

U. S. Department of Homeland Security

United States Coast Guard

Certificate of Approval

Coast Guard Approval Number: 165.210/3/2

Expires: 22 December 2021

HEADING CONTROL SYSTEM FOR HIGH SPEED CRAFT

Navico Egersund AS
Nyaskaiveien 2
N-4370 Egersund NORWAY

Navico Holding AS, AP70/AP80 Heading Control System for High Speed Craft.

Navico Holding AS, AP70/AP80 heading control system for high speed craft meets the following standards as set forth in the International Convention for the Safety of Life at Sea (SOLAS) Chapter X Regulation 3.

IMO Resolution A.694(17), IMO Resolution A.822(19), IMO Resolution A.342(IX) as amended by IMO Resolution MSC.64(67) Annex 3, ISO 16329, IEC 60945, and IEC 61162 (applicable part).

Navico Holding AS, AP70/AP80 heading control system for high speed craft consists of the following equipment:

Operator Units -

AP70 (Control Unit, SW Ver: 1.3.xx) and/or AP80 (Control Unit, SW Ver: 1.3.xx)

Computers:

AC80A (With AD80 and SI80 board, SW Ver: 1.3.xx) or AC80S (With SD80 and SI80 board, SW Ver: 1.3.xx) or AC85 (With SI80 and optional boards: AC70, AD80, SD80; SW Ver: 1.3.xx) and AD80 (With AD80 board, SW Ver: 1.3.xx) and/or SD80 (With SD80 board, SW Ver: 1.3.xx)

Interface Units:

CZone (Network interface, SW Ver: 2.x), SG05 PRO (Network gateway, SW Ver: 1.3.xx), SI80 (With SI80 interface board, SW Ver: 1.3.xx)

Remote Operator Units (all optional):

QS80 (Non follow up quick stick lever, SW Ver: 1.3.xx), FU80 (Follow up lever, SW Ver: 1.3.xx), NF80 (Non follow up lever, SW Ver: 1.3.xx), R3000X (Portable remote control), JS10 (Non follow up lever), S35 (Non follow up lever), S9 (Non follow up lever)

Sensors (all optional):

RC42N (Monitor compass (not for steering), SW Ver: 1.3.xx), CD100A (Course detector), CD180 (Course detector, SW Ver: 1.1.xx), GI51 (Gyro compass interface, SW Ver: 1.2.xx), RF300 (Rudder feedback unit), RF45X (Rudder feedback unit), RF14XU (Rudder feedback unit), RF25N (Rudder feedback unit, SW Ver: 1.2.xx), RF70N (Rudder feedback unit, SW Ver: 1.2xx)

THIS IS TO CERTIFY THAT the above named manufacturer has submitted to the undersigned satisfactory evidence that the item specified herein complies with the applicable laws and regulations as outlined on the reverse side of this Certificate, and approval is hereby given. This approval shall be in effect until the expiration date hereon unless sooner canceled or suspended by proper authority.



GIVEN UNDER MY HAND THIS 22nd DAY OF DECEMBER 2016, AT WASHINGTON D.C.

T. M. HOWARD CHIEF, SYSTEMS ENGINEERING DIVISION BY DIRECTION OF THE COMMANDANT TERMS: The approval of the item described on the face of the Certificate has been based upon the submittal of satisfactory evidence that the item complies with the applicable provisions of the navigation and shipping laws and the applicable regulations in Title 33 and/or Title 46 of the Code of Federal Regulations. The approval is subject to any conditions noted on this Certificate and in the applicable laws and regulations governing the use of the item on vessels subject to Coast Guard inspection or on other vessels and boats.

Consideration will be given to an extension of this approval provided application is made 3 months prior to the expiration date of this Certificate.

The approval holder is responsible for making sure that the required inspections or tests of materials or devices covered by this approval are carried out during production as prescribed in the applicable regulations.

The approval of the item covered by this certificate is valid only so long as the item is manufactured in conformance with the details of the approved drawings, specifications, or other data referred to. No modification in the approved design, construction, or materials is to be adopted until the modification has been presented for consideration by the Commandant and confirmation received that the proposed alteration is acceptable.

NOTICE: Where a manufacturer of safety-at-sea equipment is offering for sale to the maritime industry, directly or indirectly, equipment represented to be approved, which fails to conform with either the design details or material specifications, or both, as approved by the Coast Guard, immediate action may be taken to invoke the various penalties and sanctions provided by law including prosecution under 46 U.S.C. 3318, which provides:

"A person that knowingly manufactures, sells, offers for sale, or possesses with intent to sell, any equipment subject to this part (*Part B. of Subtitle II of Title 46 U.S.C.*). and the equipment is so defective as to be insufficient to accomplish the purpose for which it is intended, shall be fined not more than \$10,000, imprisoned for not more than 5 years or both."