

Flight Procedures Cover Page	Task Action: FLIGHT CHECK	Task Type: STAR	Estimated Chart Date: 01/22/2026	APWS Task ID: 17B62156F84648C288D13A156D5E56DA	APWS Project ID: 9332F0DD6BC64500A3AFAEB42203A35A
Procedure: STAR OUTLA ONE (RNAV) NORFOLK VA KORF		Enroute: YES	Specialist: Bradshaw, Henry		Agreement Number:
Airport ID: KORF			Airport City: NORFOLK		State: VA
Facility ID:	Facility Type:	Flight Inspection Remark Type: New FC Slot			

Procedure Comments:
ESTABLISH OUTLA (RNAV) STAR

ACTIVE DATA USED

CONTACT: CASEY HILL (AJV-A421) 405-954-0624

WAIVER (1): NO ALT IN COMMON ROUTE.



08/20/2025



FIPC DME/DME FORM

PROCEDURE: OUTLA (RNAV) ONE ARRIVAL		AIRPORT NAME: NORFOLK INTL		AIRPORT ID: KORF	SPECIAL CONTROL NO: YG-10-073-25
FAC ID: OUTLA1		CITY: NORFOLK		ST: VA	ORIG CHART DATE: 01/22/2026
DFL TYPE: PROC/D	THIRD PARTY: <input type="checkbox"/> YES	EST. TIME ON SITE: 1.0	REIMB. NUMBER: AC0721	PTS TASK ID: 17B62156F84648C288D13A156D5E56DA	

PREFLIGHT NOTES

REVIEWER:	DATE:
COMMENTS:	CHECK ONE: <input type="checkbox"/> FLT CK REQ <input type="checkbox"/> NFCR <input type="checkbox"/> REJECT
	<input type="checkbox"/> YES <input type="checkbox"/> NO
	CPV COMPLETE? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

PROCEDURE RESULTS

INSPECTION DATE: 11/07/2025	CREW #: VN497	N #: N92	INSTRUMENT PROCEDURE STATUS: <input checked="" type="checkbox"/> SAT <input type="checkbox"/> SAT W/CHANGES <input type="checkbox"/> UNSAT	ARINC CODING: <input checked="" type="checkbox"/> SAT <input type="checkbox"/> SAT/GOLD <input type="checkbox"/> UNSAT
FLIGHT INSPECTOR SIGNATURE: craig larson @ 11/07/2025 13:22		PRINTED NAME: LARSON, CRAIG RUSSELL		NOTAM INITIATED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

FLIGHT INSPECTOR REMARKS:

DME/DME STATUS: <input type="checkbox"/> SAT <input type="checkbox"/> UNSAT	SPECIALIST SIGNATURE:	PRINTED NAME:
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SPECIALIST REMARKS:

IN-FLIGHT OBSTACLE REPORT

OBSTRUCTION ID #:	COORDINATES OR LOCATION:	GNSS ALTITUDE (MSL):	BAROMETRIC ALTITUDE (MSL):	HEIGHT ABOVE GROUND LEVEL:
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ARRIVAL ROUTE DESCRIPTION

COLIN TRANSITION (COLIN.OUTLA1)

EWOOD TRANSITION (EWOOD.OUTLA1)

FLAT ROCK TRANSITION (FAK.OUTLA1)

HARCUM TRANSITION (HCM.OUTLA1)

JAMIE TRANSITION (JAMIE.OUTLA1)

MAULS TRANSITION (MAULS.OUTLA1)

TBONN TRANSITION (TBONN.OUTLA1)

TRPOD TRANSITION (TRPOD.OUTLA1)

LANDING ALL AIRPORTS: From OUTLA on track 180° to MEEKA, then on track 180°. Expect RADAR vectors to final approach course.

PROTOTYPE-NOT FOR NAVIGATION

1. FLIGHT PROCEDURE IDENTIFICATION:

NORFOLK, VA
ORF
OUTLA ARRIVAL (RNAV)

2. WAIVER REQUIRED AND APPLICABLE STANDARD:

Do not publish or code any altitudes on the procedure. Per 8260.3F, para 2-2-7e. Common route and runway transitions. Establish a mandatory, minimum or block altitude restriction at a fix that represents the lowest altitude authorized by the STAR or STAR runway transition.

3. REASON FOR WAIVER (JUSTIFICATION FOR NONSTANDARD TREATMENT):

a. The OUTLA STAR serves multiple airports and runway configurations within Norfolk TRACON airspace and utilizes varying altitude restrictions to all airports based on dynamic traffic situations. Additionally, the procedure authorizes differing aircraft types, thus introducing different performance characteristics from one aircraft to another. The OUTLA STAR is not a descend via procedure and ATC will issue CROSS (FIX) AT AND MAINTAIN or DESCEND AND MAINTAIN clearances to control the flow of traffic.

b. Coding the procedure with an altitude on the common route that serves multiple airports with mixed aircraft types and differing performance characteristics may cause confusion and additional workload when the issued altitude is different from the coded restriction on the procedure. Coding two different altitudes on one procedure based on aircraft type is not allowed per design criteria.

4. EQUIVALENT LEVEL OF SAFETY PROVIDED:

a. FAAO 7110.65, paragraph 4-5-6 and 5-6-1 requires altitude assignments above the minimum IFR altitude/minimum vectoring altitude (MIA/MVA).

b. With RADAR required and ATC issuing a "CROSS (FIX) AT AND MAINTAIN" or "DESCEND AND MAINTAIN" clearance for all aircraft ensures the requirements are met. These altitudes provide obstacle clearance, communication, and navigable facility requirements for aircraft to utilize. When radio communications are in use, ATC will provide appropriate altitudes as specified in the ZDC/ORF Letter of Agreement for separation, including obstacle clearance.

c. The MVA at the termination fix (MEEKA) is 1700 ft MSL. The lowest altitude that will be assigned by ATC at MEEKA is 3000 ft MSL.

5. ALTERNATIVE ACTIONS DEEMED NOT FEASIBLE:

Designing a STAR with coded altitudes was considered and deemed not feasible. Establishing coded altitudes on the STAR common route restricts ATC ability to dynamically assign altitudes based upon the traffic scenarios. A procedure with one coded altitude restriction on the common route that authorizes mixed aircraft performance characteristics and numerous airports of intended landing may create pilot confusion and questions resulting in a significant workload increase for ATC and pilots.

