

CHAPTER 4

Standard Operating Procedures - Rotary Wing

HELICOPTER FLIGHT OPERATIONS (GENERAL)

All aircraft operations will be conducted in accordance with all applicable FARs, local and national laws, manufacturers' aircraft manuals and limitations, and this Manual. Aircraft will be operated in an airworthy condition at all times. Aviation personnel are expected to utilize sound, conservative judgment in their approach to their duties. Safety is the primary objective of the Department.

The policies and procedures in this section are supplemental to those listed in the General Section of this manual. Where the word "aircraft" is used, the material applies to both fixed-wing and helicopter operations. The words "airplane" or "helicopter" respectively refer to airplane and helicopter categories of aircraft.

FLIGHT CREW CHECK-IN AND POST FLIGHT PERIOD

Flight crewmembers shall check-in for flights no less than one hour and 15 minutes prior to the scheduled departure time. When the Chief Pilot or PIC determines the conditions warrant additional time prior to departure, an earlier check-in time may be designated.

The post-flight period is assumed to be 30 minutes.

FLIGHT PLANNING

The PIC is responsible for flight planning and related information (i.e. catering, ground transportation, servicing requirements, reservations, etc.). The PIC may assign this duty to the other pilot but retains the responsibility for the task. There must be no confusion as to which pilot is to do this function. Both pilots will thoroughly review the trip manifest prepared by Flight Dispatch. Any discrepancies or questions should be reviewed with the dispatcher. Confirm the number of passengers on each leg so that proper fuel planning can be accomplished, and ensure all ground transportation needs are understood.

The pilot accomplishing the flight planning shall make the maximum use of available information and specialized equipment (computer flight planning and commercial weather services) provided by the Department.

Heliports are not normally included in the NOTICES TO AIRMEN reports issued by local Flight Service Facilities. It is therefore the PIC's responsibility to determine the latest status of destination heliports. Flight Dispatch will make every possible effort to determine heliport conditions before the flight and relay appropriate information to the crew. There will be occasions (holidays, weekends, change of destinations, winter snows, dignitary or politician closures, delays etc.) when the PIC will be required to ascertain the heliport conditions. Heliport conditions should be confirmed by the PIC at least 30 minutes prior to arrival with a call to the destination heliport or controlling authority for the latest advisories. If a phone call is not feasible, try to make radio contact as early as possible into the flight to allow a change of destination if conditions warrant. The landing authority at privately operated heliports will always be arranged through the dispatcher. A contact number to determine heliport conditions will be provided to the PIC prior to the proposed flight departure.

The senior pilot will fly the first leg as PIC (Captain) when departing a Department base. Subsequent legs shall be alternated in accordance with operational qualifications and by mutual agreement between the pilots.

REQUIRED PUBLICATIONS

Current copies of this manual, Aircraft Maintenance Log (AML), Deferred Maintenance Log (DML) and Minimum Equipment List (MEL) and Federal Aviation Regulations (FAR) must be carried on board each Company aircraft.

The Department maintains subscriptions to FAA and Jeppesen for each aircraft and base. Each Company aircraft will carry a current set of aeronautical charts, instrument approach procedure charts for the area of operation and applicable supplemental information. Where available, the subscription shall include color, shaded terrain and pictorial approach charts.

The charts, FAA-approved rotorcraft flight manual (RFM) and any applicable supplements and operating handbooks for each aircraft and for installed optional equipment will be provided through a subscription or revision service, as applicable. Each Department aircraft will carry a current set of manuals, handbooks, and supplements during all flight operations. A current copy of the IATA Hazardous Material Manual "Dangerous Goods Regulations" will be maintained at each base of operation.

Additional or supplemental publications may be obtained as needed. The Chief Pilot must approve all subscriptions and major purchases of publications.

Contract aircraft suppliers shall provide all required documents, manuals, approach and navigation charts and maps, certificates, licenses, logs and other written information for the aircraft being supplied. All contractor-supplied material must be complete and current.

WEATHER

Prior to each flight, the PIC will obtain aviation weather reports and forecasts and analyze the following data to determine the effect on the proposed operations:

- Latest NOTAM for the point of departure, route of flight, the destination and the alternate destination.
- Surface weather observations for pertinent stations.
- Forecasts for all pertinent routes and stations.
- Reports or forecasts of severe weather, turbulence or icing which could affect the proposed flight.
- Any known air traffic delays.

Pilots will check weather forecasts sufficiently in advance of a proposed flight and notify Flight Dispatch of any conditions that may affect passenger schedules. This includes checking weather forecasts the night before an early morning scheduled departure. The PIC may delegate some of these duties, but will retain responsibility.

WEATHER LIMITATIONS

This section sets forth operational limitations for the Department rotor-wing aircraft with regard to weather conditions. This section's provisions are intended to simplify decision-making in critical areas. It is well-known that all pilots should avoid flight into adverse weather conditions and that careful planning and in-flight evaluation should preclude such encounters. In the event that unforecasted adverse weather conditions are encountered, the pilots shall take immediate action to avoid further exposure to those conditions.

No pilot may operate under VFR with less than one statute mile visibility or a ceiling off less than 500 feet for day operations. For night operations, the following shall apply. No pilot shall operate at night with less than:

- 3 statute miles visibility and a ceiling of 900 feet or,
- 4 statute miles visibility and a ceiling of 800 feet.

Care must be taken to note the floor of controlled airspace along all routes to be flown. If controlled airspace is to be entered with less than the weather minimums prescribed for that airspace under FAR 91.155, a Special VFR (SVFR) clearance issued under FAR 91.157 must be obtained.

No flight will be dispatched into forecast or reported freezing precipitation and no pilot may continue flight in icing conditions.

When wind gusts greater than 35 knots are reported, no heliport landings will be allowed unless by determination of the PIC, a safe landing can be made taking into consideration wind direction, condition of heliport, etc.

SEVERE WEATHER AND WEATHER DETECTION DEVICES

Flights into areas of known or forecast severe weather will be avoided to the maximum extent possible. When flight is necessary into areas of reported thunderstorms, turbulence, etc., avoidance will be accomplished using visual means, airborne radar and, when available, air traffic control assistance.

Operable weather radar must be installed in the aircraft if operation is planned into areas of known or forecast thunderstorm activity where avoidance cannot be accomplished by visual means.

APPROACH CATEGORY (ROTOR-WING)

The Department's [rotorcraft type] helicopter will be operated to Category A approach weather minimums.

HELICOPTER PERFORMANCE

A clear approach and departure path, consistent with aircraft performance (one-engine inoperative) shall be utilized for all passenger-carrying operations.

APPROACH AND LANDING MINIMUMS

Each Department pilot making an IFR takeoff, approach, or landing at an airport shall comply with the applicable instrument approach and weather minimums published for that facility.

At airports where weather reporting services are available, Department pilots shall not initiate an instrument approach procedure unless the latest weather report for that airport, reports the visibility at or above the published IFR landing minimums as depicted on the applicable instrument approach procedure chart consistent with the operational status of the approach facility being used.

If during an instrument approach that utilizes RVR for landing visibility, the RVR is reported to be below the required minimums before the aircraft has passed the FAF, the approach shall be aborted and a missed approach shall be executed. If the aircraft is inside of the FAF when the RVR is reported to have gone below minimum conditions, the pilot may continue the approach to DH or MDA.

Department pilots shall not operate an aircraft below the authorized MDA or continue an approach below the authorized DH unless:

- The aircraft is continuously in a position from which a descent to a landing on the intended runway can be made at a normal rate of descent using normal maneuvers, unless that descent rate will allow touchdown to occur within the touchdown zone of the runway of intended landing.
- The flight visibility is not less than the visibility prescribed in the standard instrument approach procedure being used.
- Where any necessary visual reference requirements are specified by the FAA Administrator, at least one of the following visual references for the intended runway is distinctly visible and identifiable to the pilot:
 - A. The approach light system, except that the pilot may not descend below 100 feet above the touchdown zone elevation using the approach lights as a reference unless the red terminating bars or the red side row bars are also distinctly visible and identifiable
 - B. The threshold.
 - C. The threshold markings.
 - D. The threshold lights.
 - E. The runway end identifier lights (REIL).
 - F. The visual approach slope indicator (VASI).
 - G. The touchdown zone lights.
 - H. The runway or runway markings.
 - I. The runway lights.

At airports not served by weather services and at airports with irregular or minimum weather reporting services, the approach may be initiated and a landing executed if, when reaching the MDA or DH, the weather is found to be at or greater than that specified for the approach. Also the aircraft must be stabilized and continuously in a position from which a descent to a landing on the intended runway can be made at a normal rate of descent using normal maneuvers and where such a descent rate will allow touchdown to occur within the touchdown zone of the runway of intended landing.

APPROACHES LOW VISIBILITY (ROTOR-WING)

The Department helicopter will be operated to Category A approach weather minimums, or Copter only approach minimums which include the Copter ILS, 100 foot ceiling and 1/4 mile visibility minimums. The helicopter will be fully coupled (as applicable) with the autopilots engaged during these approaches. The deceleration mode will also be engaged during the Copter only ILS approaches to minimums of 100 foot ceiling, and 1/4 mile visibility. The PIC must

successfully complete recurrent training in the helicopter simulator within the intervals listed in Section 4 of this Manual. The training must have included 100' ceiling and 1/4 mile minimum Copter ILS approaches.

CIRCLING APPROACHES (ROTOR-WING)

Department rotor-winged aircraft will be operated to Category A weather minimums during circling approaches.

HIGH MINIMUMS CAPTAIN

The following restrictions apply to a new Captain who has not completed 100 flight hours as PIC in the assigned make/model/series of aircraft or has not completed 50 flight hours as PIC in another type of Department aircraft:

- Takeoff visibility of not less than 1/2 mile (RVR 2400 feet/800 meters).
- The DH or MDA and visibility landing minimums must be increased by 100 feet and 1/2 mile respectively. This restriction applies to the destination airport, destination alternate and takeoff alternate.
- The high-minimums PIC must notify Flight Dispatch as soon as possible when it appears that the known or forecast weather conditions are insufficient for the planned flight.

SECOND-IN-COMMAND (PILOT) LIMITATIONS - LINE OPERATIONS

Pilots who are not designated as Captain by the Flight Department Manager for the specific make/model/series of aircraft to be utilized may function as a second-in-command only. Non-type rated pilots shall be limited by Department policy from:

- Flying from the command seat at any time during line operations.
- Making takeoffs and landings during passenger carrying operations, until they have accumulated 100 hours in type.
- Making takeoffs and landings when:
 - A. The reported surface visibility is less than 5/8 mile (3200 feet/1000 meters).
 - B. The RVR or the ceiling is within 100 feet of the applicable approach minimums (DH or MDA).

Type rated pilots who are not designated as Captain (by the Department) for the type specific aircraft being flown must comply with the same limitations as applicable to non-type rated pilots, except the rated pilot may fly the aircraft from the command seat at the discretion of the PIC (Captain).

Note: All flight operations are at the final discretion of the PIC for that flight.

TAKEOFFMINIMUMS (ROTOR WING)

A PIC (not designated as a High Minimums Captain) may takeoff from a runway when the reported RVR for that runway is at or above 800 feet or 1/8 statute mile visibility, which ever is lower providing that:

- There exists a suitable takeoff alternate within 75 nm.
- Before takeoff, the pilots shall determine from weather reports, forecasts and NOTAM'S that the takeoff alternate is at or above landing minimums and is expected to remain so for the time period during which the takeoff alternate is required.
- The PIC has successfully completed recurrent training in the [rotorcraft type] within the intervals listed in Section 4 of this manual. The training must have included 600' RVR takeoffs, aborted takeoffs and engine failure procedures.

ALTERNATE AIRPORT REQUIREMENTS

Requirements for filing an alternate airport:

- All IFR flights should include at least one alternate as a normal procedure.
- Within the conterminous United States, an alternate airport need not be filed for a destination airport having a standard instrument approach procedure if the ceiling is forecast to be at least 2,000 feet (600 meters)

above the destination airport elevation and the surface visibility is forecast to be at least 3 miles (4.8 km) at the destination airport for at least one hour before and one hour after the estimated time of arrival at the destination airport.

 Within the continental United States, an alternate airport must be filed for a destination airport not having a standard instrument approach procedure if the ceiling and visibility do not allow descent from the MEA to approach and landing under basic VFR.

An airport may not be listed as an alternate airport in the flight plan unless the appropriate weather reports or forecasts, or any combination thereof, indicate that the weather conditions will be at or above the alternate weather minima specified on the applicable instrument approach procedure chart for that particular airport when the flight arrives.

On the Jeppesen instrument approach procedure chart, alternate weather minima are found in the "for filing as alternate" box. When alternate weather minima are not specified for a particular airport, approved minimum weather is:

- For airports having an approach with an electronic glide slope, a ceiling of 600 feet (180 meters) and a visibility of two miles (3200 meters)
- For airports with LOC, VOR, etc., type approaches, a ceiling of 800 feet (240 meters) and a visibility of two miles (3200 meters)
- For airports with no approved instrument approach, a ceiling of at least 1000 feet (300 meters) above the lowest MEA or MOCA and a visibility of at least three miles (4.8 km).

Footnotes on the Jeppesen instrument approach procedure chart for any particular airport may specify additional applicable restrictions for filing the airport as an alternate airport.

In the event of a diversion to an alternate, regular Company and FAR or ICAO minimums become applicable. Rules applicable to high-minimum pilots at regular airports apply equally at the alternate in this case.

NOISE ABATEMENT

Pilots will adhere to published noise abatement procedures and voluntary curfews except when the safety of flight is involved.

SPECIAL VFR ROUTES/NOISE ABATEMENT ROUTES

Helicopter flights shall utilize special VFR routes when available. These helicopter routes shall be flown whenever possible. The highest acceptable altitude shall be flown on the prescribed routes to reduce the impact to noise sensitive areas.

FLIGHT FOLLOWING

Whenever possible, crews will maintain flight following and radar advisories with ATC facilities during VFR flights. This kind of positive communication enhances safety and is important should unforeseen circumstances arise.

NIGHT OPERATIONS/OFF-AIRPORT/HELIPORT

Department pilots will consider the following when operating at an Off-Airport/Heliport site during the hours of darkness:

- The landing site must be adequately illuminated. If perimeter or stadium lights are not available, helicopter operations will be limited to daylight hours only.
- If a visible, lighted wind direction indicator is available and the landing site has been thoroughly evaluated during the arrival landing process (during daylight hours), a night departure may be made at the discretion of the PIC.
- Pilots operating the helicopter at night will perform a thorough high, low and ground level reconnaissance during daylight hours, before a night takeoff is attempted. Maximum performance takeoffs should be utilized at night, if feasible, to ensure obstacle clearance is assured.
- Special considerations should always be given to noise sensitive areas.

LANDING SITES - NON AIRPORT/HELIPORT

An optimum location for an Off-Airport/Heliport landing site is one that is in close proximity to the location of the passengers. The Department helicopter pilots will use their best judgment when considering a potential landing site. Some factors that must be reviewed include:

- Obstruction clearance.
- Ground slope.
- Noise sensitive communities around the operating area.
- FOD hazards.

A suitable landing site will be a minimum, 75 x 75 ft. The location can be on the ground, a marine vessel, an elevated platform, or the roof of a building or parking garage. A suitable landing area will provide a visual means to determine wind direction (i.e., wind sock, weather vane, smoke stack, flags, etc.). The landing area is not required to be paved, but it may not contain loose objects that may be blown up into the rotor system or engine intakes.

Prior to landing at an Off-Airport site, Department Flight Dispatch, or the helicopter pilots will confirm with the local authorities that the helicopter landings are authorized at the proposed landing location. A high and low reconnaissance of the site will be performed prior to committing to a landing.

The landing surface must be dry, firm, level and able to support the weight of the aircraft and should have at least one clear approach and departure path.

Passenger protection must be provided at all times when the helicopter is operated on the ground. Passengers must never approach or depart the helicopter unless escorted by a crewmember or ground personnel trained in helicopter safety procedures. The PIC is responsible for determining that this requirement is satisfied.

MIXED AIRCRAFT OPERATIONS ON THE RAMP

For passenger convenience, safety, and aviation efficiency, the operation of both fixed-wing and rotor-wing aircraft on the same ramp is compatible and easily accomplished when standard procedures are addressed. Wheeled helicopters produce no more of a rotor wash concern than airplanes with prop or jet blast. To ensure an increased level of awareness is realized, the following procedures are standard.

Helicopters will avoid hovering on the ramp or near other aircraft. Take-off and landings will be made from adjacent taxiways or runways and not from the ramp. There will be no over flight of other aircraft at low altitudes by the helicopter. Whenever possible, ground taxi to keep rotor wash to a minimum. When ground taxiing, reduce power to minimize rotor wash, confirm clear both sides, and verbalize any safety concerns during brief before taxiing (i.e. chocks, mats, trash, etc. left unattended on ramp). Ground guides should be used when taxiing around other aircraft. Over lapping of rotor blades and airplane wings will be avoided. When parking, the tail of helicopter should be away from the direction of passengers' paths.

Communications between the helicopter crew and fixed-wing crew will be exchanged on the company UNICOM frequency so it is clear what taxi operations are intended for passenger drop-off or aircraft repositioning. The communications should include the direction of taxi, or the side of the aircraft approaching. Any other concerns should also be expressed between aircraft crews, i.e. extra baggage, or special needs (crutches, etc).

Passengers will always be escorted to and from the helicopter. Deplaning and boarding the helicopter will always be from the side, moving out and away from under the rotor disc, and never to the front or back near the tail rotor. The pilot at the controls of the helicopter should be attentive to ground personnel's movement by staying "heads up" on the controls and ensure that the rotor disc is tilted aft far enough for passenger clearance. Hats should be removed when near the running helicopter. Umbrellas will not be used near or under the helicopter rotor disc. At no time is running permitted around the helicopter. Crews will maintain constant vigilance when there are limos or autos operating on the ramp, and never allow them to drive under the rotor disc.

MINIMUM LANDING FUEL RESERVES

The minimum reserve fuel planned to be on board the Company helicopter at the time of landing is 300 lbs. The minimum fuel reserve is designed as an absolute minimum and is not intended to be used as a landing fuel target. If

a landing is made with less than the specified quantity of fuel on board, the Company assigned PIC shall submit a written report explaining the use of the reserve specified to the Chief Pilot within five working days.

FLIGHT CREWMEMBER TRIP PACK/FLIGHT LOG

A Trip Manifest will be issued by base Flight Dispatch for each crewmember assigned to a Department scheduled trip. Crewmembers are responsible to verify accuracy of the Passenger Manifest (i.e. all passengers accounted for) and destination with the lead passenger prior to departure and to notify Flight Dispatch prior to departure if any changes develop to an itinerary while conducting a trip.

After completion of the trip, the Company Assigned PIC shall complete the passenger manifest(s) and flight log(s) entries and submit them to Flight Dispatch. Incorrect or obsolete leg data information that is found by the flight crew should be corrected and the new information provided to Flight Dispatch. The PIC may delegate this duty but retains the final responsibility for the accuracy of the trip data. For security purposes, all flight crewmembers who have been issued a Trip Manifest must return any unused portions to their base Flight Dispatch for proper disposal.

OPERATING AT UNCONTROLLED AIRPORTS

The following are recommended operating procedures for operating on or in the vicinity of an uncontrolled airport. When approximately 15 miles out, pilots should ask ATC if there is any conflicting traffic and monitor the ATC frequency for traffic alerts. Approximately ten miles out, pilots shall broadcast, in the blind if necessary, position and intentions on the Common Traffic Advisory Frequency (CTAF) or Local Airport Advisory (LAA). Calls recommended on CTAF or LAA are:

- Ten miles out.
- Entering downwind.
- Base.
- Final.
- Exiting the runway.

IFR flight plans should be canceled to avoid initiating search and rescue operations for overdue aircraft, but not until after landing at uncontrolled airports. On instrument approaches, it is recommended that pilots broadcast the following on CTAF:

- Departing final approach fix.
- On final approach.
- Approach completed.

When operating on or in the vicinity of an airport in class G airspace, the FAA requires that each pilot of a helicopter avoid the flow of fixed-wing aircraft. It is the responsibility of the PIC to ensure that the landing area is clear. If conditions permit, an approach overhead the airport helps to verify that the runway or landing area is clear, the wind direction, the runway in use, and increases the probability of visual acquisition by other aircraft.

When departing from the airport, broadcast departure intentions before taxiing and before taking the runway. Pilots should comply with the departure procedures for the airport including noise abatement procedures. Recommended procedures are:

- Make frequent radio calls. Request any traffic in the vicinity of the airport identify themselves so that you are aware of each other's presence.
- Turn all exterior lights on. Dim interior lights as much as possible during night operation for better outside visibility.
- BE ALERT. Complete as many checklist items as possible before entering the pattern.
- Call the airport manager or the FBO prior to departing on the trip to inquire about runway conditions, weather, NOTAM, runway lighting, obstacles or any possible hazards.

• Review charts prior to flight and note minimum altitudes for terrain clearance.

AIRWORTHINESS DETERMINATION (PILOTS)

The final responsibility for determining airworthiness of the aircraft rests with the PIC (FAR 91.7). In addition to completing a pre-flight check, the PIC shall thoroughly review the AML and DML and confirm that the aircraft is in an airworthy condition. These responsibilities include but are not limited to ensuring:

- Compliance with all applicable AD's and mandatory service bulletins.
- That the planned flight or series of flights will not exceed the time remaining for the time/date maintenance requirements as shown on the "Item Due" sticker.
- That all inspection due dates, hour or cycle limits have been carried forward and are not past due.
- That all maintenance discrepancies have been corrected or deferred in accordance with the MEL. All maintenance record entries shall be completed and signed by a certified technician approving the aircraft for return to service.
- That the deferred items do not render the aircraft unsuitable for the planned flight or series of flights.
- That all required equipment and documents are on board.

AIRCRAFT PRE-FLIGHT CHECK

Pre-flight checks are to be accomplished by a pilot in accordance with the Rotorcraft Flight Manual.

USE OF MINIMUM EQUIPMENT LIST (MEL)

The FAA requires that all systems, components and equipment must be in operating condition prior to aircraft dispatch unless allowed to be inoperative by an FAA-approved MEL. An FAA approved copy of the MEL will be carried on board each Department aircraft. If an aircraft system becomes inoperative away from the home maintenance base, the pilot will enter the discrepancy in the AML. An inoperative item may be deferred if permitted by the MEL, by number "per MEL." Any maintenance or operational action, installation of placards or mechanical stops, etc. required by the MEL must be completed prior to the next flight.

VOR CHECK

The PIC or designee shall complete, or verify completion of, a VOR check in accordance with FAA regulations. If a VOR check is due, the pilot shall complete the check and document completion in the AML:

In the Discrepancy block: "VOR Check Due"

In the Corrective Action block: "VOR Check Completed" Date Place Bearing Error Signature & ATP Number

After completing the AML entry, the Pilot shall initial and date in the appropriate block of the "VOR Check" sticker located on the inside cover of the AML log binder.

COLD WEATHER OPERATIONS

Department aircraft should be hangared when freezing precipitation or snow is anticipated.

If the aircraft is exposed to accumulations of frost, ice or snow, the contamination will be removed in accordance with the aircraft manufacturer's recommended procedures and industry-standard methods prior to flight. The aircraft should be pre-heated, when possible, prior to attempting to activate any of the aircraft systems. Cabin systems (water storage, food and drink containers, coffee-makers, etc.) must be properly handled (removed and stored in heated area, serviced with anti-freeze, etc.) to prevent damage from freezing or during defrosting.

Aircraft parked outside should be headed into the wind when possible to minimize the accumulation of frozen precipitation in the openings around flight control surfaces. Covers and plugs must be installed to protect the engine

inlets from accumulation while the aircraft is parked. The parking brakes must be released after the aircraft has been chocked to prevent damage due to temperature changes.

FROST, SNOW AND ICING

No pilot shall attempt a takeoff if the aircraft has frost, snow or ice adhering to any, windshield, powerplant installation, flight or rate instrument system, wings, rotors, control surfaces or other areas that could affect flight characteristics or performance.

Aircraft that are found to have frost, snow or ice accumulations must be de-iced prior to flight in accordance with the aircraft manufacture's recommended procedures using industry standard procedures and materials. If existing conditions could cause accumulations to reoccur, the PIC must ensure that the aircraft is deiced as often as necessary based on deicing product specifications and observed conditions. Prior to takeoff, the PIC must determine that there is no accumulation that would affect performance of the aircraft.

Flight must not be attempted into known or forecast icing conditions.

TOWING

All towing operations will be performed in accordance with the methods and limitations described in the appropriate sections of the RFM and maintenance manual.

AIRCRAFT REFUELING PROCEDURES

The PIC is responsible to ensure that fuel is of the proper grade and quality and that the desired amount is placed into the aircraft fuel tanks. The PIC may delegate the fueling of the aircraft but retains the responsibility. The crewmember should verify that the refueling equipment is labeled with the name of the product ordered (Jet A, Jet B, etc.), and is properly positioned and is not under any part of the aircraft that could settle during refueling. Fuel trucks should not be backed up to the aircraft and should be parked so that the truck could be moved away from the aircraft in case of a malfunction or emergency.

The fuel truck will be bonded to the aircraft structure at the recommended bonding point and the nozzle ground wire attached before any fuel cap is opened or the nozzle is connected.

No fueling will be performed with passengers onboard the aircraft. One pilot will supervise the refueling and ensure that the aircraft is properly grounded before fueling commences. The supervising crewmember will physically check the fuel caps for security at the completion of fueling and will ensure that all bonding cables are disconnected from the aircraft. The bonding cables and fuel hose must be clear of the aircraft before takeoff occurs.

The personnel used for rapid fueling must have prior experience fueling helicopters with engines running and blades turning. A suitable fire extinguisher must be readily available during all fueling operations and a pilot must remain at the controls with the engines at flight idle.

No fueling will be allowed if a thunderstorm is in the immediate vicinity of the fueling facility. All strobe lights will be turned off and no radio transmissions shall be made during fueling. When required by the aircraft type or mission a crewmember shall remain in the vicinity of the aircraft until the refueling has been completed. A flight crewmember shall ensure that the refueling panel and fuel cap(s) are secure and determine that all bonding wires have been disconnected from the aircraft.

If there is any question as to the quality of the fuel or fueling equipment being used, the flight crewmember will request that a sample be taken from the final fuel filter of the refueler or from the delivery nozzle being used to refuel the aircraft prior to accepting fuel into the aircraft. Fuel samples should have a clear and bright appearance and have no evidence of free or suspended (cloudy or hazy) water and have no visible particulate matter (dirt, rust, etc.). Fuel that is not clear, clean and free from water should not be accepted.

GROUND POWER UNITS

When a ground power unit (GPU) is supplying power to aircraft systems, one person qualified to operate the GPU must remain in attendance in the immediate vicinity of the aircraft. The immediate vicinity of the aircraft is defined as sufficiently close in proximity to enable the person to take immediate corrective action in the event of an emergency involving the aircraft or the power unit.

CABIN EMERGENCY EQUIPMENT

Emergency equipment meeting the requirements of FAR 91.513 and passenger briefing cards are carried on Department aircraft. Each crewmember shall be familiar with the location, condition, inspection status (per attached inspection tag or label) and operation of the emergency equipment carried on board the aircraft.

SURVIVAL EQUIPMENT REQUIREMENTS

No flight will be conducted over water that is more than 30 minutes flying time, or 100 nautical miles from the nearest shoreline unless the equipment specified in FAR 91.509 is carried on board the aircraft.

The PIC will ensure that the proper amount and type of equipment is on board prior to departure and that each crew member is aware of the operation and location of all survival equipment.

USE OF FLOATS

Helicopters used for over-water flight operations, including departures and approaches, shall be equipped with emergency aircraft flotation devices. These devices must be functional and armed during over-water departures and approaches.

The aircraft must be equipped with a personal flotation device (life jacket) for each person on board the aircraft.

BOARDING AND DEPLAINING PASSENGERS WITH ENGINES RUNNING OR BLADES TURNING

At least one pilot must be at the flight controls whenever the helicopter engines are operating. The pilot must be alert to personnel and equipment in the vicinity of the aircraft. Passengers shall always be escorted by a crewmember when boarding or deplaning the helicopter. Coordination with fixed-wing aircraft will be made when boarding passengers and luggage from Department fixed-wing aircraft or deplaning to Department fixed-wing aircraft. A helicopter crewmember must meet a fixed-wing crewmember to accept baggage and safely escort passengers to the aircraft

Due to the low-tip path of the main rotor blades, passengers should never be allowed to approach, or depart, the aircraft from the front. Passengers should never be allowed to move toward the tail rotor beyond the baggage compartment area. All passenger movement should be from the same side of the helicopter and a crewmember must supervise the movements.

A crewmember will load and unload the passenger baggage and will ensure that the passengers are seated and the seat belts are fastened. Each passenger will be handed a briefing card. The crewmember will ensure that all doors are properly secured before returning to the cockpit.

Caution: Umbrellas will not be opened near or under the helicopter rotor disc. Winds and rotor wash can unexpectedly pull an umbrella into the rotor disc.

BAGGAGE LOADING/STORAGE

Baggage will be placed in designated compartments or placed where it will not block access to aisles or normal or emergency egress routes. Passengers may access hand baggage during cruise flight. Baggage must be secured for takeoff and landing and passengers shall be briefed of this requirement. Cabin baggage, including briefcases, must be properly secured to prevent it from becoming a projectile during takeoff, landing or during in-flight turbulence.

Baggage loading will be shared between flight crews and ground personnel.

CABIN ANNOUNCEMENTS/BRIEFINGS

Pilots are to keep passengers informed of delays and other important information pertinent to the flight before each takeoff. The PIC shall ensure that all passengers are briefed as required under FAR Part 91, which includes the following:

- Use and operation of seat belts and shoulder harnesses.
- The location and operation of emergency exits.
- The location and operation of survival equipment.
- Use of the Smokeshield respirator devices.
- Smoking.

- Stowage of loose articles and hand baggage.
- Use of portable electronic devices.

Recorded briefings may be used and supplemented by printed briefing cards. These cards must be carried in a location that is visible and convenient and must contain aircraft specific information. Prior to flights requiring flotation equipment, pilots shall ensure that all passengers have been briefed on its use.

PORTABLE ELECTRONIC DEVICES

No person shall operate a personal radio transmitter, television receiver, cellular phone or any other electronic device known to emit electromagnetic or radio frequency emissions that could interfere with the aircraft navigation systems during flight.

Portable tape recorders, pacemakers, hearing aids, electric shavers, DVD/CD players and portable computers are acceptable for use on board Department aircraft.

HEADSETS

Each flight crewmember is supplied with a headset. Headsets shall be used by all cockpit crewmembers anytime the aircraft is in motion on the surface, or airborne.

STERILE COCKPIT

Crewmembers will eliminate all extraneous cockpit conversation that does not apply directly to the operation of the aircraft anytime the aircraft is in motion on the surface, or airborne, while operating in congested, busy airspace.

The sterile cockpit environment will also be maintained during peak workload flight periods, i.e. approaches and departures.

OPERATION OF FLIGHT CONTROLS

Only Department employees designated as pilots, contract pilots, contract flight training pilots, FAA Pilot Examiner or Designated Pilot Examiner, a qualified manufacturer's test pilot or a Company designated instructor pilot may manipulate the flight controls of any Company aircraft.

STANDARDIZATION PROGRAM

The Department Standardization Program encompasses the use of Standard Operating Procedures (SOP's) and Standardization Flights to ensure effective crew coordination. Crew coordination is the effective delegation of responsibility and division of workload among the flight crewmembers. Crew coordination is essential in the safe operation of Department aircraft.

The use of SOP's, checklists and terminology creates a standardized system whereby the pilots become immediately aware of any departure from the normal sequence of events or normal system operations. The use of these SOP's will place the flight crew in the best position to recognize potential problems and respond to emergency and abnormal situations in the proper manner.

Flight crews are not authorized to deviate from Department procedures unless the deviation is in the best interest of safety. All such deviations shall be reported to the Chief Pilot within 24 hours of the occurrence. A constant evaluation process ensures that these procedures are effective and suitable for Department flight operations.

The PIC retains the final authority for the conduct of the flight. Unless already dictated by Department SOP's, the PIC must clearly establish the pilot flying (PF) and pilot not flying (PNF) responsibilities so that there will be no confusion as to the duties or task assignment.

The PF's primary responsibility is to fly the aircraft and operates or commands the operation of the flight controls, flight instruments, and the autopilot.

The PNF performs all other cockpit duties including the following:

 In normal flight - Navigates, communicates, programs communication and navigation equipment, monitors the radar and flight and engine instruments, and completes required paperwork and other tasks, as directed by the PF. • During emergencies or abnormal system operations - checks instrument indications, reads and accomplishes checklists, performs checks, takes corrective action, as necessary.

All emergency actions taken by the PNF should be validated with the PF and concurrence obtained prior to taking the action. If an apparent error in any flight parameter is detected, the PNF shall immediately notify the PF of the deviation from published procedures, limitations, or air traffic clearance or routing. The PF and the PNF shall coordinate with each other prior to initiating the following:

- A change in aircraft configuration.
- A transferring of aircraft control.
- Selection or change of navigation equipment settings or frequencies.
- Checklist initiation and completion.
- A change in altitude.
- A change in weather radar setting.

PRE-DEPARTURE BRIEFING

The PIC shall conduct a pre-departure briefing prior to each flight. The briefing shall include all crewmembers to enhance team-building and set the tone for the flight. Thorough preflight briefings shall be used to ensure that no significant points are omitted.

USE OF CHECKLIST

The Department SOP's are based on the systematic use of checklists to accomplish the required checks (normal, abnormal, emergency etc.). SOP items that are shown in quotation marks are to be stated as written.

STANDARD OPERATING PROCEDURE

The following Standard Operating Procedure (SOP) is to be utilized in all routine rotor-wing flight operations conducted by the department. Any deviation from this SOP as dictated by conditions, or circumstances, must be thoroughly briefed by the Pilot Flying and understood by all crewmembers.

BEFORE STARTING ENGINES CHECK

Task/Initiation Cue	PF or PNF
Pre-flight check completed.	The cockpit preparation can be completed by either pilot using the Before Starting Engines checklist. However, completion of the Before Starting Engines checklist by only one pilot should be verified by both
	pilot crew members prior to starting engines.

RUN-UP CHECK

A minimum of one person qualified to operate aircraft engines must be seated in a pilot seat when an aircraft engine is started, or running. Engines will be started utilizing the proper checklist procedures. Before starting an engine, the immediate area around the aircraft must be visually checked for potential hazards to ensure a safe start. Pilots should make an effort to have a line service person act as an outside observer during engine starts whenever practical. All engines must be started before commencing taxi.

Task/Initiation Cue	PF	PNF
Prestart check complete.	Call, "Run-up checks." Both pilots complete the Start and Run-Up checklist.	Both pilots complete the Start and Run-Up checklist. Call, "Run-up check complete."

PRE-TAXI CHECKS

Task/Initiation Cue	PF	PNF
All engines running and Run-up	Call, "Pre-taxi check."	Both pilots complete the Pre-taxi
check complete.	Both pilots complete the Pre-Taxi	checklist.
	checklist.	Call, "Pre-taxi check complete."
PNF calls, "Pre-taxi check complete."	Call, "Ready to taxi."	Obtain ATIS and taxi clearance.
Aircraft cleared to taxi.	Both pilots clear aircraft for taxi, and	Both pilots clear aircraft for taxi, and
	during taxi.	during taxi.

TAXI CHECK

When any Department aircraft is to be moved under its own power, one person qualified to taxi the aircraft is required to be seated in the pilot seat with seat belts fastened and seat and controls properly adjusted. Operation on crowded ramps and taxiways requires the attention of both pilots. Paperwork and other cockpit duties shall not be accomplished while taxiing in close proximity to other aircraft or obstructions. Both pilots shall maintain maximum possible vigilance. When the aircraft is being maneuvered in close quarters, the pilot not controlling the aircraft will signify proper clearance on the respective side of the aircraft by placing a hand on the center of the glareshield with the thumb in a thumb-up signal. This will place the hand signal in the pilot's peripheral vision and will allow the person taxing to devote maximum attention to the other respective side of the aircraft and the area in front of the aircraft. The aircraft will not be taxied unless the pilot has determined that there is enough clearance to maneuver the aircraft safely. Ground guides will be utilized whenever possible to ensure required clearance is maintained. When adequate clearance is in doubt, the aircraft should be towed.

Systems checks should be accomplished so that, at least, one pilot is maintaining vigilance. Checks should be accomplished at times and locations, during taxiing, with the least exposure to a ground mishap and appropriate for verification of system integrity.

It may be necessary for the PNF to get the clearance during taxi. If possible, cockpit flow should be managed to avoid this. However, when the PNF is required to copy the clearance during taxi, the PF must maintain vigilance and care in taxiing. Changes to any clearance or procedure prior to departure shall be reviewed by both pilots with the helicopter stopped.

Task/Initiation Cue	PF	PNF
Pre-taxi check complete.	Call, "Before Takeoff check."	
	Both pilots complete Before Takeoff	Both pilots complete Before Takeoff
	Checklist, in accordance with aircraft	Checklist, in accordance with aircraft
	flight manual, through takeoff	flight manual, through takeoff
	briefing.	briefing.

TAKEOFF BRIEFING

Prior to takeoff, the PF shall consider (at least) the following items, and brief the PNF, as appropriate:

- Special factors influencing this takeoff (wet runway, anti-icing requirements, cross-wind, deviations from the norm, etc.).
- Verify the airspeed settings (bugs).
- Verify the navigation equipment setup.
- Verify the initial flight clearance (headings, altitudes, etc.).
- Review the emergency return plan.
- PF will complete the briefing by asking "Do you have anything to add? "
- If the PNF has nothing to add, the response will be "I have nothing to add."

• If the PNF has questions or comments, they will be addressed before continuing the checklist.

Use the acronym "SUDS" for Takeoff Briefings.

- S V speeds i.e. Check chart based on Gross weight and temperature.
- U Undercarriage Gear up called at specified speed, and who will pop floats if necessary.
- D Direction to turn if problem develops. I.e. Strong wind from the south, will head south.
- S Safety Issue? I.e. sail boat in front of heliport on the river with tall mast.

Task/Initiation Cue	PF	PNF
Takeoff briefing completed.		Complete Before Takeoff checklist. Call, "Before Takeoff check complete."

BEFORE TAKEOFF CHECK

Both pilots will review any changes in the ATC clearance prior to initiating the Before Takeoff Checklist. All Before Takeoff checklist items must be completed before the takeoff commences. This operation is the final check before the flight phase and must be properly completed.

Task/Initiation Cue	PF	PNF
PNF calls, "Before Takeoff check	Call, "Ready for hover."	Obtains takeoff clearance.
complete."		

TAKEOFF

Task/Initiation Cue	PF	PNF
In position for takeoff, Before	Call, "Hover check."	Call, "Hover check at (torque
Takeoff checklist completed, and cleared for takeoff.	Pull collective to hover power as per RFM.	indicated, i.e. 68%), instruments stabilized."
		Monitor engines and systems
		indications.
Hover power normal, instruments	Call, "On the go."	Continue to monitor engines and
normal.	Maintain directional control,	systems indications.
	steady increase in power to	
	takeoff setting.	
Positive airspeed indication.		Call, "Airspeed alive."
PNF calls, "Airspeed alive."	Verify airspeed.	
At V1.		Call, "V1."
PNF calls, "V1."	Adjust power, accelerate to V2.	
At V2.		Call, "V2."
PNF calls, "V2."	Verify V2	

CLIMB CHECK

Task/Initiation Cue	PF	PNF
Positive rate of climb.		Call, "Positive rate."
PNF calls, "Positive rate."	Verify positive rate.	Select gear up.

	Call, "Gear up."	Call, "Gear selected up." Monitor and call, "Gear indicated up."
	Airspeed accelerate to VBROC	Monitor engine and flight instruments.
Established in climb	Either PF of PNF call, "Climb check."	Either PF of PNF call, "Climb check."
PF of PNF calls, "Climb check."		Complete checklist. Call, "Climb check complete."

ALTITUDE VERIFICATION PROCEDURE

The following procedures will normally be used regardless of which pilot is flying:

- The PNF sets the altitude and points to the altitude alerter.
- The PF points at the new altitude and verbally acknowledges it.

If there is anything other than total agreement by both pilots during the verification process, ATC is to be contacted immediately to resolve the conflict. Always seek verification of any clearance you do not understand or is understood differently by any crewmember. NEVER resolve a clearance conflict issued by cockpit consensus alone. Do not leave an assigned altitude if there is any question about a newly assigned altitude until it has been verified with ATC.

ALTITUDE CALLOUT PROCEDURE

The PF will verbalize leaving the altitude 1,000 feet prior to an assigned altitude. The callout is to include the altitude vacating and the assigned altitude i.e. "Six thousand for seven thousand." After the PF makes this call, the PNF will verify and validate the call by stating "check." If the PF fails to make the call, the PNF shall initiate the call and the PF shall validate the call.

APPROACH BRIEFING

The PNF shall have the appropriate navigation and approach charts organized and readily available. The PNF shall obtain the destination weather and the approach in use information and advise the PF.

Both pilots shall review the information and procedure to be used for the descent and approach. The PF shall provide a brief description of intentions to the PNF. The briefing should be concise and not be an attempt to memorize the approach procedure. It should include a review of the pertinent information and any special conditions, or procedures, that will be utilized for the approach and landing. Both pilots shall have a clear view of the approach plate during the procedure.

The 4 "M"'s should be reviewed as follows:

- MSA.
- Marker altitude.
- Minimum altitude.
- Missed approach procedure.

If any abnormal conditions or events occurred during the flight which will have an effect on the intended approach and landing, those implications must be thoroughly briefed and understood by both pilots.

- PF will complete the briefing by asking "Do you have anything to add? "
- If the PNF has nothing to add, the response will be "I have nothing to add."
- If the PNF has questions or comments, they will be addressed before continuing the checklist.

INSTURMENT APPROACH CHECK

Task/Initiation Cue PF PNF			
	Task/Initiation Cue	PF	

Within range.	Complete Instrument Approach checklist.
Instrument Approach checklist complete.	Call, "Instrument Approach check complete."

NOTE: After the Instrument Approach check has been completed, utilize the appropriate Approach SOP (Precision, Non-Precision, and Visual) for the type of approach that is being conducted.

PRECISION APPROACH (ILS)

Task/Initiation Cue	PF	PNF
Initial convergence of Course Deviation Indicator (CDI).	Call, "Localizer alive."	Confirm and call, "Localizer alive."
Annunciators indicate course capture.	Call, "Localizer capture."	Confirm and call, "Localizer capture." Set heading bug to initial missed approach heading (as applicable).
First movement of the glideslope indicator.	Call, "Glideslope alive."	Confirm and call, "Glideslope alive."
At FAF.	State the DH.	

BEFORE LANDING CHECK (PRECISION APPROACH)

Landing gear will be selected at or before the final approach fix (FAF). Approach will be stabilized from FAF until landing, or missed approach.

Task/Initiation Cue	PF	PNF
One dot from glideslope intercept or	Call, "Gear down, Before Landing	Select gear down.
approaching the final approach fix.	check."	Call, "Gear selected down."
		Monitor and call "Gear down-three
		green."
		Complete Before Landing check.
		Call, "Before Landing check
		complete."
Glide slope capture.	Call, "Glideslope capture."	Confirm and call, "Glideslope
		capture."
		Set missed approach altitude in
		altitude alerter.
1000' above minimum for approach.		Call, "1000' above minimums."
PNF calls, "1000' above minimums."	Verify altitude. Call, "Check."	
Landing clearance.		Prior to DH, obtain/confirm cleared to
		land, call "Cleared to land."
500' above minimums.		Call, "500' above minimums."
PNF calls, "500' above minimums."	Verify altitude. Call, "Check."	
100' above minimum.		Call, "Approaching minimums."
PNF calls, "Approaching minimums."	Verify altitude. Call, "Check"	
Decision height.		If the runway environment is in sight,
		call what you see. E.g. "Approach
		lights, continue."
Runway in sight.		Call, "Runway in sight."
PNF calls, "Runway in sight"	Call, "Going visual."	Confirm going visual call by stating,
		"Roger, monitoring instruments."
		Monitor flight instruments.
OR		
Decision Height		If the survey environment is NOT is
Decision Height.		If the runway environment is NOT in
DNE collo "Minimumo do oround"	Call "Caing around "	sight, call, "Minimums, go-around."
PNF calls, "Minimums, go-around."	Call, "Going around."	
	Execute missed approach	

procedure.

NOTE: If visual contact is lost beyond the MAP, a go-around is to be announced and executed by the PF.

BEFORE LANDING CHECK (NON-PRECISION)

Task/Initiation Cue	PF	PNF
Approaching the Final Fix.	Call, "Gear down, Before Landing	Select gear down. Call, "Gear
	check."	selected down."
		Monitor and call, "Gear down-three
		green."
		Complete Before Landing check.
		Call, "Before Landing check
		complete."
FAF.	State the MDA	Verify MDA. Call the tower and start
		the time.
1000' above minimums.		Call, "1000' above minimums."
Landing clearance.		Prior to MDA obtain and confirm
C C		landing clearance.
		Call, "Cleared to land."
PNF calls, "1000' above minimums."	Verify altitude. Call, "Check."	
500' above minimums.		Call, "500' above minimums."
PNF calls, "500' above minimums."	Verify altitude. Call, "Check."	
100' above minimums.		Call, "Approaching minimums."
PNF calls, "Approaching minimums."	Verify altitude. Call, "Check"	
At minimum descent altitude		Call, "Minimums, (state time or
		distance) to go."
PNF calls, "Minimums, (time or	Verify altitude and time or distance to	
distance) to go."	go. Call, "Check."	
Crossing missed approach point.		If the runway environment is in sight,
c		call what you see. E.g. "Approach
		lights, continue."
Runway is in sight.		Call, "Runway in sight."
PNF calls, "Runway in sight."	Call, "Going visual."	Confirm going visual call by stating,
	_	"Roger, monitoring instruments."
		Monitor flight instruments.
OR		_
Crossing missed approach point.		If the runway is NOT in sight, call,
		"minimums, go-around."
PNF calls, "Minimums, go-around."	Call, "going around."	
-	Execute missed approach	
	procedure.	

NOTE: If visual contact is lost beyond the MAP, a go-around is to be announced and executed by the PF.

