

**USAF Academy Flight Training Center**  
 Cessna C-172 SP Emergency Procedures Closed Book Exam  
 12 Oct 2023 – Answer Key

**ENGINE FIRE DURING START**

|   |
|---|
| 1. Cranking – CONTINUE                      |
| If Engine Starts:                           |
| 2. Power – 1800 RPM                         |
| 3. Engine – SHUTDOWN                        |
| If Engine Fails to Start:                   |
| 4. Cranking – CONTINUE                      |
| 5. Throttle – FULL OPEN                     |
| 6. Mixture – IDLE CUT-OFF                   |
| 7. Fuel Shutoff Valve – OFF (Pull Full Out) |
| 8. Auxiliary Fuel Pump Switch – OFF         |

**ENGINE FAILURE DURING TAKEOFF RUN**

|                    |
|--------------------|
| 1. Throttle – IDLE |
| 2. Brakes – APPLY  |

**ENGINE FAILURE DURING FLIGHT**

|  |
|--|
| 1. Airspeed – BEST GLIDE                                     |
| 2. Fuel Shutoff Valve – ON (Push Full In)                    |
| 3. Fuel Selector Valve – BOTH                                |
| 4. Auxiliary Fuel Pump Switch – ON                           |
| 5. Mixture – RICH (if restart has not occurred)              |
| 6. Ignition Switch – BOTH (or START if propeller is stopped) |

**ENGINE FIRE IN FLIGHT**

|  |
|--|
| 1. Mixture – IDLE CUT OFF              |
| 2. Fuel Shutoff Valve – PULL OUT (OFF) |
| 3. Auxiliary Fuel Pump Switch – OFF    |
| 4. Master Switch – OFF                 |

**ELECTRICAL FIRE IN FLIGHT**

|                                    |
|------------------------------------|
| 1. Master Switch – OFF             |
| 2. Vents, Cabin Air, Heat – CLOSED |
| 3. Fire Extinguisher – ACTIVATE    |

|                                    |          |                                 |          |
|------------------------------------|----------|---------------------------------|----------|
| V <sub>A</sub> at Max Gross Weight | 105 KIAS | V <sub>FE</sub> 10° Flaps       | 110 KIAS |
| V <sub>A</sub> at 2200 lbs         | 98 KIAS  | V <sub>FE</sub> 10° - 30° Flaps | 85 KIAS  |
| V <sub>A</sub> at 1900 lbs         | 90 KIAS  | Best Glide at Max Gross         | 68 KIAS  |