



# Fly Corps Aviation – Twin Star DA42TDI- N480TS – Preflight and Start Up Procedures

<p style="text-align: center;"><b>— Cabin Check —</b></p> <p>Airplane Documents ..... Check  Flight Planning ..... Complete  Hobbs Time ..... Record  Parking Brake ..... Set  Canopy &amp; Rear Door ..... Check  Baggage ..... Secured  Fuel Selector ..... ON  Power Lever ..... Check then Idle  Alternate Static ..... Closed  Manual Gear Handle ..... Pushed In  Alternate Air ..... Closed  Alternator ..... On  ECU Switch ..... AUTO  Pitot Heat ..... OFF  Engine Masters ..... OFF  Start Key ..... OUT  Electric Master ..... OFF  Avionics Master ..... OFF  Gear Selector ..... DOWN  Flaps Selector ..... UP  Circuit Breakers ..... IN  Electrical Equipment ..... OFF  Emergency Switch ..... Off/Secured  ELT ..... Armed  Electric Master ..... ON  Fuel Quantity ..... Check/Rest  Lights ..... Check  Stall Warning ..... Check  Stall Heat ..... Check  Pitot Heat ..... Check  Gear Warning and Fire Detector ..... Test  Control Stick ..... Aft &amp; Hold  Flap ..... LDG  Power Level ..... MAX  Variable Elevator Backstop ..... Check  Power Level ..... Idle  Variable Elevator Backstop ..... Check  Flaps ..... UP  Electric Master ..... OFF  Control ..... Free &amp; Correct  Trims ..... Set</p> <p style="text-align: center;"><b>— Main Gear —</b></p> <p>Strut &amp; Lock ..... Check  Down Switch ..... Check  Uplock Switch ..... Check  Tire Condition ..... Check  Brake Line ..... Check  Slip Marks ..... Check  Landing Gear Door ..... Check  Checks ..... Remove</p>	<p style="text-align: center;"><b>— Left Engine —</b></p> <p>Air Inlet/Air Outlet ..... Clear  Engine Oil Level ..... Check  Gearbox Oil ..... Check  Cowling ..... Check  Gascolator ..... Drain  Venting Pipe ..... Check  Exhaust Pipe ..... Check  Propeller ..... Check  De-icing Boots ..... Check  Underside ..... Check  Auxiliary Tank Drain ..... Drain  Auxiliary Tank Filler ..... Check/secure</p> <p style="text-align: center;"><b>— Left Wing —</b></p> <p>Entire Wing Surface ..... Visual Inspection  Tank Air Outlet ..... Check  Tank Drain ..... Drain  Openings on Lower Surface ..... Check  Stall Warning Device ..... Check  Tank filler ..... Check and closed  Pitot Probe ..... Check  Wing Tip ..... Check  Static dischargers ..... Check  Position Light &amp; Strobes ..... Check  Aileron and Linkage ..... Check  Aileron Hinges and Safety Pin ..... Check  Foreign Objects in aileron paddle ..... Check  Flap and Linkage ..... Check  Flap hinges and safety pin ..... Check  Nacelle underside ..... Check  Step ..... Check</p> <p style="text-align: center;"><b>— Fuselage, Left and Underside —</b></p> <p>Canopy Left Side ..... Check  Rear Cabin door &amp; Window ..... Check  Fuselage Skin ..... Check  Antennas ..... Check  Fuselage ..... Check for Contamination  Static Source ..... Check Blockage</p> <p style="text-align: center;"><b>— Empennage —</b></p> <p>Stabilizers and Control Surfaces ..... Check  Hinges ..... Check  Elevator/Rudder Trim Tabs ..... Check  Tail Skid Lower Fin ..... Check  Static Dischargers ..... Check</p>	<p