



N725A

Schweizer 269C-1
300CB

CHECKLIST



SCHWEIZER RSG 300CB HELICOPTER MODEL 269C-1

Description: The 300CB is piston powered two-seat helicopter with a high-inertia, three-bladed main rotor and two-bladed anti-torque tail rotor. The aircraft is powered by a Lycoming 180 horsepower HO-360 air cooled engine. Engine power is transmitted through a belt-drive system to main transmission and tail rotor shaft. An overrunning clutch permits autorotation without driving the belts of engine.

Power plant: Lycoming HO-360-CIA, 180HP at 2700 rpm

Fuel Capacity: 35.2 U.S. gallons (35.0 usable)

Fuel type: 100LL

Oil Quantity: 8 quarts

Electrical System: 24V

LIMITATIONS/OPERATING PARAMETERS

Maximum Weight: 1,750lbs

Maximum Cabin Weight: 600lbs

Empty weight: 1,101lbs (N725A: 1,137)

Maximum Operating Altitude:

- Hovering ceiling: 4600ft density altitude
- Takeoff/landing: 8,000ft density altitude
- Enroute: 10,000ft density altitude

Rotor Speed Limitations (Power OFF)

- Minimum rotor speed: 390 RPM
- Maximum rotor speed: 504 RPM

Rotor Speed Limitations (Power ON)

- Minimum rotor speed: 442 RPM
- Maximum rotor speed: 471 RPM

Engine – Rotor Disengaged

- Engine idle speed: 1200-1600 RPM
- With rotor disengaged, do not exceed 1600 RPM.
- Initial clutch engagement 1500-1600 RPM

Engine – Rotor Engaged

- Minimum engine RPM: 2530
- Maximum engine RPM: 2700
- NO momentary overspeed allowed
- Maximum continuous power: 180 horsepower at 2700 RPM
- Oil pressure operating range: 55-95 psi (redline 115)
- Oil temperature operating range: 100-245 degrees F (redline 245)
- Cylinder Head Temperature Operating range: 230-450 degrees F (redline 500)

Key Speeds

- Autorotation speed: 52 knts
- Best rate of climb (Vy): 41kts
- Run on landing speed 36 kts maximum
- Normal approach: 53 knts

Never Exceed Speed (Vne)⁽¹⁾

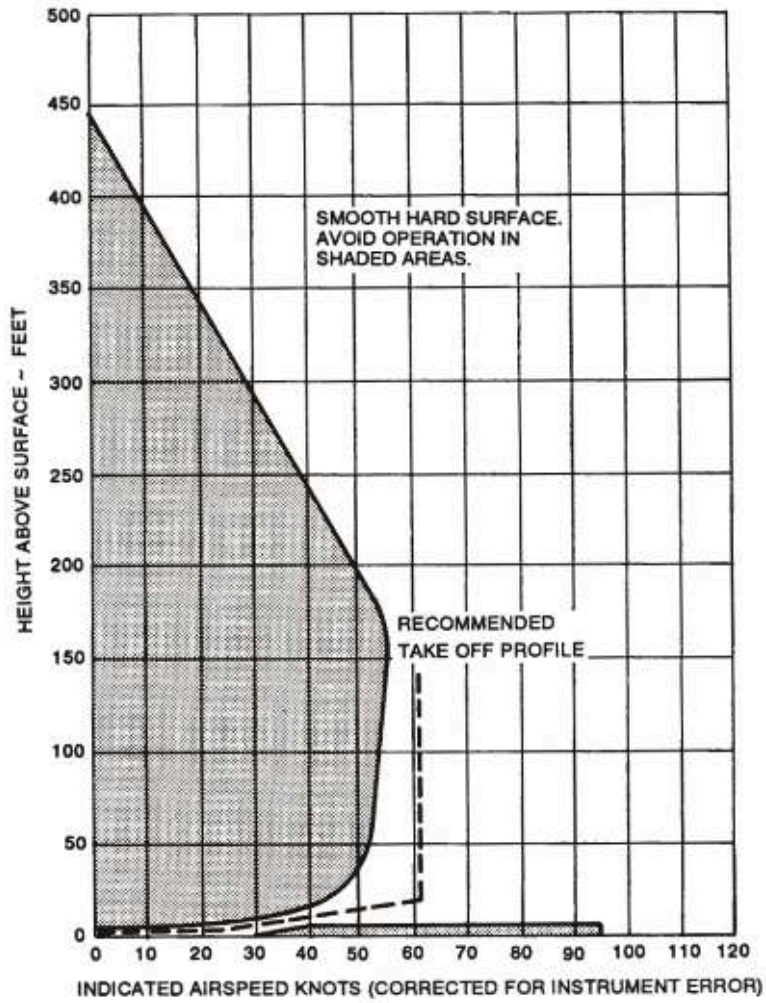
- Doors off operations Vne: 90kts IAS
- Maximum Vne 94kts

Other Items

- Solo from the right seat only
- Operation in IFR conditions prohibited
- Controllability demonstrated in 17kts winds (any direction)
- No leaning of mixture in flight
- Fuel consumption: 12GPH (N725A)
- Max range: 230NM (not in POH)
- Best range cruise speed: 63 kts (not in POH)

History: The origin of the 300CB was the Hughes TH-55. The TH-55 was used as the primary training helicopter for the Army from 1969-1988. The design was purchased and produced by Schweizer for several years. The type certificate was sold to Sikorsky in 2004. In 2018, the type certificate was sold to Schweizer RSG and returned to production in 2019.

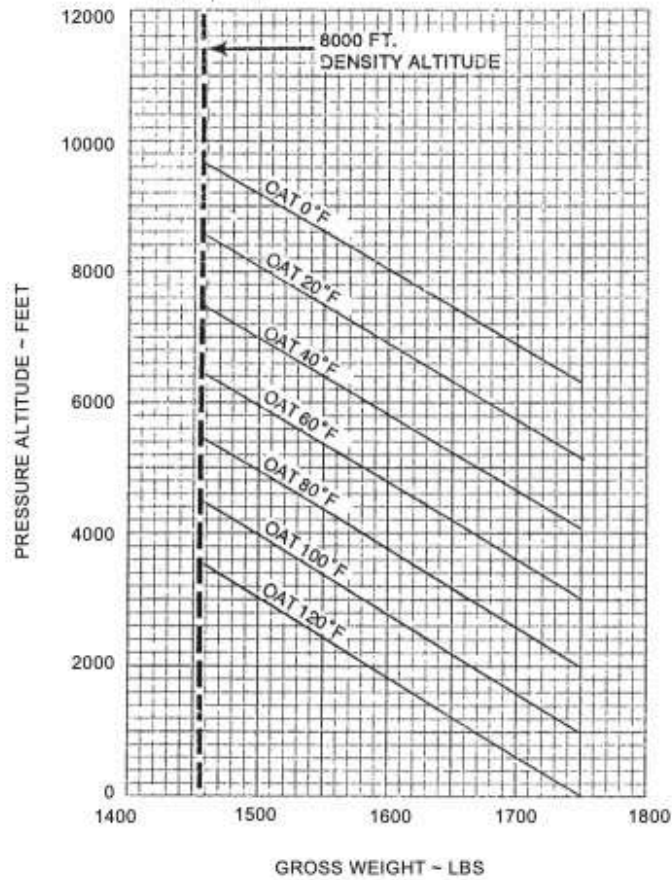
HEIGHT / VELOCITY DIAGRAM



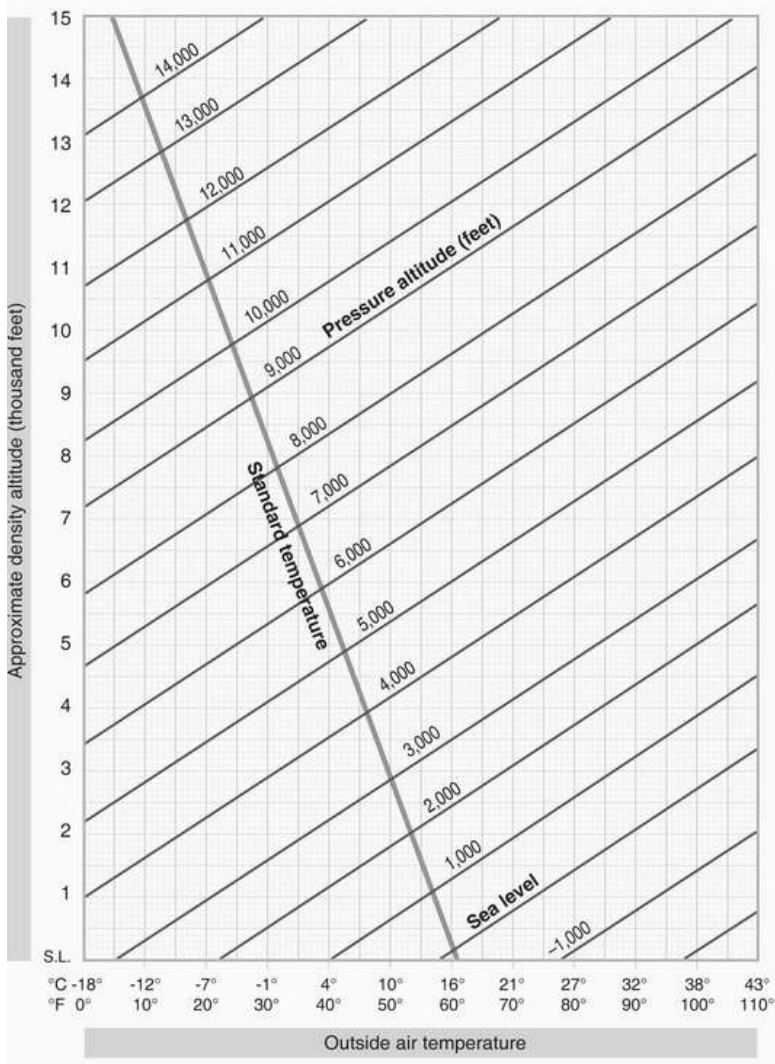
IN GROUND EFFECT HOVER VS. GROSS WEIGHT

°F	°C
0	-18
20	-7
40	4
60	16
80	27
100	38
120	49

- THIS CHART BASED ON:**
- Full Throttle at 2700 RPM.
 - Mixture Full Rich
 - Carburetor Heat Off.
 - 2-Foot Skid Height
 - Upstack Exhaust Pipe Installed
 - No M/R Blade Abrasion Tape.



DENSITY ALTITUDE CHART



PREFLIGHT INSPECTION

Visually check the following items for wear, general condition and obvious damage. Damage is defined as any condition that is not normal or not within limits. Examples of conditions to look for are: inoperable equipment, excessive leakage, discoloration due to heat, dents, cracks, punctures, abrasion, chaffing, galling, nicks and evidence of corrosion. These are the most common types of damage; however, do not limit inspection to the above conditions.

1. If discrepancies are noted perform further inspection prior to flight.
2. Flight is prohibited when unrepaired damage exists which makes the rotorcraft unairworthy.

WARNING. GROUND RESONANCE MAY RESULT IF HELICOPTER IS OPERATED WHEN THE LANDING GEAR DAMPERS ARE NOT IN GOOD OPERATING CONDITION.

NOSE AREA

Aircraft Attitude: **CHECK** (with fuel, slightly nose up)
Tiedowns and Covers: **REMOVED**
Canopy: **NO DAMAGE / CLEAN**
Outside Air Temperature (OAT): **NO OBSTRUCTIONS**
Tail Rotor Pedals/Retaining Pins: **ADJUST/SECURE**
Induction System: **NO OBSTRUCTIONS/FREE**
Pitot Tube: **NO OBSTRUCTIONS**
Antennae: **NO DAMAGE** (VHF, transponder)
Front Crossbeam/Skid Strut **NO DAMAGE**

CABIN – LEFT SIDE

Documents: **CHECK** (airworthiness, registration, RFM)
Battery: **ON**
Fuel Quantity: **CHECK**
Beacon: **ON**
Landing Light: **ON**
Position Lights: **ON**
Lights: **CHECK**
Landing Light: **OFF**
Position Lights: **OFF**
Battery: **OFF**
Canopy Slat: **NO DAMAGE**
Cabin: **NO DAMAGE**
Door and Latch: **CHECK**
Frame/Cluster Fittings: **NO DAMAGE/NO CRACKS**
Aft Crossbeam/Skid Strut: **NO DAMAGE**
Stabilizer: **NO DAMAGE** (including position/beacon)
Dampers: **CHECK**
Drag Strut: **NO DAMAGE**
Skid Tube: **CHECK**
Ground Handling Wheel: **UP/LOCKED** (if installed)

ENGINE – LEFT SIDE

Fuel Tank Vent: **NO OBSTRUCTIONS**
Fuel Tank Cap: **CHECK**
Fuel Lines: **CHECK**
Fuel Strainer: **DRAIN** (proper type; no water, or debris)
Engine Oil Level: **CHECK** (add if < 6 qts)
Engine Oil lines: **CHECK**
Engine Oil Drain Plug: **CHECK**
Exhaust and Intake Tubes: **CHECK**
Induction/Alternate Air: **CHECK**
Mixture Linkage: **CHECK**
Alternator/Belt: **CHECK**
Engine and Components: **CHECK**

TAILBOOM LEFT SIDE

Belt Drive H-Frame Bracket/Strut: **SECURE/NO CRACKS**
Tail Rotor Shaft Alignment Marks: **SET**
Tailboom Supports/Fittings: **SECURE/NO DAMAGE**
Tailboom: **NO DAMAGE**
Exhaust Support at Tailboom: **NO DAMAGE**
Static Port: **NO OBSTRUCTIONS**
GPS Antenna: **CHECK**
Tailboom Support Strut End Fitting: **SECURE/NO DAMAGE**
VOR Antenna: **CHECK**
Vertical Fin: **SECURE/NO DAMAGE** (left side)

TAIL ROTOR

Tail Rotor Shaft Alignment: **CHECK**
Tail Rotor Push-Pull Rod/Linkage **CHECK**
Swashplate/Boots **CHECK**
Tail Rotor Blade Pitch Links: **CHECK**
Teetering Bearings: **CHECK**
Tail Rotor Blade Attachments: **SECURE/NO DAMAGE**
Tail Rotor Abrasion Strip Bonding: **CHECK**
Tail Rotor Transmission Connection: **SECURE**
Tail Rotor Transmission Oil Level: **CHECK**
Tail Skid: **CHECK**
Tail Light/Wires: **CHECK**

TAILBOOM RIGHT SIDE

Horizontal Stabilizer: **CHECK**
Tailboom: **NO DAMAGE**
Vertical Fin: **SECURE/NO DAMAGE** (right side)
VOR Antenna: **CHECK**
Tailboom Support Strut End Fitting: **SECURE/NO DAMAGE**
GPS Antenna: **CHECK**
Tailboom Supports and Fittings: **SECURE/NO DAMAGE**

MAIN ROTOR SYSTEM

Main Rotor Locking Nut: **CHECK**
Main Rotor Flapping Hinges: **CHECK**
Main Rotor Blade Attachments: **CHECK**
Main Rotor Blades: **CHECK**
Main Rotor Dampers: **CHECK**
Main Rotor Pitch Links: **CHECK**
Main Rotor Droop Stop: **CHECK**
Main Rotor Retaining Rings: **CHECK**
Main Rotor Scissor Links: **CHECK**
Main Rotor Dust Boots: **CHECK**
Main Rotor Swash Plate: **CHECK**
Main Rotor Control Rods: **CHECK**
Main Rotor Mast: **CHECK**
Main Rotor Control Bell Crank: **CHECK**
Main Rotor Transmission Oil Level: **CHECK**

BELT DRIVE SYSTEM

Upper Pully: **CHECK**
Drive Belts: **CHECK**
Idle Pully: **FREE/SMOOTH**
Lower Coupling Shaft/Pully: **CHECK**
Impeller: **CHECK**
Clutch Control: **CHECK**
Tail Rotor Control: **CHECK** (cable/rod/crank)

ENGINE RIGHT SIDE

Frame/Cluster Fittings: **NO DAMAGE/NO CRACKS**
Aft Crossbeam/ Skid Strut: **NO DAMAGE**
Oil Lines/Cooler: **CHECK** (cover on if <56 degrees)
Fuel Lines: **CHECK**
Carburetor Control Linkage: **CHECK**
Exhaust and Intake Tubes: **CHECK**
Battery: **INSPECT**
General Engine Area: **CHECK**

CABIN RIGHT SIDE

Canopy Slat: **NO DAMAGE**
Cabin: **NO DAMAGE**
Door and Latch: **CHECK**
Stabilizer: **NO DAMAGE** (including position/beacon)
Dampers: **CHECK**
Drag Strut: **NO DAMAGE**
Skid Tube: **CHECK**
Ground Handling Wheel: **UP/LOCKED** (if installed)

COCKPIT CHECK

Tail Rotor Pedals: **ADJUST/SECURE**
Seat Belts and Shoulder Harness: **CHECK**
Collective Area: **NO OBSTRUCTIONS**
Control Frictions: **RELEASE**
Controls: **FREE**
Control Frictions: **ON**
Altimeter: **SET**
All Switches: **OFF** (beacon may remain on)
Circuit Breakers: **IN**
Throttle: **CLOSED**
Mixture: **IDLE CUTOFF** (pull/out)
Battery Switch: **ON**
Fuel Quantity: **CHECK**
Low Voltage Caution Light: **ON**
Low Fuel Caution Light: **OFF** (press-to-test)
Transmission Warning Light: **ON**
Tail Rotor Chip Detector Light: **OFF** (press-to-test)
Clutch Control Switch: **RELEASE** (down)
Clutch Light: **ON** (disengaged)

STARTING ENGINE

Fuel Valve: **OPEN** (push/in)
Throttle Friction: **ADJUST**
Carb Heat: **OFF**
Prime: **AS NEEDED**
Primer: **DOWN and LOCKED**
Magneto Switch: **BOTH**
Mixture: **FULL RICH** (push/in)
Beacon: **ON**
Position Lights: **AS NEEDED**
Throttle: **CLOSED**
Area: **CLEAR**
Starter: **ENGAGE** (disengage when engine starts)

CAUTION: Do not exceed 1600 RPM with rotor disengaged.

RPM: **1400 RPM**
Oil Pressure: **MINIMUM 25 PSI** (within 30 secs or shut down)
Alternator: **ON**
Avionics Master: **ON**
Instrument Master: **ON**

ROTOR ENGAGEMENT

Collective: **DOWN and FRICTION ON**
Pedals: **NEUTRAL**
Cyclic: **CENTERED and FRICTION ON**
Area: **CLEAR**
Engine RPM: **1500**
Rotor: **ENGAGE AS FOLLOWS**

Set clutch control switch in ENGAGE position. When engine rpm drops approximately 100 RPM, move the switch to the HOLD position. Repeat this procedure until engine and rotor rpm needles are superimposed.

Clutch Control Switch: **ENGAGE**

CAUTION: Do not add any throttle during rotor engagement

Clutch Light: **OFF** (engaged)
Clutch Guard: **CLOSED**
Tachometer: **CONFIRM** (needles superimposed)

ENGINE GROUND RUN

Engine Speed: **2000 RPM**
Engine Oil Pressure: **CHECK**
Engine Oil Temperature: **CHECK**
All Warning/ Caution Lights: **OFF**
Ammeter: **CHECK**
Radio: **SET**
Transponder: **1200** (sby/alt/grd)
Collective Friction: **RELEASE**
Collective: **15 inches MP and 2000 RPM**
Magneto: **CHECK** (125 max drop allowable within 5 seconds)
Carb Heat: **CHECK**
Collective: **FULL DOWN/2000RPM**
Throttle: **CLOSE** (confirm needle split.)
Throttle Override: **CHECK** (do not raise collective)
RPM: **2000**
Cyclic Friction: **RELEASE**
Cyclic Trim: **ADJUST**
Tip Path Plane: **CHECK**
VNE: **NOTE**

FLOODED ENGINE

Throttle: **FULL OPEN**
Magnetos: **OFF**
Starter: **ENGAGE (3 SEC)**
After clearing engine, close throttle.
Proceed with normal starting sequence.

LEANING PROCEDURE

NOTE: Overleaning may cause engine stoppage. Should engine stoppage occur, engage starter before rotor RPM decays. Leaning is only recommended above 3750 feet density altitude. Allow cylinder head temperature to reach 300°F prior to leaning.

Manual Leaning Procedure (no EGT gage)
Engine Speed: **2600 RPM**
Mixture: **Lean to maximum engine RPM, then set mixture by turning mixture knob two complete revolutions clockwise.**

BEFORE TAKEOFF

Check the following items for proper indication or position, before takeoff. Under certain weather conditions it may not be possible to obtain the green range while on the ground; however, stabilize temperatures before takeoff.

Fuel Quantity: **CHECK**
Cylinder Head Temperature: **CHECK**
Engine Oil Pressure: **CHECK**
Engine Oil Temperature: **CHECK**
Transmission Warning Light: **OFF**
Switches and Circuit Breakers: **CHECK**
Fuel Valve: **OPEN (Push)**
Mixture: **AS REQUIRED**

HOVER and TAKEOFF

NOTE: Before hover or takeoff is attempted, check that cylinder head and oil temperature gauge indicators are in the green. Under certain weather conditions it may not be possible to obtain the green range while on the ground; however, stabilize temperatures before takeoff.

Carb Heat: **AS REQUIRED** (Normally OFF unless CAT not in yellow, then adjust carb heat as required).

Use 2700 rpm for hover and takeoff; add collective to establish hover at a 3-foot skid height to check power and control response. Adjust throttle during lift-off to maintain rotor rpm.

NOTE: When maximum performance is required, use rpm and skid height specified on the Performance Charts in Section V of the flight manual.

For climb out, apply only sufficient additional collective to maintain ground clearance until translational lift is obtained. One inch of MP above hover power is recommended.

Perform climb out at 2700 rpm. Lower nose and accelerate to climb speed following profile in Height Velocity Diagram. Above 450 AGL, reduce rpm to 2600 to 2700 range.

NOTE: Exercise caution to assure that the throttle system is not in the override position (full throttle) when reducing collective to avert overspeed. Avoid excessive nose down attitude.

CRUISE

Cruise in 2600 to 2700 rpm range.

Carb Heat: **AS REQUIRED**

CAUTION: In-flight leaning is not recommended.

CAUTION: If ground leaning procedure was accomplished at high altitude, be sure the mixture control is pushed back in before descending to lower altitude, otherwise, engine may quit. If engine stops, lower collective, push mixture to full rich and restart using left hand. Do not disengage clutch.

Mixture: **AS REQUIRED**

WARNING: TO MINIMIZE POSSIBILITY OF ENGINE STOPPAGE RAPID THROTTLE REDUCTIONS TO FULL IDLE SHALL NOT BE CONDUCTED.

USE OF CARBURETOR HEAT

WARNING: CAT GAGE IS ONLY EFFECTIVE ABOVE 18 INCHES MP. DURING DESCENTS OR AUTO-ROTATION UNDER CONDITIONS CONDUCTIVE TO CARB ICE, IGNORE GAGE AND APPLY FULL CARB HEAT.

When conditions conducive to carburetor ice are known or suspected, such as fog, rain, high humidity, or when operating near water, use carb heat as follows:

During hover or cruise flight above 18 inches MP, apply Carb Heat as required to keep the CAT gage out of the Yellow Arc. If an unexplainable drop in manifold pressure or RPM occurs, apply full Carb Heat for about one minute and check for an increase in MP or RPM.

During autorotation or reduced power below 18 inches MP apply full Carb Heat regardless of CAT gage temperature. When power is reapplied, return Carb Heat control to full cold or partial heat position.

LANDING APPROACH

Set engine rpm at 2700.

CAUTION: Fire can result from a landing in tall dry grass due to exhaust heat; exercise care in selecting landing site. In case of a grass fire move aircraft to a clear area.

CAUTION: At high power settings an overspeed might occur if throttle is not reduced slightly when collective is lowered.

Slow airspeed to approximately 53 kt for a normal approach and reduce collective for the desired rate of descent. Maintain 2700 rpm. On approaching the desired landing spot, reduce airspeed and rate of descent until a hover is established.

RUNNING LANDING

CAUTION: Avoid rapid lowering of collective pitch control after ground contact.

Thirty-six (36) knots maximum recommended ground contact speed for smooth hard surface.

PRACTICE AUTOROTATION

WARNING: DURING POWER RECOVERY FROM PRACTICE AUTOROTATIONS, AIRSPEED AND ALTITUDE COMBINATIONS THAT ARE INSIDE THE HEIGHT VELOCITY CURVE SHALL BE AVOIDED. HIGH RATES OF DESCENT MAY DEVELOP FROM WHICH RECOVERY MAY BE DIFFICULT OR NOT POSSIBLE.

WARNING: PRACTICE AUTOROTATIONS SHALL BE CONDUCTED IN AN AREA WITH A SUITABLE LANDING SITE AVAILABLE TO MINIMIZE HAZARDS ASSOCIATED WITH INADVERTENT ENGINE STOPPAGE.

WARNING: TO REDUCE THE CHANCE OF ENGINE STOPPAGE WHEN INITIATING PRACTICE AUTOROTATIONS OR SIMULATED FORCED LANDING TRAINING THE THROTTLE SHALL NOT BE ABRUPTLY RETARDED TO THE IDLE POSITION.

CAUTION: At high power settings an overspeed might occur if throttle is not reduced slightly when collective is lowered.

Split the needles by reducing throttle slightly and lowering the collective. The throttle correlation will establish a high idle rpm (approximately 2000 rpm) which will aid in preventing the engine from loading up or stalling during recovery. Conversely, for recovery increase throttle slightly when the collective is raised, the correlation is such that only minor throttle adjustments will be required to perform a smooth recovery without exceeding 2700 rpm.

If engine stops make a touchdown auto landing.

