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## Introduction to Shipboard Weapons

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time when Marines were crowded aboard ships off Vietnam for as long as 88 days without a break; race relation problems are common to all services; Marines tend to use court martials more freely than other services. However, all these problems are to a great extent solvable. Higher recruiting standards recently initiated by the Marines should lower the number of disciplinary incidents.

The Navy/Marine team must continue to provide the strategic planner with the special options offered by an amphibious force. Binkin and Record's study should motivate the Marine Corps and Navy to review deployment plans, R. & D. and personnel procedures in order to maintain this important capability.

WARREN W. ERIKSON  
Captain, U.S. Navy

Corse, Carl D., Jr. *Introduction to Shipboard Weapons*. Annapolis, Md.: U.S. Naval Institute Press, 1975. 398pp.

The efforts of the United States Naval Institute to revitalize its practice of publishing texts dealing with the basic aspects of the naval profession are most commendable. Lieutenant Commander Corse's fine book is the sixth volume in the *Fundamentals of Naval Science Series* which thusfar has focused on the disciplines of shipboard organization, operations, and navigation.

In his preface, the author informs us that his intention is to provide a basic textbook on shipboard weapons systems which can be utilized in its entirety as an integrated program or in segments dealing with specific topics. Lieutenant Commander Corse envisions the majority of his readers as prospective naval officers, but he has selected and organized the material in a manner which will make this book an excellent reference for a newly commissioned officer to carry with him to his first command.

is divided into five parts: Introduction to Fire Control, Sensors and Detection Devices, Guns, Missiles, and Antisubmarine Weapons. The author explains that he is limiting his scope to include only those systems found on surface combatants, and, with the exception of a short digression on the Polaris fire control system in chapter 25, he follows this plan. Although the table of contents gives the appearance of a balanced analysis, an emphasis on gun systems is most evident—of some 390 pages of text, 230 pages are dedicated to guns and their support systems. A very good argument can be made that the solution of the gunfire control problem has been the basis for modern shipboard weapon technology and consequently a sound knowledge of these fundamentals is a prerequisite to understanding newer systems. Lieutenant Commander Corse's approach supports this philosophy, but there is some concern in this reviewer's mind that the detailed gun sections are inconsistent with the broader perspective utilized for other systems.

The sections on gun fundamentals are well prepared, and it is to the author's credit that he has based his development of linear rate systems on the MK-68 system and allowed the venerable MK-37 system to take its proper place in history. The discussions of digital MK-86 and MK-92 systems, which are included in the DD-963 and FFG-7 programs, are timely and informative. Further sections dealing with the MK-45 lightweight 5 inch/54 gun, the 76mm Oto Melara gun, the 20mm Close-in Weapon System (CIWS), and guided projectiles make excellent reading for naval officers without intimate knowledge of these new systems.

The chapters on sensors cover the full range from electro-optical devices to sonars. The introduction to radar fundamentals utilizes a clear approach characterized by excellent pictorial presentations and an absence of confusing technical detail. Sonar and MAD techniques

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are well presented and excellent graphics portray the fundamentals of acoustic propagation.

Chapters 21 through 25 provide a fine overview of shipboard missile technology. A brief historic development leads into a description of the Talos, Terrier, Tartar, and Standard missiles in the context of area and point defense employments. The Basic Point Defense Missile System (BPDMS) and Harpoon programs are treated, and the chapter concludes with an excellent section on launchers. A concise and well illustrated overview of missile guidance systems provides a useful introduction to this highly technical area, and an excellent chapter on the integration of missiles, weapons direction systems, and the Navy Tactical Data System (NTDS) effectively draws together the earlier chapters on individual components. Lieutenant Commander Corse wisely emphasizes the importance of digital processing techniques and the need for compatibility of future shipboard sensors with weapons and command, control, and communications functions.

The sonar chapters do not include the detail of earlier sections and emphasize basic technology. The SQS-26 and the newer passive systems, including towed arrays and acoustic analysis, could be more fully developed.

The chapters on antisubmarine weapons and fire control systems encompass most modern developments with sections on the MK-46 and MK-48 torpedoes, the Light Airborne Multi-purpose System (LAMPS helo), and the ASROC Underwater Battery Fire Control System.

In summary, *Introduction to Shipboard Weapons* is a valuable addition to the instructional literature of the naval profession. The photographs and diagrams are outstanding and, with few exceptions, well chosen. Photographs of a crewmember supporting a 5-inch projectile by the nose fuze and of an un-protected bridge team firing a

"combat" mission off Vietnam are unfortunate selections for a teaching text. A short glossary of weapons terms is followed by an excellent bibliography and comprehensive index.

Lieutenant Commander Corse points out that his book is the first unofficial textbook on U.S. Navy weapons to appear since 1937. His efforts will certainly contribute to a better understanding of this complex subject, and one hopes that another 38-year hiatus will not transpire before a new edition appears.

PAUL TOBIN

Lieutenant Commander, U.S. Navy

Drucker, Peter F. *Management: Tasks, Responsibilities, Practices*. New York: Harper and Row, 1974. 811pp.

If you believe management involves more than the inventory control of rifle stocks, you may be ready for this book. If you believe this country's social, political, and economic systems are worth managing and fighting for, you will appreciate this treatment of management and its alternative: tyranny. If you aspire to high rank and its attendant leadership/management positions, you will better understand the unique tasks, responsibilities, and practices expected, rather required, in such positions. Professor Peter F. Drucker, long a noted author in the management discipline and the acknowledged dean of managerial philosophy, has provided a signal work on the subject which contains profound insight and advice.

Management, according to the author, is dominant within each institution comprising our pluralistic society. It is not limited in any way simply to the caring of business. Some comments of note to the military mind, for example: "Management, that is, the organ of leadership, direction and decision in our social institutions, . . . is a *generic function* [author's emphasis] which faces the same basic tasks in every