

September 8, 1992

TO ALL EXEC BUILDERS

EXEC ADVISORY SERVICE BULLETIN A-12

History: Tail rotor drive belts (part numbers E18-1150 and E18-1160) have recently failed during use in two separate instances. Both of these belts were Gates brand. Investigation into the belt industry has revealed that Gates has recently changed their manufacturing facilities and processes; and that users of Gates belts in other applications have experienced premature belt wear and failure.

Since we cannot be sure of the location or process by which the belts are manufactured, we recommend no further use of Gates brand belts on the tail rotor drive system. Loss of your tail rotor will most likely result in significant aircraft damage.

Action: RotorWay International has constructed a fixture for testing different brands of belts. Bando belts, which appear to be of superior construction and are currently being used in the drive train, have tested satisfactory and are now available from RotorWay.

We strongly recommend that all Gates brand belts currently being used in the tail rotor drive be replaced immediately with Bando belts.

Note: Proper installation and maintenance of these belts is critical, and the following installation procedures should be adhered to. The nuts on the tail rotor shaft adjustment rods should be fully loosened so the belts can be installed without being under any tension. NEVER ROLL ANY BELT INTO PLACE over the edge of a pulley while under tension - this can damage the cords inside the belt. After installation, tighten the nuts on the adjustment rods to tension the belt. Then check belt tension just forward of the first tail boom bulkhead using a spring scale and ruler. Adjust the belt so that it deflects one inch with 10 pounds of pull.

The belts should be kept free from any dirt, oil, grease, etc. Clean as necessary with a clean cloth, dampened with acetone.