

(b) *Combustion heater compartments* All lines, hoses, and end fittings, and couplings which carry fuel to the heaters and heater controls, must be of FAA approved fire-resistant construction.

24. *Vent and drain lines—(a) Engine compartment.* C-46 engine compartments meet the requirements of §121.261 if—

(1) The compartments conform to type design and comply with all applicable airworthiness directives or FAA approved equivalent; and

(2) Drain lines from supercharger case, engine-driven fuel pump, and engine-driven hydraulic pump reach into the scupper drain located in the lower cowl segment.

(b) *Combustion heater compartment.* C-46 heater compartments meet the requirements of §121.261 if they conform to AD-49-18-1 or FAA approved equivalent.

25. *Fire-extinguishing system.* (a) To meet the requirements of §121.263, C-46 airplanes must have installed fire extinguishing systems to serve all designated fire zones. The fire-extinguishing systems, the quantity of extinguishing agent, and the rate of discharge shall be such as to provide a minimum of one adequate discharge for each designated fire zone. Compliance with this provision requires the installation of a separate fire extinguisher for each engine compartment. Insofar as the engine compartment is concerned, the system shall be capable of protecting the entire compartment against the various types of fires likely to occur in the compartment.

(b) Fire-extinguishing systems which conform to the C-46 transport category requirements meet the requirements set forth in paragraph (a). Furthermore, fire-extinguishing systems for combustion heater compartments which conform to the requirements of AD-49-18-1 or an FAA approved equivalent also meet the requirements in paragraph (a).

In addition, a fire-extinguishing system for C-46 airplanes meets the adequacy requirement of paragraph (a) if it provides the same or equivalent protection to that demonstrated by the CAA in tests conducted in 1941 and 1942, using a CW-20 type engine nacelle (without diaphragm). These tests were conducted at the Bureau of Standards facilities in Washington, DC, and copies of the test reports are available through the FAA Regional Engineering Offices. In this connection, the flow rates and distribution of extinguishing agent substantiated in American Airmotive Report No. 128-52-d, FAA approved February 9, 1953, provides protection equivalent to that demonstrated by the CAA in the CW-20 tests. In evaluating any C-46 fire-extinguishing system with respect to the aforementioned CW-20 tests, the Administration would require data in a narrative form, utilizing drawings or photographs to show at least the following:

Installation of containers; installation and routing of plumbing; type, number, and location of outlets or nozzles; type, total volume, and distribution of extinguishing agent; length of time required for discharging; means for thermal relief, including type and location of discharge indicators; means of discharging, e.g., mechanical cutterheads, electric cartridge, or other method; and whether a one- or two-shot system is used; and if the latter is used, means of cross-feeding or otherwise selecting distribution of extinguishing agent; and types of materials used in makeup of plumbing.

High rate discharge (HRD) systems using agents such as bromotrifluoromethane, dibromodifluoromethane and chlorobromomethane (CB), may also meet the requirements of paragraph (a).

26. *Fire-extinguishing agents, Extinguishing agent container pressure relief, Extinguishing agent container compartment temperatures, and Fire-extinguishing system materials.* No change from the requirements of §§121.265 through 121.271.

27. *Fire-detector system.* Compliance with the requirements of §121.273 requires that C-46 fire detector systems conform to:

(a) AD-62-10-2 or FAA approved equivalent for engine compartments; and

(b) AD-49-18-1 or FAA approved equivalent for combustion heater compartments

28. *Fire detectors.* No change from the requirements of §121.275.

29. *Protection of other airplane components against fire.* To meet the requirements of §121.277, C-46 airplanes must—

(a) Conform to the type design and all applicable airworthiness directives; and

(b) Be modified or have operational procedures established to provide additional fire protection for the wheel well door aft of each engine compartment. Modifications may consist of improvements in sealing of the main landing gear wheel well doors. An operational procedure which is acceptable to the Agency is one requiring the landing gear control to be placed in the up position in case of in-flight engine fire. In accordance with §121.315, such procedure must be set forth in the emergency portion of the operator's emergency checklist pertaining to in-flight engine fire.

30. *Control of engine rotation.* C-46 propeller feathering systems which conform to the type design and all applicable airworthiness directives meet the requirements of §121.279.

31. *Fuel system independence.* C-46 fuel systems which conform to the type design and all applicable airworthiness directives meet the requirements of §121.281.

32. *Induction system ice prevention.* The C-46 carburetor anti-icing system which conforms to the type design and all applicable airworthiness directives meets the requirements of §121.283.