



Fortnightly E-News Brief of National Maritime Foundation

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MARITIME EDITORIALS



Of Course China Is Building More Aircraft Carriers

- Shannon Tiezzi

A local government inadvertently confirmed that China is building a second aircraft carrier on Sunday, sparking a wave of media analysis of China's maritime ambitions. According to Reuters, the government of Changzhou, a city in Jiangsu province, posted on its micro blog that a Changzhou-based power cable manufacturer had been awarded a deal to supply products for China's new carrier. The reports were also carried by a local newspaper before being scrubbed.

China currently operates one aircraft carrier, the Liaoning, the pride of China's navy Yet the Liaoning was not domestically produced – the carrier is a refitted version of Ukraine's Varyag. The goal all along has been for China to use the Liaoning as a training platform, a stepping stone to the production and use of Chinese-made aircraft carriers.

Thus, while the Chinese government tightly restricts any discussion of new carriers, it's a foregone conclusion that they are being built. Last January, the Party chief of Liaoning province let slip that China had already begun building its second carrier in Dalian. The official added that China ultimately planned to build four aircraft carriers, with the first new carrier expected to be ready by 2020. As with the recent reports from Changzhou, this story (originally run by Hong Kong's Ta Kung Pao newspaper, was quickly removed.

While Beijing has been typically tight-lipped about its plans for new carriers, all indications are that construction is underway, although varying reports provide different specifics about how many carriers will be produced and when we can expect them to hit the high seas. A December 2014 article from Global Times nicely sums up the conflicting reports on China's new aircraft carrier fleet — estimates of the total number range from two to four additional carriers. The GT piece also points out that China will need to construct not only the carriers themselves but full carrier battle groups. "China is manufacturing large numbers of 052D type destroyers and

054A type frigates to train alongside the Liaoning, so that once future carriers are

commissioned, escorts will be readily available," Global Times reports.

Construction on these new ships, including rumors of new aircraft carriers, comes as

China is ramping up its maritime ambitions. Chinese vessels have been venturing

farther and farther afield, both for overseas missions (notably anti-piracy patrols in

the Gulf of Aden) and for port calls as part of China's burgeoning military diplomacy.

In addition, Chinese companies are investing heavily in ports from the South China

Sea to the Indian Ocean, including the African coast, as part of the new Maritime Silk

Road. While there's much debate over whether these commercial ports are also

intended for eventual use by the PLA Navy, China will doubtless seek to project

naval power into these regions are its trading interests grow — particularly given that

the Maritime Silk Road as currently envisioned traverses some dangerous waters

near the Somali coast.

Source: Diplomat, 3 Feb 2015

The One Article to Read on Chinese Naval Strategy in 2015

Franz-Stefan Gady

The last two lines of Thomas Hardy's poem "And There Was a Great Calm," written

on the occasion of the signing of the armistice in November 1918, contains the

following exchange, laconically summarizing what I believe is the eternal tension that

permeates foreign policy decision-making.

In short, those lines speak to the tension between those who have a natural

disposition toward seeing the U.S. national interests at stake everywhere in the

world, and those who cautiously question some of the basic premises of this

assumption. I would posit that especially the Socratic "Why?" part of the stanza

ought to be one of the guiding principles of those who provide advice to senior-policy

makers, who often by default have to assume a "It has/had to be" stance.

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As I already stated in my last analysis. I have always been rather skeptical of the anti-access/anti-denial (A2/AD) hype propagated by certain U.S. naval analysts. It smacks too much of the "when life gives you lemons, make lemonade" attitude, i.e. it says much more about how the U.S. navy and its analysts envision what Chinese naval strategy *ought* to be, inferred from their own assumptions (made while subconsciously looking for ways to justify the raison of the world's most powerful navy), rather than the reality of Chinese naval doctrine.

Now, two American professors have published a fascinating essay entitled "Projecting Strategy: The Myth of Chinese Counter-Intervention" investigating the validity of the centrality of counter-intervention strategies in Chinese military thought. The authors, M. Taylor Fravel and Christopher P. Twomey, thus assume the stance of the Socratic "Why?" evidenced by Hardy's "Spirit of Pity." They state that "Chinese military writings usually use 'counter-intervention' only to describe the United States A2/AD concept in Chinese terms. In this way the use of 'counter-intervention' sustains a form of mirror-imaging by casting China's modernization in terms familiar to U.S. defense planners."

Fravel and Twomey further point out that the Chinese terms used to denote counter-intervention (A2/AD), "do not appear in any of the white papers on national defense, which are authored by AMS [Academy of Military Science] for the Ministry of National Defense (...)The 2011 edition of the PLA's official glossary of military terms does not contain an entry for any of these terms." Nor are the terms featured in other prominent Chinese publications. The authors conclude that none of the military campaigns outlined in the PLA's professional military literature are "best conceptualized as serving a broad 'counter-intervention' strategy."

Could it be that the Chinese PLAN is trying to deceive the United States regarding its real intentions? This is not very likely, according to the authors, for "a military operation needs the broader parameters of its primary operational doctrine to be relatively public so as to align a wide range of choices and policies it must take. Trainings must be conducted to serve that goal. Procurement and even organizational changes should also mesh up with the strategic goal." They do point out that China has a host of new weapons perfectly suited for denying an enemy the

use of the "near seas", such as the famed DF-21D anti-ship missile, but they

question in what ways these weapons will be used in a future conflict.

What are the risks of overzealous analysts painting doomsday "carrier-killer"

scenarios? For one, analysts may miss other aspects of the PLAN's modernization

and its development of blue-water-capable naval forces. Fravel and Twomey

emphasize that "casting counter-intervention as China's strategy reduces the

objective of China's military modernization to one primary mission, thereby

overlooking that much broader range of goals that actually motivate China's defense

policy." The myth of counter-intervention also "increases the perceived threat that

China's military rise poses to the United States." The authors point out that the the

"Air Sea Battle" concept is built around the alleged primacy of A2/AD strategies in

Chinese military doctrine.

The result of this overemphasis upon Chinese counter-intervention strategies may

have deep repercussions on the macro-level, as the authors argue: "Thus,

mischaracterizing Chinese strategy has deeply negative effects. It can lead to a

deepening of tensions between the two largest power on the globe by exacerbating

security dilemmas and characterizing the Chinese strategy as aimed at the United

States more than it actually is." The authors conclude with a call for more objective

analysis. "To avoid unnecessary conflicts between the two great powers," they write,

"it is vital to ensure that the analytic community grounds its conclusions in empirical

evidence."

In other words, that scholars continue to ask that all-important "Why?" when told that

something "had to be."

Source: Diplomat, 3 Feb 2015

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<u>Indian Ocean: Exploring Maritime Domain Awareness – Analysis</u>

- Vijay Sakhuja

Attacks on maritime targets such as the USS Cole and MV Limburg off Yemen by al Qaeda, the 2008 Mumbai attacks by the Pakistan based Lashkar-e-Taiba, and the 2014 attempt on Pakistan Navy ship by al Qaeda in the Indian Subcontinent have exposed the weaknesses of surveillance systems and intelligence agencies of the Indian Ocean littorals. Likewise, the rise in piracy attacks in Southeast Asia and Gulf of Aden/Somalia have highlighted the sophistication of pirate communication networks, which the naval and maritime forces could not penetrate. Security agencies concur that a robust intelligence, surveillance, reconnaissance and communication network is the key to robust counter-terrorism and anti-piracy operations and can effectively reduce the risk of attack by the perpetrators.

In the Indian Ocean, three wide-area CISR networks have been set up to respond to threats and challenges posed by non-State actors such as terrorists and pirates. These networks receive vital information from multiple systems such as the Automatic Identification System (AIS), the long-range identification and tracking (LRIT), satellites and shore based Electro-optical systems and radars to enable real-time data of ships operating in the oceans.

The Information Fusion Centre (IFC) is a Republic of Singapore Navy (RSN) initiative, and was established in 2009 at the Changi Command and Control Centre (CC2C) in Singapore. It is a 24/7 regional maritime focal point and undertakes a number of activities to enhance maritime situation awareness. The IFC is a symbol of effective mechanism of 'multi-agency co-operation and interoperability amongst national and regional maritime agencies' and an enabler for technological and operational interoperability among maritime forces which ensures timely regional responses to crisis. The IFC is linked to nearly 45 agencies from 28 countries and manned by the RSN personnel and 30 multi-national staff called International Liaison Officers (ILOs) from 12 countries who work together to generate a maritime situation picture.

Likewise, the Information Management and Analysis Centre (IMAC) at Gurgaon in India is an Indian Navy initiative and connects national coastal radar stations and other maritime systems and collates, fuses and disseminates critical intelligence and information about 'unusual or suspicious movements and activities at sea' for use by Indian agencies. It is part of the National Command Control Communication Intelligence (NC3I) network and was commissioned in November 2014.

The Piracy, Maritime Awareness and Risks (PMAR), a European Union initiative for capacity-building of Eastern and Southern African/Indian Ocean (ESA-IO) region, aims to enhance maritime situational awareness and counter-piracy capability of the regional States. It provides a real-time Maritime Situational Picture (MSP) of the Western Indian Ocean and Gulf of Aden to the Regional Maritime Rescue Coordination Centre (RMRCC) under the control of Kenya Maritime Authority (KMA) in Mombasa and the Anti-Piracy Unit of the Indian Ocean Commission (IOC) in the Seychelles. The PMAR is a roll on project and will be operational for fifteen months (July 2014 and October 2015); earlier, it had focused on the Horn of Africa (2010-2012) and Gulf of Guinea (2011-2013).

In the past, a number of multilateral information-sharing and intelligence exchange mechanisms such as the Shared Awareness and De-confliction (SHADE), the Contact Group for Piracy off the Coast of Somalia and the Djibouti Code of Conduct (DCoC) were set up in the Indian Ocean to counter piracy in the Gulf of Aden, and maybe wound up given that only 11 incidents of piracy were reported during 2014.

