

FLIGHT NORMAL PROCEDURES

BEFORE STARTING ENGINE

1. Preflight Inspection.....COMPLETE
2. Passenger Briefing.....COMPLETE
3. Emergency Egress Brief.....COMPLETE
4. Parachute..... AS REQ'D
5. Seat Belts, Harness..... ADJUST/SECURE
6. Fuel Shut-off Valve..... ON
7. Brakes.....SET
8. Electrical Switches / CB..... OFF / IN
9. Cabin Door.....CLOSED
10. Window..... As Desired

STARTING ENGINE

1. Strobe Lights..... ON
2. Master Switch..... ON
3. Magneto Switches (2)..... ON
4. Throttle..... OPEN ½" - 1"
5. Alternate Air..... COLD
6. Mixture..... FULL RICH
7. Prop..... Full Forward
8. Fuel Boost Pump..... ON (~3 secs) then OFF
9. Mixture..... IDLE CUT-OFF
10. Propeller Area..... CLEAR

11. Starter..... ENGAGE

AFTER ENGINE FIRES

12. Mixture..... FULL RICH
13. Starter..... RELEASE
14. Throttle..... 1000 RPM
15. Oil Pressure.....CHECK
16. Radio/Transponder Switches..... ON
17. Transponder..... 1200, ALT
18. ATIS / Altimeter.....SET

BEFORE TAKEOFF

1. Brakes.....SET
2. Flight Controls.....CHECK
3. Elevator Trim.....SET for TAKEOFF
4. Flight Instruments/Radios.....SET
5. Mixture..... FULL RICH
6. Prop..... Full Forward
7. Engine Instruments.....CHECK
8. Elevator Control..... FULL BACK
9. Throttle..... 1800 RPM
10. Magnetos...CHECK (< 175 RPM or 50 RPM diff)
11. Alt Air..... CHECK (for RPM drop)
12. Engine Instr and Ammeter.....CHECK
13. Prop Control..... Cycle 3 times
14. Throttle.....IDLE, then 1000 RPM
15. Takeoff Procedures..... REVIEW
16. Seat Belts, Shldr Harnesses..... RE-CHECK
17. Cabin Door/Window.. CLOSED & LATCHED
18. Lights.....ON, as Req'd
19. Transponder..... ALT
20. Fuel Boost Pump..... ON

TO BE USED IN CONJUNCTION WITH THE APPROVED SUPER-D CHECKLIST

Super D – 8KCAB

NORMAL TAKEOFF

1. Elevator..... NEUTRAL
2. Throttle.....Smoothly apply to FULL OPEN
3. Engine Instruments.....CHECK
4. Attitude.....RAISE TAIL to level flt attitude
5. Lift-Off.....55 – 60 MPH
6. Climb.....75 – 80 MPH
7. Above 500', Fuel Boost Pump..... OFF

NORMAL CLIMB

1. Mixture.....FULL RICH (below 5000ft)
2. Airspeed.....80 - 90 MPH

CRUISE

1. Fuel Boost Pump..... Verify OFF
2. Mixture..... LEAN (below 75% power)
3. Prop..... MP 23 in/RPM 2300

DESCENT

1. Mixture..... FULL RICH

BEFORE LANDING

1. Gas.....CHECK
2. Mixture..... FULL RICH
3. Prop..... Full Forward
4. Seat Belts, Harnesses..... SECURE
5. Lights..... AS REQ'D
6. Fuel Boost Pump..... ON

NORMAL LANDING

1. Airspeed (3 point).. 60-75 MPH (normal 73)
2. Airspeed (wheel).....80 MPH

STOP & GO

1. Elevator Trim.....SET for TAKEOFF
2. Mixture..... FULL RICH
3. Lights.....SET
4. Transponder.....ALT
5. Fuel boost pump..... ON

AFTER LANDING

1. Fuel Boost Pump..... OFF
2. Lights..... AS REQ'D

BALKED LANDING

1. Climb Speed.....58 MPH
2. Clear of Obstacles..... 75-80 MPH

ENGINE FIRE DURING START

1. Starter..... REMAIN ENGAGED
 2. Mixture..... IDLE CUT-OFF
 3. Throttle..... FULL OPEN
- If fire persists:
4. Fuel Shut-Off Valve..... OFF
 5. Electrical and Mag Switches..... OFF
 6. Exit Aircraft

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FLIGHT EMERGENCY PROCEDURES

SHORT FIELD/OBSTACLE TAKEOFF

Normal Takeoff Procedure except:

1. Lift-Off.....50-55 MPH
2. Climb (Vx).....58 MPH

SOFT FIELD TAKEOFF

Normal Takeoff Procedure except:

1. Tail..... LOW, but clear of ground
2. Lift-off..... AS SOON AS POSSIBLE
3. Level Flight to safe speed, then climb

SHORT FIELD/OBSTACLE LANDING

Normal landing procedures and:

1. Airspeed.....60 MPH

SOFT FIELD LANDING

Normal FULL STALL (3 PT) landing procedures:

