

Another commenter asks that we allow for optional tracking of the carriage part and serial number instead of the aircraft serial number to demonstrate compliance. The commenter states that it currently has an AMOC approved for AD 2002-22-05 that addresses this situation.

We agree with the commenters' requests to accept certain AMOCs approved previously for AD 2002-22-05. We have added a new paragraph (f)(2) to this supplemental NPRM to include AMOCs previously approved for AD 2002-22-05. Regarding optional tracking of the carriage part and serial number instead of the airplane serial number, the commenter may submit substantiating data that support a request for an AMOC for this proposed AD per paragraph (f)(1) of this proposed AD.

Request To Require Additional AD for Carriage Spindle Only

One commenter states that paragraph (d) of the original NPRM describes two constraints on the overhaul process. The commenter notes that paragraph (d)(1) of the original NPRM specifies the maximum time allowed before carrying out the hydrogen embrittlement procedure, and paragraph (d)(2) of the original NPRM defines the maximum thickness of nickel plating that can be done at any one plating/baking cycle. The commenter adds that the Boeing Standard Operating Procedures Manual for nickel plating includes the requirements specified in paragraph (d)(1), but the maximum plating requirements specified in paragraph (d)(2) are not included in the Boeing Component Maintenance Manual (CMM) 57-53-56, so compliance cannot be assumed by following the procedures in the CMM. The commenter is concerned that if these elements are required in an AD, there is a possibility that a flap carriage may be overhauled without reference to the AD, and subsequently, since there is no mechanism to prevent it, passed back to the operator without evidence of compliance with requirements. The commenter suggests that, if the relevant amendments are not placed in the CMM (against which the overhaul is to be performed before the effective date of the AD), a component AD against the flap carriage assemblies should be issued to ensure that the overhaul requirements are both complied with and certified as such before the assemblies are passed on to an operator. The commenter adds that the magnetic particle inspection addresses only the carriage, not the carriage spindle.

We do not agree with the commenter. Overhaul manuals are not FAA-approved documents. Updating these manuals is done by the original equipment manufacturer for the benefit of the operators. When an unsafe condition exists, we issue an AD to correct that condition, and, if additional safeguards are required as part of the mandated action, those safeguards are included in the text of the AD, unless mandated in other rulemaking actions. Ultimately, it is the responsibility of the operator to ensure compliance with any ADs that affect the operator's fleet. No change to the supplemental NPRM is necessary in this regard.

Request To Remove or Change Paragraph (a)

One commenter asks that the current inspections that would be required by paragraph (a) of the original NPRM be removed or changed as they are ineffective for finding cracks. The commenter states that it performed the inspections and, approximately 10 days later, a carriage spindle severed during flight. The commenter does not see any benefit in performing the current inspections.

We do not agree with the commenter. The inspections mandated by AD 2002-22-05 are designed to find a fully failed spindle before the second spindle fails due to load redistribution from the failed spindle. AD 2002-22-05 is required to safeguard against a dual-spindle failure. Further, the carriage spindle is manufactured from high strength steel, which is a material not generally conducive to damage tolerance methods. No change to the supplemental NPRM is necessary in this regard.

Request To Add the Repetitive Overhaul in Paragraph (c) to the Operator's Time Limit Index

One commenter asks that paragraph (c) of the original NPRM, which requires repetitive overhaul of the carriage spindles every 12,000 flight cycles or 8 years, whichever is first, be incorporated into an Operator's Time Limit Index (Hard Time Component Program). The commenter states that this can be done by adding the following statement to paragraph (c): "Operators may incorporate the overhaul requirement into the FAA-approved maintenance program if the Principal Maintenance Inspector (PMI) approves that action." The commenter adds that this would allow the PMI to approve the action, when appropriate, without a concern that it violates the Code of Federal Regulations.

We do not agree with the commenter. To include the overhaul of this part in a particular overhaul program would be an operations-dependent procedure and cannot be done as a general option. The commenter provides no data to substantiate that its request would provide an acceptable level of safety. However, an affected operator may request approval of an AMOC, as provided by paragraph (f)(1) of this AD, if data are submitted to support that an alternative method would provide an acceptable level of safety. No change to the supplemental NPRM is necessary in this regard.

Request To Change Cost Impact Section

Two commenters ask the Cost Impact section of the original NPRM be changed, as follows:

- One commenter states that the estimated cost of the replacement of the carriage spindle (\$45,000 per spindle, and \$10,000 per spindle for the overhaul) does not include the out-of-service time and work hours necessary.
- One commenter states that the "short" initial compliance time would require operators to remove flaps outside their routine maintenance program, which would take an additional 192 work hours per airplane. The commenter estimates the additional labor cost at over \$500,000. The commenter adds that the overhaul of the carriage spindle will require additional spare carriage spindles over the short initial compliance timeframe. Based on an overhaul turnaround time of 30 days, the commenter estimates it would need up to six shipments of spare carriage spindles at a cost of approximately \$1.2 million. All these spares would then not be used for the remainder of the 8-year period until the next overhaul. In addition, the commenter notes that the cost for overhauling the carriage spindle is almost \$100,000, based on the cost estimate per airplane provided in the original NPRM.

We do not agree with the commenters. The cost impact information describes only the costs of the specific actions required by this AD. The number of work hours necessary to accomplish the overhaul or replacement, as specified in the cost impact information, is consistent with the service bulletin. This number represents the time necessary to perform only the actions actually required by this AD. We recognize that, in accomplishing the requirements of any AD, operators may incur additional costs due to special circumstances when scheduling maintenance visits. However, because maintenance schedules vary significantly from operator to operator,