

CHINA CORPORATION REGISTER OF SHIPPING



## **CR Annual Report 2010**

**60th Anniversary** 



#### 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. 





CR Annual Report 2010 www.crclass.org.tw

#### 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 Road, Lingya District, 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 7650-0031, 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開發大道明匯軒C座2001室

Rm.2001, Building C, MingHuiXuan, Kaifa Road, Guangzhou Economic & Technological Development District, P.R.C.

Tel / Fax: +86-20-3207-0330 Mobile: +86-138-5720-1435

E-mail: cr.cn@crclass.org.tw

### 新加坡代表處 SINGAPORE OFFICE

068808 新加坡珊頓大道5號UIC大樓#14-07

5 Shenton Way #14-07 UIC Building Singapore 068808

Fax: +65-6223-9289 Tel: +65-6223-9239 Mobile: +65-8121-3069

E-mail: cr.sg@crclass.org.tw

#### 德國代表處 GERMANY OFFICE

Querstr.49, 21502 Geesthacht, Germany

Tel: +49-04152-887947 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

Tel: +27-021-7979922 Fax: +27-021-7979925 Mobile: +27-082-8813690

E-mail: frank7yang@hotmail.com





# 中國驗船中心 品質政策

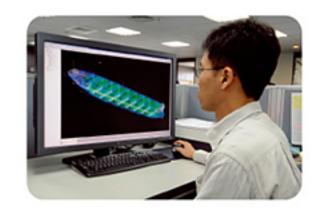
增進船舶及海上人命安全,防止船舶對海洋造成污染











### **Annual Report 2010**

O1 CR簡介 Brief Introduction of CR

02 組織架構 Organization

03 中國驗船中心六十週年董事長感言 60th Anniversary Speech by Chairman of CR

D5 董事會 Board of Directors

6 船級委員會 Classification Committee

07 技術委員會 Technical Committee

08 品管委員會 Quality Management Committee

據點擴展 Network Expansion

建造中入級申請 Application for Classification of Ships during Construction

現成船入級申請 Application for Classification of Existing Ships

新入級船舶 Newly Classed Ships

> 在級船舶 Classed Ships

12 ISM & ISPS 評鑑 ISM & ISPS Verifications

> 港口國管制 Port State Control

工廠認可及型式認可 Works Approval and Type Approval

3 規範研究 Rules Development

14 研究成果 Results of Study

政府授權

Government Authorization

| **ETAS**緊急技術評估服務 | Emergency Technical Assessment Service (ETAS)

CRPA電子審圖 CR Plan Approval (CRPA)

