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Figure 3-30A, Aerobatic Maneuvers Performed after Turn Away Performed, for Category III aircraft examples.)

- 3) Helicopter Operations. As listed in Table 3-2, all helicopters must take off and land at a minimum distance of 200 feet from the spectator area during an aviation event and helicopters will not pass over spectator areas at any time, except as provided in subparagraphs 3-148H and I below, during the departure and arrival. Direction of flight must be away from the spectator area(s) for takeoff. Landing approach or ingress should be done at a 45-degree angle to the spectator area.
- 4) Aircraft Towing. Conduct glider, hang glider, and paraglider towing (airplane/automobile) at a minimum distance of 200 feet from the crowd. UAS towing is not authorized.
  - 5) Engine Run Areas. The FAA requires at all aviation events:
- a) Unguarded engine run areas where engines and propellers are turning must be at least 100 feet from the spectator area. Areas where aircraft with rotors are turning must be at least 200 feet from the spectator area. These distances are measured from the critical wingtip, tail, tail rotor, or rotor-blade.
- b) In guarded areas where engines and propellers are turning, the aircraft must be at least 50 feet from the spectator area. In areas where rotors are turning, the rotorcraft must be at least 100 feet from the spectator area. These distances are measured from the critical wingtip, tail, tail rotor, or rotor-blade. All aircraft must be guarded by wing walkers, marshallers, and either crowd monitors or barriers that prevent entry by unauthorized personnel.

NOTE: These are minimum distances. Consideration should be given to increasing distances when large aircraft and/or military aircraft are operating in the engine run area or at events with spectator areas that are very congested.

## H. Flight Over Primary Spectator Area.

- Civilian and Military Aircraft. Flight over the primary spectator area is permitted when at or above 1,000 feet above the spectators. Flight is non-maneuvering and straight and level or wings level in a normal climb. Formation flight is also required to be in one direction only—back to front or front to back.
- 2) Military Demonstration Teams. Only when authorized by the General Aviation and Commercial Division, military demonstration teams and USAF Heritage teams are permitted to fly at a minimum altitude of 500 feet above the highest obstacle over the primary spectator area if:
- a) Flight is non-maneuvering and straight and level or wings level in a normal climb; and
  - b) The direction of flight is in one direction only—back to front or front to back.