



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2015-0627; Directorate Identifier 2015-CE-002-AD; Amendment 39-18337; AD 2015-24-05]**

**RIN 2120-AA64**

**Airworthiness Directives; Piper Aircraft, Inc. Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Piper Aircraft, Inc. Models PA-23-250, PA-24-250, PA-24-260, PA-24-400, PA-30, PA-31, PA-31-300, PA-31P, PA-39, and PA-E23-250 airplanes. This AD was prompted by an accident caused by fuel starvation where the shape of the wing fuel tanks and fuel below a certain level in that tank may have allowed the fuel to move away from the tank outlet during certain maneuvers. This AD requires installing a fuel system management placard on the airplane instrument panel and adding text to the Limitations Section of the pilot's operating handbook (POH)/airplane flight manual (AFM). We are issuing this AD to correct the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this AD, contact Piper Aircraft, Inc., Customer Service, 2926 Piper Drive, Vero Beach, Florida 32960; telephone: (877) 879-0275; fax: none; email: customer.service@piper.com; Internet: www.piper.com. You may view this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-0627; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Ansel James, Aerospace Engineer, Atlanta Aircraft Certification Office, FAA, 1701 Columbia Avenue, College Park, Georgia 30337; telephone: (404) 474-5576; fax: (404) 474-5606; email: [ansel.james@faa.gov](mailto:ansel.james@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Piper Aircraft, Inc. Models PA-23-250, PA-24-250, PA-24-260, PA-24-400, PA-30, PA-31, PA-31-300, PA-31P, PA-39, and PA-E23-250 airplanes. The NPRM published in the Federal Register on March 23, 2015 (80 FR 15171). The NPRM was prompted by an accident caused by fuel starvation where the shape of the wing fuel tanks and fuel below a certain level in that tank may have allowed the fuel to move away from

the tank outlet during certain maneuvers. The NPRM proposed to require installing a fuel system management placard on the airplane instrument panel and adding text to the Limitations Section of the pilot's operating handbook (POH)/airplane flight manual (AFM). We are issuing this AD to correct the unsafe condition on these products.

### **Comments**

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM (80 FR 15171, March 23, 2015) and the FAA's response to each comment.

### **Request for Local Fabrication of the Required Warning Placard**

Edward Rognerud and an anonymous commenter requested that the AD be written to allow for the local fabrication of the required warning placard as long as it contains the exact warning text mandated by the service information and is printed in 8-point type. The anonymous commenter also requested that the AD allow for the installation of the warning placard onto the instrument panel at any location that does not obscure existing controls, instruments, or markings and is in clear view of the pilot.

The commenters requested this change as a means of controlling the cost of compliance without compromising safety.

We agree with the commenters that local fabrication of the warning placard may be necessary if the shape of the placard available from Piper Aircraft, Inc. does not fit on the instrument panel. The service information contains the exact text, font size, and installation restrictions necessary for the local fabrication of a compliant placard. Paragraph (g)(2) of the proposed AD included instructions to fabricate and install the placard. This implied that the placard can only be fabricated if the placard available from Piper Aircraft, Inc. does not fit on the instrument panel.

We revised the AD as requested to allow for the fabrication of the placard following the instructions in the service information under any condition.

## **Request for Local Fabrication of the Supplemental Page for Updating of the Aircraft's POH/AFM**

Edward Rognerud and an anonymous commenter requested the updating of the airplane's POH/AFM by inserting a locally fabricated supplemental page into the Limitation Section as an alternative to inserting a supplemental page bought from Piper Aircraft, Inc. We infer the commenter's meaning to be that a locally fabricated supplemental page will meet the requirements of the AD.

The commenters requested this change as a means of controlling the cost of compliance without compromising safety.

We agree with the commenters that compliance can be shown with paragraph (h)(3) of the AD by inserting into the Limitations Section of the POH/AFM a locally made supplemental page containing the applicable placard text or a supplemental page procured from Piper Aircraft, Inc.

We revised the AD as requested.

## **Request Private Pilot Certificate as a Minimum Credential for AD Signoff in Logbook**

An anonymous commenter requested a private pilot certificate as a minimum credential for AD signoff in airplane's logbook. The anonymous commenter requested this change to control cost of compliance without compromising safety.

We agree with the anonymous commenter. We determined that the installation of a purchased or locally fabricated supplemental page into the POH/AFM can be done by the owner/operator with at least a private pilot certificate. We have also determined that the local fabrication and installation of the placard following the instructions in the service bulletin can be done by the owner/operator with at least a private pilot certificate.

We revised the AD as requested.

## **Request Withdrawal of the NPRM**

Jeffrey Aryan commented that the proposed AD is not appropriate. The commenter also wrote that the proposed AD would add a more cumbersome display to an already crowded flight deck. We infer that the commenter requested withdrawal of the NPRM.