While these are noteworthy initiatives, there are at least three challenges for a robust MDA in the Indian Ocean. The IFC and IMAC lack institutional and technological networking to generate a common maritime picture for the Indian Ocean countries. Further, given that maritime security is transnational and transoceanic, these are not linked to similar agencies/systems in other regions such as the MARSUR, an initiative of the European navies. Second, the PMAR is temporary in nature and would be withdrawn / shifted to another region by the EU on completion of the stipulated fifteen months. Third is the necessity of obtaining and sharing additional information about shipping given that AIS is prone to data manipulation.

As far as a pan-Indian Ocean MDA is concerned, the Indian Ocean Naval Symposium (IONS) is a useful platform to explore the above idea. After all, the idea of the IFC may have had its genesis in the 18th International Seapower Symposium at Rhode Island, US, where Chiefs of Navy of the participating countries acknowledged that information-sharing is critical for maritime domain awareness, and since then it has become a 'common thread championed at various security dialogues and forums'.

The IMAC could consider inviting ILOs from Indian Ocean countries and enhancing multi-national naval cooperation. It is also a good idea to explore if IMAC can support regional Humanitarian Assistance and Disaster Relief and Search and Rescue (SAR) operations, and augment environmental surveillance through situational information.

Source: Eurasia Review, 4 Feb 2015

The Challenge of the 'Indo-Pacific'

Asif Ezdi

Until recently, the word Indo-Pacific was hardly known, except as a term used in marine biology to describe the tropical regions of the Indian and Pacific Oceans as a fish habitat. Now it is on the lips of every Indian strategist worth his salt. One of them speaks of the "Modi Doctrine for the Indo-Pacific region". As a former Indian diplomat put it some time ago with obvious relish, "From a geopolitical perspective [the expression Indo-Pacific] represents the inclusion of the Western Pacific within the range of India's security interests, thus stretching beyond the traditional focus on the Indian Ocean theatre".

The word as well as the concept, though, is of American provenance, just like another expression - 'Act East' - which Indian officials and commentators have embraced enthusiastically. Both terms gained currency following policy statements in 2010 and 2011 by the then Secretary of State Hillary Clinton to underpin the notion that India is not just a large South Asian country but should also play a more active political and economic role in the Asia Pacific region. The whole idea is part of a grand American design first announced to the world by the Bush presidency in 2005 to 'make India a global power' to contain China's rise.

'Indo-Pacific' as a concept has also been adopted by Japan and Australia. For this purpose, Tokyo has coined the phrase 'confluence of the seas'. American officials still use 'Indo-Pacific' only in the limited context of India, mostly when welcoming and encouraging Indian activity in the affairs of Asia Pacific. The first part of this particular hyphenation stands not for India though, as India's great strategic minds might wish, but for the Indian Ocean.

It is possible that like another American geopolitical term, namely the 'Broader Middle East and North Africa', which the Bush administration coined and which is hardly heard anymore, 'Indo-Pacific' may also turn out to be a short-lived expression. But whatever happens to this term, there is not going to be any change in the American policy of giving India a geopolitical boost and helping it assert a bigger role for itself in the Asia-Pacific and Indian Ocean regions. This was also the purpose of the 'Joint Strategic Vision of the Asia-Pacific and Indian Ocean region' announced during Obama's visit to India. The statement refers to this vast stretch of very diverse territory and ocean as a single region, though the word 'Indo-Pacific' is not used.

Much of the media comment on this statement has focused on the support expressed by India in it for "freedom of navigation and over flight throughout the region, especially in the South China Sea", which is tilted against China's position on the issue. For Pakistan, however, the importance of the US-India statement lies more in the fact that it amounts to a joint US-Indian project to help India expand its influence in the area "from Africa to East Asia", which includes but is much wider than what India has traditionally claimed as its "extended neighbourhood", a kind of Indian 'Near Abroad'.

The broader aim of this venture, shared by both the US and India, is to contain China's influence in the Indian Ocean – which India likes to fancy is its backyard – and to enable India to make inroads in the waters of Southeast Asia, where India's presence so far has been minimal. For India, whose foreign policy continues to be

Pakistan-centric despite all talk of de-hyphenation, one more equally important purpose of the 'strategic vision' is to isolate Pakistan.

Not surprisingly, China takes a very relaxed view of the Indian challenge and has shrugged it off rather dismissively. The Global Times, a newspaper run by the Chinese Communist Party, gave India some friendly advice not to fall into the trap of rivalry set by the west. The common interests that the two countries share, it said, are much bigger than any differences and they should see more space for cooperation instead of contention.

Pakistan, on the other hand, cannot afford to ignore the Indian ambitions, now that they have the open backing of Washington. The Kashgar-Gwadar Economic Corridor should put a damper on India's designs to dominate the area. But there is no reason for complacency, certainly not of the kind displayed by Sartaj Aziz in his comments on the US-India plan in his speech on January 29. Pakistan must also strengthen its links with countries of Asia Pacific, where Asia's strategic and economic centre of gravity lies.

Sartaj is also wrong in asserting that the US is keen to give India a boost "in the eastern half of Asia" only. The truth is that the US wishes to see India with an enhanced footprint in both South Asia and Central Asia. But because the region is land-locked, the US plans cannot go very far without the participation of Pakistan. That is why the US acknowledges, as Sartaj rightly said, that Pakistan has an indispensable role in promoting stability and facilitating connectivity in 'Central and West Asia'.

Pakistan has also sporadically expressed interest in APEC membership, as well as other regional groupings of Asia Pacific, but has not made any serious concerted effort among the member countries, mainly because of a lack of commitment at the leadership level. The prime minister squandered an excellent opportunity to take up the question when he visited Beijing last November to participate in the 'Dialogue on Strengthening Connectivity Partnership', which took place a few days before the APEC Summit.

But it is not just the prime minister's fault. In two speeches last year on Pakistan's foreign policy, Special Assistant Fatemi spoke of efforts to strengthen ties with ASEAN and the "ANZUS region" – which is actually a military alliance not a region – but made no mention of APEC or the East Asia Summit, the two main Asia Pacific groupings. Maybe he mixed up APEC with ANZUS.

Pakistan will clearly have to do a lot of diplomatic heavy lifting, and soon, if it is to join APEC. The window of opportunity is going to close very shortly, because once India is admitted, it will get a veto on Pakistan's admission. Our best chance to join APEC is when it opens the door slightly to let India in; and once we are admitted to APEC our chances of joining the East Asia Summit will improve greatly. So we should expect India to do its damnedest to keep Pakistan out of APEC.

Source: The News, 9 Feb 2015

Blue Economy

Ashok Malik

Among the more audacious foreign policy documents agreed to by an Indian Prime Minister in recent years, the India-United States "Joint Vision Statement on Asia-Pacific and the Indian Ocean Region" has come in a certain context. The reference here is not just to the Chinese advance in the Indian Ocean, but to the fervent efforts of two successive Prime Ministers, Manmohan Singh and now Narendra Modi, to awaken India to its maritime potential and responsibilities.

For Dr Singh, the lesson was derived from his intellectual understanding of India's economy and transoceanic engagement. For Mr Modi, the derivation is more instinctual, coming as he does from a coastal state, Gujarat, with a long tradition of sea-faring traders. His thrust, as that of Dr Singh before him, is ranged against the continentals of strategic thinking in New Delhi, which would rather obsess with the regions to India's west and see India as the base of the Eurasian heartland and of Central Asia. In such a framework, it is difficult to conceptualize India as sitting at the top of Southeast Asia and the waters of the Indian Ocean system.

Over 90 per cent of India's international trade (by volume) is dependent on the sea. Yet, the 1,100 odd merchant ships that bear the Indian flag make up only two per cent of global capacity and carry a mere 10 per cent of India's global trade. In contrast, seven per cent of all Merchant Navy workers, anywhere in the world, are Indian.

The sea is critical to India's military and economic security. A revival in shipbuilding, historically an Indian comparative advantage, will have implications for both cargo vessels as well as the Navy. There was a time when Bombay Docks and the shipbuilding prowess of the Wadia family had made India a leader in ship making. HMS Trincomalee, the oldest extant warship of the Royal Navy to be fair it is a sailing frigate, going back to the 19th century, and has more heritage value than utility was built in Bombay Docks. Today, all that is the stuff of trivia and little else.

Building ships in India is a healthy aspiration and integral to the "Make in India" mission. Yet, it cannot be done without policy overhaul, infrastructure upgrade and international collaboration. For example, 41 naval ships are at various stages of building or design in Indian shipyards. This comprises the Navy's entire order book and includes the proposed aircraft carrier INS Vishal, to be built in Kochi using Indian steel. Having said that, without an arrangement with the US that allows integration of American technology, this aircraft carrier will not be the big leap the Indian Navy needs.

It is the same with commercial ships, including the LNG super-tankers for which India wants to partner South Korean companies. While the latter hold best-in-class intellectual property in this regard, they will be wary of committing to a big construction project in an India that does not have adequate shipyards. That apart, the frustrating experience of Posco, the South Korean giant that is still trying to set up a steel facility in Orissa, has travelled far and wide: to India's detriment.

Capacity and policy are a function of ambition. Here too India has underplayed, undersold and undermined its sea-linked possibilities. Take fishing. Despite such remarkable access to the deep sea, 90 per cent of India's fishing is in coastal waters. Indian fishing companies have neither the gumption nor the investment to go further

and grow their businesses. They are happier picking small fry, literally and otherwise. This has ecological consequences in that it severely affects coastal fish populations.

There is also the question of provoking the neighborhood. The fishing war with Sri Lanka is not really about small Indian fishermen accidentally straying into Sri Lankan waters. That may be the popular mythology and suit nationalist perception in Tamil Nadu and India. The fact is Indian fishing companies frequently use trawlers and sophisticated equipment to hijack waters from relatively modest Sri Lankan fishermen. Once more the vast seas that surround India, and the prospect of deep-sea fishing, is not explored.

