Flight Procedures Cover Page	Task Action: FLIGHT CHECK	Task Type: STAR	Estimated Chart Date: 08/07/2025	APWS Task ID: 5D011A614EBB425CABB9A47446801208	APWS Project ID: E62A0CD074E34F8E8128AE020F6FD44C
Procedure: BLUEM (RNAV) FIVE ARRIVAL		Enroute: YES	Specialist: Young, Silvia		Agreement Number:
Airport ID: KMSP			Airport City: MINNEAPOLIS		State: MN
Facility ID:	Facility Type:	Flight Inspection Remark Type: New FC Slot			

Procedure Comments:
APPROVAL LETTER (S):

1. LAZYY TO BLUEM DESCENT GRADIENT

2. CANDD TO HAPTN & DNDIS TO JAMEZ LEG LENTH FOR DECELERATION

ACTIVE DATA USED FOR KMSP AIRPORT AND RWYS.

CONTACT: CASIMIR TABAKA, (405)954-7931.

QUALITY 9 CHECKED
BEGUE

04/11/2025

QUALITY 14 CHECKED

Data as of: 04/03/2025 13:46:31 CDT

Federal Aviation Administration

Memorandum

Date:	December 13, 2024
To:	Charles R Erickson, (Acting) Fight Procedures Team Manager
From:	Jessica Roses, Support Manager, Airspace and Procedures
Prepared by:	Scott Enander, Task Order Manager, NAVTAC Contract Support
Subject:	Letter of Approval Request BLUEM STAR, KMSP

KMSP BLUEM Standard Terminal Arrival Route (STAR): LAZYY to BLUEM Descent Gradient.

Currently, FAAO 8260.3F, PARA 2-2-8a (1), The STAR's maximum permissible descent gradient is 330 ft/nm (approximately 3.11 degrees). LAZYY has a restriction of AT OR ABOVE 16000, and BLUEM has a restriction of AT OR ABOVE 10000MSL. The descent gradient (461.17 ft/nm) from LAZYY and BLUEM is greater than the maximum permissible gradient allowed. Flight Standards approval is required.

The BLUEM STAR serves Minneapolis – St Paul International/Wold-Chamberlain Airport. The altitude restrictions on the BLUEM STAR are designed to separate aircraft on the procedure from either adjacent airspace or other traffic. The deviation from Descent Gradient criteria does not introduce any new risk into the system. Additionally, the procedure does not have any reported issues by either air traffic control or the airline industry.

Therefore, ZMP is requesting a Letter of Approval to utilize the altitudes at LAZYY (AT OR ABOVE 16000) to BLUEM (AT OR ABOVE 10000) resulting in a descent gradient of 461.17 ft/nm as developed for the BLUEM STAR.

Sincerely,

Jessica Roses
Support Manager, Airspace & Procedures
Minneapolis ARTCC, MN

Federal Aviation Administration

Memorandum

Date:	December 13, 2024
To:	Charles R Erickson, (Acting) Fight Procedures Team Manager
From:	Jessica Roses, Support Manager, Airspace and Procedures
Prepared by:	Scott Enander, Task Order Manager, NAVTAC Contract Support
Subject:	Letter of Approval Request BLUEM STAR, KMSP

KMSP BLUEM Standard Terminal Arrival Route (STAR): CANDD to HAPTN Leg Length for Deceleration.

KMSP BLUEM Standard Terminal Arrival Route (STAR): DNDIS to JAMEZ Leg Length for Deceleration.

KMSP BLUEM Standard Terminal Arrival Route (STAR): CANDD to HAPTN Leg Length for Deceleration.

Currently, criteria evaluate loss of altitude and airspeed wholly contained within a single segment, not through the entirety of the flown procedure. FAAO 8260.3G, PARA 2-2-10 prescribes allowable deceleration distances for STAR development.

The length of the leg from CANDD to HAPTN is 1.63 NM. This leg must be at least 4 NM long due to deceleration from 230.0 KIAS to 210 KIAS at 7000 ft MSL. Flight Standards approval is required.

The total distance from CANDD to HAPTN is 1.63 NM and the segment requires the aircraft to lose 20 KTS of airspeed. Paragraph 2-2-10a of 8260.3G, computes a minimum deceleration distance of 4 NM. Industry indicates that the procedure can be easily managed without increased energy management actions by the flight crew and these altitude restrictions and speed restrictions have been published on this procedure for several years without any reported issues.

KMSP BLUEM Standard Terminal Arrival Route (STAR): DNDIS to JAMEZ Leg Length for Deceleration.

Currently, criteria evaluate loss of altitude and airspeed wholly contained within a single segment, not through the entirety of the flown procedure. FAAO 8260.3G, PARA 2-2-10 prescribes allowable deceleration distances for STAR development.

The length of the leg from DNDIS to JAMEZ is 8 NM. This leg must be at least 10 NM long due to deceleration from 230.0 KIAS to 210 KIAS between 9000.0 ft. MSL

to 7000.0 ft MSL. Flight Standards approval is required.

The total distance from DNDIS to JAMEZ is 8 NM and the segment requires the aircraft to lose 2000ft of altitude and 20 KTS of airspeed. Using formula 2-2-2 of 8260.3G, computes a minimum deceleration distance of 10 NM. Industry indicates that the procedure can be easily managed without increased energy management actions by the flight crew and these altitude restrictions and speed restrictions have been published on this procedure for several years without any reported issues.

Sincerely,

Jessica Roses
Support Manager, Airspace & Procedures
Minneapolis ARTCC, MN

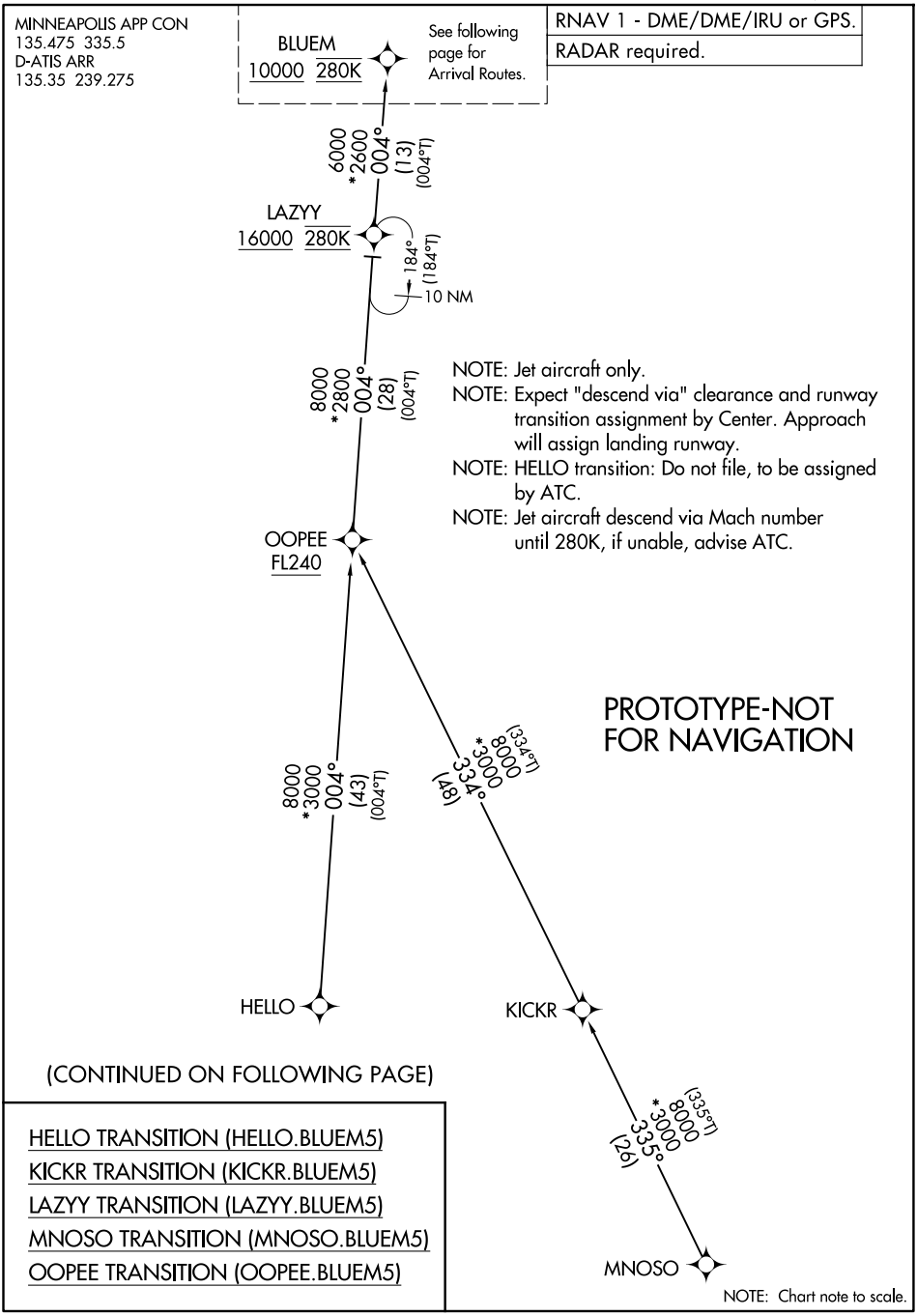
NEW

(BLUEM.BLUEM5) FIG

BLUEM FIVE ARRIVAL (RNAV)

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

Transition Routes AL-264 (FAA) MINNEAPOLIS, MINNESOTA



(CONTINUED ON FOLLOWING PAGE)

HELLO TRANSITION (HELLO.BLUEM5)
KICKR TRANSITION (KICKR.BLUEM5)
LAZYY TRANSITION (LAZYY.BLUEM5)
MNOSO TRANSITION (MNOSO.BLUEM5)
OOPEE TRANSITION (OOPEE.BLUEM5)

BLUEM FIVE ARRIVAL (RNAV)
Transition Routes
MINNEAPOLIS, MINNESOTA
(BLUEM.BLUEM5) FIG
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