We disagree. The FAA evaluated all relevant information and determined that the addition of the placard to the instrument panel and the supplemental pages to the Limitations Section of the POH/AFM will address the unsafe condition identified in the AD.

We made no change to the AD as a result of this comment.

## **Conclusion**

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (80 FR 15171, March 23, 2015) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (80 FR 15171, March 23, 2015).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

**Related Service Information under 1 CFR part 51**

We reviewed Piper Aircraft, Inc. Service Bulletin No. 1266, dated December 16, 2014. Piper Aircraft, Inc. Service Bulletin No. 1266, dated December 16, 2014, calls for/describes actions for, when necessary, installing the correct fuel warning placard on the instrument panel and adding correct text of that fuel warning placard in the Limitations Section of the POH/AFM. This information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this AD.

## Costs of Compliance

We estimate that this proposed AD affects 3,000 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

### Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection to determine if placard, if installed, and Limitations Section of the POH/AFM are compliant with Piper Aircraft, Inc. Service Bulletin No. 1266, dated December 16, 2014.	.5 work-hour X \$85 per hour = \$42.50	Not Applicable	\$42.50	\$127,500

We estimate the following costs to do any necessary placard/POH/AFM order and installation that would be required based on the results of the inspection. We have no way of determining the number of airplanes that might need any necessary placard/POH/AFM order and installation:

### On-condition costs

Action	Labor cost	Parts cost	Cost per product
Order and install replacement placard	1 work-hour X \$85 per hour = \$85	\$40	\$125
Order updated POH/AFM and install updated pages	.5 work-hour X \$85 per hour = \$42.50	\$300	\$342.50

## Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.



**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):  
2015-24-05 **Piper Aircraft, Inc. Airplanes**: Amendment 39-18337; Docket No.  
FAA-2015-0627; Directorate Identifier 2015-CE-002-AD.

**(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to the following Piper Aircraft, Inc. airplanes, certificated in any category:

<b>Model</b>	<b>Serial Numbers</b>
PA-23-250 (Six Place) Aztec "B"	27-2322 through 27-2504, FUEL INJECTED ONLY
PA-23-250 (Six Place) and PA-E23-250 (Six Place) Aztec "C," "D" and "E"	27-2505 through 27-4866, 27-7304917 through 27-7405476
PA-24-250 Comanche	24-2563, 24-2844 through 24-3641, 24-3643 through 24-3687, FUEL INJECTED ONLY
PA-24-260 Comanche	24-3642, 24-4000 through 24-4299, 24-4300 through 24-4782, 24-4784 through 24-4803, FUEL INJECTED ONLY
PA-24-260 Comanche "C"	24-4783, 24-4804 through 24-5047
PA-24-400 Comanche	26-1 through 26-148
PA-30 Twin Comanche	30-1 through 30-2000
PA-31 and PA-31-300 Navajo	31-2 to 31-861, 31-7300901 through 31-7300923, 31-7300925, 31-7300927, 31-7300929, 31-7300931
PA-31P Navajo	31P-1 through 31P-80, 31P-7300110 through 31P-7300115
PA-39 Twin Comanche C/R	39-1 through 39-155

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 1130, PLACARDS AND MARKINGS; Interior Placards.

**(e) Unsafe Condition**

This AD was prompted by an accident caused by fuel starvation where the shape of the wing fuel tanks and fuel below a certain level in that tank may have allowed the fuel to move away from the tank outlet during certain maneuvers. We are issuing this AD to prevent loss of engine power due to fuel starvation. This condition, if not corrected, could lead to loss of engine power or engine shutdown, which may result in loss of control.

**(f) Compliance**

Unless already done, within the next 50 hours time-in-service (TIS) after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), do the actions in paragraphs (g) and (h) of this AD, as applicable, including all subparagraphs.

**(g) Fuel Warning Placard Inspection**

(1) Inspect the fuel warning placard, if existing, following the Instructions section, of Piper Aircraft, Inc. Mandatory Service Bulletin No. 1266, dated December 16, 2014. If the placard is present and compliant with the Instructions section of Piper Aircraft, Inc. Mandatory Service Bulletin No. 1266, dated December 16, 2014, then no further action regarding the placard is required.

(2) If the fuel warning placard is not present or not compliant with the Instructions section of Piper Aircraft, Inc. Mandatory Service Bulletin No. 1266, dated December 16, 2014, then order the applicable placard from Piper Aircraft, Inc. at the address identified in paragraph (1)(3) of this AD. Alternatively, you may fabricate the applicable fuel warning placard following the Instructions section of Piper Aircraft, Inc. Mandatory Service Bulletin No. 1266, dated December 16, 2014. Install the fabricated fuel warning placard or the fuel warning placard obtained from Piper Aircraft, Inc. following the Instructions section of Piper Aircraft, Inc. Mandatory Service Bulletin No. 1266, dated December 16, 2014.