Finally, there are the blunders of India's cabotage policy. As per the Merchant Shipping Act, 1958, only ships bearing the Indian flag can carry cargo from one Indian port to another. Meant to boost domestic shipping companies, this protectionist policy has had quite a different impact. It has actually deterred investment in Indian shipping and enriched ports in other countries. If an American or Norwegian ship carrying cargo for Mumbai port and as well as Kochi port comes to India, it cannot carry cargo or travel between Mumbai and Kochi. It must then unload the cargo for Kochi in Mumbai and find an Indian ship to do the domestic leg, from Mumbai to Kochi.

This has had two results. First, foreign ships simply bypass India and go to ports like Colombo, from where they do multiple trips to India to Mumbai and back to Colombo and then to Kochi, for example. This is expensive and inefficient. It also gives business to Colombo 90 per cent of cargo coming into or exiting the port there is India related that should have come to an Indian port and city. In the past five years, Colombo port has gone through a massive expansion, including with Chinese support, largely to continue to exploit India's sabotage policy.

Second, Indian coastal shipping companies are happy to service big international ships and carry cargo from one Indian port to the next. They do not have the competition or the incentive to want to incorporate large ocean-worthy ships. They are content with second-class vessels that sail in fairly shallow waters, live off a bad policy and survive on lobbying. Not surprisingly, politics creeps in. A leading

Maharashtra politician and his family have interests in coastal shipping and are

significant beneficiaries of this shortsighted sabotage policy.

The Modi-Obama vision statement on the Indian Ocean cannot reach a satisfactory

conclusion without India acting on the deficiencies and distortions referred to above.

The sea is vital for India, but the flag and trade need to sail in unison. Without

ambitious sea commerce, there is little point in dreaming of a strong Navy.

Source: Asian Age, 9 Feb 2015

India Must Play its Cards Well

Ashok B Sharma

Easing of sanctions against Iran by the Western powers coupled with the drawdown

of NATO forces from Afghanistan has prompted India to speed up its development

plans of the Chabahar port. It is an opportunity for India, which has so far been

denied direct overland link to Afghanistan by Pakistan, to take up the development

of the port with all sincerity and commitment.

Further, there is another concern for India. It is China's String of Pearls in the Indian

Ocean and more particularly its presence in the Gwadar port in Pakistan. Taking

advantage of India's slackness in developing Chabahar port, Beijing had also

offered investment of about \$78 million way back in July 2013 to upgrade this deep

sea port. Beijing has signed an agreement with Pakistan for a multi-billion dollar

LNG pipeline and terminal. The same would be extended from Gwadar to Iran for

gas import when sanctions on Tehran are lifted. China sees the prospects of linking

Gwadar to Xinjiang roping in central Asian republics.

After the new Government led by Prime Minister Narendra Modi assumed office,

India in October last year decided to invest \$85.21 million in developing the port.

Apart from this it also decided to invest an annual revenue expenditure of \$22.95

million to support the efforts.

But New Delhi needs to tackle the geopolitics in the region with a view to going ahead with its Chabahar plans. Following the agreement between P5+1 and Iran, there has been only limited easing of trade restrictions on strategic items such as petrochemical products, aircraft parts and precious metals accounting for \$7 billion of trade over six months, subject to Tehran's implementation of its assurances. Even after withdrawal of its troops from Afghanistan, the US' ambition in the region has not yet faded away.

New Delhi, therefore, faces the challenge of cleverly playing its diplomatic cards to win the US confidence. Washington had earlier pressurized the Musharraf regime in Pakistan to favor a Singaporean firm over the Chinese in operating the docks at the Gwadar port. But later the Singaporean firm backed out paving the way for the Chinese.

This results in Tehran's outgo of hundreds of millions of dollars to the UAE. Tehran also faces the possibility of the UAE closure of this facility in case of a conflict between it and Iran or GCC countries and their western allies. Tehran is also conscious of the presence of the US naval patrol in the area. Similarly, Pakistan is interested in developing Gwadar as Karachi port is already heavily loaded with serious congestion from commercial fishing, civil and military shipping. It also fears that Indian Navy may target Karachi port in case of a conflict. China has stepped in to gain advantage in the Indian Ocean.

The distance between Chabahar and Gwadar is only 72 km. Both these ports with appropriately planned road and rail connectivity can offer trade facilities to landlocked central Asian countries and even extend the facilities to Gulf countries, Russia and Europe.

But regarding implementation of the works, Chabahar stands at a more advantage position than that in Gwadar. Gwadar is among the worst under developed districts in Pakistan. The local Baluchis are up in arms against this mega projects and this has led to the killings of Chinese engineers. The Balochistan National Party-Mengal, Baloach National Front, Baloach Republican Party and militant organizations such as Balochistan Liberation Front, Balochistan Liberation Army and Balochistan Republican Army are among those who oppose the deal with China. This situation has delayed the work at Gwadar project.

Comparatively, the Chabahar project is more or less hassle-free. The proposed

road and rail link bypasses Pakistan and connects with Afghanistan. However, its

success will depend on the security situation in Sistan-Balochistan province where it

is located and subsequently in the rail and road links in Afghanistan that connects to

central Asia. However, Iran has been successful in capping any possible insurgency

in Sistan-Balochistan.

However, India stands to benefit much from the Chabahar project, not only in terms

of its trade connectivity with Afghanistan, Central Asia and beyond but also in terms

of easier access to oil and gas in the region. India and Iran has also planned to

establish direct shipping between Chabahar and Mumbai and Kandla. The

proposed North-South and East-West corridors and rail links will further facilitate

trade.

Finally, Indian should take up the Chabahar project with utmost sincerity and

commitment and wisely play its cards in the geopolitics of the region.

Source: The Hans India, 12 Feb 2015



MARITIME SECURITY



PLA Navy Aims to Control Indian Ocean

The People's Liberation Army Navy is preparing for a permanent deployment to the Indian Ocean and plans to use dual-use ports as secret ammunition caches and to support military operations, according to a piece in Washington-based National Interest.

The US magazine said China aims to dominate the Indian Ocean after Beijing deployed amphibious ship the Changbaishan and a nuclear submarine to the region. The country has attempted to establish itself as a maritime player in the Indian Ocean by increasing anti-piracy deployments, naval exercises and investments in maritime infrastructure projects. These activities raised concerns on whether Beijing will adopt more aggressive maritime strategies in the future.

The PLA Navy's submarines docked at the port of Colombo in Sri Lanka twice last year and China is said to have established military facilities in the country. Beijing also holds a controlling stake in Hambantota port in the southeast of the country. With the shares, Chinese state-owned companies gained the operating rights of the port's four berths from Sri Lanka, which got an easing of loan conditions in exchange.

Although Beijing has said that these activities are part of their Maritime Silk Road project, there have been concerns that China seeks to reinforce its "string of pearls" strategy that encircles India. China may also set up dual-use bases in the Indian Ocean with low-level logistical support capability, which would allow Beijing to use a commercial port to support military operations during conflicts or cover up a secret ammunition cache.

Although the PLA denied that it has ever set up such base, the Republic of Seychelles is said to have offered its port for Chinese ships combating pirates in the Gulf of Aden and the West Indian Ocean in 2011.

Beijing would need a "maritime presence" if it wanted to dominate the Indian Ocean. Their presence would challenge the Indian Navy's role as the region's major security provider and reduce New Delhi's influence in the region.

Source: Want China Times, 1 Feb 2015

Japan, Philippines Renew Vow to Strengthen Maritime Security Cooperation

Philippine Defense Secretary Voltaire Gazmin and his Japanese counterpart, Defense Minister General Nakatani, renewed vows to strengthen cooperation maritime security at a time when China's reclamation in the South China Sea (West Philippine Sea) raises concern among ASEAN countries.

"The two ministers particularly briefed each other on and acknowledged the current situation of South China Sea and East China Sea," read a joint statement released on Friday, January 30.

"Both Ministers shared the view that any dispute should be settled peacefully, without use of force or coercion, in accordance with basic principles of international law," the statement added. The two ministers signed the "Memorandum on Defense Cooperation and Exchanges between the Ministry of Defense of Japan and the Department of National Defense of the Republic of the Philippines" after a meeting in Tokyo from January 29-31.

Aside from maritime security, the two defense ministers agreed to strengthen cooperation in humanitarian assistance and disaster relief and defense equipment and technology. Both Japan and the Philippine are dealing with an aggressive China in the East China Sea and South China Sea (West Philippine Sea), respectively. The Japan Self Defense Forces helped the Philippines in the relief operations in the aftermath of super typhoon Yolanda. In 2014, the Japan Ground Self-Defense Force also participated as an observer in a Philippine-US Joint Exercise.

The Tokyo meeting also happened after Manila warned fellow members of the Association of Southeast Asian Nations (ASEAN) at a minister's retreat in Malaysia that the 10-country grouping's credibility was at stake unless it dealt strongly with the

"critical issue in our own backyard."

Source: Rappler.com, 1 Feb 2015

PLA Navy May Establish Fourth Fleet for the Indian Ocean

The PLA Navy's 19th Escort Task Force takes over patrol duties in the Gulf of Aden

from the 18th Escort Task Force on Dec. 26, 2014. To extend its reach to the Indian

Ocean, China's PLA Navy may establish a fourth fleet after the North Sea, East Sea

and South Sea fleets, according to Duowei News, an outlet operated by overseas

Chinese.

Senior Colonel Yang Yujun, spokesperson for the Chinese defense ministry, said on

Jan. 29 that the PLA Navy is ready to increase its activity in the Indian Ocean. In the

future, the Chinese military will send different kinds of naval ships to take part in

escort missions in accordance with the situation and need, Yang was quoted as

saying by the UK-based IHS Jane's Defense Weekly.

Responding to concerns about the movements of Chinese submarines in the Indian

Ocean, Yang said these are only "normal activities" of the PLA Navy and that not too

much should be read into them. The Chinese military has sent various kinds of naval

ships to the Gulf of Aden and the waters off the Somali coast to conduct escort

missions since 2008, Yang said, adding that countries concerned had been notified

of the PLA escort missions, which have included submarines.

