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Space, Missile, Command and Control

**AERODROME PROCEDURES AND AIR
TRAFFIC CONTROL**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFD 13-2, *Air Traffic Control, Airspace, and Range Management*. It prescribes local airfield operations and procedures, airspace utilization, flight operations, ground operations, and emergency procedures at Travis Air Force Base. Deviations from this instruction are only authorized in the interest of safety. Coordinate all changes, additions, or deletions with Airfield Operations Flight (60 OSS/OSA) prior to formal change. 60th Operations Group Commander may publish interim changes, as necessary, to effect priority/emergency changes if it applies to all of Travis AFB.

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This document is substantially revised and must be completely reviewed.

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Chapter 1

GENERAL AIRFIELD OPERATIONS

1.1. Aircraft Movement Areas and Runways ([Attachment 2](#)).

1.1.1. The aircraft movement area includes the runways, taxiways, and other areas of the airfield which are utilized for taxiing/hover taxiing, air taxiing, takeoff and landing of aircraft, excluding maintenance areas, loading ramps, maintenance hangars, and parking areas.

1.1.2. Within the aircraft movement area is the controlled movement area. The controlled movement area is:

1.1.2.1. Comprised of both runways, 100 feet on either side of the runway edge, and the checkerboard area, (the area between the 200 ramp and the outside runway that includes taxiways D, E, F, and G).

1.1.2.2. Controlled by direct radio communication with Tower. No vehicles, personnel, or aircraft shall enter the controlled movement area without clearance from the Tower.

1.1.3. Travis has two runways, 21R/03L and 21L/03R.

1.1.4. Runway 21L is the primary instrument runway.

1.1.5. Runway 21L/03R is 10,995' x 300'.

1.1.6. Runway 21R/03L is 11,002' x 300'.

1.2. Airspace and Satellite Airport Information ([Attachment 3](#)).

1.2.1. The Travis Radar Approach controls Class E airspace from surface to 10,000' MSL, in an approximately 2,000 square mile area, extending east to west from Napa County Airport to just west of Sacramento, and from north to south from Concord to just north of Watts-Woodland. Numerous civilian satellite airports and VFR training areas are within Travis Class E airspace (see [Chapter 7](#)).

1.2.2. The Travis Tower controls Class D airspace, consisting of a 5 NM radius around the airport from the surface to 2,600' MSL.

1.2.2.1. The Travis Aero Club lies within the northwest corner of the Class D airspace.

1.2.2.2. Medical mission helicopters operate within the northwest corner of the Class D airspace at David Grant Medical Center.

1.3. Local Frequencies and Channelization.

1.3.1. Command and control frequencies and channelizations are listed in [Attachment 4](#).

1.3.2. Tower and Radar Approach Control (RAPCON) may direct frequency changes in the UHF spectrum for locally based C-5 and KC-10 aircraft by referring to the local channels and using procedures in FAAO 7110.65, *Air Traffic Control*. Example: "Contact Command Post local channel one," or "Change to my frequency local channel six."

1.4. Pilot to Metro Service (METRO).

1.4.1. A weather forecaster is on duty 24 hours a day.

1.4.2. Pilots can obtain current weather observations and en route and terminal forecasts by contacting Travis METRO ([Attachment 4](#)).

1.4.3. Pilots should immediately report all potentially hazardous or un-forecasted weather encountered to METRO. Forecasters will disseminate those reports locally and in weather briefings.

1.4.4. Tower or RAPCON will report PIREPS to the weather forecaster.

1.5. Bird Avoidance Procedures. For detailed guidance on the Travis Wildlife Hazard Program, refer to 60 AMW OPLAN 91-212, *Travis AFB BASH Plan*.

1.5.1. Bird watch conditions (BWC) at Travis.

1.5.1.1. Visual sightings by aircrew, Tower, Base Operations, or safety personnel can initiate changes to the BWC.

1.5.1.2. BWC severe - defined as heavy concentrations of birds (more than 15 large birds or 30 small birds) on or above the runways, taxiways, infield areas, and departure or arrival routes.

1.5.1.3. BWC moderate - defined as concentrations of 5 to 15 large birds (waterfowl, raptors, gulls, etc.) or 15 to 30 small birds (terns, swallows, blackbirds, etc.) observable in locations that present a probable hazard to safe flying operations.

1.5.1.4. BWC low - normal at Travis, with sparse bird activity within 15 nautical miles of the airfield (less than that bird activity defined as moderate).

1.5.2. Operational restrictions apply to all aircraft operating at Travis AFB. Deviations require 60th Operations Group Command (60 OG/CC) or higher approval.

1.5.2.1. During BWC severe, all takeoffs, landings, and approaches are prohibited. Airborne aircraft will divert or hold.

1.5.2.2. During BWC moderate, all local Instrument Flight Rules (IFR)/Visual Flight Rules (VFR) traffic pattern activity will cease. Airborne aircraft will full-stop, hold or divert. All takeoffs require approval by the 60th Operations Group Commander.

1.5.2.3. During BWC low, no operational restrictions apply. However, personnel are reminded to maintain vigilance for bird and wildlife hazards.

1.5.3. Current BWC, other than low, will be broadcast on the ATIS, and will be available to crews via ATC, Base Operations, and Command Post.

1.5.4. During Phase II (fall and winter months), bird activity increases significantly at Travis. Additional restrictions (as outlined in 60 AMW OPLAN 91-212, the IFR supplement and NOTAMS) apply during this period.

1.6. Inbound Distinguished Visitor (DV) Aircraft. DV information is vital to the base protocol office and other base officials. For detailed information, refer to 60 AMWI 11-201, *DV Arrivals and Departures*.

1.6.1. Command Post is the point of contact for departing and arriving DV aircraft.

1.6.2. Command Post will notify Base Ops, Tower and RAPCON of DVs code four or higher.

1.6.3. Requests by Command Post for inbound DV information are made through the RAPCON watch supervisor via direct landline. This information is provided to the Command Post on a work-

load-permitting basis. RAPCON will provide a 30-mile out call to Command Post on the DV aircraft when able.

1.6.4. When requested by Command Post, RAPCON and Tower will provide preferential air traffic handling to DVs to the maximum extent possible, within sound safety practices as determined by the ATC watch supervisors.

1.7. Quiet Hours For Special Events.

1.7.1. Request quiet hours at least ten working days in advance through the Chief, Airfield Management who will coordinate the request.

1.7.2. Airfield activities are modified to provide total quiet or only reduce noise in a certain area. Total quiet is only used when absolutely necessary since it requires the termination of all flying and many essential ground activities. Reduction of noise in a certain area is accomplished with minimum mission disruption.

1.7.3. The Chief, Airfield Management will evaluate each request, and request 60 OG/CC approval.

1.7.4. Base Operations will inform all agencies of required actions and stop/start times.

1.7.4.1. Current Operations (60 OSS/OSO) will be notified immediately upon receipt of approval by phone and fax.

1.7.4.2. The following agencies will be notified by fax: 15 AF/DO, HQ AMC/DOA, 60 AMW/CP, 60 LG/CC, 60 SPTG/CC, AAFES, 60 OSS/CC, 60 APS/TRO, 349 AMW/CC, 349 OG/CC, 349 LG/CC, 349 SPTG/CC, ROICC, VQ3 DET, and the PRIDE airfield contractor representative.

1.7.4.3. 60 OSS/OSO will transmit to all active duty and reserve flying squadrons.

1.7.5. The Command Post duty officer will advise Base Operations when the event is terminated early. Otherwise, quiet hours expire when scheduled.

1.7.6. Final authority to terminate the quiet period rests with the 60 OG/CC, or designated representative.

1.8. Airfield Operations Board. The Airfield Operations Board meets quarterly as a forum for discussing, updating, and tracking various activities in support of the wing flying mission.

1.8.1. Membership. The following organizations have been appointed as members of the Airfield Operations Board by the 60 OG/CC IAW AFI 13-203, *Air Traffic Control*:

1.8.1.1. 60AMW/CP/SE

1.8.1.2. 60 OG/CC/OGV/OGT

1.8.1.3. 60 OSS/CC/OSA/OSAA/OSAB/OSAD/OSAC/OSAE/OSAP/OSF/OSO/OSW

1.8.1.4. 6 ARS/CC

1.8.1.5. 9 ARS/CC

1.8.1.6. 21 AS/CC

1.8.1.7. 22 AS/CC

1.8.1.8. 60 SPTG/CC

- 1.8.1.9. 60 SVS/SVBA
 - 1.8.1.10. 60 CES/CC/CECC/CECP/CEOE/CEOHH/CEV
 - 1.8.1.11. 60 CS/CC/SCM/SCX
 - 1.8.1.12. 349 OG/CC/OGV/SE
 - 1.8.1.13. 65 AES/CC
 - 1.8.1.14. 70 ARS/CC
 - 1.8.1.15. 79 ARS/CC
 - 1.8.1.16. 301 AS/CC
 - 1.8.1.17. 312 AS/CC
 - 1.8.1.18. VQ-3 DET/CC
 - 1.8.1.19. Bay TRACON (not a mandatory member)
 - 1.8.1.20. OAKLAND ARTCC (not a mandatory member)
 - 1.8.1.21. Stockton TRACON (not a mandatory member)
 - 1.8.1.22. Sacramento TRACON (not a mandatory member)
- 1.8.2. Mandatory Airfield Operations Board Agenda Items.
- 1.8.2.1. The agenda will include the following mandatory items as a minimum:
 - 1.8.2.1.1. At each meeting: airspace (terminal, en route, and special use airspace), ATC/flying procedures, military and/or FAA concerns, Airfield Operations Flight staffing and proficiency, Air Traffic Control and Landing Systems (ATCALs), airfield environment, status of flight line driving program, Hazardous Air Traffic Reports, Air Traffic System Evaluation Program, unauthorized use of ATC frequencies, ATC delays, Mission Design Series (MDS) changes, Bird Aircraft Strike Hazard (BASH), trend data collected through questionnaires, and Mid Air Collision Avoidance (MACA).
 - 1.8.2.1.2. Once annually, the board will review certain items according to the following schedule:
 - 1.8.2.1.2.1. First Quarter: ATCALs preventive maintenance inspection schedule, airfield tree and vegetation growth and management, airfield and air traffic control waivers.
 - 1.8.2.1.2.2. Second Quarter: airfield operations procedural guidance, Air Installation Compatible Use Zone (AICUZ), commercial power reliability, engine run procedures, local aircraft priorities.
 - 1.8.2.1.2.3. Third Quarter: terminal instrument procedures, alternate ATC capabilities.
 - 1.8.2.1.2.4. Fourth Quarter: OPLAN taskings, aircraft parking plan, Notice To Airmen (NOTAM) circuit and Automated Weather Dissemination System (AWDS) reliability.

1.9. Ramps and Runways Working Group.

- 1.9.1. By direction of the Wing Commander (60 AMW/CC), the Ramps and Runways Working Group meets semi-annually, or as needed prior to the quarterly Programs Working Group.

1.9.2. The purpose of this group is to maintain a consistent focus on long term airfield plans and programming, while managing short-term airfield construction and repair projects.

1.9.3. Members of the Ramps and Runways Working Group, as appointed by the 60 AMW/CC, are listed below. Bold font indicates mandatory member.

1.9.3.1. 60AMW/SE

1.9.3.2. 60 OG/CD (Co-chair)

1.9.3.3. 60 OG/OGV

1.9.3.4. 60 APS/TRK

1.9.3.5. 60 OSS/DO/OSA/OSAA (briefer)/OSAB

1.9.3.6. 60 SPTG/CD (Co-chair)

1.9.3.7. 60 CES/DO/CEC/CECC/CECP/CEF/CEO/CEOE/CEOHH/CEOIE/CERR

1.9.3.8. 60 SUPS/LGSF

1.9.3.9. 60 AGS

1.9.3.10. 660 AGS

1.9.3.11. 60 LG/LGLOP/LGGT

Chapter 2

AIRFIELD AND RAMP OPERATIONS

2.1. Aircraft Operations in the Movement Area.

2.1.1. Tower exercises positive control of aircraft operating on all portions of the aircraft movement area (see paragraph 1.1. and Attachment 2).

2.1.1.1. Tower is not responsible for positive control in designated blind areas not visible to Tower. All personnel must exercise extreme caution operating in these areas.

2.1.2. All vehicles, equipment, and personnel on the ramps and taxiways are uncontrolled, and will give way to taxiing or towed aircraft.

2.1.3. Aircraft must use extreme caution while taxiing, and report observed hazards to Tower and/or Command Post.

2.1.4. Tower provides aircraft with all known or observed hazards that exist along an aircraft taxi route.

2.2. Pedestrian/Vehicle Control Operations and Recall Procedures in the Movement Area. Refer to TAFBI 13-103, *Vehicle Operations on the Flightline*, for specific guidance on operating vehicles within the movement area.

2.2.1. Extensive construction or maintenance work within the movement area shall be coordinated with the Chief of Airfield Management prior to commencement of work, normally at the preconstruction meeting. If no preconstruction meeting is scheduled, coordinate with the Chief, Airfield Management at least thirty days prior to commencement of work.

2.2.2. Personnel and equipment working adjacent to the movement area shall remain clear of the controlled movement area, defined in paragraph 1.1.2. and the runway hold lines on taxiways. Access to the controlled movement area is not authorized unless specific approval is obtained from Tower.

2.2.2.1. Personnel who must work in close proximity to or inside of the movement area must obtain a briefing from the Base Operations shift supervisor and complete training IAW TAFBI 13-103 prior to starting any work. The Base Operations shift supervisor has the following responsibilities:

2.2.2.1.1. Brief proper operation of the portable radio, how to contact Tower for movement area access, and the requirement to monitor the radio at all times while in the area.

2.2.2.1.2. Instruct the work crew supervisor to delegate one person to monitor the radio for evacuation instructions.

2.2.2.1.3. Ensure the work crew supervisor understands Tower light gun signals; provide a visual aid, if necessary.

2.2.2.1.4. Assign a portable radio to the work crew supervisor, and assign a call sign to the work crew.

2.2.2.1.5. Coordinate the work activity with the Tower supervisor. If the work will extend beyond one day, the shift supervisor will brief the Tower Chief Controller of the work schedule.

2.2.3. Personnel in the controlled movement must continuously maintain direct radio communications with Tower unless otherwise authorized by Tower.

2.2.4. If the Tower supervisor determines the work crew may interfere or is interfering with airfield operations, he/she will coordinate with the Base Operations shift supervisor for clarification and closure of portions of the airfield or removal of work crews.

2.2.5. Tower will, to the maximum extent possible and consistent with flight safety, monitor the ramp net at all times when vehicles are operating in the checkerboard area or on or near the runways. Should Tower need to discontinue monitoring the net, Tower will advise vehicles operating in the checkerboard they are no longer monitoring the net.

2.2.6. In the event of an emergency recall, all pedestrians and vehicles shall clear the controlled movement area as soon as possible. Emergency recall notification will normally occur with radio instructions or light gun signals if radios are inoperable. In the event these methods are inoperative, Tower will flash the airfield lights on and off to alert personnel of the immediate need to clear the area (this method does not replace the requirement for operators to monitor radios at all times).

2.2.7. Security Forces access. Security Forces should, if possible, coordinate runway crossing directly with Tower on the Ramp Net. Tower has limited Land Mobile Radio (LMR) capabilities, with the Crash and Ramp Nets taking priority. Should the Security Forces, without Ramp Net capability, need emergency access into the movement area or the Navy Take Charge and Move Out (TACAMO) area, the subsequent procedures must be followed.

2.2.7.1. Security Forces patrol will proceed to the runway hold line.

2.2.7.2. Patrol will then notify Security Forces Control Center (SFCC) of their position and that they are requesting permission to cross the active runway.

2.2.7.3. SFCC will notify Tower via landline that they have a patrol requesting permission to cross the active runway and relay the call sign of the patrol.

2.2.7.4. Tower will make contact with the patrol on the Law Enforcement (LE) Net to authorize access onto the runway. The patrol will notify Tower of the location and number of vehicles that require crossing.

2.2.7.5. The patrol will immediately notify Tower upon departing the active runway.

2.2.7.6. Tower will discontinue monitoring of the LE net once the crossing is complete.

2.3. Preferred Taxi Routes, Taxiway Restrictions, and Runway Clear Zones.

2.3.1. Taxiways are 75 feet wide except for D, E, and F, which are 100 feet wide.

2.3.2. Paved areas on the airfield, not stressed for aircraft movements, are marked with a double yellow line separating the areas from aircraft weight-bearing pavement. All aircraft (taxiing or towed) will follow established taxiway centerlines at all times. Aircraft tires must never cross double yellow movement edge lines.

- 2.3.3. No C-5 aircraft are authorized on taxiway K north of taxiway N. Taxiway K between taxiway N and runway 21R/03L is open for Day/VFR operations only.
- 2.3.4. All aircraft with wingspans larger than a C-141 (includes C-5 and KC-10) are restricted to tow only on taxiway L north of taxiway N. Taxiway L between taxiway N and runway 21R/03L is open for Day/VFR operations only.
- 2.3.5. Taxiway P is closed to all aircraft.
- 2.3.6. Taxiway R, southwest of taxiway G, is closed to all aircraft.
- 2.3.7. Taxiway K/L restricted to daytime, VFR conditions.
- 2.3.8. Spots 301 - 302 are authorized for taxi-on, tow-off operations.
- 2.3.9. Reference the intersection of taxiways H, J, K, and L:
- 2.3.9.1. Taxiing aircraft are permitted to:
 - 2.3.9.1.1. Turn right onto taxiway H from taxiway K.
 - 2.3.9.1.2. Turn left onto taxiway K from taxiway H.
 - 2.3.9.1.3. Taxi from spot 510 as long as they make right turns only onto either taxiway H or J.
 - 2.3.9.2. Taxiing aircraft are not permitted to:
 - 2.3.9.2.1. Turn left onto taxiway H from taxiway K.
 - 2.3.9.2.2. Turn right onto taxiway H from taxiway L.
 - 2.3.9.2.3. Turn left onto taxiway H from spot 510.
- 2.3.10. Aircraft on spots 605-607 will normally be parked facing taxiway L. Prior to departure, the aircraft will be pushed back onto taxiway K.
- 2.3.11. Unless specific approval is received from SFCC, no aircraft other than those associated with Navy Detachment VQ-3 shall be allowed to taxi between taxiway G and spot S-6 on taxiway T.
- 2.3.12. Open fuel cell maintenance taxi restrictions.
- 2.3.12.1. With open fuel tanks on spot 302, no aircraft will be permitted to taxi past spot 302 on taxiway H in either direction. However, aircraft tow operations are permitted in either direction with auxiliary power unit (APU) running.
 - 2.3.12.2. With open tanks on spots 718 - 719, the first 1,500 feet of taxiway L north of taxiway N are closed to all taxiing aircraft. However, aircraft may be towed past these spots.
 - 2.3.12.2.1. Tower will broadcast this information and put an advisory on the Automated Terminal Information Service (ATIS): “OPEN TANKS ON SPOT (number), FIRST FIFTEEN HUNDRED FEET OF TAXIWAY L NORTH OF TAXIWAY N CLOSED TO ALL TAXIING AIRCRAFT.”
- 2.3.13. Taxi restrictions for Ragsdale Road.
- 2.3.13.1. Ragsdale Road is a public roadway that crosses Taxiway M. Because of the public roadway, Tower cannot ensure separation of aircraft from vehicles along taxiway M.

2.3.13.2. A “Follow Me” or escort vehicle is not required for aircraft taxiing across Ragsdale Road when the reported visibility is two miles or greater during daylight hours.

2.3.13.3. All vehicles on Ragsdale Road are required to stop prior to crossing taxiway M.

2.3.13.4. Tower will issue the following cautionary advisory to all aircraft crossing Ragsdale Road: “(Aircraft ID), CAUTION, YOU ARE ABOUT TO CROSS A PUBLIC ROADWAY NOT VISIBLE FROM THE TOWER.”

2.3.14. Runway 21R approach zone taxi restrictions.

2.3.14.1. Tower will ensure aircraft operations are not conducted in the area between taxiways N and R (**Attachment 6**) when aircraft are within four miles on final to runway 21R.

2.3.14.2. Aircraft exiting runway 21L at taxiways D, E, or F will usually be instructed to hold short of runway 21R. Tower will use the following phraseology: “(Aircraft ID), HOLD SHORT OF RUNWAY 21R” or “(Aircraft ID), HOLD SHORT OF RUWNAY 21R ON TAXIWAY (D, E, or F).”

2.4. Aircraft Towing Procedures. In the interest of safety and anti-theft/hijack procedures, all tow operators must closely coordinate tows and follow established procedures.

2.4.1. Command Post maintenance controllers will coordinate all tow operations with Tower via the Tower/Command Post direct line. Information will include location, destination, call sign, type aircraft, whether the tow will be power on or off, and frequency to be used (ramp net or ground frequency).

2.4.2. Command Post will notify Security Forces of all aircraft tows.

2.4.3. Tow operators will coordinate and obtain tow approval through Tower.

2.4.4. Prior to moving the aircraft, tow supervisor will contact ground control with call sign, location, destination, and route of tow, if appropriate, and must maintain radio contact with Tower on ground control frequency or the ramp net throughout the operation.

2.4.5. Maintenance personnel may maneuver aircraft tows in and out of hangars without coordinating with Tower. However, tow vehicles will be in contact with the Tower prior to entering any taxiway or movement area.

