

RADIO FIX AND HOLDING DATA RECORD

NAME: BFREE

STATE: CO

COUNTRY: US

ICAO REGION CODE: K2

LATITUDE/LONGITUDE: 392922.11N/1044129.37W

TYPE: WP, RADAR, DME

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM FEET	MRA	MAA
1	DENVER	I-OUF	LOC/DME		172.51	180.51	24.61	24.60	10000	14000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-OUF	LOC/DME	R-173	25	10000	14000

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

DENVER (FAC 1) USED TO ESTABLISH FIX COORDINATES.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 34R	1		KDEN	DENVER	CO (US)
IAP	ILS RWY 34R (CAT II/CAT III)	1		KDEN	DENVER	CO (US)
IAP	ILS RWY 34R (SA CAT I)	1		KDEN	DENVER	CO (US)
IAP	RNAV (GPS) Y RWY 34R			KDEN	DENVER	CO (US)
IAP	RNAV (RNP) Z RWY 34R			KDEN	DENVER	CO (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1

DATE OF REVISION: 11/27/2025

REASON FOR REVISION:

FIX USE ADDED RNAV (GPS) Y RWY 34R, RNAV (RNP) Z RWY 34R @ KDEN

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A433

NAME: JOSHUA DUGAN

APPROVED BY:

DATE: 10/23/2025

OFFICE: AJV-A433

NAME: ROBERT HAMILTON

SIGNATURE:

RADIO FIX AND HOLDING DATA RECORD

NAME: BOENG STATE: CO COUNTRY: US ICAO REGION CODE: K2

LATITUDE/LONGITUDE: 393958.76N/1044122.08W 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	MRA	MAA
								NM FEET		
1	DENVER	I-OUF	LOC/DME		172.51	180.51	14.00	14.00	9000	11000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-OUF	LOC/DME	R-173	14	9800	11000

HOLDING: HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

DENVER (FAC 1) USED TO ESTABLISH FIX COORDINATES.
NAME CHANGED FROM RLESS TO BOENG

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 34R	1		KDEN	DENVER	CO (US)
IAP	ILS RWY 34R (CAT II/CAT III)	1		KDEN	DENVER	CO (US)
IAP	ILS RWY 34R (SA CAT I)	1		KDEN	DENVER	CO (US)
IAP	RNAV (GPS) Y RWY 34R			KDEN	DENVER	CO (US)
IAP	RNAV (RNP) Z RWY 34R			KDEN	DENVER	CO (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 DATE OF REVISION: 11/15/2012

REASON FOR REVISION:

FAC 1 MAG BRG CHANGED FROM 171.51 TO 172.51
FAC 1 MAGVAR CHANGED FROM 9E TO 8E
UPDATED FIX USE
NAME CHANGED FROM RLESS TO BOENG

INITIATED BY:	DATE:	ORGANIZATION:	NAME:
DEVELOPED BY:	DATE: 10/31/2011	OFFICE: AJV-354	NAME: CHARLES SCHNEIDER
APPROVED BY:	DATE: 10/22/2012	OFFICE: AJV-354	NAME: DEZ SILAGYI

SIGNATURE:

DISTRIBUTION: NFDC
FPO: WST
ARTCC: ZDV
ATC FACILITY: DEN APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: BOOBU STATE: CO COUNTRY: US ICAO REGION CODE: K2

LATITUDE/LONGITUDE: 393200.38N/1044127.57W 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	MRA	MAA
								NM FEET		
1	DENVER	I-OUF	LOC/DME		172.51	180.51	21.97	21.97	8000	11000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-OUF	LOC/DME	R-173	22	8000	11000

HOLDING: HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 34R	1		KDEN	DENVER	CO (US)
IAP	ILS RWY 34R (CAT II/CAT III)	1		KDEN	DENVER	CO (US)
IAP	ILS RWY 34R (SA CAT I)	1		KDEN	DENVER	CO (US)
IAP	RNAV (GPS) Y RWY 34R			KDEN	DENVER	CO (US)
IAP	RNAV (RNP) Z RWY 34R			KDEN	DENVER	CO (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4 DATE OF REVISION: 11/15/2012

REASON FOR REVISION:

FAC 1 MAG BRG CHANGED FROM 171.51 TO 172.51
FAC 1 MAGVAR CHANGED FROM 9E TO 8E
UPDATED FIX USE

INITIATED BY: DATE: ORGANIZATION: NAME:

