

中國驗船中心

CR CLASSIFICATION SOCIETY



CR Annual Report 2014



台北總部 OPERATION CENTER

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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



財團法人中國驗船中心
CR CLASSIFICATION SOCIETY

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CR CLASSIFICATION SOCIETY

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CR Classification Society(former name: 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」。

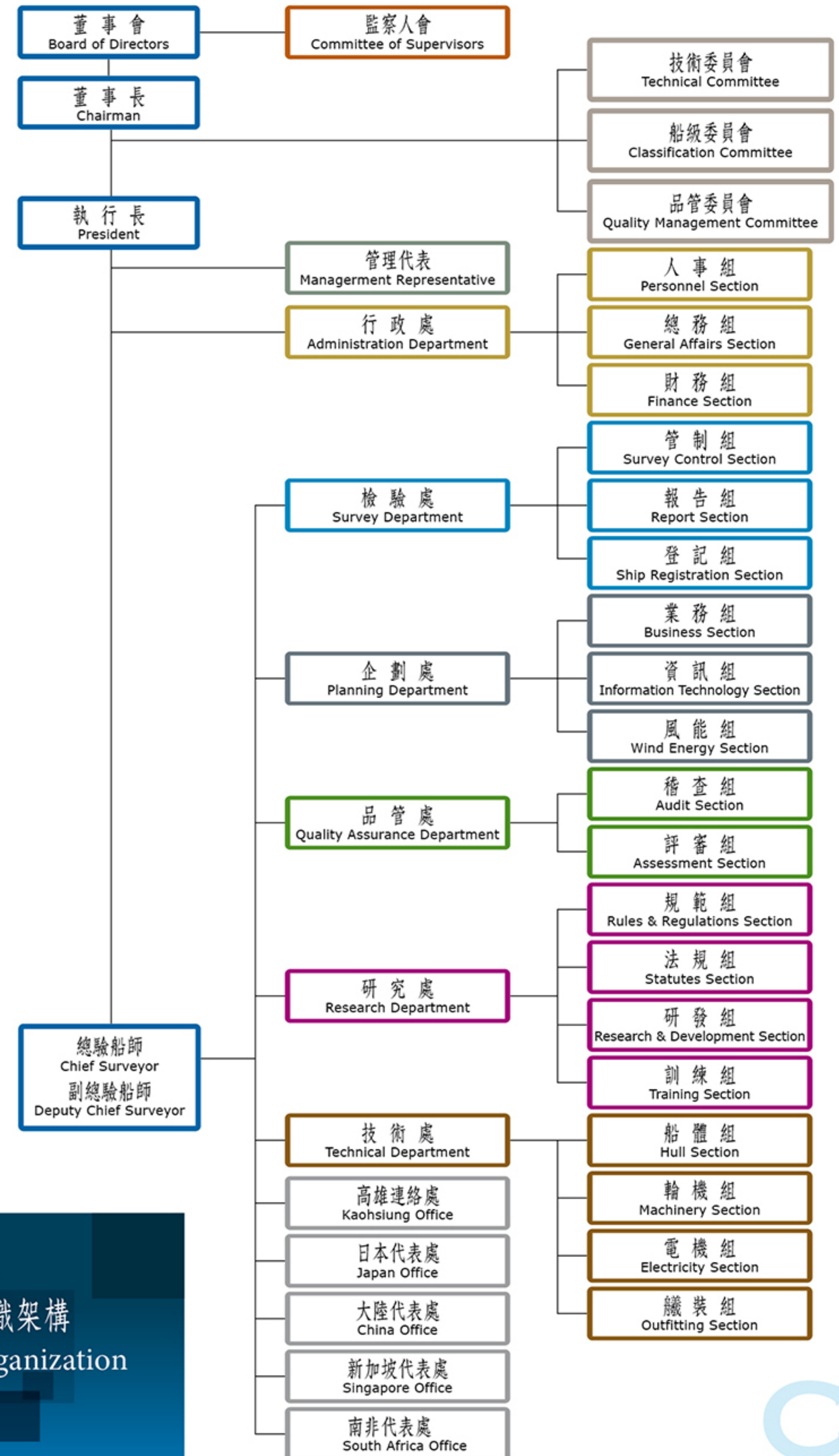
本中心為一民間純技術性，不以營利為目的之服務事業機構，其目標為提供優良之技術、高度之效率與熱忱之服務。組織型態(如下表)及工作內涵，一如世界各大驗船機構，其服務工作據點遍及世界各重要港口，為船東、造船廠及機材製造廠商提供最便捷之服務。



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, "CR Classification Society" (former name: China Corporation Register of Shipping), also know 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



2014年全球經濟增長緩慢，加上疲軟的原物料需求，整體復甦不如預想的樂觀，特別是中國進入經濟結構調整期，原物為主的國際大宗物品價格持續下降，以及運力供大於求的矛盾仍未緩解，皆對2014年全球海運市場造成波動。如此險峻的環境下，CR與所有航運產業感同身受，並了解惟有持續不斷的深耕與努力，肩負起企業社會責任，方能為航運產業，貢獻最大之力量。

東京備忘錄(Tokyo Mou)2014年5月公佈最新查驗評比，我船旗國與CR分列白名單(White List)及高表現度(High Performance Level)之最佳成績。同年9月交通部航港局稽核小組執行為期三天之「驗船機構技術稽核」，證實CR符合「驗船機構章程(Recognition Organization Code, 簡稱RO Code)」之規定。目前CR持續參加其他地區海事主管機關所舉辦之港口國管制(Port State Control, 簡稱PSC)研討會，並與國內航政主管機關與航商共同檢討船舶加強自主檢查與改善之措施，進而與政府、航商共同達成增進海上人命安全與防止海洋環境污染之使命。

現階段CR持續與國內學術界合作，期能發展出對航運產業最優化之對策。除了與國立台灣大學合作透過船模試驗驗證流體力學軟體的運算結果外，目前CR也跟國立台灣海洋大學持續研究關於EEDI規定中所關注的節能減碳船型與氣候因子之影響在流體力學的應用。

在風力發電的領域，CR已經完成與DNV-GL的合作訓練案，並為國內風力發電產業提供如氣象觀測塔儀器設置驗證、水下結構檢驗、風力發電機型式認證、離岸風場專案認證等相關服務。



目前持續與國立台灣大學合作離岸風機塔架及支撐結構之安全性分析計畫，也與CLASS NK簽約合作研究颱風與地震對於台灣以及日本地區的風力發電環境的影響，短期內CR將建立離岸風力發電系統的設立規範供產業參考與運用。而在經濟部工業合作案中，CR也與ABS合作，與中鋼運通公司，台灣國際造船公司以及聯合船舶暨海洋研究中心共同研習ABS風力發電安裝船的規範。

展望2015年，全球航運市場仍難以立即擺脫困境，無論航運業、造船業與船級協會，皆將面對嚴峻的挑戰，CR必將不負交通部之指導與航運界之支持，我們充滿信心，持續提供最優質之服務，守護每一個航次，為航運界創造更大的價值。

中國驗船中心
董事長 趙國樑

趙國樑



Chairman's Speech

Due to slow development on global economy, and weak demand for raw materials, the economic recovery is not optimistic as expected in 2014. Also, because China has been under economic restructuring, the prices of commodities such as crude oil keep slowing down, and overcapacity in the fleets remains, the global shipping market fluctuates markedly. In this steep environment, CR has identified with problems faced by all shipping industry. CR understands only continuous cultivation and endeavor and taking on corporate social responsibility can devote ourselves to the shipping industry.

In March 2014, Tokyo MOU announced latest inspection statistics, ROC flag and CR are respectively listed in "White List" and "High Performance" which are both the best grade. In September 2014, the audit team from Maritime and Port Bureau conducted a three-day technical audit for classification society, and proved CR complied with requirements of Recognition Organization Code (RO Code). Currently, CR has continuously attended seminars for Port State Control (PSC) held by maritime authorities in other areas. CR also discussed enforcement on self examination and modified measures on vessels with domestic authority and shipowners. We hope to enhance the safety of life at sea and prevent pollution of the marine environment with the government and shipowners together.

Right now, CR continues to cooperate with academics in Taiwan and looks forward to developing optimization strategy for the shipping industry. CR have not only cooperated with National Taiwan University to validate the hydrodynamic software by ship model tests, but also researched energy-saving ships focused by EEDI requirements and application of the influence of weather factors in Hydrodynamics.

In wind-energy field, CR has already finished cooperation training project with DNVGL. CR provided some relevant services such as instruments installation verification of meteorological mast, sub-structure surveillance, type certification of wind turbine, and project certification of offshore wind farm to domestic wind-energy industry. CR participated in the project of "Safety Analysis for Offshore Wind Turbine Tower and Support Structure" with National Taiwan University. Furthermore, CR signed MOU with CLASS NK in order to research how typhoons and earthquakes influence wind-energy environment in Taiwan and Japan. In the short term, CR will establish installation rules for offshore wind energy system for reference and application.

In the industrial cooperation program of Ministry of Economic Affairs, CR studied ABS rules of wind power installation vessels with China Steel Express Corporation, CSBS, and Ship and Ocean Industries R&D Center together.

In 2015, the global shipping market will still be under recession. The shipping industry, shipbuilding industry, and classification society will all face big challenge. In response to guidance of Ministry of Transportation and Communications, and support of the shipping industry, CR is confident in providing best-quality services, and guarding every voyage to create bigger value for the shipping industry.

Donald Chao, Chairman
CR Classification Society



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 Kuo-Liang, Chao	中國驗船中心董事長 Chairman, CR Classification Society
藍俊德 Jiun-Der, Lan	四維航運股份有限公司董事長 Chairman, Shih Wei Navigation Co., Ltd.
祁文中 Wei-Jong, Chi	交通部航港局局長 Director-General of Maritime and Port Bureau, Ministry of Transportation and Communications R.O.C.
陳進生 Jim-Sheng, Chen	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 Ya-Jung, Lee	考試院考試委員兼台大教授 Member of the Examination Yuan, R.O.C.
黃肇嘉 Chao-Chia, Huang	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 I-Yuan, Chang	台灣航業股份有限公司董事長 Chairman, Taiwan Navigation Co., Ltd.
林信得 Shinn-Der, Lin	交通部運輸研究所所長 Director-General of Institute of Transportation, Ministry of Transportation and Communications R.O.C.
謝志堅 Chih-Chien, Hsieh	長榮集團副總裁 Second Vice Group Chairman, Evergreen Group
彭士孝 William S.H. Peng	中國航運股份有限公司執行副總裁 Executive Vice President, Chinese Maritime Transport Ltd.
陳柏廷 Po-Ting, Chen	萬海航運股份有限公司董事長 Chairman, Wan Hai Lines Ltd.
王書吉 C. K., Ong	裕民航運股份有限公司總經理 General Manager, U-Ming Marine Transport Corporation
張瑞宗 Ray-Chung, Chang	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 Ying-Ru, Liu	中國驗船中心執行長 President, CR Classification Society
郭義隆 I-Lung, Guo	藍海海運及松光航業董事長 Chairman, OceanLance Maritime Co., Ltd. and Biggin Shipping Corporation
許志堅 Chih-Chien, Hsu	益利航運股份有限公司董事長 Chairman, Eddie Steamship Co., Ltd.
陳燦煌 Steve T.H. Chen	富邦產物保險股份有限公司總經理 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 Pin-Jan, Ku	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	陳藤 I. Chen	世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	李慶超 Steve Lee	中鋼運通股份有限公司董事長 Chairman, 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 President, Nautical Sea Shipping Co., Ltd.
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	何允彥 You-Yen Ho	四維航業股份有限公司副總經理 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	張傑德 Jie-De, Chang	台灣國際造船股份有限公司副總經理 Vice President, CSBC Corporation, Taiwan
委員 Member	徐志廷 Jyh-Tyng, Shyu	慧洋海運股份有限公司工務部副總經理 Vice President of Technical Department, 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 Jeong-Shin, Lin	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.
委員 Member	陳嘉 Charles Chen	陽明海運股份有限公司副總經理 Vice President, Yang Ming Marine Transport Corporation
委員 Member	邱瑞斌 Reul-Bin, Chiou	光明海運股份有限公司董事長 Chairman, Kuang Ming Shipping Corporation
委員 Member	黃崇智 Eddie C. Huang	協榮航業股份有限公司代表 Representative, Glory Navigation Co., Ltd.
委員 Member	周慕豪 Muh-Haur, Jou	中國航運股份有限公司副董事長 Vice Chairman, Chinese Maritime Transport Ltd.
委員 Member	馬耀湘 Yao-Shiang, Ma	新健公司副總經理 Vice President, Hsin Chien Marine Co., Ltd.



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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 Shy-Tzong, Liou	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副總經理 Vice President, CSBC Corporation, Taiwan
委員 Member	郭真祥 Jen-Shiang, Kuoh	國立臺灣大學教授 Professor, National Taiwan University
委員 Member	林鴻志 Hong-Jyh, Lin	財團法人船舶暨海洋產業研發中心副執行長 Vice President, 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	何永順 Jackie Ho	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, CR Classification Society
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



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協理 General Manager of Marine Department, Taiwan Navigation Co., Ltd.
委員 Member	歐陽定 Andy D. Ouyang	新健海運公司駐埠船長 Chief Port Captain, 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.