對外研討會 External Workshops

教育訓練 Training

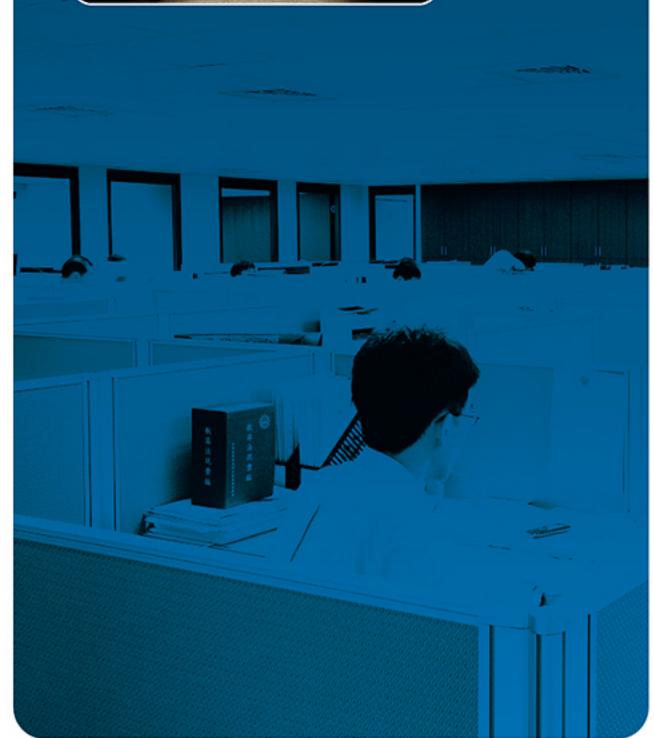


### CR簡介

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。



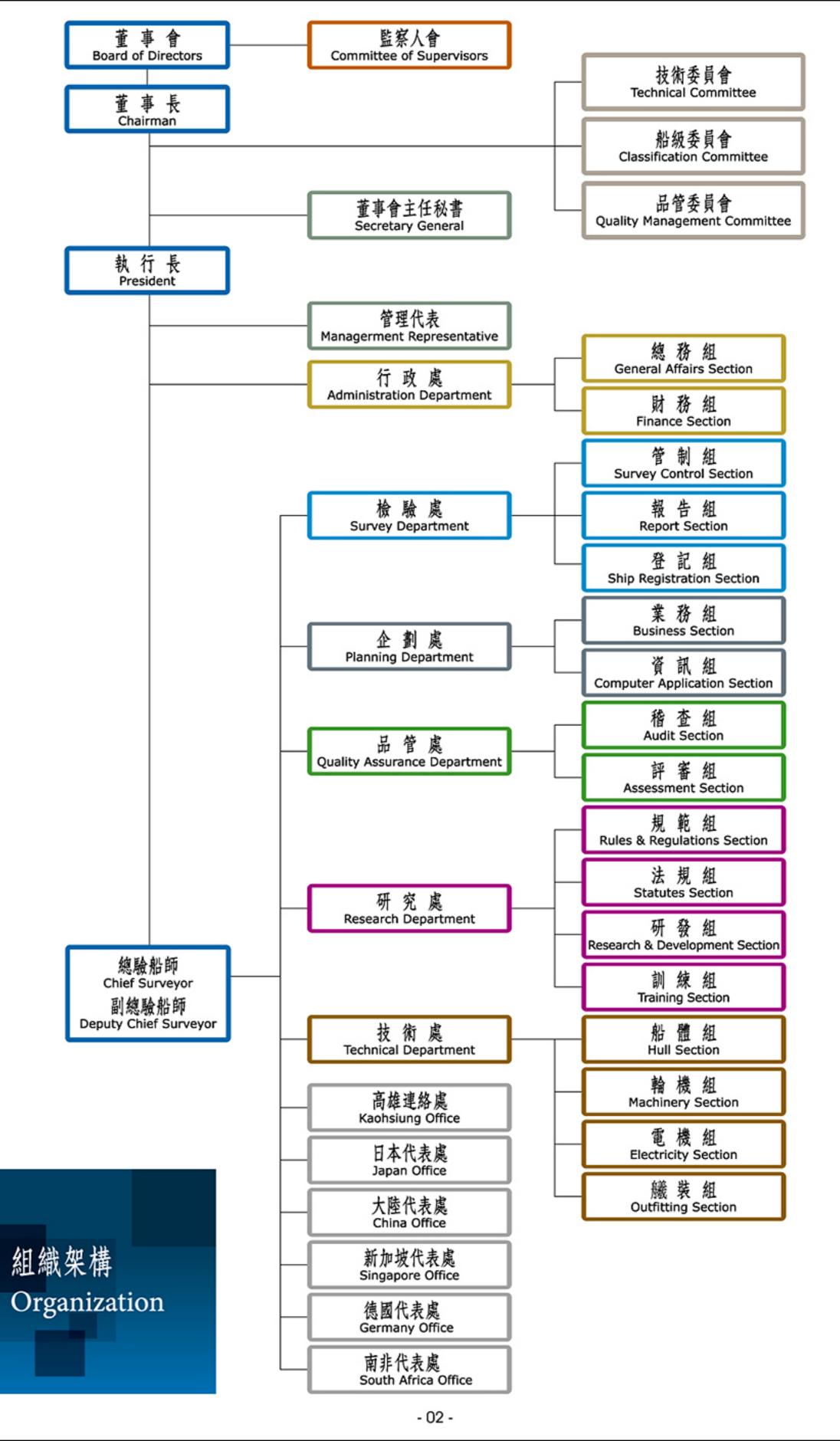




#### Brief Introduction of CR

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 know as CR, was founded on February 15, 1951, in Taipei City. On July 1, 1978, it was restructured after receiving financial contributions from nongovernmental 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.



- 01 -

### 中國驗船中心六十週年董事長感言



本中心之前身「社團法人中國驗船協會」成立於民國40年2月15日,經於民國67年7月1日改組更名為「財團法人中國船中心」,今年適逢60週年,走過一甲子歲月,目睹今日之成長,固感欣慰,然本中心仍待我們去努力,本人受推選為董事長於茲五載,蒙各董事及監察人之督促、交通部之督導及航業界之支持,使本中心得以茁壯強大,穩定發展,在此深深致謝。

本中心為一非營利之財團法人,以服務為本,各工作同仁均能本此原則,勤廉自持,共同為航業界努力與奉獻。然全球航運業盛衰起伏變化極大且快速,加以全球氣候的遊變,嚴重影響航運業的發展與成長,2003年SARS過後,航運業一片榮景,百年難得一見,但2008年的金融海嘯,重創了全球經濟,造成新造船舶之需求急遽降溫,許多訂單紛紛延遲或解約。然而,在危機中又見轉機,目前全球造船訂單又將慢慢增溫,再加上延遲交船量也相當可觀。可以預見,2011年也將會是忙碌的一年

隨著業務量的成長,為了能提供船東更好的服務,使航行於全球各地的船舶能以最快的速度安排受檢,CR計劃持續拓展海外據點,並已於2009年9月正式成立新加坡代表處、2010年6月正式成立了南非代表處,後於2010年9月正式成立了德國代表處。同時,為了能提高品質,除了持續招募優秀人才之外,亦不斷致力於驗船師的培養及訓練。





回顧2010年之工作成果,CR為因應船舶相關技術的發展及國際公約的增訂,修訂了甫於2009年出版的《網船建造與入級規範》;另因加強管制對老舊船舶的檢驗標準,使得入級CR的船舶之平均船齡降為12.8年,在港口管制PSC紀錄如Tokyo MOU及Paris MOU中維持不錯的成績;持續加強研發工作及改進資訊系統,自行開發之電子審圖系統CRPA大幅提高了審圖效率;加入CR緊急技術評估服務(ETAS)之船隊持續增加,且能發揮實際效果,成功協助觸礁船舶脫困,降低了船東風險的潛在損失。

時值本中心60週年,面對未來的挑戰,CR將會以技術 與服務為主軸,秉持獨立公正的精神,依循合理及安全 可靠的規範和標準執行檢驗及提供快速、熱忱之服務, 為增進海上人命安全與防止海洋環境污染做出貢獻,這 不僅是CR的責任亦是使命。最後,CR對交通部、海巡 署、漁業署及航業界等多年來的支持表示深切的謝意, 並保證會一如既往,在未來的歲月裡,盡最大的努力, 以提供最好的服務。

中國驗船中心 一 董事長 藍俊德

並俊德







#### 60th Anniversary Speech by Chairman of CR

"China Corporation Register of Shipping" was founded on February 15, 1951 and later restructured on July 1, 1978, and the year 2011 coincides with CR's 60th anniversary. After all these years, people can really see our growth. Though gratified by this, we understand that there is still room for improvement. I was elected Chairman of CR and have assumed my position for 5 years. I am truly thankful for the supervision of CR directors and supervisors, the guidance of the Ministry of Transportation and Communications, and the support of the shipping industry. Without their help, we could not have continued to grow steadily.

CR is a nonprofit corporation rendering technical services. All our staff members work diligently and honestly to contribute to the further development of the shipping industry. However, due to the constantly changing and unstable global shipping industry, coupled with the drastic changes in global climate, the development and growth of the shipping industry were seriously affected. After the period of the SARS outbreak in 2003, the shipping industry enjoyed a thriving business, which could be seen maybe only once in a century. Nevertheless, the 2008 financial crisis inflicted heavy losses on the global economy, causing a sharp decline in demand for newbuildings. Many orders were either delayed or cancelled. However, in the midst of such crisis, new opportunities emerged. The number of global shipbuilding orders will be gradually increasing, and the quantity of delayed ship deliveries of this year will also be growing tremendously; therefore, we can foresee that 2011 is going to be another busy year for CR.

