

escape from the cloud. Ash clouds may extend for hundreds of miles and pilots should not attempt to fly through or climb out of the cloud. In addition, the following procedures are recommended:

**1.** Disengage the autothrottle if engaged. This will prevent the autothrottle from increasing engine thrust;

**2.** Turn on continuous ignition;

**3.** Turn on all accessory airbleeds including all air conditioning packs, nacelles, and wing anti-ice. This will provide an additional engine stall margin by reducing engine pressure.

**d.** The following has been reported by flightcrews who have experienced encounters with volcanic dust clouds:

**1.** Smoke or dust appearing in the cockpit.

**2.** An acrid odor similar to electrical smoke.

**3.** Multiple engine malfunctions, such as compressor stalls, increasing EGT, torching from tailpipe, and flameouts.

**4.** At night, St. Elmo's fire or other static discharges accompanied by a bright orange glow in the engine inlets.

**5.** A fire warning in the forward cargo area.

**e.** It may become necessary to shut down and then restart engines to prevent exceeding EGT limits. Volcanic ash may block the pitot system and result in unreliable airspeed indications.

**f.** If you see a volcanic eruption and have not been previously notified of it, you may have been the first person to observe it. In this case, immediately contact ATC and alert them to the existence of the eruption. If possible, use the Volcanic Activity Reporting form (VAR) depicted in Appendix 2 of this manual. Items 1 through 8 of the VAR should be transmitted immediately. The information requested in items 9 through 16 should be passed after landing. If a VAR form is not immediately available, relay enough information to identify the position and nature of the volcanic activity. Do not become unnecessarily alarmed if there is merely steam or very low-level eruptions of ash.

**g.** When landing at airports where volcanic ash has been deposited on the runway, be aware that even a thin layer of dry ash can be detrimental to braking

action. Wet ash on the runway may also reduce effectiveness of braking. It is recommended that reverse thrust be limited to minimum practical to reduce the possibility of reduced visibility and engine ingestion of airborne ash.

**h.** When departing from airports where volcanic ash has been deposited, it is recommended that pilots avoid operating in visible airborne ash. Allow ash to settle before initiating takeoff roll. It is also recommended that flap extension be delayed until initiating the before takeoff checklist and that a rolling takeoff be executed to avoid blowing ash back into the air.

### **7-5-10. Emergency Airborne Inspection of Other Aircraft**

**a.** Providing airborne assistance to another aircraft may involve flying in very close proximity to that aircraft. Most pilots receive little, if any, formal training or instruction in this type of flying activity. Close proximity flying without sufficient time to plan (i.e., in an emergency situation), coupled with the stress involved in a perceived emergency can be hazardous.

**b.** The pilot in the best position to assess the situation should take the responsibility of coordinating the airborne intercept and inspection, and take into account the unique flight characteristics and differences of the category(s) of aircraft involved.

**c.** Some of the safety considerations are:

**1.** Area, direction and speed of the intercept;

**2.** Aerodynamic effects (i.e., rotorcraft downwash);

**3.** Minimum safe separation distances;

**4.** Communications requirements, lost communications procedures, coordination with ATC;

**5.** Suitability of diverting the distressed aircraft to the nearest safe airport; and

**6.** Emergency actions to terminate the intercept.

**d.** Close proximity, inflight inspection of another aircraft is uniquely hazardous. The pilot-in-command of the aircraft experiencing the problem/emergency must not relinquish control of the situation and/or jeopardize the safety of their aircraft. The maneuver must be accomplished with minimum risk to both aircraft.