NEW

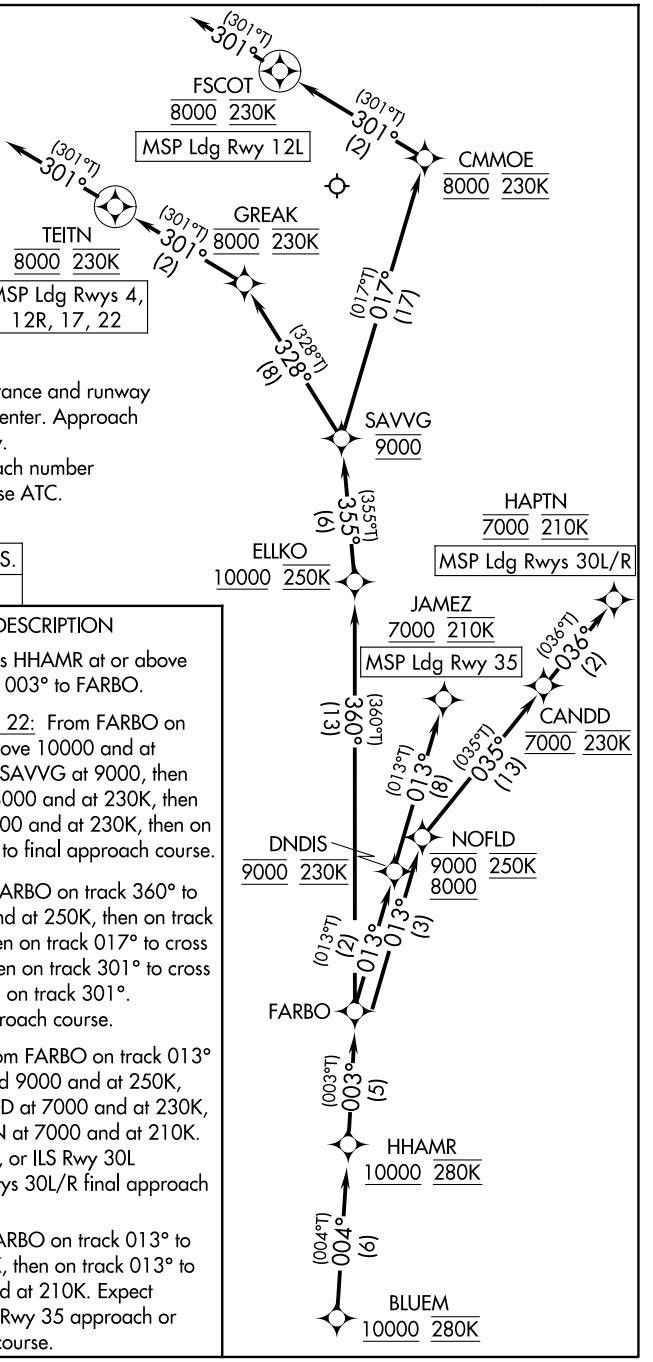
(BLUEM.BLUEM5) FIG

BLUEM FIVE ARRIVAL (RNAV)

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)
Arrival Routes AL-264 (FAA)
MINNEAPOLIS, MINNESOTA

MINNEAPOLIS APP CON
135.475 335.5
D-ATIS ARR
135.35 239.275

PROTOTYPE-NOT FOR NAVIGATION



NOTE: Jet aircraft only.
NOTE: Expect "descend via" clearance and runway transition assignment by Center. Approach will assign landing runway.
NOTE: Jet aircraft descend via Mach number until 280K, if unable, advise ATC.

NOTE: Chart not to scale.

RNAV 1 - DME/DME/IRU or GPS.
RADAR required.

ARRIVAL ROUTE DESCRIPTION

From BLUEM on track 004° to cross HHAMR at or above 10000 and at 280K, then on track 003° to FARBO.

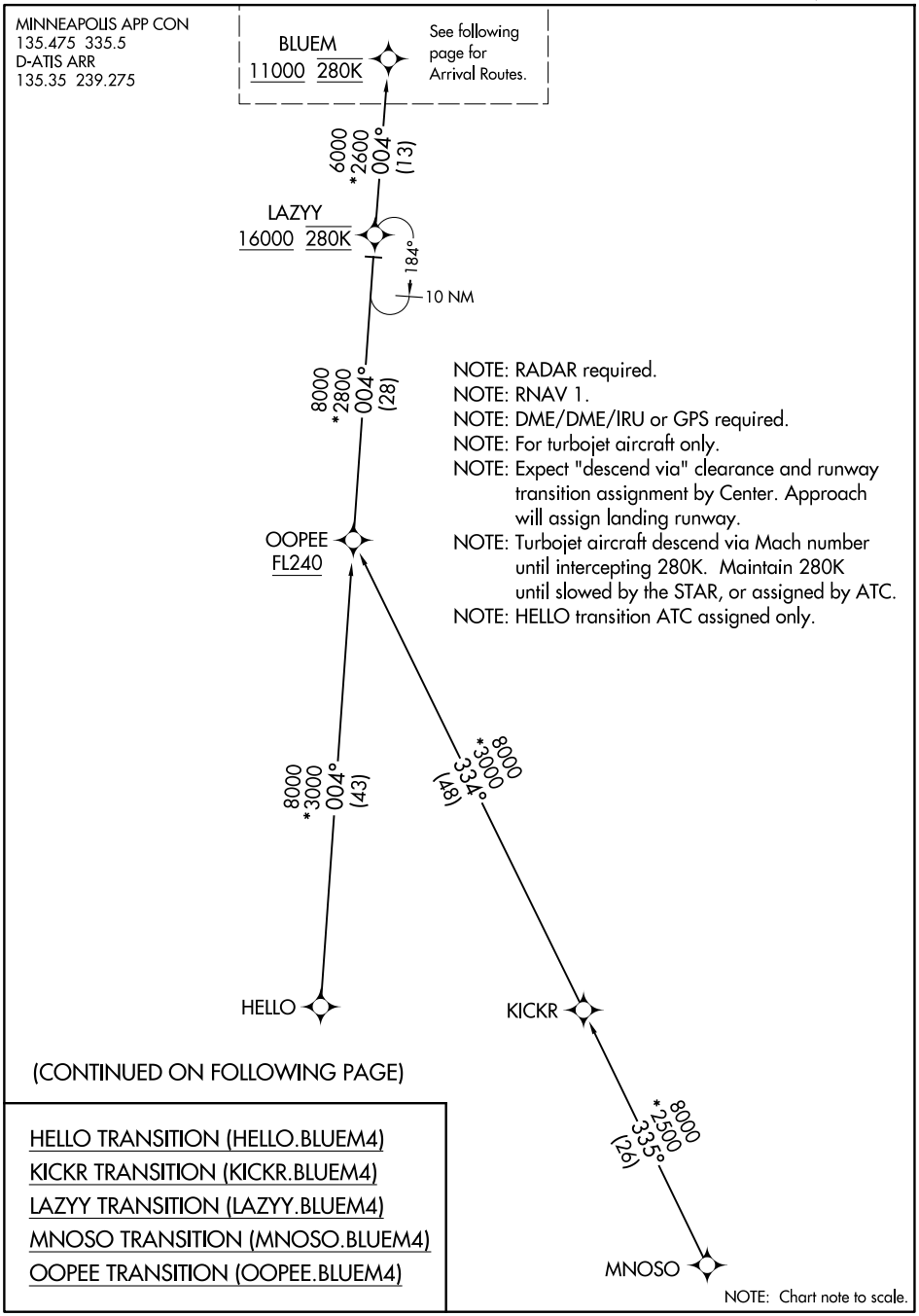
LANDING RUNWAYS 4, 12R, 17, 22: From FARBO on track 360° to cross ELLKO at or above 10000 and at 250K, then on track 355° to cross SAVVG at 9000, then on track 328° to cross GREAK at 8000 and at 230K, then on track 301° to cross TIETN at 8000 and at 230K, then on track 301°. Expect RADAR vectors to final approach course.

LANDING RUNWAY 12L: From FARBO on track 360° to cross ELLKO at or above 10000 and at 250K, then on track 355° to cross SAVVG at 9000, then on track 017° to cross CMMOE at 8000 and at 230K, then on track 301° to cross FSCOT at 8000 and at 230K, then on track 301°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 30L/R: From FARBO on track 013° to cross NOFLD between 8000 and 9000 and at 250K, then on track 035° to cross CANDD at 7000 and at 230K, then on track 036° to cross HAPTN at 7000 and at 210K. Expect RNAV (RNP), RNAV (GPS), or ILS Rwy 30L approach or RADAR vectors to Rwys 30L/R final approach course.

LANDING RUNWAY 35: From FARBO on track 013° to cross DNDIS at 9000 and at 230K, then on track 013° to cross JAMEZ at or above 7000 and at 210K. Expect RNAV (RNP), RNAV (GPS), or ILS Rwy 35 approach or RADAR vectors to final approach course.

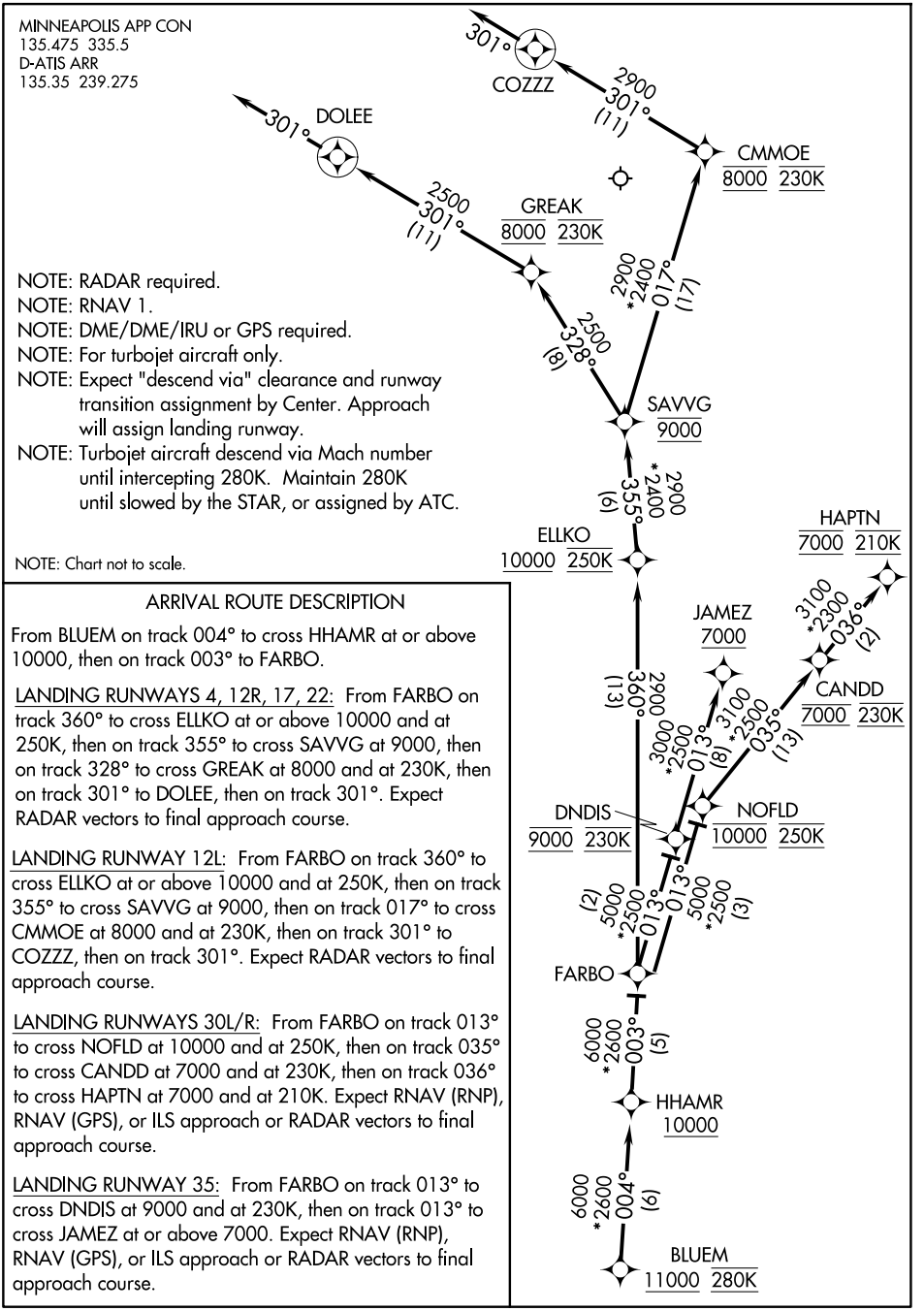
BLUEM FIVE ARRIVAL (RNAV)
(BLUEM.BLUEM5) FIG
Arrival Routes
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)
MINNEAPOLIS, MINNESOTA



