




## EC TYPE EXAMINATION (MODULE B) CERTIFICATE

This is to certify that:

LLOYD'S REGISTER VERIFICATION LIMITED (LRV), designated as a "notified body" under the terms of the Merchant Shipping (Marine Equipment) Regulations 2016 (S.I. 2016 No. 1025) did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the essential Navigation equipment requirements of Marine Equipment Directive (MED) 2014/90/EU and Commission Implementing Regulation (EU) 2018/773 indicating design, construction and performance requirements and testing standards for marine equipment, subject to any conditions in the Design Appraisal Document attached hereto.

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|--|--|
| <b>Manufacturer (Applicant)</b>                              | Northrop Grumman Sperry Marine BV  |
| <b>Address</b>   | 118 Burlington Road<br>New Malden<br>Surrey, KT3 4NR<br>United Kingdom (UK)  |
| <b>Reference Regulation Item (No &amp; Item designation)</b> | <b>Regulation (EU) 2018/773</b><br><b>MED/4.33 TRACK CONTROL SYSTEM (WORKING AT SHIP'S SPEED FROM MINIMUM MANOEUVRING SPEED UP TO 30 KNOTS)</b>  |
| <b>USCG Category Number</b>                                  | <b>165.112 TRACK CONTROL</b>   |
| <b>Product Type</b>  | <b>VisionMaster FT, ECDIS with TRACK CONTROL</b><br><b>Hardware component parts of the equipment above are listed in the attached design appraisal document.</b><br><b>Software version: - 11.0.0</b>                                      |
| <b>Product Description</b>                                   | Track Control System   |
| <b>Specified Standards</b>                                   | <b>IMO Resolutions:</b> A694(17), MSC191(79), MSC74(69), MSC302(87)<br>IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008)<br>IEC 61162-1 Ed5.0 (2016) and IEC61162-2 Ed1.0 (1998)<br>IEC 62065 Ed2.0 (2014-02)<br>IEC 62288 Ed. 2.0 (2014-07) |

The attached Design Appraisal Document (schedule) forms part of this certificate.  
This certificate remains valid unless cancelled or revoked, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.

|                 |               |             |  |
|-----------------|---------------|-------------|--|
| Date of issue   | 25 April 2019 | Expiry date | 24 April 2024  |
| Certificate No. | MED 1900007   | Signed      |                        |
| Sheet No        | 1 of 6        | Name        | P. Huntley-Hawkins<br>For and on behalf of Lloyd's Register Verification<br>LRV EC Distinguishing No. 0038 |

Note:

This certificate is issued under the authority of the MCA.  
This certificate is not valid for equipment; the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify the notified body named on this certificate of any modification or changes to the equipment in order to obtain a valid Certificate.

USCG-EU MRA - This product has been assigned a U.S. Coast Guard Module B number: USCG Module B number: 165.112/EC0038 to note type approval to Module B only as it pertains to obtaining U. S. Coast Guard approval as allowed by the "Corrigendum to Council Decision 2004/425/EC of 21 April 2004 on the conclusion of an Agreement between the European Community and the United States of America on the mutual recognition of certificates of conformity for marine equipment."

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### DESIGN APPRAISAL DOCUMENT

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#### ATTACHMENT TO EC TYPE EXAMINATION (MODULE B) CERTIFICATE No. MED 1900007

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions and European Union legislation for the EC Type Examination of Marine Equipment for use on Merchant Ships Registered in the European Economic Area.

This Design Appraisal Document (schedule) forms part of the Certificate.

This Certificate is renewal of the Certificate No. MED 1400005/M4

#### HARDWARE DETAILS

Schedule 1 - Type numbers of processor and display unit.

