

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
Distances are in nautical miles (NM). Graphic depictions attached.

Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
TTHOR (RNAV)	TWO	TTHOR.TTHOR2	ONE	04/22/2021	2 DEC 2021

TRANSITION ROUTES:

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
KYLEG	KYLEG.TTHOR2	KYLEG	KYLEG						
			JAGGZ	154.04	38.56	10000	2000		AT/ABOVE FL240
			WEEEEK	181.94	21.06	10000	1400		AT/ABOVE 16000
			TTHOR	183.18	15.40	5000	1400		AT 12000
LPERD	LPERD.TTHOR2	LPERD	LPERD						
			JAGGZ	182.46	19.73	10000	1400		AT/ABOVE FL240
			WEEEEK	181.94	21.06	10000	1400		AT/ABOVE 16000
			TTHOR	183.18	15.40	5000	1400		AT 12000

ARRIVAL ROUTE DESCRIPTION:

LANDING KEVB/KOMN/KDAB/KDED/KX50/7FL6: FROM TTHOR ON TRACK 162.80/9.23 TO CROSS BIKEZ AT 10000, THEN ON TRACK 164.62. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KSFB/KLEE/KORL: FROM TTHOR ON TRACK 182.22/17.69 TO CROSS OWEDN BETWEEN 8000 AND 11000 AND AT 250 KIAS, THEN ON TRACK 182.91/7.28 TO CROSS THANO BETWEEN 7000 AND 9000, THEN ON TRACK 181.60/7.72 TO CROSS RAGNR AT OR BELOW 7000, THEN ON TRACK 184.51/5.56 TO CROSS LOKII AT 5000, THEN ON TRACK 199.92/6.61 TO CROSS MUNKZ AT 5000 AND AT 210 KIAS, THEN ON TRACK 201.10. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

PBN REQUIREMENT NOTES

RNAV 1 - DME/DME/IRU OR GPS

EQUIPMENT REQUIREMENT NOTES

RADAR REQUIRED

PROCEDURAL DATA NOTES:

NOTE: Expect "descend via" clearance from ARTCC.

NOTE: Landing KORL, KSFB and KLEE, Expect RADAR Vectors prior to MUNKZ.

NOTE: Landing KEVB/KOMN/KDAB/KDED/KX50/7FL6 Expect RADAR Vectors prior to BIKEZ.

NOTE: JET and TURBOPROP AIRCRAFT ONLY.

FIXES AND/OR HOLDING PATTERNS:

CHART HOLDING AT LPERD: HOLD N, RT, 194.35 INBOUND, 10 NM LEGS.

CHART HOLDING AT WEEEEK: HOLD N, LT, 181.94 INBOUND, 10 NM LEGS.

COMMUNICATIONS:

CHART: ORLANDO APP CON

CHART: DAYTONA APP CON

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AIRPORTS SERVED:

EXECUTIVE, ORLANDO, FL (KORL)
LEESBURG INTL, LEESBURG, FL (KLEE)
ORLANDO SANFORD INTL, ORLANDO, FL (KSFB)
SPRUCE CREEK, DAYTONA BEACH, FL (7FL6)
DAYTONA BEACH INTL, DAYTONA BEACH, FL (KDAB)
DELAND MUNI-SIDNEY H TAYLOR FLD, DELAND, FL (KDED)
NEW SMYRNA BEACH MUNI, NEW SMYRNA BEACH, FL (KEVB)
ORMOND BEACH MUNI, ORMOND BEACH, FL (KOMN)
MASSEY RANCH AIRPARK, NEW SMYRNA BEACH, FL (KX50)

LOST COMMUNICATIONS PROCEDURE:

REMARKS:

ENVIRONMENTAL REVIEW UNDER ORDER 1050.1 (LATEST EDITION) AND THE NOISE SCREENING HAVE BEEN ACCOMPLISHED.

ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0)
REFERENCE MAGNETIC VARIATION = KSFB 05W/2000
CHART AT MUNKZ TERMINUS: KSFB/KLEE/KORL
CHART AT BIKEZ TERMINUS: KEVB/KOMN/KDAB/KDED/KX50/7FL6

FLIGHT INSPECTED BY:

MATTHEW R BUFORD
Name

FPO
Organization

09/21/2021
Date

Digitally signed by

JOHN BORDY

Sep 23, 2021 Signature

DEVELOPED BY:

VICKI TURNER
Name

DESIGN IMPLEMENTATION MANAGER
AJV22
Organization

05/10/2021
Date

Digitally signed by

JOHN BORDY

Sep 23, 2021 Signature

APPROVED BY:

MARLON ROBINSON
Name

MANAGER AJV-A420
Organization

Date

Digitally signed by

JOHN BORDY

Sep 23, 2021 Signature

CHANGES:

1. ADDED AIRPORTS KDAB, KOMN, KEVB, KDED, 7FL6, KX50 TO STAR.
2. REMOVED WANGU AND RNMAN WAYPOINTS AND ADDED JAGGZ AND WEECK TO KYLEG/LPERD TRANSITIONS; MOCA VALUES (EXCEPT JAGGZ) TO READ 1400.

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3. ADDED CROSSING ALTITUDES TO ALL TRANSITION ROUTE FIXES, ADDED 280 KIAS TO JAGGZ.
4. ADDED COMMON ROUTE TRANSITION, TERMINUS WAYPOINT BIKEZ, AND ARRIVAL ROUTE DESCRIPTION TO SERVE KDAB, KOMN, KEVB, KDED, 7FL6, KX50 ARRIVALS.
5. MOVED LOKII, TTHOR and RAGNR WAYPOINTS AND UPDATED TF COURSE/DISTANCE.
6. UPDATED KSFB/KLEE/KORL ARRIVAL: CROSS OWEDN FROM AT/BELOW 11000 TO BETWEEN 8000 AND 11000; CROSS THANO FROM AT/BELOW 9000 TO BETWEEN 7000 AND 9000.
7. CHANGED NOTE 'Landing ORL, SFB and LEE, Expect RADAR Vectors prior to MUNKZ' TO 'Landing KORL, KSFB and KLEE, Expect RADAR Vectors prior to MUNKZ.'
8. ADDED NOTE: Landing KDAB, KOMN, KEVB, KDED, 7FL6, KX50, Expect RADAR Vectors prior to BIKEZ.
9. ADDED HOLDING AT WEECK: HOLD N, LT, 181.94 INBOUND, 10 NM LEGS.

REASONS:

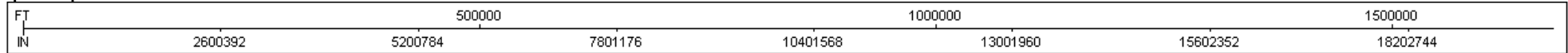
1. ATC REQUESTED.
- 2, 3. PROVIDES MORE PREDICTABLE ROUTING AND CONTROLLED DESCENT. MOCA INCREASES PER MEMO Clarification to FAA Order 8260.19, Flight Procedures and Airspace, STAR MOCA Documentation 07/01/2021.
4. TO SERVICE NEWLY ADDED AIRPORTS.
- 5, 6. PROTECT AIRSPACE BOUNDARIES.
7. TO AVOID CONFUSION BETWEEN THREE LETTER AND FOUR LETTER IDENTIFIERS AND MATCHES THE OTHER LANDING NOTE.
8. ASSOCIATED WITH ADDED TRANSITION ROUTE TO BIKEZ.
9. REPLACES ARRIVAL HOLDING AT RNMAN.

