

CSN, CSO, or CST limits listed in Table 4 of this AD, to no more than one engine per airplane. Thereafter, ensure that no more than one engine per airplane exceeds the HPC CSN, CSO, or CST limits listed in Table 4 of this AD. See paragraph (i) of this AD for return to service requirements.

(h) For Airbus A300 PW4158 engine operators, except those operators whose engine fleets are determined to be Category 3 classification based on surge rate in accordance with paragraph (f)(6) of this AD, re-evaluate your fleet category within 6 months from the last evaluation, and thereafter, at intervals not to exceed 6 months, using the following criteria:

(1) For operators whose engine fleets are initially classified as Category 1 or 3 in accordance with paragraph (f) of this AD, determine the percent of takeoffs with greater than a 1.45 Takeoff EPR data for engines operating in your fleet. Count takeoffs from a sample of at least 200 takeoffs that occurred over the most recent six month time period since the last categorization was determined, or the total number of takeoffs accumulated over 6 months if less than 200 takeoffs. See paragraph (v)(6) of this AD for definition of takeoff EPR data.

(i) If there is insufficient data to satisfy the criteria of paragraph (h)(1) of this AD, use A300 PW4158 Category 3 limits listed in Table 4 of this AD.

(ii) If the percentage of takeoffs with greater than a 1.45 Takeoff EPR data determined in paragraph (h)(1) of this AD is greater than 31%, use A300 PW4158 Category 3 limits listed in Table 4 of this AD.

(iii) If the percentage of takeoffs with greater than a 1.45 Takeoff EPR data determined in paragraph (h)(1) of this AD is less than or equal to 31%, use A300 PW4158 Category 1 limits listed in Table 4 of this AD.

(2) For operators whose engine fleets are initially classified as Category 2 in accordance with paragraph (f) of this AD, determine the percent of takeoffs with greater than a 1.45 Takeoff EPR data for engines operating in your fleet. Count takeoffs from a sample of at least 200 takeoffs that occurred over the most recent six month time period since the last categorization was determined, or the total number of takeoffs accumulated over 6 months if less than 200 takeoffs. See paragraph (v)(6) of this AD for definition of takeoff EPR data.

(i) If there is insufficient data to satisfy the criteria of paragraph (h)(2) of this AD, use A300 PW4158 Category 3 limits listed in Table 4 of this AD.

(ii) If the percentage of takeoffs with greater than a 1.45 Takeoff EPR data determined in paragraph (h)(2) of this AD is greater than 37%, use A300 PW4158 Category 3 limits listed in Table 4 of this AD.

(iii) If the percentage of takeoffs with greater than a 1.45 Takeoff EPR data determined in paragraph (h)(2) of this AD is greater than or equal to 21% and less than or equal to 37%, use A300 PW4158 Category 1 limits listed in Table 4 of this AD.

(iv) If the percentage of takeoffs with greater than a 1.45 Takeoff EPR data determined in paragraph (h)(2) of this AD is less than 21%, use A300 PW4158 Category 2 limits listed in Table 4 of this AD.

Return to Service Requirements for Engines To Be Installed on Airbus or McDonnell Douglas Airplanes

(i) Engines removed from service in accordance with paragraph (c), (d), or (g) of this AD may be returned to service and installed on Airbus or McDonnell Douglas airplanes under the following conditions:

(1) After passing a cool-engine fuel spike stability test (Testing-21) that has been done in accordance with one of the following PW4000 Engine Manuals (EM) as applicable, except for engines configured with Configuration E, or engines that have experienced a Group 3 takeoff surge:

(i) PW4000 EM 50A443, 71-00-00, TESTING-21, dated March 15, 2002.

(ii) PW4000 EM 50A822, 71-00-00, TESTING-21, dated March 15, 2002.