Processor - 65901AC, 65901AN, 65901AP, 65901AT, 65901AU, 65901AE(Dual) and 65901AF(Dual)

Display - 65926H, 65926L, 65926P (25.5") or 65823A, 65923C (23.1") or 65817G (19.0")

PCIO Interface Unit - 65900AA or 65900AB

Control Panel - 65903AF, 65903AG, 65903AH, 65903KF, 65903KG or 65903KH

Security Device - 32SDR003, 32SDR004, 32SDR005 or 32SDR006, 32SDT003, 32SDT004, 32SDT005 or 32SDT006

Integrated Tabletop Display - 65920BNAF, 65920BNAG, 65920BNBF or 65920BNBG, 65920BTAF, 65920BTAG, 65920BTBF or 65920BTBG

Navipilot 4000+ Control and Display Unit (CDU) - 4960 and software 020800-0000-000 Rev. k

Navipilot 4000+ Steering Control Unit (SCU) - 4961 and software 020801-0000-000 Rev. k

#### NOTES:

1. The 32SDR005 or 32SDT005 Multi-node security device allows operation of an integrated multi display ships bridge. A security string defines the product type on all the nodes for a particular vessel's bridge operating plan. The product type must be set to ECDIS, ECDIS with Radar overlay or Total Watch as appropriate.
2. The 32SDR006 or 32SDT006 Total Watch security device enables operation as a Multi-function workstation and allows the operator to switch between Chart Radar, ECDIS and conning display. This certificate only applies to Track Control when the mode is set to ECDIS for a Total Watch system.
3. This approval remains valid for Minor software amendments, as allowed by the 11.0.x numeric format, where written details of the modifications have been submitted to and accepted by the Notified Body.
4. This equipment also provides a remote interface to the ships propulsion controller and is compliant with Route Based Speed Control as defined in IEC62065 Annex B, as well as standard Manual Speed Control.

Schedule 2 - Ancillary Units

Network Serial Interface - 4802181

External serial interface - 4801162

Course mode joystick - 4303153

Analogue Interface Assembly - 1982776

Network switch - RA00009746, RA00004325 or RA00014423

Kit Format Units - 65900614, 65900615, 65900667, 65900668, 65900635 and 65900625

Secure Maritime Gateway - 67050FA



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#### ATTACHMENT TO EC TYPE EXAMINATION (MODULE B) CERTIFICATE No. MED 1900007

#### APPROVAL/EXAMINED DOCUMENTATION

|   |            |
|---|------------|
| QINETIQ/D&TS/SES/TC0703744  | 30.03.2007 |
| QINETIQ/MS/EES/TC1001181  | 26.03.2010 |
| Change Note 65901/075   | 14.03.2012 |
| Change Note 65920/027   | 30.05.2013 |
| Change Note JLR037 Issue 1  | 28.10.2016 |
| Change Note JLR039 (SC4 EEPROM) Issue 2   | 14.03.2017 |
| Change Note JLR042  | 15.06.2017 |
| Change Note JLR043  | 26.06.2017 |
| Change Note JLR045  | 02.01.2018 |
| Change Note JLR047  | 21.03.2018 |
| Change Note JLR048  | 22.05.2018 |
| VisionMaster Technical File   | 10.06.2015 |
| VMFT V7.0 Impact Assessment + Results   | 18.02.2015 |
| VMFT V8.0 Impact Assessment + Results   | 15.04.2016 |
| VMFT V9.0 Impact Assessment + Results   | 20.03.2017 |
| IA-V10-NML-008 (Impact Assessment VMFT 10.0.0)  | 18.09.2017 |
| IA-V10.0.1-NML-009, issue 3 (Impact Assessment VMFT 10.0.1)                           | 13.02.2018 |
| GA-V11-NML-002 (Gap Analysis IEC 61162-1 Ed. 4 to Ed. 5)                              | 18.10.2017 |
| IA-V11-NML-011 (Impact Assessment VMFT V11.0.0)                                       | 11.12.2018 |
| ECDIS User Guide, 65900012-13 Rev C   |            |
| VisionMaster Ships Manual 65900011V1-18 Rev A   | -          |
| VisionMaster Ships Manual 65900011V2-18 Rev A   | -          |
| DNV-GL Type Approval Certificate 20513-11HH   | 03.11.2016 |
| Hatteland Display, HD 26T22 MMD - IEC 60945 & IACS E10 Statement DOC205830-1-1-Rev. 3 | Undated    |
| DNV GL Type examination certificate (Module B) MEDB00001Z6, Revision 2                | 29.09.2017 |

