# ADDRESSING CONTEMPORARY AIR DEFENCE CHALLENGES

In conversation with
James J. McGovern
Raytheon Missiles & Defense

Published on: 24 August 2020







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Ahead of the Full Spectrum Air Defence conference, taking place online 22-24 September, Defence iQ interviewed James McGovern of Raytheon Missiles & Defense, one of the conference's industry partners.





### **BIOGRAPHY**



James J. McGovern

Vice President of Requirements
& Capabilities for Europe, Africa
and the Arctic
Raytheon Missiles & Defense, a
Raytheon Technologies
Company

McGovern is responsible for building and maintaining trusted relationships with U.S. European Command, U.S. Africa Command, NATO, the EU and leaders and defense and security professionals throughout Europe, Africa and the Arctic, with the goal of providing end-to-end solutions to today's most complex security needs.

Prior to this role, McGovern held the role of Vice President of Business Development for Mission Systems and Sensors (MSS) in Raytheon's Integrated Defense Systems (IDS) business. He was assigned to this position in June of 2018, and was responsible for providing a large portfolio of weapons, sensors and integrated systems across multiple mission areas including air and missile defense; early warning and C5l™ command, control, communications, computers and intelligence to a broad international and domestic customer base, including the U.S. Missile Defense Agency, the U.S. Armed Forces and the Department of Homeland security

Prior to joining Raytheon, McGovern served as a Colonel in the United States Air Force. From 2014-2017 he was the Defense Attaché to Iceland and the Air Attaché to Norway at the U.S. Embassy in Oslo. In this role he managed FMS cases worth over \$2.1B, to include a sensitive radar program in the High North valued at over \$350 million.

From 2010-2013, McGovern served as Commander, 607th Air and Space Operations Center at Osan Airbase in the Republic of Korea, leading over 3000 joint personnel. In this role, he was responsible for over 65 interdependent, advanced C41 and mission subsystems worth over \$4B. He achieved the first-ever integration of 4 agencies, 3 nations and 24 commands in a unified missile defense architecture in advance of increased North Korean space vehicle and missile launches and led the development of the first, Joint Integrated Prioritized Target List for the Alliance in over 15 years. McGovern annually oversaw the largest command post exercise in the world, Exercise Ulchi Freedom Guardian, and led the air planning and military response operations after two deadly North Korean attacks in the Northwest Islands in 2010.

## **INTERVIEW**

# "our solutions provide end-to-end kill chain capability from sensor to effector across any architecture."

# Q1. Recently Raytheon & United Technologies merged to form Raytheon technologies. As part of the merger, several legacy Raytheon business units consolidated; can you talk about the benefits of the merger and consolidation?

In April, Raytheon and United Technologies conducted a merger of equals and formed Raytheon Technologies, a new company that is defining the future of aerospace and defense. At the same time we merged, Raytheon consolidated its four businesses and formed Raytheon Missiles & Defense and Raytheon Intelligence & Space.

Raytheon Missiles & Defense is a customer-centric organization that creates innovative solutions to meet the most difficult challenges that the U.S. and its Allies face. In many ways we are going back to basics.' We're a world-class engineering company, and every day we are proving to our customers that our sole focus is on developing solutions and capabilities that enable them to succeed. RMD is driving integration at every level; for example, systems engineers play an essential and lead role ensuring that our solutions provide end-to-end kill chain capability from sensor to effector across any architecture.

One of the benefits of the new RMD organization is that collaboration between the people from the sensor side of our business and the effector side of the business has been made a lot easier: we are all in one house now.

The combination of Standard Missile 6 and the SPY-6 radar are a perfect example. When you put the two together you have an end-to-end solution that is giving our customer in the U.S. Navy a new way of thinking about surface warfare and anti-air warfare.. Although this was in work well before the merger, it is now easier to accelerate and propose new capabilities that we wouldn't have before. That's enabled by this new organization -- even with social distancing, remote working and the other challenges imposed on us by the pandemic - we're still able to move faster to deliver capabilities at the speed of relevance.

# Q2. What's your view on the current air and missile threat environment, and what's your understanding of the key challenges facing the end user today?

The increasing prevalence and variety of advanced threats coupled with the relative proximity of potential adversaries in the European region has created a very challenging defense situation for our customers. The compression of time and space created by the velocity and accuracy of systems developed by potential adversaries means we

must respond with ever-increasing defensive capabilities. Emblematic of this challenge is the threat that hypersonic weapons pose to the Alliance and its partners and friends.

Without indications or warnings of a potential conflict, target discrimination in congested air environments presents initial threat acquisition challenges, and reaction times become so short that some defensive systems will lose all deterrent value. The essential need is a layered, survivable, scalable and highly interoperable system of systems approach, to include the ability to identify and track targets upon or shortly after launch. In addition, international cooperation, data-sharing across a common operating picture and coordinated defensive capabilities will be key to partner success.

Raytheon Missiles & Defense is working with our partners in government and industry across the Atlantic to make layered air and missile defense a reality, protecting Europe and deterring adversaries.

# "industry helps build networks and bonds across the Alliance, all while providing crucial capability to the military."

#### Q3. What do you see as the role of industry in strengthening the trans-Atlantic alliance?

The Alliance is more than a collection of nations with common security interests – it's built on a foundation of trust, respect, cooperation, shared values and partnership. One of the reasons the Alliance has been able to weather all sorts of ups and downs over the almost three quarters of a century it has existed is because of the strength of those enduring relationships. Industrial cooperation and partnerships are a key component of that, and we see that play out on an almost daily basis in the strong network of partners, teammates and suppliers Raytheon Missiles & Defense has across Europe.

For example, RMD and Kongsberg have been teammates for 52 years and together, have provided a number of solutions and capabilities to customers around the globe. One of our signature programs is the National Advanced Surface to Air Missile System, a medium-range air defense capability that defends Washington D.C. and is in the inventory of 4 other NATO members and Finland. The daily interactions – even if they are from a social distance – that employees from both companies have with each other and our NATO customers is just one small way that industry helps build networks and bonds across the Alliance, all while providing crucial capability to the military.

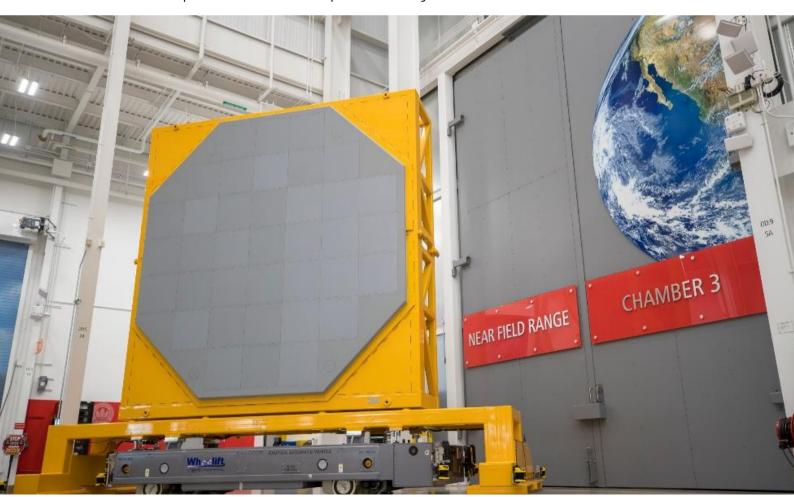
This is also writ-large with Raytheon Technologies, which has an expansive European footprint. We have more than 20,000 employees in Europe, and many of them are involved in important work on behalf of the Alliance. For example, Polish employees at our sister business Pratt & Whitney are making critical components for the F135 engines that power the 5th Generation F-35 Lightning II fighter aircraft, which will be operated by the U.S. armed forces and eight other NATO countries (Belgium, Canada, Denmark, Italy, the Netherlands, Norway, Poland, UK).

### "Having an allied force with a common technology baseline offers NATO and its security partners numerous opportunities to train and operate together."

#### Q4. What do you see as the role of technology in strengthening the alliance?

I think there are two ways to answer this. At the purely technological level, we want NATO to have the capability to overmatch the threat. It's crucial that NATO member nations have the most cutting edge capability, whether it's in the realm of hypersonics/counter-hypersonic solutions, command and control, sensors such as early warning radars, the full suite of layered integrated air and missile defense, and kinetic effectors. RMD is well positioned to work closely with our customers across the Alliance to help them field these capabilities and deter aggression.

Having an allied force with a common technology baseline offers NATO and its security partners numerous opportunities to train and operate together. For example, Patriot is the backbone of integrated air and missile defense for seven NATO members and Sweden. These countries are able to work together in ways that would be impossible if they had dissimilar systems. Along those lines, U.S. Army Soldiers and German Airmen have cross-trained on each other's Patriots during live-fire exercises in Crete. Not only does this type of activity enhance air defender proficiency, but it also strengthens relationships and gives the different members of the Alliance a better understanding of the capabilities their counterparts can bring to the table.



# FULL SPECTRUM AIR DEFENCE ONLINE

The Online Gathering of the World's Air Defence Community



22 - 24 September 2020

www.defenceig.com/events-airdefenceinternational-online/

As the Coronavirus pandemic has clearly illustrated, our world is capable of imposing dramatic and surprising strategic shock. Faced with the proliferation of UAVs as well as heightened tensions with missile capable nations, strategic and point air defence depends upon intelligently maintaining a competitive edge. There is far greater peril in hubris and neglect than in seizing the advantage offered by the latest technologies and military method.

The Full Spectrum Air Defence Digital Forum has been built to provide a forum of value to the air defence community. While COVID-19 has disrupted many traditional processes, including our community's annual face-to-face meetings, it has also unleashed new digital opportunities.

Free-to-attend for the military, the world's first online meeting of the air defence community will allow future leaders to benefit from the presentations of senior leaders drawn from around the world and expand the networks required to engage with industry and foreign militaries alike.

With ever increasing threats from state and non-state actors alike, the need share knowledge has rarely been greater. The Full Spectrum Air Defence Digital conference will take place online 22-24 September.

DOWNLOAD THE 2020 AGENDA HERE

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Free-to-attend for the military.

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We recognise that established paradigms in defence are being challenged by new, complex threats and disruptive technologies, and as such public-private sector collaboration and the cross-fertilization of ideas about the present and future defence enterprise has become more important than ever.

As such, Defence iQ welcomes the contributions from thought leaders across the defence community, to help inform, educate and inspire the current and next generation of disruptive thinkers, innovators and smart customers in defence.

Please get in touch with the Editor, Alex Stephenson, at <a href="mailto:alexander.stephenson@defenceig.com">alexander.stephenson@defenceig.com</a> to discuss submission proposals.