

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** CALLS **STATE:** AZ **COUNTRY:** US **ICAO REGION CODE:** K2

**LATITUDE/LONGITUDE:** 321307.35N/1110336.01W **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	TUCSON	I-TUS	LOC/DME		303.04	315.04	10.22	10.20	5000	7100
2	RYAN	RYN	NDB	H	035.18	047.18			5000	17500
3	TUCSON	TUS	VORTAC	H	303.05	315.05	10.46		5000	17500

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

**REMARKS:**

I-TUS DME ANTENNA COORDINATES: 320554.97N/1105503.23W

**FIX USE:**

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 11L	1, 2		KTUS	TUCSON	AZ (US)
IAP	RNAV (GPS) Z RWY 11L			KTUS	TUCSON	AZ (US)
IAP	RNAV (RNP) Y RWY 11L			KTUS	TUCSON	AZ (US)
IAP	VOR OR TACAN RWY 11L	2, 3		KTUS	TUCSON	AZ (US)

**REQUIRED CHARTING:** MILITARY IAP, IAP

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 8 **DATE OF REVISION:** 12/29/2022

**REASON FOR REVISION:**

1. DELETED FROM FIX MAKE-UP FACILITIES FAC 4, KTUS R11L.
2. DELETED "TUCSON INTL -" FROM FIX USE TITLES ON KTUS IAPS.
3. ADDED FIX USE FAC 1, 2 TO ILS OR LOC RWY 11L, AND FAC 2, 3 TO VOR OR TACAN RWY 11L AT KTUS.
4. UPDATED REMARK, I-TUS DME ANTENNA COORDINATES FROM 320554.93N/1105503.39W TO 320554.97N/1105503.23W (MOVED 14.35 FT NORTHEAST).
5. CHANGED FAC 1 MAG BRG FROM 303.03 TO 303.04, TRUE BRG FROM 315.03 TO 315.04 AND DME FROM 10.21 TO 10.22.
6. ADDED FAC 1 DIST FROM FAC NM 10.20.

<b>INITIATED BY:</b>	<b>DATE:</b>	<b>ORGANIZATION:</b>	<b>NAME:</b>
<b>OFFICE OF PRIMARY RESPONSIBILITY:</b>		AJV-A431	<b>NAME:</b> MICHAEL MCCARTNEY
<b>APPROVED BY:</b>	<b>DATE:</b> 12/29/2022	<b>OFFICE:</b> AJV-A430	<b>NAME:</b> JOHNNIE BAKER
<b>SIGNATURE:</b>			Digitally signed by <b>ERIC N SUSKI</b> Oct 31, 2022



# RADIO FIX AND HOLDING DATA RECORD

**NAME:** DINGO **STATE:** AZ **COUNTRY:** US **ICAO REGION CODE:** K2

**LATITUDE/LONGITUDE:** 322944.34N/1113239.72W **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	TUCSON	TUS	VORTAC	H	295.00	307.00	40.00	40.00		6000	45000

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

**REMARKS:**

TUCSON (FAC 1) USED TO ESTABLISH FIX COORDINATES.  
ATC REQUESTS CHARTING AS A STAND-ALONE FIX ON KTUS ILS OR LOC RWY 11L AND VOR OR TACAN RWY 11L.

**FIX USE:**

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	SCOTTSDALE	1		KSDL	SCOTTSDALE	AZ (US)
IAP	ILS OR LOC RWY 11L	1		KTUS	TUCSON	AZ (US)
IAP	RNAV (GPS) Z RWY 11L			KTUS	TUCSON	AZ (US)
IAP	RNAV (GPS) Z RWY 29R			KTUS	TUCSON	AZ (US)
IAP	RNAV (RNP) Y RWY 11L			KTUS	TUCSON	AZ (US)
IAP	RNAV (RNP) Y RWY 29R			KTUS	TUCSON	AZ (US)
IAP	VOR OR TACAN RWY 11L	1		KTUS	TUCSON	AZ (US)
STAR	DINGO	1		KTUS	TUCSON	AZ (US)

