

TO: All owners and operators of Bell Helicopters

SUBJECT: TORQUE APPLICATION ON FLUID LINES AND FITTINGS

Bell Helicopter has been informed of an incident where a Model 412 EP had made a precautionary landing due to loss of hydraulic pressure of the number 1 hydraulic system. The investigation revealed that the loss of hydraulic pressure was due to excessive tightening of the hose coupling nut resulting in fracture of the aluminum fitting at the outlet port of the hydraulic pump.

This Information letter emphasizes the importance of proper torque application on fluid lines coupling nut and fittings. For proper torque application, refer to the BHT-ALL-SPM Tables 2-9 and 2-10. As noted in the Table 2-10, for torque application on flareless fitting nuts, the "Nut Turn Method" is recommended when standard open end wrenches are used. This method recommends tightening the nut 1/6 to 1/3 turn (1 to 2 Hex flats) past the point of sharp torque rise.

After proper torque application, if fluid leak is observed, the line and mating fitting should be inspected for possible damage and wear. Excessive tightening of fluid line coupling nut and fitting to achieve leak free condition may result in cracking or fracture of fluid fittings.