With the growth in business and for the purpose of rendering better services to shipowners and enabling ships navigating around the world to undergo inspections as quickly as possible, we plan to continue expanding our overseas network and already established the Singapore Office in September 2009, the South Africa Office in June 2010, and the Germany Office in September 2010. Meanwhile, in an effort to improve quality, we have been working diligently on the cultivation and training of our surveyors in addition to the continuous recruitment of excellent people.

Looking back on the year 2010, we had some accomplishments in the following areas:

- In response to the development of ship-related technology and the revision and inclusion of international conventions, we revised
  the "Rules for the Construction and Classification of Steel Ships", which was newly published in 2009;
- (2) As a result of our intensified control over the inspection standards for aged ships, the average age of ships classed with CR declined to 12.9 years. According to the PSC records, such as Tokyo MOU and Paris Mou, the results were satisfactory.
- (3) We continued to enhance the research and development as well as improve the Information Technology System;
- (4) We developed the Electronic Plan Approval System (CRPA), which greatly increased the drawing approval efficiency;
- (5) The number of fleet covered by the "CR Emergency Technical Assessment Service" continued to grow, which demonstrated the actual effects, helped the ships grounding on reefs reach safety successfully, and lowered the risk of possible losses the shipowners might have suffered.

To mark CR's 60th anniversary and to face future challenges, we will focus on inspection techniques and services. We will conduct surveys in an impartial manner in accordance with the reasonable, safe and dependable rules and standards and will provide quick and cordial services in order to make a contribution to the enhancement of safety of life at sea and to the prevention of marine environmental pollution. This is not only our responsibility, but also our mission. In closing, we would like to express our heartfelt appreciation once again to the Ministry of Transportation and Communications, Coast Guard Administration, Fisheries Agency, and the shipping industry for their kind support over the years, and guarantee that we will make every effort as always to provide you with the best service for years to come.

J. D. Lan, Chairman China Corporation Register of Shipping



- 03 -

#### 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,任期自2009年5月18日起,為期三年,董事長由董事會遴選之。 現任董事長由藍俊德先生擔任,監察人會主席由陳財旺先生擔任。現任董事及監察人如下:

#### **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, 2009. The Chairman elected from among the directors is Mr. J. D. Lan, 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:

董事 Director	現任職務 Position
藍俊德 Lan, Jiun-Der	中國驗船中心董事長 Chairman, China Corporation Register of Shipping
祁文中 Chi, Wen-Jong	交通部航政司司長 Director of Department of Navigation and Aviation, Ministry of Transportation and Communications, R.O.C.
謝明輝 Shieh, Ming-Hui	交通部參事 Counselor, Ministry of Transportation and Communications, R.O.C.
邱東明 Chiu, Tung-Ming	交通部參事 Counselor, Ministry of Transportation and Communications, R.O.C.
李雅荣 Lee, Ya-Jung	考試院考試委員 Member of the Examination Yuan, R.O.C.
黄肇嘉 Huang, Chao-Chia	行政院海岸巡防署企劃處處長 Manager of Department of Planning, Coast Guard Administration, R.O.C.
王文潮 Wilfred Wang	台塑石化股份有限公司董事長 Chairman, Formosa Petrochemical 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.
陳源成 Y. C. Chen	中鋼運通股份有限公司顧問 Advisor, China Steel Express Corporation
謝志堅 Hsieh, Chih-Chien	長榮海運股份有限公司董事長 Chairman, Evergreen Marine Corporation
周慕豪 Jou, Muh-Haur	中國航運股份有限公司總經理 General Manager, 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 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 Chang, Ray-Chung	台灣中油股份有限公司副總經理 Vice President, CPC Corporation, Taiwan
黄健強 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
黄順章 Huang, Shun-Chang	台灣國際造船股份有限公司總經理 President, CSBC Corporation, Taiwan
張達禮 Chang, Ta-Li	聯合船舶設計發展中心顧問 Advisor, United Ship Design & Development Center
楊鴻彬 Young, Hung-Bin	台灣產物保險股份有限公司董事 Director, Taiwan Fire & Marine Insurance Co., Ltd.
程正平 Paul C. P. Cheng	能源航運股份有限公司董事長 Chairman, Energy Shipping Co., Ltd.
鄒政下 Joseph C. S. Chou	兆豐產物保險股份有限公司總經理 General Manager, Chung Kuo Insurance Co., Ltd.
鄧運連 Y. L. Teng	中國驗船中心執行長 President, China Corporation Register of Shipping
郭義隆 Guo, I-Lung	協榮航業股份有限公司顧問 Advisor, Glory Navigation Co., Ltd.

監察人 Supervisor	現任職務 Position
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.
黄壽椿 Huang, Show-Chuen	交通部統計長 Director of Department of Statistics, Ministry of Transportation and Communications, R.O.C.
許志堅 Hsu, Chih-Chien	益利輪船股份有限公司董事長 Chairman, Eddie Steamship Co., Ltd.

