NAVY NEWS WEEK 2-5

11 January 2018

Ending Piracy in Nigerian Waters

January 5, 2018

Eromosele Abiodun writes that **the report by the International Maritime Bureau on rising cases of piracy in Nigeria focused on government agencies responsible for tackling the menace**

Recently, the International Maritime Bureau (IMB) released a report naming Nigeria as one of the hotspots for sea piracy. The IMB in the report said: "*Of the 27 seafarers kidnapped worldwide for ransom between January and March 2017, 63 per cent were in the Gulf of Guinea. Nigeria is the main kidnap hotspot with 17 crew taken in three separate incidents, up from 14 in the same period in 2016. "All three vessels – a general cargo ship, a tanker and a bulk carrier were attacked while underway 30-60 nautical miles off the Bayelsa coast. Three more ships were fired upon at up to 110 nautical miles from land, and many other attacks are believed to go unreported.*" Director of IMB, Pottengal Mukundan, said: "*The Gulf of Guinea is a major area of concern, consistently dangerous for seafarers, and signs of kidnappings increasing. IMB has worked closely with the response agencies in the region including the Nigerian Navy, which has provided valuable support, but more needs to be done to crack down on the area's armed gangs. We urge vessels to report all incidents so that the true level of piracy activity can be assessed.*" IMB said guns were used in 18 of the incidents and vessels were underway in 17 of the 20 reported attacks. IMB further stated that 39 of the 49 crew members kidnapped globally occurred off Nigerian waters in seven separate incidents. Other crew kidnappings in 2017 have been reported 60 nautical miles off the coast of Nigeria. "In total, 92 vessels were boarded, 13 were fired upon, there were 11 attempted attacks and five vessels were hijacked in the first nine months of 2017, "it stated. The flagship global report noted that, while piracy rates were down compared to the same period in 2016, there is continuing concern over attacks in the Gulf of Guinea and in South East Asia.

Who's Responsibility?

Since the report was released a number of attacks have been recorded, showing that government agencies responsible for the monitoring and foiling of attacks are clearly failing in their responsibility. Put simply, Section 22 (P) of the NIMASA Act provides opportunity for the agency to provide maritime security. The obvious question then will be why the agency is not doing what is necessary to put an end to piracy in Nigerian waters. For those who don't know, the NIMASA only last year awarded a surveillance contract worth billions of naira, a move that was intended to check raising cases of piracy and other vices in Nigerian waters. This has not happened and no one seems to care. Late last year, the United States of America, through its Maritime Administration, warned ships to be wary when approaching Nigerian waters. "*Two incidents have been reported in the Gulf of Guinea in the past six days. The first reportedly occurred south of Port Harcourt, Nigeria at 0600 GMT on October 21, 2017. The second reportedly occurred in the vicinity of 03-35.50N 006-49.20E at 1905 GMT on October 25, 2017; both incidents have been confirmed,* "it said in a report. "*The nature of the first incident was piracy and kidnapping; the nature of the second incident was piracy,*" it noted. Quoting the latest quarterly report from the IMB, the US Maritime Administration stated that "the latest quarterly report from the International Maritime Bureau notes that a total of 20 reports of attacks against all vessel types were received from Nigeria, 16 of which occurred off the coast of Brass, Bonny and Bayelsa. In general, all waters in and off Nigeria remain risky, despite intervention in some cases by the Nigerian Navy. We advise vessels to be vigilant, "it concluded. The US advisory report to ship masters and owners further warned that ship transiting Nigerian waters to be cautious and seek further information, even as it stated that the alert subsists until November 2, 2017.

Deadly Waters

Late last year, the Director General of NIMASA, Dr Dakuku Peterside confirmed the U.S maritime administration report that Nigeria water is deadly and unsafe. Dakuku stated this against the backdrop of Nigeria's loss of a seat in Category C of the International Maritime Organisation (IMO), noting that country' insecure and unsafe water contributed immensely to the election loss. Speaking to Journalists at the end of a meeting of the '**G7 Friends of Gulf of Guinea Group'** in Lagos, he   explained that G7 Friends of the Gulf of the Guinea Group is one of the international initiatives Nigeria is leveraging on to strengthen fight against piracy and other criminal activities on the sea. The NIMASA boss said the impression of the international community is that Nigeria was not doing enough to tackle the challenge adding that it contributed immensely to Nigeria losing the election. "*I cannot deny the fact that the issue of piracy may have had some impact on the elections. Our colleagues did not have much information about what we were doing to tackle piracy and there was a general impression that Nigeria was not doing enough to tackle the issue of piracy,*" he said. Also, speaking on the amount spent on the lost election, the DG said a whopping N100million was expended on Nigeria failed election bid. "*NIMASA spent less than N100million for the IMO campaign and it was only three delegates that attended the conference from NIMASA*, "he said. He explained that countries like Singapore, China, and United Arab Emirates attended the IMO with highest number of delegates. Speaking further on why Nigeria lost out of the IMO Election, Dakuku identified late preparations, delay from the Federal Executive Council and recession as another reason why the country lost. "*Also, late preparations and the fact that we did not go round other countries like others did, it would have cost plenty of money but we are not willing to spend such money. We had considered economic factors in context of our political aspirations. "It is Nigeria that ran for IMO category C,*

and for you to use the name Nigeria, you must get the approval of the man who is managing all the country, the president just got elected, so it would have gone through a process, we have lost some time but the approval eventually came, after we got the approval, there are also budgetary processes to go through, even if the approval was given two years ago, we also need to do the background work to get budgetary provision for it before we begin the campaign, all of these things affected our early preparations. "But now that we know better, we are starting the next preparations immediately, because we deserve a place in the council of the IMO, these are what we meant by late preparations, "he explained.