(CONTINUED ON FOLLOWING PAGE)

HELLO TRANSITION (HELLO.BLUEM4)
KICKR TRANSITION (KICKR.BLUEM4)
LAZYY TRANSITION (LAZYY.BLUEM4)
MNOSO TRANSITION (MNOSO.BLUEM4)
OOPEE TRANSITION (OOPEE.BLUEM4)

NC-1, 23 JAN 2025 to 20 FEB 2025



ARRIVAL ROUTE DESCRIPTION

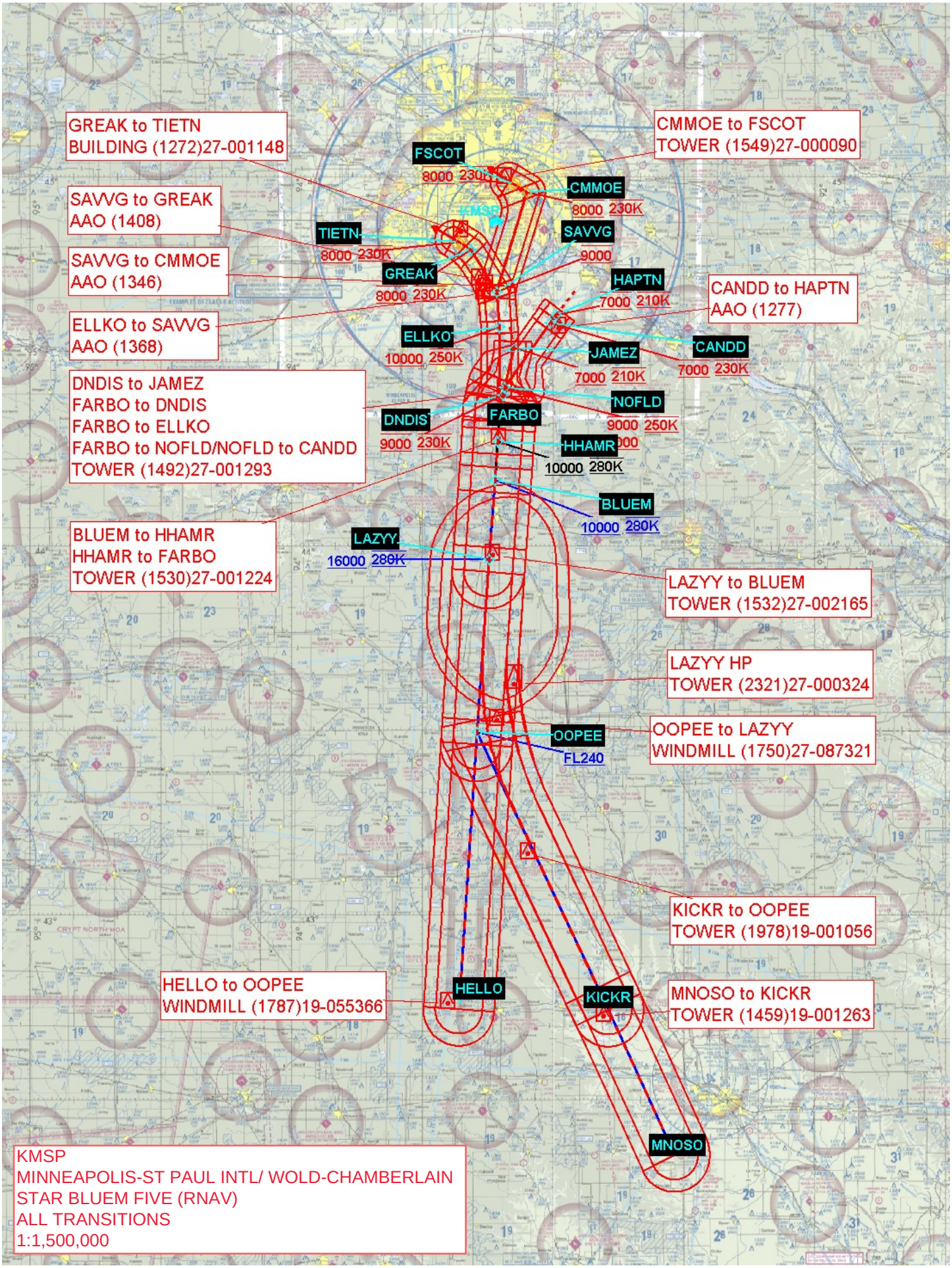
From BLUEM on track 004° to cross HHAMR at or above 10000, then on track 003° to FARBO.

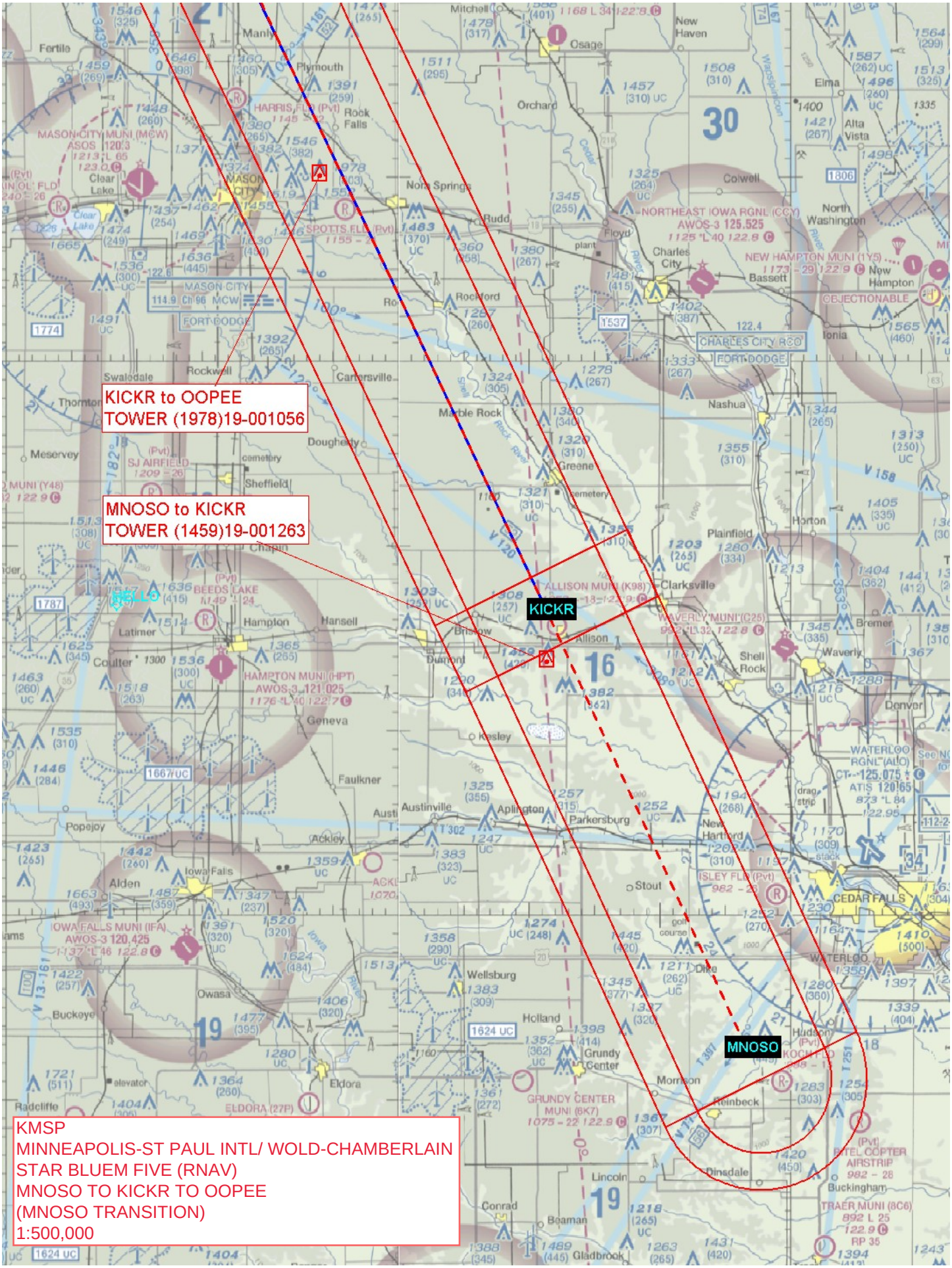
LANDING RUNWAYS 4, 12R, 17, 22: From FARBO on track 360° to cross ELLKO at or above 10000 and at 250K, then on track 355° to cross SAVVG at 9000, then on track 328° to cross GREAK at 8000 and at 230K, then on track 301° to DOLEE, then on track 301°. Expect RADAR vectors to final approach course.

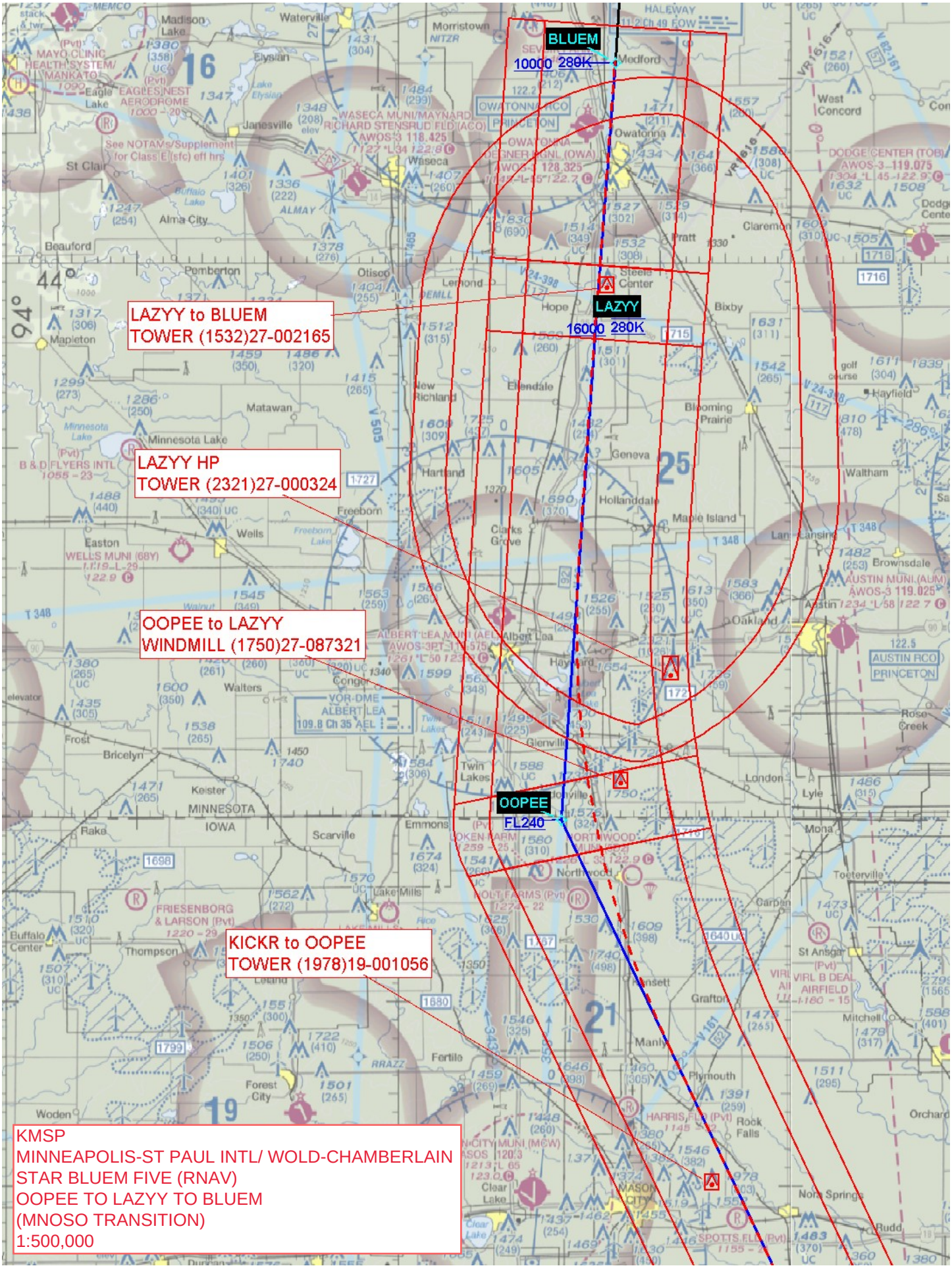
LANDING RUNWAY 12L: From FARBO on track 360° to cross ELLKO at or above 10000 and at 250K, then on track 355° to cross SAVVG at 9000, then on track 017° to cross CMMOE at 8000 and at 230K, then on track 301° to COZZZ, then on track 301°. Expect RADAR vectors to final approach course.