1. Elevator..... FULL AFT after touchdown
2. DO NOT USE BRAKES
3. Power..... as Req'd to not get stuck

CROSSWIND LANDING

1. Do Not Drop Tail until below flying speed

ENGINE FIRE IN FLIGHT

1. Mixture Control.....IDLE CUT-OFF
2. Fuel Shut-Off Valve.....OFF
3. Electrical and Mag Switches..... ALL OFF
4. Cabin Heat..... OFF front and rear
5. Fire Extinguisher.....ACTIVATE (As Req'd)
6. Land.....use "Forced Landing Procedures"

ENGINE FAILURE ON TAKE-OFF

If sufficient runway remains:

1. Throttle..... CLOSED
2. Land using maximum braking

If altitude permits, Attempt an engine restart:

3. Fuel Shut-Off Valve..... CHECK ON
4. Mixture Control..... FULL RICH
5. Alternate Air..... FULL HOT
6. Magneto Switches.....BOTH ON (Up)
7. Fuel Boost Pump.....ON

If no restart is possible:

8. Select most favorable landing area ahead

ENGINE AIR START

1. Maintain Airspeed.....80 MPH, minimum
2. Magneto Switches.....BOTH ON (Up)
3. Fuel Boost Pump.....ON
4. Mixture... FULL RICH, as req at high altitude
5. Fuel Shut-Off Valve..... CHECK ON
6. Alternate Air..... FULL HOT
7. If restart not possible, change throttle, mixture, mag, or carb/alt air to restart.
8. No Start .. Run "Forced Landing Procedure"

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FORCED LANDING (Complete Power Failure)

1. Airspeed.....Maintain 75 MPH
2. Mixture..... IDLE CUT-OFF
3. Fuel Shut-Off Valve..... OFF
4. Master Switch..... ON
5. Radio.....MAYDAY 121.5 MHz
6. Attempt to position the aircraft:
Over point of landing - 1000 ft (AGL)
Downwind and abeam – 500 ft (AGL)
7. Electrical Switches..... ALL OFF
8. On Final Approach..... Airspeed 70-75 MPH
9. Touchdown with minimum airspeed (three point full stall) if landing on rough terrain.

PARTIAL POWER LOSS I ROUGH RUNNING

1. Follow the engine air restart procedure.

INFLIGHT OVERSTRESS

Fly at a reduced airspeed, (70-80 MPH) to a suitable landing point. Maintain level flight as much as possible and limit forces on aircraft.

EMERGENCY EXIT / BAIL OUT

1. Throttle..... CLOSED
2. Door..... JETTISON
3. Use the cabin door frame for support. Dive straight out and slightly aft of wing struts.
4. Parachute..... OPEN

ELECTRICAL FIRE

1. Electrical Switches..ALL OFF (Magnetos ON)
2. Air Vents/Windows..OPEN as Req'd for vent
3. Use hand fire extinguisher if available
4. If fire continues, land immediately.

ALTERNATOR/ELECTRICAL FAILURE

An alternator failure is indicated by a steady discharge on the ammeter.

1. Master Switch..... CYCLE
2. If excessive battery discharge continues, turn OFF all nonessential electrical equipment to conserve battery power.
3. Land as soon as practical

DITCHING

1. Cabin Side Door..... JETTISON
2. Land into wind if high winds are evident, or parallel to swells with calm winds.
3. Contact the water with nose high attitude.
4. DO NOT STALL prior to touchdown.
5. After coming to complete stop - EXIT

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GROUND PROCEDURES

Super Decathlon 8KCAB

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Cockpit/Cabin

1. Documents and HandbookARROW
2. Cabin DoorCONDITION/SECURITY
3. Flight Controls....FREEDOM OF MOVEMENT
4. Rudder Cables Tension
5. Control Stick..... Linkage
6. Inverted Fuel System Check for Leakage
7. Mags & Electrical Switches OFF
8. Fuel QuantityCHECK
9. Master Switch ON
10. LightsCHECK
11. Stall warning hornCHECK
12. Master Switch OFF
13. Fuel Selector Valve ON
14. Seat BeltsCHECK, Secure Rear if Solo
15. Secure or Remove Loose Objects

Right Wing

16. Wing Root FairingCHECK SECURE
17. Wing Fuel DrainSUMP
18. Aileron & Spade CHECK
19. Wing Tip & Lights CHECK
20. Front & Rear Lift StrutsCHECK
21. Drain Holes Dry, Not Plugged
22. FuelCHECK Quantity, Cap Secure

Right Main Gear

23. Tires – Condition/Inflation CHECK
24. Brakes – Condition/Leakage CHECK

Nose Section

25. Windows CLEAN
26. Oil Quantity, Dip Stick Secure CHECK
27. Engine Compartment..... CHECK
28. Cowling & Inspection Door CHECK
29. Propeller and Spinner CHECK
30. Air Filter CHECK
31. Landing Light..... CHECK
32. Fuel Gascolator DRAIN, Check for leakage