Lasting Solution

However, to find a lasting solution to piracy, Dakuku explained that the G7 Friends of the Gulf of the Guinea Group is one of the international initiatives Nigeria is leveraging on to strengthen the fight against piracy and other criminal activities on the sea. "What you are seeing now is an international dimension of the fight against piracy and maritime crime which is a new strategy. G7 is an initiative of the group towards finding lasting solution to the issues of security in the gulf of guinea. "For the first time, they decided to take the program outside the continent of Europe and the lot fell on Nigeria because they think the gulf of guinea suffers the peculiar problem and criminal activities on sea. Also speaking, Chairman Senate Committee on Navy, Isah Hamma Misau encouraged the group to sustain its intervention beyond the direct anti-piracy policies to ensure that appropriate resources and taxation flow into the region, so that public health, education and employment are equitably offered in the region. He said that this would help address the underlying socio-economic root causes of piracy in the region. He added that to boost maritime development on the Gulf of Guinea, there is also the need to strengthen maritime institutions.

Safeguarding Vessels

Meanwhile, Nigeria will spend $186 million to combat piracy in a bid to safeguard its waters and vessels moving in and out of the country. Transport Minister, Chibuike Rotimi Amaechi revealed this in a speech at Nor-Shipping's inaugural Africa Podium in Oslo, Norway recently. The fund is meant to acquire three new ready-for-war ships, three aircrafts, 12 vessels and 20 amphibious vehicles to combat the menace of piracy in the Gulf of Guinea. Amaechi allayed potential investors' fears of growing security concerns in Nigeria's seaway amid the rise in attacks by pirates. He revealed that over the next six months, the Nigerian government would give additional training to its navy, while providing technical and further support to patrol vessels in the region. "Rest assured, in six months you will no longer be harassed in our waters," he told the delegates. Amaechi said piracy is not the only issue currently impacting the progress of the maritime sector in Nigeria. While admitting that eradicating this growing menace was the main priority, Amaechi was keen to point out that Nigeria was also making significant strides in its bid to improve its creaking transport infrastructure. "All you hear about is efforts to stamp out corruption, but we are working extremely hard to develop transport infrastructure," he added. Whether this be roads or railways, the development of ports, the dredging of inland waterways and coastal regions, he said there was huge investment and resources earmarked for projects now and in the future.   **Source: https://www.thisdaylive.com**

Van Speijk Intercepts 1600 Kilos Of Cocaine

The naval ship **Hr. Ms. *Van Speijk*** has intercepted 1600 kilos of cocaine in the Caribbean. The drugs were transported on board a merchant ship that was en route to the Dominican Republic. It was the second drug seizure for *Van Speijk* in two weeks. On Christmas Day, the helicopter of the naval ship discovered the suspect ship sailing under the Tanzanian flag. A team from the American Coast Guard then boarded the ship to search it. That did not yield anything in the first place. The ship was chained in Santo Domingo in the Dominican Republic. In new searches, the drugs were found on New Year's Eve in a space between the fuel tanks. The ship, the drugs and passengers were transferred to the officers in the Dominican Republic. *Van Speijk* is currently conducting anti-drug operations in the Caribbean Sea. On 22 December, the naval ship intercepted 550 kilos of cocaine on board of a speedboat.   **Source : curacaochronicle**

Australian warship makes second big drugs bust in Arabian Sea

By AFP | Published: 05th January 2018 01:15 PM |
Last Updated: 05th January 2018 04:50 PM

SYDNEY: An Australian warship has made its second large drugs bust in the Arabian Sea within a week, seizing 3.5 tonnes of hashish with an estimated street value of USD 142 million, officials said today. It followed **HMAS *Warramunga*** making an eight-tonne hashish haul in late December during manoeuvres in the area as part of the Combined Maritime Forces (CMF) naval partnership. The latest seizure occurred on January 3 with support from a British Royal Navy helicopter, with crew

from the frigate boarding a suspect vessel in international waters. HMAS Warramunga commanding officer Dugald Clelland said it was a complex night operation.

In this photo provided by the Australian Border Force, methamphetamine is displayed in Perth, Australia | AP

"*The Royal Navy helicopter was able to cue us onto a suspect vessel, which Warramunga's boarding party searched in challenging conditions*," he said. "*The boarding party did a first-rate job locating and seizing more than three-and-a-half tonnes of illicit narcotics*." Officials did not say where in the Arabian sea the drugs were seized, where the smuggling vessel was believed to have come from or give its likely destination. The **HMAS *Warramunga*** is part of the Combined Maritime Forces naval partnership in which 32 nations patrol 6.5 million square kilometres of international waters. Their focus is on ensuring the free flow of legitimate commerce, but also to crack down on terrorist activity in the Middle East and Indian Ocean regions.

Source: http://www.newindianexpress.com

3 European producers bid for Poland sub deal

By: Jaroslaw Adamowski   30 Dec 2017

Scorpene-class subs can be armed with MBDA's cruise missiles. (MBDA)

WARSAW, Poland — Poland's Ministry of Defence has obtained three offers to acquire new submarines for the country's Navy as the service seeks three new vessels to replace outdated Kobben-class subs. France's Naval Group is offering its Scorpene-class subs armed with MBDA's naval cruise missiles; Germany's ThyssenKrupp Marine Systems is bidding with its 212CD-class subs; and Swedish, Saab-owned company Kockum is offering its A26-class subs, the ministry said in a statement. "*These vessels are to constitute the essential combat and flagship element of the Polish Navy, and, at the same time, as they will be fitted with cruise missiles, they will be a key element of the state's and alliance's military deterrence*," the ministry said. The French offer is the only one comprising cruise missiles, which could put Naval Group in a preferential position to secure the deal, local observers say. Deliveries of the new subs are scheduled for the years 2024 to 2026. In addition to the minesweepers and one rescue vessel, the contract is estimated to be worth some 10 billion zloty (U.S. $2.9 billion), according to data from the ministry. Last August, the Polish ministry decided to overhaul two of the Kobbens. One vessel will be decommissioned in 2018 and the other in 2020.