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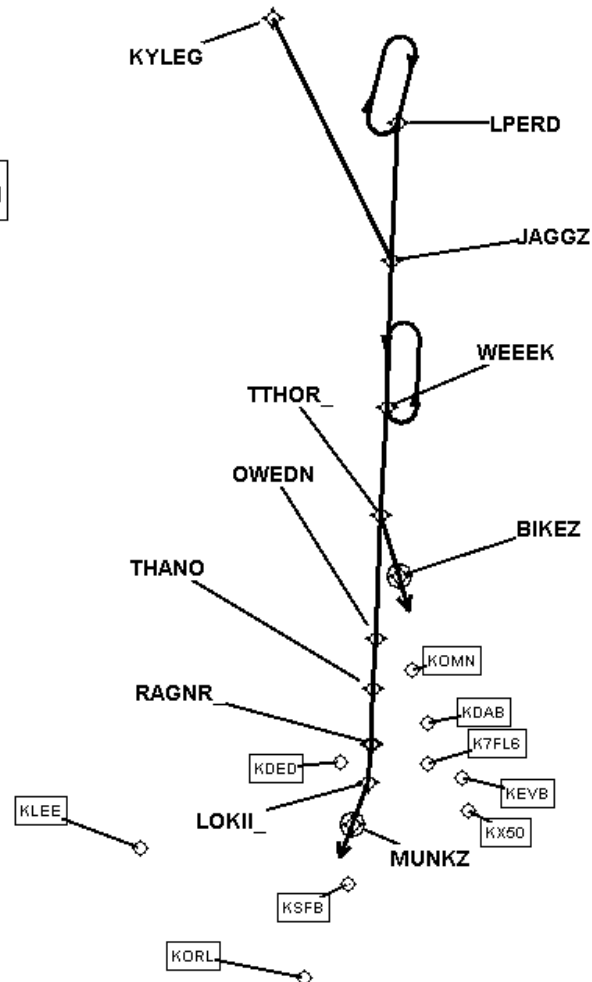
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Graphic Depiction 1



TTHOR (RNAV)

