

PREFLIGHT / WALK-AROUND

Cockpit

Book/HobbsCHECK
DocumentsAROW
Control Lock REMOVE
Master ON
Fuel GageCHECK
Ignition/Mags OFF
Avionics OFF
Circuit BreakersCHECK
Lights ON
Beacon ON
Lights WALK AROUND
Master OFF
Lights OFF
Throttle IDLE
Prop FORWARD
Mixture CUT-OFF
Flaps DOWN
Trim T/O
Fuel Selector FULLEST
Fire ExtinguisherCHECK
Parking Brake OFF

Left Wing

Main Gear WheelCHECK
Main Gear BrakeCHECK
Fuel Sump DRAIN
FlapCHECK
AileronCHECK
Static WicksCHECK
Wing TipCHECK
LightsCHECK
Tie Down REMOVE
Fuel VentCHECK
Stall Warning OpeningCHECK
PitotREMOVE/CHECK
Fuel LevelCHECK
Fuel Cap ON

Nose

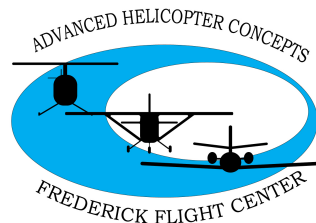
Windscreen CHECK
Cowling CHECK
Nose Wheel CHECK
Strut CHECK
Spinner CHECK
Propeller CHECK
Air Filter CHECK
Oil CHECK (5-6 Qt)
Fuel Strainer DRAIN
Access Cover CLOSED

Right Wing

Fuel Level CHECK
Fuel Cap ON
Vent CHECK
Tie Down REMOVE
Lights CHECK
Static Wick CHECK
Aileron CHECK
Flap CHECK
Main Gear Wheel CHECK
Main Gear Brake CHECK
Fuel Sump DRAIN

Empennage

Antenna CHECK
Static Opening CHECK
Elevator CHECK
Trim Tab CHECK
Tie Down REMOVE
Rudder CHECK
Elevator CHECK



BEFORE STARTING

Passenger Brief COMPLETE
Rudder Pedals ADJUSTED
Seat Belts SECURED
Rear Door CLOSED
Canopy CLOSED or VENTED
Fuel FULLEST
Trim T/O
Alt Air CLOSED
Alt Static Source CLOSED
Strobe Switch ON
Circuit Breakers CHECK
Ess Bus OFF
Avionics OFF

STARTING - COLD

Master/Alternator ON
Fuel Pump ON
Propeller / Area CLEAR
Throttle FULL
Mixture RICH 3-5 SEC
Mixture CUTOFF
Brakes HOLD
Ignition / Mags START
10s ON – 20s OFF
6 attempts then 30m cool-off
Throttle 1000 RPM
Oil Pressure GREEN
Fuel Pump OFF

STARTING - HOT

Master/Alternator ON
Fuel Pump OFF
Propeller / Area CLEAR
Mixture CUTOFF
Brakes HOLD
Ignition / Mags START
Throttle 1000 RPM
Oil Pressure GREEN
Fuel Pump OFF

WARM-UP

Avionics ON
Mixture LEAN 1”
Flaps UP to T/O
Avionics/GPS SET
Radios SET
Squawk 1200
Weather ASOS/ATIS CHECK
Fuel Tanks SWITCH

TAXIING

Taxi Area CLEAR
Brakes CHECK
Attitude ERECT
Turn Coord ..BANKS PROPERLY
VSI SHOWS 0
Lights AS REQUIRED
Taxi Clearance OBTAIN

GROUND CHECK / RUN-UP

Brakes HOLD
Doors / Windows CHECK
Fuel Pump ON
Mixture RICH
Throttle 2000 RPM
Prop CYCLE 3 TIMES
Magnetos 175 max/50 diff
Engine Gages CHECK
Ammeter CHECK
Idle Throttle CHECK
Throttle 1000 RPM
Circuit Breakers CHECK
Alt Air CHECK
Lights AS REQUIRED
Pitot Heat AS REQUIRED
Flight Controls FREE
Trim T/O
Take Off Brief COMPLETE
Take-Off Clearance OBTAIN

