

–8E, –8H, –8X, –8Y, –8Z, 529D–7E, –7H, –8E, –8H, –8X, –8Y, –8Z, 531, 532–2L, –7, –7N, –7P, –7L, –7R, 535–2, –7R, 542–4, –4K, –10, –10J, –10K, 552–2, 552–7, and –7R turboprop engines with a high pressure (HP) turbine disc or intermediate pressure (IP) turbine disc that has a serial number (SN) listed in

Table 1 of this AD installed. These engines are installed on, but not limited to, BAE Systems (Operations) Limited, Model HS 748 Series 2A and 2B airplanes, Fokker Aircraft B.V., F.27 Friendship Mark 200, 400, 500, and 600 airplanes, Gulfstream Aerospace Corporation Model G–159 “Gulfstream I”

airplanes, Maryland Air Industries, Inc. F–7F, F–27A, F–27G, F–27J, F–27M, FH–227B, FH–227C, FH–227D, and FH–227E airplanes, and Mitsubishi Heavy Industries, Ltd Model YS–11, YS–11A–200, YS–11A–300, YS–11A–500, and YS–11A–600 airplanes. Table 1 follows:

TABLE 1.—AFFECTED TURBINE DISCS

Turbine disc serial number	Turbine disc stage	Date when coating was applied	Turbine disc cycles-since-new when coating was applied
DETN128	HP	31. Mar 01	4356
DETN155	HP	22. Jun 99	0
DETN3541	HP	17. Apr 01	2850
DETN3542	HP	16. Jan 01	6053
LA759	HP	27. Oct 00	5858
LP219	HP	23. Nov 99	6688
LW376	HP	21. Jul 99	3302
LX484	HP	22. Feb 00	4632
LZ299	HP	23. Dec 99	5839
LZ404	HP	13. Jul 01	630
LZ555	HP	30. Aug 00	2158
LZ564	HP	15. Mar 01	4204
SG612	HP	20. Apr 00	5735
SH195	HP	16. Dec 99	5349
DETN25	IP	30. Aug 00	2158
DETN238	IP	31. Mar 01	4356
DETN240	IP	18. Apr 01	0
DETN944	IP	04. Mar 00	2200
DETN2666	IP	17. Apr 01	2850
DETN5538	IP	16. Jul 01	630
DETN6400	IP	14. Apr 99	0
LA407	IP	22. Jun 00	5736
LA858	IP	27. Oct 00	5858
LB99	IP	13. Aug 99	9093
LE284	IP	24. Dec 99	5679
LN87	IP	10. May 99	5829
LP519	IP	23. Nov 99	6688
LW517	IP	22. Dec 99	5865
LX214	IP	09. Dec 00	6498
LX379	IP	22. Feb 00	4632
LZ248	IP	23. Dec 99	5839
LZ385	IP	17. Oct 01	9072
LZ603	IP	22. Jun 99	0
SG554	IP	20. Apr 00	5735
SH863	IP	16. Dec 99	5349

Unsafe Condition

(d) This AD is prompted by reports of Sermetel coating (Omat 7/46) applied to certain turbine discs which, if allowed to remain on the discs would react adversely with the disc dry film lubricant, causing uncontained HP or IP turbine disc failure, which could result in damage to the airplane. We are issuing this AD to prevent HP or IP turbine disc failure, which could result in damage to the airplane.

Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified unless the actions have already been done.

Determining if Action Is Required

(f) Within 60 days after the effective date of this AD, determine the SN of the HP turbine disc and the IP turbine disc. If none

of the HP and IP turbine discs with SNs listed in Table 1 are installed in the engine, no further action is required.

(g) If one or more of the discs with SNs listed in Table 1 of this AD are installed in the engine, do the following:

(1) If the engine has had a full overhaul of the turbine after the shop visit at which the Sermetel coating (Omat 7/46) was applied, no further action is required.

(2) If only the HP turbine disc is listed in Table 1, and the engine has RRD Service Bulletin No. Da72–533, Revision 3, dated October 2001, incorporated, no further action is required.

Removal of Sermetel Coating and Disc Inspection

(3) Before accumulating 10,000 flight cycles since the coating was applied, completely remove Sermetel coating (Omat 7/46) from HP turbine discs and LP turbine discs. Information on coating removal can be

found in RRD Overhaul Processes Manual, Overhaul Process 114.

(4) Visually inspect HP turbine discs and LP turbine discs, and return to service discs that pass inspection. Information on disc pass or fail inspection criteria can be found in the RRD Engine Overhaul Manual, Chapter 72–6–1.

Alternative Methods of Compliance

(h) Alternative methods of compliance must be requested in accordance with 14 CFR part 39.19, and must be approved by the Manager, Engine Certification Office, FAA.

Material Incorporated by Reference

(i) None.

Related Information

(j) The subject of this AD is addressed in LBA airworthiness directive LTA 2003–015, dated February 6, 2003.