

submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, ECO.

**Note 2:** Information concerning the existence of approved alternative methods of

compliance with this airworthiness directive, if any, may be obtained from the ECO.

**Special Flight Permits**

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR

21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

**Incorporation by Reference Material**

(d) The actions required by this AD shall be performed in accordance with the following service documents:

Document No.	Pages	Revision	Date
RB.211-72-C878 .....	1-2 .....	1 .....	December 10, 1999
	3-4 .....	Original .....	November 19, 1999
	Appendix .....	Original .....	November 19, 1999
Total pages: 7.			

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Rolls-Royce plc, PO Box 31, Derby, England; telephone: 011-44-1332-249428; fax: 011-44-1332-249223. Copies may be inspected at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**Effective Date of This AD**

(e) This amendment becomes effective on August 2, 2000.

Issued in Burlington, Massachusetts, on June 21, 2000.

**Mark C. Fulmer,**

*Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.*

[FR Doc. 00-16231 Filed 6-30-00; 8:45 am]

**BILLING CODE 4910-13-U**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

[Docket No. 99-NM-196-AD; Amendment 39-11806; AD 2000-13-07]

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Model A330 and A340 Series Airplanes**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to certain Airbus Model A330 and A340 series airplanes. This AD requires repetitive detailed visual and ultrasonic inspections of the main landing gear (MLG) to detect fatigue cracks, and repair if necessary; replacement of certain nose landing gear (NLG) handwheel controllers and certain placards with new placards; installation of steering angle recording

software; and corrective action for exceeding certain steering angles. This AD also requires an AFM revision to limit the nose wheel steering angle for pushback and towing and to limit the nose wheel steering for powered turns. This amendment is prompted by issuance of mandatory continuing airworthiness information by a foreign civil airworthiness authority. The actions specified by this AD are intended to prevent MLG failure due to fatigue cracking, which could result in reduced structural capability of the airplane and collapse of the MLG.

**DATES:** Effective August 7, 2000.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of August 7, 2000.

**ADDRESSES:** The service information referenced in this AD may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to all Airbus Model A330 and A340 series airplanes was published in the **Federal Register** on January 12, 2000 (65 FR 1833). That action proposed to require repetitive detailed visual and ultrasonic inspections of the main landing gear (MLG) to detect fatigue cracks, and

repair if necessary; replacement of certain nose landing gear (NLG) handwheel controllers and certain placards with new placards; installation of steering angle recording software; corrective action for exceeding certain steering angles; and an AFM revision to limit the nose wheel steering angle for pushback and towing and to limit the nose wheel steering for powered turns.

**Comments**

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comment received.

**Request To Exclude Certain Airplanes From Proposed Actions**

The commenter (an operator) requests that certain airplanes be excluded from the actions specified in the proposed AD. (Although the proposed rule identifies no affected U.S.-registered airplanes, the commenter has since taken delivery of several Model A330 series airplanes.) Subsequent to issuance of the proposed rule, the manufacturer developed the following production modifications for Model A330 and A340 series airplanes (all of which have been installed on the commenter's airplanes):

- Modification 47487: Introduces scallop on the growth main fitting of the main landing gear (MLG)
- Modification 47500: Introduces brake steering and control unit (BSCU) S8D for the MLG
- Modification 47701: Provides for application of markings for maximum turning angle (±65 degrees) for towing and pushback of the nose landing gear doors
- Modification 47787: Introduces ACMS software to record nose wheel steering angles exceeding 67 degrees during towing and pushback

**FAA Response**

The FAA concurs with the request. The Direction Generale de l'Aviation

Civile (DGAC), which is the airworthiness authority for France, advises that the four production modifications are acceptable alternative means of compliance with all requirements of the parallel French airworthiness directives. Based on the data presented, the FAA has revised the applicability of the final rule to remove the inspection and modification requirements for airplanes on which all four of the referenced production modifications have been installed.

### Conclusion

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the change described previously. The FAA has determined that this change will neither increase the economic burden on any operator nor increase the scope of the AD.

### Cost Impact

None of the airplanes affected by this action is on the U.S. Register. All airplanes included in the applicability of this rule currently are operated by non-U.S. operators under foreign registry; therefore, they are not directly affected by this AD action. However, the FAA considers that this rule is necessary to ensure that the unsafe condition is addressed in the event that any of these subject airplanes are imported and placed on the U.S. Register in the future.