Writing for the Diplomat, an English-language political website based in Tokyo, Prem

Mahadevan from the Center for Security Studies at ETH Zurich said the PLA Navy

may already be in the process of creating a fourth fleet which will ultimately consist

of two carrier battle groups based in Hainan, the southern island province which is

already home to the PLA's South Sea Fleet.

China at present has one aircraft carrier in service, a refitted Soviet-era vessel

purchased from Ukraine that was commissioned in 2012, but is understood to be in

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the process of designing and building domestically constructed carriers which may enter service by 2020.

Source: Want China Times, 3 Feb 2015

How Floating Armouries Help Guard Cargo Ships from Pirates on High Seas

Before dawn one morning in November, four men on the deck of the MNG Resolution lifted cases of guns and body armour out of shipping containers and

heaved them into a waiting speedboat.

The team zipped across the water to a tanker, where the crew pulled aside razor wire and hoisted the weapons aboard. The four men clambered up a rope ladder, and the speedboat raced back. The 141-foot Resolution, built 30 years ago to service offshore oil platforms, has a new job: She is a floating armory and bunkhouse for contract security forces. At least a half dozen such boats ply the Gulf

of Oman.

The oceangoing armoires are the by-product of global trade, high-seas piracy and national arms restrictions. Shippers traversing the dangerous waters off Somalia want armed guards to protect their cargo and crews, but most countries won't let private security forces bring guns into their ports. So ships like the Resolution have appeared to cache weapons offshore for security companies and ferry their guns and

guards to vessels needing protection.

The shipping industry once regarded armed guards on vessels as too dangerous. But a spate of Somali pirate attacks several years ago changed that thinking. Every month now, thousands of weapons pass through the Indian Ocean and hundreds of security teams rotate on and off ships in the Gulf of Oman. A similar trade goes on in the Red Sea and off Sri Lanka. Sovereign Global, a U.K.-based security company, can accommodate 200 people in the armoury it operates off the coast of Djibouti on the Horn of Africa. The MV Mahanuwara, a 40-year-old supply ship that works off the southern Sri Lankan port of Galle, can hold a thousand guns and the ammunition needed to use them.

The international shipping industry spent around \$1 billion on armed guards and equipment in the Indian Ocean in 2013, according to Oceans Beyond Piracy, a nonprofits group based in Colorado. Attacks in the high-risk area have fallen precipitously in the last two years. The last hijacking and ransom of a merchant vessel by Somali pirates was in 2012.

The proliferation of armouries ships is fanning concerns. There is no official record of how many armoires exist or who operates them. Nor are there any regulatory bodies overseeing such enterprises in international waters. International standards for private-security firms don't address floating armoires. In theory, the ships are overseen by the nations whose flags they carry, but some in the industry say vessels don't always declare they are armoires.

Critics say the armoires themselves could be targets for attack by pirates or terrorists. India, fearful that armoires present a security risk, is pushing the International Maritime Organization, a United Nations agency, to develop guidelines for regulating the industry. In a 2012 report, the U.N. Security Council committee on Somalia and Eritrea said that the armoury business was "uncontrolled and almost entirely unregulated, posing additional legal and security challenges for all parties involved."

In October 2013, the MV Seaman Guard Ohio, an armouries operated by Washington, D.C.-based Advan Fort International Inc., drifted into Indian waters. Indian authorities seized the vessel and arrested its crew and passengers. Onboard were 35 assault rifles and 5,680 rounds of ammunition, Indian officials said. Last July, Advan Fort said the charges against the 35 men on board had been dropped after eight months. Advan Fort couldn't be reached for comment.

But armed guards can't operate in those areas, partly because the trade routes pass closer to land, giving coastal nations more territorial jurisdiction. So for now, the armoury business is confined to the waters off Somalia—and useful only as long as the shipping industry remains fearful of attacks, crews held hostage or killed, and ransom demands.

Source: Hellenic Shipping News, 4 Feb 2015

New Strategy to Strengthen Dutch Maritime Position

The Dutch Government said that in Rotterdam, the Netherlands has the largest port

in Europe, whilst the Dutch inland shipping fleet has the largest European market

share. The Netherlands is also the main global producer of super yachts and the

Dutch offshore and hydraulics sectors rank among the world top.

However, it added that maintaining this top position is not a matter of course,

considering the growth among ports in countries such as Brazil, China and South

Africa. "The maritime strategy is unique, as it has been established in collaboration

with all the maritime partners. We have taken this important step to preserve and

strengthen our top maritime position in the world," Schultz van Haegen commented.

The maritime strategy is composed of six themes: human capital; innovation; trade;

accessibility; safety and the environment; and security threats and stability. The

maritime strategy not only involves collaboration between the national government,

employers and employees, but also collaboration between decentralised

governments, educational establishments and NGOs in the field of, for example,

nature, the environment and health.

Source: Pan European Networks, 5 Feb 2015

Maritime Security Exercise Concludes in Djibouti

An eight-day training exercise for Horn of Africa naval forces concluded Wednesday

(February 4th) in Djibouti, Somalia's Radio Danan reported.

"Exercise Cutlass Express 2015" focused on improving regional co-operation and

information-sharing practices among East African and Indian Ocean nations to

counter sea-based illicit activity, including the detection and disruption of the delivery

of materials used to build and develop weapons of mass destruction, according to

the US Africa Command, which co-ordinate the exercise.

Participating nations included Australia, Canada, Comoros, Djibouti, Madagascar, Mauritius, Mozambique, Kenya, Uganda, South Africa, Seychelles, Tanzania and Turkey. Commander of the Djiboutian Navy Colonel Abdourahman Aden Cher presided over the closing ceremony, where he praised the opportunity the exercise presented for Djiboutian troops to gain expertise in maritime defense, the Djiboutian

Information Agency reported.

"This is the first time that the Djiboutian Coast Guard, which is a young institution, has participated in an exercise on a regional scale involving a number of different national and international partners," said Colonel Waiss Omar Bogoreh, commander of Djibouti's Coast Guard. "This represents a unique opportunity to strengthen our capacity to collectively fight criminal activities such as terrorism, maritime piracy and illegal trafficking at sea," he said.

Source: Sabahi Online, 5 Feb 2015

US Navy Eyes "Security Implications" Of Shrinking Arctic Ice

The US Navy is eyeing retreating Arctic sea ice for the "security implications" of increased competition for the area's rich hydrocarbon reserves and potential shipping routes, officials said on Thursday. "The opening of the Arctic Ocean has important national security implications as well as significant impacts on the US Navy's required future capabilities," Adm. Jonathan Greenert, Chief of Naval Operations, said in a statement on Thursday.

Data from 2007-2014 shows that Arctic ice zones have been shrinking in summertime, suggesting the area could be ice-free in summer in the future, the US Navy said.

Martin Jeffries, program officer for the US Office of Naval Research Arctic program, said in a statement that US Navy underwater robots had been investigating ice conditions and measuring the retreating Arctic ice zones for years. "There's no question that the Arctic sea ice extent is decreasing," said Jeffries. "Multiple sources of data – autonomous underwater gliders, ice-measuring buoys and satellite images

of the marginal ice zone – were used to help understand why the ice is retreating."

Adm. Greenert added that the United States had a "history" of maritime security and

defense concerns in the Arctic. The United States, Russia, Canada, Denmark and

China all have economic interests and all except China have staked territorial claims

in the region.

Last year, Russian President Vladimir Putin announced plans to step up Moscow's

presence in the Arctic and challenge other nations in exploring the world's largest

untapped natural reserves, days after it started shipping its first oil from the region.

Denmark, Canada and Russia all say an underwater mountain range, known as the

Lomonosov Ridge, which stretches 1,118 miles across the pole under the Arctic Sea,

is part of their own landmass. China has expressed an interest Arctic shipping

routes.

Source: Sputnik International, 5 Feb 2015

Mauritian Warship Leaves Indian Shores

The Coast Guard Ship Barracuda, the first ever naval ship to be built by India for a

foreign nation, set sail for Mauritius from the Garden Reach Shipbuilders and

Engineers Ltd in Kolkata on Sunday. The ship was designed in India as per

requirements from the Government of Mauritius. It was formally handed over to the

Mauritian government in December.

"The Barracuda is an Offshore Patrol Vessel of unique design and has wide-ranging

capabilities. It is designed to safeguard the safety and security of the Exclusive

Economic Zone of Mauritius. This model has been a pioneer in the production line,

setting the trend for a new series of vessels that would be capable of multiple roles.

GRSE is fully equipped to build more such variants of the OPV that may be used by

the Indian Navy and Coast Guard as well as international customers," said Rear

Admiral A K Verma, chairman cum managing director, GRSE, who was among those

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who saw off the ship from the West Jetty of the company's main works.

Commodores Kiran Deshmukh, principal director, ship production and P K Dewan,

warship production superintendent, Kolkata, of the Indian Navy were also present

during the occasion.

The CGS Barracuda measures 74 metres in length and 11.40 metres in breadth and

can achieve a top speed of 22 knots with an approximate displacement of 1,300

tonnes. It has been fitted with state-of-the-art main engines, controls and integrated

bridge system catering to all needs of communication and navigation. The ship has

fully air-conditioned modular accommodation.

"The ship can carry out anti-piracy and search and rescue operations, anti-smuggling

and anti-drug surveillance, anti-poaching operations in the EEZ of Mauritius including

fisheries protection. The CGS Barracuda can also provide logistic support including

transportation of dry cargo, fuel, fresh water and refrigerated food. It can transport a

small detachment of troops and landing them in remote island territories. The OPV

can operate a helicopter, participate in pollution response operations and external

fire-fighting," a senior GRSE official said.

According to Verma, export of the warship is not only a significant milestone in Indo-

Mauritian co-operation but has added yet another feather in the cap of the company

that delivered India's first indigenously built warship INS Ajay to the Navy in 1961.

