

RADIO FIX AND HOLDING DATA RECORD

NAME: BAYKS **STATE:** WI **COUNTRY:** US **ICAO REGION CODE:** K5

LATITUDE/LONGITUDE: 450337.67N/0921253.65W **TYPE:** WP

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

HOLDING: **HOLDING TYPE OF ACTION:**

FIX USE:						
USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	MUSCL (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: 08/19/2014	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: CEWDA

STATE: WI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 444832.00N/0883300.00W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE
EN ROUTE
STARUSE TITLE
Q812
MUSCL (RNAV)

FAC

PAT

AIRPORT IDENT

CITY

STATE
(US)
MN (US)

KMSP

MINNEAPOLIS

REQUIRED CHARTING: STAR, CONTROLLER, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 03/05/2015

REASON FOR REVISION:

REMOVED AIRSPACE DOCKET NUMBER.
ADD FIX USE.
ADD STAR TO REQUIRED CHARTING.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 08/19/2014

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: CMARO **STATE:** WI **COUNTRY:** US **ICAO REGION CODE:** K5

LATITUDE/LONGITUDE: 445634.79N/0904135.78W **TYPE:** WP

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

HOLDING: **HOLDING TYPE OF ACTION:**

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

REQUIRED CHARTING: STAR, EN ROUTE HIGH

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: GREAK **STATE:** MN **COUNTRY:** US **ICAO REGION CODE:** K3

LATITUDE/LONGITUDE: 444819.40N/0931904.57W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

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

FIX USE:	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
USE TYPE						
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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2 **DATE OF REVISION:** 03/19/2026

REASON FOR REVISION:
 1. REMOVED FIX USE: KMSP RNAV (RNP) Y RWY 12R.
 2. REMOVED REQUIRED CHARTING: IAP.

INITIATED BY:	DATE:	ORGANIZATION:	NAME:
OFFICE OF PRIMARY RESPONSIBILITY:		AJV-A432	NAME: BARBARA GORMAN
APPROVED BY:	DATE: 02/12/2026	OFFICE: AJV-A430	NAME: CASIMIR TABAKA
SIGNATURE:			

RADIO FIX AND HOLDING DATA RECORD

NAME: IDIOM		STATE: WI		COUNTRY: US		ICAO REGION CODE: K5	
LATITUDE/LONGITUDE: 443018.00N/0881757.00W		TYPE: WP					
AIRSPACE DOCKET:		FIX TYPE OF ACTION: NO CHANGE					
HOLDING:		HOLDING TYPE OF ACTION: NO CHANGE					
FIX USE:	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE	
USE TYPE	Q440					(US)	
EN ROUTE	MUSCL (RNAV)			KMSP	MINNEAPOLIS	MN (US)	
STAR							

REQUIRED CHARTING: STAR, CONTROLLER, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2 **DATE OF REVISION:** 03/05/2015

REASON FOR REVISION:
 REMOVED AIRSPACE DOCKET NUMBER.
 ADD FIX USE.
 ADD STAR TO REQUIRED CHARTING.

INITIATED BY:	DATE:	ORGANIZATION:	NAME:
DEVELOPED BY:	DATE: 08/20/2014	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: KROIX **STATE:** WI **COUNTRY:** US **ICAO REGION CODE:** K5
LATITUDE/LONGITUDE: 445323.70N/0924345.43W **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	MUSCL (RNAV)			KMSP	MINNEAPOLIS	MN (US)
STAR						

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 01/05/2017

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
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: LKLND

STATE: WI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 445802.53N/0923724.03W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: ESTABLISH

HOLDING:

HOLDING TYPE OF ACTION:

FIX USE:

USE TYPE
STARUSE TITLE
MUSCL (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: 08/20/2014

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: MUSCL

STATE: WI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 450143.75N/0914636.60W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

FIX NAME RETAINED, PER JO 7400.2K.

FIX USE:

USE TYPE

STAR

USE TITLE

MUSCL (RNAV)

FAC

PAT

AIRPORT IDENT

KMSP

CITY

MINNEAPOLIS

STATE

MN (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 01/05/2017

REASON FOR REVISION:

MOVED FIX 2.08 NM NORTH AND ADDED FIX RETENTION REMARK.

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: TRTEL

STATE: WI

COUNTRY: US

ICAO REGION CODE: K5

LATITUDE/LONGITUDE: 445157.46N/0924543.09W

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 30R			KMSP	MINNEAPOLIS	MN (US)
IAP	RNAV (GPS) Z RWY 30R			KMSP	MINNEAPOLIS	MN (US)
IAP	RNAV (RNP) Y RWY 30R			KMSP	MINNEAPOLIS	MN (US)
STAR	MUSCL (RNAV)			KMSP	MINNEAPOLIS	MN (US)

REQUIRED CHARTING: STAR, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 06/22/2017

REASON FOR REVISION:

1. UPDATED FIX USE: ADDED RNAV (GPS) Z RWY 30R KMSP.

INITIATED BY:
DATE:
ORGANIZATION:
NAME:
DEVELOPED BY:
DATE: 12/21/2016

OFFICE: AJV-5432

NAME: DEANNA FIELDS

APPROVED BY:
DATE:
OFFICE: AJV-5430

NAME: PATRICK MULQUEEN

SIGNATURE:
DISTRIBUTION:

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

RADIO FIX AND HOLDING DATA RECORD

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

LATITUDE/LONGITUDE: 445642.40N/0925621.76W **TYPE:** WP

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

HOLDING: **HOLDING TYPE OF ACTION:**

FIX USE:						
USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	MUSCL (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: 08/20/2014	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: ZASKY		STATE: MN	COUNTRY: US	ICAO REGION CODE: K3
LATITUDE/LONGITUDE: 445549.08N/0930151.18W		TYPE: WP		
AIRSPACE DOCKET:		FIX TYPE OF ACTION: MODIFY		
HOLDING:		HOLDING TYPE OF ACTION: NO CHANGE		
FIX USE:	USE TITLE	FAC	PAT	AIRPORT IDENT
USE TYPE STAR	MUSCL (RNAV)			KMSP
			CITY MINNEAPOLIS	STATE MN (US)

REQUIRED CHARTING: STAR, AREA, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 7 **DATE OF REVISION:** 03/19/2026

REASON FOR REVISION:
 1. REMOVED FIX TYPE: DME.
 2. REMOVED FIX MAKE-UP FACILITY: MINNEAPOLIS (MSP) VOR/DME.
 3. REMOVED FIX USE: KMSP EAU CLAIRE STAR AND WILDD STAR.
 4. UPDATED REQUIRED CHARTING: CONTROLLER TO CONTROLLER LOW.

INITIATED BY:	DATE:	ORGANIZATION:	NAME:
OFFICE OF PRIMARY RESPONSIBILITY:		AJV-A432	NAME: BARBARA GORMAN
APPROVED BY:	DATE: 02/12/2026	OFFICE: AJV-A430	NAME: CASIMIR TABAKA
SIGNATURE:			