



Host Nation Home Guard soldier.
Photo by JWC PAO.

OUR HISTORY

20

YEARS OF

THE JOINT WARFARE CENTRE

NATO's Footprint in the North

by Inci Kucukaksoy
NATO International Civilian
Public Affairs Officer
NATO Joint Warfare Centre



"The Joint Warfare Centre is not the typical NATO peacetime headquarters that we associate with the Alliance. It provides a unique warfare capability that will help NATO's joint and combined warfighters meet the challenges of today and anticipate the challenges of the future."

Admiral Edmund P. Giambastiani, Jr. (Retired)

NATO's first Supreme Allied Commander Transformation

Speaking on the occasion of the Joint Warfare Centre's activation in Stavanger, Norway,

October 23, 2003

ON OCTOBER 23, 2003, the Norwegian Minister of Defence, NATO's first Supreme Allied Commander Transformation (SACT), the Supreme Allied Commander Europe (SACEUR), and military representatives across the Alliance arrived in Stavanger to celebrate the activation of NATO's new training establishment: the Joint Warfare Centre (JWC). "This is the new NATO that we will need in the 21st century," declared Admiral Edmund P. Giambastiani, Jr. (Retired), the first SACT. "Keeping our focus on delivering products today, not years from now, is exactly why the activation of the Joint Warfare Centre is so important for NATO. Let the spirit of innovation become a new northern light for our Alliance here in Stavanger." Lieutenant General Thorstein Skiaker (Retired), who previously led NATO Kosovo Force 5 (KFOR 5), was appointed as the first Director of the JWC.



Introduction

The terrorist attacks against the United States on September 11, 2001, changed the world forever: Within less than 24 hours of the attack, NATO invoked Article 5 of the Washington Treaty for the first time. "Transformation" was the key word at the Prague Summit in 2002, providing the foundation for one of the biggest changes in NATO's command and control structures. The aim was to become "leaner, more efficient, effective and deployable." NATO leaders agreed to create a NATO Response Force (NRF), saying that this "tech-

nologically advanced, flexible, deployable, interoperable and sustainable force including land, sea, and air elements ready to move quickly to wherever needed" would be the main catalyst for transforming the Alliance's military capabilities.

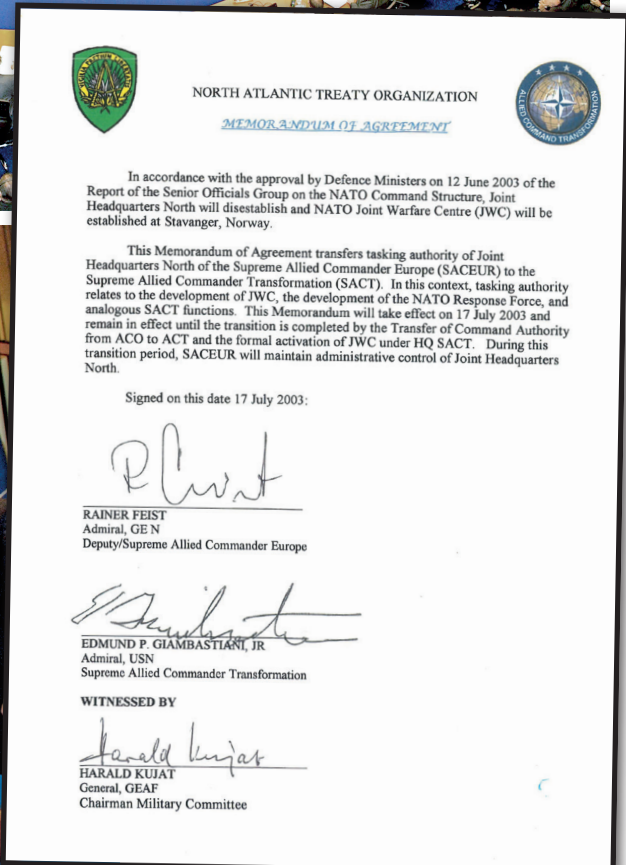
Soon after, Allied Command Europe (ACE) and Allied Command Atlantic (ACLANT), which were both established at the onset of the 1950s, were deactivated. Replacing them were the two new strategic commands, which reflected the fundamental

This is a new version of an article published in the JWC's "History Book 2022." It was amended both for clarity and to reflect changes since October 2022. The articles in this section include previously published photographs.





20
YEARS OF
THE JWC



Above, clockwise: The Tribute in Light memorial in New York City, photo by Denise Gould; the opening session of the 2002 Prague Summit, photo by NATO; the Transfer of Tasking Authority and the signature ceremony of the Transfer of Tasking Authority from SACEUR to SACT on July 17, 2003, with Admiral Giambastiani Jr.; General Harald Kujat (Retired), centre, the former Chairman of the NATO Military Committee, and Admiral Rainer Feist (1945–2007), then Deputy Supreme Allied Commander Europe, photo by Alf Ove Hansen. **Left:** The JWC's activation ceremony, from back to front, General Sir Jack Deverell (Retired), former Commander Allied Forces North; General James Jones (Retired), former SACEUR; Kristin Krohn Devold, the then Norwegian Minister of Defence; Admiral Giambastiani, Jr. and Lieutenant General Thorstein Skiaker. Photo by JWC PAO

shift in NATO: Allied Command Operations (ACO) would be responsible for all military operations, while Allied Command Transformation (ACT) would be responsible for leading continuous transformation.

