

中國驗船中心

CHINA CORPORATION REGISTER OF SHIPPING



CR Annual Report 2013



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CR

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CR Annual Report 2013 www.crclass.org.tw

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中國驗船中心 品質政策

增進船舶及海上人命安全，防止船舶對海洋造成污染

China Corporation Register of Shipping



財團法人中國驗船中心
China Corporation Register of Shipping

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CR

CR 簡介

鑒於船舶檢驗與航行安全息息相關，世界各航運大國均設立本國驗船機構以執行船舶之嚴格檢驗。我航運業、保險業及造船業各界有識之士，為求航業蓬勃發展，幾經磋商籌劃，始於民國40年2月15日在台北市成立「社團法人中國驗船協會」，英文名稱為China Corporation Register of Shipping，簡稱CR。復於民國67年7月1日接受民間捐助，改組並更名為「財團法人中國驗船中心」。

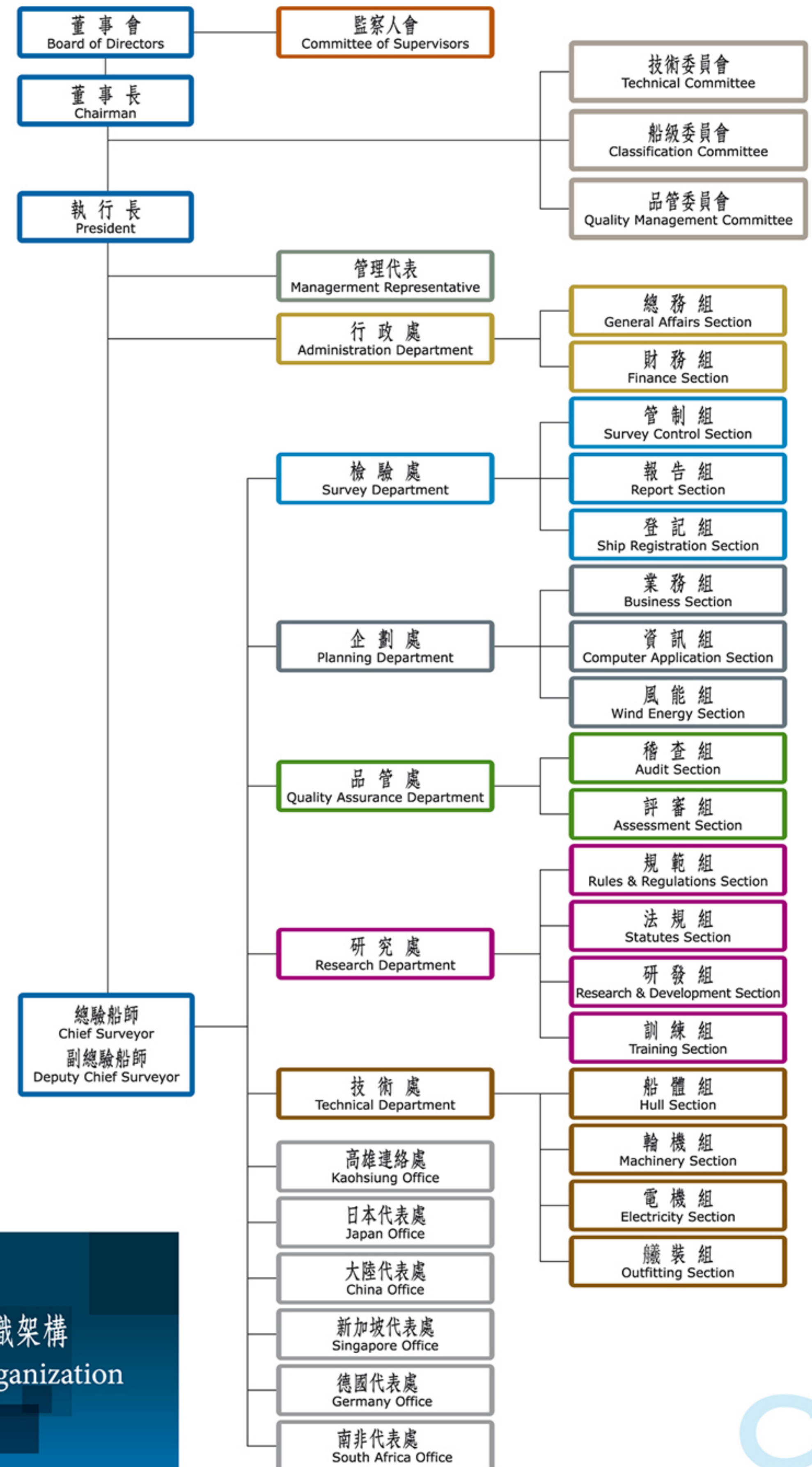
本中心為一民間純技術性，不以營利為目的之服務事業機構，其目標為提供優良之技術、高度之效率與熱忱之服務。組織型態(如下表)及工作內涵，一如世界各大驗船機構，其服務工作據點遍及世界各重要港口，為船東、造船廠及機材製造廠商提供最便捷之服務。



Brief Introduction of CR

As survey of ships and safety of navigation are closely related, countries throughout the world engaged in shipping activities have their own classification societies in order to conduct ship surveys in a strict manner. A good number of people of insight from the shipping industry, insurance industry, and shipbuilding industry in Taiwan share the same views on the importance of establishing this country's own classification society for the prosperity of its shipping industry. After repeated negotiations and adequate preparation, "China Corporation Register of Shipping", also known as CR, was founded on February 15, 1951, in Taipei City. On July 1, 1978, it was restructured after receiving financial contributions from non-governmental sources and hence changed its Chinese name.

CR is a non-governmental and nonprofit organization rendering technical services. The purpose of its work is to provide excellent techniques, high efficiency and cordial services. Its structure (see the following Organization Chart) and scope of work are similar to those of the other leading classification societies in the world, and it has a worldwide network of branch offices in important foreign ports, rendering quick services to shipowners, shipyards, and manufacturers of materials and equipment.



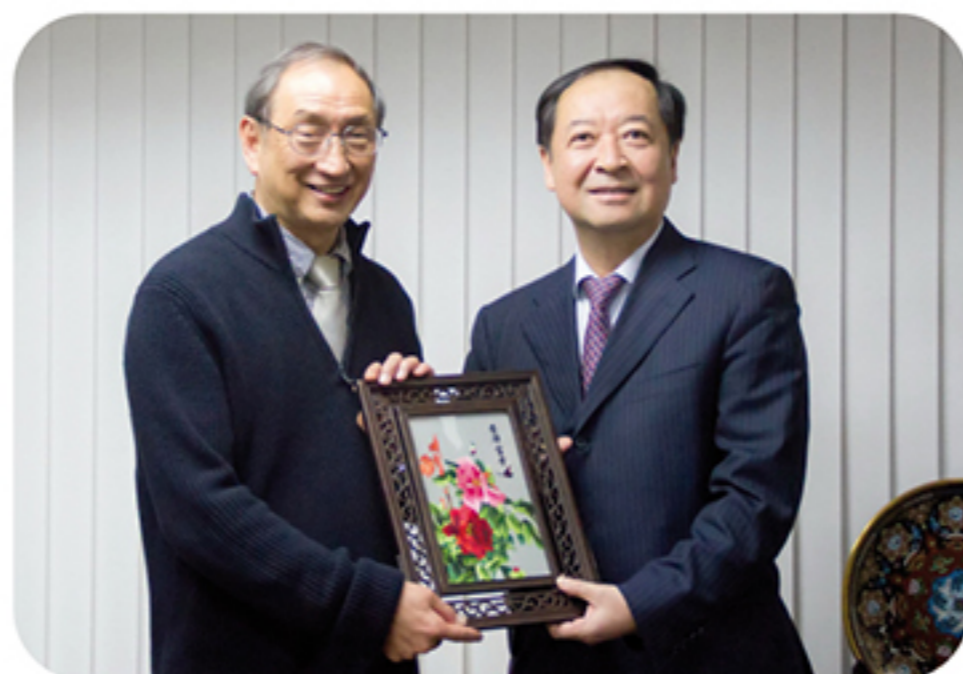
組織架構 Organization

董事長感言



中國驗船中心自西元1951年成立至今，始終堅守增進海上人命安全與防止海洋環境污染之使命，並提供最優良之技術、最高度之效率與最熱忱之服務。回顧近幾年，世界經濟的不明朗因素，為航運業、造船業及船級協會帶來極大的挑戰，而2013年，全球經濟正步入溫和復甦增長的新階段，在經濟改善的帶動下，航運相關產業亦有望遵循相同的增長趨勢。

回顧2013年，CR重大業務發展如下：一、分別順利完成交通部及國家通訊傳播委員會與本中心簽訂授權合約後之文件稽查與實地督導考核。二、因應2013年8月20日海事勞工公約之生效，執行船舶之MLC檢查與發證，包含ROC籍88艘、巴拿馬籍58艘及吉里巴斯籍1艘。三、根據巴拿馬海事局發佈MMC-267通告，獲得巴拿馬海事局授權簽發船級證書，自2013年6月1日起，巴拿馬籍500總噸以上船舶皆需備有認可船級協會簽發之船級證書。四、出版「鋼船建造與入級規範2013」、「貨物裝卸設備構造與檢驗規範2013」、「貨櫃建造與發證規範2013」、「高速船建造與入級規範2008」之修訂版(編號2)、「鋁合金船建造與入級規範2013」修訂版(編號1)，並於2014年1月1日開始生效。五、風能組積極了解國內外市場與動態，並持續儲備風能技術能力，2013年分別與DNV以及GL(後續合併為DNV-GL Group)簽署合作備忘錄與人員訓練合約，並完成風力機認證、風場資源量測、離岸支撐結構設計評估等訓練課程。六、配合2013年小兩會之兩岸互設驗船機構議題，多次與大陸海事局以及中國船級社溝通與交流，並已達成良好共識。



新的一年是充滿希望與契機的一年，CR將持續招募優秀人才與培訓技術人員，並積極參加國際會議與國內外研討會，以提升人員水平，期能符合客戶的期待與需求，並面對未來所有挑戰。感謝交通部之指導與航運界之支持，CR將繼續盡最大之努力，提供最高品質之服務，竭盡所能，全力以赴。

中國驗船中心
董事長 趙國樑

趙國樑



Chairman's Speech

China Corporation Register of Shipping was founded in 1951. We always contribute to promote the safety of life at sea and prevent the pollutions to the marine environment. Moreover, we provide our clients with excellent techniques, high efficiency, and cordially warm services. Looking back on recent years, because of uncertainty on global economy, shipping industries, shipbuilding industries, and classification society all face a great challenge. In 2013, global economy is moving forward in reviving and progressive steps. With the improvement on economy, shipping industries is expected to grow following the same trend.