**REQUIRED CHARTING:** DP, STAR, MILITARY IAP, IAP

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 6 **DATE OF REVISION:** 12/29/2022

**REASON FOR REVISION:**

1. ADDED FIX TYPE "RADAR" AND DELETED "INT".
2. DELETED FROM FIX MAKE-UP FACILITIES FAC 2, AVQ NDB, ASSOCIATED FIX USE ON KTUS IAPS, ILS OR LOC RWY 11L AND VOR OR TACAN RWY 11L.
3. ADDED CHARTING NOTE REMARK "ATC REQUESTS CHARTING AS A STAND-ALONE FIX ON KTUS ILS OR LOC RWY 11L AND VOR OR TACAN RWY 11L".
4. ADDED MILITARY IAP TO REQUIRED CHARTING.

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

**OFFICE OF PRIMARY RESPONSIBILITY:** AJV-A431 **NAME:** MICHAEL MCCARTNEY

**APPROVED BY:** **DATE:** 12/29/2022 **OFFICE:** AJV-A430 **NAME:** JOHNNIE BAKER

**SIGNATURE:** *Digitally signed by*  
**ERIC N SUSKI**  
Oct 31, 2022



# RADIO FIX AND HOLDING DATA RECORD

NAME: HUGIK

STATE: AZ

COUNTRY: US

ICAO REGION CODE: K2

LATITUDE/LONGITUDE: 320741.14N/1105712.45W

TYPE: 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	TUCSON	I-TUS	LOC/DME		303.04	315.04	2.54	2.53	2800	7100

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## REMARKS:

I-TUS DME ANTENNA COORDINATES: 320554.97N/1105503.23W

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 11L	1		KTUS	TUCSON	AZ (US)

REQUIRED CHARTING: MILITARY IAP, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 12/29/2022

## REASON FOR REVISION:

1. UPDATED REMARK, I-TUS DME ANTENNA COORDINATES FROM 320554.93N/1105503.39W TO 320554.97N/1105503.23W (MOVED 14.35 FT NORTHEAST).
2. CHANGED FAC 1 MAG BRG FROM 303.03 TO 303.04, TRUE BRG FROM 315.03 TO 315.04 AND ADDED DIST FROM FAC NM 2.53.
3. DELETED "TUCSON INTL -" FROM FIX USE TITLE ON KTUS ILS OR LOC RWY 11L AND ADDED FAC 1.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: MICHAEL MCCARTNEY

APPROVED BY:

DATE: 12/29/2022

OFFICE: AJV-A430

NAME: JOHNNIE BAKER

SIGNATURE:

*Digitally signed by*

**ERIC N SUSKI**

Oct 31, 2022



# RADIO FIX AND HOLDING DATA RECORD

NAME: LIPTE STATE: AZ COUNTRY: US ICAO REGION CODE: K2  
 LATITUDE/LONGITUDE: 321816.95N/1110941.08W 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	TUCSON	I-TUS	LOC/DME		303.05	315.05	17.50	17.49	6000	12000
2	RYAN	RYN	NDB	H	348.02	000.02			6000	17500
3	TUCSON	TUS	VORTAC	H	303.05	315.05	17.75		6000	17500

## EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-TUS	LOC/DME	R-303	25	7100	12000

HOLDING: HOLDING TYPE OF ACTION: NO CHANGE

## 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	NW	TUS	VORTAC	303.05	123.05	R	1		6000	10000	10	12
2	NW		WP	302.83	122.83	R		7	6000	10000	10	12
3	NW	I-TUS	LOC/DME	303.03	123.03	R	1		6000	10000	10	12

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	265	AAO	321640.80N/1110845.50W	4887	6A
2	265	AAO	321640.80N/1110845.50W	4887	6A
3	265	AAO	321640.80N/1110845.50W	4887	6A