2.4.5.1. Aircraft may be positioned on the south side of Hangar 818 while another aircraft is inside the hangar, as long as the aircraft are positioned nose-to-nose.

2.4.6. Final authority to postpone or discontinue towing operations rests with Tower based on aircraft ground movements, coordination, anti-theft/hijack procedures, and safety.

2.5. Aircraft Parking Spot Assignments.

2.5.1. Aircraft parking assignments are controlled and assigned by maintenance senior controllers (located in the Command Post). Transient aircraft parking spots are coordinated between Transient Alert and the KC-10 senior maintenance controller.

2.5.2. Departing aircraft will report their parking spot to Tower (ground control) prior to engine start.

2.5.3. Arriving aircraft will report parking spot on initial contact with ground control.

2.6. Hazardous Cargo Movement/Parking Procedures. Handle aircraft carrying hazardous material in accordance with (IAW) AFI 11-204, *Operational Procedures For Aircraft Carrying Hazardous Materials*.

2.6.1. The primary parking locations for aircraft with hazardous cargo are H-13 and H-14, located at the end of taxiway M. For safety concerns, H-13 and H-14 should only be used by aircraft carrying hazardous material and not for normal parking ([Attachment 7](#)).

2.6.1.1. The alternate locations are spots S-11 and S-12 ([Attachment 7](#)).

2.6.2. Hazardous cargo includes explosives, gases, flammable liquids, flammable solids, oxidizers, poisons, radioactive substances, corrosives, and other miscellaneous dangerous substances.

2.6.3. Explosive-laden vehicles will use the vehicle routes prescribed in TAFBI 91-104, *Explosives, Firearms, and Hazardous Materials Transportation Program*.

2.7. Engine Systems Functional Check Areas. The primary areas for departing aircraft engine run-ups are near the approach ends of runways 21R, 3R or 3L.

2.7.1. Quiet hours for engine runs are from 2200 to 0600 hours local. The following restrictions apply:

2.7.1.1. Engine runs at idle are permitted.

2.7.1.2. Engine runs above idle after dark will be held to a minimum, consistent with mission requirements.

2.7.1.3. Engine runs above idle during quiet hours require 60th Logistics Group Commander (60 LG/CC) or his/her designated representative's approval.

2.7.1.4. All engine runs on H-14 during quiet hours require 60 LG/CC or designated representative approval.

2.7.2. Coordination procedures. (Maintenance personnel should refer to 60 LG OI 21-8, *Engine Ground Operation*, for internal coordination requirements).

2.7.2.1. All aircraft requiring engine runs will coordinate through Maintenance Aircraft Coordination Center/Command Post (MACC/CP).

2.7.2.2. Prior to starting engines, aircraft/maintenance personnel shall contact ground control frequency, or local channel 2, with the aircraft tail number, spot number, and whether or not the engines will be advanced above the idle position.

2.7.2.3. Final clearance to commence engine runs must be obtained from Travis ground control prior to engine start.

2.7.3. Regardless of location, aircrew/maintenance will continuously monitor the ground control frequency during engine runs.

2.7.4. Engine runs will not be conducted on aircraft parked next to another aircraft that is undergoing flare loading/unloading operations (TAFBI 91-106, *C-5 Defensive System Flare Handling and Loading/Downloading Procedures*, paragraph 3.3).

2.7.5. Taxi or tow operations are prohibited directly in front of an aircraft running engines above idle.

2.7.6. Idle engine runs are permitted on the aerodrome as long as a 200-foot clear area for KC-10s and a 300-foot clear area for C-5s is maintained behind the engines unless there is a blast fence. Aircraft personnel must monitor wind direction and speed (unless there is a blast fence).

2.7.7. For engine runs above idle, the maintenance crew chief is responsible for continuously checking for debris that may have blown onto the runway or taxiway. Debris will be reported to Command Post who will immediately notify Base Operations. Base Operations will inspect areas and suspend airfield activity as required until debris is removed. Tower will notify Base Operations of observed debris.

2.7.8. Vehicle control procedures.

2.7.8.1. Maintenance will control vehicle traffic by using “Jet Blast” warning signs or personnel (spotters) and cones during power runs on spots without a blast fence except on H-14. “Jet Blast” warning signs (with operational beacon lights at night) will be positioned off of each wing tip far enough behind the aircraft to effectively warn vehicles of the jet blast danger.

2.7.8.2. Spotters (if used) will mark off the area using four reflective taped cones to allow the run crew to maintain proper jet blast clearance during engine operation. Spotters will also control vehicle traffic on any taxiway affected by the engine run and will wear reflective vest or belt and eye protection (day or night.) Spotters will use wands during nighttime engine runs.

2.7.9. With regards to jet blast near the runways, Tower shall issue a cautionary advisory to all aircraft operating behind heavy jet aircraft holding on taxiways immediately perpendicular to the runways. Suspend operations to the affected runway when the jet blast is directed towards the runway touch-down zones, anticipated rotation point, or if you believe an airborne aircraft may pass within the affected area.

2.7.10. [Attachment 8](#) and [Attachment 9](#) give general data on jet wake vortices for C-5 and KC-10 aircraft.

2.7.11. C-5 engine run procedures.

2.7.11.1. The primary power run spots for C-5 aircraft are spots 517, 518, and 521.

2.7.11.1.1. TRT engine runs on spots 517 and 518 suspend operations on taxiway K behind these spots. Engine run aircraft must have engines at idle for aircraft to taxi on Kilo behind 517 and 518.

2.7.11.2. Alternate C-5 power run spots.

2.7.11.2.1. When mission dictates, alternate spots are spots 410 – 432, 440, 441, and H-14, provided:

2.7.11.2.1.1. All aircraft parking locations on the 400 ramp aft of the spot are vacant.

2.7.11.2.1.2. Spot H-14 requires:

2.7.11.2.1.2.1. Clear visibility behind the aircraft, and, in a no-wind condition, a 1,220 foot clear area behind the engine to be maintained at all times during TRT settings.

2.7.11.2.1.2.2. Coordination between aircraft maintainers and Air Terminal Operations Center to determine type and amount of stored munitions prior to conducting the engine run. Detailed information is contained LG OI 21-8.

2.7.11.2.1.3. C-5 engine runs above idle on 440 and 441 impose the following additional restrictions:

2.7.11.2.1.3.1. All operations behind the parking spots on taxiways H, I and N will be suspended.

2.7.11.2.1.3.2. Large and Small aircraft landings on runway 21R are prohibited.

2.7.11.2.1.3.3. All Small aircraft operations on runway 21R/03L north of taxiway I intersection are prohibited.

2.7.11.2.1.3.4. Aircraft will return to idle when directed by Tower to avoid unnecessary delays.

2.7.11.3. On the 200 ramp, C-5 engine runs are normally restricted to taxi power required to start the aircraft in motion. Required engine run-ups for minor maintenance operational checks (MOCs) will be held to the absolute minimum. Extended engine runs will require towing or taxiing to a designated engine run-up area.

2.7.12. KC-10 engine run procedures.

2.7.12.1. The primary power run spots for KC-10 aircraft are 212A, 222A, and 272A. Every effort will be made to keep 272A open for mission completed aircraft with known power engine run requirements. The following restrictions apply:

2.7.12.1.1. Engine runs on spots 212A and 222A suspend Taxiway H operations east of spot 212A to runway 21R/03L.

2.7.12.1.2. Engine runs on 272A suspend Taxiway D operations between Taxiways H and P as well as Taxiway H operations between Taxiways D and E.

2.7.12.2. Alternate KC-10 engine run spots are 410 – 432, 440, 441, 517, 518, 521, and H-14, with the following restrictions:

2.7.12.2.1. Engine runs are approved on spots 410 through 432, provided all aircraft parking locations on the 400 ramp aft of the spot are vacant.

2.7.12.2.2. KC-10 engine runs on spots 440 and 441 suspend all operations to runway 21R/03L. In addition, restrictions listed in paragraph [2.7.11.2.1.3.](#) apply to KC-10 engine runs on these spots.

2.7.12.2.3. TRT Engine runs on spots 517 - 518 suspend taxiway K operations behind these spots.

2.7.12.2.4. Spots 517, 518, and 521 are authorized for KC-10 #1 and #3 engine runs only. The blast fences are not high enough to protect #2 engine runs.

2.7.12.2.5. Spot H-14 requires clear visibility behind the aircraft, and, in a no-wind condition, a 1,220 foot clear area behind the engine to be maintained at all times during TRT settings.

2.7.13. E-6 Engine Runs on the Sugar Ramp. TRT E-6 engine runs will be conducted on spot S-3, S-4, and S-5 only, to protect Perimeter Road.

2.8. Engine Running Crew Change (ERCC). Aircrews will normally conduct ERCCs at the intersection of taxiways “G” and “N” on the diagonal corner with the nose pointed towards the runway. A good point of reference is placing the nose wheel near the point where the taxi lines separate.

2.8.1. Tower will use the following guidelines when directing or approving ERCC requests at other locations:

2.8.1.1. Traffic situation.

2.8.1.2. DV status information (coordinated with Command Post).

2.8.1.3. ERCCs will be approved on the 200 ramp only when no DV aircraft are parked there (coordinate exceptions with Command Post).

2.9. Protection of Precision Approach Critical Areas. The Travis 21L and 03L ILS approaches require protection of critical areas within the movement area when the reported ceiling is less than 800 feet or the visibility is less than 2 miles when an aircraft conducting the ILS approach is inside the Final Approach Fix.

2.9.1. Runway 21L ILS Critical Areas ([Attachment 10](#) and [Attachment 11](#)):

2.9.1.1. The runway 21L ILS localizer critical area encompasses portions of taxiways G and F on runway 21L. The runway 21L/03R hold short lines on taxiways G and F protect the localizer critical area. Tower will instruct aircraft and/or vehicles to hold short of the runway at the hold lines located on these taxiways.

2.9.1.2. The runway 21L ILS glide slope critical area is penetrated by a maintenance access road, Perimeter Road and the base perimeter fence.

2.9.1.2.1. The maintenance access road shall be used by authorized personnel, and only when permitted by the Control Tower via Ramp Net. Personnel performing maintenance within the runway 21L glide slope critical area shall monitor the Ramp Net.

2.9.1.2.2. The runway 21L glide slope critical area is not protected from vehicles operating on Perimeter Road, a public roadway.

2.9.1.3. The runway 21L ILS touchdown critical area pertains only to the Category II ILS approach. There are no unauthorized penetrations of the 21L ILS touchdown critical area.

2.9.2. Runway 03L ILS Critical Areas ([Attachment 12](#) and [Attachment 13](#)):

2.9.2.1. The runway 03L ILS localizer critical area is penetrated by taxiways D, E, and F. The runway 03L/21R hold short lines on taxiways D, E, and F protect the localizer critical area. Tower will instruct aircraft and vehicles to hold short of the runway at the hold lines located on these taxiways.

2.9.2.1.1. As an extra safety precaution at Travis, aircraft and vehicles shall not be allowed to cross the departure end of runway 03L via taxiways G or H when the localizer critical area is protected.

2.9.2.2. The runway 03 ILS glide slope critical area is penetrated by Perimeter Road and taxiway M.

2.9.2.2.1. The runway 03L/21R hold short lines on taxiway M protect the glide slope critical area. Tower will instruct aircraft and vehicles to hold short of the runway on this taxiway.

2.9.2.2.2. The runway 03L glide slope critical area is not protected from vehicles operating on Perimeter Road.

Chapter 3

FLIGHT PLANNING AND BASE OPERATIONS

3.1. Flight Plans.

3.1.1. All aircraft departing Travis AFB will file a flight plan (DD Form 175 or DD Form 1801) at Base Operations in accordance with Air Force policy, except:

3.1.1.1. Naval Detachment VQ-3 (per LOA).

3.1.1.2. Travis Aero Club (see paragraph 7.7.).

3.1.2. ATC will verify all “no flight plan” aircraft operations at Travis AFB via Base Operations prior to granting engine start approval or landing clearance, unless an emergency exists (also see paragraph 7.6.).

3.1.3. Pilots can amend flight plans via the radio with Base Operations on pilot to dispatch frequency or with RAPCON ([Attachment 4](#)).

3.1.4. Filing original flight plans via radio transmission is not authorized.

3.2. Forwarding of Flight Data.

3.2.1. Flight plans.

3.2.1.1. Flight plans will normally be transmitted from Base Operations to Oakland Center for inclusion in the National Airspace System.

3.2.1.1.1. KC-10 cell departure flight plans will contain the phrase, “MARSA w/ (wingman’s callsign)” as the first remark in the remarks section. KC-10 cell departures are discussed in [Chapter 5](#). (Note, this is for automation purposes only. KC-10 aircrews shall file flight plans with Base Ops as dictated in FAAO 7610.4, *Special Military Operations*, paragraph 12-12-8.)

3.2.1.2. When Oakland ARTCC’s computer is not operational, Base Operations will provide RAPCON with the following data on IFR departures:

3.2.1.2.1. Aircraft identification.

3.2.1.2.2. Type of aircraft.

3.2.1.2.3. Destination.

3.2.1.2.4. Proposed departure time.

3.2.1.2.5. Any other remarks pertaining to operation in the terminal area (for example, instrument check rides).

3.2.1.3. When FDIO (Flight Data Input-Output) is not operational, Base Operations shall provide Tower with the following data on all departures and arrivals via direct landline:

3.2.1.3.1. Aircraft identification.

3.2.1.3.2. Type of aircraft.

3.2.1.3.3. Estimated time of departure/estimated time of arrival or controlled departure time.

3.2.1.3.4. Requested Proposed Departure.

3.2.1.3.5. Stop-over flight plan information.

3.2.1.3.6. VFR/IFR.

3.2.1.3.7. Additional data, such as oceanic routings, local flight plans, and/or any other information that would assist in service to the flight.

3.2.2. Departure and arrival times.

3.2.2.1. Tower will forward all departure and arrival times to Base Operations via direct landline.

3.2.2.2. Base Operations will pass departure and arrival times to Command Post via direct landline.

3.3. Base Operations Zero

3.3.1. On occasion, Base Operations will have limited operating capability.

3.3.2. Base Operations Zero is defined as the temporary absence of personnel in the Base Operations work center.

3.3.3. Factors that might initiate Base Ops Zero include, but are not limited to:

3.3.3.1. Emergency evacuation of the primary operating location (extended until alternate location established).

3.3.3.2. Any airfield response when only one person is assigned in Base Operations.

3.3.4. During periods of Base Ops Zero, all activities other than receipt of the primary crash net and activation of the secondary crash net will cease until full base operations capability is restored.

3.3.5. Base Operations (60 OSS/OSAA) shall:

3.3.5.1. Only initiate Base Ops Zero in the event of a real (not exercised) emergency as required.

3.3.5.2. Immediately notify Command Post, Weather, Security Forces, VQ-3, Tower and RAPCON on direct lines that the Base Operations counter will be unmanned for a short period of time, and that Base Ops Zero operations are in effect.

3.3.5.3. Notify Chief, Airfield Management via fastest means possible in the event of a major incident that requires extensive airfield response. Chief, Airfield Management will recall personnel to staff Base Operations to resume normal operations if necessary.

3.3.5.4. Return to Base Operations (or establish alternate location) as soon as practical.

3.3.5.5. Inform Command Post, Weather, Security Forces, VQ-3, Tower and RAPCON as soon as practical upon return that Base Ops is manned and that normal operations are in effect.

3.3.6. Command Post shall:

3.3.6.1. Assume responsibility for emergency condition notification.

3.3.6.2. Upon receipt of primary crash net activation:

3.3.6.2.1. Copy emergency information verbatim as passed by the Tower controller.

- 3.3.6.2.2. Respond as all other agencies asking only critical questions when addressed to allow agencies to begin response.
 - 3.3.6.2.3. When the Tower has passed all information, secure the net.
 - 3.3.6.2.4. Contact Tower on direct line to obtain any other necessary information.
 - 3.3.6.2.5. Activate the secondary crash net.
 - 3.3.6.2.6. Pass all information verbatim, twice.
 - 3.3.6.2.7. Ensure all agencies have the opportunity to ask questions concerning the emergency information.
 - 3.3.6.2.8. Secure secondary crash net only after all questions have been answered.
- 3.3.6.3. Upon receipt of weather warnings, watches and advisories from Base Weather, activate the secondary crash net to inform base-wide agencies.
- 3.3.6.4. Conduct alternate secondary crash net tests on the first duty day of each month, as soon as possible after Base Operations tests the secondary crash net, and log test and results. Establish alternate notification procedures for line outages.
- 3.3.6.5. Per AFI 13-213, *Airfield Management*, the secondary crash net shall only be used to relay critical information regarding the airfield. It is not used to relay information that can be effectively passed through other means.
- 3.3.7. Base Weather shall:
- 3.3.7.1. Notify Command Post of weather warnings, watches, and advisories when Base Ops Zero procedures are in effect.
 - 3.3.7.2. Notify Base Operations personnel upon their return of any pertinent weather information.
- 3.3.8. Tower shall:
- 3.3.8.1. Contact Base Operations personnel via radio in the event of necessary coordination.
 - 3.3.8.2. If a spare UHF radio is available, monitor Pilot to Dispatch frequency until normal Base Operations procedures are resumed.

Chapter 4

ATC OPERATIONS AND PROCEDURES

4.1. ATC Services. The ATC complex shall operate 24 hours a day, 7 days a week, unless otherwise published. The ATC complex is comprised of a VFR Control Tower and RAPCON.

4.1.1. Tower provides VFR ATC services to aircraft within the Class D airspace.

4.1.2. Radar Approach Control Class E airspace is depicted in [Attachment 14](#) to [Attachment 17](#). Airspace configuration is governed by the direction of traffic flow in the major San Francisco Bay Area airports and wind velocity and direction at Travis AFB. RAPCON ATC services include the following:

4.1.2.1. Advisories, separation, and sequencing to IFR aircraft landing at or departing from Travis AFB and transiting Travis airspace.

4.1.2.2. Advisories to VFR aircraft landing at Travis AFB.

4.1.2.3. VFR/IFR service to Travis AFB, Buchanan Field (Concord), Nut Tree, University (University of California at Davis), Watts-Woodland, Rio Vista, Yolo County, and Travis Aero Club airfields.

4.1.2.4. VFR flight following services, time and workload permitting.

4.2. Aircraft Priorities. Exercise activity shall not interfere with operational mission flying. Air traffic controllers will use the following aircraft priorities when sequencing arrivals and departures:

4.2.1. Navy Emergency War Order (EWO) launch.

4.2.2. Emergency.

4.2.3. Air Evac (upon request).

4.2.4. Navy "Giant Shot Rotate."

4.2.5. Designated mission priority operations.

4.2.5.1. Alpha Launches.

4.2.5.2. Bravo Launches.

4.2.5.3. Other Priority Departures.

4.2.5.4. Controlled Departures.

4.2.5.4.1. Controlled departure times and priority departure information should be relayed by Command Post to Tower prior to the aircraft taxiing out of the chocks. This allows controllers to plan traffic sequence accordingly.

4.2.6. Distinguished Visitors.

4.2.7. All other aircraft on a first-come, first-served basis.

4.2.8. Pattern Priorities.

4.2.8.1. During periods when limited numbers of aircraft are allowed in the local patterns, the priority to remain in the patterns in the event capacity is exceeded will be:

4.2.8.1.1. Check rides in progress.

4.2.8.1.2. Formal Schools Training (CCTS, Active Duty and Reserves).

4.2.8.1.2.1. TACAMO alert crew transition training.

4.2.8.1.3. Aircraft scheduled for local transition training.

4.2.8.1.3.1. TACAMO transition training.

4.2.8.1.4. Aircraft scheduled for off-station transition training.

4.2.8.2. Aircrews shall monitor Command Post VHF frequency ([Attachment 4](#)) while transitioning in the local area. If there is a conflict concerning the number of aircraft in the pattern:

4.2.8.2.1. ATC will send the appropriate number of aircraft into holding, and inform Command Post of situation.

4.2.8.2.2. Command Post will then determine the pattern priority based on the daily pattern priority schedule, and inform ATC of the lowest priority aircraft.

4.2.8.2.3. The aircraft with the lowest priority will make intentions known to ATC and Command Post (full-stop, depart the area, hold, or full-stop to taxi back).

4.2.8.2.4. Transient aircraft doing practice approaches are always the lowest priority.

4.3. Runway Selection.

4.3.1. The Tower watch supervisor is responsible for selecting the active runway using the following guidelines:

4.3.1.1. Runway 21 is the calm wind runway.

4.3.1.2. Use the runway most nearly aligned with the wind when 5 knots or more.

4.3.1.3. Use runway 21 when wind is less than 5 knots unless use of another runway:

4.3.1.3.1. Will be operationally advantageous, or

4.3.1.3.2. Is requested by the pilot.

4.3.2. Use of a runway other than the active will not be authorized when a tailwind component of greater than 10 knots exists in accordance with aircraft technical orders.

4.3.3. During periods of conflicting wind information from sensing equipment located at the opposite ends of the runway, Tower will request the winds aloft from aircraft operating in the local area and the watch supervisor will determine the runway in use.

