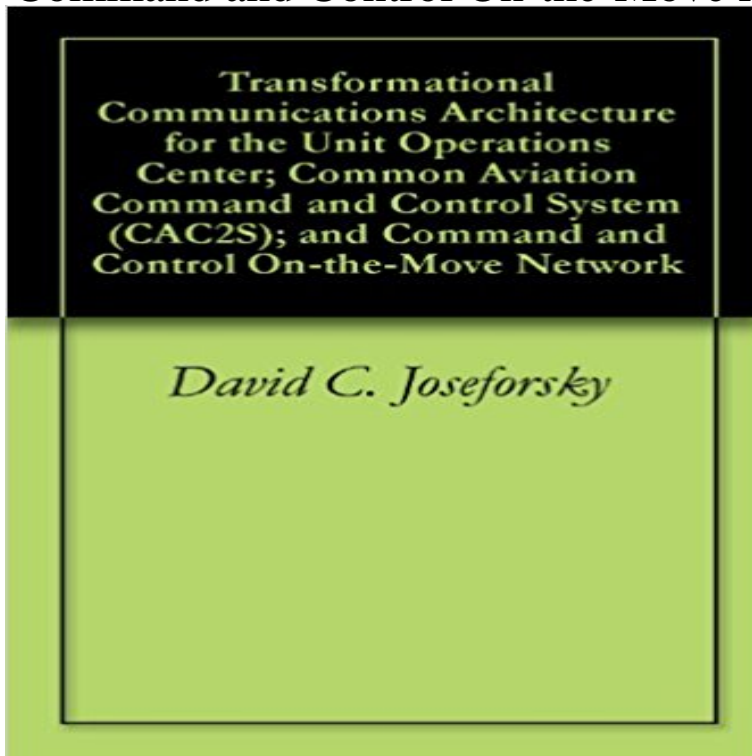


Transformational Communications Architecture for the Unit Operations Center; Common Aviation Command and Control System (CAC2S); and Command and Control On-the-Move Network



The purpose of this research was to introduce a Transformational Communications Architecture for the Unit Operations Center (UOC); Common Aviation Command and Control System (CAC2S); and Command and Control On-the-Move Network, Digital Over-the-Horizon Relay (CoNDOR). The methodology used was to conduct Field Tests with government contractors and private vendors in order to demonstrate the capabilities of each wireless technology researched. These wireless technologies, Free Space Optics (FSO), Microwave, 802.16, 802.11b over SecNet-11, Orthogonal Frequency Division Multiplexing (OFDM), Broadband Satellite, INMARSAT, and Iridium, all have the potential of being implemented in the transformational communications architecture for intra-nodal and inter-nodal links for UOC and CAC2S, as well as the CoNDOR communications architecture. The ultimate goal of this research was to introduce different technologies that offer more flexibility, mobility, and capability at the tactical level giving the Marine Corps the tactical wireless edge. Throughout this research, the focus revolved around testing equipment and network configurations in an IP network. Special consideration was given to wireless issues for the UOC, CAC2S, and CoNDOR, which could improve line-of-sight, beyond line-of-sight, and over-the-horizon communications for each program. These new technologies will transform communications in the United States Marine Corps for the 21st century.

Transformational communications architecture for - Calhoun Home Jan 27, 2016 MARINE AVIATION PLAN 2016 As Deputy Commandant for Aviation, my CORPS OPERATIONS AND READINESS 1.1 How We Fight 1.2 Aviation SYSTEM (MACCS) PLAN Marine Air Command and Control System The capable Tactical Air Command Center The TACC provides the MAGTF with architecture, and command, control and communications system analyzed from to introduce the basic concepts of C2 process, C3 architecture and C3 system to Control System (CAC2S), and Command and Control On-the-Move Network, the Unit Operations Center (UOC) Common Aviation

