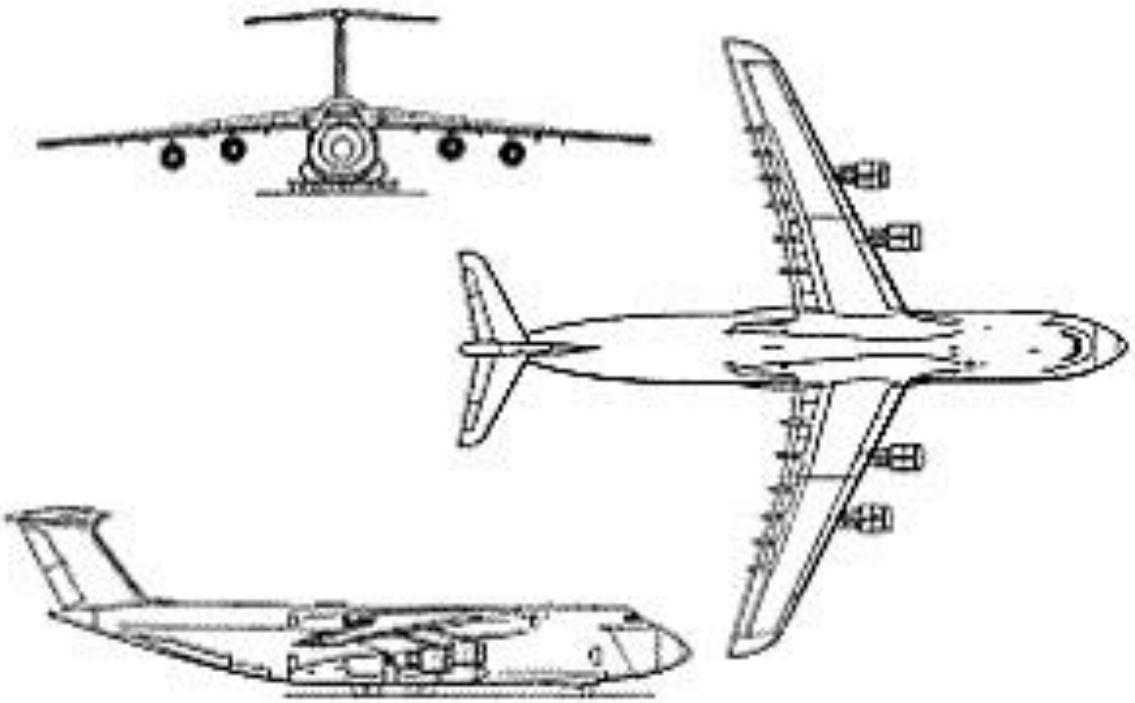
VIRTUAL UNITED STATES AIR FORCE MISSION QUALIFICATION TRAINING HANDBOOK for the LOCKHEED C-5M Super Galaxy



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COMMANDER, AIR MOBILITY COMMAND
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Contents

① A 3000' block altitude is approved subject to direction of flight; eg. eastbound FL250B270, westbound FL220B240

AR167 (North)	LRD VORTAC 341/30 N27°58.00' W99°31.00'	RSG VORTAC 152/69 N28°55.00' W99°54.00'	RSG VORTAC N30°00.88' W100°17.99'	a. 235.100 b. 260.200 c. N/R d. N/R e. 32/95	FL260/FL310	149FG/DOOS Kelly AFB, TX DSN 969-5934	Houston ARCP-323.1W EXIT-380.2W
(South)	RSG VORTAC N30°00.88' W100°17.99'	RSG VORTAC 152/69 N28°55.00' W99°54.00'	LRD VORTAC 341/30 N27°58.00' W99°31.00'				Houston ARCP-380.2E EXIT-323.1E

REMARKS: All course reversal turns will be made to the east. Receivers may exit only at ARIP or EXIT points. When exiting at RSG, receivers should file to JCT or FST to pick up supplemental flight plans. Crystal MOA must be scheduled by users during same period of track operations. Hours of operation: Sun-Sat 1200-0400Z++.

COURSE INTRODUCTION

VIRTUAL UNITED STATES AIR FORCE HEADQUARDTERS AIR MOBILITY COMMMAND SCOTT AIR FORCE BASE ILLINOIS

Dear Future AMC Pilot:
Congratulations on graduating Initial Flight Training, and welcome to Air Mobility Command. You are now on track to becoming a fully mission-ready pilot as part of the Virtual United States Air Force!

Prior to becoming mission ready, you must complete Mission Qualification Training. Mission Qualification Training (MQT) is a training program that upgrades newly assigned crewmembers to Combat Mission Ready (CMR) or Basic Mission Capable (BMC) to accomplish the unit mission. Depending on your assigned airframe, this may include basic fighter tactics, various air-to-ground strike profiles, and/or combat air patrol techniques.
Entry into MQT and training will start no later than 7 workdays after the crewmember has arrived on base and has been cleared for flying duties. If the crewmember elects to take leave prior to entering MQT, the timing will begin after the termination of the crewmember's leave. Crewmembers will complete all required MQT sorties within 90 calendar days after arriving at their duty station. Training is complete upon SQ/CC certification to CMR or BMC.
While it may look challenging, I assure you that we will be more than happy to help get you trained and ready.

//signed//
vLt Col. Jamaal Brathwaite, vUSAF
Commander, Air Mobility Command
Scott Air Force Base, Illinois

OPERATIONAL REQUIREMENTS / SETTINGS

REQUIRED SIMULATOR SETTINGS

UNLIMITED FUEL:	OFF	MSFS REALISM SETTINGS PANEL
"G" FORCES:	OFF	MSFS REALISM SETTINGS PANEL
DAMAGE & COLLISIONS:	OFF	MSFS REALISM SETTINGS PANEL
REALISM SLIDERS:	MAX	MSFS REALISM SETTINGS PANEL
AIR TRAFFIC TAGS:	OFF	MSFS TRAFFIC CONTROL PANEL

REQUIRED PROGRAMS

The following programs are required in order to initially qualify to enrollment into MQT training:
MICROSOFT FLIGHT SIMULATOR X (ANY VERSION) or LOCKHEED MARTIN'S PREPAR3D (ANY VERSION)
xPlane is currently being evaluated by vAFOTEC for use as a combat platform, and is not currently available as an AMC-platform.

VERTICAL REALITY SIMULATIONS' *TACPACK* - **HTTPS://WWW.VRSIMULATIONS.COM/TACPACK.PHP**
TacPack is a true single and multi-player tactical combat engine for FSX or P3D. TacPack features the ability to spawn AI ships (e.g. aircraft carriers with pitching, rolling decks), refueling tankers, drones, and lethal SAM sites directly into the simulation via a handy in-game menu.
NOTE: TacPack is ONLY required if you wish to become a mission-qualified combat pilot. Pilots who do not wish to purchase a TacPack license will be allowed to operate ACC airframes, but will not become earn a Combat Mission Ready status and will be limited to non-combat flight operations (e.g. ferry flights). Therefore, a TacPack license is STRONGLY recommended.

JOINFS - HTTP://PMEM.UK/JOINFS/
JoinFS provides for latency-free multiplayer missions through a peer-to-peer style network.

FSX@WAR/CCP -- HTTPS://FSXWAR.COM/.
FSX@War is used to create the training scenarios and CCP is used to create moving convoys, surface-to-air missiles and other wartime effects.
Walkaround video: https://www.youtube.com/watch?v=jS-DVhcQ0sw

Required MSFS Settings:

Unlimited fuel:	Off	MSFS realism settings panel
"G" Forces:	Off	MSFS realism settings panel
Damage & Collisions:	Off	MSFS realism settings panel
Realism Sliders:	Max	MSFS realism settings panel
Air Traffic Tags:	Off	MSFS traffic control panel

INSTALLATION INFORMATION

KSKF Kelly Field Airport
San Antonio, Texas, USA

Location
FAA Identifier: SKF
Lat/Long: 29-23-03.2400N 098-34-52.0200W
29-23.054000N 098-34.867000W
29.3842333,-98.5811167
(estimated)
Elevation: 690.6 ft. / 210 m (estimated)
Variation: 04E (2020)
From city: 4 miles SW of SAN ANTONIO, TX
Time zone: UTC -5 (UTC -6 during Standard Time)
Zip code: 78236

Airport Communications
ATIS: 120.45 273.5
KELLY GROUND: 121.8 289.4
KELLY TOWER: 124.3 322.35
SAN ANTONIO APPROACH: 118.05
SAN ANTONIO DEPARTURE: 125.7
AFRC COMD POST: 138.6 252.1
EMERG: 121.5 243.0
PMSV METRO: 239.8
PTD: 122.95 ;AIRBAND 126.2 372.2

Nearby radio navigation aids

VOR radial/distance	VOR name	Freq	Var
SSFr307/(10.4)	STINSON VOR	108.40	09E
SATr194/16.8	SAN ANTONIO VORTAC	116.80	08E
RNDr237/17.5	RANDOLPH VORTAC	112.30	05E

NDB name	Hdg/Dist	Freq	Var	ID
ALAMO	179/13.4	368	04E	AN .- --.
DEVINE	045/23.9	359	07E	HHH ....

