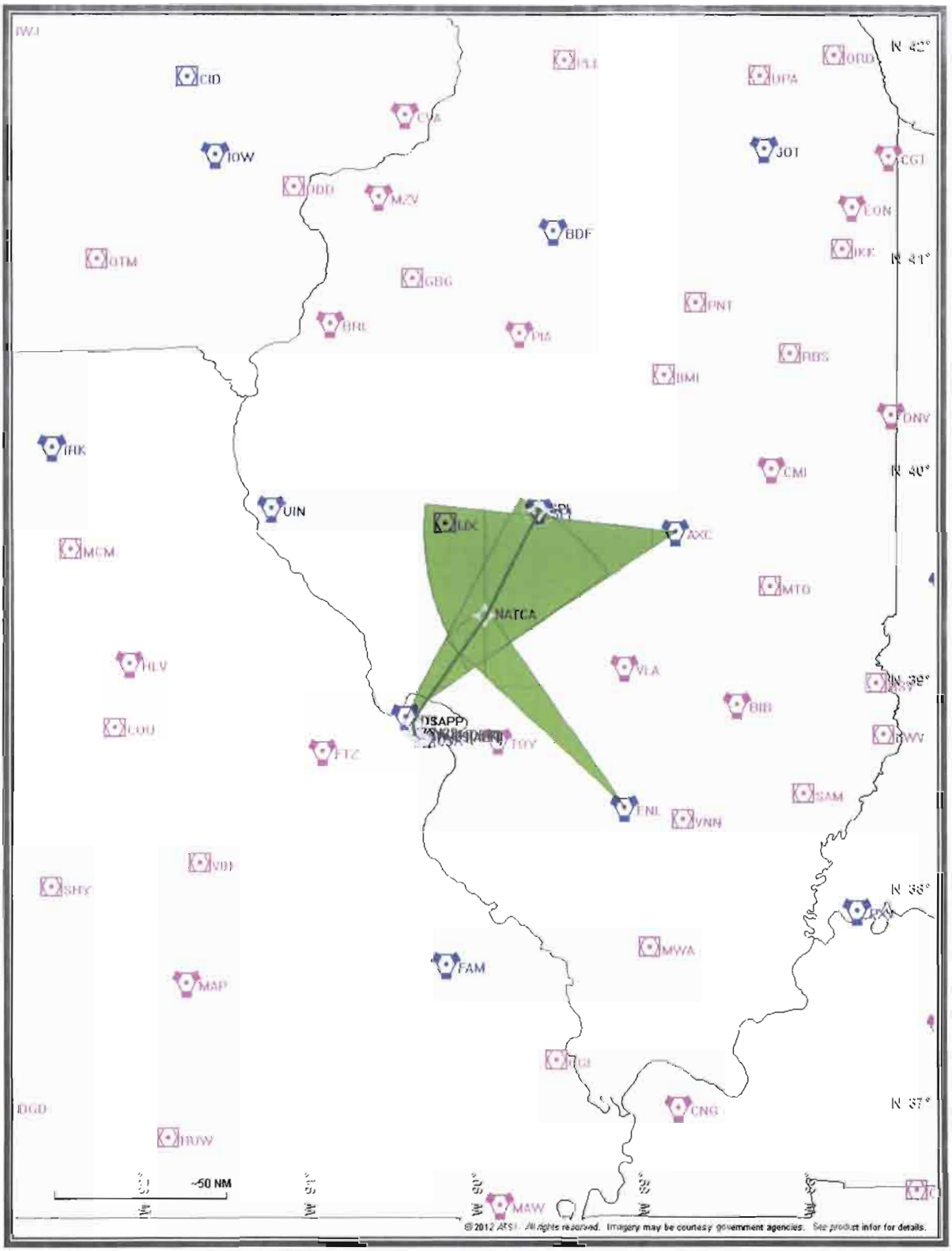
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BDF
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MCM
MTO
NATCA
HLV
VLA
BIB
COU
FTZ
TOY
ENL
VNN
SAM
SHY
FAM
MWA
MAP
CNG
MAW
~50 NM
N 42°
N 41°
N 40°
N 39°
N 38°
N 37°
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Flight Plan

Return To Summary

Name	Type	Lat/Lon	Alt [Ft]	VNAV Mode	IAS [Kts]	Turn Type	Leg Type
RW29(A...	WP	N 38° 44' 48.46" W 90° 22' 59.39"	556.0	VNAV	0.0	Fly Over	TF
RW11(D...	WP	N 38° 45' 35.83" W 90° 24' 35.55"	653.0	VNAV	130.0	Fly Over	VA
GH29:	WP	N 38° 46' 7.93" W 90° 25' 40.75"	1120.0	VNAV	145.0	Fly Over	DF
DSAPP	WP	N 38° 50' 1.06" W 90° 26' 38.98"	2500.0	VNAV	180.0	Fly By	TF
NATCA	WP	N 39° 20' 4.75" W 89° 59' 52.83"	9811.6	VNAV	180.0	Fly By	TF
SPI	WP	N 39° 50' 23.03" W 89° 40' 39.83"	16557.0	VNAV	210.0	Fly Over	TF

Climb Gradient: 500.0 Ft/NM up to 1120.0 Ft MSL

Flyability

Return To Summary

Settings:

Flight Type: Departure
Selected Airport: KSTL
Aircraft Category: Cat D
Climb Gradient: 500.0 Ft/NM up to 1120.0 Ft MSL
Ground Speeds:
Departure: **120.0 Kts** out to **10.0 NM**
Table:
200.0 Kts up to **29000.0 Ft.**
280.0 Kts up to **99900.0 Ft.**
Wind Settings: *None assigned*
Descent During a Turn: Allowed
VNAV Mode: Flight Plan

Flight Track comes into contact with terrain. Minimum AGL along route was -47.99 Ft.
Flight Track contacted terrain (DTED lvl 0 max) between AER and DER or within 2/3 NM of DER.

DME/DME

Return To Summary

Settings:

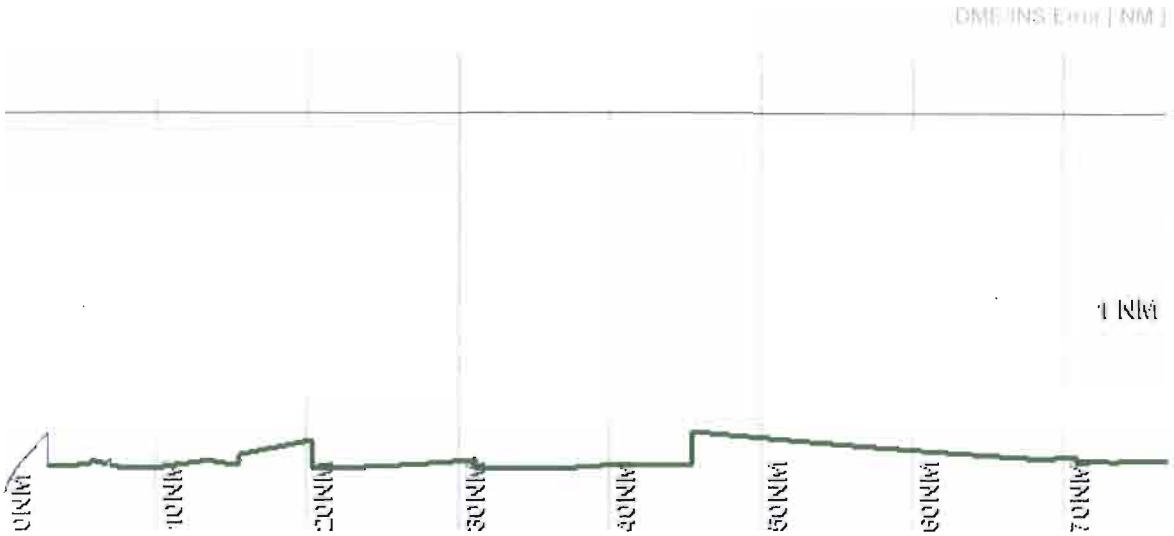
RNP: 2.0
Flight Mode: Manual
Line of Sight (DTED Level 0 Max): Evaluated
DME Restrictions: Evaluated
Inertial Drift: Enabled
Initial Drift: 0.165 NM
INS Drift Rate: 8.000 NM/Hour
Range Mode: OSV
Co-Frequencies: Evaluated
RNP Edges: Evaluated
Min DME Range: 3.0 NM
Allowed Gap Length: 4.0 NM
DME Types: VOR/DME , VORTAC , TACAN , and User
DME Include Angles: 30 to 150
Critical DMEs: Allowed
DoD Facilities: Not included
Foreign Facilities: Not included
Low & Terminal DMEs: Included
Flight Check DMEs: Selected
Higher Altitudes: Evaluated
Near Maximum Altitude: Evaluated
Minimum MSL DMEs Avail: 1661 Ft.

Total Number of DMEs Used: 9

Maximum DME Error: 0.429 NM.

No Critical DMEs were found.

Available DMEs: STL, FTZ, TOY, CSX, ENL, AXC, SPI, UIN, BDF



DME/DME (Continued.)

