

European Aviation Safety Agency

European Technical Standard Order

Subject: AUTOMATIC PILOTS

1 - Applicability

This ETSO gives the requirements which new models of vertical velocity instruments that are manufactured on or after the date of this ETSO must meet in order to be identified with the applicable ETSO marking.

2 - Procedures

2.1 - General

Applicable procedures are detailed in CS-ETSO Subpart A.

2.2 - Specific

None.

3 - Technical Conditions

3.1 - Basic

3.1.1 - Minimum Performance Standard

Standards set forth in the SAE Aerospace Standard (AS) document: AS 402A „Automatic Pilots“, dated February 1, 1959 as amended and supplemented by this ETSO.

(1) Exceptions

(i) Conformance with the following paragraph of SAE AS 402A is not required: 3.1, 3.1.1, 3.1.2, 3.2.

(ii) Substitute the following for section 7 of SAE AS 402A:

“Performance tests: The following tests, in addition to any others deemed necessary by the manufacturer, shall be the basis for determining compliance with the performance requirements of this standard.”

(2) Additions

In addition to the means of indication specified in paragraph 4.3 of SAE AS 402A, the following shall be included:

(i) Power malfunction indication. Means shall be provided to indicate readily to the pilot in a positive manner when each phase of the primary power (voltage and/or current) to the automatic pilot is not adequate for safe operation.

(ii) Airborne navigation reference indication. A visual means shall be provided to indicate readily to the pilot in a positive manner when the automatic pilot is not engaged to the airborne navigation reference.

3.1.2 - Environmental Standard

As indicated in SAE AS 402A.

3.1.3 – Computer Software

None

3.2 - Specific

None

4 - Marking

4.1 - General

Marking is detailed in CS-ETSO Subpart A paragraph 1.2.

4.2 - Specific

None.

5 - Availability of Referenced Document

See CS-ETSO Subpart A paragraph 3.