4.4. Runway Change. The Tower supervisor will coordinate with the RAPCON supervisor to determine the best time to change runways. Responsibilities upon initiating a runway change:

4.4.1. Tower will notify RAPCON, Base Weather, and Base Operations.

4.4.2. Base Operations will notify Command Post and Fire Station One.

4.5. Clearance Delivery. RAPCON provides ATC clearance delivery on frequencies listed in [Attachment 4](#). All aircraft need to contact clearance delivery 15 – 30 minutes prior to the proposed departure time.

4.6. Departure Procedures. Departure procedures are normally assigned and radar monitoring provided to departing aircraft. When an operational advantage is obtained or a NAVAID outage precludes assignment of a departure procedure, radar vectors are assigned.

4.6.1. Runway 21 in use: Teall One Departure Procedure (“CLIMB DIRECT TEALL (SUU 212R/7DME), THEN VIA TRANSITION OR ASSIGNED ROUTE”).

4.6.2. Runway 3 in use: Travis One Departure Procedure (“CLIMB DIRECT TRAVIS VOR (SUU 030R/8.7DME), THEN VIA TRANSITION OR ASSIGNED ROUTE.”)

4.7. Local Aircraft Transitioning Departure Procedures. These departure procedures will be used by locally assigned KC-10 and C-5 aircraft staying within Travis airspace for pattern work.

4.7.1. Standard Departures.

4.7.1.1. Standard Two Departure: Climb and maintain two thousand, fly runway heading, departure frequency local channel six. ATC will use the term “Standard Two Departure” for inter- and intra-facility coordination and as a departure clearance or climb-out instructions. Example: “(Aircraft Callsign), AFTER COMPLETING THE OPTION, DEPART VIA THE STANDARD TWO DEPARTURE.”

4.7.1.2. Standard Four Departure: Climb and maintain four thousand, fly runway heading, departure frequency local channel six. ATC will use the phraseology “Standard Four Departure” for inter- and intra-facility coordination and as a departure clearance or climb-out instructions.

4.7.2. Runway 21.

4.7.2.1. Teall One Local Departure: Teall One Departure, Williams 169 radial 25 mile fix, direct SEATO, maintain five thousand, departure frequency local channel six. ATC will use the term “Teall One Local” for inter- and intra-facility coordination and as a departure clearance or climb-out instructions.

4.7.3. Runway 3 in use.

4.7.3.1. Travis One Local Departure: Travis One Departure, Williams 157 radial 25 mile fix, direct SEATO, maintain five thousand, departure frequency local channel six. ATC will use the phraseology “Travis One Local” for inter- and intra-facility coordination and as a departure clearance or climb-out instructions.

4.7.4. Upon initial contact with departure control, with Teall One or Travis One clearances, pilots are expected to state the number of turns in holding requested at SEATO. As they practice the departure procedures, pilots are also expected to state when “Ready for direct SEATO” if prior to 25 mile fix.

4.8. Intersection Departures. Tower may initiate intersection departures with pilot concurrence or upon pilot request. The following table and [Attachment 18](#) show intersection departure runway remaining distances.

Txwy	Rwy 21L	Rwy 21R	Rwy 03L	Rwy 03R
D	1,995	-	-	9,000
E	1,295	-	-	9,700
F	695	-	-	10,300
G	-	Full Rwy	-	Full Rwy
H	-	10,000	1,000	-
I	-	8,600	2,400	-
J	-	5,200	5,800	-
K	-	3,700	7,300	-
L	-	3,200	7,800	-

4.9. Radar Arrivals and Pattern Operations:

4.9.1. Radar Approach controlled arrivals can expect vectors to intercept the ILS final approach course, unless requesting otherwise.

4.9.2. Radar Approach controlled arrivals requesting multiple approaches should coordinate “next approach” intentions with approach control as soon as practical.

4.9.3. Radar traffic patterns are depicted in [Attachment 19](#). Headings and altitudes may vary according to weather and traffic conditions. Normally, patterns are flown at:

4.9.3.1. 2000’ MSL in the east pattern.

4.9.3.2. 4000’ or 5000’ MSL in the west pattern.

4.9.4. Aircraft in the VFR pattern requesting to enter the radar pattern shall coordinate with Tower one pattern prior to returning to radar.

4.10. Circling Approaches.

4.10.1. TACAN Alpha and Bravo Approaches are the primary approach procedures for conducting practice circling approaches (authorized for base-assigned aircraft only; plates are available in Base Ops). See paragraph [7.4](#). for additional TACAN Alpha and Bravo information.

4.10.2. All circling maneuvers are flown to the southeast of the runway centerline.

4.10.3. Tower approves requests for opposite direction circling approaches.

4.10.4. Arrivals for the active runway are given priority until the opposite direction aircraft is established on 10 mile final for the opposite direction runway.

4.10.5. IFR Opposite Direction Circling Approach versus VFR approach. When the VFR pattern is active, the following restrictions apply:

4.10.5.1. Ceiling at least 1,500’ AGL and visibility at least 7 SM.

4.10.5.2. The opposite direction aircraft will not proceed closer than four miles from the landing threshold unless Tower is in communication with both aircraft, the aircraft have each other in sight, and are instructed to maintain visual separation.

4.10.5.3. The pilot will start the circling maneuver at the published circling altitude, prior to the non-active runway threshold, and stay within published circling criteria. Opposite direction circling must commence prior to the VFR aircraft reaching the active runway landing threshold.

4.10.5.4. Once commencing the circle, the circling aircraft will maintain VMC at all times.

4.10.6. IFR Opposite Direction Circling Approach versus IFR approach. RAPCON shall not allow an arriving aircraft inside 10 miles to the active runway until the opposite direction aircraft has commenced the circling maneuver.

4.10.7. Successive opposite direction circling approaches are not authorized.

4.11. Opposite Direction Approaches and Departures. Approval for opposite direction approaches and departures are on an individual basis and require considerable ATC coordination and spacing/sequencing of other aircraft in the ATC system. Opposite direction landings and departures should be requested only when it is mission essential or when air traffic is very light.

4.11.1. Arrival versus arrival. RAPCON shall not allow the arriving aircraft using the active runway to proceed closer than 10 miles until the opposite direction aircraft has landed.

4.11.2. Departure versus arrival. RAPCON shall not allow an arriving aircraft within 10 miles on final until the aircraft departing opposite direction is under radar control and the appropriate radar separation is ensured.

4.11.3. Arrival versus opposite direction circle. RAPCON shall not allow an arriving aircraft inside 10 miles to the active runway until the opposite direction aircraft has commenced the circling maneuver.

4.12. VFR Traffic Patterns.

4.12.1. Visual Flight Rules (VFR) traffic patterns are depicted in [Attachment 20](#) and [Attachment 21](#). Altitudes are:

4.12.1.1. VFR Rectangular: 1100' MSL.

4.12.1.2. Overhead: 1600' MSL.

4.12.2. Direction of patterns:

4.12.2.1. Aircraft will normally fly left traffic/breaks to runway 21 and right traffic/breaks to runway 03.

4.12.2.2. Exceptions:

4.12.2.2.1. Helicopters and small, non-fighter type jet aircraft arriving from the southwest to the northwest, are authorized to fly right traffic to runway 21 or left traffic to runway 3 using a pattern altitude of 1400' MSL.

4.12.2.2.2. Aircraft may break right in an overhead approach to runway 21L.

4.12.3. Threat Avoidance Arrivals and Departures are addressed in [Chapter 5](#).

4.13. Standard Go-Around Procedures/Protection of Overhead Pattern.

4.13.1. If necessary to initiate a go-around, ATC will issue the following instructions: “(Aircraft I.D.), CLIMB AND MAINTAIN TWO THOUSAND, FLY RUNWAY HEADING (reason).”

4.13.2. If the overhead pattern is in use, ATC will issue the following instructions: “(Aircraft I.D.), MAINTAIN AT OR BELOW ONE THOUSAND ONE HUNDRED UNTIL DEPARTURE END OF RUNWAY (21R or 03R) THEN CLIMB AND MAINTAIN TWO THOUSAND, FLY RUNWAY HEADING, (reason).”

4.14. Noise Abatement Procedures.

4.14.1. Departure turns are made after the departure end of the runway or as directed by ATC.

4.14.2. Circling approaches to runway 3R will avoid overflying the farm house approximately 400 yards east of Travis TACAN.

4.14.3. Pilots on the visual approach will avoid overflying populated areas below 3,000 feet MSL.

4.14.4. West downwind traffic is not normally used in the Tower pattern, but is authorized for use.

4.14.5. East radar pattern will be used to the maximum extent. West radar pattern may be used by ATC based on airspace congestion, configuration, expeditious movement, or safety reasons.

4.15. Firing Range Avoidance Procedures.

4.15.1. 60 SFS/SFTC will notify Tower when the range is active or inactive.

4.15.2. When the range is active:

4.15.2.1. A red flag will fly over the range and a red beacon will flash.

4.15.2.2. Tower will include the broadcast on the ATIS, “ Travis firing range located one half mile from runway 21R and approximately 500 ft right of centerline is hot, avoid overflight.”

4.15.2.2.1. Tower and RAPCON will notify all aircraft in the pattern when the firing range is active/inactive until the ATIS is updated.

4.15.2.3. Aircrews will avoid overflying the firing range.

4.16. Cat II ILS Procedures.

4.16.1. Loss of any of the following facilities precludes CAT II ILS operations and requires appropriate NOTAM action:

4.16.1.1. Approach lights, runway centerline lights, high intensity runway lights, or touchdown zone lights (sequenced flashing lights are not part of the approach lighting system).

4.16.1.2. Touchdown Zone Runway Visual Range (RVR).

4.16.1.3. ILS Far Field Monitor (FFM).

4.16.1.4. ILS Remote Status Indicator (RSI).

4.16.1.5. ILS Inner Marker.

4.16.2. Aircrews are allowed to fly practice CAT II approaches with these malfunctions as long as they are aware of the malfunctions and weather is above CAT I ILS no approach light minima.

4.17. Diverse Vector Area

4.17.1. The diverse vector area (DVA) at Travis is bounded by the 325 and 248 magnetic radials off the airport reference point. The non-diverse vector area is from the 248 magnetic radial clockwise to the 325 magnetic radial.

Chapter 5

SPECIAL OPERATIONS

5.1. Designated Mission Priority Operations. A designated mission priority aircraft requires special ATC handling in order to fulfill an urgent operational need.

5.1.1. Command Post Responsibilities.

5.1.1.1. Relay priority assignment by calling Tower via direct landline as soon as possible, and state: "MISSION PRIORITY (aircraft ID), PRIORITY TIME (time)."

5.1.1.2. Advise which aircraft has priority if a conflict arises between two or more priority operations.

5.1.1.3. Advise ATC of any changes to aircraft priority status.

5.1.1.4. Address any questions pertaining to ATC delays to the Airfield Operations Flight Commander.

5.1.2. Air Traffic Control Responsibilities.

5.1.2.1. Ensure local traffic, ground or airborne, does not conflict with the priority departure, commensurate with flight safety and established aircraft priorities IAW FAAO 7110.65 and paragraph 4.2. of this instruction.

5.1.2.2. Tower shall coordinate priority information with RAPCON in time to allow traffic pattern adjustments, and coordinate potential problems with Command Post.

5.1.2.3. For departures, pilots will advise ground control as soon as possible if the aircraft will be ready for departure upon reaching the runway so an ATC departure release is obtained and traffic is adjusted to expedite the departure.

5.1.2.4. RAPCON will adjust the traffic flow within Travis' delegated airspace so as to not delay priority operations.

5.2. Naval Operations (Detachment VQ-3).

5.2.1. Specific procedures for Airfield Operations and VQ-3 are detailed in a separate written agreement.

5.2.2. VQ-3 aircraft routinely execute no-notice alert launches. All base personnel should understand that these take priority over most other operations. Delays and cancelled approaches should be expected during these launches.

5.2.3. During an alert recall, the following will occur:

5.2.3.1. Aircrew on the community side of base, recalled on the Aircrew Alerting System (AAS), will notify Tower on ground control frequency or the ramp net of request to cross the runway to the Sugar line for subsequent launch.

5.2.3.2. The vehicle will drive to the airfield entry point at the base of the Tower and contact ground control while proceeding to taxiway G (taxiway G is the primary route, taxiway D is the alternate with clearance from Tower): Travis ground, this is Navy (vehicle number), at base of Tower, request immediate clearance to Sugar line". The vehicle will not enter the "checkerboard

area” until given clearance to proceed to the Sugar line via taxiway G or D and runway 21L. In the event that traffic prohibits the use of either the primary or alternate routes, Tower ground control will issue the crossing clearance with the amended route.

5.2.3.3. The primary route for all non-alert VQ-3 vehicles crossing the runways is taxiway D.

5.3. Single Runway Operations.

5.3.1. Base Operations Responsibilities:

5.3.1.1. Coordinate with Command Post and Air Traffic Control to determine if it is necessary to restrict transient aircraft in advance from using Travis AFB for transition training whenever their activities may significantly impact Travis-assigned aircraft flight missions.

5.3.1.2. Implement alternate vehicle routing as required.

5.3.1.3. Implement alternate aircraft taxi routings as required. Inform VQ-3 of alternate routes prior to implementation.

5.3.2. Current Operations Flight (60 OSS/OSO) Responsibilities:

5.3.2.1. Adjust schedules, as necessary, to help alleviate traffic congestion during peak traffic periods.

5.3.2.2. Notify aircrews to expect delays and diversions during emergency closure of a runway and to plan their fuel accordingly.

5.3.3. Tower Responsibilities:

5.3.3.1. Restrict aircraft making approaches to a closed runway to low approaches at or above 600' MSL when personnel are on or near the controlled movement area, and advise personnel on the runway of aircraft making a restricted low approach. Restrict low approaches at or above 1100' MSL for heavy aircraft doing multiple approaches to the closed runway when personnel and equipment are on the runway. Example: “(Aircraft ID) CLEARED RESTRICTED LOW APPROACH AT OR ABOVE 600'/1100', MEN AND EQUIPMENT ON RUNWAY.”

5.3.3.2. Advise Command Post when approaches for local training are denied based on traffic and airfield conditions.

5.3.4. Instrument approaches to the closed runway, culminating in a published side-step maneuver to the open runway or a low approach to the closed runway, are authorized.

5.3.4.1. If men and equipment are working on the closed runway, the ILS critical areas for that runway are not protected. Base Operations will NOTAM the closed runway's associated Instrument Landing System as unusable when weather is less than 800' reported ceiling and/or 2 miles visibility.

5.4. Simulated Flame-Out (SFO) Approaches. SFOs are not authorized at Travis AFB.

5.5. KC-10 Cell Operations.

5.5.1. All KC-10 cell departures shall be conducted in nonstandard formation using MARSA procedures.

5.5.2. Cell departures will normally consist of two to four KC-10 aircraft departing Travis via the Williams (ILA) transition in one-minute intervals.

5.5.3. RAPCON shall:

5.5.3.1. Assign a block altitude to allow intra-cell vertical spacing of 500 feet between each aircraft in the formation, and shall assign block altitudes for initial, interim, and final altitudes.

5.5.3.2. Assign each aircraft an individual beacon code and have them squawk on departure.

5.5.3.3. Assign all nonstandard formation departures the breakup fix as the clearance limit, IAW FAAO 7110.65.

5.5.3.4. Issue control instructions for the flight to the lead aircraft. (i.e., “Siera 51 heavy flight,....”).

5.5.3.4.1. ATC will not issue instructions for the flight until all aircraft in the flight are airborne, unless necessary for safety of flight.

5.5.3.5. Issue individual control instructions to single aircraft in the flight as necessary (radar contact, traffic, emergency action, for example).

5.5.4. The lead aircraft shall:

5.5.4.1. Ensure each element of the flight has the correct ATC instructions, including individual squawks for departure.

5.5.4.2. Request a change to departure after takeoff clearance has been issued and before departure roll.

5.5.5. Tower shall ensure that all applicable information is issued prior to frequency change. If needed, Tower will issue additional instructions on guard.

5.5.6. The aircraft will depart in 1 minute intervals as a non-standard flight. Aircraft already airborne (i.e., in the VFR/radar pattern) will coordinate with ATC to adjust their patterns accordingly to comply with the one minute interval criteria.

5.5.7. On departure, all aircraft will squawk the IFR code assigned by clearance delivery.

5.5.8. After the lead aircraft has departed, the other elements in the flight may request visual cutoff to join. This procedure will be in day/VMC conditions and approved based on traffic. Travis RAPCON will respond to the request with “VISUAL CUT-OFF APPROVED” or “UNABLE DUE TO (reason), REMAIN ON THE DEPARTURE PROCEDURE.”

5.5.9. In night/IMC conditions, ATC will allow the flight to remain on the departure procedure, to the maximum extent possible.

5.5.10. Aircraft will recover to Travis as either a single ship or in a flight of up to four aircraft.

5.5.10.1. Normally, aircraft will be split-up by Oakland Center and return to Travis for their approach.

5.5.10.2. If entering Travis airspace in a flight, aircraft may request break up and vectors for approaches, or may request vectors to initial in flights of two.

5.6. Threat Avoidance Arrival and Departure (TAAD).

5.6.1. TAAD procedures:

- 5.6.1.1. Must be performed in VFR conditions.
- 5.6.1.2. Will not be authorized if the DBRITE or the ASR is out of service.
- 5.6.1.3. Require cancellation of an IFR flight plan prior to commencement.
- 5.6.1.4. Have the same priority as other local training missions.
- 5.6.1.5. Are authorized at the discretion of the Tower Watch Supervisor.
- 5.6.1.6. Are controlled by the Tower, except spiral-up departures when the aircraft is transitioning to an IFR environment after the procedure.
- 5.6.1.7. Spiraling procedures will normally be accomplished southeast of the field. However, aircraft may spiral to the right in a random steep approach to Runway 21L at the discretion of the Tower Watch Supervisor.

5.6.2. Random Steep Approach.

- 5.6.2.1. This approach will normally begin at 5000' MSL and may be flown to any runway.
- 5.6.2.2. If transitioning from a radar environment, RAPCON will transfer the aircraft to Tower prior to reaching initial.
- 5.6.2.3. The pilot will report "HIGH INITIAL (runway)" approximately 3 NM from the runway.
- 5.6.2.4. The Tower controller will either clear the aircraft for the approach or inform the pilot to continue circling, using the following phraseology: "CLEARED RANDOM STEEP (runway) REPORT BASE" or "MAKE THREE SIXTY AND REPORT HIGH INITIAL."
- 5.6.2.5. Aircraft will normally receive landing clearance (and wheels down check) on base leg.
- 5.6.2.6. Once cleared for the approach, the aircraft will spiral down to the runway.
- 5.6.2.7. Aircraft executing the random steep approach will not be able to follow other aircraft, so Tower controllers must ensure the aircraft is number one for the runway prior to clearance out of high initial.

5.6.3. Spiral- Up Departure.

- 5.6.3.1. This departure profile is basically the opposite of the random steep approach.
- 5.6.3.2. Once cleared for this procedure, the aircraft will takeoff and spiral up to an altitude of 5000' MSL. Upon reaching 5000', the aircraft may request to execute the random steep approach or proceed with some other pre-approved clearance.

5.6.3.2.1. Tower controllers shall:

- 5.6.3.2.1.1. Coordinate this procedure with RAPCON prior to the aircraft departing.
- 5.6.3.2.1.2. Use the following phraseology: "CLEARED SPIRAL UP DEPARTURE".
- 5.6.3.2.1.3. Retain control of the aircraft throughout the maneuver, if the aircraft plans to execute another VFR procedure after the spiral-up.
- 5.6.3.2.1.4. Request an IFR release and transfer the aircraft to departure control prior to takeoff, if the aircraft wishes to proceed with an IFR clearance after the spiral-up.

5.6.3.3. Aircraft planning to depart the area IFR after executing the spiral-up will coordinate with Clearance Delivery prior to departing.

5.6.3.4. In addition to the IFR clearance, Clearance Delivery will issue a VFR code for the pilot to use during the spiral-up procedure.

5.6.3.5. After reaching 5000' MSL, RAPCON will instruct the aircraft to change to an IFR code and clear the aircraft for the pre-coordinated clearance.

5.6.4. Curvilinear Approach.

5.6.4.1. This is somewhat similar to a basic circling approach. It may be flown to any runway.

5.6.4.2. The approach will begin at a designated VFR reporting point, MUSEUM, approximately 5 NM east of Travis (over the Railroad Museum located off Highway 12).

5.6.4.3. Once cleared for the approach, the aircraft will proceed to the field and execute a circling maneuver to the assigned runway.

5.6.4.4. The ground track for this approach will look very similar to the TACAN ALPHA/BRAVO approach with two distinct differences. The aircraft will fly the procedure at approximately 3500' MSL and maintain approximately 230 knots until turning inbound.

5.6.4.5. Controllers will use the following phraseology: "REPORT MUSEUM" or "MAKE THREE-SIXTY AND REPORT MUSEUM"; "CLEARED CURVILINEAR APPROACH (runway) REPORT BASE."

5.6.4.6. Aircraft will normally receive landing clearance (and wheels down check) on base leg.

5.6.4.7. Aircraft transitioning from the radar environment must be transferred to the Tower prior to reaching MUSEUM. If the aircraft is starting this procedure from the Tower pattern, Tower will coordinate with RAPCON prior to the aircraft leaving the Class Delta and retain control throughout the procedure.