Return To Summary

DMEs Used

#	Name	Lat/Lon	Range	Source	Critical	Err. [NM]	Status	Time	Distance
1	STL	N 38° 51' 38.48" W 90° 28' 56.52"	H + ESV	User	NO	0.512	Enabled	31.5 %	32.0 %
2	FTZ	N 38° 41' 39.58" W 90° 58' 16.17"	L	Database	NO	0.694	Enabled	22.1 %	18.0 %
3	CSX	N 38° 45' 9.88" W 90° 21' 39.46"	H	Database	NO	0.712	Enabled	18.9 %	15.8 %
4	TOY	N 38° 44' 20.97" W 89° 55' 7.06"	L	Database	NO	0.819	Enabled	22.6 %	25.5 %
5	ENL	N 38° 25' 12.00" W 89° 9' 32.39"	H + ESV	User	NO	0.429	Enabled	10.2 %	11.6 %
6	AXC	N 39° 44' 15.08" W 88° 51' 23.15"	H + ESV	User	NO	1.416	Enabled	37.7 %	42.7 %
7	SPI	N 39° 50' 23.04" W 89° 40' 39.83"	H	Database	NO	0.667	Enabled	27.8 %	31.4 %
8	BDF	N 41° 9' 35.03" W 89° 35' 16.34"	H	Database	NO	0.429	Enabled	6.9 %	7.8 %
9	UIN	N 39° 50' 52.35" W 91° 16' 44.13"	H	Database	NO	0.429	Enabled	6.2 %	7.0 %

Flight Check DME Selection

Distance [NM]	Selected DMEs					Alternate
0.0						
1.5	STL					
2.5	STL	FTZ	CSX	TOY		
6.2	STL	FTZ	CSX	TOY		
31.0	STL	ENL	CSX	TOY	AXC	SPI
42.7	STL	SPI	CSX	TOY	AXC	
64.8	UIN	SPI	ENL	BDF	AXC	STL

Inertial Drift Segments

#	Start Location	End Location	Length [NM]
1	N 38° 44' 48.46" W 90° 22' 59.39"	N 38° 46' 23.72" W 90° 26' 0.03"	2.9
	VOR: CSX	Available from N 38° 44' 48.46" W 90° 22' 59.39" to N 38° 46' 23.72" W 90° 26' 0.03"	
	VOR: FTZ	Available from N 38° 44' 48.46" W 90° 22' 59.39" to N 38° 46' 23.72" W 90° 26' 0.03"	
	VOR: STL	Available from N 38° 44' 48.46" W 90° 22' 59.39" to N 38° 46' 23.72" W 90° 26' 0.03"	
	VOR: TOY	Available from N 38° 44' 48.46" W 90° 22' 59.39" to N 38° 46' 23.72" W 90° 26' 0.03"	

DME/DME (Continued.)

Return To Summary

Inertial Drift Segments (Continued.)

#	Start Location	End Location	Length [NM]
2	N 38° 50' 10.81" W 90° 26' 30.33"	N 38° 50' 24.08" W 90° 26' 18.86"	0.3
	VOR: CSX	Available from N 38° 50' 10.81" W 90° 26' 30.33" to N 38° 50' 24.08" W 90° 26' 18.86"	
	VOR: FTZ	Available from N 38° 50' 10.81" W 90° 26' 30.33" to N 38° 50' 24.08" W 90° 26' 18.86"	
	VOR: STL	Available from N 38° 50' 10.81" W 90° 26' 30.33" to N 38° 50' 24.08" W 90° 26' 18.86"	
	VOR: TOY	Available from N 38° 50' 10.81" W 90° 26' 30.33" to N 38° 50' 24.08" W 90° 26' 18.86"	

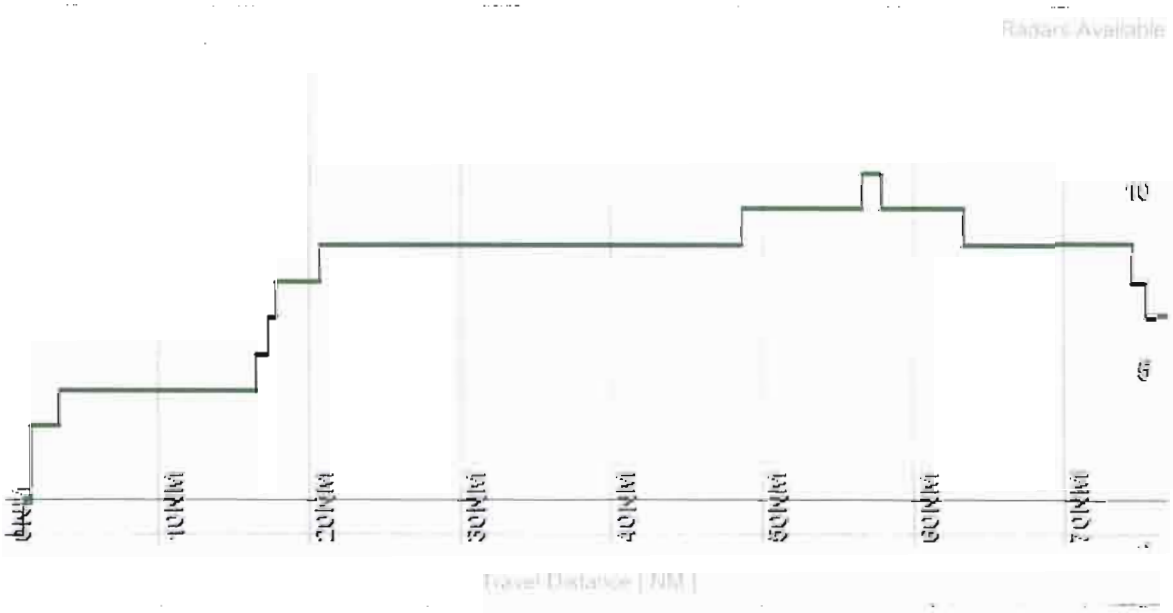
User DMEs

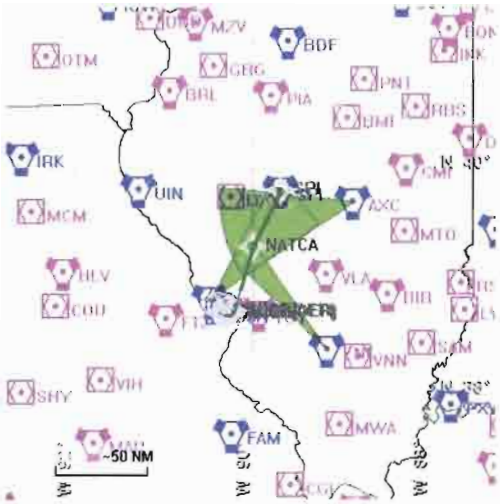
#	Name	Lat/Lon	Range	Elevation [Ft]	Frequency	Replaces:	Status
1	AXC	N 39° 44' 15.08" W 88° 51' 23.15"	H	707.5	117.20	AXC	Used
		ESV: Bearing [True]: 236.0° to 277.0° Bearing [Mag]: 233.0° to 274.0°			Arc Distance: Out to 70.0 NM Altitude: 6000.0 to 17000.0 Ft.		
2	STL	N 38° 51' 38.48" W 90° 28' 56.52"	H	449.5	117.40	STL	Used
		ESV: Bearing [True]: 27.0° to 54.0° Bearing [Mag]: 26.0° to 53.0°			Arc Distance: Out to 70.0 NM Altitude: 6000.0 to 17000.0 Ft.		
3	ENL	N 38° 25' 12.00" W 89° 9' 32.39"	H	545.8	115.00	ENL	Used
		ESV: Bearing [True]: 314.0° to 326.0° Bearing [Mag]: 310.0° to 322.0°			Arc Distance: Out to 70.0 NM Altitude: 6000.0 to 17000.0 Ft.		

Radar Analysis

Return To Summary

Settings: **Radar Types:** ARSR and ASR





Name:	enanders
Project Name:	
Software:	RNAV-Pro™
Version:	2.35
Date/Time:	2/19/2012 12:54:26 PM
Input File:	NATCA RW12R SPI 2012...
Databases:	AVNIS Date: 08/26/2011
	NFD Date: 07/02/2009
	DTED® (MAX) Date: 2002

Results Summary:

Flyability	✔	**Please Check Flyability Results**
DME/DME	✔	
Radars	✔	
Comms	?	
TERPS	?	