#### TEST REPORTS

|   |            |
|---|------------|
| DANAK-196393                                  | 04.09.2002 |
| BO613465/1                                    | 24.12.2004 |
| DNV 2005-3112                                 | 14.03.2005 |
| EMV-05/5061-1                                 | 12.04.2005 |
| ECDIS Monitor, LCD, Test Procedure and Report | 13.04.2005 |
| DANAK-198181                                  | 23.12.2005 |
| DANAK-198236                                  | 20.01.2006 |
| JA 340-8596-4                                 | 16.03.2006 |
| JA 340-8596-2                                 | 08.05.2006 |
| JA 340-8596-1                                 | 14.07.2006 |
| MET EMC19618-EN60945                          | 28.08.2006 |
| TL1016  | 30.10.2006 |
| QINETIQ/D&TS/SS/CR0607592/1.0                 | 06.12.2006 |
| Sperry Marine Report 5000657                  | 28.06.2007 |
| BSH 46162/0040380/07                          | 12.09.2007 |
| DANAK-198899 Revision 2                       | 10.12.2007 |
| QINETIQ/EMEA/iX/CR070194/Issue 1.0            | 20.12.2007 |
| QINETIQ/EMEA/iX/CR0802757/Issue 1.1           | 19.02.2008 |
| QINETIQ/EMEA/iX/CR0709724/2                   | 06.03.2008 |



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|--|---------------|
| DNV 2008-3142  | 11.03.2008    |
| DNV 2008-3143  | 11.03.2008    |
| QinetiQ/EMEA/iX/CR0709442                                    | 11.04.2008    |
| DANAK-1910255  | 18.08.2008    |
| QINETIQ/MS/EES/TSTR0801840/1                                 | 02.09.2008    |
| DNV 2008-3464  | 18.09.2008    |
| QinetiQ/MS/EES/TC0802918                                     | 17.10.2008    |
| QinetiQ/MS/EES/TC0803242                                     | 14.11.2008    |
| QinetiQ/MS/EES/TSTR0900216/1.0                               | 29.01.2009    |
| QinetiQ/MS/EES/TSTR0900779/1.0                               | 24.02.2009    |
| QinetiQ/MS/EES/TSTR0901740/1                                 | 20.04.2009    |
| TL1316   | 29.06.2009    |
| QINETIQ/MS/EES/TC0905317                                     | 14.12.2009    |
| QINETIQ/MS/EES/TSTR0903808/3.0                               | 14.12.2009    |
| TUV 75906944 Report 01 Issue 1                               | 14.01.2010    |
| DANAK-1910681 Revision B                                     | 25.01.2010    |
| DNV 2010-3124 rev. 2   | 19.08.2010    |
| QINETIQ/TEG/TECS/TSTR1000030                                 | 24.08.2010    |
| TUV 75909781 Report 02 Issue 1                               | 22.10.2010    |
| QINETIQ/TEG/TECS/TSTR1000308                                 | 02.02.2011    |
| QINETIQ/TEG/TECS/TC1100272                                   | 03.07.2012    |
| QINETIQ/MS/WD/TSTR1201598                                    | 13.08.2010    |
| DANAK 1912564  | 02.11.2012    |
| TUV 75919870 Report 04 Issue 1                               | April 2013    |
| TUV 75921754 Report 01 Issue 1                               | April 2013    |
| TUV 75931934 Report 01 Issue 1                               | December 2015 |
| SP 4P07869   | 05.12.2014    |
| SP 4P00022-2   | 06.05.2014    |
| SP 5P05969-1   | 30.10.2015    |
| NEMKO 254678   | 12.03.2014    |
| DNV 2013-3038  | 03.04.2013    |
| TR-V10.0.1-NML-007 (Track Control with NaviPilot rev. J & K) | 12.02.2018    |
| TR-V10.0.1-NML-008 (IEC 61174 - 2015 Test Report)            | 12.02.2018    |
| TR-V10.0.1-NML-009 (IEC 62065 - 2014 Test Report)            | 12.02.2018    |
| TR-V10.0.1-NML-010 (IEC 62288 - 2014 Test Report)            | 12.02.2018    |
| TR-V10.0.1-NML-011 (MSC.302(87) Test Report)                 | 12.02.2018    |
| TR-V10.0.1-NML-012 (System Performance Test)                 | 13.02.2018    |
| SP6P03819-2  | 13.09.2016    |
| APPLICA Test and Certification, 21009, rev 0                 | 10.02.2017    |
| Hatteland Display, DOC102352-4, rev 2                        | 03.04.2017    |
| Hatteland Display, DOC102351-1, rev 2                        | 05.04.2017    |
| Hatteland Display, DOC102352-3, rev 1                        | 11.11.2016    |
| IST Test Report No. 94164                                    | 08.02.2018    |
| TR-V11-NML-014 (IEC 62065 - 2014 Test Report)                | 12.11.2018    |
| TR-V11-NML-015 (IEC 61162-1 - 2016 Test Report)              | 12.11.2018    |
| TR-V11-NML-016 (IEC 61174 - 2015 Test Report)                | 12.11.2018    |
| TR-V11-NML-017 (IEC 62288 - 2014 Test Report)                | 12.11.2018    |
| TR-V11-NML-019 (System Performance Test)                     | 12.11.2018    |
| 103230862LHD-001 (Intertek Environmental Test Report)        | 06.12.2017    |
| 103230862LHD-001 ISS 4 (Intertek EMC Test Report)            | 02.01.2018    |