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

## REMARKS:

I-TUS DME ANTENNA COORDINATES: 320554.97N/1105503.23W.  
 265K PATTERN EVALUATED FOR F-16 AIRCRAFT AT KTUS.  
 PRECIPITOUS TERRAIN EVALUATION COMPLETED.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 11L	1, 2	3	KTUS	TUCSON	AZ (US)
IAP	RNAV (GPS) Z RWY 11L		2	KTUS	TUCSON	AZ (US)
IAP	RNAV (RNP) Y RWY 11L			KTUS	TUCSON	AZ (US)
IAP	VOR OR TACAN RWY 11L	2, 3	1	KTUS	TUCSON	AZ (US)

REQUIRED CHARTING: MILITARY IAP, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3

DATE OF REVISION: 12/29/2022

## REASON FOR REVISION:

- DELETED FROM FIX MAKE-UP FACILITIES FAC 4, KTUS R11L.
- UPDATED ESV FORMAT AND ESV DATA FROM "TUCSON INTL - LOC/DME 303/18/71/100; 303/25/71/100" TO "I-TUS LOC/DME R-303 25 7100 12000".
- DELETED "TUCSON INTL -" FROM FIX USE TITLES ON KTUS IAPS.
- ADDED FIX USE FAC 1, 2 TO ILS OR LOC RWY 11L, AND FAC 2, 3 TO VOR OR TACAN RWY 11L AT KTUS.
- CHANGED FIX USE HOLDING PATTERN DOCUMENTATION FROM "(PAT 1)" TO "1", "(PAT 2)" TO "2", AND "(PAT 3)" TO "3".
- MOVED FROM REMARKS TO HOLDING RESTRICTIONS "HOLDING LIMITED TO ESTABLISHED PATTERNS".
- ADDED REMARK "PRECIPITOUS TERRAIN EVALUATION COMPLETED".
- UPDATED REMARK, I-TUS DME ANTENNA COORDINATES FROM 320554.93N/1105503.39W TO 320554.97N/1105503.23W (MOVED 14.35 FT NORTHEAST).
- CHANGED FAC 1 MAG BRG FROM 303.03 TO 303.05, TRUE BRG FROM 315.03 TO 315.05, AND MAA FROM 10000 TO 12000.
- CHANGED FAC 2 MAG BRG FROM 348.03 TO 348.02 AND TRUE BRG FROM 000.03 TO 000.02.
- ADDED FAC 1 DIST FROM FAC NM 17.49.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A430

NAME: MICHAEL MCCARTNEY

APPROVED BY:

DATE: 12/29/2022

OFFICE: AJV-A430

NAME: JOHNNIE BAKER

SIGNATURE:

Digitally signed by

ERIC N SUSKI

Oct 31, 2022



# RADIO FIX AND HOLDING DATA RECORD

**NAME:** PARCS

**STATE:** AZ

**COUNTRY:** US

**ICAO REGION CODE:** K2

**LATITUDE/LONGITUDE:** 320918.11N/1105906.35W

**TYPE:** 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	TUCSON	I-TUS	LOC/DME		303.04	315.04	4.82	4.81	3380	7100
2	RYAN	RYN	NDB	H	071.78	083.78			3400	17500
3	TUCSON	TUS	VORTAC	H	303.04	315.04	5.06		3400	17500

**HOLDING:**

**HOLDING TYPE OF ACTION:** NO CHANGE

**REMARKS:**

I-TUS DME ANTENNA COORDINATES: 320554.97N/1105503.23W

**FIX USE:**

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 11L	1, 2		KTUS	TUCSON	AZ (US)
IAP	VOR OR TACAN RWY 11L	2, 3		KTUS	TUCSON	AZ (US)

**REQUIRED CHARTING:** MILITARY IAP, IAP

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 11

**DATE OF REVISION:** 12/29/2022

**REASON FOR REVISION:**

1. DELETED "TUCSON INTL -" FROM FIX USE TITLES ON KTUS IAPS.
2. ADDED FIX USE FAC 1, 2 TO ILS OR LOC RWY 11L, AND FAC 2, 3 TO VOR OR TACAN RWY 11L AT KTUS.
3. UPDATED REMARK, I-TUS DME ANTENNA COORDINATES FROM 320554.93N/1105503.39W TO 320554.97N/1105503.23W (MOVED 14.35 FT NORTHEAST).
4. CHANGED FAC 1 MAG BRG FROM 303.03 TO 303.04, TRUE BRG FROM 315.03 TO 315.04 AND ADDED DIST FROM FAC NM 4.81.