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。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 and the South Africa Office on June 4, 2010, represented by Mr. P. K. Yang. CR Operation Center and other offices can be reached in the following ways:



台北總部 Operation Center

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

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

日本代表處 Japan Office

〒650-0031 日本神戸市中央區東町116-1シテイライフ三宮ビル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

新加坡代表處 Singapore Office

2B, Hong San Walk, #17-06, Singapore 689048
Tel: +65-63101034 Fax: +65-68935997
E-mail: cr.sg@crclass.org

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

2014年建造中入級CR的船舶共計有23艘，分列如下：

There were a total of 23 ships classed by CR during construction in 2014 as listed below:

船東 Owner	造船廠 Shipyard	建造地點 Place	船型 Ship type	艘數 Number
四維航業 SHIH WEI NAVIGATION CO.	尾道 ONOMICHI	日本 JAPAN	60,000 DWT 散裝船 60,000 DWT Bulk Carrier	4
環能海運 TAIWAN GLOBAL ENERGY MARITIME CO., LTD.	JMU	日本 JAPAN	302,000 DWT 油輪 302,000 DWT Oil Tanker	2
高雄港務分公司 PORT OF KAOSIUNG, TIPC	靖海造船 TING HAI	台灣 TAIWAN	12.8M 客船 12.8M Passenger Ship	1
中油 CPC CORPORATION, TAIWAN	台船 CSBC	台灣 TAIWAN	40,000 DWT 油輪 40,000 DWT Oil Tanker	2
四維航業 SHIH WEI NAVIGATION CO.	名村 NAMURA	日本 JAPAN	33,800 DWT 散裝船 33,800 DWT Bulk Carrier	2
東信 DONG SIN LINE CO., LTD.	EVOLUTION COMMERCIAL	澳洲 AUSTRALIA	29M 客船 29M Passenger Ship	1
海岸巡防總局中部巡防局 GENERAL COAST GUARD ADMINISTRATION	昱旻企業 KARMIN	台灣 TAIWAN	FRP 多功能艇 FRP Multifunctional Boat	1
競強輪船	龍德 LUNG TEH	台灣 TAIWAN	28.5M 客船 28.5M Passenger Ship	1
台灣航業 TAIWAN NAVIGATION CO., LTD.	大島 OSHIMA	日本 JAPAN	60,200 DWT 散裝船 60,200 DWT Bulk Carrier	4
裕民航運 U-MING MARINE TRANSPORT CORP.	大島 OSHIMA	日本 JAPAN	62,000 DWT 散裝船 62,000 DWT Bulk Carrier	2
四維航業 SHIH WEI NAVIGATION CO.	尾道 ONOMICHI	日本 JAPAN	60,000 DWT 散裝船 60,000 DWT Bulk Carrier	2
新健海運 HSIN CHIEN MARINE CO., LTD.	四國 SHIKOKU	日本 JAPAN	36,000 DWT 散裝船 36,000 DWT Bulk Carrier	1

現成船入級 Classification of Existing Ships

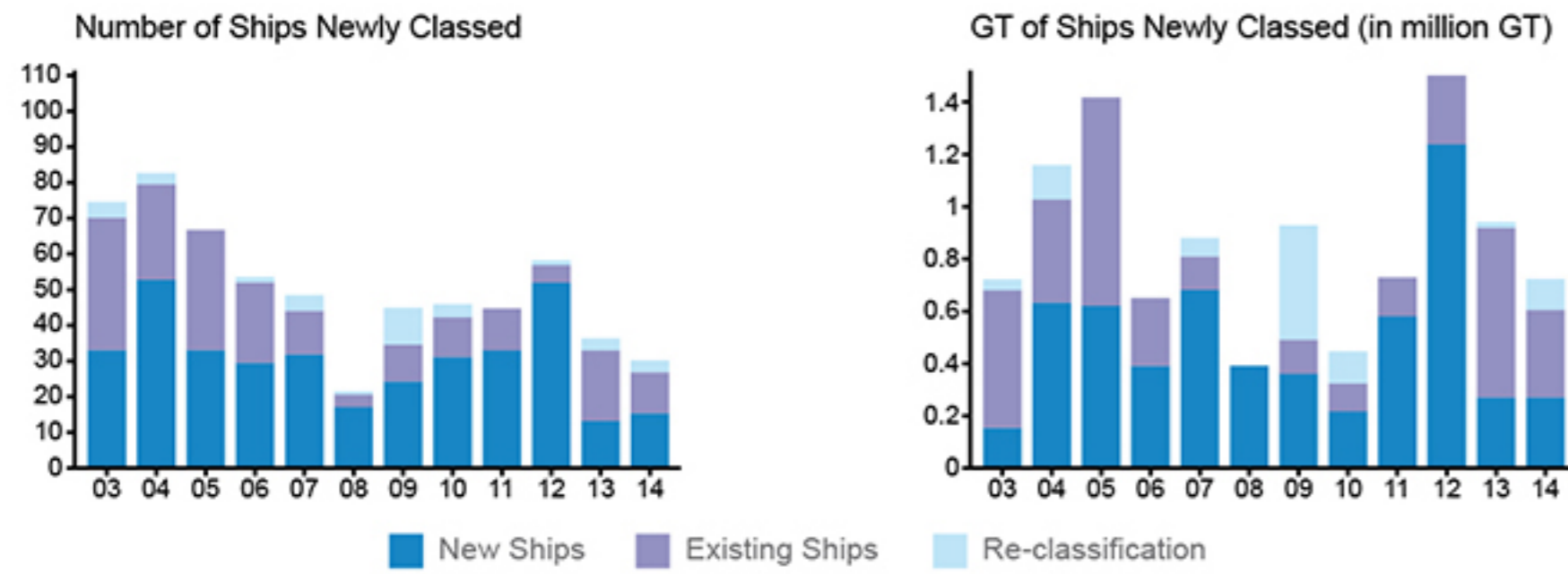
2014年現成船入級CR的船舶共計有11艘，分列如下：

There were a total of 11 existing ships classed by CR in 2014 as listed below:

船名 Ship name	船東 Owner	船旗 Flag	總噸位 GT	船型 Ship type
慈利 CONTESS SEA	SEA COUNTESS MARINE CORP.	巴拿馬 Panamanian	26136	散裝船 Bulk Carrier
智慧女神 MINERVA	安立海運股份有限公司 ANLI LINES CORP.	中華民國 R.O.C.	7823	乾貨船 General Dry Cargo Ship
海平 OCEAN PEACE	巴商海新航運公司 OCEAN FLOWER NAVIGATION S.A.	巴拿馬 Panamanian	26341	散裝船 Bulk Carrier
台閩之星 TAI MIN STAR	巴福實業股份有限公司 BA FWU INDUSTRY CO., LTD.	中華民國 R.O.C.	9351	滾裝客船 Ro-ro Passenger Ship
遠明 YM INAUGURATION	陽明海運股份有限公司 YANG MING MARINE TRANSPORT CORP.	中華民國 R.O.C.	16488	貨櫃船 Container Carrier
長忠 EVER LOYAL	長榮海運股份有限公司 EVERGREEN MARINE CORP.(TAIWAN). LTD.	中華民國 R.O.C.	98882	貨櫃船 Container Carrier
長輝 EVER LUCID	長榮海運股份有限公司 EVERGREEN MARINE CORP.(TAIWAN). LTD.	中華民國 R.O.C.	99998	貨櫃船 Container Carrier
台塑8號 FORMOSA EIGHT	台塑海運股份有限公司 FORMOSA PLASTICS MARINE CORPORATION	中華民國 R.O.C.	19095	化學船 Chemical Carrier
海美 OCEAN BEAUTY	巴商海后航運公司 OCEAN QUEEN NAVIGATION S.A.	巴拿馬 Panamanian	26047	散裝船 Bulk Carrier
大吉之星 TAI JI JIHI SING	海有航運股份有限公司 HAI YOU SHIPPING CO., LTD.	中華民國 R.O.C.	498	客船 Passenger Ship
大亨 TAI KING	TYCOON MARINE S.A.	巴拿馬 Panamanian	1481	乾貨船 General Dry Cargo Ship

