



**DATE: October 23, 2012**

**AD #: 2012-21-52**

This emergency airworthiness directive (EAD) 2012-21-52 is being sent to owners and operators of Agusta S.p.A. (type certificate currently held by AgustaWestland S.p.A.) (Agusta) Model AW139 helicopters.

### **Background**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2012-0213-E, dated October 16, 2012, to correct an unsafe condition for certain Agusta Model AW139 helicopters. EASA advises that an incident of an incorrectly installed pilot's collective stick, pilot's cyclic stick, and co-pilot's cyclic stick was reported. This condition, if not detected and corrected, could lead to in-flight detachment of the cyclic or collective sticks and subsequent loss of control of the helicopter.

### **FAA's Determination**

These helicopters have been approved by the aviation authority of Italy and are approved for operation in the United States. Pursuant to our bilateral agreement with Italy, EASA, its technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of the same type design.

### **Related Service Information**

Agusta has issued Bollettino Tecnico (BT) No. 139-308, dated October 16, 2012 (BT 139-308). The BT describes procedures to inspect the pilot's and co-pilot's collective and cyclic sticks for the correct installation of bolts, washers, self-locking nuts, cotter pins, ring nuts, and quick-release pins. If any collective or cyclic stick is incorrectly installed, the BT requires reinstalling the affected control stick.

### **EAD Requirements**

This EAD requires, within 5 hours time-in-service (TIS):

- Inspecting the pilot collective and cyclic control sticks for the correct installation of the attachment bolts, washers, self-locking nuts, and cotter pins. If the installed hardware is not as prescribed in this EAD, before further flight, reinstalling the pilot collective or cyclic control stick.
- Inspecting the co-pilot collective and cyclic control sticks for the correct installation of the ring nuts and quick-release pins. If the installed hardware is not as prescribed in this EAD, before further flight, reinstalling the co-pilot collective or cyclic control stick.

## **Differences Between this EAD and the EASA AD**

The EASA AD allows compliance within 1 week or 5 flight-hours; this EAD requires compliance within 5 hours TIS.

## **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.

## **Adoption of the Emergency Airworthiness Directive (EAD)**

We are issuing this EAD under 49 U.S.C. Sections 106(g), 40113, and 44701 according to the authority delegated to me by the Administrator.

**2012-21-52 AGUSTA S.P.A. (TYPE CERTIFICATE CURRENTLY HELD BY AGUSTAWESTLAND S.P.A.) (AGUSTA):** Directorate Identifier 2012-SW-097-AD.

### **(a) Applicability.**

This EAD applies to Agusta Model AW139 helicopters, serial numbers (S/N) 41201 through 41310, except S/N 41290, 41291, 41292, 41302, 41304, 41305, 41306, and 41309, certificated in any category.

### **(b) Unsafe Condition.**

This EAD defines the unsafe condition as an incorrectly installed cyclic and collective control stick, detachment of the cyclic or collective control stick, and subsequent loss of control of the helicopter.

### **(c) Effective Date.**

This EAD is effective upon receipt.

### **(d) Compliance.**

You are responsible for performing each action required by this EAD within the specified compliance time unless it has already been accomplished prior to that time.

### **(e) Required Actions.**

Within 5 hours TIS:

(1) Inspect the pilot collective stick installation to determine whether the self-locking nuts, part-number (P/N) MS17825-4, are secured with cotter pins, P/N MS24665-136, as depicted in

Figure 1 to paragraph (e)(1) of this EAD. If the self-locking nuts are not secured with cotter pins, before further flight, reinstall the pilot collective stick.