**INITIATED BY:**

**DATE:**

**ORGANIZATION:**

**NAME:**

**OFFICE OF PRIMARY RESPONSIBILITY:**

AJV-A431

**NAME:** MICHAEL MCCARTNEY

**APPROVED BY:**

**DATE:** 12/29/2022

**OFFICE:** AJV-A430

**NAME:** JOHNNIE BAKER

**SIGNATURE:**

*Digitally signed by*

**ERIC N SUSKI**

Oct 31, 2022



# RADIO FIX AND HOLDING DATA RECORD

NAME: POCIB

STATE: AZ

COUNTRY: US

ICAO REGION CODE: K2

LATITUDE/LONGITUDE: 321142.36N/1110155.96W

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	FAC FEET	MRA	MAA
1	TUCSON	I-TUS	LOC/DME		303.04	315.04	8.22	8.20	49824	4600	7100
2	RYAN	RYN	NDB	H	050.85	062.85				4600	7100
3	TUCSON	TUS	VORTAC	H	303.05	315.05	8.46	8.46	51404	4600	7100

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## REMARKS:

I-TUS DME ANTENNA COORDINATES: 320554.97N/1105503.23W  
FAAO 8260.52 USED TO DETERMINE PFAF

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 11L	1, 2		KTUS	TUCSON	AZ (US)
IAP	RNAV (GPS) Z RWY 11L			KTUS	TUCSON	AZ (US)
IAP	RNAV (RNP) Y RWY 11L			KTUS	TUCSON	AZ (US)
IAP	VOR OR TACAN RWY 11L	2, 3		KTUS	TUCSON	AZ (US)

REQUIRED CHARTING: MILITARY IAP, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 12/29/2022

## REASON FOR REVISION:

1. DELETED FROM FIX MAKE-UP FACILITIES FAC 4, KTUS R11L.
2. ADDED TO FIX MAKEUP I-TUS DISTANCE FROM FACILITY 8.20 NM/49824 FT.
3. ADDED TO FIX MAKEUP TUS VORTAC DISTANCE FROM FACILITY 8.46 NM/51404 FT.
4. DELETED "TUCSON INTL -" FROM FIX USE TITLES ON KTUS IAPS.
5. ADDED FIX USE FAC 1, 2 TO ILS OR LOC RWY 11L, AND FAC 2, 3 TO VOR OR TACAN RWY 11L AT KTUS.
6. UPDATED REMARK, I-TUS DME ANTENNA COORDINATES FROM 320554.93N-1105503.39W TO 320554.97N/1105503.23W (MOVED 14.35 FT NORTHEAST).
7. CHANGED FAC 1 MAG BRG FROM 303.03 TO 303.04, TRUE BRG FROM 315.03 TO 315.04 AND DME FROM 8.21 TO 8.22.
8. CHANGED FAC 2 MAG BRG FROM 050.86 TO 050.85 AND TRUE BRG FROM 062.86 TO 062.85.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: MICHAEL MCCARTNEY

APPROVED BY:

DATE: 12/29/2022

OFFICE: AJV-A430

NAME: JOHNNIE BAKER

SIGNATURE:

*Digitally signed by*

**ERIC N SUSKI**

Oct 31, 2022



# RADIO FIX AND HOLDING DATA RECORD

NAME: RYAN NDB STATE: AZ COUNTRY: US ICAO REGION CODE: K2  
 LATITUDE/LONGITUDE: 320819.64N/1110941.38W TYPE: 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	RYAN	RYN	NDB	H							
2	TUCSON	TUS	VORTAC	H	269.80	281.80	12.84			5300	17500