Should an affected airplane be imported and placed on the U.S. Register in the future, it would require approximately 1 work hour to inspect the main landing gear; approximately 7 work hours to replace the controller; approximately 1 work hour to replace the placards; approximately 1 work hour to install the software program; and approximately 1 work hour to revise the AFM. The average labor rate is \$60 per work hour. The manufacturer has previously committed to bearing the cost of the necessary parts to accomplish the actions. Based on these figures, the cost impact of the inspections required by this AD would be \$60 per airplane, per inspection cycle, and \$660 per airplane for the remaining actions.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

Should an operator elect to modify the functional software of the brake

steering and control unit (BSCU) rather than replace the nose wheel steering handwheel controllers, the modification would take approximately 1 work hour. Based on this figure, the cost impact of the optional modification would be \$60 per airplane.

### Regulatory Impact

The regulations adopted herein 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (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); and (3) 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. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES**.

### List of Subjects in 14 CFR Part 39

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

### Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by adding the following new airworthiness directive:

**2000-13-07 Airbus Industrie:** Amendment 39-11806. Docket 99-NM-196-AD.

*Applicability:* Model A330 and A340 series airplanes, certificated in any category, except those on which Airbus Modifications 47487, 47500, 47701, and 47787 have been installed in production.

**Note 1:** This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (k) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

*Compliance:* Required as indicated, unless accomplished previously.

To prevent main landing gear (MLG) failure due to fatigue cracking, which could result in reduced structural capability of the airplane and collapse of the MLG, accomplish the following:

### Inspection of the MLG

(a) Prior to the accumulation of 800 total landings on the MLG, or within 120 landings after the effective date of this AD, whichever occurs later, perform detailed visual and ultrasonic inspections of the MLG to detect fatigue cracks, as specified in either paragraph (a)(1) or (a)(2) of this AD, as applicable.

(1) For Model A330 series airplanes: Accomplish the detailed visual and ultrasonic inspections in accordance with Airbus Service Bulletin A330-32A3088, Revision 02, dated June 10, 1999.

**Note 2:** For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

**Note 3:** Detailed visual and ultrasonic inspections accomplished prior to the effective date of this AD in accordance with Airbus Service Bulletin A330-32A3088, dated October 16, 1998; or Revision 01, dated November 20, 1998; are acceptable methods of compliance for the inspection requirements of paragraph (a)(1) of this AD.

(2) For Model A340 series airplanes: Accomplish the detailed visual and ultrasonic inspections in accordance with Airbus Service Bulletin A340-32A4124, Revision 01, dated November 20, 1998.

**Note 4:** Detailed visual and ultrasonic inspections accomplished prior to the effective date of this AD in accordance with Airbus Service Bulletin A340-32A4124, dated October 16, 1998, are acceptable methods of compliance for the inspection requirements of paragraph (a)(2) of this AD.

### Repetitive Inspections

(b) If no crack is detected during the inspection required by paragraph (a)(1) or

(a)(2) of this AD: Repeat the detailed visual and ultrasonic inspections thereafter at intervals not to exceed 120 landings.

#### Corrective Actions

(c) If any cracking is detected during any inspection required by paragraph (a) or (b) of this AD: Prior to further flight, perform a detailed magnetic particle inspection of the MLG to detect fatigue cracks, in accordance with Airbus Service Bulletin A330-32A3088, Revision 02, dated June 10, 1999, or Airbus Service Bulletin A340-32A4124, Revision 01, dated November 20, 1998, as applicable; and repair in accordance with a method approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, or the Direction Generale de l'Aviation Civile (DGAC) (or its delegated agent). For a repair method to be approved by the Manager, International Branch, ANM-116, as required by this paragraph, the Manager's approval letter must specifically reference this AD.

#### Reporting

(d) Within 10 days after accomplishing any inspection required by paragraph (a), (b), or (c) of this AD, report the inspection results (both positive and negative) to Airbus Industrie at fax 33(0) 5 61 93 32 73. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*) and have been assigned OMB Control Number 2120-0056.

#### Replacement of Nose Wheel Steering Handwheel Controllers or Software Modification

(e) Within 20 days after the effective date of this AD, replace the nose wheel steering handwheel controllers with new controllers, or modify the functional software of the brake steering and control unit (BSCU), as specified in either paragraph (e)(1) or (e)(2) of this AD, as applicable.

(1) For Model A330 series airplanes: Replace the controllers in accordance with Airbus Service Bulletin A330-32-3091, Revision 01, dated December 2, 1998, or modify the functional software of the BSCU in accordance with Airbus Service Bulletin A330-32-3092, Revision 02, dated June 10, 1999.

**Note 5:** Replacement of nose wheel steering handwheel controllers with new controllers accomplished prior to the effective date of this AD in accordance with Airbus Service Bulletin A330-32-3091, dated November 19, 1998, is an acceptable method of compliance for the replacement requirements of paragraph (e)(1) of this AD.

**Note 6:** Modification of the functional software of the BSCU accomplished prior to the effective date of this AD in accordance with Airbus Service Bulletin A330-32-3092, dated December 18, 1998; or Revision 01, dated February 24, 1999; is an acceptable method of compliance for the software modification requirements of paragraph (e)(1) of this AD.

