

RADIO FIX AND HOLDING DATA RECORD

NAME: CUXER

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 465136.78N/0920437.89W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: CANCEL

FIX RESTRICTIONS:

COPTER RNAV (GPS) 193, MN33, DULUTH, MN

HOLDING:

HOLDING TYPE OF ACTION:

REMARKS:

5/17/17 THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 3/28/17.
UPDATED DATE OF REVISION FROM 10/15/15 TO 6/22/17.

FIX USE:

USE TYPE
SPECIAL IAP

USE TITLE
COPTER RNAV (GPS) 193

FAC

PAT

AIRPORT IDENT
MN33

CITY
DULUTH

STATE
MN (US)

REQUIRED CHARTING: SPECIAL IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 06/22/2017

REASON FOR REVISION:

UPDATED FIX USE.
DELETED FAC 1.
DELETED RESTRICTED-ST MARY'S HOSPITAL FROM REMARKS, ADDED SPECIAL COPTER RNAV GPS) 193, KMN33, DULUTH, MN TO FIX RESTRICTIONS.
ADDED SPECIAL IAP TO REQUIRED CHARTING.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 04/30/2015

OFFICE: AJV-5413

NAME: JERRY MCCULLOUGH

APPROVED BY:

DATE: 02/20/2025

OFFICE: AJV-A420

NAME: CASIMIR TABAKA

SIGNATURE: *Digitally signed by*
DAVID DANNER

DISTRIBUTION:

NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY: DLH APP CON
OTHER:
Oct 21, 2024

QUALITY
20
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: DUKTE

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 464828.26N/0920536.31W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: CANCEL

FIX RESTRICTIONS:

EHOSI ONE, MN33, DULUTH, MN
COPTER RNAV (GPS) 193, MN33, DULUTH, MN

HOLDING:

HOLDING TYPE OF ACTION:

REMARKS:

5/17/17 THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 3/28/17.
UPDATED DATE OF REVISION FROM 10/15/15 TO 6/22/17.

FIX USE:

USE TYPE
SPECIAL DP
SPECIAL IAP

USE TITLE
EHOSI ONE
COPTER RNAV (GPS) 193

FAC

PAT

AIRPORT IDENT
MN33
MN33

CITY
DULUTH
DULUTH

STATE
MN (US)
MN (US)

REQUIRED CHARTING: SPECIAL IAP, SPECIAL DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 06/22/2017

REASON FOR REVISION:

DELETED FAC 1.
UPDATED FIX USE.
DELETED RESTRICTED-ST MARY'S HOSPITAL FROM REMARKS, ADDED SPECIAL COPTER RNAV (GPS) 193, KMN33, DULUTH, MN TO FIX RESTRICTIONS.
ADDED SPECIAL IAP TO REQUIRED CHARTING.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 04/30/2015

OFFICE: AJV-5413

NAME: JERRY MCCULLOUGH

APPROVED BY:

DATE: 02/20/2025

OFFICE: AJV-A420

NAME: CASIMIR TABAKA

SIGNATURE:

Digitally signed by

DAVID DANNER

DISTRIBUTION:

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

Oct 21, 2024

QUALITY
20
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: EHOSI

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 465432.76N/0920343.25W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: CANCEL

FIX RESTRICTIONS:

EHOSI ONE, MN33, DULUTH, MN
COPTER RNAV (GPS) 193 (SPECIAL), MN33, DULUTH, MN

HOLDING:

HOLDING TYPE OF ACTION: CANCEL

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME DME	HOLDING ALTITUDES MIN MAX	TEMPLATES MIN MAX
1	N		WP	013.02	193.02	R	4	3100 6000	4 4

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	100	200' AAO	470333.00N/0920324.00W	1788	4E

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:

5/17/17 THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 3/28/17.
UPDATED DATE OF REVISION FROM 10/15/15 TO 6/22/17.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
SPECIAL DP	EHOSI ONE			MN33	DULUTH	MN (US)
SPECIAL IAP	COPTER RNAV (GPS) 193 (SPECIAL)			MN33	DULUTH	MN (US)

REQUIRED CHARTING: SPECIAL IAP, SPECIAL DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 06/22/2017

REASON FOR REVISION:

DELETED FAC 1.
UPDATED FIX USE.
DELETED RESTRICTED-ST MARY'S HOSPITAL FROM REMARKS, ADDED SPECIAL COPTER RNAV (GPS) 193 (SPECIAL), KMN33, DULUTH, MN TO FIX RESTRICTIONS.
MOVED HOLDING LIMITED TO ESTABLISHED PATTERN FROM REMARKS TO FIX RESTRICTIONS.
ADDED SPECIAL IAP TO REQUIRED CHARTING.
UPDATED HOLDING RAD/CRS/BRG FROM 010.02 TO 013.02 AND CRS INBOUND FROM 190.02 TO 193.02 DUE TO MAG VAR UPDATE FROM 2E TO 1W

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 04/30/2015

OFFICE: AJV-5413

NAME: JERRY MCCULLOUGH

APPROVED BY:

DATE: 02/20/2025

OFFICE: AJV-A420

NAME: CASIMIR TABAKA

SIGNATURE:

Digitally signed by

DAVID DANNER

Oct 21, 2024

DISTRIBUTION:

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

QUALITY
20
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: FEMUG

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 464926.92N/0920518.14W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: CANCEL

FIX RESTRICTIONS:

COPTER RNAV (GPS) 193, MN33, DULUTH, MN

HOLDING:

HOLDING TYPE OF ACTION:

REMARKS:

5/17/17 THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 3/28/17.
UPDATED DATE OF REVISION FROM 10/15/15 TO 6/22/17.

FIX USE:

USE TYPE
SPECIAL IAP

USE TITLE
COPTER RNAV (GPS) 193

FAC

PAT

AIRPORT IDENT
MN33

CITY
DULUTH

STATE
MN (US)

REQUIRED CHARTING: SPECIAL IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 06/22/2017

REASON FOR REVISION:

DELETED FAC 1.
UPDATED FIX USE.
DELETED RESTRICTED-ST MARY'S HOSPITAL FROM REMARKS, ADDED SPECIAL COPTER RNAV (GPS) 193, KMN33, DULUTH, MN TO FIX RESTRICTIONS.
ADDED SPECIAL IAP TO REQUIRED CHARTING.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 04/30/2015

OFFICE: AJV-5413

NAME: JERRY MCCULLOUGH

APPROVED BY:

DATE: 02/20/2025

OFFICE: AJV-A420

NAME: CASIMIR TABAKA

SIGNATURE:

Digitally signed by

DAVID DANNER

DISTRIBUTION:

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

Oct 21, 2024

QUALITY
20
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: LAZNU

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 464644.45N/0920042.34W

TYPE: WP, DME

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	DULUTH	DLH	VORTAC	H	094.93	099.93	8.00	8.00		3000	6000

HOLDING:

HOLDING TYPE OF ACTION: CANCEL

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE (US)
EN ROUTE	V191-430					

REQUIRED CHARTING: EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3

DATE OF REVISION: 02/20/2025

REASON FOR REVISION:

DELETED HOLDING PATTERN 1 AND ALL ASSOCIATED DATA.
DELETED HOLDING RESTRICTIONS: HOLDING LIMITED TO ESTABLISHED PATTERN.
DELETED FIX USE: MN33 SPECIAL IAPS - COPTER RNAV (GPS) 193 AND 333.
DELETED REQUIRED CHARTING: SPECIAL IAP AND CONTROLLER.
ADDED REQUIRED CHARTING: CONTROLLER LOW.
DELETED REMARKS: 5/17/17 THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 3/28/17 AND UPDATED DATE OF REVISION FROM 10/15/15 TO 6/22/17.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A421

NAME: ANDRE MARSH

APPROVED BY:

DATE: 02/20/2025

OFFICE: AJV-A420

NAME: CASIMIR TABAKA

SIGNATURE: *Digitally signed by*
DAVID DANNER
Oct 21, 2024



RADIO FIX AND HOLDING DATA RECORD

NAME: VURLY

STATE: MN

COUNTRY: US

ICAO REGION CODE: K3

LATITUDE/LONGITUDE: 465521.98N/0915900.47W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: MODIFY

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE
EN ROUTE
EN ROUTE

USE TITLE
Q924
T331

FAC PAT AIRPORT IDENT CITY

STATE
(US)
(US)

REQUIRED CHARTING: EN ROUTE LOW, EN ROUTE HIGH, CONTROLLER LOW, CONTROLLER HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 6

DATE OF REVISION: 02/20/2025

REASON FOR REVISION:

DELETED FIX USE: MN33 SPECIAL IAP - COPTER RNAV (GPS) 193. (PROCEDURE CANCELLED).
DELETED REQUIRED CHARTING: SPECIAL IAP.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A421

NAME: ANDRE MARSH

APPROVED BY:

DATE: 02/20/2025

OFFICE: AJV-A420

NAME: CASIMIR TABAKA

SIGNATURE:

Digitally signed by

DAVID DANNER

Oct 21, 2024