HOLDING: HOLDING TYPE OF ACTION: NO CHANGE

## 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	W	RYN	NDB	270.00	090.00	R	1		5000	14000	9	10
2	W	TUS	VORTAC	269.80	089.80	R	1		6000	14000	9	13
3	W		WP	270.00	090.00	R		7	6000	14000	10	14
4	W	RYN	NDB	270.00	090.00	R	1		5800	14000	9	13

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	265	AAO	321232.79N/1110623.93W	4499	2C
1	310	AAO	321232.79N/1110623.93W	4499	2C
2	265	AAO	321232.79N/1110623.93W	4499	2C
3	265	AAO	311232.79N/1110623.93W	4499	2C
4	265	AAO	321232.79N/1110623.93W	4499	2C

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS

## PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	TAKEOFF MINIMUMS	KRYN	TUCSON	AZ (US)

## REMARKS:

FACILITY MAGVAR: 12 DEGREES EAST (1995)  
 HOLD PATTERN 2, 3, AND 4 EVALUATED FOR F-16, 265K  
 PRECIPITOUS TERRAIN EVALUATION COMPLETED

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	TAKEOFF MINIMUMS		1	KRYN	TUCSON	AZ (US)
IAP	NDB RWY 06R	1, 2		KRYN	TUCSON	AZ (US)
IAP	ILS OR LOC RWY 11L	1, 2	2, 4	KTUS	TUCSON	AZ (US)
IAP	RNAV (GPS) RWY 11R		3	KTUS	TUCSON	AZ (US)
IAP	RNAV (GPS) RWY 21		3	KTUS	TUCSON	AZ (US)
IAP	VOR OR TACAN RWY 11L	1, 2	2, 4	KTUS	TUCSON	AZ (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 10 DATE OF REVISION: 12/29/2022

## REASON FOR REVISION:

1. ADDED REQUIRED CHARTING CONTROLLER LOW.  
 2. ADDED FIX USE PAT 2, 4 TO VOR OR TACAN RWY 11L AT KTUS.  
 3. ADDED REMARK FACILITY MAGVAR: 12 DEGREES EAST (1995).

INITIATED BY:	DATE:	ORGANIZATION:	NAME:
OFFICE OF PRIMARY RESPONSIBILITY:		AJV-A431	NAME: MICHAEL MCCARTNEY
APPROVED BY:	DATE: 12/29/2022	OFFICE: AJV-A430	NAME: JOHNNIE BAKER
SIGNATURE:			Digitally signed by ERIC N SUSKI Oct 31, 2022

QUALITY  
26  
CHECKED

# RADIO FIX AND HOLDING DATA RECORD

NAME: SSAND STATE: AZ COUNTRY: US ICAO REGION CODE: K2  
 LATITUDE/LONGITUDE: 320933.39N/1101951.22W 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	MAA
1	TUCSON	TUS	VORTAC	H	070.50	082.50	30.00		14000	45000

HOLDING: HOLDING TYPE OF ACTION: NO CHANGE

## PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH DME	HOLDING ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	E		WP	071.18	251.18	R	10	14000	17500	14	17

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	265	200' AAO	321256.20N/1103241.70W	8864	4E

## REMARKS:

FAC 1 ACTUAL BEARING IS 082.498 (PLACEMENT ON J 104 AS DETERMINED BY NACO).  
 HOLDING LIMITED TO ESTABLISHED PATTERN.  
 HOLDING PATTERN 1 CONTROLLING OBSTACLE LOCATED 5347 FEET INTO SECONDARY.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	J104	1				(US)
IAP	ILS OR LOC RWY 11L	1		KTUS	TUCSON	AZ (US)
IAP	RNAV (GPS) Z RWY 11L			KTUS	TUCSON	AZ (US)
IAP	RNAV (RNP) Y RWY 11L			KTUS	TUCSON	AZ (US)
IAP	VOR OR TACAN RWY 11L	1		KTUS	TUCSON	AZ (US)
STAR	ZONNA (RNAV)		1	KTUS	TUCSON	AZ (US)

REQUIRED CHARTING: STAR, MILITARY IAP, IAP, EN ROUTE HIGH, CONTROLLER HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3 DATE OF REVISION: 12/29/2022

