



中国船级社
CHINA CLASSIFICATION SOCIETY

证书格式号/Form: T01.01-
GZ000085

型式认可证书
CERTIFICATE OF TYPE APPROVAL

证书编号/Certificate No. LD11T00008

兹证明本证书所述制造厂生产的下列产品能够满足下面列明认可标准的要求。

This is to certify that the following products produced by the manufacturer stated in the certificate can meet the requirements of the approval standards listed below.

认可产品/ Product Approved

船载航行数据记录仪

SHIPBORNE VOYAGE DATA RECORDER

制造厂/ Manufacturer

KELVIN HUGHES LTD

KELVIN HUGHES LTD

NEW NORTH ROAD, HAINAULT, ILFORD, ESSEX, IG6 2UR
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认可标准/ Approval Standard

- 1.IMO A.861(20)决议 《船载航行数据记录仪(VDR)性能标准》
IMO Resolution A.861(20),Performance Standards for Shipborne Voyage Data Recorder
- 2.IMO Resolution A.694(17)
IMO Resolution A.694(17)
- 3.IEC 60945(2002)
IEC 60945(2002)
- 4.1974 SOLAS 公约第5章第20条
Regulation 20,Chapter V,1974 International Convention for SOLAS

证书有效期至/ This Certificate is valid until 2015年7月8日 / Jul. 8, 2015

发证机构 中国船级社伦敦办事处
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本证书根据中国船级社《钢质海船入级规范》及有关程序规定签发。关于证书的有关规定见本证书背面的说明。当本证书包括多页纸张时，则所有证书页为一个整体，必须同时使用。每一页证书均须由本社盖章方为有效。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。本认可证书不代表本社对个体产品质量的检验。有关各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 for Classification of Sea-going Steel Ships and related procedures of the Society. Refer to the back of the certificate for detailed requirements of the certificate. When the certificate consists of more than one page, all pages of the certificate are taken as a whole and are used simultaneously. No certificate page is valid without bearing the stamp of the Society 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. This approval certificate does not constitute the inspection of the Society about the quality of the unit/batch product. Related parties who are doubted about the authenticity of the certificate may inquire of the Society or its offices.



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LD83425084

Nº 11878372

产品明细/ Product Description

船载航行数据记录仪/Shipborne Voyage Data Recorder
系统组成/The system consists of
型号/Model

: See Below
: Manta Digital VDR

船载航行数据记录仪/Shipborne Voyage Data Recorder
系统组成/The system consists of
型号/Model

: See Below
: Manta Digital VDR

批准的图纸和设计计算书/ Approved Drawings and Design Calculations

图纸批准号/ Drawings Approval No. : LD11T00008

产品认可试验报告/ Approval Test Report

试验报告编号/Test Report No. : QinetiQ/D-TS/SS/CR0605238/1.1
试验报告日期/Test Report Date : 2006-12-06
试验单位/ Laboratory : QinetiQ
试验单位地址/ Test Address : Ively Road, Farnborough, Hampshire, UK, GU14 0LX

试验报告编号/Test Report No. : QinetiQ/S-E/SPS/MATS/R/TT 23/03
试验报告日期/Test Report Date : 2004-09-06
试验单位/ Laboratory : MATS, QinetiQ Fraser Portsmouth
试验单位地址/ Test Address : Fort Cumberland Road, Portsmouth, Hants, UK, PO4 9LJ

试验报告编号/Test Report No. : DERA/TAN-05/01-RPT1-1.0, RPT2-1.0
试验报告日期/Test Report Date : 2002-02-07
试验单位/ Laboratory : MATS, QinetiQ Fraser Portsmouth
试验单位地址/ Test Address : Fort Cumberland Road, Portsmouth, Hants, UK, PO4 9LJ

试验报告编号/Test Report No. : TS1000-0904
试验报告日期/Test Report Date : 2007-06-28
试验单位/ Laboratory : KELVIN HUGHES
试验单位地址/ Test Address : NEW NORTH ROAD, HAINAULT, ILFORD, ESSEX, IG6 2UR

产品适用范围/ Application of the Product

Marine applications.

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.

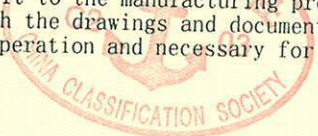
2. 工厂的专业质量管理体系应保持有效运行, 并且与认可时一致。如果质量管理体系发生改变, 应经原体系认证机构审核并报本社批准。

The professional 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.



