# N16AV EMERGENCY PROCEDURES

## I. ELECTRICAL FAILURES

Ignitions: Ignition 1 is powered from the main battery at all times when the Ign 1 switch is ON. Ignition 2 is normally powered by the backup battery when switched ON. This serves as a check on the backup battery. Ignition 2 can be switched to main battery power by an IGN 2 PWR SELECT switch. In the event of a suspected Ignition 2 problem, switch Ignition 2 to the main battery temporarily to determine if the backup battery has failed. Observe ignition circuit breakers. Each LSE ignition draws 1300ma. Ignitions can be turned off and on in flight. On the panel is a small digital volt meter and button to check back-up battery voltage periodically.

In the event of an alternator failure, reduce electrical load by turning E-BUS EMER POWER - ON and turning the MASTER SWITCH - OFF. Reduce ignition load by turning Ignition 2 – OFF. This isolates a presumably fully-charged backup battery for last-resort use by Ignition 2. Turn one fuel pump OFF. NOTE: With both fuel pumps off, the engine will continue to run at reduced power by gravity-fed fuel. This engine does not use a mechanical fuel pump. Land as soon a possible.

Systems powered by the E-bus and their approximate current draw are

Dynon (700-1100 ma)
Both Fuel pumps (1600 ma each, 3.2A both)
uMonitor (150 ma)
Icom A200 (360 ma listen, 2.6A talk)
ICS (250 ma)

The E-bus load may be further reduced by turning off all E-bus systems except one fuel pump. E-bus systems may be turn on as needed to fly, communicate, and land. Thus, battery load using the full E-bus and one ignition will be approximately 4.6A. Using only one ignition and one fuel pump, it will be reduced to approximately 3 amps. The aircraft uses a 22AH main battery when fully charged and a ___A back-up battery (the backup battery is only avaiable for ignition 2).

CHECKLIST IN THE EVENT OF ALTERNATOR FAILURE:

1. Cycle the alternator switch, if failure continues,
2. E-Bus Emergency Power -- on
3. Master Switch – off
4. Ignition 2 - off
5. Selectively power-down the following E-bus systems if not needed
   - one fuel pump
   - intercom
   - comm radio
   - Dynon
   - uMonitor
6. Land as soon as possible
7. Monitor main battery voltage on the Dynon or uMonitor. Lightspeed igntion should run down to

5.5V

II. ENGINE FAILURE

Best glide speed is approximately 90 KIAS. If the engine cannot be restarted, glide speed is increased by stopping the prop.