5.7. Drag Chute Jettison.

5.7.1. Tower will instruct transient landing aircraft not to release their drag chutes.

5.7.2. Aircraft must taxi off the runway with their drag chutes attached. Aircraft may release their drag chutes prior to parking if high winds present taxi problems.

5.7.3. When pilots report their chutes have been released, Tower will notify Base Operations. Base Operations will coordinate pick up with Transient Alert. Travis does not have the capability to re-pack drag chutes.

5.7.4. When visibility is poor, or at night, and pilots report their chutes have been released, Tower may need to suspend runway operations until the chute is retrieved.

5.8. Special Procedures Not Applied at Travis. The following special procedures are not available or applicable at Travis AFB:

5.8.1. Reduced Runway Separation. Runway separation will be accomplished IAW FAAO 7110.65 and AFI 13-203.

5.8.2. Multiple Approach and ASLAR Procedures.

5.8.3. Air Base Defense.

5.8.4. Multiple Radar Final Control.

5.8.5. Aircraft Arresting Systems.

Chapter 6

EMERGENCY PROCEDURES

6.1. Aircraft Emergencies.

6.1.1. The primary landing runway for emergencies is 21R/3L.

6.1.2. Circumstances requiring use of 21L/3R:

6.1.2.1. The pilot elects to land the outside runway due to the urgency of the situation.

6.1.2.2. As directed by the Base Operations duty officer or on-scene commander.

6.1.2.3. Weather conditions require use of 21L.

6.1.3. Relay all instructions for ATC about an emergency through Base Operations until a control point is established by either the on-scene commander (Blue One) or Base Operations shift supervisor. Coordination and requests for technical assistance from the 60 AMW and other base agencies are initiated by the on-scene commander or the Base Operations shift supervisor.

6.1.4. Tower will activate the airfield evacuation alarm when the emergency aircraft is established on an approach inbound to Travis, but no later than 10 miles from the runway. If aircraft is within 10 miles (i.e., in the VFR pattern or on the go), Tower will activate the evacuation alarm as soon as possible.

6.1.5. Fire fighting command personnel may monitor ATC frequencies. If, in their opinion, direct “pilot-to-fire fighter” communication may become necessary during an emergency response, fire fighting command personnel may request use of the frequency from the tower supervisor. Specific tower approval must be obtained prior to the use of ATC frequencies.

6.1.5.1. Non-ATC transmissions are allowed only when the tower specifically releases the frequency by stating, “Frequency XXX.XX is released.” This release will be given over the direct landline.

6.1.5.1.1. Tower shall only release the frequency after the aircraft is completely stopped and no further ATC assistance to the pilot is necessary. Ground movement of the aircraft will be coordinated pilot-to-controller via tower or ground frequency.

6.1.5.2. Non-ATC personnel will not issue ATC instructions nor will they approve requests for aircraft movement or tows.

6.1.5.3. Emergency personnel will not rely on ATC frequencies for non-ATC transmissions. Other means of communication should be used to the maximum extent possible.

6.1.5.4. Tower shall interrupt transmissions if necessary to continue ATC services.

6.1.5.5. At the termination of the emergency, fire fighting personnel will release the frequency back to the tower over the direct landline.

6.2. Emergency Notification and Crash Phone Procedures.

6.2.1. When advance information is received regarding an aircraft emergency at Travis AFB or inbound to Travis Aero Club, relay all known information to Tower.

6.2.2. Tower will immediately activate the primary crash phone when an emergency is declared. All updates pertaining to the emergency aircraft are transmitted via the primary crash phone. The following agencies have access to the primary crash phone:

6.2.2.1. Tower - only agency capable of activation, transmit, and receive.

6.2.2.2. Base Operations - transmit and receive.

6.2.2.3. Hospital Flight Surgeon – transmit and receive (during duty hours).

6.2.2.4. Hospital Emergency Room - transmit and receive (non-duty hours).

6.2.2.5. Fire Station One - transmit and receive.

6.2.2.6. Fire Station Two - receive.

6.2.2.7. Security Forces Control Center - receive.

6.2.2.8. Command Post - receive.

6.2.3. Base Operations will relay all known data over the secondary crash net and advise Tower and RAPCON of updated information received from a different source.

6.2.4. Tower will advise the On-Scene Commander or Fire Chief via radio when the emergency aircraft is number one for landing.

6.2.5. The fire department will immediately notify Tower when a class III fuel spill is discovered or when a Class II spill is upgraded to a Class III.

6.2.6. Tower will receive emergency termination from the fire department over the fire/crash net or direct landline.

6.2.7. Tower/RAPCON/Command Post will notify Base Operations upon termination of an emergency. The primary crash phone is not activated to relay emergency termination.

6.2.8. Base Operations will relay emergency termination over the secondary crash net and advise Tower and RAPCON.

6.2.9. Tower will check the primary crash phone daily between 0730 and 0745 local.

6.2.10. Base Operations will check the secondary crash net system daily, normally right after the primary crash net is tested.

6.3. Suspending Runway Operations.

6.3.1. When an emergency aircraft is seven flying miles from touchdown, Tower will discontinue all takeoffs and landings. After the emergency aircraft lands, Tower will suspend operations to that runway unless the emergency consisted only of passenger or aircrew medical emergencies.

6.3.2. Tower may resume normal runway operations with the Base Operations shift supervisor's concurrence.

6.4. Radio Out Aircraft

6.4.1. No radio or radio-out aircraft procedures will be followed as published in the Flight Information Handbook.

6.5. Emergency Salvo, Cargo, External Stores and Tip Tank Jettison Areas.**6.5.1. Areas for jettison of equipment or cargo, listed in decreasing preference:**

6.5.1.1. Pacific Ocean more than three miles from the shoreline.

6.5.1.2. North end of Suisun Bay which is an area one square mile in size and at SUU 188R/8 DME or TZZ 199R/16 NM.

6.5.1.3. Heading 030 degrees in the area along and to the right side of runway 3R, between the runway and the southeast perimeter road, commencing at the mid-point of the runway extending to the northeast end of the runway past the RAPCON facility.

6.5.1.4. Any open area.

6.5.2. Procedures.

6.5.2.1. The pilot will proceed to the selected area and determine if the area is clear.

6.5.2.2. If using the drop zone along runway 3R, the axis of attack is on the runway heading of 030 degrees so that the trajectory is away from the base and other populated areas.

6.5.3. Tower Responsibilities:

6.5.3.1. Upon request, describe jettison areas to transient aircraft experiencing an emergency that requires salvo or jettison and coordinate with RAPCON for vectors. Vectors are to the approximate and appropriate jettison area as these areas are not depicted on the controller's scope.

6.5.3.2. Notify Base Operations of the salvo or jettison intentions.

6.5.4. RAPCON Responsibilities:

6.5.4.1. Advise Oakland ARTCC of the request to jettison cargo/equipment and the jettison area used.

6.5.4.2. If possible, monitor the drop.

6.5.5. Base Operations Responsibilities:

6.5.5.1. If time permits, call Security Forces and request they clear the proposed area of personnel and vehicles.

6.5.5.2. Request guards to safeguard discharged bombs or rockets until they are removed.

6.5.5.3. Notify Disaster Control and Explosive Ordnance Disposal (60 CES/CED), and request removal of bombs or rockets.

6.5.5.4. Notify Command Post of situation.

6.6. Fuel Dumping.

6.6.1. Fuel dumping is IAW prescribed technical orders, FAAO 7110.65, and MAJCOM directives, and accomplished clear of populated areas. Aircrew will coordinate with RAPCON/Oakland ARTCC for area and altitude.

6.6.1.1. Recommended fuel dump track within Travis delegated airspace boundaries: Hold Northwest of SAC R-266/TZZ R-324 on TZZ R-324, 4 minute (15 NM) legs.

6.6.1.2. Altitudes 10,000 feet or below will allow aircraft to remain within Travis delegated airspace. Altitudes above 10,000 feet will require a clearance with Oakland ARTCC.

6.6.2. Procedures.

6.6.2.1. When fuel dumping is necessary, the recommended fuel dump area will be used except in cases of extreme emergency.

6.6.2.2. If the aircraft commander decides the situation does not warrant fuel dumping in the local area, RAPCON will vector the aircraft to W-513, west of Sausalito VORTAC. Oakland ARTCC will give clearance to enter. This area will keep the aircraft in the immediate vicinity of Travis; if the situation deteriorates further, an eastbound turn will place the aircraft on final for San Francisco International Airport.

6.6.3. Tower Responsibilities.

6.6.3.1. Upon request, describe jettison areas to transient aircraft experiencing an emergency that requires fuel dumping and coordinate with RAPCON for vectors.

6.6.4. RAPCON will advise Oakland ARTCC of the request to fuel dump and jettison area used.

6.6.5. Base Operations shall, if applicable and time permits, call Security Forces and request they clear the proposed area of personnel and vehicles.

6.6.5.1. Base Operations shall notify Command Post.

6.7. Aircraft Abandonment/Bail-Out Areas.

6.7.1. Bail-out areas listed in order of decreasing preference:

6.7.1.1. Heading 030 in the area along and to the right side of runway 03R, past the RAPCON facility.

6.7.1.2. Pacific Ocean.

6.7.1.3. Any open area.

6.8. Crash Position Indicator (CPI)/Emergency Locator Transmitter (ELT)

6.8.1. When CPI/ELT signals are received, reported or terminated, Tower will notify RAPCON and Base Operations.

6.8.2. RAPCON Responsibilities:

6.8.2.1. If a known aircraft emergency is in progress within RAPCON airspace, immediately determine if the emergency aircraft status has changed. Notify Tower if communications/radar contact with the emergency aircraft is lost.

6.8.2.2. Notify Oakland ARTCC; advise them if other agencies are receiving the signal and when it terminates.

6.8.3. Base Operations Responsibilities:

6.8.3.1. Coordinate signal source search activities.

6.8.3.2. Notify the Command Post Senior Maintenance Controller.

6.8.3.3. Notify Life Support (60 OSS/OSOL).

6.8.3.4. Each 60 minutes following the initial notification, if the signal has not terminated:

6.8.3.4.1. Query the Command Post Senior Maintenance Controller to determine the status of the search.

6.8.3.4.2. Query Life Support to determine the status of the search.

6.8.3.4.3. Notify RAPCON of the status of the search.

6.8.3.5. Pass transmission termination to Life Support and the Command Post Senior Maintenance Controller.

6.9. Evacuation of ATC Facilities.

6.9.1. Tower Evacuation. Base agencies will be notified of tower evacuation/resumption of normal activities on either the primary or secondary crash nets.

6.9.1.1. Tower will evacuate when the wind speed reaches peak gusts or a sustained wind speed of 45 knots or greater, or when, in the opinion of the Tower watch supervisor, the Tower is unsafe or nonfunctional.

6.9.1.2. Tower or RAPCON will direct all transient aircraft conducting practice approaches to depart the traffic patterns.

6.9.1.3. Tower will advise VFR aircraft to contact RAPCON on departure frequencies for advisories.

6.9.1.4. The VFR pattern and Class D airspace are uncontrolled. Pilots shall use Tower VHF as UNICOM.

6.9.1.5. Runways are uncontrolled. Due to the possibility of aircraft, vehicles, or personnel on the runway, departures and landings are at the pilot's own risk.

6.9.1.6. Prior to evacuation, time permitting, Tower shall set the airfield lighting IAW FAAO 7110.65.

6.9.1.7. The Tower supervisor shall advise Base Operations of the lighting requirements immediately after evacuation.

6.9.1.8. Upon notification, airfield lighting changes are the responsibility of Base Operations until ATC services are restored in the Tower. The Tower supervisor or his or her representative will provide airfield lighting guidance.

6.9.1.9. RAPCON will advise aircraft on all frequencies when normal Tower operations resume.

6.9.2. RAPCON Evacuation. RAPCON will advise tower of intent to evacuate/resume normal operations. Tower will notify Base Operations, who issue/cancel appropriate NOTAMs.

6.9.2.1. RAPCON will advise all IFR aircraft to contact Oakland ARTCC on the appropriate frequencies.

6.9.2.2. VFR operations in the local pattern will continue under Tower control.

6.9.2.3. Oakland Center will advise aircraft on all frequencies when normal service resumes.

6.9.3. Emergency procedures for extended evacuations may result in full-stop only operations.

6.10. ASR Wind Limitations.

6.10.1. IAW T.O. 31P5-2 GPN21-2, the Approach Surveillance Radar (ASR) shall be turned off and allowed to free wheel when the wind speed equals or exceeds 65 knots from any direction.

6.10.2. When the ASR is free-wheeling, non-radar procedures will be used.

6.11. Contingency Procedures For Control of Airfield Lighting. Should the airfield lighting or the Tower lighting panel fail, Tower shall advise Base Operations of the outage and provide the lighting requirements. Base Operations shall advise Civil Engineering airfield lighting personnel, who will adjust the lighting systems appropriately. If Tower has radio/telephone contact with airfield lighting personnel, Tower may provide them with lighting requirements.

6.12. Explosive Detection K-9 Team Information. If an emergency aircraft requests the services of an explosive detection K-9 team, the request is relayed to the Base Operations duty officer who will coordinate with the law enforcement desk to determine if they can provide assistance. Base Operations will notify Command Post of the situation, if not already relayed via the crash net.

6.13. Hot Gun/Hung Flare Procedures ([Attachment 22](#)). Hot gun/hung flares constitute an emergency, and require activation of the crash net by Tower.

6.13.1. The control Tower will direct aircraft with hot guns in the runway environment to the closest hot gun area, unless otherwise directed by the fire chief or on-scene commander.

6.13.2. The primary hot gun areas are the:

6.13.2.1. Intersection of Taxiway M and N heading 180 degrees.

6.13.2.2. Departure end of runway 03R, heading 030 degrees.

6.13.3. The alternate hot gun area is the approach end of runway 03R, heading 030 or 210 degrees.

6.13.4. Aircraft in the runway environment with hung flares will be directed to the appropriate hot gun areas.

6.13.5. Hot gun/hung flare situations in the ramp area will be directed via the on-scene commander.

6.13.6. Aircraft with hot gun/hung flare should be vigilant to make turns that keep ordinance pointed away from populated areas.

6.14. Hot Brake Procedures. Hot brakes constitute an emergency, and require activation of the crash net by Tower. The following are hot brake areas for landing runway in use. Tower will direct aircraft to hold in these areas, unless otherwise requested by the aircraft commander or fire chief.

6.14.1. Runway 21L: Taxiway G between the runways.

6.14.2. Runway 21R/03L: The first available taxiway.

6.14.3. Runway 03R: Where aircraft stops on the runway.

6.15. Reduction of Base Rescue or Fire Fighting Capabilities.

6.15.1. Crash personnel will notify Base Operations and Command Post when base rescue or fire fighting capability is reduced to such a level that members cannot support local flying operations.

6.15.2. Influencing factors which impact the unit's ability to provide crash fire fighting capability are manning, crash fire rescue vehicles, and non-aircraft related emergencies.

6.15.3. The following crash fire rescue (CFR) capability categories were developed to aid commanders in making operational decisions when CFR capability is degraded.

6.15.3.1. CATEGORY A. Capability at or above 100%. Normal Risk. Fire protection can support all airfield operations.

6.15.3.2. CATEGORY B. Capability above 78%. Medium Risk. Consider minimizing touch and go landings for large frame aircraft (C-5, KC-10, E-4, and B-747). Can fully support medium frame aircraft (C-9, C-17, C141, E-3, and KC-135) operations. Consider diverting inflight emergencies on large frame aircraft. Consider minimizing aircraft maintenance activities to those activities that directly support the mission. Degraded capability to mount an effective aircraft interior fire fighting attack.

6.15.3.3. CATEGORY C. Capability above 50%. Maximum Risk. Cannot adequately support runway operations for large frame or medium frame aircraft. Consider curtailing aircraft launches to higher priority missions only. Curtail or consider stopping aircraft maintenance activities. Extremely limited capability to mount an effective interior fire attack on a large frame aircraft.

6.15.3.4. CATEGORY D. Capability below 49%. Extreme Risk. Stop all airfield operations.

Chapter 7

CIVIL TRAFFIC AND VFR AREA

7.1. Local VFR Flying Area (**Attachment 23**). The local flying areas are designated as the portion of northern California, bordered on the south by a straight line starting at Monterey, northeast to Lee Vining Airport (Mono Lake), northwest to the northern tip of Eagle Lake, west to Eureka, south to Point Arena, and southeast to the point of origin.

7.2. Adjacent Airports. There are several civil airports with numerous general aviation aircraft operating VFR and IFR at all altitudes near Travis AFB. The following list gives the names, identifier, and locations of the airports (from Travis TACAN (SUU)), and type of air traffic to expect (**Attachment 3**).

7.2.1. Nut Tree Airport (VCB). 320R/7DME; heavy VFR and light IFR traffic.

7.2.2. University Airport (005). 002R/17DME; light VFR and IFR traffic.

7.2.3. Buchanan Field (CCR). 186R/18DME; heavy VFR and IFR traffic, including jets, climbing and descending.

7.2.4. Watts-Woodland Airport (O41). 345R/20 DME; moderate VFR and light IFR traffic.

7.2.5. Yolo County International (2Q3). 350R/20 DME; parachuting from all altitudes, normally conducted from 14,500' MSL and below, 0800 until dusk daily; jet and turbo-prop aircraft.

7.2.6. Napa County Airport (APC). 244R/18DME; heavy VFR and IFR traffic.

7.2.7. Rio Vista Airport (O88). 090R/13DME; light IFR/VFR traffic.

7.2.8. Travis Aero Club (8Q0). 259R/3DME; moderate VFR traffic. Travis Tower and RAPCON should advise all aircraft to monitor UNICOM 123.3 and announce their intentions if they will fly through or very close to the Travis Aero Club traffic pattern.

7.3. Civil Traffic. Pilots should use caution while operating within the Travis radar control area; high-density civil traffic may not be in contact with Tower or RAPCON.

7.4. Rio Vista Airport Operations. The Rio Vista airport is uncontrolled and has no operational Tower. VFR traffic flying into the Rio Vista airport normally call in the blind on Rio Vista UNICOM, frequency 122.8. The high volume of VFR traffic increases the potential for a mid-air collision. Crews should exercise increased vigilance in the vicinity of the airport. When flying the TACAN Alpha and Bravo approaches, aircrews are encouraged to announce their type aircraft, position, altitude, and intentions on frequency 122.8.

7.5. Civil Use of USAF ATCALs. Civil aircraft, not flying a Department of Defense mission, are authorized to receive radar vectors and use base ATCALs facilities for practice low approaches only. Military Aero Club aircraft are owned by the Department of Defense and are authorized to make touch and go landings on Travis runways, traffic permitting, and in accordance with paragraph **7.7.11**.

7.6. No Flight Plan Arrivals. Unless an emergency exists, Tower will refuse landing clearance to all civilian "no flight plan" aircraft requesting to land at Travis until Base Operations grants approval.

7.7. Aero Club Operations.

7.7.1. Runway 4/22 is the only active runway. Runway 16/34 (sod) is closed.

7.7.2. Rectangular pattern altitude is 860' MSL (560' MSL during decreased visibility, see para. [7.7.5.2.1.](#)). VFR patterns are represented in [Attachment 24](#) and [Attachment 25](#).

7.7.3. The local flying area is within a 50 NM radius of the Aero Club, 25 NM radius for student pilots ([Attachment 23](#)).

7.7.4. Flight Plans and Flight Authorization.

7.7.4.1. Local flights must be cleared by the authorized individual at the Aero Club.

7.7.4.2. A flight plan for each flight leaving the local area will be filed before departure with Rancho Murieta Flight Service Station (RMFSS). When airborne, the pilot will open the flight plan with RMFSS on 122.3. Flight plans will be closed with Rancho Murieta Flight Service Station upon landing or cancellation of IFR. (RMFSS is the Search and Rescue agent for the Aero Club).

7.7.4.3. Aero Club must retain for 90 days a written record of all flights departing their runway and originals of any flight plans filed by fax to Base Operations. This record will be in place of filing a DD Form 175, Military Flight Plan, in person with Base Operations.

7.7.5. Weather restrictions:

7.7.5.1. When there is a weather warning in effect (vice forecasted), Aero Club flight operations are not authorized until the warning is either canceled or expired.

7.7.5.2. Ceiling/Visibility Restrictions:

7.7.5.2.1. Day VFR. 1,500 foot ceiling and three miles visibility (1,000 foot ceiling/3 miles visibility in the Aero Club traffic pattern at 560 feet MSL), as reported by Base Weather.

7.7.5.2.2. Night local VFR. 2,500 foot ceiling and five miles visibility (as noted in AFM 34-132, *Aero Club Operations*).

7.7.5.2.3. Student pilot IFR departures. Authorized with minimum 200 foot ceiling and ½ mile visibility.

7.7.5.2.4. Private/Commercial pilot SVFR. Authorized given clear of clouds and one mile visibility.

7.7.5.3. Wind Restrictions.

7.7.5.3.1. Student pilots may not exceed any of the following limits: 25-knot headwind, 10-knot crosswind/component, and 10-knot gust spread.

7.7.5.3.2. Private and commercial pilots may not exceed any of the following limits: 30-knot headwind, 15-knot crosswind/component, and 10-knot gust spread.

7.7.5.3.3. Instructor pilots may not exceed any of the following limits: 35-knot headwind, 20-knot crosswind/component, and 15-knot gust spread.

