



Aerosonde Emergency & Abnormal Procedure Summary:

ENGINE FAIL WITHIN 5nm

- A. AIRSPEED - SET MIN - Predetermined at Flight Readiness Review
- B. SAFE HEADING - EST (Return to Base) - Predetermined at Flight Readiness Review
- C. Check AV descent Rate - Check weather conditions (thermals etc)
 - 1. If AV maintains altitude and / or has a positive climb rate (non thermal) - refer to DSP Lock-Up Procedure.
- D. Land - As Soon As Safely Possible
- E. Electrical Load - Reduce
- F. Bus Voltage - Monitor
- G. If Unable to safely return to base:
 - 1. Conduct Ditch Procedure

ENGINE FAIL BEYOND 5nm

- A. AIRSPEED - SET MIN - Predetermined at Flight Readiness Review
- B. SAFE HEADING - EST (Return to Base) - Predetermined at Flight Readiness Review
- C. Check AV descent Rate - Check weather conditions (thermals etc)
 - 1. If AV maintains altitude and / or has a positive climb rate (non thermal) - refer to DSP Lock-Up Procedure.
- E. Electrical Load - Reduce
- F. Bus Voltage - Monitor
- G. Land - As Soon As Safely Possible
- H. If Unable to safely return to base:
 - 1. Conduct Ditch Procedure

ENGINE REDUCED PERFORMANCE

- A. AIRSPEED - SET MIN - Predetermined at Flight Readiness Review
- B. SAFE HEADING - EST (Return To Base)- Predetermined at Flight Readiness Review
- C. Land - As Soon As Safely Possible
- D. If Unable to safely return to base:
 - 1. Conduct Ditch Procedure

STUCK THROTTLE

- A. AIRSPEED - SET TO MAINTAIN SAFE ALTITUDE - Predetermined at Flight Readiness Review
- B. SAFE HEADING - EST (Return To Base)- Predetermined at Flight Readiness Review
- C. Land - As Soon As Safely Possible
- D. If Unable to safely return to base:
 - 1. Conduct Ditch Procedure

LOW FUEL PRESSURE

- A. AIRSPEED - SET MIN - Predetermined at Flight Readiness Review
- B. SAFE HEADING - EST (Return To Base)
- C. Land - As Soon As Safely Possible
- D. If Unable to safely return to base:
 - 1. Conduct Ditch Procedure

DSP LOCK-UP

- A. AIRSPEED - SET TO MAINTAIN SAFE ALTITUDE - Predetermined at Flight Readiness Review
- B. SAFE HEADING - EST (Return To Base)- Predetermined at Flight Readiness Review
- C. Confirm AV is maintaining Altitude - Verify
- D. Land - As Soon As Safely Possible



STAGE BOX LOCK-UP

- A. STAGE BOX - CYCLE POWER - VERIFY OPERATION
- B. BACK-UP STAGE BOX - SWITCH
- C. Land - As Required

IRIDIUM PHONE LOCK-UP

- A. IRIDIUM PHONE - CYCLE POWER
- B. BACK-UP IRIDIUM PHONE - SWITCH
- C. Land - As Required

PC LOCK-UP

- A. BACK-UP PC - SWITCH
- B. Land - As Required

AP FAIL / UNCONTROLLED FLIGHT

- A. IN VISUAL RANGE
 - 1. MANUAL PILOT - HANDOFF
 - 2. SAFE HEADING - EST (Return To Base) - Predetermined at Flight Readiness Review
 - 3. Land - As Soon As Safely Possible
- B. BEYOND VISUAL RANGE
 - 1. AIRSPEED - SET - Predetermined at Flight Readiness Review
 - 2. SAFE HEADING - EST (Return To Base) - Predetermined at Flight Readiness Review
 - 3. Land - As Soon As Safely Possible
- C. If Unable to safely return to base:
 - 1. Conduct Ditch Procedure

GEN FAIL

- A. SAFE HEADING - EST (Return to Base)
- B. AIRSPEED - SET MAX AND MAINTAIN SAFE ALTITUDE - Predetermined at Flight Readiness Review
- C. ELECTRICAL LOAD - MINIMIZE
- D. Bus Voltage - Monitor
- E. Land - As Soon As Safely Possible
- F. If Unable to safely return to base:
 - 1. Conduct Ditch Procedure

ENGINE OVER TEMP

- A. ALTITUDE - LEVEL
- B. AIRSPEED - SET MIN - Predetermined at Flight Readiness Review
- C. Descend - As Required
- D. Land - As Required



GPS FAIL

- A. SAFE HEADING - (Return to Base) - Predetermined at Flight Readiness Review
- B. ATC - Notify
- C. Last Known location - Identify
- D. Map/Video or Payload Correlation - Perform (if available)
- E. Radar Vectors - Request (if available)
- F. Land - As Soon As Safely Possible
- G. If Unable to safely return to base:
 - 1. Conduct Ditch Procedure

GCS POWER FAIL

- A. POWER SOURCE - VERIFY
- B. BACK-UP STATION - SWITCH
- C. Land - As Required



DITCH Procedure

- A. ATC - Notify
- B. Safe Heading - Est
- C. Ditch Site - Select known or calculated safe area
- D. Airspeed - Set Minimum
- E. Payload - Stow
- F. Payload - Off
- G. Engine - Cut
- H. Last Known Position - Record

INTERMITTENT COMMUNICATIONS

- A. Safe Heading - Est (RTB)
- B. Radio Settings - Verify
- C. Antenna - Verify/Switch
- D. RF Attenuation/Line Of Sight - Verify
- E. Back-up Station - Switch
- F. Land - As Required

LOST COMMUNICATIONS

- A. Radio Settings - Verify
 - B. Antenna - Verify/Switch
 - C. RF Attenuation/Line Of Sight - Verify
 - D. Back-up Station - Switch
- IF COMMUNICATIONS NOT RE-ESTABLISHED
- 1. Stage Box / Iridium Link - OFF
 - 2. Last Known Position - Record
 - 3. ATC - Notify
 - 4. Time to Base - Estimate
- REPEAT AS NECESSARY
- E. Land - As Required

MANUAL CONSOLE FAIL

- A. Pilot Address - Verify
- B. Console Cable - Check
- C. Back-up Console - Switch
- E. Land - As Soon As Practical
- F. If Unable to safely return to base:
 - 1. Conduct Ditch Procedure