新入級船舶 Newly Classed Ships

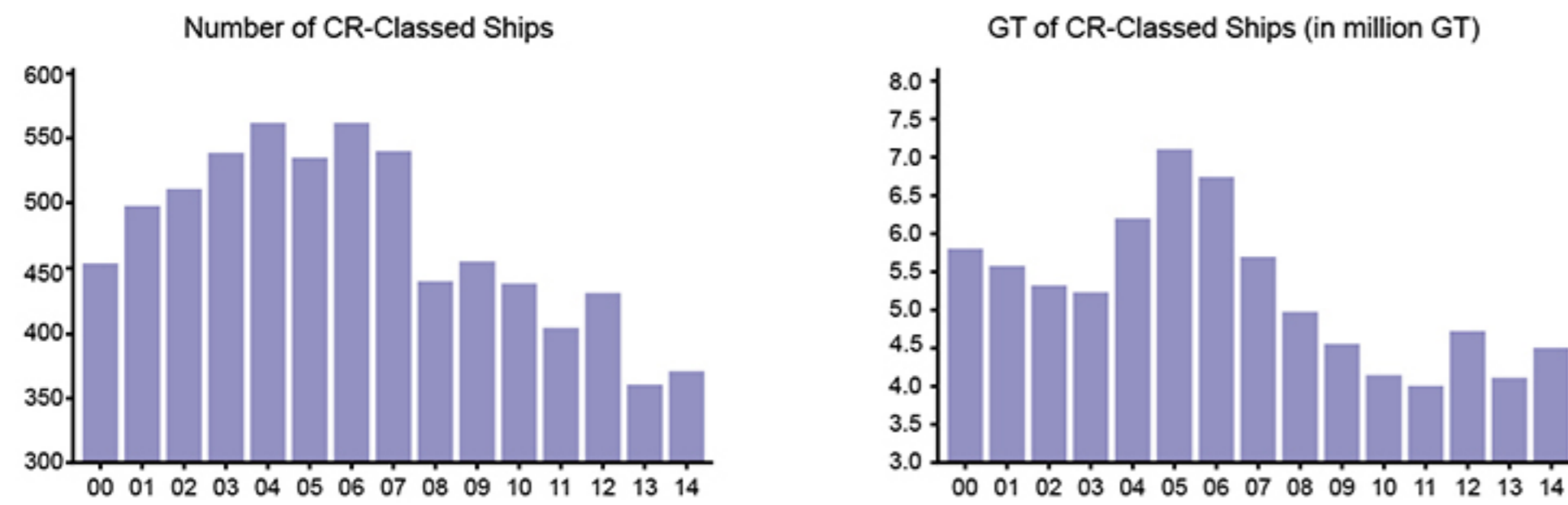
2014年經審核後正式入級的船舶有34艘共計715,067總噸，艘數為在級船舶的9.3%，其中新船入級23艘，現成船入級11艘，重新入級3艘。
After careful review, a total of 34 ships with 715,067 gross tonnage were formally classed with CR in 2014. The number of ships accounted for 9.3% of the number of those already classed with CR. Among these newly classed ships, there were 23 new ships, 11 existing ships, and 3 re-classed ships.



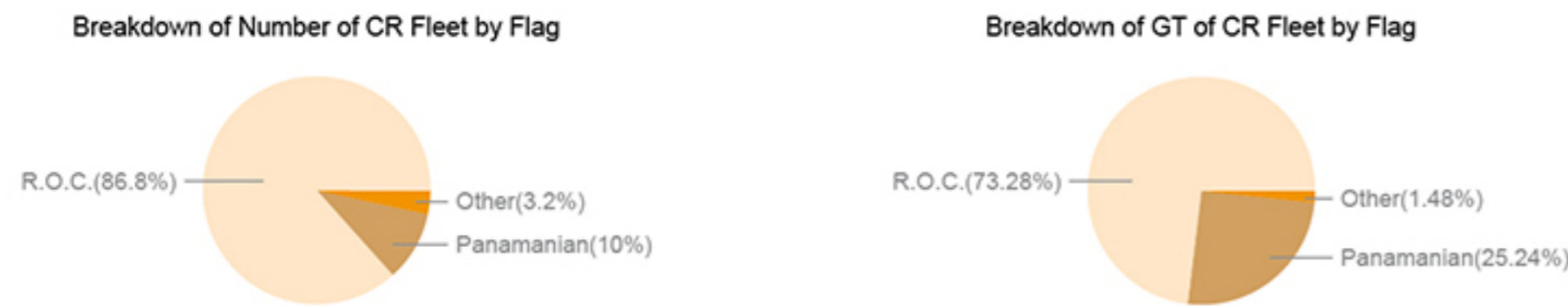
在級船舶 Classed Ships

截至2014年底，維持CR船級之船舶有375艘，共計4,641,423總噸，平均船齡為13年。
Up to the end of 2014 there were 375 ships maintaining CR class with 4,641,423 gross tonnage, and the average age of ships was 13 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



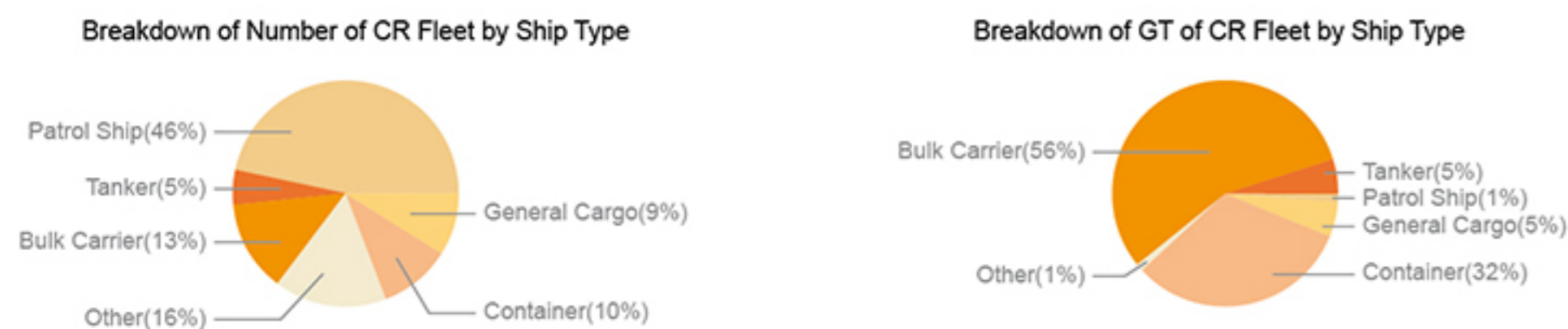
在級船舶之船旗國分析 Analysis of flag states of CR-classed ships



