

# RADIO FIX AND HOLDING DATA RECORD

NAME: MUSTANG VORTAC

STATE: NV

COUNTRY: US

ICAO REGION CODE: K2

LATITUDE/LONGITUDE: 393152.60N/1193921.87W

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 FAC NM	MRA FEET	MAA
1	MUSTANG	FMG	VORTAC	H						45000

**FIX RESTRICTIONS:**

MCA V6 12000 SOUTHWEST BOUND  
MCA V165 10000 SOUTHBOUND  
MCA V28-113 10500 SOUTHBOUND

**HOLDING:**

HOLDING TYPE OF ACTION: NO CHANGE

**PATTERNS:**

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG TIME	LENGTH DME	HOLDING MIN	ALTITUDES MAX	TEMPLATES MIN	MAX
1	NE	FMG	VORTAC	041.13	221.13	L	1		10000	17500	9	16
2	NE	FMG	VORTAC	041.13	221.13	R	1		10000	17500	9	16
3	NE	WP	WP	041.13	221.13	L		7	12000	17500	10	17

**CONTROLLING OBSTRUCTIONS:**

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	AAO	393909.00N/1192745.00W	8222	4E
1	310	AAO	394521.00N/1192739.00W	8537	4E
2	230	AAO	393909.00N/1192745.00W	8222	4E
2	310	AAO	394521.00N/1192739.00W	8537	4E
3	230	AAO	393909.00N/1192745.00W	8222	4E
3	310	AAO	394521.00N/1192739.00W	8537	4E

**PRECIPITOUS TERRAIN ADDITIONS:**

PAT	SPEED	ADDITION
1	230	330
1	310	370
2	230	340
2	310	360
3	310	370
3	230	330

**REASON FOR NONSTANDARD HOLDING:**

PAT 1 ATC REQUEST  
PAT 3 ATC REQUEST

**HOLDING RESTRICTIONS:**

HOLDING LIMITED TO ESTABLISHED PATTERNS.

**PROCEDURES REQUIRING CLIMB-IN-HOLD:**

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	HUNGRY	KRNO	RENO	NV (US)
1	MUSTANG	KRNO	RENO	NV (US)
1	TAKEOFF MINIMUMS	KRNO	RENO	NV (US)
1	VISTA	KRNO	RENO	NV (US)
1	VOR-D	KRNO	RENO	NV (US)
1	MYBAD (RNAV)	KRNO	RENO	NV (US)
2	TAKEOFF MINIMUMS	KRTS	RENO	NV (US)
3	KENNO (RNAV)	KRNO	RENO	NV (US)

**REMARKS:**

PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
MAGVAR FMG 16E/1985.

**FIX USE:**

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	CHICO			KCIC	CHICO	CA (US)
DP	YOSEMITE			KFAT	FRESNO	CA (US)
DP	OZIEE (RNAV)			KAPC	NAPA	CA (US)
DP	SHASTA			KRDD	REDDING	CA (US)
DP	DUDES			KSMF	SACRAMENTO	CA (US)
DP	RICHY			KTVL	SOUTH LAKE TAHOE	CA (US)
DP	SHOLE			KTVL	SOUTH LAKE TAHOE	CA (US)
DP	TAHOE (RNAV)			KTRK	TRUCKEE	CA (US)
DP	TRUCK			KTRK	TRUCKEE	CA (US)
DP	HUNGRY		1	KRNO	RENO	NV (US)
DP	MUSTANG		1	KRNO	RENO	NV (US)
DP	RENO			KRNO	RENO	NV (US)
DP	TAKEOFF MINIMUMS		1	KRNO	RENO	NV (US)

DP	VISTA	1	KRNO	RENO	NV (US)
DP	WAGGE		KRNO	RENO	NV (US)
DP	TAKEOFF MINIMUMS	2	KRTS	RENO	NV (US)
DP	KINGSLEY		KLMT	KLAMATH FALLS	OR (US)
EN ROUTE	J32				(US)
EN ROUTE	J5				(US)
EN ROUTE	J7				(US)
EN ROUTE	J92				(US)
EN ROUTE	J94				(US)
EN ROUTE	T331				(US)
EN ROUTE	V105				(US)
EN ROUTE	V113				(US)
EN ROUTE	V165				(US)
EN ROUTE	V200				(US)
EN ROUTE	V28				(US)
EN ROUTE	V32				(US)
EN ROUTE	V392				(US)
EN ROUTE	V452				(US)
EN ROUTE	V564				(US)
EN ROUTE	V6				(US)
IAP	LDA/DME-1 RWY 18		KTVL	SOUTH LAKE TAHOE	CA (US)
IAP	RNAV (GPS) RWY 11		KTRK	TRUCKEE	CA (US)
IAP	RNAV (GPS) RWY 20		KTRK	TRUCKEE	CA (US)
IAP	ILS OR LOC/DME RWY 34L		KRNO	RENO	NV (US)
IAP	ILS Y RWY 16R		KRNO	RENO	NV (US)
IAP	LOC Y RWY 16R		KRNO	RENO	NV (US)
IAP	RNAV (GPS) X RWY 16L		KRNO	RENO	NV (US)
IAP	RNAV (GPS) X RWY 16R		KRNO	RENO	NV (US)
IAP	RNAV (RNP) Z RWY 34L		KRNO	RENO	NV (US)
IAP	RNAV (RNP) Z RWY 34R		KRNO	RENO	NV (US)
IAP	TACAN-F		KRNO	RENO	NV (US)
IAP	VOR-D	1	KRNO	RENO	NV (US)
IAP	ILS OR LOC RWY 32		KRTS	RENO	NV (US)
STAR	SQUAW VALLEY		KSUU	FAIRFIELD	CA (US)
STAR	GOLDEN GATE		KSFO	SAN FRANCISCO	CA (US)
STAR	MODESTO		KSFO	SAN FRANCISCO	CA (US)
STAR	STINS		KSFO	SAN FRANCISCO	CA (US)
STAR	BRINY		KSJC	SAN JOSE	CA (US)
STAR	EL NIDO		KSJC	SAN JOSE	CA (US)
STAR	ANAHO		KRNO	RENO	NV (US)
STAR	EELZA (RNAV)		KRNO	RENO	NV (US)
STAR	HARTT (RNAV)	3	KRNO	RENO	NV (US)
STAR	KENNO (RNAV)	3	KRNO	RENO	NV (US)
STAR	MYBAD (RNAV)	1	KRNO	RENO	NV (US)
STAR	RUSME (RNAV)	3	KRNO	RENO	NV (US)
STAR	RYANN		KRNO	RENO	NV (US)
STAR	TARVR		KRNO	RENO	NV (US)
STAR	WADOL (RNAV)		KRNO	RENO	NV (US)