# 船級委員會 Classification Committee

職別	姓名 Name	現任職務 Position
主任委員	盧峯海	陽明海運股份有限公司董事長
Chairman	Frank F. H. Lu	Chairman, Yang Ming Marine Transport Corporation
副主任委員	施清溪	台灣航業股份有限公司顧問
Vice-Chairman	C. C. Shih	Advisor, Taiwan Navigation Co., Ltd.
委員	藍俊昇	慧洋海運股份有限公司董事長
Member	Chun-Sheng Lan	Chairman, Wisdom Marine Lines S.A.
委員	范國萬	台塑海運股份有限公司副總經理
Member	K. W. Fan	Vice President, Formosa Plastics Marine Corporation
委員	任樹傑	中鋼運通股份有限公司副總經理
Member	S. J. Ren	Vice President, China Steel Express Corporation
委員	陳籐	台灣航業股份有限公司總稽核
Member	T. Chen	General Auditor, Taiwan Navigation Co., Ltd.
委員	潘凌雲	遠森網路科技公司執行副總經理
Member	Michael L. Y. Pan	Executive Vice President, Eastern Media International Corporation
委員	張豐州	新興航運股份有限公司副總經理
Member	F. J. Chang	Vice President, Sincere Navigation Corporation
委員	胡海國	陽明海運股份有限公司副總經理
Member	H. K. Hwu	Vice President, Yang Ming Marine Transport Corporation
委員	黄訓國	長榮海運股份有限公司副總經理
Member	Shiug-Kwo Huang	Vice President, Evergreen Marine Co., Ltd.
委員	何尤彦	四維航業股份有限公司協理
Member	You-Yen Ho	Assistant Vice President, Shih Wei Navigation Co., Ltd.
委員	高雅平	裕民航運股份有限公司副總經理
Member	Y. P. Kao	Vice President, U-Ming Marine Transport Corporation
委員	黄宏志	台灣國際造船股份有限公司基隆廠廠長
Member	H. C. Huang	General Manager of Keelung Yard, CSBC Corporation, Taiwan
委員	林炯炘	萬海航運股份有限公司資深協理
Member	Lin, Jeong-Shin	Senior Assistant Vice President, Wan Hai Lines Ltd.
委員	林家淦	明台輪船股份有限公司副總經理
Member	C. K. Lin	Vice President, MingTai Navigation Co., Ltd.









- 05 -

# 技術委員會 Technical Committee

職別	姓名 Name	現任職務 Position
主任委員	張達禮	聯合船舶設計發展中心高級顧問
Chairman	T. L. Chang	Advisor, United Ship Design & Development Center
副主任委員	王偉輝	國立臺灣海洋大學教授
Vice-Chairman	W. H. Wang	Professor, National Taiwan Ocean University
委員	劉詩宗	交通部航政司副司長
Member	Liou, Shy-Tzong	Vice Director of Department of Navigation and Aviation, Ministry of Transportation and Communications, R.O.C.
委員	韓碧祥	中信造船股份有限公司董事長
Member	P. H. Han	Chairman, Jong Shyn Shipbuilding Co., Ltd.
委員	洪錦榮	協同造船廠股份有限公司董事長
Member	C. J. Hung	Chairman, Hsieh Tung Shipbuilding Co., Ltd.
委員	廖文獻	台灣國際造船股份有限公司副總經理
Member	Liow, Wen-Shian	Vice President, CSBC Corporation, Taiwan
委員	郭真祥	國立臺灣大學教授
Member	Kouh, Jen-Shiang	Professor, National Taiwan University
委員	林鴻志	聯合船舶設計發展中心工程處處長
Member	Lin, Hong-Jyh	Director, United Ship Design & Development Center
委員	黄正清	國立成功大學教授
Member	C. C. Huang	Professor, National Cheng Kung University
委員	桑滿林	台塑海運股份有限公司顧問
Member	Man-Lin Sang	Advisor, Formosa Plastics Marine Corporation
委員	陳嘉	陽明海運股份有限公司協理
Member	Charles Chen	Assistant Vice President, Yang Ming Marine Transport Corporation
委員	黄守真	能德造船工業股份有限公司董事長
Member	Sheldon Huang	Chairman, Lung Teh Shipbuilding Co., Ltd.
委員	譚泰平	台灣國際造船公司董事長
Member	Paul Tay-Ping Tang	Chairman, CSBC Corporation, Taiwan
委員	林哲宏	台灣中油股份有限公司储運處組長
Member	J. H. Lin	Team Leader, Storage and Transporation Division, CPC Corporation, Taiwan
委員	鄭添元	中國鋼鐵股份有限公司冶金規範課課長
Member	T. Y. Cheng	Section Manager, China Steel Corporation











# 品管委員會 Quality Management Committee

職別	姓名 Name	現任職務 Position
代主任委員兼 副主任委員 Acting Chairman & Vice-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
委員	黄文哲	陽明海運股份有限公司協理
Member	W. C. Huang	Assistant Vice President, Yang Ming Marine Transport Corporation
委員	張中傷	長榮海運股份有限公司副協理
Member	C. C. Chang	Assistant Vice President, Evergreen Marine Co., Ltd.
委員	陳木川	四維航業股份有限公司副總經理
Member	M. C. Chen	Vice President, Shih Wei Navigation Co., Ltd.
委員	蔣銘	宏銘企業管理顧問有限公司總經理
Member	M. Chiang	President, Chiang Marine Services Ltd.
委員	陳朝宗	中國航運股份有限公司副總經理
Member	C. C. Chen	Vice President, Chinese Maritime Transport Ltd.
委員	楊仲筂	中華海運研究協會顧問
Member	C. C. Yang	Advisor, Chinese Maritime Research Institute
委員	蕭捷明	明台海運公司總經理
Member	Jimmy Shiao	President, MingTai Navigation Co., Ltd.
委員	陳火財	安生理算檢定公司總經理
Member	H. T. Chen	President, Overseas adjusters and Surveyors Co., Ltd.
委員	歐陽定	達和航運股份有限公司船務部海技課課長
Member	D. Ou Yang	Section Manager, Ta-Ho Maritime Corporation
委員	步壽椿	旭航船舶管理顧問有限公司董事長
Member	S. C. Pu	Chairman, SWS Shipmanagement and Maritime Consultant Co., Ltd.
委員	金明遠	台灣國際造船股份有限公司基隆廠副廠長
Member	M. Y. Chin	Vice General Manager of Keelung Yard, CSBC Corporation, Taiwan

- 07 -

### 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 Road, Lingya District, 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開發大道明匯軒C座2001室 Rm.2001, Building C, MingHuiXuan, Kaifa Road, Guangzhou Economic & Technological Development District, P.R.C. Tel / Fax: +86-20-3207-0330 Mobile: +86-138-5720-1435 E-mail: cr.cn@crclass.org.tw

