AUTHORITY STATEMENT

The operational policies and procedures contained in this manual reflect the Kern County Sheriff's Office's commitment to the safe conduct of flight and ground operations.

The Pilot in Command (PIC) is responsible for safe and efficient aircraft operations and is the final authority regarding all operational / flight decisions. Safety is the priority during all operations. If there is any reasonable doubt that a flight cannot be conducted safely, the PIC is expected to stop, gather more information, re-evaluate the options and consider canceling the flight until another day. Should there be a choice as to the course of action to be taken, the most conservative course of action should apply.

All Air Support Unit (ASU) personnel, flight crews and maintenance crews, are responsible for safe and efficient operation of equipment and personnel movement. Each ASU member should be familiar with the safety and operations within the hangar and on the flight line. Each ASU member is expected to pass along that knowledge and courtesy to visitors and department personnel by escorting non-ASU personnel while they are in the facility.

It is recognized that not all situations can be covered in this manual or FAA regulations and practices; while this material should be followed; compliance is not a substitute for good judgment. The Air Support Unit personnel are expected to take the actions necessary to ensure safety.

Approved by:

Doug Jauch
Undersheriff

Tim Posey
Commander
Metro Patrol Section

Joel Swanson
Lieutenant
OIC – Air Support

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FORWARD

This publication presents a consolidation of information, procedures, rules and guidelines for the operation and support of the Kern County Sheriff's Office – Air Support Unit.

It complements existing departmental policies, manufacturers flight manuals, Federal Aviation Regulations and other pertinent information relating to flight and ground operations.

All Air Support Unit (ASU) personnel shall make themselves familiar with the policies and procedures of this manual and subsequent updates. They are also expected to adhere to the policies and procedures as outlined in this manual.

Any suggestions to modify, add, or delete any portion of this manual should be submitted to the Air Support Unit officer in charge (OIC).

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RECORD OF REVISIONS

This manual will be reviewed and updated periodically. Temporary supplements will be published and posted on the briefing boards until they are incorporated into the next revision of this manual.

Revision Date	Description of Revision	By
6-22-2010	Added H-1600	T.C.
11-21-2011	Added: I-205, I-206, I-407; Amended I-203	T.C.
10-02-2014	Added F-1500, Updated TOC	T.C.
9-10-2020	Updated Authority Stmnt, Forward, grammar	J.S.
	overall review and wording	

Revision Date	Description of Revision	By

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GENERAL OPERATIONS

SECTION A

A-100 UNIT MISSION STATEMENT

The mission of the Air Support Unit is to compliment other bureaus, divisions, services, and sections of the Kern County Sheriff's Office and local governmental agencies in their endeavors to enhance public safety, provide for the prevention and detection of crime, and to assist in the apprehension of criminals.

A-200 ORGANIZATION AND ADMINISTRATION

A-201 POSITIONS

Officer in Charge

The Officer-in-charge (OIC) is directly responsible for:

- Air Support Unit personnel, aircraft, and maintenance operations.
- Budget, assignment of personnel, and the operations schedule.

Chief Flight Instructor – Duties expanded in Section VII

The Chief Flight Instructor is responsible for:

- Scheduling training
- Oversight of the flight-training program, and other instructor pilots, both fixed wing and rotor wing
- Develop a training plan and conduct training, currency and evaluations as appropriate.

Flight Instructor – Duties expanded in Section VII

- Under the direction of the Chief Flight Instructor and the OIC, conduct training and assist in monitoring the training program as requested by the Chief Flight Instructor and / or OIC.

Command Pilot

- Perform flight and administrative duties as assigned by the Air Support Unit OIC in accordance with FAR's and departmental policies and procedures.

Tactical Flight Officer

- Perform flight and administrative duties as assigned by the Air Support Unit OIC.
- Direct and coordinate activities of their assigned aircraft in support of field operations.

Safety Officer - Duties expanded in Section VII

- To establish a safety manual, safety practices, and to provide recommendations for the Air Support Unit OIC regarding safety items.
- Assist the OIC in incident / accident investigations.

TFO Training Officer – Duties expanded in Section VI

- To provide training to new tactical flight officers as scheduled by the OIC.

Director of Maintenance – Duties expanded in Section IV

- To provide direction to the maintenance section personnel and schedule aircraft on a maintenance schedule
- Perform maintenance on aircraft and overseeing the maintenance performed by other maintenance personnel.

Maintenance Personnel - Duties expanded in Section IV

- Perform scheduled and unscheduled maintenance on aircraft.

A-300 LAW ENFORCEMENT

A-301 AREA SEARCH

Defined as an aerial search over an area where a wanted subject is believed to be hiding or moving. Such a search could also be used to detect an abandoned, hidden, or wanted vehicle, or other objects including; crime victims, fruits of crime, criminal activities, etc., for the purpose of gathering evidence, furthering an investigation, or other activities related to criminal law enforcement.

A-302 REDACTED

A-303 CRIMINAL PHOTOGRAPHY

The use of an aircraft as a platform from which photographs are made of crime scenes, fruits of crime, etc., for the purpose of gathering evidence, furthering an investigation, or other activities related to criminal law enforcement.

A-304 REDACTED

A-305 PRISONER AND WITNESS TRANSFER

The use of an aircraft to provide transportation of prisoners or civilian witnesses in the furtherance of a criminal investigation, the prosecution of a criminal case, for the purpose of prisoner and / or witness security, or to transport prisoners or such witness for other official reasons related to a criminal case.

A-306 CRIMINAL INVESTIGATION

The use of an aircraft to participate in or to transport passengers to participate in, coordinate, or enhance a criminal investigation.

A-307 SPECIALIZED PERSONNEL AND / OR EQUIPMENT

To transport the SWAT team, laboratory personnel, bomb squad, or other specially trained personnel or equipment in the furtherance of a criminal investigation or other criminal activities.

A-308 QUICK RESPONSE FLIGHTS

This term refers to missions when an aircraft is airborne for the sole purpose of responding rapidly to support, when appropriate, any criminal enforcement situation that occurs while that aircraft is airborne.

A-309 ENFORCEMENT PATROL

To perform line patrol over a designated section of Kern County where violations are frequent. The purpose of this operation is the detection of law violations, abandoned vehicles, vehicle breakdowns, road hazards, etc., and directing ground units to the scene.

A-310 REDACTED

A-400 SEARCH AND RESCUE

A-401 LOST PERSON SEARCH

To conduct an aerial search for a lost or missing person, especially in the rural areas where terrain makes ground searches difficult.

A-402 DOWNED AIRCRAFT

To search for a reported downed or missing aircraft.

A-403 DROWNING VICTIMS

To search for missing or drowned subjects as a result of water accidents.

A-404 RESCUES

To rescue persons marooned during life threatening situations.

A-405 SPECIALIZED PERSONNEL AND / OR EQUIPMENT

For the transportation of rescue personnel, supplies, foods, medicine to the rescue site.

A-500 MEDICAL AND DISASTER

A-501 DELIVERING SUPPLIES

For the emergency delivery of medical supplies, medicines, organs or medical equipment to an appropriate medical facility or accident scene.

A-502 DISASTER RECONNAISSANCE

To reconnoiter any disaster area such as a flooded area, tornado or hurricane damaged area, explosion, fire, etc.

A-503 COMMUNICATIONS COMMAND POST

To establish KCSD communications and area coordination of police activities in the event that communication facilities are disabled.

A-504 SPECIALIZED PERSONNEL AND / OR EQUIPMENT

For the transportation of damage evaluation teams, rescue teams, communication personnel, and their respective equipment.

A-600 MISCELLANEOUS FLIGHTS

A-601 FLIGHT TRAINING

To maintain necessary pilot proficiency, entry-level training, and the upgrading of current ratings, FAA flight currency, and proficiency check flights.

A-602 AIRCRAFT MAINTENANCE

To transport aircraft parts and / or pilots to a maintenance facility. The movement of an aircraft to and from a maintenance facility and test flights to determine proper completion of maintenance procedures.

To transport mechanics to an off-site location for maintenance of an aircraft.

A-603 AIRCRAFT SPECIAL FLIGHTS

The use of an aircraft to transport persons and/or property at the request of the Sheriff.

A-604 EXTRADITION FLIGHTS

The use of an aircraft to transport prisoners to / from other counties / states.

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FIXED WING OPERATIONS

SECTION B

ABBREVIATIONS AND DEFINTIONS

Term	Definition
AC	Advisory Circular
AFD	Airport/Facility Directory
AGL	Above Ground Level
AIM	Aeronautical Information Manual
APC	Annual Proficiency Check
APL	Approved Pilot's List (KERN COUNTY SHERIFF'S OFFICE)
ASRS	Aviation Safety Reporting System
ATC	Air Traffic Control
CFI	Certified Flight Instructor
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FLIGHT CREW	Consists of the PIC, TFO, and any other required personnel on the aircraft.
FSS	Flight Service Station
IMC	Instrument Meteorological Conditions (see AIM Pilot/Controller Glossary)
Movement Area	Airport surface area under air traffic control (see AIM 2-3-6.c)
MEF	Maximum Elevation Figure (VFR Charts)
MSA	Minimum Safe Altitude
MEA	Minimum En-Route Altitude
MOCA	Minimum Obstacle Clearance Altitude
MSL	Mean Sea Level
NASA	National Aeronautics and Space Administration
NOTAM	Notice to Airmen
NTSB	National Transportation Safety Board
OROCA	Off-Route Obstacle Clearance Altitude
Pilot in Command (PIC)	The person who has the final authority and responsibility for the operation and safety of the flight (see FAR 1 and FAR 91.3)
POH	Pilot's Operating Handbook
Shall/must	Material considered mandatory in nature is described with terms such as "shall" and "must."
Should/may	Guidance information is described with terms such as "should" and "may" indicating the actions are desirable or permissive, but not mandatory.
SM	Statute Miles
TFR	Temporary Flight Restriction
VMC	Visual Meteorological Conditions (see AIM Pilot/Controller Glossary)

B-100 OBJECTIVE AND INTRODUCTION

The operational policies and procedures contained in this manual reflect the Kern County Sheriff's Office commitment to the safe conduct of fixed wing operations.

The purpose of this manual is to establish minimum standards beyond those established by FAA regulations, document policies, provide guidelines, and assist flight crewmembers in making decisions for safe and effective flight operations in fixed wing aircraft.

Aircrews will make themselves familiar with the contents of this manual and the operations of fixed wing aircraft of the Kern County Sheriff's Office.

B-101 APPLICABILITY

This manual is applicable to any Kern County Sheriff's Office employee (or affiliate) conducting operations in fixed wing aircraft on behalf of or in furtherance of the business of the Kern County Sheriff's Office.

Furthermore, this manual is applicable to any member of the Kern County Sheriff's Office when conducting any operations in fixed wing aircraft. (Rented or borrowed and in use by the Kern County Sheriff's Office).

B-102 COMPLIANCE

The pilot-in-command is expected to know and comply with the applicable requirements of this manual as well as FAA regulations and practices (i.e., FAR/AIM). In general, the content of this manual has been limited to areas where the requirements are more stringent than FAA regulations; where not stated, the FAA regulation governs.

It is recognized that not all situations can be covered in this manual or FAA regulations and practices. While this material should be followed, compliance is not a substitute for good judgment. The pilot-in-command is expected to take the actions necessary to ensure safety.

B-200 PLANNING AND GROUND OPERATION PROCEDURES

B-201 CHECKLIST USE

The manufacturer's checklist should be used whenever practical. While the PIC is not expected to recall from memory all items in a checklist, items where timely action is required are designated memory items (typically **bold** text) and should be committed to memory.

B-202 PRE-FLIGHT PLANNING AND PREPARATION

Careful pre-flight planning and preparation are keys to completing a safe flight. Mindful of FAR 91.103's requirement for the PIC to be familiar with all available information concerning a flight, pre-flight planning should be as detailed as necessary for the PIC to be confident in completing a safe flight. When in doubt, stop and gather more information, re-evaluate other options, seek council from a more experienced pilot or CFI, delay the flight until conditions are favorable, or cancel the flight. Safety is the priority during all operations.

FAR 91.103 and the following are considered minimum pre-flight preparation measures. Additional planning information may be required based on weather conditions, PIC experience, and familiarity with the airplane, route, and airports to be used.

Airworthiness Status (Inspections, Squawks)

The PIC shall review the maintenance status of the aircraft, including open squawks and upcoming inspections to ensure the flight can be conducted legally and safely (Chapter B-700 of this section).

Weight and Balance and Aircraft Loading

The PIC should review the weight and balance information contained in the aircraft's POH, particularly if the PIC has not flown that aircraft recently or the aircraft has recently undergone modifications. Added/removed equipment may have changed the empty weight/moment.

The PIC should complete a weight and balance calculation for their loading configuration. Where the center of gravity may be affected by fuel burn or the airplane has a maximum landing weight less than the maximum takeoff weight, the calculation should be repeated for the expected loading upon landing. Actual passenger/baggage weights should be used whenever the calculation shows the weight and balance near the POH limits.

Consideration should be given to using safety/cargo netting to secure baggage.

Hazardous cargo is any material that may be dangerous or pose a threat to the aircraft or passengers. The PIC has absolute authority to reject any request for the transportation of hazardous material.

Performance Calculations

The PIC should review expected aircraft performance (esp. takeoff, climb, landing data) in the POH for the conditions of the flight. The PIC should recognize that POH takeoff and landing data are absolute minimums; the PIC should consider adding a margin to POH takeoff and landing data to account for variables such as pilot skill, engine age, runway condition/gradient, weather conditions, etc.

Weather/Airspace Briefing

In accordance with FAR 91.103, the PIC shall obtain a weather briefing for a flight not in the vicinity of an airport. While weather outlets such as ATIS/ASOS, The Weather Channel, and other sources are valuable aids in building a synoptic picture of the weather, they are not considered "official" weather briefing sources as they may not provide information on NOTAMS or TFR's (Temporary Flight Restrictions); TFR's may appear with little advance warning, thereby increasing the importance of a timely official weather briefing.

Risk Assessment Evaluation

The PIC shall review the flight for potential risks and complete a Flight Risk Assessment Tool (FRAT) before every flight. Every attempt should be made to evaluate and reduce potential risks prior to departure.

Flight Log / Manifest

Prior to any flight, the PIC shall log the flight and passenger list on the flight / manifest log.

B-203 PRE-FLIGHT OPERATIONS

Pre-Flight Inspection

A detailed pre-flight inspection shall per the aircraft POH, be conducted prior to the first flight of the day. Subsequent flights on the same day shall at a minimum, consist of a walk-around inspection including a visual check of fluids and oil levels. Anytime the aircraft has been left unattended on the ramp or at an FBO, check for damage that may have occurred while unattended. Damage is possible from towing, a nearby taxiing airplane, prop blast, etc.

Should any discrepancies be noticed during the pre-flight inspection, refer to Chapter B-700 of this section for procedures regarding documentation and a graphical aid in determining whether the flight may be conducted. When in doubt, consult a maintenance technician or CFI.

Regardless of the urgency of the mission, each pilot shall do a walk around inspection of the aircraft prior to engine start.

B204 ENGINE STARTS

Prior to entering the aircraft, the pilot shall complete a walk-around inspection.

Prior to engine start, the PIC should visually clear the propeller arc, turn the rotating beacon "on," visually clear the area around the airplane, and warn nearby personnel of the impending start by announcing "CLEAR PROP." While cranking the engine, the PIC should maintain visual alert outside the cockpit.

Propeller Safety

A propeller should be treated as though the engine may start. The PIC should ensure that their passengers remain clear of the propeller arc on any airplane at all times.

The PIC and ground personnel should take care when in the vicinity of the propeller arc in conducting required duties (i.e., pre-flight, tow-bar, etc.). When such duties are required, ensure:

- Mixture is in idle-cutoff position
- Master switch is OFF
- Ignition switch is OFF (key on person or visible on the glare shield)

Prop Blast

Prior to engine start, the PIC should be mindful of the area behind the airplane prone to prop blast. Loose debris such as gravel, dirt/dust, containers, etc. may be picked up and propelled by prop blast causing potential injury or damage to nearby people, vehicles, or other aircraft. Should there be any question, the airplane should be towed to another area where prop blast would not cause a problem.

Enplaning / Deplaning Passengers

An enplaning/deplaning passenger with the engine running is prohibited except in an emergency. This does not apply to the right engine running while operating the Turbo Commander.

Engine Fire

A fire extinguisher should be available prior to engine starts.

Abnormal Starts

The PIC should follow manufacturer's POH procedures for abnormal engine starts, including hot starts, external power starts, and starting with a low battery.

Hand propping is prohibited.

B-205 AIRCRAFT MOVEMENT

Prior to taxiing, the PIC shall have all appropriate, current charts necessary for the flight including sectionals, LAERC, approach plates, airport diagrams (for airports where they are available) readily available in the cockpit. The use of electronic charts is acceptable providing there is a backup to the electronic chart in the aircraft.

The airport diagram of the departure and arrival airports should be reviewed for runway incursion "hot spots" and to anticipate the taxi route to/from the desired runway, particularly being mindful of any runways the route may cross. In addition, the airport diagram should be reviewed for any changes to taxiway designations.

When in a congested ramp area, taxi speed should be slowed to allow maneuvering clear of other airplanes and obstructions. Where available, ask line-service or another pilot to provide hand-signals or to walk with the wingtips to ensure the aircraft remains clear.

Particular vigilance should be paid when taxiing onto or crossing a runway. Prior to taxiing onto a runway, the PIC should maneuver to be able to visually ensure no conflicting traffic is on approach or on the runway from either direction (a controller's clearance to cross a runway is no substitute for the PIC visually clearing the area).

Taxi Procedures (Non-Towered Airport**)**

Taxi operations at a non-towered airport do not require a taxi clearance. However, the PIC should monitor the radio for other taxi traffic as well as make self-announced radio calls to inform other traffic of their intentions, especially when the taxi route crosses a runway.

"Line Up and Wait" on a runway at a non-towered airport is discouraged. This places the aircraft's blind spot on the approach end of the runway in an uncontrolled environment.

Taxi Procedures (Towered Airport)

Taxi operations in designated non-movement areas do not require a taxi clearance from ATC. However, taxi operations in designated movement areas require a taxi clearance. "Hold short" instructions are to be read-back.

Although a clearance to "taxi to" is a clearance to cross any intersecting runway except the one stated in the clearance (or any "hold short"), the PIC should confirm with ATC prior to crossing the runway. This is in addition to visually clearing the runway per Section B-205.

Anytime the PIC is unsure of their position or clearance route, request progressive taxi instructions. If necessary, stop (not on a runway) and review the airport diagram.

The PIC should bear in mind that a "Line Up and Wait" clearance places the aircraft's blind spot on the approach end of the runway. The PIC should decline a "Line Up and Wait" clearance if they have any doubt of it being conducted safely, particularly during high-traffic operations, at unfamiliar airports, or at night.

B-206 POST-FLIGHT PROCEDURES

Post Flight Inspection

Following the flight and shutdown, the PIC should perform a post-flight inspection of the aircraft. Discrepancies or squawks noted during flight or during the post-flight inspection should be recorded in accordance with the procedures of Chapter B-700 of this section.

The aircraft will be left in a "ready for flight" condition. This includes ensuring the aircraft is fueled, the windscreen is clean, and the aircraft has been wiped down. In the event of overtime, the cleaning of the aircraft can be continued at the first of the next day.

Chocking, Tie-Down and Storing Aircraft

The pilot-in-command is ultimately responsible for the safety of the aircraft when left unattended.

At a minimum and for short durations, the wheel(s) should be chocked, and the parking brake set. However, in the event flight line personnel may tow/reposition the aircraft while unattended -- do not set the parking brake.

Where available, especially for extended durations or overnight, aircraft shall be placed in the hangar. The tug shall be placed along side of the aircraft, out of the wheel and propeller path.

In the event the aircraft cannot be placed in a hangar, it shall be tied-down, with the gust lock, parking brake and chocks in place.

In the event of any of the following, the pilot-in-command should take all reasonable measures to hangar the aircraft, unless all conditions indicate it would be safe to leave the aircraft tied-down outside:

- Severe weather
- Hail
- Windstorm

When making a flight out of county, the PIC should attempt to call the ASU OIC to advise when the PIC has landed safely and an ETA for departure to return.

B-300 FLIGHT OPERATION PROCEDURES

B-301 MINIMUM ALTITUDES

In addition to FAR 91.119 (all operations) or FAR 91.177 (IFR operations), the following en-route altitudes shall apply:

- 1,000' AGL (day)
- 2,000' AGL (night)

Practice emergency procedures (i.e., simulated engine failures) shall not be continued below 1,500' AGL except when conducted at an airport with the intention of landing.

B-302 VFR FLIGHT FOLLOWING

The PIC is encouraged to use VFR radar services ("Flight Following") when available.

B-303 STABILIZED APPROACH

A stabilized approach should be established with the aircraft configured for landing no lower than 500' AGL. A stabilized approach has the aircraft in landing configuration, at an appropriate power setting, with pre-landing checklists and briefings complete, a constant

sink rate, maintaining approach speed to approach speed +10 knots, and on the desired flight path with only small heading and pitch changes required to maintain that path.

A go-around should be executed whenever the aircraft becomes de-stabilized during approach.

B-304 GO-AROUNDS

In addition to executing a go-around in the event of a de-stabilized approach, the PIC shall anticipate and plan for a go-around for each approach/landing, at any point in the approach/landing. Last-minute runway changes, cockpit distractions, potentially conflicting traffic, runway incursions, and other distractions during the high-workload environment of the approach and landing phase of flight increase the possibility of a landing incident, especially in single-pilot operations. Execute a go-around rather than attempt to salvage a bad approach or landing.

B-305 LAND AND HOLD-SHORT OPERATIONS

Before accepting a "land and hold short" (LAHSO) clearance, the PIC should ensure they are familiar with field length requirements, aircraft performance, and LAHSO procedures in the AIM.

LAHSO are prohibited at night, when visibility is less than 3 SM, or on contaminated runways.

B-400 WEATHER

B-401 VFR OPERATIONS

VFR Weather Minimums

Special VFR operations are prohibited unless the PIC is instrument rated.

Comply with the VFR weather minimums of FAR 91.155,

VFR Night Operations

Night VFR operations are prohibited when ceiling/visibility is less than 1,000' AGL and 3 SM.

Night VFR operations in mountainous terrain are prohibited below 2,000' AGL.

B-402 IFR OPERATIONS

Aircraft may depart airports under VFR and then obtain an IFR clearance when appropriate. Arriving aircraft may cancel IFR and precede VFR to the airport; however, it is recommended that an IFR flight plan not be cancelled before landing.

IFR Departures

In order to initiate a takeoff from an airport, the reported weather shall be greater than the lowest approach minimums for that airport.

IFR departures can include IFR, IFR to VFR on top, Special VFR.

IFR Approach and Landing Minimums

Category II and III approaches are prohibited.

Except for training, the PIC should consider deviating to an alternate if two unsuccessful approaches have been attempted to the same runway. At no time will the PIC compromise the capability (i.e., sufficient fuel reserves) to divert to an alternate if necessary.

B-500 FUEL

B-501 FUELING PROCEDURES

A fire extinguisher should be available nearby prior to commencing fueling operations.

Smoking is prohibited within 50 feet of the aircraft, fueling source, or during fueling operations.

Fueling operations are prohibited with passengers aboard.

Fueling operations shall not be conducted during heavy rain (potential for fuel contamination) or with lightning in the vicinity (i.e., thunder can be heard); delay fueling until conditions pass.

Do not depend solely on pump quantity or fuel receipt for determining fuel load. A visual inspection should be used to verify fuel on board.

FBO Fueling

In addition to the general fueling procedures above, following being fueled by line-service or FBO personnel, verify that fuel caps are secure and check for aircraft damage incurred by the fuel truck, hose, nozzle, ladder, etc. (especially if PIC is unable to monitor fueling operations).

Pilot-Fueling

Many airports (particularly smaller ones) offer self-fueling operations. Check with the airport in advance regarding specific pilot-fueling procedures or details (fuel grades, hours, availability, etc.).

It is the pilot's responsibility to ensure fueling is performed properly and safely. If unfamiliar with or uncomfortable with pilot fueling, seek the assistance of knowledgeable line-service, airport employee, or CFI; or plan the flight to use airports with line-service operations.

In addition to the general fueling procedures above, the following apply to pilot fueling:

- Source: Although the pilot often has little control, in general pilot-fueling from an above-ground source is preferred as below-ground tanks can be prone to fuel contamination from ground water
- Bonding: Ensure the aircraft is grounded with a suitable bonding strap. Bonding straps typically are connected to the exhaust pipe or front wheel strut bolt

B-600 CHECKOUTS AND CURRENCY

B-601 RECENCY OF FLIGHT EXPERIENCE

A minimum of 25 flight hours (fixed wing) must be flown per year to retain PIC status. 10 hours must be in KCSO aircraft. If unable to meet these time requirements, the PIC shall complete a Proficiency Check with an approved Kern County Sheriff's Office CFI or designee prior to conducting flight operations.

The PIC shall meet the recency of flight experience, as required by the F.A.R.'s, in regards to the type of flight operation to be conducted, and in the make and model of aircraft to be used, before acting as PIC.

B-602 SIX MONTH PROFICIENCY CHECK

The PIC shall have completed a proficiency check every six months in the most complex aircraft they are qualified to fly to retain flight privileges in that and all less complex aircraft in which they are qualified.

Completion of a pilot certificate or rating in the most complex aircraft for which they are qualified satisfies the six-month proficiency check requirement of this paragraph.

For the purposes of this section, the following aircraft hierarchy applies (most to least complex)…

- Turbo Commander
- 210 (all models, including turbo)
- 206 (all models, including turbo)

B-700 MAINTENANCE PROCEDURES

In accordance with FAR 91.403, the owner/operator is responsible for *maintaining* the aircraft in an airworthy condition. In accordance with FAR 91.7, the PIC is responsible for *determining* that the aircraft is in an airworthy condition.

B-701 SQUAWKS AND DISCREPANCIES

Prior to conducting any flight, the PIC shall check previous open squawks and determine whether the flight can be completed legally and safely with the squawk. Where available, the PIC may also elect to review recently closed squawks for a more complete picture of recent maintenance.

Some squawks may only render an aircraft non-airworthy for certain kinds of operations; for example, an inoperative wingtip navigation/position light may make the aircraft non-airworthy for night flight, but not for a day flight. Refer to Figure B-1.

Should there be any question about a squawk or discrepancy and its effect, the PIC should first attempt to consult Kern County Sheriff's Office maintenance personnel or a CFI. If not available and away from home base, the PIC should consult a local maintenance technician (A&P).

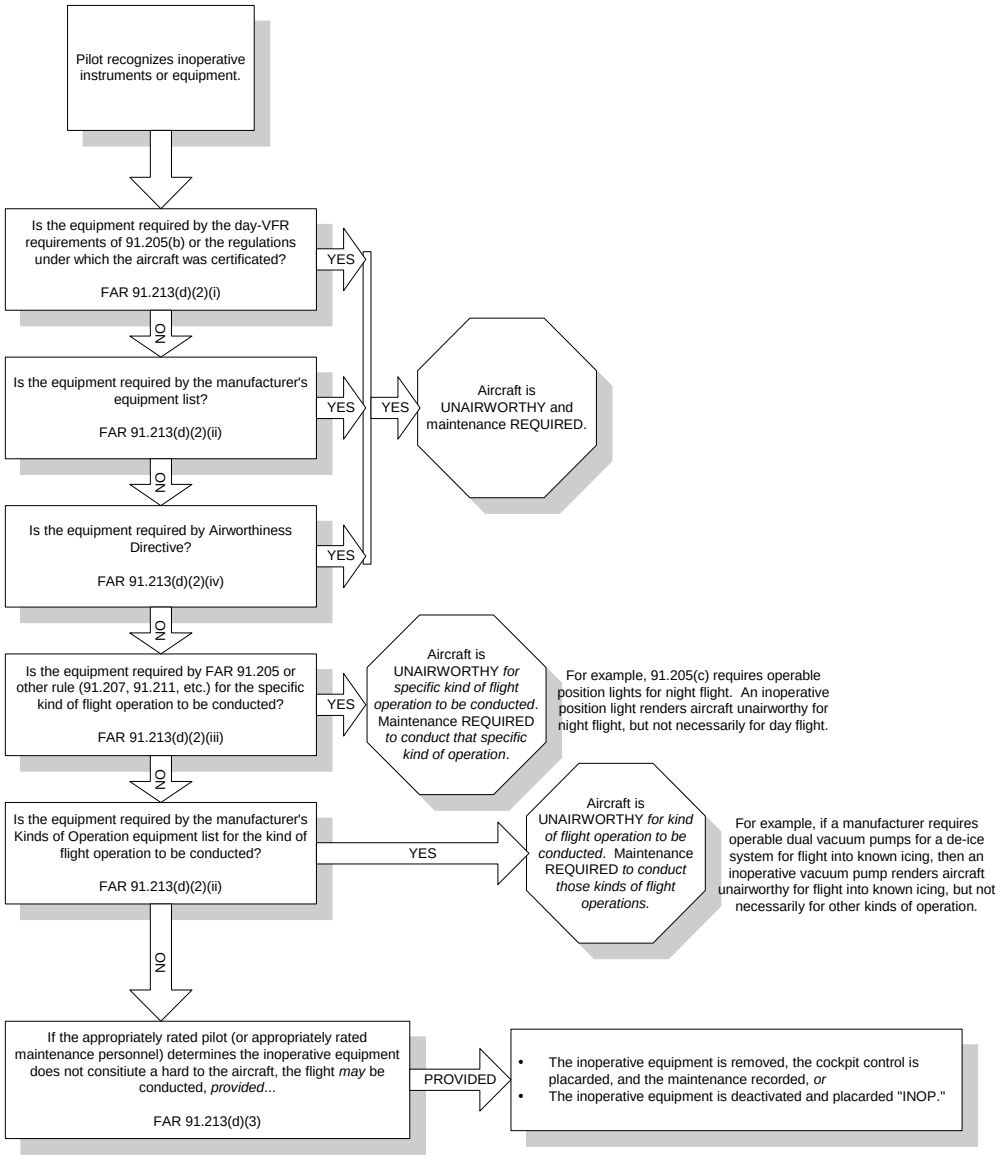
The PIC is expected to discontinue a flight when an un-airworthy condition occurs.

Following the flight, the PIC shall document all squawks encountered during flight. The description should be detailed enough to allow maintenance personnel to troubleshoot and remedy the squawk and also contain contact information for maintenance personnel to contact the squawk author, if needed.

B-702 REQUIRED INSPECTIONS AND TIME LIMITS

Prior to conducting any flight, the PIC shall verify the required inspection due times will not be exceeded during the flight.

Should there be any question about an upcoming inspection of maintenance item, the PIC should consult maintenance personnel.



(Figure B-1) - Decision-Making Flowchart for Inoperative Equipment or Instruments.

B-800 PROHIBITED OPERATIONS

The following operations and practices are strictly prohibited unless dealing with an emergency:

- REDACTED
- Hand propping (Section B-204)
- Night VFR operations in mountainous terrain below 2,000' AGL (Section B-402)
- Smoking within 50 feet of the aircraft, fueling source, or fueling operation (Section B-502)
- Fueling operations with passengers aboard (Section B-502)
- Disabling warning systems unless authorized in the POH
- Flight operations contrary to the Airplane Flight Manual or Pilot's Operating Handbook
- Stalls or slow flight below 1500' AGL
- VFR flight in IMC
- "Scud running" defined as less than 3SM visibility or below 1500' AGL (as a minimum)
- Takeoffs with flaps set at other than those specified in the POH

NOTE: Flights into and out of short and/or unimproved strips should only be accomplished after training / checkout with a CFI, and only after careful study of runway length and width, obstructions, wind, altitude, temperature, weight, and runway slope and condition. A safety margin of 20% (familiar runway) to 50% (unfamiliar or unimproved) should be added to POH numbers.

B-900 SPECIAL FLIGHT OPERATIONS

The following flight operations, because of their degree of complexity or pilot workload, may require additional considerations or training. The training required in this section may be completed by a KCSO approved CFI / check pilot.

B-901 COLD WEATHER OPERATIONS

Prior to flight operations when the ambient temperature is less than 20°F (or as specified in the POH) the PIC shall review and be familiar with the relevant cold weather operation

material contained in aircraft POH. Pre-heating is prohibited while fueling, de-fueling, or in the vicinity of a fueling source.

B-902 MOUNTAIN FLYING

The PIC shall become familiar will all aspects of mountain flying prior to flying a mission. If unsure, the PIC should receive the appropriate training from an approved CFI prior to flying a mission in the mountains.

B-1000 INCIDENT/ACCIDENT PROCEDURES

B-1001 DEFINITIONS AND SITUATIONS REQUIRING IMMEDIATE NOTIFICATION

NTSB 830 contains definitions for incidents and accidents, specifies when immediate NTSB notification is required, and provides the procedures for making that notification. NTSB 830 is available in the FAR/AIM as well as on-line

The requirements of NTSB 830 shall apply.

B-1002 NOTIFICATION PROCEDURES

When involved in an aircraft incident or accident, the PIC shall (to the extent able):

- If required, call "911" to activate local emergency response,
- Notify Kern County Sheriff's Office Air Support Unit OIC and inform them that a Kern County Sheriff's Office aircraft was involved in an incident or accident.
- Be prepared to give the following information to law enforcement investigative personnel:
    - Type and registration of aircraft
    - Name of owner and operator of aircraft
    - Name of PIC
    - Date and time of accident
    - Last point of departure and point of intended landing
    - Position of aircraft with reference to geographical points
    - Number of persons aboard: number fatal, number injured, number uninjured

- Nature of accident, weather, extent of damage (if known)
- Description of hazardous articles aboard

- Air Support Unit OIC will then make the appropriate notifications to initiate Kern County Sheriff's Office appropriate response team

B-1003 POST-INCIDENT/ACCIDENT PILOT ACTIONS

To the extent they are able following an incident/accident, the PIC must assume control of the site in the absence of emergency response personnel or law enforcement officials. The PIC's responsibilities include:

- Secure assistance and provide immediate medical attention to the injured
- If there are fatalities, ensure local law enforcement notify the coroner
- Move away from the aircraft if a hazard exists (i.e., fire)
- Do not return to the aircraft except to assist passengers or for survival
- If in a remote area, prepare signaling methods
- Preserve the integrity of the accident site for investigators. Unless for survival, do not remove any baggage or cargo, reposition switches, doors, etc. Ensure the aircraft is not disturbed until the NTSB/FAA (or equivalent) takes custody of the site
- Secure the names and contact information of eyewitnesses
- Arrange for photographs of the accident

Arrange for cargo to be stored, pending instructions for disposition Refer media requests to Kern County Sheriff's Office Public Information Officer (PIO). The PIC should not make any statements (including statements to the NTSB/FAA) until there is an opportunity to fully recover from the shock of the event, review the details of the event, and if requested, obtain legal advice. The PIC should not fill out any reports without Kern County Sheriff's Office assistance.

B-1100 SECURITY PROCEDURES

Kern County Sheriff's Office operates aircraft and therefore faces risk of criminal or terrorist threats / activity. This section provides guidance on dealing with those threats.

B-1101 REDACTED

B-1102 EXECUTIVE PROCEDURES

An executive flight should be conducted as professionally as possible. Weather permitting, the flight should be conducted conservatively, using smooth roll rates and reasonable bank angles; emphasis should be on comfort, smoothness, speed, and efficiency. Steep climbs and descents, stalls, steep turns, etc. should be avoided.

Start/Taxi Considerations

- Use a checklist to complete all pre-takeoff items
- Since it will be noisy after engine start, the flight should be pre-briefed

Takeoff/Climb Considerations

- Follow recommended climb schedules.
- Where approved in the POH, a reduction in prop RPM will reduced noise levels for noise abatement

Level-off/Cruise Considerations

- Use an altitude based on passenger comfort. Lower altitudes minimize pressure changes; higher altitudes may be smoother and cooler on a hot day
- Set maximum cruise power from the checklist and allow aircraft to accelerate
- Turns should be made with slow smooth roll rates with bank angles less than 20°
- Turn on and engage the autopilot and weather equipment.

Descent/Landing Considerations

- Use shallow descent to minimize pressure changes
- Landing should be smooth and comfortable

Notification of Landing

- Upon arrival at destination, the PIC should as soon as practical, notify on duty personnel of their arrival and the planned return time
- In the event the PIC is unable to contact ASU personnel, leave a message on the OIC phone line. (661) 391-7724

B-1200 TRANSPORTATION OF PRISONERS

B-1201 PRISONERS NOT TRANSPORTABLE

- Prisoners not able to fit normally in a single seat
- Those prisoners with a history of attempt suicides

B-1202 AMOUNT OF PRISONERS TRANSPORTED AT ONE TIME

Under most circumstances, only one prisoner shall be transported per flight.

Two prisoners can be transported under the following circumstances:

- The Pilot in Command and the Transportation Officer agree it can be done safely
- The Pilot in Command is a Sworn Deputy and is armed

B-1203 REDACTED

B-1204 PRISONER POSITION IN THE AIRCRAFT

The Pilot in Command will have the final authority as to where the prisoner will be seated.

Under no circumstances shall a prisoner be seated in the co-pilot's seat.

B-1205 REDACTED

B-1206 REDACTED

B-1207 DEADLY FORCE WHILE AIRBORNE

The Penal Code and Department policy, for the use of deadly force, will be used. It should be noted, and all Department personnel aboard the aircraft are to be briefed, that situations in an airborne aircraft can deteriorate to a life threatening manner much more rapidly than if the same event was occurring on the ground.

B-1208 REDACTED

B-1209 PILOT RESPONSIBILITIES

The Pilot in Command of the aircraft is directly responsible for, and is the final authority as to, the operation of the aircraft, which includes all persons aboard that aircraft.

B-1210 TRANSPORTATION OFFICER RESPONSIBILITIES

The Transportation Officer will be directly responsible for the prisoner.

B-1211 SECURITY MEASURES AT THE AIRPORT

The Pilot in Command will take into consideration security issues when selecting a parking location and interacting with ground personnel at the airport.

B-1212 PRISONER BACKGROUND INFORMATION

The Pilot in Command will see that the following information is obtained on the prisoner:

- Mental state – has the prisoner shown suicidal tendencies or do they have a history of attempt suicides
- Does the prisoner have a fear of flying
- Does the prisoner have motion sickness
- Does the prisoner have any medical issues that may be aggravated by flying

B-1213 PRE-FLIGHT INFORMATION

The Pilot in Command will obtain the following information prior to the flight:

- Body weight of the Transportation Officer(s) and the prisoner
- Weight of any baggage, i.e.: handcuffs, equipment, etc.
- The criminal charges for the prisoner
- Type of chemical agents and location of weapons carried by the Transportation Officer(s)
- Any fear of flying or motion sickness the Transporting Officer(s) may have

B-1214 AIRCRAFT USED TO TRANSPORT PRISONERS

The Cessna 206 may be used when configured in the following manner:

- The factory middle row backseats are installed
- All surveillance equipment, that is transferable between aircraft, is removed

B-1215 REDACTED

B-1300 APPENDICES

B-1301 NASA AVIATION SAFETY REPORTING SYSTEM (ASRS) FORM

Consult ASRS website for electronic copies of the ASRS form as well as additional information regarding the immunity policy of the ASRS system (see also FAR 91.25 and AC 00-46).

B-1302 KERN COUNTY SHERIFF'S OFFICE ACCIDENT REPORTING FORM

Consult the KERN COUNTY SHERIFF'S OFFICE ASU Safety Manual for additional information regarding KERN COUNTY SHERIFF'S OFFICE accident reporting requirements.

B-1303 NTSB ACCIDENT REPORT FORM (NTSB 6120.1/2)

Consult NTSB 830 and the NTSB website for additional information regarding NTSB accident/incident reporting.

B-1304 BIRD/WILDLIFE STRIKE REPORT (FAA FORM 5200-7)

Consult the AIM (section 7-4-3 and Appendix 1) or the FAA website for electronic copies of the form, how to submit a report on-line, and additional information regarding animal strikes.

B-1305 VOLCANIC ACTIVITY REPORTING FORM

Consult the AIM (section 7-5-8 and Appendix 2) or the FAA website for electronic copies of the form.

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HELICOPTER OPERATIONS

SECTION C

ABBREVIATIONS AND DEFINITIONS

Term	Definition
AC	Advisory Circular
AFD	Airport/Facility Directory
AGL	Above Ground Level
AIM	Aeronautical Information Manual
APC	Annual Proficiency Check
APL	Approved Pilot's List (Kern County Sheriff's Office)
ASRS	Aviation Safety Reporting System
ATC	Air Traffic Control
CFI	Certified Flight Instructor
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FSS	Flight Service Station
IMC	Instrument Meteorological Conditions (see AIM Pilot/Controller Glossary)
Movement Area	Airport surface area under air traffic control (see AIM 2-3-6.c)
MEF	Maximum Elevation Figure (VFR Charts)
MSA	Minimum Safe Altitude
MEA	Minimum En-Route Altitude
MOCA	Minimum Obstacle Clearance Altitude
MSL	Mean Sea Level
NASA	National Aeronautics and Space Administration
NOTAM	Notice to Airmen
NTSB	National Transportation Safety Board
OROCA	Off-Route Obstacle Clearance Altitude
Pilot in Command (PIC)	The person who has the final authority and responsibility for the operation and safety of the flight (see FAR 1 and FAR 91.3)
POH	Pilot's Operating Handbook
Shall/must	Material considered mandatory in nature is described with terms such as "shall" and "must."
Should/may	Guidance information is described with terms such as "should" and "may" indicating the actions are desirable or permissive, but not mandatory.
SM	Statute Miles
TFR	Temporary Flight Restriction
VMC	Visual Meteorological Conditions (see AIM Pilot/Controller Glossary)

C-100 OBJECTIVE AND INTRODUCTION

The operational policies and procedures contained in this manual reflect Kern County Sheriff's Office commitment to the safe conduct of helicopter operations.

The purpose of this manual is to establish minimum standards beyond those established by FAA regulations, document policies, provide guidelines, and assist flight crewmembers in making decisions for making safe and effective flight operations in helicopter aircraft.

Aircrews will make themselves familiar with the contents of this manual and the operations of rotor-wing aircraft of the Kern County Sheriff's Office.

C-101 APPLICABILITY

This manual is applicable to any Kern County Sheriff's Office employee (or affiliate) conducting helicopter operations on behalf of or in furtherance of the business of the Kern County Sheriff's Office.

Furthermore, this manual is applicable to any member of the Kern County Sheriff's Office when conducting any helicopter operations. (Rented or borrowed and in use by the Kern County Sheriff's Office).

C-102 COMPLIANCE

The pilot-in-command is expected to know and comply with the applicable requirements of this manual as well as FAA regulations and practices (i.e., FAR/AIM). In general, the content of this manual has been limited to areas where the requirements are more stringent than FAA regulations; where not stated, the FAA regulation governs.

It is recognized that not all situations can be covered in this manual or FAA regulations and practices. While this material should be followed, compliance is not a substitute for good judgment. The pilot-in-command is expected to take the actions necessary to ensure safety.

C-200 PLANNING AND GROUND OPERATION PROCEDURES

C-201 CHECKLIST USE

The checklist should be used for pre-flight as well as each phase of flight and emergency procedure. While the PIC is not expected to recall from memory all items in a checklist,

items where timely action is required are designated memory items and should be committed to memory.

C-202 PRE-FLIGHT PLANNING AND PREPARATION

Careful pre-flight planning and preparation are keys to completing a safe flight. Mindful of FAR 91.103's requirement for the PIC to be familiar with *all* available information concerning a flight, pre-flight planning should be as detailed as necessary for the PIC to be confident in completing a safe flight. When in doubt, stop and gather more information, re-evaluate other options, seek council from a more experienced pilot or CFI, delay the flight until conditions are favorable, or cancel the flight. Safety is the priority during all operations.

FAR 91.103 and the following are considered minimum pre-flight preparation measures. Additional planning information may be required based on weather conditions, PIC experience, and familiarity with the aircraft, route, and airports to be used.

Airworthiness Status (Inspections, Squawks)

The PIC shall review the maintenance status of the aircraft, including open squawks and upcoming inspections to ensure the flight can be conducted legally and safely (See C-701).

Weight and Balance and Aircraft Loading

The PIC should review the weight and balance information contained in the aircraft's POH, particularly if the PIC has not flown that aircraft recently or the aircraft has recently undergone modifications. Added/removed equipment may have changed the empty weight/moment.

The PIC should complete a weight and balance calculation for their loading configuration. Where the center of gravity may be affected by fuel burn or the aircraft has a maximum landing weight less than the maximum takeoff weight, the calculation should be repeated for the expected loading upon landing. Actual passenger/baggage weights should be used whenever the calculation shows the weight and balance near the POH limits.

Consideration should be given to using safety/cargo netting to secure baggage.

Hazardous cargo is any material that may be dangerous or pose a threat to the aircraft or passengers. The PIC has absolute authority to reject any request for the transportation of hazardous material, including SWAT items.

Performance Calculations

The PIC should review expected aircraft performance (esp. takeoff, climb, landing data) in the POH for the conditions of the flight. The PIC should recognize that POH takeoff and landing data are absolute minimums; the PIC should consider adding a margin to POH takeoff and landing data to account for variables such as pilot skill, engine age, runway condition/gradient, weather conditions, etc.

Weather/Airspace Briefing

In accordance with FAR 91.103, the PIC shall obtain a weather briefing (from FSS, DUAT, etc.) for a flight not in the vicinity of an airport. While weather outlets such as ATIS/ASOS, The Weather Channel, and other sources are valuable aids in building a synoptic picture of the weather, they are not considered "official" weather briefing sources as they may not provide information on NOTAMS or TFRs (Temporary Flight Restrictions); TFRs may appear with little advance warning, thereby increasing the importance of a timely official weather briefing.

Risk Assessment Evaluation

The flight crew should review the flight for potential risks. Every attempt should be made to evaluate and reduce potential risks prior to departure. The use of a FRAT (Flight Risk Assessment Tool) shall be used by every crew to identify hazards, risks and available forms of mitigation when a flight is to be conducted outside normal flight operations.

C-203 PRE-FLIGHT OPERATIONS

Pre-Flight Inspection

A detailed pre-flight inspection shall be conducted prior to the first flight of the day. Subsequent flights on the same day shall, at a minimum, consist of a walk-around inspection, including checking fluid levels. Anytime the aircraft has been left unattended on the ramp or at an FBO, check for damage that may have occurred while unattended. Damage is possible from towing, a nearby taxiing airplane, prop blast, etc.

Should any discrepancies be noticed during the pre-flight inspection, refer to Section C-700 for procedures regarding documentation and a graphical aid in determining whether the flight may be conducted. When in doubt, consult a maintenance technician or CFI.

C-204 ENGINE STARTS

Prior to entering the aircraft, the pilot shall complete a walk-around inspection.

Prior to engine start, the PIC should visually clear the tail rotor / engine exhaust area, turn the strobes or navigation lights (as required) on, visually clear the area around the aircraft, and warn nearby personnel of the impending start by announcing "CLEAR." While cranking the engine, the PIC should maintain visual alert outside the cockpit.

Whenever possible, the Tactical Flight Officer (TFO) or other trained personnel should stand outside the aircraft during the start. This is to monitor for any obstructions or personnel nearing the aircraft.

In the event of fire, this person will also assist in extinguishing the fire and / or helping subjects out of the aircraft.

Rotor Safety

A rotor should be treated as though the engine may start. The PIC should ensure that their passengers remain clear of the rotor arc on any aircraft at all times.

Rotor Wash

Prior to engine start, the PIC should be mindful of the area behind the aircraft prone to rotor wash. Loose debris such as gravel, dirt/dust, containers, etc. may be picked up and propelled by prop blast causing potential injury or damage to nearby people, vehicles, or other aircraft. Should there be any question, the helicopter should be towed to another area where prop blast would not cause a problem.

Enplaning / Deplaning Passengers

An enplaning/deplaning non-crew passenger(s) with the engine running is discouraged except in an emergency. Every passenger, civilian or sworn, not familiar with helicopter operations shall be given a safety briefing before flight. A TFO or trained personnel shall escort a passenger at all times near aircraft regardless if the engine is running or not.

Engine Fire

A fire extinguisher should be available prior to engine starts. Should an engine fire occur during start, follow manufacturers recommended POH procedures.

Abnormal Starts

The PIC should follow manufacturer's POH procedures for abnormal engine starts, including hot starts, external power starts, and starting with a low battery.

C-205 AIRCRAFT MOVEMENT

Prior to flight, the PIC shall have all appropriate, current charts necessary for the flight including sectionals, airport diagrams (for airports where they are available) readily available in the cockpit.

The airport diagram of the departure and arrival airports should be reviewed for runway incursion "hot spots" and to anticipate the taxi route to/from the desired runway, particularly being mindful of any runways the route may cross. In addition, the airport diagram should be reviewed for any changes to taxiway designations.

When in a congested ramp area, helicopter pilots should be mindful of possible damage to other aircraft, vehicles, and property during a hover taxi. Keep a safe distance from other aircraft and a low hover to minimize rotor wash.

Particular vigilance should be paid when taxiing onto or crossing a runway. Prior to taxiing onto a runway, the PIC should maneuver to be able to visually ensure no conflicting traffic on approach or on the runway from either direction (a controller's clearance to cross a runway is no substitute for the PIC visually clearing the area).

Taxi Procedures (Non-Towered Airport)

Taxi operations at a non-towered airport do not require a taxi clearance. However, the PIC should monitor the radio for other taxi traffic as well as make self-announce radio calls to inform other traffic of their intentions, especially when the taxi route crosses a runway.

Taxi Procedures (Towered Airport)

Taxi operations in designated non-movement areas do not require a taxi clearance from ATC. However, taxi operations in designated movement areas (see AIM 4-3-18) require a taxi clearance. "Hold short" instructions are to be read-back.

Although a clearance to "taxi to" is a clearance to cross any intersecting runway except the one stated in the clearance (or any "hold short"), the PIC should confirm with ATC prior to crossing the runway.

Anytime the PIC is unsure of their position or clearance route, request progressive taxi instructions. If necessary, stop (not on a runway) and review the airport diagram.

The PIC should bear in mind that a "taxi into position and hold" clearance places the aircraft's blind spot on the approach end of the runway. The PIC should decline a "position and hold" clearance if they have any doubt of it being conducted safely, particularly during

high-traffic operations, at unfamiliar airports, or at night. If the PIC has been "position and hold" for more than approximately 30 seconds, the PIC should query the tower.

C-206 POST-FLIGHT PROCEDURES

Post Flight Inspection

Following the flight and shutdown, the PIC should perform a post-flight inspection of the aircraft. Discrepancies or squawks noted during flight or during the post-flight inspection should be recorded in accordance with the procedures of Section C-701.

The aircraft should be left in a "ready for flight" condition. This includes ensuring the aircraft is fueled, the windscreen is clean, and the aircraft has been wiped down. In the event of overtime, the cleaning of the aircraft should be completed at the first of the next day.

Storing Aircraft

The flight crew is ultimately responsible for the safety of the aircraft when left unattended.

At a minimum, the trailer parking brakes shall be set.

Where available, especially for extended durations or overnight, aircraft should be placed in a hangar.

In the event the aircraft cannot be stored in a hangar, the blades shall be tied down (OH-58 and Huey II). In the event of any of the following, the pilot-in-command should take all reasonable measures to hangar the aircraft, unless all conditions indicate it would be okay to leave the aircraft tied-down outside:

- Severe weather
- Hail
- Windstorm

Equipment

If the flight crew removes equipment prior to a flight, (night sun, FLIR, etc.), they shall replace the equipment at the end of their flight. An exception would be if the next flight is assigned as a training or administrative flight or the next flight crew requested leaving the equipment off.

C-300 FLIGHT OPERATION PROCEDURES

C-301 GO-AROUNDS

The PIC should anticipate and plan for a go-around for each approach/landing, at any point in the approach/landing. Last-minute changes, cockpit distractions, potentially conflicting traffic, runway incursions, and other distractions during the high-workload environment of the approach and landing phase of flight increase the possibility of a landing incident, especially in single-pilot operations. Execute a go-around rather than attempt to salvage a bad approach or landing.

The use of "Sterile Cockpit" procedures is recommended.

C-302 DESTINATION ADVISORY

When making a flight out of county, the PIC should attempt to call or text the ASU OIC or on-duty ASU personnel to advise when the PIC has landed safely. The PIC shall again call or text the ASU OIC or ASU personnel to advise when they are ready for the return trip and their ETA. If notified by text, the ASU OIC or ASU personnel should acknowledge receiving the text with a follow-up text to the PIC.

If unable to contact anyone at the ASU office or leave a message on the phone, the PIC shall call the KCSD communications center and advise of the status.

C-500 FUEL

C-501 FUELING PROCEDURES

A fire extinguisher should be available nearby prior to commencing fueling operations.

Smoking is prohibited within 50 feet of the aircraft, fueling source, or during fueling operations.

Fueling operations are prohibited with passengers aboard.

Fueling operations are not recommended during heavy rain (potential for fuel contamination) or with lightning in the vicinity (i.e., thunder can be heard); delay fueling until conditions pass.

Do not depend solely on pump quantity or fuel receipt for determining fuel load. A visual inspection should be used to verify fuel on board.

FBO Fueling

In addition to the general fueling procedures above, following being fueled by line-service or FBO personnel, verify that fuel caps are secure and check for aircraft damage incurred by the fuel truck, hose, nozzle, ladder, etc. (especially if PIC is unable to monitor fueling operations).

Pilot-Fueling

Many airports (particularly smaller ones) offer self-fueling operations. Check with the airport in advance regarding specific pilot-fueling procedures or details (fuel grades, hours, availability, etc.).

It is the pilot's responsibility to ensure fueling is performed properly and safely. If unfamiliar with or uncomfortable with pilot fueling, seek the assistance of knowledgeable line-service, airport employee, or CFI; or plan the flight to use airports with line-service operations.

In addition to the general fueling procedures above, the following apply to pilot fueling:

- Source: Although the pilot often has little control, in general pilot-fueling from an above-ground source is preferred as below-ground tanks can be prone to fuel contamination from ground water.
- Bonding: Ensure the aircraft is grounded with a suitable bonding strap. Bonding straps are typically connected to wind tie-downs or other unpainted surfaces.

HOT REFUELING

Hot refueling is not recommended for normal operations.

During hot refueling, the following conditions should be met:

- No passengers will be within 50 feet of the aircraft during a hot refuel.
- Fire extinguisher available
- Aircraft is grounded
- The PIC is at the controls

C-600 CHECKOUTS AND CURRENCY

C-601 RECENCY OF FLIGHT EXPERIENCE

A minimum of 50 flight hours (helicopter) must be flown per year to retain PIC status. If unable to meet these time requirements, the PIC shall complete a Proficiency Check with an approved Kern County Sheriff's Office CFI or designee prior to conducting flight operations.

For all operations, a PIC shall have completed 3 takeoffs and landings within the preceding 90 days in that make and model to conduct flight operations as PIC. If unable to meet this requirement the PIC shall become current (emphasizing takeoff and landing procedures) prior to conducting flight operations in that make and model.

C-602 QUARTERLY PROFICIENCY CHECK

The PIC should complete a proficiency check every three months to retain flight privileges.

Pilots are encouraged to complete a phase of the Wings program (see AC 61-91) in conjunction with the quarterly proficiency check. Completion of a pilot certificate or rating in the most complex aircraft for which they are qualified satisfies the quarterly proficiency check requirement of this paragraph.

C-603 LICENSES

All command pilots are required to have while acting as PIC:

- Current second class medical
- Commercial Rating certificate
- Governmental picture Identification

A copy of these certificates and proof of currency will be maintained in each pilot's unit record.

C-604 FLIGHT REVIEW

All pilots are required to have a current flight review.

During the flight review, the CFI will check for currency of the certificates and medical.

C-700 MAINTENANCE PROCEDURES

In accordance with FAR 91.403, the owner/operator is responsible for maintaining the aircraft in an airworthy condition. In accordance with FAR 91.7, the PIC is responsible for determining that the aircraft is in an airworthy condition.

C-701 SQUAWKS AND DISCREPANCIES

Prior to conducting any flight, the PIC shall check previous open squawks and determine whether the flight can be completed legally and safely with the squawk. Where available, the PIC may also elect to review recently closed squawks for a more complete picture of recent maintenance.

As an aid in determining whether a squawk renders an aircraft non-airworthy, Figure C-1 may be used. Some squawks may only render an aircraft non-airworthy for certain kinds of operations; for example, an inoperative wingtip navigation/position light may make the aircraft non-airworthy for night flight, but not for a day flight.

Should there be any question about a squawk or discrepancy and its effect, the PIC should first attempt to consult Kern County Sheriff's Office maintenance personnel or a CFI. If not available and away from home base, the PIC should consult a local maintenance technician (A&P).

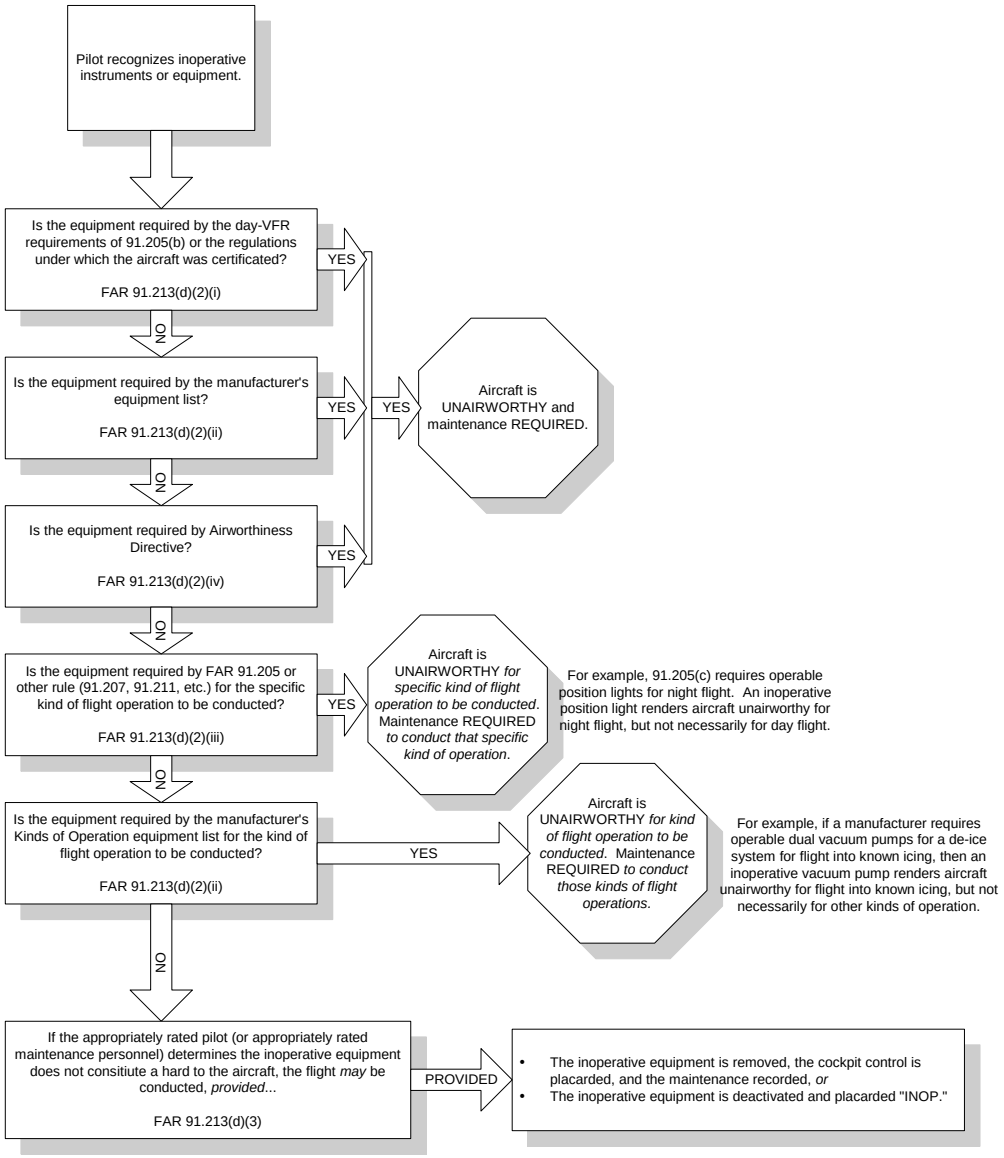
The PIC is expected to discontinue a flight when a non-airworthy condition occurs.

Following the flight, the PIC shall document all squawks encountered during flight. The description should be detailed enough to allow maintenance personnel to troubleshoot and remedy the squawk and also contain contact information for maintenance personnel to contact the squawk author, if needed.

C-702 REQUIRED INSPECTIONS AND TIME LIMITS

Prior to conducting any flight, the PIC shall verify that required inspection or maintenance due dates (or times) will not be exceeded during the flight.

Should there be any question about an upcoming inspection of maintenance item, the PIC should consult maintenance personnel.



(Figure C-1) Decision-Making Flowchart for Inoperative Equipment or Instruments.

C-800 PROHIBITED OPERATIONS

The following operations and practices are strictly prohibited:

- NO CHEMICAL AGENTS WILL BE WORN DURING ANY FLIGHT
- Flight into known or forecasted icing
- Night mountain VFR operations with ceiling or visibility less than 1,000' AGL and 3 SM
- Smoking within 50 feet of the aircraft, fueling source, or fueling operation
- Fueling operations with passengers aboard

- Pre-heating while fueling, de-fueling, or in the vicinity of a fueling source
- In-flight disabling warning systems unless authorized in the POH
- Intentional in-flight engine shutdowns
- Flight operations contrary to the Airplane Flight Manual or Pilot's Operating Handbook
- Practicing auto-rotations without an authorized CFI at or near the controls

C-900 SPECIAL FLIGHT OPERATIONS

The following flight operations, because of their degree of complexity or pilot workload, may require additional considerations or training. The training required in this section may be completed by a departmentally authorized CFI.

C-901 MOUNTAIN OPERATIONS

The PIC shall become familiar will all aspects of mountain flying prior to flying a mission. The PIC shall receive the appropriate training and endorsement from an approved CFI prior to flying a mission in the mountains.

C-902 FORMATION FLIGHT

Prior to formation flight operations, the involved flight crews will brief.

C-903 EXTERNAL LOAD OPERATIONS

The PIC shall be familiar with all equipment being used during external load operations. This includes pre-flight equipment checks, arming, loading, and normal / emergency release operations.

The PIC shall conduct a crew briefing prior to flight operations including, but not limited to:

- Safety equipment; goggles, headgear, gloves etc.
- Emergency procedures such as engine failure or settling with power

Load release during normal and emergency operations The PIC shall inspect all equipment prior to use for operational condition. The PIC shall be aware of aircraft fuel status at all times. Hot refueling is authorized during external load operations and training only after a pre-flight briefing with the refueler.

The fuel operator shall be familiar with all aspects of hot refueling including:

- Grounding of the aircraft
- Grounding of the fuel truck
- Operations around the aircraft
- Fire suppression systems

C-1000 INCIDENT/ACCIDENT PROCEDURES

C-1001 DEFINITIONS AND SITUATIONS REQUIRING IMMEDIATE NOTIFICATION

NTSB 830 contains definitions for incidents and accidents, specifies when immediate NTSB notification is required, and provides the procedures for making that notification. NTSB 830 is available in the FAR/AIM as well as on-line. The requirements of NTSB 830 shall apply.

C-1002 NOTIFICATION PROCEDURES

When involved in an aircraft incident or accident, the PIC shall (to the extent able):

- If required, call "911" to activate local emergency response
- Notify Kern County Sheriff's Office Air Support Unit OIC and inform them that a Kern County Sheriff's Office aircraft was involved in an incident or accident
- Be prepared to give the following information to law enforcement investigative personnel:
    - Type and registration of aircraft
    - Name of owner and operator of aircraft
    - Name of PIC
    - Date and time of accident
    - Last point of departure and point of intended landing
    - Position of aircraft with reference to geographical points
    - Number of persons aboard: number fatal, number injured, number uninjured
    - Nature of accident, weather, extent of damage (if known)
    - Description of hazardous articles aboard
- Kern County Sheriff's Office Air Support Unit OIC will then make the appropriate notifications to initiate Kern County Sheriff's Office's appropriate response team

C-1003 POST-INCIDENT/ACCIDENT PILOT ACTIONS

To the extent they are able following an incident/accident, the PIC must assume control of the site in the absence of emergency response personnel or law enforcement officials. The PIC responsibilities include:

- Secure assistance and provide immediate medical attention to the injured
- If there are fatalities, ensure local law enforcement notify the coroner
- Move away from the aircraft if a hazard exists (i.e., fire)
- Do not return to the aircraft except to assist passengers or for survival
- If in a remote area, prepare signaling methods
- Preserve the integrity of the accident site for investigators. Unless for survival, do not remove any baggage or cargo, reposition switches, doors, etc. Ensure the aircraft is not disturbed until the NTSB/FAA (or equivalent) takes custody of the site
- Secure the names and contact information of eyewitnesses
- Arrange for photographs of the accident

Arrange for cargo to be stored, pending instructions for disposition Refer media requests to Kern County Sheriff's Office Public Information Officer (PIO). The PIC should not make any statements (including statements to the NTSB/FAA) until there is an opportunity to fully recover from the shock of the event, review the details of the event, and if requested, obtain legal advice. The PIC should not fill out any reports without Kern County Sheriff's Office assistance.

C-1100 SECURITY PROCEDURES

Kern County Sheriff's Office operates aircraft and therefore faces risk of criminal or terrorist threats / activity. This section provides guidance on dealing with those threats.

C-1101 REDACTED

C-1200 NIGHT VISION GOGGLES (NVG)

Night Vision Goggles (NVG) can enhance the safety of night flight missions by providing visual information not normally available to the unaided eye. Due to the limitations inherent with Night Vision Goggles that could inhibit flight safety, the following policy will be used.

It will be the policy of the Kern County Sheriff's Air Support Unit that Night Vision Goggles will not be used to expand mission capabilities that would otherwise be flown unaided. The only exceptions will be during mountain transitions under NVG as outlined in C-1202 and training with an instructor pilot.

C-1201 CURRENCY TRAINING

- NVG proficiency training will be conducted every 90 days, or as soon as practical after a missed training session
- Proficiency training will be conducted as needed during normal proficiency training sessions and times adjusted to accommodate a night flight

C-1202 MOUNTAIN TRANSITION USE

- Pilots are encouraged to maintain a minimum of 1,000 feet AGL while transitioning the mountains
- When possible, transitions should be near a highway or major road

C-1203 PILOT IN COMMAND

- New pilots must complete an approved 8 hour ground school and 5 hours of flight training by an approved NVG instructor
- Prior to flying under NVG without a safety pilot, (lifting the night time restriction), the PIC must pass an approved NVG pilot course

C-1204 TFO QUALIFICATIONS

- The TFO should complete an approved NVG course as soon as practical

C-1205 NVG SECURITY DURING OFF SITE LANDINGS

- NVG will not be left unattended in an aircraft

C-1206 NVG CARE

- Personnel using NVG shall be responsible for the proper use and care.
- Unassigned NVG will be stored in the locked safe after use.
- NVG should be stored with fresh batteries as needed

C-1300 APPENDICES

C-1301 NASA AVIATION SAFETY REPORTING SYSTEM (ASRS) FORM

Consult the ASRS website for electronic copies of the ASRS form as well as additional information regarding the immunity policy of the ASRS system (see also FAR 91.25 and AC 00-46).

C-1302 KERN COUNTY SHERIFF'S OFFICE ACCIDENT REPORTING FORM

Consult the Kern County Sheriff's Office ASU Safety Manual for additional information regarding Kern County Sheriff's Office's accident reporting requirements.

C-1303 NTSB ACCIDENT REPORT FORM (NTSB 6120.1/2)

Consult NTSB 830 and the NTSB website for additional information regarding NTSB accident/incident reporting.

C-1304 BIRD/WILDLIFE STRIKE REPORT (FAA FORM 5200-7)

Consult the AIM (section 7-4-3 and Appendix 1) or the FAA website for electronic copies of the form, how to submit a report on-line, and additional information regarding animal strikes.

C-1305 VOLCANIC ACTIVITY REPORTING FORM

Consult the AIM (section 7-5-8 and Appendix 2) or the FAA website for electronic copies of the form.

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MAINTENANCE OPERATIONS

SECTION D

D-100 MAINTENANCE PROGRAM

The objective of the maintenance program shall be to ensure compliance with the maintenance procedures required by FAR's, FAA air worthiness directives, service bulletins, and currently revised manufacturers maintenance manuals.

D-101 MAINTENANCE GUIDELINES

- Approved facilities: If possible, all maintenance will be performed at the Kern County Sheriff facilities hangar, unless under contract for warranty.
- Prior to maintenance being performed, the OIC, the maintenance supervisor or their designee will approve it.
- The pilot in command may approve maintenance performed outside the facility on an emergency basis if unable to contact the OIC / maintenance personnel.

D-102 MAINTENANCE REQUIREMENTS

- Aircraft will be maintained in strict compliance with procedures established in the appropriate maintenance manuals. These manuals contain the time limit intervals and requirements for scheduled and unscheduled maintenance checks.
- All certificated aircraft will have an annual inspection as required by FAA form 8050-3 Airworthiness Certificate issued. Non-certificated aircraft will follow a phase type of inspections as appropriate to the aircraft.
- All aircraft, engines, propellers and related components shall have the required hourly inspection complied with at intervals called out in the appropriate maintenance manuals, manufacturers service bulletins, and / or Airworthiness Directives.
- All aircraft shall have the required inspections as per the FAR's (transponder, altimeter, pitot-static, etc.).

D-103 MAINTENANCE PERFORMED BY PILOTS

- Pilots are allowed to perform preventative maintenance on aircraft as per FAR 43.3, and FAR 43, appendix A, items 1 – 32

- Regardless of the maintenance pilots can perform, pilots shall only perform that maintenance allowed in FAR 43.3, and FAR 43, appendix A, items 1 – 32, and as instructed by any Airworthiness Directives compliance instructions
- Pilots will only perform maintenance they have been specifically trained to do by approved air support unit mechanics or their designee
- Contact air support unit maintenance personnel if there is any doubt about maintenance to be performed by a pilot

D-200 MAINTENANCE SUPERVISOR

The maintenance supervisor is directly responsible for all aspects of aviation maintenance for both fixed wing and helicopter aircraft operated by the Kern County Sheriff's Office – Air Support Unit.

D-201 CHAIN OF COMMAND

The maintenance supervisor reports directly to the Air Support Unit OIC and will keep him / her appraised of the status all aircraft assigned to the air unit.

D-202 DUTIES / RESPONSIBILITIES

- Coordinate the availability of aircraft to best meet the needs of flight operations
- Plan maintenance requirements to best utilize man-hours and the missions at hand
- Perform required scheduled inspections, and maintenance, schedule component overhaul, and / or time retirement replacements and aircraft alterations
- Maintains all required FAA documentation
- Monitors purchase of parts and services
- Trains and advises mechanics
- Consults with manufacturer and technical representatives as necessary to provide support as needed
- Assist the air support unit OIC with budgeting
- Evaluates and justifies maintenance equipment needs
- Directs development of special equipment

- Maintains a technical information library for all aircraft and accessories assigned to the air support unit
- Maintains all aircraft, engine, propeller and related aircraft components maintenance and parts manuals, manufacturers Service Bulletins, and Airworthiness Directives updated in libraries as revised by the manufacturers and FAA current revisions
- Supervises the maintenance of tools and equipment and maintains a record of tools and equipment requiring certified calibration
- Maintains a self-training program to keep abreast of continuing advancements of the industry
- Maintains Inspection Authorization (I.A.) certification
- Applies and monitors safety techniques for all aircraft maintenance and flight operations

D-300 MAINTENANCE PERSONNEL

Coordinate with the maintenance supervisor and assist with all inspections, repairs, and alterations of aircraft and components.

Maintenance personnel are responsible for the upkeep and accuracy of all aircraft records and files for the work performed.

D-301 DUTIES / RESPONSIBILITIES

- Plan maintenance requirements to best utilize man-hours
- Perform inspections, repairs, and alterations of aircraft and components
- Consults with manufacturer and technical representatives as necessary to provide support as needed
- Evaluates and justifies maintenance equipment needs
- Directs development of special equipment
- Supervises the maintenance of tools and equipment
- Maintains a self-training program to keep abreast of continuing advancements of the industry
- Applies and monitors safety techniques for all aircraft maintenance and flight operations

- Keeps working area and equipment in a clean, orderly fashion

D-400 MAINTENANCE TOOLS AND EQUIPMENT

- Maintenance tools and equipment shall be maintained in good repair
- Any discrepancies noted should be brought to the attention of the maintenance supervisor or the OIC
- Tools specifically designed for a certain task may not be used for other tasks
- Mechanics shall have a system for tool accountability after working on aircraft
- Mechanics will be responsible for removing all tools after maintenance is performed, prior to the engines being started. This does not refer to equipment being used for in progress maintenance such as rotor system tracking and balancing

D-500 MAINTENANCE TEST FLIGHTS

- Only pilots who have been certified by the chief instructor pilot, as pilot in command in the appropriate aircraft will perform maintenance test flights
- Only the chief instructor pilot or his/her designee will perform maintenance test flights after major maintenance, repairs, and alterations
- Major maintenance, repairs, or alterations requiring test flights are listed below but not limited to:
    - Airframe repairs or alterations
    - Replacement of aircraft and engine components
    - Rigging of flight controls
    - Equipment installation for proper operation
    - Aircraft vibration levels
- No passengers are allowed on maintenance test flights. Only the test pilot and a maintenance person may go on maintenance test flights

NOTE: For the purposes of training, a second maintenance crewmember or second test pilot may go on a flight, but only after the initial test flight has been performed and the aircraft is deemed airworthy.

D-600 MAINTENANCE REPAIR RECORDS

Personnel authorized to make repairs are required to make an appropriate record entry anytime maintenance is performed.

All current maintenance records shall be kept in the maintenance office. The maintenance supervisor is responsible for the accuracy of the records and their safe storage.
Personnel performing any maintenance shall:

- Record the date maintenance was performed
- Record aircraft Total Time in service
- A brief description of the work performed
- Record a signature and pilot license number (if required) in the appropriate place
- Maintenance personnel or an FAA approved Repair Station representative's signature approving aircraft for return to service (if required)
- Type of certificate and number held by maintenance personnel or an FAA approved Repair Stations' certificate number

D-601 RECORDS OF MAINTENANCE TO BE MAINTAINED ARE:

- Annual inspections
- Scheduled hourly inspections
- Special inspections i.e.: Service Bulletins / A.D.
- Current total time remaining for components due overhaul or retirement
- Component total time in service since last overhaul or total time remaining due retirement status for each aircraft, engine, propeller, and related aircraft components
- Aircraft, engine, propeller, and related aircraft components Total Time in service
- Maintain a current status of manufactures issued Service Information i.e.: bulletins, letters and notices as revised for each aircraft, engine, propeller, and related aircraft components. Current A.D. listing as revised for each aircraft, engine, propeller, and related aircraft components
- Manufacturers issued Service Information i.e.: bulletins, letters, notices, and FAA issued A.D. for each aircraft, engine, propeller, and related aircraft components requiring recurring action: date, aircraft total time when complied, brief description of maintenance action taken with date or aircraft time next due is to be recorded

D-700 SCHEDULED MAINTENANCE

Advanced planning and coordination will ensure that all scheduled maintenance is accomplished without adversely affecting mission capabilities and aircraft downtime to include the following:

- Last minute schedule changes
- Emergency call-outs
- Personnel availability
- Uncontrollable acts of nature

The maintenance supervisor or his/her designee will provide a list of aircraft scheduled to fly. This will be made in coordination with upcoming missions, (i.e. training, external loads, etc.) and if possible, ride-a-long scheduling and pilot availability. Scheduling is subject to change as scheduled / unscheduled missions are changed.

The maintenance supervisor should be made aware in advance of scheduled training such as external load, hoist rescue, fast rope, pilot re-currency, etc. This is to ensure an aircraft is available for the required training.

This list will be posted in a position readily accessible to the pilots for identification on which aircraft will be used as primary, and backup. The maintenance supervisor or his designee shall make changes to the posted list due to mission changes as soon as practical.

The list should include both fixed wing and helicopter scheduling.

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GROUND EQUIPMENT OPERATIONS

SECTION E

E-100 OBJECTIVE

Provide guidelines for the safe use and storage of ground handling equipment in the working and non-working environment at the hangar, ramp and off-site locations.

E-200 GROUND HANDLING EQUIPMENT

E-201 START CART / APU USE

- The start cart or auxiliary power unit (APU) is a wheeled cart that is used to provide power to aircraft, helicopter or fixed wing
- The APU can be used to provide electricity for a start on either the helicopter or fixed wing aircraft. It should also be used when training with aircraft systems, (i.e. Moving map, FLIR, GPS) for extended periods of time. It can also provide power to the aircraft during maintenance procedures
- It can be used at four locations in or out of the KCSO hangar. There is one outlet at each pad outside the hangar. There are two outlets inside the hangar, one on the north wall, one on the south wall
- To operate, plug the APU into the power receptacle. Place the other cord into the aircraft, making sure to stay clear of propellers and rotors. Turn the cart power on. After the cart reaches 28 volts, turn the toggle switch on to power the aircraft

E-202 APU STORAGE

- When the cart is stored in the hangar, it should be stored away from aircraft and other obstacles
- Inside the hangar, the normal storage place is in the N/E corner of the main hangar along the cabinets

E-203 FUEL TRUCKS

- All air support unit personnel should become familiar with the fuel truck systems, its' use, and the location of fire extinguishers aboard the truck

E-204 FUEL TRUCK PARKING

- When not in use, the fuel trucks will be locked at all times when parked in their assigned parking spaces at the south side of the hangar, or when re-positioned to the East side of the hangar during helicopter activities
- When in use, the fuel trucks should be parked in a safe location away from taxiing or towed aircraft
- When used in off-site locations, the operator of the fuel trucks will ensure that the vehicle is secured at all times. When the operator is not in the immediate vicinity of the vehicle, he / she will make sure the vehicle is locked and safely parked
- Department personnel operating KCSO fuel trucks off the headquarters facility must possess the appropriate Class Commercial Driver License as well as a Hazmat Endorsement

E-205 TRACTORS / TUGS / TRAILERS / FORK LIFT

- All air support unit personnel should become familiar with the safe operation of each piece of equipment prior to using it. Care should be taken during the starting of this equipment, as some may be able to start up in gear. This effect could cause an aircraft to be moved into a hazardous position causing damage to the aircraft
- It is recommended that the parking brake be utilized on all tugs

E-206 AIRPLANE TUGS

- There are two portable hand controlled power tugs used to move the fixed wing aircraft. Each tug is set for a specific aircraft. Be sure to use the correct one or to properly adjust the tug for the aircraft you intend to move

E-207 WHEELED CARTS

- There are several types of wheeled carts assigned to the air support unit. Types of these carts include the APU, work carts, rotor blade and aircraft stands, mechanic's toolboxes, and the night sun / FLIR storage cart
- Whenever possible, these carts should be stored inside the hangar, and at a location that is out of the way of normal foot traffic and aircraft handling areas

- Due to the possibility of movement with a wheeled cart, the carts should be stored away from aircraft with the wheels chocked or brakes applied if so equipped

E-208 PORTABLE FIRE EXTINGUISHERS

- There are several portable fire extinguishers located throughout the hangar and maintenance areas. All air support personnel should be familiar with each location and how to use them
- If a fire extinguisher is found to be out of inspection or is undercharged, that extinguisher should be reported to maintenance and serviced as soon as possible

E-209 FOAM FIRE EXTINGUISHER

- There are three fire suppression tanks containing AFFF – Aqueous Film Forming Foam at 6%.
    - Two 3-gallon tanks and a 30-gallon tank

Fighting fires

Start spraying nearest flames, building a layer, working away from you.

Start a new angle and fight fire the same way until fire is out.

Servicing large system

- Foam systems will be re-charged as necessary
- Foam will be replaced every two (2) years
- Tanks will be hydrostatic tested every five (5) years
- Large tank mixing: 2 gallons of AFFF to 28 gallons of water

Use of systems

The large tank will be stored in the hangar with the wheels chocked.

The small tanks will be mounted on the tugs so as to be available during starts. If only one small tank is available, it should be mounted on the tug being used or in the bed of the fuel truck if being used off-site.

Discharge

In the event a tank is discharged, (except during a training session), a memo shall be made to the safety officer. The memo should include why the tank was discharged, what damage occurred to any equipment, time / date of occurrence, etc.

The Safety officer will fill out a hazard investigation form and submit it to the OIC.

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PILOT TRAINING OPERATIONS

SECTION F

F-100 FLIGHT INSTRUCTORS

F-101 CHIEF FLIGHT INSTRUCTOR

The Air Support Unit OIC will designate the Chief Flight Instructor.

The Chief Flight Instructor is responsible for overseeing and coordinating all aspects of helicopter flight training, including the training responsibilities of the unit's other certificated flight instructors.

The Chief Flight Instructor must have the ability to train pilots in professional piloting skills, including emergency procedures and administer proficiency checks to maintain a high level of skill, and to evaluate a pilots' technical performance.

The Chief Flight Instructor is responsible for the development and implementation of the flight operations training program

F-102 CERTIFIED FLIGHT INSTRUCTORS

Air Support Unit Flight Instructors must possess a current Fight Instructor's Certificate and at least a second-class Medical Certificate.

Collateral Duties / Responsibilities:

- Mission pilot – patrol, SAR, special assignments
- Assist safety officer in duties and / or investigations

F-200 FIXED WING COMMAND PILOT REQUIREMENTS (MINIMUMS)

F-201 QUALIFICATIONS:

Fixed wing pilots assigned to the air support unit shall have the following requisites:

- Commercial ASEL rating
- Instrument airplane rating
- PIC sign-off by KCSO CFII
- Complex endorsement
- High performance endorsement
- Second class medical (minimum)

- 350 hours total time
- 100 hours Category / Class
- 50 hours transition / familiarization training (may be included with above 100 hours).
- Approval of the Chief Flight Instructor and the Air Support Unit OIC

F-300 HELICOPTER COMMAND PILOT REQUIREMENTS (MINIMUMS)

F-301 REQUIREMENTS

Helicopter pilots assigned to the air support unit shall have the following requisites:

- Commercial Helicopter rating
- Second class medical (minimum)
- 350 hours total time
- 100 hours Category / Class
- Approval of the Chief Flight Instructor and the Air Support Unit OIC

F-400 PILOT CANDIDATE SELECTION

F-401 PILOT SELECTION

ASU Assigned Personnel

The Air Support Unit OIC and the Chief Flight Instructor shall evaluate and select Air Support Unit personnel that have passed their ASU probation status (6 months) for pilot positions.

Department Personnel

The Air Support Unit OIC and the Chief flight instructor shall evaluate and select any appropriately rated departmental employees not currently assigned to the air support unit that have passed their probation status for pilot positions.

Civilians

The Air Support Unit OIC and the Chief Flight Instructor shall evaluate and select civilian pilots applying for any pilot position, full or part time.

- Minimum flight hours for civilian pilots shall be 1500 hours (fixed wing or helicopter). Prior ASU Command Pilots (Retired) will be evaluated on a case-by-case basis.

- Minimum 500 hours turbine helicopter.

Pilot candidates shall be evaluated on their overall flight operations experience, aviation experience and proficiency as an observer.

F-500 PRIVATE PILOT TRAINING – FIXED WING

Air Support Unit personnel interested in pursuing a private ASEL rating should obtain that rating on their own.

ASU fixed wing aircraft shall not be used for primary training. The aircraft use involved with primary training is hard on the aircraft and better left to an outside provider. Solo flight with Air Support Unit aircraft would require both high performance and complex endorsements.

F-600 PRIVATE PILOT TRAINING – HELICOPTER

Air Support Unit personnel who have been selected to begin primary helicopter training shall be scheduled training days as allowed by the Air Support Unit operations schedule. Scheduling of training days / nights will be made by the Air Support Unit OIC. Training will be under the direction of the Chief Flight Instructor. Training will be conducted by an Air Support Unit designated CFI.

F-601 SOLO FLIGHT

No solo flight will occur by the student pilot until:

- The student is ready
- CFI recommends it to the Chief Flight Instructor
- The Chief Flight Instructor reviews the training and approves it
- The Chief Flight Instructor may require an evaluation flight with the student pilot prior to allowing solo flight.
- The private pilot written examination will be completed prior to any solo flight.
- A pre-solo written examination, consistent with the aircraft to be used, will be completed prior to any first solo flight.
- The student will have a minimum of a student pilot license with a current second class medical prior to solo flight.

- No maximum number of hours will be designated for training.

F-602 CFI RESPONSIBILITIES

It is the responsibility of the assigned flight instructor to be able to evaluate the student pilots' abilities to:

- Comprehend the instruction given,
- Successfully demonstrate the flight maneuvers,
- Successfully complete the training program.

F-603 TRAINING PROGRESSION

Should learning difficulties be encountered, the flight instructor shall evaluate and confer with the chief flight instructor and / or the air unit OIC whether training should continue. Additional training shall be evaluated on a case-by-case basis.

During the course of training, the chief flight instructor may give a series of phase check-rides to the student pilot.

F-700 COMMERCIAL PILOT TRAINING – FIXED WING

F-701 PROCEDURE

- A private pilot (ASEL) assigned to the Air Support Unit interested in upgrading to a commercial (ASEL) status can make a request to the Air Support Unit OIC
- Air Support Unit OIC, along with the Chief Flight Instructor, shall make the decision whether to allow the subject to advance to the commercial pilot level training
- Commercial flight training shall be either in-house or at a designated facility as determined by the Air Support Unit OIC in coordination with the chief flight instructor
- Each candidate is responsible for completing the commercial ASEL written test
- Training will be conducted as the operations schedule allows

F-702 CFI RESPONSIBILITIES

It is the assigned flight instructors' responsibility to be able to evaluate the private pilots' abilities to:

- Comprehend the instruction given,
- Successfully demonstrate the flight maneuvers,
- Successfully complete the training program.

F-703 TRAINING PROGRESSION

Should learning difficulties be encountered, the Flight Instructor shall evaluate and confer with the Chief Flight Instructor and / or the air unit OIC whether training should continue. Additional training shall be evaluated on a case-by-case basis.

During the course of training, the chief flight instructor may give a series of phase check-rides to the private pilot / student pilot.

F-800 COMMERCIAL PILOT TRAINING – HELICOPTER

F-801 PROCEDURE

- A private helicopter pilot assigned to the Air Support Unit interested in upgrading to a commercial pilot status can make a request to the Air Support Unit OIC
- Air Support Unit OIC shall make the decision, along with the chief flight instructor, whether to allow the subject to advance
- Training will be conducted as the operations schedule allows

F-802 CFI RESPONSIBILITIES

It is the responsibility of the assigned flight instructor to be able to evaluate the private pilots' abilities to:

- Comprehend the instruction given
- Successfully demonstrate the flight maneuvers
- Successfully complete the training program

F-803 TRAINING PROGRESSION

Should learning difficulties be encountered, the flight instructor shall evaluate and confer with the chief flight instructor and / or the air unit OIC whether training should continue. Additional training shall be evaluated on a case-by-case basis.

During the course of training, the chief flight instructor may give a series of phase check-rides to the private pilot.

F-900 INSTRUMENT PILOT TRAINING

F-901 PROCEDURE

- A private or commercial ASEL pilot assigned to the Air Support Unit wanting to add an instrument rating can make a request to the Air Support Unit OIC to upgrade a rating
- Training for an instrument rating shall be either in-house or at a designated facility as determined by the Air Support Unit OIC in coordination with the Chief Flight Instructor
- Training will be conducted as the operations schedule allows
- It is up to that pilot to complete the instrument rating written test

F-902 CFI RESPONSIBILITIES

It is the responsibility of the assigned flight instructor to be able to evaluate the private pilots' abilities to:

- Comprehend the instruction given
- Successfully demonstrate the flight maneuvers
- Successfully complete the training program

F-903 TRAINING PROGRESSION

Should learning difficulties be encountered, the flight instructor shall evaluate and confer with the Chief Flight Instructor and / or the air unit OIC whether training should continue. Additional training shall be evaluated on a case-by-case basis.

During the course of training, the Chief Flight Instructor may give a series of phase check-rides to the private pilot.

F-1000 CFI TRAINING

F-1001 PROCEDURE

- A commercial pilot assigned to the Air Support Unit interested in upgrading to CFI status can make a request to the Air Support Unit OIC
- Air Support Unit OIC shall make the decision, along with the Chief Flight Instructor, to advance the subject to the next rating
- Training will be conducted as the operations schedule allows
- It is up to the prospective CFI to complete both written tests (FOI / CFI)

F-1002 CFI RESPONSIBILITIES

It is the responsibility of the assigned flight instructor to be able to evaluate the commercial pilots' abilities to:

- Comprehend the instruction given,
- Successfully demonstrate the flight maneuvers,
- The likelihood of successful completion of the training program.

F-1003 TRAINING PROGRESSION

Should learning difficulties be encountered, the flight instructor shall evaluate and confer with the chief flight instructor and / or the air unit OIC whether training should continue. Additional training shall be evaluated on a case-by-case basis.

During the course of training, the chief flight instructor may give a series of phase check-rides to the commercial pilot.

F-1100 EXTERNAL LOAD TRAINING

F-1101 PROCEDURE

- A command pilot assigned to the Air Support Unit interested in external load operations can make a request to the Air Support Unit OIC
- Air Support Unit OIC shall make the decision, along with the chief flight instructor, whether to allow the subject to begin training
- External load training will be conducted as the operations schedule allows. Primary training will normally utilize an outside provider. Secondary training and evaluation will be done by the chief instructor pilot or his designee

F-1102 CFI RESPONSIBILITIES

It is the responsibility of the assigned flight instructor to be able to evaluate the pilots' abilities to:

- Comprehend the instruction given,
- Successfully demonstrate the flight maneuvers,
- Successfully complete the training program.

F-1103 TRAINING PROGRESSION

Should learning difficulties be encountered, the flight instructor shall evaluate and confer with the chief flight instructor and / or the air unit OIC whether training should continue. Additional training shall be evaluated on a case-by-case basis.

Restrictions may be placed on the pilot such as no mountains or others as deemed necessary by the chief instructor pilot or his / her designee.

F-1200 HUEY II TRANSITION

F-1201 PROCEDURE

A commercial pilot assigned to the Air Support Unit who meets the minimum experience and qualifications can make a request to the Air Support Unit OIC to transition to the medium lift Huey II.

F-1202 TRAINING REQUIREMENTS

During the Huey II transition, the pilot in training should receive ground school and a minimum of 20 hours of flight instruction that includes:

- Normal and emergency maneuvers
- Mountain operation maneuvers and procedures

F-1203 CERTIFICATION

The requesting pilot must possess the following certificates and endorsements:

- A commercial helicopter pilot certificate.
- A current second-class medical certificate.
- Vertical reference – Precision long line training certificate.
- Mountain operations check out by an ASU CFI.

Exception: In the event a requesting pilot is unable to meet the vertical reference training, the following restrictions will apply:

- Long line external load operations
- Hoisting operations
- Fast rope operations

F-1204 FLIGHT EXPERIENCE

The requesting pilot must have the following minimum flight experience:

- 1500 hours total helicopter time.
- 1200 hours helicopter Pilot-In-Command time.
- 1000 hours helicopter turbine time.

F-1300 PILOT RESTRICTIONS

Upon receiving initial command pilot status, all newly rated pilots, at the direction of the Chief Flight Instructor and / or Air Support Unit OIC, may have flight restrictions. The restrictions may include, but are not limited to the following:

- No night flights without a safety pilot
- No passengers
- No mountain flying without a mountain qualified safety pilot.
- Any restrictions the chief flight instructor deems necessary for the safety of the flight, flight crew, or the Air Support Unit.
- During the transition from commercial fixed wing working on the instrument rating the following restrictions apply:
    - No passengers outside of a 50 NM radius of BFL,
    - No night flights with passengers.

F-1301 RESTRICTION REMOVAL PROCEDURE

Making a request to the Chief Flight Instructor may lift these restrictions. The Chief Flight Instructor will make a determination after examining whether the pilot has: satisfied the additional training requirements, has the additional flight experience required or the comfort level of the requesting pilot is such that a restriction can be lifted.

The Chief Flight Instructor will make a recommendation to the Air Support Unit OIC whether or not to lift the restriction.

The Air Support Unit OIC will make the final decision to lift or remove a restriction.

A copy of an updated pilot status will be completed and added to the pilots' flight jacket.

F-1400 PILOT RECORD / TRAINING JACKETS

A record keeping system of pilot activities shall be maintained and updated regularly.

Pilots are responsible for keeping their information current in the file.

Records shall include the following (if applicable):

- Emergency contact information

- Department pilot certifications
- Copy of pilot license
- Copy of CFI rating
- Copy of current medical certificate
- Proficiency check records
- Evidence of bi-annual flight review or proof of participation in Wings program with current FAA sign-off
- Copy of current USFS card
- Copy of dated change of address form to the FAA
- Copies of any certification that would go towards pilot / TFO status or training such as:
    - Thermographer certificate
    - Attendance at ALEA / HAI conference training
    - Attendance at safety conference

F-1500 TURBO COMMANDER TRANSITION

F-1501 PROCEDURE

A commercial pilot assigned to the Air Support Unit who meets the minimum experience and qualifications can make a request to the Air Support Unit OIC to transition to the Turbo Commander. The Air Support Unit OIC shall make the decision, along with the Chief Flight Instructor, whether to allow the requesting pilot to begin flight training.

F-1502 TRAINING REQUIREMENTS

During the Turbo Commander transition, the pilot in training should receive ground school and initial flight training from a competent outside provider. Additional transition training will be provided by an appropriately rated ASU flight instructor. The pilot in training should receive a minimum of 50 hours of flight instruction that includes:

- Normal Maneuvers
- Emergency Maneuvers including single engine flight operations
- Night Flight Operations

- High Altitude in Route Flight Operations

F-1503 CERTIFICATION REQUIREMENTS

The requesting pilot must possess the following certificates and endorsements:

- Commercial AMEL rating
- Instrument airplane rating
- Complex endorsement
- High performance endorsement
- High altitude endorsement
- Second class medical certificate
- PIC sign-off by KCSO CFII

F-1504 FLIGHT EXPERIENCE

The requesting pilot must have the following minimum flight experience:

- 600 hours total airplane flight time.
- 500 hours Pilot-In-Command flight time.

PUBLIC AIRCRAFT ISSUES

SECTION G

G-100 PURPOSE

The purpose of this section is to highlight important issues regarding Public Aircraft Operations, and to provide Air Support Unit (ASU) members with standard operating procedures for decision-making when these issues arise. Interpretations of law contained herein are just that - interpretations. Further information can be found in the references below, and by contacting the Fresno FAA Flight Standards District Office (FSDO).

G-200 REFERENCES

- FAA Advisory Circular AC Number 00-1.1
- PUBLIC LAW 106-181 – APR. 5, 2000
- PUBLIC LAW 106-424 – NOV. 2, 2000
- *The Public Aircraft Issues Resource Book* – Don Roby, Baltimore County Police Department, Maryland
- ALEA Unit Managers Course – July 2008
- Federal Aviation Regulations (FAR)

G-300 KERN COUNTY SHERIFF'S AIRCRAFT

The current fleet of the Kern County Sheriff's Office Air Support Unit consists of the following aircraft:

Model	Registration	Certificated
MD500E	N197E	Yes
	N297E	Yes
OH-58A+	N397E	No
	N497E	No
UH-1H II	N597E	No
T-210N	N97E	Yes
Turbo Commander	N911KC	Yes
T-206H	N35438	Yes

For the purposes of the Kern County Sheriff's Office ASU fleet, all eight aircraft meet the definition of Public Aircraft capable of performing governmental functions, that is - county government owns all aircraft. Public Aircraft can either be certificated or non-certificated. It is the aircraft's mission that determines if it is being used as a Public Aircraft or a Civil Aircraft. Some flights performed by the Air Support Unit fall under civil aircraft rules. These flights must comply with FAR Part 91 and must be done in a certificated aircraft. Furthermore, for the purposes of this section, it is assumed that the Air Support Unit does comply with all requirements of Part 91 during civil aircraft flights.

G-400 DEFINITIONS

Public Aircraft

An aircraft "…owned and operated by the government of a State, the District of Columbia, or a territory or possession of the United States…" This defines all of the KCSO ASU aircraft. [PL 106-181 sec. 40102]

Governmental Function

Any activity undertaken by the government (county) such as "…firefighting, search and rescue, law enforcement, or resource management". [PL 106-181 sec. 40125]

Commercial Purpose

Transportation of persons or property for compensation or hire, but does not include the operation of an aircraft…by one government on behalf of another government under a cost reimbursement agreement **if** the government on whose behalf the operation is conducted certifies to the FAA that the operation is necessary to respond to a significant and imminent threat to life or property (including natural disasters), **and** that no service by a private operator is reasonably available to meet the threat". [PL 106-181 sec. 40125]

Qualified Non-Crewmember

An individual…"whose presence is required to perform, or is associated with the performance of, a governmental function." [PL 106-181 sec. 40125 (3)(B)]

G-500 UNIT STANDARD OPERATING PROCEDURES - Q&A

Q: When can ASU carry passengers on certificated aircraft?

A: Anytime (as long as the nature of the mission does not place the passenger in unreasonable peril (active shooter/sniper, etc.). These flights include civilian passengers, transporting personnel to meetings, and any of the flights below.

Q: When can ASU carry passengers on non-certificated helicopters?

A: Besides the aircraft crew, other persons on-board the aircraft must meet the definition of a qualified non-crewmember. Their presence must be required for the mission. Accepted examples of these flights include:

Law Enforcement:

- Training flights for TFO's or patrolmen to orient them to patrol areas,
- Narcotics officers searching for marijuana gardens,
- Investigators observing a crime scene,
- Technical Investigators photographing an incident or crime scene,
- Special operations team insertion or extraction (to include training),
- Command and Control platform during major incidents,
- Maintenance test flights.

Search and Rescue:

- Insertion or extraction of volunteer searchers (to include training),

Extraction of victims, Resource Management:

- Flying government officials over an area of interest where the flight would offer an enhanced perspective toward employment or deployment of governmental resources. Though these flights are common during natural disasters, it is not necessary that an emergency or crisis exist.

Q: On what flights can ASU not carry passengers on non-certificated aircraft?

A: Civilian passengers to include non-mission-essential county employees, transport of government officials to/from meetings, training flights for ASU members to become commercial pilots (logging flight time). Flight training to obtain an FAA pilot certificate or to maintain recent flight experience currency.

Q: Can ASU accept compensation from another agency for services?

A: The evolution of laws pertaining to Public Aircraft has had much to do with this very question. In the early 90's, commercial operators sought restrictions of Public Aircraft operators from accepting compensation. Since then, certain conditions must exist before compensation can be accepted.

Before the KCSO Air Support Unit can provide any airborne mission to another agency ***for compensation***, the following must apply:

- The agency on whose behalf the operation is conducted must certify to the FAA that the operation is necessary to respond to a significant and imminent threat to life or property and,
- No service by a private operator is reasonably available to meet the threat, and,
- The ASU Supervisor must approve the flight.

This certification can be in the form of a letter from the requestor, informing the FAA that these conditions exist. Even in the event of a major incident, the Air Support supervisor should seek to have this certification in-hand before services are granted.

According to the FAR, once the above conditions exist and certification has been made, the flights are permitted under Public Aircraft flights (in non-certificated aircraft) and Civil Aircraft flights (in certificated aircraft). There is no requirement for the granting unit to comply with FAR Part 135. Also, the granting unit (KCSO) can bill and be compensated for any and all expenses, including fuel, aircraft operating costs, pilot/crew pay, etc.

Q: Can ASU accept "just fuel" for services?

A: The acceptance of fuel may be considered compensation, and the criteria for Public Aircraft operators to accept compensation may apply. Generally speaking, ASU flight crews will not accept fuel in exchange for services unless approved by the ASU Supervisor.

Q: Can ASU fly a Board of Supervisors member and other county personnel in the Huey II to observe the construction of a new highway?

A: Yes. The flight must be specifically related to managing county (governmental) resources.

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SAFETY MANUAL

SECTION H

H-100 SAFETY AND HEALTH POLICY STATEMENT

The Air Support Unit OIC is firmly committed to maintaining a safe and healthful working environment. Safety is best expressed as, *the way we do business around here* and is *not* to be compromised. No activity is so important or time critical that it cannot be done safely. There are no excuses for unsafe acts! To maintain our safety goal of zero accidents we have implemented a comprehensive Safety Program. This Program is designed to prevent work place accidents, and injuries. The success of any safety program depends on the safety consciousness and cooperation of everyone in the organization. Employees at all levels are expected to assist in the prevention of work place accidents and injuries. It is the duty of each employee to support and adhere to all applicable Federal and State laws and regulations and Kern County Sheriff's Office procedures regarding workplace safety, health, and security. Any injury that occurs on the job, even a slight cut or strain, must be reported immediately to a supervisor. Remember, our goal is ***zero accidents***.

H-200 SAFETY GOALS

Management within the air support unit is an extension of the risk management objective articulated for the entire Kern County Sheriff's Office organization. That is, the protection and conservation of assets essential to meeting the goals of the department. These assets are:

- Personnel
- Property
- The image and reputation of the Sheriff's Office

The air support unit has established a Safety Program. The following goals have been established for the air support unit safety program:

- ZERO ACCIDENTS — No accidents, no injuries, and no adverse publicity as a result of any activity related to the provision of air transportation in support of air support unit business
- Provide a safe and healthy working environment for all employees, guests, and visitors
- Development of activities that increase knowledge and safety awareness among all personnel, and to the extent possible, among our passengers, and associates
- Identify, eliminate, or control all hazardous conditions
- Reduce insurance costs and claims

H-300 ROLES & RESPONSIBILITIES - OFFICER IN CHARGE (OIC)

H-301 OIC RESPONSIBILITY

The OIC is responsible for the safety and health of the employees who report to work under his / her direction or control, and for the safety and health of individuals who enter their departments or work areas. To fulfill this duty, the OIC must:

- Review applicable safety and health laws and regulations
- Review company safety rules and policies
- Be familiar with the safety aspects of the portion of the operations under your control
- Train employees in general safe work practices
- Train employees in hazards specific to each employee's job assignment
- Submit verification of training to the Safety Officer so that the appropriate entries can be made in the Employee Training Records for all safety and health training
- Regularly inspect their area of responsibility for hazards
- Submit all Hazard Report Forms to the Safety Officer with a report of corrective actions taken
- Submit a Hazard Report Form, for your work area, to the Safety Officer with a report of corrective actions taken
- Take positive steps to avoid unsafe work conditions for employees under your supervision
- Periodically observe workers to ensure they follow safe work practices
- Correct unsafe work conditions promptly
- Maintain good housekeeping in your area of responsibility
- In your area of responsibility, report all accidents, injuries, illnesses, or near misses to the Program Administrator
- Encourage employees under your supervision to submit Hazard Report Forms on unsafe practices or conditions they observe
- Ensure that all personnel are trained in workplace safety and are familiar with the safety and health hazards to which employees under their immediate direction or control may be exposed, as well as applicable laws, regulations, and safety rules and policies
- Ensure that supervisors and employees are trained in general safe work practices

- Ensure that employees are trained in hazards specific to their job or assignment

H-302 SAFETY OFFICER

The Air Support Unit OIC is responsible for the overall implementation and maintenance of the organization's Safety Program. The safety officers' duties include, but are not limited to the following:

- Prepare annual safety inspection and maintain a file on Safety Inspection Report Forms. (ANNEX 1)
- Manage the Hazard Reporting program including maintaining reports of corrective actions taken
- Report unsafe work practices promptly
- Ensure that records of all accidents, injuries, illnesses, or near misses are maintained on file
- Encourage employees to submit Hazard Report Forms on unsafe practices or conditions as they are observed
- Provide annual guidance to the OIC and meet with him / her regularly to monitor status of the Safety Program
- Acts as Facilitator of the Safety Committee. In this capacity involve members of the Committee in identifying and prioritizing safety issues within their areas of operation
- Maintain a record of aeronautical occurrences, including mishaps during aircraft operations, maintenance, and ground support activities
- Investigate mishaps during aircraft operations, maintenance, and ground support activities
- Investigate, analyze, and identify trends of aeronautical occurrences and hazard detection reports. Recommend appropriate accident prevention action to the OIC
- Maintain appropriate organizational aviation safety records and accident, incident, and aviation hazard statistics
- Work with department management to ensure that appropriate safety issues are addressed in department policy statements and initiatives
- Obtain appropriate training and education related to the safety function
- Provide technical guidance where safety is a factor in flight and ground operations and training

H-303 EMPLOYEES

All employees are responsible for working safely and maintaining a safe and healthy work environment. Employees are required to conduct themselves in a manner that is consistent with the air support unit safety rules and policies. To fulfill this requirement, each employee must:

- Attend all required meetings (including safety meetings)
- Review applicable safety and health laws and regulations
- Review company safety rules and policies
- Be familiar with the safety aspects of the portion of the operation where you work
- Participate in training in general safe work practices
- Participate in training in hazards specific to each job assignment
- Regularly inspect your area of responsibility for hazards
- Submit Hazard Report Forms to the Program Administrator when you identify a hazard in the work environment
- Take positive steps to avoid unsafe work conditions
- Correct unsafe work conditions promptly
- Maintain good housekeeping in your area of responsibility
- In your work area, report all accidents, injuries, illnesses, or near misses to your supervisor
- Encourage all employees to submit Hazard Report Forms on unsafe practices or conditions they observe

H-400 HOUSEKEEPING POLICY

Good housekeeping is an integral part of any effective safety program. Keeping hangars, aircraft, and work areas neat and clean reduces the chances for accidents and injuries. Well-organized work areas also increase the ability of employees to perform their jobs efficiently. Each person is responsible for keeping his or her work area neat and orderly. The safety officer(s) will regularly review housekeeping.

H-500 RESPONSIBILITY FOR SAFETY

The responsibility and authority for ensuring that safety policies and practices are followed rests with all personnel.

All personnel are responsible for working safely and maintaining a safe work environment. All personnel are required to conduct themselves in a manner that is consistent with the air support unit safety rules and policies.

H-600 SAFETY COMMITTEE

H-601 PURPOSE

The Safety Committee will assist in the administration of the Safety Program by performing the following functions:

- Provide feedback and input to management regarding safety in the workplace
- Collect and disseminate information
- Analyze *Safety Suggestions* and *Operational Hazard Reports*, prepare recommendations, and forward OIC
- Follow up recommendations to ensure compliance
- Assist in safety training programs
- Assist in mishap investigations

H-602 SAFETY COMMITTEE MEMBERSHIP

Membership of the Safety Committee will consist of the safety officer(s), the OIC, the chief flight instructor, and a maintenance officer.

H-700 HAZARD ASSESSMENT AND CONTROL

H-701 IDENTIFICATION OF HAZARDS

The Air Support Unit safety program has been developed along the lines of cause and effect. This concept suggests that:

- Mishaps are caused by hazards

- Identification, control, or elimination of hazards may prevent mishaps
- The Air Support Unit program is designed to prevent mishaps by identifying, controlling, or eliminating hazards

H-702 SAFETY REVIEW

Periodic assessment of all air support unit practices, policies, and procedures with an emphasis on their impact on safety is a key element of an effective safety program. Therefore, a comprehensive safety review of all departmental functions will be conducted annually. At the discretion of management, this may be done more frequently. In any case, the safety officer will conduct the review in conjunction with members of the Safety Committee.

H-703 SAFETY SUGGESTIONS PROGRAM

The Safety Suggestion Program has been established to provide a way for any employee to give input to management through the safety committee regarding their ideas about how to make our workplace a safer one.

Procedures: Safety Suggestion forms are available near the safety briefing board. The completed form is to be placed in the drop box adjacent to the briefing board

The Safety Committee will review the forms and recommendations will be made to the. The ASU OIC will provide formal feedback to the individual who submitted the recommendation and provide information regarding disposition of the recommendation and status of corrective actions. In addition, disposition of the recommendation and status of corrective action will be published in the minutes of the safety meeting

Everyone is encouraged to participate in the Safety Suggestion program

H-704 CONTRACTORS AND VENDORS:

Contractors and vendors that provide services of a critical nature such as fuel suppliers, FBO's that are used frequently, especially for overnight parking or storing, and suppliers of temporary personnel such as pilots and flight attendants, will be evaluated periodically for adherence to safe practices, procedures, and physical conditions of their facilities, if appropriate.

The safety officer will be responsible for developing criteria for such evaluations along with appropriate standards if they are to be conducted in-house. If conducted by a third party, the safety officer will review the evaluation criteria. A written report will be submitted to the OIC upon completion of the review. The frequency of these reviews will be determined by the safety officer in consultation with the OIC, as appropriate.

If a review is to be conducted of a vendor or contractor, the management of that organization will be provided with a copy of the evaluation criteria prior to the review. In addition, that management will be debriefed after such a review and a copy of the ensuing report will be forwarded to them. Any significant items that do not meet the applicable standard will be noted and a satisfactory review conducted before that contractor or vendor is utilized.

H-705 ONGOING WORK PLACE REVIEW

Every supervisor or employee must engage in daily, ongoing, safety monitoring and inspection of his/her department work area. Any potential safety concerns should be reported to an immediate supervisor or to the safety officer.

H-706 PERSONNEL REPORTING OF HAZARDS

Personnel are required to immediately report any unsafe condition or hazard that they discover in the work place to their supervisor or the Aviation Safety Officer. A Hazard Report Form is provided for this purpose. *No employee will be disciplined or discharged for reporting any work place hazard or unsafe condition*.

Personnel who wish to remain anonymous may report unsafe conditions or hazards by submitting a Hazard Report Form to the safety officer without identifying themselves.

The OIC takes all reports of unsafe conditions seriously. Prompt attention will be given to all actual and potential hazards that have been reported to the safety officer. The safety officer or OIC will inform the employee (If known) who reported the hazard of the action that was taken to correct the hazard or the reasons why the condition was determined not to be hazardous. *There will be no discrimination against any employee who reports unsafe working conditions or work place hazards.* Indeed, personnel are *encouraged and required* to do so.

H-707 EVENT AND HAZARD REPORTING

A system of in-house event reporting has been established to allow department management to identify specific operational areas and safety issues that warrant further attention. This reporting system facilitates the collection event data to assist in the identification of the "root causes," so that appropriate measures (training, establishment or modification of procedures, etc.) can be implemented. The program allows for anonymous reporting. Use the Hazard Reporting form to make a report

H-708 CORRECTIVE ACTION

Corrective actions may take place on two levels: Initial Actions and Safety Committee recommendations

Initial Actions will vary depending on the nature and severity of the situation. Severe hazards require immediate attention and use of the material or process should be suspended until further actions can be taken

Frequently, the initial action may be all the correction that is required. The Safety Committee needs to only review and concur with the initial action

On other occasions, the Safety Committee may recommend further action to rectify the situation. The Safety Committee shall work together to develop a solution acceptable to all. In the rare event that a mutually acceptable solution cannot be achieved, the OIC shall make the final decision

Following are some remedial actions that may be taken to eliminate workplace hazards. Although not intended as a complete list, it may serve as a resource for developing a corrective action. Selection of the method will be determined by the circumstances:

- Mop, clean and/or clear hazards off the floor
- Fixing defective equipment
- Implementing safer methods for using the equipment
- Training employees on proper use
- Replacing or removing the item altogether
- Deferral to Safety Committee or other resource for recommendation

H-709 COMPLETION OF CORRECTIVE ACTION

Upon completion of the corrective action and concurrence from the Safety Committee, the Hazard Form will be filed and retained for at least three years. Additionally, the Safety Committee will communicate results of the action to all employees.

H-800 NEW SAFETY & HEALTH CONCERNS

The OIC will respond to new safety concerns as soon as they are discovered. All hazards will be corrected, controlled or abated in a timely manner. Any hazard that poses an imminent risk of harm to personnel will be corrected immediately. All other hazards will be corrected as soon as feasible. If for any reason these time requirements cannot be met, the OIC must be notified immediately. Personnel must report workplace safety concerns to the OIC immediately. The OIC or his or her designee will set a target date for correction of any hazards that cannot be abated immediately. Potentially affected personnel will be notified of any newly identified hazard in a timely manner.

H-900 HAZARDS THAT GIVE RISE TO A RISK OF IMMINENT HARM

It is the intent to immediately eliminate hazards that give rise to a risk of imminent harm. When such a hazard exists, which cannot be eliminated immediately without endangering personnel and/or property, all exposed personnel will be removed from the area of potential exposure, except those necessary to correct the hazardous condition. All personnel involved in correcting the hazardous condition will receive appropriate training and will be provided with necessary safeguards and personal protective equipment.

H-1000 EMERGENCIES

H-1001 ACCIDENT/INCIDENT RESPONSE PLAN

In the event of an aircraft accident or incident, the actions to be taken by department personnel are spelled out in the air unit response plan. The plan contains a call-down list and a description of the responsibilities of certain individuals within the department if such an event occurs.

H-1002 THE PURPOSE OF AN ACCIDENT/INCIDENT RESPONSE PLAN

Provide a guide for actions in a time of extremely high stress. The objectives of the plan dovetail with the objectives of Kern County Sheriff's Office Accident/Incident Response Plan: to safeguard company personnel and to preserve company assets and reputation. The goals are:

- To ensure prompt rescue and medical attention for accident victims
- To assist the families and co-workers of the accident victims
- To minimize, to the extent possible, financial losses to the department
- To the extent possible, maintain day-to-day operation of the department in the aftermath of an accident
- To ensure cooperation and compliance with investigating authorities

H-1003 OIC RESPONSIBILITY

The OIC is responsible for maintaining the Accident/Incident Response Plan. The plan will be reviewed semi-annually for appropriateness and accuracy of names and phone numbers. An exercise will be conducted annually to evaluate the effectiveness of the plan. The exercise may be a "real time" simulation of an accident or a "table-top" exercise. However, a "real-time" simulation will be conducted at least every three years

The OIC will maintain a list of holders of the *Accident/Incident Response Plan* and will be responsible for distributing revisions as they occur

H-1100 COMMUNICATING WITH PERSONNEL ON SAFETY AND HEALTH ISSUES

Communicating with everyone concerning safety hazards and the methods used to control them will help create the safest possible work environment. This places a great deal of importance on communicating with personnel about safety issues. The system for communicating with personnel on safety issues includes:

H-1101 THE SAFETY PROGRAM

A copy of this plan is maintained by the OIC and is in the air support unit operations manual for review.

H-1102 SAFETY MEETINGS

The safety officer will post monthly safety briefings. These briefings must be read and initialed at the bottom. As necessary, the OIC will arrange in person safety meetings to discuss:

- New hazards that have been introduced or discovered in the work place
- Causes of any recent accidents or injuries and the methods adopted by the air support unit to prevent similar incidents in the future; and
- Any health or safety issue deemed by the OIC to deserve reinforcement

H-1103 ANONYMOUS NOTIFICATION PROCEDURES

The air support unit has a system of anonymous notification whereby personnel who wish to inform the OIC of safety hazards may do so anonymously by sending a written notification to the safety officer using a Hazard Report Form. All such reports will be investigated in a prompt and thorough manner.

H-1104 POSTINGS

The safety officer will regularly post safety information on the safety briefing board. Personnel are required to read the briefing board monthly and initial.

H-1105 BULLETINS

From time to time it may become necessary to inform flight and/or ground crews of critical operational information. Depending upon the importance of the information, any or all of the following procedures may be utilized to forward the information:

- Direct personal contact
- Written Communication
- E-mail
- Bulletin boards

Regardless of the method(s) used, essential information must be forwarded to all appropriate parties, and it will be the responsibility of each person to ensure the conveyance of the information.

H-1200 SAFETY TRAINING

Safety education comprises many aspects and subjects. There are general subjects and job-specific subjects in which every new employee must be trained. In addition to safety meetings and staff meeting briefings, some subjects have formal currency requirements that are spelled out in the air support unit operations manual. The following section describes the required initial safety training. Brief training outlines may be found in the Facility Operations manual.

H-1201 Awareness

Awareness of potential safety hazards, as well as knowledge of how to control such hazards, is critical to maintaining a safe and healthful work environment and preventing injuries, illnesses, and accidents. The air support unit is committed to instructing personnel in safe and healthful work practices. To achieve this goal, the OIC will provide training to personnel on general safety procedures and on any specific safety procedures for each employee's job.

H-1202 FREQUENCY OF TRAINING

Training will be provided as follows:

- Upon hiring
- Whenever a person is given a new job assignment for which training has not previously been provided
- Whenever new substances, processes, procedures or equipment that represent a new hazard are introduced into the work place
- Whenever the OIC is made aware of a new or previously unrecognized hazard; and,
- Whenever the OIC, Safety Officer, or any supervisor believes that additional training is needed

H-1203 TRAINING OF SUPERVISORS

Supervisors shall be apprised of, and provided with, any appropriate training and instruction with regard to safety and health hazards to which personnel under their immediate direction

and control may be exposed. To accomplish this task, the safety officer or his/her designee will:

- Conduct sessions for all supervisors informing them of any new substances, processes, procedures or equipment that have been introduced into the work place
- Distribute written safety and health communications to supervisors whenever the safety officer believes that it is necessary to inform them of particular hazards or concerns
- Update the safety rules, procedures and policies on a regular basis, and distribute the updates to all supervisors
- Take all other actions necessary to keep the ASU OIC informed about work place hazards that may affect their personnel

H-1204 AREAS OF TRAINING FOR PERSONNEL

Training will be conducted for new personnel and recurrent training shall be conducted on an annual basis in the following areas:

- ASU safety policy
- Injury/Incident reporting
- Hazard reporting
- Fire/Police/Ambulance calls
- Smoking policy
- Fire Extinguisher locations
- General safe work practices
- Emergency action plan
- Flight line safety standards
- Fueling operations
- Towing
- Aircraft Storage
- Shop equipment familiarization
- Unique operational hazards
- Personal Protective Equipment
- Forklift Training

- Medical First Aid
- Machinery & Machine Guarding
- Fire Training & Emergency Response

H-1300 ACCIDENT INVESTIGATION

All work-related accidents will be investigated in a timely manner. Minor incidents and near misses will be investigated as well as serious accidents. A near miss is an incident, which, although not serious, could have resulted in a serious injury or significant property damage. Investigation of these instances may avoid serious accidents in the future.

H-1301 RESPONSIBILITY FOR ACCIDENT PREVENTION

The safety officer shall investigate all work-related accidents involving personnel. After investigating an accident, the investigator shall prepare a report. The OIC will ensure that the investigation was thorough and that proper action has been taken to avoid similar accidents in the future.

H-1302 PROCEDURES OF INVESTIGATING ACCIDENTS

The safety officer will investigate any accidents or incidents involving Kern County Sheriff's Office ASU aircraft, vehicles, personnel, or equipment and report the findings of such an investigation to the OIC. In addition, the safety officer may investigate any circumstances involving safety issues in the air support unit if he or she feels that such an investigation will be beneficial. From time to time the OIC may direct the safety officer to investigate circumstances involving safety issues.

Reports of investigations conducted by the safety officer will be presented to the OIC. Reports will set out the specific factual findings, an analysis of the circumstances and cause(s) of the accident or incident, and recommendations for action to prevent such an occurrence in the future.

H-1303 TIMELINES OF INVESTIGATIONS

All accidents shall be investigated as promptly as possible. In conducting his or her inquiry, the person investigating the accident, at a minimum, shall:

- Visit the accident scene as soon as possible
- The investigator should interview the employee as soon as he or she is physically and mentally able
- Interview witnesses to the accident either at the scene or as soon after the accident as possible
- Document details graphically using photographs, sketches, or diagrams wherever appropriate
- Save or preserve all physical evidence

H-1400 CORRECTING HAZARDS AND PREVENTING RECURRENCE

The OIC will ensure that the proper personnel are assigned responsibilities to take all steps necessary to correct the hazard and avoid similar accidents in the future. Preventative action will include, if required:

- Replacing all defective or broken tools and equipment
- Revision or addition to the Safe Practice Guidelines
- Re-training personnel
- Monitoring the hazard to ensure that it remains corrected or controlled

H-1500 ENFORCEMENT OF THE ACCIDENT PREVENTION PROGRAM

Safety must be integrated into the way we do business. In order for us to achieve our goal of Zero Accidents, everyone must do their part. Safety violations will be taken very seriously. All violations will be reviewed by the OIC and dealt with on a case-by-case basis. Depending on the circumstances, disciplinary procedures may be involved.

H-1600 NOISE AND HEARING LOSS PROTECTION

Approved hearing protection devices shall be made available and worn by all Air Support Unit staff, civilians, and department members when working in close proximity to sources of

loud noise including loud power tools, vehicles, and running aircraft including helicopters and airplanes.

Acceptable forms of hearing protection include:

- Expandable foam plugs
- Pre-molded plugs
- Canal caps
- Earmuffs
- Flight Helmets

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RESCUE OPERATIONS MANUAL

SECTION I

ABBREVIATIONS AND DEFINITIONS

For the purposes of this manual, the following definitions shall apply.

Term	Definition
Air-Rescue Systems	Applies to any equipment used for rescue operations. Includes hoist, harnesses, litters, devices and generally any other item stored or located within the helicopter in the rescue configuration.
BLS Designation	Medical designation of aircraft as granted by the EMS Department dependent upon medical personnel staffing and compliance with EMS Policies.
M.O.C.	Medical Operations Coordinator – describes the officer appointed to manage the medical component of the Air-Rescue Program
M.S.	Medical Specialist – crewmember, holding a current qualifying medical certification, responsible for cable deployments and victim recoveries.
Off-Shift	Period of time that a rescue crew is off-duty and available for call-out.
R.O.C.	Rescue Operations Coordinator– describes the officer appointed by the Unit Supervisor to manage the various aspects of the Helicopter Rescue Program. The R.O.C. shall serve as a designated Rescue Operations Training Officer.
R.O.T.O.	Rescue Operations Training Officer – Personnel designated to conduct Rescue Crew training and proficiency evaluations.
R.S.	Rescue Specialist – Non-medical crewmember responsible for cable deployments and victim recoveries.
Rescue Evolution	Operational period beginning with the commencement of an approach to a rescue scenario and concluding with the aircraft returning to a safe forward airspeed.
S.O.	Systems Operator – crewmember responsible for managing the rescue systems and all aspects of each mission not related to safe operation of the aircraft or aircraft limitations.
Sterile Channel	Non-common channel used to communicate between the Aircraft and Rescue Specialist during a rescue scenario.
Type-I Extended Endorsement	Extended endorsement issued to rescue crews set to expire due to a cancelled training/proficiency session. Extension valid for no more than 30 days from issuance.
Type-II Extended Endorsement	Extended endorsement issued to rescue crews set to expire before next scheduled proficiency check that can demonstrate recent operational experience. Extension valid for no more than 12 weeks from last operation.
Work-Shift	Period of time that a rescue crew is actually on-duty at the workstation.

I-100 OBJECTIVE AND INTRODUCTION

The Kern County Sheriff's Office - Air Support Unit has established an Air-Rescue Program utilizing highly trained personnel and specialized equipment including a hoist equipped Huey II Helicopter. Due to the inherent risk involved in aerial rescue operations, this section has been adopted to assist flight crews in conducting operations in a safe and efficient manner.

All personnel shall become familiar with this section prior to commencement of / or assignment to any rescue operations or training.

I-101 APPLICABILITY

Without exception, only Kern County Sheriff's Office personnel either compensated or volunteer, that has successfully completed an approved Air-Rescue Training Program, shall operate in any capacity, the Air-Rescue Systems. As such, this section is applicable to all personnel meeting this criterion.

I-102 COMPLIANCE

All personnel shall conform to the standards and qualifications of this section.

I-103 DEVIATIONS

Any deviations to this section shall be due to emergency operations and must be documented following the conclusion of the emergent situation.

Documentation will minimally consist of a verbal report to both the Unit Supervisor and the Rescue Operations Coordinator as soon as possible following the deviation. Furthermore, involved personnel will complete a written report of the incident upon the request of either the Unit Supervisor or the Rescue Operations Coordinator.

I-104 RESCUE OPERATIONS TRAINING AND STANDARDS MANUAL

Flight crews will become familiar with the Rescue Operations Training and Standards Manual. The manual will be based on the standards of the Class D External Load curriculum. Any adopted standards that differ from the Class D curriculum will be contained and approved in this manual and shall be the standard to which all operators will adhere.

The Rescue Operations Coordinator shall be responsible for maintaining the Rescue Operations Training and Standards Manual.

Any operator wishing to develop new standards or make changes to those in effect will notify the Rescue Operations Coordinator of the desired changes and reasons for the request. The R.O.C. will evaluate the requested changes to determine the need for the change.

If the R.O.C. determines a need for a change to the Training and Standards Manual, he/she will notify rescue crews and incorporate the changes into the next training cycle if needed.

Otherwise, crews are to adhere to the guidelines and standards of the Rescue Operations Training and Standards Manual.

I-200 RESCUE OPERATIONS MANAGEMENT

I-201 RESCUE OPERATIONS SUPERVISIOR

The Air Support Unit Supervisor shall supervise all aspects of the Kern County Sheriff's Office Air-Rescue Program. The Supervisor may appoint personnel to assist in the management of the Air-Rescue Program at his/her discretion.

I-202 RESCUE OPERATIONS COORDINATOR

At the discretion of the Unit Supervisor, the Air-Rescue Program may be managed by the appointment of an officer permanently assigned to the Air Support Unit. The appointed officer shall operate under the title of Rescue Operations Coordinator (R.O.C.).

I-203 R.O.C. RESPONSIBILITIES

The Rescue Operations Coordinator shall be responsible for the following:

- Training
    - Develop the unit training program for initial and recurrent training
    - Administer and document the unit training program
    - Maintain an advanced level of skills proficiency through on-going training
- Unit Proficiency
    - Establish performance standards
    - Conduct quarterly proficiency training/evaluations

    - Function as Safety Officer for all training/proficiency operations
- Equipment procurement and/or replacement
    - Determine needs for rescue equipment
    - Evaluate new equipment for implementation
    - Inspect and maintain current equipment inventory
- Equipment configuration and placement
    - Determine aircraft configuration and equipment placement
    - Approve all rescue equipment configurations
- Maintain medical designation
    - Maintain aircraft BLS Designation
    - Review and approve EMS reports for quality assurance and EMS data reporting requirements
- Maintain program documentation needs
    - Develop/Maintain Rescue Training Manual
    - Maintain applicable Operations Manual sections
    - Maintain training, proficiency and equipment documentation
- Any other needs identified by the Unit Supervisor

I-204 RESCUE OPERATIONS TRAINING OFFICER (R.O.T.O.)

In addition to the Rescue Operations Coordinator, the Unit Supervisor may appoint one or more personnel to the position of Rescue Operations Training Officer.

The R.O.T.O. will be responsible for assisting the R.O.C. with development of training curriculum and completion of Rescue Crew proficiency checks.

The Rescue Operations Coordinator shall be considered a Rescue Operations Training Officer.

All training and proficiency will be conducted with a designated R.O.T.O. present and acting as the Safety Officer.

I-205 MEDICAL OPERATIONS COORDINATOR

At the direction of the Unit Supervisor, the medical component of the Air-Rescue Program may be managed by the appointment of an officer permanently assigned to the Air Support Unit. The appointed officer shall operate under the title of Medical Operations Coordinator (M.O.C.).

I-206 M.O.C. RESPONSIBILITIES

- Equipment procurement and/or replacement
    - Evaluate new equipment for implementation
    - Inspect and maintain current equipment inventory
- Training
    - Develop and maintain medical training program
    - Oversee and ensure compliance with EMT certification training requirements
- Medical Reports
    - Review and approve EMS reports for quality assurance and EMS data reporting requirements

I-300 PERSONNEL QUALIFICATIONS

I-301 SYSTEMS OPERATOR (S.O.)

Prior to receiving an endorsement as a Systems Operator, all personnel shall complete an approved training course covering all aspects of the Class D External Load curriculum; and, demonstrate a level of proficiency consistent with safe and efficient operations of the Rescue Systems.

I-302 RESCUE SPECIALIST (R.S.)

Prior to receiving an endorsement as a Rescue Specialist, all personnel shall complete an approved Rescue Specialist training course. Any personnel holding a Systems Operator endorsement shall be considered qualified as a Rescue Specialist.

I-303 MEDICAL SPECIALIST (M.S.)

Prior to receiving an endorsement as a Medical Specialist, all personnel shall comply with the qualifications of Rescue Specialist in addition to holding the following valid and current certifications:

- California State EMT-D or EMT-P Licensure
- County of Kern Accreditation
- CPR Certification

Furthermore, all personnel qualifying as Medical Specialist shall comply with all regulations set forth by California Emergency Medical Services Authority (EMSA) and Kern County Emergency Medical Services (EMS).

M.S. personnel shall be individually responsible for notifying the Unit Supervisor of training needs for maintaining certification currency, and shall coordinate with the Unit Supervisor for compensation of continuing certification.

I-304 CURRENCY REQUIREMENTS

All personnel holding any rescue endorsement shall meet the following currency requirements before functioning, or being assigned, as an operator other than during a training mission supervised by the Rescue Operations Training Officer:

- Systems Operator:
    - Satisfactory completion of a proficiency check within the preceding 12 weeks, AND
    - A valid proficiency endorsement in log book / flight jacket
- Rescue Specialist:
    - Current Systems Operator endorsement, OR
    - Satisfactory completion of a proficiency check within the preceding 12 weeks, OR
    - Completion of one mission with at least one hoist deployment as a Rescue Specialist within the preceding 12 weeks
- Medical Specialist:
    - In addition to requirements for Rescue Specialist, M.S. Operators shall maintain current state licensure, local accreditation and CPR Certification

- If any of these additional requirements are not current, the operator shall function only as a Rescue Specialist until lapsed currency is corrected; and, as long as R.S. currency is valid

I-305 NON-CURRENCY PROCEDURES

Any operator not meeting current proficiency requirements shall not operate in the capacity of their expired classification other than during a training session under the supervision of a Rescue Operations Training Officer.

It shall be the responsibility of the operator whose currency has expired to notify the Rescue Operations Coordinator of the status of currency and request a proficiency check be scheduled.

With the approval of the Unit Supervisor, operators with lapsed currency may be allowed to regain currency prior to the next scheduled training session if resources permit. Otherwise, the operator shall only be used to the level of their currency until the next scheduled training cycle with satisfactory completion of proficiency demonstrated.

If an operator has completed one or more missions since the last training cycle, the Rescue Operations Coordinator may evaluate the mission details and issue a currency extension. Currency extensions may be valid for no more than 12 weeks from the date of the last completed mission.

I-306 PILOT QUALIFICATIONS

Pilot qualifications shall be governed by Section C of this Operations Manual. However, no pilot shall be assigned to an Air-Rescue Mission unless they meet the following minimum criteria:

- Successful completion of an approved Air-Rescue Training Program
- Endorsement to operate the Rescue Aircraft
- Night Vision Goggle qualification and currency requirements
- Compliance with all requirements of Section C of this manual regarding pilot qualifications

Pilot-currency requirements shall not be governed by this section, and remain under the supervision of the Chief Flight Instructor.

Pilots wishing to maintain currency in Systems Operations will be placed on the training rotation, and must comply with all requirements of this section.

I-400 TRAINING

I-401 RESCUE OPERATIONS TRAINING DEFINED

For purposes of this section, approved Rescue Operations Training means any of the following:

- Certified Class D External Load training via an approved vendor ***See I-701**
- Internal departmental training covering all aspects of the Class D External Load training curriculum

I-402 STANDARDS

All personnel operating the Rescue Systems shall be trained to the standard of the Class D External Load curriculum. Furthermore, all personnel shall adhere to the techniques and standards of the Rescue Operations Training and Standards Manual. Operators shall not deviate from these standards unless required to do so in the event of an emergency.

I-403 DEVIATIONS

All deviations from the adopted operational standard shall be reported and evaluated for possible revision to the current Rescue Operations Training and Standards Manual.

I-404 R.O.T.O. RESPONSIBILITY

The Rescue Operations Training Officers shall be responsible for developing training sessions that accomplish:

- Currency qualifications
- Maintenance of perishable skills
- Incorporation of new techniques / skills
- Development of advanced skill levels

The Rescue Operations Coordinator may assign unit personnel to assist with the development of training sessions that meet the above criteria, however, the R.O.C. shall

maintain the responsibility of ensuring the sessions are safe and within the current abilities of the rescue crews to complete.

I-405 PROFICIENCY

Each qualified rescue operator shall be placed on a 12-week training rotation. This training rotation shall be used to ensure proficiency currencies are maintained. It shall be the responsibility of individual operators to reschedule any missed training session due to illness, vacation or reasons not beyond their control.

In the event a training session has to be cancelled for reasons beyond the control of flight crews, the Rescue Operations Coordinator may issue a Type-I Extended Endorsement to any operator with a current proficiency endorsement set to expire as a result of the cancelled training session. In any event, the Type-I Extended Endorsement shall be good for no more than 30 days from issuance or upon completion of a training session, whichever occurs first.

I-406 MEDICAL SPECIALIST

Operators holding a medical certificate qualifying them for the Medical Specialist classification shall additionally be responsible for locating Continuing Education that meets the requirements of re-licensure. Personnel are responsible for coordinating with the Unit Supervisor for scheduling concerns and shall immediately notify the Supervisor and the Rescue Operations Coordinator of any change in status of their medical certification.

I-407 M.O.C. RESPONSIBILITIES

The Medical Operations Coordinator shall be responsible for developing training sessions that accomplish:

- Compliance with EMS and State regulations requirements as to subject matter
- Provide for adequate CE credits per license period
- Increase EMT knowledge and skill levels
- Increase EMT proficiency in documentation skills
- Increase crew proficiency in proper use and applicability of rescue equipment
- Realistic scenarios applicable to air-rescue capabilities and missions

I-500 OPERATIONS

I-501 OPERATIONAL READINESS

As resources permit, a rescue crew will be assigned on a daily basis. It is the responsibility of each assigned crew to arrive and prepare for operational readiness in as timely and efficient manner as possible.

Each assigned crew shall cover a 24-hour period, unless otherwise approved by the Unit Supervisor. The time period shall commence at 6:00am and conclude the following day at 6:00am when the relief crew assumes call.

Each work-shift shall be at the discretion of the Unit Supervisor, but will normally be between 8:00am and 4:00pm. The work-shift may be changed for operational needs, i.e. scheduled-operations, training, weather or maintenance.

During the work-shift period, flight crews should remain in close enough proximity to the airport to be able to respond to the hangar within ten minutes of a service call.

During off-shift periods, flight crews will be on call via cell phone. Crewmembers should be able to respond to the hangar within thirty minutes of a service call.

In the event Operational Readiness cannot be maintained as outlined in this section, the Unit Supervisor will be notified of the situation.

In the event no rescue crew is assigned or available, the assigned Air-1 crew shall cover call-outs. The standby period will begin at 6:00am through 6:00am the following day and will utilize the assigned Air-1 crew during that period.

For callouts that occur during off-work periods and an Air-1 crew is on-duty, the Air-1 crew may stand-in as the Air-Rescue crew to assist in overtime issues and operational readiness. Any remaining crewmembers needed to complete the mission will be drawn from the assigned crewmembers on-call for the day.

I-502 RESPONSE AUTHORIZATION

In the event a Search and Rescue callout is received while any crewmember is away from the aircraft, or is received during off-shift hours, a Code-3 response to the aircraft is authorized pursuant to DPPM E-100.

This applies only to personnel operating an authorized Code-3 equipped vehicle.

If responding Code-3, advise the communications center that you are responding Code-3 for a Search and Rescue. Each operator is responsible for complying with the policy detailed in DPPM E-100.

In the event the on-duty supervisor cancels your code response, follow the direction given and request the dispatcher to notify the Unit Supervisor you have been cancelled and will be delayed.

I-503 DUTIES

At the beginning of each work-shift, the assigned flight crew shall:

- Preflight the aircraft and equipment
- Identify crew positions and conduct a daily briefing
    - Briefing shall consist of operational status, forecasted weather, known flight restrictions and any other topics that may affect the days operation
- Notify the communication center of status
- Monitor radios for potential service calls

I-504 RESPONSIBILITIES

The pilot of the aircraft shall maintain responsibility for the safe operation of the aircraft, and shall be solely responsible for determining the operational limitations of the aircraft.

The Systems Operator shall be responsible for the operation of the rescue systems and all aspects of the mission not involving aircraft safety or performance.

However, any person involved in the operation may, at any time, address safety concerns and ultimately has authority to cease further operations. In the event a crewmember requests a cease of operations, the remaining flight crew shall comply with the request and return the aircraft to a safe location and/or status. The flight crew will attempt to resolve the addressed concerns in order to resume the mission, or return to base of operations if unable to reach a resolution.

I-505 WEATHER

When adverse weather conditions are confronted, a "Go, No-Go" decision will be made following a full crew briefing that considers aircraft limitations, expected conditions, forecast

changes and crew comfort. The event itself should not be a factor that causes the flight crew to "Go" when a "No-Go" decision would otherwise be reached.

I-506 NIGHT OPERATIONS

Night operations are authorized with the use of Night Vision Goggles (N.V.G.). All crewmembers must be certified in the use and operation of N.V.G. and must meet currency requirements if applicable.

When available information indicates the likelihood of a mission extending into darkness:

- There shall be sufficient N.V.G. units aboard the aircraft for each crewmember assigned to the mission
- The Pilot and Systems Operator should have the devices attached and operationally ready, prior to departure, unless a safe landing area is previously identified

When unaided ground reference cannot be maintained, N.V.G. must be used during the course of the rescue evolution. In the event N.V.G. cannot be used, or the evolution cannot be conducted under N.V.G., the operation shall be cancelled until such time as lighting conditions improve, or the condition causing the inability to use N.V.G. is corrected.

I-507 MEDICAL TRANSPORTS

As regulated by the aircraft's BLS Designation, medical transports to a hospital are generally prohibited and discouraged. It is generally in the victim's best interest to receive advanced care and transport aboard a specifically equipped medical transport vehicle.

Therefore, following completion of a rescue in which the victim requires further medical aid or transport to a hospital, the flight crew shall make every effort to rendezvous with an Air Ambulance or Ground Ambulance as soon as practical following the rescue.

However, the following criteria allow for direct patient transport to a hospital:

- The aircraft is on stand-by at an incident, **and**
- It has been determined that it is in the patient's best interest from a time and patient care perspective to not rendezvous with an Air Ambulance or Ground Ambulance; **or,**
- As a multi-casualty incident transport resource, if requested by the EMS Department. Use of the aircraft for this purpose will be secondary to the use of Air Ambulance level resources

I-508 OPERATIONAL VIDEOS

As video equipment resources permit, all training and operational evolutions should be recorded. The videos should be archived following the mission to be available for training needs. Archived recordings may be displayed to departmental personnel without the need for authorization; however, the video may not be released except to a ranking officer of Lieutenant or above.

Any other release of video either to departmental personnel, allied agency or media outlet shall be approved through the Unit Supervisor. In any case, the release shall be a copy of the original archive, and the original shall remain in the custody of Air Support control.

I-509 STERILE COMMUNICATIONS

Generally, unless a safety issue requires immediate addressing, the only communications over the intercom system (ICS) during the course of an evolution should be between the Pilot and Systems Operator. Therefore, other persons aboard the aircraft shall refrain from talking on the ICS during the evolution. Should an immediate hazard present itself, any person aboard the aircraft shall make a clear and concise indication of the situation and immediately return control of the ICS to the Pilot and S.O.

I-510 AIRCRAFT COMMUNICATIONS

Prior to commencement of a rescue evolution, the aircrew will identify a sterile channel to operate on during the evolution. All communications with ground units will conclude prior to the evolution beginning. The Systems Operator will advise the ground units the aircraft will be off-channel during the evolution for safety reasons. Preferably, the S.O. should not identify the sterile channel to the ground units, as it will be compromised.

Additionally, the Pilot will disable the aircraft radios prior to each rescue evolution to prevent distraction.

When the rescue evolution commences, the S.O. will move to the sterile channel to communicate with the Rescue Specialist during the rescue operation. However, the R.S. shall abide with Sterile Communications requirements while the aircraft is engaged in a rescue evolution to allow the aircrew to coordinate effectively. Should the R.S. encounter an emergency, he shall advise the situation to the aircrew via the sterile channel.

Once the aircraft returns to surveillance mode, the R.S. and S.O. may communicate at will to coordinate the remaining rescue efforts.

In the event communication on the common channel needs to be re-established, the current evolution will be terminated and the aircraft returned to surveillance mode prior to communications being resumed.

I-511 POST-MISSION DEBRIEF

Following each mission, or as soon as practical thereafter, the involved flight crew shall conduct a post-mission debrief. Debriefing is an invaluable tool that promotes improvement of weak areas, and strengthens the strong points. The debrief should cover all aspects of the mission and each crewmember is encouraged to give an honest assessment of his or her viewpoint. No crewmember is to be subject to ridicule or harassment due to information conveyed during this process.

Should there be highlights identified that could be useful to the other flight crews, the Systems Operator should document the incident so it can be discussed at the next training session.

I-600 EQUIPMENT

I-601 DIRECTIVE

All personnel are responsible for the day-to-day maintenance and care of all rescue equipment. Should any equipment be found in an unsatisfactory condition, the equipment shall immediately be removed from service and the Unit Supervisor and Rescue Operations Coordinator shall be notified.

I-602 ASSIGNED EQUIPMENT

Personnel assigned any rescue equipment are responsible for the care, maintenance and inspection of the equipment in their possession. Should any discrepancies be found, the assigned operator shall notify the Unit Supervisor of the repair/replacement needs.

I-603 RED-TAGGED EQUIPMENT

Any equipment that suffers suspected damage (dropped carabiners, shock-loaded cable, etc...) beyond approved limitations shall be immediately removed from service and permanently marked indicating it to be unsatisfactory for operational use. This may be accomplished via a red-equipment-tag or red paint.

Under no circumstances may a red-tagged device be stored or carried aboard the aircraft, or be used in a load-bearing training scenario.

Any equipment bearing a red-tag or red marking shall not be used operationally and may be considered a ground-training device only.

Damaged equipment shall be reported to the Unit Supervisor and Rescue Operations Coordinator.

I-604 EQUIPMENT PREFLIGHT

At the start of every work-shift, the assigned Systems Operator shall ensure the rescue equipment is inventoried and inspected for discrepancies.

The rescue log shall be examined for equipment squawks and completeness.

The S.O. shall also inspect the hoist system. If the hoist cable has not been run out since the last post-flight, he/she will run out the cable to the last logged length to inspect for cable damage.

I-605 AIRCRAFT CONFIGURATION

In order to establish uniformity, the unit shall adopt a uniform equipment-configuration model. The Rescue Operations Coordinator shall be responsible for determination of the configuration model of the aircraft, and shall base the decision upon unit feedback, mission evaluations and Aircraft Weight and Balance requirements.

Should personnel have suggestions for configuration changes, they will advise the R.O.C. of the requested changes and reasons for the request. The R.O.C. will evaluate the request and make a determination of the need for the requested change.

If a change in configuration is warranted, the R.O.C. will advise the unit members of the new standard, and incorporate the changes into the next training if needed.

Otherwise, crews shall not make changes to the aircraft configuration.

I-606 POST FLIGHT PROCEDURES

At the conclusion of the daily work-shift, the flight crew shall ensure the aircraft has been returned to the standard configuration.

Any equipment used during the shift shall be inspected for damage, cleaned, restocked and returned to its storage location.

The flight crew should inspect the hoist cable past the point of maximum use during the shift, and lubricate the cable following the inspection.

The Systems Operator shall complete the Rescue Log for the shift and ensure all entries are correct.

I-607 CABLE MAINTENANCE

A complete inspection of the hoist cable shall minimally be completed every 12 weeks. The Rescue Operations Coordinator shall be responsible for ensuring the cable is maintained. Designated Rescue Operations Training Officers will make an effort to complete cable maintenance during each training session. The cable maintenance shall include:

- Full length inspection
- Cable wash
- Cable lubrication
- Cable seasoning

Following each cable maintenance event, the Rescue Operations Training Officer will make an entry into the Rescue Log.

I-608 ALUMINUM CARABINERS

While not prohibited from operational use, aluminum carabiners should not be used for lifting human loads. They may be used for lifting cargo and tag lines as long as they have not been red-tagged.

Aluminum carabiners are recommended for training devices and attaching cargo/equipment to the aircraft.

I-700 APPENDICES

I-701 APPROVED CLASS-D TRAINING VENDORS

The following is the current listing of approved vendors for Class-D External Hoist training:

- Priority-1 Air Rescue Services Incorporated
    - http://www.priority1airrescue.com/

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MISHAP PLAN

SECTION J

MISHAP PLAN

In the event of an accident involving one of our aircraft, we must work as a unit to protect our employees, their families, and the air support unit from unnecessary publicity and unconfirmed rumor. This plan is designed to gather information, verify its accuracy, and protect all pertinent records.

The investigating officer will request records from personnel. Those personnel will collect the requested records and deposit them with the investigating officer(s). Personnel not involved with the accident plan will be given updates as information is confirmed.

The news media can be especially intrusive in this situation. Any response to their questions may be taken out of context. To preclude any misinformation being reported as fact, the only contact with the press must be by the Public Information Officer (PIO) or OIC.

Our initial concern in the event of an aircraft accident is to render proper aid to those injured and prevent any additional injuries.

Our second concern is that additional damage is avoided or reduced in its severity (this includes damage to the public image and implication of liability).

Our third concern is that the root cause of the accident be determined so that preventive measures are instituted against recurrence.

INITIAL ACTIONS

The following procedures will be followed when an aircraft is involved in an accident/incident.

- **Start an "Incident Log":** Record the date and times for all incoming and outgoing phone calls, conversations, search efforts, etc., as the events take place.
- **Notify Management Personnel:** Chain of command personnel must be immediately notified when an aircraft is known to have had an accident, precautionary landing or is in any other emergency type situation. If management cannot be notified, contact the FAA and request search and rescue assistance.
- **Confirm passenger accountability:** Ensure all persons on-board have been rescued and / or accounted for by checking the passenger manifest.
- **Obtain professional medical attention:** Ensure all injured persons receive medical attention from the nearest facility as soon as possible.
- **Notify the nearest fire department:** If danger of fire exists at the crash site, notify the nearest fire department as soon as possible.

- **Guard the wreckage area:** Guard the wreckage to protect citizens and to preserve evidence. Do not permit anyone access to the wreckage without prior approval. Do not disturb the wreckage other than to rescue the survivors. If wreckage is moved, photograph wreckage and ground scars from all angles and from various distances.
- **Obtain written statements**: Ask the pilot, passengers and all witnesses to complete written statements as soon as possible. The investigating officer will collect these statements. Witnesses should be instructed to concentrate their statements on what they saw and heard, and their exact location at the time of the accident.

CATEGORY A - AIRCRAFT ACCIDENT

Immediate Site Response:

- Activate the "INITIAL ACTIONS" section as outlined in this document.
- Activate rescue and fire suppression.
- Start an Incident Log.
- Notify the Air Support Unit OIC, Federal Aviation Administration and the National Transportation Safety Board. Ensure scene safety and security.
- Ensure safety and security.
- Stabilize the aircraft for investigation.

CATEGORY B - MISSING/OVERDUE AIRCRAFT

An aircraft is considered overdue when it is 1 hour past the estimated arrival time.

Response

- Activate the "INITIAL ACTIONS" section as outlined in this document.
- Make a radio search if possible.
- Contact the communications center, FSS, and / or the FAA.
- If contact has not been established within 1 hour, assume that the aircraft is in an emergency situation.

- When an aircraft is known to have had an accident, precautionary landing or other emergency situation, contact management personnel immediately. If management cannot be notified, contact the FAA and request search and rescue assistance.
- Notify the appropriate agency, i.e. Federal Aviation Administration, the National Transportation Safety Board, or the Rescue Coordination Center. Request other company aircraft in the vicinity of the overdue aircraft be permitted to participate in the search. Local law enforcement will control search and rescue efforts until such time as the Rescue Coordination Center (RCC) initiates search and rescue. At that time RCC will assume control of the search.

OPERATIONS DUTIES / RESPONSIBILITIES

Flight Operations is designated as the collection point for all information. DO NOT allow rumors to spread misinformation. The OIC will confirm and release information as appropriate to the PIO.

DEPARTMENTAL DUTIES TO ACCOMPLISH

- 1. Establish an event log. Annotate every call, fax, e-mail or other activity related to the emergency situation. Make copies of the log for future reference.
- 2. Identify location for securing records and information.
- 3. Notify appropriate agencies.

AIR SUPPORT UNIT OIC

The Air Support Unit OIC will direct the efforts of the investigative team. The welfare of the crew and passengers is a prime concern of the OIC. He / she will determine what assets can be utilized to aid and comfort the victims and their families. Notification of next of kin and the customer rests with the OIC or his appointed representative. Information will need to be disseminated only through the OIC or PIO. He/she alone will coordinate any releases to the news media.

DUTIES

- Direct overall conduct of investigation.
- Identify resources to assist victims.
- Ascertain that proper medical care is being provided.
- Make arrangements for transportation and accommodations of family, if possible.

- Notify next of kin.
- Notify chain of command of accident.
- Authorize an aircraft recovery after the investigation is completed.
- Coordinate news media information.
- Establish a single point of contact and assure confirmation before any release of information.
- If required, dispatch personnel required to assist investigating officer in aircraft accident investigation.

MAINTENANCE DUTIES / RESPONSIBILITIES

The Maintenance Department will gather and secure all aircraft maintenance records at the request of the investigating officer. An audit of these records will be accomplished to determine if there are any trends or anomalies to be considered in this accident. Copies (if requested by investigating officer) will be made to be included in report

DEPARTMENTAL DUTIES TO ACCOMPLISH

- Secure and audit aircraft maintenance records.
    - Verify accuracy of aircraft logbooks.
    - Update computer and make run of component times for reference.
    - Verify accuracy of weight & balance forms.
    - Verify inspections complied with.
    - Verify all A.D.'s are complied with.
- Secure and audit aircraft daily logs.
    - Verify compliance with preflight/daily regulations.
    - Verify carry forward of maintenance due items.
- Assist investigating officer (if requested) in follow-up work.
    - Contacting aircraft manufacturers
    - Contacting engine manufacturers
    - Contacting avionics manufacturers
    - Contacting FAA representatives.

INVESTIGATING OFFICER DUTIES / RESPONSIBILITIES:

The investigating officer will gather and secure all pertinent information about the flight crew involved in the accident. An audit of these records will be performed to verify compliance with the appropriate FAR 91 Regulations.

DUTIES

- Use accident investigation checklist to assure all items are covered for report.
- Secures evidence at site.
    - Aircraft/equipment unmolested.
    - Secure cargo and personal effects.
    - Supervise removal of aircraft to minimize post-accident damage.
- Photograph accident site. (T.I. should be used if possible.)
    - Still photographs -air and ground.
    - Location of ground impact(s)
    - Video of all areas, if possible.
    - Drawings of accident site, including distances.
- Compile evidence for investigation.
    - Records from Aviation contractor's operations file.
    - Evidence from accident site
    - Photographs and video.
    - Interviews of survivors and witnesses.
- Interface with other parties. (Maintenance personnel may assist)
    - Customer representatives
    - NTSB/FAA
    - State authorities
    - Aircraft manufacturers representatives
    - Power Plant manufacturer representative
    - Avionics manufacturer representative
- Secure and audit flight crew records.
    - Determine total flight time since last training.
- Audit crewmember certification.

- Obtain copies of pilot certificates.
- Verify medical certificates for proper time/class.
- Verify currency of flight (90 days).
- Obtain total month/quarter/yearly total flight times.
- Note dates of last proficiency checks.

- Audit maintenance records. (Maintenance personnel may assist with review of records.)
  - Verify accuracy of logbooks
  - Verify all inspections have been complied with
  - Verify all A.D.'s have been complied with.
  - Verify current weight and balance forms
- Obtain statement from Audit pilot diaries.
  - Mechanic who last worked on aircraft.
- Obtain statement from last known mechanic.
  - Verify daily completed normally.
  - Determine any trends or minor anomalies.
- Generate Accident Report
  - Compile evidence and photographs
  - Area sketch(s), map references
  - List possible causation
  - Make recommendations to eliminate recurrence
  - Forward copy of report along with checklist to OIC.

MEDIA INITIAL RELEASE STATEMENT

Release Date: _____ Time: _____

Aircraft Accident at _____

(Location)

The Kern County Sheriff's Office confirms an aircraft incident involving their

_____at_____.

(Aircraft Type) (Location of Aircraft)

A scheduled flight departing from _____ enroute to

_____ has been involved in an accident

The damage is reported to be _____

(Extensive, Major, Minor)

and though no numbers are yet confirmed, there are (no) reports of fatalities. The unconfirmed passenger total is _____ with a crew of _____.

Media personnel will be advised further at _____ of the location of the Media center and of pertinent releases.

Kern County Sheriff's Office

_____

Public Information Officer