

# 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: 100/130 or 100LL Oil Quantity: 4-6 quarts, 7quarts total 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)<sup>(1)</sup>

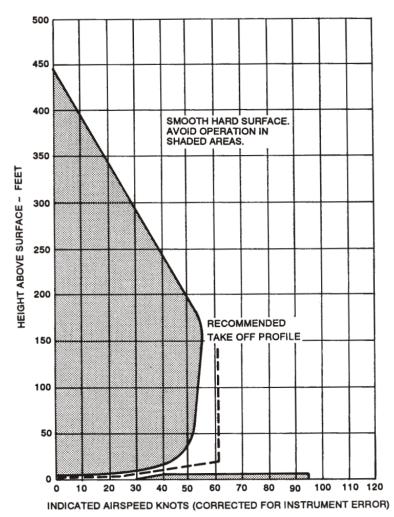
- Doors off operations Vne: 90kts IAS
- Maximum Vne 94kts

#### **Other Items**

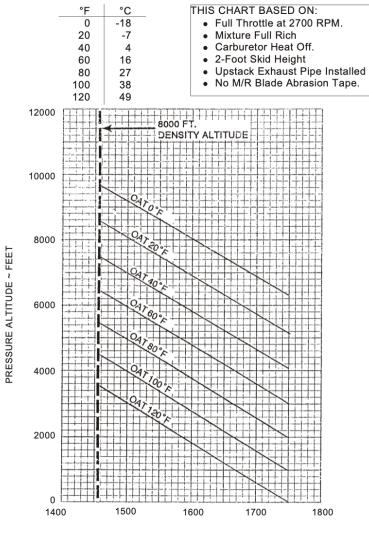
- Solo from the right seat only
- Operation in IFR conditions prohibited
- Controllability demonstrated in 17kts winds (any direction)
- No leaning of mixture in flight
- Fuel consumption: 12GPH (N725A)
- Max range: 230NM (not in POH)
- Best range cruise speed: 63 kts (not in POH)

**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**

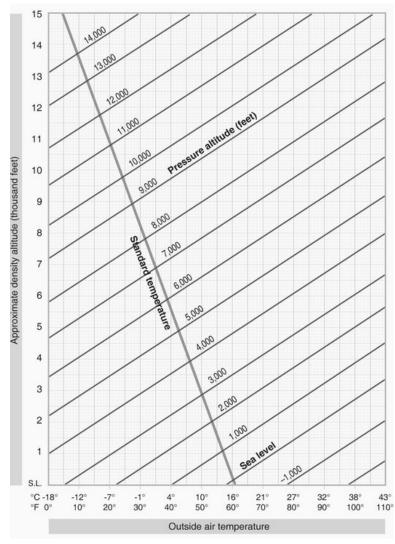


## IN GROUND EFFECT HOVER VS. GROSS WEIGHT



GROSS WEIGHT ~ LBS

## **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

Tiedowns and Covers: **REMOVED** Aircraft Attitude: **CHECK** (with fuel, slightly nose up) Canopy: **NO DAMAGE / CLEAN** OAT: **NO OBSTRUCTIONS** Induction System: **NO OBSTRUCTIONS** Pitot Tube: **NO OBSTRUCTIONS** Frame/Front Crossbeam/Drag Strut/Skid: **NO DAMAGE** VFR Antennae: **NO DAMAGE** Tail Rotor Pedals/Retaining Pins: **SECURE** 

#### **CABIN – LEFT SIDE**

Battery: ON Fuel Quantity: CHECK Beacon: ON Landing Light: AS REQUIRED Position Lights: AS REQUIRED Lights: CHECK Landing Light: OFF Position Lights: OFF Battery: OFF Cabin: NO DAMAGE Door and Latch: CHECK Canopy Slat: NO DAMAGE Front Oleo Damper: CHECK Skid Tube: CHECK Ground Handling Wheel: UP/LOCKED (if installed)

#### ENGINE – LEFT SIDE

Engine Oil Level: CHECK Engine Oil Drain Plug: CHECK Engine and Components: CHECK Exhaust and Intake Tubes: CHECK Fuel Strainer: DRAIN (no water or debris) Fuel and Oil Lines: CHECK Fuel Tank Cap: CHECK Fuel Tank Vent: NO OBSTRUCTIONS Alternator: CHECK Belt Drive Lower H-Frame Bracket and Strut: NO CRACKS / SECURE Aft Crossbeam: CHECK Rear Oleo Damper: CHECK Center Frame Cluster: NO DAMAGE / NO CRACKS

CAUTION. If cracking of cluster fittings is suspected dye penetrant inspect prior to further flight.

