



# JOINT CAPABILITY INTEGRATION AT THE JOINT WARFARE CENTRE

By Lieutenant Colonel Barrett Burns, United States Army  
 SO Concept Development, JCID  
 Joint Warfare Centre

---

**JOINT CAPABILITY INTEGRATION at the JWC is the synchronisation of interdependent processes in the areas of concepts, experimentation, lessons learned and doctrine to enable TRAINING AUDIENCE TRANSFORMATION and NATO INSTITUTIONAL IMPROVEMENT.**

---

### Why transform?

In the face of continually evolving political and military requirements and an agile opposition, a force that remains static — practicing existent procedures and doctrine — will become increasingly irrelevant. To drive necessary adaptations, NATO has embraced military transformation as an organic part of both structure and function. This capacity for change, illustrated by the prominence of programmes like the Connected Forces Initiative (CFI), enables NATO's military structure to react in a timely manner to political and military changes. The structure to lead this transformative

capacity starts at the military strategic level with Allied Command Transformation (ACT), created in 2003 as part of NATO Command Structure reform.

Within ACT, Deputy Chief of Staff (DCOS) Capability Development (CAP-DEV) provides guidance and direction for the activities that identify and prioritise Alliance capability gaps, then synchronises the delivery of military and non-military solutions through a holistic capability development approach. Development and delivery of these solutions are made through the ACT Transformation Network, which





## The operational level exercises delivered by JWC also provide NATO with a controlled environment to validate and improve the operational level doctrine in the Allied Joint Publications."

drives continuous reform of NATO forces, structures and processes. The CAPDEV structure to deliver transformation is similar to JWC's Joint Capability Integration Division (JCID), but focused on development and delivery rather than on integration. CAPDEV uses concept development, an experimentation Programme of Work (POW), lessons learned, and doctrine development to generate holistic solutions for prioritised shortfalls. JWC contributes to this effort by including transformative elements in training delivery at the operational level as well as transformative contributions to NATO institutional entities.

### What is Joint Capability Integration?

Joint Capability Integration is the synchro-

nisation of interdependent processes in the areas of concepts, experimentation, lessons learned, and doctrine to enable Training Audience transformation and NATO institutional improvement. It is the logical result of the unrelenting need to transform NATO forces to meet current requirements. The specific implementation of Joint Capability Integration in operational level exercises has been shaped by the development of ACT, along with Peacetime Establishment (PE) and functional changes in JWC. The resurgence of the transformative capacity in JWC has been slow due to the overriding importance of ISAF training in recent years, but as the ISAF mission changes and responsibility for training is shouldered to a greater degree by Joint Force Training Centre (JFTC), JWC has regained the ability to address this critical gap in our capacity to identify and integrate transformational elements into our training.

**THE RE-AWAKENING OF** the warfare capacity in JWC coincides with significant internal organisational changes (cultural re-shaping and the JWC optimisation study) along with external initiatives like the recent NATO Command Structure reform, new NATO Force Structure responsibilities for Joint Headquarters, and the Connected Forces Initiative. Incorporation of these initiatives in exercises provides more opportunities to execute capability integration and experimentation projects.

JWC can leverage these initiatives and projects to increase our institutional understanding of warfare and operational

art in NATO and to improve exercise delivery through training analysis and lessons learned. The operational level exercises delivered by JWC also provide NATO with a controlled environment to validate and improve the operational level doctrine in the Allied Joint Publications (AJPs). To meet these challenges, JWC has re-aligned JCID resources from providing exercise delivery support to leading the transformational tasks central to the Joint Capability Integration mission.

As a result of this re-alignment, Joint Capability Integration in JWC exercises has moved from mainly semi-isolated experiments, like Alternative Analysis (AltA) and internal lessons learned, towards larger roles for concept/capability integration and doctrinal engagement. As we evolve to address the broader Joint Capability Integration transformation mission in a holistic manner, using all JCID functions, we must construct an Exercise Control (EXCON) structure to provide guidance, resources, and accountability. The Capability Integration and Experimentation Coordination Cell (CIECC) will provide this control in exercise TRIDENT JUNCTURE 15 (TRJE 15/Part 1) as a mission tailored structure under the Chief JCID, to support ACT and Training Audience transformation objectives.

### Prioritising Joint Capability Integration exercise objectives

Determining priorities for Joint Capability Integration activities, including independent and interdependent priorities for concepts, experimentation, lessons learned and doctrine, is a process that balances Bi-SC priorities with Training Audience requirements and JWC capacity. The process starts with the analysis of annual training guidance and Bi-SC Directives and guidance regarding capability development. These priorities are then refined and scheduling possibilities are discussed in the course of regular NATO Capability Development Conferences, working groups and VTCs.

For exercise TRJE 15, JCID took initial steps to integrate this cross-organisational planning function into the recent Concept Development and Experimentation Working Group. During the follow-on Exercise Planning Group and Core Planning Team meetings, the JWC Joint Capability Integration representative incorporates





## Mission Tailored CIECC Support

**CIECC must be fully integrated as part of the EXCON structure.**



- In each phase of the exercise, a different mix of capabilities from the JCID team is required to perform holistic Joint Capability Integration.

- The base functions provided (as required) are:

- Concepts
- Doctrine
- Lessons Learned
- Experimentation

- For any Training Audience event, **Lessons Learned and Doctrine** support is the minimum requirement.



an understanding of capability integration requirements, possible experimentation and doctrinal focus areas into the Training Audience priorities. Exercise stakeholders (OSC, OCE, ODE<sup>(1)</sup> and Training Audiences) should express the initial Joint Capability Integration priorities and framework in the Exercise Specification (EXSPEC) document and confirm this framework in the Commander's EXSPEC Confirmation Conference. Once this framework is in place, the Joint Capability Integration work begins in earnest.

Much of the solicitation responsibility for external projects and recruitment of project teams falls to HQ SACT CAPDEV in the early stages. JWC JCID starts development of internally sourced projects and helps ensure that CAPDEV efforts are synchronised with ongoing exercise development. Initial planning and proposals for all projects (internal and external) must be complete for presentation to stakeholders in the exercise planning team during the Initial Planning Conference (IPC). Stakeholder agreement at the IPC enables detailed planning and allocation of resources to prepare for exercise execution phases.

The Main Planning Conference (MPC) serves as a second check, since the exercise construct and Training Audience priorities continue to evolve throughout the exercise lifecycle, in order to ensure

that projects are integrated seamlessly and do not conflict with Training Audience priorities. If a project has not seen appropriate planning or progress by the MPC, it should be cancelled to prevent interference with exercise execution phases. The key to success at this phase is a common understanding between stakeholders that while Joint Capability Integration projects are critical to NATO transformation, the primary purpose of the exercise is to meet Training Audience requirements.

**THE JOINT CAPABILITY** Integration portion of the operational conduct stage of the exercise, beginning with Academics, is supported by the CIECC, which synchronises functional support by the JCID team. The CIECC is the part of EXCON that provides a centralised mechanism to coordinate all Joint Capability Integration functions and support agencies, much as the Experimentation Coordination Cell has done in the past. In each phase (Academics, Crisis Response Planning, Execution and Assessment), a mission tailored team provides support to the Training Audiences and EXCON. The minimum functions provided to each audience are lessons learned and doctrine support (see above). Additional staff support is added to the CIECC team to support the pre-planned concept, experimentation, and capability integration initiatives in each lo-

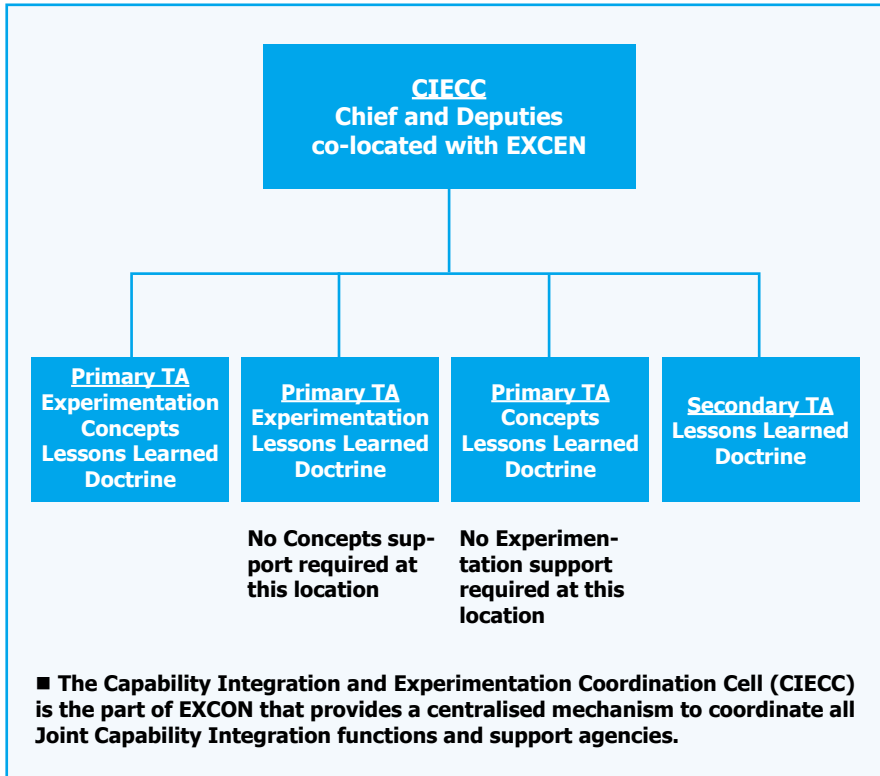
cation. A core CIECC team, co-located with EXCON during the execution phase, synchronises and guides the observations made in each audience. Observers are not limited to JCID or even JWC personnel. In exercise TRIDENT JAGUAR 14 (TRJR 14), contributors included not only each Division in JWC, but also external observers from the Training Audience and the Joint Analysis and Lessons Learned Centre (JALLC). The CIECC provides oversight and coordinates/synchronises the efforts of the entire Joint Capability Integration team.

### JCID structure to support transformation and exercises

To meet the challenge of incorporating these transformative elements into exercises delivered through JWC, the Joint Capability Integration Division (JCID) is structured as four interrelated functional sections: Concepts, Experimentation, Lessons Learned and Doctrine. Personnel are assigned to a section relating to one of these functions, but the interdisciplinary nature of Joint Capability Integration, the limited number of PE billets, and the search for efficiency necessitates developing cross-functional skills in each section.

- **Concepts Section:** The Concepts Section supports concept and capability integration activities in close coordination with





CAPDEV and the wider concept development community. Always scanning the Bi-SC horizon for initiatives to improve Training Audiences' methods, processes, and capacity, the Concepts Section tracks, analyses, and prioritises both new requirements and solutions for integration into exercises. By virtue of this Bi-SC vantage point, concepts staff officers are able to identify beneficial capability integration linkages that can be incorporated into JWC exercises. In the exercise planning process, Concepts staff officers coordinate the efforts of external project sponsors, Training Audience capability integration initiatives, JWC exercise planners, and Subject Matter Experts (SMEs) to ensure delivery of transformative elements that are seamlessly integrated into the exercise design. As part of the CIECC, the Concepts Section develops knowledge of integrated concepts and capabilities to ensure smooth development and execution within the exercise construct. The Concepts Section also has a limited capacity to conduct smaller capability integration projects, as part of a holistic JCID capability integration team, without external sponsors if required.

- **Experimentation:** The Experimentation Section supports experimentation and

capability integration activities in close alignment with HQ SACT programme managers, capability developers, and the exercise community. JWC's training products need to keep step with evolving NATO warfare capabilities, as laid out in SACEUR's Annual Guidance on Education, Training, Exercises and Evaluation (the SAGE). Historically, JWC has been able to harness ACT's Experimental Programme of Work (EPOW) which represents NATO's "state-of-the-art" in capability development. Integration of these experiments into JWC exercises has exposed the Training Audience to new capabilities and has contributed to meeting priorities detailed in the SAGE.

In past years, JWC has integrated experiments examining counter-IED and "Attack the Network", various aspects of the Comprehensive Approach and Civil Emergency Planning into our exercises. JWC has also hosted and participated in experimentation focused on expanding our understanding of Knowledge Development and validating the Comprehensive Operations Planning Directive. The EPOW has gradually reduced in recent years, presenting JWC with a problem in meeting SAGE expectations, which has been partly remedied through JWC's Ca-

pability Integration Programme. However, the experimentation pendulum has started to swing back and CAPDEV's Operational Experimentation Branch has gathered support for an ambitious experimentation plan in exercise TRJE 15.

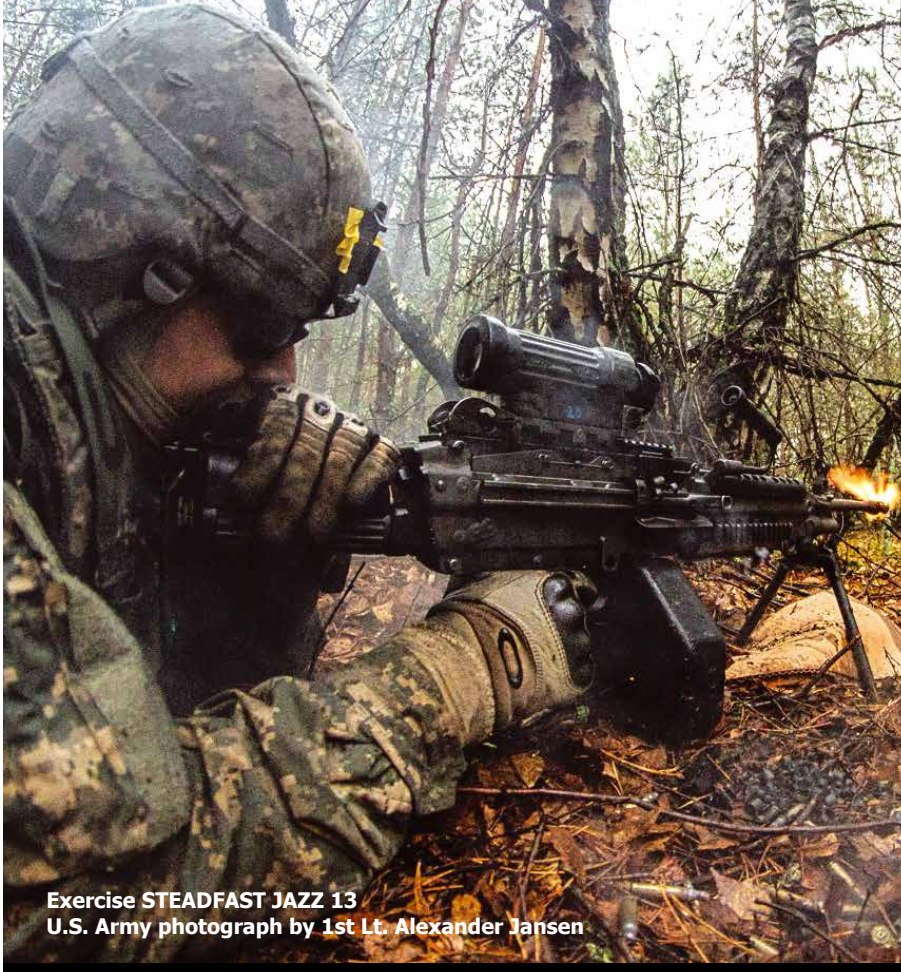
Within the CIECC construct for exercise TRJE 15, the Experimentation Section will act as an intermediary, representing experimentation interests to the exercise design team at JWC and representing exercise design interests to the experiment project teams. During execution, the CIECC will liaise closely with stakeholders to ensure that experiments do not compromise training objectives. Building off the interaction between JWC and HQ SACT in exercise TRJE 15 and the transformational intent of CFI, experimentation should continue to play a larger role in exercises during 2016 and beyond.

- **Lessons Learned:** The main task of the Lessons Learned Section is to continually increase JWC capability and capacity to improve those we train. This ongoing learning effect is a synergistic result of the JWC internal lessons learned process, collaboration with external organisations and the development of institutional and operational best practices. Lessons learned collaborators include every entity that we can reach, including the NATO Command Structure, the NATO Force Structure, other NATO entities, and NATO Allies and Partners. The lessons learned team collects and analyses data and observations from not only the JWC EXCON and Training Teams but also from the various Training Audiences. As part of the CIECC during exercises, the scope of the Lessons Learned Section includes but is not limited to the doctrine, experimentation and concepts initiatives being executed in the exercise.

- **Doctrine:** The Doctrine Section leads efforts in JWC to support doctrine development activities and it is the JWC interface with the wider NATO doctrine community. This Section represents the JWC at the Maritime, Land and Air Working Groups, and at the Allied Joint Operations Doctrine (AJOD) Working Group, whose role is to harmonise the 45 Allied Joint Publications (AJP). These engagements shape the direc-







Exercise STEADFAST JAZZ 13  
U.S. Army photograph by 1st Lt. Alexander Jansen

**"SHAPE and the Training Audiences must integrate transformation and development of new capabilities into exercise objectives and training requirements."**

tion received from HQ SACT for doctrinal integration in exercises. When conducting formal doctrine integration tasks in exercises, the Doctrine Section leads the development of the data collection plan and storyline that will stimulate use of the new doctrine. Additionally, the Doctrine Section works closely with the Joint Training Division SMEs and experts from across NATO to identify shortfalls in AJP, which can range from small but important points of detail (e.g. differing definitions of G-day) to total doctrinal voids (e.g. the current ab-

sence of specialist cyber doctrine). Through the CIECC, the Doctrine Section collects observations and generates reports for the AJOD Working Group and the wider doctrine community.

### **Delivering Joint Capability Integration**

The benefits of Joint Capability Integration in JWC can only be realised when each exercise stakeholder is proactive about transformation. SHAPE and the Training Audiences integrate transformation and

development of new capabilities into exercise objectives and training requirements. HQ SACT and the transformational hub led by CAPDEV drive the analysis of requirements and the development of solutions. The sum of interaction at the Bi-SC level in support of Joint Capability Integration initiatives sets the stage for successful inclusion and development of these initiatives in various venues. And similarly, the interaction between Divisions at JWC is critical to the successful execution of Joint Capability Integration initiatives. ✦



Major General Buehler discussing the exercise (TRJR 14) with Maritime Response Cell members. Photograph by JWC PAO.

(1) OSC: Officer Scheduling the Exercise; OCE: Officer Conducting the Exercise; ODE: Officer Directing the Exercise.

### **FURTHER READING**

For these related stories, visit [www.act.nato.int](http://www.act.nato.int)  
\* Innovation in CAPDEV Publication Series,  
<https://www.act.nato.int/publications>