Source: Times of India, 8 Feb 2015

Curriculum on Safeguarding Country's Coastline Needed

Schools and colleges in the country must have curriculum designed to create

awareness among youngsters on the importance of safeguarding India's vast

coastline, a top Naval officer has said.

"Citizens must be made more aware of the importance of coastal security.

Curriculum in schools and colleges must include related subjects and offer courses

on them," said Commodore G Prakash, director of Maritime Warfare Centre,

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Southern Naval Command, adding that the country was developing better allied

infrastructure for improving coastal security and surveillance.

He was addressing a technical session on 'Ocean and National Security' at the

World Ocean Science Congress, jointly organized by the Kerala University of

Fisheries and Ocean Studies and the Swadeshi Science Movement. Prakash

pointed out that drug cartels, terrorists and groups with vested interests had become

a major threat to national security.

Direct Implication on Economy

"Terrorism has started to spill into the sea, along with arms trafficking. Securing the

seas is of prime importance for the country as any strife on the waters would have

direct implication on the economy."

Earlier, addressing the plenary session on 'Ocean and National Security', retired

Naval officer Vice-Admiral B Kannan observed that though the country had a three-

layer security system, consisting of the Navy, Coast Guard and Coastal Police, to

deal with threats from the sea, there was no system in place to check threats from

underwater. "Though the three-layer security system has been well integrated,

underwater threats to national assets and installations continue to be a major

concern," he said. Kannan further pointed out that illegal immigration and ghost ships

had become a major concern in recent times.

"We need to focus more on the Indian Ocean considering the growing interest of

other countries in the region. "With China already going much ahead in deep-sea

mining in the Indian Ocean, we need to have a fairly large number of unmanned and

manned submarines to monitor the entire ocean," he added.

Naval Physical and Oceanographic Laboratory director S Ananthanarayanan said

that the national security agencies were working in close coordination with national

scientific and research organizations for strengthening coastal security systems,

mainly to safeguard vital installation like ports and nuclear power units.

Source: Indian Express, 9 Feb 2015

Tanzania Keen to Enhance Maritime Security, Fight High Sea Piracy

Tanzania is committed to taking all necessary and acceptable actions to enhance maritime security and work together with regional and international partners to fight piracy.

Speaking for the Director of Public Prosecution at the just-ended judicial exhibition week in Dar es Salaam last week, Senior State Attorney Mohamed Salum told the 'Daily News' that fighting maritime piracy was not the undertaking of a single country.

"As a move to foster the Regional and Global progress on the prosecution of pirates, the country developed the National Plan to Combat Maritime Piracy aimed at consolidating national efforts for combating piracy," he said. The plan, the trial attorney said, would assist the government to promote Maritime Security through development of the required administrative practices, procedures and acquisition of necessary material, technical and human resources.

In 2002, the government of Tanzania and United Kingdom (UK) signed a Memorandum of Understanding for the transfer of suspected pirates from UK marine forces to Tanzania for prosecution.

Likewise in 2013, Tanzania and the Kingdom of Denmark signed a Transfer Agreement for suspected pirates. Furthermore, last year, the government signed another agreement with European Union with a view to prosecute the transferred suspected pirates arrested by the Naval Forces operating under the EU mission. Such pacts contain rights and obligations of transferring and receiving state and the suspects. The trial attorney, who is an expert trained in piracy prosecutions, pointed out, however that, implementation of available plans required financial and human resources for paying interpreters and feed incarcerated pirates.

According to him, resources are also needed for the training of judges, investigators, prosecutors and pay for costs of handling of exhibits so as to maintain a firm chain of their custody. They are facing only one count of piracy, contrary to Section 66 (1) (a) (b) of the Penal Code, as amended. Such provision reads, "Any person who does any act of violence or detention or degradation, committed for private ends by the

crew or the passengers of a private ship or aircraft and directed against another ship or aircraft, or persons or property on board, (...) or in a place outside the jurisdiction of any state. "...participates in the operation of a ship or of an aircraft with knowledge of facts making it a pirate ship or aircraft, or does any act of inciting or of intentionally facilitating an act (stated above) commits an act of piracy."

According to the law under which the seven men are charged with, notably Sub-Section (2) of the Act, a person who does or participates in the piracy commits an offence of piracy and on conviction is liable to imprisonment for life.

In October 2011, a Navy Unit of the Tanzania People's Defense Forces captured the Somali suspects a short distance away from Mafia Island at night. An oil-prospecting vessel was attacked by a group of at least seven ocean suspected terrorists of Somali origin. However, when the attack was radioed in, the Tanzanian navy units in the area immediately went into action to intercept the pirates.

Upon closing in on the pirates, a fierce fight reportedly ensued before the navy personnel overpowered them and took them into custody. Tanzanian security forces thereafter interrogated the suspects before being taken to a district court in Kibaha for a preliminary inquiry of their matter.

Source: Daily News, 9 Feb 2015

China Finds Natural Gas Reserve in Disputed South China Sea

China today announced the discovery of a huge gas field in the politically charged South China Sea that could yield over 100 billion cubic metres of natural gas, raising its stakes in the waters claimed by several South East Asian nations. The Lingshui 17-2, approved as a large-scale gas field by Ministry of Land and Resource, was discovered 150 kilometres south of China's southernmost island of Hainan. State-run China National Offshore Oil Corporation said Lingshui 17-2's average operational depth is 1,500 metres below the sea surface. The company's deepwater drilling rig CNOOC 981 discovered Lingshui 17-2, the country's first self-support deepwater gas field, in September 2014, state-run Xinhua news agency reported. Xie Yuhong, a

manager with CNOOC, said the approved gas reserves of Lingshui 17-2 will help the corporation build a gas trunk line to connect other gas fields in the SCS, so as to meet the huge gas demand of southern provinces, Hong Kong and Macao. The field, however, could meet only about six to seven months of Chinese gas supply currently, experts say. Observers say the discovery may raise further tensions in the South China Sea, one of the world's busiest shipping routes but dominated by overlapping claims by several nations including Malaysia, Vietnam, Taiwan, the Philippines, Brunei and China, which virtually claims all of the sea. China-Vietnam ties nose-dived two months ago after Beijing placed a rig in the contested waters that triggered violent protests in Vietnam. Two Chinese workers were killed and 140 injured in the violence. China has also objected to India's ONGC accepting a Vietnamese invite to take-up oil exploration in the SCS.

Source: Money Control.com, 10 Feb 2015

West Coast Port Operations Resume after Partial Shutdown

U.S. West Coast port operations resumed in full on Feb. 9 after shipping companies halted loading and unloading of freighters for the weekend, citing chronic cargo backups that shippers and dockworkers have blamed on each other during months of labor tensions.

But a planned resumption of federally mediated contract talks was pushed back until Feb. 11 without explanation, even as the White House joined retailers and manufacturers in urging the sides to redouble efforts to settle a dispute that has rippled through the U.S. commercial supply chain.

Shippers and terminal operators announced last week they would suspend cargo crane operations for container vessels at the ports on Feb. 7 and 8 because of mounting congestion they say had brought the docks to virtual gridlock.

Still, work continued in the terminal yards through the weekend to clear cargo containers stacking up on the waterfronts, at least at the five busiest ports — Los

Angeles, Long Beach, Oakland, Seattle and Tacoma, according to management spokesman Steve Getzug. Both sides say full port operations were restored on Feb. 9 as planned. The 29 ports affected handle nearly half of all U.S. maritime trade and more than 70 percent of Asian imports.

The companies have accused the International Long shore and Warehouse Union of instigating work slowdowns since October to gain leverage for 20,000 dockworkers whose contract talks with the Pacific Maritime Association have dragged on for nine months.

The union faults the carriers for worsening congestion, citing changes in shipping practices. Union officials have said a settlement is near, and characterized the shippers' weekend move as posturing aimed at exaggerating the magnitude of the crisis. The companies say they remain at odds with the union over several issues, including the system for binding arbitration of contract disputes.

Ripple Effects

Port slowdowns have trickled through the U.S. distribution chain, disrupting shipments of a wide range of goods affecting agriculture, manufacturing, transportation and retail.

The Obama administration is monitoring the situation and urged an expeditious resolution, but the dispute "is up to the two parties to resolve at the bargaining table," White House spokesman Frank Benenati says. The last time contract talks led to a full shutdown of the West Coast ports was in 2002, when the companies imposed a lockout that was lifted 10 days later under a court order sought by President George W. Bush, invoking the 1947 Taft-Hartley Act.

The shipping industry has estimated the 2002 lockout caused \$15.6 billion in economic losses. When it ended, some 200 freighters were waiting at anchor to be unloaded up and down the coast.

By comparison, 23 vessels were anchored awaiting berths on Feb. 9 outside Los Angeles and Long Beach, down from 31 on Feb. 8, port authorities say. Another 13 freighters were idled off the Puget Sound ports of Tacoma and Seattle.

Once a settlement is reached, it will take six to eight weeks to clear out the

immediate backlog at the ports of Los Angeles and Long Beach — the nation's two

busiest container cargo hubs — and possibly a few months more to restore freight

traffic to normal, port representatives say. The National Association of Manufacturers

and the National Retail Federation have projected that a new 10-day port shutdown

could cost the U.S. economy at least \$2 billion a day. Both groups renewed their

calls on Feb. 9 for the administration to ratchet up pressure for a settlement.

"If the administration can impart a message of urgency, that would certainly be

helpful," says Robyn Boerstling, transportation director for the manufacturers group.

She says a number of manufacturers had reported that uncertainty surrounding the

ports dispute had led some Asian buyers to cancel U.S. factory orders. Industry

executives say many retailers were already rerouting some seagoing shipments

through the Eastern seaboard, the Gulf Coast, Mexico and Canada, as well as via air

freight, changes that could add billions of dollars in costs to the supply chain

Source: Agweek, 10 Feb 2015

Vietnam Has Scant Legal Basis for South China Sea Claims

Vietnam's claim of sovereignty to islands in the South China Sea has scant legal

basis, judging from the scope of its territory at various junctures of its history.

