



中国船级社
CHINA CLASSIFICATION SOCIETY

证书编号/Certificate No.
GB20PTA00001_01

型式认可证书
CERTIFICATE OF TYPE APPROVAL

兹证明本证书所述制造厂具备按照下列标准的要求生产本证书所列产品的能力和条件。

This is to certify that the manufacturer stated in the certificate meets the requirements of the standards listed below and is available with the ability and conditions to produce the products described in the certificate.

制造厂/Manufacturer

Thrane & Thrane A/S

地址/Address

Lundtoftegaardsvej 93D, 2800 Kgs. Lyngby Denmark

产品名称/Product

救生艇筏手提式双向VHF无线电话
Survival craft portable two-way VHF radiotelephone
双向甚高频无线电话设备
Two-way VHF Radiotelephone Apparatus

认可标准/Approval Standard

1. IMO A. 694 (17) 《作为全球海上遇险和安全系统 (GMDSS) 组成部分的船载无线电设备和电子导航设备一般要求》
IMO A.694(17)"General Requirements for Shipborne Radio Equipment Forming Part of the Global Maritime Distress and Safety System(GMDSS) and for Electronic Navigational Aids"
2. IMO A. 809 (19) 《救生艇筏双向VHF无线电话装置的性能标准》
IMO A.809(19)"PERFORMANCE STANDARDS FOR SURVIVAL CRAFT TWO-WAY VHF RADIOTELEPHONE APPARATUS"
3. IMO MSC. 149 (77) 《通过经修订的救生艇筏便携式双向无线电话设备的性能标准》
IMO MSC.149(77)"ADOPTION OF THE REVISED PERFORMANCE STANDARDS FOR SURVIVAL CRAFT PORTABLE TWO-WAY VHF RADIOTELEPHONE APPARATUS"
4. IEC 60945 (2002) 《海上导航和无线电通信设备及系统---一般要求---测试方法和要求的测试结果》
IEC60945(2002)"Maritime navigation and radio communication equipment and systems -- General requirements -- Methods of testing and required test results"

用于/Intended for

船舶与海上设施/Ships and Offshore Installations

产品明细/Product Description

双向甚高频无线电话设备/Two-way VHF Radiotelephone Apparatus (M0001)

名称/Name	属性(值)/Value	单位/Unit
型号/Type	Sailor SP3520	
发射频率/Tx Frequency	155.000 - 161.450	MHz

证书有效期至/This Certificate is valid until 2024年02月19日/ Feb. 19,2024

发证机构 中国船级社哥德堡办事处 签发日期 2020年02月19日
Issued by CCS Gothenburg Office Date Feb. 19,2020

本证书根据中国船级社规范和相关规定签发。所有证书页为一个整体，必须同时使用。纸质证书每页均须由本社盖章方为有效，电子证书含数字签名方为有效，本证书复印件无效。任何单位和个人均不应摘录或节选本证书的部分内容。有关方对所持证书的真实性有疑问时，可以向本社检验机构咨询。This Certificate is issued pursuant to the Rules of the Society and related regulation. All pages of the certificate are taken as a whole and are used simultaneously. No paper certificate page is valid without bearing the stamp of the Society, no electronic certificates is valid without the digital signature, and no copied form of the certificate is regarded as valid. Any part of the certificate is not to be extracted or abridged by any unit or individual in any form. Related parties who are doubted about the authenticity of the certificate may inquire of the Society or its offices.



Form No: T01.

联系方式/Contact Us, 见本社官方网站/See official web site of the Society (<http://www.ccs.org.cn>)

UTN:P020-55194805

接收频率/Rx Frequency	155.000 - 163.425	MHz
输出功率/Output Power	(Hi/Lo) 2 W/1 W	

批准的图纸/Approved Drawings

图纸批准号/ Drawings Approval No. : GB16A00001

产品认可试验报告/ Approval Test Report

试验报告编号/ Test Report No. : DANAK-19K0457
 试验报告日期/ Test Report Date : 2007-06-15
 试验单位/ Laboratory: DELTA
 试验单位地址/ Test Address: Denmark

试验报告编号/ Test Report No. : DANAK-19K0469
 试验报告日期/ Test Report Date : 2007-09-09
 试验单位/ Laboratory: DELTA
 试验单位地址/ Test Address: Denmark

试验报告编号/ Test Report No. : 99788220
 试验报告日期/ Test Report Date : 2007-04-09
 试验单位/ Laboratory: Telefication
 试验单位地址/ Test Address: Netherland