Looking back on 2013, the major developments on business activities are stated as follows:

1. We have respectively passed the document and statutory auditing after signing authorization contract with MOTC and NCC.
2. In response to the effectiveness on MLC on August 20, 2013, we have conducted MLC inspection and issued certificates to 88 vessels of ROC flag, 58 vessels of Panama flag, and 1 vessel of Kiribati flag.
3. According to the announcement MMC-267 issued by Panama Maritime Authority, we are authorized to issue classification certificate by PMA. From June 1, 2013, panama-flag vessels over 500 tons are required to have classification certificate issued by recognized classification society.
4. We have published "Rules for the Construction and Classification of Steel Ships 2013," "Rules For the Construction and Survey of Cargo Gears 2013," "Rules For the Construction and Certification of Freight Containers 2013," "Rules for the Construction and Classification of Aluminum Vessels 2013" Amendment No.1, and "Rules for the Construction and Classification of High-Speed Craft 2008" Amendment No.2, all of which will be effective from January 1, 2014.
5. Wind energy section attended to understanding the trend of wind energy business both in domestic and international markets. Besides, we signed the training contracts and MOU with DNV and GL (hereafter merged to DNV-GL Group) in 2013 and kept learning the technical knowledge and gaining ability for wind energy surveillance. Till now we finished the training topics including type certification of wind turbine, measurement of wind source and the parts of design concept and assessment of support structure for offshore wind turbine.
6. In response to the issue of establishment of classification society in both sides, which is discussed in the meeting between Taiwan Cross-Strait Shipping Association and Cross-Strait Shipping Exchange Association, we have exchanged opinions and reached consensus with Maritime Safety Administration of the People's Republic of China and China Classification Society.

2014 is a new year with hope and opportunities. We will be working diligently on the cultivation and training of our surveyors in addition to continuous recruitment of excellent people. In order to enhance the level of our personnel, we will also participate in international meetings and seminars as many as we can. We hope to meet our clients' anticipation and demand. And we will definitely overcome all challenges in the future. We would like to express sincere appreciation to guidance of MOTC and support of shipping industries. CR will devote every effort to providing excellent techniques, high efficiency and cordial services.

K. L. Chao, Chairman
China Corporation Register of Shipping



CR

董事會

董事會係本中心最高管理階層，共有董事23人，監察人3人，第12屆董事會任期自2012年5月18日起至2015年5月17日止，為期三年，董事長由董事會遴選之。第12屆董事會之董事及監察人如下：

(註: 本中心第12屆董事會已於2012年3月30日全面改選，董事長及監察人會主席則訂於2012年5月18日改選)

Board of Directors

The Board of Directors, which has a total of 23 directors and 3 supervisors, is the highest decision-making body of CR. Their term of service is 3 years starting May 18, 2012. The Chairman elected from among the directors is Mr. Kuo-Liang Chao, and Mr. Richer Chen took over the post of Chairman of the Board of Supervisors. The list of the elected directors and supervisors is given below:

(P.S. The 12th Board of Directors has been re-organized on March 30, 2012. The Chairman and the Chairman of supervisors will be elected on May 18, 2012.)

董事 Director	現任職務 Position
趙國樑 Chao, Kuo-Liang	中國驗船中心董事長 Chairman, China Corporation Register of Shipping
藍俊德 Lan, Jiun-Der	四維航運股份有限公司董事長 Chairman, Shih Wei Navigation Co., Ltd.
祁文中 Chi, Wei-Jong	交通部航港局局長 Director-General of Maritime and Port Bureau, Ministry of Transportation and Communications R.O.C.
陳天賜 Chen, Tian-Ci	交通部航政司司長 Director of Department of Navigation and Aviation, Ministry of Transportation and Communications R.O.C.
李雅榮 Lee, Ya-Jung	考試院考試委員兼台大教授 Member of the Examination Yuan, R.O.C.
黃肇嘉 Huang, Chao-Chia	行政院海岸巡防署參事 Counselor, Coast Guard Administration, R.O.C.
王文潮 Wilfred Wang	台塑海運股份有限公司董事長 Chairman, Formosa Plastics Marine Corporation
盧峯海 Frank F. H. Lu	陽明海運股份有限公司董事長 Chairman, Yang Ming Marine Transport Corporation
張義源 Chang, I-Yuan	台灣航業股份有限公司董事長 Chairman, Taiwan Navigation Co., Ltd.
林信得 Lin, Shinn-Der	交通部運輸研究所副所長 Deputy Director-General of Institute of Transportation, Ministry of Transportation and Communications R.O.C.
謝志堅 Hsieh, Chih-Chien	長榮集團副總裁 Second Vice Group Chairman, Evergreen Group
周慕豪 Jou, Muh-Haur	中國航運股份有限公司副董事長 Vice Chairman, Chinese Maritime Transport Ltd.
陳柏廷 Chen, Po-Ting	萬海航運股份有限公司董事長 Chairman, Wan Hai Lines Ltd.
王書吉 Ong, C. K.	裕民航運股份有限公司總經理 General Manager, U-Ming Marine Transport Corporation
張瑞宗 Chang, Ray-Chung	台灣中油股份有限公司副總經理 Vice President, CPC Corporation, Taiwan
黃健強 Edward Huang	台灣水泥股份有限公司資深副總經理兼達和航運公司董事 Senior Vice President, Taiwan Cement Corporation
賴杉桂 Robert Lai	台灣國際造船股份有限公司董事長 Chairman, CSBC Corporation, Taiwan
蕭捷明 Jimmy C. Hsiao	明台輪船股份有限公司總經理 General Manager, MingTai Navigation Co., Ltd.
宋道平 Charles Sung	台灣產物保險股份有限公司總經理 General Manager, Taiwan Fire & Marine Insurance Co., Ltd.
劉英如 Liu, Ying-Ru	中國驗船中心執行長 President, China Corporation Register of Shipping
郭義隆 Guo, I-Lung	藍海海運及松光航業董事長 Chairman, OceanLance Maritime Co., Ltd. and Biggin Shipping Corporation
許志堅 Hsu, Chih-Chien	益利航運股份有限公司董事長 Chairman, Eddie Steamship Co., Ltd.
陳財旺 Richer Chen	富邦產物保險股份有限公司副總經理 Vice President, Fubon Insurance Co., Ltd.
監察人 Supervisor	現任職務 Position
程正平 Paul Cheng	能源航運股份有限公司董事長 Chairman, Energy Shipping Co., Ltd.
陳瑞 Ray Chen	兆豐產物保險股份有限公司總經理 General Manager, Chung Kuo Insurance Co., Ltd.
辜炳珍 Ku, Pin-Jan	交通部統計長 Director of Department of Statistics, Ministry of Transportation and Communications, R.O.C.

船級委員會 Classification Committee

(任期自2012年5月18日起至2015年5月17日止，為期三年)

職別	姓名 Name	現任職務 Position
主任委員 Chairman	盧峯海 Frank F. H. Lu	陽明海運股份有限公司董事長 Chairman, Yang Ming Marine Transport Corporation
副主任委員 Vice-Chairman	陳籐 T. Chen	式邦船務代理有限公司船舶管理處董事長特助 Special Assistant to Chairman of Ship Management Dept., Trans Vantage Shipping Agency Ltd.
委員 Member	任樹傑 S. J. Ren	中鋼運通股份有限公司副總經理 Vice President, China Steel Express Corporation
委員 Member	姚坤泰 Quentin Yao	環能海運公司董事長 Chairman, Global Energy Maritime Co., Ltd.
委員 Member	潘凌雲 Michael L. Y. Pan	遠森網路科技公司執行副總經理 Executive Vice President, Eastern Media International Corporation
委員 Member	張豐州 F. J. Chang	新興航運股份有限公司總經理 General Manager, Sincere Navigation Corporation
委員 Member	胡海國 H. K. Hwu	天文海船務代理公司董事長/台灣海難救護股份公司副董事長
委員 Member	黃崇榮 Tsung-Yung Huang	長榮海運股份有限公司造船部副總經理 Acting Executive Vice President of Shipbuilding Department, Evergreen Marine Corporation
委員 Member	何尤彥 You-Yen Ho	四維航業股份有限公司協理 Assistant Vice President, Shih Wei Navigation Co., Ltd.
委員 Member	高雅平 Y. P. Kao	裕民航運股份有限公司副總經理 Vice President, U-Ming Marine Transport Corporation
委員 Member	黃宏志 H. C. Huang	台灣國際造船股份有限公司總稽核 General Auditor, CSBC Corporation, Taiwan
委員 Member	藍俊昇 Chun-Sheng Lan	慧洋海運股份有限公司董事長 Chairman, Wisdom Marine Lines S.A.
委員 Member	范國萬 K. W. Fan	台塑海運股份有限公司副總經理 Vice President, Formosa Plastics Marine Corporation
委員 Member	林炳圻 Lin, Jeong-Shin	萬海航運股份有限公司資深協理 Senior Assistant Vice President, Wan Hai Lines Ltd.
委員 Member	林家淦 C. K. Lin	明台輪船股份有限公司副總經理 Vice President, MingTai Navigation Co., Ltd.