## REASON FOR REVISION:

1. CHANGED REQUIRED CHARTING FROM CONTROLLER TO CONTROLLER HIGH.
2. MOVED FIX USE J104 COMMENT "FAC 1 ACTUAL BEARING IS 082.498 (PLACEMENT ON J 104 AS DETERMINED BY NACO)" TO REMARKS SECTION.
3. DELETED "TUCSON INTL -" FROM FIX USE TITLES FOR IAPS AND STAR AT KTUS.
4. ADDED FAC 1 TO FIX USE ON KTUS ILS OR LOC RWY 11L AND VOR OR TACAN 11L.
5. UPDATED FIX USE STAR ZONNA (RNAV) HOLDING PATTERN DOCUMENTATION FROM "(PAT 1)" TO "1".
6. CHANGED FAC 1 MAG BRG FROM 070.49 TO 070.50 AND TRUE BRG FROM 082.49 TO 082.50.

INITIATED BY:	DATE:	ORGANIZATION:	NAME:
OFFICE OF PRIMARY RESPONSIBILITY:		AJV-A431	NAME: MICHAEL MCCARTNEY
APPROVED BY:	DATE: 12/29/2022	OFFICE: AJV-A430	NAME: JOHNNIE BAKER
SIGNATURE:			Digitally signed by ERIC N SUSKI Oct 31, 2022





# RADIO FIX AND HOLDING DATA RECORD

**NAME:** TACUB **STATE:** AZ **COUNTRY:** US **ICAO REGION CODE:** K2

**LATITUDE/LONGITUDE:** 322618.54N/1111911.07W **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	MRA	MAA
1	TUCSON	TUS	VORTAC	H	303.05	315.05	29.10		6000	17500

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

**FIX USE:**

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 11L	1		KTUS	TUCSON	AZ (US)
IAP	RNAV (GPS) Z RWY 11L			KTUS	TUCSON	AZ (US)
IAP	RNAV (RNP) Y RWY 11L			KTUS	TUCSON	AZ (US)
IAP	VOR OR TACAN RWY 11L	1		KTUS	TUCSON	AZ (US)

**REQUIRED CHARTING:** MILITARY IAP, IAP

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 1 **DATE OF REVISION:** 12/29/2022

**REASON FOR REVISION:**

1. DELETED FIX TYPE "INT" AND ADDED "RADAR".
2. DELETED FROM FIX MAKE-UP FACILITIES FAC 2, AVQ NDB.
3. DELETED FROM FIX MAKE-UP FACILITIES FAC 3, KTUS R11L.
4. DELETED "TUCSON INTL -" FROM FIX USE TITLES ON KTUS IAPS.
5. ADDED FIX USE FACILITY "1" TO ILS OR LOC RWY 11L, AND VOR OR TACAN RWY 11L AT KTUS.

<b>INITIATED BY:</b>	<b>DATE:</b>	<b>ORGANIZATION:</b>	<b>NAME:</b>
<b>OFFICE OF PRIMARY RESPONSIBILITY:</b>		AJV-A431	<b>NAME:</b> MICHAEL MCCARTNEY
<b>APPROVED BY:</b>	<b>DATE:</b> 12/29/2022	<b>OFFICE:</b> AJV-A430	<b>NAME:</b> JOHNNIE BAKER
	<b>SIGNATURE:</b>		<i>Digitally signed by</i> <b>ERIC N SUSKI</b> Oct 31, 2022



# RADIO FIX AND HOLDING DATA RECORD

NAME: TUCSON VORTAC STATE: AZ COUNTRY: US ICAO REGION CODE: K2  
 LATITUDE/LONGITUDE: 320542.73N/1105453.48W TYPE:

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	TUCSON	TUS	VORTAC	H							45000

## FIX RESTRICTIONS:

MCA V395 9000 SOUTHBOUND  
 MCA V393 9000 SOUTHBOUND

## HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## 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	NW	TUS	VORTAC	308.00	128.00	R	1		6500	45000	8	29

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	AAO	321640.80N/1110845.50W	4887	6A
1	310	AAO	321640.80N/1110845.50W	4887	6A

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

## PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	TAKE-OFF MINIMUMS	KTUS	TUCSON	AZ (US)

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
 FACILITY MAGVAR: 12 DEGREES EAST (1995).