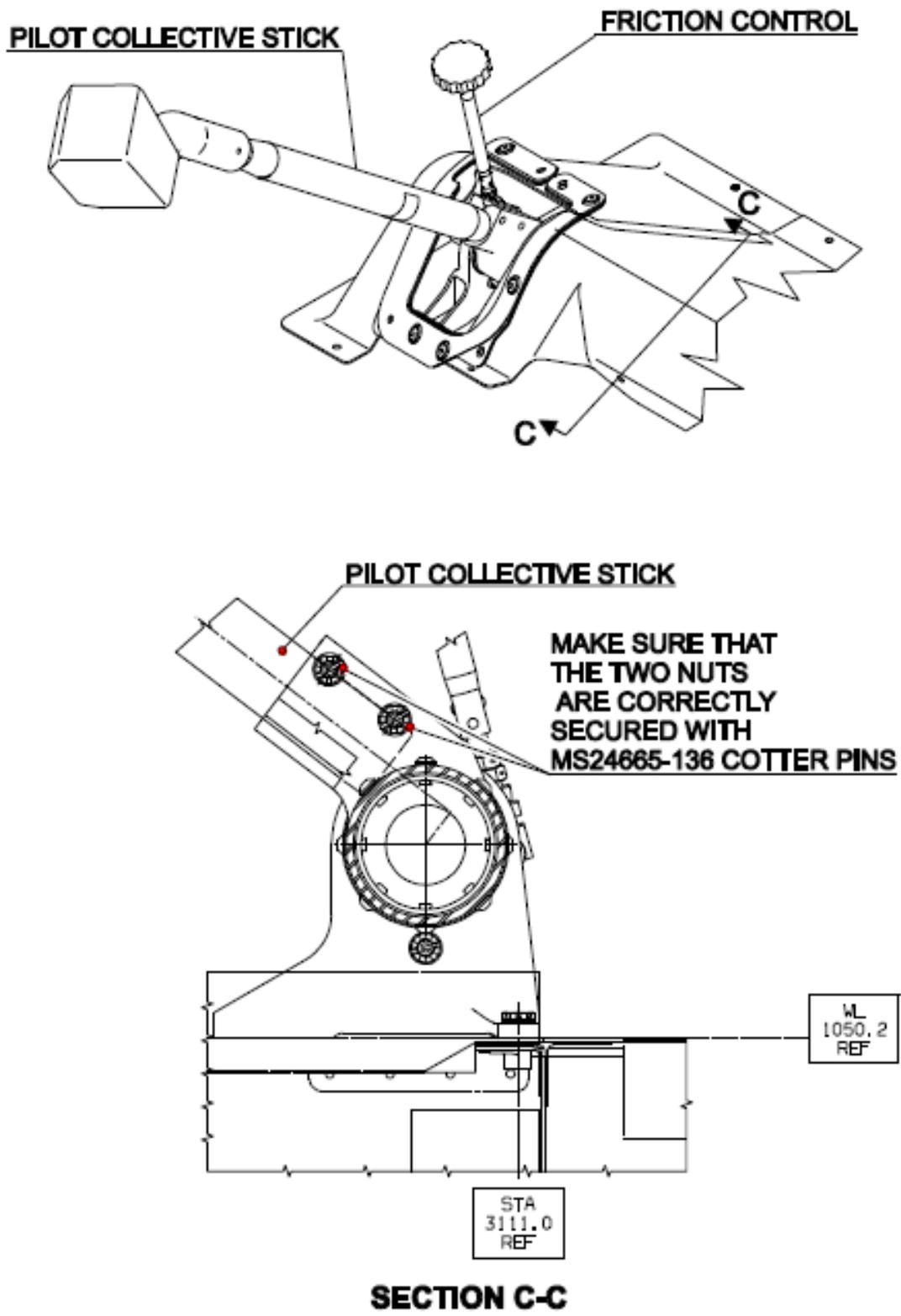


Figure 1 to paragraph (e)(1)

(2) Inspect the co-pilot collective stick installation to determine whether the ring nut (item 2) is loose and the quick-release pin (item 3) is installed as depicted in Figure 2 to paragraph (e)(2) of this EAD. If the ring nut is loose or the quick-release pin is not installed, before further flight, reinstall the co-pilot collective stick.