style="text-align: center;"><b>— Fuselage, Right and Underside —</b></p> <p>Fuselage Skin ..... Check  Rear Window ..... Check  Canopy Right Side ..... Check  Static Source ..... Check Blockage</p> <p style="text-align: center;"><b>— Right Wing —</b></p> <p>Entire Wing Surface ..... Visual Inspection  Tank Air Outlet ..... Check  Tank Drain ..... Drain  Openings on Lower Surface ..... Check  Tank filler ..... Check and Closed  Wing Tip ..... Check  Static dischargers ..... Check  Position Light &amp; Strobes ..... Check  Aileron and Linkage ..... Check  Aileron Hinges and Safety Pin ..... Check  Foreign Objects in aileron paddle ..... Check  Flap and Linkage ..... Check  Nacelle underside ..... Check  Step ..... Check  Cabin Vent Air Inlet ..... Check</p> <p style="text-align: center;"><b>— Right Engine —</b></p> <p>Air Inlet/ Air Outlet ..... Clear  Engine Oil Level ..... Check  Gearbox Oil ..... Check  Cowling ..... Check  Gascolator ..... Drain  Venting Pipe ..... Check  Exhaust Pipe ..... Check  Propeller ..... Check  De-icing Boots ..... Check  Underside ..... Check  Auxiliary Tank Drain ..... Drain  Auxiliary Tank Filler ..... Check</p> <p style="text-align: center;"><b>— Front Fuselage —</b></p> <p>L/R Front Baggage Doors ..... Locked  Nose Landing Gear Strut ..... Check  Down &amp; Uplock Switches ..... Check  Tire Condition ..... Check  Slip Marks ..... Check  Gear Door Linkage ..... Check  Chocks ..... Remove  OAT Sensor ..... Check  EPU Connector ..... Check</p>	<p style="text-align: center;"><b>— Before Start —</b></p> <p>Pre-flight ..... Complete  Flight Planning ..... Complete  Passengers ..... Safety Briefing  Rear Door ..... Closed &amp; Locked  Front Canopy ..... Closed &amp; Locked  Rudder Pedals ..... Adjusted  Seat Belts ..... On &amp; Secured  Power Lever ..... IDLE  Parking Brake ..... SET  Avionics Master ..... OFF  Gear Selector ..... DOWN  ECU Switch ..... AUTO  Alternators ..... ON  Electric Master ..... ON  Fuel Temp ..... Check</p> <p style="text-align: center;"><b>— Engine Start —</b></p> <p>Strobe Lights ..... ON  Position Lights ..... ON  Engine Master(s) ..... ON  Annunciations ..... “GLOW ON”  Engine/System Page ..... OK/Normal  Annunciations ..... “Glow Anc. Off”  Start Key ..... Engage, hold until 500RPM  <b>Do not engage the starter for MORE THAN 10 SECONDS</b>  <b>Let cool for 20 seconds after 6 attempts stop for 30 minutes.</b>  Annunciations/Engine Sys Page ..... CHECK  Annunciations/Starter ..... OFF  Annunciations Oil Pressure ..... OK  Circuit Breakers ..... CHECK  IDLE RPM ..... CHECK 900+/- 20RPM  Repeat with 2<sup>nd</sup> Engine  Avionics Master ..... ON  Warm Up ..... IDLE 2 min then 1400 RPM</p> <p style="text-align: center;"><b>- STARTER MALFUNCTION -</b></p> <p>If the starter does not disengage from the engine after starting:  Power Lever affected engine ..... IDLE  Engine Master affected engine ..... OFF  Electric Master ..... OFF  Terminate Flight</p>
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# Fly Corps Aviation – Twin Star DA42TDI- N480TS – Taxi, Landing, Takeoff Procedures

<p style="text-align: center;"><b>— Before Taxi —</b></p> <p>Electrical Equipment ..... ON          Flight Instruments and Avionics ..... SET          Flood Light .....as required          Pitot/Stall Warning Heat..... ON/Check          Pitot/Stall Warning ..... OFF          Lights .....as required          Autopilot.....ON          Autopilot Disconnect.....Verify Function          Trim.....Set T/O</p> <p style="text-align: center;"><b>— Taxi —</b></p> <p>Parking Brake ..... Release          Brakes .....TEST          Nose Wheel Steering ..... Check          Flight Instruments/Avionics ..... Check          Fuel Pumps LH/RH..... OFF          Fuel Selector.....CROSSFEED</p> <p>The fuel Crossfeed function can be tested simultaneously with both engines. Proper function can be tested by running the engines for approx. 30 seconds with CROSSFEED selected. The operation of both engines with both FUEL SELECTORS in CROSSFEED position, other than for this test, is prohibited</p> <p>Fuel Selector.....ON</p> <p style="text-align: center;"><b>— Before Take Off —</b></p> <p>Position Plane into wind          Parking Brake .....SET          Safety Belts ..... ON          Rear Door ..... Closed/Locked          Front Canopy .....Closed/Locked          Front Baggage Doors..... VISUAL CLOSED          Door Warning ..... Verify no indication          Annunciations/Engine Page.....NORMAL          Circuit Breakers .....IN          Elevator Trim..... Set T/O          Directional Trim .....Neutral          Flaps ..... UP          Flight Controls .....Free/Clear          Pitot Heat .....As required          Landing Light .....As required</p>	<p style="text-align: center;"><b>— ECU Test —</b></p> <p><i>If L/R A/B FAIL indicators do not illuminate and extinguish during test sequence, there is a malfunction in the ECU. Terminate flight</i></p> <p><b>Engine/Gearbox oil temps must be in green</b>          Brakes..... Set/Held          Power Lever .....IDLE          L/R ECU SWAP .....ECU B          Engine.....Check Running          ECU Test .....Press and Hold</p> <p style="text-align: center;">Annunciations in sequence:          ECU A/B Fail ON          Propeller RPM Increase          ECU A/B Fail Lights OFF          ECU B Fail Light ON          Propeller RPM Decrease/Increase          ECU B Fail Light OFF          ECU A Fail Light ON          Propeller RPM Decrease          ECU Fail Light OFF          Propeller RPM Decrease to Idle</p> <p>ECU Test Button.....Release  <i>Check Engine during switch. Shake may occur</i></p> <p>Running the engine with the ECU SWAP on ECU B, other than for this test or in an emergency is prohibited. The engine control system redundancy is only given with the ECU SWAP set on AUTO.</p> <p>Power Lever .....Max 10 seconds          Annunciations .....check normal          Instruments .....check normal          RPM .....Stabilize at 2240 to 2300          Load Indication .....Stabilizes 90-100%          Power Level .....IDLE</p>	<p style="text-align: center;"><b>— Take Off (Normal) —</b></p> <p>Transponder .....ALT          Power Lever.....MAX          Elevator.....Neutral          Rudder ..... Maintain Control          Nose Wheel Lift Off ..... Vr min 72 KIAS          Airspeed for initial Climb..... Vyse 82 KIAS          Landing Gear ..... Apply Brakes then UP          Alternate Air ..... Open in rain/snow/moisture</p> <p style="text-align: center;"><b>— Short Field Take Off —</b></p> <p>Flaps..... APP          Transponder .....ALT          Power Lever.....MAX          Elevator.....Neutral          Rudder ..... Maintain Control          Nose Wheel Lift Off ..... Vr min 72 KIAS          Airspeed for initial Climb..... Vyse 82 KIAS          Landing Gear.....Apply Brakes then UP          Alternate Air ..... Open in rain/snow/moisture</p> <p style="text-align: center;"><b>— Initial Climb —</b></p> <p>Landing Light ..... OFF          Landing Gear ..... Check Up          Flaps..... Check Up          Airspeed.....set/check          Cruise Climb 90 KIAS          Power Lever .....92%          Trim .....As required          Annunciations/Engine Page..... Monitor</p> <p style="text-align: center;"><b>— Cruise —</b></p> <p>Power Level .....performance as required          Manufacture recommends 70% for cruise          Trim ..... as required          Annunciations/Engine Page..... Monitor</p>	<p style="text-align: center;"><b>— Descent —</b></p> <p>Power Level .....as required          Air Speed .....as required          Trim .....as required          Annunciations.....Monitor</p> <p style="text-align: center;"><b>— Approach &amp; Landing —</b></p> <p>Safety Belts..... ON          Controls..... free from obst.          Landing Light..... ON          Gear Warn Horn.....CHECK          Fuel Selector .....ON          Landing Gear ...Down, 3 Green          Parking Brake..... Released          Trim ..... As required          Air Speed.....min 86 Flaps Up          Flaps..... as required          Power Lever..... as required          Trim ..... as required          Final Approach Speed          Flaps LDG.....min 78 KIAS</p> <p style="text-align: center;"><b>— Go Around —</b></p> <p>Power lever.....MAX          Flaps .....APP          Air Speed ..... 82 KIAS          Landing Gear .....UP          Flaps .....UP</p> <p style="text-align: center;"><b>— After Landing —</b></p> <p>Power Level .....IDLE          Brakes .....as required          Pitot Heat .....OFF          Avionics .....as required          Lights .....as required          Flaps .....UP</p>
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# Fly Corps Aviation – Twin Star DA42TDI- N480TS – Shut Down and Performance Information

— Shut Down —	— V Speeds —		— INFO —
<p>Parking Brake.....set Power Lever .....Idle 2 minutes Engine/System..... Check ELT ..... Check Off Avionics Master ..... OFF Electrical Consumers..... OFF Engine Master ..... OFF Strobes..... OFF Electric Master ..... OFF</p> <p>Before Shut-down the engine must run for 2 minutes with power at idle to avoid heat damage of the turbo charger.</p> <p><b>DO NOT SHUT DOWN ENGINE WITH FUEL SELECTOR VALVE</b></p> <p style="text-align: center;">— Post Flight Inspection —</p> <p>Squawks ..... Record Canopy Cover..... as required Pitot Probe..... Cover</p> <p>Engines – Continental TAE 125-02-99</p> <p>WARNING indication – means that the non-observation of the corresponding procedure leads to an immediate or important degradation of flight safety</p> <p>CAUTION indication– means that the non-observation of the corresponding procedure leads to a minor or to a more less long-term degradation in flight safety.</p> <p><b>No intentional training shut down below 3000AGL or above 10,000 MSL.</b></p>	Airspeed		KIAS
	VA	Maneuvering Speed	120-126
	VFE (APP)	Max Flap Extend. Flaps Approach	137
	VFE (LDG)	Max Flap Extend. Flaps Landing	111
	VLOE	Landing Gear Extension	194
	VLOR	Landing Gear Retraction	156
	VLE	Max Landing Gear Speed	194
	VMCA	Minimum Control Airspeed	68
	VNO	Max Structural Cruising Speed	155
	VNE	Never exceed speed	194
	VYSE	Best Single Engine Climb	82
	VY	Best Rate of Climb	77-79
	VX	Best Angle of Climb	77
	Vr	Rotation Speed	72
		Cruise Climb	85-90
VREF	Approach Speed (APP flaps)	min 82	
VREF	Landing Speed (LDG flaps)	min 78	
	Max Emergency Gear Extension	156	
			<p>Maximum Landing Weight .....3935lbs Maximum Take Off Weight.....3935lbs Max Load Nose Baggage..... 66lbs Max Load in Cabin Baggage ..... 100lbs Max Operating Altitude ..... FL180 Useable Fuel Mains .....2x25gal Useable Fuel Aux..... 2x13gal Service Ceiling .....18,000 ft MAX Restart Alt .....8,000MSL MAX fuel Imbalance .....5gal/side Restart Airspeed .....Below 90 KIAS Take off over 50’ OBS .....2400ft Take off ground roll .....1500ft Landing over 50’ OBS.....2350ft Landing ground roll .....1350ft *80° F and no wind used for calculations*</p> <p>Normal Category Approved Maneuvers:</p> <ul style="list-style-type: none"> <li>- Normal flight maneuvers</li> <li>- Stalling (no dynamic stalls)</li> <li>- Lazy Eights, Chandelles, and steep turns less than 60 bank</li> </ul>