6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):

Eastern Service Area Flight Procedures Team PBN FAA and NATCA leads.
Washington ARTCC (ZDC)
Norfolk TRACON (ORF)
Delta Air Lines, American Airlines, United Airlines, Southwest Airlines

7. SUBMITTED BY:

DATE OFFICE IDENTIFICATION TITLE

SIGNATURE

8. AFS ACTIONS:

APPROVED DISAPPROVED NOT REQUIRED

Digitally signed by
ROBERT G HAMILTON
Aug 21, 2025

COMMENTS:

DATE **ROUTING SYMBOL** **SIGNATURE**



Federal Aviation Administration

Memorandum

Date: July 18, 2023

To: Instrument Flight Procedures Service Providers
WADE EK
TERRELL

From: Eric S. Parker, Acting Manager, Flight Technologies and Procedures
Division

Subject: Waiver to FAA Order 8260.3, United States Standard for Terminal
Instrument Procedures (TERPS), STAR Termination Altitude

Digitally signed by WADE
EK TERRELL
Date: 2023.07.18 10:10:39
-05'00'

This memorandum waives the requirement of FAA Order 8260.3 paragraph 2-2-7.f(2) for Flight Standards approval when, due to an operational need, an altitude is not established at the termination fix on a STAR that does not join an approach.

Establishing an altitude at the termination fix on STAR that does not join an approach is beneficial for arrival descent planning purposes and is highly encouraged where practical. We recommend consulting Flight Standards, Flight Procedures and Airspace Group early in the design phase to assist in understanding how an altitude at a termination fix benefits operators.

No additional waiver request action is required. Please direct all inquiries to the Flight Procedures and Airspace Group, Standards Section (405) 954-1139 or 9-AWA-AVS-AFS420@faa.gov.



Federal Aviation Administration

Memorandum

Date:

To: Instrument Flight Procedures Service Providers

From: Eric S. Parker, Acting Manager, Flight Technologies and Procedures
Division

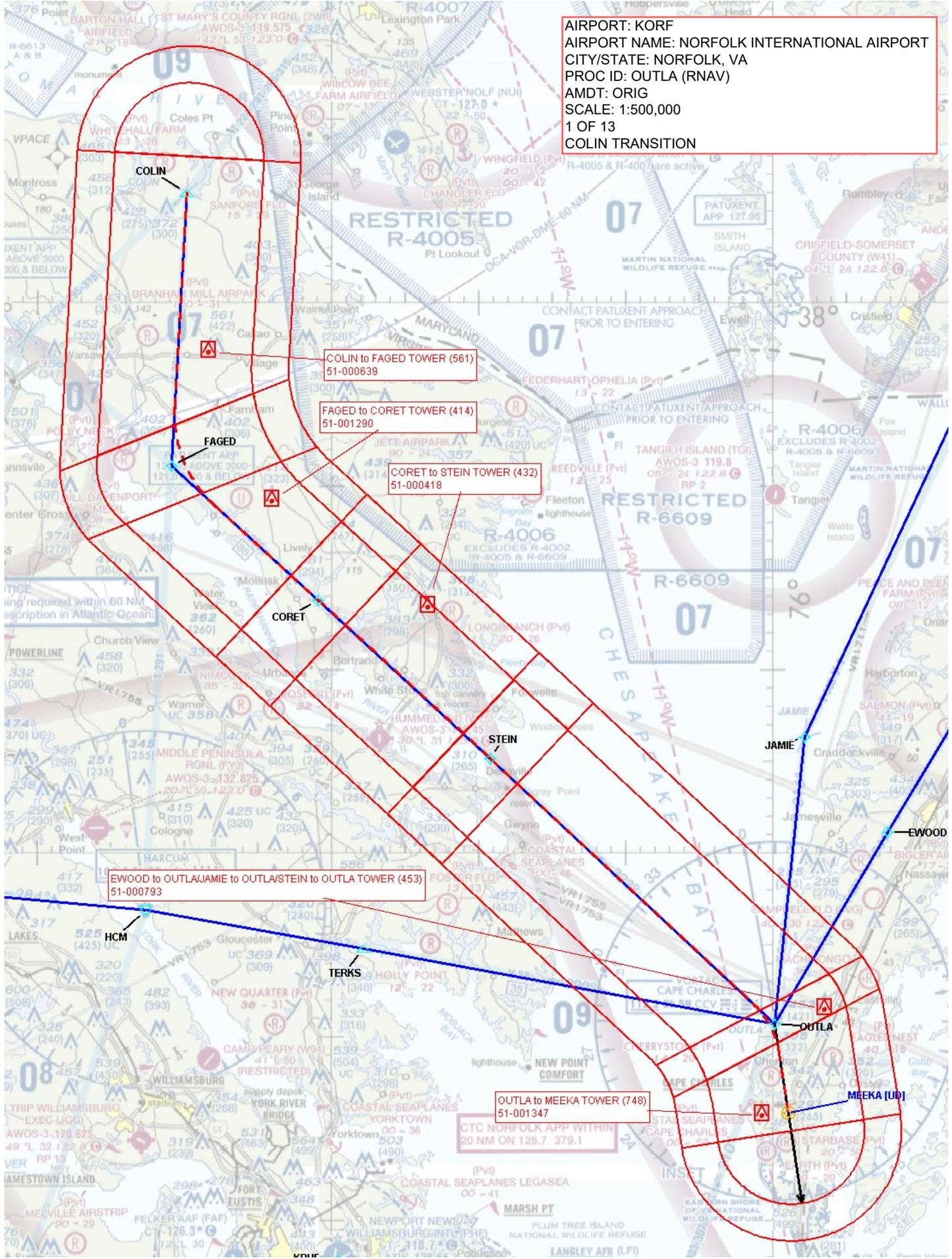
Subject: Waiver to FAA Order 8260.19, Flight Procedures and Airspace, STAR
Termination Altitude