7.7.5.3.4. If winds are forecasted to be above 35 knots but no wind weather warning is published, flight operations are authorized as long as the official weather observation is below 35 knots.

7.7.6. Procedures When the Aero Club is Unmanned. Takeoffs or landings are not authorized when the club is not manned by a dispatcher or other qualified Aero Club employee except when meeting all the following conditions:

7.7.6.1. The departure is approved by the Aero Club manager.

7.7.6.2. The pilot will:

7.7.6.2.1. File a flight plan with RMFSS and fax a copy to Base Operations.

7.7.6.2.2. Notify Travis Base Operations by phone of intended operations.

7.7.6.2.3. Establish contact with Tower on frequency just before beginning takeoff roll.

7.7.6.2.4. Advise Tower when safely airborne and request flight plan activation with RMFSS.

7.7.6.3. Tower will activate the primary crash net if the Aero Club aircraft does not safely get airborne or needs emergency help.

7.7.7. VFR procedures.

7.7.7.1. Aircraft will avoid base buildings, base housing areas, the farm house one half mile southwest of the Aero Club, and all schools, unless departing IFR.

7.7.7.2. VFR departure and arrival procedures are confined to a sector of the Class D airspace north of Air Base Parkway and west of Peabody Road ([Attachment 26](#)).

7.7.7.3. Aircraft in the Aero Club traffic pattern at or below 900' MSL and aircraft at or below 1,100' MSL entering/exiting Class D airspace through the area north of Air Base Parkway and west of Peabody Road ([Attachment 26](#)) are not required to maintain communications with Tower.

7.7.7.4. All other operations within the Class D airspace must establish and maintain communications with Tower.

7.7.7.5. When outside of the Class D airspace, Radar Approach Control will provide traffic advisory service, on a workload permitting basis.

7.7.8. Special VFR Procedures.

7.7.8.1. Aircraft will arrive and depart the Class D airspace under SVFR conditions at or below 2,500 feet MSL using the designated departure and arrival routes as depicted in [Attachment 26](#).

7.7.8.2. Obtain clearance from Tower on 120.75 prior to departure or entry into the Class D airspace.

7.7.8.3. Pilots must have an instrument rating and be operating an instrument-approved aircraft.

7.7.9. IFR Departure Procedures.

7.7.9.1. The pilot will call Travis RAPCON clearance delivery to obtain an ATC clearance.

7.7.9.2. RAPCON will instruct the pilot to contact Tower for the IFR release prior to taxiing onto the runway.

7.7.9.3. When requested by Tower, RAPCON will issue the release, based on the current traffic situation, along with a clearance void time (normally two minutes). Example: "(aircraft ID) RELEASED, CLEARANCE VOID IF NOT OFF BY (time), TIME NOW (time hack)."

7.7.9.4. The pilot will immediately notify Tower if the clearance void time cannot be met.

7.7.10. IFR Arrival Procedures.

7.7.10.1. Travis RAPCON will advise aero club aircraft conducting an instrument approach to Travis to remain on the approach until canceling IFR and report cancellation to the Tower.

7.7.10.2. Travis RAPCON will transfer aircraft to Tower prior to the aircraft entering the Class D airspace.

7.7.10.3. Tower will frequency change the aircraft to UNICOM upon cancellation of IFR and/or reporting the airport in sight.

7.7.10.4. Tower will advise RAPCON when the aircraft cancels IFR or goes missed approach.

7.7.11. Other usage's of Travis AFB by the Aero Club.

7.7.11.1. Aero club aircraft are authorized to make instrument approaches to Travis AFB, traffic permitting.

7.7.11.2. Every attempt should be made to utilize 21L/3R. All runway 3R departures will be an intersection departure at taxiway D.

7.7.11.3. Aero club aircraft are authorized to recover on Travis' runways.

7.7.11.3.1. The intent of use is for limited night operations and not as the main operating point for the Aero Club.

7.7.11.3.2. Base assigned and transient aircraft have priority over Aero Club aircraft.

7.7.11.3.3. Aero Club aircraft shall not conduct practice approaches at Travis when other aircraft are operating in the local patterns. The Tower Watch Supervisor will have the final decision regarding practice approaches.

7.7.11.4. Aero Club aircraft will use spot S-10 in the Sugar area for parking.

7.7.11.4.1. No more than three aircraft will be on the spot at a time.

7.7.11.4.2. Access to the parking area will be via the TACAMO access road off of Perimeter Road.

7.7.11.4.3. Flightline access cards stamped "S-10 Only" will be issued and a master list compiled by the Aero Club manager, will be maintained of all Aero Club members issued a card. A current copy will be forwarded to 60 OSS/OSA when changes are made.

7.8. Helicopter Operations at David Grant USAF Medical Center. Helicopter operations will be conducted west of the hospital to and from the grass strip adjacent to the emergency room. Emergency room personnel will contact police and fire agencies to cordon off the emergency room access road.

7.8.1. Arrivals and departures are not visible from Travis Tower, therefore the following phraseology will be used to conduct helicopter operations to and from the Medical Center:

7.8.1.1. Arrivals: "LANDING AT DAVID GRANT HOSPITAL WILL BE AT YOUR OWN RISK (reason and additional instructions, as necessary). TRAFFIC (as applicable), or TRAFFIC NOT A FACTOR."

7.8.1.2. Departures: “DEPARTURE FROM DAVID GRANT HOSPITAL WILL BE AT YOUR OWN RISK (reason and additional instructions, as necessary). TRAFFIC (as applicable), or TRAFFIC NOT A FACTOR.”

7.8.1.3. Workload permitting, the Travis Tower will issue helicopter operators possible traffic advisories on Aero Club pattern traffic.

Chapter 8

AIR TRAFFIC CONTROL/AIRFIELD OPERATIONS MAINTENANCE

8.1. Airfield/Air Traffic Control and Landing Systems (ATCALs) Operational Status.

8.1.1. ATCALs facilities include the NAVAID facilities, Control Tower, RAPCON, weather equipment, and airfield lighting systems.

8.1.2. Navigational aid (NAVAID) facilities include the Travis Tactical Air Navigation (TACAN), Instrument Landing System (ILS), VHF Omnidirectional Range (VOR), and Airport Surveillance Radar (ASR). The ASR and Travis VOR are components of the National Airspace System (NAS).

8.1.3. Travis RAPCON is the primary NAVAID status monitoring facility.

8.1.4. RAPCON will respond when pilot reports (PIREPS) or a NAVAID remote status indicator (RSI) show a NAVAID is malfunctioning. If an RSI malfunctions or is inoperative, the NAVAID will remain operational as long as pilot or maintenance reports show the equipment is operating normally.

8.1.5. Base agencies shall contact Base Operations as soon as practical to coordinate unscheduled (partial or complete system failure) runway/taxiway closures and ATCALs outages.

8.1.5.1. Base Operations will coordinate all status changes with the Airfield Operations Flight Commander (60 OSS/OSA), who will notify the 60th Operations Group Commander (60 OG/CC) after obtaining all required information. Base Operations will take appropriate NOTAM action.

8.1.6. Any pre-planned action that will/may disrupt ATCALs operations, including but not limited to power source changes, No NOTAM PMIs, and scheduled downtime, require coordination with the RAPCON and/or Tower Watch Supervisor immediately prior to changing the power source or taking the system off the air, and as soon as practical after the system is returned to service.

8.2. ATCALs Maintenance Response Requirements. 60th Communications Squadron Mission Systems Flight (60 CS/SCM) responsibilities:

8.2.1. Airport Surveillance radar (ASR): qualified maintenance personnel will be on duty or on call and able to respond within 1 hour for dual-channel operations. During single-channel operations, personnel will be on duty until dual-channel operations are restored or needed parts are placed on back-order by supply.

8.2.2. NAVAIDs: qualified meteorological/navigational maintenance personnel will respond within one hour to outages of either primary or standby equipment.

8.2.3. Radios: qualified radio maintenance personnel will respond within one hour to outages for which backup equipment is not available, including outages of multi-channel transceivers.

8.3. ATCALs Primary Power Source During Inclement Weather.

8.3.1. Commercial power is the primary source of power for all ATCALs equipment at all times. Travis ATCALs equipment will remain on commercial power during inclement weather.

8.3.2. Base civil engineers will coordinate with the Tower watch supervisor for scheduled outages prior to changing power sources for the airfield lighting system.

8.3.3. 60 CS/SCM will coordinate with RAPCON supervisor prior to changing power sources for all other ATCALs.

8.4. No-NOTAM PMI schedule. The Department of Defense Flight Information Publication IFR enroute supplement carries the weekly maintenance period schedule.

8.4.1. Temporary changes to the No-NOTAM PMI times shall be coordinated through Airfield Operations to the 60 OG/CC with the information contained in paragraph **8.5**.

8.4.2. When the weather is forecasted or is below VFR, Maintenance Control will, preferably one day prior, contact Airfield Operations to determine if they can waive the weather minimums.

8.4.3. Mission information for short-notice PMI extensions shall be requested from ATC and Command Post.

8.5. Requests For Additional ATCALs Downtimes.

8.5.1. Direct requests for additional ATCALs downtimes as follows:

8.5.1.1. ATCALs, Radar and Radio Maintenance (60 CS/SCM) shall coordinate ATCALs system downtimes with the Airfield Operations Flight Commander, when maintenance requires NAVAID downtime other than prescribed PMI times.

8.5.1.2. Airfield Lighting (60 CES/CEOIE) shall coordinate airfield lighting downtimes with the Chief, Airfield Management.

8.5.1.3. All requests for ATCALs downtimes normally occur no later than five working days prior to the requested downtime, and include the following information:

8.5.1.3.1. Name of requester, date of request.

8.5.1.3.2. System requiring downtime.

8.5.1.3.3. General description of the work to be done (justification for downtime). Include reasons why specific time periods are needed to accomplish work (i.e., daylight for safety).

8.5.1.3.4. Date and time of request, and alternate. If the downtime will last more than one day, specify if the system will be down continuously or only during periods of maintenance (i.e., 1 – 3 Jan, 0700 – 1200L daily vs. 0700L 1 Jan – 1200L 3 Jan).

8.5.1.3.5. Mission impact if downtime not approved.

8.5.2. Upon receipt of the above information, Airfield Operations shall:

8.5.2.1. Obtain weather forecast from 60 OSS/OSW.

8.5.2.2. Obtain mission forecast from 60 OSS/OSO, to include C-5, KC-10 and transient aircraft arrivals, departures and training schedules.

8.5.2.3. Coordinate ASR and VOR downtime requests with Oakland Center.

8.5.2.4. Determine a mission impact of the outage and repair times.

8.5.2.5. Present all pertinent information to 60 OG/CC for approval.

8.5.2.6. If disapproved, inform requester.

8.5.2.7. If approved, coordinate with necessary agencies, to include, as a minimum, the requester, Base Operations, Tower, RAPCON, Command Post, and Current Operations.

8.5.2.8. Ensure NOTAM disseminated appropriately.

8.5.3. The 60th Operations Group Commander has delegated approval authority for ATCALs outages lasting less than one hour to the Approach Control Watch Supervisor, based on following guidance:

8.5.3.1. The Watch Supervisor cannot waive the weather requirements.

8.5.3.2. Outages must not affect current or reasonably projected aircrew operations and training. This is not a factor if maintenance believes the affected facility will fail without repair actions.

8.5.3.3. The affected facility should be recallable throughout the outage.

8.5.3.4. The Watch Supervisor shall notify Tower and Base Operations. Base Operations shall notify Command Post and VQ3.

8.5.3.5. The Watch Supervisor shall notify the Chief Controller or Airfield Operations Flight Commander if the outage is projected to or exceeds one hour.

8.6. NOTAM Requirements For ATCALs Equipment.

8.6.1. Base Operations is the primary NOTAM dissemination facility, and will send NOTAMs concerning ATCALs equipment as required.

8.6.2. RAPCON is the primary NOTAM monitoring facility.

8.6.3. RAPCON will notify all affected Federal Aviation Administration (FAA) ATC facilities of status changes and restoral estimates.

8.7. Civil Engineer Airfield Lighting Inspections and Maintenance.

8.7.1. Civil engineer airfield lighting crews will complete all routine daily airfield lighting inspections and maintenance as soon as practical each day. Airfield maintenance crews shall acquire a list of current outages from the Base Operations counter prior to conducting their daily routine maintenance.

8.7.2. Airfield lighting crews can complete emergency repairs at any time with the concurrence of the Base Operations shift supervisor and Tower watch supervisor.

8.7.3. Airfield lighting may request single runway closures for maintenance. The 60 OG/CC has delegated approval for runway closure for lighting maintenance to the Airfield Operations Flight Commander based on the following:

8.7.3.1. Requests should be made to the Airfield Operations Flight Commander or Chief, Airfield Management at least five working days in advance.

8.7.3.2. Projected weather must be VFR.

8.7.3.3. Work must occur on a weekend or holiday, and may last no longer than one day.

8.7.3.4. Approval will not be granted if the weekend is a reserve training weekend or Current Operations projects extensive flying.

8.7.3.5. The Airfield Operations Flight Commander will notify the 60 OG/CC, VQ-3, Tower, Base Operations, Current Operations, and Command Post of closures.

8.7.3.6. The closure will be cancelled/terminated if:

8.7.3.6.1. Weather drops below VFR and the runway affected is the active instrument runway. If the runway changes during maintenance, airfield lighting will terminate work when notified by the Tower. Airfield lighting may continue to work if immediately recallable from the airfield and aircraft operations (including training) are not effected.

8.7.3.6.2. Runway 21R/03L is the closed runway, winds significantly favor runway 03 and multiple aircraft operations are projected.

8.7.3.7. Restricted low approaches over personnel and equipment will be approved.

8.8. No Light Approach Minima. Approach minima are adjusted and NOTAM action accomplished by Base Operations.

8.8.1. IAW AFMAN 11-226, *US Standard For Terminal Instrument Procedures*, when touchdown zone lights, approach lights, and/or runway centerline lights become inoperative, the minima in the flight information publications and AFI 11-202, Volume 3, *General Flight Rules*, apply.

8.8.2. If the high intensity runway edge lights become inoperative, landings are not authorized from sunset to sunrise.

8.8.3. The no light approach minimas for Travis AFB are listed in [Attachment 27](#) (*Flight Information Publication, DOD Volume 2, Terminal, Low Altitude United States, California*).

8.9. FORMS PRESCRIBED: DD Form 175, and DD Form 1801.

JACK F. PETERS, Col, USAF
Director of Wing Staff

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFPD 13-2, Air Traffic Control, Airspace and Range Management
AFI 11-202V3, General Flight Rules
AFI 11-204, Operational Procedures for Aircraft Carrying Hazardous Materials
AFMAN 11-226, United States Standards for Terminal Instrument Procedures
AFI 13-203, Air Traffic Control
AFI 13-213, Airfield Management
AFM 34-132, Aero Club Operations
60 AMW OPLAN 91-212, Travis AFB BASH Plan
60 AMWI 11-201, DV Arrivals and Departures
60 LG OI 21-8, Engine Ground Operations
TAFBI 13-103, Vehicle Operations on the Flight Line
TAFBI 91-104, Explosives, Firearms, and Hazardous Materials Transportation Program
TAFBI 91-106, C-5 Defensive System Flare Handling and Loading/Downloading Procedures
FAAO 7110.65, Air Traffic Control
FAAO 7610.4, Special Military Operations
DOD Vol 2 FLIP, Flight Information Publication, Terminal, Low Altitude, United States, California

Abbreviations and Acronyms

AAS—Aircrew Alerting System
AGL—Above Ground Level
APU—Auxiliary Power Unit
ARTCC—Air Route Traffic Control Center
ASR—Airport Surveillance Radar
ATC—Air Traffic Control
ATCALs—Air Traffic Control and Landing Systems
Atch—Attachment
ATIS—Automated Terminal Information System
AWDS—Automated Weather Dissemination System
BASH—Bird Aircraft Strike Hazard

BHC—Bird Hazard Condition
CPI—Crash Position Indicator
DME—Distance Measuring Equipment
DV—Distinguished Visitor
ELT—Emergency Locator Transmitter
ERCC—Engine Running Crew Change
EWO—Emergency War Order
FAA—Federal Aviation Administration
FAAO—Federal Aviation Administration Order
IAW—In Accordance With
IFR—Instrument Flight Rules
ILS—Instrument Landing System
METRO—Pilot to Metro (Weather) Service
MSL—Mean Sea Level
NAS—National Airspace System
NAVAID—Navigational Aid
NM—Nautical Mile
NOTAM—Notice to Airman
PIREPS—Pilot Reports
PMI—Preventive Maintenance Inspection
RMFSS—Rancho Murietta Flight Service Station
RPM—Revolutions per Minute
RSI—Remote Status Indicator
SFO—Simulated Flame-Out Approach
SID—Standard Instrument Departure
SVFR—Special Visual Flight Rules
SUU—Travis TACAN Identifier
TACAN—Tactical Air Navigation
TACAMO—Take Charge and Move Out
TERPS—Terminal Instrument Procedures
TRT—Take-off Rated Thrust
TZZ—Travis VOR identifier

UHF—Ultra High Frequency

VFR—Visual Flight Rules

VHF—Very High Frequency

VMCO—Velocity Minimum Climb Out

VOR—VHF Omnidirectional Range

VORTAC—Collocated VOR and TACAN

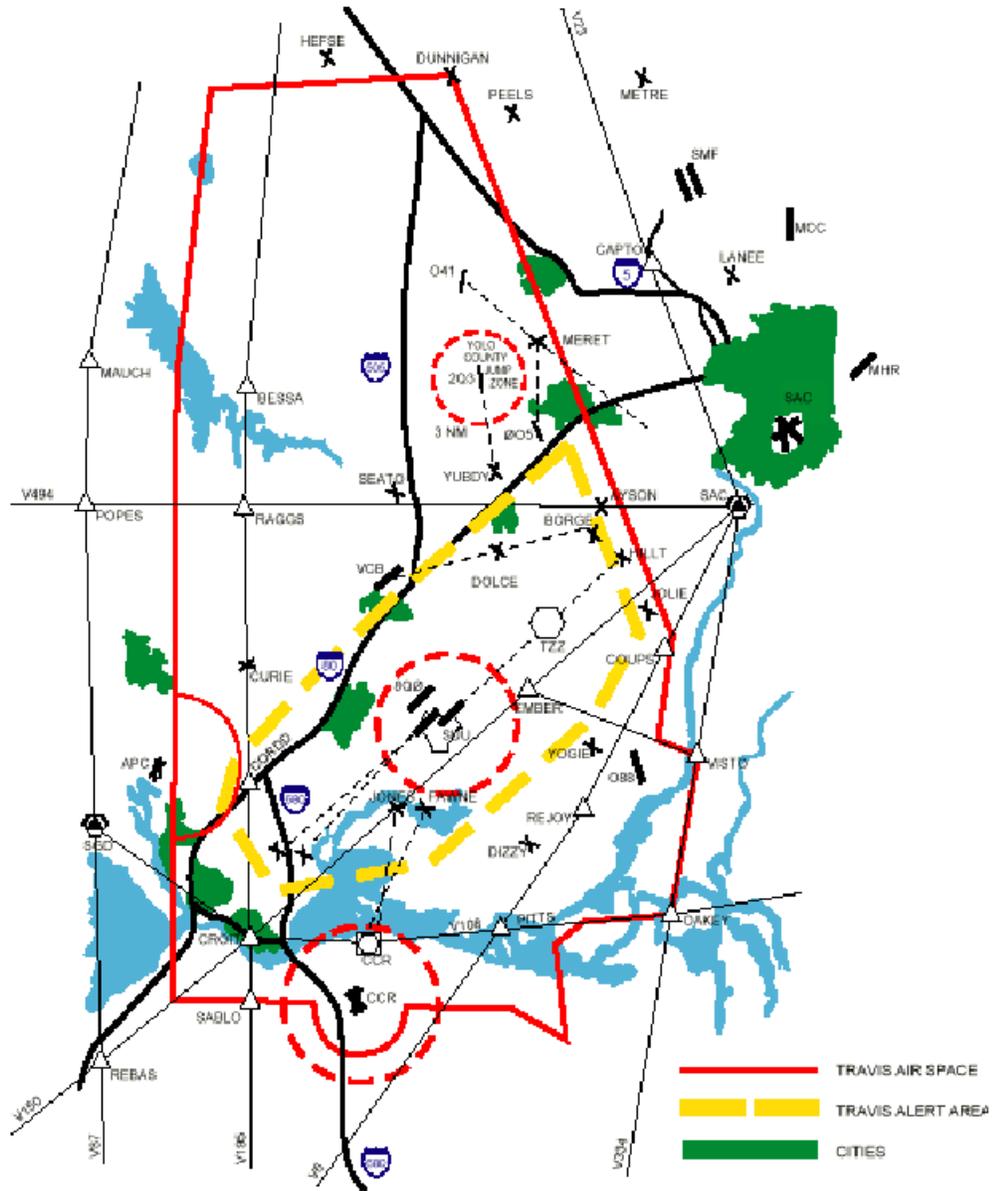
VQ-3—Fleet Air Reconnaissance Squadron Three (Navy)

Attachment 2

AIRCRAFT MOVEMENT AREA

Attachment 3

GENERAL AIRSPACE (NOT TO SCALE)



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If you have any questions about flying in the Travis area or would like to visit the Travis AFB Air Traffic Control facilities, call the Air Traffic Control Operations at (707) 424-3007, or the 80th Air Mobility Wing Flight Safety Office at (707) 424-5437.