Airport Services
Fuel available: 100LL JET-A+
100LL:ACFT USING AVGAS SELF-SERVE: DO NOT DEVIATE FM TAX LNS TO/FM AVGAS SELF-SERVE TO ENSURE SAFE DSTC FM OTR OPNS. 100LL FUEL IS SELF SERVE AT PORT SAN ANTONIO AND FULL SERVICE AT FBO.
Parking: tiedowns
Airframe service: MAJOR
Powerplant service: MAJOR

Bottled oxygen: NONE
Bulk oxygen: HIGH/LOW

Runway Information

Runway 16/34

Dimensions: 11550 x 150 ft. / 3520 x 46 m
Surface: concrete, in good condition
Weight bearing capacity: PCN 58 /R/B/W/T
Runway edge lights: high intensity

	RUNWAY 16	RUNWAY 34
Latitude:	29-23.961000N	29-22.147000N
Longitude:	098-35.200500W	098-34.533500W
Elevation:	689.9 ft.	660.0 ft.
Traffic pattern:	left	left
Runway heading:	158 magnetic, 162 true	338 magnetic, 342 true
Markings:	precision, in good condition	precision, in good condition
Visual slope indicator:	4-light PAPI on left (3.00 degrees glide path)	4-light PAPI on right (3.00 degrees glide path)
RVR equipment:	touchdown, rollout	touchdown, rollout
Approach lights:	ALSF1: standard 2,400 foot high intensity approach lighting system with centerline sequenced flashers (category I)	ALSF1: standard 2,400 foot high intensity approach lighting system with centerline sequenced flashers (category I)
Runway end identifier lights:	no	no
Touchdown point:	yes, no lights	yes, no lights
Instrument approach:	ILS	ILS

Airport Ownership and Management from official FAA records

Ownership: U.S. Air Force
Owner: U.S. AIR FORCE
502 ABW & JOINT BASE SAN ANTONIO
SAN ANTONIO, TX 78234
Phone (210) 808-7503
Manager: 502 OSS
2261 HUGHES AVE., SUITE 107
SAN ANTONIO, TX 78236-9805
Phone 210-925-5880
FOR CIVILIAN OPERATIONS, CONTACT PORT OPERATIONS 210-362-7875.

Airport Operational Statistics

Aircraft based on the field: 53
Single engine airplanes: 12
Multi engine airplanes: 2
Jet airplanes: 1
Military aircraft: 38

Aircraft operations: avg 71/month *
93% transient general aviation
6% local general aviation
<1% military
* for 12-month period ending 10 August 2016

Additional Remarks

E60-34 BAK-14 BAK-12A(B) (1677') HOOK MB100 (60' OVRN).

E60-16 BAK-14 BAK-12A(B) (1853').

- ACFT WITH WING SPAN LARGER THAN 93 FT NOT AUTHORIZED IN ARM/DEARM PADS.
- CSTMS/AG/IMG: CSTMS, PLANT QUARANTINE AND IMG AVBL, CTC AMOPS BY FONE PATCH OR PTD RDO 2 HR BEFORE ARR. ALL PERS, EXCLD ACTIVE US MIL, MUST CLEAR IMG INBD.

- BEARING STRENGTH RWY 16/34 - ST175 SBTT590 DDT870 TRT580.
- MISC: ACFT WITH CODE 6 AND ABV CTC AMOPS FONE PATCH/PTD WITH BLOCK TIME AT LEAST 1 HR BEFORE LDG.
- A-GEAR: BAK-12A(B) CABLES RAISED BY BAK-14 DEVICE O/R TO CTL TWR. POTENTIAL FOR HOOK SKIP AT BAK-12 CABLE SYS DUE TO IRREG EDGES AND UNEVEN DEPTHS WI 200 FT OF ARRESTING SYS
- MISC: OFFICIAL POINT OF OBSERVATION DOES NOT ALLOW A CLEAR UNOBSTRUCTED VIEW OF RWY. WX TECHNICIAN VIEW FROM N TO SE IS PARTIALLY OBSTRUCTED BY TREES, BLDGS, & HANGARS. TECHNICIAN RELIES ON COOPERATIVE WX WATCH WITH TWR. HIGH INTENSITY SECURITY LGTS HINDER ABILITY TO DETERMINE SKY COND AT NIGHT.
- RSTD: TRAN ACFT EXP DELAYS AND MAY BE LTD TO ONE APCH TO A FULL STOP FOR HOME STN FORMAL TRNG UNIT OPS AND TACTICAL ARR AND DEP TRNG MON-FRI 1500-0400Z ++.
- CAUTION: PROBABILITY OF HYDROPLANING AT ALL SPEEDS ENTIRE RWY.
- CIVILIAN RAMP LCTD NE OF RY. GA RAMP ACCESS VIA TWYS A1, B AND C.
- CUSTOMS/AG/IMG RQR 72 HRS PN CTC FBO. J8-ATLANTIC AVN, 1200-0600Z++, 2 HR PN FOR DEFUELING AND RESERVICE.
- RSTD: QUIET HRS 0500-1200++ DLY DEP AND FULL STOP LDG ONLY.
- MILITARY SERVICE: FUEL- A++, A+. MIL FUEL UNAVBL SAT 0400-1200Z++.
- WARNING: LARGE SUCCESSIVE FLOCKS OF CATTLE EGRETS, 5 TO 50 IN NO., HAVE BEEN OBSERVED FLYING BLW 300 FT AGL ACROSS N END OF RWY EV MORNING AT SR FOR UP TO 2 HRS, RETURNING WITHIN 2 HR OF SS. BASH PH II IN EFF 1 MAR-30 NOV. CAUTION: NORTH END UNDERRUN/OVRN 147' PAVED, 853' UNPAVED. RUNWAY AND MAJORITY OF TAXIWAY PAVEMENT SHOULDERS EXCEED STANDARD DIMENSIONS AND ARE NOT MARKED WITH YELLOW CHEVRON DECEPTIVE SURFACE MARKINGS TO INDICATE UNUSABLE.
- USER FEES APPLICABLE TO CIVIL ACFT.
- MILITARY SERVICE: TRAN ALERT - OPR 1130-0430Z++ MON-FRI, 1330-0230Z++ SAT-SUN, CLSD FEDERAL HOL; OT 2 HR PN RQR CTC AMOPS. 1 HR PN FOR ALL ACFT SVC; CTC AMOPS DSN 945-6802,C210-925-6802 OR PTD TO AVOID DELAYS. UNA TO SUPPORT TRAN ACFT LCL SORTIES.
- MILITARY SERVICE: JASU -(A/M32A-86D, A/M32A-95 LASS).
- MILITARY SERVICE: FLUID - SP PRESAIR LHOX LOX LHNIT.
- MILITARY SERVICE: OIL - O-133-148-156; SOAP - AVBL 2000-0600Z++ MON; 1230-0600Z++ TUE-THUR; 1230 - 2230Z++ FRI.
- MILITARY-MISC: USAF ACFT WILL USE TRAN ALERT SVC AND PARK ON MIL RAMP; FOR QNS CTC AFLD MGT OPNS C210-925-6803.
- CONTACT PORT SAN ANTONIO OPS 210-362-7837/7838.
- SERVICE-LGT: RWY 34 PAPI LCTD NSTD ON RGT (EAST) SIDE OF RWY 34.
- ACFT ARR BTN 0500-1200Z++ EXP FULL STOP LDG. NO AFTER BURNER TKOF DUR THESE TIMES WO PRIOR COORD AND APVL.
- PORT OPERATIONS 210-362-7875.
- CAUTION: HVY RUBBER DEPOSITS OBSCURING RWY MRKGS AT TDZS
- TWY G WEST OF TWY H IS FOR 149FW USE.
- RSTD:REQ FOR PPR WILL BE TAKEN NO EARLIER THAN 7 DAYS PRIOR TO PLANNED MISSION. AT LEAST 24 HR PN RQRD FOR PPR, EXC MEDEVAC, DV AND OTHER ACFT ON A CASE BY CASE BASIS APVD BY DO. CTC BASE OPS DSN 945-6803, C210-925-6803. PPR GOOD FOR +1/-1 HR PPR BLOCK TIME. COORD OF PPR OUTSIDE OF BLOCK TIME BY FONE IS RQRD.
- MISC: RWY COND CODE (RWYCC) NOT RPRTD.
- MISC: LTD CLASSIFIED MTRLS STORAGE: EXCESS AND TS MTRLS MUST GO TO 433 AW/CP.
- ANG: OPR 1345-2230Z++ TUE-SAT. PPR FOR USE OF ANG RAMP, DSN 945-5934, C210-925-5934.
- APN PSA RAMP CLSD IN BOTH DRCTNS AT TWY B AT APN ENTRANCE TO TWY C TO ALL ACFT UNLESS UNDER TOW.
- MISC: TACAN CK POINT/ALTM SIGN ON TWY F AND B SITED OPPOSITE DRCTN OF TACAN.
- SERVICE-LGT: TWY F: NO TWY END LGTS.
- AFRC: PPR FOR USE OF AFRC RAMP, DSN 945-4330, C210-925-4330.

Instrument Procedures

NOTE: All procedures below are presented as PDF files. If you need a reader for these files, you should download the free Adobe Reader.

NOT FOR NAVIGATION. Please procure official charts for flight.
FAA instrument procedures published for use from 10 August 2023 at 0901Z to 07 September 2023 at 0900z.

STARs - Standard Terminal Arrivals

BRAUN THREE (RNAV) ****CHANGED**** 2 pages: [1] [2] (326KB)

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CENTERPOINT TWO	download (217KB)
LEMIG ONE	download (220KB)
MARCS ONE	2 pages: [1] [2] (389KB)
STONEWALL ONE	download (214KB)

IAPs - Instrument Approach Procedures

HI-ILS OR LOC/DME Z RWY 16	download (148KB)
HI-ILS OR LOC/DME Z RWY 34	download (145KB)
ILS OR LOC/DME Y RWY 16	download (135KB)
ILS OR LOC/DME Y RWY 34	download (130KB)
RNAV (GPS) RWY 16	download (86KB)
RNAV (GPS) RWY 34	download (70KB)
HI-TACAN Z RWY 16	download (137KB)
HI-TACAN Z RWY 34	download (133KB)
TACAN Y RWY 16	download (120KB)
TACAN Y RWY 34	download (117KB)
NOTE: Special Take-Off Minimums/Departure Procedures apply	download (171KB)

Other nearby airports with instrument procedures:

KRND - Randolph Air Force Base (18 nm NE)

KRND **Randolph Air Force Base**
Universal City, Texas, USA

Location

FAA Identifier: RND
Lat/Long: 29-31-44.0630N 098-16-40.9100W
29-31.734383N 098-16.681833W
29.5289064,-98.2780306
(estimated)
Elevation: 760.9 ft. / 231.9 m (surveyed)
Variation: 05E (2010)
From city: 13 miles NE of UNIVERSAL CITY, TX
Time zone: UTC -5 (UTC -6 during Standard Time)
Zip code: 78148

Airport Operations

Airport use: Private use. Permission required prior to landing
Activation date: 09/1937
Control tower: yes
ARTCC: HOUSTON CENTER
FSS: SAN ANGELO FLIGHT SERVICE STATION

NOTAMs facility: RND (NOTAM-D service available)
Attendance: MON-FRI 1300-0100Z++
CLSD WEEKEND & FEDERAL HOL.
Pattern altitude: TPA: RWY 15L/33R 2600 FT AGL OVERHEAD, RWY 15R-33L 1800 FT AGL.
Segmented circle: no
Lights: SS-SR
Beacon: white-green (lighted land airport)
Operates sunset to sunrise.

