

RADIO FIX AND HOLDING DATA RECORD

NAME: BLUEM STATE: MN COUNTRY: US ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 441052.86N/0931325.67W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: ESTABLISH

HOLDING:

HOLDING TYPE OF ACTION:

FIX USE:

USE TYPE
STARUSE TITLE
BLUEM (RNAV)

FAC

PAT

AIRPORT IDENT
KMSPCITY
MINNEAPOLISSTATE
MN (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG

DATE OF REVISION: 03/05/2015

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 08/18/2014

OFFICE: AJV-353

NAME: THOMAS KIRKPATRICK

APPROVED BY:

DATE: 02/27/2015

OFFICE: AJV-353

NAME: GEORGE GONZALEZ

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: MSP APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: CANDD

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 443622.81N/0930050.94W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: ESTABLISH

HOLDING:

HOLDING TYPE OF ACTION:

FIX USE:

USE TYPE
STAR
STARUSE TITLE
BLUEM (RNAV)
NITZR (RNAV)

FAC

PAT

AIRPORT IDENT
KMSP
KMSPCITY
MINNEAPOLIS
MINNEAPOLISSTATE
MN (US)
MN (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG

DATE OF REVISION: 01/05/2017

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 08/24/2016

OFFICE: AJV-5431

NAME: DAVID DOWLING

APPROVED BY:

DATE: 11/08/2016

OFFICE: AJV-5420

NAME: TONY LAWSON

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: MSP APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: CMMOE

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 445739.87N/0930607.55W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE

USE TITLE

FAC

PAT

AIRPORT IDENT

CITY

STATE

| | | | | | | |
|------|----------------------|--|--|------|-------------|---------|
| IAP | RNAV (RNP) Y RWY 12L | | | KMSP | MINNEAPOLIS | MN (US) |
| STAR | BLUEM (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |
| STAR | KKILR (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |
| STAR | MUSCL (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |
| STAR | NITZR (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |

REQUIRED CHARTING: STAR, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 08/07/2025

REASON FOR REVISION:

1. FIX MOVED 0.2 NM SOUTHEAST.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A432

NAME: BARBARA GORMAN

APPROVED BY:

DATE: 07/03/2025

OFFICE: AJV-A430

NAME: CASIMIR TABAKA

SIGNATURE:

RADIO FIX AND HOLDING DATA RECORD

NAME: COZZZ

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 450315.64N/0931910.42W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: CANCEL

HOLDING:

HOLDING TYPE OF ACTION:

FIX USE:

USE TYPE

STAR
STAR
STAR
STAR

USE TITLE

BLUEM (RNAV)
KKILR (RNAV)
MUSCL (RNAV)
NITZR (RNAV)

FAC

PAT

AIRPORT IDENT

KMSP
KMSP
KMSP
KMSP

CITY

MINNEAPOLIS
MINNEAPOLIS
MINNEAPOLIS
MINNEAPOLIS

STATE

MN (US)
MN (US)
MN (US)
MN (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG

DATE OF REVISION: 08/07/2025

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 08/18/2014

OFFICE: AJV-353

NAME: THOMAS KIRKPATRICK

APPROVED BY:

DATE: 07/03/2025

OFFICE: AJV-A430

NAME: CASIMIR TABAKA

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: MSP APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: DNDIS

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 442437.21N/0931143.55W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: ESTABLISH

HOLDING:

HOLDING TYPE OF ACTION:

FIX USE:

USE TYPE
STARUSE TITLE
BLUEM

FAC

PAT

AIRPORT IDENT
KMSPCITY
MINNEAPOLISSTATE
MN (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG

DATE OF REVISION: 01/05/2017

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 08/24/2016

OFFICE: AJV-5431

NAME: DAVID DOWLING

APPROVED BY:

DATE: 11/08/2016

OFFICE: AJV-5420

NAME: TONY LAWSON

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: MSP APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: DOLEE

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 445402.69N/0933236.02W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: CANCEL

HOLDING:

HOLDING TYPE OF ACTION:

FIX USE:

USE TYPE

STAR
STAR
STAR
STAR

USE TITLE

BLUEM (RNAV)
KKILR (RNAV)
MUCSL (RNAV)
NITZR (RNAV)

FAC

PAT

AIRPORT IDENT

KMSP
KMSP
KMSP
KMSP

CITY

MINNEAPOLIS
MINNEAPOLIS
MINNEAPOLIS
MINNEAPOLIS

STATE

MN (US)
MN (US)
MN (US)
MN (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG

DATE OF REVISION: 08/07/2025

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 08/18/2014

OFFICE: AJV-353

NAME: THOMAS KIRKPATRICK

APPROVED BY:

DATE: 07/03/2025

OFFICE: AJV-A430

NAME: CASIMIR TABAKA

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: MSP APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: ELLKO

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 443542.49N/0931226.32W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE
STAR
STARUSE TITLE
BLUEM (RNAV)
NITZR (RNAV)

FAC

PAT

AIRPORT IDENT
KMSP
KMSPCITY
MINNEAPOLIS
MINNEAPOLISSTATE
MN (US)
MN (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 01/05/2017

REASON FOR REVISION:

ADDED KMSP BLUEM (RNAV) STAR TO FIX USE.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 08/24/2016

OFFICE: AJV-5431

NAME: DAVID DOWLING

APPROVED BY:

DATE: 11/08/2016

OFFICE: AJV-5420

NAME: TONY LAWSON

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: MSP APP CON, MSP TOWER
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: FARBO **STATE:** MN **COUNTRY:** US **ICAO REGION CODE:** K3

LATITUDE/LONGITUDE: 442228.13N/0931226.22W **TYPE:** WP

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

HOLDING: **HOLDING TYPE OF ACTION:**

| | | | | | | |
|-----------------|------------------|------------|------------|----------------------|-------------|--------------|
| FIX USE: | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
| STAR | BLUEM (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 03/05/2015

| | | | |
|----------------------|-------------------------|------------------------|---------------------------------|
| INITIATED BY: | DATE: | ORGANIZATION: | NAME: |
| DEVELOPED BY: | DATE: 08/18/2014 | OFFICE: AJV-353 | NAME: THOMAS KIRKPATRICK |
| APPROVED BY: | DATE: 02/27/2015 | OFFICE: AJV-353 | NAME: GEORGE GONZALEZ |

SIGNATURE:

DISTRIBUTION: NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: MSP APP CON, MSP TOWER
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: FSCOT

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 445855.65N/0930906.94W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE

USE TITLE

FAC

PAT

AIRPORT IDENT

CITY

STATE

| | | | | | | |
|------|----------------------|--|--|------|-------------|---------|
| IAP | RNAV (RNP) Y RWY 12L | | | KMSP | MINNEAPOLIS | MN (US) |
| STAR | BLUEM (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |
| STAR | KKILR (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |
| STAR | MUSCL (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |
| STAR | NITZR (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |

REQUIRED CHARTING: STAR, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 08/07/2025

REASON FOR REVISION:

1. FIX MOVED 3.2 NM SOUTHEAST. ATC RETAINED FIX NAME FOR OPERATIONAL ADVANTAGE.
2. ADDED FIX USE: KMSP STARS MUSCL (RNAV), NITZR (RNAV), BLUEM (RNAV), AND KKILR (RNAV).
3. ADDED REQUIRED CHARTING: STAR.
4. REMOVED REMARK: PRECISE FIX COORDINATES: 450035.378N/0931257.679W.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A432

NAME: BARBARA GORMAN

APPROVED BY:

DATE: 07/03/2025

OFFICE: AJV-A430

NAME: CASIMIR TABAKA

SIGNATURE:

RADIO FIX AND HOLDING DATA RECORD

NAME: GREAK

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 444819.40N/0931904.57W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE

USE TITLE

FAC

PAT

AIRPORT IDENT

CITY

STATE

| | | | | | | |
|------|----------------------|--|--|------|-------------|---------|
| IAP | RNAV (RNP) Y RWY 12R | | | KMSP | MINNEAPOLIS | MN (US) |
| STAR | BLUEM (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |
| STAR | KKILR (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |
| STAR | MUSCL (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |
| STAR | NITZR (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |

REQUIRED CHARTING: STAR, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 01/05/2017

REASON FOR REVISION:

MOVED FIX 693 FT SE FROM 444822.93N/0931912.80W.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 08/25/2016

OFFICE: AJV-5431

NAME: DAVID DOWLING

APPROVED BY:

DATE: 11/08/2016

OFFICE: AJV-5420

NAME: TONY LAWSON

SIGNATURE:

DISTRIBUTION:

NFDC

FPO: CEN

ARTCC: ZMP

ATC FACILITY: MSP APP CON, MSP TOWER

OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: HAPTN

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 443742.13N/0925930.61W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE

USE TITLE

FAC

PAT

AIRPORT IDENT

CITY

STATE

| | | | | | | |
|------|----------------------|--|--|------|-------------|---------|
| IAP | ILS OR LOC RWY 30L | | | KMSP | MINNEAPOLIS | MN (US) |
| IAP | ILS RWY 30L (CAT II) | | | KMSP | MINNEAPOLIS | MN (US) |
| IAP | RNAV (GPS) Z RWY 30L | | | KMSP | MINNEAPOLIS | MN (US) |
| IAP | RNAV (RNP) Y RWY 30L | | | KMSP | MINNEAPOLIS | MN (US) |
| STAR | BLUEM (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |
| STAR | NITZR (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |

REQUIRED CHARTING: STAR, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 01/05/2017

REASON FOR REVISION:

UPDATED FIX USE.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 09/08/2016

OFFICE: AJV-5421

NAME: DEANNA FIELDS

APPROVED BY:

DATE: 11/22/2016

OFFICE: AJV-5420

NAME: TONY LAWSON

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: MSP APP CON, MSP TOWER
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: HELLO

STATE: IA

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 424651.00N/0932135.00W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: ESTABLISH

HOLDING:

HOLDING TYPE OF ACTION:

FIX USE:

USE TYPE
STARUSE TITLE
BLUEN (RNAV)

FAC

PAT

AIRPORT IDENT
KMSPCITY
MINNEAPOLISSTATE
MN (US)

REQUIRED CHARTING: STAR, CONTROLLER, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG

DATE OF REVISION: 03/05/2015

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 08/18/2014

OFFICE: AJV-353

NAME: THOMAS KIRKPATRICK

APPROVED BY:

DATE: 02/27/2015

OFFICE: AJV-353

NAME: GEORGE GONZALEZ

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: MSP APP CON, MSP TOWER
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: HHAMR **STATE:** MN **COUNTRY:** US **ICAO REGION CODE:** K3
LATITUDE/LONGITUDE: 441703.65N/0931251.79W **TYPE:** WP

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

HOLDING: **HOLDING TYPE OF ACTION:**

| FIX USE: | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|------------------|--------------|-----|-----|---------------|-------------|---------|
| USE TYPE STAR | BLUEM (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 03/05/2015

| INITIATED BY: | DATE: | ORGANIZATION: | NAME: |
|---------------|------------------|-----------------|--------------------------|
| DEVELOPED BY: | DATE: 08/18/2014 | OFFICE: AJV-353 | NAME: THOMAS KIRKPATRICK |
| APPROVED BY: | DATE: 02/27/2015 | OFFICE: AJV-353 | NAME: GEORGE GONZALEZ |

SIGNATURE:

DISTRIBUTION: NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: MSP APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: JAMEZ **STATE:** MN **COUNTRY:** US **ICAO REGION CODE:** K3

LATITUDE/LONGITUDE: 443224.23N/0930908.72W **TYPE:** WP, RADAR, DME

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 | FEET | MRA | MAA |
|-----|-------------|-------|---------|-------|---------|----------|-------|------------------|------|------|------|
| 1 | MINNEAPOLIS | I-BMA | LOC/DME | | 169.53 | 169.53 | 21.37 | 21.38 | | 3000 | 7000 |

EXPANDED SERVICE VOLUME (ESV):

| FAC IDENT | FAC TYPE | RADIAL/BEARING | DISTANCE | MIN ALTITUDE | MAX ALTITUDE |
|-----------|----------|----------------|----------|--------------|--------------|
| I-BMA | LOC/DME | R-170 | 22 | 3000 | 7000 |

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

REMARKS:

I-BMA DME COORDINATES 445324.62N/0931438.04W

FIX USE:

| USE TYPE | USE TITLE | FAC | PAT | AIRPORT IDENT | CITY | STATE |
|----------|---------------------------|-----|-----|---------------|-------------|---------|
| IAP | ILS V RWY 35 (CONVERGING) | 1 | | KMSP | MINNEAPOLIS | MN (US) |
| IAP | ILS Z OR LOC RWY 35 | 1 | | KMSP | MINNEAPOLIS | MN (US) |
| IAP | ILS Z RWY 35 (CATII/III) | 1 | | KMSP | MINNEAPOLIS | MN (US) |
| IAP | ILS Z RWY 35 (SA CAT I) | 1 | | KMSP | MINNEAPOLIS | MN (US) |
| IAP | RNAV (GPS) Z RWY 35 | | | KMSP | MINNEAPOLIS | MN (US) |
| IAP | RNAV (RNP) Y RWY 35 | | | KMSP | MINNEAPOLIS | MN (US) |
| STAR | BLUEM (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |

REQUIRED CHARTING: STAR, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3 **DATE OF REVISION:** 03/05/2015

REASON FOR REVISION:

UPDATE FIX COORDINATES, FIX MOVED 4258 FEET S.
 FAC 1: CHANGED DME FROM 20.67 TO 21.37 AND DIST FROM FAC 20.68 TO 21.38.
 UPDATE ESV DME FROM 21 TO 22.
 UPDATED FIX USE.
 ADD STAR TO REQUIRED CHARTING.