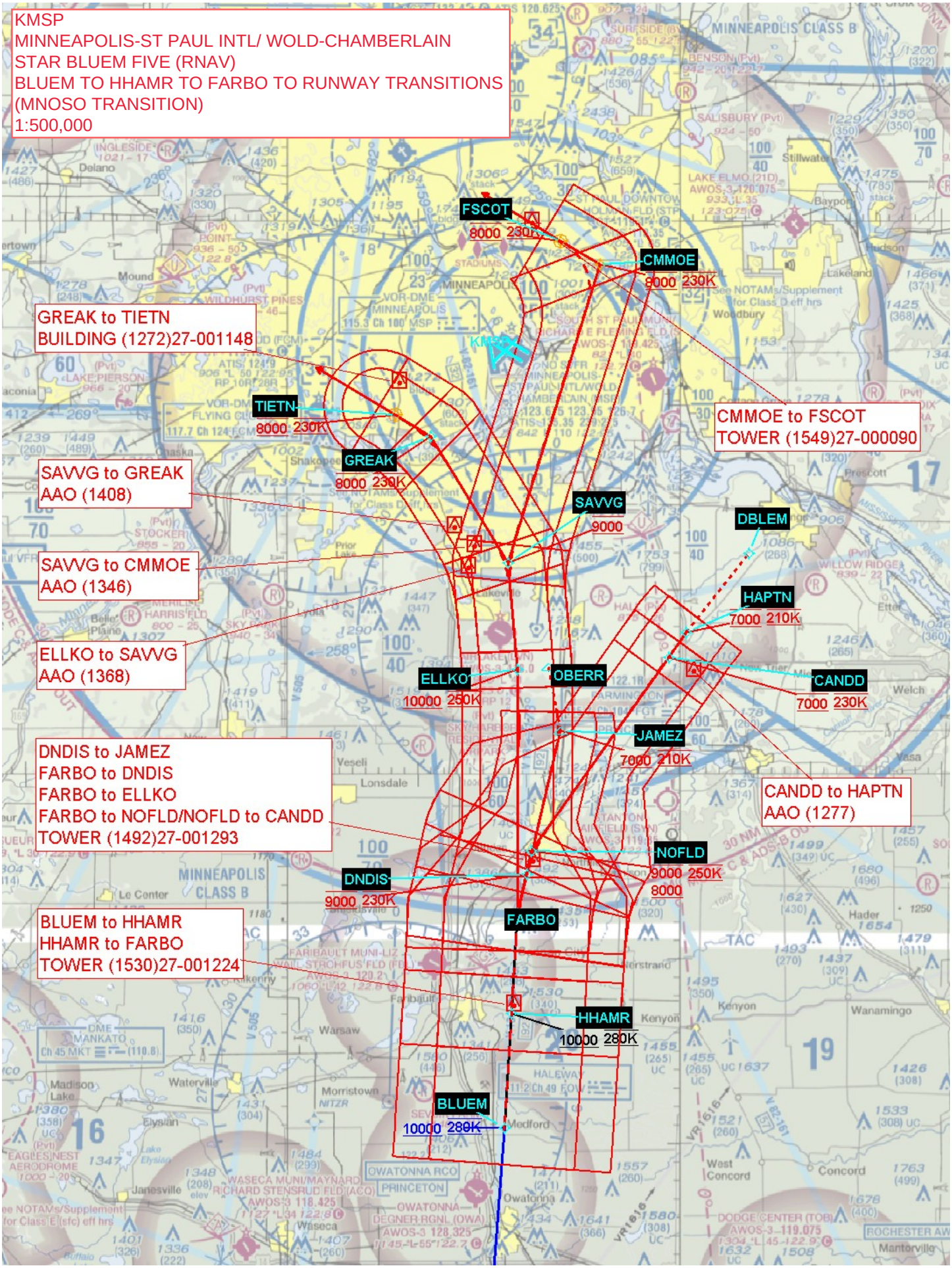
LANDING RUNWAYS 30L/R: From FARBO on track 013° to cross NOFLD at 10000 and at 250K, then on track 035° to cross CANDD at 7000 and at 230K, then on track 036° to cross HAPTN at 7000 and at 210K. Expect RNAV (RNP), RNAV (GPS), or ILS approach or RADAR vectors to final approach course.

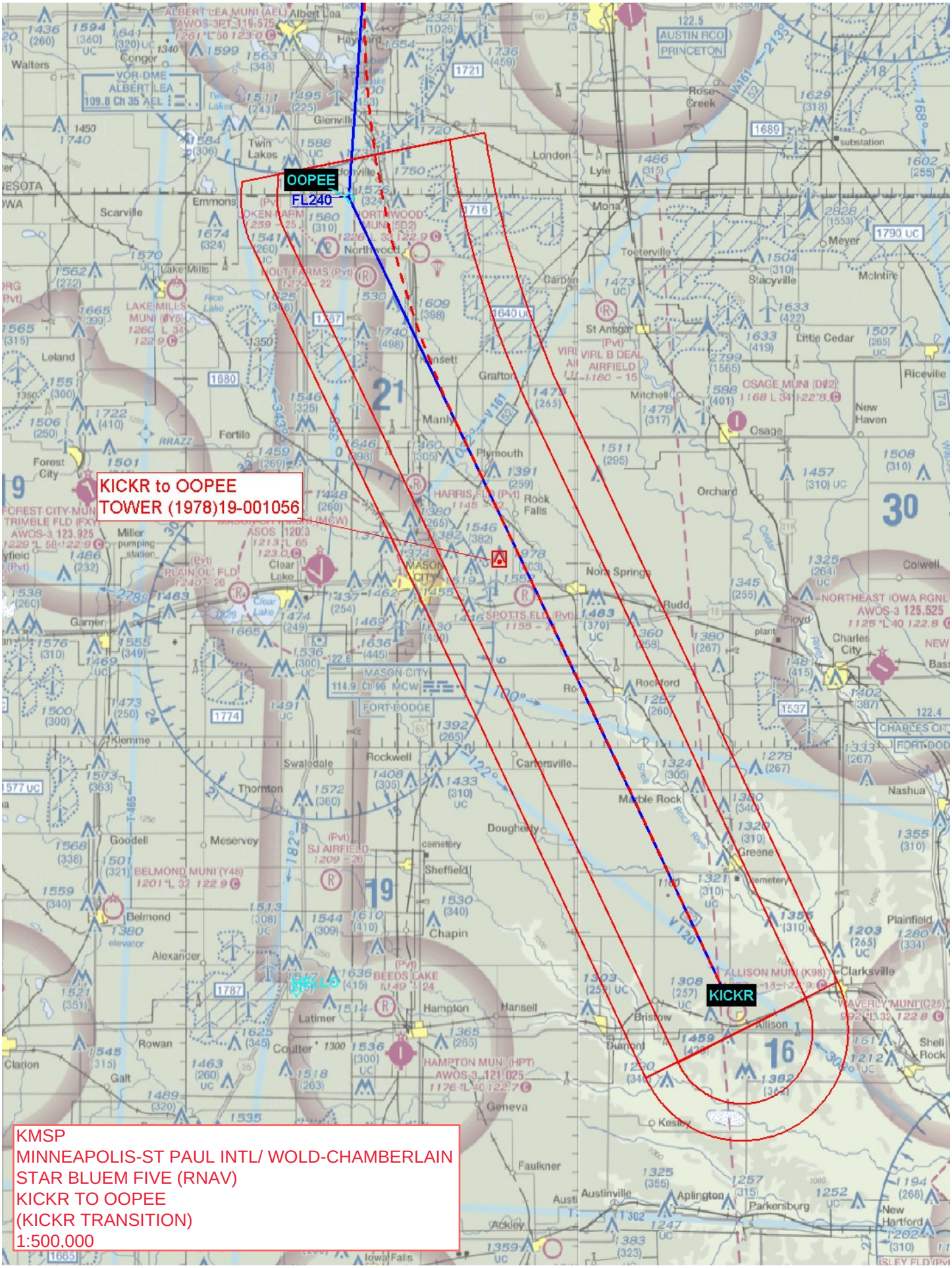
LANDING RUNWAY 35: From FARBO on track 013° to cross DNDIS at 9000 and at 230K, then on track 013° to cross JAMEZ at or above 7000. Expect RNAV (RNP), RNAV (GPS), or ILS approach or RADAR vectors to final approach course.