**(h) Pilot's Operating Handbook (POH)/Airplane Flight Manual (AFM) Inspection**

(1) Inspect the Limitations Section of the applicable POH/AFM following the Instructions section of Piper Aircraft, Inc. Mandatory Service Bulletin No. 1266, dated December 16, 2014.

(2) If the Limitations Section of the applicable POH/AFM contains the exact text found in table 2 of Piper Aircraft, Inc. Mandatory Service Bulletin No. 1266, dated December 16, 2014, there is no need for a POH/AFM revision.

(3) If the Limitations Section of the applicable POH/AFM does not contain the exact text found in Table 2 of Piper Aircraft, Inc. Mandatory Service Bulletin No. 1266, dated December 16, 2014, then revise the POH/AFM by inserting into the Limitations Section of the POH/AFM a fabricated supplemental page containing the applicable placard text from the Appendix to this AD or a supplemental page obtained from Piper Aircraft, Inc. at the address identified in paragraph (l)(3) of this AD.

**(i) Pilot Authorization**

In addition to the provisions of 14 CFR 43.3 and 43.7, the actions required by paragraphs (g) and (h) of this AD, to include all subparagraphs, may be performed by the owner/operator (pilot) holding at least a private pilot certificate and must be entered into the airplane records showing compliance with this AD in accordance with 14 CFR 43.9 (a)(1)-(4) and 14 CFR 91.417(a)(2)(v). The record must be maintained as required by 14 CFR 91.417. This authority is not applicable to airplanes being operated under 14 CFR Part 119.

**(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Atlanta Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (j)(1) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(k) Related Information**

For more information about this AD, contact Ansel James, Aerospace Engineer, Atlanta Aircraft Certification Office, FAA, 1701 Columbia Avenue, College Park, Georgia 30337; telephone: (404) 474-5576; fax: (404) 474-5606; email: [ansel.james@faa.gov](mailto:ansel.james@faa.gov).

**(l) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Piper Aircraft, Inc. Service Bulletin No. 1266, dated December 16, 2014.

(ii) Reserved.

(3) For Piper Aircraft, Inc. service information identified in this AD, contact Piper Aircraft, Inc., Customer Service, 2926 Piper Drive, Vero Beach, Florida 32960; telephone: (877) 879-0275; fax: none; email: [customer.service@piper.com](mailto:customer.service@piper.com); Internet: [www.piper.com](http://www.piper.com).

(4) You may view this service information at FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

**APPENDIX TO AD 2015-24-05**  
**Models Affected/Model Serial Numbers/Applicable Text**  
**for**  
**Supplemental Page to Pilot's Operating Handbook (POH)/Airplane Flight Manual (AFM)**

<b>Models Affected</b>	<b>Model Serial Numbers</b>	<b>Placard Text for Limitations Section of the POH/ AFM</b>
PA-24-250 Comanche with fuel injection	24-2563, 24-2844 through 24-3641, 24-3643 through 24-3687	WARNING — UNCOORDINATED MANEUVERS, INCLUDING SIDE SLIPS OF 30 SECONDS OR MORE, FOR ANY REASON, AND FAST TAXI TURNS JUST PRIOR TO TAKEOFF CAN CAUSE LOSS OF POWER IF FUEL TANK IN USE IS LESS THAN 1/2 FULL
PA-24-260 Comanche with fuel injection	24-3642, 24-4000 through 24-4299, 24-4300 through 24-4782, 24-4784 through 24-4803	WARNING — UNCOORDINATED MANEUVERS, INCLUDING SIDE SLIPS OF 30 SECONDS OR MORE, FOR ANY REASON, AND FAST TAXI TURNS JUST PRIOR TO TAKEOFF CAN CAUSE LOSS OF POWER IF FUEL TANK IN USE IS LESS THAN 1/2 FULL
PA-24-260 "C" Comanche	24-4783, 24-4804 through 24-5047	WARNING — UNCOORDINATED MANEUVERS, INCLUDING SIDE SLIPS OF 30 SECONDS OR MORE, FOR ANY REASON, AND FAST TAXI TURNS JUST PRIOR TO TAKEOFF CAN CAUSE LOSS OF POWER IF FUEL TANK IN USE IS LESS THAN 1/2 FULL
PA-24-400 Comanche	26-1 through 26-148	WARNING — UNCOORDINATED MANEUVERS, INCLUDING SIDE SLIPS OF 30 SECONDS OR MORE, FOR ANY REASON, AND FAST TAXI TURNS JUST PRIOR TO TAKEOFF CAN CAUSE LOSS OF POWER IF FUEL TANK IN USE IS NOT FULL