While Vietnam was under colonial rule, France laid claim to the Paracels, saying the

archipelago belonged to Vietnam from ancient times, but it failed to push the claim

as the monarchs of the Nguyen Dynasty, then under the French protectorate, were

lukewarm concerning the claim.

In addition, Vietnamese maps printed during the French colonial era did not cover

the islands nor did any official document from the time underscore effective

administration of them by France.

Moreover, there is no documentary trace showing a transfer of sovereignty over the islands by the French government to the new regime when Vietnam won

independence. Since the islands were not included in Vietnam's territory under

French rule, how could France return the ownership during the change of power?

At the conference in 1951 that culminated in the Treaty of San Francisco that

officially ended World War II, France and Vietnam failed to win support for Vietnam's

claim to South China Sea islands, even in the absence of a China representative

from either side of the Taiwan Straits. This is further evidence of the lack of a legal

basis for the Vietnamese claim. As a result, the San Francisco Peace Treaty only

included Japan renouncing its claims to the Spratly and the Paracel islands, without

specifying their ownership.

It would be advisable to have France admit its failure to secure any legal basis for

Vietnam's claim to South China Sea islets during its period of colonial rule.

Source: Want China Times, 12 Feb 2015

China, Sri Lanka, and the Maritime Great Game

The surprising decision by the new government of Sri Lanka to reverse course and

support a billion-dollar Chinese port project underscores the long shadow of Beijing's

influence in the region, even in countries seemingly determined to push back. More

importantly, the green light for the port project highlights China's determination to

secure access to a network of coastal installations across the Indian Ocean, a key

part of President Xi Jinping's own pivot to the West.

Colombo Port City is about a whole lot more than a deep-water harbor, golf course,

and Formula One racetrack. It's part and parcel of one of Xi's signature foreign-

policy initiatives: a double-barreled, \$40 billion plan to deepen China's physical and

economic links with neighbors to the West.

The United States, for its part, has spent several years trying to push back against a

smothering Chinese embrace of its neighbors in the South China Sea. That's one

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reason it's now keeping a close eye on Chinese infrastructure investments in Sri Lanka, Pakistan, the Maldives, the Comoros, and the Seychelles that promise to extend China's economic, diplomatic, and possibly military reach across the entire region.

"You have a bit of a maritime Great Game going on in the Indian Ocean that will involve us, it will involve India, and it will involve, of course, China," Adm. Gary Roughead, a former U.S. chief of naval operations who is now at Stanford University's Hoover Institution. "I think we have to watch it and look at it with eyes wide open."

For China, the new Maritime Silk Road, like its landlocked twin, is all about economic development. President Xi has touted the project's potential to bring "common development and prosperity" to China and Southeast Asia. Building big, modern ports and other infrastructure will not only boost trade across the region; it is meant to provide a huge, short-term economic boost for countries on the receiving end. China believes that the Sri Lanka port plan could spur \$13 billion in new investment, for example. But it's not all dollars and cents. Initiatives like the Maritime Silk Road also offer Beijing a way to boost its appeal in the region and win friends, after a tough few years of blowback thanks to heavy-handed diplomacy in Southeast Asia.

"I believe that the Maritime Silk Road has a strategic component. State-sponsored investment in infrastructure projects helps China advance its influence in the region and creates a network of friendly countries," Virginia Marantidou, an Asia-Pacific security analyst at Pacific Forum CSIS, a think tank.

Even when China's state-backed firms carry out big investment plans, it often just spurs backlash in countries worried about suffering a Chinese bear hug. That's happened in Africa, Latin America, and Asia. Myanmar pulled the plug on a big dam project in part because of concerns about overbearing Chinese influence in Naypyidaw.

Still, for policymakers in the region and in the United States, seemingly mundane construction projects on far-off islands can carry a much deeper meaning. "The broader strategic game that's in play is China's very thoughtful way of reshaping the

landscape and the seascape and the security architecture in Asia and the Indo-Pacific," Roughead said.

Source: Foreign Policy, 12 Feb 2015

Indonesian Govt to Strengthen Maritime Security Body

The government is planning to issue a government regulation (PP) to expand the

role of the Maritime Security Board as part of efforts to realize President Joko

"Jokowi" Widodo's maritime-axis program. Several ministers, including Coordinating

Political, Legal and Security Affairs Minister Tedjo Edhy Purdijatno, Defense Minister

Ryamizard Ryacudu, Coordinating Maritime Affairs Minister Indroyono Susilo and

Indonesian Military chief Gen. Moeldoko, held a meeting to work out details for the

regulation.

Indroyono said that the new regulation would be ready by March this year.

"The team is ready to work on synchronizing drafts for the regulation. All relevant

ministries have agreed to work and finish the draft," Indroyono told. In anticipation of

the issuance of the new regulation, the government also plan to hold trial joint

maritime security operations under Bakamla's supervision.

"The joint operation will not only aim to improve maritime security but also safety at

sea and navigation as Indonesia is an archipelagic country," Indroyono

said. Currently, Bakamla has the task of coordinating 12 institutions in the country's

maritime sector, including the Indonesian Navy, the Water Police, the Customs

Office, the Immigration Agency, Prosecutors' Offices, the Maritime Affairs and

Fisheries Ministry, the Foreign Affairs Ministry and the Transportation Ministry

Bakamla, established on Dec. 13 last year, evolved from the Maritime Security

Coordinating Board armed with more powerful roles and functions, as well as a

larger staff and fleet. Mandated by Law No. 32 2014 on maritime affairs, Bakamla

was established as a coordinating body for the large number of institutions involved

in the country's maritime sector. Minister Tedjo said that Bakamla would be

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responsible for handling all crimes occurring at sea. But it depends on the type of

crime occurring in the maritime territory. If it is a customs violation, the customs

office will handle the case but if the problem affects the fisheries sector, it will be

handed over to the fisheries ministry. He expressed optimism that Bakamla would be

an effective maritime institution.

The government, meanwhile, expects Bakamla to encounter no budgetary problems.

Tedjo said House of Representatives Commission I on political, security and foreign

affairs had agreed to earmark Rp 726 billion for Bakamla's operations. The bulk of

the budget, he revealed, would be used to purchase patrol boats and helicopters.

Presently, Bakamla only runs three patrol vessels, with 30 others vessels still under

construction. The agency plans to arrange nine operations collectively titled

Operation Nusantara to secure the country's territorial waters in 2015.

The operations will work based on intelligence data, as well as data from the

Bakamla Early Warning System. The institution announced the results of Operation

Nusantara I, which started on Jan. 20. The haul from the operation was six local

ships that were caught in illicit activities at sea. Bakamla field officer Hudiansyah

explained that the six ships had been caught carrying onions, rice and fuel

illegally. "Four of the ships have been handed over to the investigator. We will start a

legal process against those ships as soon as possible," Hudiansyah said.

Source: Jakarta Post, 13 Feb 2015



SHIPPING



Japanese Shipping Executive Sentenced in US for Price Fixing

An executive of Japan-based Kawasaki Kisen Kaisha Ltd. (K-Line) pleaded guilty Friday, January 30 and was sentenced to 18 months in a U.S. prison for his involvement in a conspiracy to fix prices, allocate customers and rig bids of international ocean shipping services for roll-on, roll-off cargo, such as cars and trucks, to and from the United States and elsewhere, the U.S. Department of Justice announced today.

According to the one-count felony charge filed today in U.S. District Court for the District of Maryland in Baltimore, Hiroshige Tanioka, who was at various times an assistant manager, team leader and general manager in K-Line's car carrier division, conspired to allocate customers and routes, rig bids and fix prices for the sale of international ocean shipments of roll-on, roll-off cargo to and from the United States and elsewhere, including the Port of Baltimore. Tanioka participated in the conspiracy from at least as early as April 1998 until at least April 2012.

"For more than a decade this conspiracy has raised the cost of importing cars and trucks into the United States," said Assistant Attorney General Bill Baer for the Department of Justice's Antitrust Division. "Today's sentencing is a first step in our continuing efforts to ensure that the executives responsible for this misconduct are held accountable."

Today's sentence was the first to be imposed against an individual in the division's ocean shipping investigation. Previously, three corporations have agreed to plead guilty and to pay criminal fines totaling more than \$136 million, including Tanioka's employer K-Line, which sentenced to pay a criminal fine of \$67.7 million in November 2014.

Pursuant to the plea agreement, which accepted by the court today, Tanioka sentenced to serve an 18-month prison term and pay a \$20,000 criminal fine for his participation in the conspiracy. In addition, Tanioka has agreed to assist the department in its ongoing investigation into the ocean shipping industry.

Tanioka was charged with a violation of the Sherman Act, which carries a maximum

sentence of 10 years in prison and a \$1 million criminal fine for an individual. The

maximum fine may be increased to twice the gain derived from the crime or twice the

loss suffered by the victims of the crime, if either of those amounts is greater than

the statutory maximum fine.

The plea agreement is the result of an ongoing federal antitrust investigation into

price fixing, bid rigging and other anticompetitive conduct in the international roll-on,

roll-off ocean shipping industry, which is being conducted by the Antitrust Division's

Washington Criminal I Section and the FBI's Baltimore Field Office, along with

assistance from the U.S. Customs and Border Protection Office of Internal Affairs.

Washington Field Office/Special Investigations Unit.

Source: Marine Link, 2 Feb 2015

Port Hedland Iron Shipments to China Hold above 30 Million Tons

Iron ore shipments to China from Australia's Port Hedland, the world's biggest bulk-

export terminal, held above 30 million metric tons in January, little changed from

December and 29 percent higher than a year earlier.

Exports to the biggest buyer totaled 30.2 million tons last month from 30.6 million

tons in December and 23.3 million tons a year earlier, according to port authority

data on Tuesday. Total shipments were 36.8 million tons from 37.1 million tons in

December and 28.2 million tons in January 2014, the data showed.