Airport Communications

ATIS: 290.525 327.8 ;HANGOVER
HANGOVER GROUND: 119.65 124.75 ;HANGOVER TWR 275.8 353.75 ;HANGOVER TWR [MON-FRI 1300-0100Z++, CLSD WEEKEND & FEDERAL HOL.]
HANGOVER TOWER: 120.5 ;HANGOVER TWR 128.25 291.1 ;HANGOVER TWR 294.7 [MON-FRI 1300-0100Z++, CLSD WEEKEND & FEDERAL HOL.]
SAN ANTONIO APPROACH: 124.45
SAN ANTONIO DEPARTURE: 127.1
CLEARANCE DELIVERY: 338.35 ;RWY 15L/33R
EMERG: 121.5 243.0
PMSV METRO: 239.8
PTD: 372.2
WX ASOS at SAT (10 nm W): PHONE 210-805-5583
WX ASOS at SSF (15 nm SW): PHONE 210-927-9391
WX ASOS at BAZ (16 nm NE): 119.325 (830-629-7979)

- PMSV METRO: FULL SVC AVBL 0500-0200Z++ MON-FRI, 1700-2200Z SUN, AS RQR, CLSD SAT AND FEDERAL HOL AT DSN 487-2992, C210-652-2992. AN/FMQ-19 ASOS IN USE, AUGMENTED BY HUMAN OBSERVER AS NEC DUR AFLD OP HR. BACKUP WX OBSN VIEW LTD, RSTD FR S-NW BY FLIGHTLINE FAC AND TREES. CTC 26 OWS DSN 331-2616/2690/2603, C318-529-2616/2690/2603 DUR WX FLT CLOSURE OR EVAC. WHEN POSSIBLE, PROVIDE 2 HR PN FOR ALL RQR BRIEFS.
- FREQ 120.5/291.1 FOR TFC CTL RWY 15R-33L WHEN STUDENT TRNG IN PROGRESS.
- WX OPR H24 MON-THU, 0500-0300Z++ FRI, 0300-0500Z++ SUN AT DSN 487-3040, C210-652-3040. AN/FMQ-19 ASOS IN USE, AUGMENTED BY HUMAN OBSERVER AS NEC DUR AFLD OP HR. BACKUP WX OBSN VIEW LTD, RSTD FR S-NW BY FLIGHTLINE FAC AND TREES. CTC 26 OWS DSN 331-2651/2633/2635/2636, C318-529-2651/2633/2635/2636 DUR WX FLT CLOSURE OR EVAC. WHEN POSSIBLE, PROVIDE 2 HR PN FOR ALL RQR BRIEFS.

Nearby radio navigation aids

VOR radial/distance	VOR name	Freq	Var
RND at field	RANDOLPH VORTAC	112.30	05E
SATr118/11.8	SAN ANTONIO VORTAC	116.80	08E
SSFr019/(18.4)	STINSON VOR	108.40	09E

Airport Services

Parking: hangars
Airframe service: MINOR
Powerplant service: NONE
Bottled oxygen: NONE
Bulk oxygen: HIGH/LOW

Runway Information

Runway 15L/33R

Dimensions: 8351 x 200 ft. / 2545 x 61 m
Surface: concrete
Weight bearing capacity: PCN 54 /R/A/W/T
Runway edge lights: high intensity

	RUNWAY 15L	RUNWAY 33R
Latitude:	29-32.565132N	29-31.371452N
Longitude:	098-16.557577W	098-15.770605W
Elevation:	742.4 ft.	722.8 ft.
Traffic pattern:	left	left
Markings:	NSTD, in good condition	NSTD, in good condition
Visual slope indicator:	4-light PAPI on left (3.00 degrees glide path)	4-light PAPI on left (3.00 degrees glide path)
RVR equipment:	touchdown	touchdown
Approach lights:	ALSF1: standard 2,400 foot high intensity approach lighting system with centerline sequenced flashers (category I)	ALSF1: standard 2,400 foot high intensity approach lighting system with centerline sequenced flashers (category I)
Runway end identifier lights:	no	no
Touchdown point:	yes, no lights	yes, no lights
Instrument approach:	LOC/GS	ILS

Runway 15R/33L

Dimensions: 8352 x 200 ft. / 2546 x 61 m
FIRST 1000 FT RWY 15R & FIRST 2500 FT RWY 33L CONC; MIDDLE 4852 FT ASPH.
Surface: PEM
Weight bearing capacity: PCN 22 /R/C/W/T
Runway edge lights: high intensity

	RUNWAY 15R	RUNWAY 33L
Latitude:	29-32.097317N	29-30.903540N
Longitude:	098-17.593183W	098-16.806027W
Elevation:	760.9 ft.	727.3 ft.
Traffic pattern:	left	left
Markings:	numbers only, in good condition	numbers only, in good condition
Visual slope indicator:	4-light PAPI on left (3.00 degrees glide path)	4-light PAPI on left (3.00 degrees glide path)
Runway end identifier lights:	no	no
Touchdown point:	yes, no lights	yes, no lights
Instrument approach:	LOC/GS	LOC/GS

Airport Ownership and Management from official FAA records

Ownership: U.S. Air Force

Owner: U.S. AIR FORCE
RANDOLPH AFB
UNIVERSITY CITY, TX 78148
Manager: COMMANDING OFFICER
RANDOLPH AFB
UNIVERSITY CITY, TX 78148

Additional Remarks

E60-15L	BAK-15 CHAG (250' OVRN).
E60-33R	BAK-15 CHAG (250' OVRN).
E60-15R	BAK-15 CHAG (250' OVRN).
E60-33L	BAK-15 CHAG (250' OVRN).

- BEARING STRENGTH RWY 15L/33R: ST175 SBTT593 TRT585.
- BEARING STRENGTH RWY 15R/33L: ST175 DDT392.
- SERVICE-LGT: RWY 15L AND RWY 33R ILS AND PAPI GS ARE NOT COINCIDENTAL.
- JASU: 3(MC-2A) (GTC-85) 9(ESSEX B809) 6(SGNC)
- CAUTION: DURG VMC DEP ACFT MUST REMAIN BLO 1300 FT RY 15R/33L; 2100 FT RY CAUTION - DUR VMC DEP ACFT MUST REMAIN BLW 1300' RWY 15R-33L, 2100' RWY 15L-33R TIL PAST DEP END TO ENSURE SEPARATION FR VFR OVERHEAD TFC PAT UNLESS OTHERWISE CLEARED BY ATC.
- FLUID: SP PRESAIR LHOX LOX.
- OIL: O-133-148-156 SOAP-NOT AVBL WKEND.
- RSTD: PPR 48 HR PN RQR, CTC BASE OPS DSN 487-2943, C210-652-2943, AFLD MGR DSN 487-8160/8166, C210-652-8160/8166, PAX TERMINAL, DSN 487-5287, C210-652-5287.
- RSTD: ACFT MUST ADHERE TO PPR ARR BLOCK +/- 30 MIN OF SKED LDG.
- RSTD: EXP RADAR VECTOR FOR ILS OR VFR STR-IN APCH AND FULL STOP LDG DUR STU TRNG.
- MISC: ACFT WITH CODE 7 AND ABV CTC PTD WITH BLOCK TIME 60 MILES PRIOR LDG.
- NS ABTMT: DEP AND ARR ACFT WILL USE MIN PWR SETTINGS CONSISTENT WITH ACFT FLT MANUALS AND COMPLY WITH ALL ATC INSTR.
- SERVICE-LGT: ALS RWY 15L NSTD LEN 2100'.
- MISC: FLEET SVC AVBL 48 HR ADVANCE NTC. NO GLYCOL AVBL.
- BASH PH II IN EFF 1 MAR-31 MAY & 1 AUG-30 NOV, EXP HVY MIGRATION. YR ROUND BIRD ACT HIGHEST IN EARY-MID MORNING AND AFTER 2230Z++ DAILY.
- RSTD: RECOMMEND ALL WIDE BODY ACFT TAXI WITH INBOARD ENG ONLY ON TWYS A, D AND G.
- MISC: FLEET SVC UNAVBL.
- SERVICE-FUEL: A++.
- MILITARY SERVICE TRAN ALERT: DE-ICING UNAVBL. TRAN ACFT MUST USE FLW-ME TO PARK.
- SEE FLIP AP/1 SUPPLEMENTARY ARPT RMK.
- MISC: RWY COND CODE (RWYCC) NOT RPTD.
- RSTD: ARFF, USAF CORE SET 1, NFPA CAT 1-4.