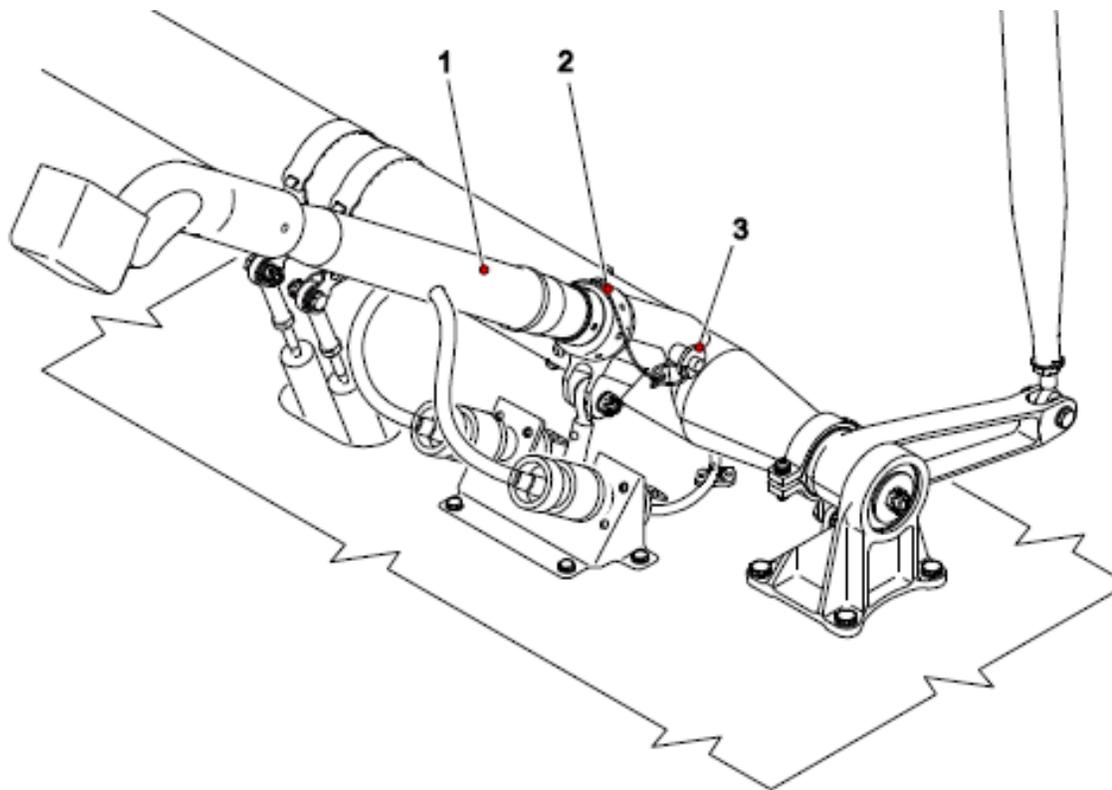


Figure 2 to paragraph (e)(2)

(3) Inspect the pilot cyclic stick installation for proper installation of the bolt (item 3), washer (item 4), self-locking nut (item 7), washer (item 6), and the cotter pin (item 8), as depicted in Figure 3 to paragraph (e)(3) of this EAD. If the pilot cyclic stick is not installed as depicted, before further flight, reinstall the pilot cyclic stick.

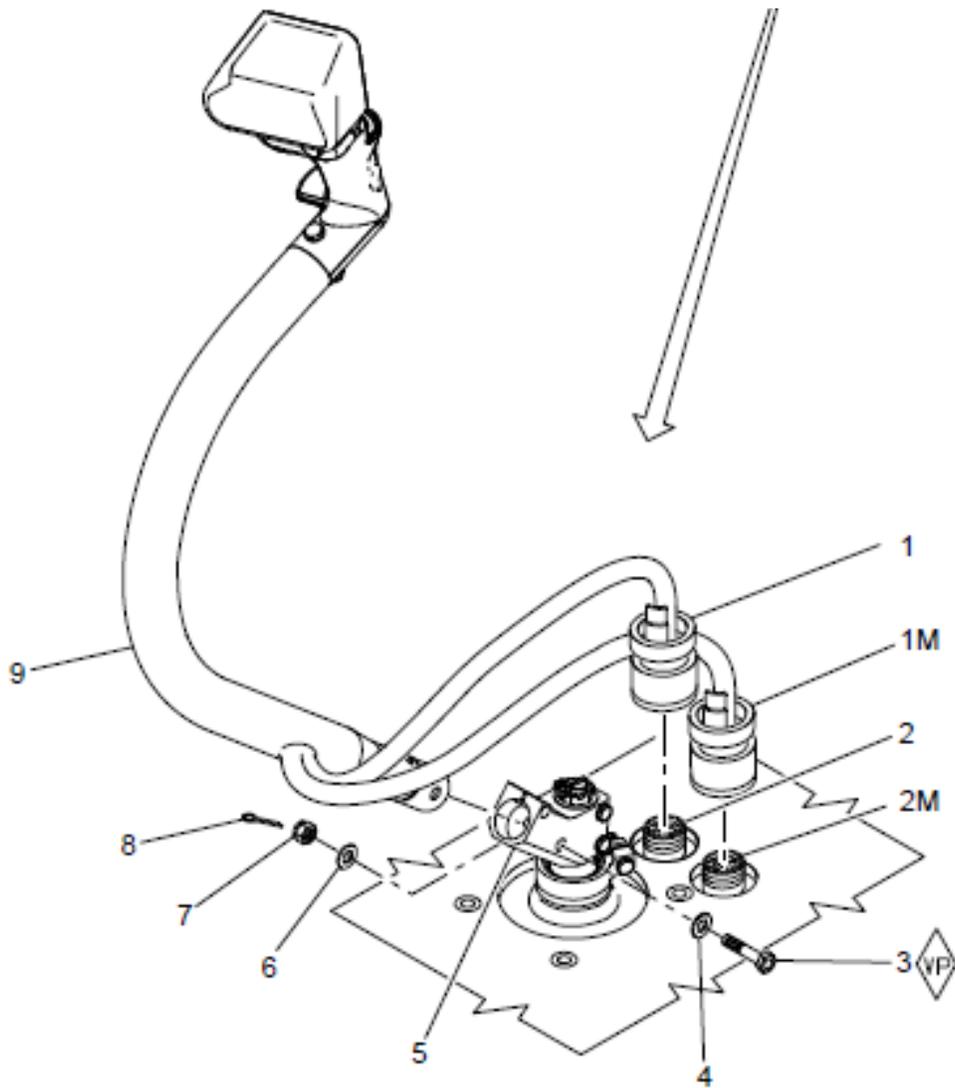


Figure 3 to paragraph (e)(3)