在級船舶之船齡分析 (平均船齡 13.1 年) Analysis of age of CR-classed ships (the average age of ships: 13.1 years)



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

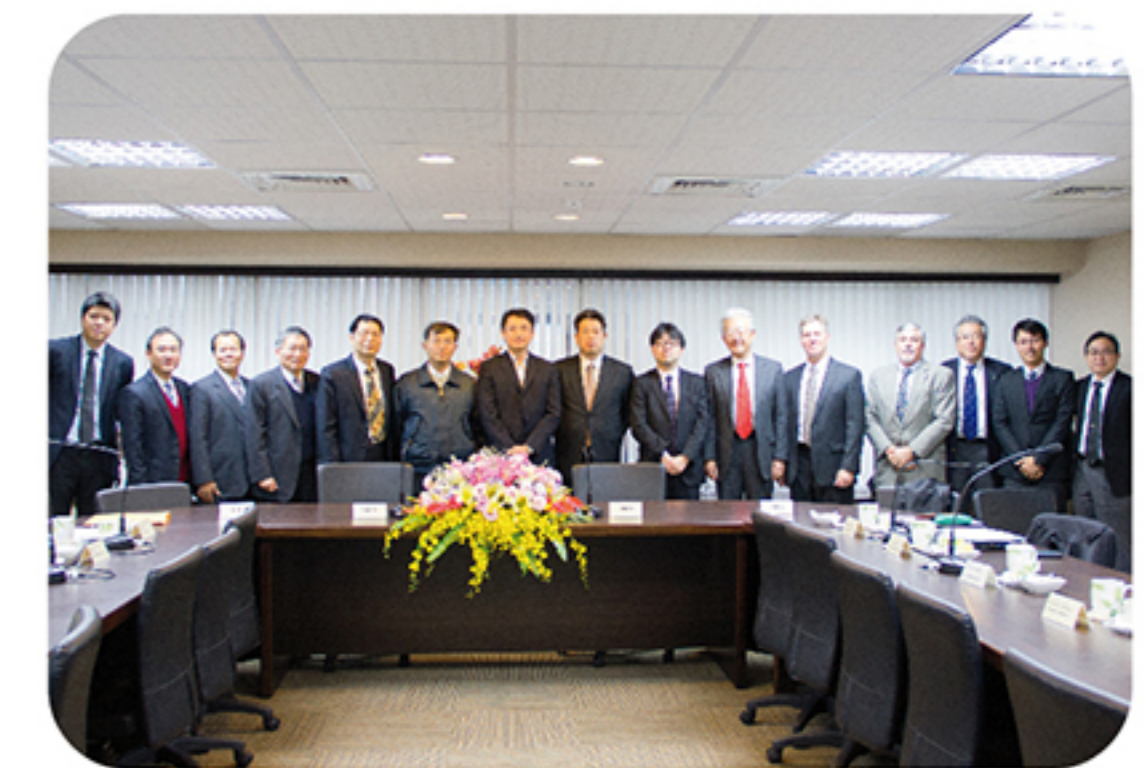


ISM, ISPS 及 MLC 評鑑

2014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43家，船舶管理評鑑(SMC)102艘，國際船舶保全(ISPS)評鑑共112艘次及海事勞工公約(MLC)檢查共44艘。

ISM, ISPS & MLC Verifications

In 2014, CR conducted ISM, ISPS and MLC verification and certification work, carrying out DOC verifications for 43 companies, SMC verifications for 102 ships, ISPS verifications for 112 ships, and MLC inspection for 44 ships.



工廠認可及型式認可

2014年CR執行船舶用品工廠認可及產品型式認可共計51家101型，其中包括危險品容器之認可工廠共16家、中型容器型式共5型、小型容器型式共148型。

Works Approval and Type Approval

In 2014, CR conducted works approval of 51 companies and type approval of 101 products for use on vessels, including 16 works of small packagings/intermediate bulk containers (IBCs) for dangerous goods, 5 types of IBCs, and 148 types of small packagings.

CR

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2011-2014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. From 2011 to 2014, the performance of CR in Tokyo MOU remains at a HIGH level.

規範研究

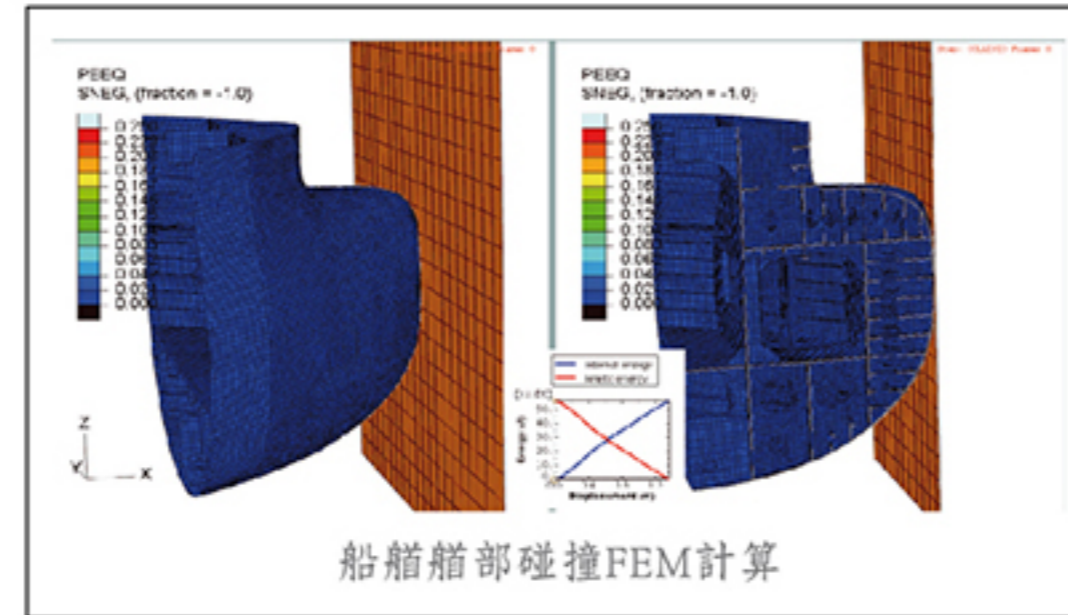
本中心之「鋼船建造與入級規範」係自行開發並每四年改版一次，期間亦隨時因應法規及技術發展而增訂修訂版。目前本中心所編撰之船級規範計有：