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BNYRD (RNAV)			KCHD	CHANDLER	AZ (US)
DP	BNYRD (RNAV)			KGEU	GLENDALE	AZ (US)
DP	BNYRD (RNAV)			KGYR	GOODYEAR	AZ (US)
DP	TAKE-OFF MINIMUMS			KAVQ	MARANA	AZ (US)
DP	NOGALES			KOLS	NOGALES	AZ (US)
DP	TAKE-OFF MINIMUMS			KOLS	NOGALES	AZ (US)
DP	BNYRD (RNAV)			KDVT	PHOENIX	AZ (US)
DP	BNYRD (RNAV)			KIWA	PHOENIX	AZ (US)
DP	STANFIELD			KPHX	PHOENIX	AZ (US)
DP	STRRM (RNAV)			KPHX	PHOENIX	AZ (US)
DP	BNYRD (RNAV)			KSDL	SCOTTSDALE	AZ (US)
DP	SCOTTSDALE			KSDL	SCOTTSDALE	AZ (US)
DP	DAVIS MONTHAN			KDMA	TUCSON	AZ (US)
DP	TAKE-OFF MINIMUMS		1	KTUS	TUCSON	AZ (US)
DP	TUCSON			KTUS	TUCSON	AZ (US)
DP	WLDKT (RNAV)			KTUS	TUCSON	AZ (US)
EN ROUTE	J104					(US)
EN ROUTE	J11					(US)
EN ROUTE	J2					(US)
EN ROUTE	J92					(US)
EN ROUTE	T306					(US)
EN ROUTE	T310					(US)
EN ROUTE	V105					(US)
EN ROUTE	V16					(US)
EN ROUTE	V393					(US)
EN ROUTE	V395					(US)
EN ROUTE	V66					(US)
IAP	RNAV (GPS) RWY 8			KFHU	FORT HUACHUCA/SIERRA VIST	AZ (US)
IAP	VOR/DME OR GPS-B			KOLS	NOGALES	AZ (US)
IAP	ILS OR LOC RWY 30C			KIWA	PHOENIX	AZ (US)
IAP	VOR OR TACAN RWY 30C			KIWA	PHOENIX	AZ (US)
IAP	RNAV (GPS)-E			KAVQ	TUCSON	AZ (US)
IAP	ILS OR LOC RWY 6R			KRYN	TUCSON	AZ (US)
IAP	NDB RWY 06R			KRYN	TUCSON	AZ (US)
IAP	RNAV (GPS) RWY 06R			KRYN	TUCSON	AZ (US)
IAP	ILS OR LOC RWY 11L			KTUS	TUCSON	AZ (US)
IAP	RNAV (GPS) Z RWY 11L			KTUS	TUCSON	AZ (US)
IAP	RNAV (GPS) RWY 11R			KTUS	TUCSON	AZ (US)
IAP	RNAV (GPS) Z RWY 29R			KTUS	TUCSON	AZ (US)
IAP	VOR OR TACAN RWY 11L			KTUS	TUCSON	AZ (US)
IAP	VOR OR TACAN RWY 29R			KTUS	TUCSON	AZ (US)

QUALITY  
26  
CHECKED

STAR	SUNSS	KCHD	CHANDLER	AZ (US)
STAR	SUNSS	P19	CHANDLER	AZ (US)
STAR	SUNSS	KGEU	GLENDALE	AZ (US)
STAR	SUNSS	KGYR	GOODYEAR	AZ (US)
STAR	SUNSS	KFFZ	MESA	AZ (US)
STAR	SUNSS	KDVT	PHOENIX	AZ (US)
STAR	SUNSS	KIWA	PHOENIX	AZ (US)
STAR	SUNSS	KPHX	PHOENIX	AZ (US)
STAR	SUNSS	KSDL	SCOTTSDALE	AZ (US)
STAR	DINGO	KTUS	TUCSON	AZ (US)
STAR	ZONNA (RNAV)	KTUS	TUCSON	AZ (US)

