



CIMIC in the Air Domain

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INTRODUCTION

Civil-military cooperation (CIMIC) is described in AJP 0.1 as part of the Joint Function Framework. As a Joint Function, CIMIC must be recognized in every domain and in all dimensions - virtual, cognitive, and physical. This publication aims to explain the relationship between CIMIC and the air domain, providing examples for clarification.

Air operations are characterised by altitude, speed, and reach. This means that ground-based obstacles do not restrict aircraft, but they can move quickly and operate at extensive ranges. This unique value of aviation capabilities makes our role in air operations significant. The air domain encompasses all airspace from ground level up to the level of the Karman line (100 km), where space begins.

Airspace is utilised by an enormous number of users, 24/7, with diverse capabilities, unhindered by constraints such as weather and range. Coordinating standard processes in airspace allocation and control is crucial due to this large number of users. This coordination becomes even more essential with the increased military need for airspace and the associated rise in take-offs and landings, noise production, and CO2 emissions. CIMIC in the air domain plays a vital role in understanding the impacts of any military constraints on airspace and how this could affect civil airspace utilization in peacetime and crisis and during extensive military operations across the globe.

Although CIMIC activities are commonly perceived as ground activity, the military's use of airspace can significantly impact the wider civil environment and its population. Civil air domain-related infrastructure and facilities, such as airports, air traffic control, communications, support and meteorological services, are essential in helping CIMIC personnel compile a comprehensive picture of the civil environment from an air (military) perspective.

THREATS AND DISRUPTIONS

Airspace has a large number of users. Commercial aircraft cross the airspace in all directions alongside all other variants of civil users (ranging from small drones to private aircraft, both rotary and fixed-wing) and have to fly fully coordinated (in peacetime) with the full spectrum of military air capabilities, such as UAVs, air transport and fast jets under well-developed processes. All users (both military and civilian) of the airspace must be coordinated and controlled to achieve priority, ensure safe operations, and avoid collisions that may result in potentially fatal incidents.



Inseparable and supporting air operations are a limited number of critical infrastructures, ranging from small-scale airfields to vast airports, supported by complex communications and control systems, all requiring significant levels of enablement from industry for support and maintenance. As civilian air capabilities are both limited in number and expensive, generating large-scale support from the civil market at short notice for military use will not be without issues and impacts. Furthermore, in a strategic incident, such as a natural disaster, the limited space and resources must be coordinated intelligently, and airspace processes must be adapted to maximise capacity in the affected region.

Civilian aircraft operating in any area where ground-to-air or air-to-air weapons or surface-launched (ballistic) missiles are being used need careful coordination with military operations to avoid accidental shoot down. This coordination should include but is not limited to, accurate flight plans, which are deconflicted with military operations and robust communication processes that can facilitate in-flight activities.

NEW TECHNOLOGY – NEW CHALLENGES

The possibilities for using drones are numerous and constantly changing. Commercial use of drones for making aerial recordings or delivering goods to places previously inaccessible or barely accessible, for example. While the military is looking for the operational use of drones and ways to intercept drones, the fire brigade uses drones to detect fires, rescue workers use drones to bring equipment to calamities, and the local police and emergency services use drones to conduct surveillance. Most non-military drone users do not have malicious intentions. However, some users use commercial drones for illegal surveillance, espionage, or the illegal delivery of weapons. In short, non-commercial drones are unlimited, both legally and illegally. From the perspective of military operations, the use of drones is a challenge in the area of de-confliction and security.

Military use of drones as a tactical weapon to attack and destroy critical infrastructure or on purpose attack civilian populations is a potential war crime under the Law Of Armed Conflict (LOAC) but is nevertheless used in the Ukraine war.

Another recent development that requires consideration is the development and use of long-range, hypersonic weapons to attack critical civilian infrastructure or military objectives. As defence against these types of weapons is both complex and challenging from a military perspective, using these weapons against critical civilian infrastructure and centres of the civilian population could significantly impact population cohesion and a nation's resilience.

CIMIC IN THE AIR DOMAIN

Civil-military cooperation (CIMIC) in the air domain focuses on understanding and enabling the interaction and collaboration between military air forces and civil actors across aviation activities. It includes integrating those civil factors and non-military actors connected to the air domain (e.g., governmental organisations, International Organizations, Host Nation Contractors and aviation agencies) into military planning processes.



Civil-military interaction (CMI) activities should enable deconfliction and prioritisation of airspace, information exchanging (security classification permitting), and, as a last resort, using military assets to support non-military actors. The enablement of the full range of interaction across the aviation spectrum is crucial in maintaining operational success during peace and conflict.

The joint function CIMIC can help assess the impact of the military presence in the Joint Operations Area, including economic, environmental, and security implications through the NATO CIMIC Assessment and Analysis Capability (NCAAC). It can also provide advice concerning Key Leader Engagements and coordination in contact with Host Nation representatives, International Organizations and Governmental Organizations. The Air Domain CIMIC organisation would contribute to the Joint Task Force air elements through the A9 branch.

During the targeting process, A9 will review the Prioritized Target List to assess the impact of operations on the civil infrastructure, the environment, and the human situation from a harm mitigation perspective. The goal is to reduce the military impact as reasonably possible, balanced against the need to meet the military objective.

Surface-based Air Defence systems can defend large areas against enemy missiles and attack aircraft. These systems will protect a prioritised mix of military and non-military assets within their operating footprint. During the planning and operational phases, CIMIC can assist with prioritising and integrating Air Missile Defence deployment via the Joint Defended Asset Working Group.

CONCLUSION

Non-military groups primarily operate in the air space, which significantly affects military planning and operations. To prepare for potential military actions in times of peace, crisis, and war, CIMIC (Civil-Military Cooperation) establishes the necessary conditions for engaging with relevant non-military groups. This is especially important considering the shared use of airspace, potential airspace closures, and the risks that air operations pose to non-military groups. It's essential to consider CIMIC as a collaborative function, not just at the operational level but also within individual military branches, such as the Air Force. This requires enabling and deploying existing staff elements for CIMIC analysis.

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