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THE SHIP'S SERVICEMAN RATING:
NEW CONCEPTS TO IMPROVE TRAINING,
ASSIGNMENT, PERFORMANCE, AND UTILIZATION

Del H. Sass
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Skill and knowledge requirements for ship's servicemen are discussed in terms of billets, training, identification, and utilization. Advancement opportunity, retention and rating structure are also considered. Evaluation of the rating is in terms of its primary responsibility to provide services and conveniences, mainly to the afloat forces. The responsibilities of the rating require the performance of a variety of non-related jobs, ranging from manual labor to administration, which require varying degrees of physical dexterity and mental ability. Significant factors adversely affecting performance include inadequate numbers of rated personnel, high percentage of personnel in the lower mental groups, deficiencies in training, and lack of skill identification. The foregoing, in turn, affect personnel utilization, personnel development, advancement, and retention. Recommendations are made to assist Navy planners in developing procedures for training, identifying, utilizing, and managing personnel in the ship's serviceman rating.			

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FOREWORD

This research was accomplished under Exploratory Development Research Task Area PF39.521.010, Navy Career Structures. Mr. Kenneth M. Gladstone served as principal investigator through 30 June 1971 and his contribution to the project is gratefully acknowledged.

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SUMMARY

Problem

The increased emphasis toward providing expanded personal services and conveniences aboard ship to improve habitability for the afloat forces has placed increased demands on the ship's serviceman (SH) rating. Limitations in manpower resources and qualifications have restricted the capabilities of SH personnel to successfully meet the increased demand for services. The objective of this research is to evaluate the qualitative and quantitative manning required to provide effective personal service functions and to develop new concepts and procedures designed to improve the effectiveness of the ship's serviceman rating.

Background and Requirements

The Chief of Naval Personnel (Pers A4) requested that a comprehensive analysis of the ship's serviceman rating be conducted to evaluate advancement opportunities, retention, training, skill requirements, rating structure, and all factors relating to and affecting the rating. The ability of SH personnel to effectively perform assigned functions was a major concern.

The SH rating is one of several enlisted ratings whose personnel must possess those face-to-face skills involving interpersonal relationships. Personnel assigned to the rating perform duties designed to provide a variety of services and conveniences considered essential to the well-being of Navy personnel, e.g., barbering, tailoring, laundering, dry cleaning, and operating common resale outlets. The jobs, ranging from manual labor to administration, require varying combinations of physical dexterity and mental ability.

The advancement procedures for the rating are unusual in that personnel are advanced to SH3 on the basis of having passed an examination in one of the rating's special skill areas, e.g., barber, tailor, laundryman, or clerk. General examinations, emphasizing clerical, administrative, and supervisory functions, are used for advancement to SH2 and above.

There appeared to be deficiencies in the ability of SH personnel to perform their assigned responsibilities. The deficiencies became more pronounced with the increased demand for additional services on the part of ship's servicemen brought about by the Navy's desire to provide better services to its personnel. Problems were indicated in such areas as training effectiveness, skill requirements, personnel utilization, etc. It was then determined that a complete analysis and evaluation of the rating was essential to provide a base for developing positive courses of action.

Approach

An in-depth analysis of the rating to evaluate job functions, responsibilities, skill levels, training requirements, personnel characteristics and qualifications, manpower requirements, manning levels and all factors related to performance effectiveness was conducted. Personal interviews conducted at various activities and questionnaires completed by ship's servicemen provided first hand information on rating requirements and problems encountered at operating, supervisory, and management levels. Additional resource material was obtained from rate training manuals; school curricula and study guides; procedural, operating, and personnel manuals; and sundry directives and handbooks. Navy master enlisted tape extracts were used to provide a variety of personnel and statistical data.

Findings

1. The rating is comprised of a number of non-related jobs requiring diverse manual and mental skills, e.g., general manual and mechanical skills for laundering and dry cleaning; specific hand skills for barbering and tailoring; combined manual and mental skills for operation of resale outlets; and clerical, arithmetic, and analytical skills for administering (e.g., purchasing, material control, merchandising, financial records, accounting, etc.).
2. Rating series navy enlisted classification codes (NEC's) are used to identify SH personnel with special qualifications and aptitudes in the diverse occupations associated with the rating. All personnel are advanced to SH3 having qualified in one of the occupational areas but the skills and qualifications of approximately 80% of SH3's are not known because they do not carry an NEC.
3. Approximately 50% of all personnel in the rating do not carry an NEC and therefore their special skills and qualifications are not known.
4. The SH rating is at 85% of total requirements, however the percentage assigned to sea billets is less. Some ships are at 100% or more of allowance but a significant number have less than one-half of allowed ship's servicemen.
5. The recent emphasis to improve shipboard habitability has increased the demands for services and conveniences thus requiring greater efforts and a higher degree of proficiency on the part of the ship's servicemen. Additional personnel and training have not been provided to offset the added requirements.
6. Input sources to the rating are limited with few recruits having the necessary skills to become designated strikers at the time of enlistment. Most personnel come from the deck force and generally are assigned to the manual, lower skilled jobs such as those existing in the laundry.

7. Sixty percent (60%) of SH personnel attained below average GCT scores, i.e., 25% are in lower Group III and 35% are in Group IV.

8. The three-week SH store clerk course is used to train rated and non-rated personnel, ranging from recruits to leading petty officers, as a homogeneous group despite incompatibility of backgrounds and learning capabilities.

9. With the exception of the barber school, all Class "C" schools are not operating at capacity. Approximately one-half of student quotas were not filled during fiscal year 1971.

10. Record keeping and administration are the most important aspects of the rating for career development and they are emphasized in advancement examinations. However, more time is spent in formal training of SH personnel in manual and hand skills which apply generally only to the lower paygrades than is spent in formal training in record keeping and administration.

11. Advancement opportunities are limited at paygrades E-6 and above. The average ship's serviceman has completed 14 years of service at the time of advancement to SH1 compared to the Navy average of 7½ years.

12. Compared to Navy averages, first term SH personnel reenlistment rates are low but are high among career personnel.

13. There are no billet requirements for NEC SH-3156, dry cleaner, nor are any ship's servicemen assigned this NEC.

Conclusions

1. The ship's serviceman rating structure, as constituted, is essentially sound and should be retained.

2. Operation of the service functions cannot be maintained at efficient and acceptable levels because shortages of personnel necessitate using untrained and unskilled personnel in positions where some degree of training or experience is essential.

3. The inability to identify personnel according to job skills and qualifications, e.g., barber, tailor, etc., prevents the effective detailing and assignment of personnel, particularly at the lower paygrades.

4. The current Class "C" SH store clerk course cannot be taught effectively because of the heterogeneous backgrounds and learning capabilities of students.

5. The long average length of service to attain the supervisory grades serves to discourage first termers, particularly those in the higher mental groups, from reenlisting.

6. NEC SH-3156, dry cleaner, is not required because personnel and billets can be adequately identified by using NEC SH-3154, laundryman/dry cleaner.

Recommendations

1. Establish a Class "A" school emphasizing training in the clerical and administrative functions associated with the rating. (Pages 8, 9, 14, 15, 17, 30)
2. Intensify efforts to maximize utilization of the present Class "C" schools. (Pages 14, 15, 20)
3. Establish entrance prerequisites for the SH store clerk course to minimize the number of students lacking fundamental knowledge of service and resale activity operations. (Pages 16, 17)
4. A new procedure be used to assure adequate identification of personnel skills by assigning appropriate NEC's, e.g., barber, tailor, laundryman, or clerk, to all personnel passing the advancement examinations for SH3. Concurrently, encourage individual commands to recommend assignment of applicable NEC's to qualified personnel, particularly SH3's and SH2's. (Pages 22, 23)
5. Consider new procedures, such as direct procurement at advanced paygrades and limited enlistments, if present methods do not satisfy personnel requirements. (Page 18)
6. Delete NEC SH-3156, dry cleaner, and use NEC SH-3154, laundryman/dry cleaner, to identify applicable billets and personnel. (Pages 23, 24)

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I. INTRODUCTION

A. Problem

The increased emphasis toward providing expanded personal services and conveniences aboard ship to improve habitability for the afloat forces has placed increased demands on the ship's serviceman (SH) rating. Limitations in manpower resources and qualifications have restricted the capabilities of ship's servicemen to successfully meet the increased and expanded demands for services. The objective of this research is to evaluate the qualitative and quantitative manning required to provide effective personal service functions and to recommend new concepts and approaches designed to improve the effectiveness of the ship's serviceman rating.

B. Purpose

The purpose of this research was to explore the existing rating structure in terms of job tasks, training requirements, skill levels, advancement opportunities, sea/shore rotation, performance standards, manning levels, and other factors related to the accomplishment of the mission assigned to ship's servicemen. Management concepts to increase personnel utilization effectiveness and steps to improve the career and occupational structure of the rating were to be investigated.

C. Background

The ship's serviceman rating as established in 1943 remains essentially the same today with only minor modifications having been made to up-date and accommodate changes in rating responsibilities. The rating initially identified four specialty areas: barber (SHB), laundryman (SHL), tailor (SHT), and cobbler (SHR).¹ Subsequently the store clerk (SHC) was included as one of the specialty areas. Ship's servicemen were identified in these specialty areas in paygrades E-4 and E-5; at E-6 and above, they were considered generalists.²

The reduced demand for shoe repair services led to the abolishment of the cobbler specialty. The letter designators were ultimately dropped from the four remaining specialty areas which were then and are now identified with navy enlisted classification (NEC) codes. With the advent of dry cleaning services, an additional job was added to the rating and three related NEC codes are now utilized to identify varying combinations of laundry and dry cleaning skills.³ Accounting and record keeping for the service functions were considered a responsibility of storekeepers

¹ Circular Letter Number 205-43 of 12 October 1943, Subj: Rating Structure, changes in.

² Manual of Qualifications for Advancement in Rating, NAVPERS 18068, Revised February 1949.

³ Manual of Navy Enlisted Classifications, NAVPERS 15105-U, July 1971. (See Appendix A)

until June 1969 when these duties were transferred to the ship's serviceman rating.¹ To accommodate this change, the title of the store clerk was changed to clerk and the NEC definition was amended to incorporate the additional duties.² Ship's servicemen are considered as specialists through paygrade E-4 and as generalists at paygrade E-5 and above, e.g., eligibility for advancement to SH3 is determined by a special advancement examination in one of four skill areas (laundry, barber, tailor, or clerk). One general examination, emphasizing clerical and administrative skills, is used to determine eligibility for advancement to SH2 and above.

Problems in the ship's serviceman rating apparently developed soon after its establishment as evidenced by numerous studies, reports, and recommendations made over the years. The Permanent Board for Review of the Enlisted Rating Structure considered the rating at various times but made no major changes. The historical background is well documented in the files of the recorder for this board.

Numerous recurring problems in the rating were the basis for completion of two major research efforts by the Naval Personnel Research Activity (now Naval Personnel Research and Development Laboratory).³ The results of these studies were published in 1955 and 1961. Both reports, among other findings, emphasized the lack of training available to the rating and recommended the establishment of new or additional formal training programs. These recommendations were never fully implemented and only during the past two years have any significant improvements been made in making additional training available to SH personnel.

Though it may be too early to fully evaluate the effectiveness of the recent changes in training effort, there appeared to be other problem areas having an adverse effect on the rating. Therefore, the program manager for the supply ratings, Pers-A49, recommended a comprehensive review of the rating. Accordingly, the Chief of Naval Personnel, Pers-A4 requested that an analysis and evaluation be conducted to include advancement opportunities, retention, training, skill requirements, rating structure and all other areas relating to and affecting the ship's serviceman.⁴

¹Manual of Qualifications for Advancement, NAVPERS 18068B, Change 4, June 1969.

²Op Cit NAVPERS 15105-11

³Study of the Ship's Servicemen (SH) Rating, January 1955, Washington: U. S. Naval Personnel Research Field Activity, (RS 55-1); Arzigian, S. and Coulombis, T. A., Final Report - Study of the Ship's Serviceman Rating, February 1961, Washington: U. S. Naval Personnel Research Field Activity, (RS 61-6).

⁴CNP (Pers-A4) Memo of 6 October 1970, Subj: PMIC Task E-2.

II. APPROACH

A. Methodology

To accomplish research objectives, the various service functions for which the ship's serviceman rating is responsible were analyzed to ascertain the job tasks and requisite personnel skills needed for effective performance. Training requirements to provide proficiency in the necessary skills were determined and evaluated. Qualifications and capabilities of personnel assigned to the rating were compared with the job requirements to evaluate, isolate, and measure the extent of personnel and rating structure problems. Quantitative and statistical analyses were made to provide additional data in support of the various areas studied.

B. Procedures

To fully understand the extent and complexity of the alleged problems present in the ship's serviceman rating, several distinct, but interrelated, steps were undertaken.

The variety of ship's serviceman functions require heterogeneous skills, e.g., skills required of a barber are different than skills required of the store clerk or laundryman. A detailed job analysis was performed to delineate the numerous tasks, determine the various job elements with respect to difficulty and complexity, evaluate the differences and similarities, and finally to establish the skill levels required by incumbents to discharge assigned tasks efficiently and effectively.

The job analysis process included observations of personnel in day-to-day working situations, interviews at all levels, and questionnaire techniques. A by-product included a detailed insight into the quality of personnel assigned to the rating and into the problems encountered in the service functions as viewed by individual ship's servicemen, by supervisors, and by managers.

The master enlisted personnel tapes provided additional data on SH personnel with respect to general qualifications, test scores, NEC assignments, promotion and career histories, length of service, etc. Documentation in a variety of forms was used to provide background information and to substantiate and correlate data obtained through the variety of sources. Several quantitative analyses were made to compare personnel and job requirements with inventories and billet allowances by paygrade or by activity. Results were compared with the total Navy enlisted population and with other selected ratings to segregate and identify situations unique to the ship's serviceman rating. Environmental factors relating to working conditions were also considered because of their effect on job satisfaction and work performance.

All data collected were compiled, evaluated and analyzed to determine and select those factors which appeared to significantly contribute to the problems of the rating.

C. Collection of Data

Personal interviews, questionnaires, personnel statistical summaries, reports, manuals and various other publications were utilized as resource input to complete this research.

Supply Corps officers and ship's servicemen in numerous shore and afloat activities were interviewed.¹ It was not possible to visit every type of shore installation, so visits were limited to activities to which most ship's servicemen are assigned during their shore tours, i.e., commissaries and navy exchanges. Of ships visited, most sizes and classes representative of each type command were included. In addition, civilians attached to shore stations closely associated with service functions were interviewed.

Personal interviews were supplemented with a questionnaire which was completed by approximately 400 ship's servicemen who could not be interviewed personally.² A statistical compilation of the results of this questionnaire are not included in this report because many of the responses were in narrative form and did not lend themselves to a simple, visual, summary-type presentation. The results, however, were consolidated with other interview and statistical data to provide background material for the various areas discussed in this report.

The Naval Personnel Research and Development Laboratory's Statistical Department and the Bureau of Naval Personnel (Pers-N) provided statistical summaries and data from the master enlisted personnel tapes relating to career histories, NEC assignment and utilization, test scores, current assignments, paygrade distribution, billet allowances, and other personnel information pertinent for the purposes of this research.

Rate training manuals, handbooks, procedural manuals, training aids and materials, local instructions and directives, and various documents relating to the rating or to service functions were collected and utilized to provide in-depth coverage of the rating and the functions for which SH personnel are responsible.

¹See Appendix B for listing of activities visited.

²See Appendix C for sample questionnaire.

III. DISCUSSION

A. General

The ship's serviceman rating is one of several enlisted ratings whose personnel must possess those face-to-face skills which involve interpersonal relationships with all Navy personnel. The duties performed by SH personnel serve to provide a variety of personal services and conveniences considered essential to the comfort and welfare of Navy personnel.

Numerous sociological changes along with the anticipated all volunteer military force has lead to philosophic and policy changes in many areas affecting military life styles. Some of the changes included improving, expanding, and increasing the services and functions maintained by ship's servicemen and therefore have had a notable impact on the rating.

The modification of hair grooming standards requires a greater degree of professionalism on the part of the barber because he must be capable of cutting and trimming all types of hair in a variety of styles. The introduction of civilian clothing aboard ship has placed additional demands on laundry and dry cleaning services. Ship store hours have been expanded and staggered to provide convenient shopping opportunities to all hands. Ship store stocks are continually being increased to provide a larger variety of convenience and luxury items.

The number of rated personnel on duty is insufficient to meet requirements. This, along with the shortening of sea tours has significantly affected the afloat activities. In reducing the number of experienced SH personnel available for sea duty but at the same time demanding greater service has made it difficult for them to successfully accomplish their assigned mission. Allowances have not been augmented nor have any great strides been made in upgrading or improving the qualifications and capabilities of personnel assigned to the rating.

B. Service Functions

1. Afloat

The ship's serviceman is responsible for providing the following services: barbering, laundering, dry cleaning, tailoring, and operating resale outlets which include vending machines, soda fountains, and merchandise stores offering health, welfare, convenience, and luxury items. Procurement, stowage, issuing and receiving, merchandising, stock records and inventory control, financial records and accounting, supervision, and management comprise those related duties and responsibilities vital to the operation of the service functions.

2. Ashore

The variety and number of widely scattered shore billets limited study to those existing in the commissary stores and navy exchanges where

approximately 70% of SH personnel are assigned for shore duty. There were no problem areas cited by personnel assigned to navy exchanges. Most ship's servicemen, regardless of current assignment, considered navy exchange billets desirable because of similarities to the afloat resale activities.

Personnel assigned to commissary stores, however, generally were not satisfied with this duty for a variety of reasons including long hours and irregular shifts. A significant number indicated they were working in billets not related to their rating or that their capabilities were not being used adequately. For example, SH2's, SH1's, and in some cases, SHC's work as meat cutters, warehousemen, stock clerks, truck drivers, fork lift operators, janitors and in other similar occupations. Ship's servicemen feel many of the shore billets which are civilianized could very well be performed by them such as barbers, tailors, clerks, etc. They also feel SH personnel, instead of storekeepers, should be assigned to clothing and small stores billets ashore because aboard ship, these billets are assigned to ship's servicemen.

Many of the problems encountered ashore are not unique to the SH rating but are similar to those found in many ratings. Sufficient numbers of comparable shore billets are not available, e.g. shore billets, requiring skills similar to those used aboard ship, are civilianized or, the skills used aboard ship are not required in shore billets. Thus SH personnel, and personnel in other ratings, are frequently assigned to a variety of shore billets that are non-rating related. The rating's primary purpose is to provide personnel to support ships and remote stations and shore billets provide temporary relief from such duty. The problems associated with shore assignments therefore were not considered significant for the purposes of this research.

C. Job Skills

The rating is comprised of diverse non-related jobs requiring personnel to possess a broad scope of heterogeneous skills to perform duties ranging from unskilled manual labor to skilled professional administration. It was found that most ship's servicemen possess varying degrees of proficiency in one or more of the jobs requiring manual dexterity but few possess or are able to acquire and develop the mental skills required in the supervisory, clerical, and administrative positions.

Most jobs in the rating are those requiring the use of manual or hand skills. For example, the bulk of the workload in the laundry and dry cleaning operations is manual labor but mechanical aptitude and knowledge are required of personnel operating the relatively non-complex equipment associated with these operations. Satisfactory performance, however, is contingent upon effective and reliable training. The barber and tailor require specific hand skills for which specialized training is essential. In all of the foregoing jobs, intellectual capacity is not a major factor. Once learned, the jobs are performed on a fairly routine and repetitive basis.

The primary jobs in the resale operations require no particular degree of specialized knowledge or ability. Clerical duties are involved but most of the work is manual in nature. A combination of manual and mental skills are required therefore to perform the specific resale jobs, i.e., bulk storeroom operator, vending machine operator, soda fountain clerk, store clerk or cashier, etc. On the job training is normally considered sufficient to qualify personnel for these lower level jobs in the resale activities.

The administrative duties associated with the rating are particularly important in the resale operations and are defined to include the following tasks: purchasing, stock and inventory control, merchandising, accounting and financial control, financial reporting, and all related efforts necessary to provide effective control and supervision to assure successful operation of the service and resale functions. The administrative duties are normally performed by the higher rated and/or leading ship's servicemen. Clerical and arithmetic aptitude, analytical ability, and diverse mental skills are essential to carry out the administrative responsibilities. SH personnel must be sufficiently proficient to provide technical assistance to ship's store officers as needed.¹

The training necessary to acquire administrative skill is usually more complex than that required for jobs in other service activities. Though a significant number of SH personnel learn through experience, a three-week Class "C" ship's store clerk training course is available to assist in developing administrative skills, particularly those required for record keeping and report preparation.

Though not identified as a skill, an important characteristic of the rating is accountability.² There is some degree of accountability in all service activities but it is most significant in the resale operations. An officer, usually the ship's store officer, is legally accountable for all funds and property involved in the service and resale functions. Accordingly, he is responsible for assuring that all property and funds entrusted to his care are properly used and accounted for. To carry out this responsibility, he must assure that adequate safeguards are used and that adequate records are maintained to reflect the status of funds and property inventories.