職別	姓名 Name	現任職務 Position
主任委員 Chairman	張達禮 T. L. Chang	財團法人船舶暨海洋產業研發中心高級顧問 Senior Consultant, Ship and Ocean Industries R&D Center
副主任委員 Vice-Chairman	王偉輝 W. H. Wang	國立臺灣海洋大學教授 Professor, National Taiwan Ocean University
委員 Member	劉詩宗 Liou, Shy-Tzong	台灣港務股份有限公司副總經理 Administration Vice President, Taiwan International Ports Co., Ltd.
委員 Member	韓碧祥 P. H. Han	中信造船股份有限公司董事長 Chairman, Jong Shyn Shipbuilding Co., Ltd.
委員 Member	洪錦榮 C. J. Hung	協同造船廠股份有限公司董事長 Chairman, Hsieh Tung Shipbuilding Co., Ltd.
委員 Member	曾國正 Kuo-Cheng, Tseng	台灣國際造船股份有限公司助理副總經理 Assistant Vice President, CSBC Corporation, Taiwan
委員 Member	郭真祥 Kouh, Jen-Shiang	國立臺灣大學教授 Professor, National Taiwan University
委員 Member	林鴻志 Lin, Hong-Jyh	財團法人船舶暨海洋產業研發中心產業發展委員 Senior Specialist, Ship and Ocean Industries R&D Center
委員 Member	黃正清 C. C. Huang	國立成功大學教授 Professor, National Cheng Kung University
委員 Member	桑滿林 Man-Lin Sang	中塑海運公司執行副總經理 Executive Vice President, Simosa Shipping Co., Ltd.
委員 Member	陳嘉 Charles Chen	陽明海運股份有限公司協理 Assistant Vice President, Yang Ming Marine Transport Corporation
委員 Member	黃守真 Sheldon Huang	龍德造船工業股份有限公司董事長 Chairman, Lung Teh Shipbuilding Co., Ltd.
委員 Member	鄧運連 Y. L. Teng	中國驗船中心技術委員會委員 Member of Technical Committee, China Corporation Register of Shipping
委員 Member	林哲宏 J. H. Lin	台灣中油股份有限公司儲運處組長 Team Leader, Storage and Transportation Division, CPC Corporation, Taiwan
委員 Member	鄭添元 T. Y. Cheng	中國鋼鐵股份有限公司冶金規範及試驗組組長 Manager of Metallurgical Specification and Testing Section, China Steel Corporation



CR



品管委員會 Quality Management Committee (任期自2012年5月18日起至2015年5月17日止，為期三年)

職別	姓名 Name	現任職務 Position
主任委員 Chairman	許洪烈 H. L. Hsu	中華民國輪船商業同業公會全國聯合會秘書長 Secretary General, National Association of Chinese Shipowners
副主任委員 Vice-Chairman	曹志毅 Chih-I Tsao	中華民國品質學會理事 Director, Chinese Society for Quality
委員 Member	黃文哲 W. C. Huang	陽明海運股份有限公司資深協理 Senior Vice President, Yang Ming Marine Transport Corporation
委員 Member	張中雋 C. C. Chang	長榮海運股份有限公司協理 Senior Vice President, Evergreen Marine Co., Ltd.
委員 Member	陳木川 M. C. Chen	四維航業股份有限公司副總經理 Vice President, Shih Wei Navigation Co., Ltd.
委員 Member	蔣銘 M. Chiang	宏銘企業管理顧問有限公司董事長 Chairman, Chiang Marine Services Ltd.
委員 Member	陳朝宗 C. C. Chen	中國航運股份有限公司副總經理 Vice President, Chinese Maritime Transport Ltd.
委員 Member	陳志宏 Chih-Hong Chen	台灣航業公司船務部經理 General Manager of Marine Department, Taiwan Navigation Co., Ltd.
委員 Member	歐陽定 D. Ou Yang	新健海運股份有限公司船務部駐埠總船長 Chief Port Captain of Marine Dept, Hsin Chien Marine Co., Ltd.
委員 Member	匡乃彰 Eric Kuang	台灣中油公司工程品質組經理 Manager of Quality Engineering Department, CPC Corporation, Taiwan
委員 Member	陳火財 H. T. Chen	安生理算檢定公司總經理 President, Overseas adjusters and Surveyors Co., Ltd.
委員 Member	步壽椿 S. C. Pu	旭航船舶管理顧問有限公司董事長 Chairman, SWS Shipmanagement and Maritime Consultant Co., Ltd.

CR

據點擴展

為擴展海外據點，加強對船東之服務，CR於2009年9月11日在新加坡正式成立代表處，2010年6月4日在南非正式成立代表處，由楊沛光擔任駐南非代表；並於2010年9月23日於德國成立代表處。CR總部及各代表處的連絡方式如下：

Network Expansion

In order to expand our overseas network and render better services to shipowners, CR officially established the Singapore Office on September 11, 2009; the South Africa Office on June 4, 2010, represented by Mr. P. K. Yang and the Germany Office on September 23, 2010. CR Head Office and other offices can be reached in the following ways:



台北總部 Head Office

104 台北市中山區南京東路3段103號8樓
8th Fl., No.103, Sec. 3, Nanking E. Rd., Jhongshan Dist., Taipei, 104, Taiwan R.O.C.
Tel: +886-2-2506-2711 Fax: +886-2-2507-4722
E-mail: cr.tp@crclass.org.tw

高雄連絡處 Kaohsiung Office

802 高雄市苓雅區海邊路31號26樓之3
26th Fl.-3, No. 31, Haibian Rd., Lingya Dist., Kaohsiung, 802, Taiwan R.O.C.
Tel: +886-7-330-5617 Fax: +886-7-330-6295
E-mail: cr.kh@crclass.org.tw

日本代表處 Japan Office

〒650-0031 日本神戸市中央區東町116-1シティライ
フ三宮ビル9階
9F., No. 116-1, Higashimachi, Chuo-ku, Kobe 〒650-0031, Japan
Tel: +81-78-333-8515 Fax: +81-78-333-8506
E-mail: crskobe@silver.ocn.ne.jp

大陸代表處 China Office

廣州市經濟技術開發區青年路東園二街明珠廣場1603室
Rm. 1603, Pearl Garden Square, Qingnian Rd., Guangzhou Economic & Technological Development Dist., Guang Dong Province, China.
Tel / Fax: +86-20-3207-0330
Mobile: +86-134-162-52949
E-mail: cr.cn@crclass.org.tw

新加坡代表處 Singapore Office

2B, Hong San Walk, #17-06, Singapore 689048
Tel: +65-6310-1034 Fax: +65-6893-5997
E-mail: cr.sg@crclass.org.tw

德國代表處 Germany Office

Querstrasse 49, 21502 Geesthacht Germany
Tel: +49-4152-887945 / +49-4065-915676
E-mail: cr.de@crclass.org.tw

南非代表處 South Africa Office

P.O. Box 298, Plumstead 7801, Cape Town, South Africa 23,
Manson Close, Bergvliet Cape Town, South Africa
Tel: +27-21-7125382 Fax: +27-862736840
Mobile: +27-82-8813690
E-mail: frank7yang@hotmail.com

建造中入級 Classification of Ships During Construction

2013年建造中入級CR的船舶共計有68艘，分列如下：

There were a total of 68 ships classed by CR during construction in 2013 as listed below:

船東 Owner	造船廠 Shipyard	建造地點 Place	船型 Ship type	艘數 Number
泰富輪船國際股份有限公司	龍德 LUNG TEH	台灣 TAIWAN	28.5M鋁合金客船 28.5 Aluminum Passenger Ship	3
連江縣政府 LIENCHIANG COUNTY	龍德 LUNG TEH	台灣 TAIWAN	40M鋁合金客船 40M Aluminum Passenger Ship	1
眾益輪船	龍德 LUNG TEH	台灣 TAIWAN	28.5M鋁合金客船 28.5 Aluminum Passenger Ship	1
澎湖縣政府 PENGHU CONUTY	龍德 LUNG TEH	台灣 TAIWAN	48M鋁合金客船 48M Aluminum Passenger Ship	1
海洋巡防總局 COAST GUARD ADMINISTRATION	慶富 CHING FU	台灣 TAIWAN	100噸級巡防救難艇 100-ton Class Patrol Vessel	28
SITC	台船 CSBC	台灣 TAIWAN	1,800 TEU貨櫃船 1,800 TEU Container Carrier	4
基隆港務局 KEELUNG HARBOR BUREAU	展華造船	台灣 TAIWAN	12M工作船 12M Work Ship	1
基隆港務局 KEELUNG HARBOR BUREAU	展華造船	台灣 TAIWAN	14M巡邏艇 14M Patrol Boat	1
海洋巡防總局 COAST GUARD ADMINISTRATION	亞曼企業	台灣 TAIWAN	FRP多功能艇 FRP Multifunctional Boat	2
中油 CPC CORPORATION, TAIWAN	靖海造船	台灣 TAIWAN	640HP工作船 640HP Work Ship	1
四維航業 SHIH WEI NAVIGATION CO.	新昇發造船 SHIN SHENG FA	台灣 TAIWAN	FRP客船 FRP Passenger Ship	2
中聖海運 SIMOSA SHIPPING CO., LTD	福岡 FUKUOKA	日本 JAPAN	4,990 DWT溼青船	1
式邦 TRANS VANTAGE SHIPPING AGENCY LTD.	旭洋 KYOKUYO	日本 JAPAN	1,103 TEU貨櫃船 1,103 TEU Container Carrier	2
四維航業 SHIH WEI NAVIGATION CO.	四國 SHIKOKU	日本 JAPAN	37,000 DWT散裝船 37,000 DWT bulk carrier	2
四維航業 SHIH WEI NAVIGATION CO.	佐伯重工 SAIKI HEAVY	日本 JAPAN	37,000 DWT散裝船 37,000 DWT bulk carrier	1
四維航業 SHIH WEI NAVIGATION CO.	函館 HAKODATE	日本 JAPAN	31,600 DWT散裝船 31,600 DWT bulk carrier	3
中鋼運通股份有限公司 CHINA STEEL EXPRESS CORPORATION	UNIVERSAL	日本 JAPAN	209,000 DWT散裝船 209,000 DWT bulk carrier	2
中鋼運通股份有限公司 CHINA STEEL EXPRESS CORPORATION	JMU	日本 JAPAN	209,000 DWT散裝船 209,000 DWT bulk carrier	2
中鋼運通股份有限公司 CHINA STEEL EXPRESS CORPORATION	檜垣 Higaki	日本 JAPAN	12,000 DWT貨船 12,000 DWT Cargo Vessel	2
台塑海運 FORMOSA PLASTICS MARINE CORP.	JMU	日本 JAPAN	209,000 DWT散裝船 209,000 DWT bulk carrier	2
裕民 U-MING MARINE TRANSPORT CORP.	大島 OSHIMA	日本 JAPAN	83,000 DWT散裝船 83,000 DWT bulk carrier	4
協榮 GLORY NAVIGATION CO., LTD.	新來島 SHIN KURUSHIMA	日本 JAPAN	8,500 DWT貨船 8,500 DWT Cargo Vessel	2

現成船入級 Classification of Existing Ships

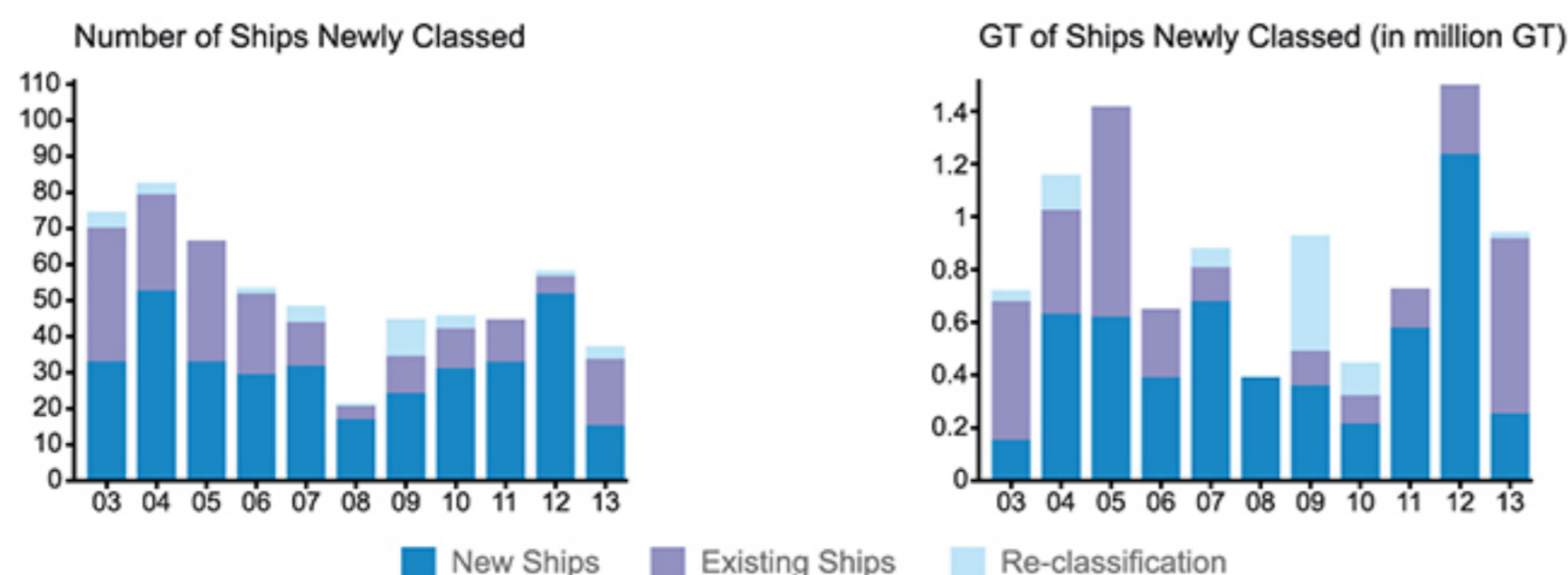
2013年現成船入級CR的船舶共計有17艘，分列如下：

There were a total of 17 existing ships classed by CR in 2013 as listed below:

船名 Ship name	船東 Owner	船旗 Flag	總噸位 GT	船型 Ship type
綠島之星 GREEN ISLAND STAR	龍鴻航業股份有限公司 LONG HUNG SHIPPING CO., LTD.	中華民國 R.O.C.	2476	客船 Passenger ship
亞利 ASIA EXPLORER	SEA EXPLORER MARINE CORP.	巴拿馬 Panamanian	25891	散裝船 Bulk carrier
臺塑晶華 FORMOSA GAS CRYSTAL	台塑海運股份有限公司 FORMOSA PLASTICS MARINE CORP.	中華民國 R.O.C.	15175	液化石油氣船 LPG. carrier
麗娜輪 NATCHAN RERA	東聯航運股份有限公司 UNI-WAGON MARINE CO., LTD.	中華民國 R.O.C.	10712	滾裝客船 Ro-Ro Passenger ship
長青 EVER LIVEN	長榮海運股份有限公司 EVERGREEN MARINE CORP. LTD.	中華民國 R.O.C.	98882	貨櫃船 Container carrier
長理 EVER LOGIC	長榮海運股份有限公司 EVERGREEN MARINE CORP. LTD.	中華民國 R.O.C.	98882	貨櫃船 Container carrier
環利 PANAMAX UNIVERSE	益利航運股份有限公司 PANAMAX UNIVERSE MARINE CORP. LTD.	巴拿馬 Panamanian	43501	散裝船 Bulk carrier
新華8號 SHIN HWA NO.8	鴻福航運股份有限公司 HONG FU SHIPPING CO., LTD.	中華民國 R.O.C.	1355	油輪 Oil carrier
聖輝輪 UNISON LEADER	友聖航運股份有限公司 UNISON MARINE CORPORATION	中華民國 R.O.C.	20947	散裝船 Bulk carrier
依依 YI YI	建洋船船股份有限公司 CHIEN YANG SHIPPING CO., LTD.	中華民國 R.O.C.	4754	乾貨船 Dry Cargo Ship
運明 YM UPSURGENCE	陽明海運股份有限公司 YANG MING MARINE TRANSPORT CORP.	中華民國 R.O.C.	90532	貨櫃船 Container carrier
營明 YM UNICORN	陽明海運股份有限公司 YANG MING MARINE TRANSPORT CORP.	中華民國 R.O.C.	90532	貨櫃船 Container carrier
滿天星2號 ALL STAR NO.2	滿天星航運股份有限公司 ALL STAR SHIPPING INDUSTRY CO., LTD.	中華民國 R.O.C.	489	客船 Passenger ship
中工1號 BES-1	中華工程股份有限公司 BES ENGINEERING CORPORATION	中華民國 R.O.C.	7212	駁船 Barge
中工3號 BES-3	中華工程股份有限公司 BES ENGINEERING CORPORATION	中華民國 R.O.C.	4465	駁船 Barge
石川7號 SHIH CHUAN 7	石川工程企業股份有限公司 SHIH CHUAN CONSTRUCTION CO., LTD.	中華民國 R.O.C.	4523	駁船 Barge
太武 TAI WU	金門縣公共車船管理處 BUS & FERRY MANAGEMENT OFFICE, KIMEN OFFICE	中華民國 R.O.C.	198	渡輪 Ferry