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HI-ILS OR LOC Z RWY 33R	download (150KB)
ILS OR LOC RWY 15R	download (142KB)
ILS OR LOC RWY 33L	download (148KB)
ILS OR LOC Y RWY 15L	download (146KB)
ILS OR LOC Y RWY 33R	download (155KB)
RNAV (GPS) RWY 15L	download (132KB)
RNAV (GPS) RWY 15R ****CHANGED****	download (124KB)
RNAV (GPS) RWY 33L	download (135KB)
RNAV (GPS) RWY 33R	download (153KB)
HI-TACAN A	download (130KB)
HI-TACAN B	download (121KB)
TACAN RWY 15R	download (114KB)
TACAN RWY 33L	download (110KB)

Other nearby airports with instrument procedures:

KSKF - Kelly Field Airport (18 nm SW)

KSUU Travis Air Force Base
Fairfield, California, USA

Location

FAA Identifier: SUU
Lat/Long: 38-15-52.3320N 121-55-26.8733W
38-15.872200N 121-55.447888W
38.2645367,-121.9241315
(estimated)
Elevation: 63.4 ft. / 19.3 m (surveyed)
Variation: 13E (2020)
From city: 3 miles E of FAIRFIELD, CA
Time zone: UTC -7 (UTC -8 during Standard Time)

Zip code: 94535

Airport Operations

Airport use: Private use. Permission required prior to landing
Activation date: 05/1941
Control tower: yes
ARTCC: OAKLAND CENTER
FSS: RANCHO MURIETA FLIGHT SERVICE STATION
NOTAMs facility: SUU (NOTAM-D service available)
Attendance: CONTINUOUS
Segmented circle: no
Beacon: white-green (lighted land airport)
Operates sunset to sunrise.
International operations: customs landing rights airport

Airport Communications

TRAVIS GROUND: 121.8 289.4
TRAVIS TOWER: 120.75 254.4 239.05
TRAVIS APPROACH: 119.9 ;SOUTH 126.6 ;NORTH 281.45 ;NORTH 322.325 ;SOUTH 128.4 139.9 398.2
TRAVIS DEPARTURE: 119.9 281.45 ;NORTH 306.9 ;NORTH 322.325 ;SOUTH 126.6
CLEARANCE DELIVERY: 127.55 335.8
BMBER STAR: 119.9 ;SOUTH 126.6 ;NORTH 306.9 ;NORTH 322.325 ;SOUTH 124.8
COMD POST: 141.9 349.4
D-ATIS: 135.55 292.125
EMERG: 121.5 243.0
PMSV METRO: 271.1
PTD: 342.5
WX ASOS at VCB (7 nm N): 134.75 (707-448-1594)
WX AWOS-AV at O88 (11 nm E): 127.075 (707-374-5396)
WX ASOS at APC (17 nm W): PHONE 707-252-7916
WX AWOS-3 at EDU (17 nm N): 119.025 (530-754-6839)
WX ASOS at CCR (18 nm S): PHONE 925-689-2077
WX AWOS-3P at DWA (19 nm N): 125.775 (530-750-2759)

- COMMUNICATIONS: SFA REMARKS: ON REQ.
- ILS/RADAR-RADAR: LIMITATION BETWEEN TACAN (SUU) 075 AND 185 RADIALS, BEGINNING 3 DME OUT TO 13 DME ALL ALTITUDES. TRAFFIC ADVISORIES AVAILABLE ON TRANSPONDER EQUIPPED AIRCRAFT ONLY.
- WX SVC AVBL 24/7 AT DSN 837-3003/5549, C707-424-3003/5549. AN/FMQ-19 AUTOMATED OBSERVING SYS IN USE; AUGMENTED BY HUMAN OBSN WHEN NEC. DUR WX FLT CLOSURE OR EVAC, REMOTE BRIEFING SVC AVBL FR 25 OP WX SQ DSN 228-6598/6599/6588, C520-228-6598/6599/6588. WHEN AUTO OBSN SYS INOP, OBST AT 350-020° AND 210-280° MAY IMPACT DERIVED PREVAILING VIS. RVR INFO NOT AVBL RWY 21R APCH.
- COMMUNICATIONS: TRAVIS AERO CLUB - 122.725 REMARKS: LCTD AT RIO VISTA MUNI O88.
- CALL GOLDEN OPS
- COMM/NAV/WEATHER REMARKS: ASR-11/DASR - NO-NOTAM MP 0701-1300Z++ MON THRU FRI. ILS/RADAR-RADAR: RADAR COVERAGE LTD IN AREA BOUNDED BY SUU075/004, SUU115/013, SUU157/011, SUU185/003. TFC ADZY MAY NOT BE AVBL TO NON-TRANSPONDER EQPT ACFT.

Nearby radio navigation aids

VOR radial/distance	VOR name	Freq	Var
CCRr006/14.4	CONCORD VOR/DME	117.00	17E
SACr221/20.6	SACRAMENTO VORTAC	115.20	17E
SGDr059/21.8	SCAGGS ISLAND VORTAC	112.10	17E
MCCr208/34.4	MC CLELLAN VOR/DME	109.20	17E
OAKr007/35.3	OAKLAND VOR/DME	116.80	17E
SAUr032/37.5	SAUSALITO VOR/DME	116.20	17E

Airport Services

Fuel available: A++
Parking: hangars
Airframe service: MAJOR
Powerplant service: MAJOR
Bottled oxygen: NONE
Bulk oxygen: HIGH/LOW

Runway Information

Runway 3R/21L

Dimensions: 10995 x 150 ft. / 3351 x 46 m
Surface: concrete
Weight bearing capacity: PCN 72 /R/B/W/T
Runway edge lights: high intensity

	RUNWAY 3R	RUNWAY 21L
Latitude:	38-15.688000N	38-16.907500N
Longitude:	121-55.591000W	121-53.892000W
Elevation:	53.2 ft.	53.3 ft.
Traffic pattern:	left	left
Runway heading:	034 magnetic, 047 true	214 magnetic, 227 true
Markings:	precision, in good condition	precision, in good condition
Visual slope indicator:	4-light PAPI on left (2.50 degrees glide path)	4-light PAPI on left (2.80 degrees glide path)
RVR equipment:	touchdown, midfield, rollout	touchdown, midfield, rollout
Approach lights:		ALSF2: standard 2,400 foot high intensity approach lighting system with centerline sequenced flashers (category II or III)
Runway end identifier lights:	no	no
Centerline lights:	yes	yes
Touchdown point:	yes, no lights	yes, lighted
Instrument approach:		ILS

Runway 32/212

Dimensions: 3500 x 90 ft. / 1067 x 27 m
Surface: concrete
Weight bearing capacity: PCN 57 /R/B/W/T
Runway edge lights: medium intensity

	RUNWAY 32	RUNWAY 212
Latitude:	38-16.428833N	38-16.817000N
Longitude:	121-54.413167W	121-53.872167W
Elevation:	57.4 ft.	51.6 ft.
Traffic pattern:	left	left

Runway 3L/21R

Dimensions: 11001 x 300 ft. / 3353 x 91 m
Surface: PEM
Weight bearing capacity: PCN 82 /R/C/W/T
Runway edge lights: high intensity

	RUNWAY 3L	RUNWAY 21R
Latitude:	38-14.597833N	38-15.818500N
Longitude:	121-57.418667W	121-55.719667W
Elevation:	32.7 ft.	50.4 ft.
Traffic pattern:	left	left
Runway heading:	034 magnetic, 047 true	214 magnetic, 227 true
Markings:	precision, in good condition	precision, in good condition
Visual slope indicator:	4-light PAPI on left (2.50 degrees glide path)	4-light PAPI on left (2.80 degrees glide path)
RVR equipment:	touchdown	rollout
Runway end identifier lights:	no	no
Touchdown point:	yes, no lights	yes, no lights
Instrument approach:	LOC/GS	LOC/GS

Airport Ownership and Management from official FAA records

Ownership: U.S. Air Force
Owner: USAF
TRAVIS AFB
FAIRFIELD, CA 94535
Manager: BASE OPERATIONS (USAF)
TRAVIS AFB
FAIRFIELD, CA 94535
Phone 707-424-2836

Airport Operational Statistics

Aircraft based on the field: 3
Military aircraft: 3

Additional Remarks

- CAUTION: RWY EDGE LGTS FOR BOTH RWYS LCTD MORE THAN 10 FT FROM EDGE OF USABLE RWY SFC.