(2) Engines tested before the effective date of this AD, in accordance with PW4000 EM 50A443, 71-00-00, Testing-21, dated November 14, 2001; or PW4000 EM 50A822, 71-00-00, TESTING-21, dated November 14, 2001; or PW4000 EM 50A443, Temporary Revision No. 71-0026, dated November 14, 2001; or PW4000 EM 50A822, Temporary Revision No. 71-0018, dated November 14, 2001; or PW Internal Engineering Notice (IEN) 96KC973D, dated October 12, 2001, meet the requirements of TESTING-21; or

(3) After passing an on-wing Testing-21 on PW4460 and PW4462 engines installed on the MD-11 airplanes that has been done in accordance with Major IEN 02KCW13H, dated December 9, 2002 or done prior to the approval of Major IEN 02KCW13H, dated December 9, 2002 in accordance with Minor IEN 02KCW13F, dated October 14, 2002 except for engines configured with Configuration E, or engines that have experienced a Group 3 takeoff surge; or

(4) The engine HPC was replaced with an HPC that is new from production with no time in service; or

(5) The engine HPC has been overhauled, or the engine HPC replaced with an overhauled HPC with zero cycles since overhaul; or

(6) An engine that is either below or exceeds the limits of Table 3 or Table 4 of this AD may be removed and installed on another airplane without Testing-21, as long as the requirements of paragraph (c), (d), or (g) of this AD are met at the time of engine installation.

Return to Service Requirements for Engines To Be Installed on Boeing 747 or 767 Airplanes

(j) Engines removed from service in accordance with paragraph (c), (d), or (e) of this AD may be returned to service and installed on Boeing airplanes under the following conditions:

(1) After passing a cool-engine fuel spike stability test (Testing-21) that has been done in accordance with PW4000 EM 50A605, 71-00-00, Testing-21, dated June 15, 2003, except for engines configured with Configuration E, or engines that have experienced a Group 3 takeoff surge; or

(2) Engines tested before the effective date of this AD, in accordance with PW4000 EM 50A605, 71-00-00, Testing-21, dated March 15, 2002; or PW IEN 96KC973D, dated

October 12, 2001; or PW4000 EM 50A605, Temporary Revision No. 71-0035, dated November 14, 2001 meet the requirements of Testing-21; or

(3) For PW4056 engines installed on Boeing 747 airplane, after successfully completing on-wing Testing-21 in accordance with Major IEN 02KCW13E, dated November 21, 2002 or if done prior to the approval of Major IEN 02KCW13E dated November 21, 2002 in accordance with Minor IENs 02KCW13, dated October 14, 2002, 02KCW13A, dated October 14, 2002, 02KCW13C, dated July 25, 2002, or 02KCW13D, July 29, 2002 except for engines configured with Configuration E, or engines that have experienced a Group 3 takeoff surge; or

(4) An engine that is either below or exceeds the limits of Table 3 or Table 4 of this AD may be removed and installed on another airplane without Testing-21, as long as the requirements of paragraph (c), (d), or (e) of this AD are met at the time of engine installation.

(5) Engine has incorporated the RCC rear HPC in accordance with PW SB PW4ENG 72-755, Revision 2, dated May 23, 2003. Completing this SB changes the engine configuration to Configuration I.

Phase 0 or Phase 1, FB2T or FB2B Fan Blade Configurations

(k) For Configuration A, B, C, D, E, F, G, and H engines with Phase 0 or Phase 1, FB2T or FB2B fan blade configurations complying with the requirements of AD 2001-09-05, (66 FR 22908, May 5, 2001), AD 2001-09-10, (66 FR 21853, May 2, 2001), or AD 2001-01-10, (66 FR 6449, January 22, 2001), do the following:

(1) Operators complying with the ADs listed in paragraph (k) of this AD using the weight restriction compliance method, must perform Testing-21 in accordance with paragraph (i) or (j) of this AD whenever any quantity of fan blades are replaced with new fan blades, overhauled fan blades, or with fan blades having the leading edges recontoured after the effective date of this AD, if during the shop visit the HPC is not overhauled and separation of a major engine flange, located between "A" flange and "T" flange, does not occur.

(2) If an operator changes from the weight restriction compliance method to the fan blade leading edge recontouring method after the effective date of this AD, testing-21 in accordance with paragraph (i) or (j) of this AD is required each time fan blade leading edge recontouring is done, if the fan blades accumulate more than 450 cycles since new or since fan blade overhaul, or since the last time the fan blade leading edges were recontoured.

Minimum Build Standard For Engines Installed on Airbus and McDonnell Douglas Airplanes

(l) Use the following minimum build standards for engines to be returned to service and installed on Airbus and McDonnell Douglas airplanes:

(1) After the effective date of this AD, do not install an engine with HPC and HPT modules where the CSO of the HPC is 1,500