新入級船舶 Newly Classed Ships

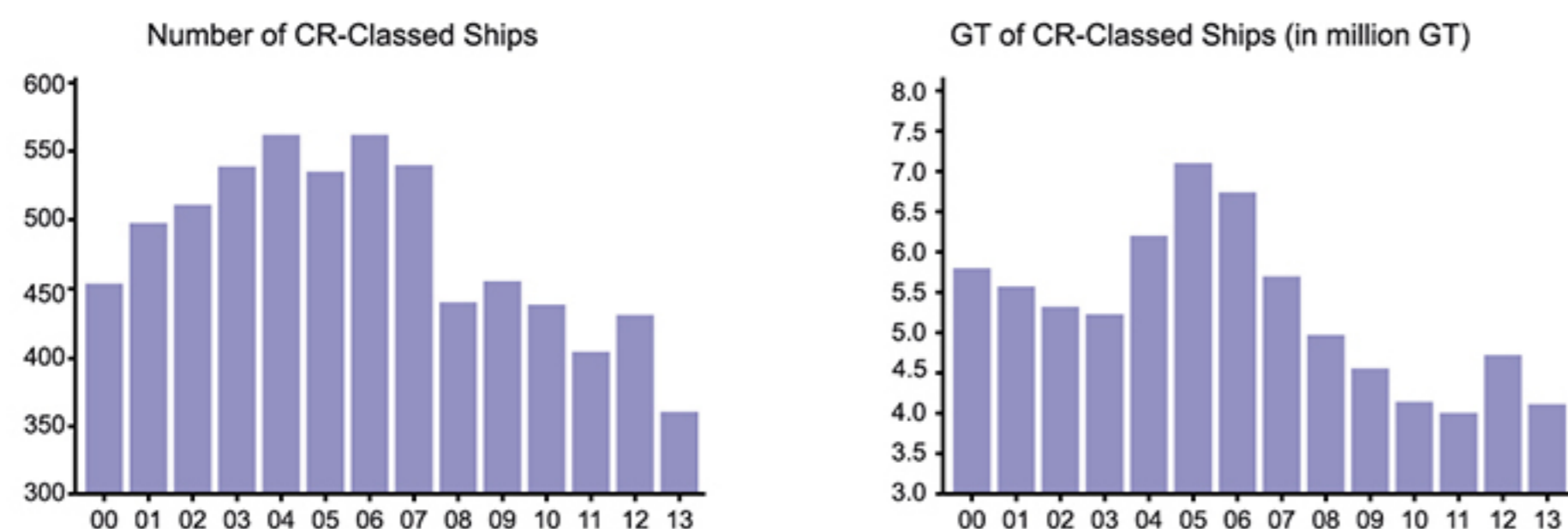
2013年經審核後正式入級的船舶有36艘共計914,848總噸，艘數為在級船舶的8.6%，其中新船入級14艘，現成船入級20艘，重新入級2艘。
After careful review, a total of 36 ships with 914,848 gross tonnage were formally classed with CR in 2013. The number of ships accounted for 8.6% of the number of those already classed with CR. Among these newly classed ships, there were 14 new ships, 20 existing ships, and 2 re-classed ships.



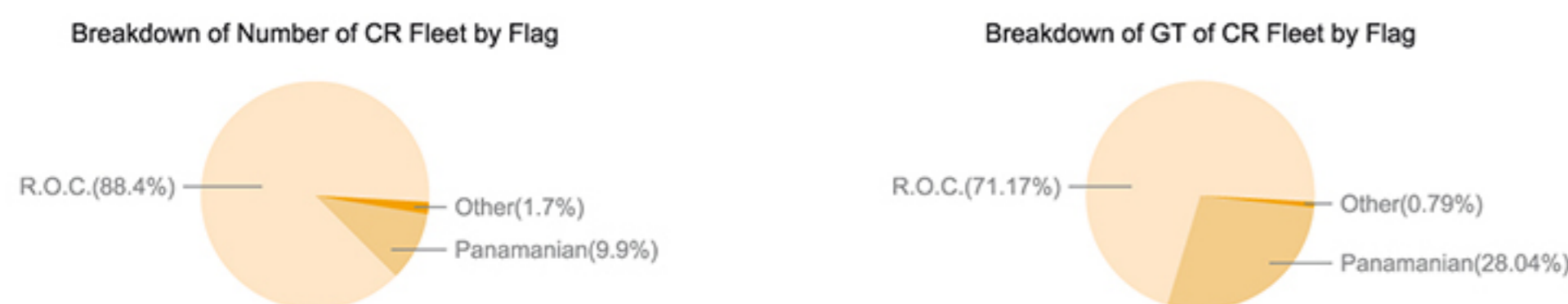
在級船舶 Classed Ships

截至2013年底，維持CR船級之船舶有363艘，共計4,080,670總噸，平均船齡為12.3年。
Up to the end of 2013 there were 363 ships maintaining CR class with 4,080,670 gross tonnage, and the average age of ships was 12.3 years.

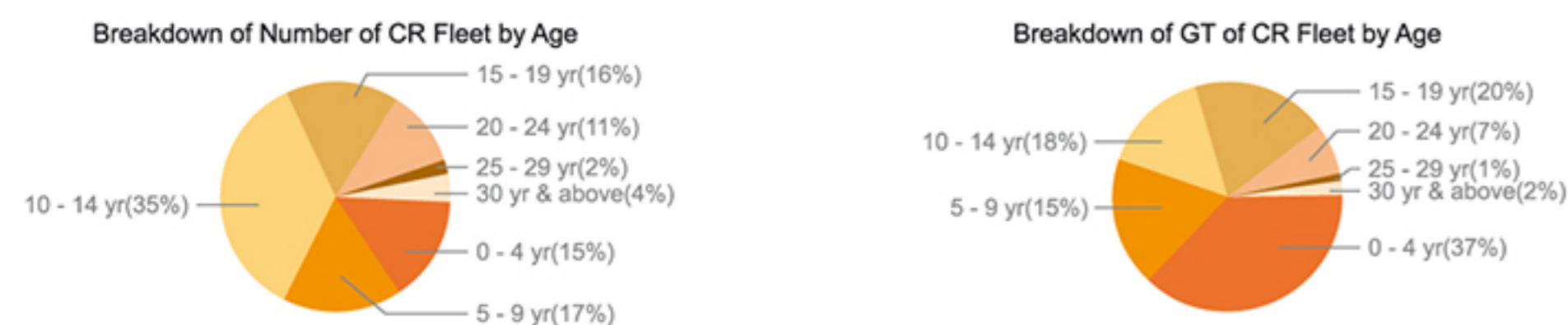
歷年在級船舶艘數及總噸位 The number of CR-classed ships over the years and their gross tonnage



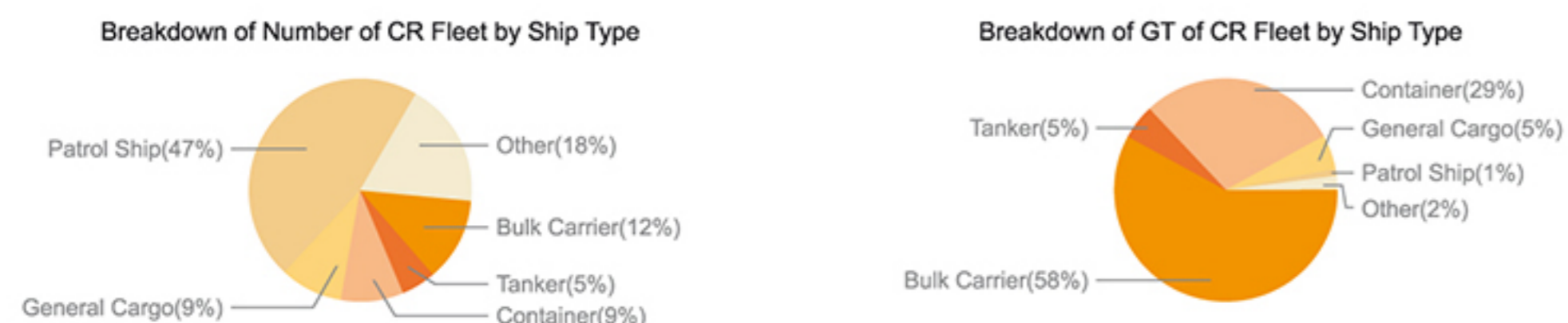
在級船舶之船旗國分析 Analysis of flag states of CR-classed ships



在級船舶之船齡分析 (平均船齡13年) Analysis of age of CR-classed ships (the average age of ships: 13 years)



在級船舶之船型分析 Analysis of types of CR-classed ships



ISM & ISPS 評鑑

2013年CR辦理航業公司及其所屬船舶申請國際安全管理章程(ISM)及國際船舶與港口設施保全章程(ISPS)及海事勞工公約(MLC)之評鑑及發證工作，共計符合文件(DOC)評鑑42家，船舶管理評鑑(SMC)68艘，國際船舶保全(ISPS)評鑑共63艘次及海事勞工公約(MLC)檢查共147艘。

ISM & ISPS Verifications

In 2013, CR conducted ISM, ISPS and MLC verification and certification work, carrying out DOC verifications for 42 companies, SMC verifications for 68 ships, ISPS verifications for 63 ships, and MLC inspection for 147 ships.



港口國管制

自2006年起，為改善本中心入級船舶之PSC滯留率，特制定「現成船加強檢驗及管理辦法」及「加強管制現成船入級辦法」等二辦法以加強對高齡船舶之嚴格檢驗及入級之適當設限，如今已見成效。本中心在2013年東京備忘錄(TOKYO MOU)的紀錄上為高績效的表現。

Port State Control

In order to improve the detention rate of CR-classed ships, since 2006 we have established the "Rules for intensifying inspection and management of existing ships" and the "Rules for controlling Classification of existing ships" as part of our effort to enhance the inspection of aged ships and to impose proper restrictions on classification of these ships. So far, this has demonstrated effectiveness. In 2013, the performance of CR in Tokyo MOU remains at a HIGH level.



工廠認可及型式認可

2013年CR執行船舶用品工廠認可及產品型式認可共計46家77型，其中包括危險品容器之認可工廠共22家、中型容器型式共5型、小型容器型式共196型。

Works Approval and Type Approval

In 2013, CR conducted works approval of 46 companies and type approval of 77 products for use on vessels, including 22 works of small packagings/intermediate bulk containers (IBCs) for dangerous goods, 5 types of IBCs, and 196 types of small packagings.