APPROACH DEVIATION LIMITS (CALLOUTS AFTER PASSING FAF OR 1000 FEET AGL)

After passing the FAF or 1000 feet AGL the PNF will call out any warning indications, or deviations, as noted below. The PF will acknowledge with "Correcting". If the PF does not respond and the deviation continues, the PNF will repeat the call. If the PF still does not respond or the deviation remains uncorrected, the PNF will take control of the aircraft following the second failure to respond by the PF. The change of control will be announced by the PNF stating, "My aircraft".

PRECISION APPROACH

Task/Initiation Cue	PF	PNF
One dot right or left of localizer		Call, "One dot right" or "one dot left."
One dot above glideslope, anything		Call, "One dot high" or "low on
below glideslope		glideslope."

NON-PRECISION APPROACH

Task/Initiation Cue	PF	PNF
VOR or LOC approach:		Call, "One dot right," or "One dot
One dot right or left of course.		left."
NBD Approach:		Call actual deviation,
±5° right or left of desired bearing.		"° right," or "° left."
(Maximum deviation allowed ±10°)		-

VISUAL APPROACH SLOPE INDICATOR (VASI)

Task/Initiation Cue	PF	PNF
Above glidepath or below glidepath.		Call, "Above glidepath," or "Below
		glidepath."

VERTICAL SPEED

Task/Initiation Cue	PF	PNF
Sink rate exceeds 1000 feet per minute without corrective action initiated by PF.		Call, "Sink rate."

MISSED APPROACH PROCEDURE

Task/Initiation Cue	PF	PNF
MAP and landing requirements not		Call, "Go around."
met, i.e. did not break out.		
PNF calls, "Go around."	Call, "Going around."	Call, "Climb power."
PNF call, "Climb power."	Immediately apply maximum power	Confirm power set.
	and accelerate to VBROC.	Call, "Airspeed kts."
	Call, "Power set%, airspeed	
	accelerating."	
Climb power set, positive rate of		Call, "Positive rate."
climb established.		
PNF calls, "Positive rate."	Verify positive rate.	Select gear up.
	Call, "Gear up."	Call, "Gear selected up."
		Monitor and call, "Gear indicated
		up."
PNF calls, "Gear indicated up."	State initial heading and altitude of	Verify PF altitude and heading
	missed approach procedure	callout.
	(published or as cleared by ATC).	Call, "Check."
		Set missed approach altitude in the
		altitude alerter.
		Call any deviation observed.
	Call, "Climb check" when conditions	Communicate with ATC.
	permit.	Complete After Takeoff check.

NOTE: The PNFs' primary responsibility during execution of the missed approach procedure shall be to assist the PF and to monitor the aircraft. ATC communications should be accomplished as soon as practical, but should not interfere with this primary responsibility.

AFTER LANDING CHECK

Task/Initiation Cue	PF	PNF
Clear of active runway or upon	Call, "After Landing check."	Complete After Landing checklist.
completion of a 180° turn.		Call, "After Landing check complete."

PRE-SHUTDOWN CHECK

Task/Initiation Cue	PF	PNF
Aircraft parked on ramp.	Call, "Pre- shutdown check."	Complete Pre-shutdown checklist. Call, "Pre-shutdown check complete."

SHUTDOWN CHECK

Prior to either pilot leaving the cockpit and after engine(s) shutdown, the PIC shall designate Shutdown Checklist duties and passenger handling requirements between crewmembers.

Task/Initiation Cue	PF	PNF
Pre-shutdown checklist complete.	Call, "Shutdown check."	Complete Shutdown checklist.
		Call, "Shutdown check complete."

POST-FLIGHT CHECK (PILOT)

If a post-flight inspection will not be accomplished by Department maintenance personnel after the completion of the last flight of the day, the Company assigned PIC, or designee, shall conduct a walk-around check of the aircraft, noting any oil or fuel leaks, abnormal wear or damage to the aircraft. Any discrepancies found during this walk-around are to be listed in the AML. The Company assigned PIC will notify the respective Maintenance Manager if there is any question as to the airworthiness status of the aircraft.

FLIGHT CREW DEBRIEFINGS

In order to continuously evaluate and improve Department flight operations procedures and enhance interpersonal skills, crewmembers are encouraged to conduct post-flight debriefings after each flight. The debriefings should include all crewmembers of the flight, as practical, and be discussed from the self-discovery perspective, i.e. "I think I could have performed better during that high workload situation by distributing tasks more evenly."

STANDARDIZATION FLIGHTS

Standardization flights will be conducted by Department Standardization Pilots in order to provide a method to ensure that the Program is being followed in day-to-day operations and to constantly evaluate the program.

Each Department pilot will receive, at least, one standardization flight every six months. These intervals shall not exceed eight months. If the pilot is qualified, current, and assigned to more than one type aircraft, the six month standardization flight will alternate between types. The minimum number of standardization flights per 12 month period, per aircraft, shall be one.

Standardization flights may be conducted during normal passenger carrying flights. No abnormal or emergency procedures will be required as part of the flight. These flights will involve routine practices and standard operating procedures described herein and in the AFM for the subject aircraft.

The Standardization Pilot will act as an observer during the flight and will not be considered as an assigned flight crewmember for the purpose of the flight.

RESULTS OF STANDARDIZATION FLIGHTS

The Standardization Pilot will use a Company "Pilot-Standardization Flight Worksheet" to conduct the evaluation. This document will be utilized as the controlling document for the flight (the worksheet will be destroyed at the conclusion of the crew's debriefing).

Crewmembers that are found to be deficient will be advised of the specific deficiencies during post-flight debriefing unless, in the opinion of the standardization pilot, the deficiency directly affects the operational safety of the flight. If this is deemed to be the case, the standardization pilot will advise the flight crew of the deficiency immediately upon discovery.

In the remote case that the pilot(s) are unwilling or unable to perform their duties in accordance with the FAR, the AFM, the Department SOP's, or this Manual, they will be advised of this. If the situation cannot be resolved at the local level, to the satisfaction of the Standardization Pilot, the flight will not depart, or if already airborne, will not proceed beyond the next point of landing.

In this event, the Standardization Pilot will contact the [*Position Title*] as soon as practical, for resolution of the situation. The [*Position Title*] will determine the proper course of action to be taken from that point.

Successful completion of a standardization flight will be recorded for each individual. These forms will be forwarded to the [*Position Title*] for review, retained in the employees training file.

USE OF HELICOPTER ROTOR BRAKE

The helicopter rotor brake will not be used during Aircraft Engine Starts as a normal, everyday practice. However, during excessively high winds, or other abnormal circumstances at the discretion of the PIC, the rotor brake can be used during the start with only one engine started before rotor brake release. Use of the rotor brake on shutdown is permissible anytime with a modulated, gradual application so as to not cause the rotor to be halted abruptly.

CAUTION: At no time should the rotor brake be depended upon to keep the rotor stopped. All individuals should remain clear of the rotor during engine starts with the rotor brake applied. Rotor brakes have been known to slip requiring immediate action on the part of the pilot to release the brake fully or shut the engine down.