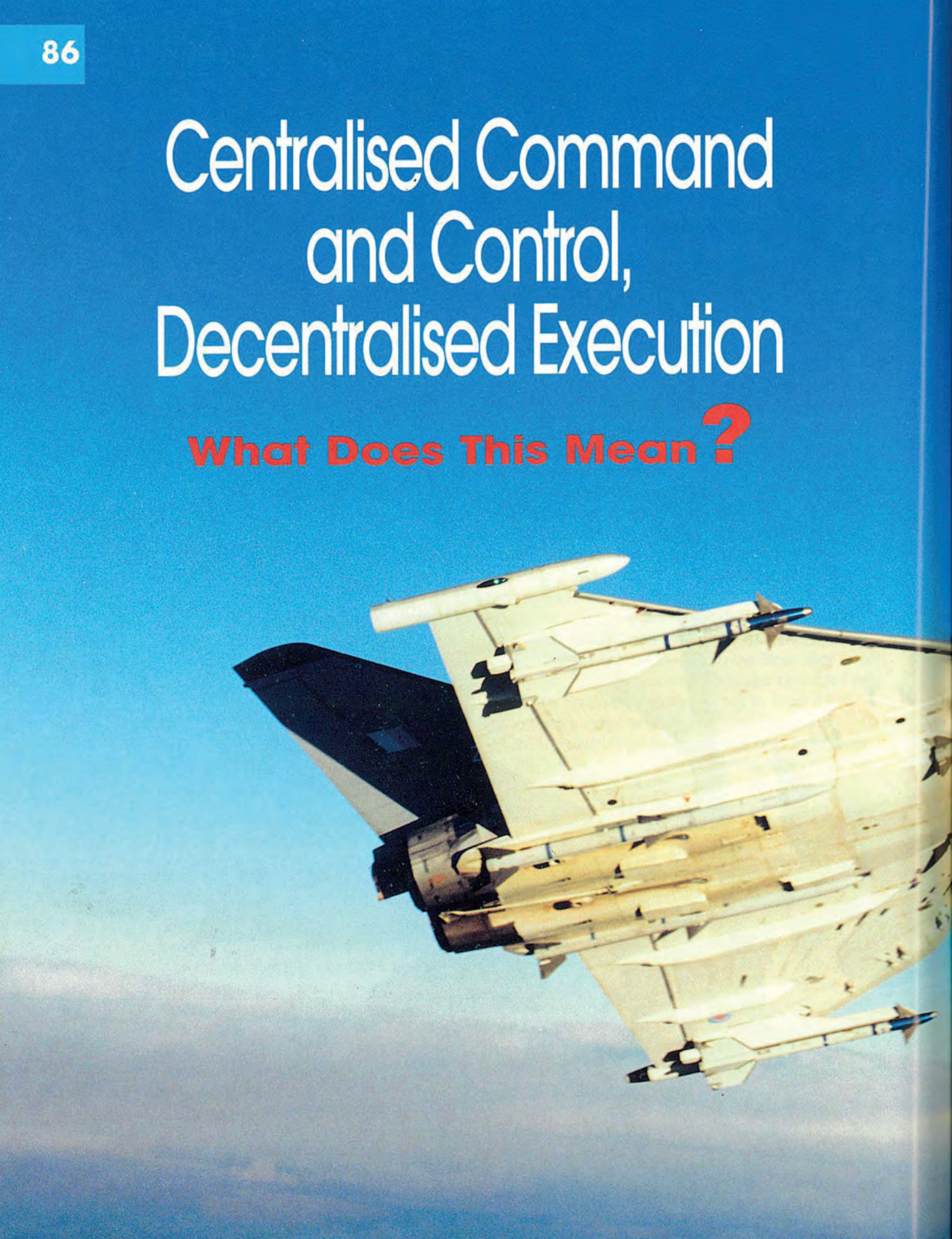
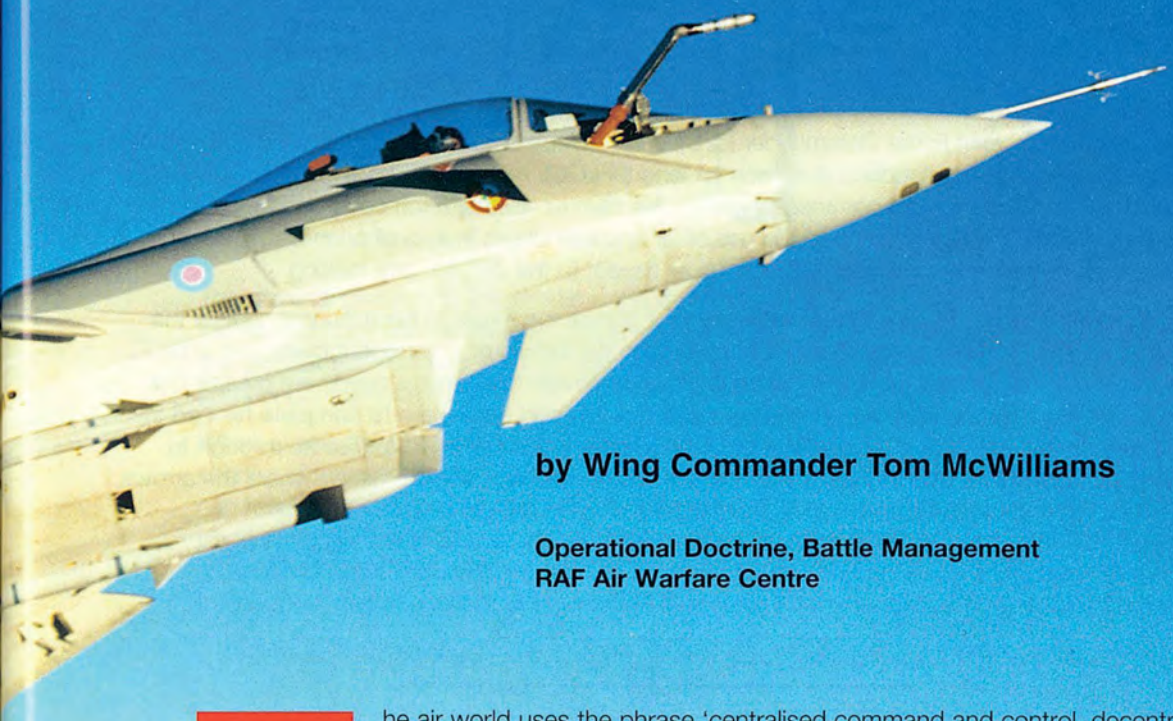
Centralised Command and Control, Decentralised Execution

What Does This Mean?





by Wing Commander Tom McWilliams

Operational Doctrine, Battle Management
RAF Air Warfare Centre

The air world uses the phrase 'centralised command and control, decentralised execution' so often that it apparently needs no explanation. Similarly, the introduction of computer-aided planning and tasking systems are essential if we are to become more efficient and effective in the employment of air power. What is the truth behind these two statements? Are they two air power 'truisms' to be accepted as gospel, or should we take the time to examine and question them? Each time the Air Tasking Cycle is examined, deficiencies in command, control or tasking are blamed on technology. It is common belief that eventually technology improvements will overcome any deficiencies and that the integration of all command systems will result in a more efficient and productive process for the employment of air power. Is this really the case? Or are we mesmerised by technology, and allowing it to dictate the methods by which we plan, task and execute our operational art?

Unfortunately, although the phrase 'centralised command and control, decentralised execution' trips off the tongue, the two ideas expressed either side of the comma are quite separate. Taking the easy part first, centralised command and control is easier to describe in reverse. What it is not is shown in Figure 1.

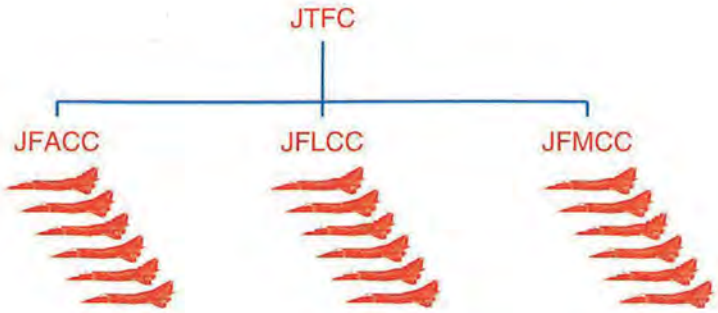


Figure 1

In this example a Joint Force Commander (JFC) is the theatre commander of three individual Joint Force Component Commanders, one each for land (JFLCC), maritime (JFMCC), and air (JFACC). In this model, each component commander 'owns' his own air assets. Each component commander applies individual Service doctrine to the use of air and formulates individual priorities. This results in component commanders offering only surplus air assets to the JFC for joint tasking.

Using a defensive model as an illustration, Figure 2 shows the threat to be strongest against the JFMCC and least towards the JFACC. Depending on the individual component plans, the JFMCC may have difficulty convincing his fellow component commanders that his needs are greater than theirs. He may even be unable to encourage sufficient support from them to complete his part in the joint campaign. In this case, the enemy could overwhelm the JFMCC and strike through to defeat the overall joint plan Figure 3. This model remains true for offensive action where the arrows would be reversed to indicate the main thrust of the JFC's plan.