規範研究

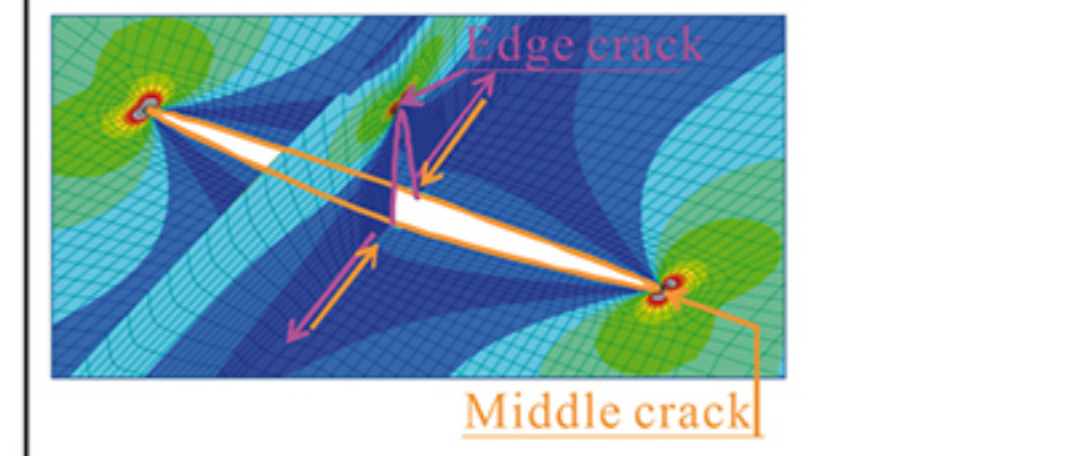
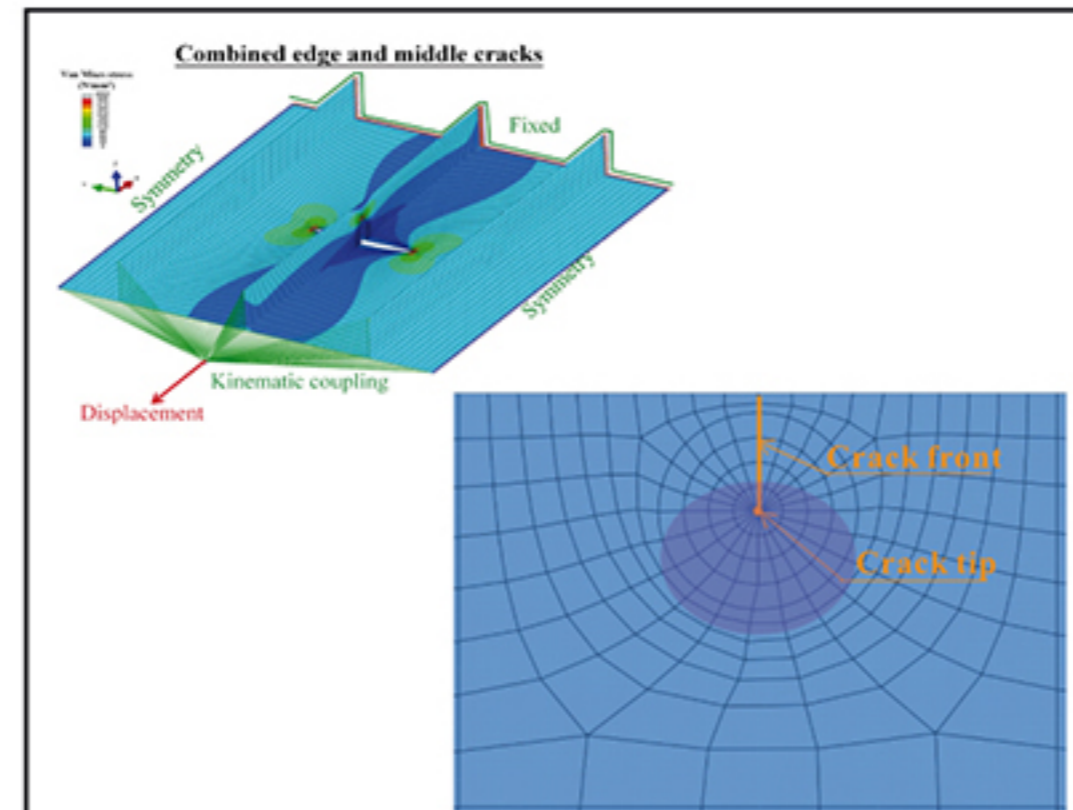
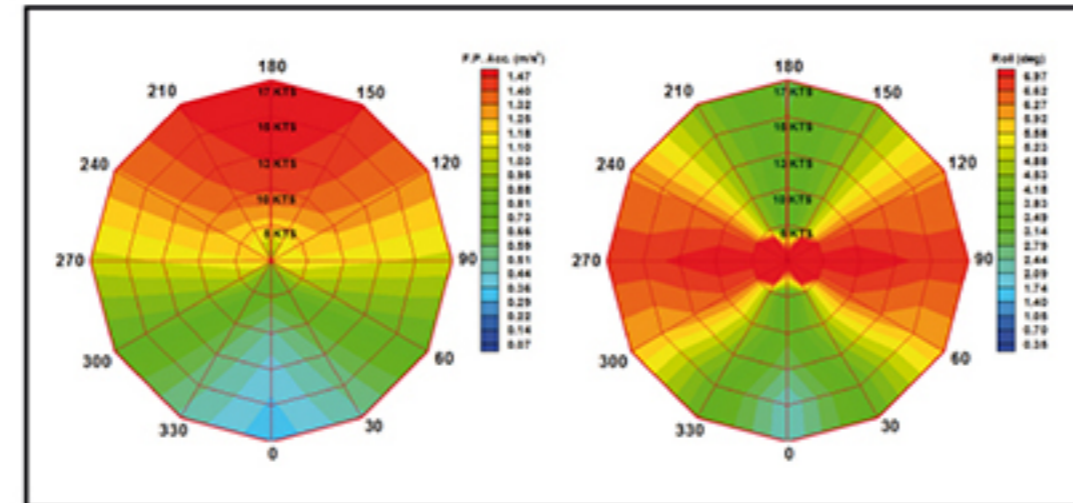
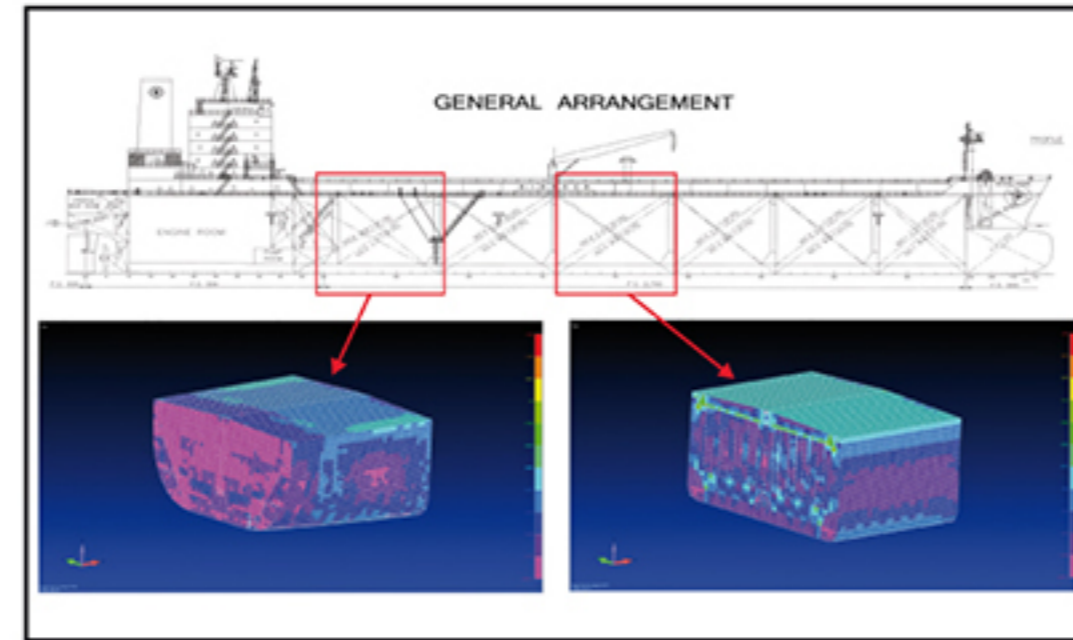
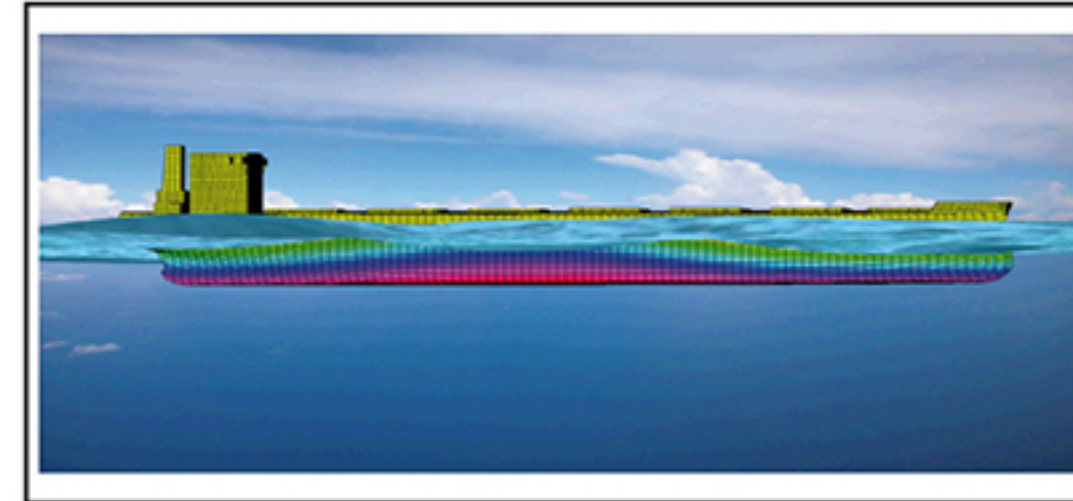
本中心之「鋼船建造與入級規範」係自行開發並每四年改版一次，期間亦隨時因應法規及技術發展而增訂修訂版。目前本中心所編撰之船級規範計有：