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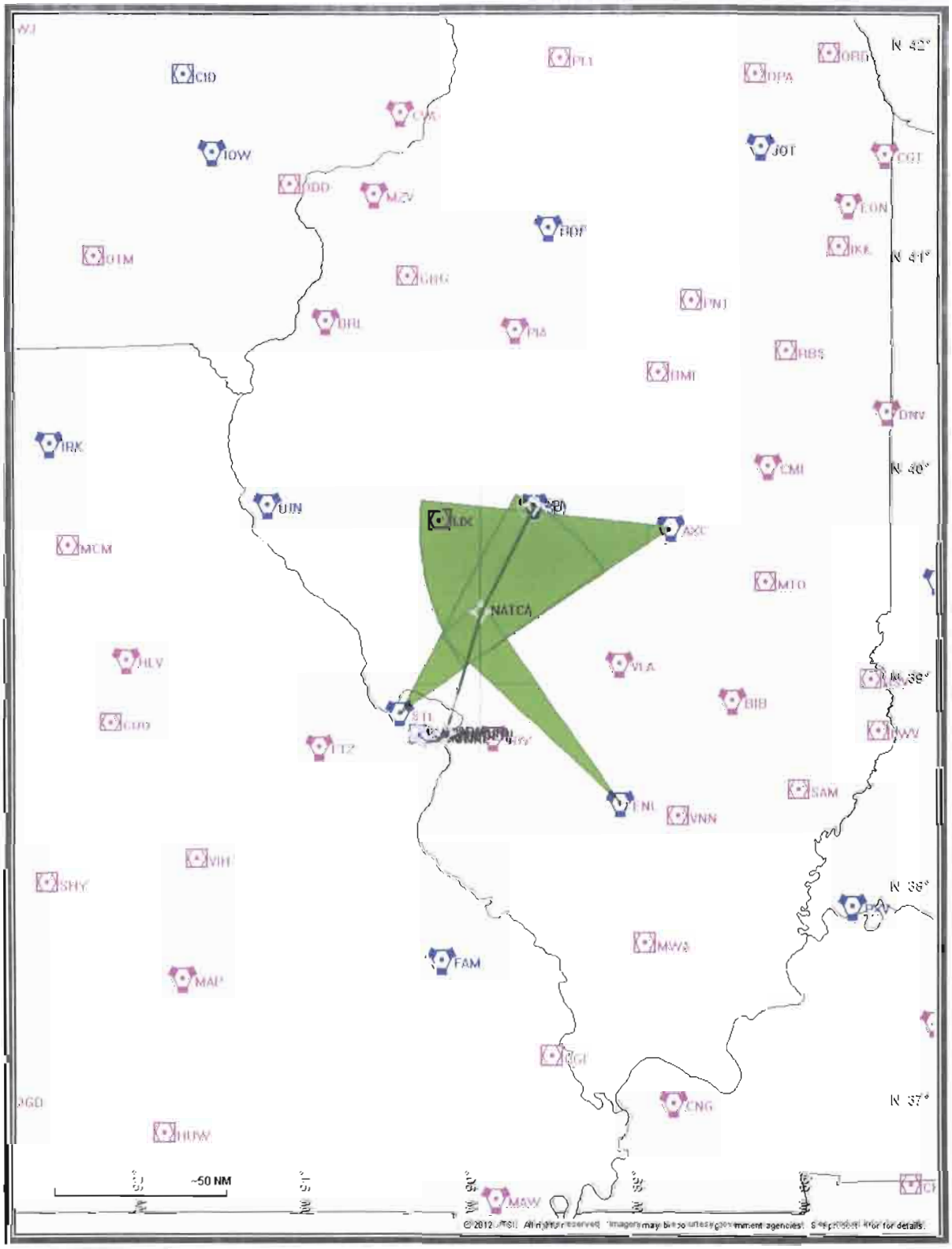

N 42°
N 41°
N 40°
N 39°
N 38°
N 37°
CID
IOW
JOT
CGT
LON
IKK
DBQ
MCV
DDF
OTM
GBG
PNT
DRL
PIA
RBS
DMI
DNV
IRK
CMI
UIN
LDC
AXC
MCM
MTO
NATCA
HLV
VLA
BIB
COU
TTZ
SAM
ENL
VNN
VIH
SHY
MWA
FAM
MAP
CNG
HRW
MSW
~50 NM

Flight Plan

Return To Summary

Name	Type	Lat/Lon	Alt [Ft]	VNAV Mode	IAS [Kts]	Turn Type	Leg Type
RW12R(...	WP	N 38° 45' 11.59" W 90° 22' 39.98"	541.6	VNAV	0.0	Fly Over	TF
RW30L(...	WP	N 38° 44' 16.01" W 90° 20' 47.27"	620.8	VNAV	130.0	Fly Over	VA
GH12R	WP	N 38° 43' 41.81" W 90° 19' 37.96"	1120.0	VNAV	145.0	Fly Over	DF
FUNKE	WP	N 38° 43' 39.26" W 90° 15' 35.58"	2500.0	VNAV	180.0	Fly By	TF
BEART	WP	N 38° 45' 35.04" W 90° 12' 39.30"	3100.0	VNAV	180.0	Fly By	TF
NATCA	WP	N 39° 20' 4.75" W 89° 59' 52.83"	10274.2	VNAV	180.0	Fly By	TF
SPI	WP	N 39° 50' 23.03" W 89° 40' 39.83"	17019.7	VNAV	210.0	Fly Over	TF

Climb Gradient: 500.0 Ft/NM up to 1120.0 Ft MSL

Flyability

Return To Summary

Settings:

Flight Type: Departure
Selected Airport: KSTL
Aircraft Category: Cat D
Climb Gradient: 500.0 Ft/NM up to 1120.0 Ft MSL
Ground Speeds:
Departure: **120.0 Kts** out to **10.0 NM**
Table:
200.0 Kts up to **29000.0 Ft.**
280.0 Kts up to **99900.0 Ft.**
Wind Settings: *None assigned*
Descent During a Turn: Allowed
VNAV Mode: Flight Plan

Flight Track comes into contact with terrain. Minimum AGL along route was -71.92 Ft.
Flight Track contacted terrain (DTED lvl 0 max) between AER and DER or within 2/3 NM of DER.

DME/DME

Return To Summary

Settings:

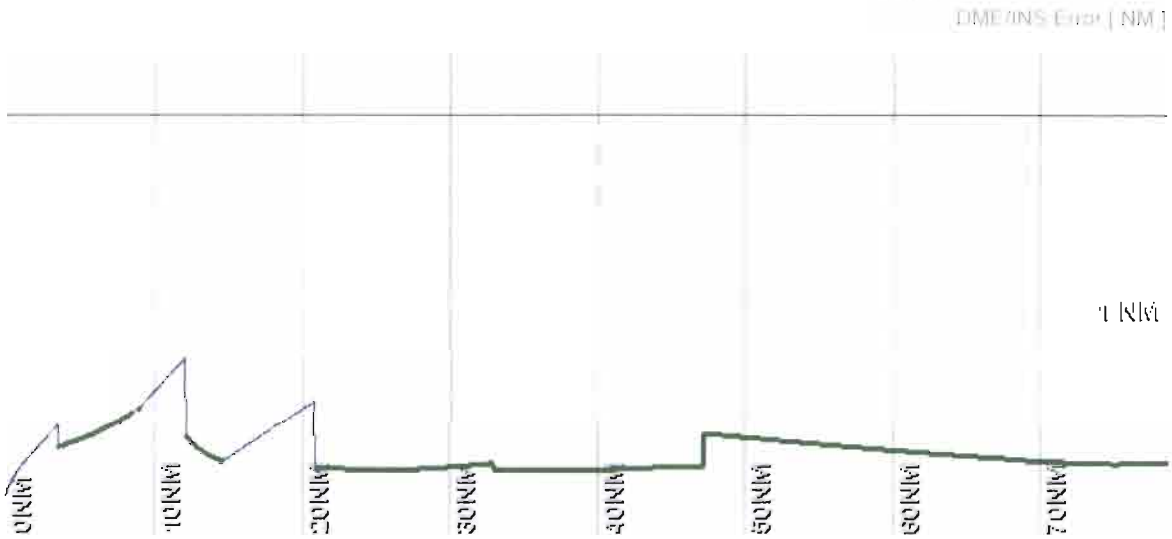
RNP: 2.0
Flight Mode: Manual
Line of Sight (DTED Level 0 Max): Evaluated
DME Restrictions: Evaluated
Inertial Drift: Enabled
Initial Drift: 0.165 NM
INS Drift Rate: 8.000 NM/Hour
Range Mode: OSV
Co-Frequencies: Evaluated
RNP Edges: Evaluated
Min DME Range: 3.0 NM
Allowed Gap Length: 4.0 NM
DME Types: VOR/DME , VORTAC , TACAN , and User
DME Include Angles: 30 to 150
Critical DMEs: Allowed
DoD Facilities: Not included
Foreign Facilities: Not included
Low & Terminal DMEs: Included
Flight Check DMEs: Selected
Higher Altitudes: Evaluated
Near Maximum Altitude: Evaluated
Minimum MSL DMEs Avail: 2017 Ft.

Total Number of DMEs Used: 9

Maximum DME Error: 0.740 NM.

No Critical DMEs were found.

Available DMEs: STL, FTZ, CSX, TOY, ENL, AXC, SPI, UIN, BDF



DME/DME (Continued.)