#### 新加坡代表處 Singapore Office 068808 新加坡珊頓大道5號UIC大樓#14-07

5 Shenton Way #14-07 UIC Building Singapore 068808 Tel: +65-6223-9239 Fax: +65-6223-9289 Mobile: +65-8121-3069 E-mail: cr.sg@crclass.org.tw

### 德國代表處 Germany Office

Querstr.49, 21502 Geesthacht, Germany Tel: +49-04152-887947 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 Tel: +27-021-7979922 Fax: +27-021-7979925

Mobile: +27-082-8813690 E-mail: frank7yang@hotmail.com

# 建造中入級申請 Application for Classification of Ships during Construction

2010年向CR申請建造中入級的船舶共計有50艘,分列如下:

There were a total of 50 ships applying for CR class during construction in 2010 as listed below:

船東 Owner	造船廠 Shipyard	建造地點 Place	船型 Ship type	艘數 Number
高雄市輪船股份有限公司	新昇發	台灣	渡輪	3
Kaohsiung City Shipping Co., Ltd.	Shin Sheng Fa	Taiwan	Ferry	
慧洋海運股份有限公司	大島	日本	75,700 DWT 散裝船	1
Wisdom Marine Lines S.A.	Oshima	Japan	75,700 DWT bulk carrier	
國防部軍備局	罡旻	台灣	巡邏船	31
Armaments Bureau	Karmin	Taiwan	Patrol boat	
基隆港務局	龍德	台灣	巡邏船	1
Keelung Harbor Bureau	Lung teh	Taiwan	Patrol boat	
台塑海運股份有限公司 Formosa Plastics Marine Corp.	Universal	日本 Japan	297,000 DWT 油輪 297,000 DWT oil tanker	3
慧洋海運股份有限公司	村上秀	日本	25,000 DWT 散裝船	3
Wisdom Marine Lines S.A.	Murahide	Japan	25,000 DWT bulk carrier	
海洋巡防總局	台船	台灣	2,000 噸級巡防艦	1
Coast Guard Administration	CSBC	Taiwan	2,000-ton class patrol vessel	
中國航運股份有限公司	台船	台灣	203,000 DWT 散裝船	2
Chinese Maritime Transport Ltd.	CSBC	Taiwan	203,000 DWT bulk carrier	
海洋巡防總局	中信	台灣	1,000 噸級巡防艦	2
Coast Guard Administration	Jong Shyn	Taiwan	1,000-ton class patrol vessel	
台灣中油股份有限公司 CPC Corporation, Taiwan	靖海	台灣 Taiwan	600HP 工作船 600HP work boat	1
四維航業股份有限公司	佐伯	日本	37,000 DWT 散裝船	2
Shih Wei Navigation Co.	Saiki	Japan	37,000 DWT bulk carrier	

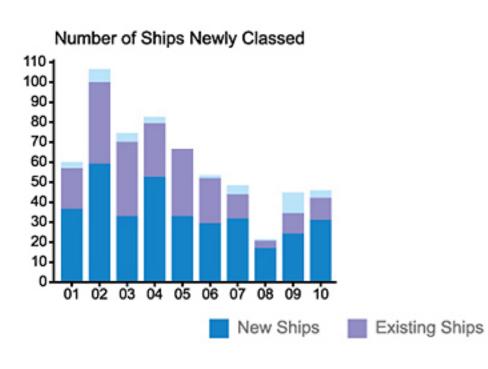
# 現成船入級申請 Application for Classification of Existing Ships

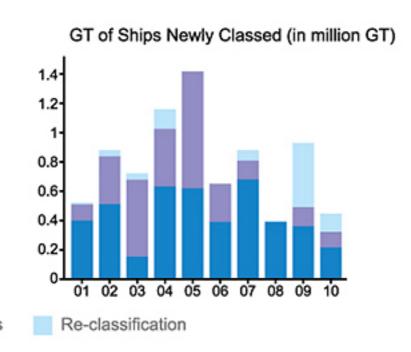
2010年向CR申請現成船入級的船舶共計有11艘,分列如下:

船名 Ship name	船東 Owner	船旗 Flag	總噸位 GT	船型 Ship type
佳星	巴商佳欣航運公司	巴拿馬	22361	散裝船
Tropical Star	TROPICAL BEAUTY NAVIGATION S. A.	Panamanian		Bulk carrier
夭使17號	永順船舶有限公司	中華民國	5373	化學/油品船
ANGEL 17	WINSON SHIPPING TAIWAN	R.O.C.		Chemical & oil tanker
華維 BLOSSOM PESCADORES	BLOSSOM PESCADORES S.A.	巴拿馬 Panamanian	4334	雜貨船 General cargo/Timber carrie
德洋明陽	德洋海運	中華民國	6354	雜貨船
DERYOUNG SUNSHINE	DERYOUNG MARITIME CO., LTD.	R.O.C.		General cargo ship
HUA FU 107	WELL SUCCESS MARINE S.A.	巴拿馬 Panamanian	4964	冷凍船 Reefer carrier
建輝	漢福股份有限公司	中華民國	18502	货櫃船
KANWAY GLOBAL	CHINA FAMOUS CO., LTD.	R.O.C.		Container carrier
麥唐娜	新與航運股份有限公司	中華民國	32505	散裝船
MADONNA III	SINCERE NAVIGATION CO.	R.O.C.		Bulk carrier
華星108 TIARA 108	TIARA MARINE S. A.	巴拿馬 Panamanian	4361	冷凍船 Reefer carrier
裕宏	裕品實業股份有限公司	中華民國	337	拖船
YU HONG	YU PIN SHIPPING CO., LTD	R.O.C.		Tug
裕元101號	裕品實業股份有限公司	中華民國	303	拖船
YU YUAN NO.101	YU PIN SHIPPING CO., LTD	R.O.C.		Tug
德翔臺北	德翔海運股份有限公司	中華民國	15487	貨櫃船
TS TAIPEI	T.S. LINES CO., LTD.	R.O.C.		Container carrier

### 新入級船舶 Newly Classed Ships

2010年經審核後正式入級的船舶有45艘共計443,988總噸,艘數為在級船舶的10.3%,其中新船入級31艘,現成船入級11艘,重新入級3艘。 After careful review, a total of 45 ships with 443,988 gross tonnage were formally classed with CR in 2010. The number of ships accounted for 10.3% of the number of those already classed with CR. Among these newly classed ships, there were 31 new ships, 11 existing ships, and 3 re-classed ships.