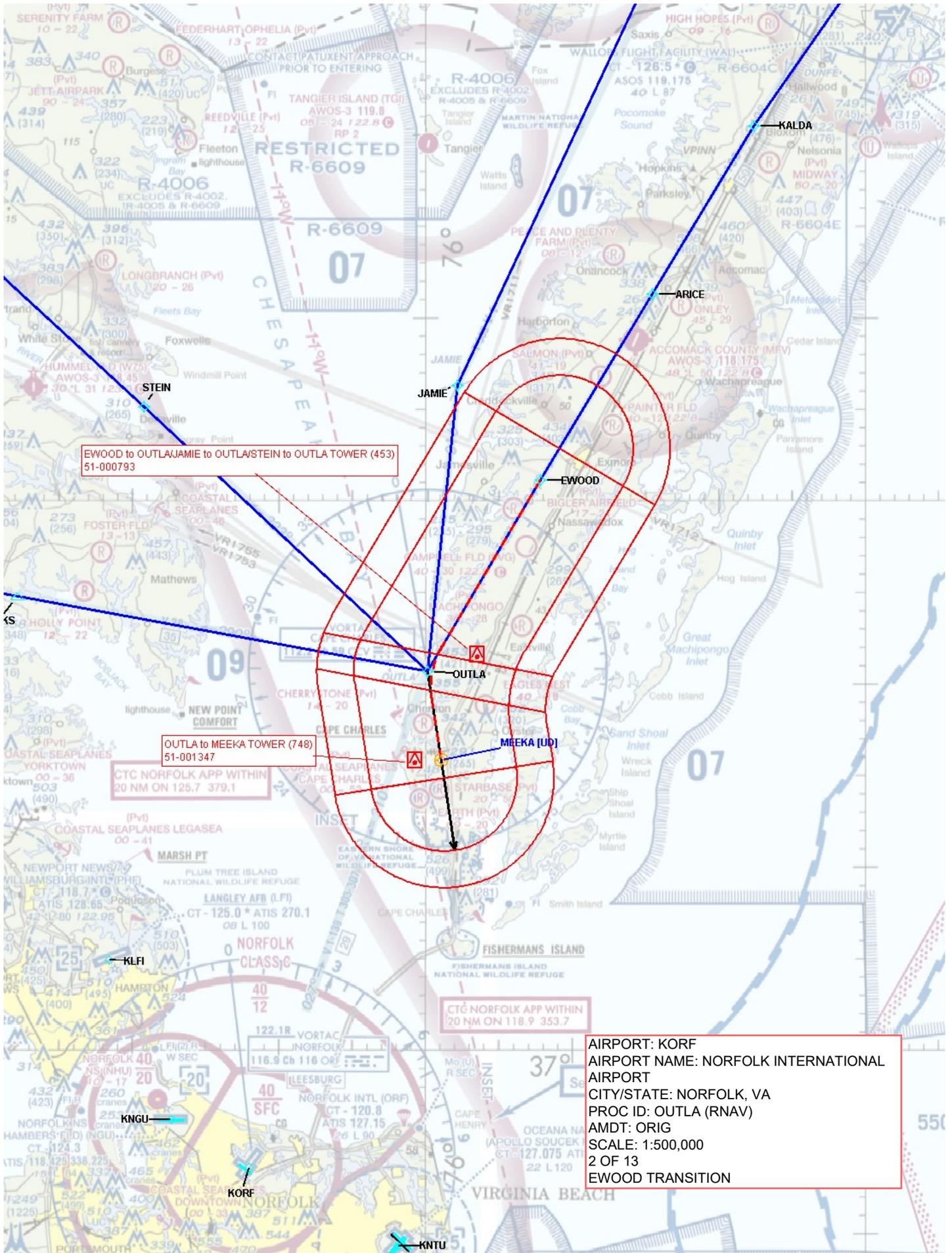
This memorandum waives the requirement of FAA Order 8260.19 paragraph 4-5-2.j for an altitude to be specified at the termination fix at the STAR termination point [see memo dated July 18, 2023, subject: Waiver to FAA Order 8260.3, paragraph 2-2-7.f(2)].

When no altitude is specified at that fix, the lowest altitude that will be assigned by air traffic control at the termination fix must be used for descent gradient and obstacle clearance calculations and noted in the Remarks section of Form 8260-17.1. Example: LOWEST ASSIGNED ATC ALTITUDE AT GIZMO, 3000.

No additional waiver request action is required. Please direct all inquiries to the Flight Procedures and Airspace, Standards Section (405) 954-1139 or 9-AWA-AVS-AFS420@faa.gov.

AIRPORT: KORF
AIRPORT NAME: NORFOLK INTERNATIONAL AIRPORT
CITY/STATE: NORFOLK, VA
PROC ID: OUTLA (RNAV)
AMDT: ORIG
SCALE: 1:500,000
1 OF 13
COLIN TRANSITION





EWOOD to OUTLA/JAMIE to OUTLA/STEIN to OUTLA TOWER (453)
51-000793

OUTLA to MEEKA TOWER (748)
51-001347

CTC NORFOLK APP WITHIN
20 NM ON 125.7 379.1

CTC NORFOLK APP WITHIN
20 NM ON 118.9 353.7

AIRPORT: KORF
AIRPORT NAME: NORFOLK INTERNATIONAL
AIRPORT
CITY/STATE: NORFOLK, VA
PROC ID: OUTLA (RNAV)
AMDT: ORIG
SCALE: 1:500,000
2 OF 13
EWOOD TRANSITION

AIRPORT: KORF
AIRPORT NAME: NORFOLK INTERNATIONAL AIRPORT
CITY/STATE: NORFOLK, VA
PROC ID: OUTLA (RNAV)
AMDT: ORIG
SCALE: 1:500,000
3 OF 13
FAK TRANSITION

NOTICE
Special awareness training required within 60 NM
of DCA VOR-DME. See description in Atlantic Ocean.