# Fly Corps Aviation – Twin Star DA42TDI- N480TS– One Engine Inoperative Procedures

— Engine Demonstration/Restart —

Maximum Altitude .....8,000’MSL  
 Minimum Altitude .....3,000’MSL

**When demonstrating handling qualities with one engine inoperative the left engine is the critical engine.**

— One Engine Inoperative Procedures —

**WARNING**

In certain combinations of airplane weight, configuration, ambient conditions, speed and pilot skill, negative climb performance may result.

Refer to POH Chapter 5 - PERFORMANCE for one engine inoperative performance data. In any event the sudden application of power during one-engine inoperative operation makes the control of the airplane more difficult.

**Detecting the Inoperative Engine**

One engine inoperative means an asymmetric loss of thrust, resulting in uncommanded yaw and roll in direction of the so-called "dead" engine (with coordinated controls). To handle this situation it is vital to maintain directional control by mainly rudder and additional aileron input. The following mnemonic can help to identify the failed engine:

**"Dead foot - dead engine"**

This means that, once directional control is re-established, the pilot can feel the control force on the foot pushing the rudder-pedal on the side of the operative engine, while the foot on the side of the failed engine feels no force. Further, the engine instruments can help to analyze the situation.

— Engine Troubleshooting —

**Fly the Airplane - Control Flight Attitude First**

Power Lever.....IDLE  
 If in Icing Conditions.....Alternate Air On  
 Fuel Quantity..... Check  
 Fuel Selector.....On/Crossfeed  
 ECU Swap.....ECU B  
 Circuit Breakers.....Check/Reset

If swap any action restores engine power, land ASAP

Depending on situation restart may be possible prior to securing the engine:

**CAUTION**

Restarting the engine at altitudes above 8000’ have not been demonstrated by the manufacturer

— ENGINE SECURING PROCEDURE —

Inoperative Engine .....ID/VERIFY  
 Engine Master inoperative engine .....OFF  
**Do not shut down with fuel selector valve**  
 Alternator inoperative engine .....OFF  
 Fuel Selector Inoperative Engine .....OFF

Cross Feed to maintain fuel balance

— RESTART (Starter)- IN FLIGHT —

Airspeed .....below 90 KIAS  
 Power Lever affected Engine .....IDLE  
 Fuel Selector affected engine .....ON  
 Alternate Air .....As Required  
 Alternator .....ON  
 Engine Master affected engine .....ON  
 Starter affected Engine .....Engage, Hold until 500RPM

**DO NOT ENGAGE STARTER IF PROPELLER IS WINDMILLING**

Once started, set power level to a moderate level until oil pressure reaches green range.  
 Circuit Breakers .....Check

— Windmilling Restart —

Airspeed .....125-145 KIAS  
 Power Lever affected Engine .....IDLE  
 Fuel Selector affected engine .....ON  
 Alternate Air .....As Required  
 Alternator .....ON  
 Engine Master affected engine .....ON  
 Once started set power level a moderate level until oil pressure reaches green range.  
 Circuit Breakers .....Check



