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ADVISORY CIRCULAR

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

SUBJECT: AIRCRAFT FIRE AND RESCUE COMMUNICATIONS

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1. PURPOSE. This advisory circular provides guidance information for use by airport management in establishing communication and alarm facilities by which personnel required to respond to and function at aircraft ground emergencies may be alerted and supplied with necessary information. Other guidance on this subject is contained in paragraph 370 of National Fire Protection Association Publication No. 403, Aircraft Rescue and Fire Fighting Services at Airports.
 2. CANCELLATION. Advisory Circular 150/5210-7, Aircraft Fire and Rescue Communications, dated 28 October 1966, is canceled.
 3. GENERAL. The effectiveness of fire fighting and related rescue operations at airports is directly affected by the adequacy of the system for alerting and communicating with the participating personnel. Accordingly, the importance of such a system cannot be overemphasized.
 4. SYSTEM FACILITIES. Normally, the system should include a two-way voice radio, a direct-line telephone, and an audible alarm. Consistent with the individual requirements of each airport, these facilities should provide for:
 - a. Direct communication between the activating authority (FAA control tower or Flight Service Station, airport manager, fixed-base operator, or airline office) and the airport fire station in order to assure the prompt dispatch of fire fighting and rescue units in the event of an aircraft emergency.
 - b. Emergency signals to alert auxiliary personnel and, as necessary, essential related services located on or off the airport.
 - c. Communication with and between units responding to the emergency to assist in the effective management of fire and rescue efforts.
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5. RADIO.

- a. Fire Station. When full-time fire fighters are employed, the fire station should be equipped with a two-way voice radio so that the activating authority can alert and direct the aircraft fire and rescue units to the scene of the emergency. This would also provide a means by which the responding units may communicate with the fire station.
- b. Vehicle. Each emergency vehicle in use on a civil airport having an FAA control tower should be equipped with a two-way voice radio to provide a means of communication between the control tower and the vehicles and between one vehicle and another. It is preferable that communications between vehicles and the FAA control tower be on the assigned standard ground control frequency. On airports not having a control tower but having another means of ground-to-air communication, the light-weight rescue truck should be equipped so that the activating authority can communicate with this vehicle which is normally the first to arrive at the scene of an emergency.

6. TELEPHONE.

- a. When one or more full-time fire fighters are employed, a direct-line telephone circuit should be provided between the FAA control tower or other activating authority and the fire station. This will provide a secondary means of communication should mechanical difficulty be experienced with the radio facility. A similar circuit should be provided between the airport fire station and off-airport fire departments if aid agreements are in effect.
- b. To facilitate the notification of all units required to respond to an aircraft emergency on a large airport, consideration should be given to the use of a "conference" circuit by which all units could be notified simultaneously. This "conference" circuit should include such units or offices as:
 - (1) Control tower.
 - (2) Fire and rescue unit.
 - (3) Security guards.
 - (4) Airport management.

- (5) Airline station managers.
 - (6) Military units (joint-use airports).
- c. Direct-line telephone circuits should be electrically supervised so the operating condition of these circuits can be continuously monitored. Local procedures should be developed which would assure "around-the-clock" maintenance for these circuits.
7. AUDIBLE ALARMS. When auxiliary fire fighters are used, an audible alarm (siren or air horn) that can be clearly heard above the normal noise level in all areas where auxiliary personnel are employed should be installed to notify them of an existing or impending emergency.
- a. At airports equipped with ground-to-air communication systems, the activating authority should be provided with a device for actuating these alarms.
 - b. At airports not equipped with ground-to-air communication systems, alarm actuating stations should be provided near hangars, shops, fueling stations, and aircraft parking areas where vision of the runway complex is unobstructed and where service and maintenance personnel are normally present.
8. HOW TO OBTAIN THIS PUBLICATION. Obtain copies of this Advisory Circular 150/5210-7A, Aircraft Fire and Rescue Communications, from the Department of Transportation, Distribution Unit, TAD-484.3, Washington, D.C. 20590.



CHESTER G. BOWERS
Director, Airports Service