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|   |            |
|---|------------|
| 416.095.1 (kmf_suv_magicnetgwr)         | 17.06.2016 |
| 416.095.2 (kmf_klima_magicnetgwr)       | 11.05.2016 |
| 416.095.3 (emc_nomatronics_magicnetgwr) | 18.05.2016 |
| 962 (CSD_MagicNet)                      | 08.03.2017 |

#### CONDITIONS OF CERTIFICATION

1. Production items of the subject equipment are to be manufactured in accordance with either an approved Production Quality Assurance system (Module D), a Product-Quality assurance system (Module E) or a Product Verification Process (Module F). The wheelmark cannot be affixed to the product until a conformity assessment module is in place
2. This product has been assigned a **U.S. Coast Guard Module B number USCG Approval Category 165.112/EC0038** to note type approval to Module B only as it pertains to obtaining U. S. Coast Guard approval as allowed by the "Corrigendum to Council Decision 2004/425/EC of 21 April 2004 on the conclusion of an Agreement between the European Community and the United States of America on the mutual recognition of certificates of conformity for marine equipment"

In those instances where the Notified Body conducting the conformity assessment in accordance with either Module D, E or F of the Marine Equipment Directive is not Lloyd's Register Verification Ltd., such Notified Body would use the above U.S. Coast Guard Module B number to provide the manufacturer with the U.S. Coast Guard approval number by noting it on the Certificate of Conformity, thereby authorizing the manufacturer to mark the product accordingly

Note: For products placed on board U.S. flagged ships there is no declaration of conformity required to meet U.S. Coast Guard requirements

3. Each item, batch or lot of the equipment is to be issued with a "Declaration of Conformity" and have the "Mark of Conformity" affixed after a conformity assessment module is in place

#### SOFTWARE VERSIONS

11.0.0

#### STANDARDS NOT APPLICABLE

The following MED specified standards do not apply to this product:

IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)  
IEC 61162-460 ed1.0 (2015-08)



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**PLACE OF PRODUCTION**

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