



**Clockwise**

The JWC-led Grey Cell during Exercise TRIDENT JUPITER 2019-1; CIS provides the digital backbone for all exercises; the JWC's Advisory Team in Spain during Exercise TRIDENT JACKAL 2019; the OPFOR Cell during Exercise STEADFAST JUPITER 2023 MEL/MIL Scripting Workshop.  
Photos by JWC PAO

## HOW WE DELIVER TRAINING

# The JWC's 11 Core Exercise Functions

Shooting a simulated news report for Exercise STEADFAST JUPITER 2023 MEL/MIL Scripting Workshop



### Think you know all about **managing complexity**?

Here are **11 exercise functions** the Joint Warfare Centre controls simultaneously to ensure **NATO trains as it fights**. The JWC's training architecture is a truly immersive environment where everyone plays an important part in providing **first-class training** to NATO Command and Force Structure headquarters to prepare them **for any contingency**.





*In no particular order*



## EXERCISE CONTROL

The Exercise Control (EXCON) organization is the "nerve centre" that commands and controls an exercise involving a diverse team of professionals, while setting the conditions for achieving exercise aims and objectives. The Commander Joint Warfare Centre (JWC) serves as the exercise director (EXDIR), leading the direction and tempo of the exercise play. The JWC provides the core of the EXCON personnel, which is augmented by staff from across the Alliance, partner organizations, other external resources, and trusted agents from the training headquarters. An EXCON organization can involve up to 1,000 personnel under the overall command of EXDIR. Although the JWC is the customary home to EXCON, it can be established at dispersed locations too, requiring high-calibre CIS support. One final takeaway about EXCON: it is how response cells, subject matter experts, warfighters and non-NATO elements come together to ultimately create a world-class exercise environment, providing the training audiences with a realistic, coherent, seamless and transparent presentation of the exercise play. All of this serves one purpose: to make NATO better.

## SCENARIO DESIGN & MANAGEMENT

The JWC's Scenario team provides comprehensive scenario background and supporting documentation to JWC-directed exercises, tailored to meet both NATO and national requirements, and covering the Alliance 360 degrees geographically. The scope of these fictitious but highly realistic settings and scenarios allows for exercises in both Article-5 collective defence and non-Article 5 crisis response operations mode at various levels of effort, from divisional up to multi-corps, and across all five military domains — air, land, maritime, cyberspace and space. Within this broad spectrum, and in addition to the conventional spectrum of warfare, the JWC scenarios can also accommodate a wide range of modern warfare threads, such as anti-access/area denial, civil-military interaction and resilience, cyber defence, hybrid warfare, and state- and non-state actor-sponsored terrorism.

## MAIN EVENTS LIST/MAIN INCIDENTS LIST

The main events list/main incidents list (MEL/MIL) is the "script" that keeps the exercise on track. The MEL/MIL team in Content Branch is responsible for the development and delivery of the overall exercise content during the planning and execution phases of JWC-directed exercises. Under the MEL/MIL team's guidance, the JWC's subject matter experts as well as trusted agents from the training audiences, participating nations and supporting response cells script the MEL/MIL over a series of three developmental workshops. The exercise script is synchronized with the exercise scenario, the training audience's operation and coordination orders, as well as opposing forces' actions. The result is an artificial but highly realistic exercise environment that affords the training audiences the opportunity to achieve their exercise and training objectives.





## CAX

The JWC Computer-Assisted Exercise (CAX) team employs the Joint Theatre Level Simulation-Global Operations (JTLS-GO) to manage large-scale scenarios with multiple joint operations areas (JOA). The team prepares comprehensive databases for each exercise that reflect the complexity of contemporary multi-domain challenges. This allows the JWC's training audiences to conduct planning and decision-making in a demanding and realistic exercise environment that is as close as possible to that of a genuine operation. If the CAX team executes as intended, the training audiences are unaware that CAX support exists; they truly train as they fight. Given the shift to high-intensity, multi-JOA and multi-domain warfighting exercises, the JWC's CAX capability continues to evolve, such as the creation of a NATO order of battle (ORBAT) data inventory, as well as some analysis capability including an integration with wargame capability. Lately, the JWC CAX team has been working closely with the JWC Wargaming team to develop innovative CAX wargame methodologies that optimize the new exercise processes.

## ADVISORY TEAM

The JWC's Advisory Team is composed of subject matter experts with diverse backgrounds in their respective warfighting functions. The team's mission is to advise, assist and monitor training audiences throughout an exercise. Working directly with the staffs at the different levels of headquarters, the Advisory Team participates in the planning, coordination and synchronization of each exercise. This allows the team to maintain situational understanding of the participants and the role of the different headquarters in their respective locations. The entire exercise process is normally an 18-month cycle, and so it is invaluable for the team to be integrated from the onset. Members of the Advisory Team also conduct the Joint Operations Planning Group (JOPG) Leaders Workshop during the training audiences' foundation training. In addition, the Advisory Team serves as the JWC's "EXCON Forward." An integral aspect of the Advisory Team is their partnered relationship with NATO senior mentors — the retired generals and admirals who have worked within the NATO Command Structure.

## HIGHER CONTROL

The Higher Control (HICON) Cell replicates the highest political and military headquarters during the JWC-directed exercises. HICON facilitates the top-echelon military and political play during the exercise and serves as the linkage between the policy makers in NATO Headquarters, Supreme Headquarters Allied Powers Europe (SHAPE), and the operational and tactical-level commands. With their in-depth knowledge of NATO processes at the operational, strategic and political levels, HICON staff ensure that current NATO doctrine, concepts, strategies and guidance are synchronized with the exercise and training objectives. The interaction, direction and guidance HICON provides to training audiences is critical in ensuring a realistic and legitimate exercise.



**The PLAN is nothing, but  
PLANNING is indispensable.**

General Dwight D. Eisenhower  
NATO's first SACEUR





## MEDIA SIMULATION

The JWC delivers a full-scale media and information environment during the exercises it directs, which includes television news, online news and social media simulation. For television news, World News Today (WNT) is the flagship programme, replicating international news outlets such as CNN International or BBC World, as well as adversarial products. Online news span content from local, national, regional, and international perspectives, including adversarial content, all delivered digitally via NewsWeb, the JWC's news aggregate website. Social media effects are delivered via Chatter, JWC's simulated social networking platform. These simulation platforms bring the exercise to life, but more importantly, they provide the media consequences of operational decision-making. Media simulation products also include scenario-based scripted sentiment analysis and public opinion polls, which help training audiences to understand the effectiveness of their strategic communications efforts.

## GREY CELL

Populated by retired senior military officers, civil leaders or diplomats, the aim of the JWC's Grey Cell is to prepare the training audiences for operating in a complex, multi-dimensional environment, which requires a comprehensive approach by the international community involving a wide spectrum of civil and military instruments. The Grey Cell generates and replicates key leaders from NATO and non-NATO host nations alongside non-military actors such as the United Nations, the European Union, the International Committee of the Red Cross et al., or international and non-governmental organizations with which the training audience would expect to liaise in a theatre of operations, depending on the exercise scenario. Interacting with the training audience through face-to-face meetings or video conferences, the Grey Cell subject matter experts, together with the Advisory and Media Simulation teams, make up the JWC "front of house."



**Readiness and effectiveness  
are about much more than  
numbers. You need SPEED  
and SCALE as well as  
FLEXIBILITY and a wide range  
of CAPABILITIES.**

Admiral Rob Bauer  
Chair of the NATO Military Committee





## REAL LIFE SUPPORT

Up to four major NATO exercises per year, along with national exercises and other events, bring thousands of participants to the JWC. On average, the Centre hosts 24 events annually with more than 4,000 external participants from all over the world. The RLS team is the participants' first point of contact with the JWC. An integral part of all JWC-directed exercises, the Real Life Support involves services in various areas including catering, accommodation, transportation, medical care, in-processing, facility preparation, event helpdesk and database, security, cleaning services, religious service and social events.

## OPPOSING FORCES

The JWC's Opposing Forces (OPFOR) Cell was set up in 2012 to represent adversaries realistically during the JWC-directed exercises. Simulating all instruments of power (diplomatic, information, military and economic) that an adversary could potentially use, an intelligent OPFOR construct has been a key element of the JWC's comprehensive approach to training and scenario development since then. The simulated adversary acts in accordance with doctrine with coherent aims and objectives. Today, this evolving capability is an integral part of the combined effort to bring the exercises to life, providing realistic, contemporary challenges to the training audiences.

## CIS

The JWC requires advanced technical networks and processes for the simulation and global coordination of exercise activity, as the challenges facing NATO continue to diversify in the 21st century and both technology and user expectations change rapidly. NATO's aim is to deliver fully interoperable command and control and information technology services to enable multi-domain operations and digital transformation. Communications and Information Systems (CIS) provide the digital backbone for the JWC-directed exercises, which involve large quantities of data, including the virtual battlespaces of the exercise environment across multiple networks. This generates its own challenges for CIS, as the speed and complexity of exercise activity must be supported by increased interoperability and ever more capable equipment. These core NATO and unique JWC networks are all directly supported by the NATO Communications and Information (NCI) Agency and the local CIS Support Unit in Stavanger (CSU Stavanger).

Exercise TRIDENT JUPITER 2019-1.  
Photo by Bastian Koob, Eurocorps