ENGINE FAILURE – ALTITUDE ABOVE 450 FEET

- Lower collective pitch
- Enter normal autorotation
- Establish a steady glide of 52KTS IAS approximately
- At an altitude of approximately 50 feet, initiate a flare
- At approximately 10 feet, coordinate collective pitch with forward movement of the cyclic stick to level aircraft and cushion landing. Make ground contact with aircraft level.
- Avoid rapid lowering of collective pitch or the use of aft cyclic stick during initial ground contact or during ground slide.
- In the event of an engine failure at night, do not turn on landing light above 1,000 feet above terrain in order to preserve battery power.

ENGINE FAILURE – ALTITUDE 7FEET to 450 FEET

Conduct takeoff operation in accordance with the restrictions shown on Height Velocity Diagram. In the event of power failure during takeoff, lower the collective pitch (altitude permitting), in order to maintain rotor speed. The amount and duration of collective reduction depends upon the height above the ground at which the engine failure occurs. As the ground is approached, use aft cyclic and collective as needed to decrease forward and vertical velocity. Establish a level attitude prior to ground contact. Apply collective pitch as necessary in order to cushion landing.

ENGINE FAILURE – ALTITUDE BELOW 7 FEET

A power failure is indicated by a sudden yawing of the ship to the left. Do not reduce collective pitch. Apply right pedal to prevent excessive yawing and right stick to minimize drift. Apply collective pitch as necessary in order to cushion landing.

DITCHING – POWER OFF

Follow the procedures defined for autorotation approach and landing. Upon contact with water, proceed as follows:

- Lower collective pitch and apply sideward cyclic stick after contact is made with water.
- Release seat belt and shoulder harness.
- Open both doors and exit helicopter.

CLEAR HELICOPTER IMMEDIATELY

DITCHING – POWER ON

- Descend to hovering altitude over water. Unlatch doors.
- Passenger exit aircraft
- Fly a safe distance away
- Turn battery and alternator switches OFF
- Close twistgrip to idle position
- Allow aircraft to settle in a level attitude, apply full collective. When aircraft begins to roll, reduce collective to full down. Release seat belt and shoulder harness.
- When rotor blades have stopped turning, clear aircraft as quickly as possible.

TRANSMISSION WARNING/CAUTION INDICATORS

Main Rotor Transmission Temperature/Pressure: **LIGHT ON**

- Land as soon as possible.

NOTE: A red warning light (M/R XMSN TEMP/PRESS) on the instrument panel comes on when transmission oil pressure drops below 2-1/2 psi or temperature exceeds 235°F.

Tail Rotor Transmission Chip Detector: **LIGHT ON**

- Land as soon as possible.

NOTE: An amber caution light (T/R XMSN CHIPS) on the instrument panel comes on to indicate possible deterioration of components within the tail rotor transmission.

FUEL LOW, CAUTION INDICATOR

Low Fuel Indicator: **LIGHT ON**

- Land immediately.

NOTE: An amber fuel low caution light (FUEL LOW) on the instrument panel comes on in flight when approximately one gallon of usable fuel remains in the tank.

Do not use fuel low caution light as a working indication of fuel quantity (flight time remaining).

CLUTCH WARNING LIGHT

Clutch Warning Light: **LIGHT ON**

- Be prepared to enter autorotation.
- Land as soon as possible.

NOTE: A red clutch warning light (RELEASE) is illuminated whenever the clutch is not fully engaged.

TAIL ROTOR FAILURE

Different types of failure may require slightly different techniques for optimum success in recovery.

Complete loss of tail rotor thrust: Failure is normally indicated by an uncontrollable (by pedal) yawing to the right.

Loss of Tail Rotor Thrust Occurs In Forward Flight:

- Reduce power by lowering collective.
- Adjust airspeed to 50 to 60 knots.
- Use left lateral cyclic in combination with collective pitch to limit left sideslip to a reasonable angle.
- If conditions permit, place the twistgrip in the IDLE position once a landing area is selected, and perform a normal autorotation. Plan to touch down with little or no forward speed.

WARNING: WHEN HOVERING AT ALTITUDES WITHIN OR ABOVE THE CROSS-HATCHED AREAS DEPICTED ON THE HEIGHT VELOCITY DIAGRAM, IT IS NECESSARY TO REDUCE ALTITUDE TO 7 FEET OR LESS PRIOR TO PLACING THE TWISTGRIP IN THE GROUND IDLE POSITION AND PERFORMING A HOVERING AUTOROTATION.

Loss of Tail Rotor Thrust Occurs While At A Hover

- Place the twistgrip in the IDLE position and perform a hovering autorotation.