(4) Inspect the co-pilot cyclic stick installation to determine whether the ring nut (item 1) is loose and the quick-release pin (item 5) is installed as depicted in Figure 4 to paragraph (e)(4) of this EAD. If the ring nut is loose or the quick-release pin is not installed as depicted, before further flight, reinstall the co-pilot cyclic stick.

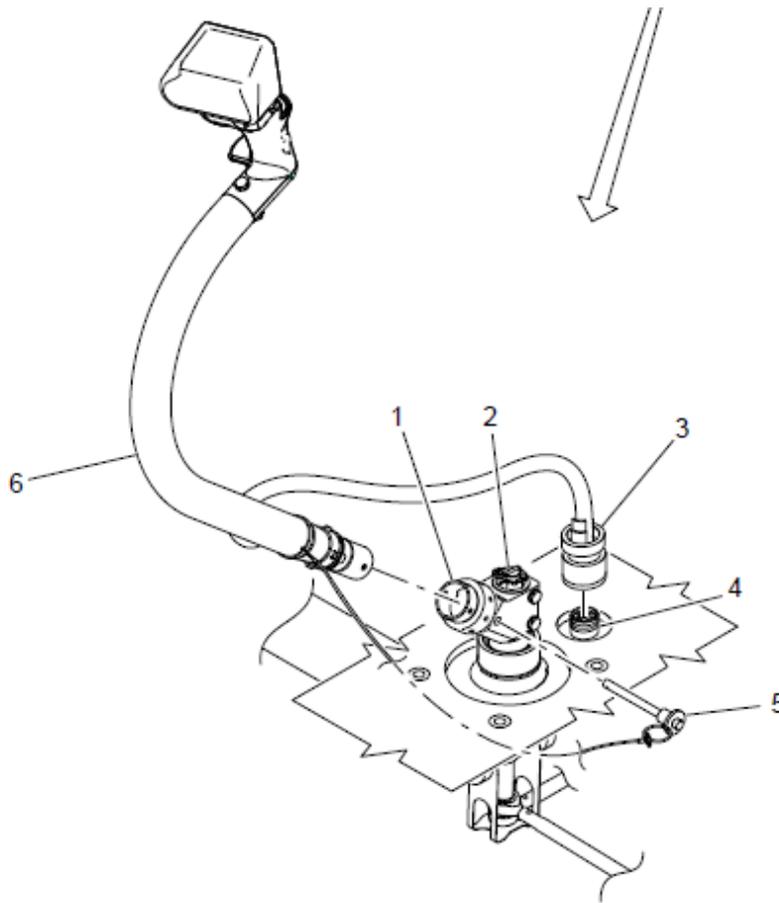


Figure 4 to paragraph (e)(4) of this EAD.

**(f) Special Flight Permit.**

Special flight permits will not be issued.

**(g) Alternative Methods of Compliance (AMOCs).**

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this EAD. Send your proposal to: Robert Grant, Aviation Safety Engineer, Safety Management Group, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone 817-222-5328; email [robert.grant@faa.gov](mailto:robert.grant@faa.gov).

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this EAD through an AMOC.

**(h) Additional Information.**

(1) For further information, contact Robert Grant, Aviation Safety Engineer, Safety Management Group, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone 817-222-5328; email [robert.grant@faa.gov](mailto:robert.grant@faa.gov).

(2) Agusta Bollettino Tecnico No. 139-308, dated October 16, 2012, which is not incorporated by reference, contains additional information about the subject of this EAD. For a copy of the service information referenced in this EAD, contact: AgustaWestland, Customer Support & Services, Via Per Tornavento 15, 21019 Somma Lombardo (VA) Italy, ATTN: Giovanni Cecchelli; telephone 39- 0331-711133; fax 39 0331 711180; or at <http://www.agustawestland.com/technical-bulletins>.

(3) The subject of this EAD is discussed in European Aviation Safety Agency AD No. 2012-0213-E, dated October 16, 2012.

**(i) Subject.**

Joint Aircraft Service Component (JASC) Code: 2700: Flight Controls.

Issued in Fort Worth, Texas, on October 23, 2012.

Kim Smith,  
Manager, Rotorcraft Directorate,  
Aircraft Certification Service.