NORMAL TAKE OFF

Flaps..... T/O
Throttle..... FULL
Prop..... FORWARD
Mixture..... RICH
Engine Gages..... GREEN
Air Speed..... ALIVE
Rotate..... 59 Kts
Climb... VxVy (T/O flaps) = 67 Kts
..... Vy = 76 Kts

CRUISE

Lights..... AS REQUIRED
Power..... SET
Trim..... SET
Mixture..... LEAN above 3000'
Fuel..... SWITCH as REQUIRED

DESCENT

Mixture..... AS REQUIRED
Airspeed..... AS REQUIRED
Lights..... AS REQUIRED
Flight Plan..... CLOSE

APPROACH and LANDING

Fuel..... FULLEST
Mixture..... RICH
Prop..... FORWARD
Lights..... ON
Seatbelts..... CHECK
Flaps..... AS REQUIRED
Airspeed..... 75 Kts

CLEAR OF RUNWAY

Radios..... ANNOUNCE
Flaps..... UP
Throttle..... 1000 RPM
Mixture..... LEAN 1"
Lights..... OFF

SHUTDOWN

Tach (on MFD)..... RECORD
Avionics..... OFF
Mixture..... IDLE CUTOFF
Ignition/Mags..... OFF
Master..... OFF
Control Lock..... INSTALL
Times..... RECORD
Plugs..... INSTALL
Tie Downs/Chalks..... INSTALL

V SPEEDS - INFO

Vr..... 59 Kts
Vx..... 67 Kts
Vy (T/O Flaps)..... 67 Kts
Vy (Flaps Up)..... 76 Kts
Cruise Climb..... 75-85 Kts
Va..... 111 Kts @ 2646 lbs
..... 94 Kts @ 2284 lbs
Vno..... 129 Kts
Vne..... 178 Kts
Vso..... 52 Kts
Vs..... 53 Kts
Vg..... 76 Kts
Vref..... 70-75 Kts
Max X-Wind..... 20 Kts
Glide Ratio..... 13:1
Max T/O Weight..... 2646 lbs
Max Landing Weight..... 2535 lbs

FIRE DURING START

Cranking..... CONTINUE

If Engine Starts

Throttle..... 2000 RPM
Engine..... SHUTDOWN

If Engine Fails to Start

Cranking..... CONTINUE
Fuel..... OFF
Throttle..... CLOSED
Mixture..... IDLE CUTOFF
Fire Extinguisher..... REMOVE
Ignition/Mags..... OFF
Master..... OFF
Fire Extinguisher..... USE

ENGINE FAILURE

ABC

Airspeed..... 76 Kts
Best Landing Area..... SELECT
Checklist.....
Fuel Pump..... ON
Fuel..... SWITCH
Mixture..... RICH
Throttle..... FULL
Prop..... FORWARD
Alt Air..... OPEN
Ignition/Mags..... BOTH
Master/Alternator..... ON

If no restart

Transponder..... 7700
ELT..... ON
Radio..... MAYDAY
Fuel..... OFF
Mixture..... IDLE CUTOFF
Throttle..... OUT
Ignition/Mags..... OFF
Master..... OFF ON FINAL

ICING

*Turn back or change altitude to
area of warmer temperature*

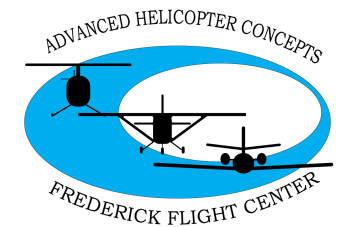
Pitot Heat..... ON
Cabin Heat..... ON
Defroster..... ON
Throttle..... FULL
Alt Air..... OPEN

SPIN RECOVERY

Throttle..... IDLE
Ailerons..... NEUTRAL
Rudder..... Full Opposite Rotation
Control Stick..... FULL FORWARD
Rudder..... NEUTRAL
Control Stick..... RECOVER
Throttle..... FULL to regain attitude

ALTERNATOR/ELEC FAILURE

Circuit Breakers..... CHECK
Ess Bus..... ON
Emerg Power..... ON



Diamond Star N53SL
Flight Center..... 240-529-5500
Signature (Fuel)..... 301-662-8156