# Fly Corps Aviation – Twin Star DA42TDI- N480TS – Emergency Procedures – ENGINE OUT

<p style="text-align: center; color: red;"><b>ENGINE FAILURE DURING GROUND ROLL</b></p> <p>ABORT TAKE OFF          Power level .....IDLE/BOTH          Rudder..... Maintain Control          Brakes.....As required          Risk of fire can be reduced:          Engine Master.....BOTH OFF          Fuel Selector.....BOTH OFF          Electric Master.....OFF</p> <p style="text-align: center; color: red;"><b>ENGINE FAILURE AFTER ROTATION</b></p> <p>If landing gear is still extended and remaining runway/surface is adequate – ABORT T/O &amp; LAND</p> <p><i>If Insufficient Runway Remains for a Safe Stop:</i>          Power Lever .....MAX          Rudder..... Maintain Directional Control          Airspeed .....Pitch for Vyse 82 KIAS          Landing Gear ..... UP          Flaps.....UP          Identify &amp; Verify Inoperative Engine          Secure Inoperative Engine          Land as soon as safe and practical</p> <p style="text-align: center; color: red;"><b>ENGINE FAILURE DURING INITIAL CLIMB</b></p> <p>Rudder..... Maintain Directional Control          Airspeed .....Pitch for Vyse 82 KIAS          Power Lever .....MAX          Landing Gear ..... UP          Flaps.....UP          Establish zero slide slip condition          Identify &amp; Verify Inoperative Engine          Secure Inoperative Engine          Land as soon as safe and practical.</p> <p style="text-align: center; color: red;"><b>ENGINE FAILURE DURING FLIGHT</b></p> <p>Rudder..... Maintain Directional Control          Airspeed.....As Required/ Above Vmca 68 KIAS          Power Lever as required to maintain directional control          Establish zero slip condition          Identify &amp; Verify Inoperative Engine          Secure Inoperative Engine          Land as soon as safe and practical.</p>	<p style="text-align: center; color: red;"><b>FLIGHT WITH ONE ENGINE INOPERATIVE</b></p> <p>Even if a positive flight performance can be established with one engine inoperative, land as soon as possible at next suitable airfield/airport.</p> <p>Airspeed..... above Vmca – 68 KIAS          Remaining Engine ..... Monitor          Fuel Quantity .....Monitor          Fuel Selector remaining engine.....Crossfeed or ON          Land as soon as practical</p> <p>If the FUEL SELECTOR is set on CROSSFEED, the engine will be supplied with fuel from the main tank on the opposite side. This will extend range and helps to keep the wings laterally balanced</p> <p style="text-align: center; color: red;"><b>LANDING WITH ONE ENGINE INOPERATIVE</b></p> <p>Safety Harnesses .....Secured          Landing Light .....ON          Gear Warning Horn .....CHECK</p> <p>Operative Engine:          Fuel Selector .....ON</p> <p>Inoperative Engine .....Verify Secured  <i><b>Airspeed As Required until “Field is Made”</b></i></p> <p style="text-align: center; color: red;"><b>“Field Made”</b></p> <p>Airspeed .....as required to operate Gear          Landing Gear .....Down and verify 3 GREEN          Trim .....as required          Airspeed .....reduce as required          Flaps .....as required</p> <p style="text-align: center;">Final Approach Speed Max Weight          VREF - Flaps UP 85 KIAS          VREF - Flaps APP 82 KIAS          VREF - Flaps LDG 76 KIAS</p> <p>Power lever.....as required          Trim .....as required</p> <p style="text-align: center;">Perform Normal Touchdown and ground roll</p>	<p style="text-align: center; color: red;"><b>GO AROUND ONE ENGINE INOPERATIVE</b></p> <p style="text-align: center; color: red;"><b>Not recommended below 800 AGL</b></p> <p>Power lever .....MAX          Rudder .....Maintain Control          Air Speed .....Vyse 82 KIAS          Landing Gear.....UP          Flaps .....UP</p> <p style="text-align: center; color: red;"><b>BOTH ENGINES OUT LANDING</b></p> <p>Engine Master.....Both OFF          Alternator Switches.....Both OFF          Fuel Selector.....Both OFF          Seat Belts.....ON/Secured          Flaps.....as required          Airspeed .....Min. 82 KIAS          Landing Gear.....down and confirm 3 green          Power Lever.....Both IDLE          Electric Master .....OFF          Touch Down.....Lowest practical speed</p> <p style="text-align: center; color: red;"><b>ENGINE SECURING PROCEDURE</b></p> <p>Directional Control..... MAINTAIN          Inoperative Engine .....ID/VERIFY          Engine Master inoperative engine .....OFF          Do not shut down with fuel selector valve          Alternator inoperative engine .....OFF          Fuel Selector Inoperative Engine .....OFF</p>
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# Fly Corps Aviation – Twin Star DA42TDI- N480TS – Emergency Procedures – System Failures