Rules Development

The "Rules for Construction and Classification of Steel Ships" is self-developed and has been revised once in four years. Supplements and revisions are also published from time to time before the next edition is published in order to cope with the development of technology. At present, we are compiling the following rules for classification of ships:

- 2013年鋁合金船建造與入級規範
Rules for the Construction and Classification of Aluminum Vessels, 2013
- 2013年鋼船建造與入級規範
Rules for the Construction and Classification of Steel Ships, 2013
- 2008年高速船建造與入級規範
Rules for the Construction and Classification of High-Speed Craft, 2008
- 1998年玻璃纖維強化型膠船建造與入級規範
Rules for the Construction and Classification of Ships for Fibreglass Reinforced Plastics, 1998

CR



政府授權

CR接受交通部委託，承辦本國籍船舶之國際公約檢驗。此外，本中心亦符合IMO決議案A.739(18)及A.789(19)之規定，並獲得巴拿馬、貝里斯、蒙古、柬埔寨、吉里巴斯、吐瓦魯、多米尼克等政府之授權執行各該國籍船舶之國際公約檢驗。

海事勞工公約(Maritime Labour Convention, MLC)於2013年8月20日生效，本中心順利執行所有船舶之MLC檢查與發證，共完成國輪88艘，巴拿馬籍58艘及吉里巴斯1艘。

交通部於2012年12月21日蒞臨本中心進行查核，查核重點係針對本中心之檢驗業務、組織、管理方法、設立許可、財務狀況及公益績效等各項加以評審，稽核結果符合「交通部審查交通事務財團法人設立許可及監督要點」之各項規定。並於102年3月1日前往本中心高雄連絡處及停靠中鋼101號碼頭之「中鋼運通」輪完成實地督導考核。

國家通訊傳播委員會(NCC)於102年6月13日及25日順利完成對本中心授權無線電審驗與發證後之首次稽查。

巴拿馬海事局發布MMC-267通告要求巴拿馬籍500總噸以上船舶自2013年6月1日起，船上須備有認可船級協會簽發之船級證書，且該船級協會須經當局認可授權。本中心於2013年5月24日向巴拿馬當局提出申請，經審核後於6月12日順利取得認可授權。

Government Authorization

CR is authorized by the Ministry of Transportation and Communications to carry out statutory surveys of ROC ships. In addition, we have met the requirements of IMO Resolutions A.739(18) and A.789(19) and obtained authorization from the governments of Panama, Belize, Mongolia, Cambodia, Kiribati, Tuvalu, and Dominica for conducting statutory surveys of ships registered with their respective governments.

Maritime Labour Convention(MLC) is effective on August 20, 2013. CR have successfully conducted MLC inspection and issued certificates to 88 vessels of R.O.C. flag, 58 vessels of Panama flag, and 1 vessel of Kiribati flag.

The Ministry of Transportation and Communications performed an audit of CR at our head office on December 21, 2012, evaluating particularly our survey work, organization, management techniques, establishment permit, financial situation, and performance relating to public welfare. The audit results met all the requirements of the "Regulations of the Ministry of Transportation and Communications for Governing Supervision and Establishment of Corporations regarding Transportation Affairs". MOTC also performed an audit at CR Kaohsiung Branch Office and the vessel, China Steel Express, which stopped on No.101 port of China Steel Corporation.

National Communications Commission (NCC) performed the first-time audit at our office on Radio inspection and certification on June 13 and 25, 2013.

Panama Maritime Authority issued Announcement MMC-267 to inform Panama-flag vessels over 500 tons are required to have classification certificate issued by recognized organization which is authorized by government. CR applied to Panama on March 24, 2014, and successfully obtained authorization on June 12, 2014.

研究成果

2013年本中心對外發表研討會論文七篇，「含初始變形平板扭曲強度分析與規範值之比較」、「散裝船考慮液艙沖激下之運動與上浪分析」、「具疲勞裂縫船縱向結構之破壞抗力」、「考慮僅有船艙損傷時之散裝船抗擱淺能力」、「考慮船縱向構件破壞失效下之臨界疲勞裂縫長度評估」、「散裝船壓載貨艙具沖激效應時之運動分析」、「艙櫃沖激之數值模擬」。針對協調共同結構規範(Harmonised Common Structural Rules)之描述性規定所開發的結構審圖軟體「高峰」(High CRest)，功能漸趨完備。

Research Achievement

In 2013, this Society published seven conference papers, which respectively entitled as "Buckling Analysis of Plates with Initial Deflection and Its Comparison with Rule Requirement", "Analysis of Bulk Carrier's Motion and Green Sea Behavior with Sloshing Effect", "Fracture Resistance of Ship Longitudinal Members Including Fatigue Crack", "Grounding Resistance Capacity of a Bulk Carrier Considering Damage Confined to the Bow", "Assessment of Critical Fatigue Crack Length Considering the Fracture Failure of Ship Longitudinal Members", "Bulk Carrier's Motion Analysis with Sloshing Effect in Water Ballast Cargo Hold", "Numerical Simulation for Tank Sloshing".

The structural plan approval program developed for the prescriptive requirements of the Harmonised Common Structural Rules, named as "High CRest", was continuously improved in its functions.



ETAS 緊急技術評估服務

截至2013年底，各航運公司向本中心申請緊急技術評估服務(ETAS)的船舶共計有 23 艘次。

Emergency Technical Assessment Service (ETAS)

Up to the end of 2013, there are 23 ships for which the companies applied to CR for Emergency Technical Assessment Service (ETAS).