- CAUTION: EXTV LGT ACFT OPR. POSSIBLE RF INTFC ALL FREQS 9 NM NE OVER VOA TRANS. EXP WIND SHEAR BLW 2000 FT ON APCH TO ALL RWYS. HVY C5 JET TFC IN IMMED VCNTY. HI DENSITY VFR TFC CROS FINAL APCH AND DEP CRS.
- CAUTION: ARR ACFT EXP HVY JET ACFT CROS RWY TO PARL TWY. AVOID OVFT OF FRNG RNG LCTD 550 FT RGT OF CNTRLINE AND 1 NM PRIOR TO APCH END RWY 21R WHEN RED BCN IS ON OR RED FLAG IS DISPLAYED.
- MISC: ALL ACFT CARRYING DV WILL NOTIFY COMD POST NO LATER THAN 24 HR PRIOR WITH ARR TIME AND RQR AT DSN 837-5517 OR C707-424-5517. ACFT WITH DV CODE 7 OR ABV AND ALL INBD PAX/CARGO ACFT MUST CTC COMD POST 30 MIN PRIOR TO LDG AND CONFIRM BLOCK TIME.
- MISC: FIRST 2175 FT RWY 03R AND FIRST 1000 FT RWY 21L CONC; 75 FT KEEL SECTION IS CONC, RMNG WIDTH IS REINFORCED ASPH, 38 FT ON EITHER SIDE OF KEEL. FIRST 1000 FT RWY 21R AND FIRST 2900 FT RWY 03L CONC, MID 7100 FT ASPH.
- CAUTION: TAKE-OFF OBSTS RWY 3L: 122 FT MSL (58 FT AGL) PARKED KC10 TAILS 966 TO 1870 FT FROM DEP END OF RWY, 738 TO 958 FT LEFT OF CNTRLN.
- RWY-LGTS: RWY 21L SF.
- TFC PAT REVISE TO: RECTANGULAR 1600 FT, OVERHEAD 2100 FT.
- CAUTION: TWY N MAY BE TMPRY CLSD WO NTC S OF 900 RAMP DUE TO C17 COMBAT OFF-LOAD/STAR TRNG.
- CAUTION: OUTBOARD ENGINES RESTRICTED TO IDLE ON TWY A, B, D, AND M RY 03R/21L & RY 03L/21R FOR B747 AND LARGER.
- CAUTION: NO C17 COMBAT OFFLOADS AUTHORIZED ON TWY DELTA EAST OF RWY 21L/3R.
- MISC: BACKING OPS PROH ON SPOTS 511 THRU 515. SHOULDERS ARE NON-LOAD SFCS. RWY 21L/03R GROOVED 148 FT ENTIRE RY.
- SERVICE-LGT: RWY 21R THLD LGTS GATED.
- CAUTION: RWY 03L/21R AND RWY 03R/21L EDGE LGTS HAVE GAPS OF MORE THAN 400 FT ON THE APCH/DEP END OF THE RWYS.
- CAUTION: BA ON RWYS 03L/21R AND 03R/21L MAY BE IMPAIRED DUE TO HVY RUBBER DEPOSITS. RWY 03L/21R PAVEMENT SFC DEGRADED, AIRCREWS SHOULD EXER CTN WHEN STANDING WATER IS PRESENT, EXP RDCD BRKG PER AND/OR POSS HYDROPLANING.
- CSTMS/AG/IMG - DUE TO LTD. CSTMS, PN/COORD RQR FOR ARR OUTSIDE NML WKD HR. FOR NGT, SAT, SUN AND HOL ARR, 1 HR PN RQR. MSN COORD THRU TRAVIS COMD POST AT DSN 837-5517 OR C707-424-5517.
- CAUTION: RVR UNAVBL FOR APCH END RWY 21R/DEP END RWY 3L.
- RWY: RWY 21L/03R GROOVED 148 FT ENTIRE RWY. RWY 21R FIRST 1000 FT CONC NOT GROOVED. RWY 03L FIRST 4800 FT CONC, GROOVED ONLY BTN 8900 FT AND 5200 FT REMAINING. RWY 21R ASPH BTN 10000 FT AND 4800 FT REMAINING.
- SERVICE LGT: PAPI INTENSITY NOT ADJUSTABLE. PAPI COINCIDENTAL WITH ILS GS RWY 03L VIS DESCENT PT FOR HGT GP 4 ACFT ONLY. RWY 21R PROVIDES PROPER TCH FOR HGT GP 4 ACFT ONLY.
- CAUTION: RWY 3L OVERRUN 150 FT.
- PPR DSN 837-2836/2837 C707-424-2836/2837.
- JASU - 1(MA-1) 6(MA-1A) 1(MC-1A) 1(MC-2A) 8(A/M32A-86) 1(707 STARTING UNIT).
- MISC: TRAVIS CRASH FIRE RESPONSE (CFR) IS ARFF CAT 6 WITH 13100 GALLONS OF CAPABILITY. THE STEADY ARFF COND FOR TRAVIS AFB IS OPTIMUM LEVEL OF SERVICE (OLS) FOR CATEGORIES 1-6.
- MISC: DAVID GRANT MEDICAL CENTER HELIPAD LCTD 3816.12N/12158.12W, ELEV 59 FT. HELIPAD NOT VISIBLE FROM TWR. HELIPAD EQUIPPED WITH PILOT CTL LGT (VHF 120.75) LDG/DEP WILL BE AT YOUR OWN RISK.
- MISC: RAMP 900 RAMP B747 AND C5 ACFT ON SPOT 902 WILL OFFSET 5 FT NW OF EXISTING TAXI LINE DUE TO WINGTIP CLNC.
- MISC: CTC AFLD MGMT FOR CUR BIRD WATCH COND. BASH PHASE II IS FROM 01 OCT - 30 NOV AND 01 FEB - 30 APR. SEE AP1 FOR FURTHER INFO.
- MISC: RWY 03L/21R MKD 150 FT WIDE, PAVEMENT 300 FT WIDE.
- CAUTION: POTENTIAL FOR UAS OPS IN VCNTY OF TRAVIS AFB.
- MISC: ALL AIRCREW UTILIZING GND TRNSPN ARE RQRD TO WEAR MASKS THRUT DUR OF TRNSP. AIRCREW AND PAX TRNSPN LTD TO INITIAL PICKUP, FINAL DROP-OFF, AND MSN PLANNING AT BASE OPS. ALL OTR GND TRNSPN REQS WILL BE MET BASED ON MSN PRIORITY. FAILURE TO COMPLY MAY RESULT IN LOSS OF TRNSPN SUPPORT.
- MISC: RWY 03L/21R CLSD FOR MAINT FIRST FRI MONTHLY 1800-0200Z++.
- MISC: TWY A SFC PAINT INCOR; SHOULD READ 21L.
- AMC SKEDD MSN (EXC FOR CIV DOD CONTR, DV, AND MEDEVAC MSN) DO NOT RQR PPR. ALL OTHER TSNT ACFT RQR PPR. TSNT ACFT REQ PPR CTC AFLD MGMT AT DSN 837-2836, C707-424-2836 OR 60OSS.OSAA.AMOPS@US.AF.MIL. ACFT WITH PPR CARRYING DV, AIR EVAC, AND SPL AIR MSN MUST CTC AFLD MGMT ON PTD FOR NOTIFICATION AND TRKG PURPOSES.

- DUE TO DEGRADED PAVEMENT RWY 03L-21R RSTD TO ARR AND DEP ONLY; TOUCH AND GOES UNAUTHD FOR ALL ACFT.
- OIL - O-128-133-148-156.
- FTR TYPE ACFT ARE RSTD FROM UTILIZING RWY 03L-21R. ATC WILL NOT ISSUE LDG CLNC TO FTR TYPE ACFT ON RWY 03L-21R. FTR TYPE ACFT APVD TO TAXI ACRS RWY 03L-21R VIA TWY G AND H.
- WHEN RWY 03L-21R NOT AVBL, AIRCREW SHOULD REQ 15 MIN EARLY ENG START FOR RQRD BACK TAXI OPS.
- 180 DEG TURN RSTD TO END OF RWY/THLD AREAS.
- CAUTION: EMERG ACFT LDG RWY 03R MAY EXPERIENCE EMERG FIRE SVC RESP TIMES THAT EXCEED 3 MIN.
- MISC: NO CLASSIFIED MTRL STORAGE AVBL AT AM OPS. ALL TSNT CLASSIFIED MUST BE STORED IN TRAVIS AFB COMMAND POST.
- TRAN ALERT - SVC 24 HR DLY. EXP EXTV SVC DELAY WKEND AND HOL. TRAN ACFT, EXC AMC MSN, CTC COMD POST NOT LATER THAN 15 MIN OUT FOR SVC REQ. FLEET SVC AVBL.
- REMARKS: HVY CONCENTRATION OF BLACKBIRDS, GULLS, AND OTR MIGRATORY BIRDS IN THE APCH AND DEP RTES AND ALG INFIELD AREAS FROM 1 OCT-30 NOV AND FROM 1 FEB-30 APR (PHASE II).

Instrument Procedures

NOTE: All procedures below are presented as PDF files. If you need a reader for these files, you should download the free Adobe Reader.

NOT FOR NAVIGATION. Please procure official charts for flight.
FAA instrument procedures published for use from 10 August 2023 at 0901Z to 07 September 2023 at 0900z.

STARs - Standard Terminal Arrivals

BMBER ONE (RNAV)	2 pages: [1] [2] (334KB)
OSVEE TWO (RNAV)	download (200KB)
PALISADES ONE ****NEW****	download (259KB)
PEBLL TWO (RNAV)	download (175KB)
SEATO FOUR	download (201KB)
SUTHU TWO (RNAV)	download (197KB)
WEBGO TWO (RNAV)	download (219KB)

IAPs - Instrument Approach Procedures

ILS OR LOC OR RNAV (GPS) RWY 21L	download (178KB)
ILS OR LOC RWY 03L	download (157KB)
ILS RWY 21L (CAT II)	download (157KB)
RNAV (GPS) RWY 03L	download (153KB)
RNAV (GPS) RWY 03R	download (86KB)
RNAV (GPS) RWY 21R	download (156KB)
TACAN RWY 03L	download (151KB)
TACAN RWY 21L	download (157KB)
TACAN RWY 21R	download (155KB)

Departure Procedures

BESSA ONE (RNAV)	download (104KB)
REJOY ONE (RNAV)	download (88KB)
NOTE: Special Take-Off Minimums/Departure Procedures apply	download (356KB)

MODULE 100: FAMILIARIZATION MODULE

SORTIE 101: LOCAL AREA FAMILIARIZATION

This flight will take you through the Powder River MOAs along the IR-492 Military Training Route. This mission is simply to acclimate you to the procedures and terrain surrounding the Ellsworth Range. This flight will be conducted under visual rules.

OBJECTIVES: FAMILIARIZATION WITH LOCAL AREA REQUIREMENTS AND LOCAL INSTRUMENT PROCEDURES.
LOCATION: Lackland / Kelly AFB & Laughlin AFB & Laughlin MOA
DATE & TIME: DAYLIGHT HOURS
WX: REAL WORLD – VFR CEILING GREATER THAN 7500' REQUIRED
FLIGHT PLAN:

MISSION ORDERS:

1. Conduct the required preflight checks and prepare aircraft for takeoff.
2. Request
3. Follow the route from
4. navigate accordingly to set up Combat Arrival.

SPECIAL INSTRUCTIONS:

If VATSIM ATC is available, follow all departure/arrival instructions and request flight following. Ensure you follow procedures to request activation of both IR-170 and R-6402A.

SORTIE 102: PRECISION APPROACH & NIGHTTIME OPERATIONS

This is the exact same flight as Sortie 101, but under nighttime conditions to test your precision landing skills utilizing the ILS approach at Lackland Air Force Base.

MISSION SETUP

OBJECTIVES: EXECUTE AN ILS LANDING DURING NIGHT HOURS.
LOCATION: Lackland / Kelly AFB & Laughlin AFB & Laughlin MOA
DATE & TIME: **1900 LOCAL / 0100Z**
WX: REAL WORLD WEATHER – NO MINIMUMS REQUIRED
FLIGHT PLAN:
ALTITUDE: PILOT DISCRETION

MISSION ORDERS:

1. Conduct the required preflight checks and prepare aircraft for takeoff.
2. Request VFR departure to the north (if ATC available), using the Once over fix, proceed direct
3. Follow the route from Point, maintaining visual conditions. Maintain the minimum altitudes listed in the FLIP on the route.
4. After exiting IR-170 When you have a visual on the airfield, navigate accordingly to set up Combat Arrival.
5.

SPECIAL INSTRUCTIONS:

If VATSIM ATC is available, follow all departure/arrival instructions and request flight following. Ensure you follow procedures to request activation of both IR-170.