Rules Development

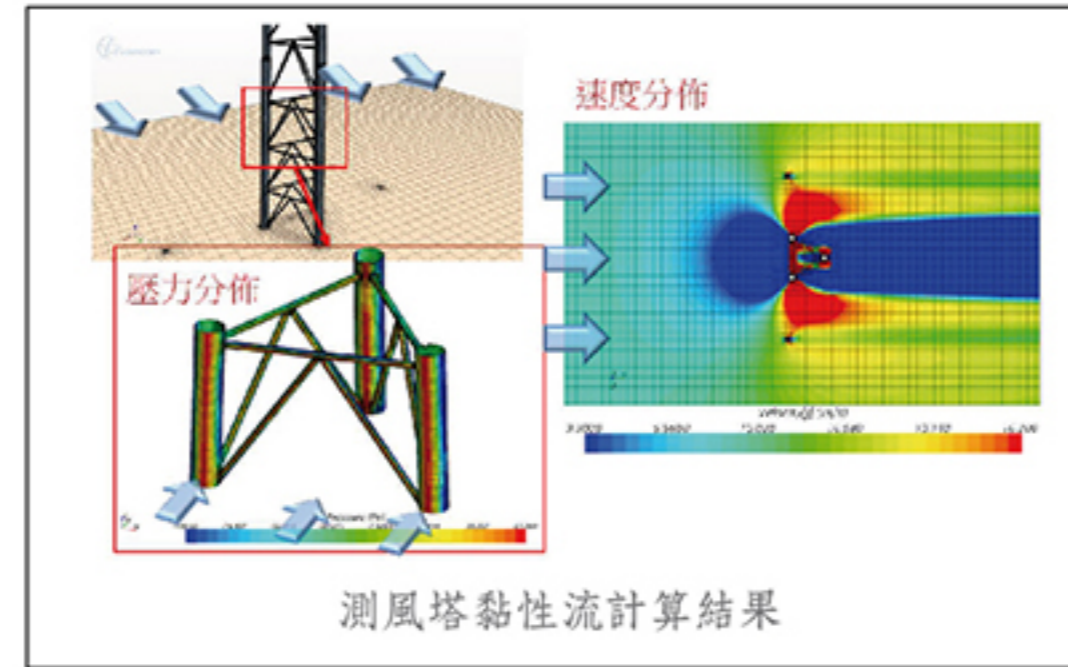
The "Rules for Construction and Classification of Steel Ships" is self-developed and has been revised once every four year. Supplements and amendmnets are also published from time to time before the next edition is published in order to cope with the development of technology. At present, we are compiling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

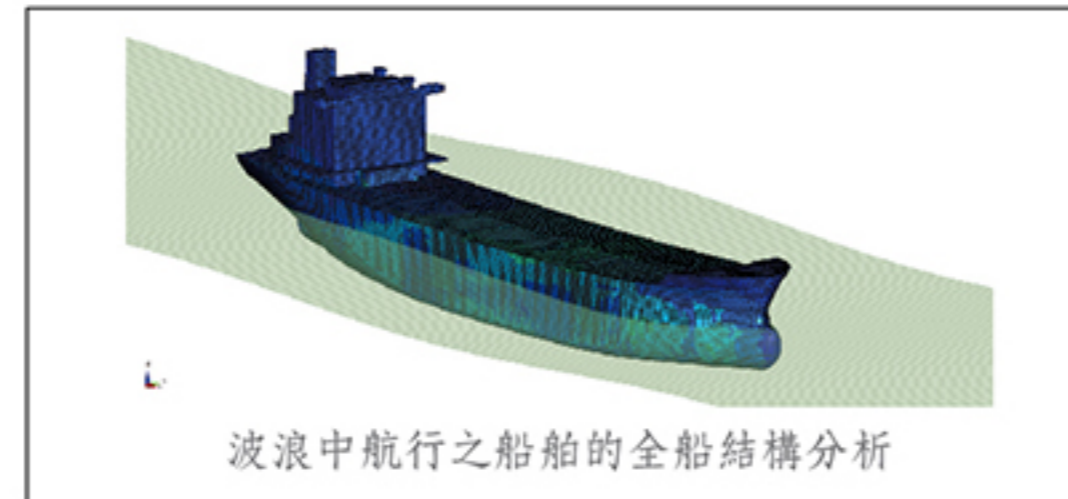
CR



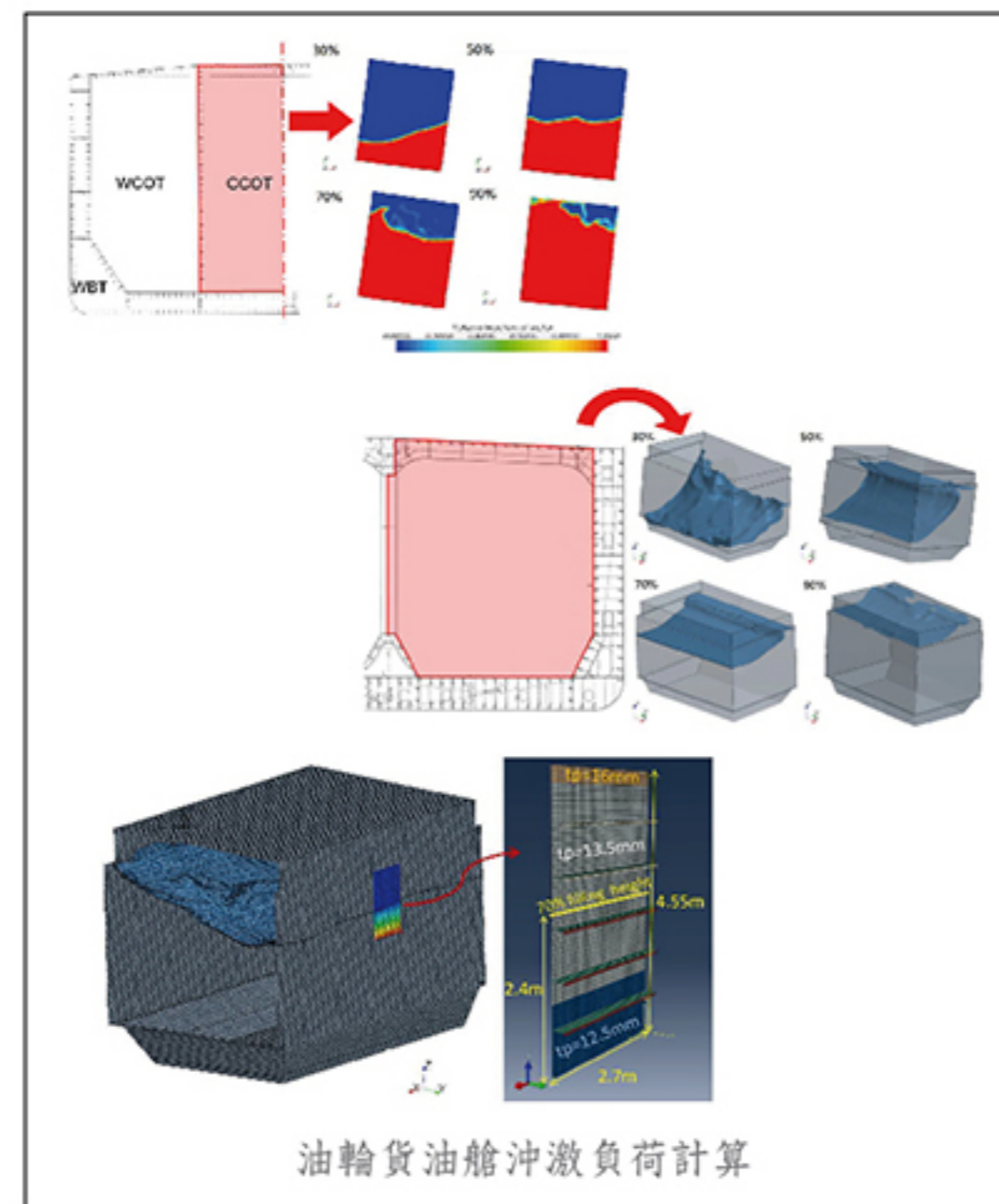
船舶艙部碰撞FEM計算



測風塔黏性流計算結果



波浪中航行之船舶的全船結構分析



油輪貨油艙沖激負荷計算

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MSC.349(92)RO Code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。

