

April 4, 2002

TO ALL EXEC 90 AND EXEC 162F OWNERS

MANDATORY COMPLIANCE BULLETIN M-20

**THIS BULLETIN IS MANDATORY AND MUST BE COMPLIED WITH**

History: Recently an accident occurred due to loss of tail rotor control. During the teardown inspection, the middle or second tail rotor belt was found separated in several pieces and the belt cords were wrapped in the groove of the rear idler pulley. There is a strong opinion that the belts were not routed properly from one pulley to the next pulley, because the cords from the separated belt were wrapped in the pulley groove intended for the rear tail rotor belt.

The tail rotor belts transfer power from the main drive to the tail rotor shaft. As indicated in the construction documents, the belts should be installed in specific grooves of the pulleys. (Refer to the drawings below taken from print E09-2000.)

Action: This Mandatory bulletin requires immediate inspection to verify proper routing of tail rotor drive belts through the tail boom. Removal of the tail boom inspection panels will allow for visual determination of belt routing. At the forward idler pulley, the belt coming from the secondary drive unit should be in the lowest groove of the idler pulley, and the second or middle belt should be in upper groove routing rearward. At the second idler pulley location, the second belt should route to the groove on pilot side of the aircraft, and the third belt which routes to the tail rotor shaft should be located in the upper or passenger side pulley groove.

If belts are routed properly there is no further action required.

**ANY BELT NOT PROPERLY ROUTED INTO CORRECT IDLER PULLEY GROOVE REQUIRES IMMEDIATE REPLACEMENT.**