试验报告编号/ Test Report No. : 99788230
 试验报告日期/ Test Report Date : 2007-04-08
 试验单位/ Laboratory: Telefication
 试验单位地址/ Test Address: Netherland

试验报告编号/ Test Report No. : 99788231
 试验报告日期/ Test Report Date : 2007-05-13
 试验单位/ Laboratory: Telefication
 试验单位地址/ Test Address: Netherland

试验报告编号/ Test Report No. : E11128.00 EN 60945 Environmental
 试验报告日期/ Test Report Date : 2011-08-14
 试验单位/ Laboratory: Nemko AS
 试验单位地址/ Test Address: Norway

试验报告编号/ Test Report No. : 180514 EN 60945 EMC
 试验报告日期/ Test Report Date : 2012-04-08
 试验单位/ Laboratory: Nemko AS
 试验单位地址/ Test Address: Norway

认可后的产品检验方式/ Method of Product Inspection after Approval

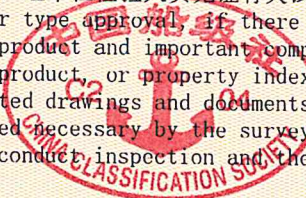
按规范认可后应进行产品检验的产品/The product should be inspected in term of the rules:
 认可后的产品检验应由本社验船师根据本社规范规定按批准的产品检验计划进行检验, 经检验合格后由本社颁发船用产品证书。

After approval, product inspection should be carried out by the Surveyor of the Society in accordance with the approved product inspection scheme, and the Marine Product Certificate will be issued by the Society upon satisfactory inspection.

认可保持条件/ Maintenance Requirements of Approval

1. 型式认可后, 如果产品及其重要零部件的设计、所用材料或制造方法有所改变, 且影响到产品的主要特性、特征; 或产品的性能指标有所更改, 且超过认可的范围, 则有关图纸和文件应经检验机构审批。并在检验机构认为必要时, 经本社检验人员见证有关试验和进行检查, 其结果应能证实仍符合认可条件。

After type approval, if there are changes to the design, materials used or manufacturing method of the product and important components and such changes affect major characteristics and properties of the product, or property indexes of the product are changed and exceed the scope of approval, related drawings and documents are to be examined and approved by the concerned survey office. Where deemed necessary by the survey office, the surveyor to the Society will go to witness relevant tests and conduct inspection and the results should be able to demonstrate compliance with the approval



conditions.

2. 工厂的质量管理体系应保持有效运行, 并且与认可时一致。如果质量管理体系发生改变, 应经原体系认证机构审核并报本社批准。

The quality management system of the factory shall be ensure effective operation, and shall be the same as the situation of approval. If there are any changes to the quality management system, auditing of the original certification organization for quality management system and the society's approval shall be obtained.

3. 认可证书有效期内, 如果出现可能导致本社取消认可的情况, 工厂应及时采取有效的纠正措施。

Within the validity of the approval certificate, if cases occur that may cause the Society to withdraw the approval, the manufacturer should take corrective actions in a prompt and effective manner.

4. 在认可证书有效期内, 本社检验人员可在未经事先通知的情况下对工厂的产品制造过程进行审核, 以验证产品的生产是否符合业经本社批准的图纸和文件。工厂应予以配合。

Within the validity of the approval certificate, the surveyor to the Society may pay unannounced audit to the manufacturing process of the product in order to confirm whether it is in compliance with the drawings and documents approved by the Society. The factory should provide an active cooperation and necessary for the surveyor.

5. 型式认可A证书获得者应接受本社每年一次的定期审核, 定期审核日为认可证书期满之日对应的每一周年日, 检查工作应在周年日的前后三个月内进行。

Those who have obtained the certificate of type approval A should be subject to periodical audit every year. The date of periodical audit shall be each anniversary date which corresponds to the date of expiry of the relevant certificate and the periodical audit shall be done within a time span of three months before and after the annual surveillance date.

备注/Remarks

本社已审核了产品厂无石棉声明, 但本社的审核不免除产品厂按照合同关系向订货方保证产品无石棉的责任。

The declaration of asbestos-free submitted by manufacturer has been reviewed by the Society. However, liability of the manufacturer to guarantee the products are asbestos-free to purchaser under contract will not be exempted.

本证书由原型式认可证书 (No. GB16Q00003_01) 换新并替代原证书。

This certificate is renewed from and supersedes the previous Type Approval Certificate No. GB16Q00003_01.