CTC NORFOLK APP WITHIN
20 NM ON 126.4 379.1

RUSSEL to HCM TOWER (633)
51-001514

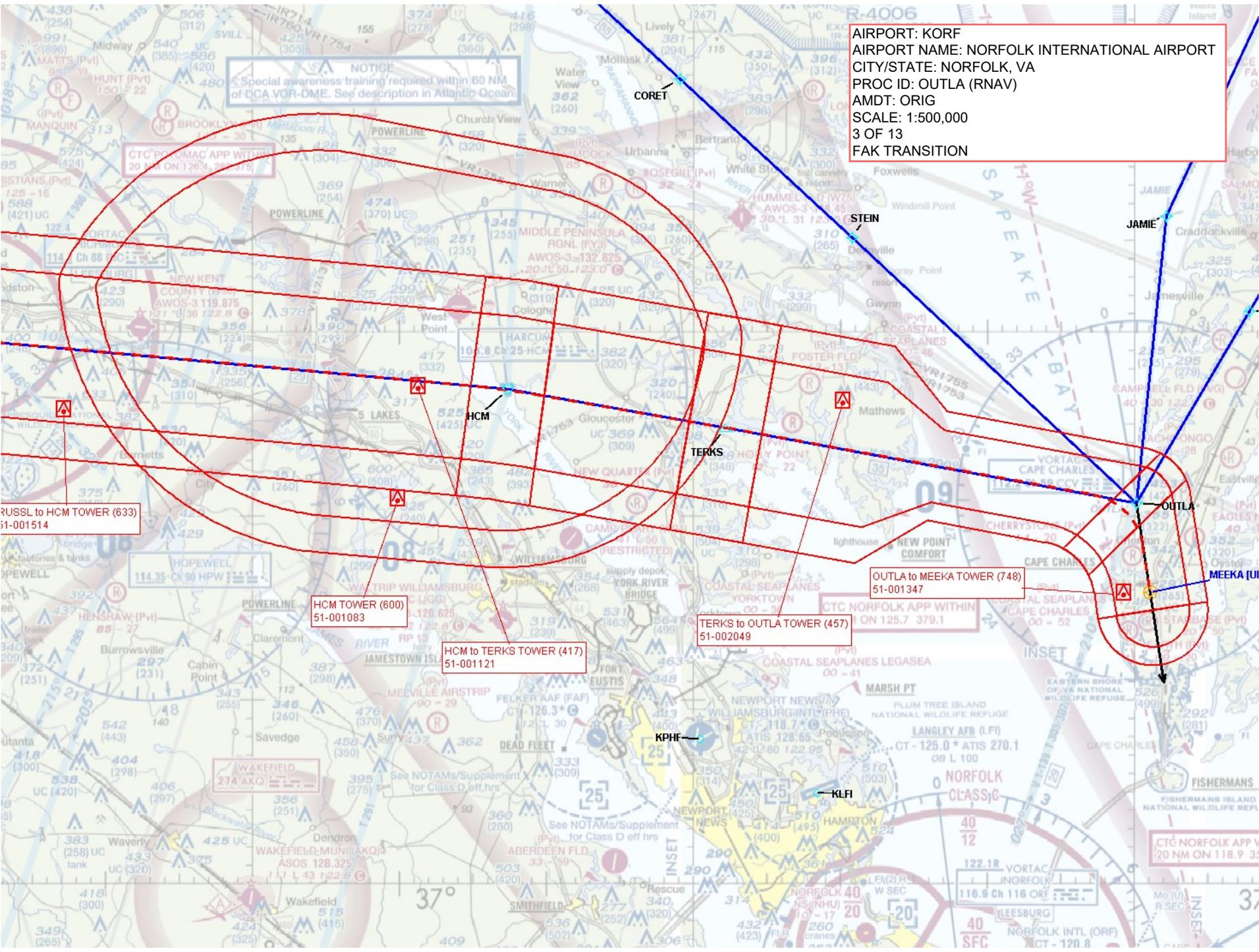
HCM TOWER (600)
51-001083

HCM to TERKS TOWER (417)
51-001121

TERKS to OUTLA TOWER (457)
51-002049

OUTLA to MEEKA TOWER (748)
51-001347

CTC NORFOLK APP V
20 NM ON 118.9 379.1



AIRPORT: KORF
AIRPORT NAME: NORFOLK INTERNATIONAL AIRPORT
CITY/STATE: NORFOLK, VA
PROC ID: OUTLA (RNAV)
AMDT: ORIG
SCALE: 1:500,000
6 OF 13
JAMIE TRANSITION

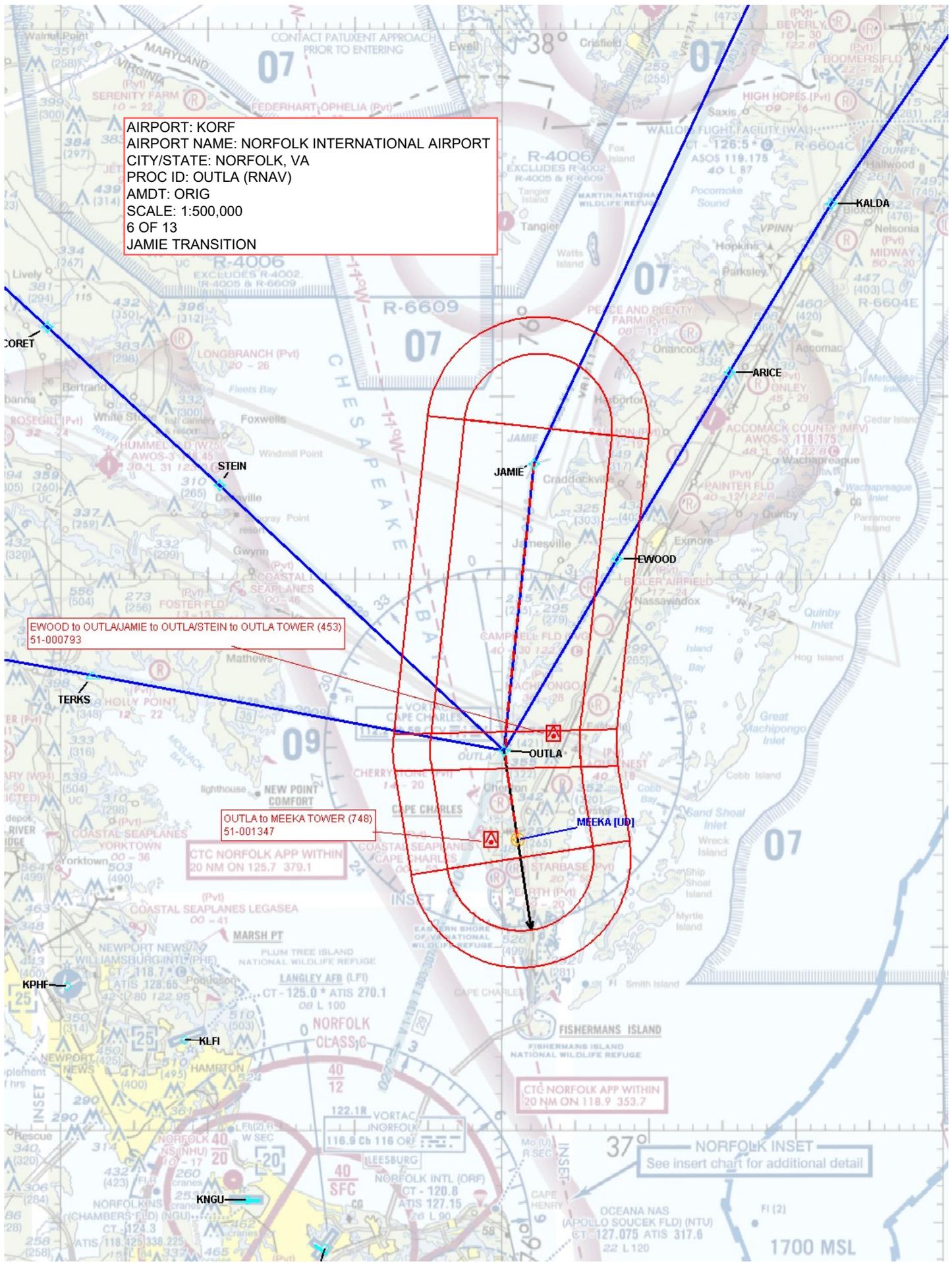
EWOOD to OUTLA/JAMIE to OUTLA/STEIN to OUTLA TOWER (453)
51-000793

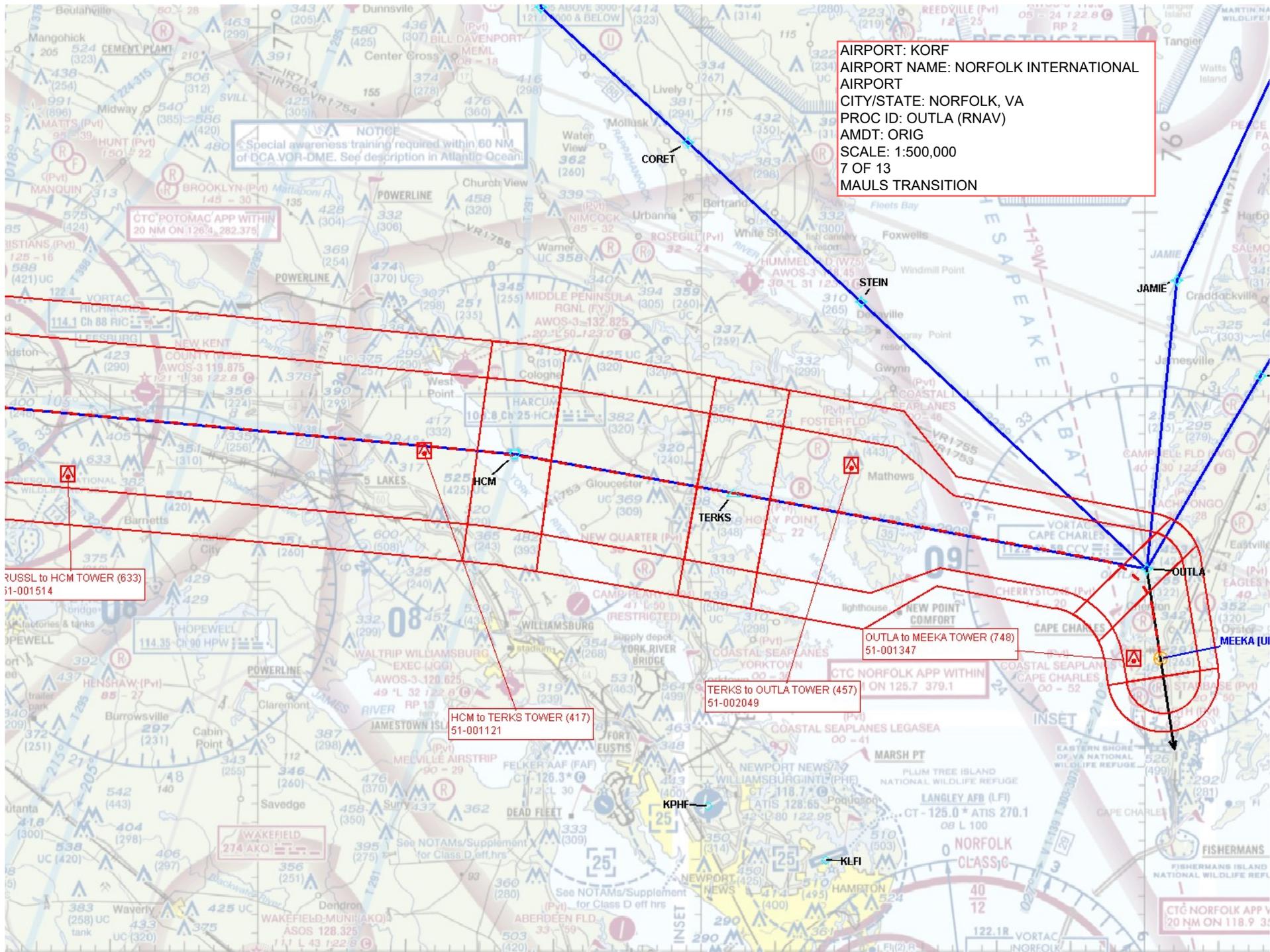
OUTLA to MEEKA TOWER (748)
51-001347

CTC NORFOLK APP WITHIN
20 NM ON 125.7 379.1

CTC NORFOLK APP WITHIN
20 NM ON 118.9 353.7

NORFOLK INSET
See insert chart for additional detail





AIRPORT: KORF
AIRPORT NAME: NORFOLK INTERNATIONAL AIRPORT
CITY/STATE: NORFOLK, VA
PROC ID: OUTLA (RNAV)
AMDT: ORIG
SCALE: 1:500,000
7 OF 13
MAULS TRANSITION

NOTICE
Special awareness training required within 60 NM of DCA VOR-DME. See description in Atlantic Ocean.