On June 19, 2003, the Headquarters Supreme Allied Commander Transformation (HQ SACT) was established with Admiral Edmund P. Giambastiani, Jr. (Retired) appointed as the first SACT. Under HQ SACT, NATO stood up three subordinate centres (commonly known as the "Triple J"):

- The JWC in Stavanger, Norway
- The Joint Force Training Centre (JFTC) in Bydgoszcz, Poland
- The Joint Analysis and Lessons Learned Centre (JALLC) in Lisbon, Portugal

During this time, the JFTC and the JALLC were subordinate to the JWC and all three were directly associated with two of the five NATO transformational processes provided in the NATO Military Committee document MC 324/1, dated May 16, 2003. These were:

(1) training and education, (2) joint and combined concept development, experimentation, assessment, and doctrine. With the addition of the lessons learned, the Triple J had a highly significant role to play in supporting NATO's military transformation.

The Early Years

The sense of innovation and great achievements, so aptly expressed by Admiral Giambastiani, Jr. on the JWC's establishment, accompanied the organization in the following two decades.





Above, clockwise: The JWC is the third NATO establishment to inhabit Mount Jåttå in Stavanger, succeeding Headquarters North (1994–2000) and Joint Headquarters North (2000–2003); Lieutenant General Thorstein Skiaker (Retired), the JWC's first Director; a bird's-eye view of the JWC's Ulsnes interim training facility; the late Major General James Short (1950–2022), who served first as the JWC Chief of Staff and, subsequently, as the Director. Photos by JWC PAO

The JWC's original mission was focused on (1) planning and executing the mission rehearsal training for NATO's operational-level commanders and staff before their deployment to Afghanistan as part of the International Security Assistance Force (ISAF), and (2) training the Alliance's newly established, highly ready and joint multinational force, NRF. The JWC was also tasked with advancing military transformation through experimentation, doctrine development, and lessons learned.

A former Norwegian naval hub in Ulsnes, approximately 15 kilometres north of Jåttå, was chosen to provide the interim location for the JWC's exercises and training events.

The JWC's first exercise took place in February 2004 for the NRF, with Allied Forces Southern Europe (AFSOUTH) based in Naples, Italy, as its first training audience. The vignette-driven exercise, dubbed Operation STAVANGER, was followed by ALLIED ACTION 2004. This was the first NRF certification exercise, which tested the activation of NATO's first Deployable Joint Task Force Headquarters (DJTF HQ) concept. The exercise was based on a fictitious scenario called JEWELLERY — the first of many developed by the JWC in the years to come.

NATO established ISAF at the request of the Afghan authorities in 2001. Under the

UN mandate, the purpose of ISAF was to contribute to the reconstruction and development of Afghanistan. It lasted from August 2003 to December 2014 and aimed to "develop new Afghan security forces and enable Afghan authorities to provide effective security across the country in order to create an environment conducive to the functioning of democratic institutions and the establishment of the rule of law."

The JWC's first ISAF mission rehearsal training was conducted in June 2004 for ISAF VI, led by Eurocorps. To replicate a realistic exercise environment, the training was supported by near real-time operational information and data collected from the ISAF Headquarters in





Above: The signing of the Memorandum of Agreement with Norway, June 21, 2006: Anne-Grete Strøm-Erichsen, the then Norwegian Minister of Defence, and the late Air Marshal Peter B. Walker CB CBE (1949–2015), the former Director of the JWC. Photo by Per Arne Juvang

Kabul, Afghanistan, a few weeks prior to the training event.

On June 28, 2004, NATO heads of state and government agreed to support a request from the Iraqi Interim Government to help train Iraqi security forces in accordance with UN Resolution 1546. By August 2004, the initial NATO Training Implementation Mission Advance Party, which also included personnel

from the JWC, arrived in Baghdad, Iraq. Soon thereafter, the mission was renamed the NATO Training Mission-Iraq (NTM-I) and placed under the umbrella of the Multinational Security Transition Command-Iraq (MNSTC-I). In November 2004, the JWC hosted the first iteration of the Iraqi Key Leader Training (IKLT) for senior members of the Iraqi Ministry of Defence and Iraqi Ministry of the Interior, which served

as a pilot project for the follow-on training held in March 2005.

In 2005, the JWC started planning for NATO's STEADFAST series of exercises. The fictitious ZORAN SEA CRISIS scenario was developed, providing a comprehensive background for all three STEADFAST exercises conducted in 2006. This same year, at the 2006 Riga Summit, the NRF was declared fully operational and the JWC also achieved its full operational capability.

On June 21, 2006, the JWC reached another milestone by signing a new memorandum of agreement with its host nation partners. With this ceremony, the Joint Headquarters North was officially disestablished.

Throughout the early part of the decade, the JWC's exercise and simulation architecture continued to evolve: By 2008, the JWC programme of work encompassed three major NRF certification exercises per year within the bounds of the STEADFAST series — one exercise for each joint force command, in addition to the biannual ISAF pre-deployment training events. The JWC launched a new training scenario in 2008: CERASIA, a NATO out-of-area scenario, which allowed training audiences to exercise crisis management operations and a comprehensive approach.

In 2009, NATO restructured ISAF to face up to the expansion of military operations

Below and right: ISAF mission rehearsal training event at the JWC's Ulsnes Interim Training Facility; the arriving ISAF training audience greeted by the former JWC Chief of Staff, Brigadier General Philip Ruhlman (Retired), at Sola Military Airport, February 11, 2006. Photos by JWC PAO





to the whole of Afghanistan. NATO's new combatant command, named Headquarters ISAF Joint Command, would be responsible for executing the full spectrum of tactical operations throughout the country. The JWC expanded its training model accordingly, which resulted in its first in-theatre exercise in Kabul in October 2009. The next year, the JWC started conducting the Individual Augmentee Pre-Deployment Training (IAPDT) for those who were unable to attend the ISAF mission rehearsal training.