SORTIE 103A: CROSS COUNTRY FLIGHT

(Insert description)

MISSION SETUP

OBJECTIVES:
LOCATION:
DATE & TIME:
WX: REAL WORLD WEATHER – NO MINIMUMS REQUIRED
SUGGESTED ROUTE: KSKF SAT J2 JCT J15 FUSCO Q20 CNX J15 RSK J58 ILC J198 MVA KSUU
ALTITUDE: PILOT DISCRETION

Overview:

The purpose of this mission is to offer you an opportunity to demonstrate your instrument skills and navigate cross country while operating a high-performance complex aircraft. During the sorties you will demonstrate basic knowledge and capabilities to aviate and navigate using the VOR, NDB instrumentation and published charts in real time weather (WX) conditions, ending the flight by performing a non-precision approach in daylight and a precision approach at night. Both flights shall be performed on the VATSIM network using real time weather updates either through Active Sky, vPilot or any third party software of your choice.

Mission Orders:

SORTIE 103A:

- Start FS and then start JoinFS.

- Start at KSKF ramp cold and dark in the C-5. Perform preflight check and startup. File an IFR flight plan for KSKF to KSUU with the WEBGO2 (or more recent WEBGO#) arrival. Note: If ATC is online and re-routes you, notate this in your MIREP. Your routing from KSKF to WEBGO arrival KSUU is at your discretion but should leverage airways whenever possible while avoiding any significant weather notated in the SIGMETs. This information is all available on SkyVector.com using layers (for SIGMETs) and the World HI (aka IFR High) charts. A suggested route is available in the Misson Setup section.

- Before your decent, check the weather at KSUU and determine the best runway. If ATC is online follow their instructions for the active runway, otherwise use the weather and judgement to determine which runway you should land on using a non-precision approach (TACAN if able, or LOC if unable). Use of Runway 32/212 is prohibited for this mission. All approaches must begin at an appropriate Initial Approach Fix (IAF) and not use "Vectors". ATC, if online, may vector you, you are to say unable and request the approach via the first IAF notated on the chart (not the closest to the runway – e.g. SEATO for the TACAN 3L).

- Upon Top of Decent, descend via the WEBGO arrival. If ATC is online and has not given you decent instructions, report Top of Decent to ATC. If ATC is not online, communicate Top of Decent on Unicom (122.8). During the descent, comply with all posted speed and altitude constraints notated on the chart. Additionally, compliance with the national speed limit (250kt indicated) below 10,000 ft is mandatory for this flight. As part of your MIREP, provide the current METAR for KSUU for this point in flight.

- Upon final approach, perform the published missed approach procedure and hold as notated in the

approach chart and perform 1 full hold at the appropriate speed and leg distance. As a reminder, hold speeds are: 200kt below 6,000ft; 230kt 6,001ft to 14,000ft; 265kt at or above 14,001ft for non-high performance Air Force Aircraft.

• If there is ATC online, request IFR clearance for the approach via the original IAF you used to land using the non-precision if minima allow, otherwise request a precision approach (ILS or RNAV GPS), and comply with ATC's instructions for routing. If there is no ATC online, leave the hold going direct to the IAF you used earlier and perform the non-precision if minima allow, otherwise perform a precision approach (ILS or RNAV GPS). It is the pilot's responsibility to ensure that they choose the correct approach for the conditions by referencing the minima at the bottom of the approach chart.

• Upon arrival and touch down, taxi clear of the runway and back to the hold short line of the active RWY and save your JoinFS file under your name and mission number of 103A .

SORTIE 104A:

MISSION SETUP

OBJECTIVES:
LOCATION:
DATE & TIME:
WX: REAL WORLD WEATHER – NO MINIMUMS REQUIRED
SUGGESTED ROUTE: KSUU AVE J6 PMD J65 DECAS J212 BXK J4 SSO J50 ELP J2 FST KSKF
ALTITUDE: PILOT DISCRETION

• Start at KSUU ramp cold and dark in the C-5. Perform preflight check and startup. File an IFR flight plan for KSUU to KSKF using the REJOY1.AVE departure (ATC will call this the REJOY1 departure, Avenal transition) and the Centerpoint Two (CSI2) arrival via the Fort Stockton (FST) transition. If there is a newer SID or STAR, the pilot is to follow and comply with the most recent version. Additionally, the pilot is to comply with all routing, speed, and altitude restrictions as notated on departure and approach charts.

As in Sortie 103A, your routing from KSUU to KSKF is at your discretion but should leverage airways whenever possible while avoiding any significant weather notated in the SIGMETs and must leverage the notated departures and arrivals. Also, as in 103A, if ATC is online and reroutes you, you must notate this in your MIREP. A suggested route is available in the Misson Setup section.

- As with 103A, you should fly the arrival while complying with all published routing and restrictions as well as including the current METAR for KSKF in your MIREP.

- For this initial approach you must use the RNAV 16 approach via the REUBE transition regardless of the wind direction. If ATC is online, inform them of this and include "expect missed" when you request this approach.

- Perform the final approach and execute the published missed approach at the appropriate minima plus 50 feet as notated on the chart. Remember it is your responsibility to call out a missed approach to

ATC if they are online.

- After at least one full hold:
  - If there is ATC online, request IFR clearance to KSKF with the appropriate precision approach (RNAV GPS or ILS) for the winds. Follow ATC instructions and execute a full stop landing.
  - If no ATC is online, proceed direct to the IAF for the appropriate precision approach (RNAV GPS or ILS) for the winds and execute a full stop landing.

- Upon landing, taxi to parking and shut down and file a flight report for both mission Sorties. Save your file under your name and mission number then email both files to File flight report via your SimAcars, indicate this mission number in the comment section.

MODULE 200: AIR to AIR REFUELING MODULE

AAR PROCEDURE AND PHRASES.

The Procedure There are 6 Points to a Air to Air Refuel they are as follows:

- First Contact at 30 nm
- Astern Position
- Observation Position
- Refuel
- Reform Area
- Leaving the Area

GREEN IS RECEIVER
Comms will Look like

Standard AAR Once on frequency and 30nm from the tanker, you would call:

TEXACO41 THIS IS RAZOR21 FLIGHT 2 TIMES F16 30NM TO THE SOUTH REQUESTING WET REFUEL (GIVE AMOUNT REQUIRED)

RAZOR 21 FLIGHT THIS IS TEXACO41 COPY YOUR REFUEL REQUEST CONTINUE APPROACH CALL AT 10NM

RAZOR21 FLIGHT CONTINUING APPROACH WILL CALL 10NM

At this point the tanker is aware that you are in the area and you need fuel so you will continue the approach when at 10nm from the tanker you would call the following:

TEXACO41 THIS IS RAZOR 21 FLIGHT HAVE YOU RADAR JUDY

10NM RAZOR21 FLIGHT CONTINUE APPROACH CLEARED ASTERN

(you repeat)RAZOR21 FLIGHT CLEARED ASTERN

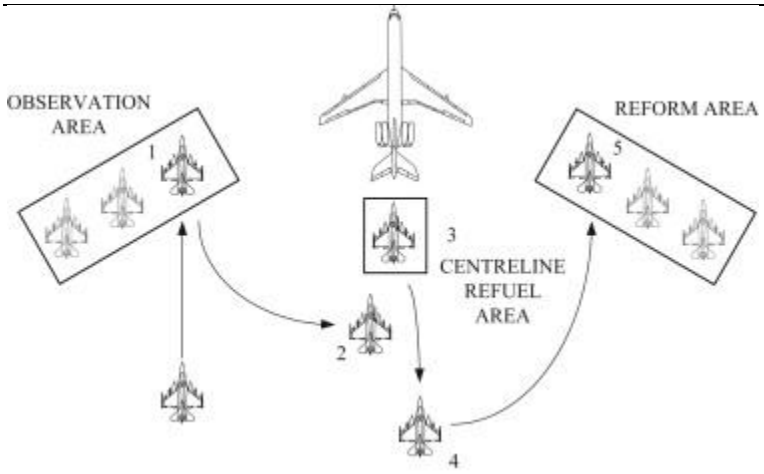
Astern is directly behind the tanker but 3nm back when you are in this position you call up with the following:

TEXACOS41, RAZOR21 FLIGHT ASTERN

RAZOR21 FLIGHT CLEARED TO THE OBSERVATION AREA RAZOR21 FLIGHT CLEARED OBSERVATION

This procedure is to be used for any AAR in any situation

The observation area is forming on tankers left (Port)wing



this is done to PID (Positively Identify) the receivers.

Once the receivers have been PID by the tanker you will be asked to drop back to the Pre-Contact position and you would be given you hose to connect to. This in 0.5nm from the tanker directly behind and the comms would be as follows:

TEXACO41 RAZOR21 FLIGHT OBSERVATION

RAZOR21 FLIGHT COPY, CLEARED PRE-CONTACT BOOM

RAZOR21 FLIGHT CLEARED PRE-CONTACT 21 LEFT HOSE 22 RIGHT HOSE

If there are more than 2 receivers the tanker will say for instance 21 cleared pre-contact left hose 22 right hose.(or BOOM) in the observation area.

At the point of pre-contact the taker will deploy the refueling boom when in position and stable the receivers call when ready at this point the flight has split to individual aircraft and they all make their own calls to the tanker as follows:

RAZOR 21 PRE-CONTACT

RAZOR21 CLEARED CONTACT

RAZOR 21 CLEARED CONTACT

At this point, the TANKER will connect to the BOOM when in position stable and connected the receiver will call: -

RAZOR 21 CONTACT

COPY RAZOR 21 FUEL FLOWING

When the requested amount of fuel has been passed the tanker will say:

RAZOR 21 FUEL TRANSFER COMPLETE CLEARED DISCONNECT, GO REFORM AREA

RAZOR 21 CLEAR DISCONNECT AND REFORM AREA

The reform area is to the right-wing of the tanker it is used to reform the flight before they are cleared to leave. If any aircraft are still refueling, then the aircraft will be held in the reform area.

Also if any aircraft are in the holding area then they will refuel from the tanker and then getcleared to the reform area, to join with the rest of their flight. Once all aircraft are ready and in reform area then the tanker will clear them to leave

RAZOR21 FLIGHT YOU ARE CLEARED TO LEAVE CONTACT CONTACT freq TO.....

TEXACOS41 RAZOR21 FLIGHT CLEARED TO LEAVE THANKS FOR THE FUEL CONTACTING .....

