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Consult POH / AFM for "Warnings, Cautions and additional Information"

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E 3**ENGINE FAILURE**  **BEFORE TAKEOFF**

1	Throttle	IDLE
2	Brakes	APPLY
3	Tower (ATC)	INFORM

AFTER T/O & DURING CLIMB

1	Airspeed	70 KIAS
2	ATC - Call for Emergency	CONTACT
3	Fuel Selector	FULLER TANK
3	Fuel Pump	ON
4	Ignition	BOTH
5	Throttle	FULL FWD
6	Prop	FULL FWD
7	Choke	PUSH (OFF)
8	Carburetor Heat	PULL (ON)
9	Flaps	AS REQ
Before Landing		
10	Fuel Selector	OFF
11	Ignition	OFF
12	Master - GEN / BAT	OFF



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E 4**ENGINE FAILURE IN FLIGHT**  **ROUGH ENGINE**

1	Carburetor Heat	PULL (ON)
2	Fuel Pump	ON
3	Ignition Switch cycle	L-BOTH
4	Ignition Switch cycle	R-BOTH
5	Throttle	MAINTAIN
6	If roughness continues	REDUCE PWR
7	Precautionary LDG	PERFORM

LOSS OF OIL PRESSURE

1	Oil Temperature	CHECK NORM
2	If Oil Press. Below Green	LAND NRST A/D
3	Oil Temperatur	RISING
4	Throttle	REDUCE MIN
5	Precautionary LDG	PERFORM

LOSS OF FUEL PRESSURE

1	Fuel Pump	ON
2	Fuel Selector	FULLER TANK
3	Fuel Pump	ON
4	If Fuel press. Warning Light still ON	LAND NRST A/D

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E 5**ENGINE RESTART**  **STOPPED PROPELLER**

1	Non Essential Electrics	OFF
2	Master - GEN / BAT	ON
3	Prop	FULL FWD
4	Fuel Selector	FULLER TANK
5	Fuel Pump	ON
6	Throttle when hot	2 cm OPEN
7	when cold	IDLE
8	Choke when hot	PUSH (OFF)
9	when cold	PULL / HOLD
10	Ignition	BOTH / START
When Power Restored		
11	Oil Pressure	CHECK
12	Choke	PUSH (OFF)
13	Electrical Equipment	AS REQ
14	Oil Temperature	CHECK



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E 6**ENGINE RESTART**  

PROPELLER WINDMILLING	
1	Airspeed 76 KIAS
2	Master - GEN / BAT ON
3	Fuel Selector FULLER TANK
4	Prop FULL FWD
5	Fuel Pump ON
6	Ignition BOTH
7	Throttle when Hot 2 cm OPEN
8	when cold IDLE
9	Choke when Hot PUSH OFF
10	when Cold PULL / HOLD
11	Oil Pressure CHECK
12	Choke PUSH (OFF)
13	Electrical Equipment AS REQ
14	Oil Temperature CHECK

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E 7

FORCED LANDING  

PRECAUTIONARY LANDING	
1 ATC	INFORM
2 Locate a suitable Field - Caution	WIND / OBSTACLE
3 Seat Belt / Harness	TIGHT
4 Initiate Descent	INSPECT FIELD
5 Abeam touchdown	PREP LANDING
6 Throttle	AS REQ
7 Prop	FULL FWD
8 Carburetor Heat	PULL (ON)
9 Fuel Pump	ON
10 Flaps	LDG
11 Airspeed	60 KIAS
12 Touchdown	LOWEST SPEED
13 Brakes	AS REQ
14 Fuel Selector	OFF
15 Ignition Switch	OFF
16 Master - GEN / BAT	OFF



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E 8**FORCED LANDING**  **EMERGENCY / POWER OFF - LANDING**

1	Emergency Frequency	121,5 MHz
2	Emergency Call (121,5 MHz)	REPORT
3	Flap LDG	60 KIAS
4	Flap T/O	65 KIAS
5	Flap UP	70 KIAS
6	Fuel Selector	OFF
7	Ignition	OFF
8	Seat Belt / Harness	TIGHT
9	Master - GEN / BAT	OFF

SMOKE AND FIRE  **ENGINE FIRE ON GROUND**

1	Fuel Selector	OFF
2	Throttle	FULL FWD
3	Master - GEN / BAT	OFF
4	Ignition	OFF
5	Aircraft	EVACUATE



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E 9

SMOKE AND FIRE 

ENGINE FIRE IN FLIGHT

1	Fuel Selector	OFF
2	Air Speed	90 KIAS
3	Flaps T/O	SET
4	Throttle	FULL FWD
5	Cabin Heat	PUSH (OFF)
6	Canopy Slide Window	OPEN
7	Power Off LDG	PERFORM (E8)



ELECTRICAL FIRE / SMOKE ON GROUND

1	Master - GEN / BAT	OFF
If engine is running		
2	Throttle	IDLE
3	Fuel Selector	OFF
4	Ignition	OFF
5	Canopy / Window	OPEN
6	Fire Extinguisher	AS REQ



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E 10**SMOKE AND FIRE**  **ELECTRICAL FIRE/ SMOKE IN FLIGHT**

1	Master - GEN / BAT	OFF
2	GEN2 CB	PULL
3	Avionics	OFF
4	All Electr. Switches	OFF  
5	Vents, Slide Window	OPEN
6	Flashlight (Night)	ON
7	Fire Extinguisher	AS REQ
8	Forced Landing	PERFORM (E8)
9	Engine	SHUTDOWN
10	Canopy	OPEN
11	After Engine stops	EVACUATE

ELECTRICAL SYSTEM MALFUNCTIONS  **COMPLETE ELECTRICAL SYSTEM FAIL**

1	Flight Attitude	STABILISE
2	Flashlight	ON
3	Master - GEN / BAT	CHECK ON
4	GEN2 CB	RESET
5	BAT CB	RESET
6	GEN1 CB	RESET
If still no Power		
7	Precautionary LDG	PERFORM (E7)



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E 11**GENERATOR FAILURES**  **GENERATOR GEN1 FAILURE**

1	GEN1 Warning Light	ILLUMIN
2	Master - GEN	OFF / ON
3	GEN1 CB	RESET
4	If GEN1 warning Light	STILL ON
5	GEN1 CB	PULL
6	Power Flarm	OFF
7	ACL	OFF
8	Master - GEN	OFF
9	Non-Essential Instruments	DIMM
10	Voltmeter / Ammeter	MONITOR

GENERATOR GEN2 FAILURE

1	GEN2 Warning Light	ILLUMIN
2	GEN2 CB	RESET
3	If GEN2 Warning Light	STILL ON
4	GEN2 CB	PULL
5	If GEN1 operating	CONTINUE
6	Non-Essential Equip	CONSIDER OFF

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E 12**GENERATOR FAILURES**  **GENERATORS GEN1 + GEN2 FAIL**

1	Master - GEN	OFF / ON
2	GEN1 CB	RESET
3	GEN2 CB	RESET
If GEN1 + GEN2 Warn-Light still on, or If Voltage still low		
4	GEN1 CB	PULL
5	GEN2 CB	PULL
6	Non-Essential Equipment	OFF
7	Land at nearest A/D	< 30 MIN


VOLT WARNING LIGHT

1	Master - GEN	OFF / ON
2	GEN1 CB	RESET
3	GEN2 CB	RESET
If still Low Voltage		
4	GEN1 CB	PULL
5	GEN2 CB	PULL
6	Non-Essential Equipment	OFF
7	Land at nearest A/D	< 30 MIN





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E 13**LOW VOLTAGE INDICATION**  **LOW VOLT ON GROUND**

- | | | |
|---|--------------------------------|--|
| 1 | Increase RPM | UP TO 1350 rpm |
| 2 | Non-Essential Equipment | OFF |
| 3 | If Voltage still low on Ground | DO NOT FLY   |

LOW VOLT IN FLIGHT / APPROACH

- | | | |
|---|--|---|
| 1 | Non-Essential Equipment | OFF |
| 2 | If Voltage still low | GENERATOR FAIL |
| 3 | Land at nearest A/D | < 30 MIN |
| 4 | After Landing, perform CL low Volt on Ground |   |

TRIM CONTROL SYSTEM FAILURES  **TRIM SYSTEM INOPERATIVE**

- | | | |
|---|-------------------|---------------|
| 1 | Trim Actuator CB | RESET |
| 2 | Trim Control CB | RESET |
| 3 | Trim Switch: NOSE | UP / DOWN |
| 4 | Land | LAND NRST A/D |

TRIM ACTUATOR RUNAWAY

- | | | |
|--|--------------------|---------------|
| 1 | Control Column | HOLD |
| 2 | Trim Actuator CB | PULL |
| If Trim Switch is pressed or jammed | | |
| 3 | Trim Actuator CB | RESET |
| 4 | If Problem remains | LAND NRST A/D |