**REQUIRED CHARTING:** DP, STAR, MILITARY IAP, IAP, EN ROUTE LOW, EN ROUTE HIGH, CONTROLLER LOW, CONTROLLER HIGH

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 34

**DATE OF REVISION:** 02/28/2019

**REASON FOR REVISION:**

1. UPDATED FIX USE. - ADDED RNAV (GPS) RWY 11 AND KTRK RNAV (GPS) RWY 20 AT KTRK.
2. UPDATED FIX USE. - REMOVED RNAV (GPS) Y RWY 20 AND RNAV (GPS) Z RWY 20 AT KTRK.

**INITIATED BY:**                      **DATE:**                      **ORGANIZATION:**                      **NAME:**

**OFFICE OF PRIMARY RESPONSIBILITY:**                      AJV-5422                      **NAME:** AUSTIN GOTCHER

**APPROVED BY:**                      **DATE:**                      **OFFICE:** AJV-5420                      **NAME:** JULIE MORGAN

**SIGNATURE:**

**DISTRIBUTION:**      **NFDC**  
**FPO:** WST  
**ARTCC:** ZOA  
**ATC FACILITY:** RNO APP CON, RNO ATCT  
**OTHER:**

# RADIO FIX AND HOLDING DATA RECORD

NAME: SIGNA STATE: CA COUNTRY: US ICAO REGION CODE: K2  
 LATITUDE/LONGITUDE: 392049.57N/1203820.84W TYPE: WP, INT, 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	MRA	MAA
1	WILLIAMS	ILA	VORTAC	L	057.23	075.23	66.82	66.82	11000	17500
2	SACRAMENTO	SAC	VORTAC	H	021.00	038.00	68.99	68.99	11000	17500
3	SQUAW VALLEY	SWR	VOR/DME	L	284.26	300.26		19.91	11000	17500

## EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
ILA	VORTAC	R-057	67	11000	17500
SAC	VORTAC	R-021	69	11000	14500

HOLDING: HOLDING TYPE OF ACTION: NO CHANGE

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	265	AAO	392600.00N/1202151.00W	9321	4E

## REMARKS:

WILLIAMS (FAC 1) AND SACRAMENTO (FAC 2) USED TO ESTABLISH FIX COORDINATES  
 UNPLANNED HOLDING LIMITED TO FIX MAKE-UP FROM FAC 1 & 3, OR FAC 2 & 3, OR DME ONLY ON AIRWAY RADIALS AT OR ABOVE  
 AIRWAY MEAS.  
 PRECIPITOUS TERRAIN EVAL COMPLETE.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	TAHOE (RNAV)			KTRK	TRUCKEE	CA (US)
EN ROUTE	V200-392	1, 2, 3				(US)
IAP	RNAV (GPS) -A			KTRK	TRUCKEE	CA (US)
IAP	RNAV (GPS) RWY 11			KTRK	TRUCKEE	CA (US)
IAP	RNAV (GPS) RWY 20			KTRK	TRUCKEE	CA (US)

REQUIRED CHARTING: DP, IAP, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 11 DATE OF REVISION: 02/28/2019

## REASON FOR REVISION:

1. UPDATED FIX USE - ADDED RNAV (GPS) RWY 20 AND RNAV (GPS)-A AT KTRK.  
 2. ADDED DP, CONTROLLER LOW, AND IAP TO REQUIRED CHARTING.

INITIATED BY: DATE: ORGANIZATION: NAME:  
 OFFICE OF PRIMARY RESPONSIBILITY: AJV-5422 NAME: AUSTIN GOTCHER

APPROVED BY: DATE: OFFICE: AJV-5420 NAME: JULIE MORGAN

SIGNATURE:

DISTRIBUTION: NFDC  
 FPO: WST  
 ARTCC: ZOA  
 ATC FACILITY: SAC APP CON  
 OTHER: TRK ATCT