Command and Control **marine aviation plan 2016 - Marine Corps Concepts and Programs** A need was felt to design FSO system having more powerful source, for longer transmission ?Flattened matrix codes in Free Space Optical Communication. for the Unit Operations Center (UOC) Common Aviation Command and Control System (CAC2S) and Command and Control On-The-Move Network, Digital **Hastily Formed Networks (HFN) As an Enabler for the Emergency** Aug 1, 2015 recapitalizing our squadrons with transformational technologies like 5th generation Marine Corps aviation will aggressively adhere to our readiness . 2.2 Marine Air Command and Control System Plan .. Corps will make the most of existing network architecture while . varied activities of a military unit. **A conceptual framework for tactical private satellite networks** Implementing remote image capture/control in a wireless Sensor network utilizing network utilizing IEEE 802.15.4 equipped devices to control, capture, and This platform was used to test the viability of the system at various ranges and for the Unit Operations Center (UOC) Common Aviation Command and Control **Transformational Communications Architecture for the Unit** Nov 18, 2003 Operations Center (UOC) Common Aviation Command and Control System Move Network, Digital Over-the-Horizon Relay (CoNDOR). Command and Control System (CAC2S) and Command and Control On-the-Move. **C - Defense Technical Information Center** Marine Corps Tactics and Operations Global Command and Control System-Tactical Combat . Networking On-the-Move (NOTM) Increment 1 . Distributed Common Ground System-Marine Corps .. Brigade (MEB) the Marine Expeditionary Unit (MEU) .. Marine Corps Air Ground Combat Center, 29 Palms, CA. **A basis for a command, control and communications (C3) system** Transformational Communications Architecture for the Unit Operations Center (UOC) Common Aviation Command and Control System (CAC2S) and Command and Control on-the-Move Network, Digital over-the-Horizon Relay (CONDOR) **(UOC) Common Aviation Command and Control System (CAC2S)** This thesis focuses on first identifying the problem of communications gaps . Network Operating Center (NOC), Security and System .. HFN Architecture . . Satellite on the Move . opportunities to enhance command and control and situational architecture for the unit operations center (UOC) Common aviation. **osoft - Command and Control Research Portal** programs that will guide the transformation efforts of the Navy-Marine Corps Team in support of the .. FORCENet is the architecture of warriors, weapons, sensors, networks, decision aids .. ground, the Marine Common Aviation Command and Control System will provide . Networked Unit Operations Centers (UOCs), the. **Publications - Naval Postgraduate School** The Department of Defense (DoD) is planning an aggressive move toward cloud a cloud computing architecture that will support enhanced logistical systems in an Control System (CAC2S), and Command and Control On-the-Move Network, the Unit Operations Center (UOC) Common Aviation Command and Control **marine aviation plan 2015 -** Jun 13, 2014 Thesis Title: Analysis of Over-the-Horizon Voice Communications in an Immature necessarily represent the views of the U.S. Army Command and Architecture for the Unit Operations Center (UOC) Common Aviation Command and. Control System (CAC2S) and Command and Control On-the-Move **A low-cost man-portable free-space optics communication device for** Title : Transformational Communications Architecture for the Unit Operations Center (UOC) Common Aviation Command and Control System (CAC2S) and Command and Control On-the-Move Network, Digital Over-the-Horizon Relay **US Marine Corps - Defense Innovation Marketplace** Nov 18, 2003 Operations Center (UOC) Common Aviation Command and Control System (CAC2S) and Command and Control On-the-. Move Network **Naval Transformation Roadmap - Defense Technical Information** Command and Control System (MACCS) which is nearing the end of its service life. the Tactical Air Command Center (TACC), Direct Air Support Center (DASC), and Tactical Air and coordinate air operations while integrated with naval and joint C2. (PDS), the Communications Subsystem (CS), and the Sensor Data **ANALYSIS OF OVER-THE-HORIZON TACTICAL** Department of the Navy Transformation Roadmap .. ability of naval forces to project network centric defenses in support of the joint force Defense (TAMD) Littoral Sea Control and .. ground, the Marine Common Aviation Command and Control System will provide . Networked Unit Operations Centers (UOCs), the. **Performance Analysis of Pseudo-Orthogonal Codes at 10 Gbps for** Transformational communications architecture for the Unit Operations Center Control System (CAC2S) and Command and Control On-the- Move Network, **marine aviation plan 2015 - Marine Corps Concepts and Programs** B.4.2 Air Force C2 Acquisition Transformation B- B.6 NIMA USIGS Communications Architecture B- D.3.4 Marine Corps IT Network Operations Center D- E.1.2 Single Integrated Air Picture Systems Engineer (SIAP SE) E- .. and in theater Command and Control on the Move allows Commanders the freedom to move **Management of autonomous systems in the Navys Automated** (c) Conduct land and air operations essential to the prosecution of a naval we need each aircrew to fly to achieve a T2.0 readiness level for that unit. .. 2.2 Marine Air Command and Control System Plan . MAGTF

networking architecture is comprised of a series of disparate .. The CAC2S Phase 2 Aviation Command. **Naval Transformational Roadmap - Homeland Security Digital Library** In an effort to create a more efficient, interoperable communications environment for its ships at sea the Navy has developed the Automated Digital Network System. Control System (CAC2S), and Command and Control On-the-Move Network, the Unit Operations Center (UOC) Common Aviation Command and Control **Transformational Communications Architecture for the Unit - eBay** During Operation Desert Storm, the senior U.S. Marine Headquarters used a Local Area Network for command and control. Matching functional requirements to system capabilities will lead to optimum employment. Transformational communications architecture for the Unit Operations Center (UOC), Common Aviation **Cloud computing solutions for the Marine Corps: an architecture to** Operations Center (UOC), (2) Common Aviation Command and Control System (CAC2S), and (3) Command and Control On-the-Move Network Digital **Common Aviation Command and Control System (CAC2S)** First is to examine the current state of military satellite communications and to analyze of such private satellite networks within the context of Net Centric Operations, for a tactical private satellite network that facilitates Command and Control of Center (UOC) Common Aviation Command and Control System (CAC2S) **Tactical local area networks.** The transformation of naval forces is dedicated to greatly .. Defense (TAMD) Littoral Sea Control and FORCENet is the architecture of warriors, weapons, sensors, networks, decision .. ground, the Marine Common Aviation Command and Control System will provide . Networked Unit Operations Centers (UOCs), the. **(UOC), Common Aviation Command and Control System (CAC2S)** Nov 8, 2014 (d) Conduct expeditionary operations in the urban littorals and other challenging environments force in readiness we must maintain each unit at a T-2.0 readiness state. . 2.2 Marine Air Command and Control System Plan . MAGTF networking architecture is comprised of a series of disparate networks. **USMC Aviation Plan 2016 - SlideShare** Common Aviation Command and Control System (CAC2S) Integrated Architecture Behavior Model, integration with fifth full Network Enabled Command and Control. Program Wing and the Marine Corps Communications the CAC2S operations facility using fielded CAC2S is designed to operate as main unit. **common aviation command and control system - Defense Innovation** Nov 18, 2003 (UOC) Common Aviation Command and Control System (CAC2S) and Command Move Network, Digital Over-the-Horizon Relay (CoNDOR). Communications Architecture for the Unit Operations Center (UOC) Common