

Reshaping Norwegian Defense



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By Dr. Robbin F. Laird

Norway is enhancing its core defense capabilities for national and coalition purposes.

Notably, air and naval power modernization is a key part of the Norwegian effort as well as shaping the kind of ground maneuver defense capability appropriate to its territory and Arctic operations.

And shaping forces to work hand in glove with core allies for the defense of NATO's Northern Tier is an integral part of the effort.

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BY DR. ROBBIN F. LAIRD

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INTRODUCTION

With the modernization of Russian forces and with the skillful use of those forces to pursue specific and targeted objectives by Putin, Norway faces the challenge of crafting a national defense strategy for the 21st strategy. Putin's Russia is crafting leveraged military power, or put simply, Putin thinks through his use of military power and designs limited objectives to achieve what he considers in the best interest of Russia.

This means that Norway faces a double challenge: how to defend Norway against such a threat and how to work with allies who are not very good at designing limited objectives for the use of military power.

Norway's allies are all in transition: Brexit Britain, Trump America, and an uncertain European Union with new leadership coming in France and with Germany with both those nations facing significant uncertainty about their economic, political and security futures.

The allied side is clearly a work in progress with much uncertainty surrounding the way ahead and the interaction between these allies and Russia creates another dynamic and uncertainty.

As the Norwegian Minister of Defense, Ine Eriksen Søreide put it recently: "It seems we may have arrived at a time in history where the liberal democracy, as we know it, is facing one of its most serious challenges to date. The very framework of a stable Europe and transatlantic relationship is under pressure."

<https://www.regjeringen.no/en/aktuelt/defence-minister-ine-eriksen-soreides-opening-remarks-leangkollenseminaret-2017/id2538839/>

Within this context, Norway is focused on ways to enhance national security and ways to work with allies. They are doing so with military forces is significant transition as well – the purchase of the F-35 is seen as a key lever for change, much more than any other single asset, but it is part of a process not an additive platform.

According to Major General Skinnarland, the new Chief of Staff of the Royal Norwegian Air Force during my recent interview with her: "We are clearly modernizing our platforms but we need to transform our force, our culture and our processes as well. The strategic decisions made in the long-term investment will make us, even though small, one of the most modern air forces in the world in some years to come. It is not just about adding new platforms; it is about shaping joint capabilities for the defense of Norway in a high intensity operational setting."

<http://www.sldinfo.com/the-perspective-on-the-way-ahead-from-the-norwegian-air-force-meeting-the-challenge-of-integrated-high-intensity-operations/>

During both my interviews and during the recent Norwegian airpower conference which I attended, the Norwegians underscored the importance of Article III in the NATO treaty as a key element for the next phase of NATO development, namely, shaping effective ways to defend the nation while doing so in a way that allows for greater capability to work with allies. In all the debate about Article V, the importance of Article III as a key to being able to uphold the overall Treaty is often forgotten.

<https://forsvaret.no/hogskolene/Sider/English.aspx>

Article III reads: "In order more effectively to achieve the objectives of this Treaty, the Parties, separately and jointly, by means of continuous and effective self-help and mutual aid, will maintain and develop their individual and collective capacity to resist armed attack."

In my interview with the Norwegian Deputy Minister of Defense held in his office in Oslo prior to the Airpower Conference, Mr. Øystein BØ, emphasized the importance of Article III. “Article III is the obligation to have a strong national defense and to be able to be a net contributor to security. There is no free ride in NATO, we’ve all got to do our part to be able to defend each other.”

Presentations and meeting surrounding the recent Norwegian Airpower Conference highlighted key elements of change, which are perceived to be necessary. The conference was focused on the F-35 but perhaps 15% of the content discussed the asset – everything else was on the reset of national defense and the F-35 as well as other assets were discussed in that context.

In my interview with Lt. General Jakobsen and the Commander of the Norwegian Joint Headquarter, he characterized the overall approach as follows:

“We are creating the new national defense capabilities in order to create a threshold so that a violation of Norwegian territory will not be cost effective.”

“And clearly we cannot do this alone, and hence our NATO membership and engagement with allies is crucial. And with the nuclear dimension, clearly the American relationship along with Britain and France is crucial as well.”



FIGURE 1 THE NORWEGIAN DEFENSE MINISTER SPEAKING AT THE NORWEGIAN AIRPOWER CONFERENCE, FEBRUARY 2017. CREDIT: SECOND LINE OF DEFENSE

Several speakers highlighted the central significance of distributed strike or shaping a kill web to get maximum effect from the force. Red Flag 17-1 highlighted this capability in terms of working relationships between Typhoons and F-35s but this was seen by the Chiefs of the Norwegian Navy and Norwegian Army as requiring a major cultural and technological shift to be able to execute distributed strike.

Second Line of Defense

Clearly, how to connect a distributed force and to ensure continuity and viability is at the heart of building an effective Norwegian defense force going forward.

<http://breakingdefense.com/2016/10/rear-adm-manazir-speaks-on-allied-force-transformation-a2ad/>

There was a clear sense that the Norwegian and the allies are at the beginning of new phase, not simply shaping an upgraded legacy force. New templates, new ways of thinking are crucial.

A key element of such a reworking is clear building, deploying and maximizing kinetic effects. The Konigsberg role in building missiles for Norway and for key allies is at the heart of the national defense industrial consideration for Norway. Weapons being provided for the F-35 or to the new German submarines are part of this overall effort.

<http://www.sldinfo.com/norwegian-joint-strike-missile-tests-at-edwards-afb/>

Distributed strike was highlighted throughout in many presentations and the need was seen driven by how the Russians are shaping a bastion force from which they are projecting power. This meant that both the extension of the bastion and the bastion itself needed to be credibly dealt with.

Clearly, this is a task beyond that of Norway, which means that a new type of defense grid needs to be shaped in the North Atlantic. It is about operational synergy, which again will not come from simply buying an F-35 or a P-8. The buying of those platforms are seen as key capabilities but the synergy comes from working with the other F-35 partners in the region (UK, Denmark, the US and the Netherlands) as well as the standing up of a P-8 force to operate in the region with the UK operating from RAF Lossiemouth in Scotland, the US from Iceland and the Norwegians operating from their own territory.

Rear Admiral Lars Saunes, Chief of the Norwegian Navy highlighted the importance of such synergy in my interview with him. He underscored that both the F-35s with their ability to have significant reach through the MADL linkages among the fleet and the ability to process data in real time, as well as the P-8 maritime domain awareness strike platform which can be cross linked among Norwegian, American and British platforms provides an important element of shaping a way ahead for the kind air-sea integration Norway needs to deal with evolving challenge.

<http://www.sldinfo.com/the-norwegian-navy-and-shaping-air-sea-integration-for-norwegian-defense/>

The role of the UK is seen as of growing significance in the Northern Tier defense efforts, with the coming of the P-8, the F-35 and the Queen Elizabeth carriers. As Keith Eikenes, Director, Department for Security Policy and Operations in the Ministry of Defence of Norway, put in an interview in Oslo prior to the Conference:

“The UK bilateral relationship is very significant for Norway. We have a small number of allies, the US and the UK being especially important ones, shaping new capabilities for North Atlantic defense. We are looking at ways to enhance that working relationship. Even when the North Atlantic defense part took a dip after the end of the Cold War, the working relationship with close allies remained.”

<http://www.sldinfo.com/norway-national-defense-and-allied-collaboration-the-next-phase/>

National, allied and partner exercises are viewed as crucial means to shape new ways ahead, and there was a clear sense that finding ways to more effectively train for high intensity operations was increasingly important. They see the changes with the UK forces and the US forces as key opportunities to shape new ways ahead, and with the Dutch and Danes flying the same aircraft, opportunities as well here. And working with Sweden and Finland is crucial and to find ways for Norway to shape a defense concept, which can reach

back to the UK, and forward to Finland and integrate everything in between is crucial to the defense and independence of Norway.

Clearly, we are in times of fundamental change. The Norwegians are among the core allies who take the challenge seriously and are working a way ahead both for themselves and their friends and allies.

As the Defense Minister put it:

“Now, we do not consider Russia a military threat against Norway today. I want to be clear on that. However, Norway is NATO in the North, and we share a border with an increasingly assertive neighbor with superpower aspirations. A neighbor who has modernized its Armed Forces, significantly increased its military presence in the High North, reintroduced the old East versus West schismatic thinking, engaged in subversive actions against Western democracies, violated international law and undermined European stability. While we expect Russia to remain true to our longstanding and common interest in keeping the High North stable and peaceful, we must acknowledge that tension and conflict in other places may develop into a more serious security situation in the North. And that has implications for Norwegian defense planning.”

<https://www.regjeringen.no/en/aktuelt/defence-minister-ine-eriksen-soreides-opening-remarks-leangkollenseminaret-2017/id2538839/>

And to get there, Norway is refocusing on national defense in an allied context. Such an approach has significance beyond Norway and is relevant very much to looking at the future of NATO and the next phase of its development.

THE NORWEGIAN AIRPOWER CONFERENCE, FEBRUARY 7-9 2017

Not surprisingly, the F-35 is coming to the Norwegian forces as a key bedrock system for the evolution of the strategic way ahead. It is not simply about the aircraft but its integration into the national or coalition forces with which Norway operates to provide the deterrence in depth necessary for national and regional defense.

The Norwegians held an Airpower Conference in early February 2017, which highlighted some of the contributions anticipated by the acquisition of the F-35 for Norwegian forces. The conference was held from February 7-9 2017, and was entitled “Evolution to a Fifth Generation Air Force: Norway’s Shield and Sword?”

According to the Norwegian MoD website which announced the Conference:

Norway is about to purchase fifty-two F-35 Joint Strike Fighters. Both the Norwegian Minister of Defense (MoD) and Chief of Defense (ChoD) argue that the F-35 will be a key capacity for the defense of Norway. Even so, the purchase of the F-35 has generated a public debate that has raised important questions such as: How should we use the new combat aircraft? Do we have adequate competence to exploit the potential of this platform? What kind of defense structure will Norway have in the future? Are the primary rationales behind the purchase rooted in national defense, international operations or both?

The Royal Norwegian Air Force has coined the phrase “a Fifth Generation aircraft demands a Fifth Generation Air Force”. The premise seems to be that the current air force organization needs to develop something it currently does not possess in order to fully exploit this platform once it is fully operational in 2025. The emphasis on the idea of “a Fifth Generation Air Force” is increasing. But what kind of competence, organization, and technology must be in place over the next 8-10 years in order for us to become a “Fifth Generation Air Force”?

Second Line of Defense

The Norwegian Minister of Defense claims that Norway has become a medium NATO power – presumably largely due to the fact that this is a substantial investment that most nations in NATO cannot afford. It is likely that this investment will lead to commitments to other nations that we otherwise would not have had: once you have acquired these platforms, the political pressure to use them will increase. The question remains whether Norway can muster officers with broad and professional competence, who can influence processes on all levels (not only the tactical one) in international operations. Thus, how we define “a Fifth Generation Air Force” is central for addressing these issues.

The conference aims to reflect on and discuss the very premises for the current debate on defense in Norway and NATO, and how airpower will play a central role in this picture. We also want to examine the key international military conceptual (strategic) trends that are likely to influence Norway in the coming decade. Furthermore, the conference aims to challenge the Air Force to answer more specifically what “a Fifth Generation Air Force” is, and what is needed in order for us to become one. Finally, we would like to invite the Army, the Navy and the Norwegian Operational Headquarter to present their expectations and perspectives on “a Fifth Generation Air Force”, and the purchase of the joint resource that the F-35 is.

<https://forsvaret.no/hogskolene/Sider/English.aspx>

An additional capability being added to the force are five P-8s, and the role of these aircraft will be clearly linked to coalition as well as national defense. The P-8 was a focus of attention at the Conference as well. And here the key role seen by the British with regard to Norway and the Nordics is very clear indeed.

According to a news story published on December 6, 2016, the Norwegian decision was discussed.

“Norway signaled its intention to become the fourth export customer for the Boeing P-8A Poseidon maritime patrol aircraft. It will buy five for delivery in 2021-22 as a replacement for six Lockheed Martin P-3 Orions and three Dassault Falcon 20s, all of which were delivered in the 1990s. The cost will reportedly be \$1.5 billion, including sensors and weapons. Meanwhile, Boeing delivered the first of eight P-8As to the Royal Australian Air Force (RAAF) last month.

“The P-8A is exactly what we need to maintain our important contribution to the [NATO] alliance,” said Norwegian minister of defense Ine Eriksen Soreide. “The maritime domain is becoming more important as we speak,” she added. The country’s maritime area of responsibility is large, about seven times its land mass. The Norwegian Parliament must approve the acquisition, and is expected to do so this month.

<https://www.ainonline.com/aviation-news/defense/2016-12-06/norway-acquire-p-8s-boeing-delivers-australia>



FIGURE 2 UK DEFENCE SECRETARY SIR MICHAEL FALLON WITH INE MARIE ERIKSEN SØREIDE, THE DEFENSE MINISTER OF NORWAY, OUTSIDE OF NORWAY'S JOINT HEADQUARTERS. CREDIT: NORWEIGN MINISTRY OF DEFENCE

According to a story on the UK Ministry of Defence website, the UK and Norway have agreed on new cooperation on Maritime Patrol Aircraft.

With the coming of the P-8 to the RAF, the UK MoD is looking to ways to enhance its impact on defense in the North Sea and beyond.

Sir Michael, who visited Norway's top military headquarters, close to the Arctic Circle on Thursday, announced that the UK and Norway would work closer on Maritime Patrol Aircraft cooperation, including in reducing costs and increasing operational effectiveness.

The UK announced that it would procure nine Boeing P8 MPA in last year's Strategic Defence and Security Review.

The new capability, which will be based in Scotland, will allow for enhanced situational awareness in key areas such as the North Atlantic, and will also further increase the protection of the UK's nuclear deterrent and our two new aircraft carriers.

Sir Michael also visited Norway's Bodø Main Air Station, home of two F-16 squadrons and a squadron of Search and Rescue Sea King helicopters, where he signed a new agreement on host nation support for UK exercises in the country, further increasing the UK and Norway's ability to exercise, train and operate together.

Mr. Fallon welcomed the fact that British armed forces undertake yearly winter training in Norway, particularly 3 Commando Brigade in Harstad and Evenes and elements of Joint Helicopter Command at Bardufoss.

<https://www.gov.uk/government/news/uk-and-norway-agree-new-cooperation-on-maritime-patrol-aircraft>

THE NORWEGIAN DEPUTY DEFENSE MINISTER ON RESHAPING NORWEGIAN DEFENSE: MEETING 21ST CENTURY CHALLENGES

Prior to attending the Norwegian Airpower Conference in Trondheim, I was able to meet with Mr. Øystein Bø, the State Secretary and Deputy Defense Minister at the Norwegian Ministry of Defense to discuss his perspective on the way ahead for Norway and NATO in the Northern region.

A key point that he underscored was the importance for NATO states to invest in defense and to innovate in delivering new capabilities.

“Article III is the obligation to have a strong national defense and to be able to be a net contributor to security.

There is no free ride in NATO, we've all got to do our part to be able to defend each other.”

Put bluntly, the situation facing Norway is challenging as the Russians are modernizing and exhibiting a more assertive and less predictable behavior.

In a conference held in Oslo last year, Norwegian speakers underscored their concern with the need to take Arctic security and defense seriously.

“A strong NATO presence in the North is in the US' and Norway's interest”, said Øystein Bø, State Secretary of the Norwegian Ministry of Defense at the event.

Second Line of Defense

Bø specifically pointed to the new security environment in Europe after Russia's actions in Ukraine, and the increasing human activity in the Arctic. Norway has for a long time pushed to strengthen NATO's maritime capabilities, especially in the North Atlantic.

Ahead of the Warsaw Summit this year, Norwegian Minister of Defense Ine Eriksen Sørreide wrote in a statement "NATO needs a coherent and robust long-term strategy to deal with the new security environment. A key element of that strategy must be maritime power and presence in the North".

State Secretary Bø underlined the need for increase in training, exercises and presence, as well as improving NATO command and control structure..

<http://www.highbnorthnews.com/nato-reluctant-to-engage-in-the-arctic/>

In our discussion, he both underscored the importance of working with the Russians and deterring them. He argued for the need for predictability but also strengthening one's deterrent capabilities as well.

It was crucial for both Norwegian defense modernization as well as working effectively with allies in defense of the Norwegian region.

Exercises are an important tool in this effort, within NATO and with other Nordic exercises.

He noted that the Norwegian, Swedes and Finns do joint air exercises and operate from their home bases but work together in shaping collaborative air operations.

"This ensures efficiency in that the logistics are provided at the home bases; but also shaping collaborative capabilities by working together in common areas of interest in the region as well during the exercise."



Figure 3 The Norwegian Deputy Defense Minister Øystein Bø: Credit: Norwegian Ministry of Defense

He started the conversation by focusing on the F-35 and its potential contributions to Norwegian defense modernization.

"We do not see this just as a replacement aircraft; we see it as contributing to our ground-air-naval force modernization efforts and overall capabilities. It will interact with the Army, with the Navy and will be a platform in many ways that we believe is a game changer for us.

In other words, he sees the F-35 as a strategic asset from the standpoint of extended Norwegian defense capabilities.

An aspect of the F-35 program, which is not generally realized, is the importance of allied investments in capabilities, which can be used across the F-35 global enterprise.

In the Norwegian case, the Joint Strike Missile (JSM), which is considered a crucial asset in providing for maritime defense of Norway, is available to other NATO-allies flying the F-35 as well.

“This is a 21st century aspect of burden sharing as our investments in ‘our’ missile benefits all F-35 users of this missile across the globe, whether in Japan, Australia or in Europe.”

“It is not money that just goes directly into our armed forces, but it’s a lot of money that goes into developing capabilities that the alliance needs. It is about contributing to our joint security as well.”

He focused notably upon the changing nature of Russian capabilities in the North Atlantic and the stronger focus on NATO’s northern maritime flank, including the Greenland-Iceland-UK gap.

“History has returned but with new technologies necessary to deal with the challenge. Joint operation of the P-8 is certainly part of our joint response working with the US and the UK as we establish a joint operating capability.”

Clearly, the goal is to maintain stability, but doing so is not simply sitting on one’s hands hoping for a favorable outcome.

“We are working hard on defense modernization with our allies and at the same time clearly working for dynamic stability in the region.

But this is an evolving process.”

Norway is in a crucial position. “If you look at the map, we are in a crucial position in the north.

But we are a small country, with a large geography and only five million people.

So we need to truly focus on a smart defense strategy.”

And as the Deputy Defense Minister made clear throughout, the Norwegian government sees defense modernization, indeed interactive transformation with core NATO allies as well as partners in the region to provide for an effective role as stewards of the North.

NORWAY, NATIONAL DEFENSE AND ALLIED COLLABORATION: THE NEXT PHASE

Prior to attending the 2017 Norwegian airpower conference, I had a chance to talk with Keith Eikenes, Director, Department for Security Policy and Operations in the Ministry of Defence of Norway.

He has spent many years in Washington and came back to Oslo three years ago.

We focused on the new security environment and the Norwegian way ahead.

Question: Three years can be a long time.

How do you see the changes in just three years with regard to Norwegian defense?

Eikenes: It is a significant period of change.

Second Line of Defense

When I was in Washington, we were primarily focused on out of area operations, counter insurgency and counter terrorism.

Now with the Crimean crisis and the modernization of Russian forces, questions of national defense and protecting the North Atlantic have returned to the fore.

We are seeing a Russia that is becoming less predictable, more assertive about its interests, and also, undergoing a fundamental military in modernization, which makes it far more militarily capable than it was.

And indeed, Russia is modernizing more rapidly than many anticipated.

And those new capabilities are being joined to a growing debate about sea control and sea denial strategy.

Question: Clearly part of this is the Arctic challenge.

When you put the territorial defense challenge with the Arctic one, what do you see?

Eikenes: As you know, the High North is a strategically important area for Norway.

We have jurisdiction over ocean areas that are roughly seven times the size of our land mass and which are almost the size of the Mediterranean.

Obviously with that kind of maritime challenge we are looking to shape enhanced capabilities, and that is one reason we are buying the P-8, coast guard vessels, F-35s and new submarines.

Question: The UK seems to have returned to the North Atlantic defense area.

How important is that bilateral relationship for Norway?

Eikenes: It is very significant.

We have a small number of allies, the US and the UK being especially important ones, shaping new capabilities for North Atlantic defense.

We are looking at ways to enhance that working relationship.

Even when the North Atlantic defense part took a dip after the end of the Cold War, the working relationship with close allies remained.

We are building on that experience and trust as we add new capabilities.

It will help as well that we will fly the same aircraft as the RAF and the Royal Navy for the first time in a very, very long time.

The P-8 piece is crucial as well as with indications that the US Navy will operate P-8s out of Keflavik and collaborate with the UK and Norway in joint operations over the North Atlantic.

For us, these bilateral relationships have always complemented our NATO membership and will continue to do so.

We are starting to put in place some key pillars for shaping 21st century defense architecture for the North Atlantic.

Question: If we return to Russia, it is clearly an engagement strategy that you are pursuing for working with Russia is important as well.

Could you discuss this aspect of your policy?

Eikenes: Our policy is to engage with Russia where it's possible, and we do have examples of pragmatic good cooperation that we've had historically, and in some areas, that it's still ongoing.

For example, we cooperate on safety incidents at sea, and on fisheries with regard to common management, and cooperation.

We also have border guard cooperation, so there are certainly areas where we can have a pragmatic cooperation as well.

<https://thebarentsobserver.com/en/security/2016/06/arctic-nations-deepen-coast-guard-cooperation>

Question: When the French planned to sell the Mistral to Russia, I raised concern in many venues about this transaction and its impact on Norway as well as upon French interests in Northern Europe.

Fortunately, this did not happen.

How have the French responded to the new situation?

<http://www.atlanticcouncil.org/blogs/natosource/france-might-withhold-2nd-mistral-ship-from-russia>

Eikenes: We've seen an increase in French interest on engagement and presence in the North Atlantic.

They have stated their vision is to be more present in the North Atlantic.

They have some very significant capabilities to contribute in the area.

It is clear that there has been a return of geography so to speak.

The GIUK has returned as a key issue.

We have to take Northern European defense seriously in the wake of Russian actions, capabilities and unpredictability.

And we are building on our close allied relationships to shape new capabilities into a new template to provide for defense in our region.

THE NORWEGIAN AIRPOWER CONFERENCE, 2017: SHAPING A WAY AHEAD FOR NORWEGIAN AND NORTHERN TIER DEFENSE

During the first week of February this year (February 7-9), the Chief of Staff of the Norwegian Air Force sponsored an airpower conference entitled "Evolution to a Fifth Generation Air Force."

What was especially interesting for me with my opportunities to deal with the USMC as they are constructing their three dimensional force under the impact of the Osprey and the F-35, the UK undergoing both shaping a post-Brexit defense policy and forging its own air and naval power transition and the Aussies both pursuing Plan Jericho for the Air Force and force structure transformation and integration under the impact of fifth generation airpower, is to see many similarities among the three forces as they work towards force transformation.

Second Line of Defense

<http://www.sldinfo.com/the-f-35b-in-the-perspective-of-aviation-history/>

<http://www.sldinfo.com/download-the-three-dimensional-warriors/>

<http://www.sldinfo.com/royal-air-force-operations-and-evolving-concepts-of-operations-shaping-a-triple-transition/>

<http://www.sldinfo.com/new-approaches-to-air-sea-integration/>

What is evident in each case is that the F-35 is a core capability but less as an in itself platform but as a stimulant and foundation for overall force transformation. It is a key part of what the USN leadership is referring to as shaping a kill web where distributed force can operate throughout a battlespace to deliver the combat effects which one needs against evolving threats and challenges.

<http://www.sldinfo.com/the-deputy-chief-of-naval-operations-for-warfare-systems-look-at-the-way-ahead-rear-admiral-manazir-on-shaping-kill-webs/>

We have argued that it is about shaping a networked honeycomb force able to operate in discrete interactive force packages to deliver deterrence in depth.

<http://www.sldinfo.com/extending-the-honeycomb-transformation-re-visited/>

What one saw with the Norwegian presentations and discussions both public and private was a clear focus on shaping a new approach to national defense and one which needed to have plug and play capabilities with core allies to ensure that both the extended defense of Norway could be ensured as well as enhancing Norway's contribution to Northern tier NATO defense.



Figure 4 Norway's Minister of Defence, Ine Eriksen Sørdeide, in front of the country's first F-35 combat aircraft. (Photo: Torgeir Haugaard/Forsvaret)

There were briefings on the two core new air systems which are coming to the Norwegian Air Force, namely the F-35 and the P-8. The F-35 is seen as not simply replacing the F-16s but providing new capabilities useful to the joint force and with extended reach for airpower in ensuring expanded defensive punch. The P-8 is seen as part of the return of North Atlantic defense, which has been necessitated, by the modernization of Russian forces and the enhanced capabilities of the Russian for bastion defense in the region adjacent to Norway.

<http://www.sldinfo.com/the-arrival-of-a-maritime-domain-awareness-strike-capability-the-impact-of-the-p-8triton-dyad/>

The integration challenge as seen by Norway, Australia and the Brits is the central one – simply following a platform additive path will not get them where they need to go – which is extended defense of the homeland. For the Norwegian air, naval and army speakers, force integration was a key theme.

For the Navy, the surface and modernizing subsurface fleet clearly had opportunities to leverage both of the new air platforms coming to the force. Clearly, one such capability is the off boarding of weapons whereby the F-35 can call on joint fires from the ground or sea to generate integrated firepower. For Norway, the integration of Aegis with F-35 is clearly an opportunity and they will work closely with the USN on this strategic challenge and opportunity.

<http://www.sldinfo.com/pacific-strategy-vii-“aegis-is-my-wingman”/>

http://www.usni.org/document/laird-robbin-2012-138-1-1307pdf?magazine_article=9450

For the Norwegian Army, much like for the Australian Army, the F-35 is seen as a key asset to support the ground maneuver force. And for the Norwegian Army, senior leadership sees the opportunities inherent in vehicle modernization to shape a more integrated digital ground maneuver force, which can provide situational awareness to the air force as well with regard to targets of interest in a fluid battlespace.

<http://www.sldinfo.com/the-australian-army-modernizes-for-the-21st-century-battlespace-an-interview-with-brigadier-general-chris-mills-australian-army/>

<http://www.sldinfo.com/an-update-on-air-sea-land-integration-for-the-adf-the-perspective-of-brigadier-general-mills/>

For the Air Force, the shaping of the infrastructure of the F-35 and the coming of the F-35 to Norway later this year are major strategic challenges and opportunities. It was clear from presentations that the all weather capability of the F-35 provided by its integrated sensor suite is a key advantage in supporting national forces in the kinds of conditions in which the Norwegians need to provide for their defense.

It is also the case that the capabilities of the aircraft when properly cross linked can provide for an extended defense capability simply beyond the capabilities of the current F-16 fleet and one speaker highlighted the need for the Norwegian Air Force to shape concepts of operations symmetrical with such capabilities.

We have referred to this elsewhere as shaping the offensive defensive enterprise crucial to any deterrence in depth strategy.

<http://www.sldinfo.com/transforming-the-power-projection-forces-for-the-liberal-democracies/>

It is clear as well that the fact that core allies of Norway in the region whether the Brits, the Danes, the Dutch or the Americans flying the same aircraft will allow for a much greater interoperability capability. And the fact that Britain and Norway will both fly the P-8 and leverage Lossiemouth as well provides new opportunities as well.

According to one senior Norwegian official, although integration is challenging, the new equipment can provide greater opportunities to build in integration from the ground up. Joint training at Luke for the F-35, flying with F-35s from Marham, the Queen Elizabeth with the USAF from Lakenheath (25 miles from Marham), from Denmark and Holland, allow for a Red Flag kind of training as these common aircraft work together.

The USN-USMC working through its own integration of P-8/Triton with F-35 can provide an important asset as well for Norway's own efforts.

Second Line of Defense

A key requirement for Norway is rapid and effective reinforcement by allies in case of crises. The Cold Response exercises as well as the Trident Juncture exercise coming next year are key elements of the reshaping both the Norwegian concepts of operations and plug and play capabilities for strategic reinforcement.

<http://www.sldinfo.com/cold-response-2016-concludes-norway-hosts-allies-in-high-intensity-force-on-force-cold-weather-exercise/>

<http://www.sldinfo.com/usaf-support-to-marines-during-cold-response-exercise/>

<http://www.sldinfo.com/field-life-during-cold-response-16/>

<http://www.sldinfo.com/u-s-marines-during-cold-response-16/>

<http://www.sldinfo.com/cold-response-2016-norwegian-troops-in-the-exercise/>

<http://www.sldinfo.com/nato-forces-in-cold-response-2016/>

A USMC general, who spoke during the conference, underscored that the old days of stockpiling equipment and slow rolling force into a crisis was simply not going to work against evolving capabilities of adversaries. Clearly, rapid insertion in a plug and play manner is a crucial element for force generation and deterrence in depth.

And sustainment is a key part of any effective national defense strategy. The Norwegians are clearly looking at the need for a robust European sustainment capability for the F-35 as a key element of their force building strategy and support for the kind of sortie generation rates necessary for their defense.

A key challenge facing Norway will be the shaping of an effective C2 system for national defense. How best to integrate an agile force able to operate over the vast regions of Norway, the Arctic and the North Atlantic to provide effective management of an extended defense force?

The speakers highlighted the importance in the uptick of UK engagement with Norway and the central importance of working with the USMC, the USN and the USAF as well.

Similar to the famous Sherlock Holmes story where the key to the mystery was the dog that did not bark, not a single speaker mentioned Canada even though with the emphasis on the North Atlantic and the Arctic Canada is a crucial player. But with no serious force modernization plans in process, how will the UK, the US and Norway deal with Canada and any strategic gap left by Canada's non-modernization of forces?

In effect, NATO is entering a new phase whereby those countries, which take Article III seriously, will anchor regional defense and force integration. It is difficult to defend those who have no real approach to their own defense. And notably with regard to Norway they are working closely with Finland and Sweden as well to shape an extended defense strategy.

For example, later this year, the Air Forces of these three countries will conduct a common Arctic security and defense exercise.

According to a press release by the Norwegian Air Force published in early February 2017:

The Air Forces of Finland, Norway and Sweden will host multinational Arctic Challenge Exercise 2017 from 22 May to 2 June 2017. More than one hundred aircraft from twelve nations will participate in the air exercise carried out in the airspace over the northern areas of the host countries.

This year's Arctic Challenge Exercise (ACE 17) is the third of its kind that Finland, Norway and Sweden have organised together. The exercise conducted every second year since 2013 is this time led by the Finnish Air Force that is responsible for planning and direction of the training event.



Figure 5 Arctic Exercise Area. Credit: Norwegian Ministry of Defense

ACE 17 provides opportunity to train the large-scale planning and conducting of air operations in a real-like operating environment that involves a wide range of aircraft and forces of modern air warfare.

Arctic Challenge exercises are part of Cross Border Training (CBT) started in 2009 between Finland, Norway and Sweden. The Air Forces of these nations conduct on almost a weekly basis combined air combat training missions that are flown from their northern home bases. The cost-effective implementation pattern of combined exercises can also be applied to large-force air exercises.

Arctic Challenge Exercise 2017 is one of Europe's largest live air exercises. It will gather more than over one hundred aircraft. In addition to multi-role fighters, transport and liaison aircraft, aerial refuelling tankers, airborne warning and control system aircraft, and transport and search and rescue helicopters can be seen in the exercise. Participating nations are Finland, Norway, Sweden, Belgium, Canada, France, Germany, Great Britain, the Netherlands, Spain, Switzerland and the United States. These will be supported by NATO-operated airborne warning and control system (AWACS) aircraft and also by ground crew and ground-based air defence units.

The ACE17 host bases are located in Bodø in Norway, Luleå in Sweden, and Rovaniemi in Finland. Flying is conducted from Monday to Friday in two to three daily waves from 9 till 18 Finland time (from 8 till 17 Norway and Sweden time). Flight missions are carried out in the areas extending over the three nations' northern regions (see Map of Area of Operation).

Also the training areas of Rovajärvi in Finland, Vidsel in Sweden and Setermoen in Norway are available. Simultaneously with ACE17, the Finnish Defence Forces Army North 17 exercise is being conducted at Rovajärvi which will enable the exercise units to have the benefit of ACE17 flight missions directed into this area to their training. In addition, aircraft will operate in Lohtaja training area in Finland where, at the same time, the Finnish Defence Forces Air Defence Exercise 1/17 is going on.

Around ninety aircraft at most may participate simultaneously in individual waves in ACE17. Exercise sorties will involve flying at low altitudes and they may also include supersonic flying. Aircraft will deploy flare countermeasures that can be seen as bright spots of light in the sky.

Second Line of Defense

In short, Norway is taking defense modernization seriously and is challenging core allies to work effective means to work together to deal with evolving challenge to the East.

THE PERSPECTIVE ON THE WAY AHEAD FROM THE ROYAL NORWEGIAN AIR FORCE: MEETING THE CHALLENGE OF INTEGRATED HIGH INTENSITY OPERATIONS

During the Norwegian Airpower Conference held at Trondheim in early February 2017, I had a chance to discuss with the new Chief the Royal Norwegian Air Force, Major General Tonje Skinnarland, and Brigadier General Jan Ove Rygg, chief of the National Air Operations Center (NAOC) their perspectives on the way ahead.

<http://www.sldinfo.com/new-head-of-the-norwegian-air-force-in-a-period-of-significant-airpower-transition/>

The Chief of the Royal Norwegian Air Force set the tone for much of the discussion during the Conference by focusing on the Norwegian Air Force in transition and the challenge of shaping integrated defense capabilities for the defense of Norway.

Norway being a small country with a large geography and a large neighbor on its border obviously needed to shape a defense capability highly interactive with its allies to ensure deterrence in depth for Norwegian defense.



Figure 6 Chief the Royal Norwegian Air Force, Major General Tonje Skinnarland, speaking at the Norwegian Airpower Conference, February 2017. Credit: Second Line of Defense.

The perspective of the Chief of the Royal Norwegian Air Force on the F-35 was that this was not at all a replacement aircraft, but a strategic asset when properly integrated with the national defense force and NATO forces.

The Air Force is in the throes of significant modernization with the addition of the F-35, the P-8 as well as new helicopters, and the overall challenge was to ensure integration of these platforms into a joint force able to operate in the integrated battlespace.

And she made it very clear that it was preparation for and training to ensure effective capabilities for the high-end fight, which was the core focus of attention.

She highlighted the need to reshape concepts of operations for Norwegian defense and to work across the Norwegian defense structure for integrated C2 which was crucial.

She also highlighted that with the F-35 distributed operations were possible so in reforming C2 part of the challenge was what is called mission command, namely, authorizing pilots for missions, rather than providing for overly centralized tactical operational control.

I asked both senior Air Force officers the same question to start the conversation, namely, the Air Force is in a period of significant transition, how do they view the challenges and the opportunities?

Major General Skinnarland: “We are clearly modernizing our platforms but we need to transform our force, our culture and our processes as well.

“The strategic decisions made in the long-term investment will make us, even though small, one of the most modern air forces in the world in some years to come.

<https://forsvaret.no/en/newsroom/news-stories/new-long-term-plan-for-the-armed-forces>

<https://www.regjeringen.no/en/topics/defence/ltp/ny-langtidsplan-for-forsvarssektoren/langtidsplanen-for-forsvarssektoren-er-vedtatt/id2520659/>

“At the same time, the security situation is challenging. After the annexation of Crimea and the buildup of Russian capabilities over the last years has made us understand that we have need to revitalize the concept of actually defending Norway in high intensity operations.

“It is not just about adding new platforms; it is about shaping joint capabilities for the defense of Norway in a high intensity operational setting.

“To achieve integrated defense and joint operations will not be easy and certainly will not happen simply by adding new platforms.

“There are a lot of different tasks to be done ranging from getting all the spare parts, logistics, the training, and, of course, shaping the national defense plan.

“As we get all these new systems, which will make us even more capable of handling the current situation and current threats together with other allies and partners, there is another challenge.”

How best to be able to manage the process of change?

“A key challenge will be on the human capital side.

“How do we best train and task our people in shaping our new integrated force? For it will depend on them to actually bring such a force into being.

“When it comes to opportunities in the new systems and particularly in the F-35, the conference has alluded a lot to this, the capability in the aircraft itself with weapons technology and networking will come.

“But how do we make sure that we are able to utilize these technologies fully and effectively?

“We must shape the correct competencies, the correct concepts of operations, and develop and execute effective plans for joint operations as well.”

Brigadier General Jan Ove Rygg then answered the same question from his operational responsibilities.

Second Line of Defense

“If I address the same question, but from my perspective, the challenge is to get the joint processes in Norway to the point where we can do targeting efficiently.

“We need to build an effective national command and control capability which seamlessly works with core allies who are crucial to defense operations in the High North.

“What makes this particularly challenging is what we are talking about is national integration and C2 for national defense ground, sea and air operations, which can operate with core allies in extended defense operations”

Question: Clearly, with core allies in the region operating similar platforms, notably F-35 and P-8, there are significant opportunities for interoperability built in, but obviously these potentials need to become realities.

How best to ensure that happens?

Major General Skinnarland: “With the UK, the US, the Danes and the Dutch operating the same combat aircraft, there are clear opportunities to shape new common operational capabilities.

“Also crucial is to shape a strong European F-35 sustainment base to ensure that we get the kind of sortie generation capabilities inherent in the aircraft, but you need the right kind of logistical support to achieve the outcomes you want.



Figure 7 Left to Right, Major Morten “Dolby” Hanche, the first Norwegian F-35 pilot, Major General Tonje Skinnarland and Brigadier General Heckl, COS STRIKFORNATO at the Norwegian Airpower Conference. Credit: Second Line of Defense

“The P-8s operating from the UK, Iceland, and Norway can shape a maritime domain awareness data capability which can inform our forces effectively as well but again, this requires work to share the data and to shape common concepts of operations.

“A key will be to exercise often and effectively together.

“To shape effective concepts of operations will require bringing the new equipment, and the people together to share experience and to shape a common way ahead.

“In this sense, we see Trident Juncture 2018 as especially important in shaping effective national C2 and working towards more integrated operations with allies coming to Norway for the exercise.

“We should plug and play in terms of our new capabilities; but that will not happen by itself, by simply adding new equipment.

“It will be hard work.

<https://forsvaret.no/en/exercise-and-operations/exercises/nato-exercise-2018>

“We have regular exercises in Norway like the Arctic Challenge Exercise, which is an exercise building on the weekly trilateral fighter training between Finland, Sweden, and Norway.

“In May/June 2017 this invitex will see more than one hundred fighter aircraft from 8 nations, including the UK and US, participating in high quality training in the Nordic countries.

“You also have other national exercises which are important in shaping our concepts of operations.

“We need to enhance engagement with core NATO allies, such as expanding our working relationship with allied airpower operating in Norway during exercises.

“We would love to see a UK F-35B squadron and a USAF F-35A deploy to Norway during an exercise and operate in the northern part of Norway under Norwegian command and control to see how we can get them to work together.

“They might fly either from home bases with air-to-air tanker or stage from Norway, and work on how we effectively can integrate those squadrons during joint operations.”

Brigadier General Jan Ove Rygg: “The C2 issue is really a strategic one.

“We are very good at the tactical level in operating in a joint context with our C2; we need to be as capable at the strategic level.

“With the fifth generation force, you have capabilities to off-board weapons and to direct fire from sea or land as well as air.

“When you try to do targeting and actually engage targets with different resources it is a challenge.

“How do we shape a C2 structure, which can take advantage of this capability?”

For an interesting overview of the way ahead, see the following:

http://cms.polsci.ku.dk/events/airpower2014/Gjert_Lage_Dyndal.pdf

[Gjert Lage Dyndal](#)

THE CHALLENGE OF SHAPING A 21ST CENTURY INTEGRATED FORCE FOR THE EXTENDED DEFENSE OF NORWAY: THE PERSPECTIVE OF LT. GENERAL RUNE JAKOBSEN

In the Fall of 2015, then Major General Rune Jakobsen became Lt. General Jakobsen and the Commander of the Norwegian Joint Headquarters. According to the announcement at the time:

The new commander started his military career in July 1980 and has filled several key positions in the Norwegian Armed Forces.

He has been commanding officer for the Telemark Battalion, Chief of the Army Staff, National Contingent Commander in Afghanistan and Chief of Staff in the Norwegian Defence Staff.

The Norwegian Joint Headquarters is nothing new for Jakobsen. From 2010 to 2013, he served as Chief of Operations at the Headquarters.

<https://forsvaret.no/en/newsroom/news-stories/new-commander-at-the-headquarters>

According to an article published on the Norwegian Ministry of Defence website, the Norwegian Joint Headquarters is the operational heart of the Norwegian Armed Forces.

It plans, conducts and leads the Armed Forces' operations in times of peace, crisis and war.

The Norwegian Joint Headquarters (NJHQ) operates day and night, and has the overall command and control of all military activity in Norway. It also commands the Norwegian military personnel abroad. In Norway, it controls activities like the Coast Guard, the search and rescue service, military air traffic, and the Border Guard.

The Headquarters operates from its mountain complex outside the city of Bodø in Northern Norway. From its operation centre, experienced officers continuously monitor the activity in Norway's vast land and sea territories.

This is possible thanks to our many sensors like radars, the Coast Guard and the maritime surveillance aircraft P-3 Orion. The Headquarters gathers all the information and makes a complete picture of the current situation. This picture is shared with other departments in the Armed Forces, and with NATO.

The NJHQ Chief is the Chief of Defence's most important advisor in questions concerning military operations and activity. The current Chief is Lieutenant General Rune Jakobsen.

NJHQ MAIN TASKS:

- *Keep an eye with Norway's vast sea and air territories, and have a current understanding of the overall situation.*
- *Exercise sovereignty in Norway's land, sea and air territories – and exercise national jurisdiction in these areas.*
- *Be present, and be able to handle crisis of any kind.*
- *Support civil society.*
- *Plan and head military exercises.*
- *Provide control and support to Norwegian forces in international operations.*

<https://forsvaret.no/en/organisation/joint-headquarters>

Lt. General Jakobsen spoke at the Norwegian Airpower Conference on 5th Gen and I had a chance to talk with him after the conference as well.

During his presentation, he underscored the crucial need to have a very credible and high threshold against any power that thought about attacking Norway.

Lt. General Jakobsen discussing the role of the F-35 in the evolution of Norwegian defense at the Norwegian Airpower Conference.

On the one hand, this meant better force integration of Norwegian forces, and within this effort F-35 integration with the total force was deemed a critical aspect of the way ahead.

On the other hand, shaping more capable and effective integration with allied forces operating in the North Atlantic was integral to shaping a very high threshold against any attack against Norway.

Reshaping C2 and working force integration at home and with allies are seen as key challenges facing the joint force.

According to Lt. General Jakobsen, Norway pursued a total defense concept during the Cold War, in terms of integrating defense with civil society, somewhat like Finland does today.

Norway is returning to such a concept but in 21st century terms, which means building out for new 21st century capabilities.

Lt. General Jakobsen discussing the way ahead with regard to force integration to provide for Norwegian defense at the Norwegian Airpower Conference.

“Together with Sweden during the Cold War, we were world champions in total defense concept, if you know that, I mean all governmental institutions linked together in not an organization but a network where all parts of society had a role in defense.

“We moved away from that after the Cold War.

“In the post Cold War period, we have focused on international operations much more than on national defense.

“Since 2014, we have re-shifted our focus to rebuild national defense capabilities.”

He then underscored the challenges in shaping the way ahead.

“We have a modern navy.

“We will have one of the most modern air forces in Europe when procurement projects have finished, but unfortunately we have put the land forces on hold.

“There is a study going on that will deliver a report in June what kind of land force we need in future. And I have great expectations too that that will fill in the missing pieces.

“We don’t think a conflict with Russia will occur on a bilateral basis between our two countries. If we will have a conflict in future it will be a spillover from tensions somewhere else in Europe.

“Of course, Russia relies heavily on the Kola Peninsula and is expanding its reach to defend the Peninsula and those poses challenges as well.”

Second Line of Defense

He then spoke of the nature of the Russian-Norwegian relationship.

“The Norwegian relationship to Russia is different from the UK or especially the Baltic perspective.

“We have a common border that is more than 1,000-years-old, and it has never been contested. Lives have never been lost on Norwegian-Russian border except for in 1943 when the Nazis crossed it.

“Russia was the first country to acknowledge Norwegian sovereignty in 1905. Stalin pulled his generals out in 1945 when they wanted to stay in Norway, after liberating the northern part from the Nazis.

“And we see Russia behaving differently towards us than even towards Sweden or the Baltic States.

“We have, together over the years, developed cooperation about management of the fish stocks. We have common interests in the Barents Sea, and up to March 2014 there was decent cooperation on the exercise side, especially between the two navies.

“To date we see the Northern Fleet behaving professionally towards us. There are no border violations, no violations of Norwegian airspace. Their training activity is understandable given that they have modernized their armed forces.



Figure 8 Commander of the Norwegian Joint Headquarters Lieutenant General Rune Jakobsen in conversation with foreign colleagues during exercise Cold Response 2016 – Photo courtesy of Torbjørn Kjosvold/Forsvaret

“They have some pretty scary capabilities, and they have technological equality or parity with the West; that’s scary.

“But the intention to use it actively towards Norway, on a bilateral basis, we don’t see.

“But then again, we can’t be naïve. Modern Russia will protect her interests by every means and they will fill every power vacuum.

“Our national strategy towards Russia is to pursue both dialogue and deterrence hand in hand.”

Lt. General Jakobsen discussing the broad challenge facing extended Norwegian defense at the Norwegian Airpower Conference.

The Lt. General reinforced the point, which he made during his presentation to the conference about the central importance of having a high threshold for Norwegian defense and deterrence.

“We are creating the new national defense capabilities in order to create a threshold so that a violation of Norwegian territory will not be cost effective.

“And clearly we cannot do this alone, and hence our NATO membership and engagement with allies is crucial. And with the nuclear dimension, clearly the American relationship along with Britain and France is crucial as well.”

He then highlighted the importance of the cold weather exercises held on Norwegian soil with the US Army, the USMC and the UK forces.

“To see American forces every second year on the Cold Response exercise is important. It is important that Allied units are capable of operating under cold weather conditions.

“We have two Allied Training Centers as of today: one in Finnmark and one also down in Harstad, where especially UK and Dutch units are training every year. Special forces units from other countries are training in Finnmark.

“That is part of increasing the threshold to provide for winter training to be capable of operating in the Arctic, but training together is crucial.”

(See the briefing below, regarding allied training with Norwegian forces:

<https://forsvaret.no/en/ForsvaretDocuments/Allied%20training%20in%20Norway.pdf>).

We then closed by discussing the importance of allies working with similar platforms, in this case the F-35.

“When we fly the same platform, we have common solutions on maintenance, which makes the operating costs lower. That’s one good thing. But it also means we have to train together, and that gives us interoperability.

“And of course, a much more capable and integrated force from the ground up.”

THE NORWEGIAN NAVY AND SHAPING AIR-SEA INTEGRATION FOR NORWEGIAN DEFENSE

After the Norwegian Airpower Conference, 2017, I had a chance to talk with the head of the Norwegian Navy, Rear Admiral Lars Saunes. Because this was an airpower conference, the focus on the maritime dimension naturally was primarily focused on air-sea integration in the extended defense of Norway.

A key theme within the Conference was the re-emergence of Russia as an air and maritime power globally, and most certainly in the Northern region. The Northern Fleet and the defense bastion built around the Kola Peninsula are two aspects of the direct presence of the Russians in the Norwegian area of interest. And clearly, the expanded reach of Russia into the Arctic also affects the nature of the air and sea domain of strategic interest to Norway as well.

In the Long Term Plan issued on June 17, 2016, this is how the Ministry of Defence characterized the Russian challenge.

The most significant change in the Norwegian security environment is Russia’s growing military capability and its use of force. The military reform in Russia has resulted in a modernization of Russia’s conventional forces as well as a strengthening of its nuclear capabilities.

Second Line of Defense

With the modernization of Russian forces, the addition of new surface and subsurface assets and enhanced precision strike capabilities, Norway and, indeed NATO, faces a formidable challenge, on both the conventional and nuclear level. A key requirement is to have very accurate real time knowledge of the operation of Russian forces and sufficient capability to deal with those forces in times of crisis.

The Norwegians already have Aegis combat systems aboard their frigates which provides an opportunity to build out the fleet and to integrate them with the new air combat power coming to Norway and to NATO in the region.

Both the F-35s with their ability to have significant reach through the MADL linkages among the fleet and the ability to process data in real time, as well as the P-8 maritime domain awareness strike platform which can be cross linked among Norwegian, American and British platforms provides an important element of shaping a way ahead for the kind air-sea integration Norway needs to deal with evolving challenges.

<http://www.sldinfo.com/the-arrival-of-a-maritime-domain-awareness-strike-capability-the-impact-of-the-p-8triton-dyad/>

During the Conference, one analyst focused on the bastion defense approach being taken by the Russians from the Kola Peninsula out and the challenges this posed for Norway. The broad point is that not only are the Russians modernizing their forces they are working and extended reach for those forces from their own territories.

This was point made as well in an interview we did with the recently retired head of NORAD/NORTHCOM who highlighted the enhanced threat from the 10 and 2 O'clock from the United States and, of course, Norway lies in the 2:00 region as seen from North America.

<http://www.sldinfo.com/north-american-defense-and-the-evolving-strategic-environment-admiral-gortney-focuses-on-the-need-to-defend-north-america-at-the-ten-and-two-oclock-positions/>

The head of the Norwegian Navy highlighted the importance of the new air platforms, and the new submarines and the need to effectively integrate the data provided by those platforms as well as crafting and evolving the C2 necessary to leverage an integrated air-sea force.

He also highlighted the fact that the sensors and weapons onboard his surface ships can interact with the air assets to provide support and protection as well for the air systems.

I asked him about the opportunity notably to integrate Aegis with F-35s, something I referred to in earlier work as the long-reach of Aegis, and he commented" that was more than happy to be the wingman for the F-35 if it helped destroy adversary targets."

<http://www.usni.org/magazines/proceedings/2012-01/long-reach-aegis>

But he noted that this was a work in progress for the USN and the Norwegian Navy would work closely with the US Navy on this issue.

The Rear Admiral underscored that flying the same assets as the US Navy, the USAF and the RAF and the Royal Navy would provide enhanced capabilities within the North Atlantic.

And it should be noted that the coming of the Queen Elizabeth will bring F-35s into the integration effort with P-8s, and as Royal Navy Officer pointed out in his presentation in Australia to the air-sea integration conference, that the Royal Navy was looking to integrate their surface fleet with the F-35s to provide for cross cutting fire support, similar to what the US and Norwegian navies are looking to do as well.

Second Line of Defense

<http://www.sldinfo.com/f-35-and-aegis-preparing-for-the-integrated-fight-in-the-extended-battlespace/>

The Rear Admiral noted that the Norwegians have never stopped flying their MPAs, in this case their P-3s, over their areas of interest in the North. They did not send their P-3s to the Middle East, nor did they retire their MPAs as did the UK. “We have kept this competence not only alive but focused on the key areas of interest to us in the region.”

<http://www.sldinfo.com/keeping-skill-sets-alive-while-waiting-for-a-replacement-aircraft-from-nimrod-to-p-8/>

The P-3s have been “critical to understand the underwater domain for our forces. We are buying the P-8 because of its capability and the priority to focus upon this capability.



Figure 9 The Chiefs of Navy, the Joint Forces, the Air Force and Army, respectively at the Norwegian Airpower Conference, February 2017. Credit: Second Line of Defense

He argued that although they are interested in the future of autonomous systems, they will work with allied navies as they introduce such capabilities and to sort out a way ahead for Norway with regard to such systems in the future.

For example, in my recent interview with the USCG Commandant, he highlighted that he believed that Unmanned Underwater Vehicles might of interest, namely in the Arctic region. I am sure the Norwegian Navy will watch this closely and interact with the USCG on their operational experiences as part of their own learning curve.

<http://www.sldinfo.com/the-way-ahead-for-the-uscg-the-perspective-of-admiral-paul-zukunft-commandant-of-the-uscg/>

The Rear Admiral did point out that the P-8 and the F-35 are man-machine systems and as the Norwegian forces got operational experience with these systems, they would open the aperture with regard to expanding the scope of including autonomous systems as well.

Indeed, it should be noted that the USAF is working hard on fifth generation aircraft incorporating autonomous systems as part of future deployment packages (this is what Secretary Wynne has referred to as the Wolfpack operational concept).

<http://www.sldinfo.com/shaping-the-wolfpack-leveraging-the-5th-generation-revolution/>

The Rear Admiral closed by highlighting the challenge of shaping rapid decision making systems which can make effective use of the new systems. In many ways his concern on this issue reminded of the comments by the Commander of the Australian Fleet:

“We are joint by necessity.

“Unlike the US Navy, we do not have our own air force or our own army. Joint is not a theological choice, it’s an operational necessity.”

It was clear both from his presentation and our discussion during the interview that Rear Admiral Mayer was focused on how the build out of the Navy in the period ahead would be highly correlated with the evolution of the joint network.

“The network is a weapons system.

“Lethality and survivability have to be realized through a networked effect.”

<http://www.sldinfo.com/the-network-as-a-weapon-system-the-perspective-of-rear-admiral-mayer-commander-australian-fleet/>

Editor’s Note: For a report from Australia on new approaches to air-sea integration, see the following:

<http://www.sldinfo.com/new-approaches-to-air-sea-integration/>

THE TRANSFORMATION OF NORWEGIAN DEFENSE: GERMANY, NORWAY AND SUBMARINE ACQUISITION

In effect, a new phase of NATO development is underway where anchor states in key geographical regions take Article III of the NATO treaty seriously and focus on national defense in an allied context. For Norway, this means raises the bar on the defense of Norway by acquiring new platforms, fully integrating those platforms into a national C2 system, but doing so in a plug and play context whereby key allies can more easily interoperate with Norwegian defense and thereby providing simultaneously extended Norwegian defense and enhanced Northern tier defense for NATO.

The week before the airpower conference, the Norwegian defense minister announced the decision to acquire four submarines from Germany as part of the transformation process. The Minister is a very engaging person, who is a ball of energy and one suspects a pretty tough customer. I would not let that elfin smile fool you!

The purchase of the German submarines is more than that. What Norway is looking for is interoperable with allies who are operational prepared to provide for defense of the Northern region. This means that the manufacturers who sell new equipment to Norway need to understand that they are committed to effective sustainment of the force in Norway under a wide spectrum of conditions. It is not just about selling a platform.

And for Germany, the Minister of Defense and the Chancellor need to understand that they are committing themselves de facto to active defense of the Northern region, including Baltic defense. It is not simply about buying equipment; it is about active engagement and enhanced interoperability.

According to the Norwegian MoD, the decision involves a broad and long-term Navy-to-Navy cooperation encompassing submarines and other naval capabilities. The cooperation will include training, exercises, spare parts, maintenance and lifetime management of the new submarines. The identical design of the six boats also would enable the swap of crews.

<http://www.defensenews.com/articles/norway-joins-forces-with-germany-to-procure-new-submarines>

Second Line of Defense

It is not just a market opportunity to save the German submarine maker from the end of the line.

According to a press release published on February 3, 2017, the acquisition was announced.

After a comprehensive evaluation process, The Norwegian Government decided on Germany as strategic partner for new submarines. The partnership is based on a German-Norwegian common purchase and lifetime management of identical, new submarines.

The decision involves a broad and long-term Navy-to-Navy cooperation encompassing submarines and other naval capabilities. The cooperation will include a purchase of identical submarines and cooperation on training, exercises, spare parts, maintenance and lifetime management of the new submarines. The submarines will be based on the 212-design already in service in Germany and Italy. The cooperation also includes cooperation between Norwegian and German industry.

– Submarines are amongst the Norwegian Armed Forces' most important capabilities and is of great significance for our ability to protect Norway's maritime interests. It is important that we have found a strategic partner that we can build a broad and long lasting cooperation with. This lays a good foundation for the long-term relations we need to maintain a credible submarine capability in the future. Submarine cooperation with Germany will ensure that Norway gets the submarines we require, and at the same time contributing to Smart defence and more efficient defence material cooperation in NATO, says the Minister of Defence Ine Eriksen Søreide.

The Norwegian Ministry of Defence has practised equal treatment of the suppliers and their nations. The same amount of time and effort has been spent towards France and Germany, and the activities towards both have been balanced. It has been clearly communicated on all levels that it is the totality of the offers that will be the determining factor. Both France and Germany offer excellent submarines that meet Norwegian needs, and both nations have been given good opportunities to come up with a total offer on new submarines and cooperation.

Norway will now enter into final negotiations with German authorities. When a government-to-government agreement is in place, a German-Norwegian negotiation towards the German submarine supplier thyssenkrupp Marine Systems (tkMS) will commence. tkMS is the largest producer of conventional submarines in Western Europe. The shipyard has long experience with building advanced submarines and a large production capability.

The plan is to sign a common contract for new submarines in 2019. This will enable delivery of new submarines from the mid-2020s to 2030. This timeline ensures a continuous Norwegian submarine capability as the Ula-class submarines reaches end of life and starts decommissioning.

– The submarines Norway and Germany will procure ensures a submarine service for the future. Norway has an evolutionary approach to new submarines, and will base the procurement on an existing submarine design. This way we avoid an extensive development project with the risks and costs this would involve. In addition, together with Germany, we will get a larger scale in the production, says the Minister of Defence.

Independent of this decision, the work to establish further cooperation with other nations continue in order to achieve even greater synergies and economies of scale. Norway has for several years worked closely towards the Netherlands and Poland to create a broad submarine cooperation. This work will continue.

Norwegian industry is world leading on some of the technology used in submarines, and the Norwegian Government will use the procurement as an opportunity for the Norwegian Defence industry. The procurement of new submarines will be used actively towards international partners to further develop a competent and competitive Norwegian Defence industry. The scope of the industrial cooperation with Germany is in line with the ambition of the Norwegian Parliament. It will provide good opportunities for the Norwegian defence and security

industry in the prioritised technological areas as stated in the white paper Meld. St. 9 (2015-2016) Nasjonal forsvarsindustriell strategi.

Facts:

Submarines are a strategic capability that contribute to the Norwegian Armed Forces deterrent effect, and NATO's collective defence. The white paper on the future of the Norwegian Armed Forces, St. prp. 151 S (2015-2016), underlines the importance of submarines and their place in the future development of the Norwegian navy.

The Ministry of Defence has been working on different solutions for the future of the submarine service since 2007. Establishing a broad and long lasting international submarine cooperation with partners has been one of the goals in this work.

The plans for the procurement of the new submarines are ready and the Government is planning to present the investment project on new submarines to Parliament in the spring of 2017.

<https://www.regjeringen.no/en/aktuelt/germany-chosen-as-strategic-partner-for-new-submarines-to-norway/id2537621/>

For other stories on the Norwegian decision, see the following:

<https://thebarentsobserver.com/en/security/2017/02/norway-teams-germany-new-submarines>

<http://navaltoday.com/2017/02/03/german-tkms-will-build-norways-submarines/>

<http://www.businessinsider.com/r-norway-picks-germany-over-france-in-race-to-supply-submarines-2017-2?IR=T>

<http://www.maritime-executive.com/article/norway-partners-with-germany-on-new-submarines>

<http://theforeigner.no/pages/news/norway-submarine-contract-to-germany/>

THE CHANGING NORWEGIAN STRATEGIC ENVIRONMENT: THE PERSPECTIVE OF THE NORWEGIAN DEFENSE MINISTER

Norway is an especially interesting and perhaps precarious situation or put another way is at the crossroads of 21st century history. It is a small country with a very large territory bordering on one of the most active military powers, led by a skillful strategist. Their allies are Brexit Britain, Trump America and various non-NATO allies, such as Finland and Sweden. There is much uncertainty as well about the future of the European Union and the Euro zone.

Although a growing has generated much of the concerns about the future of trans-Atlantic security body of intellectual selfies about what the Trump Administration will do. Remarks made by the President during the campaign have turned into a cottage industry of interpreting his statements to imply certainty about policy. Global dynamics of change were there before the President and will be there after his Presidency. What remains to determine is how his Administration will scope out its way ahead and shape its responses.

While that may uncertain, it is clear that the President is committed to rebuilding the US military and its role in the world. It is also clear that he intends to reshape the American role in the world. Again, although this generates uncertainty in terms of continuities in policy, it is very unlikely that the United States will be anything less than a pillar of support to liberal democracies world wide.

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At the recent conference which I attended in Norway, there were three foreign policy speakers all of whom expressed deep concern with developments in the UK and the US. One even made the amazing statement that the election of President Trump and Brexit were the most dramatic changes in the past thirty years! And one of the speakers provided an indictment of the President that was truly amazing to listen to as the Administration to date has just started, is not fully staffed and has several solid beginnings under its belt, notably the close working relationship with Japan, the Abe visit to New York, the Pacific and then to DC to meet the President. General Mattis has visited the Pacific and reaffirmed the core commitments of the US in the region.

One can suspect that there are those abroad who are using the Trump effect for their domestic advantages and creating a threat which is simply not there. I did talk to many Norwegians at the Conference and in Oslo, and while there is concern, more about uncertainty than anything else, my message was pretty simple – it is early days and the track record in terms of actual policy has been to reaffirm U.S. commitments and not to run from them.

The President was elected to change U.S. policy and he will. But as the Norwegian Defense Minister has indicated it is early days. My observations of her at the Conference and in my discussion with her, it is clear that she is a tough minded individual who will clearly argue the Norwegian case to her allies, and certainly to her counterpart, General Mattis. With this kind of leadership, although we face significant challenges, a solid path forward can almost certainly be found.

The Minister provided her perspective earlier this week in a conference on security policy held in Norway and these remarks were published on the Norwegian Ministry of Defence website.

Defence Minister Ine Eriksen Søreide's opening remarks: Leangkollenseminaret 2017

February 13, 2017

By Minister of Defence Ine Eriksen Søreide

Norwegian Minister of Defence Ine Eriksen Søreide held these remarks at the Security Seminar at Leangkollen February 13th 2017.

Distinguished colleagues, former ministers, guests, ladies and gentlemen,

It's good to be back here at the annual Leangkollen seminar. I want to thank the Norwegian Atlantic Committee, Kate and her good associates for pulling it off - in style - once again. This has become an important venue for addressing key security issues, and I'm happy to see such a great turnout.

This year's topic is "Security in Northern Europe after Crimea, Brexit and the U.S. election". Let us dwell for a moment on this extraordinary combination of words in one sentence: "Security in Northern Europe. After Crimea. Brexit. And the U.S. election"...

Imagine you just woke up from a three-year hibernation and were told that Russia has taken a part of Ukraine, the UK has decided to leave the European Union and Donald Trump is now the new president of the United States.

Would you believe it?

In these days of winter sports, it's like being told that Sweden has beaten Norway in the Cross-Country World Cup.

It just wouldn't seem very likely.

Ok, perhaps this is too grave to joke about.

After all, we take skiing very seriously up here.

But making fun of each other has been the social glue of Nordic cooperation for centuries, and I see no reason to stop now.

Dear friends,

We meet in challenging times.

Russia's illegal annexation of Crimea and the following and continuing destabilization of Eastern Ukraine changed the European security landscape almost overnight.



Figure 10 The Defense Minister Speaking at the Leangkollenseminaret 2017 Conference. Credit: the Norwegian Ministry of Defence

Our increasingly assertive neighbor has demonstrated their will and ability to use military force and other more covert means in order to achieve their objectives.

Covert means that are specifically designed to cast doubt in decision making processes.

And, by doing so, they violated international law and shook the very foundation of the framework for peace and stability that we all built together on the ruins of two devastating world wars.

The Nordic and the Baltic countries had to think about security in a new way.

The Eastern European countries had to think about security in a new way.

And NATO as well as the EU had to think about security in a new way.

We all had to adapt quickly and united to a new, uncertain and unpredictable security environment. The EU and the US imposed restrictive measures, which Norway and other non-EU countries adopted in solidarity.

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And as an alliance, NATO demonstrated its ability to rapidly adjust as well as provide reassurance to our Eastern allies.

I won't take up your time by telling you a story you all know. But I want to point out that this was a dramatic change by way of external developments. Something that happened outside of our countries, but with great implications for our countries.

And by "our countries" I mean the transatlantic alliance and the Nordics.

Brexit and the US election, however, happened at home. Inside our own house, so to speak. The British people voted. The American people voted. And the results took many of us by surprise.

Brexit and the US election were two very different things, and I think we should be careful to compare them as such. But one thing they had in common is that they revealed a significant level of frustration and discontent amongst a lot of people. And that is something we're seeing not only in the UK and the US, but in many European countries.

If I am to suggest common denominators between Crimea, Brexit and the US elections concerning security in Northern Europe, it must be this:

They were all major wake-up calls, albeit for different reasons.

They have all introduced uncertainty at some level.

And they have all set in motion change and developments that we do not know the extent of.

Ladies and gentlemen, we find ourselves in a time of political, economic and social disruption.

The world, as we have known it for decades, is changing. And it's changing rapidly.

In 1992, the American political scientist and author, Francis Fukuyama, published the book *The End of History and the Last Man*. It was an unusually definitive book in that it suggested that the Western liberal democracy represented the endpoint of mankind's ideological evolution - and thus the final form of human government.

While he recognized that liberal democracies may suffer temporary setbacks, he argued that this is basically as good as it gets; This is the best we can do, and there can be no progression from liberal democracy to an alternative, better system.

The book was written in an optimistic time of change. The Berlin wall had fallen, the Soviet Union had collapsed, the Cold War was over and a warm wind of optimism swept across Europe.

I think it's safe to say that the weather has changed.

Fukuyama may be right; Perhaps the liberal democracy, with all its dilemmas and compromises, is the best form of government we are capable of designing. After all, it has enabled economic growth, prosperity, peace and stability between nations for decades.

But it seems we may have arrived at a time in history where the liberal democracy, as we know it, is facing one of its most serious challenges to date.

The very framework of a stable Europe and transatlantic relationship is under pressure.

Right-wing populism is on the rise in many countries, paving the way for different forms of nationalism.

Liberal, democratic ideals of freedom, equality and inclusion are losing terrain to ideals of the opposite.

We are witnessing more distrust between people and a deteriorating belief in democratic institutions, politicians and the media.

Public discourse and political debates in many countries are increasingly characterized by fear, xenophobia, disinformation and conflict.

Social media echo and reinforce whatever reality people subscribe to, no matter where you are on the political, cultural and social spectrum.

Facts, scientific knowledge and objective truth – the very building blocks of human development – are becoming devalued currencies in a post-factual world.

It's a sort of convergence of discontent we're witnessing. I have for some time expressed my concerns for the health condition of European politics.

The reasons for these developments are many and complex, and I will in no way pretend I have all the answers. I don't think anybody does. But I do think that many of us, both in Europe and in the US, failed for a long time to realize the extent and significance of the growing discontent amongst large groups of people. And by doing so, we have contributed to creating fertile ground for populism and the polarized political climate we are seeing today.

We also know that this development is actively fueled by Russia through intelligence and information operations, hacking, trolling and a range of other means in order influence elections and undermine European and transatlantic cohesion.

Ironically, the strengths of our liberal democracies – trust, transparency, free speech, independent media and rule of law – is also what make us vulnerable to Russia's actions in the non-kinetic domain.

It's too early to say what the implications will be of Brexit and the transnational anti-establishment movements. France, Germany and the Netherlands – as well as Norway - are having elections this year, and I would lie if I said I wasn't concerned given the current political climate and the examples we have seen of Russian subversive influence.

I am pleased that recent dialogue with, and statements from, the new US administration emphasize US commitment to NATO and transatlantic security. But at the same time, there is still much we do not know about President Trump's foreign and security policy.

While I don't think we should exaggerate the significance of Russian influence, we shouldn't underestimate it either. In any case, we need to pay close attention to what is going on in our own countries now. Because these underlying currents in many countries may also undermine international defense and security cooperation at a time when the need for cooperation is greater than in a very long time. The security challenges that we are all facing from violent extremism, a more assertive and destabilizing Russia and the consequences of conflict and instability in North Africa and the Middle East, requires more trust and closer collaboration, not the opposite. And given the current situation, one of my greatest concerns is that our ability to make decisions in NATO or the EU will be challenged.

Dear friends,

Over the next two days you will cover a range of perspectives with regards to security in Northern Europe. And as we all know, the challenges to Northern European security are many and complex. I think the greatest
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challenge right now is not one single threat, but the combined uncertainty and unpredictability of the multitude of developments that are happening at the same time both within and outside our countries.

Very few, if any, of our challenges can be solved by military means alone. But the last three years have showed us that military power remains an indispensable part of our security policy toolbox. The fight against ISIL and violent extremism requires a military response as part of a broad, comprehensive approach. And Russia's actions have caused a need to bolster European defense capabilities and cooperation, both through NATO, between the Nordic countries and bilaterally between friends and allies.

Norway's top priorities in NATO for the past two years have been a renewed maritime focus with increased attention to the North Atlantic and the High North, and a functional assessment of NATO's command structure. Both represent a clear response to the uncertainty introduced by Russia in this region.

Now, we do not consider Russia a military threat against Norway today. I want to be clear on that. However, Norway is NATO in the North, and we share a border with an increasingly assertive neighbor with superpower aspirations. A neighbor who has modernized its Armed Forces, significantly increased its military presence in the High North, reintroduced the old East versus West schismatic thinking, engaged in subversive actions against Western democracies, violated international law and undermined European stability.

While we expect Russia to remain true to our longstanding and common interest in keeping the High North stable and peaceful, we must acknowledge that tension and conflict in other places may develop into a more serious security situation in the North. And that has implications for Norwegian defense planning.

Parliament approved the government's new long-term plan in November last year. It represents an historic prioritization of our Armed Forces. Over the next 20 years, we are increasing our defense budget by 180 billion Norwegian kroner, or approximately 22 billion US dollars. After years of insufficient funding and a gradual decline in our defense capabilities, we are now making sure that our Armed Forces have the combat power, flexibility and sustainability needed in a changing and unpredictable security environment.

We are strengthening our military presence and our intelligence capacities.

Our new fleet of F-35 combat aircraft is on its way.

In addition, we are investing heavily in new maritime patrol aircraft, submarines, air defense, land power capabilities and intelligence.

NATO and American security guarantees remain the cornerstone of our security policy, and as a NATO member, Norway has an obligation to contribute to the collective security framework that we are a part of – and depend upon. We take our obligations seriously.

In addition, defence cooperation between the Nordic countries, and between the Nordic and the Baltic countries, has picked up over the last years, not least as a result of Russia's assertiveness and unpredictability.

The Baltic Sea region has become a center of gravity in the region. Increased Russian activity, including a more aggressive posture, has made the Nordic countries concerned. A crisis or conflict in the Baltic Sea region may also spread to the High North.

The Nordic countries have a responsibility to promote stability and security in our region. While Norway and Denmark are members of NATO, Sweden and Finland are not. But as close friends and neighbors, we are facing the same challenges. That has sparked us to strengthen our dialogue and step up our military cooperation.

We have established secure communication lines between our countries. And we continue to develop our cooperation with regards to air surveillance, international operations and joint training and exercises. Last year we signed an agreement with the aim of allowing easier access to each other's sea-, air-, and land domain for common training and defence purposes in peacetime. Almost every week, Nordic combat aircraft are conducting Cross-Border Training in the North.

And with NATO's partnership with Sweden and Finland, both countries' participation in annual winter exercises in Norway, and their planned participation in next year's NATO exercise Trident Juncture, we are taking Nordic and NATO cooperation to a new level.

Firmly rooted in our NATO membership, Norway sees Nordic cooperation as a pragmatic and sensible approach to increasing predictability, ensuring stability and promoting peaceful cooperation without confrontation or conflict in our part of the world. We have a shared understanding of the security challenges we are facing, and we are all adapting our defence capabilities. The value of close consultations has increased in a changing security environment.

Ladies and gentlemen,

This year's topic is "security in Northern Europe". It's difficult to navigate in this new and complex security environment, and you will have plenty of time to dive deeper into these and other issues over the next two days.

I don't have all the solutions. But if there is one thing I am sure of, it's that the challenges we are facing are so big, interlinked and complicated that we must face them together. And right now, I am concerned that the European and American political climate change may get in the way of that. Let's not make that our biggest challenge on top of all the others.

I hope you have a good seminar, and remember – whatever you do in this Nordic setting – don't start any discussions about cross-country skiing.

Thank you.

<https://www.regjeringen.no/en/aktuelt/defence-minister-ine-eriksen-soreides-opening-remarks-leangkollenseminaret-2017/id2538839/>