Software Version: 2.00.xxx

The following units may be optional:

Primary battery is Lithium Iron Disulfide 3000mAh

Rechargeable Lithium-ion Battery 1800 mAh (Secondary battery)

Battery Charger and AC/DC Converter

Sailor 3590 Hand Microphone

Sailor 3595 Hand Microphone ATEX

Class of Emission is 16K0G3E

中国船级社哥德堡办事处

CCS Gothenburg Office





中国船级社
CHINA CLASSIFICATION SOCIETY

证书编号/Certificate No.
GB20PTA00001_02

型式认可证书
CERTIFICATE OF TYPE APPROVAL

兹证明本证书所述制造厂具备按照下列标准的要求生产本证书所列产品的能力和条件。

This is to certify that the manufacturer stated in the certificate meets the requirements of the standards listed below and is available with the ability and conditions to produce the products described in the certificate.

制造厂/Manufacturer

Thrane & Thrane A/S

地址/Address

Lundtoftegaardsvej 93D, 2800 Kgs. Lyngby Denmark

产品名称/Product

双向甚高频无线电话(non-GMDSS)
TWO-WAY VHF RADIOTELEPHONE(non-GMDSS)
双向甚高频无线电话设备
Two-way VHF Radiotelephone Apparatus

认可标准/Approval Standard

- EN 60950-1:2001 《信息技术设备的安全——第1部分:通用要求》
EN 60950-1:2001 "Information Technology Equipment - Safety - Part 1: General Requirements"
- EN 301178-2 V.1.1.1 (2000-08) 《电磁兼容性和无线电频谱管理 (ERM) - 在VHF波段运行的船舶移动通信业务便携式甚高频(VHF)无线电话设备(仅用于非GMDSS)-第2部分》
EN 301178-2 V.1.1.1 (2000-08) "Electromagnetic compatibility and Radio spectrum Matters - Portable Very High Frequency (VHF) radiotelephone equipment for the maritime mobile service operating in the VHF bands (for non-GMDSS applications only) -Part 2"
- EN 300698-3 V.1.1.1 (2001-05) 《电磁兼容性和射频频谱管理(ERM)-内河道用在VHF频带上运作的海上移动业务用无线电话发射机和接收机-第3部分》
EN 300698-3 V.1.1.1 (2001-05) "Electromagnetic compatibility and Radio Spectrum Matters - Radio telephone transmitters and receivers for the maritime mobile service operating in the VHF bands used on inland waterways - Part 3"
- IEC 60945 (2002) 《海上导航和无线电通信设备及系统——一般要求——测试方法和要求的测试结果》
IEC60945(2002) "Maritime navigation and radio communication equipment and systems -- General requirements -- Methods of testing and required test results"

用于/Intended for

船舶与海上设施/Ships and Offshore Installations

产品明细/Product Description

双向甚高频无线电话设备/Two-way VHF Radiotelephone Apparatus (M0001)

名称/Name	属性(值)/Value	单位/Unit
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证书有效期至/This Certificate is valid until 2024年02月19日/ Feb. 19,2024

发证机构 中国船级社哥德堡办事处 签发日期 2020年02月19日
Issued by CCS Gothenburg Office Date Feb. 19,2020

本证书根据中国船级社规范和相关规定签发。所有证书页为一个整体，必须同时使用。纸质证书每页均须由本社盖章方为有效，电子证书含数字签名方为有效，本证书复印件无效。任何单位和个人均不应摘录或节选本证书的部分内容。有关方对所持证书的真实性有疑问时，可以向本社检验机构咨询。This Certificate is issued pursuant to the Rules of the Society and related regulation. All pages of the certificate are taken as a whole and are used simultaneously. No paper certificate page is valid without bearing the stamp of the Society, no electronic certificates is valid without the digital signature, and no copied form of the certificate is regarded as valid. Any part of the certificate is not to be extracted or abridged by any unit or individual in any form. Related parties who are doubted about the authenticity of the certificate may inquire of the Society or its offices.