Return To Summary

DMEs Used

#	Name	Lat/Lon	Range	Source	Critical	Err. [NM]	Status	Time	Distance
1	STL	N 38° 51' 38.48" W 90° 28' 56.52"	H + ESV	User	NO	1.034	Enabled	31.5 %	31.3 %
2	FTZ	N 38° 41' 39.58" W 90° 58' 16.17"	L	Database	NO	1.034	Enabled	9.6 %	6.5 %
3	CSX	N 38° 45' 9.88" W 90° 21' 39.46"	H	Database	NO	1.111	Enabled	4.8 %	4.8 %
4	TOY	N 38° 44' 20.97" W 89° 55' 7.06"	L	Database	NO	1.593	Enabled	20.9 %	23.0 %
5	ENL	N 38° 25' 12.00" W 89° 9' 32.39"	H + ESV	User	NO	0.740	Enabled	13.6 %	15.4 %
6	AXC	N 39° 44' 15.08" W 88° 51' 23.15"	H + ESV	User	NO	1.323	Enabled	33.1 %	37.4 %
7	SPI	N 39° 50' 23.04" W 89° 40' 39.83"	H	Database	NO	0.740	Enabled	24.6 %	27.8 %
8	BDF	N 41° 9' 35.03" W 89° 35' 16.34"	H	Database	NO	0.740	Enabled	9.3 %	10.5 %
9	UIN	N 39° 50' 52.35" W 91° 16' 44.13"	H	Database	NO	0.740	Enabled	8.6 %	9.8 %

Flight Check DME Selection

Distance [NM]	Selected DMEs					Alternate
0.0						
1.8						
2.8	STL	FTZ	CSX			
5.7	STL	FTZ	CSX			
8.7	STL	FTZ	CSX	TOY		
32.9	STL	ENL	CSX	TOY	AXC	SPI
44.5	STL	SPI	CSX	TOY	AXC	
66.5	UIN	SPI	ENL	BDF	AXC	STL

Inertial Drift Segments

#	Start Location	End Location	Length [NM]
1	N 38° 45' 11.59" W 90° 22' 39.98"	N 38° 43' 34.33" W 90° 18' 50.18"	3.5
	VOR: CSX	Available from N 38° 45' 11.59" W 90° 22' 39.98" to N 38° 43' 34.33" W 90° 18' 50.18"	
	VOR: FTZ	Available from N 38° 45' 11.59" W 90° 22' 39.98" to N 38° 43' 34.33" W 90° 18' 50.18"	
	VOR: STL	Available from N 38° 45' 11.59" W 90° 22' 39.98" to N 38° 43' 34.33" W 90° 18' 50.18"	
	VOR: TOY	Available from N 38° 45' 11.59" W 90° 22' 39.98" to N 38° 43' 34.33" W 90° 18' 50.18"	

DME/DME (Continued.)

Return To Summary

Inertial Drift Segments (Continued.)

#	Start Location	End Location	Length [NM]
2	N 38° 45' 17.41" W 90° 13' 6.09"	N 38° 45' 29.14" W 90° 12' 48.63"	0.3
	VOR: CSX	Available from N 38° 45' 17.41" W 90° 13' 6.09" to N 38° 45' 29.14" W 90° 12' 48.63"	
	VOR: FTZ	Available from N 38° 45' 17.41" W 90° 13' 6.09" to N 38° 45' 29.14" W 90° 12' 48.63"	
	VOR: STL	Available from N 38° 45' 17.41" W 90° 13' 6.09" to N 38° 45' 29.14" W 90° 12' 48.63"	
	VOR: TOY	Available from N 38° 45' 17.41" W 90° 13' 6.09" to N 38° 45' 29.14" W 90° 12' 48.63"	
3	N 38° 45' 35.26" W 90° 12' 42.05"	N 38° 48' 34.29" W 90° 11' 33.35"	3.1
	VOR: CSX	Available from N 38° 45' 35.26" W 90° 12' 42.05" to N 38° 48' 34.29" W 90° 11' 33.35"	
	VOR: FTZ	Available from N 38° 45' 35.26" W 90° 12' 42.05" to N 38° 48' 34.29" W 90° 11' 33.35"	
	VOR: STL	Available from N 38° 45' 35.26" W 90° 12' 42.05" to N 38° 48' 34.29" W 90° 11' 33.35"	
	VOR: TOY	Available from N 38° 45' 35.26" W 90° 12' 42.05" to N 38° 48' 34.29" W 90° 11' 33.35"	
4	N 38° 51' 3.45" W 90° 10' 38.50"	N 38° 56' 59.35" W 90° 8' 27.37"	6.2
	VOR: CSX	Available from N 38° 51' 3.45" W 90° 10' 38.50" to N 38° 56' 59.35" W 90° 8' 27.37"	
	VOR: FTZ	Available from N 38° 51' 3.45" W 90° 10' 38.50" to N 38° 53' 56.60" W 90° 9' 34.75"	
	VOR: STL	Available from N 38° 51' 3.45" W 90° 10' 38.50" to N 38° 56' 59.35" W 90° 8' 27.37"	
	VOR: TOY	Available from N 38° 51' 3.45" W 90° 10' 38.50" to N 38° 56' 59.35" W 90° 8' 27.37"	

DME/DME (Continued.)

Return To Summary

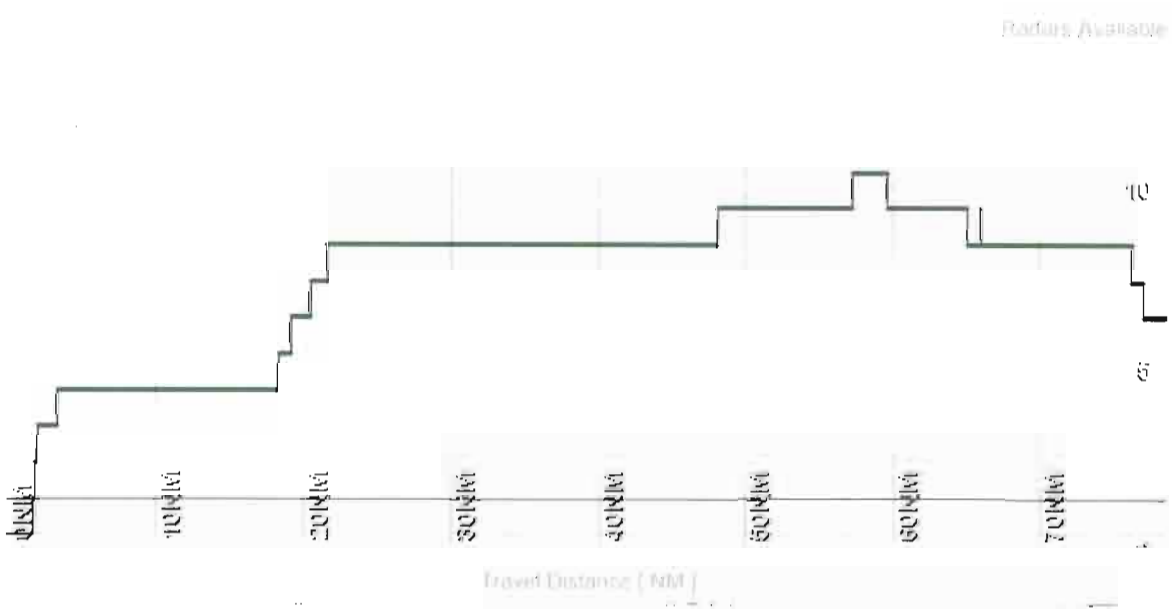
User DMEs

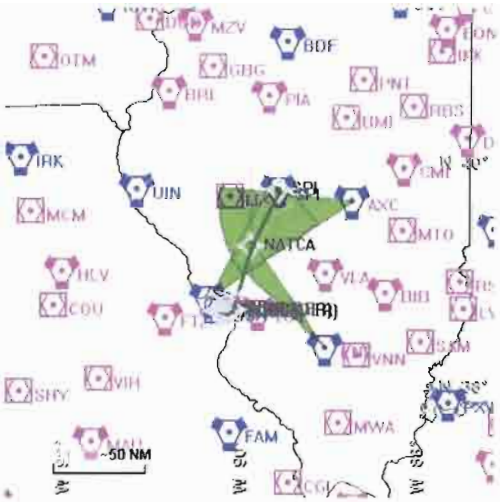
#	Name	Lat/Lon	Range	Elevation [Ft]	Frequency	Replaces:	Status
1	AXC	N 39° 44' 15.08" W 88° 51' 23.15"	H	707.5	117.20	AXC	Used
		ESV: Bearing [True]: 236.0° to 277.0° Bearing [Mag]: 233.0° to 274.0°			Arc Distance: Out to 70.0 NM Altitude: 6000.0 to 17000.0 Ft.		
2	STL	N 38° 51' 38.48" W 90° 28' 56.52"	H	449.5	117.40	STL	Used
		ESV: Bearing [True]: 27.0° to 54.0° Bearing [Mag]: 26.0° to 53.0°			Arc Distance: Out to 70.0 NM Altitude: 6000.0 to 17000.0 Ft.		
3	ENL	N 38° 25' 12.00" W 89° 9' 32.39"	H	545.8	115.00	ENL	Used
		ESV: Bearing [True]: 314.0° to 326.0° Bearing [Mag]: 310.0° to 322.0°			Arc Distance: Out to 70.0 NM Altitude: 6000.0 to 17000.0 Ft.		

Radar Analysis

Return To Summary

Settings: **Radar Types:** ARSR and ASR





Name:	enanders
Project Name:	
Software:	RNAV-Pro™
Version:	2.35
Date/Time:	2/19/2012 12:42:27 PM
Input File:	NATCA RW12L SPI 2012...
Databases:	AVNIS Date: 08/26/2011
	NFD Date: 07/02/2009
	DTED® (MAX) Date: 2002

Results Summary:

Flyability	✔	**Please Check Flyability Results**
DME/DME	✔	
Radars	✔	
Comms	?	
TERPS	?	