DEVELOPED BY: DATE: 10/31/2011 OFFICE: AJV-354 NAME: CHARLES SCHNEIDER

APPROVED BY: DATE: 10/22/2012 OFFICE: AJV-354 NAME: DEZ SILAGYI

SIGNATURE:

DISTRIBUTION: NFDC
FPO: WST
ARTCC: ZDV
ATC FACILITY: DEN APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: CADKO

STATE: CO

COUNTRY: US

ICAO REGION CODE: K2

LATITUDE/LONGITUDE: 394950.68N/1044115.27W

TYPE: WP, RADAR, DME

AIRSPACE DOCKET:

FIX TYPE OF ACTION: ESTABLISH

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC	FAC	MRA	MAA
								NM	FEET		
1	DENVER	I-OUF	LOC/DME		172.51	180.51	4.15	4.14		6000	9800

HOLDING:

HOLDING TYPE OF ACTION:

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 34R	1		KDEN	DENVER	CO (US)
IAP	RNAV (GPS) Y RWY 34R			KDEN	DENVER	CO (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG

DATE OF REVISION: 11/15/2012

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 12/12/2011

OFFICE: AJV-354

NAME: CHARLES SCHNEIDER

APPROVED BY:

DATE: 10/22/2012

OFFICE: AJV-354

NAME: DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: WST
ARTCC: ZDV
ATC FACILITY: DEN APP CON
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: CORDE

STATE: CO

COUNTRY: US

ICAO REGION CODE: K2

LATITUDE/LONGITUDE: 394650.76N/1044117.34W

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	MRA	MAA
								NM FEET		
1	DENVER	I-OUF	LOC/DME		172.51	180.51	7.13	7.13 43309	7000	9800

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

DENVER (FAC 1) USED TO ESTABLISH FIX COORDINATES.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 34R	1		KDEN	DENVER	CO (US)
IAP	ILS RWY 34R (CAT II/CAT III)	1		KDEN	DENVER	CO (US)
IAP	ILS RWY 34R (SA CAT I)	1		KDEN	DENVER	CO (US)
IAP	RNAV (GPS) Y RWY 34R			KDEN	DENVER	CO (US)
IAP	RNAV (RNP) Z RWY 34R			KDEN	DENVER	CO (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5

DATE OF REVISION: 11/27/2025

REASON FOR REVISION:

UPDATED COORDINATES FROM N394651.46/W1044117.33 TO N394650.7572/W1044117.3395 MOVED 71 FT SOUTH.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A433

NAME: JOSHUA DUGAN

APPROVED BY:

DATE: 10/23/2025

OFFICE: AJV-A433

NAME: ROBERT HAMILTON

SIGNATURE:

RADIO FIX AND HOLDING DATA RECORD

NAME: HYGEN **STATE:** CO **COUNTRY:** US **ICAO REGION CODE:** K2

LATITUDE/LONGITUDE: 400903.89N/1051057.91W **TYPE:** WP, INT, DME

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

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	FEET	MRA	MAA
1	GILL	GLL	VOR/DME	VH	221.00	234.00	35.81	35.81		9400	17500
2	FALCON	FQF	VORTAC	VH	306.00	317.00	37.90	37.90		9400	17500
3	DENVER	DEN	VOR/DME	H	302.00	310.00	31.49	31.49		9400	17500
4	KREMMLING	RLG	VOR/DME	VH	066.87	080.87	58.70	58.70		17000	17500

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
RLG	VOR/DME	R-067	59	17000	18000

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	DME	HOLDING ALTITUDES		TEMPLATES	
									MIN	MAX	MIN	MAX
1	SE	FQF	VORTAC	306.00	306.00	R	1		10000	14000	11	12
2	SE		WP	128.00	308.00	R		7	10300	14000	10	11
3	SE	DEN	VOR/DME	302.30	302.30	R	1		10400	14000	11	12
4	SE		WP	129.00	309.00	R		7	9100	14000	10	11
5	SE	FQF	VORTAC	306.00	306.00	R	1		9200	14000	11	12
6	SE	DEN	VOR/DME	302.30	302.30	R	1		9200	14000	11	12

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	AAO	400824.00N/1052103.00W	8780	4E
1	310	AAO	400821.00N/1052415.00W	8846	4E
2	230	AAO	400824.00N/1052103.00W	8780	4E
2	310	AAO	400813.20N/1052117.30W	8788	6C
3	230	AAO	400824.00N/1052103.00W	8780	4E
3	310	AAO	401732.48N/1052445.22W	9490	3A
4	230	TERRAIN	400827.00N/1052103.00W	8793	4B
5	230	TERRAIN	400827.00N/1052103.00W	8793	4B
6	230	TERRAIN	400824.00N/1052102.00W	8788	2C

PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
1	310	267
1	230	86
2	310	350
3	230	97
3	310	298
4	230	220
5	230	220
6	230	220

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:

GILL (FAC 1) AND FALCON (FAC 2) USED TO ESTABLISH FIX COORDINATES.
 PRECIPITOUS TERRAIN EVALUATION COMPLETED.
 PAT 1 CONTROLLING OBSTRUCTION (230 KIAS) 11750.28 FT INTO SECONDARY AREA (7929 EQUIV).
 PAT 2 CONTROLLING OBSTRUCTION (230 KIAS) 11585.56 FT INTO SECONDARY AREA (7810 EQUIV).
 PAT 3 CONTROLLING OBSTRUCTION (230 KIAS) 11789.04 FT INTO SECONDARY AREA (7956 EQUIV).
 PAT 4 CONTROLLING OBSTRUCTION (230 KIAS) 8530.08 FT INTO SECONDARY AREA (7941 EQUIV).
 PAT 5 CONTROLLING OBSTRUCTION (230 KIAS) 8530.08 FT INTO SECONDARY AREA (7941 EQUIV).
 PAT 6 CONTROLLING OBSTRUCTION (230 KIAS) 7865.89 FT INTO SECONDARY AREA (7965 EQUIV).

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE (US)
EN ROUTE	V220	1, 2, 3, 4				(US)
EN ROUTE	V85	1, 2, 3, 4				(US)
IAP	ILS OR LOC RWY 30R	1, 2, 3	1, 3	KBJC	DENVER	CO (US)
IAP	RNAV (GPS) RWY 30L		2	KBJC	DENVER	CO (US)
IAP	RNAV (GPS) RWY 30R		2	KBJC	DENVER	CO (US)
IAP	ILS OR LOC RWY 25	1, 2, 3	1, 6	KDEN	DENVER	CO (US)
IAP	ILS OR LOC RWY 34L	1, 2, 3	5	KDEN	DENVER	CO (US)
IAP	ILS RWY 34L (CAT II/CAT III)	1, 2, 3	5	KDEN	DENVER	CO (US)
IAP	ILS RWY 34L (SA CAT I)	1, 2, 3	5	KDEN	DENVER	CO (US)
IAP	RNAV (GPS) Y RWY 25		4	KDEN	DENVER	CO (US)
IAP	RNAV (GPS) Y RWY 34L		4	KDEN	DENVER	CO (US)

IAP	RNAV (RNP) Z RWY 34L	4	KDEN	DENVER	CO (US)
IAP	RNAV (GPS) RWY 33		KFNL	FORT COLLINS/LOVELAND	CO (US)
STAR	TOMSN	1, 2	KBKF	AURORA	CO (US)
STAR	TOMSN	1, 2	KAPA	DENVER	CO (US)
STAR	TOMSN	1, 2	KBJC	DENVER	CO (US)
STAR	TOMSN	1, 2	KCFO	DENVER	CO (US)
STAR	TOMSN	1, 2	KDEN	DENVER	CO (US)
STAR	TOMSN	1, 2	KFNL	FORT COLLINS/LOVELAND	CO (US)
STAR	TOMSN	1, 2	KGXY	GREELEY	CO (US)

REQUIRED CHARTING: SECTIONAL, STAR, IAP, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 15

DATE OF REVISION: 11/27/2025

REASON FOR REVISION:

CONTROLLING OBSTRUCTION UPDATED PAT 4 AND PAT 5

PRECIPITOUS TERRAIN ADDITIONS UPDATED PAT 4

REMARKS UPDATED PAT 4 AND PAT 5 CONTROLLING OBSTRUCTION FROM 8510.74 TO 8530.08 FROM 7938 EQUIV TO 7941 EQUIV.

FIX USE REMOVED ILS OR LOC RWY 34R, ILS RWY 34R (CAT II/CAT III), ILS RWY 34R (SA CAT I), RNAV (GPS) Y RWY 34R, RNAV (RNP) Z

RWY 34R @ KDEN REMOVED PAT 6 FROM ILS OR LOC RWY 34L

FIX USE ADDED RNAV (GPS) Y RWY 34L @ KDEN

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A433

NAME: JOSHUA DUGAN

APPROVED BY:

DATE: 10/23/2025

OFFICE: AJV-A433

NAME: ROBERT HAMILTON

SIGNATURE:

SIGNATURE: