



PILOTS NOTES
FIREFLY T67M-MkII

SECTION 4 EMERGENCY PROCEDURES

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4.1 FIRES

WARNING

THE EXTINGUISHER IN THE COCKPIT IS BCF AND GIVES OFF TOXIC FUMES IN A CONFINED SPACE. IT SHOULD BE USED WITH CARE. ENSURE ONLY SUFFICIENT EXTINGUISHANT IS USED TO PUT OUT FIRE THEN OPEN ALL FRESH AIR VENTS.

4.1.1 Electrical Fire

- Master switch Off
- Alternator Off
- Circuit breakers Trip all

Land as soon as possible - the engine will continue to run but all electrical services have been lost.

NOTE

After all circuit breakers have been tripped the battery power may be restored to enable selective resetting of circuit breakers if necessary. Should the ammeter show an excessive discharge when a particular circuit breaker is reset then leave that circuit breaker in the tripped position. Finally restore power to the alternator.

4.1.2 Engine Fire

- Throttle Closed
- Propeller Min RPM
- Mixture Cutoff
- Fuel cock Off
- Magnetos Off
- Fuel pump Off
- Cockpit hot air Off
- Radio Transmit emergency call
- Master switch Off
- Alternator Off

Carry out Forced Landing DO NOT ATTEMPT RESTART



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4.2 FORCED LANDING

>	Glide	80 kts - gives approximately 1.5 nm per 1000 ft in still air at Max AUW.	<
	Radio	Emergency call	
	Harness	Tight	
	Throttle	Closed	
	Propeller	Min RPM	
	Mixture	Cutoff	
	Fuel cock	Off	
	Magnetos	Off	
	Boost pump	Off	
	Master switch	Off	
	Alternator	Off	
	Gliding speeds	Clean - 80 kts Takeoff flap - 70 kts Landing flap - 65 kts	
	Threshold speed	65 kts	

4.3 DITCHING

Notes....

- (1) If above 2000 ft AMSL consider abandonment by parachute.
- (2) Ditching is best carried out whilst engine power is available to control the rate of descent.
- (3) In a strong wind, land into wind preferably on the crest of a wave. If the swell is heavy land along the swell.

With Power Available

Harness	Tight and locked
Canopy	Closed or locked open (Post Mod 283 A/C)
Flaps	Fully down

4.3 DITCHING (continued)

With Power Available (continued)

Speed 60 kts

Rate of descent 300 ft min

DO NOT ROUND OUT Continue descent into the water

Without Power Available

Forced landing checks Completed except canopy

Canopy Closed or locked open
(Post Mod 283 A/C)

Flaps Fully down

Speed 60 kts

Rate of descent As established

DO NOT FULLY ROUND OUT Check rate of descent but fly the
aircraft into the water.

CAUTION

- (1) In both cases the aircraft may turn on its back. Release the seat harness and exit via the open canopy before inflating the LSJ.
- (2) With canopy in open position during flight suction controlled instruments will be more difficult to read due to indicator needle flutter.



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4.4 ENGINE FAILURE - PROPELLER STOPPED

WARNING

Early preparation for an emergency landing is preferable to following drills and then being left with too little height to carry out a safe landing.

Mechanical failure

If the engine stopped with unusual mechanical noise, DO NOT ATTEMPT RESTART, but do forced landing.

Restart Procedure

- Throttle 1/4 open
- Propeller Max RPM
- Mixture Fully rich
- > Fuel contents Check (Both gauges)
- Fuel cock On (Left or Right Tank) <
- Magnetos Both
- Boost pump On
- > Fuel pressure Green <
- Master switch On
- Alternator Off
- >
- Fuel contents Not zero (Both tanks) <

Propeller EITHER operate starter OR dive to start propeller turning (approx 115 kts)

When engine starts,

- Alternator On
- Throttle Increase power slowly
Allow engine to warm up

DIVING TO RESTART THE ENGINE USES 600-800 FT

If the propeller stopped during aerobatics, the engine may be started immediately using the starter button so long as there was no mechanical noise when the engine stopped.



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4.5 ENGINE FAILURE - PROPELLER TURNING

WARNING

Early preparation for an emergency landing is preferable to following drills and then being left with too little height to carry out a safe landing.

MECHANICAL If there is no oil pressure or if there is unusual mechanical noise:

- Throttle Closed
- Propeller Min RPM
- Mixture Cutoff
- Fuel cock Off
- Magnetos Off
- Boost pump Off

CARRY OUT FORCED LANDING.

Restart Procedure

FUEL

- > Fuel cock On (Left or Right Tank) <
- Mixture Rich
- Throttle 1/4 open
- Boost pump On, check press
- Fuel contents Not Zero (Both Tanks)

MAGNETOS

- Both if no better
- Right if no better
- Left if no better
- Both

IF NO IMPROVEMENT - CARRY OUT FORCED LANDING



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4.6 FUMES IN THE COCKPIT

Cockpit hot air/demist Off
Fresh air vents Fully open

Check all engine instruments for any sign of malfunction. If smell is electrical - electrical fire drill. If the smell is petrol, do not make any electrical selection at all as a spark could lead to fire.

LAND AS SOON AS POSSIBLE

4.7 ALTERNATOR FAILURE

Alternator Off
Excitation c/b Set
Alternator c/b Set
Alternator On

If the alternator output cannot be regained, reduce electrical loads to a minimum, to conserve battery life. Descend out of cloud before services fail (radio, gauges etc).

- > In any event, the battery duration, with all essential services operating is in excess of 30 minutes. <

4.8 COMMUNICATIONS FAILURE

Check all switches and volume controls.

Change frequency, check circuit breakers.

Change headset.

Plug in headset on other side - use other transmitter button.

Turn radios off for 5 minutes and then try again.



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4.9 OIL PRESSURE FAILURE

WARNING

Prolonged use of power after engine oil pressure failure will lead to engine mechanical failure.

If oil pressure fails, the propeller will revert to the minimum RPM (Coarse Pitch) position.

Full throttle may be used in emergency but engine failure is likely to follow loss of oil pressure, particularly if much power is used.

RPM control with throttle

Throttle closed - except for emergency

Carry out forced landing at nearest available site.

4.10 PROPELLER GOVERNOR FAILURE

4.10.1 RPM will not Increase

- (a) Check that engine oil pressure has not failed.
- (b) Check that manifold pressure is above 15" - open throttle if necessary to achieve this.
- (c) Exercise the RPM control slowly throughout the whole range.
- (d) If the RPM still does not respond, leave the RPM control in mid-range and use engine power observing the RPM/Manifold pressure limits in Part 2.
- (e) Land at nearest available airfield.

4.10.2 RPM Overspeeds or will not Decrease

- (a) Use throttle to keep RPM in limits - use of more than about 3/4 throttle may cause RPM to overspeed.
- (b) Leave RPM control in mid-range.
- (c) Reduce speed to 80 kts.
- (d) Land at nearest available airfield.



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> 4.11 PITOT STATIC SOURCE FAILURE

In OAT below 0°C switch on pitot heat
and/or flight in
percipitation

If blocked static source open emergency static source
is suspected in cockpit (Mod 485)
(LH side instrument panel)

CAUTION

Whilst operating on emergency static source
allowance must be made for minor errors on
pitot static instruments



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