Left Main Gear

33. Same as Right Main gear

Left Wing

34. Same as Right Wing
35. Fuel Vent CHECK Unobstructed
36. Pitot Tube CHECK Unobstructed

Fuselage – Left Side

37. Fabric Condition,oil,etc CHECK
38. Windows..... CLEAN
39. Fuel Belly Drain DRAIN, Check for leakage
40. Radio Antenna(s) CHECK Secure
41. Static Port CHECK Clear

Empennage

42. Horiz Stabilizer & Wire Braces CHECK
43. Vertical Stabilizer & Tail Light CHECK
44. Elevator, Trim Tab & Rudder CHECK
45. Tailwheel CHECK, INFLATION

Fuselage – Right Side (same as Left Side)

SECURING AIRPLANE

1. BrakesSET
2. Clear Power Plant 1500 RPM Leaned
3. ELT CHECK, Radio @121.5
4. Throttle..... IDLE
5. Radios/Transponder OFF
6. Lights OFF
7. Mag Check Switches Off momentarily
8. MixtureIDLE CUT-OFF
9. Magnetos..... OFF
10. Master Switch..... OFF

FLOODED START PROCEDURE

1. Fuel Boost Pump OFF
2. MixtureIDLE CUT-OFF
3. ThrottleFULL OPEN
4. Magneto Switches OFF
5. Starter..... ENGAGE for several propeller revolutions
6. Do Normal Start Procedure with no prime

Note: Limit use of starter to 30 sec with 2 minute cooling off period between start attempts

AEROBATICS

Super Decathlon 8KCAB

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Acro pwr setting: 25/25
Mixture: FULL RICH

Bail Out, Bail Out, Bail Out
PULL pin, PULL aft, PUSH door
Buckle 1, Buckle 2, Dive, D-RING

Seat Belts, Air, FireExt,
Exit, Traffic, Your?s

1992 Super D 8KCAB N93WE		RNT	BFI	PAE	
V _{speed} (RO Rec'd)	CAS [MPH]	16 / 34	14R/L 32L/R	16R/L 34L/R	
V _{SO}	53	TWR 124.7	TWR(ifr) 120.6	TWR(w) 132.95	
V _S	53	GND 121.6	TWR(e) 118.3	TWR(e) 120.2	
Rotate	60	ATIS 126.95	GND 121.9	GND 121.8	
V _X	58/Will=65	UNICOM 22.85/95	ATIS 127.75	ATIS 128.65	
V _Y	80	SEA Twr 119.9	UNICOM 122.95	UNICOM 122.95	
Best Glide	75	SEA Twr 120.95			
G limits	+6 / -5				
V _A 1800/1500	120/110				
V _{NO}	160				
V _{NE}	200				
Demo Xwind	N/A				
Climb	75 - 80	Entry speed: 120 30 deg nose up Neutral elev, full ail Maybe slight: Fwd press inverted Top rud for 2nd half For slow roll, Nose up to horizon As inserting aileron, slight back press Will require clean foot work!	Entry speed: 140 - Pause at horizon - 3.5g - 4g pull - add Full Power Over the top: - reduce the pull Coming down: - pull (3.5g-4g) End at same altitude ~500' loop height	Entry speed: 140 - Pull, look, vertical Fwd stick & right rudder. - Very slight shudder kick left rudder & fwd right stick - Downline, look, recover	
App Short	≥65 60				
App Norm	60 - 75				
3-Pointer	73				
Wheelie	80				
Pattern					
	2100 100				
	1500 90				
	As Req'd 80 / 73				
	T/Dwn @ 65				
OIL Full/Min	8 / 6				
Fuel	40 gal				
Burn CRZ	9 gph				
Burn Aero	10 gph				
MTOW	1800#s				
Useful Load	463#s	Setup = loop /140 but only 5/8th's of loop to a 45° downline, hold 1-2 sec & look, then roll, recover	Setup = loop /145 (4g better) but start with 45° upline, hold 1-2 sec & look, then roll, hold on upline for a sec to bleed a/s finish is 5/8ths of loop	Entry speed: 140 Setup = pull at the top pull to a vertical downline	

Runway 16

Dep Factoria: CL to 1000', L downwind abeam
Ctrl Twr make 45° R turn to Factoria
Dep Kent: CL to 1000', direct east of Valley
Medical Center to exit Delta
Dep Lake Youngs: CL to 1000', left to SW side
Lake Youngs
Arr East Channel: East channel bridge and fly
middle of east channel to straight in
Arr Lake Youngs: NE side of Lake to Maplewood
golf course (1500'), 45° to L downwind

Runway 34

Dep East Channel: CL to 1 NM, middle of east channel
to bridge
Dep Lake Youngs: Cl to 1000', R downwind, abeam Ctrl
Twr make 45° L turn to NE side of Lake
Arr Factoria: Factoria to Water Tower (1500') then 45°
to R downwind
Arr Lake Youngs: SW side of Lake to Maplewood golf
course (1500'), 1 mile R base
Arr Kent: E of Valley Medical Center, straight in