Source: https://www.defensenews.com

SSK Scorpene Class Attack Submarine

Crew	32
Overall Length	63.5m
Draught	5.4m
Submerged Displacement	1,590t

The Scorpene submarine has been jointly developed by DCNS of France (formerly DCN) and Navantia (formerly Bazan, then Izar) of Spain. Two Scorpene submarines were ordered by Chile. The vessels replace two Oberon Class submarines which were retired in 1998 and 2003. The first, ***O'Higgins***, was built at DCN shipyard in Cherbourg, launched in November 2003, and commissioned in September 2005. It arrived in Chile in January 2006. The second, ***Carrera***, built at the Navantia shipyard in Cartagena, Spain, was launched in November 2004 and commissioned in July 2006. ***Carrera*** arrived at its homeport of Talcahuano in December 2006.

Chilean Navy Scorpene submarines

The 1,500t Scorpene built for the Chilean Navy has a length of 66.4m. The two vessels are powered by four diesel generators providing more than 2,500kW using GM synchronous motors with permanent magnets. The Chilean Scorpene has a hull-mounted medium-frequency active / passive sonar. The vessels are armed with WASS (Whitehead Alenia Sistemi Subaquei) Black Shark heavyweight torpedoes. The Black Shark is a dual-purpose, wire-guided torpedo, which is fitted with Astra active / passive acoustic head, and a multi-target guidance and control unit incorporating a counter-countermeasures system. It has an electrical propulsion system based on a silver oxide and aluminium battery. Black Shark also arms the two Scorpene vessels for the Royal Malaysian Navy. The six torpedo tubes are capable of firing SM-39 Exocet anti-ship missiles, which have a range of 50km, but they are not initially carried. The vessels are equipped with EDO Reconnaissance Systems AR-900 electronic support measures/direction-finding (ESM/DF) system.

Malaysian Navy Scorpene attack submarines

The Royal Malaysian Navy placed a contract for two Scorpene submarines in June 2002. The first vessel, **KD** *Tunku Abdul Rahman*, was launched at DCNS Cherbourg in October 2007. It was handed over in January 2009 in Toulon and arrrived in Malaysia in September 2009. The second, *Tun Razak*, was launched at Navantia Cartagena in October 2008 and commissioned in 2009. DCNS built the bow sections, Navantia the aft sections.

Indian Navy Scorpene attack submarines

In October 2005, India placed an order for six Scorpene submarines. The submarines are being built at the state-owned Mazagon dockyard in Bombay, with technical assistance and equipment from French companies DCN and Thales. At the same time, India also placed an order for 36 MBDA SM-39 Exocet anti-ship missiles to arm the submarines. Construction of the first vessel, **INS** *Kalvari*, began in December 2006 and is scheduled to be delivered by March 2017. The second submarine in class, **INS** *Khanderi*, was launched in January 2017. The total cost of the submarines is estimated to be Rs235.6bn ($3.75bn).

Brazilian Navy Scorpene attack submarines

In December 2008, Brazil placed an order for four diesel-electric-powered submarines based on the Scorpene. The submarines are being built by a joint venture company set up by DCNS and Odebrecht of Brazil and the first submarine is expected to enter service in 2017. The construction of the submarines started in July 2011.

Weapon systems

The Scorpene attack submarine can carry 18 torpedoes and missiles or 30 mines. It is equipped with six bow-located 21in torpedo tubes providing salvo launch capability. Positive discharge launching is by an air turbine pump. The submarine's weapons include anti-ship and anti-submarine torpedoes and anti-surface missiles. The handling and loading of weapons is automated.

SUBTICS combat management system

The SUBTICS combat management system, with up to six multifunction common consoles and a centrally situated tactical table, is collocated with the platform-control facilities. The combat management system is composed of a command and tactical data handling system, a weapon control system and an integrated suite of acoustic sensors with an interface to a set of air surface detection sensors and to the integrated navigation system. The system can also download data from external sources. The integrated navigation system combines data from global positioning systems, the log, depth measurement and the ship's trim / list monitoring system. The Scorpene monitors the environment including seawater density and temperature and the submarine's own noise signature.

Sonar suite

The vessel's sonar suite includes a long-range passive cylindrical array, an intercept sonar, active sonar, distributed array, flank array, a high-resolution sonar for mine and obstacle avoidance and a towed array.

Control and monitoring

All submarine handling operations are carried out from the control room. The vessel features a high level of automation and surveillance, with automatic control mode of rudders and propulsion, continuous monitoring of the propulsion systems and platform installations, centralised and continuous surveillance of all potential hazards (leaks, fires, presence of gases) and the status of the installations that affect the safety while submerged.

Construction

The submarine incorporates a high level of system redundancy to achieve an average 240 days at sea a year for each submarine. The maximum diving depth is 300m, giving the commander more tactical freedom than previously available on conventional submarines. There is no limit to the duration of dives at a maximum depth, other than the power systems and crew limitations. The structure of the submarine uses high-yield stress-specific steel, enabling dives to maximum depths

when necessary. Incorporating high-tensile steels has reduced the weight of the pressure hull, allowing a larger load of fuel and ammunition. The reduced complement minimises training costs and increase combat efficiency by making more space, while a larger payload enhances the ship's autonomy. When dived, the Scorpene has low radiated noise that permits improved detection ranges of its own sensors and reduced risk of detection by hostile sensors. The low radiated noise is achieved through the use of advanced hydrodynamics with an albacore bow shape, with fewer appendages and an optimised propeller. Between the suspended decks, the equipment is mounted on elastic mountings wherever possible, and the noisiest systems have a double-elastic mounting to reduce the risk of their noise profiles being radiated outside the submarine. The shock-resistant systems have been developed from systems incorporated in advanced nuclear-powered submarine designs. The low-acoustic signature and hydrodynamic shock-resistance give the Scorpene class the capability to carry out anti-submarine and anti-surface ship warfare operations in closed or open sea conditions, as well as the capability of working with special forces in coastal waters.