<p style="text-align: center; color: red;">— LANDING GEAR SYSTEM FAILURES —</p> <p style="text-align: center; color: red;"><b>LANDING GEAR UNSAFE WARNING</b></p> <p>Landing Gear unsafe warning light illuminates if landing gear is neither in the final up or down &amp; locked position. Illumination of this light is normal during transit.</p> <p>If the light remains on for longer than 20 seconds during landing gear retraction/extension:          Airspeed .....below 156 KIAS          Gear Selector .....Recycle</p> <p>If landing gear cannot be extended to the down and locked position or red lights do not extinguish then continue with manual gear extension.</p> <p style="text-align: center; color: red;"><b>MANUAL GEAR EXTENSION</b></p> <p>Gear indicator lights .....Test          Electric Master.....CHECK ON          Bus Voltage .....CHECK          Circuit Breaker .....CHECK          Gear Selector .....DOWN          Manual Gear Extension Handle..... PULL OUT</p> <p>The landing gear should be extended by gravity and relief of hydraulic pressure from the system. If one or more gear indicator lights do not indicate down and locked reduce airspeed to 110 KIAS and apply a moderate yawing and pitching to bring the landing gear into the locked position.</p> <p>Gear Indicator Lights .....Check 3 green          Circuit Breaker Landing Gear .....Secure</p>	<p style="text-align: center; color: red;"><b>GEAR UP LANDING</b></p> <p>Approach .....with power at normal settings          Power lever.....IDLE at touchdown</p> <p>If time allows:          Engine Master.....Both OFF          Fuel Selector .....Both OFF          Touchdown .....contact surface with min speed          On Ground.....maintain directional control w/ rudder          Electric master .....OFF</p> <p style="text-align: center; color: red;">— ELECTRICAL SYSTEM FAILURES —</p> <p style="text-align: center; color: red;"><b>COMPLETE FAILURE OF ELECTRICAL SYSTEM</b></p> <p>Circuit Breakers .....Check          Emergency Switch .....ON          Flood light.....as required          Power .....set based on lever position and engine noise          Prepare landing with flaps in given position          Land on nearest suitable airfield</p> <p style="text-align: center; color: red;"><b>WARNING</b></p> <p style="text-align: center; color: red;"><b>Engine stoppage may occur, depending on the failure mode. Backup batteries are installed for the ECU's to provide electrical power solely to the ECU and their systems for at least 30 min</b></p> <p style="text-align: center; color: red;"><b>Back up artificial horizon and flood light should have power for 1.5 hours.</b></p> <p style="text-align: center; color: red;"><b>HIGH CURRENT</b></p> <p>If high current is indicated on G1000:          Circuit breakers.....Check          Reduce electrical load          Land nearest suitable airfield</p>	<p style="text-align: center; color: red;">— SMOKE &amp; FIRE —</p> <p style="text-align: center; color: red;"><b>ENGINE FIRE ON GROUND</b></p> <p>Engine Master.....Both OFF          Fuel Selector.....Both OFF          Electric Master.....OFF          Canopy.....OPEN          Airplane ..... Evacuate Immediately</p> <p style="text-align: center; color: red;"><b>ENGINE FIRE ON TAKE OFF</b></p> <p>Cabin heat &amp; defrost.....OFF          Canopy.....Unlatch if Smoke Inside          Proceeded to engine failure on takeoff check list.</p> <p style="text-align: center; color: red;"><b>ENGINE FIRE IN FLIGHT</b></p> <p>Cabin heat &amp; defrost.....OFF          Proceed to engine failures in flight procedures</p> <p style="text-align: center; color: red;"><b>ELECTRICAL FIRE ON GROUND</b></p> <p>Electric Master ..... OFF          If Engine is running:          Power lever.....Both IDLE          Engine Master.....Both OFF          Fuel Selector.....Both OFF</p> <p>When engine has stopped          Canopy .....Open          Aircraft..... Evacuate Immediately</p> <p style="text-align: center; color: red;"><b>ELECTRICAL FIRE IN FLIGHT</b></p> <p>Emergency Switch .....ON          Avionics Master .....OFF          Electrical Master .....OFF          Cabin Heat &amp; Defrost..... OFF          Emergency Windows .....OPEN          Land at next suitable airfield</p> <p style="text-align: center; color: red;"><b>**REFER TO AFM FOR OTHER EMERGENCIES**</b></p>
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