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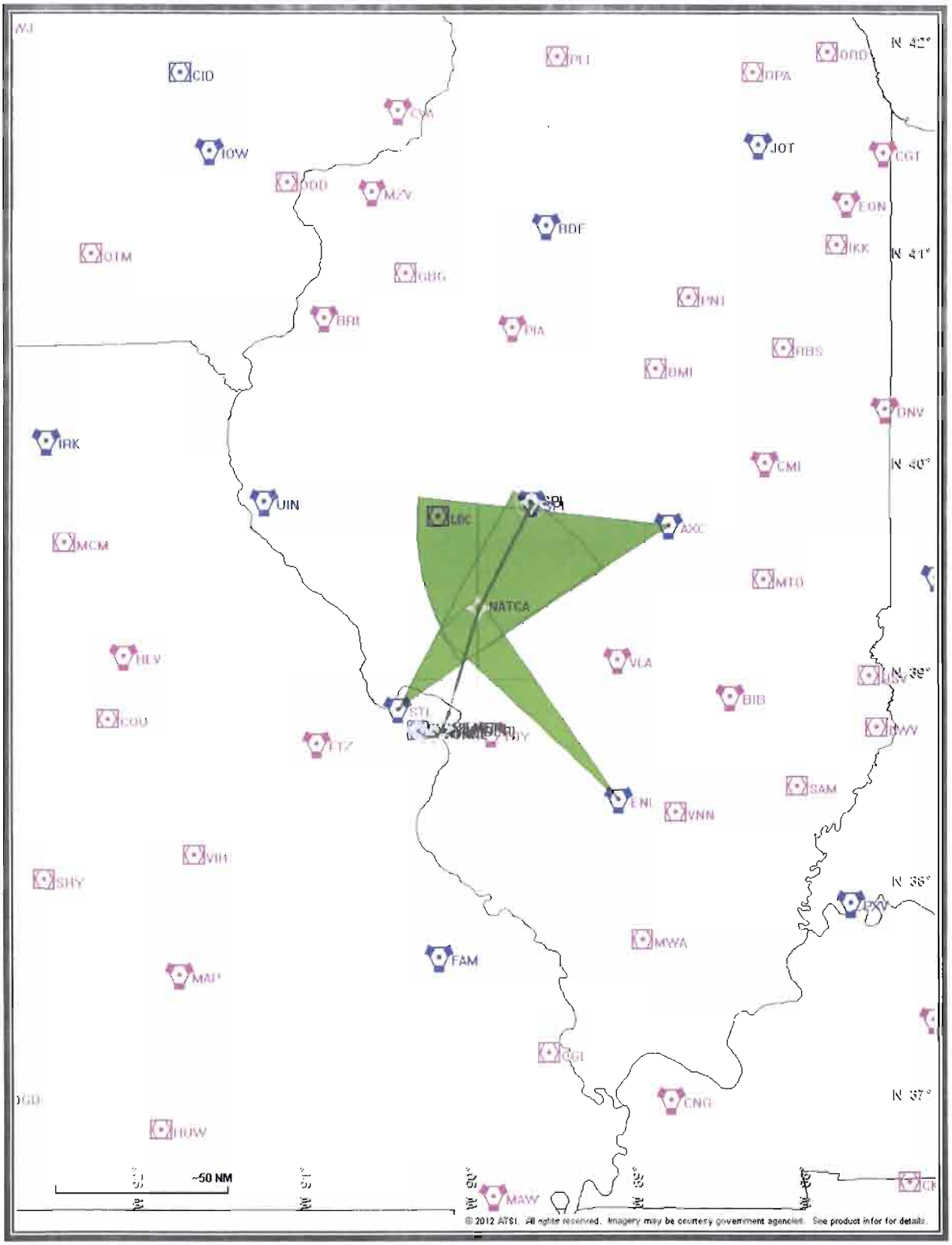
CID
IOW
JOT
CGT
EON
IKK
BDF
GBG
PNT
BRI
PIA
BMI
DNV
IRK
CMI
UIN
LBC
SPI
AXC
MCM
MTO
NATCA
HLV
VLA
BIB
COU
ENL
VNN
SAM
SHY
MWA
FAM
CNG
HUW
MAW
N 42°
N 41°
N 40°
N 39°
N 38°
N 37°
~50 NM
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Flight Plan

Return To Summary

Name	Type	Lat/Lon	Alt [Ft]	VNAV Mode	IAS [Kts]	Turn Type	Leg Type
RW12L(...	WP	N 38° 45' 6.41" W 90° 21' 58.66"	528.3	VNAV	0.0	Fly Over	TF
RW30R(...	WP	N 38° 44' 18.99" W 90° 20' 22.51"	639.5	VNAV	130.0	Fly Over	VA
GH12L	WP	N 38° 43' 45.97" W 90° 19' 15.62"	1120.0	VNAV	145.0	Fly Over	DF
FUNKE	WP	N 38° 43' 39.26" W 90° 15' 35.58"	2500.0	VNAV	180.0	Fly By	TF
BEART	WP	N 38° 45' 35.04" W 90° 12' 39.30"	3100.0	VNAV	180.0	Fly By	TF
NATCA	WP	N 39° 20' 4.75" W 89° 59' 52.83"	10274.2	VNAV	180.0	Fly By	TF
SPI	WP	N 39° 50' 23.03" W 89° 40' 39.83"	17019.7	VNAV	210.0	Fly Over	TF

Climb Gradient: 500.0 Ft/NM up to 1120.0 Ft MSL

Flyability

Return To Summary

Settings:

Flight Type: Departure
Selected Airport: KSTL
Aircraft Category: Cat D
Climb Gradient: 500.0 Ft/NM up to 1120.0 Ft MSL
Ground Speeds:
Departure: **120.0 Kts** out to **10.0 NM**
Table:
200.0 Kts up to **29000.0 Ft.**
280.0 Kts up to **99900.0 Ft.**
Wind Settings: *None assigned*
Descent During a Turn: Allowed
VNAV Mode: Flight Plan

Flight Track comes into contact with terrain. Minimum AGL along route was -64.22 Ft.
Flight Track contacted terrain (DTED lvl 0 max) between AER and DER or within 2/3 NM of DER.

DME/DME

Return To Summary

Settings:

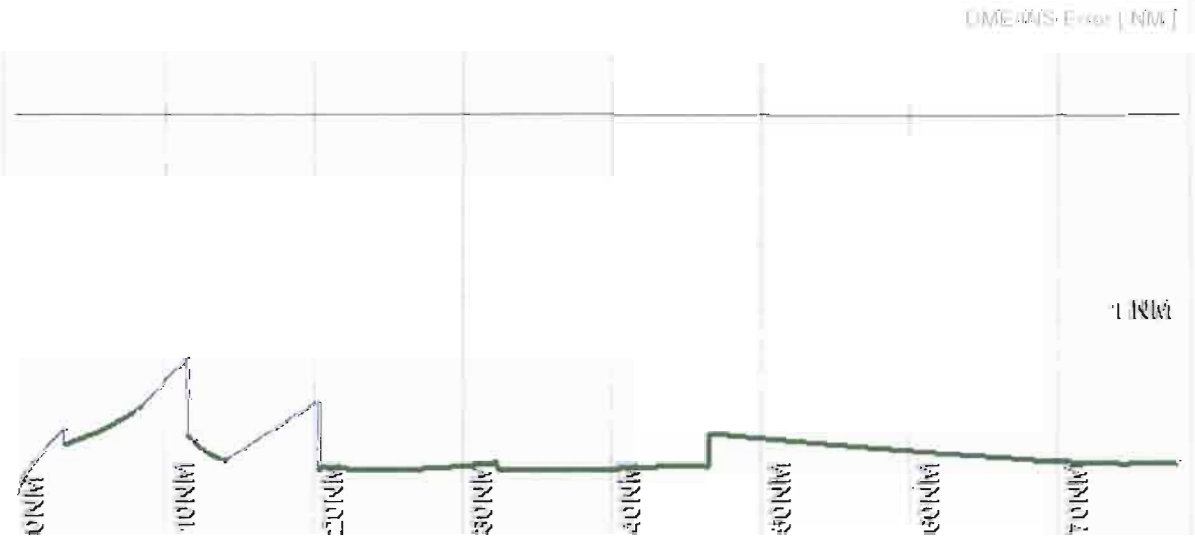
RNP: 2.0
Flight Mode: Manual
Line of Sight (DTED Level 0 Max): Evaluated
DME Restrictions: Evaluated
Inertial Drift: Enabled
Initial Drift: 0.165 NM
INS Drift Rate: 8.000 NM/Hour
Range Mode: OSV
Co-Frequencies: Evaluated
RNP Edges: Evaluated
Min DME Range: 3.0 NM
Allowed Gap Length: 4.0 NM
DME Types: VOR/DME , VORTAC , TACAN , and User
DME Include Angles: 30 to 150
Critical DMEs: Allowed
DoD Facilities: Not included
Foreign Facilities: Not included
Low & Terminal DMEs: Included
Flight Check DMEs: Selected
Higher Altitudes: Evaluated
Near Maximum Altitude: Evaluated
Minimum MSL DMEs Avail: 2122 Ft.

Total Number of DMEs Used: 9

Maximum DME Error: 0.741 NM.

No Critical DMEs were found.