Crew facilities

The ship can hold a total company of 31 men with a standard watch team of nine. The control room and the living quarters are mounted on an elastically supported and acoustically isolated floating platform. All living and operational areas are air-conditioned. The submarine also has space for six additional fold-down bunks for special operations crew. The vessel is equipped with all the necessary systems to provide vital supplies, water, provisions, regeneration of the atmosphere, to ensure the survival of all crew for seven days. The ship is equipped with full rescue and safety systems. A connection point for a diving bell or deep submergence rescue vehicle (DSRV) allows collective rescue operations.

Stealth design

The planning and design of the Scorpene was directed towards achieving an extremely quiet vessel with a great detection capability and offensive power. The forms of the hull, the sail and the appendages have been specifically designed to produce minimum hydrodynamic noise. The various items of equipment are mounted on elastic supports, which are in turn mounted on uncoupled blocks and suspended platforms. The isolation also provides better shock protection to the equipment.

Propulsion systems

The Scorpene has two diesel generation sets providing 1,250kW of power. At the top of the hull immediately above the diesel generator sets is a Dutch Breach machinery shipping hatch. The submarine has an elastically supported 2,900kW electronic engine. There are two variants of Scorpene, the CM-2000 with the conventional propulsion system and the AM-2000 equipped with air independent propulsion. The AM-2000 is capable of remaining submerged on underwater patrol for three times longer than the CM-2000.

Air independent propulsion

A conventional diesel-electrical submarine sailing underwater is difficult to detect. However the need to come repeatedly to periscope depth to recharge the batteries using the diesel engine greatly increases vulnerability by:

- Its aerial detectability, since the snorkel projecting from the water is detectable by radar
- Its underwater detectability due to increase in radiated noise from the working diesels

The ratio between this time of greater vulnerability and the total operating time is known as the 'indiscretion rate' and for all conventional modem submarines the indiscretion ratio ranges typically from 7% to 10% on patrol at 4kt, and 20% to 30% in transit at 8kt. To lessen the submarine's vulnerability, the vessel can be equipped with an air independent propulsion system such as: the Stirling engine, the fuel cell, the closed circuit diesel and the module d'energie sous-marine autonome (MESMA) system . The MESMA anaerobic system, in which heat in the primary circuit is produced by burning ethanol with oxygen, can be easily installed either at the start of the submarine's construction or in a later modernisation to convert the CM-2000 to an AM-2000 build standard. With the MESMA system the AM-2000 submarine can stay down on underwater patrol three times longer than the CM-2000. Its performance features remain the same in all other respects, except that the length increases to 70m and its submerged displacement to 1.870t (against the 61.7m and the 1,565t of the CM2000).

British Royal Navy's HMS *Prince of Wales* floated out

The British Royal Navy's second Queen Elizabeth-class aircraft carrier, the future **HMS Prince of Wales**, has been floated for the first time The undocking of the vessel was carried out ahead of schedule after being originally planned later this year. "*The 65,000t navy vessel is currently undergoing fitting out activities in Rosyth, Scotland.*" UK Defence Procurement Minister Harriett Baldwin said: "*This is an important moment in the monumental programme to build these two magnificent ships. "I would like to thank the 10,000 people from across the UK who have helped us make such progress during 2017 on both* **HMS Queen Elizabeth** *and* **HMS Prince Of Wales** *"* The 65,000t navy vessel is currently undergoing fitting out activities in Rosyth, Scotland. Its

generators and gas turbines are slated to become operational for the first time by mid-2018. **HMS** *Prince of Wales* is scheduled to carry out its sea trials in 2019 with a total of 679 crew members. The aircraft carrier was officially named during a ceremony in Rosyth in September last year Its christening ceremony took place three weeks after **HMS** *Queen Elizabeth* first entered its home port of Portsmouth as part of its maiden sea trials programme The navy's Queen Elizabeth-class ships are being built by the Aircraft Carrier Alliance comprising BAE Systems, Babcock, Thales and the UK Ministry of Defence (MoD).   **Source : naval-technology**

The Royal Navy is returning to operations after the Christmas break. First out of Devonport Jan 3 was the Type 23 Frigate **F 236 HMS** *Montrose*, going to sea after a period of maintenance.   **Photo : Raymond Wergan, Newton Ferrers. (c)**

Pakistan Navy successfully test fires Harba naval cruise missileWeb Desk

Pakistan Navy successfully test fired the indigenously developed Harbah Naval Cruise Missile from the Pakistan Navy Ship Himmat. The surface-to-surface anti-ship missile with land attack capability accurately hit its target signifying the impressive capabilities of Harbah Naval Weapon System. Chief of the Naval Staff Admiral Zafar Mahmood Abbasi witnessed the firing aboard Pakistan Navy Ship *Alamgir* . The successful live weapon firing demonstrates the credible fire power of Pakistan Navy and the impeccable level of indigenous production in high tech weaponry achieved by Pakistan's defence industry, and is a clear manifestation of government's resolve to achieve self reliance in this field. On this occasion, Chief of the Naval Staff expressed his utmost satisfaction on the operational readiness of Pakistan Navy Fleet units and commended the efforts of all those involved in achieving this significant milestone successfully. The naval chief emphasised the need to capitalise on indigenous defence capabilities and reduce reliance on foreign countries. He reaffirmed the resolve of Pakistan Navy to ensure seaward defence of Pakistan and safeguard national maritime interests at all costs. Admiral Abbasi also appreciated the efforts made by engineers and researchers in making the project a success.   **Source : ARYnews**

IRAN Naval Forces

The composition of the Iran Naval Forces can be found using the link below, but for ease of reference the 44-page document is attached: http://www.oni.navy.mil/Portals/12/Intel%20agencies/iran/Iran%20022217S.pdf?ver=2017-02-28-082613-220

China Begins Construction of Third Domestically Made Aircraft Carrier

05.01.2018(updated 03:52 05.01.2018)

© AFP 2017/ STR

Less than one year after Chinese shipyard workers completed the nation's first domestically made aircraft carrier, workers were already toiling away on what will one day become China's third homemade carrier.