Low-cost producers in Australia including BHP Billiton Ltd. and Fortescue Metals

Group Ltd., which route their cargoes through Port Hedland, boosted shipments last

year, seeking to squeeze out less competitive rivals. Prices sank 47 percent and

extended their decline in January as the jump in supplies spurred a glut just as

China's economy slowed. Australian shippers expanded their share of sales to China

last year, while Brazil's fell, according to customs data.

"Most of the Chinese buying the past year has been from Australian mines rather

than Brazilian mines," Kelly Teoh, an iron ore derivatives broker at Clarkson Plc in

Singapore, said by phone. Australia is clearly winning the battle for market share,

she said.

The performance from Port Hedland in January was more resilient than exports from

Brazil, the largest shipper after Australia. Exports from the Latin American country

dropped to 23.3 million tons last month from 37.4 million tons in December and 24.7

million tons a year earlier, according to data from the Brazilian Trade Ministry.

Peak Steel

While Morgan Stanley forecast that China's steel output will peak this year, the bank

also predicts that iron ore imports will keep expanding. Steel output will reach at 806

million tons this year, then contract in 2016 and 2017 as the economy matures, the

bank said in a report on Monday. China's iron ore imports will expand from an

estimated 872 million tons this year to about 964 million tons by 2018, it said.

Shipments from Australia accounted for 59 percent of China's overseas purchases

last year from 51 percent in 2013, according to customs data. Brazil's share was 18

percent from 19 percent in 2013, while exports from the rest of the world fell to 23

percent from 30 percent. The figures based on calculations derived from monthly

trade data by origin.

Ore with 62 percent content delivered to Qingdao, China, added 0.4 percent to

\$62.45 a dry ton on Monday, according to Metal Bulletin Ltd. It dropped to \$62.21 on

Friday, the lowest price on record going back to May 2009. The commodity fell 13

percent last month, the biggest drop since May.

Source: Hellenic Shipping News, 4 Feb 2015

Maritime Industry: Council Proposes New Economic Agenda

The Chairman, Ports Consultative Council, Chief Kunle Folarin, has said that there was need for a new Economic Agenda for the maritime sector. Folarin stated this in an interview with newsmen in Lagos.

He said the economic agenda would look into port reforms and local participation policies, port concession and terminal shipping elements, as well as the Cabotage Act (Coastal and Inland Shipping). According to him, the agenda will also look into Direct Foreign Investment policies and incentives in the maritime transport sector.

"The economic agenda will enable the ports' regulatory authorities to promote investment opportunities in the maritime sector and improve human capacity building in seafaring," Folarin said. The expert said that ship building, ship repairs and allied industry opportunities should be paramount under privatization and private sector participation in the maritime sector. "The new economic agenda will properly regulate offshore operations, ship building and ship repairs, demand and supply of maritime transport modes and also reduce maritime fraud, "Folarin said.

He said that in terms of demand, shipbuilding and repair facilities, including dry docking facilities, would require additional 50 establishments, while ship and craft in the cabotage area should be over 4,000.

Folarin said for supply, Nigerian flagged vessels involved in ocean trading were less than 45, while Nigerian flagged ships and crafts in the sabotage area (coastal trade) were less than 50. According to him, shipbuilding and repairs, including dry docking facilities, are less than 10. The expert described Nigeria's imports and exports as the basis of the nation's economic development. Our commerce and industry will thrive if we improve on our balance of trade," Folarin said.

He said there was a challenge in the shipping industry to reinforce a new economic order. The expert said he had carefully examined the demand and supply profile of shipping services in the country and expressed concern about how the support of the shippers' associations could be won.

"Without shippers' associations, shipping (cargo) will suffer a decline and the new port order being put in place will not thrive," Folarin said. The expert said that ship building, ship repairs and allied industry opportunities should be paramount under privatization and private sector participation in the maritime sector.

He said that maritime operators should be conversant with the new port order, in order to move the industry forward. Florin described shippers as the movers of the Nigerian economy, adding that without the ports, there would be no ship and without the shippers, there would be no cargo.

Source: Hellenic Shipping News, 5 Feb 2015

UK Announces Further Reduction of Light Dues

UK Minister for Shipping and Ports John Hayes chose the occasion of the UK Chamber of Shipping dinner earlier this week to announce a new reduction in light dues, the mandatory contribution for the upkeep of navigational aids levied on ships visiting British ports.

As of 1 April this year, the light dues rate will be reduced by 1p to 39p per net registered tone. The move, expected to save ship-owners collectively £2m a year, follows a 1p reduction that took effect in April 2014.

To recap, as a response to concerted pressure from ship-owner bodies, the UK government announced in 2010 that it would be streamlining the General Lighthouse Authorities of the British Isles - Trinity House, Northern Lighthouse Board, Commissioners of Irish Lights - with a view to being able to stabilize and even reduce the level of light dues. It also promised to resolve the historical anomaly that UK sources of were still being used to fund upkeep of navigational aids in the Republic of Ireland.

Hayes announced this week in a written statement to parliament that "considerable progress" had been made on three fronts since 2010, thereby enabling the cuts. Firstly, the three GLAs had exceeded their efficiency targets, "through working assets harder, adopting new technologies, and procuring services together to reduce net costs". Secondly, new arrangements for GLA pension schemes had served to "further reduce costs and remove sources of volatility from the General Lighthouse Fund". And thirdly, the cost of Irish navigational funds will be "met fully from Irish sources" from April 2015 onwards, he stated.

A spontaneous round of applause from the 750 assembled diners met the Minister's announcement of the light dues reduction at the UK Chamber dinner. The Minister also urged shipping companies to provide their input to a new six-month Maritime Growth Study launched last November, which he described as a "once-in-ageneration" opportunity to tweak the fiscal and regulatory parameters needed to "help the British Maritime Industry continue to compete in a global market".

Source: Sea Trade-Global, 5 Feb 2015

End-of-Life Ships: 'Worst Global Dumpers' Revealed

German ship owner Ernst Komrowski tops the list of 'dumpers' with 14 end-of-life vessels sold to the beaching yards. All of these were formerly part of the Maersk fleet and had been on a long-term charter with the Danish container ship giant which, in contrast to Komrowski, follows a strict recycling policy for its own vessels.

In second place is South Korea's largest container ship owner Hanjin Shipping with 11 ships while third is Swiss-based Mediterranean Shipping Company - the secondlargest container ship operator in the world. 'South Asia is still the preferred dumping ground for most ship owners as environmental, safety and labour rights standards are poorly enforced there,' comments Patrizia Heidegger, executive director of the NGO Ship breaking Platform.

'Ship owners sell their ships to the beaching yards for considerably greater profit than the price they could obtain by co-operating with modern ship recycling facilities.' It is 'shameful' for the shipping industry that so many owners choose to 'close their eyes' to on-the-ground realities in South Asia, argues Heidegger.

'Teekay and Hapag-Lloyd's decision last year to adopt responsible ship recycling policies shows that ship owners can make alternative choices,' she adds. 'It is time for the global leaders in shipping to commit to clean and safe ship recycling. Instead of selling to intermediaries and losing leverage on the fate of their vessel, ship owners can talk to ship recycling experts and negotiate directly with modern ship recycling facilities.'

Source: Recycling International, 9 Feb 2015

Bangladesh Ship Recycling Project Begins

An agreement between the International Maritime Organization (IMO) and the Government of the People's Republic of Bangladesh has been signed for the parties to collaboratively improve safety and environmental standards in the country's shiprecycling industry.

Nicolaos Charalambous, Director, Technical Cooperation Division, IMO and Md. Ashadul Islam, Additional Secretary, Economic Relations Division of the Ministry of Finance of the Government of Bangladesh signed a Memorandum of Understanding formalizing the cooperation between the two, on April 10, 2014.

The agreement will see the IMO and Bangladesh jointly implement a project entitled "Safe and Environmentally Sound Ship Recycling in Bangladesh – Phase I". With an annual gross tonnage capacity of more than 8.8 million, the Bangladesh ship recycling industry is second only to neighbouring India in terms of volume.

The project, aimed at improving standards and sustainability within the industry, will consist of five work packages, covering studies on economic and environmental impacts and on the management of hazardous materials and wastes, recommendations on strengthening the Government's one-stop service (in which all the various ministries with a responsibility for ship recycling - e.g. industries, environment, labour, shipping - offer a single point of contact for related matters), a review and upgrade of existing training courses and the development of a detailed project document for a possible follow-up project to implement the recommendations

of phase I.

It will be executed by the Marine Environment Division of IMO, in partnership with the

Ministry of Industries of Bangladesh, over the next 18 months. The Bangladeshi

ministry will coordinate input from the different stakeholder ministries within the

country, while IMO will also collaborate with other relevant UN agencies including the

International Labour Organization and the United Nations Industrial Development

Organization to ensure successful delivery of the project.

The principal funding for the project will come from the Norwegian Agency for

Development Cooperation, while the Secretariat of the Basel, Rotterdam and

Stockholm Conventions will also support the project by mobilizing some EU funding

towards the work package related to the management of hazardous materials, which

will partly be implemented by BRS.

IMO, the Government of Bangladesh, Norad and BRS have been working towards

the establishment of this project for a number of years.

Source: Marine Link, 9 Feb 2015

MARITIME ENVIRONMENT



Pollution in Ports and Harbours

Just like shipping, Ports and harbours have a responsibility to prevent pollution to the environment. Alan Scrafton, from UK spill responder, Adler and Allan, spoke to 'Maritime Journal' about this legislation and how to prevent and clean-up spills.

For ships, rigs and other sea-based platforms, pollution prevention is governed by the MARPOL Regulations, but under the Merchant Shipping Regulations 1997, ports, harbors, terminal operators and marinas also have a duty to plan for the provision of reception facilities for certain ship and boat generated MARPOL wastes. Port and harbors have a statutory 'duty of care' to ensure that waste is safely contained and is only transferred to authorized persons under the Environmental Protection Act 1990.

Oil Pollution Preparedness Regulations

In addition, ports must meet the requirements of the Oil Pollution Preparedness Response and Co-operation Convention. The national competent authority that oversees compliance in the UK is the Maritime and Coastguard Agency, which requires all qualifying ports to possess an approved contingency plan to deal with oil spills, including provision of 'self-help' (Tier 1) and regional assistance (Tier 2).

