

AIR-LAND INTEGRATION

Report Published 05 March 2020

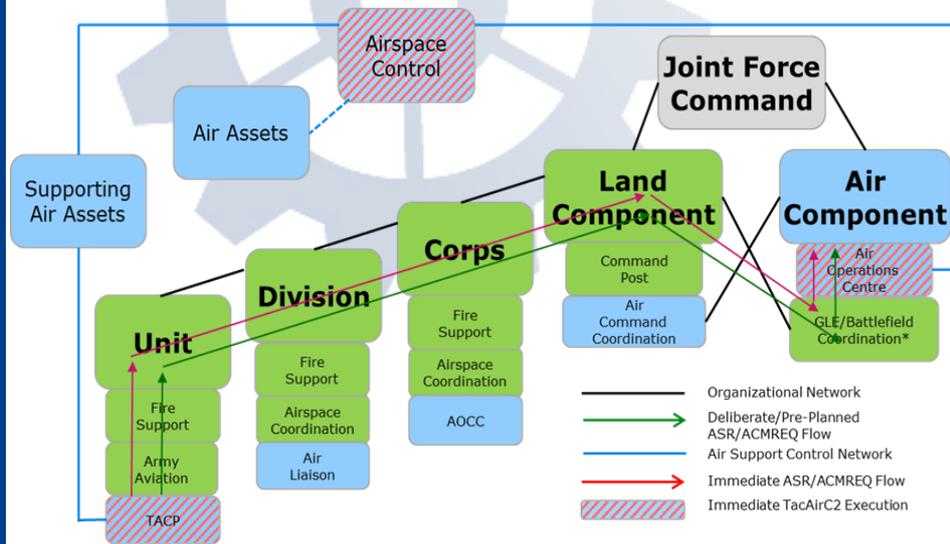
JALLC PROJECT FACTSHEET

Project Overview

The origins of Air-Land Integration (ALI) can be traced back to the First World War when aircraft were used to spot targets for artillery forces on the ground. Defined by the ALI community as the focused orchestration and application of the full range of Air and Land capabilities within a Joint Force to realize and enhance effects, the topic of ALI has always been subject to debate across all NATO Nations, Air and Land components.

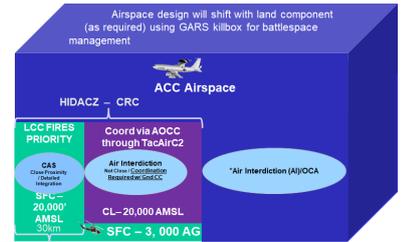
In particular, and more recently, the ALI community has reflected on the lessons from past conflicts with a view to determine how ALI can be optimized for future conflicts. At the heart of these debates is where and at what level in the military structure the function of Tactical Air Command and Control (TacAirC2) should be conducted to best coordinate and direct air support for land forces.

The topic of TacAirC2 has evolved with technology and experience but is it fit-for-purpose in the future operating environment? As an important aspect of the Alliance's warfighting capability, the JALLC was asked to analyse how NATO could optimize its TacAirC2 capability to support ALI across the full range of operations.



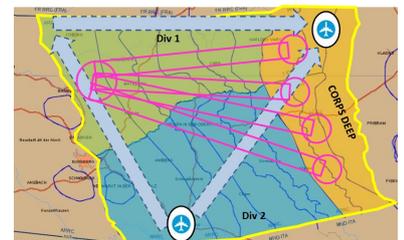
*Note: GLE supports air planning section and the battlefield coordination supports execution section.

NATO's Current Airspace Control Structure and Airspace Request Network



EAME19 Airspace Design (Ph3)

Exercise EAGLE METEOR 2019 was designed to test current doctrine feasibility. As part of the Exercise scenario, COM JFAC delegated authority to the Air Operations Coordination Centre (AOCC) to re-task, re-role, and re-direct air assets in support of Land operations.



Dynamic Air re-tasking



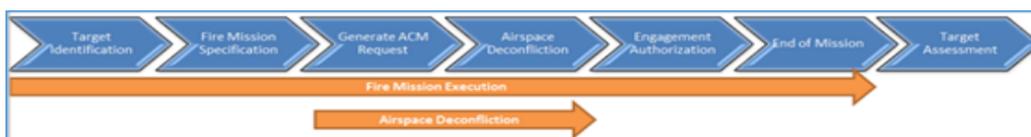


Optimizing the TacAirC2 Capability

The project team based their analysis on a variety of data extracted from sources including Final Exercise Reports, simulation studies and ALI-related policy documents. The team also attended Exercise EAGLE METEOR 2019, and hosted a workshop at the JALLC which was attended by 21 subject matter experts (SME).

The project team concluded that there is convincing evidence to suggest that NATO's current TacAirC2 capability could be optimized if it were extended down into NATO's highest Land warfighting echelon i.e. the Corps level. The report cites a number of reasons for doing so, including:

- It would set the conditions for the Corps to be delegated an increased volume of airspace where decisions can be made closer to the fight informed by increased situational awareness and understanding of the battlespace.
- The capability to integrate and deconflict fires and air assets within delegated portion of airspace would decrease the volume of deconfliction requests; this would reduce the processing burden on the JFAC, shorten the fire mission process and improve the efficiency of tactical execution.
- Efficiency drives tempo. A TacAirC2 capability at the Corps level would coordinate desired effects in a near real-time, collaborative manner.
- Increase resilience by providing an insurance that air and ground operations could continue within assigned airspace should JFAC HQ operations be disrupted and/or disabled.



Fire Mission Process based on fire mission data from a number of sources. The JALLC project team developed a simulation model to provide an indication of the time it might take to clear airspace, and also an indication of the number of airspace requests that might be generated in a large scale conflict.

Recommendations

The final report contains a number of recommendations including the need to create a governing body to oversee the development of an Operational Requirement Statement to define the requirements associated with the implementation of the TacAirC2 capability, the requirement for a multi-domain integration, and guidance on opportunities to further validate the need to adapt the TacAirC2 capability within NATO.

The report is classified and a copy can be requested by contacting the JALLC via email address provided opposite. and providing the required security credentials.

Project Team

LCL Rainer Braun
DEU F, Project Manager

Lieutenant Colonel Braun is a former Aviator and holds a Master's Degree of Science in Leadership. He joined the JALLC in 2017 as military analyst contributing to several JALLC analysis projects, and more recently as project manager. In 2017, he contributed to assess if NATO's Joint Theatre Level Simulation system is suitable to replicate an MJO+ scenario, and in 2018, he lead a team to identify challenges related to NATO's Lessons Learned capability.

LTC Gavril Metaxas
GRC A, Military Analyst

Ms. Katie Mauldin
USA NIC A-3, Senior Operational Research Analyst

Mr. Kyle Christensen
CAN NIC A-2, Civilian Analyst

Mr. David Noon
GBR NIC A-2, Civilian Analyst

Mr. Riccardo D'Ercole
ITA CIV, Research Assistant

If you are interested in this or any other JALLC Analysis product, please contact the JALLC.

JALLC

Phone: +351 21 771 7007/8/9
Fax: +351 21 771 7098
E-mail: jallc@jallc.nato.int
www.jallc.nato.int
Visit the Portal: <https://nllp.jallc.nato.int>

Avenida Tenente Martins
1500-589 Lisbon
Portugal

A proud member of Allied
Command Transformation