交通部於2014年1月27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。

交通部航港局祁局長文中於2014年9月23日至25日率領稽查小組蒞臨本中心執行「驗船機構技術稽核」，經過三天之稽查後確認本中心符合「驗船機構章程(Recognition Organization Code, 簡稱RO code)」規定，同意繼續授權本中心執行國際航線船舶之法定檢驗。

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 MSC. 349 (92) RO Code 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.

The Ministry of Transportation and Communications performed an audit of CR at our head office on January 27, 2014, 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."

Mr. Wei-Jong, Chi, Director General of Maritime and Port Bureau, Ministry of Transportation and Communications R.O.C., visited CR with an audit team to conduct a technical audit on recognized organization on September 23-25, 2014. After three-day audit, CR was found in compliance with "Recognition Organization Code, abbreviation of RO Code." And Maritime and Port Bureau issued "Evidence of Conformity" to authorize CR to continuously carry out statutory surveys on vessels sailing in international route on September 25, 2014.

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

本中心於2014年發表六篇研討會論文及一篇期刊論文，題目分別為：「船舶運動效應對螺旋槳效能之影響評估」、「CSR-H規範之船舶結構驗證軟體HighCRest軟體開發」、「以直接流固耦合計算評估油輪疲勞壽命與CSR-H規範方法之比較」、「油輪之波擊負荷計算」、「艙櫃沖激負荷計算與規範值之比較」、「油輪耐海性能試驗之數值模擬」、「船舶結構破壞抗力評估簡化方法」。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 2014, this Society has published six conference papers and one journal paper, which respectively entitled as "Evaluation of the effect of ship motion on propeller performance", "Development of the software HighCRest for ship structure verification under CSR-H requirements", "Fatigue life evaluation of an oil tanker employing direct hydro-structure computations - A comparison with the CSR-H approach", "Slamming load calculation for an oil tanker", "Tank sloshing load calculation and its comparison with rule value", "Numerical simulations for an oil tanker's seakeeping test", "Simplified fracture resistance assessment in ship structure".

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2014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 25 艘次。

Emergency Technical Assessment Service (ETAS)

Up to the end of 2014, there are 25 ships for which the companies applied to CR for Emergency Technical Assessment Service (ETAS).



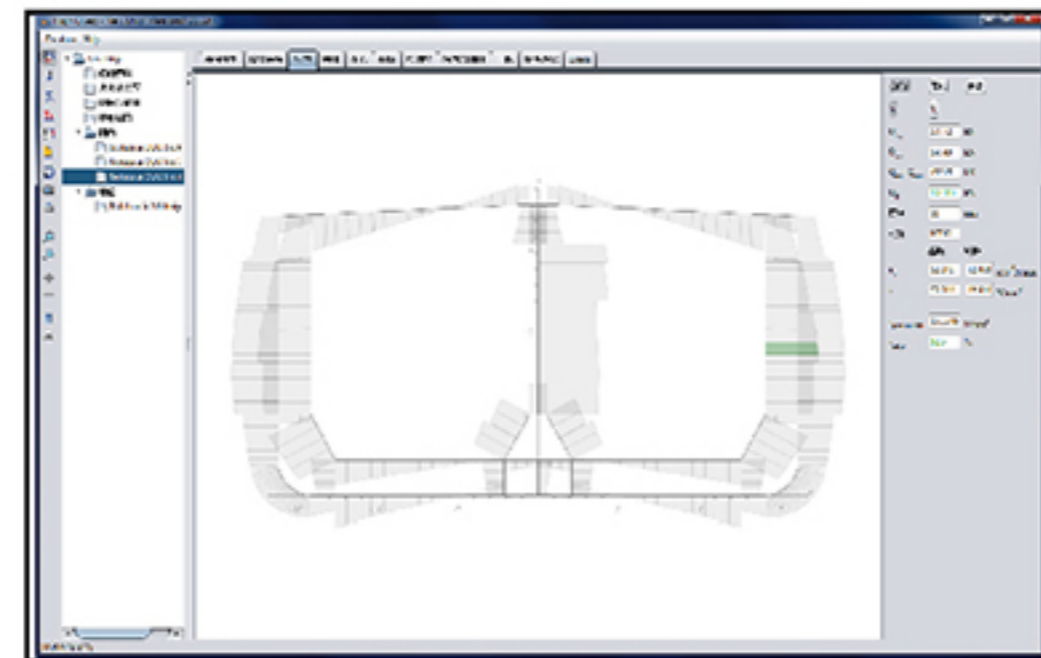
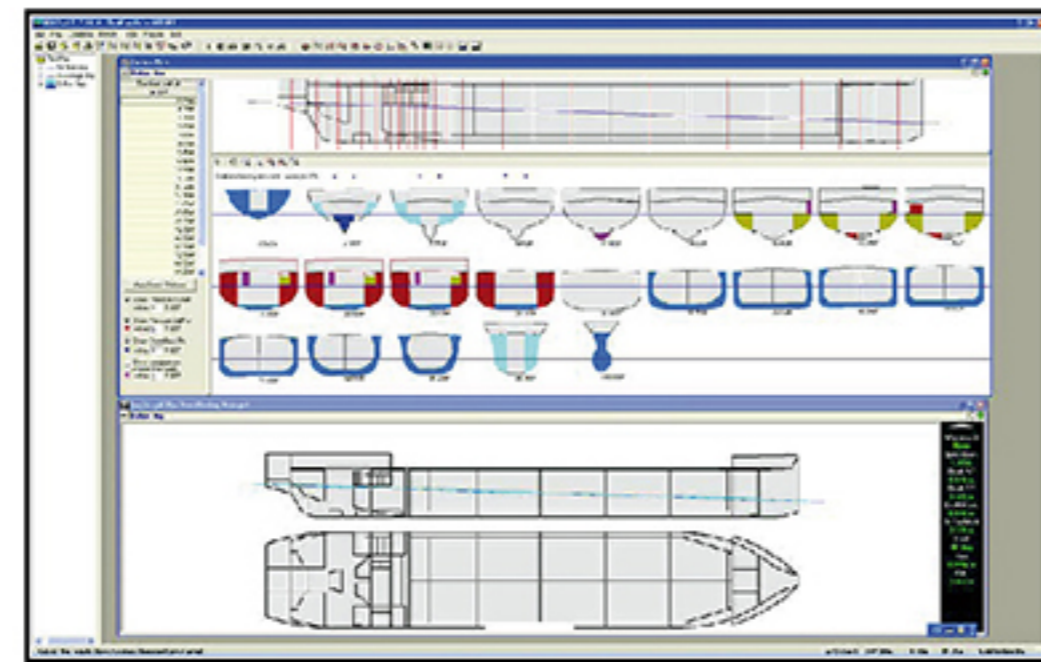
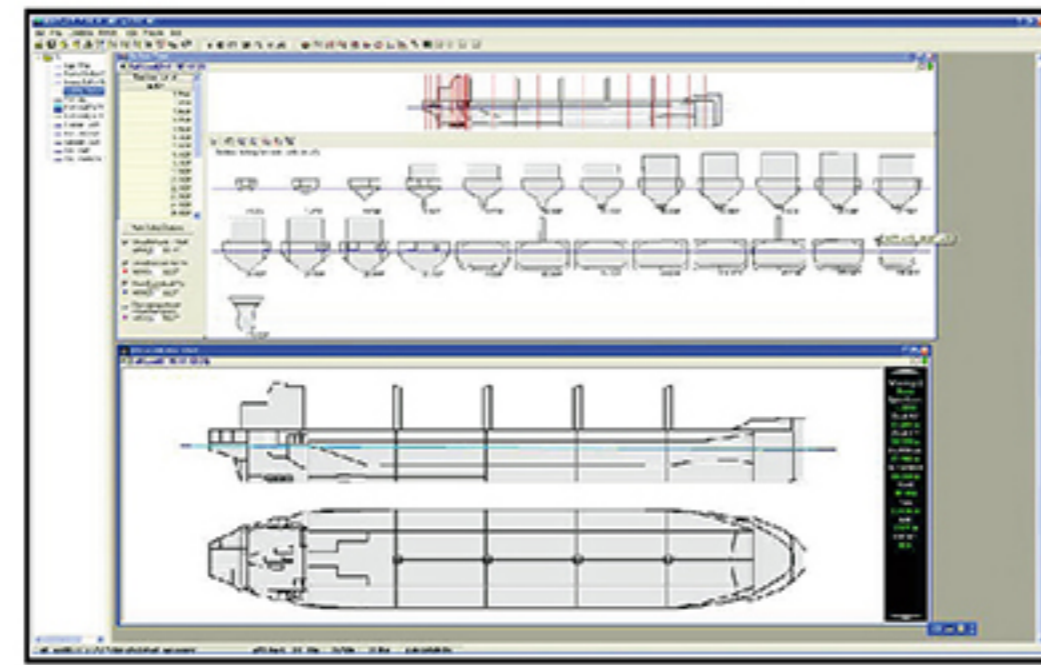
CRPA 電子審圖

