

(3) Prior to return to service and installed on McDonnell Douglas MD-11 airplanes, Configuration G or H engines must meet the requirements of paragraph (i) of this AD.

#### Engines Installed on Boeing 767 and MD-11 Airplanes

(d) For engines installed on Boeing 767 and MD-11 airplanes, except as provided in paragraph (b) and (c) of this AD:

(1) Before further flight, limit the number of engines that exceed the HPC CSN, HPC

cycles-since-overhaul (CSO), or HPC CST limits in Table 3 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 limit in Table 3 of this AD.

(2) Prior to return to service and installed on MD-11 airplanes, engines must meet the requirements of paragraph (i) of this AD.

(3) Prior to return to service and installed on Boeing 767 airplanes, engines must meet the requirements of paragraph (j) of this AD.

#### Engines Installed on Boeing 747 Airplanes

(e) Except as provided in paragraph (b) and (c) of this AD, before further flight, and thereafter, manage the engine configurations installed on Boeing 747 airplanes as follows:

(1) Limit the number of Configuration A, B, C, or E engines that exceed the HPC CSN or HPC CSO limits listed in Table 3 of this AD, to not more than one engine per airplane.

Table 3 follows:

TABLE 3.—ENGINE LIMITS FOR BOEING AIRPLANES

Configuration designator	B747 PW4056	B767 PW4052	B767 PW4056	B767 PW4060 PW4060A PW4060C PW4062	MD-11 PW4460 PW4462
A .....	1,400 CSN or CSO	3,000 CSN or CSO	1,600 CSN or CSO	900 CSN or CSO	800 CSN or CSO
B .....	2,100 CSN or CSO	4,400 CSN or CSO	2,800 CSN or CSO	2,000 CSN or CSO	1,200 CSN or CSO
C .....	2,100 CSO	4,400 CSO	2,800 CSO	2,000 CSO	1,300 CSO
D .....	2,600 CSN	4,400 CSN	3,000 CSN	2,200 CSN	2,000 CSN
E .....	750 CSN or CSO	750 CSN or CSO	750 CSN or CSO	750 CSN or CSO	750 CSN or CSO
F .....	800 CST	800 CST	800 CST	800 CST	800 CST

(2) The single Configuration A, B, C, or E engine per airplane that exceeds the HPC CSN or CSO limits listed in Table 3 of this AD, must be limited to 2,600 HPC CSN or CSO for Configuration A, B, or C engines, or 1,300 HPC CSN or CSC to Configuration E, whichever is later, for Configuration E engines.

(3) Remove from service or perform on-wing Testing-21 in accordance with paragraph (j)(3) of this AD for Configuration D engines, before accumulating 2,600 CSN.

(4) Remove from service or perform on-wing Testing-21 in accordance with paragraph (j)(3) of this AD for Configuration F engines, before accumulating 800 CST.

(5) Prior to return to service and installed on Boeing airplanes, Configuration A, B, C, D, and F engines must meet the requirements of paragraph (j) of this AD.

#### Engines Installed on Airbus A300 and A310 Airplanes

(f) For Airbus operators that began operation of their A300 fleet after the

effective date of this AD, use paragraphs (f)(7) through (f)(9) of this AD to determine which Airbus A300 PW4158 engine category 1 or 3 limits of the following Table 4 of this AD apply to your engine fleet. For Airbus operators that have been in operation before the effective date of this AD, use your PW4158 engine category classification previously determined for your fleet and continue to apply the A300 PW 4158 Category limits in Table 4 of this AD, to your fleet.

TABLE 4.—ENGINE LIMITS FOR AIRBUS AIRPLANES

Configuration designator	A300 PW4158 Category 1, and A310 PW4156 and PW4156A	A300 PW4158 Category 2, and 310 PW4152	A300 PW4158 Category 3
A .....	900 CSN or CSO	1,850 CSN or CSO	500 CSN or CSO
B .....	2,200 CSN or CSO	4,400 CSN or CSO	1,600 CSN or CSO
C .....	2,200 CSO	4,400 CSO	1,600 CSO
D .....	4,400 CSN	4,400 CSN	4,400 CSN
E .....	Not Applicable	Not Applicable	Not Applicable
F .....	800 CST	800 CST	800 CST

(1) Determine the number of Group 3 takeoff surges experienced by engines in your fleet before April 13, 2001. Count surge events for engines that had an HPC overhaul and incorporated either SB PW 4ENG 72-484 or SB PW4ENG 72-575 at the time of overhaul. Do not count surge events for engines that did not have the HPC overhauled (*i.e.* 1st run engine) or had the HPC overhauled but did not incorporate either SB PW4ENG 72-484 or SB PW4ENG 72-575. See paragraph (v)(5) of this AD for a definition of a Group 3 takeoff surge.

(2) Determine the number of cumulative HPC CSO accrued by engines in your fleet before April 13, 2001. Count HPC CSO for engines that had an HPC overhaul and incorporated either SB PW4ENG 72-484 or SB PW4ENG 72-575 at the time of overhaul.

Do not count HPC CSO accrued on your engines while operating outside your fleet.

(3) Calculate the surge rate by dividing the number of Group 3 takeoff surges determined in paragraph (f)(1) of this AD, by the number of cumulative HPC CSO determined in paragraph (f)(2) of this AD, and then multiply by 1,000.

(4) If the surge rate calculated in paragraph (f)(3) of this AD is less than 0.005, go to paragraph (f)(5) of this AD. If the surge rate calculated in paragraph (f)(3) of this AD is greater than or equal to 0.005, go to paragraph (f)(6) of this AD.

(5) If the cumulative HPC CSO determined in paragraph (f)(2) of this AD is greater than or equal to 200,000 cycles, use A300 PW4158 Category 2 limits of Table 4 of this AD. If less than 200,000 cycles, go to paragraph (f)(7) of this AD.

(6) If the surge rate calculated in paragraph (f)(3) of this AD is greater than 0.035, use A300 PW 4158 Category 3 limits of Table 4 of this AD. If less than or equal to 0.035, go to paragraph (f)(7) of this AD.

(7) Determine the percent of takeoffs with greater than a 1.45 Takeoff engine pressure ratio (EPR) data for engines operating in your fleet. Count takeoffs from a random sample of at least 700 airplane takeoffs that have occurred over at least a 3-month time period, for a period beginning no earlier than 23 months prior to the effective date of this AD. See paragraph (v)(6) of this AD for definition of Takeoff EPR data.

(8) If there is insufficient data to satisfy the criteria of paragraph (f)(7) of this AD, use A300 PW4158 Category 3 limits of Table 4 of this AD.