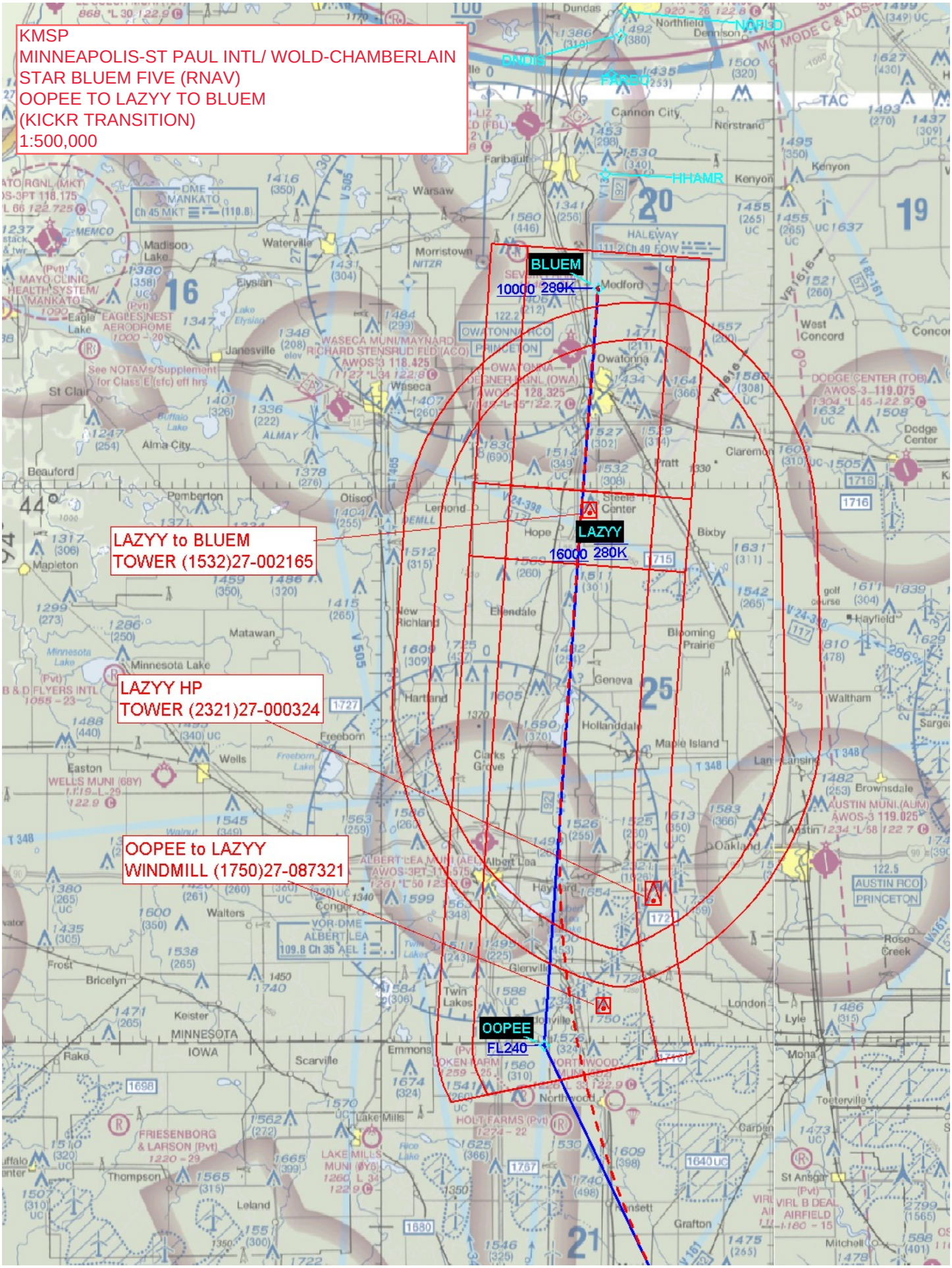

GREAK to TIETN
BUILDING (1272)27-001148
SAVVG to GREAK
AAO (1408)
SAVVG to CMMOE
AAO (1346)
ELLKO to SAVVG
AAO (1368)
DNDIS to JAMEZ
FARBO to DNDIS
FARBO to ELLKO
FARBO to NOFLD/NOFLD to CANDD
TOWER (1492)27-001293
BLUEM to HHAMR
HHAMR to FARBO
TOWER (1530)27-001224
HELLO to OOPEE
WINDMILL (1787)19-055366
CMMOE to FSCOT
TOWER (1549)27-000090
CANDD to HAPTN
AAO (1277)
LAZYY to BLUEM
TOWER (1532)27-002165
LAZYY HP
TOWER (2321)27-000324
OOPEE to LAZYY
WINDMILL (1750)27-087321
KICKR to OOPEE
TOWER (1978)19-001056
MNOSO to KICKR
TOWER (1459)19-001263
FSCOT
8000 230K
CMMOE
8000 230K
SAVVG
9000
TIETN
8000 230K
GREAK
8000 230K
HAPTN
7000 210K
ELLKO
10000 250K
JAMEZ
7000 210K
CANDD
7000 230K
NOFLD
9000 250K
DNDIS
9000 230K
FARBO
HHAMR
10000 280K
BLUEM
10000 280K
LAZYY
16000 280K
OOPEE
FL240
HELLO
KICKR
MNOSO
KMSP
MINNEAPOLIS-ST PAUL INTL/ WOLD-CHAMBERLAIN
STAR BLUEM FIVE (RNAV)
ALL TRANSITIONS
1:1,500,000

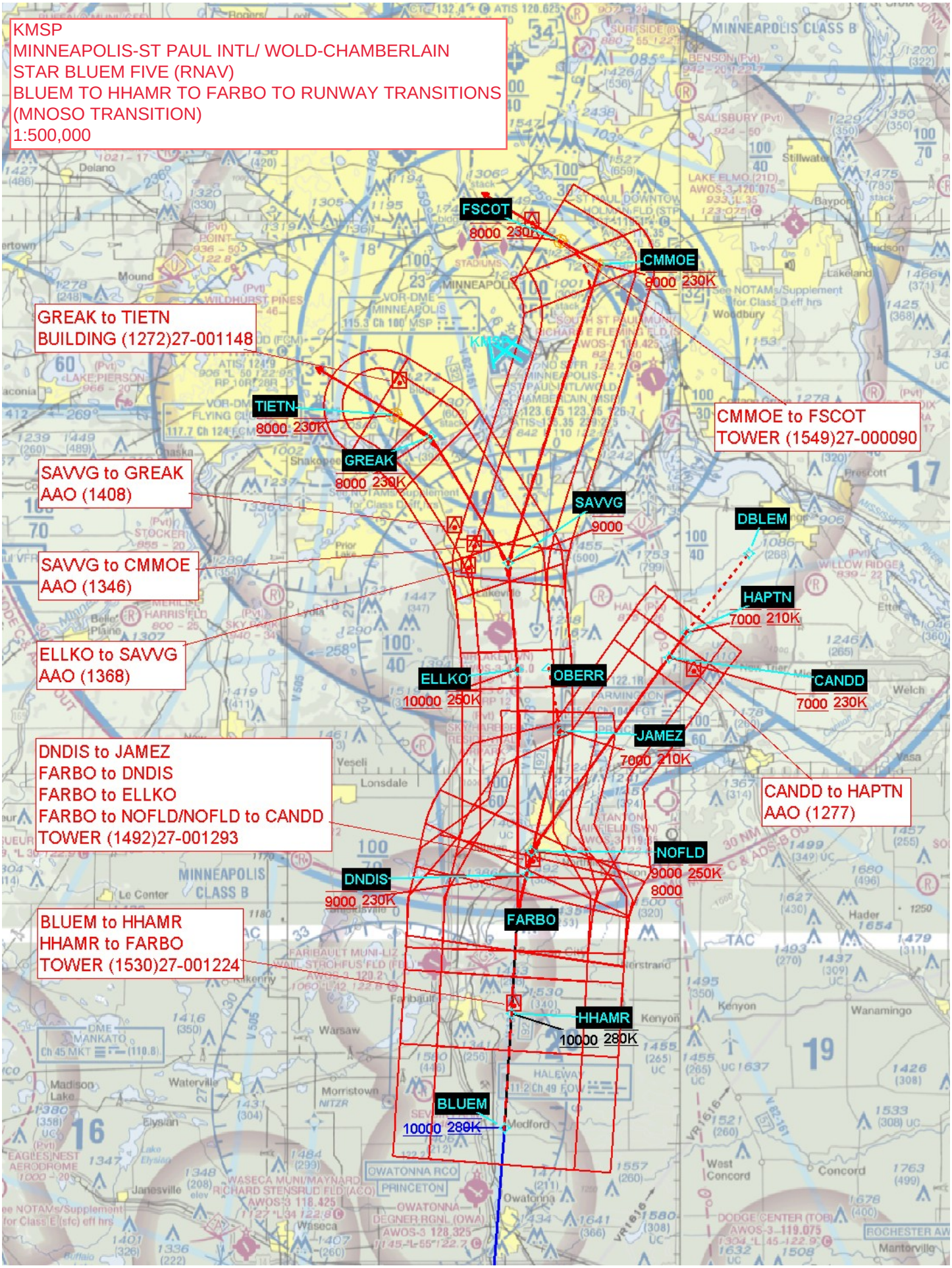

KICKR to OOPEE
TOWER (1978)19-001056
MNOSO to KICKR
TOWER (1459)19-001263
KICKR
MNOSO
KMSP
MINNEAPOLIS-ST PAUL INTL/ WOLD-CHAMBERLAIN
STAR BLUEM FIVE (RNAV)
MNOSO TO KICKR TO OOPEE
(MNOSO TRANSITION)
1:500,000

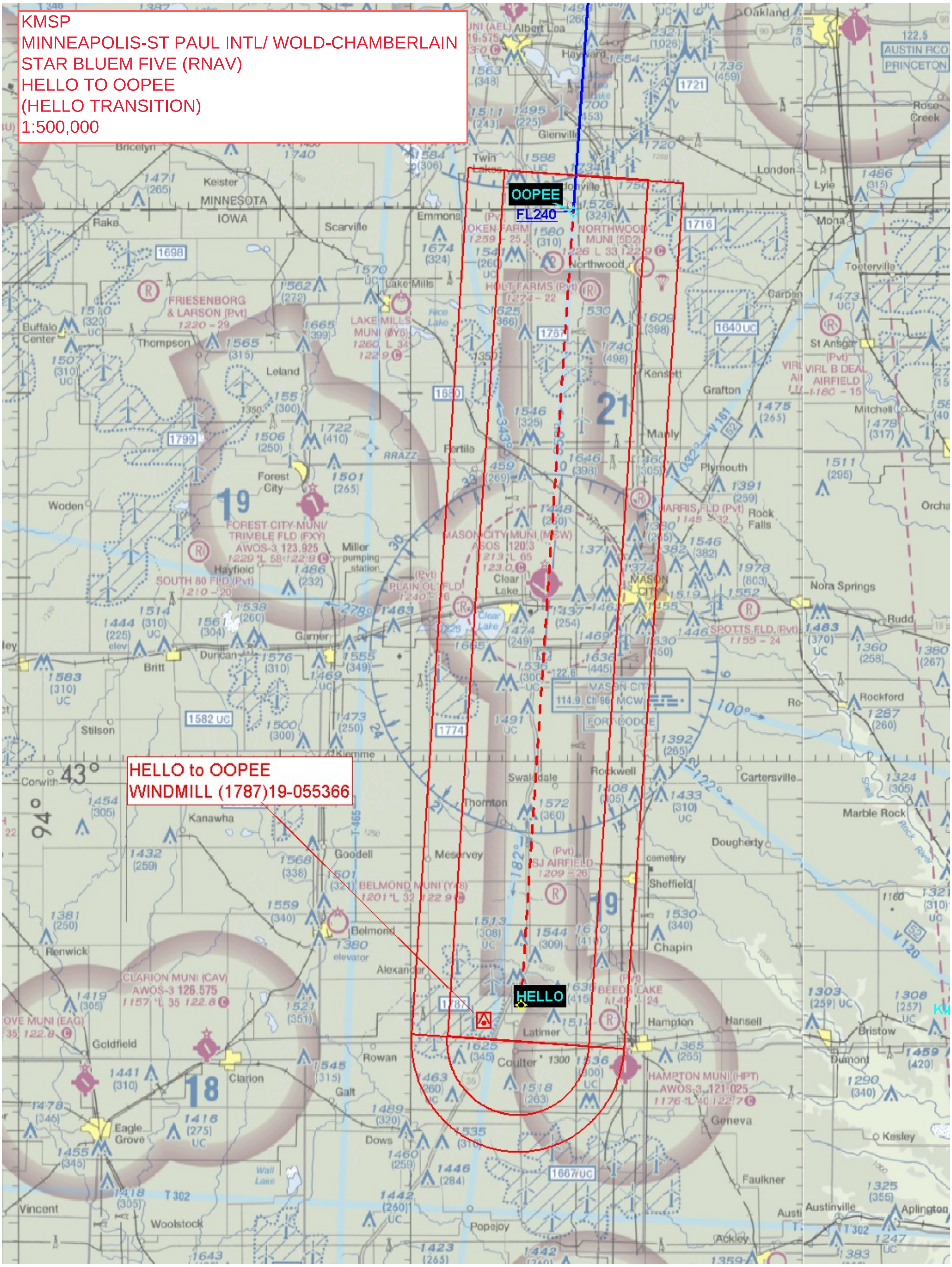

BLUEM
10000 280K
LAZYY
16000 280K
OOPEE
FL240
LAZYY to BLUEM
TOWER (1532)27-002165
LAZYY HP
TOWER (2321)27-000324
OOPEE to LAZYY
WINDMILL (1750)27-087321
KICKR to OOPEE
TOWER (1978)19-001056
KMSP
MINNEAPOLIS-ST PAUL INTL/ WOLD-CHAMBERLAIN
STAR BLUEM FIVE (RNAV)
OOPEE TO LAZYY TO BLUEM
(MNOSO TRANSITION)
1:500,000