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，本中心審圖及退審、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 and return of drawings by CR, inquiries 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.

CR



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 3 班次計 65 人，及港口設施保全員共 4 班次計 155 人。另並舉辦國際安全管理(ISM)內部稽查訓練課程共 3 班次共計 59 人，船舶產業新人課程共 2 班次計 93 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, this year, we have offered 3 CSO training classes for a total of 65 people and 4 PFSO training classes for a total of 155 people. Moreover, we have also offered 3 ISM Code training classes for a total of 59 people and 2 training classes for freshmen in the shipping industry for a total of 93 people. The above-mentioned educational training courses drew high praise from the participants.

對外研討會 External Workshops

本年度對外共舉辦5次研討會，均深獲與會人士好評。

We held 5 external workshops during 2014, all of which received favorable responses.

日期	研討會內容
2014.03.20	<ul style="list-style-type: none">• 2013年CR船級檢驗動態及PSC統計 CR Classification Activity, 2013 and Statistics of Port State Control• ISM/ISPS/MLC法規宣導及注意事項 ISM/ISPS/MLC Overview
2014.04.14	<ul style="list-style-type: none">• 東京備忘錄2014新檢查機制說明 Introduction to MOU New Inspection Regime 2014• ISM/ISPS/MLC法規宣導及注意事項 ISM/ISPS/MLC Overview
2014.06.19	<ul style="list-style-type: none">• 節能減排與柴油機發展趨勢 Energy Saving, Emission Reduction and Diesel Engine Development• 航運市場分析與回顧 Shipping Review and Analysis
2014.08.20	<ul style="list-style-type: none">• 2014年CIC重點檢查及ISM注意事項 CIC(2014)&ISM Overview• 省油船型分析服務—船艙篇 Services for Ship Bow Analysis of Energy Saving• 最新生效公約與進度 Latest Enforced Convention and Schedule
2014.12.18	<ul style="list-style-type: none">• 簡介2015年生效之國際公約修正案 Introduction of International Convention's Amendments that will Come into Force in 2015• 最新生效國際公約與進度 Latest Enforced Convention and Schedule• 疲勞強度分析 Fatigue Strength Analysis

國際交流

為了符合IMO目標型船舶建造規範(以下簡稱GBS)之要求，並將中心之GBS文件送至IMO審核，中心於3月14日董事會通過決議調整中心之英文名稱，劉執行長英如並於4月30日率員拜訪巴拿馬海事局親自說明更名之原因。會談過程中巴拿馬海事局對於中心近年之檢驗績效予以肯定，並於會談次日立即與中心簽署新授權合約。

趙董事長國樑率團於7月28-31日前往北京，先後拜訪中國船級社、中國遠洋運輸集團總公司與中國船舶工業集團公司，與各單位就技術及新船檢驗議題交換意見，同時與中國船級社就既有合作業務充分洽談，達成良好共識。

103年12月10-13日小兩會天津會談中，有關兩岸互設辦事處之議題，雙方初步同意成立工作小組來進行實質面籌設方面之有效推動。

中心風能組於101年11月起，分別於前挪威驗船協會(Legacy DNV)及前德國驗船協會(Legacy GL)執行風能訓練課程，兩訓練課程均於103年12月底全數完成，中心日後將基於雙方所簽署的合作備忘錄，與DNVGL共同推動台灣風能業務。

International Exchange

In order to comply with Goal-Based Ship Construction Standards, GBS and deliver GBS document to IMO for audit, the board of Directors decided to change English name of CR on March 14. Ms. Ying-Ru, Liu, President of CR, personally visited Panama Maritime Authority (PMA) to explain the reasons for change of the name. In the meeting, PMA affirmed high performance of CR in recent years. On the next day of the meeting, PMA re-signed new authorized agreement with CR.

Mr. Kuo-Liang, Chao, chairman of CR, led a team to head for Beijing on 28-31, July and visited CCS, COSCO, and CSSC. We exchanged opinions on technical issues and newly-constructed vessels with above-mentioned companies. We also had further discussion and reached consensus with CCS.

In the Tianjin meeting held on December 10-13, 2014, regarding the issue on establishment of classification society on both sides, CR and CCS agreed to form a working group to make effective promotion.

From November 2012, wind energy section attended training classes held by Legacy DNV and Legacy GL. These two training classes have successfully completed at the end of December, 2014. In the future, CR will promote business of wind energy in Taiwan with DNVGL based on MOU signed between CR and DNVGL.