The three carriers built by China exclude the *Liaoning*, a decades-old Soviet ship Beijing bought from Ukraine and refurbished to practice carrier operations. Beijing's Type 001A carrier took to the open seas for testing last April, while the

Type 002 is slated to hit the waters within months, the Global Times reported Friday. "*For sure, the speed is impressive, as it has only taken 10 months after the drydock was flooded for the first time in April till the builder's trial and acceptance trial at sea, to be conducted in February 2018*," a military expert told the news outlet. The Type 002 is reportedly very similar to the *Liaoning* and features an upward ramp at the bow to help aircraft take off. The new Type 003 plans to push the boundaries of Chinese naval aviation. "*Building the new carrier will be more complicated and challenging than the other two ships*," a military source told the South China Morning Post. Construction on the Type 003 is taking place in the Shanghai Jiangnan shipyard, the South China Morning Post reports. "*The shipyard is still working on the carrier's hull, which is expected to take about two years*," the official told the Post. One goal for the Type 003 is to use an electromagnetic launch system, a system the US Navy has spent years perfecting. The US Navy completed its first successful test of an F/A-18 Super Hornet taking off with electromagnetic propulsion — versus a ski-jump ramp or steam propulsion — just last year. China's ambition is to have four carrier groups operating with the People's Liberation Army-Navy by 2030. The *Liaoning* is currently the only carrier in the fleet, but the Type 001A is expected to go into full service by the end of 2018.

Source: https://sputniknews.com

Shipping lanes in Indian Ocean should remain secure: India

in Piracy and Security News 04/01/2018

India said today that it would be in China's interest that the shipping lanes in the Indian Ocean remain secure and asserted that the Indian Navy was keeping an eye on its key maritime areas. In response to a question in the Rajya Sabha, Minister of State for Defence Subhash Bhamre said the Navy's deployments in the Indian Ocean have been "*further structured*" under the new mission based deployment (MBD) concept. He said China had operationalised its overseas base at Djibouti in August last year to provide operational turn around (OTR) facilities for ships on anti-piracy missions. "*China largely depends on the oil imports transiting through the Indian Ocean. It would be in China's interest that shipping lanes and traffic in the Indian Ocean remain secure*," he said. Bhamre said the Indian Navy maintains regular presence and surveillance in the maritime areas of its interest. The Navy had operationalised a new 'mission-ready' plan for aggressive deployment of warships in critical sea lanes a few months back, seen as a move to check China's growing assertiveness in the Indian Ocean region. "*At present, there is no information to suggest that China is exercising freedom of navigation operations in the Indian Ocean Region*," said Bhamre. In November, India had joined hands with the US, Japan and Australia to form a quadrilateral coalition to pursue common interests in the Indo-Pacific region. To a separate question, Bhamre said government was aware of the urgent need for road infrastructure along the international borders in the country. He said as per the operational requirement of the Army, 530 roads of length 22,803 km are identified for construction/improvement by Border Roads Organisation (BRO).

Source: PTI via **http://www.hellenicshippingnews.com**

India stressing its seniority vis-à-vis China with respect to the Indian Ocean.

The Dimensions of Russian Sea Denial in the Baltic Sea

January 4, 2018 Guest Author

Russian troops load an Iskander missile. (Sputnik/ Sergey Orlov)

By Tobias Oder
Introduction
Over the last few years, the Russian Federation pursued an increasingly assertive foreign policy in Eastern Europe. Geopolitical infringements on Crimea and Eastern Ukraine are coupled with hybrid warfare and aggressive rhetoric. The buildup and modernization of the Russian armed forces underpins this repositioning and Russia has taken major steps in increasing its conventional and nuclear capabilities. The significant rearmament of its Western exclave Kaliningrad requires special attention.[1]   The recent buildup of Russian A2/AD forces in Kaliningrad, coupled with increasingly assertive behavior in the Baltic Sea, poses a serious challenge for European naval policy. Should Russia make active use of its sea denial forces, it could potentially shut down access to the Baltic Sea and cut maritime supply lines to the Baltic states. The full range of Russia's A2/AD capabilities in Kaliningrad comprises a wide array of different weapon systems, ranging from SA-21 Growler surface-to-air missiles[2] to a squadron of Su-27 Flanker fighters and another squadron of Su-24 Fencer attack aircrafts[3] that can be scrambled at a moment's notice to contest Baltic Sea access.[4] German naval capabilities to counter

the SS-C-5 Stooge anti-ship missile system,[5] Russia's mining of sea lanes, and its attack submarines are of particular interest in retaining Baltic sea control.