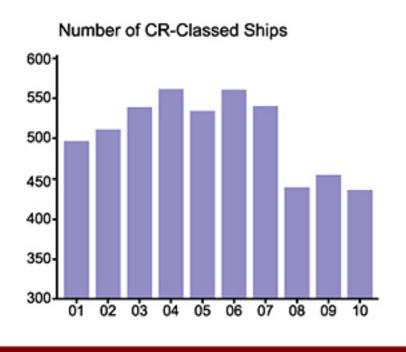


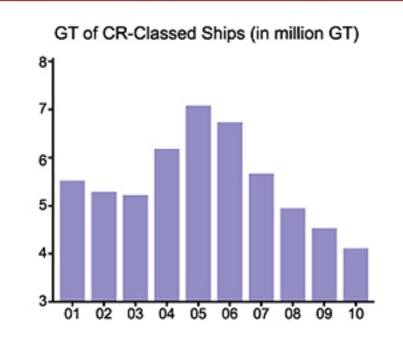
#### 在級船舶 Classed Ships

截至2010年底,維持CR船級之船舶有439艘,共計4,167,930總噸,平均船齡為12.8年。

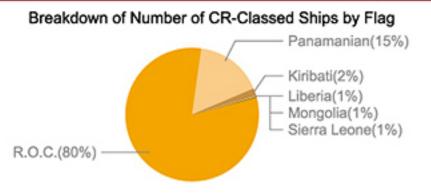
Up to the end of 2010 there were 439 ships maintaining CR class with 4,167,930 gross tonnage, and the average age of ships was 12.8 years.

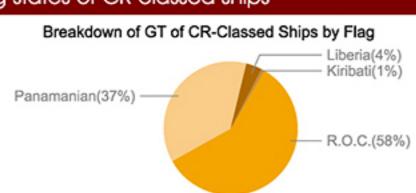
#### 歷年在級船舶艘數及總噸位 The number of CR-classed ships over the years and their gross tonnage



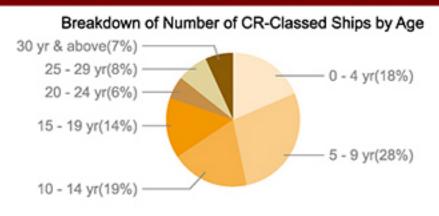


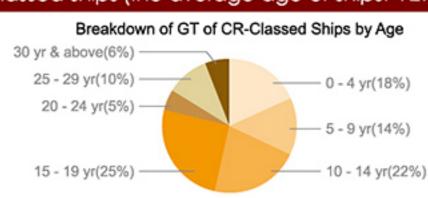
#### 在級船舶之船旗國分析 Analysis of flag states of CR-classed ships



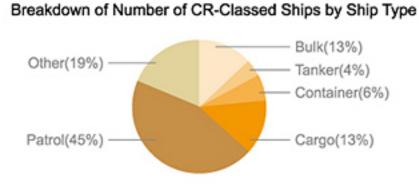


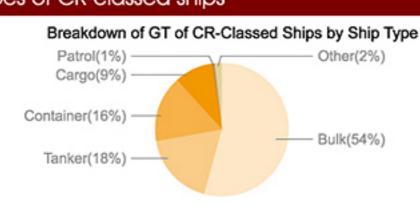
#### 在級船舶之船齡分析(平均船齡12.8年) Analysis of age of CR-classed ships (the average age of ships: 12.8 years)





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





#### ISM & ISPS 評鑑

2010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)規定之驗證及發證工作,共計符合文件(DOC)評鑑44家,船舶管理評鑑(SMC)70艘,國際船舶保全(ISPS)評鑑共50艘次。

#### **ISM & ISPS Verifications**

In 2010, CR conducted ISM and ISPS verification and certification work, carrying out DOC verifications for 44 companies, SMC verifications for 70 ships and ISPS verifications for 50 ships.





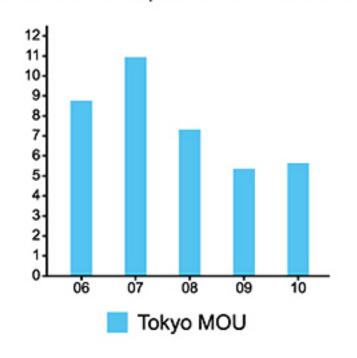
### 港口國管制

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,2010年入級CR船舶在東京備忘錄(TOKYO MOU)的紀錄中,扣船率已降為5.7%。

#### 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. According to the Tokyo MOU record, the detention rate of ships classed with CR in 2009 dropped to 5.7%.

#### Detention Ratio Comparison of Last 5 Years (%)



#### 工廠認可及型式認可

2010年CR執行船舶用品工廠認可及產品型式認可共計64家221型,其中包括危險品容器之認可工廠共13家、中型容器型式共3型、小型容器型式共119型。

#### Works Approval and Type Approval

In 2010, CR conducted works approval of 64 companies and type approval of 221 products for use on vessels, including 13 works of small packagings/intermediate bulk containers (IBCs) for dangerous goods, 3 types of IBCs, and 119 types of small packagings.