NOT FOR NAVIGATIONAL USE

Attachment 4

LOCAL FREQUENCY CHANNELIZATION

<u>CHANNEL (UHF)</u>	<u>UHF</u>	<u>VHF</u>	<u>POSITION</u>
1	335.8	127.55	Clearance Delivery
2	289.4	121.8	Ground Control
3	254.4	120.75	Local Control (Tower)
4	306.9	126.6	Departure Control
5	291.0	126.6	North Approach Control
6	294.7	128.4	Arrival Control
7	322.325	119.9	South Approach Control
8	318.1	NA	Discrete
9	392.0	NA	Discrete
10	319.4	NA	AMC Interplane
11	349.4	141.9	Command Post
12	372.2	NA	Pilot to Dispatch, USAF
13	344.6	NA	Pilot to Metro, USAF
14	285.575	NA	Pilot to Dispatch
15 - 17	BLANK	BLANK	BLANK
18	384.9	116.4	ATIS
19	269.2	NA	Pilot to Metro, SUU

Attachment 5

TAXI, PARKING SPOT AND ENGINE RUN QUICK REFERENCE CHART

SPOT [^]	PARKS (Largest)	NOTES
210	KC-10	C-5 engine runs restricted to taxi power.
211	KC-10	C-5 engine runs restricted to taxi power.
212A*	KC-10	Primary engine run spot for KC-10; suspends Txwy H ops east of 212A to Rwy 21R/03L. C-5 engine runs restricted to taxi power.
212	KC-10	C-5 engine runs restricted to taxi power.
220	KC-10	C-5 engine runs restricted to taxi power.
221	KC-10	C-5 engine runs restricted to taxi power.
222A*	KC-10	Primary engine run spot for KC-10; suspends Txwy H ops east of 212A to Rwy 21R/03L. C-5 engine runs restricted to taxi power.
222	KC-10	C-5 engine runs restricted to taxi power.
230	KC-10	C-5 engine runs restricted to taxi power.
231	KC-10	C-5 engine runs restricted to taxi power.
232	KC-10	C-5 engine runs restricted to taxi power.
241	B-747	C-5 engine runs restricted to taxi power.
251	B-747	C-5 engine runs restricted to taxi power.
252	KC-10	C-5 engine runs restricted to taxi power.
261	KC-10	C-5 engine runs restricted to taxi power. E-6 refueling spot.
262	KC-10	C-5 engine runs restricted to taxi power. E-6 refueling spot.
271	KC-10	C-5 engine runs restricted to taxi power.
272A*	KC-10	Primary KC-10 engine run spot; suspends Txwy D ops. C-5 engine runs restricted to taxi power.
272	KC-10	C-5 engine runs restricted to taxi power.
281	KC-10	C-5 engine runs restricted to taxi power.
282	KC-10	C-5 engine runs restricted to taxi power.
290	KC-10	C-5 engine runs restricted to taxi power. Tow on/taxi off.
291	KC-10	C-5 engine runs restricted to taxi power. Tow on/taxi off.
292	KC-10	C-5 engine runs restricted to taxi power. Tow on/taxi off.
301	C-5	CANN C-5 parking spot.
302	C-5	With open fuel tanks on 302, aircraft must be towed past spot 302, APU may be running.
310	C-5	

SPOT^	PARKS (Largest)	NOTES
311	C-5	
312	C-5	
320	C-5	
321	C-5	
322	C-5	
331	C-5	
332	C-5	
340	C-5	
341	C-5	
342	C-5	
410	C-5	Alternate C-5 engine run spot, IAW para 2.7.11.2.1 . Alternate KC-10 engine run spot, IAW para 2.7.12.2 .
411	C-5	Alternate C-5 engine run spot, IAW para 2.7.11.2.1 . Alternate KC-10 engine run spot, IAW para 2.7.12.2 .
412	C-5	Alternate C-5 engine run spot, IAW para 2.7.11.2.1 . Alternate KC-10 engine run spot, IAW para 2.7.12.2 .
420	C-5	Alternate C-5 engine run spot, IAW para 2.7.11.2.1 . Alternate KC-10 engine run spot, IAW para 2.7.12.2 .
421	C-5	Alternate C-5 engine run spot, IAW para 2.7.11.2.1 . Alternate KC-10 engine run spot, IAW para 2.7.12.2 .
422	C-5	Alternate C-5 engine run spot, IAW para 2.7.11.2.1 . Alternate KC-10 engine run spot, IAW para 2.7.12.2 .
430	C-5	Alternate C-5 engine run spot, IAW para 2.7.11.2.1 . Alternate KC-10 engine run spot, IAW para 2.7.12.2 .
431	C-5	Alternate C-5 engine run spot, IAW para 2.7.11.2.1 . Alternate KC-10 engine run spot, IAW para 2.7.12.2 .
432	C-5	Alternate C-5 engine run spot, IAW para 2.7.11.2.1 . Alternate KC-10 engine run spot, IAW para 2.7.12.2 .
440	C-5	Alternate C-5 engine run spot, IAW para 2.7.11.2.1.3 . Alternate KC-10 engine run spot, IAW paras 2.7.11.2.1.3 and 2.7.12.2.2 .
441	C-5	Alternate C-5 engine run spot, IAW para 2.7.11.2.1.3 . Alternate KC-10 engine run spot, IAW paras 2.7.11.2.1.3 and 2.7.12.2.2 .
510*	C-5	Aircraft may make right turns only onto Txwy H or J. Aircraft may not turn left onto Txwy H.
511	KC-10	
512A*	C-5	C-5 parking closes spots 511 and 513, and restricts taxi operations behind the spot on Txwy K.

SPOT [^]	PARKS (Largest)	NOTES
512	KC-10	
513	KC-10	
514A*	C-5	C-5 parking closes spots 513 and 515, and restricts taxi operations behind the spot on Txywy K.
514	C-5	
515A*	C-5	C-5 parking closes spots 514 and 516, and restricts taxi operations behind the spot on Txywy K.
515	KC-10	
516	C-5	
517	C-5	Tow on. Primary C-5 engine run location. Alternate KC-10 engine run location (#1 and #3 engines only). TRT suspends operations on Txywy K behind the spot.
518	C-5	Tow on. Primary C-5 engine run location. Alternate KC-10 engine run location (#1 and #3 engines only). TRT suspends operations on Txywy K behind the spot.
521	C-5	Tow on. Primary C-5 engine run location. Alternate KC-10 engine run location (#1 and #3 engines only).
601	C-17	When C-5 is parked in this spot for maintenance, Txywy K is closed to all aircraft behind this spot.
602	C-17	When C-5 is parked in this spot for maintenance, Txywy K is closed to all aircraft behind this spot.
603	C-17	When C-5 is parked in this spot for maintenance, Txywy K is closed to all aircraft behind this spot.
604	C-17	When C-5 is parked in this spot for maintenance, Txywy K is closed to all aircraft behind this spot.
605	C-17	Aircraft will be parked facing Txywy L and pushed back prior to departure.
606	C-17	Aircraft will be parked facing Txywy L and pushed back prior to departure.
607	C-17	Aircraft will be parked facing Txywy L and pushed back prior to departure.
608	C-17	
609	C-17	
610	C-17	
611	C-17	
612	C-17	
613	KC-10	
717	C-141	Collocated with Hangar 847.
718A	C-5	

SPOT^	PARKS (Largest)	NOTES
718	KC-10	With open tanks on this spot, the first 1500' of Txwy L north of Txwy N are closed to all taxiing aircraft (tow okay).
719	KC-10	With open tanks on this spot, the first 1500' of Txwy L north of Txwy N are closed to all taxiing aircraft (tow okay).
Hangar 14	KC-10	
Hangar 808	C-5	
Hangar 809	C-5	
Hangar 810N	C-5	
Hangar 810S	C-5	C-5 can be nosed in diagonally.
Hangar 811	C-5	
Hangar 818N	C-5	
Hangar 818S	C-5	Second aircraft must be parked nose-to-nose with an aircraft inside the hangar.
Hangar 847	C-141	Collocated with spot 717.
901	C-5	
902	C-5	
903	C-141	
904	C-141	
905	C-141	
906	C-141	
907	C-141	
908	C-141	
H-13	C-5	Primary hazardous cargo parking spot.
H-14	C-5	Primary hazardous cargo parking spot. TRT engine runs authorized IAW with paras 2.7.1.4. , 2.7.11.2.1. and 2.7.12.2.3.
S-1	C-5	Restricted area for TACAMO aircraft.
S-2	KC-10	Restricted area for TACAMO aircraft.
S-3	C-5	Restricted area for TACAMO aircraft. Only S-ramp spot authorized for E-6 TRT engine runs.
S-4	KC-10	Restricted area for TACAMO aircraft.
S-5	C-5	
S-6	KC-10	
S-7	C-5	Museum aircraft parking.
S-8	KC-10	
S-9	C-5	

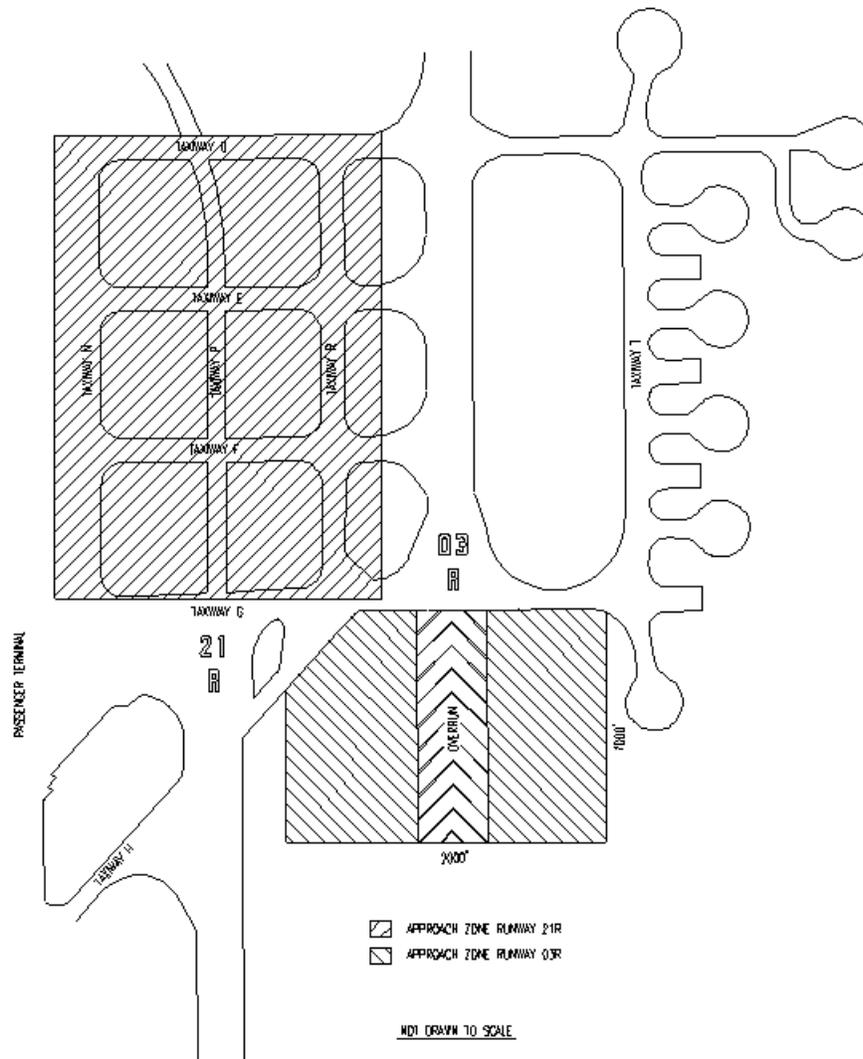
SPOT [^]	PARKS (Largest)	NOTES
S-10	KC-10	Reserved for Aero Club aircraft, unless otherwise noted.
S-11	C-5	Alternate hazardous cargo parking spot.
S-12	C-5	Alternate hazardous cargo parking spot.
TAXIWAY	WIDTH	NOTES
D	100	Portions marked with runway hold short signs to protect Rwy 21R/03L departure/approach zones. Primary route for non-alert TACAMO crews.
E	100	Portions are marked with runway hold short signs to protect Rwy 21R/03L departure/approach zones.
F	100	Portions are marked with runway hold short signs to protect Rwy 21R/03L departure/approach zones.
G	75	Primary route for alert TACAMO crews.
H	75	Aircraft may only turn left onto Txwy K from Txwy H (not right).
I	75	
J	75	
K	75	C-5s are not authorized on Txwy K between Txwys H and N. Aircraft may only turn right onto Txwy H from K (not left). Portion between Rwy 21R/03L and Txwy N closed during nighttime hours due to lack of lighting.
L	75	C-5s are authorized to tow only on Txwy L between Txwys H and N. Aircraft may not turn right onto Txwy H from Twxy L. Portion between Rwy 21R/03L and Txwy N closed during nighttime hours due to lack of lighting.
M	75	Portions are not visible from the Tower. Active public roadway crosses Txwy M.
N	75	
P	75	Closed to all aircraft.
R	75	Closed to all aircraft southwest of Txwy G. Engine runs not authorized, violated TERPS criteria.
T	75	Only aircraft authorized by TACAMO will taxi between S-6 and Txwy G on Txwy T.
V		Access to Hangars 808 and 810.
W		Access to Hangars 810, 811, 818.
X		Access to Hangar 818.

[^]Idle engine runs are authorized on all parking spots, given there is a 300' clear zone behind KC-10s and a 200' clear zone behind C-5s. Engine runs above idle must be accomplished IAW [Chapter 2](#).

*All "A" spots can be used for aircraft as noted when the adjacent spot is empty. For example, parking on 212A is authorized only when 211 is empty.

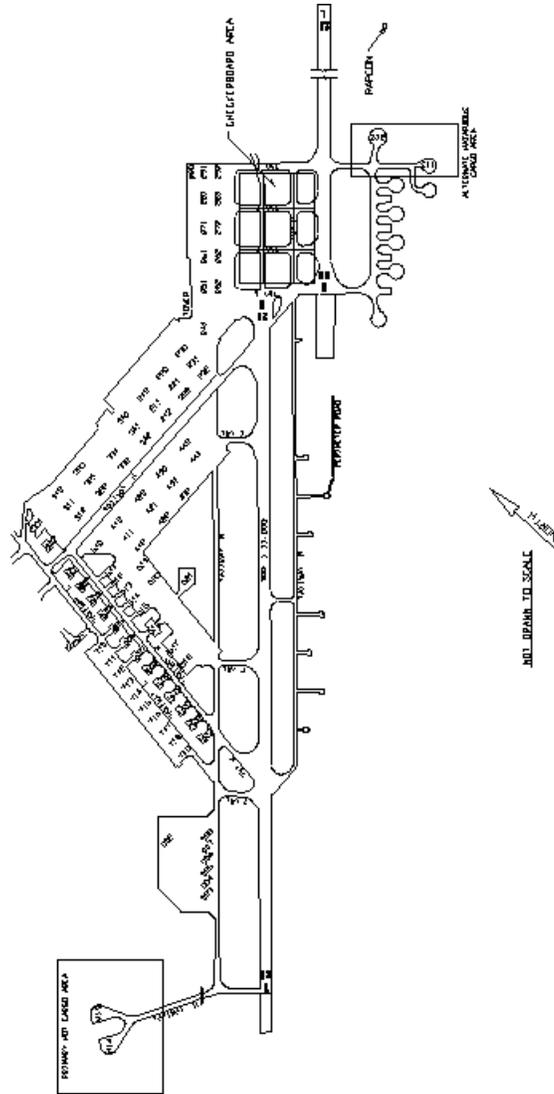
Attachment 6

RUNWAY APPROACH ZONES



Attachment 7

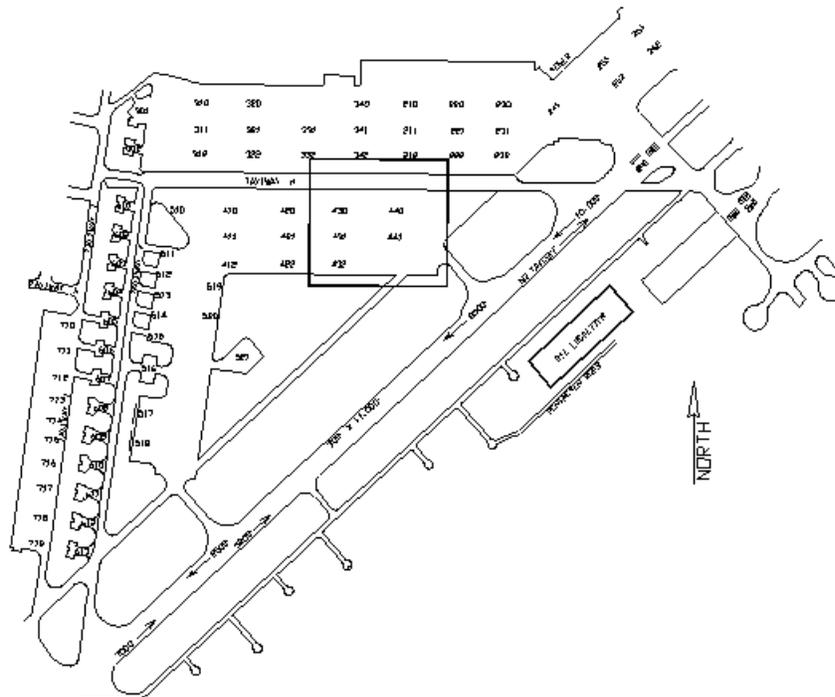
PRIMARY AND ALTERNATE HAZARDOUS CARGO PARKING SPOTS



Attachment 8

POTENTIAL C-5 JET WAKE VORTICE STRENGTH AT TRT

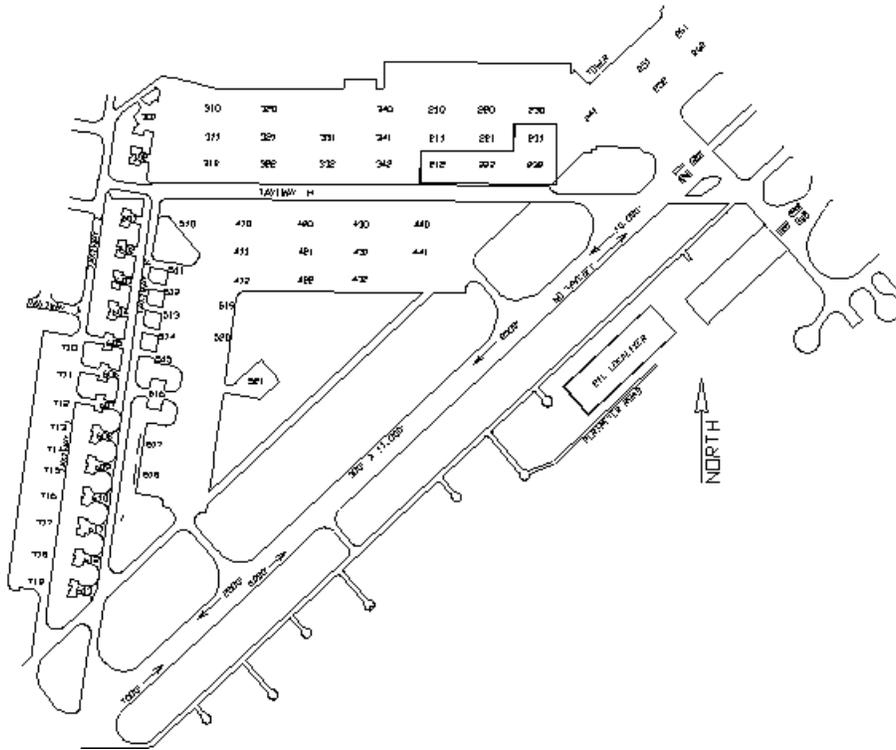
FEET BEHIND ENGINE NOZZLE	MPH NO-WIND CONDITION	MPH WITH 30 MPH HEADWIND (Highest Poss. Cond)
150	270	250+
200	195	250+
300	120	250+
400	95	250+
500	75	250+
600	65	250+
700	55	250+
800	50	250
900	45	150
1000	40	105
1200	35	65
1300	<35	60
1400	<35	50
1500	<35	45
1600	<35	40
1700	<35	35