Russian A2/AD Systems

The K300 Bastion-P system includes in its optional equipment a Monolit-B self-propelled coastal radar targeting system.[6] This radar system is capable of, according to its manufacturer, "*searching, detection, tracking and classification of sea-surface targets by active radar; over-the-horizon detection, classification, and determination of the coordinates of radiating radars, using the means of passive radar detection and ranging*."[7] The manufacturer further states that sea-surface detection with active radar ranges up to 250 kilometers under perfect conditions, while the range of sea surface detection with passive detection reaches 450 kilometers.[8] With regard to its undersea warfare capabilities, the Russian Baltic Fleet currently only operates two Kilo-class submarines. Of these diesel-powered submarines, only one is currently operational with the other unavailable due to repairs for the foreseeable future.[9] However, the entire Russian Navy's submarine fleet is currently undergoing rapid modernization and the Baltic Fleet will receive reinforcements consisting of additional improved Kilo-class submarines.[10] Despite the fact that the Baltic fleet remains relatively small in size, these upgrades amount to "*a level of Russian capability that we haven't seen before*" in recent years.[11] With its formidable ability to float through waters largely undetected and versatile missile equipment options capable of attacking targets on water and land, the Kilo-class presents a serious threat to naval security in the region.[12] In fact, its low noise level has earned it the nickname "The Black Hole."[13] The Baltic Sea is relatively small in size and has only a few navigable passageways that create chokepoints. Therefore, it resembles perfect terrain for the possible use of sea mines.[14] While often underestimated, sea mines can have a devastating impact on naval vessels. Affordable in price and hard to detect, they can be an effective area-denial tool if spread out in high quantities.[15] Russia still possesses the largest arsenal of naval mines, and according to one observer, Russia has "*a good capability to put weapons in the water both overtly and covertly*."[16] The versatility of possible launch platforms, ranging from full-sized frigates to fishing boats, makes an assessment of current capabilities in Kaliningrad a difficult endeavor.
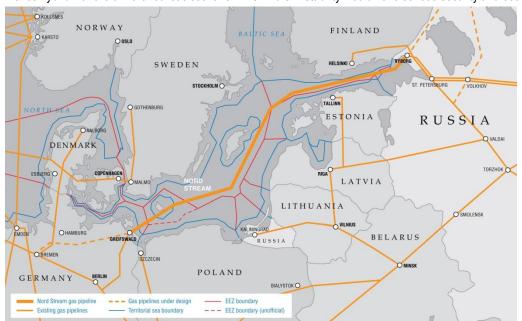
A Possible Scenario for Russian A2/AD Operations in the Baltic Sea

Given Russia's long-term strategic inferiority to western conventional capabilities, a realistic scenario will bear in mind that Russia is not interested in vertical conflict escalation. Instead, it is primarily interested in exploiting its temporary regional power superiority.[17] Thus, its endgame will not be to destroy as many enemy vessels as possible, but rather to send a signal to opponents and deter them from navigating their ships east of German territorial waters as long as needed.[18] Ultimately, A2/AD capabilities only have to inflict so much damage to make defending the Baltic States appear unattractive or too costly to decision makers, especially if those measures can create the perception of Russian escalation dominance.[19] Russia is very inclined to use means that offer plausible deniability, to possibly include sea mines.[20] The Baltic Sea is still riddled with sea mines from both World Wars[21] and if Russia manages to lay sea mines undetected, it can make the argument that any incidents in the Baltic Sea involving sea mines were simply due to old, leftover mines instead of newly deployed Russian systems. Should measures to deploy sea mines in the Baltic Sea fail, Russia may consider use of a more overt, multi-layered approach to sea denial. We can expect that a realistic scenario will feature a mixture of above-mentioned approaches that include submarine warfare as well as the use of anti-ship missiles. Russia could also make use of its naval aviation assets and other missile capabilities stationed in Kaliningrad.

Strategic Implications and NATO's Interests

It is difficult to interpret the deployment of these weapon systems and missiles as anything different than an addition to Russia's A2/AD capabilities. Russia is actively trying to improve it strategic position to deter possible troops movements on land as well as on the water.[22] They mirror Russia's claims to its sphere of influence in Eastern Europe and serve as an example of Russia's attempts to exert authority over its periphery, effectively giving Russia the potential to deny access to the Baltic Sea east of Germany. If Russia increases its A2/AD capabilities in the Baltic Sea, it complicates NATO's access to the Baltic states during a potential crisis. This is especially startling due to the fact that NATO troops are currently stationed in the Baltics and cutting off maritime supply routes would leave those troops extremely vulnerable. If Russia can effectively cut off NATO's access to the Baltic states, it increases the "*attractiveness to Russia of a fait-accompli*."[23] Ben Hodges, then-commanding general of the United States Army in Europe, shared these concerns: "*They could make it very difficult for any of us to get up into the Baltic Sea if we needed to in a contingency*."[24] In case regional states will be called to fulfill its alliance commitments in the Baltic Sea, Russian submarine blockades, along with mining and missile deployments, will be a major roadblock and possibly threaten safe passage for European vessels. NATO has an immense national interest in maintaining freedom of navigation in the Baltic Sea and ensuring free access. On average, 2,500 ships are navigating the Baltic Sea at any time and its shipping routes are vital to European economic activity.[25] In the 2016 German Defence White Paper, this is clearly identified: "*Securing maritime supply routes and ensuring freedom of the high seas is of significant importance for an exporting nation like Germany which is highly dependent on unimpeded maritime trade. Disruptions to our supply routes caused by piracy, terrorism and regional conflicts can have negative repercussions on our country's prosperity*."[26] Thus, if Russia impedes freedom of navigation in this area with its A2/AD capabilities, it will significantly damage Germany's and other European nations' export potential. However, vulnerabilities are not limited to shipping routes but also include the Nord Stream gas pipeline and undersea cables upon which a large part of European economies depend.[27] In sum, Russia's A2/AD systems, along with updated submarine capabilities and the potentially disastrous effects of disrupted undersea pipelines and communication cables, enhance Russia's strategic position and

makes hybrid warfare a more realistic scenario. This kind of instability would have serious security and economic implications for NATO.