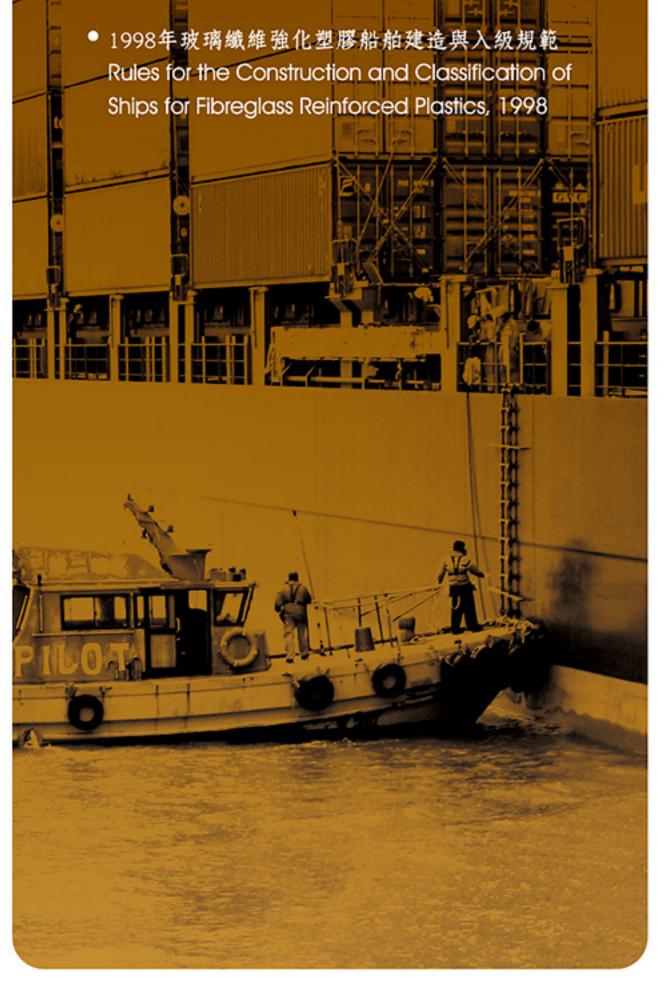
#### 規範研究

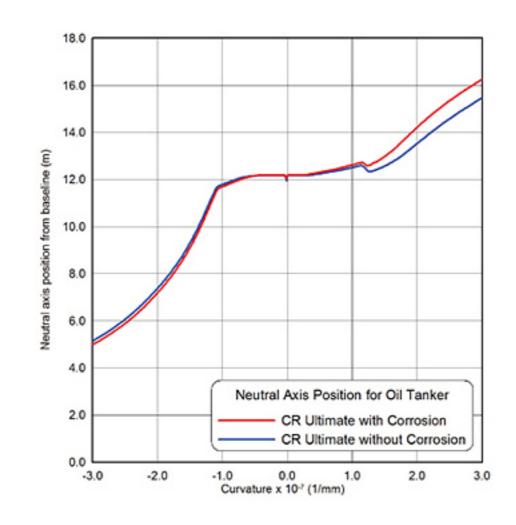
本中心之「鋼船建造與入級規範」係自行開發並每四年 改版一次,期間亦隨時因應法規及技術發展而增訂修訂 版。目前本中心所編撰之船級規範計有:

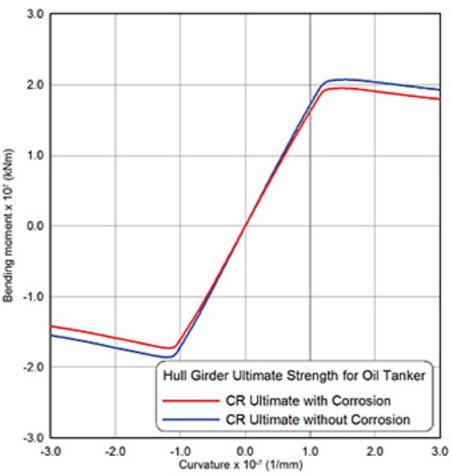
#### Rules Development

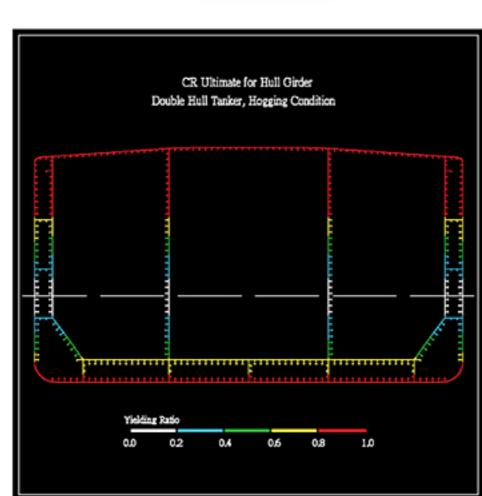
The "Rules for Construction and Classification of Steel Ships, 2009" is self-developed and has been revised once in four years. Supplements and revisions are also published from time to time before the next edition is published in order to cope with the development of technology. At present, we are compiling the following rules for classification of ships:

- 2009年鋼船建造與入級規範
   Rules for the Construction and Classification of Steel Ships, 2009
- 2008年高速船建造與入級規範
   Rules for the Construction and Classification of High-Speed Craft, 2008















### 政府授權

CR依據船舶法規定,受交通部委託,承辦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、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。

#### Government Authorization

CR conducts statutory surveys of ROC-flag ships on behalf of the Ministry of Transportation and Communications in accordance with the Law of Ships. In addition, CR has obtained the authorization from the governments of Panama, Belize, Mongolia, Cambodia, Kiribati, and Dominica and has affirmed compliance with IMO Resolution A.739(18) and A.789(19) to carry out statutory surveys of their ships.