Attachment 9

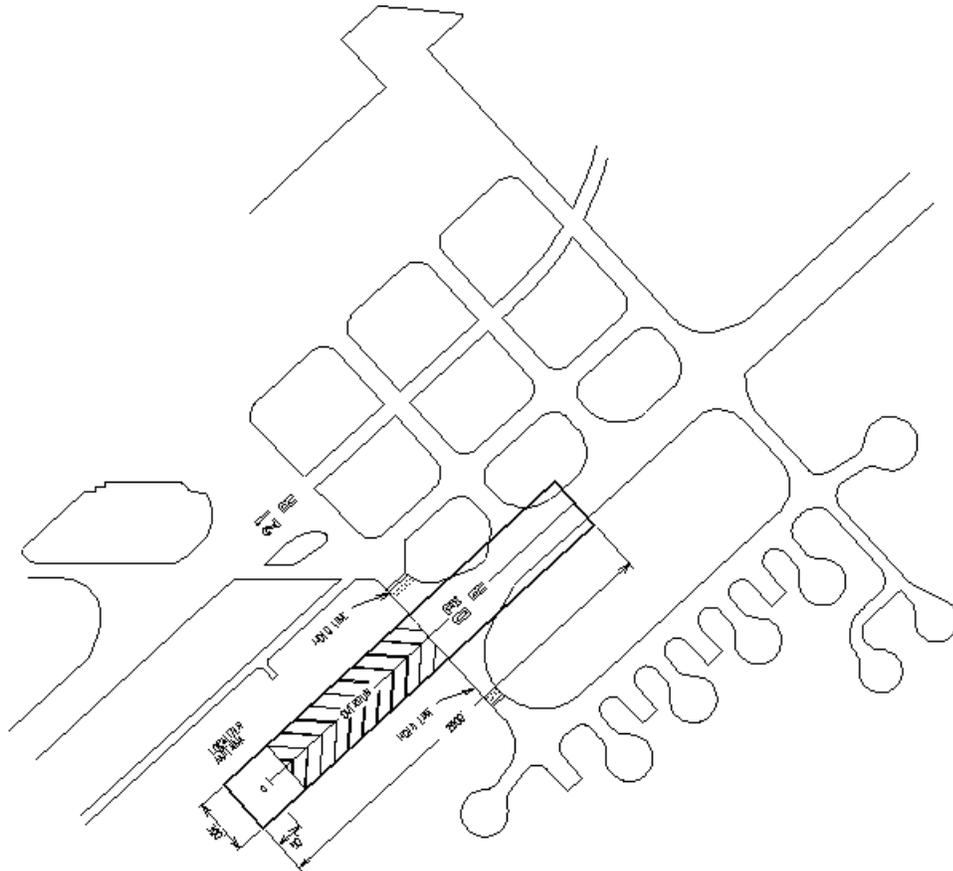
POTENTIAL KC-10 JET WAKE VORTICE STRENGTH AT TRT

