§ 29.1027 Transmission and gearboxes:
general.

(a) The oil system for components of the rotor drive system that require continuous lubrication must be sufficiently independent of the lubrication systems of the engine(s) to ensure—

1. Operation with any engine inoperative; and

2. Safe autorotation.

(b) Pressure lubrication systems for transmissions and gearboxes must comply with the requirements of §§29.1013, paragraphs (c), (d), and (f) only, 29.1015, 29.1017, 29.1021, 29.1023, and 29.1337(d). In addition, the system must have—

1. An oil strainer or filter through which all the lubricant flows, and must—

   i. Be designed to remove from the lubricant any contaminant which may damage transmission and drive system components or impede the flow of lubricant to a hazardous degree; and

   ii. Be equipped with a bypass constructed and installed so that—

      A. The lubricant will flow at the normal rate through the rest of the system with the strainer or filter completely blocked; and

      B. The release of collected contaminants is minimized by appropriate location of the bypass to ensure that collected contaminants are not in the bypass flowpath;

   iii. Be equipped with a means to indicate collection of contaminants on the filter or strainer at or before opening of the bypass;

2. For each lubricant tank or sump outlet supplying lubrication to rotor drive systems and rotor drive system components, a screen to prevent entrance into the lubrication system of any object that might obstruct the flow of lubricant from the outlet to the filter required by paragraph (b)(1) of this section. The requirements of paragraph (b)(1) of this section do not apply to screens installed at lubricant tank or sump outlets.

(c) Splash type lubrication systems for rotor drive system gearboxes must comply with §§29.1021 and 29.1337(d).

[Amtd. 29–26, 53 FR 34218, Sept. 2, 1988]