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 19

**DATE OF REVISION:** 12/29/2022

**REASON FOR REVISION:**

1. DELETED FIX USE IAP KTUS RNAV (GPS) RWY 21.
2. DELETED FIX USE FAC 1 FROM VOR OR TACAN RWY 29R AT KTUS.
3. CHANGED HOLDING CONTROLLING OBSTRUCTION PAT 1, AIRSPEED 310, FROM 4887 AAO 341640.80N/1110845.50W TO 4887 AAO 321640.80N/1110845.50W.

**INITIATED BY:**

**DATE:**

**ORGANIZATION:**

**NAME:**

**OFFICE OF PRIMARY RESPONSIBILITY:**

AJV-A431

**NAME:** MICHAEL MCCARTNEY

**APPROVED BY:**

**DATE:** 12/29/2022

**OFFICE:** AJV-A430

**NAME:** JOHNNIE BAKER

**SIGNATURE:**

*Digitally signed by*

**ERIC N SUSKI**

Oct 31, 2022



# RADIO FIX AND HOLDING DATA RECORD

**NAME:** WASON

**STATE:** AZ

**COUNTRY:** US

**ICAO REGION CODE:** K2

**LATITUDE/LONGITUDE:** 321446.22N/1110532.49W

**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	TUCSON	I-TUS	LOC/DME		303.04	315.04	12.54	12.53	5500	7100
2	RYAN	RYN	NDB	H	016.68	028.68			5500	17500
3	TUCSON	TUS	VORTAC	H	303.05	315.05	12.78		5500	17500

**HOLDING:**

**HOLDING TYPE OF ACTION:** NO CHANGE

**REMARKS:**

I-TUS DME ANTENNA COORDINATES: 320554.97N/1105503.23W

**FIX USE:**

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 11L	1, 2		KTUS	TUCSON	AZ (US)
IAP	RNAV (GPS) Z RWY 11L			KTUS	TUCSON	AZ (US)
IAP	RNAV (RNP) Y RWY 11L			KTUS	TUCSON	AZ (US)
IAP	VOR OR TACAN RWY 11L	2, 3		KTUS	TUCSON	AZ (US)

**REQUIRED CHARTING:** MILITARY IAP, IAP

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 12

**DATE OF REVISION:** 12/29/2022

**REASON FOR REVISION:**

1. DELETED FROM FIX MAKE-UP FACILITIES FAC 4, KTUS R11L.
2. DELETED "TUCSON INTL -" FROM FIX USE TITLES ON KTUS IAPS.
3. ADDED FIX USE FAC 1, 2 TO ILS OR LOC RWY 11L, AND FAC 2, 3 TO VOR OR TACAN RWY 11L AT KTUS.
4. UPDATED REMARK, I-TUS DME ANTENNA COORDINATES FROM 320554.93N/1105503.39W TO 320554.97N/1105503.23W (MOVED 14.35 FT NORTHEAST).
5. CHANGED FAC 1 MAG BRG FROM 303.03 TO 303.04, TRUE BRG FROM 315.03 TO 315.04 AND ADDED DIST FROM FAC NM 12.53.
6. CHANGED FAC 2 MAG BRG FROM 016.69 TO 016.68 AND TRUE BRG FROM 028.69 TO 028.68.

**INITIATED BY:**

**DATE:**

**ORGANIZATION:**

**NAME:**

**OFFICE OF PRIMARY RESPONSIBILITY:**

AJV-A431

**NAME:** MICHAEL MCCARTNEY

**APPROVED BY:**

**DATE:** 12/29/2022

**OFFICE:** AJV-A430

**NAME:** JOHNNIE BAKER

**SIGNATURE:**

*Digitally signed by*

**ERIC N SUSKI**

Oct 31, 2022