DISTANCE AFT OF TAIL (FT)	MPH NO WIND CONDITION
150	200
250	150
400	100
600	75
825	60
1150	45
1575	35



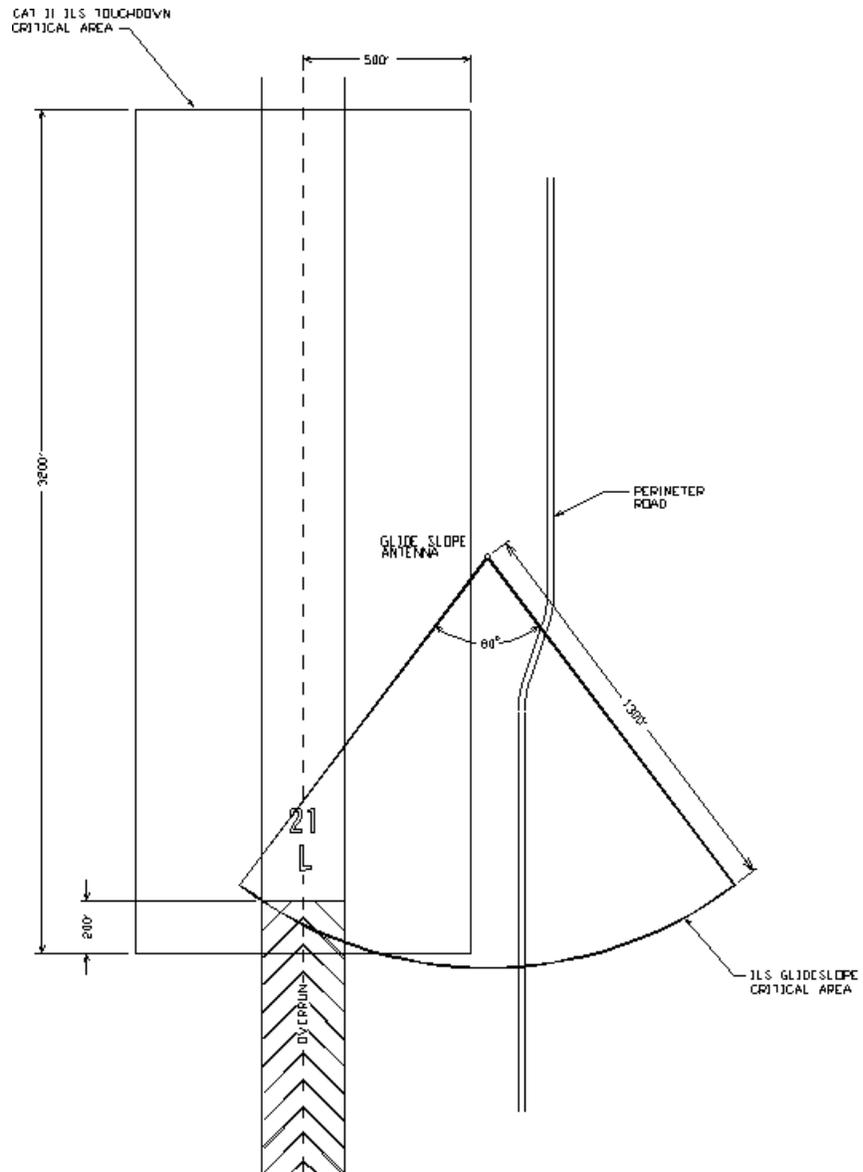
Attachment 10

RUNWAY 21L LOCALIZER CRITICAL AREA



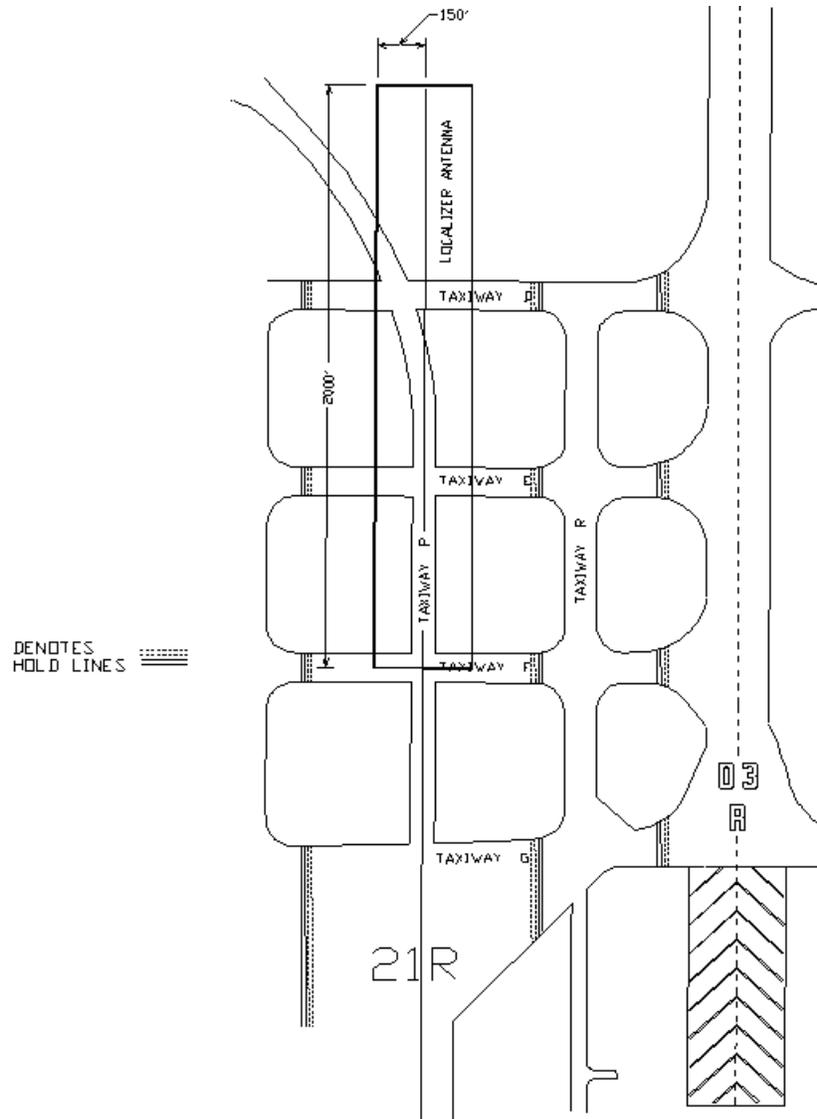
Attachment 11

RUNWAY 21L GLIDE SLOPE AND CAT II TOUCHDOWN CRITICAL AREAS



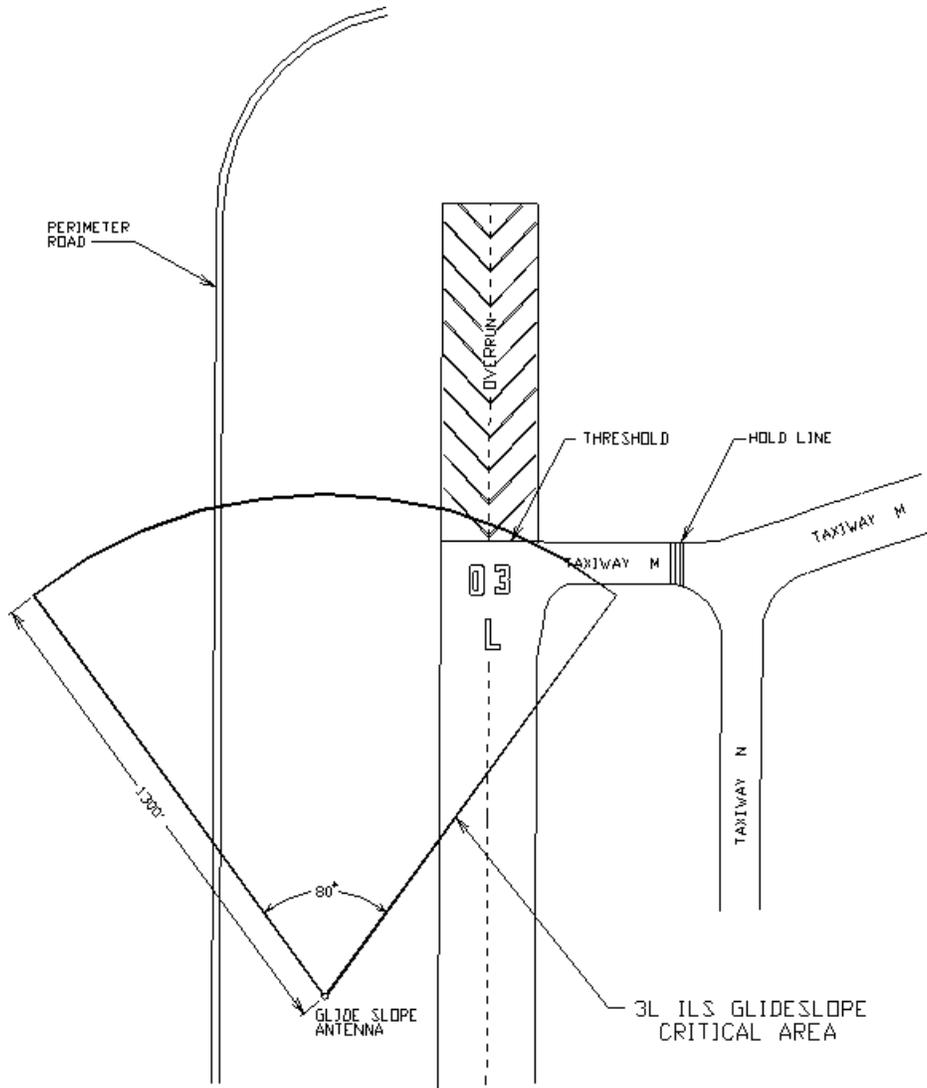
Attachment 12

RUNWAY 03L LOCALIZER CRITICAL AREA



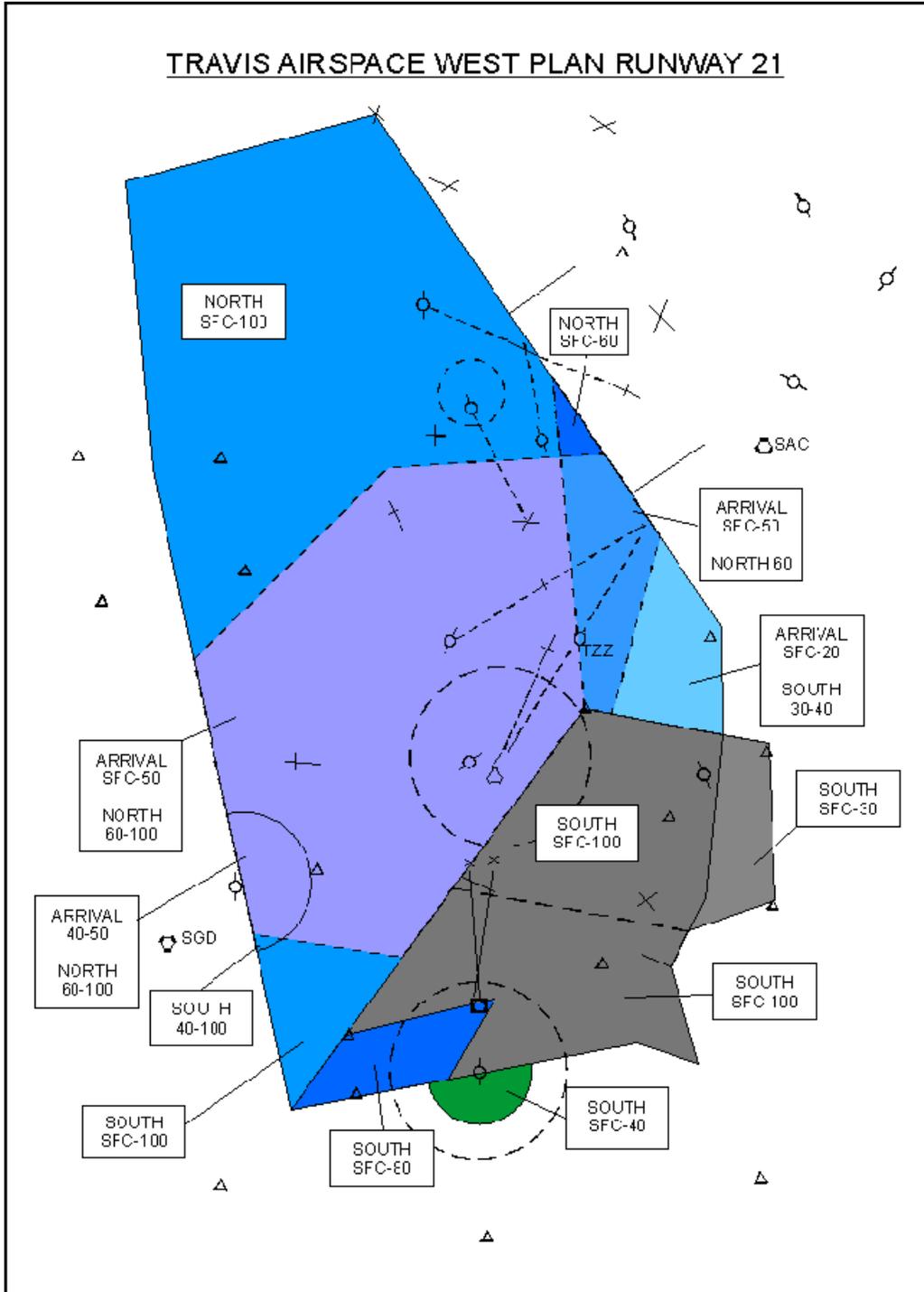
Attachment 13

RUNWAY 03L GLIDE SLOPE CRITICAL AREA



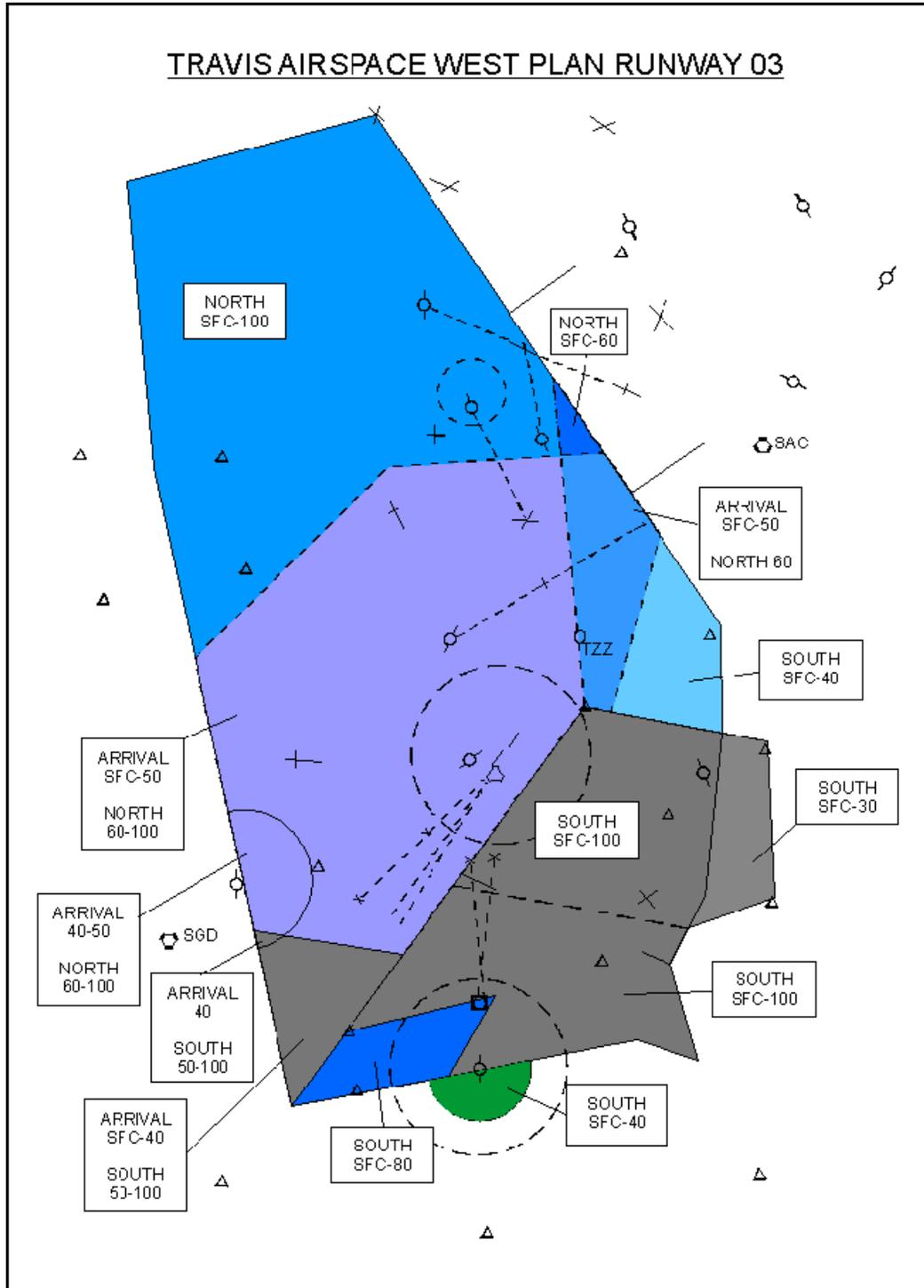
Attachment 15

TRAVIS AIRSPACE, RUNWAY 21 WEST PLAN



Attachment 17

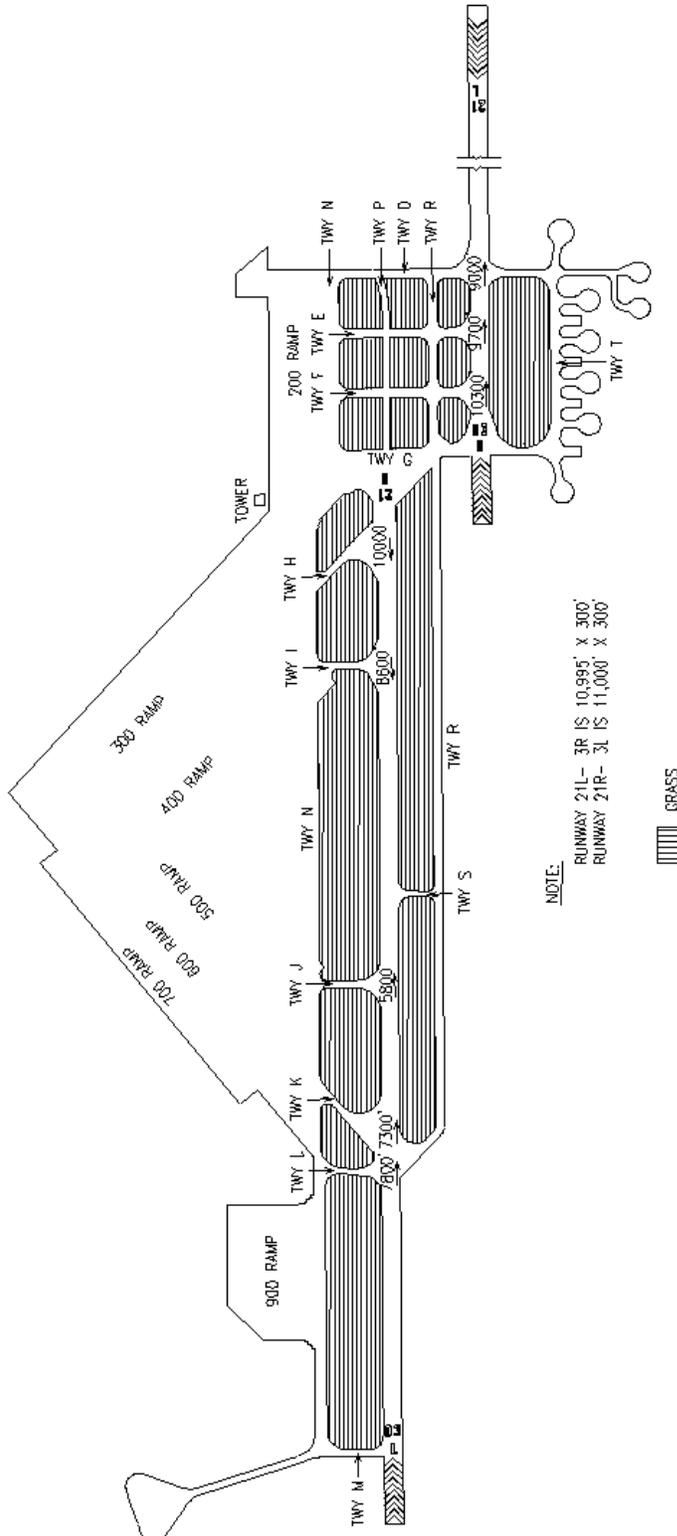
TRAVIS AIRSPACE, RUNWAY 03 WEST PLAN



Attachment 18

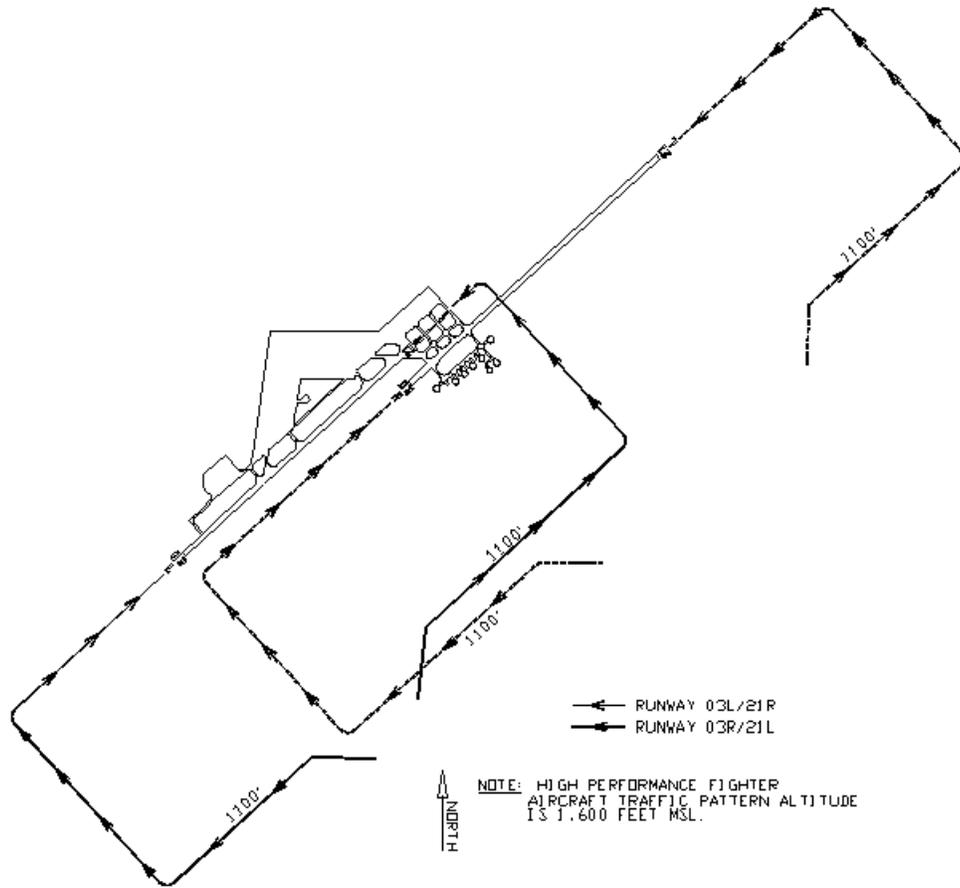
INTERSECTION DEPARTURES

INTERSECTION DEPARTURE



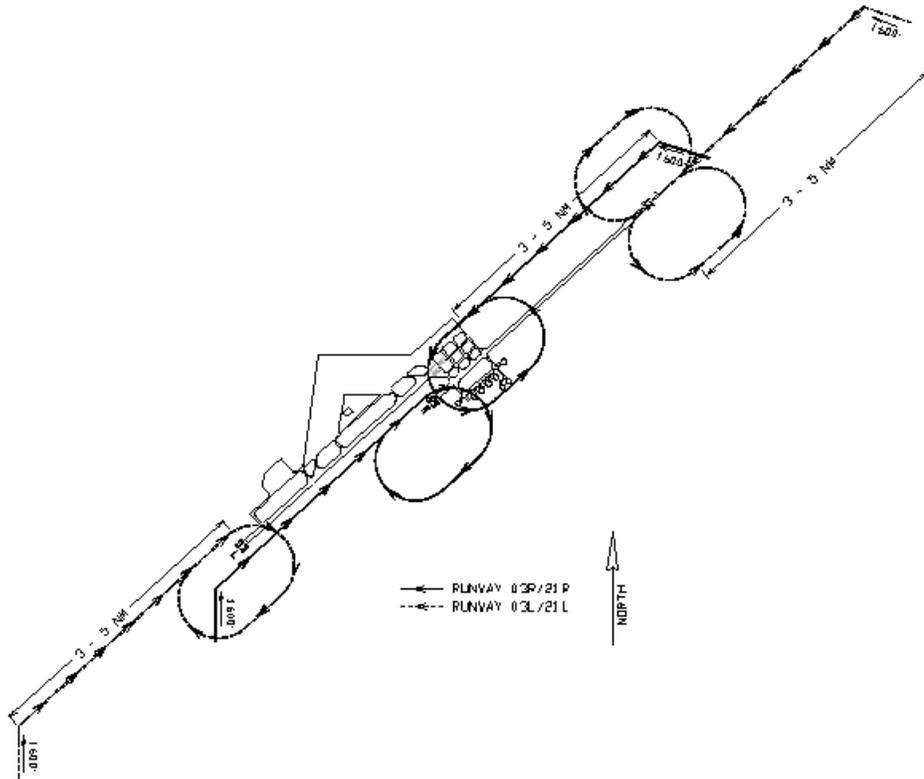
Attachment 20

TRAVIS VFR RECTANGULAR PATTERN, PATTERN ALTITUDE : 1100'



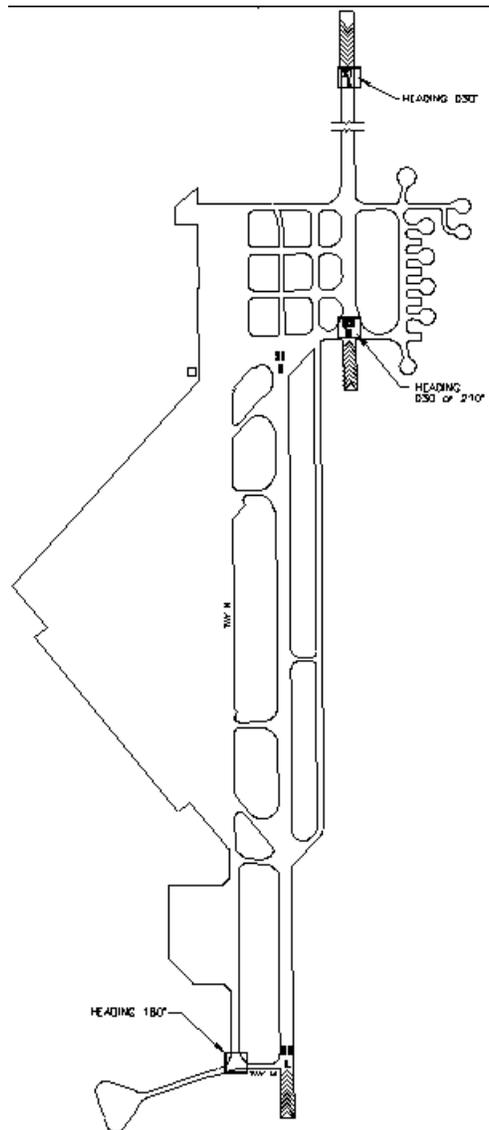
Attachment 21

TRAVIS OVERHEAD VFR PATTERN, PATTERN ALTITUDE : 1600'



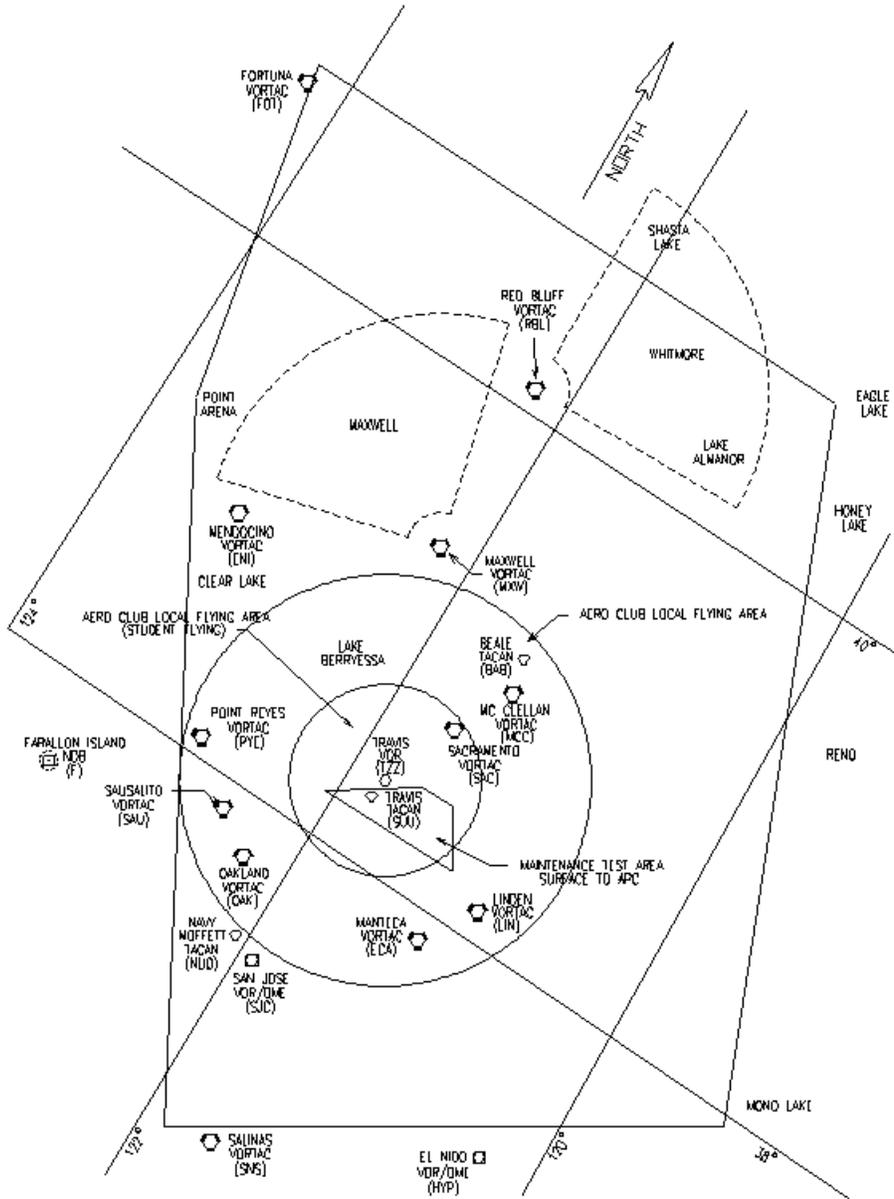
Attachment 22

HOT GUN/HUNG FLARES AREAS NORTH



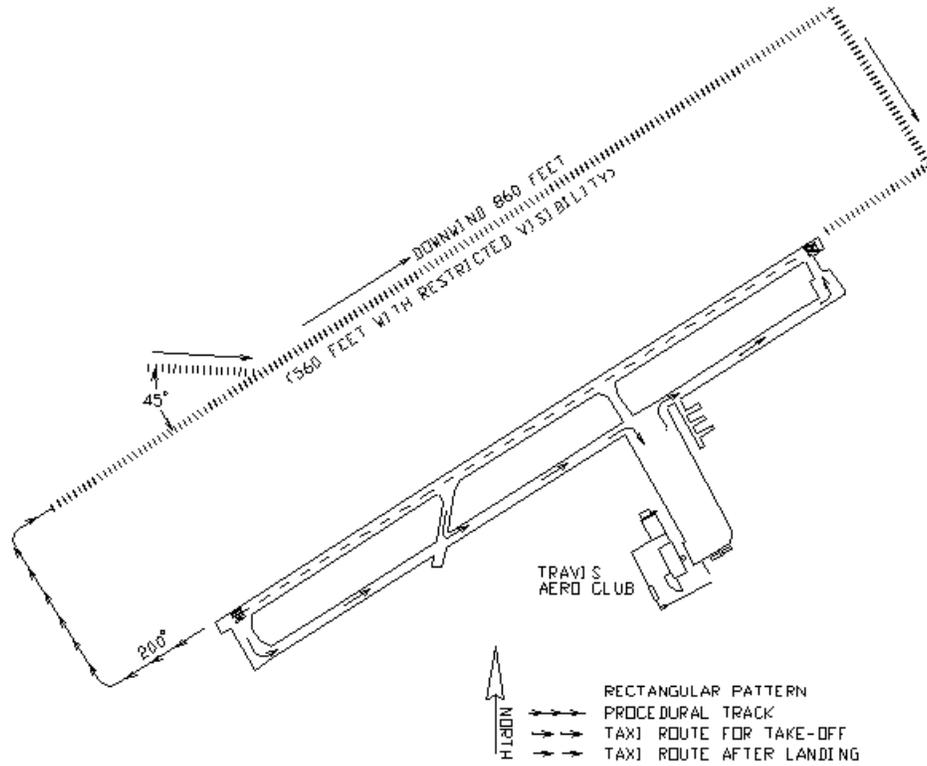
Attachment 23

LOCAL FLYING AREAS



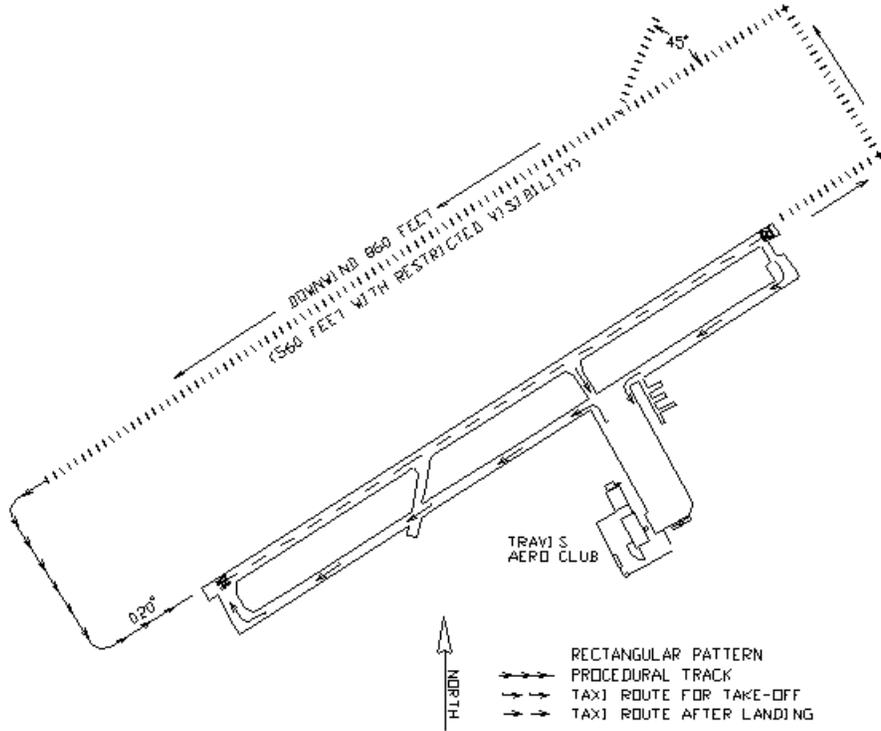
Attachment 24

AERO CLUB VFR PATTERN - RUNWAY 22



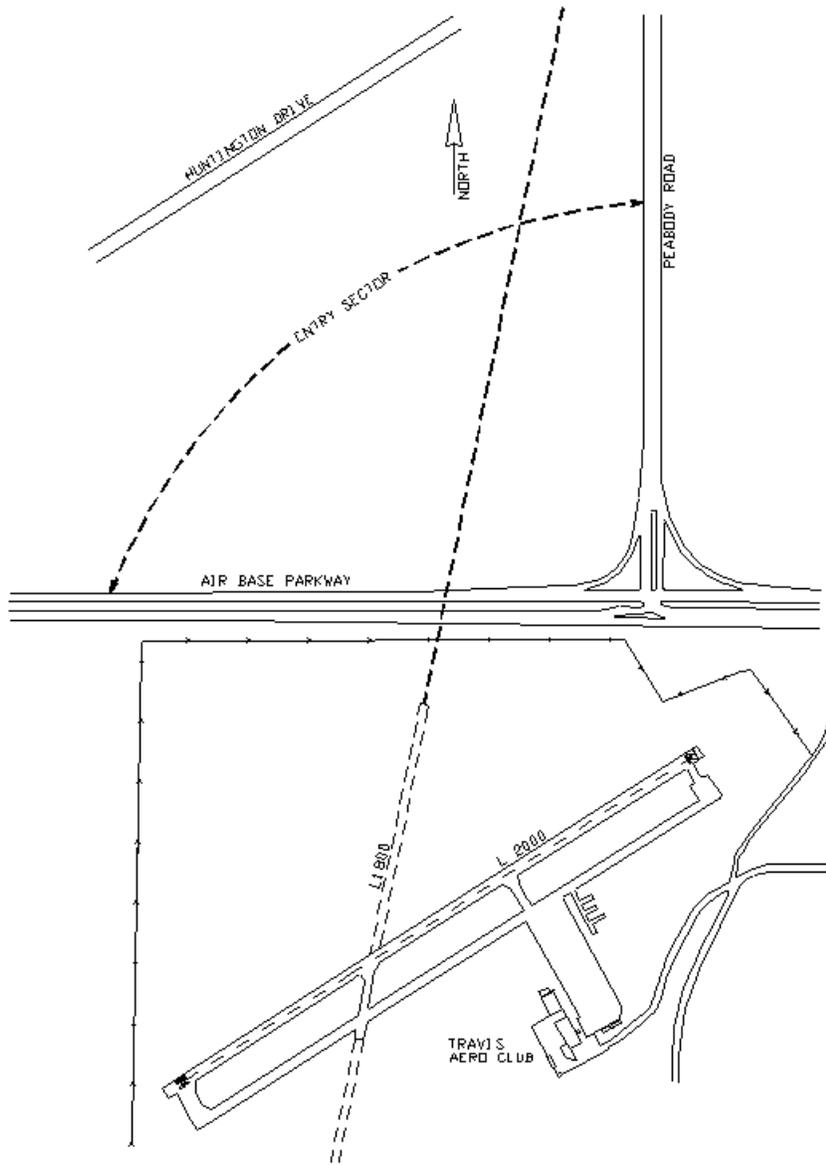
Attachment 25

AERO CLUB VFR PATTERN -- RUNWAY 04



Attachment 26

AERO CLUB ENTRY/DEPARTURE SECTOR



Attachment 27

NO LIGHT APPROACH MINIMUMS FOR TRAVIS AFB

<u>APPROACH</u>	<u>RWY</u>	<u>CAT</u>	<u>DH/MDA-VIS</u>	<u>HAT/HAA</u>	<u>CEIL-VIS</u>
ASR	21La	AB	420/24	362	400-1/2
		CDE	420/40	362	400-3/4
	21R	ABC	520-60	469	500-1 ¼
		D	520-1 ½	469	500-1 ½
		E	520-1 ¾	469	500-1 ¾
	3L	AB	680/50	645	700-1
		C	680-1 ¾	645	700-1 ¾
		D	680-2	645	700-2
		E	680-2 ¼	645	700-2 ¼
	CIR b	21L	A	480-1	418
B			520-1	458	500-1
C			520-1 ½	458	500-1 ½
D			760-2 ¼	698	700-2 ¼
E			760-2 ½	698	700-2 ½
21R		AB	520-1 ¼	458	500-1 ¼
		C	520-1 ½	458	500-1 ½
		D	760-2 ¼	698	700-2 ¼
		E	760-2 ½	698	700-2 ½
3L		AB	680-1	618	700-1
		C	680-1 ¾	618	700-1 ¾
		D	760-2 ¼	698	700-2 ¼
		E	760-2 ½	698	700-2 ½

NOTES:

- a. When ALS inoperative, increase visibility ½ mile
- b. Not authorized NW of extended centerline of Rwy 3L – 21R