

CHAPTER 13

TRAINING

Battle readiness is a primary justification for the existence of the Navy. Continuous training is a major element contributing to battle readiness. The objective of the training program is to increase the ability of personnel to administer and operate the ship effectively under all foreseeable conditions. Emphasis on training is essential in order to maintain at peak efficiency the vital communications by which command is exercised throughout the Naval Establishment.

The Navy has several service schools for rated communication personnel. The class B radioman schools provide, at an advanced level, the knowledge and skills required of radiomen in fulfilling their shipboard supervisory and operational responsibilities. As another example, teletype maintenance schools offer excellent courses of instruction in teletypewriter maintenance and repair. Requests should be initiated to have a student quota assigned to the ship whenever possible and necessary.

This chapter discusses training procedures that have become standard through custom and usage, as well as the training concepts stated in governing publications issued by the Chief of Naval Operations, principally NWP 50.

Training is directed by the Commanders in Chief of the U. S. Atlantic and Pacific Fleets, who exercise their training responsibilities through their administrative type commanders. The type commanders' written instructions relating to training, therefore, must be consulted to obtain a detailed knowledge of what is expected with respect to communication training and readiness.

ORGANIZATION FOR TRAINING

The normal administrative organization of the ship should include provisions for carrying out the training program. In most instances, the commanding officer, charged with overall responsibility for the efficiency of the ship, appoints a planning board to assist him in training matters.

PLANNING BOARD FOR TRAINING

The planning board for training, responsible directly to the commanding officer, consists of the executive officer, a delegated ship's training officer, and all department heads. The place of the planning board in the ship's training organization is shown in figure 13-1.

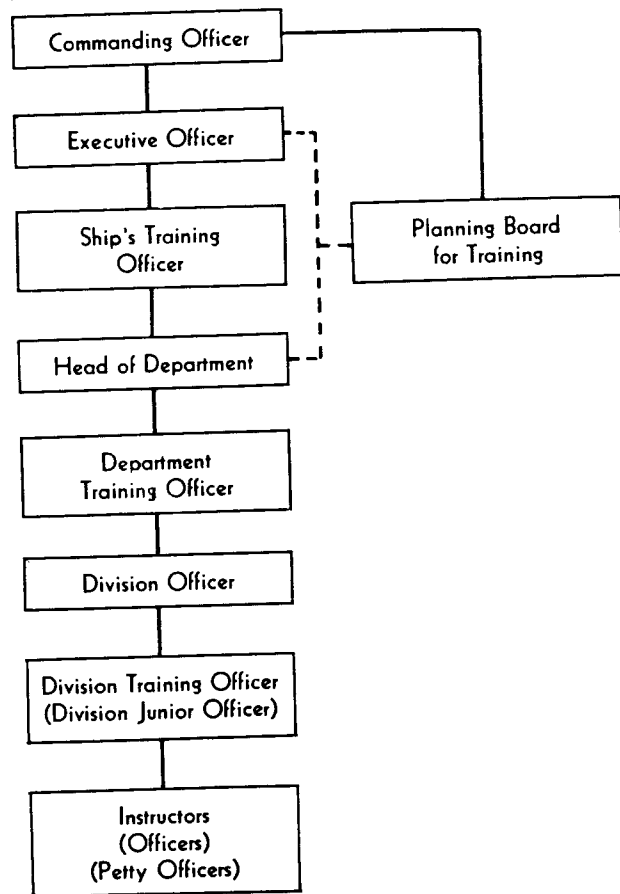


Figure 13-1. The planning board for training consists of the executive officer, ship's training officer, and department heads. 105.15

The planning board performs the following general functions:

1. Assists the commanding officer in the formulation of training policies.
2. Coordinates the training program for the ship and periodically evaluates progress of training and future requirements.
3. Establishes training syllabuses for both officers and enlisted men.

Executive Officer

The executive officer is charged with executing orders of the captain, and with coordinating and supervising the performance and administration of the command as a whole, including matters pertaining to training. The executive officer is chairman of the planning board for training, exercises overall supervision of shipboard training, and schedules training activities for the ship on a daily, monthly, quarterly, and yearly basis. He also may serve as training officer.

Training Officer

The ship's training officer is an assistant to the executive officer in all matters pertaining to such essentials as—

1. Supervising the execution and administration of the overall shipboard training program.
2. Evaluating the effectiveness of the records, reports, graphs, and other control devices used in the training program.
3. Preparing and maintaining long- and short-range training schedules.
4. Promulgating weekly training schedules.
5. Coordinating and scheduling competitive exercises, trials, and inspections.
6. Coordinating departmental requests for school quotas.
7. Coordinating orientation and indoctrination courses for new personnel.

The foregoing list is not, of course, all-inclusive.

As a member of the planning board, the training officer assists the board in formulating plans for coordinating and evaluating training in order to facilitate the education and professional advancement of all personnel.

Head of Department

The department head formulates and carries out the department training program and supervises the training and professional development of junior officers assigned to him. The head of the operations department approves syllabuses and lesson plans for communication training.

Division Officer

The division officer is a vital key in the success of the training program. As an assistant to the operations officer, the communication division officer (on a small ship also the communication officer) normally has the following duties to perform in connection with training matters:

1. Assists the operations officer in developing a communication training program in support of the training objectives of the operations department.
2. Implements approved training plans and policies within the department.
3. Coordinates and assists in administration of the division training program, including supervision of the preparation of training materials; reviews schedules and lesson plans; selects and trains instructors; observes instruction at drills, on watch, and in the classroom; and procures training aids and other material for use in the training program.
4. Maintains division training records and reports.
5. Prepares and submits division training schedules to the operations officer.
6. Disseminates information concerning availability of fleet and service schools to communication personnel.
7. Assists the operations officer in planning and coordinating training of junior officers and leading petty officers in accordance with shipboard training policy.
8. Keeps the operations officer fully advised with respect to the training program for communication personnel.

In his division notebook, the division officer should place his program data, a personal data card on each man, and any supplementary information that might be useful for reference purposes and for the orientation of his relief.

Leading petty officers should plan lessons, observe immediate aspects of the program and offer suggestions for improvement, instruct individuals and groups as required, keep records

necess
ently
every
Traini
the e
progr

ORGA

In
words
portat

Manaq

Pr
mana
and e
Five
plical
as fo

and a
these

quire
be ac

gram
the tr
pers

train
is ac

the
lishc

Tim

If

limi
met

beca
allo

trib

trai
keej

maj
the

neg

cip!
be

maj
of t

necessary to control the program, and consistently maintain a high degree of control over every aspect of communication training. Training-minded petty officers are essential to the effectiveness of the shipboard training program.

ORGANIZATIONAL CONSIDERATIONS

In organizing the training program, a few words should be said about at least three important elements that must be considered.

Management

Proper application of certain elements of management is essential to the establishment and execution of a successful training program. Five major functions of administration are applicable to the program. These may be defined as follows:

PLANNING: Establishment of objectives and a determination of the broad means by which these objectives will be accomplished.

ORGANIZING: Arrangement of the required factors in such a way that objectives will be accomplished effectively.

EXECUTING: Placing the training program in effect, utilizing the facilities with which the training will be accomplished, and motivating personnel to make the required effort.

CONTROLLING: Frequent evaluation of training results to ascertain whether the effort is accomplishing objectives.

COORDINATING: Maintaining balance in the training program in working toward established objectives.

Time

It is unfortunate that time for training is limited. It is recognized that the physical methods of teaching must vary between ships because of ship design or size, the personnel allowance, and so on. The most important contributing factor to the limitation of time for training is the maintenance problem. The upkeep and repair of material and equipment is a major contribution to battle readiness; none of the features of shipboard maintenance may be neglected. In all ships, one immutable principle of shipboard operations is that time must be balanced carefully between training and maintenance. Neither may be neglected in favor of the other. The proper apportionment of time

must be made by officers who are familiar with the existing shipboard situation. This requisite, alone, points up the importance of the planning board. Once a balance is established, programs for both training and maintenance can be planned and executed.

Training is never completed. When a man becomes qualified in a particular duty, he should commence training immediately to master another. The most effective method for utilizing the time available for this continuing education is on-the-job training.

In the training program, the primary concern is to get the crew operating efficiently. During drills, routine evolutions, and watches, on-the-job instruction should be given until each individual in the watch section can perform the duties expected of him, and each member of a team or detail can do his part in the functioning of that unit.

Every effort must be made to obtain maximum training value from all watches, drills, and evolutions. The petty officer in charge of a watch section or special detail must know—and plan in advance—the phases of training he is going to cover during a particular watch or drill. Close and continuous supervision and coordination are essential to ensure that training actually is accomplished during watches and drills.

Training Effectiveness

Every ship must have two parallel, flexible, and closely integrated parts to its training program—one for teaching skills and operations, the other for imparting related knowledge through classroom instruction. The training program must be realistic and within the capabilities of ship's personnel.

When one part of the training program is delayed, the other should be taken up. The need for this flexibility is occasioned by such incidents as inclement weather, changes in operating schedules, breakdowns, or even combat casualties. Rapid changes in training plans must be made in each instance.

An evaluation of the performance of individuals aboard ship, the transition of men from raw recruits into qualified watch standers within a reasonable length of time, the number of men fulfilling qualifications for advancement in rating, and other similar factors can be reliable indications of whether an adequate shipboard training program exists.

Instruction that is dynamic, progressive, and scheduled regularly results in effective training. The degree of preparation of the instructor, and his exhibited interest in the subject, also contribute to the success of training. Persons in authority must show real interest in the progress of individuals in matters of self-education and all other forms of training to the extent that they are conspicuously present when instruction of personnel in their departments is scheduled.

TRAINING PROGRAM

The general objectives of the overall ship's training program are to—

1. Increase the ability of personnel to administer and operate the ship effectively under all foreseeable conditions.
2. Schedule the training so that maximum benefit is derived during the time available.
3. Impart to all hands the technical knowledge and skill needed for the operation, maintenance, and repair of the ship and her equipment.
4. Increase the proficiency of each officer and enlisted man in his present duties, and prepare him for greater responsibilities.

Based on the planning board's interpretations of the ship's training objectives, the communication officer, in conjunction with the operations officer, establishes tasks for the communication division.

Training tasks for communication personnel necessarily consist of provisions for (1) general training of the individual aboard ship to include examination for advancement in rating, qualification for watches on duty stations, and the minimum training requirements for all hands; (2) ordering officers and enlisted personnel to schools; and (3) operational or team training both aboard ship and at fleet training centers ashore.

The communication training program should comprise the drills and exercises listed in figure 13-2.

PROGRAM DEVELOPMENT

The enlisted training syllabus is based on the objectives for training communication personnel plus the exercises and drills listed in Fleet Exercise Publication (FXP) 3. For each unit of instruction, shipboard instructors should develop a lesson plan, such as in figure 13-3 (the Guide for Curriculum Development,

NavPers 92684, may be helpful). The advantage of a lesson plan is that it aids in standardizing the training. If the presentation of the subject matter is well planned to begin with, succeeding classes acquire very nearly the same knowledge and skill.

Simultaneous with development of lesson plans and syllabuses comes the assignment of instructors. Everyone in authority is responsible for training the personnel he commands in action. Each petty officer must instruct his subordinates. It frequently saves time to do a certain amount of basic instruction with men drawn from each watch section. In such instances the division officer should designate a qualified petty officer to instruct. Inasmuch as the major burden of teaching rests with the petty officers, each should become a well-qualified instructor.

A detailed explanation of instructional techniques is found in the Manual for Navy Instructors, NavPers 16103. Instructor Training, NavPers 92050 contains articles of lasting interest and usefulness on instructor training. Although slanted mainly toward personnel in schools ashore, this publication may prove helpful in the administration of shipboard training. For the training program to be successful, the instructors must know their subjects thoroughly, display the qualities of leadership while teaching, and perform their jobs with enthusiasm.

All other things being equal, it is axiomatic that the more every man knows about his assigned job, the better a fighting unit the ship will be.

The natural tendency is to keep a man in a job that he knows. This trend stems from a desire to achieve and maintain a smoothly working unit, division, or team. Such action limits the scope of knowledge of the man, and does not make provision for casualty replacement or for advancement to positions of greater responsibility. To offset this tendency, there should be a plan for rotating the men through jobs within the division. Such a plan does not mean that each man should have a new job each day. Rather, it should be approached with the idea that a man should be rotated after he reaches the standard of proficiency set for the division. Any individual should be thoroughly familiar with the duties of his present rate before he is assigned duties normally performed by a higher rate.

Rotation of personnel requires some planning and controlling to ensure complete coverage of

Title	Lesson	Exercise
1. Voice radio procedure	x	
2. Tactical voice radio drill		x
3. Administrative voice radio drill		x
4. Radio circuit operation	x	
5. Radio procedure	x	
6. Use of frequency meter	x	
7. Adjustment and calibration of radio transmitters and receivers.	x	
8. Calibration and frequency shifting under normal conditions.		x
9. Frequency shifting during conditions of radio silence		x
10. Flashing light instruction	x	
11. Flashing light—intership		x
12. Instruction in use of infrared equipment	x	
13. Infrared equipment drill		x
14. Semaphore instruction	x	
15. Semaphore—intership		x
16. Visual signaling procedures	x	
17. Flaghoist instruction	x	
18. Flaghoist drill—intership		x
19. Cryptography and security	x	
20. Codes, ciphers, and crypto devices	x	
21. Cryptoboard instruction	x	
22. Cryptographic drill		x
23. Cryptoboard drill		x
24. Radio interference		x
25. Radio jamming and heckling		x
26. Radio equipment transfer panels	x	
27. Coordination and dissemination of tactical signals between CIC, conn, and bridge.	x	
28. Communication publications	x	
29. Allied Naval Signal Book	x	
30. International signal code	x	
31. Security of classified publications	x	
32. Encrypted traffic handling	x	
33. Authentication systems	x	
34. Radio call sign cipher	x	
35. Transmission security	x	
36. Distress traffic	x	
37. Tactical radio communications	x	
38. Casualties, failures, and use of emergency equipment	x	
39. Logs and records	x	
40. Maintenance	x	
41. Radioteletype procedures	x	
42. Teletype equipment safety precautions	x	
43. Maintenance of teletype equipment	x	
44. Emergency destruction procedures	x	
45. Recognition procedures	x	
46. Transfer of control of radio transmitters and receivers to remote position.		x
47. Internal handling of tactical communications		x
48. Allied Naval Signal Book drill		x
49. Authentication drill		x
50. Radio call sign cipher drill		x
51. Equipment casualty drill		x
52. Main radio destroyed in battle		x
53. Rigging and use of emergency antenna		x
54. Emergency destruction of classified matter		x
55. Telephone talker instruction	x	
56. Telephone talker drill		x

Figure 13-2. Communication drills and exercises.

NAVAL COMMUNICATIONS

LESSON NO. : C12.
 LENGTH: 35 minutes.
 SUBJECT: Flaghoist Instruction.
 OBJECTIVE: To familiarize visual signal personnel with the composition and procedures of flaghoists, and the use of pertinent signal publications.

MATERIALS: 1. Training aids: Flaghoist equipment on board.
 2. References (effective editions):
 a. ACP 129.
 b. ACP 118.
 c. ATP 1, Vol. II.
 d. ACP 131.
 e. DNC 5.

INTRODUCTION: The instructor should inform the trainees of the purpose of the lesson, and the procedure to be followed in conducting it; discuss the importance of the lesson in developing skill and understanding of this phase of visual signaling; inform trainees what is expected of them during and after completion of the instruction.

PRESENTATION: Discuss the following points:
 1. The use of flaghoists in visual signaling:
 a. Advantages.
 b. Disadvantages.

2. Composition of hoists:
 - a. Applicable publications.
 - b. Call and address.
 - c. The signal.
3. Making up hoists:
 - a. Bending on flags.
 - b. Closing up smartly.
 - c. Execution.
4. Answering hoists:
 - a. Report to conn when sighted.
 - b. Keep at dip until understood.
 - c. Close up smartly when understood.
5. Accuracy and speed:
 - a. Read signals carefully and report to conn correctly.
 - b. Answer hoists promptly and accurately.

APPLICATION: Give demonstration on all phases covered in the presentation. Ask questions to stimulate discussion in an effort to bring out points that may not have been covered sufficiently.

SUMMARY: Review the material covered, reemphasizing key points, and ask questions to determine effectiveness of instruction.

105.17

Figure 13-3. A lesson plan may be developed for each unit of instruction.

jobs by the trainees. A progress chart is essential to record the jobs performed satisfactorily and point out those in which the trainee has yet to become experienced.

Schedule of Training

In determining the ship's schedule for training, the governing elements are the operating schedule and assigned navy yard overhaul periods promulgated by the type commander. A yard overhaul takes place approximately every 2 years; the exact intervals depend upon many conditions that affect fleet planning.

LONG-RANGE TRAINING SCHEDULE. The ship's training cycle (fig. 13-4) is tied closely

to the periods of time between the start of yard overhauls. The long-range training plan, prepared by the training board, is the basic instrument for planning and carrying out the ship's training requirements.

The long-range plan is confined to information of major importance needed to ensure that overall coordination and planning of the training effort are effective. It is not concerned with minor details of the ship's training schedule. In effect, the plan outlines the periods of time that are to be considered as all-hands evolutions and during which little personal training may be scheduled. These events include major inspection, trial, and maintenance periods; and competitive exercises, off-ship team training,

TYPICAL TRAINING CYCLE (DESTROYER TYPE)

	Months out of shipyard	
Shipyard overhaul period		
Preparation for refresher training; calibration and alignment of equipment; RFS; ISE; commence refresher training	1 (Jul)	} Training year
Refresher training; ORI	2 (Aug)	
25-knot economy trial	3 (Sep)	
Commence competitive year	4 (Oct)	
	5 (Nov)	
	6 (Dec)	
	7 (Jan)	
	8 (Feb)	
	9 (Mar)	
Administrative inspection	10 (Apr)	
Full power trial	11 (May)	
Complete competitive year	12 (Jun)	
Economy trial	13	
Commence competitive year		
Operational readiness inspection	14	
	15	
	16	
	17	
Economy trial	18	
	19	
Material inspection (INSURV)	20	
Administrative inspection	21	
	22	
Full power trial; prepare for shipyard overhaul	23	
Complete competitive year	24	
Shipyard overhaul		

105.18

Figure 13-4.--The ship's training cycle is adjusted to the periods of yard overhauls.

general quarters, general drills, and the like. When complete, the plan becomes the framework for the preparation of the more detailed quarterly forecast of all-hands evolutions and the weekly training schedules.

QUARTERLY FORECAST OF ALL-HANDS EVOLUTIONS.—Based on the long-range training schedule and general policy guidance from the commanding officer, the training officer prepares a quarterly forecast, or estimate, of the number of normal working hours required to carry out evolutions involving participation by all hands. On the basis of that estimate, he also forecasts the number of hours that are

available to accomplish individual division activities.

When the ship's employment schedule is reasonably firm, the training officer prepares the quarterly forecast simultaneously with the long-range training schedule. At other times, he can forecast only as far ahead as reliable estimates can be made, perhaps monthly or biweekly.

The analysis is based on a normal workweek of 35 hours per man: 7 hours per day for 5 days. It is obvious that shipboard personnel work many more hours a week than 35. Watch standing, repairs to disabled equipment, dawn and dusk general quarters, off-duty studies,

and so on, take up much of the individual's time beyond the usual workweek. The quarterly forecast of all-hands evolutions, however, must be based on the realistic assumption that most training takes place during normal working hours.

In preparing the forecast, the training officer indicates the total number of crew-hours that are to be reserved for each all-hands evolution. Thus, during a week in which type training (TYT) is to be conducted, he may assume the utilization of 3 1/2 hours for Saturday inspection, 2 hours for general quarters, 2 hours for a competitive ASW exercise, and 2 1/2 hours for daily quarters and general drills. The reserved hours total 10. On the basis of his computation, the training officer informs all division officers of the results of his calculations, i. e., they may estimate that 25 hours during that week will be available for division activities.

DIVISION QUARTERLY FORECAST OF ACTIVITY.—The division officer may prepare a quarterly forecast of activity to indicate the manner in which time available for division activities during the quarter is to be divided between watch standing, lessons and drills, and routine maintenance and administration. The employment of this forecast is optional because small divisions, such as those on a destroyer-type ship, receive little benefit from its use. It is most helpful in the control of fairly large and homogeneous groups of men participating in diversified activities.

The forecast is simply a weekly breakdown of total hours available during the quarter as indicated by the quarterly forecast of all-hands evolutions. First, the hours needed for watch standing are subtracted from the total. The hours remaining are divided (as in the foregoing paragraph) according to the existing situation. Some routine maintenance, for instance, may have been curtailed recently because of operational commitments. If so, the first few weeks of the quarter should be devoted more to maintenance than to lessons and drills. Thereafter, the allocation of time may more nearly approach a 50-50 basis unless equipment becomes inoperable or an operational emergency arises.

QUARTERLY TRAINING SCHEDULE.—The preparation of a quarterly training schedule requires careful planning and imagination to ensure that needed individual and team training are accomplished.

In figure 13-5, the communication officer included in his quarterly training schedule a certain amount of information of interest mainly to himself. For example, he wishes to verify personally that "fully qualified" entries were made in the service records of all men scheduled to take the examinations for advancement. During August, he must supervise accomplishment of the predeployment procedures. In September, he has to work in three briefing periods for his senior petty officers, to instruct them on the communication aspects of current fleet exercises.

Most of the schedule, however, is devoted to the allotment of specific subjects that are to be taught during indicated weekly periods. A certain amount of instruction should take place during every watch, but a definite schedule ensures that each of the ship's communication drills and exercises is taught at least once every quarter, operational conditions permitting.

WEEKLY TRAINING SCHEDULE.—Toward the end of each week, division officers meet with the training officer to firm up a divisional training plan for the following week. Each division officer indicates the times and types of formal instruction periods he desires. The training officer coordinates the requests and submits a rough schedule to the executive officer for approval.

When approved and published, the weekly training schedule (fig. 13-6) serves as a guide to all hands for the ship's training effort during the period specified. The weekly schedule includes pertinent information on the long-range training schedule plus detailed plans for conducting operation drills and team training, division and interdivision instruction periods, and officer training periods. Because it also lists major maintenance activities, tests, and inspections, it can function as a plan of the week. If any scheduled event is not accomplished, the entry is marked and an explanatory note added nearby.

When space permits, the weekly schedule may include the names of instructors and such details as the locations and times of lectures and movies. Daily training schedules usually are incorporated in the plan of the day.

The weekly schedule makes provision for three categories of training: (1) all hands, (2) military, and (3) professional. All-hands training is best typified by the on-board "know-your-ship" requirements. These requirements apply to all newly reported personnel, regardless of

	July				August				September			
	1 UPK	8 TYT (ASW)	15-17 Enr Mayport	17 Special Ops Mayport	1-4 Miami	5 Special Ops Mayport	15-17 Enr NORVA	18 UPK and Prep Nelm	2 Enr and Nelm	4 Sea Spray	14 UPK	19 Strikeback
DIVSKED	<p>Exams E-3 Prepare for ASW and carrier ops Check equipment during upkeep Review mil and prof require- ments for personnel sked to take exams for adv in rating in Aug</p>											
Jul 1-5	<p>Carrier ops Fleet exams E-4-E-6 8 Aug Complete Nelm checkoff Tycom admin insp 23 Aug</p>											
Jul 8-12	<p>Prep flt ops General comm exercise last wk month</p>											
Jul 15-19	<p>Instruction</p>											
Jul 22-26	<p>Aug 5-9 19, 20, 21 Exams E-4-E-6 12-16 38, 44, 45, 55 19-23 Nelm checkoff, admin insp 26-30 32, 33, 34, 35</p>											
Jul 29-2 Aug	<p>Aug 5-9 19, 20, 21 Exams E-4-E-6 12-16 38, 44, 45, 55 19-23 Nelm checkoff, admin insp 26-30 32, 33, 34, 35</p>											
Jul 1-5	<p>Drills</p>											
Jul 8-12	<p>Aug 5-9 22, 23 12-16 51, 52, 53, 54, 56 19-23 Nelm checkoff admin insp 26-30 49, 50</p>											
Jul 15-19	<p>Aug 5-9 22, 23 12-16 51, 52, 53, 54, 56 19-23 Nelm checkoff admin insp 26-30 49, 50</p>											
Jul 22-26	<p>Aug 5-9 22, 23 12-16 51, 52, 53, 54, 56 19-23 Nelm checkoff admin insp 26-30 49, 50</p>											
Jul 29-2 Aug	<p>Aug 5-9 22, 23 12-16 51, 52, 53, 54, 56 19-23 Nelm checkoff admin insp 26-30 49, 50</p>											
Schools	<p>Swabo, SN QM Scol Ftc Npt 1-27 Jul Ham, SA Radio code Ftc Npt 1 Jul - 30 Aug</p>											

Figure 13-5. - Communication division quarterly training schedule. Numbers opposite the dates are keyed to the communication drills and exercises in figure 13-2.

NAVAL COMMUNICATIONS

WEEKLY TRAINING SCHEDULE
OPNAV FORM 3500-21

(1ST, 2ND, ETC.) 1st WEEK OF July 1958

ITEM	MON. 30 June	TUE. 1 July	WED. 2 July	THU. 3 July	FRI. 4 July	SAT. 5 July
SHIP'S EMPLOYMENT	UPKEEP	UPKEEP	UPKEEP	UPKEEP	UPKEEP	UPKEEP
INSPECTIONS, EXAMINATIONS		Divers Inspect propellers				
TRIALS, TESTS					0900-Holiday Routine	0900-Holiday Routine
MAJOR TOPSIDE MAINTENANCE		Paint ship's sides Tuesday and Wednesday				
MAJOR ENGINEER MAINTENANCE		Clean #1 and #3 boilers Tuesday and Wednesday				
OFF-SHIP TRAINING	Mount 51 crew to Dam Neck	for the entire week				
COMPETITIVE EXERCISES						
GENERAL DRILLS	9-11			9-11 GQ		
GEN. QUARTERS	GQ			9-930 Fire drill		
OFFICER TRAINING	13-15 Tactical School		13-15 Leadership Discussion			

Two 5 men to duty fire fighting school

Cancelled due to heavy rain

OPERATIONAL DRILLS (CIC, Gun, Ft., etc.) AND TEAM TRAINING (Watch and Battle Stations)

NAME OF FUNCTION	MON.	TUE.	WED.	THU.	FRI.	SAT.
ASW	930-11 ASW-5					
Communications	930-11 CW-2 VIS-4			On-the-job battle station instruction period		
Gunnery	930-11 GUN-8			930-11		
Engineering	930-11 ENG-1,4					
Damage Control	930-11 DC-6			No drills.		
Combat	930-11 CIC-4,5					

DIVISION AND INTERDIVISION INSTRUCTION PERIODS

OPERATIONS & NAVIGATOR	13-14 "O"-F-4			13-14 "O"-F-5		
GUNNERY & 1ST LT	13-14 I&2-E-2			13-14 B-2 (all crews)		
ENGINEERING & DAMAGE CONTROL	13-14 MM W-1			less engineers 13-14 BT-W-2		
AIR OR REPAIR						
MEDICAL & DENTAL						
SUPPLY	13-14 SK-P-4			13-14 SK-P-4		

KEY FOR BASIC TRAINING (Division and *Inter-Division Instruction Periods)

*A - SMALL ARMS	H - LANDING PARTY AND CLOSE-ORDER DRILLS	N - OFFICER NAVIGATION	*T - TELEPHONE TALKERS
*B - BOAT CREWS	*I - INDOCTRINATION & ORIENTATION	O - ORGANIZATION AND GENERAL REGULATIONS	*U - UCMJ AND DISCIPLINE
C - COMMUNICATIONS	J - MILITARY COURTESY	P - PROFESSIONAL PRACTICAL FACTORS	V - OFFICER TACTICAL SCHOOL
*D - DAMAGE CONTROL, FIREFIGHTING AND ABC WARFARE	K - SPECIAL MILITARY DUTIES	Q - SUPERVISED SELF-STUDY	W - WATCH STANDING & SENTRIES
E - CARE OF MATERIALS	*L - LEADERSHIP & CHARACTER GUIDANCE	*R - RECOGNITION & LOOKOUTS	*X - SWIMMING & LIFESAVING
*F - FIRST AID & HYGIENE	M - MILITARY PRACTICAL FACTORS	S - SEAMANSHIP	Y - CODING BOARD
G - GUNNERY			Z - TRAINING FILMS
			PF - PHYSICAL FITNESS

NOTE: Division or rating abbreviation and dash (1st-, E-, BM-, RM-) before key letter indicates divisions or ratings involved. Dash and number (-1, -5, etc.) after key letter shows lesson number. Times of starting and finishing all training activities should be shown in brief form: 9-11, 13-14, 830-10, etc.

8-10780

Figure 13-6.—Weekly training schedule.

24.2

rate or rating. Military training applies to the mandatory military requirements for all hands according to pay grade. Professional training is for men in a specific rating group, by pay grade.

Training Records

It is important to an effective training program that the responsible officers know at all times (1) how much training has been accomplished, and (2) how much remains to be done. To have this knowledge on a current basis, numerous records of individual training must be maintained.

To standardize recordkeeping, the Office of the Chief of Naval Operations has developed four forms, one of which should be suitable for any record or schedule needed in the training program. One such form is the weekly training schedule. All three of the remaining forms bear the title General Record; they are distinguished by the designations type I, type II, and type III. The main difference in the three types is a flexible columnar arrangement, which permits any one of the forms to be utilized for several records.

Type I is useful in preparing the long-range training schedule, quarterly forecast of all-hands evolutions, and the division quarterly forecast of activity. At the personal level, figure 13-7 illustrates several uses of the type I form.

Type II may be utilized to maintain both enlisted and officer records of training. Its format is such that a broad column on the left of the sheet permits relatively lengthy entries, such as duties, functions, or training requirements. The other columns are headed by individual names. Figure 13-8 employs type II as a group record of practical factors for enlisted personnel. Practical factors are specific physical functions that all men must demonstrate an ability to perform before they are recommended to participate in an examination for advancement in grade. It is important to each man that his Record of Practical Factors, NavPers 760, reflect all his performance qualifications. By use of a group record of practical factors, the division officer retains the needed information for all men on one readily available sheet. This system avoids the administrative difficulty of making day-to-day entries on a large number of individual records. Periodically, the information is carried forward to an individual NavPers

760 for inclusion in each man's service record.

In figure 13-9, the type II form summarizes data concerning assignments, shipboard qualifications, off-ship schooling, and self-study courses of individual officers. Each topic covered may be supplemented by a more detailed record, as in figure 13-10.

Usually the type III form is reserved for scheduling division and interdivision instruction periods. The obverse side (fig. 13-11) basically is a calendar with a space for each day of the year. Planned instruction periods are noted in pencil. Because of space limitations, the entries ordinarily are coded or abbreviated. When a planned period of training has taken place, the appropriate entry is inked in to indicate its accomplishment. On the reverse side of an interdivisional form, each division officer lists the drills and exercises that apply to his division.

APPLICATION OF TRAINING PROGRAM

The main training concern of the communication officer is to have each man function at maximum efficiency. To accomplish this, it is necessary to ascertain exactly what each is expected to do in a particular rate or rating or in a specific team effort situation. Each man must know exactly what is expected of him and what his responsibilities are. It is insufficient to tell a man: "Know your exercises." He must be told what exercises. Under "Learn safety precautions," specify which one. When you tell him to "Learn the jobs of nearby people," be specific so he won't be wondering exactly which people.

You cannot train, measure progress, or define achievement unless you define what you are trying to achieve.

Billet Analysis

An analysis of the communication billets aboard the ship may solve the problem of determining and describing accurately what tasks there are and who is to be trained to do them. An examination of the jobs assigned to the men listed on the watch, quarter, and station bill is helpful and important in making the analysis. Other sources of information are lists of all machines operated, logs and records kept, and all other duties performed by communication personnel.

NAVAL COMMUNICATIONS

GENERAL RECORD (Type 1)
OPNAV FORM 1500-30 (10-60)

PERIOD COVERED: FROM date started TO continuous

TITLE
Record of Courses for Advancement in Rating.

NAME AND RATE	DATE LAST ADVANCED	NAME OF COURSE	DATE START	COMPLETED	FINAL MARK	ENTERED SERV. REC.
A:B. SEA, RM3	3-15-64	RM2	4 Aug	15 Sep	3.7	29

GENERAL RECORD (Type 1)
OPNAV FORM 1500-30 (10-60)

PERIOD COVERED: FROM (start of cycle) TO (end of cycle)

TITLE
SCHEDULE OF OFF-SHIP SCHOOL TRAINING.

QUOTAS

NAME AND LOCATION OF COURSE	NR.	QUOTA DIRECTIVE	LENGTH, CONVENES	DESIGNED FOR	WANT-ED	USED THIS CYCLE (TOTAL TO DATE)
Basic Damage Control FltTraCen NPT-NORVA	40	List the instruction	5 days each Mon.	enlisted w/o exper.	(KEEP IN PENCIL)	27
Prac. Damage Control Procedures, FTC, NPT	402	which controls your	5 days, 1st & 3rd Mon.	Repair Party	6	8
ABC Defense Monitoring & Decontam. FTC NPT-NORVA	426	quota requests.	5 days, 2nd & 4th Mon.	D.C. Repair Party	3	5

GENERAL RECORD (Type 1)
OPNAV FORM 1500-30 (10-60)

PERIOD COVERED: FROM (date cycle started) TO (end of cycle)

TITLE
INDIVIDUAL RECORD OF OFF-SHIP SCHOOL TRAINING.

SCHOOL	NAME AND RANK OF CANDIDATE	ELIGIBILITY		SERIAL NO. Quota	& DATE Reply to Request	ATTENDANCE DATA		
		Qual.	Sec.			Date Start	Date Grad	Mark & Stand.
Prac. D.C. Procedures #(402)	John J. Jones DC2	Yes	None needed	EDE791/55-64 of 30 Jun	CDL 168-64 of 18 July			

Figure 13-7.—Three possible uses of General Record, Type I.

24.1

GENERAL RECORD (Type II)
OPNAV FORM 1500-31

(date started)
PERIOD COVERED FROM 12 Aug 19— continuous

TITLE
Group Record of Practical Factors for Signalmen (SM)

COLUMN CAPTION
Page 1 of 3

Date assigned to division.
Date transferred.
Date last advanced in rating.
Date qual. next rate level.

PRACTICAL FACTORS	RATES
PROFESSIONAL REQUIREMENTS FOR SM	
100 PRACTICAL FACTORS	
101 OPERATIONAL	
1. Locate and operate during darkness all light switches for electrical and electronic visual signal equipment controlled from the signal bridge	3
2. Stand watches as signalman on bridge underway and in port	3
3. Construct visual call signs, and look up international call signs for individual ships	3
4. Make and recognize flag and light signals pertaining to breakdown, man overboard, international distress, and storm warnings	3
5. Recognize all visual signal flags and pennants, know the order of reading flaghoist and the significance of dipped, close up, and hauled down	3
6. Render passing honors to naval ships, gigs, and barges, answer dips from merchant vessels	3
7. Perform duties of signalman as a member of a boat crew	3
8. Identify visual aids to navigation, buoys, beacons, lights and ranges	3
9. Take visual bearings using azimuth and bearing circle and alidade	3
10. Take fathometer reading	3
11. Perform duties of lookout and identify a. Types of U. S. ships and aircraft b. Foreign types of ships and aircraft	3 2
12. Transmit and receive code groups by flashing light at an approximate speed of a. Eight groups of 5-character code a minute b. Nine groups of 5-character code a minute c. Ten groups of 5-character code a minute	3 2 1
13. Transmit and receive plain language messages by flashing light at an approximate speed of a. 40 characters a minute (8 wpm) b. 50 characters a minute (10 wpm) c. 60 characters a minute (12 wpm)	3 2 1
14. Transmit and receive plain language messages by semaphore at an approximate speed of a. 75 characters a minute (15 wpm) b. 100 characters a minute (20 wpm) c. 125 characters a minute (25 wpm)	3 2 1
15. Prepare a visual message for transmission using proper form	3
16. Construct any commander or collective call sign using type and unit indicators and be familiar with the use and system of constructing all other visual call signs	2
17. Encode and decode any naval or international signal contained in effective visual communications publications, demonstrate rules of visual responsibility	2
18. Recognize aircraft emergency signals, including special flight gesture signals to ships	2
19. Identify foreign flags and ensigns of major maritime powers	2

This is a cut-out sheet from NavPers 760 pasted on the card.

Date & Initial Date & Initial

Recommend that all entries in this form be written in ink. When a man is transferred simply cross out his column.

Number all pages of this record: Page 1 of 3
Page 2 of 3
Page 3 of 3

Don't Gundeck this record.

le)

A & I.

Figure 13-8.— Enlisted group record of practical factors.

NAVAL COMMUNICATIONS

GENERAL RECORD (Type II)
OPNAV FORM 1500, 71

(date started)

PERIOD COVERED FROM 1 July 19__ TO continuous

TITLE
Officer Assignment, Qualifications, and Courses

COLUMN CAPTIONS

	Name and rank	Name and rank	Name and rank	Name and rank					
Date reported aboard									
Source of commission									
Anticipated length of tour									
Actual detachment date									
Months previous shipboard exp.									
Months prev. exper. in type									
Date of present rank (modify when promoted)									
CHRONOLOGICAL RECORD OF PRINCIPAL SHIPBOARD ASSIGNMENTS (shows progressive utilization in more responsible jobs)									
date and title of 1st principal assignment									
date and title of 2nd principal assignment									
date and title of 3rd principal assignment									
RECORD OF MAIN SHIPBOARD QUALIFICATIONS (enter previous qualifications in this record when officer reports aboard)									
Qualified as:									
Officer of the Deck									
CIC Watch Officer									
Coding Board Member									
Other (specify)									
RECORD OF OFF-SHIP SCHOOLS ATTENDED WHILE ATTACHED TO THE SHIP (do not list short courses lasting only one week or less)									
School									
Date enrolled									
Date graduated									
School									
Date enrolled									
Date graduated									
RECORD OF SELF-STUDY COURSES (NavPers and type commander courses)									
Course Title									
Date started									
Date completed									
Course title									
Date started									
Date completed									
Course Title									
Date started									
Date completed									

(Use reverse side for additional entries)

Figure 13-9.--Summary of officer assignments, qualifications, and courses.

24.3

(N.
of
Na
ma
cal
co
on
be

GENERAL RECORD (Type 11) OPNAV FORM 1500-31 (10-60)		Date started continuous					
		PERIOD COVERED: FROM			TO		
TITLE Officer of the Deck Training Record							
COLUMN CAPTIONS							
	Name	and rank	Name	and rank	Name	and rank	
OFFICER HAS ACQUIRED A KNOWLEDGE OF THE FOLLOWING:							
Voice radio procedure and voice calls (ACF 125)							Date & initials of certifying officer.
Contents of the Allied Naval Signal Book (ATPI, Vol. II)							Note: Tactical school periods should be scheduled as opportunity permits but main emphasis in officer training should rest upon each officer's demonstration of his professional qualifications and not upon means for helping him become qualified.
Contents of the OOD Standing Order Book							
Bridge Emergency Procedures							
Rules of the Road							
OFFICER HAS DEMONSTRATED HIS ABILITY TO:							
Solve 5 simple maneuvering board problems in 10 min.							
Send & receive flashing light at 6 wpm.							
Read on sight & decode 25 flag noist signals etc. etc.							

24.3

Figure 13-10.—Supplemental officer training record.

The Manual of Navy Enlisted Classifications (NEC Manual), NavPers 15105 and the Manual of Qualifications for Advancement in Rating, NavPers 18068 are available sources of information for billet analyses. The former publication lists job titles and their applicable NEC code numbers. A complete rundown, by rate, on functions and tasks that enlisted men must be able to perform is provided by NavPers

18068; it thus serves as a basic reference for those concerned with the assignment and utilization of enlisted personnel.

After the billet analysis is complete, a determination should be made of—

1. The order in which training will be given.
2. How much each man already knows.

4.3

NAVAL COMMUNICATIONS

GENERAL RECORD (Type III)
OPNAV FORM 1500-32 (10-60)

PERIOD COVERED: FROM 1 Jan 196_ TO 31 Dec 196_

TITLE
Division Instruction Periods: OC Division

MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1		Sat	Sat									
2		Sun	Sun									
3	C-1	C-16	C-27									
4	Sat											
5	Sun	C-17	C-39									
6	C-4											
7												
8	C-5	Sat	Sat									
9		Sun	Sun									
10												
11												

Notes: Enter planned lessons in pencil; ink in the entry when actually accomplished. Show Saturdays and Sundays.

	29											
	30											
	31											
WEEKLY OR BIWEEKLY	1ST											
	2ND											
	3RD											
	4TH											
	5TH											
MONTHLY												
QUARTERLY												
SEMI-ANNUAL												
ANNUAL												

Figure 13-11.—The type III form usually is reserved for group instruction periods. 24.8

3. The time, place, and methods for providing the needed instruction.

PRIORITY OF TRAINING.—In establishing priorities for training, the principal consideration usually is the ship's operating schedule. The immediate training needs center around the most commonly used equipment.

An unexpected event may present a training opportunity that can be used to good advantage.

For example, the division commander issues an order to stand by for tactical drills while steaming in company, the evolutions to be indicated by flaghoist. All signalmen and strikers should be ordered to the signal bridge to participate in the training.

Too frequent breakdown of equipment, abuse of tools and equipment, and uneconomical or inefficient operational performance are

ma
syn
are
sta

uni
a l
lac
off
of

KN
ma
me
pe
al
wr
the
of
ed
co
on

Or

jo
as
pa
du
of
or
ta
sc

sk
at
ar
st
B
ti
th
of
al
ta
ti
be
nr
o:
p:

e
tl
a
p

manifestations of a need for training. Other symptoms are situations where petty officers are working while nonrated men run errands, stand by, or just loaf.

Low morale may be caused by a feeling of unimportance or incompetence, stemming from a lack of training. Such conditions may indicate lack of leadership and also reveal that some officer or petty officer is not taking advantage of training opportunities.

DETERMINE HOW MUCH EACH MAN KNOWS.—A determination of how much each man knows is important. Nothing is more detrimental to interest in training than to require personnel to attend instruction in a subject they already know. Individuals may be examined by written or practical tests, by observation of their daily performance of duties, or evaluation of past experience. When the extent of knowledge of duties is determined accurately, the communication officer has a more positive basis on which to apply the training program.

On-the-Job-Training

Primary emphasis should be given on-the-job training of personnel to perform the duties assigned them as individuals or in crews, parties, or teams. Instructions may take place during watches, drills, or other evolutions. All officers and petty officers are responsible for on-the-job training of personnel, and they should take advantage of every opportunity to conduct some phase of instruction in the men's duties.

On-the-job instruction is mainly for teaching skills. It is the best method for complex operations. This method teaches skills rapidly and—more important—completely. When instruction is finished, the trainee can perform. Because the method itself is simple, the practical man finds it relatively easy to teach by this method. There are limitations, of course: other methods are better for teaching principles and theory; the number of trainees who can be taught at one time is limited. The latter limitation, however, is more apparent than real. On board ship, the number of occasions at which more than 6 men (for example) are to be taught one skill at the same time is unusual. This is particularly true of destroyer types.

On-the-job training requires complete knowledge of the subject, ingenuity, and initiative on the part of the instructors. They should take advantage of every training opportunity that presents itself.

Classroom Instruction

Even though all skills and some of the related information may be taught on the job, certain basic information, which leads to a better understanding of the operations, may be taught best in a classroom situation. Such instruction should be scheduled regularly, but not allowed to substitute for on-the-job instruction.

Fleet schools, such as the fleet training centers, feature short operational or team training courses. BuPers-controlled schools, on the other hand, provide basic and advanced technical instruction applicable to specific ratings. Normally, the type commander controls the input to these schools from the forces afloat. The educational services officer has information concerning availability of quotas and the method of obtaining them.

The current Catalog of U. S. Naval Training Activities and Courses (NavPers 91769) is a valuable compilation of training available at BuPers and fleet schools.

Individual Study and Practice

Self-study is mandatory if the enlisted man is to complete the requirements for advancement in rating and gain further knowledge of subjects needed to improve the efficiency of the ship. Officers also must devote time to individual study in order to be considered for promotion and gain knowledge of special skills. Individual study by all hands should be encouraged.

To ensure a successful training program, self-study requirements should be established for all communication personnel. Such requirements can be in the form of Navy training courses and associated correspondence courses. Training Publications for Advancement in Rating (NavPers 10052) contains information concerning appropriate study material for communication personnel. Some form of control, such as a checkoff list, should be used to ensure that personnel complete the required study.

Navy training courses supply information the enlisted man needs to perform the duties of his rating. The value of the training course increases if its content is correlated closely with on-the-job instruction. Supervision of the use of the training course is the responsibility of the division officer, who must assure proper correlation. The educational services officer is in charge of procurement and issue of training course books. Most of them are supplied to

the ship automatically, but replacements must be ordered. Associated correspondence courses must be requested individually, by the men concerned, through the educational services officer.

As new training and correspondence courses become available, announcements concerning them are made in such publications as the Naval Training Bulletin, All Hands, and the Naval Reservist. In addition, NavPers 10052 is revised annually, and the List of Training Manuals and Correspondence Courses, NavPers 10061, is revised semiannually.

A thorough knowledge of the appropriate directives controlling the Navy system of advancement in rating is mandatory for all officers and key enlisted personnel in administering the shipboard training program. Following are the governing references pertaining to advancement in rating:

- Bureau of Naval Personnel Manual.
- Manual of Qualifications for Advancement in Rating (NavPers 18068), which includes instructions for the administration of servicewide examinations for enlisted personnel.
- Training Publications for Advancement in Rating (NavPers 10052).

Orientation of New Personnel

Every new man reporting aboard should be given immediate instruction in topics that will speed his assimilation into the crew. This program, carried out on a shipwide basis, should be coordinated by the training officer. The program is directed chiefly toward personnel new to the Navy, but everyone reporting aboard should receive some orientation. This training phase takes the form of reading both the ship's and operations department's organization and regulations manuals, becoming acquainted with the watch bill, and the policy on leave, liberty, and so forth. Essentially, every new man should be instructed in ship's regulations, organization, history, and what is expected of him as a crewmember, and what he may expect in turn. This training should emphasize the necessity for complete knowledge of his job by the individual and the need for teamwork in making the ship an efficient fighting unit. A checkoff list should be established for uniformity of orientation of communication personnel.

As a part of the orientation of new personnel, and as a benefit to all hands on board, some ships develop "Know your ship" or "Minimum

requirements for all hands" local training courses. This program helps to develop the smartness and efficiency that distinguish a capable and well-trained ship's company.

CONTROL DEVICES

Controlling, in its administrative sense, is evaluation of progress or results. It is concerned with ferreting out data relative to direction and amount of achievement so that future corrective action may be taken. Any device used to collect these facts is called a control device. Inspections are control devices used at the point of activity. The supervisor sees at firsthand what has been or is being accomplished. Because this practice is not always possible, other control devices are utilized. In the field of training, these devices usually are records.

Two principles must be borne in mind in establishing or using any system of control: (1) The system must be accurate, effective, and impartial; and (2) a practical system of control can exist only in relation to a standard. If the communication training program has no objective, no policy, no method, none of the control devices serve any useful purpose.

The specific purposes of having a control system on the training program are to find out if (1) the objectives of the program are being met according to plan; (2) prescribed methods are used; (3) each person responsible is doing his part; and (4) basic policy is observed.

Because the program is aimed at improving individuals, these additional questions must be answered:

- Which individuals are being trained?
- What training are they receiving?
- How well are they being trained?

Inspections

Inspections as a control device for a training program do not differ materially from other inspections. The inspector has to know what he is looking for, and must employ uniform standards in judging units inspected. If the inspector does not use standards, or does not obtain meaningful facts, irrelevant considerations enter into his judgment, and his opinion loses validity.

Pr
di:
Su
tic
ce
ha
re
pr
ca
to
on
in
qu:
an
of
an
is
mu
for
qu:
re
tio
ad
Ev
on-
of
of
hav
tin
suc
mu
tra
eva
jec
str
act
Th
161
eva
Eff
Op
fol
tio
of :

Progress Charts

The main purpose of progress charts is to display graphically the progress of the trainee. Such a chart should provide sufficient information so that the communication officer can ascertain quickly the degree to which each trainee has completed the units of instruction, and what remains to be done. Use of checkoff lists or progress charts, such as the equipment qualification chart shown in figure 13-12, is essential to the training program.

Training records must be maintained not only for progress with respect to advancement in rating of the individual but also for showing qualification in team aspects such as firefighting and damage control. Examples of many types of records that can be maintained are available, and determination of the exact format to be used is a matter of individual choice.

To summarize, the communication officer must maintain a training and educational record for each man in his division to show special qualifications set forth in the BuPers Manual, records of completion of training and educational courses, and progress of training for advancement in rating.

Evaluation of Instructions

The communication officer should check the on-the-job performance of instructor personnel of his division. Some of them may be graduates of a Navy instructor school and may actually have been assigned to instructor duties at some time. Others may not have had the benefit of such training or experience. But all Navymen must become qualified instructors, because training is a continuing process.

Basically, three factors can be employed in evaluating the instructor: (1) knowledge of subject matter, (2) knowledge and application of instructional techniques, and (3) instructor characteristics (i.e., voice, diction, delivery). The Manual for Navy Instructors, NavPers 16103-C, contains excellent advice on instructor evaluation.

Efficiency of Administration and Operational Readiness

Control devices may be applied also to the following aspects of communication administration and operations to reflect the effectiveness of a training program:

1. Performance during maneuvers and exercises, including display of self-sufficiency and grades attained in exercises and inspections.
2. Military character and qualities of leadership displayed by communication personnel.
3. State of morale of communication personnel.
4. Material condition of the communication spaces and equipment, including ability of personnel to take corrective action promptly when material casualties occur.
5. Proportion of men engaged in bettering themselves by educational pursuits and percentage passing fleet exams for advancement in rating.
6. Speed, orderliness, and efficiency with which drills and daily evolutions are carried out.
7. Smart appearance of communication spaces and personnel at all hours.
8. Knowledge demonstrated by personnel in such matters as insurance, savings programs, ship's regulations, and operating schedule.

TRAINING DURING SHIPYARD OVERHAUL

During shipyard overhaul, training must be subordinate to the primary objective—the best possible overhaul. Most yard overhauls are trying periods. Work items listed under "ship's force accomplish" (SFA) often take all available personnel for the seemingly endless jobs to be completed in accordance with an exacting time schedule. In addition, there are personnel requirements for messenger watches, fire watches, shore patrol, mail clerk, and so on.

Before entering the shipyard, personnel should be briefed on the need for detailed work requests and thorough inspections to be carried out before, during, and after the yard work. As a related training item, it is important that key personnel understand the importance of making a careful inspection of yard work before recommending acceptance. The ship bears the ultimate responsibility for all work performed by the yard.

Planning for administration of personnel during the shipyard overhaul should include instruction regarding their employment in special tasks, duty assignments, and watch, training, and leave schedules.

Leave for personnel must be planned during shipyard overhaul periods. Equable distribution of leave is necessary to ensure that sufficient

NAVAL COMMUNICATIONS

Name and Rate	Equipment	AN/SRT-15	AN/URC-32	TED-9	AN/GRC-27A	AN/SRR-11	R-390/URR	AN/URA-8B	AN/SGC-1A	TT-23/5G
SHAFFER, E. J., RM1		3		6		1/2	2	1/1		
CROWLEY, H. T., RM2	6	5/10		6/15	1	5	3	2		
SKELLY, W. W., RM2		3	2	3		1/2	1			
PRESTIL, J. V., RM3		10		3		2	1	2		
SCRUGGS, W. A., RM3	2	3	2	3		2	1	2		
SELLERS, W. E., RM3		10		3		2	1	3		
HAMILTON, M. L., RMSN		3		1	2	2	2	3		
RICE, L. K., RMSA	6 1	25 3	6	4 5	2	5 2	1	2	1 2	

LEGEND

	Circuit theory and unit function.	Space filled in indicates fully qualified.
	Operation of the equipment only.	
	Calibration, adjustment, checks, and measurement.	
	Signal tracing, trouble isolation, parts replacement.	
		Number in space indicates number of hours of instruction.

Figure 13-12.—Equipment qualification chart.

24.3.2

qualified personnel are always on board so that ship routine and work continue uninterrupted.

The regular watch bill must be adjusted during the yard period because of vacant billets resulting from personnel away on leave or at school. In planning for the yard period, it is

essential to list the requisite watch stations and the communication personnel who will man them. Obtain a copy of shipyard regulations in advance of preparation of this list to assure that required watches are planned for. Normally, the shipyard will forward a copy of instructions

an the PI du the tie fle mt shi on fac ha ha ter thi tag the out sho tra div anc as vis fac as con ing per offi ove sch pro trai edu opp plet a g equ able ing ove

and regulations to the ship ahead of beginning the overhaul.

PLANNING FOR TRAINING

The training objectives to be accomplished during the yard overhaul are based largely on the personnel situation. Local training facilities (shipyard training facilities and nearby fleet schools) may be utilized. Deciding how much training is to take place away from the ship is difficult, because of the heavy demands on personnel while the overhaul is in progress.

The navy yard (or other shore-based repair facility) in which the ship will receive her overhaul always is known in advance. If the overhaul is in a shipyard near a fleet training center, the excellent training facilities available at this type of activity can be used to good advantage. Figure 13-13 is fairly representative of the overhaul training plan.

Training to be accomplished must be worked out carefully in advance of the overhaul. It should encompass both officer and enlisted training; it should include requirements for individuals in the operation of specific equipment, and team training in such important functions as firefighting. Upon arrival at the yard, a visit to the training aids center, section, or facility may be rewarding. Training aids such as scale models, mock-ups, and charts may considerably reduce instructional time. Training plans should be worked out with key enlisted personnel, then submitted to the operations officer for approval. He, in turn, submits the overall operations department shipyard training schedule to the executive officer for final approval and inclusion in the ship's integrated training schedule for the yard period.

A navy yard overhaul experience can be an education in itself. Actually, there are many opportunities for on-the-job training while completing ship's force work. Personnel can learn a great deal by observing installation of new equipment and facilities. Where mutually agreeable, ship's personnel often can learn by working with yard personnel in the installation or overhaul of equipment.

REFRESHER TRAINING

A major phase of the training cycle is post-overhaul refresher training. In anticipation of this event, planning relative to completion of the overhaul must be detailed carefully for the final

weeks within the shipyard. Emphasis is shifted at that time from the overhaul to operational routines.

READY-FOR-SEA PERIOD

A ready-for-sea (RFS) period is assigned by the type commander to afford the commanding officer time to prepare his ship for sea upon completion of the actual overhaul. Prior to the RFS period all yard work items must be reviewed for completeness, and a final report of their status made to the operations officer. On completion of the RFS period, the captain is expected to report to the type commander and other interested commands that the ship is in all respects ready for sea. The communication officer ensures that all matters affecting communications have been taken care of, that equipment is in good operating condition, and that the watch bill is up to date. All hands should be kept fully informed of what is expected of them during these final weeks in the yard.

For training purposes, plans for the final weeks of overhaul should provide for—

1. Completion of the schedule of forthcoming training and operational tests of equipment.
2. Completion of the fleet training command's arrival inspection checkoff list.
3. The return of personnel from leave and schools.
4. Inauguration of the new watch, quarter, and station bill.

Because refresher training is the ship's next major assignment, the type commander's requirements for items to be completed before beginning that training should be studied and plans made to assure compliance. The communication officer should review the training command's standard training requirements, which include the communication exercises required during refresher training.

INDIVIDUAL SHIP EXERCISES

The individual ship exercise (ISE) period is assigned to provide time for orientation of ship's company to operational functions, and to make adjustments to organizational matters and material before commencing refresher training. Basic training is conducted in communication drills and exercises, including walkthrough of exercises listed in the training command requirements.

NAVAL COMMUNICATIONS

TRAINING PLAN FOR SHIPYARD OVERHAUL PERIOD				
COURSE	LENGTH	LOCATION	CONVENING DATE	PERSON ATTENDING
OFFICERS CIC watch officer	4 wks.	Dam Neck, Va.	1 Feb 3 Mar	ENS MOOR ENS GROVE
ASD deck watch officer	3 wks.	Key West	12 Jan 7 Mar	ENS KLINE LTJ DOE
Electronics repair	16 wks.	Treasure Island	3 Feb	LTJ FITZGERALD
Loran navigation	1 wk.	Local	1 Mar	ENS BROWN
Emergency ship handling	2 days	Local	Each Monday and Wednesday	1 officer each week for 8 weeks
ENLISTED MEN CIC team	2 wks.	Local	3 Mar	CIC team
Fire fighting	2 days	Local	Every Monday and Wednesday	10 men each course
Telephone talker	3 days	Local	Every Monday	5 telephone talkers each course

SHIPBOARD TRAINING, WEEKLY SCHEDULE					
COURSE	MON	TUES	WED	THURS	FRI
Visual communications			0830-1000		
Radio communications	A		A		A
Engineering	B		B		B
Landing party		C		D	
		D			
Seamanship			1000-1130		
Navigation			E		E
Gunnery		F		F	
				G	
Swimming qualifications			1400-1600		
Athletics			H		H
			I		

DESIGNATOR	PERSONNEL ATTENDING	IN CHARGE	LOCATION
A	Quartermasters	Op. Off	Rm 6 Bldg 72, yard
B	Radiomen	Op. Off	Rm 4
C	Eng. strikers	Eng. Off	Rm 3
*D	Landing party	Wep Off	Rifle range
E	Deck strikers	Wep Off	Rm 6
F	Quartermasters	Nav	Rm 4
G	Gunnery strikers	Gun Off	Rm 3
H	All hands not qualified swimmers	Athletics Off	Swimming pool
I	Personnel not in duty section	Athletics Off	Rec. area
*1st of each month			

LESSON PLANS AND INSTRUCTOR: FIRST WEEK			
DESIGNATOR	1st PERIOD	2nd PERIOD	3rd PERIOD
A	QMC	QMC	QMC
B	Signaling procedures	Signal book	Call signs
B	RMC	RMC	Radio officer
C	Radio procedures	Radio procedures	Security
C	MMC		
D	Maintenance		
D	Landing party officer	Landing party officer	
D	Firing the range	Close order drill	
E	BMC	BMC	
E	Qualifications for rating	Splicing	
F	Asst. navigator	QMC	
F	Log writing	Maintenance of equipment	

Figure 13-13.—Typical training plan during the overhaul period.

105.20

abl
for
sel
fre
vie
off
pha
mu
poi
ula
be
me
do.

shc
ISE
ove
cer
key
tra:
The
mu
van
con
ahe
pro
to t
and

FLI

I
the
is a
is c
men
Tra:
repi
sups
tra:
(UT
enli:
train
ing
weel
on th
unde
culr
to ev

R
the
addi
held

Before departure from the yard, it is desirable to brief communication personnel on the forthcoming operating schedule and the general schedules to be followed while undergoing refresher training. It is suggested that this review include a brief talk by the communication officer on what he expects of the division, emphasizing overall ship requirements for communications from the commanding officer's point of view. The ship's organization and regulations manual should be checked carefully to be sure all communication requirements are met, and that personnel are briefed on what to do.

The instructions and drills to be conducted should be planned in advance for each day of the ISE period and integrated carefully with the overall ship training. The communication officer should hold a short meeting each day with key enlisted personnel to discuss the next day's training schedule and instruction assignments. These personnel then pass the word to the communication gang. Each man must know in advance what training will be conducted. The communication officer must plan far enough ahead so that his proposed schedule can be approved by the operations officer and submitted to the executive officer for inclusion in the daily and weekly training plans for the ship.

FLEET TRAINING COMMAND

Refresher training of all fleet units is under the cognizance of the training command, which is a type command of the fleet organization. It is concerned essentially with training groups of men into teams and crews. Commander, Fleet Training Group (COMFLETRAGRU) is the local representative of the training command. He supervises fleet schools and directs the afloat training conducted by the underway training unit (UTU). The UTU is composed of officer and enlisted shipriders (as they are known in the training command) who oversee shipboard training of the crew for periods varying from 3 to 11 weeks, depending, among other considerations, on the type of ship. During this period the ship undergoes a progressive series of exercises, culminating in a comprehensive battle problem to evaluate her battle readiness.

Refresher and team training conducted with the assistance of the training command is in addition to those drills, schools, and exercises held aboard the ship as part of the regular

training program carried on continuously under the direction of the ship type commander.

Arrival Inspection

On reporting for refresher training, the ship is accorded a welcome in the form of an arrival inspection. The purpose of this combined administrative and material inspection is to determine if the ship is ready to commence training. This inspection is based on the arrival inspection checkoff list. Emphasis is placed on items that tend to handicap training, if they are not in good order. If effective effort was made to meet requirements of the arrival inspection checkoff list, and all communication equipment is in good operating condition, the communication division is declared ready to commence training.

For the officer dealing with the training command for the first time, the refresher training period may prove a trying experience. For a period of about 6 weeks, 5 days a week, he should expect reveille about 0500, to be underway at 0600, and to return to port anywhere from 1700 to 1900.

Team Training

During the refresher training period, emphasis is on team training—the techniques, methods, and procedures of operating machinery and equipment on battle and watch stations in a team situation. The CIC team and damage control repair parties are, perhaps, the best examples of operational team performance. Effective communications also demands team performance, and many of the training exercises required of destroyer types reflect this need.

Lesson Plans and Syllabuses

Training commands in both the Atlantic and Pacific Fleets have prepared extensive lesson plans and syllabuses to assist ships in planning and conducting training. These references are readily available, and may be used to ensure inclusion in the ship's daily training plan of all important elements of team training.

These ready-made training media in no way prevent the ship from developing her own lesson plans or syllabuses, if considered desirable. In this connection, the Manual for Navy Instructors and Instructor Training may be helpful.

REFRESHER TRAINING UNDERWAY

Once the refresher training period is underway, the ship is expected to perform her own training. The fleet training group schedules exercises that require services and assigns shipriders to assist in on-the-job training. Shipriders are personnel especially qualified in the various phases of shipboard operations, such as damage control, CIC, ASW, and communications. They assist by inspecting or instructing during exercises. These same shipriders grade the ship on battle problems.

During the refresher training period, the ship schedules and conducts the various communication, damage control, gunnery, and other exercises required by the training command and applicable NWP and FXP publications for training for her type of vessel. With shipriders observing, assisting, and coaching, the ship goes through the scheduled exercises—those including the assistance of servicing ships and aircraft—and the internal drills in damage and engineering casualty control, first aid, NBC attacks, and the like.

BATTLE PROBLEMS

Exercises during the early part of the training period are paced at a deliberate rate. Gradually, the number and complexity are increased, together with the emphasis on realism that is a primary factor in training.

Midterm Battle Problem

Midway in the training period, the ship may receive a midterm battle problem. This event is designed to simulate, as nearly as possible, conditions that might prevail during actual combat, and affords the ship an evaluation of her progress in training. The fleet training group normally provides a full inspection team for this problem, and conducts a critique afterward to apprise the ship of any weaknesses in operation. From this point on, emphasis in training is directed to correct these shortcomings.

Operational Readiness Inspection

The final battle problem, or operational readiness inspection (ORI), is the official evaluation of the ship's combat readiness on completion of refresher training.

COMMUNICATIONS DURING REFRESHER TRAINING

The basic requirements for training plans are (1) those contained in FXP 3 and (2) the training command's standard requirements for the ship type. Other elements that may bear on the plans are the arrival inspection report of deficiencies, weaknesses already known to the communication officer, and the daily shiprider reports that list deficiencies noted during the daily underway training.

Training in communications has to be integrated with the overall ship training schedule for any given day. Drills in shifting frequencies, for example, obviously cannot be conducted when the ship is engaged in an exercise in which maintenance of communications is important. The ship's daily and weekly training plans are built around the weekly operation schedule, promulgated by the fleet training group, which lists exercises to be conducted by the ship requiring services. When the ship is scheduled for refueling from a tanker, the communication officer should arrange visual communication drills while joining up. Similarly, he must plan to conduct infrared drills with a carrier during night plane-guarding operations.

It is vital that the communication officer impress key personnel with the importance of maintaining lines of communication within the division so that all hands are briefed each day on training planned for the following day. He should plan daily and weekly training schedules with leading petty officers, and review the next day's training each evening for any last-minute changes.

The training-minded communication officer should bear in mind that the training schedule he prepares for the refresher training period must be flexible and subject to change, depending upon conditions that may vary from day to day.

TYPE TRAINING

Type training includes training in the various tasks assigned to naval vessels of a particular type. In type training, the self-sufficiency and smartness displayed by the ship indicate to a marked degree her state of training. This training encompasses tactics, screening, emergency ship handling, underway replenishment, rescue operations, competitive exercises, and participation in various operations. (These

ope
to
air
tur
tor
the
to t

cer
is t
of

CO

qui
exe
con
yea
bat
the
but
uat
des
FX
and
typ
Fle

for
exe
Sta
(DF
Ma

pre
DE
yea
mi
the
for
onl
pro

the
cor
tic
pre
DE
cor
mu

by
eva

operations include distant deployment designed to provide training in antisubmarine warfare, air defense, or escort of convoy.) Other features of type training provide annual qualification in shore bombardment, gunfire support, and the like. Communications, of course, is vital to the success of type training operations.

The chief concern of the communication officer in type training, as in all other operations, is to ensure that the media of intership exchange of information is as near perfect as possible.

COMPETITIVE YEAR

Closely allied with type training is the requirement for completion of certain competitive exercises by vessels of the same type. The competitive year parallels the fiscal (or training) year, running from 1 July to 30 June. The battle efficiency competition between ships of the same type is designed not only for training but also serves as a measuring device for evaluating combat readiness. Controlled exercises designated for this evaluation are taken from FXP 3, the basic training exercises publication, and are agreed upon mutually by the appropriate type commanders in both the Atlantic and Pacific Fleets.

In the destroyer force, orders and standards for controlled battle readiness (competitive) exercises are incorporated in either Orders and Standards for Battle Readiness Exercises (DESBATREAD) or the Destroyer Competition Manual (DESCOMP).

The foregoing discussion should not be interpreted to men that only exercises listed in DESBATREAD are conducted during the training year; they represent the type commander's minimum requirements for valid evaluation of the ship. These selected exercises conducted for the battle efficiency competition comprise only a small fraction of the entire type training program.

The communication officer incorporates in the training schedule as many as possible of the communication exercises listed in FXP 3. Particular attention is required to ensure that the prerequisite communication exercises listed in DESBATREAD are completed preceding the conduct, semiannually, of the overall communication exercise for competitive purposes.

In addition to the specific criteria provided by FXP 3, the following considerations govern evaluation of exercises:

1. Proficiency of teamwork.
2. Efficiency in handling daily communications.
3. Alertness in handling traffic.
4. Ability to handle casualties.
5. Proficiency during fleet problems and tactical exercises.
6. Adequacy of shipboard training program.
7. Condition of registered publications and RPS files and accounts.
8. Proper transmission security.
9. Proper security measures taken in the handling, marking, and destruction of classified information.

The foregoing items purposely duplicate information contained in other publications, but they provide the communication officer with an indication of the bases on which his ship will be evaluated so that training can be planned to stress necessary qualities.

RESPONSIBILITY FOR TRAINING

The U. S. Navy Regulations and NWP 50 amply state the training responsibilities of all officers. Suffice it to say here that the communication officer has full responsibility for the training of his personnel in the many and varied phases of communications, and must prepare himself accordingly.

The communication officer aids and advises the operations officer in directing training within the division, and coordinates the program with the departmental and overall training program of the ship.

A review of the duties normally associated with administering training within the communication division includes the following:

1. Plan, develop, and coordinate the division training program in accordance with the departmental and ship's training objectives.
2. Plan, develop, and ensure the preparation of division training schedules, and obtain space and materials required to support these schedules.
3. Select and train instructors within the division.
4. Supervise preparation of training materials, and review syllabuses and lesson plans prepared within the division.
5. Obtain, maintain custody, and issue required training aids and devices.
6. Supervise the preparation, administration, and correction of tests in practical

factors within the division, and arrange for examinations for advancement in rating.

7. Observe instruction given at drills, on watch, and on stations, and make recommendations as appropriate.

8. Maintain training records and prepare required reports.

9. Keep personnel informed of training progress, using charts and other records.

10. Submit requests to the operations officer to schedule drills and exercises.

11. Keep communication division personnel informed of available training courses, correspondence courses, fleet and service schools, and encourage their use.

12. Consult with the operations officer in all training matters affecting the division.

Ideally, an officer should have at least a working knowledge of the tasks and responsibilities assigned to all those serving under him. This quality is the real foundation of command capacity, and nothing else serves so well to give an officer an absolutely firm position with all his subordinates.

The greater part of modern naval operations, however, is noted for its diversity and complexity. For this reason, it is virtually impossible for a general line officer to know more

about radio repair than his technicians, or more about the workings of the ECM gear than a specialist in electronics repair.

It readily can be understood that there must be a different approach to the question of what kind of knowledge an officer is expected to possess, otherwise the requirement would be unreasonable and unworkable. The distinction lies in the difference between the ability to perform a task well and to judge when it is done well.

Training without leadership (or vice versa) is impossible. Whatever his rank, the naval officer stands before his men as a leader. Whether he is training them for action, or merely performing some routine duty, he represents naval leadership to those under him. Matters of correct attitude, personal conduct, and awareness of moral obligations and of obligations to the Navy and the men he commands do not lend themselves to control by a set of rules. They must be lived by the individual. The naval officer must set a high standard and inspire confidence in those under him. In the final analysis, the success of any officer's efforts depends upon his setting the very best example in everything he does, and practicing what he preaches.

R
the e
Main
tribu
senti
main
tinui
equip
prog
subor
for e
trolli
withi
M
broac

those
an of
toler

those
ment
equip

mine
equip
tions
When
are a
Fc
at lea

withir
accou

all of
ment

neces

tenan
forma

be pu
tenan
Co
direct