PATHEINDER AIR POWER DEVELOPMENT CENTRE BULLETIN

Issue 44, May 2006

BATTLESPACE SUPERIORITY

Threats to peace and stability are constantly changing factors in the assessment of national security scenarios. Changes to these threats have been rapid in the past decade which has led to international volatility. Military forces around the world are now forced to operate in a dynamic environment that is not fully predictable and does not recognise geographic boundaries. The challenge, as ever, is for the military to gain the upper hand in the battlespace where governments have decided to employ military forces as part of security campaigns.

To respond to these challenges the Australian Defence Force must first gain an intimate understanding of the changing nature of threats and operating environment. An effective response requires the three Services to operate jointly and in a whole of government context. The current thrust is for the ADF to be able to function as a seamless force, enabled by networked knowledge, which delivers the desired effect at a time and place of our choice. Air power forms an integral and critical part of this process.

The primary aim of an air force should be to provide an effective tool for national security within the larger ambit of a National Effects Based Approach. Air power is capable of producing a very large spectrum of effects and capability development for air forces will be prioritised dependent on the effects with the greatest utility in the military response to the prevalent security situation. In the hierarchy of effects, battlespace superiority is of critical importance because it provides the necessary freedom of action required to generate effects necessary to achieve military and other national objectives at all levels of warfare.

Battlespace superiority by itself is not a new concept. Even a cursory study of the campaigns

of Alexander the Great, during the period 336–323 BC, gives a very clear indication of the awareness of battlespace superiority that existed at that time. Alexander conclusively won the Battle of Granicus (334 BC)—the first major battle that he fought against the Persian Empire—by ensuring that he retained battlespace superiority at all times by having superiority of information, command and control, and offensive action.



Mosaic of Alexander at Issus, 333BC

The basic elements that create the necessary effects to ensure battlespace superiority have not changed in the years after Alexander the Great— Intelligence, Surveillance and Reconnaissance (ISR), Command and Control (C2), and Engagement. It is only the process by which superiority in these elements is achieved that has changed in the last two thousand years. Technology has now reached a sophistication that permits near real-time information flow, thereby greatly enhancing the decision-making in a force projection scenario. The core of battlespace superiority is the speed with which correct decisions can be made, disseminated, feed-back obtained and further action initiated. ISR, C2 and Engagement are also the central elements that form the basis for networked forces with this process spread across the vertical

alignment of the Command and Control structure, starting from the grand strategic down to the tactical and vice versa.

The process of creating battlespace superiority is complex and involves a constant process of inputs and outputs being synthesised at different levels. To start with, three simultaneous actions take place—all oriented towards creating a knowledge base that can then be utilised to make the necessary decisions to ensure battlespace superiority.

- Surveillance sensors collect information which becomes one of the primary inputs to the creation of knowledge.
- Intelligence systems are used to distil the information to create adequate situational awareness of the level required or to request further surveillance/reconnaissance.
- Command and Control elements are employed to align the sensory inputs to the requirements of the strategic or tactical decision makers.

The knowledge that is created is used in a two-fold manner to create battlespace superiority; firstly to create information products that could either be time-sensitive or have long-term strategic implication, and secondly as the primary input for battlespace management. In the arena of battlespace management, C2 assets assume primary importance and determine the course of action to be adopted. Appropriate battlespace management produces battlespace effects that are desired to further the overall strategy.

Battlespace superiority is a critical requirement in any military operation and the elements that form its basis—ISR, C2 and Engagement—will have to be very carefully protected. Any loss or degradation of these elements would have a cascading effect on the network possibly to a level

where effective response and performance may no longer be possible. Thus force protection becomes a key element in the planning and execution of a campaign for battlespace superiority.

Battlespace superiority is a requisite for the efficient functioning of a military force. In order to analyse the full impact of battlespace superiority in the outcome of any conflict, Pathfinder will examine the concept from a historical, contemporary and future view point in the next three issues. In combination, they will provide a holistic appraisal of the background, need and methodology by which battlespace superiority can be obtained and leveraged for maximum advantage to one's own interests. This is necessary because the continuous changes that take place in the theatre of operations cannot be fully anticipated and it is only exhaustive analysis of all aspects of the conduct of war that will provide the background to adapt in a dynamic environment. Only the capability of a force to adapt at a very fast rate to emergent challenges while continuing to maintain battlespace superiority will ensure victory.

- Battlespace superiority—not a new concept
- ISR, C2 and Engagement form the basic elements
- Creating a networked knowledge base—primary necessity

Every art has its rules and maxims. One must study them: theory facilitates practice. The lifetime of one man is not enough to enable him to acquire perfect knowledge and experience. Theory helps to supplement it.

- Frederick the Great



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