11/10/2014: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 08/18/2014.
 IN REASON FOR REVISION CHANGED DISTANCE AND DIRECTION FIX MOVED FROM 4756 FEET SE TO 4258 FEET S.

12/03/2014: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 08/18/2014.
 1. CHANGED ESV FROM BEARING TO RADIAL.
 2. IN REASON FOR REVISION, CHANGED REASON FROM "FAC 1: CHANGED DME FROM 20.67 TO 21.37 TO, DIST FROM FAC 20.68 TO 21.38" TO "FAC 1: CHANGED DME FROM 20.67 TO 21.37 AND DIST FROM FAC 20.68 TO 21.38".
 3. IN REASON FOR REVISION, CHANGED "ADDED FIX USE" TO "UPDATED FIX USE".

| | | | |
|----------------------|-------------------------|------------------------|---------------------------------|
| INITIATED BY: | DATE: | ORGANIZATION: | NAME: |
| DEVELOPED BY: | DATE: 08/18/2014 | OFFICE: AJV-353 | NAME: THOMAS KIRKPATRICK |
| APPROVED BY: | DATE: 02/27/2015 | OFFICE: AJV-353 | NAME: GEORGE GONZALEZ |

SIGNATURE:

DISTRIBUTION: NFDC
 FPO: CEN
 ARTCC: ZMP
 ATC FACILITY: MSP APP CON, MSP TOWER
 OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: NOFLD

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 442552.15N/0931120.70W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: ESTABLISH

HOLDING:

HOLDING TYPE OF ACTION:

FIX USE:

USE TYPE
STARUSE TITLE
BLUEM (RNAV)

FAC

PAT

AIRPORT IDENT
KMSPCITY
MINNEAPOLISSTATE
MN (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG

DATE OF REVISION: 03/05/2015

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 08/18/2014

OFFICE: AJV-353

NAME: THOMAS KIRKPATRICK

APPROVED BY:

DATE: 02/27/2015

OFFICE: AJV-353

NAME: GEORGE GONZALEZ

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: MSP APP CON, MSP TOWER
OTHER:

RADIO FIX AND HOLDING DATA RECORD**NAME:** SAVVG**STATE:** MN**COUNTRY:** US**ICAO REGION CODE:** K3**LATITUDE/LONGITUDE:** 444130.09N/0931309.85W**TYPE:** WP**AIRSPACE DOCKET:****FIX TYPE OF ACTION:** ESTABLISH**HOLDING:****HOLDING TYPE OF ACTION:****FIX USE:**USE TYPE
STAR
STARUSE TITLE
BLUEM (RNAV)
NITZR (RNAV)**FAC****PAT**AIRPORT IDENT
KMSP
KMSPCITY
MINNEAPOLIS
MINNEAPOLISSTATE
MN (US)
MN (US)**REQUIRED CHARTING:** STAR**COMPULSORY REPORTING POINT:** NO**RECORD REVISION NUMBER:** ORIG**DATE OF REVISION:** 03/05/2015**INITIATED BY:****DATE:****ORGANIZATION:****NAME:****DEVELOPED BY:****DATE:** 08/18/2014**OFFICE:** AJV-353**NAME:** THOMAS KIRKPATRICK**APPROVED BY:****DATE:** 02/27/2015**OFFICE:** AJV-353**NAME:** GEORGE GONZALEZ**SIGNATURE:****DISTRIBUTION:**NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: MSP APP CON, MSP TOWER
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: TIETN

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 444929.62N/0932146.79W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE

USE TITLE

FAC

PAT

AIRPORT IDENT

CITY

STATE

| | | | | | | |
|------|----------------------|--|--|------|-------------|---------|
| IAP | RNAV (RNP) Y RWY 12R | | | KMSP | MINNEAPOLIS | MN (US) |
| STAR | BLUEM (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |
| STAR | KKILR (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |
| STAR | MUSCL (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |
| STAR | NITZR (RNAV) | | | KMSP | MINNEAPOLIS | MN (US) |

REQUIRED CHARTING: STAR, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 08/07/2025

REASON FOR REVISION:

1. FIX MOVED 3.55 NM SOUTHEAST. ATC RETAINED FIX NAME FOR OPERATIONAL ADVANTAGE.
2. ADDED FIX USE: KMSP STARS MUSCL (RNAV), NITZR (RNAV), BLUEM (RNAV), AND KKILR (RNAV).
3. ADDED REQUIRED CHARTING: STAR.
4. REMOVED REMARK: PRECISE FIX COORDINATES: 445119.070N/0932603.530W.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A432

NAME: BARBARA GORMAN

APPROVED BY:

DATE: 07/03/2025

OFFICE: AJV-A430

NAME: CASIMIR TABAKA

SIGNATURE: