

Case Study:**Network Centric Warfare in the U.S. Navy's Fifth Fleet****Web-Supported Operational Level Command and Control in Operation Enduring Freedom**

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This case study examines the employment of Network Centric Warfare (NCW) systems and practices in the U.S. Fifth Fleet's Commander Task Force Fifty (CTF-50). The staff and commander of CTF-50, embarked on the nuclear aircraft carrier USS Carl Vinson (CVN 70), led a coalition force of 59 ships in combat operations against Afghanistan during the execution of Operation Enduring Freedom (OEF). The task force adopted a number of networking and collaboration tools that had significant effects on how CTF-50 was able to plan and execute missions in the Arabian Gulf and Afghanistan. This case study is of significant value in the investigation of Network Centric Warfare theory and practice in that it is one of the first studies of a staff at the operational level of war. Additionally, considerable attention is given to the conditions and climate that made CTF-50's implementation of NCW tools successful. As such, it expands on the social domain of NCW theory.

This case study draws on NCW, technology adoption, decision-making and human communication theories to examine and explain the behavior of NCW system users. Specifically, CTF-50 experienced improvements in breadth and depth of information dissemination, situation awareness, and speed of command as predicted by NCW theory. The research team also found evidence of self-synchronization of forces that would not have been possible without these tools. The sum total of the application of NCW tools and procedures was a marked improvement in flexibility and planning that enhanced mission accomplishment.

In addition to the focused findings with respect to NCW, the researchers also explored the social and leadership conditions set by CTF-50 that allowed for success with the NCW tools and techniques where other implementations had failed. In particular, the leadership of the task force (1) selected simple tools that could be quickly mastered, (2) rewarded frequent use of NCW systems up and down the chain of command, (3) deemphasized redundant legacy systems and practices that didn't support NCW operations, and (4) delegated responsibility for information to lower levels. The combined effect of these actions was a widespread acceptance of the tools and a considerable amount of innovation among the system users.