

# C4I<sup>2</sup>S<sup>3</sup>R<sup>5</sup>?

## With Command and Control, Nothing Else Matters.

# What We Really Need is Leadership

In the beginning, there was “Command.” *Command...* as in being in charge of something. *Command:* as in having authority over... something, whatever the nature of, the size, or the strength that something is!

*Command begets Control:* the power to influence behaviour or the course of events to achieve... something.

In a military context, an individual or group in a position of command is viewed as having the authority to exercise control over something, to do... something!

Does anything else really matter in the context of Command and Control? Where the rubber hits the road, probably not. Do Communications? Computers? Networks? Intelligence? Surveillance? Reconnaissance? Perhaps.

But what happens when another “C” or an “I” or an “S” or an “R” pops up? C4; I squared; S cubed; R to the fifth? We could be in for some big trouble. Conceivably, our ability to obfuscate an issue that is inherently simplistic with acronymic idiocracy, technocracy and operational presumptuous lunacy will lead us down a slippery slope of technological confusion at considerable expense in resources and time.

Today’s concept of Command and Control, C2, and its corollaries in the other C2 (Communications and Computers) and ISR (Intelligence, Surveillance and Reconnaissance) and all of their associated

complexities, reminds one of the definition of a consultant: someone who is adept at making the simple... complex.

Unfortunately it does not end there. Those of us at the “maritime C4ISR requirements coalface,” were just beginning to come to grips in making sense out of all of this, when along comes additional fuzzification and obfuscation in the form of Information Management and, by golly, Knowledge Management. Some of us have relegated these terms alongside the other managements such as: Total Quality Management; Change Management; Content Management; Transformation Management; Talent Management; Performance Management; and on and on she goes. Oh, the horror of it all. It is becoming an MBA’s dream gone awry. It is getting to the point of having so much management that we are acutely short of leadership to do what really counts. That is: Command and Control, and the ability in making decisions that really count for.... something.

### Command and Control

Command and Control (C2) is the central core of any operation, be it business, military, private or public sector oriented. In the military sense C2 rests with a Commander’s functionality, not application, by which Commanders command

and control personnel and materiel thereby coordinating military activity and action, behaviour or events in time and space in the achievement of the aim. Full stop. C2 in and of itself has nothing to do with communications, although communications is an extremely important element and could be considered the cornerstone of the foundation on which Command and Control rests. It is not Intelligence, although having some intelligence may help! It is not surveillance and it is not reconnaissance. It is not a tool, a computer, an application, a system, or a network. Command and Control is of a higher plane than Information Management or of Knowledge Management – it is

not a management at all. It is about leading and leadership. It is about commanding, taking charge, controlling resources, coordinating action and making those important decisions that will ultimately determine the success or failure of an operation.

Command and Control is of the human realm of activity: not some digitized parlance inherent within an information system or a so-called Command and Control system. In some respects the technocrats, the obfuscators, have led us down the garden path in having us believe that the more digital bits and bytes of information we have will allow us all to formulate and mold our underlying obsessions within our collective mindsets toward a Command and Control technical nirvana. C2 hogwash!

### C2: Understanding and Cognition

The function of Command and Control has more to do with intangibles such as understanding and cognition: understanding of the operational environment and being cognizant of circumstances and events as they develop and arise. In other words Command and Control is dependent upon a Commander’s understanding of the operational environment and having a solid grasp of situational awareness

when operating in it. "It" being the strategic, operational and / or tactical domain. Only then can good decisions be made. Indeed, it has taken an economist to identify one of the basic fundamentals of C2.

Thomas Sargent, in his 1993 book, *Bounded Rationality in Macroeconomics*, suggests that good decisions are normally made when the decision maker can rationalize his or her decisions in a commonly understood environment: an environment that is understood by all stakeholders.

A commonly understood environment may be the key variable in the decision-making process and ultimately C2. A commonly understood operational environment will contribute to the Commander's sense of what is happening around him or her and will be a reflection of the Commander's intent such that unity of effort in the execution of operations will achieve the aim. This concept is more comprehensive than the simple verbal or written expression of a Commander's decision. It begins with the Commander's vision of how the desired end-state is to be achieved – his or her intent – and how that vision is interpreted and acted upon throughout a force. In other words, C2 equates to vision, to leadership and the ability to lead.

## Common Operating Picture

And what about all of the COPs out there? More obfuscation! C4ISR doctrine has it that the Common Operational Picture (COP) is a metaphor for representing the operational environment, and consists quite simply (not really simply) of a synthesis of all recognized warfare pictures for a given Commander's area of interest. Historically, a distinction has been drawn between situation maps or displays at various echelons of command (Local Tactical Picture, Force or Area Picture and Wide Area Picture, Recognized Maritime Picture, etc). This is considered a redundant approach that only confuses the issue.

A COP, by any other name, is still a COP. What may change is the COP's nature and its focus – be it Tactical, Operational, Strategic; Maritime, Air, Land or Joint. The COP is *the* picture that is common to all participating warfighters, all of the stakeholders who are involved in a particular operation within a specific domain. In the long run the COP

is relevant to the decisions required of individual Commanders throughout the chain of command and is tailored, scaled and managed to each individual Commander's warfighting needs and requirements through intelligent information collection and analysis (ISR), display, dissemination and exchange – in other words, good Information Management. The information acquired through best practices (another redundant term) is a determinant for the development, maintenance and integrity of the COP and will facilitate a Commander's ability to share and transfer knowledge through his or her intentions. Information management however ends at the COP. Knowledge then takes centre stage.

## Knowledge

It is essential for those who are in a position to command and for his or her subordinate Commanders to have a shared knowledge and understanding of the operational environment and the events as they are occurring in the environment.

A good COP will help. But achieving this is an inherently complex activity. As a process, it begins by rendering, by both automated and manual methods, huge amounts of raw data into information and displaying it by various means for the Commander's use, such as managing information. However, it finishes in the mind of the Commander and his or her Subordinate Commanders and involves visualizing the current state of friendly and enemy forces, and the future force relationships that must exist to accomplish the mission: in other words, cause and effect. To accomplish this in the face of varying degrees of risk and uncertainty requires competency, which can only be achieved through experience, practice, lessons learned, education, training, intuition and instincts that have been developed over many years. In other words knowledge!

The domain of knowledge and its management, if it truly exists as a management, lies beyond the COP in the individual and collective minds of the Commander and his Subordinate Warfare Commanders up to the point where good decisions can be made but in an environment that is understood and common to all. Only then will Command and Control functionality really materialize.

## Situational Awareness

Situational awareness could be defined as a shared understanding of the Principal Warfare Commander and his or her Subordinate Warfare Commander's intent in light of the events as they are developing and occurring in the operational environment. This understanding will be dependent upon and facilitated by the quality of the information received and how it is displayed and analyzed: i.e., the integrity of the COP.

Ideally, the COP will accurately reflect what is happening in the operational environment. An understanding of the operational environment and a clear perspective with respect to situational awareness are the essential determinants for Command to exercise Command and Control. Why? Because they will impart specific rules of engagement for the decision maker on how to behave and act in different situations as they arise within a known contextual framework. A good grasp of situational awareness and subsequent action are also highly dependent upon the Commander's experience, knowledge of the environment and competency when operating in it.

## Conclusion

Communications, Computers, Intelligence, Surveillance and Reconnaissance are extremely important and may be C2's interdependencies but they are not C2. C2 stands alone. C2 should never be used in the same breath as communications, computers and networks, intelligence, surveillance and reconnaissance.

The sooner we dissect the C4ISR acronym and separate its elements the clearer the picture becomes. And let's not further confuse the issue by throwing around a lot of "managements."

These terms, concepts, management disciplines or whatever one wants to call them play a subordinate supporting role to that.....something that we want to achieve. Because, where the C2 rubber hits the road, nothing else really matters. **FL**



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