The JWC's programme of work in the early years also included the ENABLER experimentation series, designed and hosted by the JWC from 2007 to 2009.

In the period between 2004 and 2012, the JWC hosted all exercises and training events at Ulsnes. However, the facility infrastructure and equipment needed modernization, which necessitated two major capability uplifts, one in 2006 and another in 2009. Under the leadership of HQ SACT, the JWC had started to develop a capability package for a new training facility as early as 2004. Built on 13,390 square metres of land and funded by NATO, the five-storey building was a milestone for the JWC: it cost almost 100 million euros and was equipped with cutting-edge automated information systems infrastructure and virtualization technology. The foundation stone for the new training facility was laid on October 23, 2008.

On October 19, 2011, the JWC concluded its final Iraqi Key Leader Training course. In total, 256 Iraqi key leaders participated in the training programme, which involved mentoring and assisting the Iraqi security forces in defence institution building, training and education. Through this course, the JWC was a key part of the international effort to help Iraq establish effective and accountable security forces.



Left, clockwise: The JWC's training audience during ISAF training event, March 29, 2010; CAX operators during Exercise STEADFAST JOIST 2008; a lecture during an Iraqi Key Leader Training Event; Lieutenant General Wolfgang Korte (Retired), the then Commander JWC, addressing the Iraqi security forces, February 24, 2010. Photos by JWC PAO
Right, clockwise: The construction of the JWC's training facility, October 26, 2007. Photo by Hugo Bergsaker; a bird's-eye view of the JWC premises in 2015; the road to the JWC's training facility; Norway's Minister of Defence at the time, Anne-Grete Strøm-Erichsen, presiding over the foundation stone laying ceremony on October 23, 2008. Photos by JWC PAO

2007





Above and right: His Majesty King Harald V of Norway visited the JWC during NATO Exercise STEADFAST JOIST 2012 and was welcomed by Major General Jean-Fred Berger (Retired), the then Commander JWC; the Exercise Control during Exercise STEADFAST JOIST 2012. Photos by JWC PAO

NATO's Only Establishment Named After Modern Warfare

On May 14, 2012, His Majesty King Harald V of Norway paid a visit to the JWC during STEADFAST JOIST 2012, the very first exercise held at the Centre's new training facility. That same year, the JWC initiated an extensive interdisciplinary mission analysis. A process dubbed "2014 and Beyond" focused on the Centre's future strategic direction and how it could retool to best support NATO, managing escalating expectations on exercises.

A prominent fixture of the JWC's mission was its work on advancing warfare through doctrine, experimentation and les-

sons learned; the JWC was NATO's only "warfare centre" focusing on operationalizing warfare development. In April 2013, the JWC held the very first NATO-wide Warfare Development Conference. The aim was to explore how NATO and partner nations could improve and disseminate doctrine development throughout the Alliance. During this time, HQ SACT assumed the overall responsibility for all exercises, collective training, and military education from SHAPE.

In 2012, the SKOLKAN scenario was exercised for the first time during the JWC-directed STEADFAST JUNCTURE 2012. Developed by the JWC over a period of two years, SKOLKAN marked a revolutionary change to

the way NATO conducted exercises. The first version of the scenario was aimed at testing an Article-5 operation in the Baltic Sea region, involving both fictitious countries and real NATO nations. Meanwhile, two groundbreaking programmes, namely the Smart Defence Initiative and the Connected Forces Initiative (CFI), were introduced to achieve the "NATO Forces 2020" goal, which highlighted, amongst other things, the shift to smaller, more agile forces and their interoperability. The JWC contributed to the CFI through large-scale NRF exercises as the Alliance continued its transition from a heavy military footprint in Afghanistan to a renewed focus on collective defence and military mobility.

Below and right: The JWC's SKOLKAN scenario team; Lieutenant General Erhard Buehler (Retired) (middle), the then JWC Commander, the former SACEUR, General Philip Breedlove (Retired) (right), and a JWC staff member discussing the JWC's Opposing Forces (OPFOR) capability, June 19, 2014. Photos by JWC PAO



well as a series of defensive exercises focusing on collective defence and crisis management. In line with its focus on mobility, NATO created the Very High Readiness Joint Task Force for the NRE, rendering several thousand rotating troops ready to deploy on short notice, particularly within Europe.

In October 2013, the JWC started planning for the command post exercise (CPX) portion of TRIDENT JUNCTURE 2015, which involved two phases, the CPX and the live exercise (LIVEX). Based on the JWC's new non-Article 5 training scenario, SOROTAN, the CPX was designed to address some of the most important security challenges of modern warfare, including hybrid threats, combining both military and non-military aspects, such as disinformation and cyber attacks. The exercise involved more than 4,000 military and civilian personnel for the CPX and more than 36,000 for the LIVEX.

Below: Major General Reinhard Wolski (Retired), then JWC Commander, welcomed NATO Secretary General Jens Stoltenberg to the JWC during Exercise TRIDENT JUNCTURE 2015 on October 12, 2015. Photo by JWC PAO



Above, from top: The JWC staff participating in an ISAF mission rehearsal training event at Grafenwoehr Training Area, Germany, December 8, 2012; the Joint Multinational Simulation Centre, which hosted the joint U.S.-led UNIFIED ENDEAVOR and JWC-directed ISAF training events. Photos by JWC PAO

On June 13, 2014, the JWC concluded its decade-long pre-deployment training for ISAF. At its height, the ISAF mission oversaw more than 130,000 troops from 51 NATO member and partner nations. To date, ISAF remains the biggest coalition in NATO's history, which the JWC supported both through its mission rehearsal training events and, in later years, by co-directing four-tier UNIFIED ENDEAVOR/ISAF training events with its U.S. training partners.

Russia's illegal annexation of Ukraine's sovereign territory on March 18, 2014, fundamentally challenged the vision of a Europe whole, free and at peace, violating international law, treaties and norms as reflected in Secretary General Jens Stoltenberg's 2014 Annual Report. To address the Russian aggression, NATO laid out its new Readiness Action Plan at the 2014 Wales Summit, which included the "Assurance Measures" comprising a series of land, sea and air activities in Central and Eastern Europe, as



From top: NATO Exercises
TRIDENT JUNCTURE 2015 CPX,
TRIDENT JAGUAR 2015, TRIDENT
JAVELIN 2017. Photos by JWC PAO





Above: Major General Andrzej Reudowicz (Retired), the former JWC Commander, speaking during the command post exercise portion of NATO Exercise TRIDENT JUNCTURE 2018. Photo by JWC PAO

During this time, the Centre implemented a new trial organization based upon delivery and support structures. The aim of the new matrix organization was to realign the JWC's structure with its dynamic training programme, making it possible to plan more than four exercises per year. Worth noting as a distinguishing feature is that the JWC initiated its One Team programme in 2013, which would be the first human capital initiative within NATO focused on empowering its staff. The project manager said the programme aimed to "capture and baseline our organization's personality, understand the process of culture-shaping, to acknowledge and nurture the organization traits that are great so that we can purposefully select and shape the ones that might be holding us back from even higher levels of performance."

TRIDENT JAVELIN 2017, which was the first CPX in many years where the majority of the NATO Command Structure trained together in a complex Article-5 major joint operation-plus scenario, encompassed high-intensity warfare against a realistic peer competitor across all domains and in contested environments.

The JWC celebrated its 15th anniversary in Stavanger in 2018. NATO's highlight of the year was the LIVEX/CPX TRIDENT JUNCTURE 2018 — then recognized as the Alliance's biggest exercise in recent years. The LIVEX part involved more than 50,000 mili-

tary and civilian personnel from 31 NATO and partner countries, in addition to the 250 aircraft, 65 vessels, and up to 10,000 vehicles both in Norway and in the neighbouring areas of the North Atlantic and the Baltic Sea. Directed by the JWC, the CPX part of TRIDENT JUNCTURE 2018 took place from November 14 to 22 at nine different exercise locations throughout Europe, including Italy, Norway, Belgium,

Germany, and on board the Italian ship Etna. Close to 3,500 military and civilian personnel participated in the CPX to train and certify Allied Joint Force Command Naples to assume the operational command of the NRF in 2019.

Managing 360-degree Exercise Delivery

Defensive in nature, NATO exercises focus on collective defence and deterrence, improved interoperability, and higher state of readiness around the 360-degree approach to security. To be fit for purpose, it is necessary to continue to study today's volatile and increasingly complex geostrategic environment and be prepared through capability development, experimentation, doctrine and exercises, lessons learned and analysis. The exercises directed by the JWC as well as warfare development activities continue to offer unique opportunities to make NATO better by making the Alliance forces more ready and more interoperable.

In 2019, the JWC conducted one of NATO's largest and most complex CAX/CPXs until then: TRIDENT JUPITER 2019-1. This exercise ran from November 4 to 14 at ten locations across Europe, including aboard the USS Mount Whitney and the Spanish ship Castilla. More than 3,000 civilian and military

Below: The JWC EXCON Forward team during NATO Exercise TRIDENT JUPITER 2019-1. Photo by USS Mount Whitney





personnel participated in the exercise to test and evaluate the land, maritime, air, and special operations component commands of NRF20. The exercise successfully demonstrated the Alliance's deterrence and defence capabilities as well as the Allies' shared commitment to the security of Europe.

During this time, the JWC continued with its professional development and organizational culture programmes and developed a powerful vision that will lead it into the future. On February 11, 2020, less than a month before the NATO Military Committee's annual visit to ACT, which was hosted by the JWC, the Centre's current vision was launched:

"The Joint Warfare Centre drives the delivery of collective training and warfare development at the operational and strategic levels of warfare. We are NATO's trusted advisor bridging 'Operations' and 'Transformation,' underpinning NATO readiness and future capability development. The Joint Warfare Centre attracts and develops the most capable staff, both permanent and augmented, based on a reputation for excellence built on a culture of professionalism, curiosity, innovation and cooperation."

As part of this vision, today's Continuous Improvement Programme (then named Vision 2025) aims to institutionalize an organizational culture committed to change. The programme is designed to allow the staff to develop short- and long-term goals based on the JWC's four project lines: Collective Training and Exercises, Warfare Development, Organization, and Professional Development. Activities include an annual survey, which provides an opportunity for all staff to contribute to the future development of the Centre.



Above: The JWC staff developing the Centre's wargaming design capability, October 22, 2020. Photo by JWC PAO

The year 2020 would be very unusual, full of unexpected events and challenges. The COVID-19 pandemic had a major impact on military exercises due to public health measures, serious restrictions on travel, and mandatory quarantine. Consequently, in 2020, many NATO exercises were changed, reduced in size, or cancelled. The crisis helped harness the community aspect of the Centre's One Team as well as online collaboration, both internally and externally.

Despite the shift to remote working, including online conferencing and meetings, the JWC maintained business continuity, introduced new capabilities to better serve NATO, and continued to maintain excellent relations

with local authorities throughout the pandemic. In April 2020, the JWC announced the establishment of a new position within its organizational structure: the Command Senior Enlisted Leader (CSEL), to serve as the Commander's principal advisor on matters affecting the Centre's non-commissioned officers (NCOs) and to lead NCO professional development programmes at the JWC.

Although the year was defined by many fundamental changes stimulated by the pandemic, the Centre continued to innovate and extend the scope of its training enterprise. The execution phase of the JWC's new wargaming design capability was initiated in June. The aim was to complement the JWC's large-scale CPXs by expanding on the wide spectrum of political, military, economic, social, infrastructure, information variables, and sharpening decision-making skills.

In June 2020, the NATO Secretary General Jens Stoltenberg initiated NATO 2030 to ensure that the Alliance would remain strong militarily and become even stronger politically. The JWC concluded the year with Exercise STEADFAST JUPITER-JACKAL 2020, NATO's largest CPX that year and a resounding success despite the challenges brought on by the global pandemic. Executed in the form of a battle staff exercise based on the JWC's then new scenario FIKSO, it provided unique training opportunities for NRF21.



Left: The JWC's former and current Command Senior Enlisted Leaders (from left) Senior Chief Petty Officer Lars Raabe (April 2020–June 2022) and Senior Chief Warrant Officer Andrzej Woltmann (August 2022–present)



Above, clockwise: NATO Exercise STEADFAST JUPITER-JACKAL 2020 after-action review; the execution phase of the WISE AEGIS wargame; a meeting of the JWC's Advisory Team during NATO Exercise STEADFAST DEFENDER 2021 (STDE21) in Germany; a close-up of the SHAPE insignia during STDE21. Photos by JWC PAO

In early 2021, the JWC's new initiative gained momentum: the Joint Operations Planning Group (JOPG) Leader's Workshop, which focused on increasing the effectiveness of exercise planners before they conduct crisis response planning. The Centre conducted its first iteration of the JOPG Leaders Workshop in February 2021. Of note, each JWC-directed exercise requires a long planning period of 18 to 20 months. The planning of an exercise is arguably the most crucial phase in any exercise involving all stakeholders: the higher headquarters, the certifying headquarters, the training headquarters, various supporting organizations and trusted agents. It is a highly complex, cooperative effort that ensures the success of the execution phase. Between February 2021 and May 2023, the workshop

involved 13 different headquarters in NATO, training approximately 300 military planners.

Also in February 2021, the JWC achieved initial operational capability status in wargame design, following a matrix-style pilot wargame played out with the Civil-Military Cooperation Centre of Excellence, focusing on the impact of operational-level civil-military interaction on national resilience involving political, civilian and military stakeholders in a whole-of-government approach.

In May, following a 19-month planning phase, the JWC conducted the CPX portion of Exercise STEADFAST DEFENDER 2021. The exercise provided an invaluable opportunity for NATO's new Joint Support and Enabling Command (JSEC) to test the military mobility of 15,000 simulated troops and their sustain-

ment across Europe, paving the way for the JSEC's full operational capability.

At NATO Brussels Summit on June 14, 2021, the Alliance agreed on the NATO 2030 agenda, which also announced the provision of a new Strategic Concept: NATO's roadmap for the coming decade. On October 8, 2021, the JWC's current Commander, Polish Army Major General Piotr Malinowski, assumed command of the Centre. Soon after, he served as the Officer Directing the Exercise (ODE) for NATO's largest command post exercise that year: STEADFAST JUPITER 2021. The exercise involved the strategic, operational, and tactical levels to address the challenges of deterrence, from hybrid threats to real combat capabilities in a major joint operation, involving approximately 5,000 participants.





Above, clockwise: NATO Exercise STEADFAST JUPITER 2021 training audience at the JWC's In-Rock Facility in Stavanger and at Allied Joint Force Command (JFC) Brunssum during a simulated media interview with the former Commander of JFC Brunssum, General Jörg Vollmer (Retired), photos by Headquarters Rapid Reaction Corps-France and JWC PAO; the JWC's Advisory Team during NATO Exercise STEADFAST JACKAL 2021 in Italy, photo by JWC PAO

As the year drew to a close, the JWC also conducted STEADFAST JACKAL 2021. The non-Article 5 exercise focused on security challenges including destabilization, terrorism, migration and environmental issues.

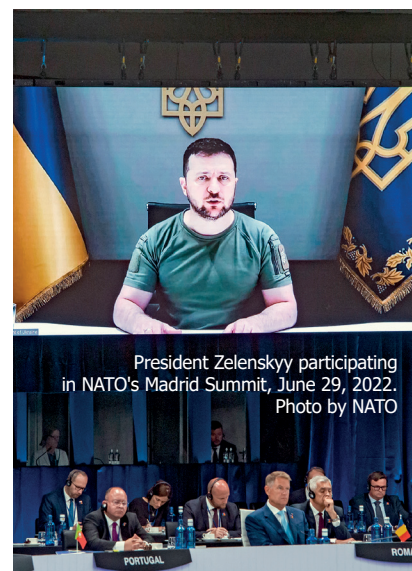
A More Competitive World

On February 24, 2022, Russia attacked Ukraine with air and missile attacks, tanks, special forces, and with a campaign of lies and disinformation. "Peace in our continent has been shattered. We now have war in Europe, on a scale and of a type we thought belong to history," said NATO Secretary General Jens Stoltenberg, following an extraordinary meeting of the North Atlantic Council on the same day.

Even greater focus on collective defence

was now called for; NATO activated high-readiness elements of the NRF for the first time in a deterrence and defence role, which aimed at reinforcing the eastern flank of the Alliance. Marching on NATO's military instrument of power at the right pace became the priority of General Philippe Lavigne, SACT.

The SACT underlined that for the military instrument of power to be effective, it needed to "comprise the right capabilities (means to fight), right strategies and doctrines (ways to fight), and the fighting spirit." With the return of war in Europe, initiatives such as the Concept for the Deterrence and Defence of the Euro-Atlantic Area, the NATO Warfighting Capstone Concept, and the Warfare Development Agenda altogether marked NATO's forward-looking vision.





Above and right: Colonel Fide Schoenrade (middle), the JWC's Deputy Chief of Staff for Support, pose in front of the construction site of the Centre's new G-Block building with Base Support staff; the re-opening of the JWC's In-Rock Facility: Norwegian State Secretary Mr Bent-Joachim Bentzen presents Major General Piotr Malinowski, Commander JWC, with a plaque. Photos by JWC PAO

At the Madrid Summit, June 29–30, 2022, NATO adopted its first new Strategic Concept in a decade, which underlined that "the Euro-Atlantic area is not at peace. Strategic competition, pervasive instability and recurrent shocks define our broader security environment." NATO's strategic environment included new focus areas such as emerging and disruptive technologies and climate change to highlight the changing security environment.

Today, NATO's military transformation is powered by the successful implementation of the concept of multi-domain operations. Here

the JWC has a role to play in transitioning to a multi-domain NATO: the Centre's training architecture, coupled with its warfare development enterprise, makes it a key venue for developing joint warfare in multiple domains. Additionally, the Centre is key in developing new ways of training and education to include wargaming and capability integration, such as operationalizing cyberspace and resilience. With wargaming, operational since May 2022, the JWC delivers a highly responsive and low-cost alternative to large-scale exercises and "helps provide a cognitive foundation upon

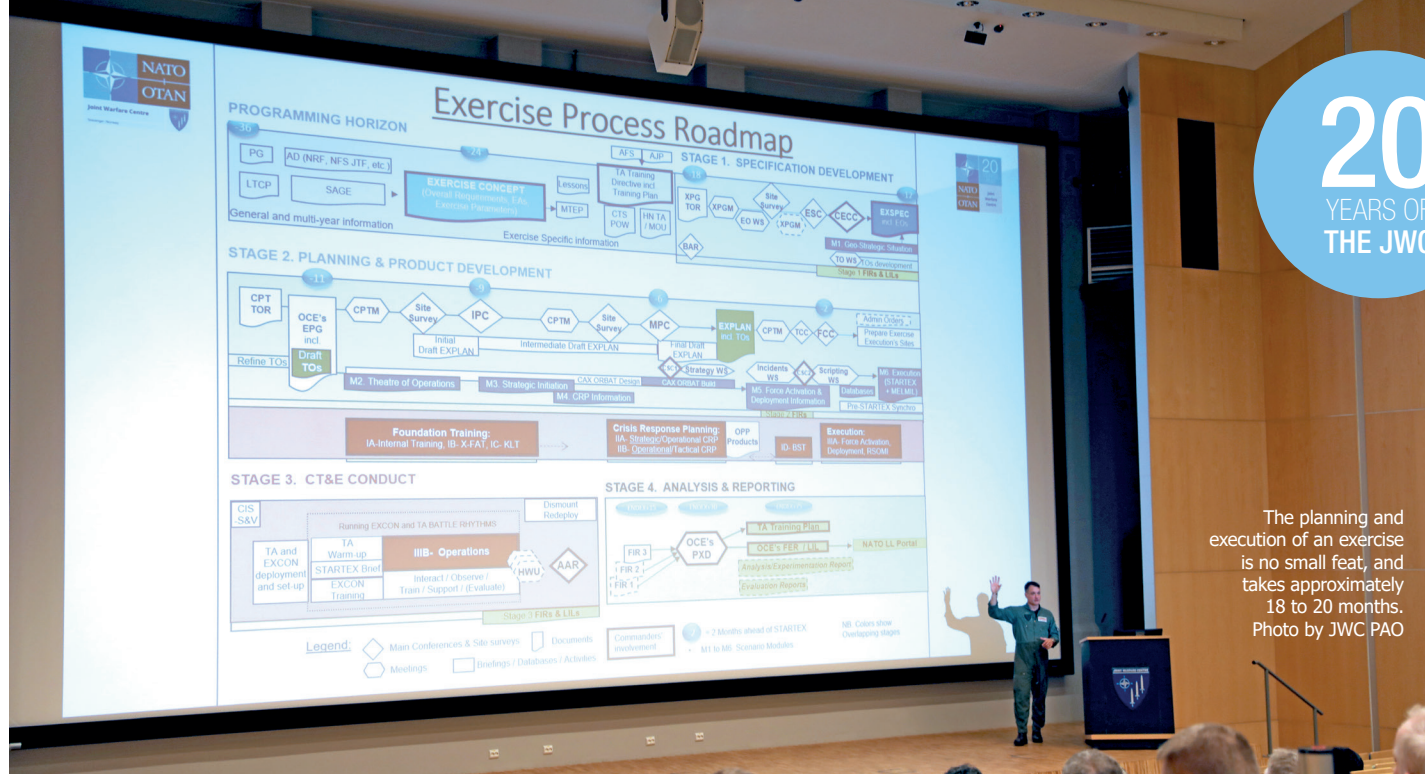
which to guide future training," as explained by the JWC's Wargaming Branch. The JWC developed and delivered its first large-scale wargame in November 2022 in support of the annual logistics-themed wargaming exercise "Joint European Time-Phased Force Flow Deployment and Sustainment Series," also known as JETS 3.0.

Another landmark exercise for the JWC was STEADFAST JUPITER 2022. With this exercise, the JWC directed its first tactical-level Article-5 CAX/CPX. It trained and evaluated 1 German-Netherlands Corps (1GNC) for



NATO Exercise STEADFAST JUPITER 2022.
Photos by JWC PAO





NRF23, and also involved a separate vignette-based exercise for SHAPE at the strategic level, and a battle staff training for JFC Naples at the operational level. The exercise was followed in December by STEADFAST JACKAL 2022, exercising a non-Article 5 small joint operation at the operational and tactical levels.

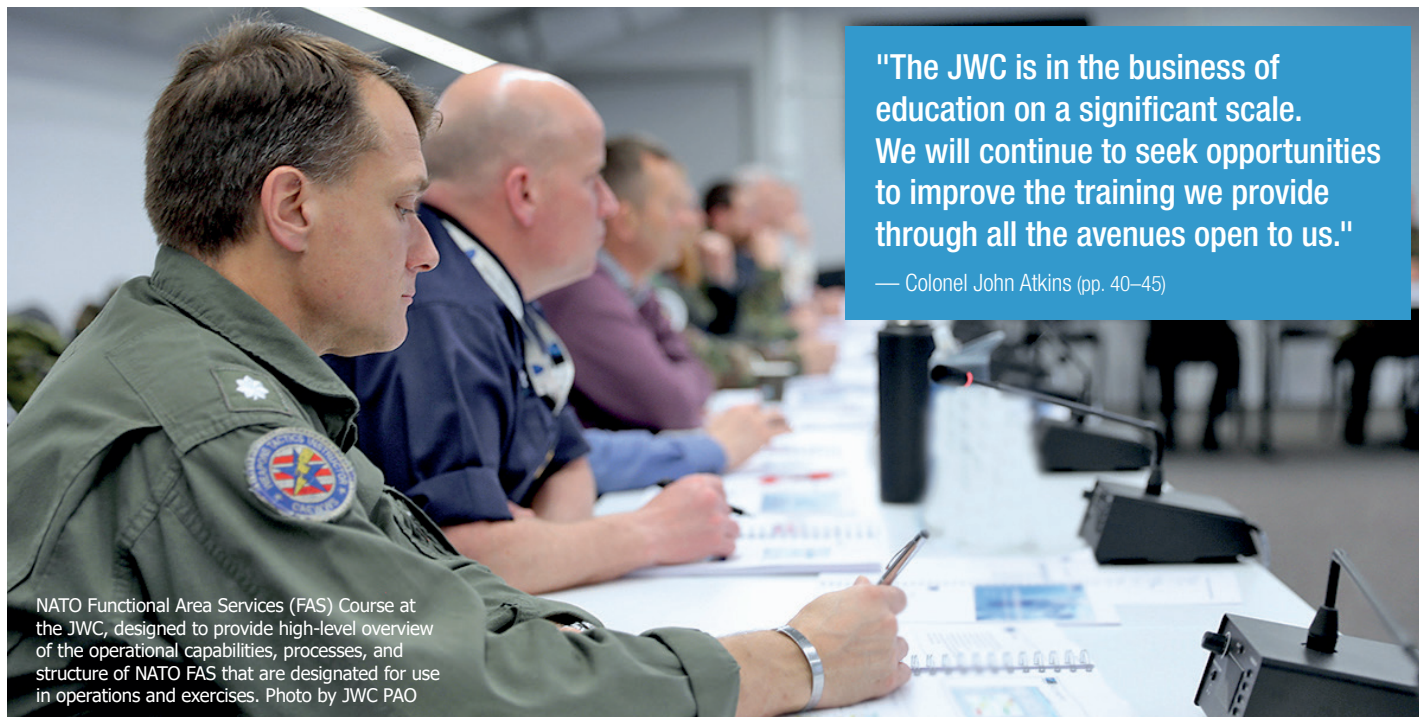
So how does NATO train for the new era of collective defence? The answer is undoubtedly STEADFAST JUPITER 2023 — NATO's largest and most complex CAX/CPX to date, for which the planning started as early as November 2021, involving 24 training audiences, in-

cluding SHAPE as a warfighting headquarters. Guided by NATO's Concept for Deterrence and Defence of the Euro-Atlantic Area (DDA), the exercise, set to take place in the autumn of 2023, is designed to strengthen the high-intensity warfighting skill sets of the NATO Command and Force Structure headquarters in a multi-domain, multi-joint operational area scenario. As NATO's first DDA-aligned exercise, STEADFAST JUPITER 2023 will be a strong landmark of the Alliance's vision, capabilities and resolve, ensuring that NATO forces remain fit for purpose well into the future.

A Proud Heritage

The JWC is NATO's footprint in the Northern European region, which includes Scandinavia, the North Sea and the Baltic. The Centre's motto "Training NATO. Advancing Doctrine. Integrating Concepts" reflects its mission and warfare development capacity, which is unparalleled in NATO. The JWC's collective operational-level training has extended to include both the strategic level and, recently, the tactical level, adding a new dimension to the complexity of the exercises the JWC delivers.





NATO Functional Area Services (FAS) Course at the JWC, designed to provide high-level overview of the operational capabilities, processes, and structure of NATO FAS that are designated for use in operations and exercises. Photo by JWC PAO

"The JWC is in the business of education on a significant scale. We will continue to seek opportunities to improve the training we provide through all the avenues open to us."

— Colonel John Atkins (pp. 40–45)

After 20 years, "the jewel in the crown of Allied Command Transformation," as described by the first SACT during a press conference following its activation, the JWC remains one of the most groundbreaking organizations within NATO, and a key contributor to its 360-degree readiness at the operational and strategic levels of warfare. The JWC's mission covers three interconnected areas:

1. Through collective training and exercises, the JWC contributes to the overall warfighting readiness of the NATO Command and Force Structures headquarters.
2. Through adherence to NATO joint operational doctrine and standards, capability integration and the delivery of the lessons learned process, the JWC contributes to NATO's Warfare Development Agenda.
3. Through its widespread cross-organizational cooperation, the JWC engages with various NATO commands on both sides of the Atlantic, national training and command organizations, governmental and non-governmental organizations, as well as regional security organizations and partners, contributing to NATO's interoperability and partnerships.

The Next Generation

The JWC was born amidst big changes and innovations in NATO: The NRF had just been announced at the Prague Summit in 2002, and the next year, NATO would take over command of ISAF in Afghanistan, marking its first mission beyond the Euro-Atlantic area. The JWC was a unique concept then, as it is today, although the world now is very different.

Looking back on how it all began, it is

hard to think of the JWC without the NRF. It is striking that the year the JWC celebrates its 20th anniversary, the NRF is in the process of transitioning to the Allied Reaction Force (ARF) — "a new, more mobile and multi-domain multinational reaction force in support of all three core tasks," as stated in the Secretary General Annual Report 2022, "bolstering responsiveness, readiness and combat power."



Joint Operations Planning Group train-the-trainer course for the JWC staff, August 25, 2023. Photo by JWC PAO



CRITICAL ENABLERS FOR NATO'S MILITARY INSTRUMENT OF POWER: Based on the NATO Warfighting Capstone Concept (NWCC), data, technology, agility, people, preparation and integration, together help to succeed in the multi-domain environment of 2040. The JWC is uniquely positioned to advance and operationalize NWCC through exercises, warfare development and an innovative organizational culture programme dedicated to human capital enhancement.



DATA

Improving the handling of data and advanced analytics within the military-strategic decision-making processes and ensuring data quality and the integrity and coherence of information flows.



TECHNOLOGY

Maintaining a technology advantage that is geared towards more effective capture of emerging and disruptive technologies to support warfighting and ensuring defensive capacity against the use of these technologies by other actors.



AGILITY

Placing agility at the centre of NATO's warfare development as the rate of commercial-led technological innovation and changes in the security environment accelerates. Allies must continue to adapt their capability development processes to allow more agile development, timely delivery and adaptation of military capabilities.



PEOPLE

Building allied recruitment, selection, training, promotion and retention systems that can deliver the right people with the right skills. NATO and Allies need leaders and staffs that are able to cope with the speed, complexity and data-centric technology of the future environment.



PREPARATION

Engraining persistent preparation within Alliance military culture to out-excel. This includes the development of demanding scenarios and practicing the development of decision-making using modelling and simulation, as well as realistic training, wargaming and experimentation.



INTEGRATION

Connecting with a broad network of partnerships, which includes partner nations, relevant international organizations, non-governmental organizations, civilian actors and industry.

Reference: HQ SACT NATO Warfighting Capstone Concept

Above: Photos by NATO, JWC PAO; illustrations by Shutterstock

In the new era of collective defence, the ARF, driven by a multi-domain approach, will be on the frontline of the JWC's mission as the Centre adapts to training the next generation of NATO's three- and four-star headquarters with its new exercise series: STEADFAST DETERRENCE, STEADFAST DUEL and STEADFAST DAGGER, as well as the STEADFAST FOXTROT wargame. Future warfighting and operating environments demand multi-domain exercises, innovation and increased collaboration between organiza-

tions. As a NATO warfare centre, the JWC is fit to respond to the requirements of the Concept for Deterrence and Defence of the Euro-Atlantic Area. However, it is not an organization that rests on its laurels.

The JWC's workforce of 261 staff members comprises NATO international civilians as well as military posts drawn from the following 17 NATO member nations: Canada, Czech Republic, Denmark, France, Germany, Greece, Hungary, Italy, the Netherlands, Norway, Poland, Portugal, Spain, Romania, Türkiye, the

United Kingdom and the United States. There is a genuine sense of pride, as we look back on the JWC's 20 years, knowing that the Centre continues to offer something new and different to the Alliance every day with its One Team, who has earned the JWC such renown. We are proud as we mark our 20th anniversary in Norway, accomplishing one of the most extraordinary endeavours in NATO: bridging the missions of Supreme Allied Commander Europe and Supreme Allied Commander Transformation — the fight today and the fight tomorrow. ✦