

Emergency Checklist – Beechcraft Duchess 76

POWER LOSS DURING TAKEOFF

- THROTTLES – CLOSE BOTH IMMEDIATELY
 BRAKES – AS REQUIRED / STOP STRAIGHT AHEAD
 * IF INSUFFICIENT RUNWAY REMAINS FOR STOPPING
 * FUEL SELECTORS – OFF
 * BATTERY / ALTERNATOR & MAGS – OFF

ONE ENGINE IMMEDIATELY AFTER TAKEOFF (Also One Engine Go-Around – Avoid If Possible)

- AIRSPPEED – 80 KIAS (92 MPH) (Min.) Go Around Min. – 85 KIAS
 GEAR / FLAPS – UP (Quality Landing Area Ahead?)
 DIRECTIONAL CONTROL – MAINTAIN
 IDENTIFY
 VERIFY – CLOSE THROTTLE (Inop. Engine)
 PROP – FEATHER (Inop. Engine) (5° Bank & ½ Ball to Good Engine)
 ACCELERATE TO 85 KIAS (98 MPH)

ONE ENGINE IN FLIGHT

- CONTROL AIRPLANE – MAINTAIN SAFE AIRSPEED 85 KIAS (98 MPH)
 INOPERATIVE ENGINE – IDENTIFY
 OPERATIVE ENGINE – ADJUST
 THROTTLE – AS NEEDED TO MAINTAIN CONTROL
 AIR START / UNFEATHERING
*Fuel-On, Throttle ¼, Fuel Pump-On, Mags, [Mixture Rich After Starter]
 Prop. w/ Accumulators- Full Forward, When Start Reduce To Low RPM Then Advance Prop Slowly to High, Starter Briefly <100KTS;
 Prop. w/o Accumulators- Forward Of Feathering Detent To Midrange, Start & Push To Prime, If No Start Clear Engine By Windmill w/ Mixture Off, When Engine Fires- Mixture Rich, Adjust Throttle/ Prop/ Mixture, Fuel Pump Off When Reliable Power, Alternator On, Oil Pressure, Warm Engine 2000 RPM / 15"*
 IF NO RESTART – SECURE DEAD ENGINE
Retard Throttle, Feather Prop, Mixture- Idle Cutoff, Fuel Pump Off, Fuel Off, Mag/Alt Off, Close Cowl Flap
 COWL FLAP (OPERATIVE ENGINE) – AS REQUIRED
 FUEL PUMP (OPERATIVE ENGINE) – AS REQUIRED

ONE ENGINE LANDING

- SECURE INOP. ENGINE – MAINTAIN SAFE AIRSPEED
 LOWER GEAR – WHEN FIELD ASSURED
 FINAL APPROACH – 85 KIAS (98 MPH) (Minimum)
 FULL FLAPS – WHEN COMMITTED TO LAND

BOTH ENGINES OUT / LANDING

- AIRSPPEED – 95 KIAS (109 MPH)
 PROPS – FEATHER
 MIXTURE – FULL LEAN / IDLE CUTOFF
 FUEL SELECTORS – OFF
 SQUAWK 7700
 DECLARE EMERGENCY (TWR, APP, Unicom, 121.5)
 SEATBELTS / HARNESS
 GEAR – DOWN (Up if Very Rough or Soft Terrain)
 FLAPS – AS NEEDED (Full Flaps When Field Assured)
 BATTERY / ALTERNATOR / MAGS – OFF
 UNLATCH DOORS / PROTECT BODY

ELECTRICAL FIRE IN FLIGHT

- ALL ELECTRICAL DEVICES + BATT / ALT – OFF (Mags On)
 CABIN HEAT & AIR – OFF
 IF FIRE OUT, BATT / ALT ON ONLY IF CRITICAL
 THEN ONE ELECTRICAL DEVICE AT A TIME (Isolate Defective Equipment)
 RESET CIRCUIT BREAKER(S) ONLY IF CRITICAL

ENGINE FIRE IN FLIGHT

- FUEL SELECTOR – OFF TO AFFECTED ENGINE
 MIXTURE – FULL LEAN / IDLE CUTOFF
 PROP – FEATHER
 AUX FUEL PUMP – OFF
 ALTERNATOR / MAGNETOS / START SWITCH – OFF
 INC REASE AIRSPEED TO EXTINGUISH – 140 KIAS (161), LAND ASAP

ENGINE FIRE DURING START

- MIXTURE – FULL LEAN / IDLE CUTOFF
 CONTINUE CRANKING ENGINE
 FUEL SELECTORS – OFF
 BATTERY / ALTERNATOR – OFF
 SHUTDOWN OTHER ENGINE
 EVACUATE / FIRE EXTINGUISHER

ICING

- PITOT HEAT – ON
 CARBURETOR HEAT / ALTERNATE STATIC SOURCE – AS NEEDED
 CABIN HEAT & DEFROST – MAXIMUM
 STRONGLY CONSIDER 180° TURN
 ATTAIN HIGHER OR LOWER ALTITUDE
 INCREASE ENGINE SPEED
 FULL FLAPS NOT RECOMMENDED FOR LANDING
 LAND FASTER AS NEEDED

MANUAL GEAR EXTENSION

- REDUCE AIRSPEED BELOW – 100 KIAS (115 MPH)
 PULL LANDING GEAR MOTOR CIRCUIT BREAKER
 LOWER LANDING GEAR LEVER
 OPEN EMERGENCY EXTENSION VALVE
 EXTENSION WRENCH – TURN COUNTERCLOCKWISE
 IF ELECTRICAL SYSTEM OK – VERIFY GEAR LIGHTS & HORN

OTHER

- UNICOM: 122.7, 122.8, 122.95, 123.0, 123.05
 MULTICOM: 122.9 (CTAF) 122.75, 122.85 (Air To Air)
 FLIGHT WATCH: 122.0
 RADIO OUT: CHECK CIRCUIT BREAKERS & VOLUME
 RECYCLE ALTERNATOR SWITCH
 If IFR & Still Out, Set Transponder At 7600.
 (Suggested For VFR If In B, C, D Airspace.)

POWER SIGNALS	ON GROUND	IN FLIGHT
Steady Green	Cleared For Takeoff	Cleared To Land
Flashing Green	Cleared To Taxi	Return For Landing
Steady Red	Stop	Yield & Continue On Way
Flashing Red	Taxi Clear of Landing Area	Airport Unusable – Do Not Land
Flashing White	Return to Starting Point	N/A
Alternating Red & Green	Use Extreme Caution	Use Extreme Caution

* Every Plane Has A Different Empty Weight And Useful Load
 Beechcraft Duchess 76 (Lycoming O-360-A166D, LO-360 ATGD / 180 HP)

- * Empty Weight: LBS (Specific Plane Weight)
 * Max. Useful Load: LBS (Including Fuel @ 6 lbs/gal)
 Max. Bag Area: 200 LBS (Included In Useful Load)
 Max. T.O. Weight 3900 LBS
 Zero Fuel Weight 3500 LBS

- Fuel Type: 100 LL (Blue) / 100 (Green)
 Usable Fuel: 100 Gallons
 Oil Capacity: 8 Quarts Per Engine
 Electrical: 24-28 VOLT, 55 AMP (ME-183 & After)
 12-14 VOLT, 60 AMP (ME-11 thru ME-182)
 Tire Pressure: Nose - 38 PSI / Main - 38 PSI