Where accidental spills in a harbor occur from vessels, the statutory harbor authority has powers to prosecute offenders. Where the source of the spill is on land, the Environment Agency is the prosecuting authority, with the harbor authority assisting in the provision of evidence.

Dealing with Spills

If a spill does occur preparation is key, oil spill contingency plans must be in place to enable ports to stop pollution in its tracks, quickly. Part of these plans should include keeping the appropriate spill equipment on site supported by trained staff - essential for ISO 14001 compliance. Tier 1 is the first line of defense, but in many cases it will not be enough. Having an expert team (Tier 2) on hand to respond round the clock is

essential to avoiding chronic damage, loss of business continuity and environmental

pollution.

Following a spill, there is a legal obligation to clean up the area thoroughly,

remediating the marine environment and/or land back to its pre-spill state. This will

require expert support, with a post-spill assessment conducted in order to implement

the best course of action.

Spill Cleanup in Action

Adler and Allan's Tier 2 response team helped in the recovery of the luxury motor

yacht, Kahu, from the seabed at East Cowes Marina on the Medina River, while

limiting the spread of pollution by containing and removing leaked oil.

Following a fire in November 2013, Kahu sank with an estimated 9,000 liters of

marine diesel fuel oil on-board. Adler and Allan used booms and skimmers to contain

and collect the diesel oil and protect an upriver wild fowl conservation site, at threat

from a strong flood tide carrying pollution to its banks. While preparations were being

made to remove Kahu from the seabed, the Adler and Allan team managed the

pollution threat around the clock and provided daily environmental reports to the

Harbor Master and Environment Group.

Kahu lifted by a floating crane onto a salvage barge. Adler and Allan deployed

further oil booms and skimmer systems to mitigate any potential major loss of fuel

from the Kahu's tanks during the lift. Prior to the final stages of the lift, a team

boarded the boat and pumped out fuel tanks and engine boom bilges. Divers also

cleared the sea bed where Kahu's hull rested.

Adler and Allan claims to be the leading marine spill response company for coastal

facilities in the UK, providing accredited Tier 2 pollution response services to over 85

ports, harbors and terminals from its nationwide network. In addition to pollution

response, Adler and Allan is accredited by the Nautical Institute on behalf of the

Maritime and Coastguard Agency to undertake marine pollution training from

Foundation to Commander Level.

Source: Maritime Journal, 2 Feb 2015

Philippines Passes Bill to Counter Maritime Pollution

The lower chamber unanimously approved House Bill 5377 or the Prevention of

Pollution from Ships Act on third reading late Monday during plenary session.

The measure shall prevent or minimize marine pollution covering oily substances,

harmful or toxic substances, garbage, sewage and other pollutants coming from

ships and floating structures," the bill reads. The measure authorizes the creation of

a Marine Pollution Adjudication Board to hear and decide on cases. Those found

liable may be penalized from P200,000 to P10 million for Philippine ships and

\$50,000 to \$5 million for foreign-flagged vessels.

The board will be made up of officials from the Transportation and Environment

departments, the Maritime Industry Authority, the Philippine Coast Guard, and the

Philippine Ports Authority, to ensure that environmental and pollution regulations are

complied with. It will also be tasked with reporting all incidents of the emission of

harmful substances to the Transportation department. The fines to be imposed are:

• for the unlawful discharge of oil and other harmful substances: P200,000 to P10

million for locally-owned ships, and \$50,000 to \$5 million for foreign ships;

• for sewage and garbage: P50,000 to P2 million for locally-owned ships, and

\$10,000 to \$1 million for foreign ships.

Persons found liable for the discharge of toxins onto Philippine waters, whether

directly or negligently, will also be fined at least P5,000 to P5 million plus the costs of

the cleanup. The measure, however, provides exceptions to the rule in the case of

warships, naval auxiliary ships, and all government and non-commercial ships

running on "emergency response cases," where the discharge of oil is required to

secure the safety of those aboard.

The passage of the proposed law is expected to fulfil the country's commitment to

the International Convention for the Prevention of Pollution from Ships signed in

1973, as drafted by the International Maritime Organization.

Source: Business World Online, 10 Feb 2015

Carbon Release from Ocean Helped End Ice Age

Carbon stored in an isolated reservoir deep in the Southern Ocean re-connected with the atmosphere, driving a rise in atmospheric CO2 and an increase in global temperatures, according to a study published in Nature. The finding gives scientists an insight into how the ocean affects the carbon cycle and climate change.

Atmospheric CO2 levels fluctuate from about 185 parts-per-million (ppm), during ice ages, to around 280 ppm, during warmer periods like today (termed interglacials). The oceans currently contain approximately sixty times more carbon than the atmosphere and that carbon can exchange rapidly (from a geological perspective) between these two systems (atmosphere-ocean).

Joint lead author Dr. Miguel Martínez-Botí from the University of Southampton said, "The magnitude and rapidity of the swings in atmospheric CO2 across the ice age cycles suggests that changes in ocean carbon storage are important drivers of natural atmospheric CO2 variations."

According to joint lead author Dr. Gianluca Marino, from ANU and previously at the ICTA, UAB, "We found that very high concentrations of dissolved CO2 in surface waters of the Southern Atlantic Ocean and the eastern equatorial Pacific coincided with the rises in atmospheric CO2 at the end of the last ice age, suggesting that these regions acted as sources of CO2 to the atmosphere".

"Our findings support the theory that a series of processes operating in the southernmost sector of the Atlantic, Pacific and Indian Oceans, a region known as the 'Southern Ocean', changed the amount of carbon stored in the deep-sea. While a reduction in communication between the deep-sea and the atmosphere in this region potentially locks carbon away from the atmosphere into the abyss during ice ages, the opposite occurs during warm interglacial periods."

The international team studied the composition of the calcium carbonate shells of ancient marine organisms that inhabited the surface of the ocean thousands of years ago in order to trace its carbon content.

Co-author Dr. Gavin Foster from the University of Southampton said, "Just like the

way the oceans have stored around 30 per cent of humanity's fossil fuel emissions

over the last 100 years or so, our new data confirms that natural variations in

atmospheric CO2 between ice ages and warm interglacial's are driven largely by

changes in the amount of carbon stored in our oceans."

"These results will help to better understanding the dynamics of human-induced CO2

accumulation in the atmosphere since the ocean is an important carbon sink and the

largest reservoir of carbon on our planet," commented co-author Patrizia Ziveri,

ICREA professor at the ICTA, UAB.

While these new results support a primary role for the Southern Ocean processes in

these natural cycles, we don't yet know the full story and other processes operating

in other parts of the ocean, such as the North Pacific, may have an additional role to

play.

Source: Eurasia Review, 12 Feb 2015

Ocean Pollution: Too Much Trash in the Deep Sea

Rubbish found in the deep sea more than 1,000 km (600 miles) from the coast

reveals the truly global impact of human activities. Food packaging and fishing gear

were among the discarded items found by Museum scientists visiting some of the

remotest parts of both the Indian and Atlantic Oceans.

The fishing gear could be found impacting the environment by entangling corals,

scraping the sea floor or even 'ghost fishing' - still catching creatures despite not

being tended by humans. 'At most of the locations we visited by ship, we were the

first team of scientists to study the area,' said Museum marine biologist Dr Lucy

Woodall. Most of the areas were more than 1,000 km from any coasts and away

from normal shipping routes. The most remote location was 1,600 km from land and

1,500m deep.

With this in mind we could expect to not have seen much litter. However we did see

litter on every feature we looked at,' she said. Sometimes the litter was a single item,

but in some cases the team found evidence of mass dumping, such as lots of glass

bottles of the same type.

Patterns of waste

The team compared litter densities on seamounts and ridges (raised features on the

sea bed) between the Atlantic and Indian Oceans to look for patterns. The density

varied considerably between features within each ocean, but there were some

patterns in the type of litter observed between the oceans.

The Atlantic Ocean features tended to accumulate more general waste, specifically

food packaging. Around many seamounts in the Indian Ocean, which are often

productive fishing areas, the team found accumulations of discarded fishing gear.

Inundated with plastics

The results of the research, led by the Museum with collaborators from the University

of Bristol, the Scottish Marine Institute, were published this week in the journal

Frontiers in Marine Science. Recently, the team reported on the ubiquity of micro

plastics - tiny fragments of plastic and fibers - in the deep sea. While this debris

likely represents a significant fraction of known plastic waste, the new discovery

marks an additional source of plastic to deep-sea ecosystems.

Cleaning up our act

Deep-sea research is logistically challenging, and still relatively little is known about

the sources and fates of litter in these ecosystems. As research is challenging, so

would be cleaning it up, said Dr Woodall.

Instead, she thinks we should focus on reducing waste through recycling, minimizing

plastic packaging, and through schemes such as official disposal of damaged fishing

gear.

Source: Yareah Magazine, 12 Feb 2015

Wärtsilä Wastewater Treatment Helps Cruise Ship Meet Environmental

Regulations

The Wärtsilä Hamworthy Membrane BioReactor systems are designed to facilitate

the management and treatment of both "grey" and "black" wastewater, and to

monitor discharges to the sea. Cunard Line awarded the contract during the third

quarter, 2014.

Cunard's 2620 passenger capacity Queen Mary 2 entered service in 2004 and was

designed with the aim of reducing the vessel's impact on the environment through

more efficient waste management. The existing on-board system is now due for

replacement and two Wärtsilä Hamworthy MBR 16 systems have been selected to

maintain the ship's environmental standards.

Wärtsilä's MBR technology is a wastewater treatment process based on biological

degradation and membrane separation. The company says it delivers the highest

quality discharge without requiring any addition or generation of chemicals

hazardous to the maritime or shipboard environments.

The Wärtsilä Hamworthy MBR is capable of meeting both current and anticipated

effluent quality standards, the company says.

Source: Environmental Leader, 12 Feb 2015

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