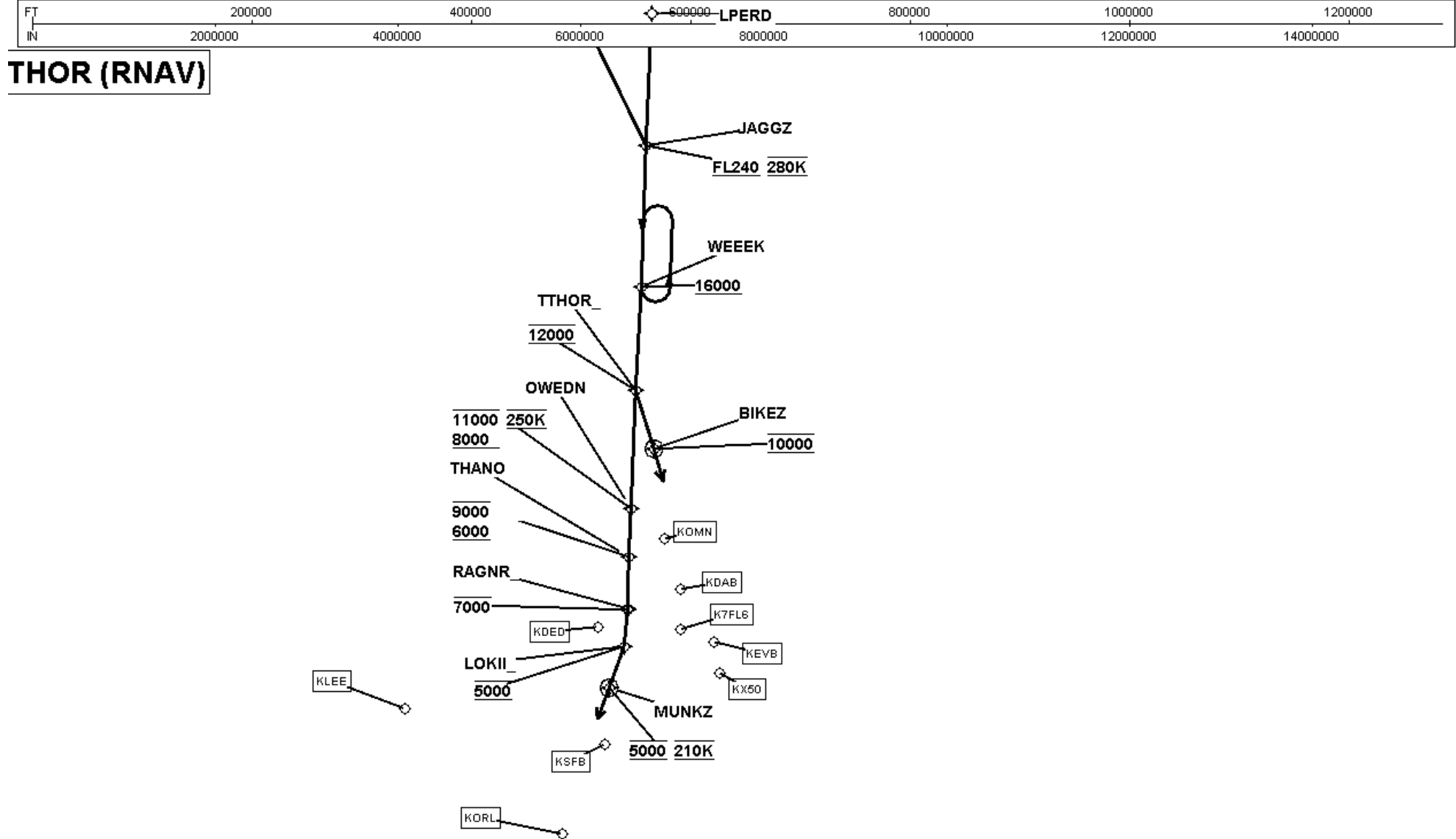


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Graphic Depiction 2

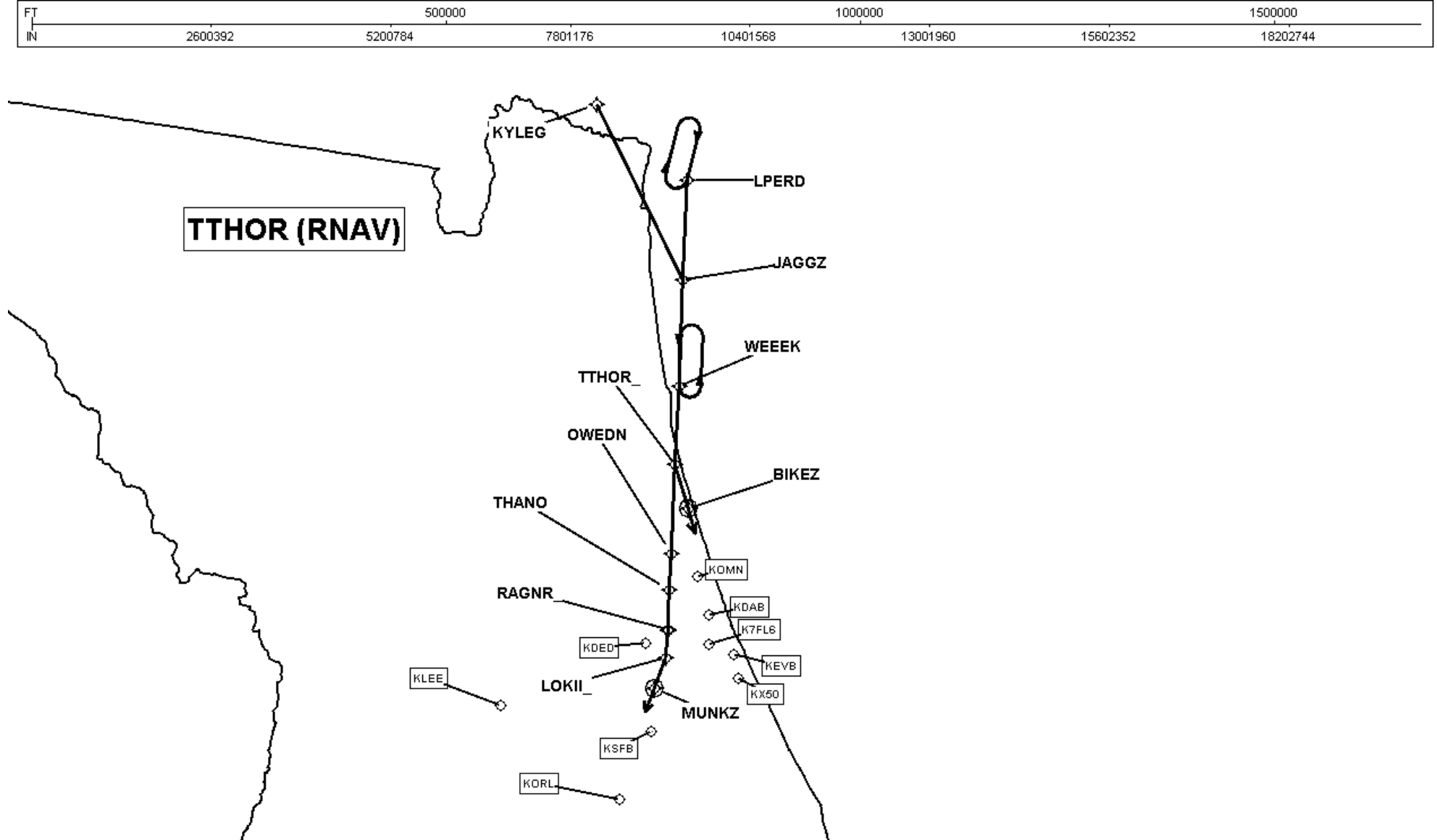


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Graphic Depiction 3



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STAR (DATA RECORD)

Arrival Name TTHOR (RNAV)		Number TWO		STAR Computer Code TTHOR.TTHOR2		Superseded Number ONE		Dated 04/22/2021	Effective Date 2 DEC 2021
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
En Route Transition									
KYLEG	304934.41N / 0813845.92W	Y		IF					KYLEG.TTHOR2
JAGGZ	301623.63N / 0811551.49W	Y	FB	TF	149.04	38.56	AT/ABOVE FL240	AT 280K	
WEEEEK	295518.81N / 0811433.77W	Y	FB	TF	176.94	21.06	AT/ABOVE 16000		
TTHOR	293953.20N / 0811400.03W	Y	FB	TF	178.18	15.40	AT 12000		
En Route Transition									
LPERD	303609.18N / 0811652.16W	Y		IF					LEPRD.TTHOR2