Available DMEs: STL, FTZ, CSX, TOY, ENL, AXC, SPI, UIN, BDF



DME/DME (Continued.)

Return To Summary

DMEs Used

#	Name	Lat/Lon	Range	Source	Critical	Err. [NM]	Status	Time	Distance
1	STL	N 38° 51' 38.48" W 90° 28' 56.52"	H + ESV	User	NO	0.996	Enabled	31.1 %	31.1 %
2	FTZ	N 38° 41' 39.58" W 90° 58' 16.17"	L	Database	NO	0.996	Enabled	9.0 %	6.1 %
3	CSX	N 38° 45' 9.88" W 90° 21' 39.46"	H	Database	NO	1.119	Enabled	5.1 %	4.9 %
4	TOY	N 38° 44' 20.97" W 89° 55' 7.06"	L	Database	NO	1.601	Enabled	21.3 %	23.2 %
5	ENL	N 38° 25' 12.00" W 89° 9' 32.39"	H + ESV	User	NO	0.741	Enabled	13.8 %	15.5 %
6	AXC	N 39° 44' 15.08" W 88° 51' 23.15"	H + ESV	User	NO	1.325	Enabled	33.4 %	37.7 %
7	SPI	N 39° 50' 23.04" W 89° 40' 39.83"	H	Database	NO	0.741	Enabled	24.8 %	28.0 %
8	BDF	N 41° 9' 35.03" W 89° 35' 16.34"	H	Database	NO	0.741	Enabled	9.4 %	10.6 %
9	UIN	N 39° 50' 52.35" W 91° 16' 44.13"	H	Database	NO	0.741	Enabled	8.6 %	9.8 %

Flight Check DME Selection

Distance [NM]	Selected DMEs					Alternate
0.0						
1.5						
2.5	STL	FTZ	CSX			
5.1	STL	FTZ	CSX			
8.1	STL	FTZ	CSX	TOY		
32.3	STL	ENL	CSX	TOY	AXC	SPI
43.9	STL	SPI	CSX	TOY	AXC	
65.9	UIN	SPI	ENL	BDF	AXC	STL

Inertial Drift Segments

#	Start Location	End Location	Length [NM]
1	N 38° 45' 6.41" W 90° 21' 58.66"	N 38° 43' 37.87" W 90° 18' 20.88"	3.3
	VOR: CSX	Available from N 38° 45' 6.41" W 90° 21' 58.66" to N 38° 43' 37.87" W 90° 18' 20.88"	
	VOR: FTZ	Available from N 38° 45' 6.41" W 90° 21' 58.66" to N 38° 43' 37.87" W 90° 18' 20.88"	
	VOR: STL	Available from N 38° 45' 6.41" W 90° 21' 58.66" to N 38° 43' 37.87" W 90° 18' 20.88"	
	VOR: TOY	Available from N 38° 45' 6.41" W 90° 21' 58.66" to N 38° 43' 37.87" W 90° 18' 20.88"	

DME/DME (Continued.)

Return To Summary

Inertial Drift Segments (Continued.)

#	Start Location	End Location	Length [NM]
2	N 38° 45' 16.83" W 90° 13' 6.99"	N 38° 45' 28.50" W 90° 12' 49.47"	0.3
	VOR: CSX	Available from N 38° 45' 16.83" W 90° 13' 6.99" to N 38° 45' 28.50" W 90° 12' 49.47"	
	VOR: FTZ	Available from N 38° 45' 16.83" W 90° 13' 6.99" to N 38° 45' 28.50" W 90° 12' 49.47"	
	VOR: STL	Available from N 38° 45' 16.83" W 90° 13' 6.99" to N 38° 45' 28.50" W 90° 12' 49.47"	
	VOR: TOY	Available from N 38° 45' 16.83" W 90° 13' 6.99" to N 38° 45' 28.50" W 90° 12' 49.47"	
3	N 38° 45' 34.50" W 90° 12' 42.72"	N 38° 48' 34.44" W 90° 11' 33.28"	3.1
	VOR: CSX	Available from N 38° 45' 34.50" W 90° 12' 42.72" to N 38° 48' 34.44" W 90° 11' 33.28"	
	VOR: FTZ	Available from N 38° 45' 34.50" W 90° 12' 42.72" to N 38° 48' 34.44" W 90° 11' 33.28"	
	VOR: STL	Available from N 38° 45' 34.50" W 90° 12' 42.72" to N 38° 48' 34.44" W 90° 11' 33.28"	
	VOR: TOY	Available from N 38° 45' 34.50" W 90° 12' 42.72" to N 38° 48' 34.44" W 90° 11' 33.28"	
4	N 38° 51' 5.57" W 90° 10' 37.71"	N 38° 56' 58.05" W 90° 8' 27.84"	6.1
	VOR: CSX	Available from N 38° 51' 5.57" W 90° 10' 37.71" to N 38° 56' 58.05" W 90° 8' 27.84"	
	VOR: FTZ	Available from N 38° 51' 5.57" W 90° 10' 37.71" to N 38° 53' 55.30" W 90° 9' 35.21"	
	VOR: STL	Available from N 38° 51' 5.57" W 90° 10' 37.71" to N 38° 56' 58.05" W 90° 8' 27.84"	
	VOR: TOY	Available from N 38° 51' 5.57" W 90° 10' 37.71" to N 38° 56' 58.05" W 90° 8' 27.84"	

DME/DME (Continued.)

Return To Summary

User DMEs

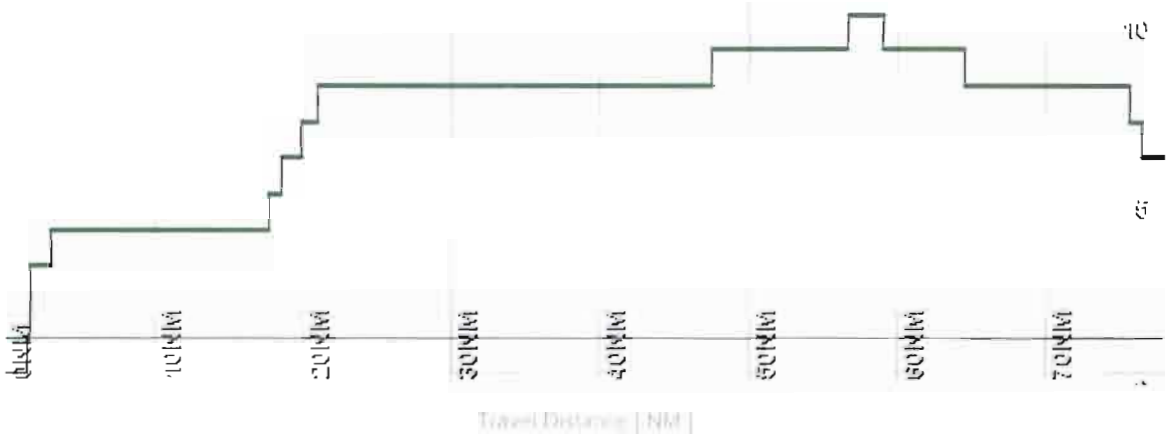
#	Name	Lat/Lon	Range	Elevation [Ft]	Frequency	Replaces:	Status
1	AXC	N 39° 44' 15.08" W 88° 51' 23.15"	H	707.5	117.20	AXC	Used
		ESV: Bearing [True]: 236.0° to 277.0° Bearing [Mag]: 233.0° to 274.0°			Arc Distance: Out to 70.0 NM Altitude: 6000.0 to 17000.0 Ft.		
2	STL	N 38° 51' 38.48" W 90° 28' 56.52"	H	449.5	117.40	STL	Used
		ESV: Bearing [True]: 27.0° to 54.0° Bearing [Mag]: 26.0° to 53.0°			Arc Distance: Out to 70.0 NM Altitude: 6000.0 to 17000.0 Ft.		
3	ENL	N 38° 25' 12.00" W 89° 9' 32.39"	H	545.8	115.00	ENL	Used
		ESV: Bearing [True]: 314.0° to 326.0° Bearing [Mag]: 310.0° to 322.0°			Arc Distance: Out to 70.0 NM Altitude: 6000.0 to 17000.0 Ft.		

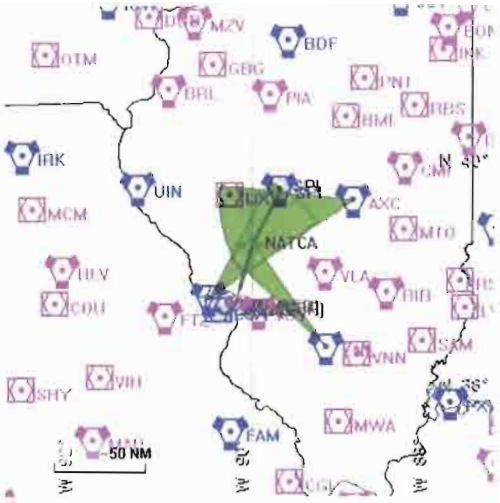
Radar Analysis

Return To Summary

Settings: **Radar Types:** ARSR and ASR

Radars Available





Name:	enanders
Project Name:	
Software:	RNAV-Pro™
Version:	2.35
Date/Time:	2/19/2012 12:30:50 PM
Input File:	NATCA RW11 SPI 20120...
Databases:	AVNIS Date: 08/26/2011
	NFD Date: 07/02/2009
	DTED® (MAX) Date: 2002

Results Summary:

Flyability	✔	**Please Check Flyability Results**
DME/DME	✔	
Radars	✔	
Comms	?	
TERPS	?	