(2) For Model A340 series airplanes: Replace the controllers in accordance with

Airbus Service Bulletin A340-32-4128, Revision 01, dated December 2, 1998, or modify the functional software of the BSCU in accordance with Airbus Service Bulletin A340-32-4131, Revision 01, dated June 10, 1999.

**Note 7:** Replacement of nose wheel steering handwheel controllers with new controllers accomplished prior to the effective date of this AD in accordance with Airbus Service Bulletin A340-32-4128, dated November 19, 1998, is an acceptable method of compliance for the replacement requirements of paragraph (e)(2) of this AD.

**Note 8:** Modification of the functional software of the BSCU accomplished prior to the effective date of this AD in accordance with Airbus Service Bulletin A340-32-4131, dated February 24, 1999, is an acceptable method of compliance for the software modification requirements of paragraph (e)(2) of this AD.

#### Replacement of Placards

(f) Within 20 days after the effective date of this AD, replace the placards on the left- and right-hand sides of the aft mechanically-operated nose landing gear doors with new placards, as specified in either paragraph (f)(1) or (f)(2) of this AD, as applicable.

(1) For Model A330 series airplanes: Replace placards in accordance with Airbus Service Bulletin A330-32-3089, dated November 2, 1998.

(2) For Model A340 series airplanes: Replace placards in accordance with Airbus Service Bulletin A340-32-4126, dated November 2, 1998.

#### Installation of a Software Program

(g) Within 20 days after the effective date of this AD, accomplish either paragraph (g)(1) or (g)(2) of this AD, as applicable.

(1) For Model A330-200 series airplanes: Install a software program that automatically records all nose wheel steering angle exceedance above 63 degrees into the Aircraft Condition Monitoring System (ACMS) [*i.e.*, modify the new setup database software by adding the existing operator customized version; and upload the setup database software to the data management unit (DMU)] in accordance with Airbus Service Bulletin A330-31-3033, dated September 13, 1999.

(2) For Model A330-300 and Model A340 series airplanes: Install a software program that automatically records all nose wheel steering angle exceedance above 67 degrees into the ACMS [*i.e.*, modify the new setup database software by adding the existing operator customized version; and upload the setup database software to the DMU] in accordance with Airbus Service Bulletin A330-31-3033, dated September 13, 1999 (for Model A330-300 series airplanes), or Airbus Service Bulletin A340-31-4047, dated September 13, 1999 (for Model A340 series airplanes); as applicable.

#### Incorporation of Ground and Crew Operating Procedures

(h) Within 20 days after the effective date of this AD, revise the Limitations Section of the FAA-approved Airplane Flight Manual (AFM) by inserting the procedures to

incorporate ground operating procedures to limit the nose wheel steering angle for pushback and towing and to limit nose wheel steering for powered turns, in accordance with Flight Operations TELEX (FOT) 999.0099/98, Revision 5, dated May 21, 1999.

#### Corrective Actions for Exceedance of Nose Wheel Steering Angle

(i) For Model A330-200 series airplanes: If, after 20 days from the effective date of this AD, a 63-degree hand wheel steering is exceeded, a 63 degrees is recorded on the ACMS, or a 60-degree steering is exceeded during towing or pushback, within 4 landings after each occurrence, accomplish the actions required by paragraph (a) of this AD.

(j) For Model A330-300 and Model A340 series airplanes: If, after 20 days from the effective date of this AD, a 65-degree hand wheel steering is exceeded, a 67 degrees is recorded on the ACMS, or a 60-degree steering is exceeded during towing or pushback; within 4 landings after each occurrence, accomplish paragraph (j)(1) and (j)(2) of this AD, as applicable.

(1) Accomplish the actions required by paragraph (a) of this AD.

(2) For airplanes on which Airbus Modification 46804 has been accomplished: Reinstall a positive stop and re-rig the tiller as specified in either paragraph (j)(2)(i) or (j)(2)(ii) of this AD, as applicable.

(i) For Model A330-300 series airplanes: Reinstall a stop and re-rig in accordance with Airbus Service Bulletin A330-32-3091, Revision 01, dated December 2, 1998.

(ii) For Model A340 series airplanes: Reinstall a stop and re-rig in accordance with Airbus Service Bulletin A340-32-4128, Revision 01, dated December 2, 1998.

#### Alternative Methods of Compliance

(k) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

**Note 9:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

#### Special Flight Permits

(l) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

#### Incorporation by Reference

(m) Except for the repair required by paragraph (c) of this AD: The actions shall be done in accordance with the following Airbus service bulletins and telex, as applicable.