CTC POTOMAC APP WITHIN 20 NM ON 126.4, 282.375

RUSSEL to HCM TOWER (633) 51-001514

HOPEWELL 114.35 Ch 90 HPW

HCM to TERKS TOWER (417) 51-001121

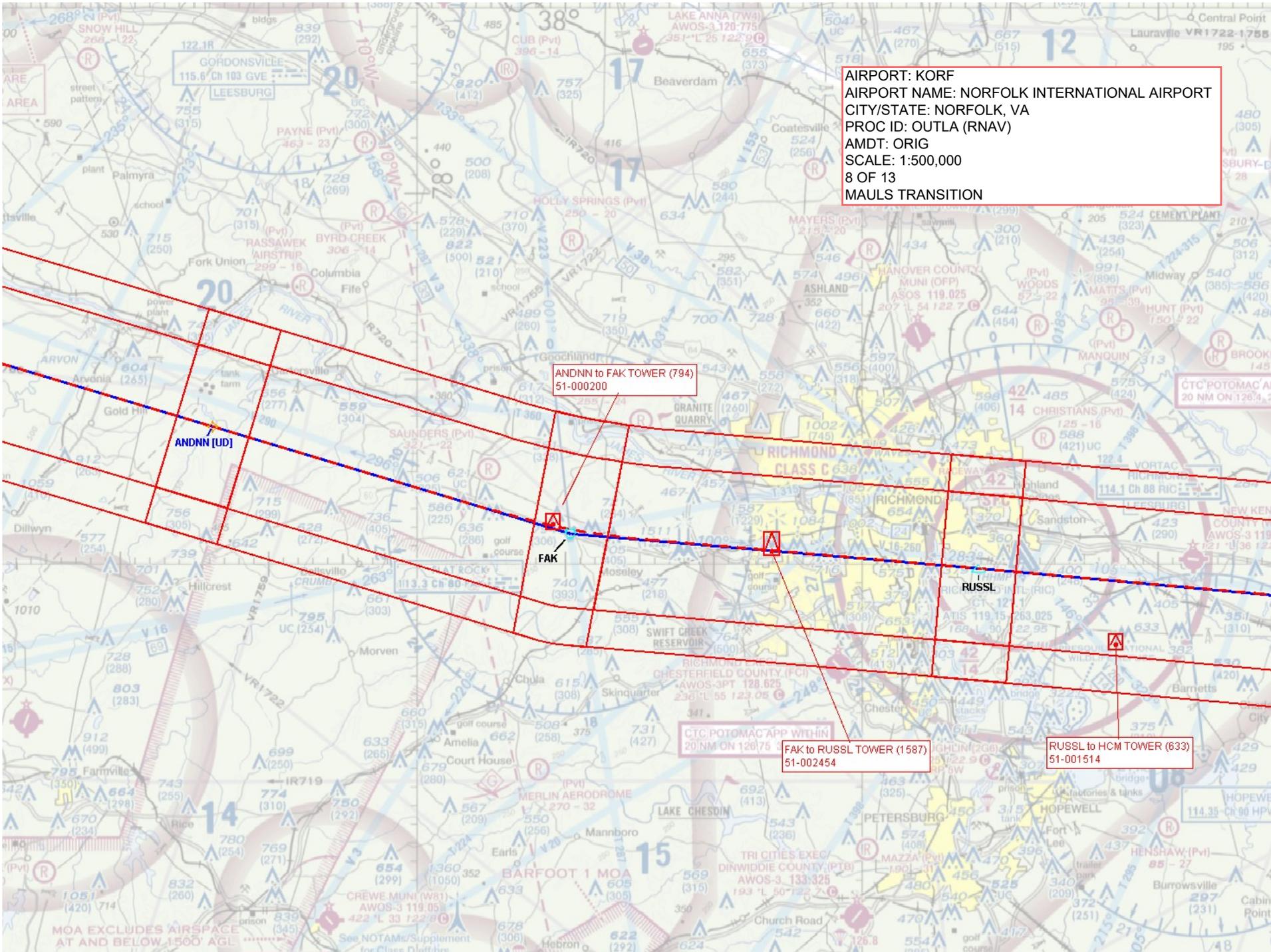
TERKS to OUTLA TOWER (457) 51-002049

OUTLA to MEEKA TOWER (748) 51-001347

CTC NORFOLK APP WITHIN 20 NM ON 125.7 379.1

WAKEFIELD 274 AKQ

CTC NORFOLK APP V 20 NM ON 118.9 3



AIRPORT: KORF
AIRPORT NAME: NORFOLK INTERNATIONAL AIRPORT
CITY/STATE: NORFOLK, VA
PROC ID: OUTLA (RNAV)
AMDT: ORIG
SCALE: 1:500,000
8 OF 13
MAULS TRANSITION

ANDNN to FAK TOWER (794)
51-000200

ANDNN (UD)

FAK

RUSSL

CTC POTOMAC APP WITHIN
20 NM ON 120/75

FAK to RUSSL TOWER (1587)
51-002454

RUSSL to HCM TOWER (633)
51-001514

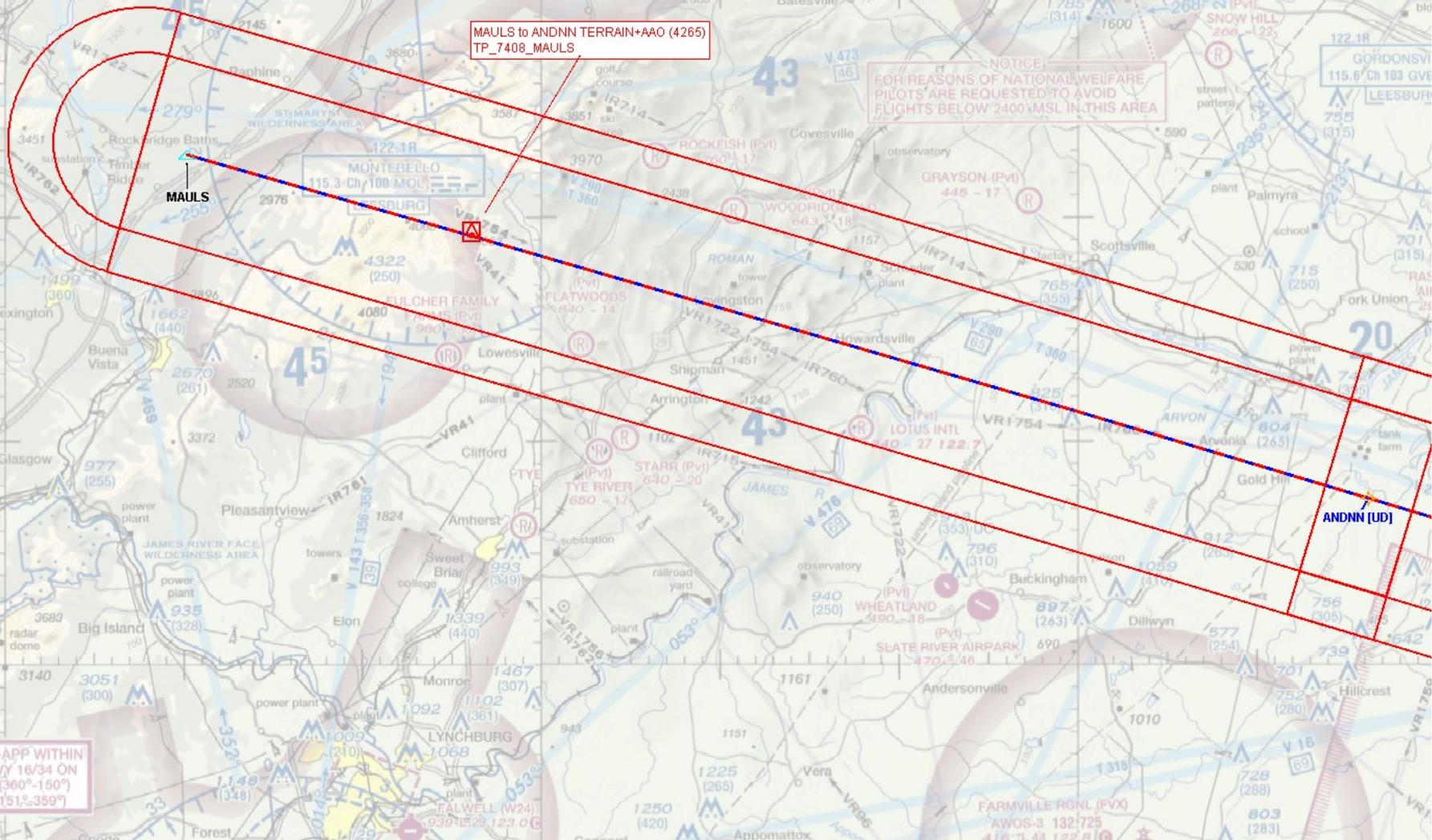
MOA EXCLUDES AIRSPACE
AT AND BELOW 1500' AGL

See NOTAMS/Supplement
for Class D Effs

AIRPORT: KORF
AIRPORT NAME: NORFOLK INTERNATIONAL
AIRPORT
CITY/STATE: NORFOLK, VA
PROC ID: OUTLA (RNAV)
AMDT: ORIG
SCALE: 1:500,000
9 OF 13
MAULS TRANSITION

MAULS to ANDNN TERRAIN+AAO (4265)
TP_7408_MAUWS

NOTICE
FOR REASONS OF NATIONAL WELFARE
PILOTS ARE REQUESTED TO AVOID
FLIGHTS BELOW 2400' MSL IN THIS AREA



OTC ROANOKE APP WITHIN
20 NM FOR RWY 16/34 ON
118.15 339.8 (360°-150°)
126.9 339.8 (151°-359°)

AIRPORT: KORF
AIRPORT NAME: NORFOLK INTERNATIONAL AIRPORT
CITY/STATE: NORFOLK, VA
PROC ID: OUTLA (RNAV)
AMDT: ORIG
SCALE: 1:500,000
10 OF 13
TBOON TRANSITION