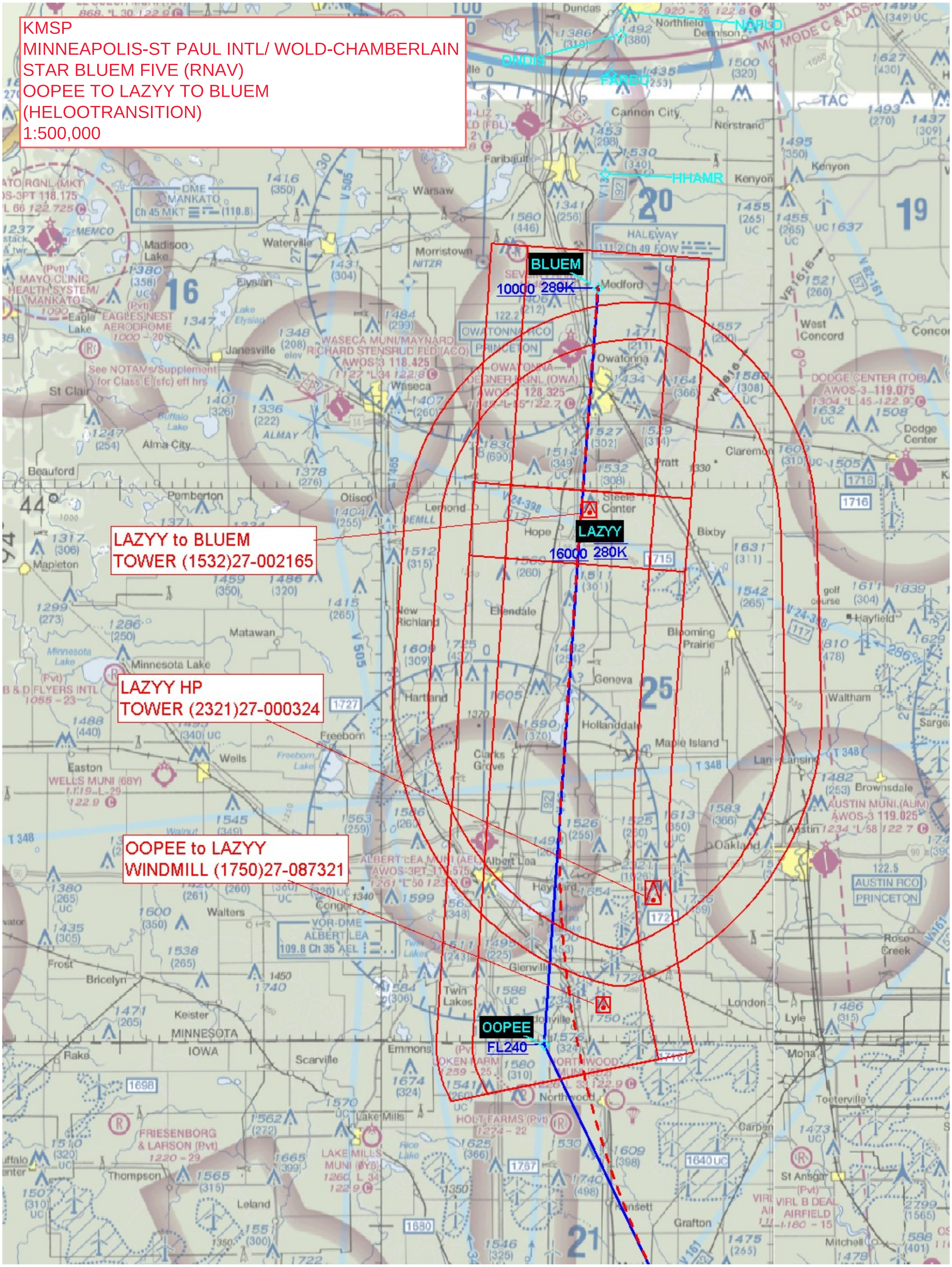

KMSP
MINNEAPOLIS-ST PAUL INTL/ WOLD-CHAMBERLAIN
STAR BLUEM FIVE (RNAV)
BLUEM TO HHAMR TO FARBO TO RUNWAY TRANSITIONS
(MNOSO TRANSITION)
1:500,000
FSCOT
8000 230K
CMMOE
8000 230K
GREAK to TIETN
BUILDING (1272)27-001148
TIETN
8000 230K
CMMOE to FSCOT
TOWER (1549)27-000090
GREAK
8000 230K
SAVVG to GREAK
AAO (1408)
SAVVG
9000
DBLEM
SAVVG to CMMOE
AAO (1346)
HAPTN
7000 210K
ELLKO to SAVVG
AAO (1368)
ELLKO
10000 250K
OBERR
CANDD
7000 230K
JAMEZ
7000 210K
DNDIS to JAMEZ
FARBO to DNDIS
FARBO to ELLKO
FARBO to NOFLD/NOFLD to CANDD
TOWER (1492)27-001293
CANDD to HAPTN
AAO (1277)
NOFLD
9000 250K
8000
DNDIS
9000 230K
FARBO
BLUEM to HHAMR
HHAMR to FARBO
TOWER (1530)27-001224
HHAMR
10000 280K
BLUEM
10000 280K
MINNEAPOLIS CLASS B
MINNEAPOLIS CLASS B

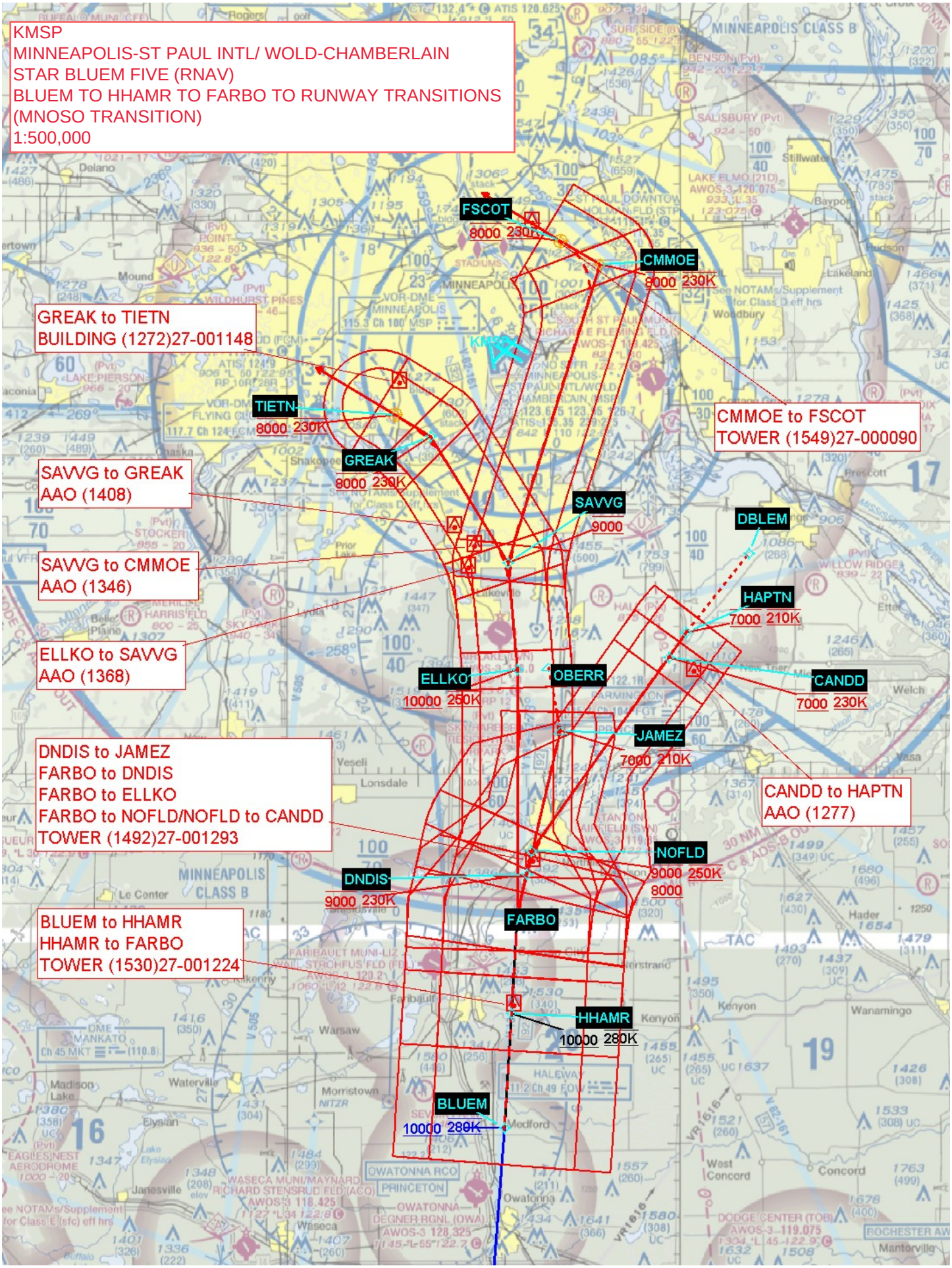

OOPEE
FL240
KICKR to OOPEE
TOWER (1978)19-001056
KICKR
KMSP
MINNEAPOLIS-ST PAUL INTL/ WOLD-CHAMBERLAIN
STAR BLUEM FIVE (RNAV)
KICKR TO OOPEE
(KICKR TRANSITION)
1:500,000