Airbus service bulletin number	Revision level	Service bulletin date
A330-32A3088 .....	02 .....	June 10, 1999.
A340-32A4124 .....	01 .....	November 20, 1998.
A330-32-3091 .....	01 .....	December 2, 1998.
A330-32-3092 .....	02 .....	June 10, 1999.
A340-32-4128 .....	01 .....	December 2, 1998.
A340-32-4131 .....	01 .....	June 10, 1999.
A330-32-3089 .....	Original .....	November 2, 1998.
A340-32-4126 .....	Original .....	November 2, 1998.
A330-31-3033 .....	Original .....	September 13, 1999.
A340-31-4047 .....	Original .....	September 13, 1999.
Flight Operations TELEX 999.0099/98 .....	Revision 5 .....	May 21, 1999.

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**Note 10:** The subject of this AD is addressed in French airworthiness directives 1998-475-103(B)R1; 1998-473-083(B)R1; and 1999-160-096(B); all dated April 21, 1999.

(n) This amendment becomes effective on August 7, 2000.

Issued in Renton, Washington, on June 22, 2000.

**Donald L. Riggin,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 00-16357 Filed 6-30-00; 8:45 am]

**BILLING CODE 4910-13-U**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

[Docket No. 2000-SW-18-AD; Amendment 39-11805; AD 2000-13-06]

**RIN 2120-AA64**

**Airworthiness Directives; Sikorsky Model S-61 Helicopters**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** This amendment supersedes an existing airworthiness directive (AD) for Sikorsky Model S-61 helicopters. That AD requires inspecting certain pylon upper and lower hinge web fittings (web fittings) for corrosion or a crack and either repairing certain web fittings or replacing any unairworthy web fittings with airworthy web fittings. That AD also requires creating a log card

or equivalent record and implementing a recurring inspection of the web fittings. This amendment retains the requirements of that AD but corrects an error in paragraph (a)(3) by removing the words "and 3.E." This amendment is prompted by an operator notifying the FAA of that error which requires an unnecessary major inspection within 25 hours time-in-service (TIS). The actions specified in this AD are intended to remove an undue burden on the public by superseding the AD and removing the requirement for the major inspection within 25 hours TIS.

**DATES:** Effective July 18, 2000.

The incorporation by reference of certain publications listed in the regulations was approved previously by the Director of the Federal Register as of March 30, 2000 (65 FR 13877, March 15, 2000).

Comments for inclusion in the Rules Docket must be received on or before September 1, 2000.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Office of the Regional Counsel, Southwest Region, Attention: Rules Docket No. 2000-SW-18-AD, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. You may also send comments electronically to the Rules Docket at the following address: 9-asw-adcomments@faa.gov.

The service information referenced in this AD may be obtained from Sikorsky Aircraft Corporation, Attn: Manager, Commercial Tech Support, 6900 Main Street, P. O. Box 9729, Stratford, Connecticut 06497-9129, phone (203) 386-7860, fax (203) 386-4703. This information may be examined at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Brian K. Murphy, Aviation Safety Engineer, ANE-150, 12 New England Executive Park, Burlington, MA 01803,

telephone (781) 238-7739, fax (781) 238-7199.

**SUPPLEMENTARY INFORMATION:** On March 6, 2000, the FAA issued AD 2000-05-16, Amendment 39-11626 (65 FR 13877, March 15, 2000). That AD for Sikorsky Model S-61 helicopters with pylon, part number (P/N) S6120-76265-001 or S6120-76266-507, installed, requires inspecting and repairing or, if necessary, replacing certain web fittings and the fitting faying surfaces. The AD also requires making an entry on the log card or equivalent record. That action was prompted by the discovery of extensive cracking in the area of the web fitting. That condition, if not corrected, could result in structural failure of certain web fittings due to stress corrosion, subsequent structural failure of the tailboom and loss of control of the helicopter.

Since the issuance of that AD, an operator notified the FAA of an error. That error is the reference in paragraph (a)(3) of the AD to paragraph 3.E. of the Accomplishment Instructions of Sikorsky Aircraft Corporation Alert Service Bulletin No. 61B20-33, dated September 3, 1999 (ASB). Requiring paragraph 3.E. of the ASB in paragraph (a)(3) of the AD would inadvertently require conducting a major inspection within 25 hours TIS, which is not intended. The Inspection Plan in Chart A of the ASB refers to paragraph 3.E., which specifies a major recurring inspection at 9000 flight hours or 4 years, whichever is less. That inspection is appropriately covered under paragraph (a)(6) of the AD, which requires entering on the log card or equivalent record the recurring inspection intervals in accordance with Chart A of the ASB.

Since requiring the major inspection within 25 hours TIS is not required to correct the unsafe condition, this AD supersedes AD 2000-05-16. This AD would correct the requirement that inadvertently requires conducting the major inspection in 25 hours TIS by removing the words "and 3.E." from paragraph (a)(3) of the AD. The short