#### TAILBOOM LEFT SIDE

Tail Rotor Shaft Alignment Marks: **SET** Tailboom: **NO DAMAGE** Tailboom Support Strut End Fitting: **NO DAMAGE** Exhaust Support at Tailboom: **NO DAMAGE** Static Port: **NO OBSTRUCTIONS** Tailboom Supports and Fittings: **CHECK** 

#### TAIL ROTOR

Tail Rotor Shaft Alignment: **CHECK** Tail Rotor Blade Pitch Links: **CHECK** Teetering Bearings: **CHECK** Swashplate: **CHECK** Tail Rotor Abrasion Strip Bonding: **CHECK** 

CAUTION. If poor abrasion strip bond is suspected, but not confirmed, inspect blade in accordance with HMI prior to further flight.

Tail Rotor Blade Attachment: **NO CRACKS** 

CAUTION If tail rotor blade attachment bushing hole cracking is suspected, perform dye penetrant inspection in accordance with HMI prior to further flight.

Tail Rotor Push-Pull Rod: **CHECK** Tail Skid: **CHECK** Tail Rotor Transmission Oil Level: **CHECK** Horizontal Stabilizer: **CHECK** 

#### TAILBOOM RIGHT SIDE

Tailboom: **NO DAMAGE** VOR Antenna: **CHECK** Tailboom Support Strut End Fitting: **NO DAMAGE** GPS Antenna: **CHECK** Tailboom Supports and Fittings: **CHECK** 

#### MAIN ROTOR SYSTEM

Main Rotor Transmission and Mast: CHECK Main Transmission Oil Level: CHECK Blades and Rotor Head: CHECK Main Rotor Dampers: CHECK Main Rotor Swashplate: CHECK Main Rotor Pitch Links: CHECK Main Rotor Upper/Lower Bearings: CHECK Main Rotor Mixer Bellcrank: CHECK Main Rotor Control Rods: CHECK

## ENGINE RIGHT SIDE

Belt Drive Lower Pulley Bearings: CHECK

Grasp forward edge of pulley (lower coupling drive) and try to move at right angles to shaft. Observe bearing to determine if bearing inner race is a tight fit on lower pulley shaft.

Engine Lower Coupling Shaft: CHECK AS FOLLOWS

Fore and aft movement. Using a flashlight (or equivalent), inspect exterior of boot for cracking, fraying, chips, and deterioration. If any damage is observed, replace boot prior to flight.

Lower Coupling Drive Shaft: CHECK AS FOLLOWS

Grasp lower pulley AFT spacer and rotate coupling shaft back and forth to take up backlash in both directions (CW and CCW). Listen for hard metal-to-metal contact noise between gear teeth. If any metal-to-metal contact noise is heard, lower coupling drive shaft and engine adapter must be removed and inspected prior to further flight.

Engine Impeller: CHECK Idler Pulley: FREE/SMOOTH

#### Clutch control: CHECK AS FOLLOWS

**Clutch engaged**: With a flashlight carefully check clutch cable where it enters spring assembly for any broken strands at the end of the internal swaged fitting. No broken strands permitted; Check spring tension mark.

**Clutch engaged and disengaged**: Check lower end of spring retainer tube for wear and wear deposits.

**Clutch disengaged**: Check spring assembly for freedom. Check pulley bracket for cracks and security.

Center Frame Cluster: NO DAMAGE

CAUTION. If cracking of cluster fittings is suspected dye penetrant inspect in accordance with HMI prior to further flight.

Tail Rotor Control Cable: CHECK General Engine Area: CHECK Carburetor Linkage: CHECK Battery: INSPECT

#### **CABIN RIGHT SIDE**

Canopy, Canopy Slat: CHECK Door and Latch: CHECK Rear Oleo Damper: CHECK Drag Strut and Skid: CHECK Front Oleo Damper: CHECK Skid Tube: CHECK Ground Handling Wheel: UP/LOCKED (if installed) Wheel Handle: SECURE (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** 

# 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.

#### **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** 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 Collective Friction: RELEASE Collective: 15 inches MP and 2000 RPM Magneto: CHECK (125 max drop allowable drop within 5 seconds Carb Heat: CHECK Collective: FULL DOWN Throttle: CLOSE (confirm needle split.) Throttle Override: CHECK (do not raise collective) Cyclic Friction: RELEASE Cyclic Trim: ADJUST Tip Path Plane: CHECK VNE: NOTE

### **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 CONDUCIVE 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 preserver 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:
  - o 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)
  - o Battery: OFF
  - Alternator: OFF
- Upon landing:
  - Exit aircraft with fire extinguisher.
  - o Extinguish fire.

## **ELECTRICAL FIRE – IN FLIGHT**

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

# THROTTLE FAILURE - IN FLIGHT

If the throttle becomes inoperative in flight, continue to a landing area that will permit a shallow approach and running 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 this situation, the mixture control must be moved to the lean position before the collective pitch is lowered to enter autorotation. 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 Alternator: OFF Battery: OFF (after clutch is fully disengaged) Switches: OFF (beacon can remain on) Fuel Valve: CLOSED (pull/out)

# 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.