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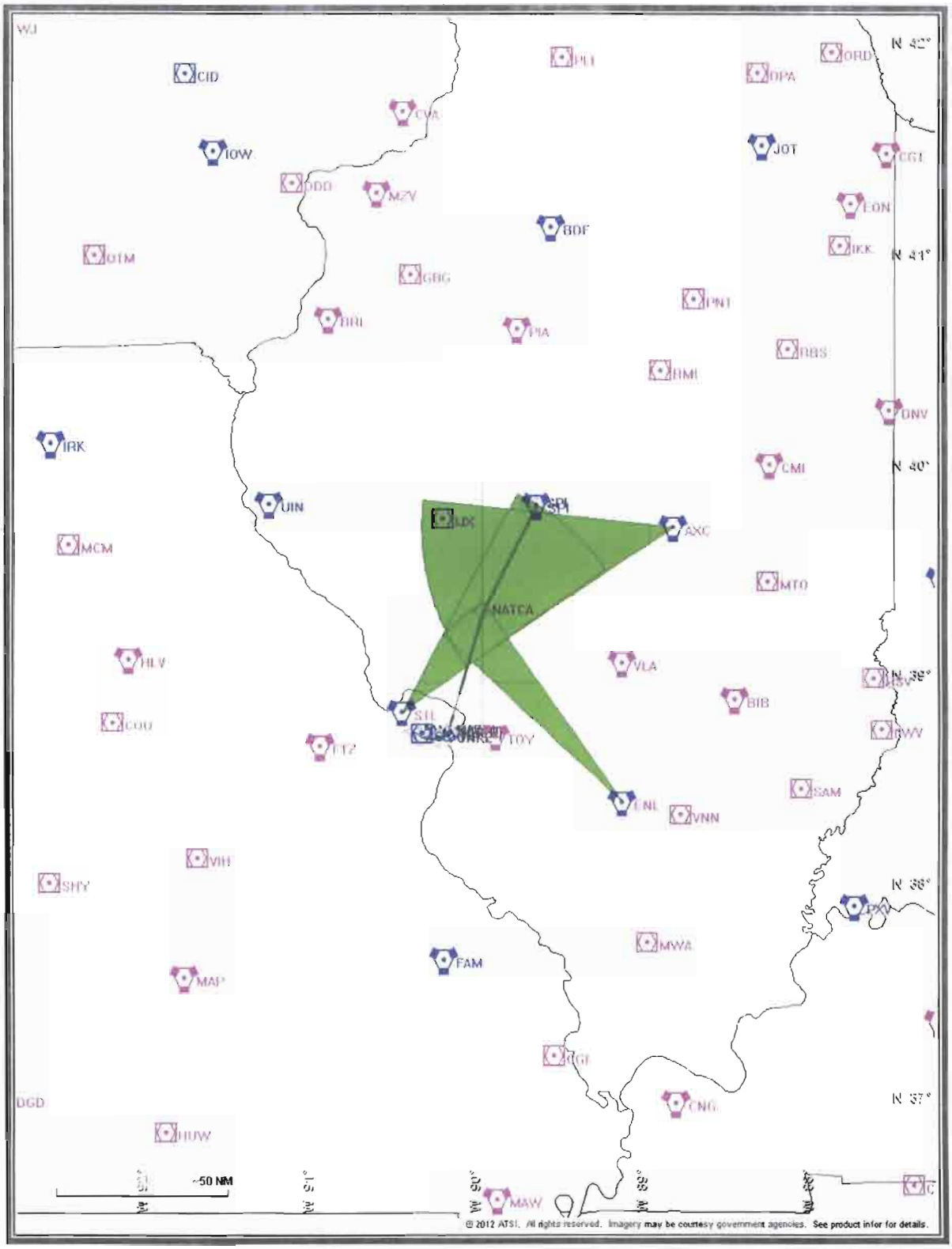
CID
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HLV
VLA
BIB
COU
TOY
VNN
SAM
VIH
SHY
FAM
MWA
MAP
CNG
DGD
HUW
MAW
N 42°
N 41°
N 40°
N 39°
N 38°
N 37°
~50 NM
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Flight Plan

Return To Summary

Name	Type	Lat/Lon	Alt [Ft]	VNAV Mode	IAS [Kts]	Turn Type	Leg Type
RW11(A...	WP	N 38° 45' 35.83" W 90° 24' 35.55"	618.0	VNAV	0.0	Fly Over	TF
RW29(D...	WP	N 38° 44' 48.46" W 90° 22' 59.39"	591.0	VNAV	130.0	Fly Over	VA
GH11:	WP	N 38° 44' 12.37" W 90° 21' 46.18"	1120.0	VNAV	145.0	Fly Over	DF
FUNKE	WP	N 38° 43' 39.26" W 90° 15' 35.58"	2500.0	VNAV	180.0	Fly By	TF
BEART	WP	N 38° 45' 35.04" W 90° 12' 39.30"	3100.0	VNAV	180.0	Fly By	TF
NATCA	WP	N 39° 20' 4.75" W 89° 59' 52.83"	10274.2	VNAV	180.0	Fly By	TF
SPI	WP	N 39° 50' 23.03" W 89° 40' 39.83"	17019.7	VNAV	210.0	Fly Over	TF

Climb Gradient: 500.0 Ft/NM up to 1120.0 Ft MSL

Flyability

Return To Summary

Settings:

Flight Type: Departure
Selected Airport: KSTL
Aircraft Category: Cat D
Climb Gradient: 500.0 Ft/NM up to 1120.0 Ft MSL
Ground Speeds:
Departure: **120.0 Kts** out to **10.0 NM**
Table:
200.0 Kts up to **29000.0 Ft.**
280.0 Kts up to **99900.0 Ft.**
Wind Settings: *None assigned*
Descent During a Turn: Allowed
VNAV Mode: Flight Plan

Flight Track comes into contact with terrain. Minimum AGL along route was -2.94 Ft.
Flight Track contacted terrain (DTED lvl 0 max) between AER and DER or within 2/3 NM of DER.

DME/DME

Return To Summary

Settings:

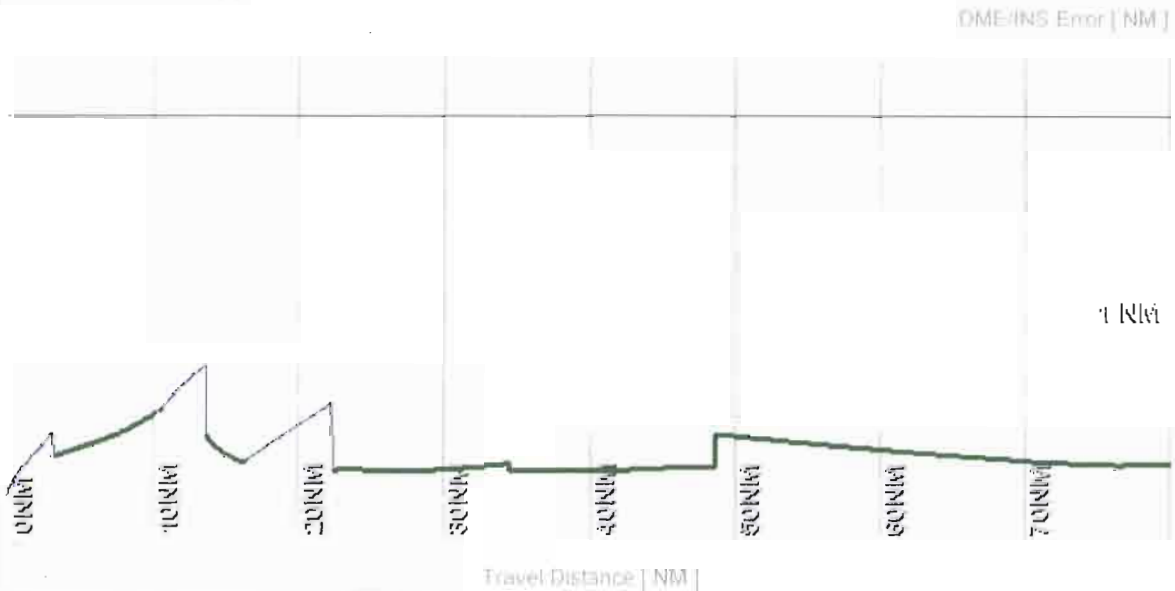
RNP: 2.0
Flight Mode: Manual
Line of Sight (DTED Level 0 Max): Evaluated
DME Restrictions: Evaluated
Inertial Drift: Enabled
Initial Drift: 0.165 NM
INS Drift Rate: 8.000 NM/Hour
Range Mode: OSV
Co-Frequencies: Evaluated
RNP Edges: Evaluated
Min DME Range: 3.0 NM
Allowed Gap Length: 4.0 NM
DME Types: VOR/DME , VORTAC , TACAN , and User
DME Include Angles: 30 to 150
Critical DMEs: Allowed
DoD Facilities: Not included
Foreign Facilities: Not included
Low & Terminal DMEs: Included
Flight Check DMEs: Selected
Higher Altitudes: Evaluated
Near Maximum Altitude: Evaluated
Minimum MSL DMEs Avail: 1839 Ft.