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**APPENDIX TO AD 2015-24-05 (Continued)**

**Models Affected/Model Serial Numbers/Applicable Text  
for  
Supplemental Page to Pilot's Operating Handbook (POH)/Airplane Flight Manual (AFM)**

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<b>Models Affected</b>	<b>Model Serial Numbers</b>	<b>Placard Text for Limitations Section of the POH/ AFM</b>
PA-31 & PA-31-300 Navajo	31-2 to 31-861, 31-7300901 through 31-7300923, 31-7300925, 31-7300927, 31-7300929, 31-7300931	WARNING — UNCOORDINATED MANEUVERS, INCLUDING SIDE SLIPS OF 30 SECONDS OR MORE, FOR ANY REASON, AND FAST TAXI TURNS JUST PRIOR TO TAKEOFF CAN CAUSE LOSS OF POWER IF FUEL TANKS IN USE ARE LESS THAN 3/4 FULL
PA-31P Navajo	31P-1 through 31P-80, 31P-7300110 through 31P-7300115	WARNING — UNCOORDINATED MANEUVERS, INCLUDING SIDE SLIPS OF 30 SECONDS OR MORE, FOR ANY REASON, AND FAST TAXI TURNS JUST PRIOR TO TAKEOFF CAN CAUSE LOSS OF POWER IF FUEL TANKS IN USE ARE LESS THAN 3/4 FULL
PA-23-250 (six place) Aztec B with fuel injection	27-2322 through 27-2504	WARNING — UNCOORDINATED MANEUVERS, INCLUDING SIDE SLIPS OF 30 SECONDS OR MORE, FOR ANY REASON, AND FAST TAXI TURNS JUST PRIOR TO TAKEOFF CAN CAUSE LOSS OF POWER IF FUEL TANKS IN USE ARE LESS THAN 1/2 FULL
PA-23-250 (six place) Aztec "C" PA-E23-250 (six place) Aztec "C"	27-2505 through 27-3836, 27-3838 through 27-3943	WARNING — UNCOORDINATED MANEUVERS, INCLUDING SIDE SLIPS OF 30 SECONDS OR MORE, FOR ANY REASON, AND FAST TAXI TURNS JUST PRIOR TO TAKEOFF CAN CAUSE LOSS OF POWER IF FUEL TANKS IN USE ARE LESS THAN 1/2 FULL

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**APPENDIX TO AD 2015-24-05 (Continued)**

**Models Affected/Model Serial Numbers/Applicable Text  
for  
Supplemental Page to Pilot's Operating Handbook (POH)/Airplane Flight Manual (AFM)**

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<b>Models Affected</b>	<b>Model Serial Numbers</b>	<b>Placard Text for Limitations Section of the POH/ AFM</b>
PA-23-250 (six place) Aztec "D" PA-E23-250 (six place) Aztec "D"	27-3837, 27-3944 through 27-4425, 27-4427 through 27-4573	WARNING — UNCOORDINATED MANEUVERS, INCLUDING SIDE SLIPS OF 30 SECONDS OR MORE, FOR ANY REASON, AND FAST TAXI TURNS JUST PRIOR TO TAKEOFF CAN CAUSE LOSS OF POWER IF FUEL TANKS IN USE ARE LESS THAN 1/2 FULL
PA-23-250 (six place) Aztec "E" PA-E23-250 (six place) Aztec "E"	27-4426, 27-4574 through 27-7405476	WARNING — UNCOORDINATED MANEUVERS, INCLUDING SIDE SLIPS OF 30 SECONDS OR MORE, FOR ANY REASON, AND FAST TAXI TURNS JUST PRIOR TO TAKEOFF CAN CAUSE LOSS OF POWER IF FUEL TANKS IN USE ARE LESS THAN 1/2 FULL
PA-30 Twin Comanche	30-1 through 30-2000	WARNING — UNCOORDINATED MANEUVERS, INCLUDING SIDE SLIPS OF 30 SECONDS OR MORE, FOR ANY REASON, AND FAST TAXI TURNS JUST PRIOR TO TAKEOFF CAN CAUSE LOSS OF POWER IF FUEL TANKS IN USE ARE LESS THAN 1/4 FULL
PA-39 Twin Comanche	39-1 through 39-155	WARNING — UNCOORDINATED MANEUVERS, INCLUDING SIDE SLIPS OF 30 SECONDS OR MORE, FOR ANY REASON, AND FAST TAXI TURNS JUST PRIOR TO TAKEOFF CAN CAUSE LOSS OF POWER IF FUEL TANKS IN USE ARE LESS THAN 1/4 FULL

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Issued in Kansas City, Missouri, on November 24, 2015.

Pat Mullen,  
Acting Manager, Small Airplane Directorate,  
Aircraft Certification Service.  
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