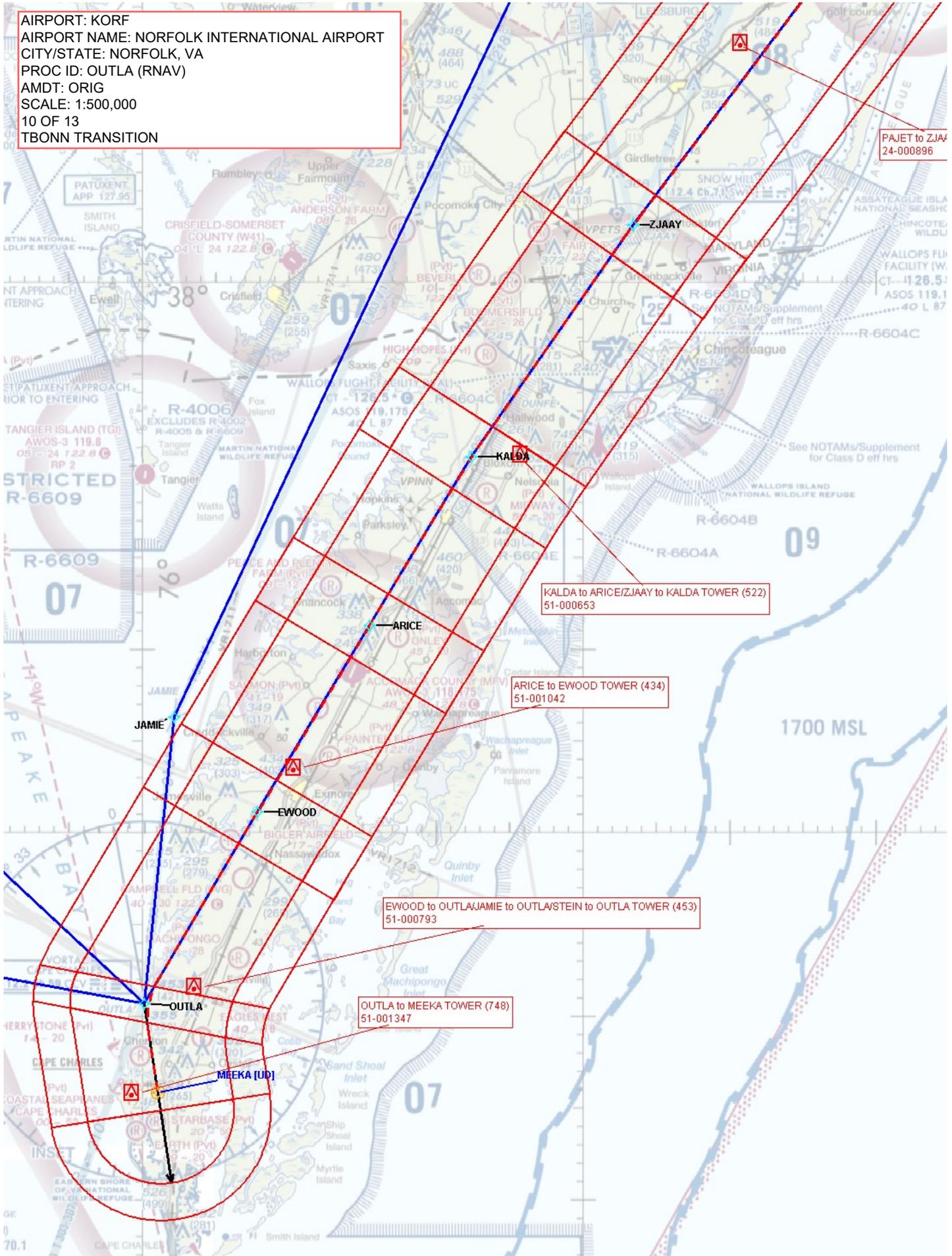
PAJET to ZJAAY
24-000896

KALDA to ARICE/ZJAAY to KALDA TOWER (522)
51-000653

ARICE to EWOOD TOWER (434)
51-001042

EWOOD to OUTLA/JAMIE to OUTLA/STEIN to OUTLA TOWER (453)
51-000793

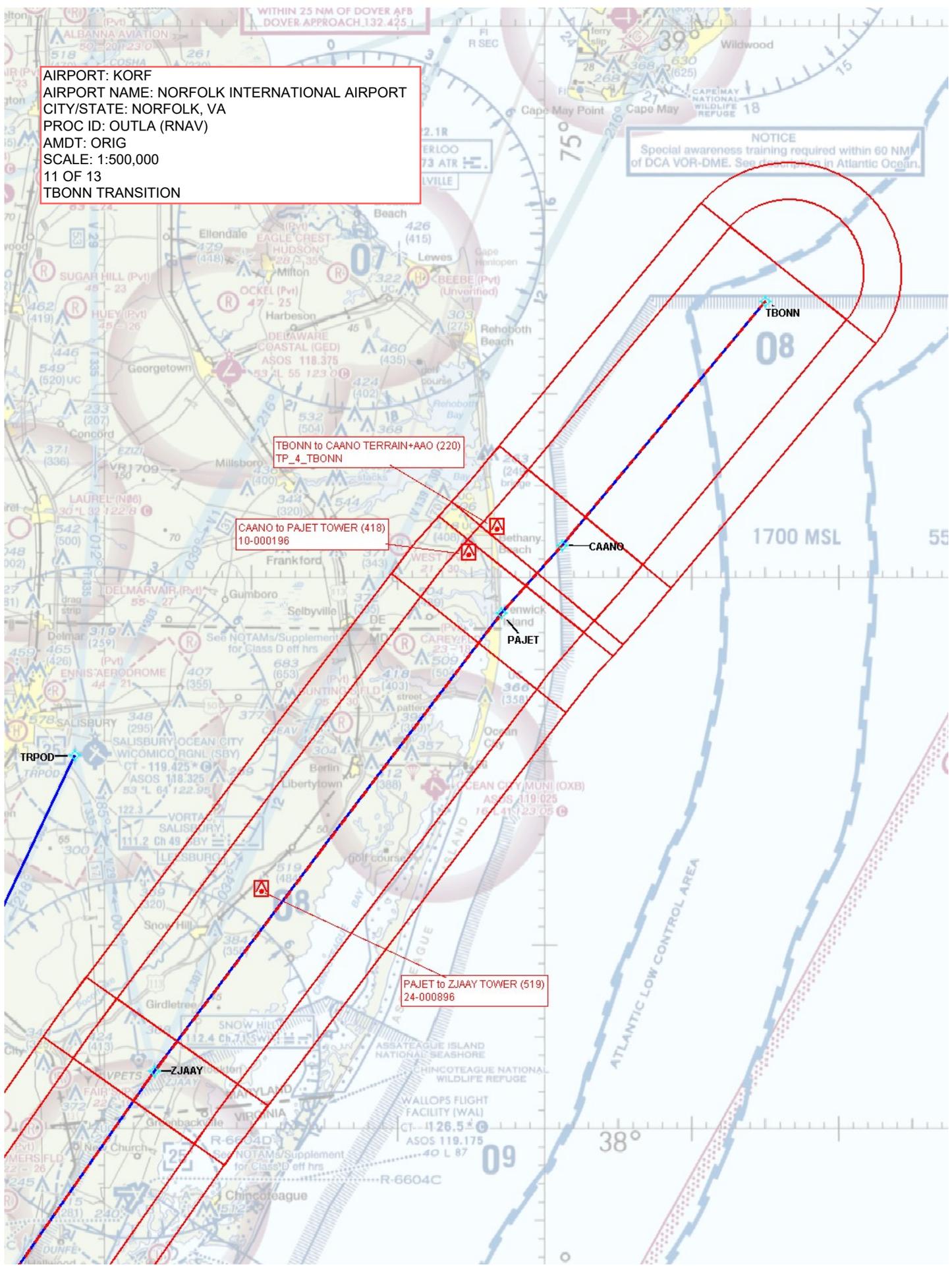
OUTLA to MEEKA TOWER (748)
51-001347



WITHIN 25 NM OF DOVER AFB
DOVER APPROACH 132.425.1

AIRPORT: KORF
AIRPORT NAME: NORFOLK INTERNATIONAL AIRPORT
CITY/STATE: NORFOLK, VA
PROC ID: OUTLA (RNAV)
AMDT: ORIG
SCALE: 1:500,000
11 OF 13
TBONN TRANSITION

NOTICE
Special awareness training required within 60 NM
of DCA VOR-DME. See description in Atlantic Ocean.



TBONN to CAANO TERRAIN+AAO (220)
TP_4_TBONN

CAANO to PAJET TOWER (418)
