DOWNLOAD PDF COMMAND AND CONTROL OF PHILIPPINE MARITIME AIR SURVEILLANCE

Chapter 1 : Joint Systems Division | Capability Acquisition and Sustainment

The Special Airborne Mission Installation and Response (SABIR) system will increase the Philippine military's maritime domain awareness, airborne command and control, counterterrorism, and humanitarian assistance and disaster relief (HADR) capabilities.

The command was organized in accordance with the PAF modernization program, which was basically realignment and consolidation of existing units with similar and complimentary functions designed to enhance security and economy of force and services. The mission of the Air Defense Command was to defend, secure and protect the Philippine archipelago. Air surveillance, early warning, aircraft control, command and control, and the communications network of the entire defense system also fell the command. The strategic deployment of missile systems would have also fallen under the ADC. These units were to be organized under the proposed th Surface to Air Weapons Wing. As of , the Philippines had not yet procured an air defense missile system of any type and the th AWW had not been formed. Maritime patrol duties were also among its prime functions, as was monitoring surface traffic in Philippines, especially in the exclusive economic zone. The functions of the ADC were effectively divided into 4 major areas: These aircraft were also forced to meet the air patrol requirements. At the time of the creation of the ADC, only 2 radar stations were operational, covering the surveillance requirement of the entirety of Luzon. The function of these CTGs was to plan, coordinate and control the employment of tactical air support elements for the ground forces operating in their respective areas of operation. Relief operations, however, covered the Luzon area only. Another additional function of the ADC was the supervision of special air operations. This includes the control of aerial activities like fly-bys, sky-diving, flower drops, confetti drop and other related activities. It was hoped that with the activation of the Air Defense Command, the Philippine Air Force would start the transition planned under the AFP Modernization Program from internal security to its traditional role of external air defense. The envisioned air defense modernization program included surveillance of air intrusion within Philippine territorial airspace, the protection of resources within the exclusive economic zone, and the provision of air support to maritime forces. The planned acquisition of multi-role fighter aircraft would enable the command to conduct an effective defense of the territorial airspace. A total of 6 radar systems were also to be strategically positioned to cover the whole Philippine Air Surveillance Network, as well as being integrated with civilian radar systems. By the 5th Fighter Wing had only one operational squadron, flying the S, as a result of the grounding and subsequent retirement of the F-5 fleet. Under the AFP Modernization Program the PAF was to be able to fully meet the external air defense mission requirement by , but officials publically stated their doubts in this regard with the lack of purpose built fighter aircraft or clear plans to acquire them. The Wing maintained its mission of providing external air defense, but the planned acquisition of new fighter aircraft had still not been completed and no contracts had been awarded.

Chapter 2 : Air Defense Wing

Air surveillance, early warning, aircraft control, command and control, and the communications network of the entire defense system is also falls the command and strategic deployment of missile systems which the air force still has to procure, for point defense against enemy air attacks.

An accurate COP is essential to NCO, as it facilitates the self-synchronization of NCO, decreasing the need for communications to establish a common understanding of a situation and thereby increasing the speed of command. While the COP as it exists today does provide important information, the current system has significant shortcomings. This situation is discussed below according to the four components of the COPâ€"the air picture, the maritime sea surface picture, the undersea picture, and the ground picture. But first, there should be some clarification of the nature of a COP. Access to data is the key here. From a network-centric perspective see the discussion in Chapter 3 , users should have access to data as soon as they are in some comprehensible form, even though further processing of the data might be intended. This is because different users will have different needs for the data, and the additional processing might remove information content according to the perspectives of some users. For example, air vehicle tracks could be processed with the criteria of minimizing false-alarm rates or in order to display all potential leakers; the resulting processed data would not be the same in the two cases. Common processing will have to be applied in cases, for example, in which the parties involved need to see the same air picture, but the data should still be accessible in their preprocessed form. The particular problems in the air picture relate primarily to aircraft and cruise missiles, given the typically unique and observable nature of ballistic missiles. Shortcomings in the air picture include missing tracks, multiple track designations for one object, swaps of track number between objects, and object misidentification. The National Academies Press. Incremental progress has been made in addressing these problems over the years, but a wholly adequate solution may not result unless a new COP for the air picture is designed from the ground up. Work is now being done on components that can be used for such a new development. Given the development of a common track manager, the issue will be the extent to which this track manager is available throughout the force all Services and inadequate legacy track-management capability is phased out. At the same time, however, as is noted above, the track data prior to processing by the common track manager should be accessible for those who have a need for those data. This requirement has implications with respect to the design of air picture systems in terms of the data interfaces and posting mechanisms that must be provided. This maritime picture is established from sensor data collected from national assets, aircraft, helicopters, and, in the future, from unmanned aerial vehicles UAVs. The airborne assets can be both naval and, potentially, those of other Services and coalition parties, too. Navy officers interviewed during the study indicated that the quality of the current maritime picture, while improving over the past few years, still has significant shortcomings. In particular, sensor coverage typically is not adequate to provide full, persistent coverage, and those sensor inputs that are available are manually assembled rather than being networked together. The consequence of these shortcomings is a maritime picture that is far less complete and accurate than it could be. OPNAV staff had formulated a potential program, called the Single Integrated Maritime Picture, to network the sensors providing maritime surveillance, but this proposal was not included in the budget for funding. A program such as that appears necessary to meet the surface threat in the littoral environment, including the possibility of swarms of small boats, particularly given the importance of littoral operations. There are significant shortcomings in the ability to detect quiet submarines and stealthy minefields see Chapter 7 , Section 7. Means for improving the networking of the undersea sensors also appear necessary, but the first priority is the need to improve the sensor detection and processing. The reason is that the scope of this study does not include the operational maneuver of Marine Corps forces ashore except for those aspects of the ground picture necessary for naval fires from or directed by expeditionary strike groups against ground targets in support of Marine Corps and other Service or coalition

forces. This ground picture includes friendly, neutral, and hostile entities. AFATDS automates the fire planning, tactical fire direction, and fire-support coordination required to support maneuver from the sea and subsequent operations ashore. It provides a suite of tools and interfaces for horizontal and vertical integration across battlespace functional areas. ADOCS has evolved into the automated support system in actual wartime situations for deep operations in several theaters. Page Share Cite Suggested Citation: The trackers used by the Marines are not yet part of a program of record, and interoperability problems exist between tracker types, although actions appear to be under way to resolve these issues. The Navy is largely dependent on the sensors of other Services and on intelligence means to provide information on coalition, neutral, and hostile entities for the ground picture, although the Navy does have some applicable organic sensors see Chapter 7 , Section 7. At the present time there is no funded programâ€"joint or in any of the Servicesâ€"to provide a composite ground picture on which the Navy can draw. In the face of this uncertainty, the Navy should ensure that it has the necessary external inputs, and that these inputs can be correlated with organic Navy inputs, to provide it with the necessary ground picture. As all the Services and intelligence entities move toward network-centric operations and post their sensor and other data, input from the external sources should become readily available to the Navy. Becoming a 21st-Century Force, Vol. That committee also noted, however, that building this technical infrastructure for network-centric operations is an exceptionally large undertaking. The programs, with the responsible organization for each, are listed and discussed below.

Chapter 3 : C-Flex Naval C2 System

The system upgrades the aircraft with advanced command and control, communications, computer, and surveillance and reconnaissance capabilities without sacrificing the aircraft's primary function as a cargo plane.

Chapter 4 : Philippine Air Force receives airborne ISR boost with C SABIR kit | Jane's

Archived Publications. Below is a list of archived publications from the Air Power Development Centre.

Chapter 5 : USS Carl Vinson pulls into Manilla | Naval Today

Air surveillance, early warning, aircraft control, command and control, and the communications network of the entire defense system also fell the command. The strategic deployment of missile.

Chapter 6 : Saab to deliver Sea Giraffe radars for Philippine Navy frigates | Naval Today

mand and Control of Philippine Maritime Air Survei ance e Puedo hijan Sea Dexter O. Huerto. Da/upiÃ± Ar.;urahuaft 8 oho/ Damaguefe SkÃ¢ltiior Capitan Oipo!og.

Chapter 7 : Command and Control (C2) and Maritime Surveillance - Raytheon AnschÃ¼tz

Raytheon AnschÃ¼tz has long experience in contributing to worldwide surveillance and security applications and in recent years has evolved into a specialized supplier for Command and Control as well as Surveillance applications for naval/maritime domain.

Chapter 8 : Raytheon Wins Philippines' Maritime Border C4ISR Contract

The th Air Intelligence and Security Wing (AISW) of the Philippine Air Force (PAF), based at Benito Ebuen Air Force Base on Mactan Island, has received an Airdyne Special Airborne Mission.

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Chapter 9 : Command and control - Wikipedia

SUMMARY OF CHANGES REVISION OF JOINT PUBLICATION DATED 12 JANUARY Adds a discussion of mission command as it relates to joint air operations and the concept of centralized control and decentralized execution.