

INTERVIEW

VICE ADMIRAL MANUEL ANTONIO MARTINEZ RUIZ

Director for Engineering and Naval
Shipbuilding of the Spanish Armada





Vice Admiral Manuel Antonio Martinez Ruiz is the Director for Engineering and Naval Shipbuilding of the Spanish Armada. He is a frequent lecturer in Universities invited by the Spanish Institute for Strategic Studies and CESEDEN. He has been an associate professor at the Universidad Carlos III and is a tenured professor of the Master in Logistics and Economic Management for the Defence at the Complutense University of Madrid (UCM). Furthermore, he is the professor of the International Master of Military Naval Engineering at the Naval Engineering School (ETSIN-UPM). VA Martinez was given an excellence award by the UCM.



What are key questions facing the naval forces today?

Operation in a multidomain environment is probably the major challenge for naval forces today and tomorrow.

How has the operation of Hypersonic Weapons changed naval tactical and strategic outlook?

Facing hypersonic threats requires creating new tactics and developing new technologies based on more sensitive sensors and better processing systems as well as operating in a distributed force based on combat cloud technologies

What are the key technologies having the most significant impact on Naval capabilities?

The warship is considered a data processing centre with improved sensors and ultra-wideband communication, all of them under a robust cyber defence environment.

When conceptualising naval defence, what would you say has caused the most significant change during your lifetime and why?

The technologies are available to develop multifunctional radars integrated into a very robust fire control loop that supports multiple missile engagements.

As we look to the future, have there been any trends that may help predict how the Naval power will change?

Naval power is probably the most challenging as it operates in 5 domains: space (MTMD), AAW, ASuW, ASW and cyber warfare. The warship is considered a data center with highly integrated sensors and processing capabilities.

Have new technologies and concepts, such as multidomain integration, changed anything from the ship's launch to its commissioning?

A warship should be designed based on a robust model-based system engineering methodology. No room to include new capabilities from launching to commissioning.

From initial design to full service, adopting ships into the forces may take over a decade. How does the navy ensure that no platform is obsolete by its induction?

Obsolescence management is critical during the shipbuilding phase.

What are the Key friction points Navies have with the industry today, and how would you suggest overcoming them?

It is critical to have a common understanding of staff requirements and to put in place a robust specs tracking system. The difference in understanding the scope of the system specs is a friction point that should be avoided.

How is the right balance between tried and tested technologies and innovation best achieved?

No technologies under TRL9 should be taken into consideration in a shipbuilding program.

If you could send the industry one message, what would it be?

Be part of the team.





ESTABLISHING A GLOBAL FLEET FOR THE FUTURE

25 - 28 JULY, 2022 | HILTON LONDON SYON PARK

Confirmed Speakers:



Admiral Sir James Burnell-Nugent KCB CBE
Former Commander-in-Chief Fleet
Royal Navy



Admiral Sir Ben Key
First Sea Lord & Chief of Naval Staff
Royal Navy



Admiral Almir Garnier Santos
Commander
Brazilian Navy



Vice Admiral Keith E. Blount, CB OBE
Commander
NATO Allied Maritime Command



Vice Admiral William Galinis
Commander Naval Sea Systems Command
U.S. Navy



Vice Admiral Christopher Gardner
Director General Ships
DE&S



Vice Admiral Manuel Antonio Martinez Ruiz
Director for Engineering and Naval Shipbuilding
Spanish Armada



Vice Admiral A'an Kurnia
Chief
Indonesian Maritime Security Agency



Vice Admiral Adeluis Bordado
Flag Officer in Command
Philippine Navy



Vice Admiral Kzysztof Jaworski
Commander Maritime Operations Center
Polish Operational Command



Rear Admiral Christoph Muller-Meinhard
Director Support
German Navy



Rear Admiral Katsushi Omachi
Director General, Operations and Plans Department
Japan Maritime Self-Defense Force (JMSDF)



Rear Admiral Chan Peng Cheong
Inspector General
Royal Malaysian Navy



Rear Admiral Iain Lower
Assistant Chief of Naval Staff (Policy)
Royal Navy



Rear Admiral Paul Marshall
Director Navy Acquisition
Royal Navy



Rear Admiral Ed Ahlgren
Commander Maritime Operations Designate
Royal Navy



Rear Admiral Rex Cox
Chief Executive Officer
U.K. National Shipbuilding Office



Rear Admiral Valentim Rodrigues
Deputy Fleet Commander, Acting Fleet Commander
Portuguese Navy



Rear Admiral Mihai Panait
Chief of Naval Forces
Romanian Navy



Rear Admiral James Parkin
Director Develop
Royal Navy



Rear Admiral Stefano Turchetto
Operation Commander
EUNAVFOR MED IRINI



Rear Admiral Gian Marco Chiapperini
Executive Director
SIMA PERU



Rear Admiral Luis Fernando Márquez Velosa
Chief Executive Officer
COTECMAR



Rear Admiral Torben Mikkelsen
Chief of Naval Staff
Danish Navy



Commodore Godwin Bessing
Chief Staff Officer
Ghana Navy



Captain John Driscoll
Chief, Office of Cutter Forces
United States Coast Guard



Commander Volkrad Kaphengst
Senior Systems Engineer, Integrated Project Teams
Germany Navy



Rear Admiral (Ret.) Nils Wang
Director
Naval Team Denmark



David Massey
CEO
Abu Dhabi Ship Building



Captain Aziz Alper Kurultay PhD
Head of Ship Construction
Turkish Navy



Lieutenant Colonel Aymen Salem Daifallah Al-Naimat
Commander
Royal Jordanian Naval Forces



Major General Jimson Mutai
Commander
Kenya Navy

[VIEW AGENDA](#)