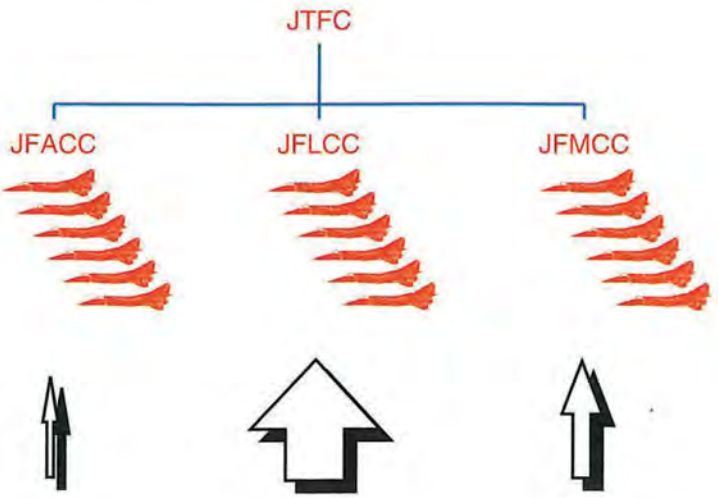


Figure 2

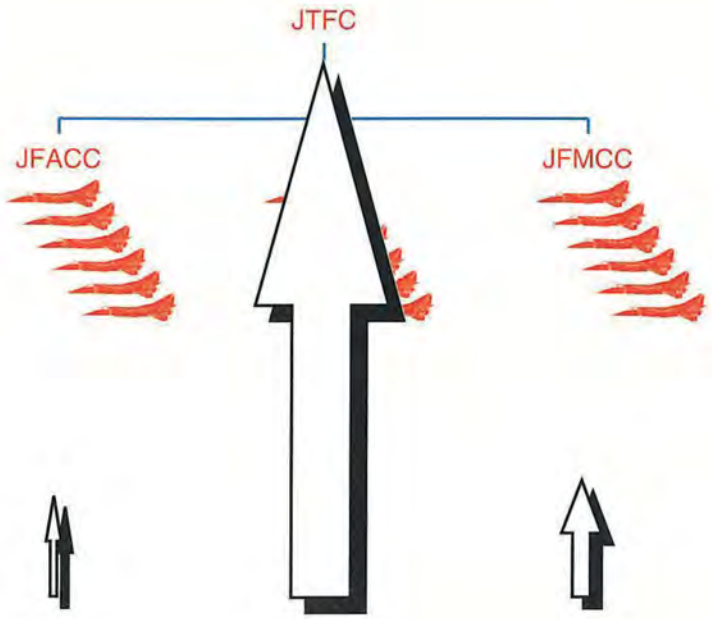


Figure 3

The greatest problem in this model is the question of 'ownership'. Individual Services have formulated doctrine and invested funds and training to build up their capability. Understandably, component commanders may be reluctant to give up what they consider organic assets to another component commander.

When assets are plentiful, the JFC may be able to circumvent the problem by geographic or time sharing of target sets and tasks. In reality, the availability of air assets is limited (for 'air assets' we can read practically any fielded asset or capability) and deconfliction through time or space is not good enough. The JFC must find another method to make maximum use of his fielded forces; the subject of 'ownership' must be tackled. In other words, the command and control of the fielded forces must rest at a level higher than the component commanders. This model is illustrated in Figure 4.

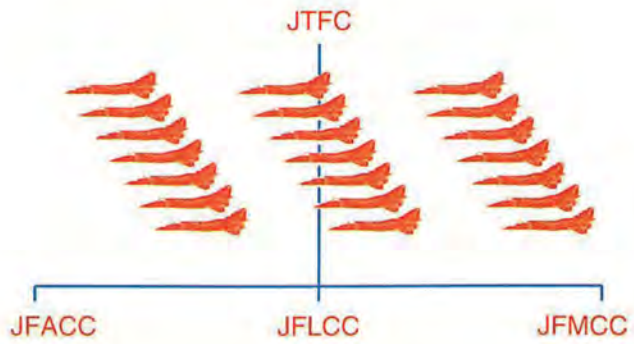


Figure 4

Here we see that rather than individual component commanders retaining 'ownership' of their forces, all fielded forces come under the 'ownership' of the theatre commander, the JFC. Of course the JFC will be fully aware of the critical role component commanders' air can play in the various supporting operations to the joint plan. Indeed, some air assets are specifically oriented towards the support of another component commander such as, maritime patrol aircraft, close air support, or support helicopters. He must weigh up the risks of denying an individual component commander the use of organic air power against the advantages of integrating them into another component commander's operation.