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E 14**FLAP CONTROL SYSTEM MALFUNCTION** **INDICATOR OR ACTUATOR FAIL**

1	Flap Actuator CB	RESET
2	Flap Control CB	RESET
3	Flap Position left Wing	CONFIRM
4	Airspeed	WHITE ARC
5	Flaps selector	ALL POSITIONS
6	Approach / Landing	SAFE SPEEDS

AVIONICS MALFUNCTIONS **COMPLETE AVIONICS FAILURE**

1	Avionic Master	OFF - 20 sec - ON
2	If AV-Switch trips to the off position	LAND NRST A/D

COM - RECEIVE MODE FAILURE

1	PTT- Button PIC/CO (Radio Display)	CHECK IF TX
2	Squelch	CHECK
3	Squelch	SWITCH OFF
4	Headset Connectors	CHECK
5	If Problem remains - inform ATC	TRANSMIT BLIND

COM - TRANSMIT MODE FAILURE

1	Transmit Signal TX	CHECK
2	Selected Frequency	CHECK
3	Microphone	CHECK/REPLACE
4	If Problem remains	X-PDR 7600

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E 15**GARMIN G500 MALFUNCTIONS****G500 - PFD FAILURE**

1 Attitude of Flight	STABILIZE
2 CB - PFD / MFD	RESET
3 Standby Instruments	USE

G500 - HEADING FAILURE

1 CB - AHRS	RESET
2 Magnetic Compass	USE

G500 - AHRS FAILURE

1 CB - AHRS	RESET
2 Standby Instruments	USE

G500 - AIR DATA COMPUTER FAILURE

1 CB - ADC	RESET
2 Standby Instruments	USE



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E 16**OTHER EMERGENCIES** **SPIN RECOVERY**

1	Rudder	FULL OPPOSITE
2	Throttle	IDLE
3	Elevator NEUTRAL	SLIGHT FWD
4	When rotation stops - RUDDER	NEUTRAL
5	Aileron	NEUTRAL
6	Flaps	UP
7	When rotation stops - RUDDER	NEUTRAL
8	Elevator carefully recover	V_{NE} 165 kts

INADVERTENT FLIGHT IN ICING

1	Carburetor Heat	PULL (ON)
2	Leave Ice Condition	IMMEDIATELY
3	P/S Heat	ON
4	Prop Lever	FULL FWD
5	Cabin Heat	PULL (ON)
6	Control Surfaces	MOVE
ATTENTION: Stall Speed increases		
ATTENTION: Airspeed, ALT, VSI unreliable		

POWER OFF GLIDE

1	Flaps	UP
2	Airspeed	78 KIAS
3	Glide Ratio	14
2,3 NM / 1000 ft (at no Wind)		



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E 17**OTHER EMERGENCIES** **FLAT TIRE LANDING**

1	Flaps	LDG
2	Runway Side	GOOD TIRE
3	Touchdown	GOOD TIRE
4	Nosewheel down	ASAP
5	Steering with Nosewheel	
6	Aileron deflect to good Tire	

FLAT NOSEWHEEL TIRE LANDING

1	Touchdown	MIN SPEED
2	Nosewheel	KEEP HIGH

STARTER MALFUNCTION

1	Starter does not decouple from Engine	
2	Throttle	IDLE
3	Ignition	OFF
4	Do not Fly	

CANOPY OPENS IN FLIGHT

1	Keep calm	NO DANGER
2	Flight attitude	STABILIZE
3	Airspeed	65 - 75 KIAS
4	Canopy	CLOSE / LOCK
5	If closing impossible	LAND NRST A/D

NORMAL AIRSPEEDS

TAKEOFF

Climb Flaps T/O	57 KIAS
V _x Flaps T/O	52 KIAS
V _y Flaps UP	65 KIAS 

LANDING

Final APP Flaps LDG	60 KIAS
Balked Ldg Flaps LDG	60 KIAS
Max. demo X Wind	15 KIAS
V _{fe} max, Flaps LDG	90 KIAS

CRUISE

V _A Maneuvering	112 KIAS
V _{NO} Max Turbulent Air	130 KIAS
V _(NE) Max Airspeed	165 KIAS

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AIRSPEEDS FOR EMERGENCY

V _A Maneuvering	112 KIAS
Best Glide Flaps UP	78 KIAS
Best Glide Flaps T/O	73 KIAS
<u>Precautionary Flaps LDG</u>	<u>60 KIAS</u>
No Engine Power	
Flaps T/O	65 KIAS
Flaps UP	70 KIAS



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