That is the basic refuelling procedure.

Emergency Procedures If at any point during the refuel the tanker call:

RAZOR 21 BREAKAWAY BREAKAWAY BREAKAWAY

The receiver must disconnect immediately and go to the reform area and await further instructions from the tanker.

https://www.vusaf.us/files/aetc/ACC-MQT/vUSAF%20AAR%20Script%2020240121.pdf

SORTIE 201A: AIR REFUELING ANCHOR AREAS

The purpose of this mission is to offer you an opportunity to demonstrate your instrument skills and navigate cross country while operating a high-performance complex aircraft. During the sorties you will demonstrate basic knowledge and capabilities to aviate and navigate using the GPS, VOR, NDB instrumentation and published charts in real time weather (WX) conditions. In addition, you will have the opportunity to set up orbit within an air refueling anchor area.

OBJECTIVES:	SET UP ORBIT WITHIN AN AR ANCHOR AREA
LOCATION:	AR669
DATE & TIME:	DAYLIGHT HOURS
WX:	REAL WORLD WEATHER – NO MINIMUMS REQUIRED
SUGGESTED ROUTE:	KLTS Direct AR669 Direct KLTS
ALTITUDE:	FL250/FL270

Overview:

Flight shall be performed on the VATSIM network using real time weather updates either through Active Sky, vPilot or any third party software of your choice.

Mission Orders:

- Start FS and then start JoinFS.
- Start at KLTS ramp cold and dark in the KC-135R/KC-46A. Perform preflight check and startup. File an IFR flight plan for KLTS to AR669 Entry Point, delay in AR669 (enough time for 3 orbits), returning to KLTS Note: If ATC is online and re-routes you, notate this in your MIREP. Your routing from KLTS to AR669 is at your discretion but should leverage airways whenever possible while avoiding any significant weather notated in the SIGMETs. This information is all available on SkyVector.com using layers (for SIGMETs) and the World HI (aka IFR High) charts. A suggested route is available in the Misson Setup section.
- Utilize the AP/1B to collect all pertinent data concerning AR669. Make sure to utilize the Entry Point, ARIP, Anchor Point, Anchor Pattern, and Exit Point. A minimum of 3 orbits is required for this mission. (Hint: Programming the GPS coordinates of each point of the anchor area works the best)
- Before your decent, check the weather at KLTS and determine the best runway. If ATC is online follow their instructions for the active runway, otherwise use the weather and judgement to determine which runway you should land on using a precision approach. All approaches must begin at an appropriate Initial Approach Fix (IAF) and not use "Vectors". ATC, if online, may vector you, you are to say unable and request the approach via the first IAF notated on the chart (not the closest to the runway – e.g. SEATO for the TACAN 3L).
- Upon Top of Decent, descend at pilot's discretion. If ATC is online and has not given you decent instructions, report Top of Decent to ATC. If ATC is not online, communicate Top of Decent on Unicom (122.8). During the descent, comply with all posted speed and altitude constraints notated on the chart. Additionally, compliance with the national speed limit (250kt indicated) below 10,000 ft is mandatory for this flight. As part of your MIREP, provide the current METAR for K for this point in flight.
- Upon final approach, perform the published missed approach procedure and hold as notated in the approach chart and perform 1 full hold at the appropriate speed and leg distance. As a reminder, hold speeds are: 200kt below 6,000ft; 230kt 6,001ft to 14,000ft; 265kt at or above 14,001ft for non-high performance Air Force Aircraft.
- If there is ATC online, request IFR clearance for the approach via the original IAF you used to land using the non-precision if minima allow, otherwise request a precision approach (ILS or RNAV GPS), and comply with ATC's instructions for routing. If there is no ATC online, leave the hold going direct to the IAF you used earlier and perform the non-precision if minima allow, otherwise perform a precision approach (ILS or RNAV GPS). It is the pilot's responsibility to ensure that they choose the correct approach for the conditions by referencing the minima at the bottom of the approach chart.
- Upon arrival and touch down, taxi clear of the runway and back to the ramp to shutdown. Save your JoinFS file under your name and mission number of 301A

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SORTIE 201B: AIR REFUELING TRACKS

The purpose of this mission is to offer you an opportunity to demonstrate your instrument skills and navigate cross country while operating a high-performance complex aircraft. During the sorties you will demonstrate basic knowledge and capabilities to aviate and navigate using the GPS, VOR, NDB instrumentation and published charts in real time weather (WX) conditions. In addition, you will have the opportunity to set yourself on an AR Track.

OBJECTIVES: SET UP ON AN AR TRACK

LOCATION: AR102B
DATE & TIME: DAYLIGHT HOURS
WX: REAL WORLD WEATHER – NO MINIMUMS REQUIRED

SUGGESTED ROUTE: KLTS Direct AR102B Direct KLTS
ALTITUDE: FL240/FL300

Overview:

Flight shall be performed on the VATSIM network using real time weather updates either through Active Sky, vPilot or any third party software of your choice.

Mission Orders:

- Start FS and then start JoinFS.
- Start at KLTS ramp cold and dark in the KC-135R/KC-46A. Perform preflight check and startup. File an IFR flight plan for KLTS to AR102B ARIP, fly the length of the track, returning to KLTS Note: If ATC is online and re-routes you, notate this in your MIREP. Your routing from KLTS to AR102B is at your discretion but should leverage airways whenever possible while avoiding any significant weather notated in the SIGMETs. This information is all available on SkyVector.com using layers (for SIGMETs) and the World HI (aka IFR High) charts. A suggested route is available in the Misson Setup section.
- Utilize the AP/1B to collect all pertinent data concerning AR102B. Make sure to utilize the ARIP, ARCP, Navigation Points, and Exit Point. (Hint: Programming the GPS coordinates of each point of the track works the best)
- Before your decent, check the weather at KLTS and determine the best runway**. Once you have done that, plan on the approach to the opposite runway, circle to land the active runway**. If ATC is online follow their instructions for the active runway, otherwise use the weather and judgement to determine which runway you should land on using a precision approach. All approaches must begin at an appropriate Initial Approach Fix (IAF) and not use "Vectors". ATC, if online, may vector you, you are to say unable and request the approach via the first IAF notated on the chart (not the closest to the runway – e.g. SEATO for the TACAN 3L).
- Upon Top of Decent, descend at pilot's discretion. If ATC is online and has not given you decent instructions, report Top of Decent to ATC. If ATC is not online, communicate Top of Decent on Unicom (122.8). During the descent, comply with all posted speed and altitude constraints notated on the chart. Additionally, compliance with the national speed limit (250kt indicated) below 10,000 ft is mandatory for this flight. As part of your MIREP, provide the current METAR for K for this point in flight.
- Upon final approach to the opposite runway, perform a circle to land the active runway. Circle should be conducted based on the approach plate data for that approach.
- Upon arrival and touch down, taxi clear of the runway and back to the ramp to shutdown. Save your JoinFS file under your name and mission number of 301B

The purpose of this sortie is to allow you an opportunity to experience and practice getting "Stern" position and the "Contact" position.

MISSION SETUP
OBJECTIVES: PERFORM AND EXECUTE ADVANCED FORMATION MOVEMENTS
LOCATION: AR
DATE & TIME:
WX: REAL WORLD

FLIGHT PLAN:

ALTITUDE: BLOCK ALTITUDE FL270 TO FL290

REQUIRED FILES:

MISSION ORDERS:

1. Start your simulator at KDLF with proper tail booked and complete pre-flight checks.
2. If ATC is online follow normal departure procedures at their direction. Hinko one or Laughlin one Departure
3. Once airborne fly to the AR167 Initial Point (ARIP)
4. Cross the ARIP at the briefed heading and altitude and call the Tanker advising:
   "Air Force XXX, (Tanker Callsign) is IP inbound requesting XXXX lbs of fuel."
5. Continue inbound to the Contact Point (ARCP) and follow the Tanker IP instructions.

SPECIAL INSTRUCTIONS

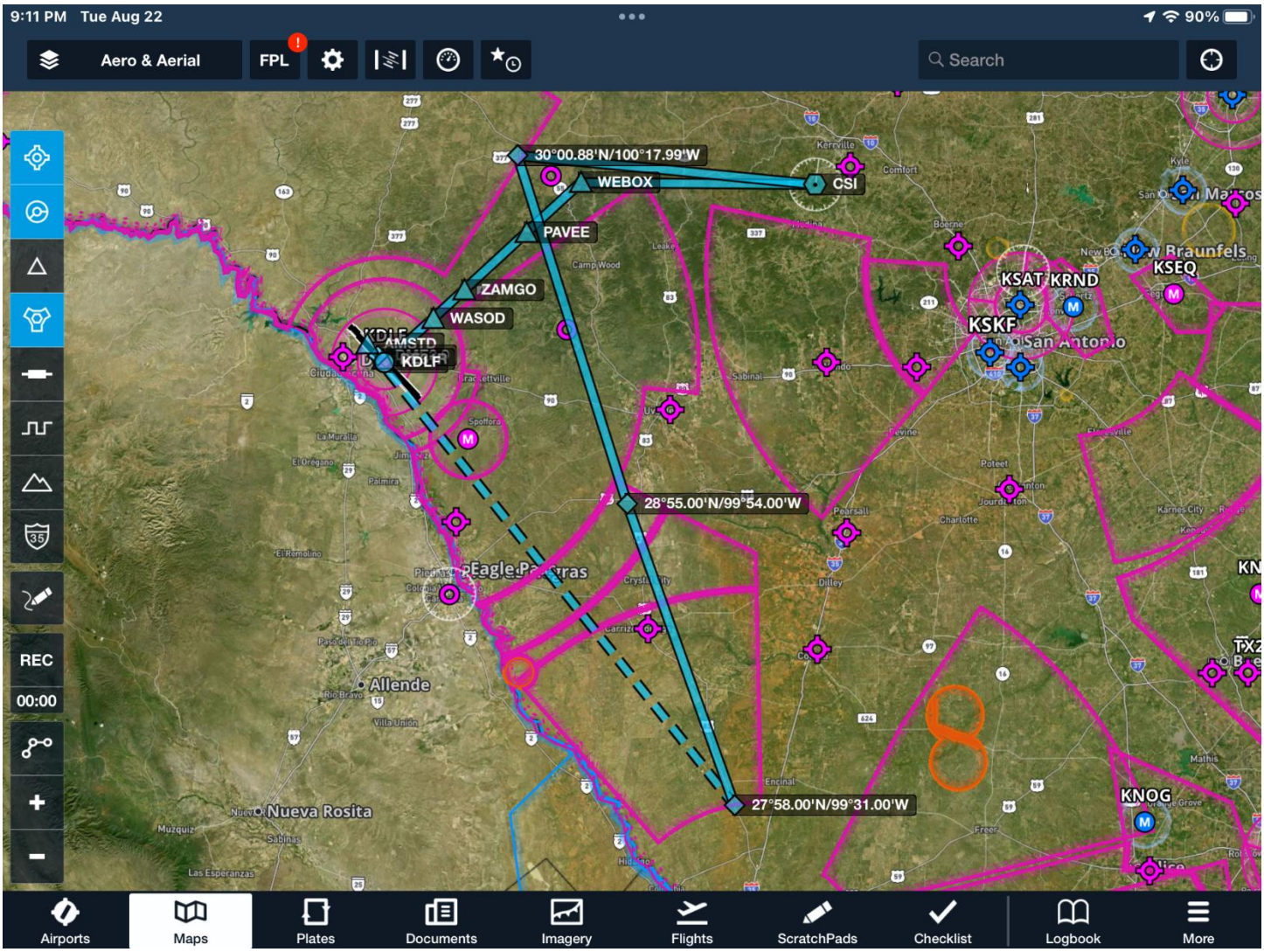
Use the communications protocol found in the vUSAF AAR Resource Document to conduct your aerial refueling. Your AR flight will be graded by the Tanker Pilot.

