



THE EVOLVING AND ADAPTING AIR OPERATIONS CENTRE

On a balmy evening towards the end of RAAF Hornet operations over Iraq in 2003, the commander of our F/A-18 contingent was discussing the nature of the functions being performed by the Coalition Air Operations Centre with the Commanding Officer of a USAF F-15E squadron. The Eagle driver's words were insightful: "What we have is a very good fixed targeting system, with an appended time sensitive targeting cell. What we now need is priority on developing a very good time sensitive targeting system with an appended fixed targeting cell".

Since the coming of age of massed air power in World War II and the need to plan and task massed air missions, the United States Air Force has continually refined the way in which it plans, commands and executes air operations at the theatre level. Historically, this desire has been driven by the pursuit of the optimal means to plan, execute, and assess the effects of massed air operations against a spectrum of fixed targets, but it has been characterised by a relatively ad hoc approach to dealing with more mobile and fleeting targets. Recently however, the operational environments that have been encountered in Kosovo, Afghanistan, and Iraq have been influential in an urgent re-prioritisation of the focus of the AOC's functions. The traditional massed nature of the conventional enemy has adapted in the face of 'shock and awe', and the centres of gravity of their operations are not predominately fixed but increasingly mobile, fleeting and very hard to find. Therefore, the AOC has had to adapt and evolve considerably to get air power platforms to deliver the required effects on time.

Officially designated a weapon system in its own right in 1995, the Combined (CAOC) or Joint (JAOC) AOC has developed a 72 hour cycle that centrally collects the necessary Intelligence, Surveillance and Reconnaissance (ISR) information and after combining them with the Commanders intent—along with specified rules of engagement (ROE)—plans, executes and assesses the air campaign. The execution 'product' of this cycle is an Air Tasking Order (ATO) that effectively controls each day's air operations. Two other ATOs are always in various stages of production and staggered in parallel so that each day a new ATO controls all airborne theatre assets. Unity

of Command and the centralised control of all air assets allow the Air Component Commander (ACC) to allocate air assets to best effect, while exploiting the unique characteristics of air power through the facilitation of decentralised execution.

In Operation Iraqi Freedom, the CAOC performed to devastating effect against Saddam's conventional forces, efficiently locating



*Combined Air Operations Centre staff review the progress of **Tasmanex**.*

and destroying both fixed and easily identifiable mobile military targets. Baghdad's fixed defences were effectively annihilated even before coalition land forces massed for the final assault. From that time on, the nature of the challenge for the AOC changed significantly. As the war took on the character of an insurgency, the mission of the AOC changed from the need to construct a complex 2000-plus mission ATO to that of flexibly assigning far less air assets, invariably in direct support of land forces. Most importantly, it had to address the evolving challenge of getting its sensor-to-shooter timings to the minimum possible, to effectively target enemy combatants who were ambiguous, elusive

and fleeting. Both procedural and technological solutions had to be found to be effective against such time sensitive targets.

Much has already been written about the evolving nature of future warfare and the challenges it poses to all manners of war fighters. While it would be premature to sound the requiem for conventional war fighting—and hence the need for high end, complex, organisational excellence as embodied in the modern fixed targeting AOC—the challenge of the modern battlespace in which air power has to operate needs immediate and creative attention. Operations in Kosovo, Afghanistan, Iraq and also southern Lebanon typify the extent of the challenge. While it seems obvious that reducing the decision cycle is the key, it is critical to recognise an important complication; for a war fighter conducting operations in accordance with the Laws of Armed Conflict (LOAC) as laid down in the Geneva Convention, it is only acceptable to kill legitimate targets.

Targets are considered legitimate only after what can sometimes involve a complex and time consuming process. The decision to lethally neutralise a SAM site that has just shot at a friendly aircraft from an open paddock is straight forward when compared to responding against a group of two or three well-dressed men who have just launched a SA-18 from a hospital roof. The Israeli experience in southern Lebanon is particularly instructive. The improvised civilian truck-borne rocket launcher becomes a legitimate target as soon as it fires at Israel from a position at the end of a street. However, within the time of flight of a fighter jet's armament, it can rapidly become an undesirable target, because of collateral damage constraints and the possible political fall-out, as it quickly retreats inside a garage in a civilian dense area.

To be effective in such extreme situations, the AOC will need to streamline its sensor-to-shooter processes and simultaneously speed up its target legitimisation processes. The ability to conduct centralised execution from the AOC will need to be realised in a complex battlespace by combining in real-time the C4ISR resources and the appropriate level of commanders who are authorised to make tough and discretionary decisions (with a LOAC lawyer in close proximity). This is a slight variation of one of the more important tenets of air power employment, that of 'centralised command and

decentralised execution'. When necessary, control and execution will have to be intimately tied.

To meet the challenges of the future battlespace, the modern AOC must not only master the organisation and execution of massed air power, encompassing days of complex planning, but also prosecute time sensitive, legitimate targets within minutes of detection. Centralised control is essential to allow air power to shorten the sensor to shooter cycle in both of these scenarios effectively. However, the control of execution will need to be flexible enough to accommodate the evolving nature of targets throughout the future battlespace spectrum.

- *Asymmetric nature of recent air operations highlight the need to possess a targeting system that is time sensitive rather than designed to deal with fixed targets*
- *The key challenge for an AOC engaged in these operations is to reduce the decision cycle between recognising a fleeting target and engaging it*
- *In extreme situations, to reduce the time taken in establishing the legitimacy of a target, C4ISR resources will have to be combined with commanders—to centralise control and execution in real-time*

"Air Power is indivisible. If you split it up into compartments, you merely pull it to pieces and destroy its greatest asset—its flexibility."

Field Marshal Bernard Montgomery.

"There was no line of cleavage between tactical and strategic air forces. It was overall effort, uniting all types of aircraft, coordinated for maximum effect."

General Carl 'Tooey' Spaatz
CDR US Strategic Air Forces in Europe, 1944



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