### 研究成果

本中心黄建樺博士自行開發符合共同結構規範船體樑極限強度計算要求之程式CR UItimate,經驗證具有極佳之精確度。黃博士並於2010年9月23日赴巴西里約熱內盧參與國際船舶及離岸結構會議(ISSC)技術委員會第二次工作報告,會中展示以CR UItimate程式計算該委員會所指定之五種船型。由於CR UItimate具有可自由指定各項參數的特性,在共同結構規範方法部分,成為唯一能符合該委員會計算要求之程式。該成果將於ISSC 2012年大會報告上呈現。

#### Results of Study

Dr. C. H. Huang of CR developed a CSR-complied hull girder ultimate strength program, CR Ultimate, which had been verified to be with very high precision. Dr. Huang attended the second interim meeting of the technical committee of ISSC held on 23 September, 2010, in Rio de Janeiro, Brazil, and demonstrated the results of CR Ultimate for the designated 5 types of ship by the committee. As CR Ultimate had the characteristics of enabling to assign all parameters by users, in the part of CSR method, CR Ultimate turned into the only one program that could satisfy the requests of the committee. The achievements will be presented in the ISSC 2012 congress report.





- 13 -

### ETAS緊急技術評估服務

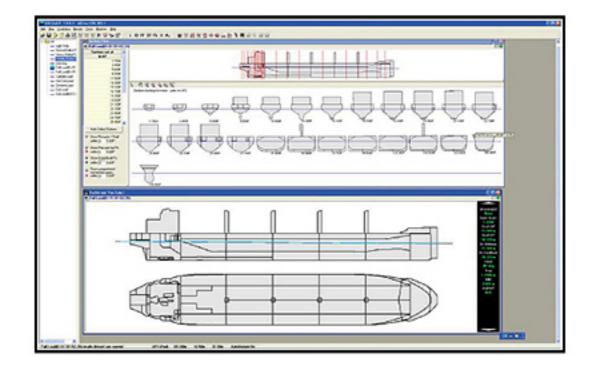
截至2010年底,各航運公司向本中心申請緊急技術評估 服務(ETAS)的船舶共計有26艘,期間曾協助觸礁船舶成 功脫困共計1艘次。

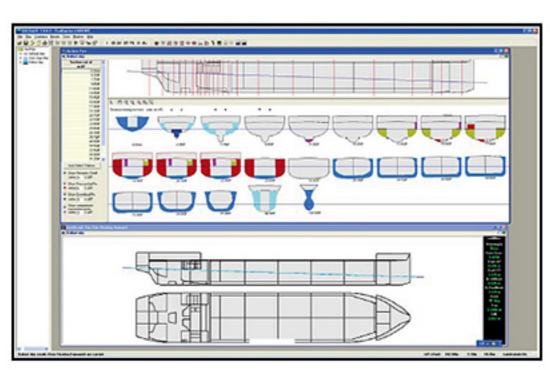
#### **Emergency Technical Assessment** Service (ETAS)

Up to the end of 2010, there are 26 ships for which the companies applied to CR for Emergency Technical Assessment Service (ETAS). During that period, we helped 1 ship grounded on rocks to successfully reach safety.







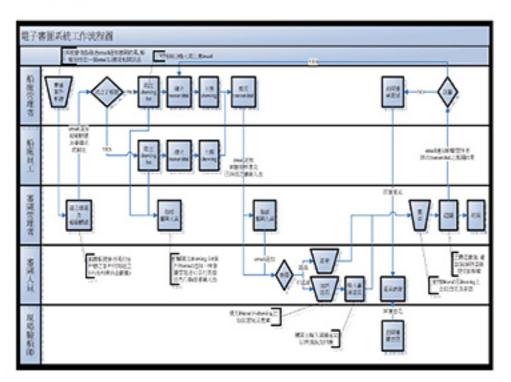


### CRPA 電子審圖

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.



### 對外研討會 External Workshops

本年度對外共舉辦7次研討會,均深獲與會人士好評。

We held 7 external workshops during 2010, all of which received favorable responses.

日期	研討會內容
2010.03.10	<ul> <li>緊急技術評估服務         Emergency Technical Assessment Service     </li> <li>船東對塗裝應有的認識         The Knowledge of Marine Coating to Ship's Owners     </li> </ul>
2010.04.28	<ul> <li>保護塗層之性能標準(PSPC)簡介 Introduction to the Performance Standard for Protective Coatings (PSPC)</li> <li>船東對塗裝應有的認識 The Knowledge of Marine Coating to Ship's Owners</li> </ul>
2010.05.11	• 油料紀錄簿(ORB)第II部分簡介 Entries in the Oil Record Book
2010.06.25	<ul> <li>防止船舶污染國際公約附錄VI-防止船舶空氣污染規則 Revised MARPOL Annex VI- Regulations for the Prevention of Air Pollution from Ships</li> <li>2008年NOx Code簡介、船上檢驗暨使用低硫燃油應注意事項 Introduction to NOx Code 2008</li> <li>最新海事訊息 Latest Marine Information</li> </ul>
2010.06.28	• 2010年ISM CODE修正之「船舶風險評估」 Ship's Risk Assessment, ISM Code Revised on 2010
2010.08.27	<ul> <li>IMO 2011年即將生效之國際公約修正案 IMO International Conventions coming into force on 2011</li> <li>巴黎備忘錄PSC 2010重點檢查活動-液貨船破損穩度 2010 CIC of Paris MOU on Port State Control</li> <li>東京備忘錄PSC 2010重點檢查活動-包裝形式之有害物質 Tokyo MOU's CIC in 2010</li> </ul>
2010.12.20	<ul> <li>從船東角度看海盜劫掠、兵險、與保費成本 The piracy, war inssurance and K&amp; R costs - view from shipowner</li> <li>國際海事固體散裝貨物章程 International Maritime Solid Bulk Cargos(IMSBC) Code</li> </ul>

### 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30人,及港口設施保全員共2班次計85人。另並舉辦國 際安全管理章程(ISM)訓練課程共2班次共計54人,海事勞工公約進階研習課程共3 班次計61人,船舶實務講習課程(一)共1班次計24人,船舶實務講習課程(二)共1班次 計9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 30 people and 2 PFSO training classes for a total of 85 people. Moreover, we offered 2 ISM Code training classes for a total of 54, 3 Advanced Couse of Maritime Labour Convention for a total of 61, 1 Ship Practice training classes (1) for a total of 24 and 1 Ship Practice training classes (2) for a total of 9. Such educational training courses drew high praise from the participants.

- 15 -- 16 -