TAIL ROTOR CONTROL FAILURE

Tail Rotor Control Failure - Fixed Pitch Setting:

- Adjust power to maintain 50 to 60 knots airspeed.
- Perform a shallow approach and running landing to a suitable area, touching down into wind at a speed between effective translational lift and 30 knots. Directional control may be accomplished by small adjustments in throttle and/or collective control.

ENGINE IDLE AT ALTITUDE

Engine idle speeds at high density altitudes may be less than those set at sea level conditions. Do not rapidly reduce throttle to idle stop in flight.

WARNING: TO MINIMIZE POSSIBILITY OF ENGINE STOPPAGE, RAPID THROTTLE REDUCTIONS TO FULL IDLE DURING FLIGHT SHALL NOT BE CONDUCTED AT ANY ALTITUDE.

AIR RESTART

- Establish autorotation (52KTS).
- Pick out landing spot. If less than 2000 feet above terrain, proceed with autorotation landing.

If altitude permits:

- Mixture - **FULL RICH**
- Throttle - **CRACK APPROXIMATELY 1/2 AN INCH**
- Starter - **ENGAGE**

FIRE WHILE ON THE GROUND

- Mixture: **IDLE CUTOFF (Pull)**
- Fuel valve: **CLOSE/OFF (Pull)**
- Battery: **OFF**
- Alternator: **OFF**

REMAIN CLEAR OF ROTOR BLADES DURING AND AFTER EVACUATION.

- Exit aircraft with fire extinguisher
- Extinguish fire

SMOKE – IN FLIGHT

Smoke and/or toxic fumes entering the cockpit:

- Open vents.
- Land as soon as possible.

FIRE IN FLIGHT – UNKNOWN ORIGIN

Note: If a fire is observed during flight, prevailing conditions such as day/night, altitude, and available landing areas must be considered in order to determine whether to execute a power-on or power-off landing.

Power-On Landing:

- Maintain airspeed and rotor RPM; be prepared to perform a full autorotation at any point in the approach.
- Immediately perform power-on landing to suitable area
- If time permits:
 - Battery: **OFF**
 - Alternator: **OFF**
- Upon landing:
 - Throttle: **CLOSE**
 - Mixture: **IDLE CUTOFF** (pull)
 - Fuel valve: **CLOSE/OFF** (pull)
 - Exit aircraft with fire extinguisher
 - Extinguish fire

Power-Off Landing:

- Immediately enter autorotation.
- If time permits:
 - Mixture: **IDLE CUTOFF** (pull)
 - Fuel valve: **CLOSE/OFF** (pull)
 - Battery: **OFF**
 - Alternator: **OFF**
- Upon landing:
 - Exit aircraft with fire extinguisher.
 - Extinguish fire.

ELECTRICAL FIRE – IN FLIGHT

- Battery: **OFF**
- Alternator: **OFF**
- Immediately perform power-on landing to suitable area
- Upon landing:
 - Throttle: **CLOSE**
 - Mixture: **IDLE CUTOFF (Pull)**
 - Fuel valve: **CLOSE/OFF (Pull)**
 - Exit aircraft with fire extinguisher.
 - Extinguish fire.

THROTTLE FAILURE

In Flight: **Perform Run-On Landing**

As descent is begun, make collective pitch adjustments smoothly and minimize the amount of movement to aid in maintaining RPM within limits. If descent cannot be made without an excessively high RPM, fly to a suitable area and accomplish an autorotational landing.

In Flight – Excessive High RPM: **Perform Autorotation**

In this situation, the mixture control must be moved to the lean position before the collective pitch is lowered to enter autorotation.

At a Hover: **Perform Hover Auto, then Lean Mixture**

If the throttle fails at a hover, lower the collective (disregarding engine RPM) and land. After the helicopter is on the ground, move the mixture control to the lean position.

ENGINE SHUTDOWN

Collective: **DOWN and FRICTION ON**
Cyclic: **NEUTRAL and FRICTION ON**
Engine RPM: **2000 for 2 Minutes MIN and CHT < 300**

Throttle: **CLOSE**
Clutch: **RELEASE** (down)
Mixture: **IDLE CUTOFF** (pull/out)

Magnetos: **OFF** (after engine stops)
Alternator: **OFF**
Switches: **OFF** (except battery and beacon)

Battery: **OFF** (after clutch is fully disengaged)

POST FLIGHT REQUIREMENTS

- Brief PAX on exit safety.
- Shutdown in accordance with procedures
- Service aircraft as required.
- Notify maintenance of discrepancies.
- Secure aircraft as required.