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UTN:P020-47508941

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型号/Type	Sailor SP3510, SP3515	
发射频率/Tx Frequency	155.000 - 161.450	MHz
接收频率/Rx Frequency	155.000 - 163.425	MHz
输出功率/Output Power	(Hi/Lo) 5 W/1 W	

批准的图纸/Approved Drawings

图纸批准号/ Drawings Approval No. : GB16A00001

产品认可试验报告/ Approval Test Report

试验报告编号/ Test Report No. : 99788830, 99788831

试验报告日期/ Test Report Date : 2007-03-11

试验单位/ Laboratory: Telefication

试验单位地址/ Test Address: Netherland

试验报告编号/ Test Report No. : 99822220, 99822231

试验报告日期/ Test Report Date : 2007-04-08

试验单位/ Laboratory: Telefication

试验单位地址/ Test Address: Netherland

试验报告编号/ Test Report No. : 99822250

试验报告日期/ Test Report Date : 2007-04-26

试验单位/ Laboratory: Telefication

试验单位地址/ Test Address: Netherland

试验报告编号/ Test Report No. : 99822232

试验报告日期/ Test Report Date : 2007-06-10

试验单位/ Laboratory: Telefication

试验单位地址/ Test Address: Netherland

认可后的产品检验方式/ Method of Product Inspection after Approval

按规范认可后应进行产品检验的产品/The product should be inspected in term of the rules:

认可后的产品检验应由本社验船师根据本社规范规定按批准的产品检验计划进行检验, 经检验合格后由本社颁发船用产品证书。

After approval, product inspection should be carried out by the Surveyor of the Society in accordance with the approved product inspection scheme, and the Marine Product Certificate will be issued by the Society upon satisfactory inspection.

认可保持条件/ Maintenance Requirements of Approval

1. 型式认可后, 如果产品及其重要零部件的设计、所用材料或制造方法有所改变, 且影响到产品的主要特性、特征; 或产品的性能指标有所更改, 且超过认可的范围, 则有关图纸和文件应经检验机构审批。并在检验机构认为必要时, 经本社检验人员见证有关试验和进行检查, 其结果应能证实仍符合认可条件。

After type approval, if there are changes to the design, materials used or manufacturing method of the product and important components and such changes affect major characteristics and properties of the product, or property indexes of the product are changed and exceed the scope of approval, related drawings and documents are to be examined and approved by the concerned survey office. Where deemed necessary by the survey office, the surveyor to the Society will go to witness relevant tests and conduct inspection and the results should be able to demonstrate compliance with the approval conditions.

2. 工厂的质量管理体系应保持有效运行, 并且与认可时一致。如果质量管理体系发生改变, 应经原体系认证机构审核并报本社批准。

The quality management system of the factory shall be ensure effective operation, and shall be the same as the situation of approval. If there are any changes to the quality management system, auditing of the original certification organization for quality management system and the society's approval shall be obtained.

3. 认可证书有效期内, 如果出现可能导致本社取消认可的情况, 工厂应及时采取有效的纠正措施。

Within the validity of the approval certificate, if cases occur that may cause the Society to withdraw the approval, the manufacturer should take corrective actions in a prompt and effective manner.

4. 在认可证书有效期内, 本社检验人员可在未经事先通知的情况下对工厂的产品制造过程进行审核, 以验证产品的生产是否符合业经本社批准的图纸和文件。工厂应予以配合。

Within the validity of the approval certificate, the surveyor to the Society may pay unannounced audit to the manufacturing process of the product in order to confirm whether it is in compliance with the drawings and documents approved by the Society. The factory should provide an active cooperation and necessary for the surveyor.

5. 型式认可A证书获得者应接受本社每年一次的定期审核，定期审核日为认可证书期满之日对应的每一周年日，检查工作应在周年日的前后三个月内进行。

Those who have obtained the certificate of type approval A should be subject to periodical audit every year. The date of periodical audit shall be each anniversary date which corresponds to the date of expiry of the relevant certificate and the periodical audit shall be done within a time span of three months before and after the annual surveillance date.

备注/Remarks

本社已审核了产品厂无石棉声明，但本社的审核不免除产品厂按照合同关系向订货方保证产品无石棉的责任。
The declaration of asbestos-free submitted by manufacturer has been reviewed by the Society.

However, liability of the manufacturer to guarantee the products are asbestos-free to purchaser under contract will not be exempted.

本证书由原型式认可证书 (No. GB16Q00003_02) 换新并替代原证书。

This certificate is renewed from and supersedes the previous Type Approval Certificate No. GB16Q00003_02.

1, Sailor SP3510 channel separation: 25kHz;

Sailor SP3515 channel separation: 25kHz, 12.5kHz

2, The following units may be optional:

Sailor 3590 Hand Microphone

Sailor 3595 Hand Microphone ATEX

3. : Battery is Lithium-Ion 1800 mAh with rechargeable

Class of Emission is (25kHz)16K0G3E; (12.5kHz)8K50G3E

中国船级社哥德堡办事处
CCS Gothenburg Office