AR 167 FLIP AP/1B INFORMATION:

① A 3000' block altitude is approved subject to direction of flight; eg. eastbound FL250B270, westbound FL220B240

AR167	LRD VORTAC	RSG VORTAC	RSG VORTAC	a. 235.100	FL260/FL310	149FG/DOOS	Houston
(North)	341/30	152/69	N30°00.88'	b. 260.200		Kelly AFB, TX	ARCP-323.1W
	N27°58.00'	N28°55.00'	W100°17.99'	c. N/R		DSN 969-5934	EXIT-380.2W
	W99°31.00'	W99°54.00'		d. N/R			
				e. 32/95			
(South)	RSG VORTAC	RSG VORTAC	LRD VORTAC				Houston
	N30°00.88'	152/69	341/30				ARCP-380.2E
	W100°17.99'	N28°55.00'	N27°58.00'				EXIT-323.1E
		W99°54.00'	W99°31.00'				

REMARKS: All course reversal turns will be made to the east. Receivers may exit only at ARIP or EXIT points. When exiting at RSG, receivers should file to JCT or FST to pick up supplemental flight plans. Crystal MOA must be scheduled by users during same period of track operations. Hours of operation: Sun-Sat 1200-0400Z++.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KSEQ
KSKF
San Antonio
Braunfels
Eagle Pass
Allende
Nueva Rosita
KNOG
REC
00:00
Airports
Maps
Plates
Documents
Imagery
Flights
ScratchPads
Checklist
Logbook
More

SORTIE 202B: AIR REFUELING (RECEIVER)

The purpose of this mission is to offer you an opportunity to demonstrate your ability to conduct Air Refueling (Receiver). This sortie will also give you an opportunity to demonstrate your ability to depart and fly as #2 in Cell. During the sortie you will demonstrate the ability to fly in cell to the A/R track and conduct Air Refueling with your Lead aircraft in the cell formation.

OBJECTIVES:

- File Appropriate Flight Plan
- #2 in Cell Take off and Departure
- Navigate to then selected track ARIP/ARCP
- Conduct Air Refueling
- RTB as required.

LOCATION: AR110 East

DATE & TIME: DAYLIGHT HOURS

WX: REAL WORLD WEATHER – NO MINIMUMS REQUIRED

SUGGESTED ROUTE: KLTS Direct AR110 East Direct KLTS

ALTITUDE: FL250/FL280

Overview:

Start FS and then start JoinFS.

- Start at KLTS ramp cold and dark in the KC-135R/KC-46A. Perform preflight check and startup. File an IFR flight plan for KLTS to AR110 East Entry Point, conduct Air Refueling with your Lead aircraft (Instructor). Your routing from KLTS to AR110 is at your leads discretion but should leverage airways whenever possible while avoiding any significant weather notated in the SIGMETs. This information is all available on SkyVector.com using layers (for SIGMETs) and the World HI (aka IFR High) charts. A suggested route is available in the Misson Setup section.

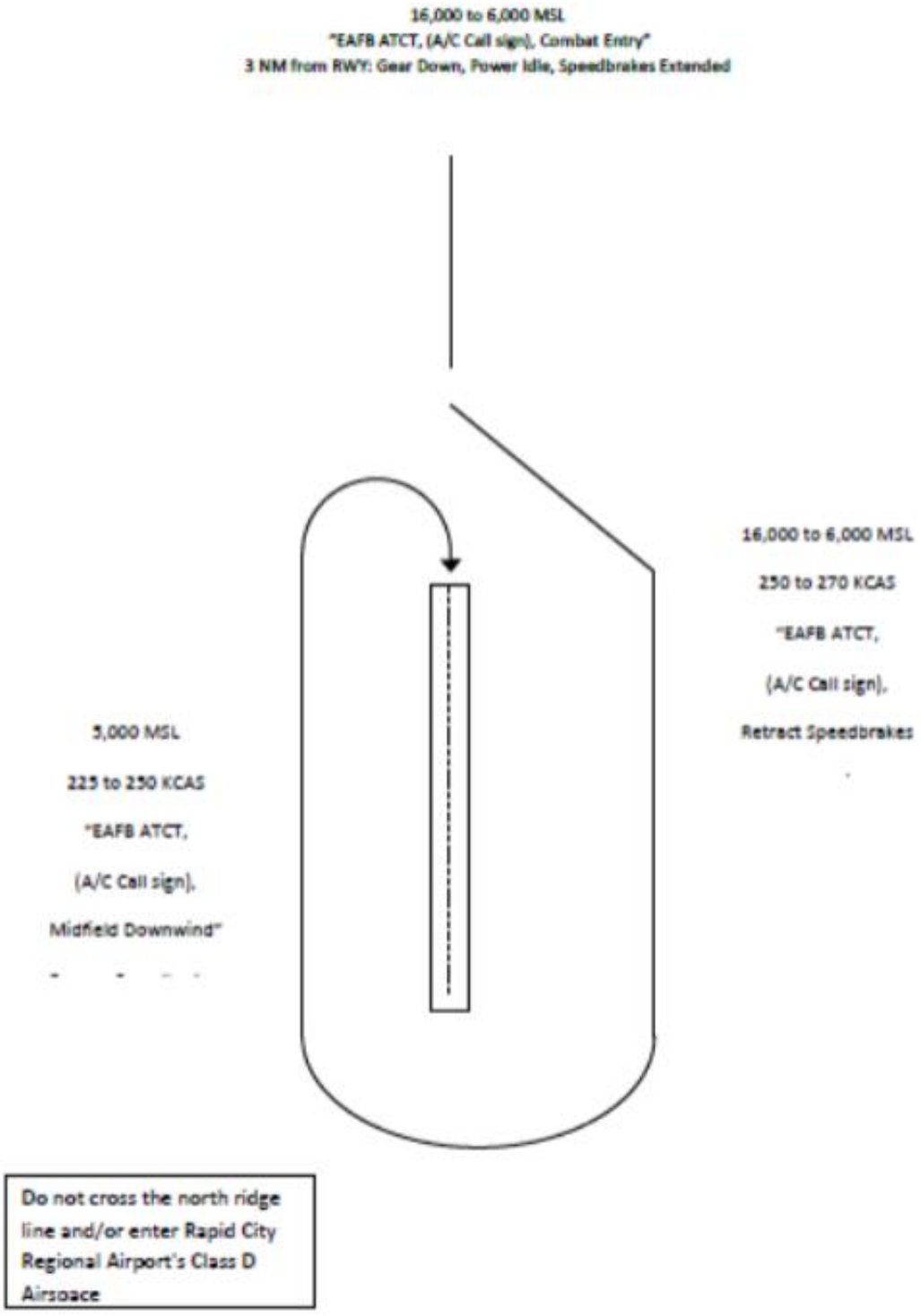
- Utilize the AP/1B to collect all pertinent data concerning AR110 East. Make sure to utilize the Entry Point, ARIP, Anchor Point, Anchor Pattern, and Exit Point. (Hint: Programming the GPS coordinates of each point of the anchor area works the best)
- Perform a stable closure rate on the tanker. You should shoot for 30 DEGREE closure climb into the Pre-Contact position. Get as close as you feel comfortable. Tanker will call contact for you. Maintain the proper contact position during refueling.
- Tanker will coordinate cell breakup procedures.
- Before your decent, check the weather at KLTS and determine the best runway. If ATC is online follow their instructions for the active runway, otherwise use the weather and judgement to determine which runway you should land on using a precision approach. All approaches must begin at an appropriate Initial Approach Fix (IAF)

and not use “Vectors”. ATC, if online, may vector you, you are to say unable and request the approach via the first IAF notated on the chart (not the closest to the runway – e.g. SEATO for the TACAN 3L).

- Upon Top of Decent, descend at pilot’s discretion. If ATC is online and has not given you decent instructions, report Top of Decent to ATC. If ATC is not online, communicate Top of Decent on Unicom (122.8). During the descent, comply with all posted speed and altitude constraints notated on the chart. Additionally, compliance with the national speed limit (250kt indicated) below 10,000 ft is mandatory for this flight. As part of your MIREP, provide the current METAR for K for this point in flight.
- Upon arrival and touch down, taxi clear of the runway and back to the ramp to shutdown. Save your JoinFS file under your name and mission number of 303B

ATTACHMENTS

COMBAT ARRIVAL DIAGRAM



CREDITS/REFERENCES