Using the same threat as before, Figure 5 shows the outcome of the JFC's apportionment of forces. Here he assesses the risks and employs the optimum forces to meet and overcome the threat. In an effort to simplify the potentially complex command and control arrangements that could occur in this model, the doctrine of supported and the supporting commander has been introduced. In this way the fielded air assets (or other forces) need not be taken away from the individual component commanders but supporting component commanders must make such assets available to the supported component commander as tasked. THIS IS CENTRALISED COMMAND AND CONTROL.

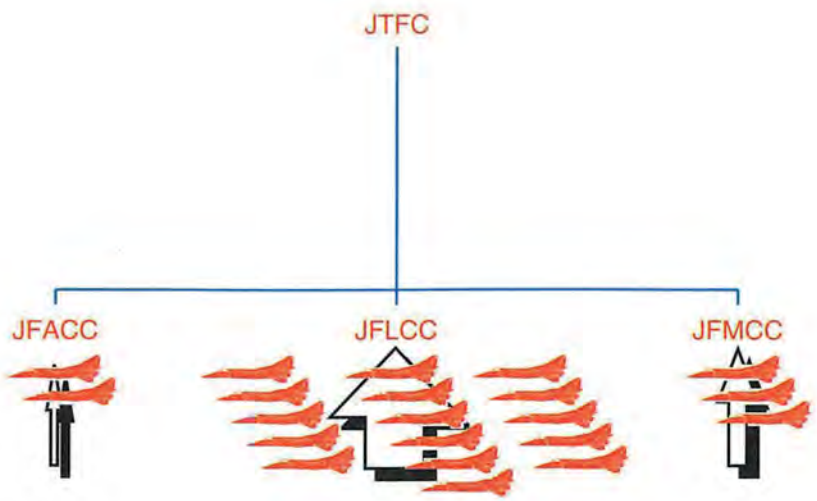


Figure 5

Note: The above example deliberately takes the JFACC to be the component commander facing the least direct threat. In contrast to the more common scenario of the JFACC controlling all the air, the model demonstrates that it is the co-ordination of all theatre air that is paramount to the success of the joint campaign. 'Ownership' is no longer an issue, although admittedly, the force of individual component commanders' arguments is. However, this is the strength of the JFC concept and centralised command and control. The JFC sits above the component-level and must consider the theatre objectives at all times.

Moving onto the subject of 'decentralised execution'; this is a more difficult concept to grasp. The Germans employ 'Auftragtaktik', the British Army 'mission command'. Under this concept, subordinate commanders are fully aware of their superior commanders' intentions two levels up, they are briefed on where they fit into the overall plan, and orders are issued in such a manner that tasks are qualified by explanatory statements. For example, 'you are to delay and neutralise the armoured threat north of point Bravo in order to protect the Division's left flank.' When couched in this manner, and taken in the context of the superior commander's scheme of manoeuvre, the subordinate commander has the authority to ignore the task of delaying and neutralising the specified armoured threat if he discovers a more direct method of protecting the Division's left flank.

Prior to the introduction of computerised tasking systems, Air Tasking Orders were less specific than they have become today. It was common for squadrons or wings to be tasked with 'closing an airfield for 48 hours' or 'interdicting a second echelon force in the rear area'. Whereas these tasks lack clear measures of merit (in order to 'prevent more than 15% enemy offensive air activity' or 'stop V Corps from joining up with forward forces'), the 'what' was delegated to the subordinate formation but not the 'how'. Nowadays, the tasking given in the Air Tasking Order is often so specific that subordinate units may have minimal input into the execution of the task. It is common for the required weapon loads, individual aircraft aiming points and basic route and timing details to be specified in the Air Tasking Order. Even the combat air support requirements and co-ordination are decided at component commander tasking level.

In plain terms, if a specific 4-ship of Offensive Support aircraft is tasked against a bridge, it is unlikely that the Air Tasking Order will provide amplifying advice on the reason why that particular bridge is to be destroyed. Even if such advice were given, eg: 'in order to delay the advance of armoured column Alpha', it would be a brave leader who calls off the attack because the column appeared to have already crossed the bridge. It would be even more unlikely that the leader would change the attack away from the bridge and onto the armoured column as the column slowed down and crowded around the choke point short of the bridge. There are practical reasons for this. The aircraft may not have suitable weapons loads to change from the bridge to the armoured column. More importantly, other than to decide on the validity of the attack (eg ROE and target acquisition) the crew does not have the ability to monitor and assess the ground situation in any detail.