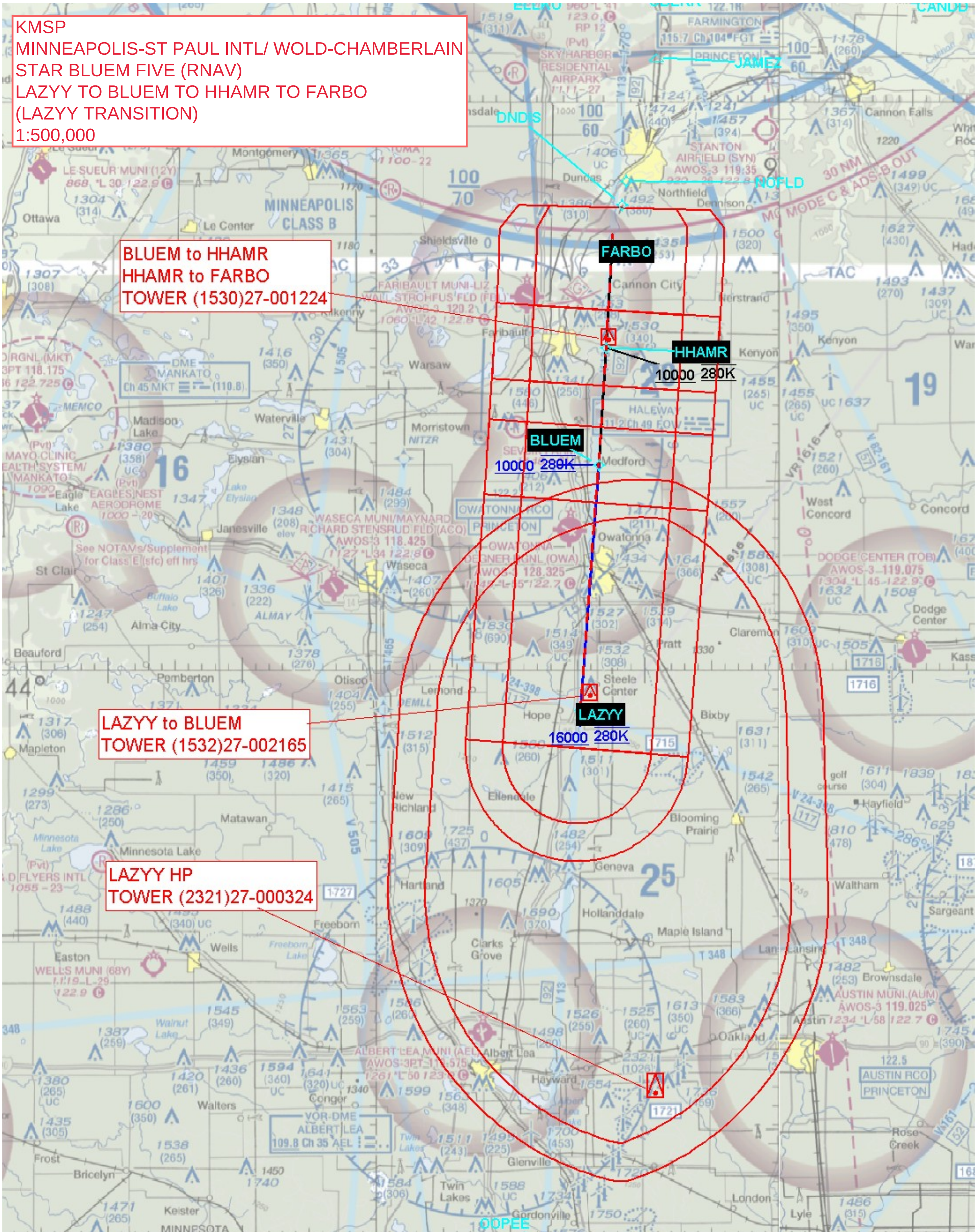

KMSP
MINNEAPOLIS-ST PAUL INTL/ WOLD-CHAMBERLAIN
STAR BLUEM FIVE (RNAV)
OOPEE TO LAZYY TO BLUEM
(KICKR TRANSITION)
1:500,000
BLUEM
10000 280K
LAZYY
16000 280K
OOPEE
FL240
LAZYY to BLUEM
TOWER (1532)27-002165
LAZYY HP
TOWER (2321)27-000324
OOPEE to LAZYY
WINDMILL (1750)27-087321

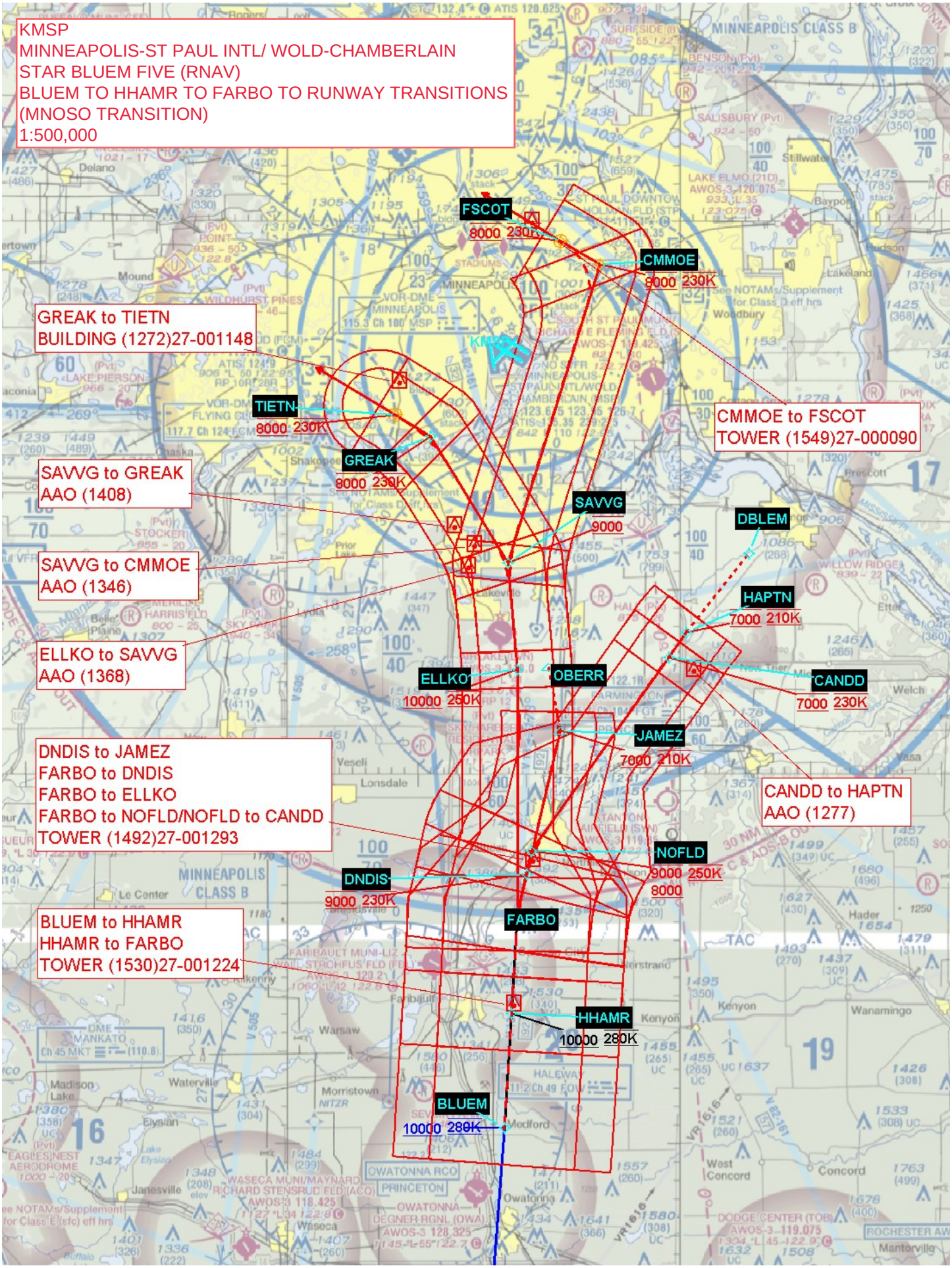

KMSP
MINNEAPOLIS-ST PAUL INTL/ WOLD-CHAMBERLAIN
STAR BLUEM FIVE (RNAV)
BLUEM TO HHAMR TO FARBO TO RUNWAY TRANSITIONS
(MNOSO TRANSITION)
1:500,000
FSCOT
8000 230K
CMMOE
8000 230K
GREAK to TIETN
BUILDING (1272)27-001148
TIETN
8000 230K
CMMOE to FSCOT
TOWER (1549)27-000090
GREAK
8000 230K
SAVVG to GREAK
AAO (1408)
SAVVG
9000
DBLEM
SAVVG to CMMOE
AAO (1346)
HAPTN
7000 210K
ELLKO to SAVVG
AAO (1368)
ELLKO
10000 250K
OBERR
CANDD
7000 230K
JAMEZ
7000 210K
DNDIS to JAMEZ
FARBO to DNDIS
FARBO to ELLKO
FARBO to NOFLD/NOFLD to CANDD
TOWER (1492)27-001293
CANDD to HAPTN
AAO (1277)
NOFLD
9000 250K
8000
DNDIS
9000 230K
FARBO
BLUEM to HHAMR
HHAMR to FARBO
TOWER (1530)27-001224
HHAMR
10000 280K
BLUEM
10000 280K
MINNEAPOLIS CLASS B
MINNEAPOLIS
MINNEAPOLIS CLASS B