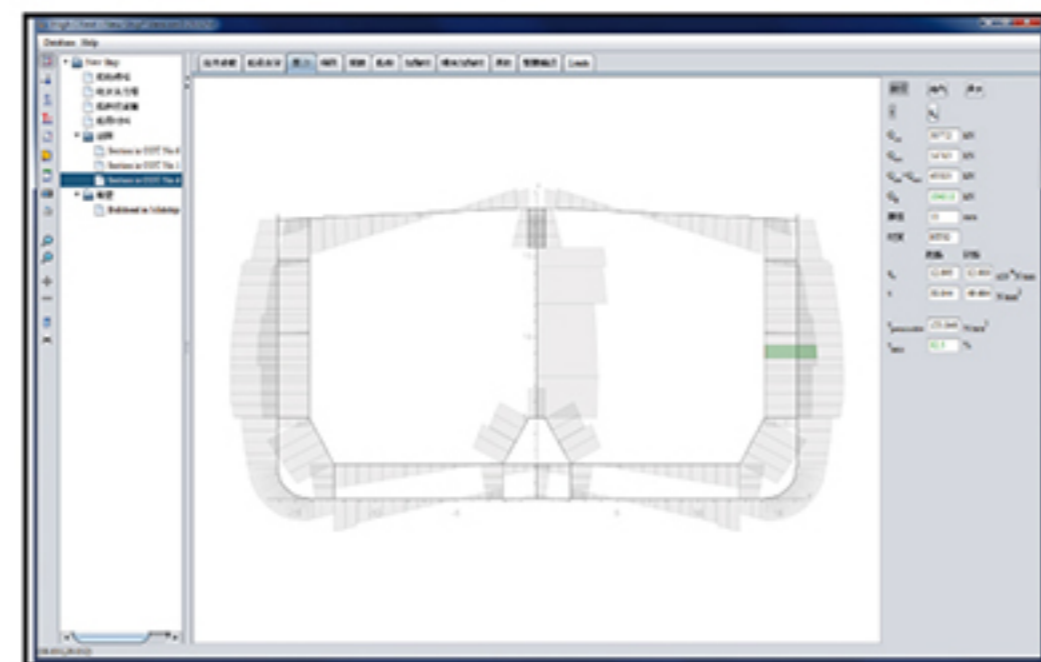
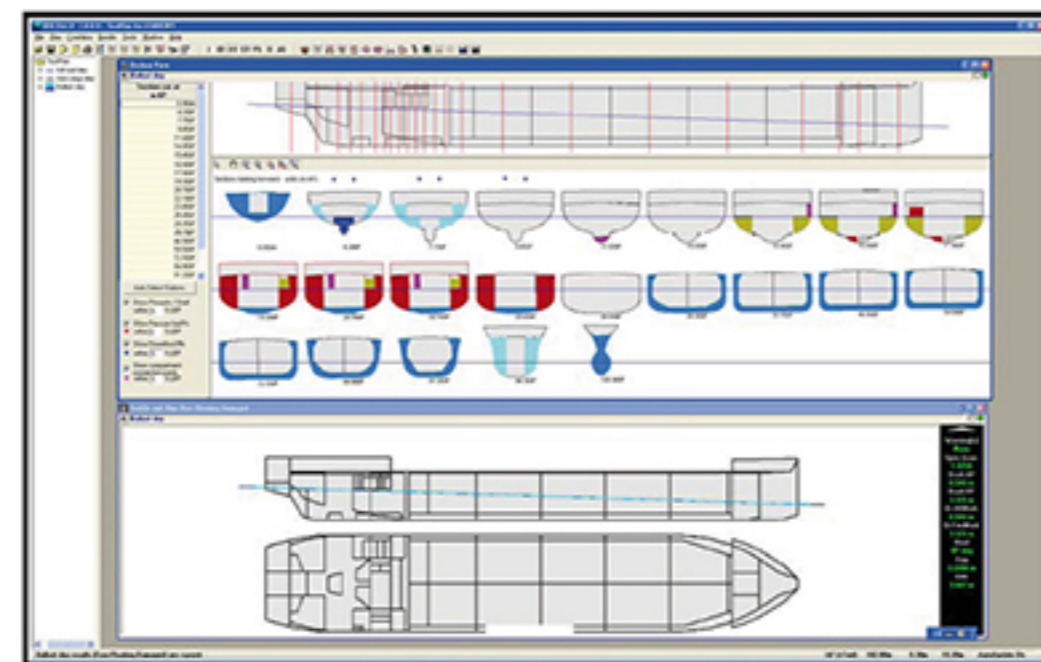
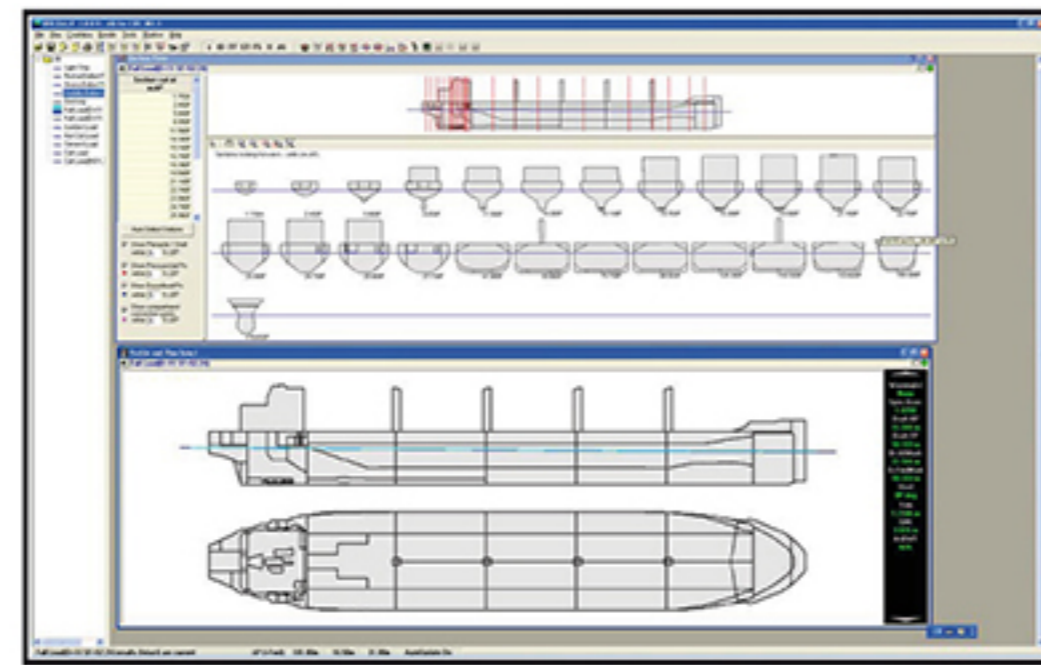


CRPA 電子審圖

為加強新造船設計圖審核效率，並減少紙張印刷之資源浪費，本中心自行開發電子審圖系統 (CRPA)，其功能包括由船廠傳送設計圖電子檔、本中心審核意見退審、現場驗船師查詢審圖意見、船廠處理退審意見、船東查詢送圖及審圖進度等。

CR Plan Approval (CRPA)

In order to enhance the efficiency of plan approval for newbuildings and to reduce paper consumption in the office, we have developed CR Plan Approval (CRPA). Its functions include submission of design drawings in electronic form by the shipyard, approval of drawings by CR with comments and return of drawings, review of approval comments by the field surveyors, handling of comments on returned drawings, and inquiries from the shipowner about submission of drawings and progress of drawing approval.



教育訓練

CR 應業界要求舉辦公司保全員(CSO)及港口設施保全員(PFSO)之訓練課程，本年度舉辦公司保全員共 2 班次計 27 人，及港口設施保全員共 3 班次計 79 人。另並舉辦國際安全管理(ISM)內部稽查訓練課程共 2 班次共計 58 人，「海事勞工公約」共 2 班次計 33 人，教育訓練課程均深獲參與學員之好評。

Training

In response to the shipping industry's request, we have provided the CSO and PFSO training courses. This year, we offered 2 CSO training classes for a total of 27 people and 3 PFSO training classes for a total of 79 people. Moreover, we offered 2 ISM Code training classes for a total of 58 people and, 2 MLC training classes for a total of 33 people. Such educational training courses drew high praise from the participants.

對外研討會 External Workshops

本年度對外共舉辦4次研討會，均深獲與會人士好評。

We held 4 external workshops during 2013, all of which received favorable responses.

日期	研討會內容
2013.03.26	<ul style="list-style-type: none">國際公約最新動態簡介(2013) Introduction of International Convention's Recent Development船舶壓艙水管理近況 The Current of Ships' Ballast Water Management
2013.07.08	<ul style="list-style-type: none">2013年IMO相關活動-壓艙水管理、船舶回收、減少溫室氣體排放之措施 Recent IMO Movement in 2013 on BWM, Ship Recycling and Measures of Reducing GHG Emissions直接計算法在船體結構之應用 Application of Direct Calculation on Ship Hull Structure
2013.08.26	<ul style="list-style-type: none">東京/巴黎備忘錄2013年PSC重點檢查活動簡介 CIC 2013 of Tokyo / Paris MOUsMLC公約的十大問題 The Top 10 Findings of MLC Inspection船級協會和船東監工的職責 The Responsibilities of Classification Society and Owners' Supervision
2012.12.26	<ul style="list-style-type: none">簡介2014年生效之國際公約修正案 Introduction of International Convention's Amendments that will Come Into Force in 2014簡介國際公約最新動態 Introduction of International Convention's Recent Development

國際交流

配合推動2013年1月小兩會新竹會談中，有關兩岸互設驗船機構之議題，於2013年7月31日前往北京拜訪中國船級社(China Classification Society, CCS)及大陸海事局。並配合政府參加9月2-3日於廈門舉行之小兩會會前工作小組會議。繼於9月26日由趙董事長國樑率團拜訪北京海事局，達成多項共識，並獲得海事局允諾減免人力及註冊資本額等多項限制。

2013年3月28日 中國船級社(CCS) 孫社長立成率團訪問CR，雙方對目標型船舶建造標準(Goal-Based Ship Construction Standards, GBS)和協調共同結構規範(Harmonised Common Structural Rules, CSR-H)交換意見，同時也對既有合作業務及可能進一步合作業務充分洽談。2013年8月15日日本中心再赴CCS上海規範研究所對GBS和CSR-H進行交流，討論GBS送交IMO審核文件之技術細節。

本中心自成立風能組起，藉由與國際認證機構之訓練合作，並參與了解國內外風能市場與動態，以提供業者專業之風能技術服務。包括：

- 1)分別與挪威驗船協會(DNV)簽署與德國驗船協會(GL)簽署合作備忘錄與人員訓練合約，並完成風力機認證、風場資源量測、現場實務訓練等課程，並持續進行現場檢驗及離岸支撐結構設計評估等訓練課程。
- 2)於2013年10月於東京舉辦之離岸風能國際研討會發表論文，說明台灣風能發展與中心風能技術之建置。

International Exchange

Regarding the issue on establishment of classification society on both sides, which is discussed on Hsinchu meeting between Taiwan Cross-Strait Shipping Association and Cross-Strait Shipping Exchange Association in January, 2013, we headed for Beijing to visit China Classification Society(CCS) and Maritime Safety Administration of the People's Republic of China. Also, we participated in the preliminary meeting before formal meeting between TCSA and CSEA in Amoy on September 2 and 3. Moreover, Chairman, Kuo-Liang Chao, led a representative team to visit Maritime Safety Administration of the People's Republic of China and reached consensus on many issues. And after discussion, Maritime Safety Administration of the People's Republic of China promised to release limits on registration capitals and personnel recruitment.

On March 28, 2013, CCS chairman Mr. Sun led a representative team to visit CR, we exchanged opinions on Goal-Based Ship Construction Standards, GBS and Harmonized Common Structural Rules, CSR-H. We also have detailed discussion on further cooperative business. On August 15, 2013, we visited CCS Shanghai Rules & Research Institutes again to discuss GBS, CSR-H, and technical details on issuance of GBS to IMO.

After establishment of wind energy section, by means of cooperation with international authorized organizations and realization of movement on wind energy market, we are able to provide our clients with professional wind energy service, including:

1. We signed the training contracts and MOU with DNV and GL (hereafter merged to DNV-GL Group) in 2013 and kept learning the technical knowledge and gaining ability for wind energy surveillance. Till now we finished the training topics including type certification of wind turbine, measurement of wind source and the parts of design concept and assessment of support structure for offshore wind turbine.
2. We delivered a speech to elaborate the development of wind energy in Taiwan and technical abilities of CR in World NAOE Forum 2013 & International Symposium on Marine and Offshore Renewable Energy, which was held in Tokyo in October, 2013.