Current plans to enhance the computerised planning and tasking systems will further flatten the command and control chain of air power. Air Power theorists now envisage 'expert systems' that will enable commanders to make use of (near) real-time imagery and sensor information to target airborne systems against very specific aiming points. Add to this the possibility of the distribution of the complete fused intelligence picture to cockpits and the prospect of employing air power efficiently and effectively appears to be a respectable goal. Unfortunately, it is not an exaggeration to state that very soon the capability will exist for senior commanders to communicate directly with airborne crews and take personal control of the mission from their desks! But it is, perhaps, an exaggeration to expect crews to conduct their missions under hostile conditions and keep abreast of the increasingly complex ground and air situations whilst inbound to their targets.

The use of 'unfortunately' above is deliberate. The great advantage of 'decentralised execution' is that the different levels of authority can concentrate on their own tasks and not become distracted by those of their subordinates. The JFC who takes too great an interest in the actions of 'mission ABC 1234' or 'B platoon' is, possibly, not doing his job. There are occasions when the success of 'mission ABC 1234' may be of specific interest to the commander. It may be the single tactical act of the campaign with strategic consequence. If this were the case, perhaps the closer the commander is to the action, the better.

The danger we face is that subordinates will not learn to take the responsibility for their decisions. This reliance on superior authority for decision-making makes for an extremely inflexible and inefficient organisation. Our trust in the ability of our people to act on their own initiative and the complete fabric of our command and control structure is at risk. In other words, in the shorter-term, we are in danger of replacing a system of delegation and empowerment that is both proven and has stood the test of time with a system that is inherently flawed. A system that in the longer-term is not self-sustaining, that has the potential to cease to function through erosion of decision-making experience.

It is easy to pick holes in this argument. Nonetheless, by exploring such extremes it is possible to focus on the real point of discussion. Deficiencies in the centralised command, control and decentralised execution of air power are neither the fault of, nor will the solution be solved by, technology. The faults and answers lie with application of technology and information systems to our command, control and tasking system. Smart technology will do little in isolation but the integration of such technology with a smart and correctly balanced command structure may.

As shown in Figure 6, initiative equals time. The secret of success is to stay inside the enemy's decision-making cycle. When we have the initiative and are preparing the enemy for a ground offensive, we can plan a well co-ordinated intricate tasking order that makes best use of scarce assets well in advance of 48 hours. We have the time and capacity to plan the most complex of plans centrally. When the balance of initiative shifts in favour of the enemy, the picture is very different. Even when our communications are intact, if we continue to plan every sortie in great detail, we will find it practically impossible to fight our way inside the enemy's decision-making cycle. The detailed lengthy planning cycle will become a liability.

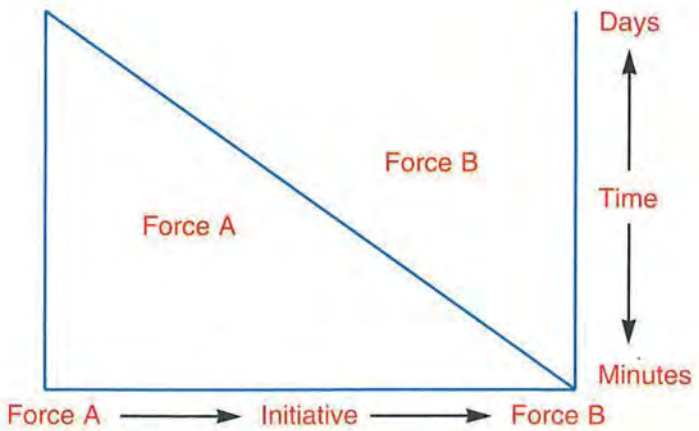


Figure 6

The commander must find the way to make time, to gain the initiative. One way is to be less detailed in the Air Tasking Order. In this scenario, the commander takes the gamble to relax his immediate staff's high degree of control over his air assets and devolve as many functions as possible. In this situation, the Air Tasking Order may contain only skeletal information but include explanatory narrative to compensate for the lack of detail. In some circumstances, it may be to the commander's advantage to exercise mission command; to rely on subordinate units to use their knowledge and experience to play a greater part in the planning of the air war. In other words, the JFACC must issue missions not tasks to fielded forces.

Is this possible? Do computerised planning and tasking systems allow this? The answer is yes. However, just because we can, and others do, does not mean that we must. Air is different from the other environments. History and experience has proven that the command and control of air is best held at the highest practicable level. But the simple decentralisation of execution is not mission command. The degree of decentralisation and the employment of mission command are tools at the commander's disposal. It is part of his operational art. The challenge is to be unpredictable and more effective than the opponent.