10-000196

PAJET to ZJAAY TOWER (519)
24-000896

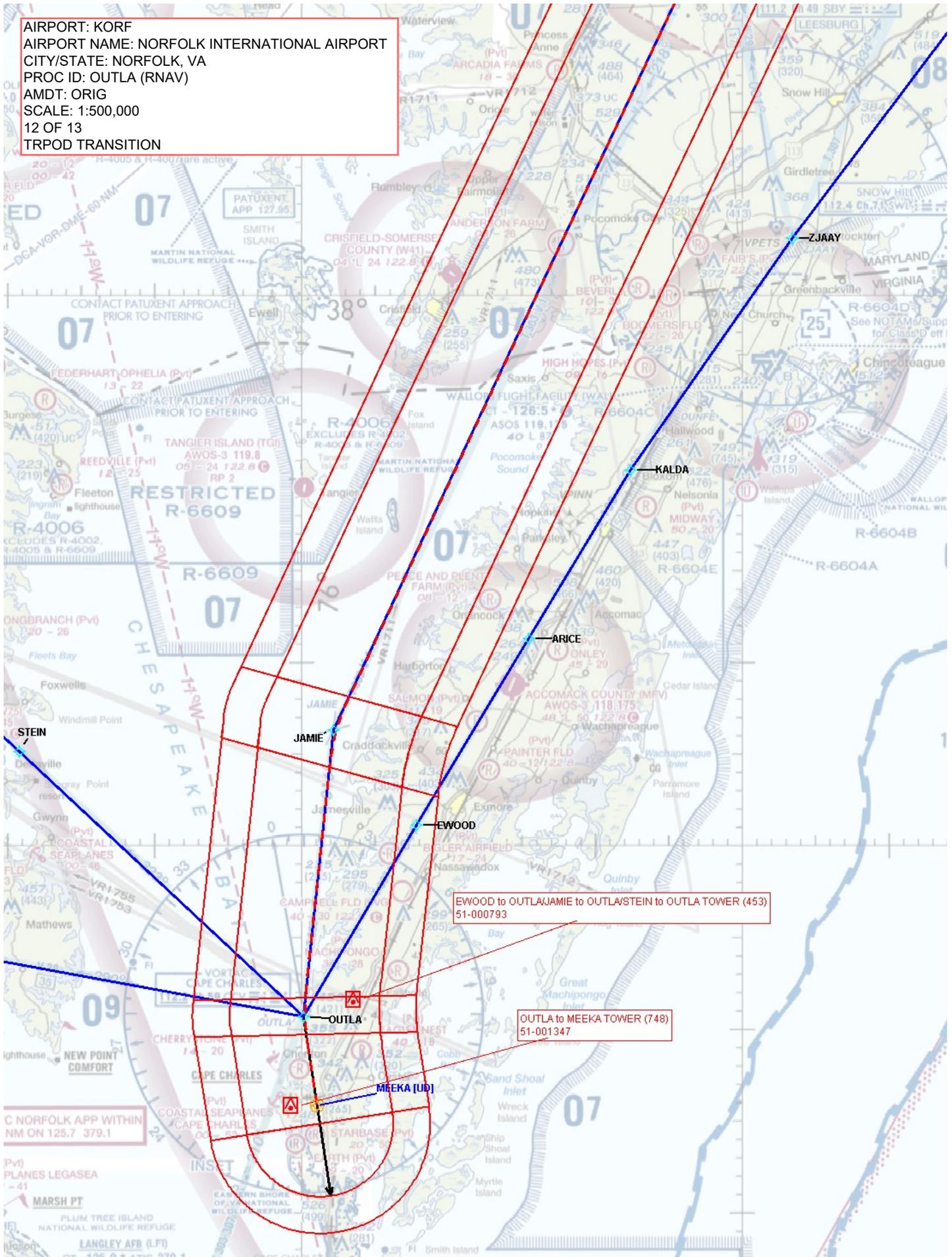
1700 MSL

08

09

ATLANTIC LOW CONTROL AREA

AIRPORT: KORF
AIRPORT NAME: NORFOLK INTERNATIONAL AIRPORT
CITY/STATE: NORFOLK, VA
PROC ID: OUTLA (RNAV)
AMDT: ORIG
SCALE: 1:500,000
12 OF 13
TRPOD TRANSITION



EWOOD to OUTLA/JAMIE to OUTLA/STEIN to OUTLA TOWER (453)
51-00793

OUTLA to MEEKA TOWER (748)
51-001347

C NORFOLK APP WITHIN
NM ON 125.7 379.1

AIRPORT: KORF
AIRPORT NAME: NORFOLK INTERNATIONAL AIRPORT
CITY/STATE: NORFOLK, VA
PROC ID: OUTLA (RNAV)
AMDT: ORIG
SCALE: 1:500,000
13 OF 13
TRPOD TRANSITION

TRPOD to JAMIE TOWER (578)
24-000178

TRPOD

ZJAAJ

KALDA

ARICE

JAMIE

1700 MSL