A map of the Nord Stream infrastructure project (Gazprom)

Recommendations

Should the Baltic Sea fall under *de facto* authority of the Russian Federation or witness conventional or hybrid conflict, then NATO would face dire economic consequences and live with a conflict zone at its doorstep. This is especially concerning given the poor state of Germany's naval power in particular. The German Navy lacks most capabilities that would qualify it as a medium-sized navy, and its strategy is mostly agnostic of a threat with significant A2/AD capabilities just East of its own territorial waters.[28] Since it is in Germany's vital interest to maintain freedom of navigation in the Baltic Sea and plan for a potential use of Russian A2/AD capabilities, the German Navy should shift its operational focus to the Baltic Sea. Having outlined the means through which Russia can deny access to the Baltic Sea, specific recommended actions can follow. Effectively countering the effects of anti-ship missiles stationed in Kaliningrad requires two measures. First, it requires the German Navy to equip its ships and submarines with standoff strike capabilities that enable them to engage Russian radars and anti-ship missiles from outside their A2/AD zone.[29] In practice, this requires the procurement of conventional long-range land-strike capabilities for the German Navy. To this day, the entire German fleet lacks any form of long-range land-attack weapon for both surface vessels and submarines.[30] Second, if the German Navy has to operate within Russia's A2/AD environment, it should equip its surface ships with more advanced electronic warfare countermeasures that disrupt sensing and enable unit-level deception. Russia's submarines are traditionally hard to detect, but they can be countered by Germany's own class of 212A submarines. Those feature better sonars and are even quieter, giving them an advantage over Russia's submarines.[31] However, in order to fully exploit this advantage, Germany has to do a better job of committing resources to the maintenance of its submarines as all six of its active submarines are currently not operational due to maintenance.[32]

German Type 212A submarine U-32. (Bundeswehr/Schönbrodt)

A large part of the effectiveness of anti-mine operations hinges on preemptive detecting. If Germany and other NATO allies can catch Russia in the act of laying mines, it will actively decrease the possible damage those mines can do to vessels in the future and thus their effect on sea denial.[33] It can do so by increasing its sea patrols in the region. These patrols can include minimally armed vessels such as the *Ensdorf* and *Frankenthal* classes in order to avoid incidental confrontations and to assume a non-threatening stance toward Russia. If preventive action fails, Germany should be ready to employ a NATO Mine Countermeasure Group in order to clear as many mines as possible and to ensure safe passage of ships.

Conclusion

The buildup of forces on Russia's Western border is paired with a more aggressive stance by the Russian military. Over the last months, the Baltic Sea became "*congested*" with Russian military activity, leading to increasingly closer encounters.[34] In

April 2014, an unarmed Russian Su-24 jet made several low-passes near a U.S. missile destroyer, the USS *Donald Cook* in the Baltic Sea.[35] Later in 2014, a small Russian submarine navigating in Swedish territorial waters spurred a Swedish military buildup along its coast due to "*foreign underwater activity.*"[36] And during July 2017, Russia conducted joint naval exercises with China in the Baltic Sea. By conducting a joint naval drill with China in these waters, the Russian military demonstrated strength and flexed its military muscle in a message specifically directed at NATO.[37] These actions by the Russian military all point toward conveying the message that Russia does not want the presence of foreign militaries in Baltic Sea waters and is capable of taking countermeasures to exert its sovereignty in the region.

Tobias Oder is a graduate student in International Affairs at the Bush School of Government and Public Service at Texas A&M University. He focuses on international security, grand strategy, and transatlantic relations

References

[1] "The Baltic Sea and Current German Naval Strategy," Center for International Maritime Security, last modified July 20, 2016, accessed September 22, 2017, http://cimsec.org/baltic-sea-current-german-navy-strategy/26194.

[2] Also known as S-400 *Triumf.*

[3] "Chapter Five: Russia and Eurasia," *The Military Balance* 117, no. 1 (2017), 183-236.

[4] "Entering the Bear's Lair: Russia's A2/AD Bubble in the Baltic Sea," The National Interest, last modified September 20, 2016, accessed September 24, 2017, http://nationalinterest.org/blog/the-buzz/entering-the-bears-lair-russias-a2-ad-bubble-the-baltic-sea-17766?page=show.

[5] Also known as K-300P *Bastion-P.*

[6] "K-300P Bastion-P System Deliveries Begin," Jane's, last modified March 5, 2009, accessed November 20, 2017, https://my.ihs.com/Janes?th=janes&callingurl=http%3A%2F%2Fjanes.ihs.com%2FMissilesRockets%2FDisplay%2F1200191.

[7] "Monolit-B," Rosoboronexport,, accessed November 20, 2017, http://roe.ru/eng/catalog/naval-systems/stationary-electronic-systems/monolit-b/.

[8] Ibid.

[9] Kathleen H. Hicks et al., *Undersea Warfare in Northern Europe* (Washington, D.C.: Center for Strategic and International Studies, 2016).

[10] Karl Soper, "All Four Russian Fleets to Receive Improved Kilos," *Jane's Navy International* 119, no. 3 (2014).

[11] "Russia Readies Two of its most Advanced Submarines for Launch in 2017," The Washington Post, last modified December 29, 2016, accessed September 23, 2017, https://www.washingtonpost.com/news/checkpoint/wp/2016/12/29/russia-readies-two-of-its-most-advanced-submarines-for-launch-in-2017/?utm_term=.2976db8c1710.

[12] "The Kilo-Class Submarine: Why Russia's Enemies Fear "the Black Hole", The National Interest, last modified October 23, 2016, accessed November 21, 2017, http://nationalinterest.org/blog/the-kilo-class-submarine-why-russias-enemies-fear-the-black-18140.

[13] "Silent Killer: Russian Varshavyanka Project 636.3 Submarine," Strategic Culture Foundation, last modified July 14, 2016, accessed November 21, 2017, https://www.strategic-culture.org/news/2016/07/14/silent-killer-russian-varshavyanka-project-636-3-submarine.html.

[14] Stephan Frühling and Guillaume Lasconjarias, "NATO, A2/AD and the Kaliningrad Challenge," *Survival* 58, no. 2 (April-May, 2016), 95-116.; Alexander Lanoszka and Michael A. Hunzeker, "Confronting the Anti-Access/Area Denial and Precision Strike Challenge in the Baltic Region," *The RUSI Journal* 161, no. 5 (October/November, 2016), 12-18.; Hicks et al., *Undersea Warfare in Northern Europe.*

[15] "Sea Mines: The most Lethal Naval Weapon on the Planet," The National Interest, last modified September 1, 2016, accessed November 21, 2017, http://nationalinterest.org/blog/the-buzz/sea-mines-the-most-lethal-naval-weapon-the-planet-17559. In fact, even a small number of sea mines have the capability to disrupt marine traffic due to the perceived risk of a possible lethal encounter (Caitlin Talmadge, "Closing Time: Assessing the Iranian Threat to the Strait of Hormuz," *International Security* 33, no. 1 (Summer, 2008), 82-117.).