Total Number of DMEs Used: 9

Maximum DME Error: 0.713 NM.

No Critical DMEs were found.

Available DMEs: STL, FTZ, CSX, TOY, ENL, AXC, SPI, UIN, BDF



DME/DME (Continued.)

Return To Summary

DMEs Used

#	Name	Lat/Lon	Range	Source	Critical	Err. [NM]	Status	Time	Distance
1	STL	N 38° 51' 38.48" W 90° 28' 56.52"	H + ESV	User	NO	1.105	Enabled	34.5 %	33.1 %
2	FTZ	N 38° 41' 39.58" W 90° 58' 16.17"	L	Database	NO	1.105	Enabled	13.0 %	8.8 %
3	CSX	N 38° 45' 9.88" W 90° 21' 39.46"	H	Database	NO	1.064	Enabled	4.3 %	4.8 %
4	TOY	N 38° 44' 20.97" W 89° 55' 7.06"	L	Database	NO	1.548	Enabled	20.2 %	22.7 %
5	ENL	N 38° 25' 12.00" W 89° 9' 32.39"	H + ESV	User	NO	0.713	Enabled	13.3 %	15.0 %
6	AXC	N 39° 44' 15.08" W 88° 51' 23.15"	H + ESV	User	NO	1.325	Enabled	32.6 %	36.7 %
7	SPI	N 39° 50' 23.04" W 89° 40' 39.83"	H	Database	NO	0.713	Enabled	24.3 %	27.4 %
8	BDF	N 41° 9' 35.03" W 89° 35' 16.34"	H	Database	NO	0.713	Enabled	9.2 %	10.3 %
9	UIN	N 39° 50' 52.35" W 91° 16' 44.13"	H	Database	NO	0.713	Enabled	8.5 %	9.6 %

Flight Check DME Selection

Distance [NM]	Selected DMEs					Alternate
0.0						
1.5	STL					
2.5	STL	FTZ	CSX			
7.2	STL	FTZ	CSX			
10.2	STL	FTZ	CSX	TOY		
34.4	STL	ENL	CSX	TOY	AXC	SPI
46.0	STL	SPI	CSX	TOY	AXC	
68.0	UIN	SPI	ENL	BDF	AXC	STL

Inertial Drift Segments

#	Start Location	End Location	Length [NM]
1	N 38° 45' 35.83" W 90° 24' 35.55"	N 38° 44' 5.41" W 90° 21' 13.44"	3.1
	VOR: CSX	Available from N 38° 45' 35.83" W 90° 24' 35.55" to N 38° 44' 5.41" W 90° 21' 13.44"	
	VOR: FTZ	Available from N 38° 45' 35.83" W 90° 24' 35.55" to N 38° 44' 5.41" W 90° 21' 13.44"	
	VOR: STL	Available from N 38° 45' 35.83" W 90° 24' 35.55" to N 38° 44' 5.41" W 90° 21' 13.44"	
	VOR: TOY	Available from N 38° 45' 35.83" W 90° 24' 35.55" to N 38° 44' 5.41" W 90° 21' 13.44"	

DME/DME (Continued.)

Return To Summary

Inertial Drift Segments (Continued.)

#	Start Location	End Location	Length [NM]
2	N 38° 45' 16.92" W 90° 13' 6.80"	N 38° 45' 28.61" W 90° 12' 49.30"	0.3
	VOR: CSX	Available from N 38° 45' 16.92" W 90° 13' 6.80" to N 38° 45' 28.61" W 90° 12' 49.30"	
	VOR: FTZ	Available from N 38° 45' 16.92" W 90° 13' 6.80" to N 38° 45' 28.61" W 90° 12' 49.30"	
	VOR: STL	Available from N 38° 45' 16.92" W 90° 13' 6.80" to N 38° 45' 28.61" W 90° 12' 49.30"	
	VOR: TOY	Available from N 38° 45' 16.92" W 90° 13' 6.80" to N 38° 45' 28.61" W 90° 12' 49.30"	
3	N 38° 45' 34.64" W 90° 12' 42.59"	N 38° 48' 33.25" W 90° 11' 33.70"	3.1
	VOR: CSX	Available from N 38° 45' 34.64" W 90° 12' 42.59" to N 38° 48' 33.25" W 90° 11' 33.70"	
	VOR: FTZ	Available from N 38° 45' 34.64" W 90° 12' 42.59" to N 38° 48' 33.25" W 90° 11' 33.70"	
	VOR: STL	Available from N 38° 45' 34.64" W 90° 12' 42.59" to N 38° 48' 33.25" W 90° 11' 33.70"	
	VOR: TOY	Available from N 38° 45' 34.64" W 90° 12' 42.59" to N 38° 48' 33.25" W 90° 11' 33.70"	
4	N 38° 51' 4.65" W 90° 10' 38.03"	N 38° 56' 57.34" W 90° 8' 28.06"	6.1
	VOR: CSX	Available from N 38° 51' 4.65" W 90° 10' 38.03" to N 38° 56' 57.34" W 90° 8' 28.06"	
	VOR: FTZ	Available from N 38° 51' 4.65" W 90° 10' 38.03" to N 38° 53' 54.59" W 90° 9' 35.45"	
	VOR: STL	Available from N 38° 51' 4.65" W 90° 10' 38.03" to N 38° 56' 57.34" W 90° 8' 28.06"	
	VOR: TOY	Available from N 38° 51' 4.65" W 90° 10' 38.03" to N 38° 56' 57.34" W 90° 8' 28.06"	

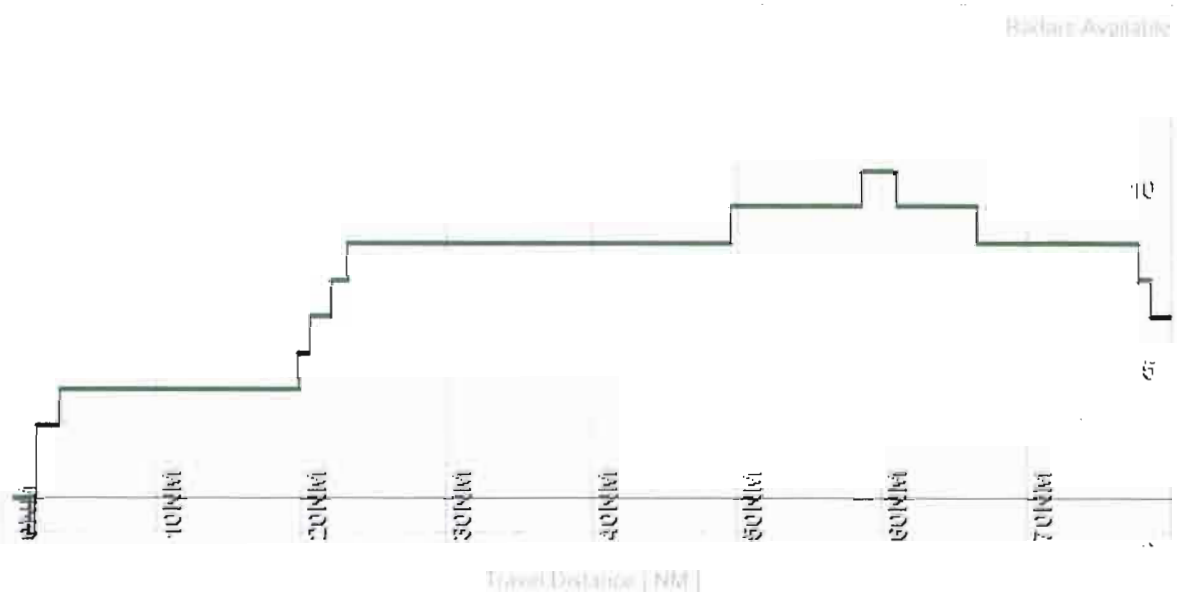
DME/DME (Continued.)

Return To Summary

User DMEs

#	Name	Lat/Lon	Range	Elevation [Ft]	Frequency	Replaces:	Status
1	AXC	N 39° 44' 15.08" W 88° 51' 23.15"	H	707.5	117.20	AXC	Used
		ESV: Bearing [True]: 236.0° to 277.0° Bearing [Mag]: 233.0° to 274.0°			Arc Distance: Out to 70.0 NM Altitude: 6000.0 to 17000.0 Ft.		
2	STL	N 38° 51' 38.48" W 90° 28' 56.52"	H	449.5	117.40	STL	Used
		ESV: Bearing [True]: 27.0° to 54.0° Bearing [Mag]: 26.0° to 53.0°			Arc Distance: Out to 70.0 NM Altitude: 6000.0 to 17000.0 Ft.		
3	ENL	N 38° 25' 12.00" W 89° 9' 32.39"	H	545.8	115.00	ENL	Used
		ESV: Bearing [True]: 314.0° to 326.0° Bearing [Mag]: 310.0° to 322.0°			Arc Distance: Out to 70.0 NM Altitude: 6000.0 to 17000.0 Ft.		

Radar Analysis

Return To Summary

Settings: **Radar Types:** ARSR and ASR