JAGGZ	301623.63N / 0811551.49W	Y	FB	TF	177.46	19.73	AT/ABOVE FL240	AT 280K	
WEEEEK	295518.81N / 0811433.77W	Y	FB	TF	176.94	21.06	AT/ABOVE 16000		
TTHOR	293953.20N / 0811400.03W	Y	FB	TF	178.18	15.40	AT 12000		
Common Route									
TTHOR	293953.20N / 0811400.03W	Y		IF			AT 12000		TTHOR.TTHOR2
BIKEZ	293119.02N / 0811000.11W	Y	FO	TF	157.80	09.23	AT 10000		
7FL6,KDAB,KDED, KEVB,KOMN,KX50				FM	159.62				
Common Route									
TTHOR	293953.20N / 0811400.03W	Y		IF			AT 12000		TTHOR.TTHOR2
OWEDN	292210.25N / 0811301.08W	Y	FB	TF	177.22	17.69	8000B11000	AT 250K	
THANO	291452.60N / 0811242.88W	Y	FB	TF	177.91	07.28	7000B9000		
RAGNR	290708.75N / 0811211.54W	Y	FB	TF	176.60	07.72	AT/BELOW 7000		
LOKII	290134.32N / 0811208.31W	Y	FB	TF	179.51	05.56	AT 5000		
MUNKZ	285510.17N / 0811404.69W	Y	FO	TF	194.92	06.61	AT 5000	AT 210K	
KLEE,KORL,KSFB				FM	196.10				

QUALITY
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CHECKED