[16] "Minefields at Sea: From the Tsars to Putin," Breaking Defense, last modified March 23, 2015, accessed November 21, 2017, https://breakingdefense.com/2015/03/shutting-down-the-sea-russia-china-iran-and-the-hidden-danger-of-sea-mines/.

[17] Frühling and Lasconjarias, *NATO, A2/AD and the Kaliningrad Challenge*, 95-116, 100.

[18] Lanoszka and Hunzeker, *Confronting the Anti-Access/Area Denial and Precision Strike Challenge in the Baltic Region*, 12-18 Specifically, commentators outline various scenarios that all share the basic notion that the ultimate goal is to deny NATO forces access to its eastern flank ("Anti-Access/Area Denial Isn't just for Asia Anymore," Defense One, last modified April 2, 2015, accessed November 20, 2017, http://www.defenseone.com/ideas/2015/04/anti-accessarea-denial-isnt-just-asia-anymore/109108/).

[19] Andrew F. Krepinevich, *Why AirSea Battle?* (Washington, D.C.: CSBA, 2010). For a more detailed discussion of potential Russian escalation dominance, see David A. Shlapak and Michael W. Johnson, *Reinforcing Deterrence on NATO's Eastern Flank* (Santa Monica, CA: RAND Corporation, 2016); "Demystifying the A2/AD Buzz," War on the Rocks, last modified January 4, 2017, accessed September 24, 2017, https://warontherocks.com/2017/01/demystifying-the-a2ad-buzz/.

[20] Rod Thornton and Manos Karagiannis, "The Russian Threat to the Baltic states: The Problems of Shaping Local Defense Mechanisms," *The Journal of Slavic Military Studies* 29, no. 3 (2016), 331-351. The idea behind plausible deniability states that Russia will only make use of means to disrupt Western forces if they cannot explicitly trace their origins back to Russia and that they cannot hold Russia accountable for these actions. This, in turn, leads to insecurity among NATO allies and prevents the alliance from taking collective action.

[21] "German Waters Teeming with WWII Munitions," Der Spiegel, last modified April 11, 2013, accessed November 25, 2017, http://www.spiegel.de/international/germany/dangers-of-unexploded-wwii-munitions-in-north-and-baltic-seas-a-893113.html.

[22] Martin Murphy, Frank G. Hoffman and Gary Jr Schaub, *Hybrid Maritime Warfare and the Baltic Sea Region* (Copenhagen: Centre for Military Studies (University of Copenhagen), 2016), 10.

[23] "The Russia – NATO A2AD Environment," Center for Strategic & International Studies, last modified January 3, 2017, accessed September 23, 2017, https://missilethreat.csis.org/russia-nato-a2ad-environment/.

[24] "Russia could Block Access to Baltic Sea, US General Says," Defense One, last modified December 9, 2015, accessed September 23, 2017, http://www.defenseone.com/threats/2015/12/russia-could-block-access-baltic-sea-us-general-says/124361/.

[25] Frank G. Hoffman, *Assessing Baltic Sea Regional Maritime Security* (Philadelphia: Foreign Policy Research Institute, 2017), 6.

[26] Federal Ministry of Defence, *White Paper on German Security Policy and the Future of the Bundeswehr* (Berlin: Federal Ministry of Defence, 2016), 50.

[27] Murphy, Hoffman and Schaub, *Hybrid Maritime Warfare and the Baltic Sea Region.*

[28] Bruns, *The Baltic Sea and Current German Naval Strategy.*

[29] Andreas Schmidt, "Countering Anti-Access/Area Denial: Future Capability Requirements in NATO," *JAPCC Journal* 23 (Autumn/Winter, 2016), 69-77.

[30] Hicks et al., *Undersea Warfare in Northern Europe.*

[31] Hicks et al., *Undersea Warfare in Northern Europe.*

[32] "All of Germany's Submarines are Currently Down," DefenseNews, last modified October 20, 2017, accessed November 21, 2017, https://www.defensenews.com/naval/2017/10/20/all-of-germanys-submarines-are-currently-down/.

[33] Talmadge, *Closing Time: Assessing the Iranian Threat to the Strait of Hormuz*, 82-117, 98.

[34] "Russian Warships in Latvian Exclusive Economic Zone: Confrontational, Not Unlawful," Center for International Maritime Security, last modified May 15, 2017, accessed September 23, 2017, http://cimsec.org/russian-warships-latvias-exclusive-economic-zone-confrontational-not-unlawful/32588.

[35] "Russian Jet's Passes Near U.S. Ship in Black Sea 'Provocative' -Pentagon," Reuters, last modified April 14, 2014, accessed September 23, 2017, https://www.reuters.com/article/usa-russia-blacksea/update-1-russian-jets-passes-near-u-s-ship-in-black-sea-provocative-pentagon-idUSL2N0N60V520140414.

[36] "Sweden Steps Up Hunt for "Foreign Underwater Activity"," Reuters, last modified October 18, 2014, accessed September 23, 2017, https://www.reuters.com/article/us-sweden-deployment/sweden-steps-up-hunt-for-foreign-underwater-activity-idUSKCN0I70L420141018.

[37] "Russia Says its Baltic Sea War Games with Chinese Navy Not a Threat," Reuters, last modified July 26, 2017, accessed September 23, 2017, https://www.reuters.com/article/us-russia-china-wargame/russia-says-its-baltic-sea-war-games-with-chinese-navy-not-a-threat-idUSKBN1AB1D6.

Source: http://cimsec.org