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

按照规范每批抽样检验的产品/The product inspected by sampling 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每批抽样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产品证书。

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

对于原材料和零部件的检验要求/ Inspection Requirements for Materials and Components

产品如下原材料和零部件应由本社认可的制造厂生产/The following materials and components of the product should be manufactured by the factory approved by the Society: Nil.

产品如下原材料和零部件应经本社检验, 持有本社产品证书/The following materials and components of the product should be inspected and certificated by the Society: Nil.

产品如下原材料和零部件的制造厂清单, 经本社批准方可变更/The list of manufacturer for the following materials and components of the product should not be changed without the Society's approval: Nil.

责任声明/Statement of Responsibility

本社的认可不影响、替代与本社授权或检验无关的各方对上述工厂的认可和发证, 并且不对与本社授权或检验无关的

各方负责, 不承担其未经应允而承认、接受本社认可所导致的法律和经济责任。

The approval of the Society does not affect and replace any approval and certification of the manufacturer by any parties that bear no relation with this Society's authorization or survey and therefore takes no responsibility for these parties. The Society does not undertake any legal and economic liabilities arising from accepting this Society's certificate without prior permission from this Society.

其他/Others

本证书由原LD07T00008证书换证。

This CCS TAC (Type Approval Certificate) replaces the previous one in LD07T00008.

1. The system consists of :

Main units:

- (1) Data Acquisition Unit (DAU), MDP-A3 or MDP-A3-ABAA+24VDC input
- (2) Bridge Microphones VDR-A6 and External Microphone VDR-A7
- (3) A Crash Survivable Module (CSM), VDR-A15 or VDR-A18
- (4) Ancillary Battery Enclosure MDP-A10

and Optional Units:

- (1) Remote Status and Alarm Module (SAM), VDR-A9
- (2) Data Interface Unit (DIU), VDR-A4
- (3) Switch Interface Unit (SIU), VDR-A4-1
- (4) Real-Time Display (RTD)
- (5) "White Box" (removable hard disk), MDP-A315 and associated Playback kit for use with a third party PC, MDP-A269.

2. Following documents were reviewed and approved during this Renewal of CCS TAC:

- (1) VDR Specification IBS00390 Issue 3.
- (2) Operator's Manual: Operation Information for Manta Digital Voyage Data Recorder KH2064 Issue 1.
- (3) Ship's Manual: Installation and Commissioning for Manta Digital Voyage Data Recorder KH2065 Issue 1.
- (4) Drawings:
 - * MDP-A3 VDR Processor Dimension Drawing IBS80260 Issue G.
 - * MDP-A315 ASSY OF 2.5 REMOVABLE HDD WITH SPARE HDD Issue 1.
 - * VDR-A4 DIU Dimension Drawing IBS80141 Issue K.
 - * VDR-A6 Internal Microphone Dimension Drawing IBS80181 Issue D.
 - * VDR-A7 External Microphone Dimension Drawing IBS80211 Issue E.
 - * VDR-A9 SAM Dimension Drawing IBS80182 Issue D.
 - * VDR-A18 CSM Dimension Drawing IBS80091 Issue B.

3. This system has also fully complied with all the applicable requirements set out by the following standards:

- (1) 海安会MSC. 214(81)对VDRs性能标准IMO A. 861(20)和S-VDRs性能标准MSC. 163(78)的修正。
MSC. 214(81): Adoption of Amendments to the Performance Standards for Shipborne Voyage Recorders (VDRs) (Res. IMO A. 861(20) and Performance Standards for Shipborne Simplified Voyage Recorders (S-VDRs) (Res. MSC. 163(78)))
- (2) IEC61996-1: 2007 《海上导航和无线电通信设备及系统--船载航行数据记录仪 (VDR)》-第1部分
IEC61996-1:2007 Maritime Navigation and Radiocommunication Equipment and Systems--Shipborne



Voyage Data Recorder(VDR)-Part 1.

(3) IMO SN/Circ/246 调查机关从航行数据记录仪 (VDRs) 和简易航行数据记录仪 (S-VDRs) 提取存储数据的推荐方法

IMO SN/Circ/246: Recommended Means for Extracting Stored Data from Voyage Data Recorders(VDRs) and Simplified Voyage Data Recorders(S-VDRs) for Investigation Authorities.

4. Individual unit certification is required by this Society.

中国船级社伦敦办事处

CCS London Office



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