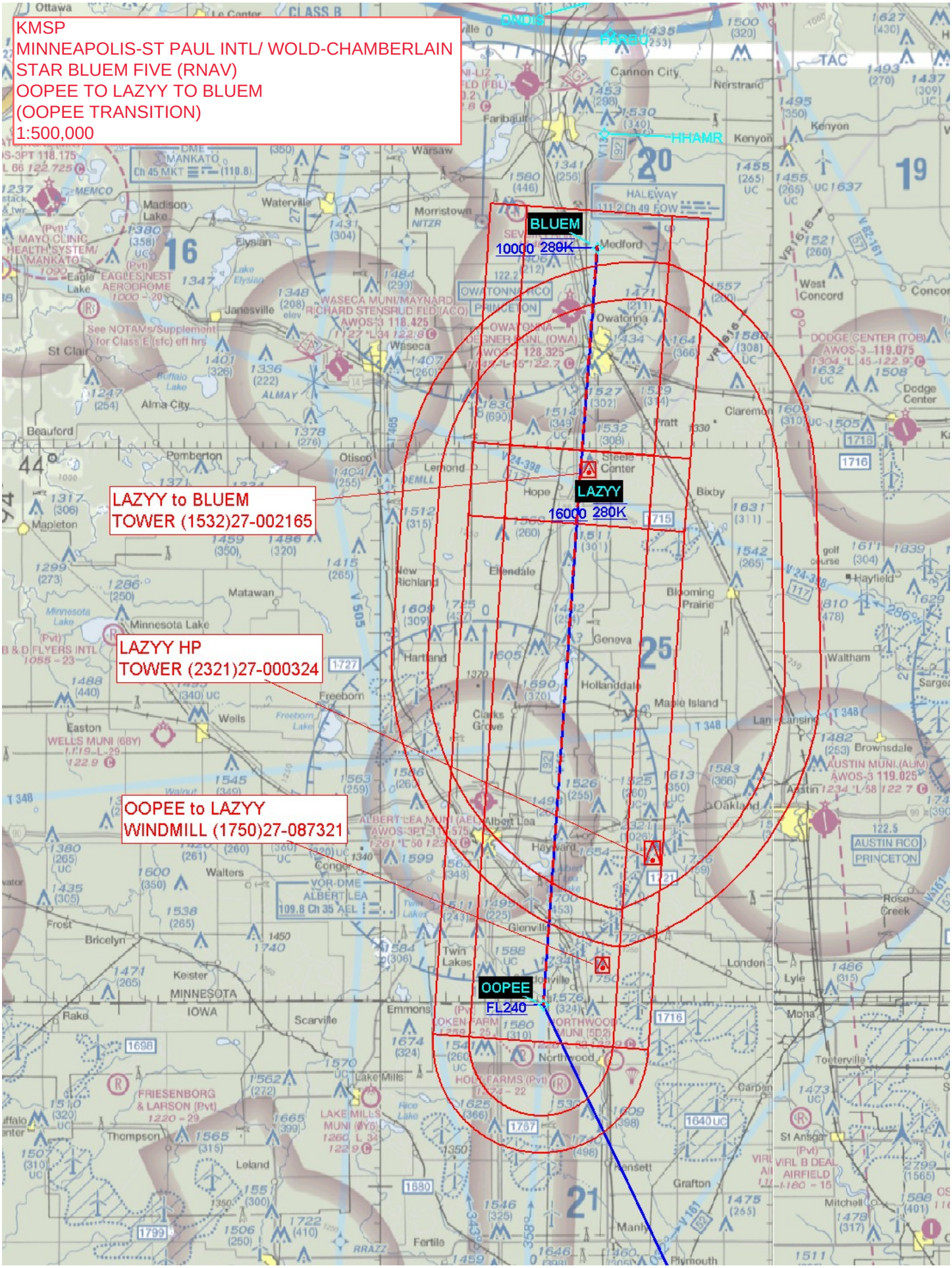

KMSP
MINNEAPOLIS-ST PAUL INTL/ WOLD-CHAMBERLAIN
STAR BLUEM FIVE (RNAV)
HELLO TO OOPEE
(HELLO TRANSITION)
1:500,000
OOPEE
FL240
HELLO
HELLO to OOPEE
WINDMILL (1787)19-055366

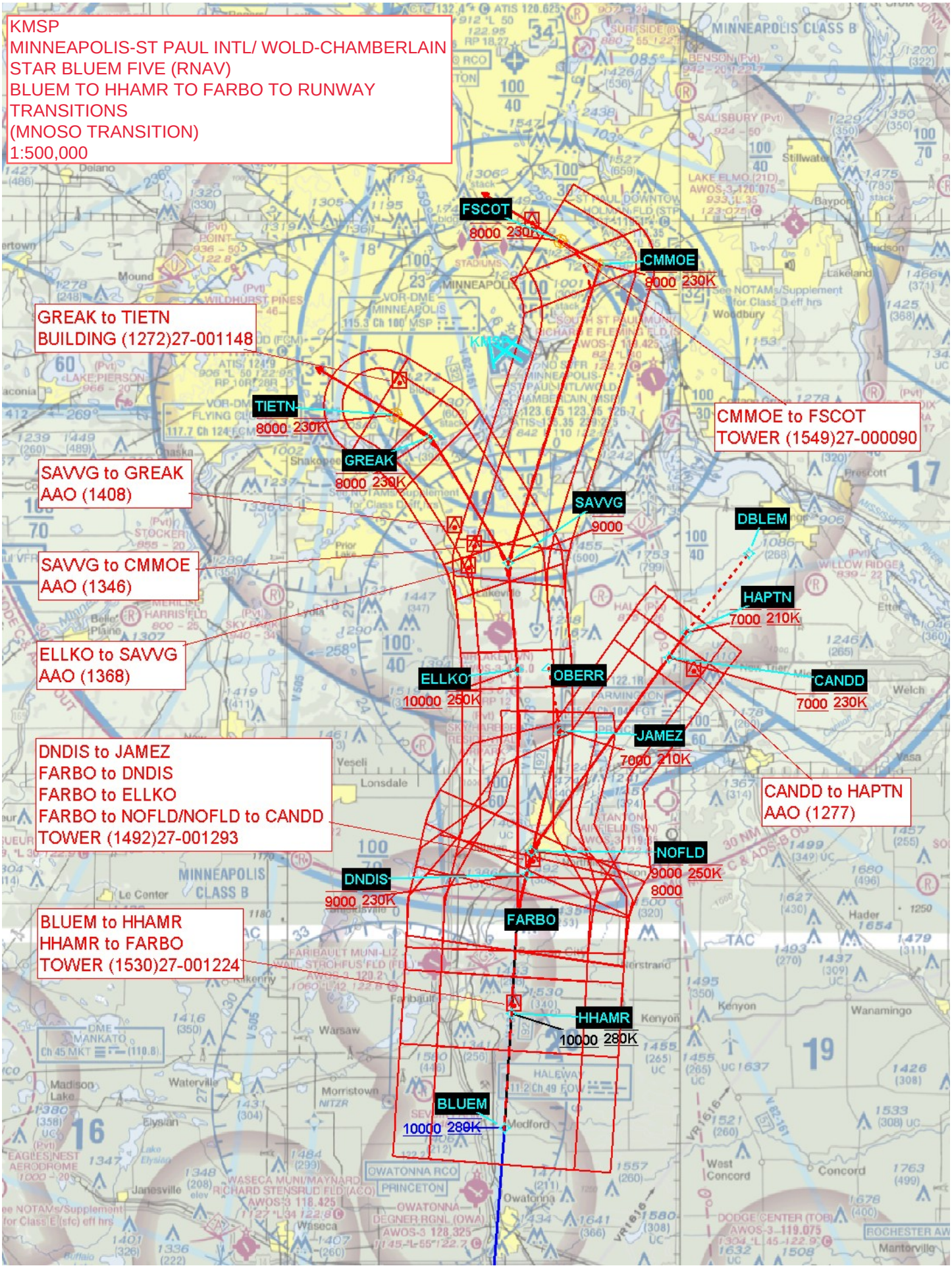

KMSP
MINNEAPOLIS-ST PAUL INTL/ WOLD-CHAMBERLAIN
STAR BLUEM FIVE (RNAV)
OOPEE TO LAZYY TO BLUEM
(HELOOTRANSITION)
1:500,000
BLUEM
10000 280K
LAZYY
16000 280K
OOPEE
FL240
LAZYY to BLUEM
TOWER (1532)27-002165
LAZYY HP
TOWER (2321)27-000324
OOPEE to LAZYY
WINDMILL (1750)27-087321
DNDIS
FARBO
NARLO
HHAMR


KMSP
MINNEAPOLIS-ST PAUL INTL/ WOLD-CHAMBERLAIN
STAR BLUEM FIVE (RNAV)
BLUEM TO HHAMR TO FARBO TO RUNWAY TRANSITIONS
(MNOSO TRANSITION)
1:500,000
FSCOT
8000 230K
CMMOE
8000 230K
GREAK to TIETN
BUILDING (1272)27-001148
TIETN
8000 230K
CMMOE to FSCOT
TOWER (1549)27-000090
GREAK
8000 230K
SAVVG to GREAK
AAO (1408)
SAVVG
9000
DBLEM
SAVVG to CMMOE
AAO (1346)
HAPTN
7000 210K
ELLKO to SAVVG
AAO (1368)
ELLKO
10000 250K
OBERR
CANDD
7000 230K
JAMEZ
7000 210K
DNDIS to JAMEZ
FARBO to DNDIS
FARBO to ELLKO
FARBO to NOFLD/NOFLD to CANDD
TOWER (1492)27-001293
CANDD to HAPTN
AAO (1277)
NOFLD
9000 250K
8000
DNDIS
9000 230K
FARBO
BLUEM to HHAMR
HHAMR to FARBO
TOWER (1530)27-001224
HHAMR
10000 280K
BLUEM
10000 280K
MINNEAPOLIS CLASS B
MINNEAPOLIS CLASS B


KMSP
MINNEAPOLIS-ST PAUL INTL/ WOLD-CHAMBERLAIN
STAR BLUEM FIVE (RNAV)
LAZYY TO BLUEM TO HHAMR TO FARBO
(LAZYY TRANSITION)
1:500,000
BLUEM to HHAMR
HHAMR to FARBO
TOWER (1530)27-001224
FARBO
HHAMR
10000 280K
BLUEM
10000 280K
LAZYY
16000 280K
LAZYY to BLUEM
TOWER (1532)27-002165
LAZYY HP
TOWER (2321)27-000324


KMSP
MINNEAPOLIS-ST PAUL INTL/ WOLD-CHAMBERLAIN
STAR BLUEM FIVE (RNAV)
BLUEM TO HHAMR TO FARBO TO RUNWAY TRANSITIONS
(MNOSO TRANSITION)
1:500,000
FSCOT
8000 230K
CMMOE
8000 230K
GREAK to TIETN
BUILDING (1272)27-001148
TIETN
8000 230K
CMMOE to FSCOT
TOWER (1549)27-000090
GREAK
8000 230K
SAVVG to GREAK
AAO (1408)
SAVVG
9000
DBLEM
SAVVG to CMMOE
AAO (1346)
HAPTN
7000 210K
ELLKO to SAVVG
AAO (1368)
ELLKO
10000 250K
OBERR
CANDD
7000 230K
JAMEZ
7000 210K
DNDIS to JAMEZ
FARBO to DNDIS
FARBO to ELLKO
FARBO to NOFLD/NOFLD to CANDD
TOWER (1492)27-001293
CANDD to HAPTN
AAO (1277)
NOFLD
9000 250K
8000
DNDIS
9000 230K
FARBO
BLUEM to HHAMR
HHAMR to FARBO
TOWER (1530)27-001224
HHAMR
10000 280K
BLUEM
10000 280K
MINNEAPOLIS CLASS B
MINNEAPOLIS CLASS B


KMSP
MINNEAPOLIS-ST PAUL INTL/ WOLD-CHAMBERLAIN
STAR BLUEM FIVE (RNAV)
OOPEE TO LAZYY TO BLUEM
(OOPEE TRANSITION)
1:500,000
BLUEM
10000 280K
LAZYY
16000 280K
OOPEE
FL240
LAZYY to BLUEM
TOWER (1532)27-002165
LAZYY HP
TOWER (2321)27-000324
OOPEE to LAZYY
WINDMILL (1750)27-087321


KMSP
MINNEAPOLIS-ST PAUL INTL/ WOLD-CHAMBERLAIN
STAR BLUEM FIVE (RNAV)
BLUEM TO HHAMR TO FARBO TO RUNWAY
TRANSITIONS
(MNOSO TRANSITION)
1:500,000
FSCOT
8000 230K
CMMOE
8000 230K
GREAK to TIETN
BUILDING (1272)27-001148
TIETN
8000 230K
CMMOE to FSCOT
TOWER (1549)27-000090
GREAK
8000 230K
SAVVG to GREAK
AAO (1408)
SAVVG
9000
DBLEM
SAVVG to CMMOE
AAO (1346)
HAPTN
7000 210K
ELLKO to SAVVG
AAO (1368)
ELLKO
10000 250K
OBERR
CANDD
7000 230K
JAMEZ
7000 210K
DNDIS to JAMEZ
FARBO to DNDIS
FARBO to ELLKO
FARBO to NOFLD/NOFLD to CANDD
TOWER (1492)27-001293
CANDD to HAPTN
AAO (1277)
NOFLD
9000 250K
8000
DNDIS
9000 230K
FARBO
BLUEM to HHAMR
HHAMR to FARBO
TOWER (1530)27-001224
HHAMR
10000 280K
BLUEM
10000 280K
MINNEAPOLIS CLASS B
MINNEAPOLIS
CLASS B