Obviously, the ship's store officer cannot physically perform all the details associated with accountability and therefore a substantial amount of this detail is delegated to SH personnel. Physical custody of property, e.g., receipt, stowage, sales, transfer, etc., is delegated to SH personnel designated as store clerks and operators. The maintenance of stock and financial control records is delegated to a records keeper. Overall administration and supervision is delegated to the leading petty officer.³

¹NAVPERS 18068C, Manual of Qualifications for Advancement, Bureau of Naval Personnel, June 1971. (See Appendix D)

²NAVPERS 10286F, Rate Training Manual, Ship's Serviceman 3 & 2, Bureau of Naval Personnel, 1970.

³NAVPERS 10287E, Rate Training Manual, Ship's Serviceman 1 & C, Bureau of Naval Personnel, 1971.

Thus, in addition to possessing the required mental and manual skills, SH personnel must be reliable and trustworthy to enable them to carry out those accountable and custodial responsibilities inherent in their jobs. The failure of SH personnel to understand their duties and responsibilities creates innumerable problems which adversely affect efficiency, profitability, and accountability. For example, inadequate safeguards during physical custody and in document handling lead to losses and shortages. Unfamiliarity with inventory and financial control records contribute to overbuying, excess inventories, inventory shortages, etc.

Accountability is established by the stock and financial records and these records are affected by a variety of documents and transactions, i.e., receiving and shipping documents, purchase invoices, property transfers, surveys, inventories, price changes, sales, etc. If a qualified records keeper and/or leading petty officer is not on board, the ship's store officer has a problem in maintaining accountable records and preparing required reports. In some instances, it was noted that storekeepers are used to keep records because their training, experience, and skills relate to functions which parallel those found in the service activities, i.e., purchasing, stock records and inventory control, accounting, financial records and reports, etc.¹ If storekeepers are not available, the remaining alternative is that the ship's store officer must keep the records.

Supply officers, ship's store officers and senior ship's servicemen related numerous examples indicating that SH personnel are not always able to effectively carry out the responsibilities expected or required. It is noted however that the qualifications for advancement establish knowledge and practical factors for all paygrades.² Therefore, at the time an individual is recommended for advancement, he is required to meet the practical factors established for the grade to which recommended. For example, all SH2's are required to prepare ship's store records and returns. SH1's are required to audit ship's store records and returns. Therefore, an SH1 who is not able to prepare a set of ship's store returns obviously did not meet the practical factors necessary to qualify for advancement to SH2.

The qualifications for advancement are fairly specific and comprehensive in detailing the knowledge and practical factors and in establishing proficiency levels at each paygrade for all jobs performed in the rating.

D. SH Personnel

1. Rating Input

To account for normal attrition, it is estimated that approximately 1,000 personnel must be added to the rating inventory during fiscal year 1972.³ Input will come from four general sources.

¹Sass, D. H., The Storekeeper Rating: New Concepts to Improve Training, Assignment, Performance, and Utilization, April 1971, Washington: Naval Personnel Research and Development Laboratory, (WRM 71-37).

²Op. Cit. NAVPERS 18068C.

³BUPERS 212-72B, Enlisted Class "A" School Training Plan, Petty Officers, Apprentices, Recruits, 21 December 1971.

The first source is through the initial recruiting process whereby those enlistees with civilian experience and/or training in one of the SH occupations are designated as SH strikers. They will be generally either barbers or tailors. There are, however, few enlistees who qualify for striker designation, e.g., during January 1972, six enlistees were designated and Pers-B25 indicated this was higher than average. Specific totals for calendar year 1971 are not available.

A second source is from those recruit graduates who are recommended to receive formal training in one of the SH Class "C" schools, i.e., store clerk, barber, tailor, or laundry/dry cleaning. Recruit graduate quotas for the Class "C" schools are currently established at 40 per month. Through August 1971, less than half of the quotas were being filled, however by 31 December 1971, according to Pers-B215, considerable improvement was noted in that approximately 60% of the monthly quotas were being filled. One of the main reasons cited for not being able to meet quotas is that first priority in assigning recruit graduates is given to filling quotas for Class "A" schools. An "A" school or SH personnel would provide a better opportunity for the rating to receive a larger number of recruit graduates as direct input to the rating.

Personnel converting from other ratings constitute a third input source to the rating. The steward rating provides the largest number of conversion candidates. Motivating factors for converting generally include better promotional opportunity and/or a desire to improve and upgrade job status.

The fourth and main personnel input source to the rating is from that pool of recruit graduates who are not selected for either Class "A" school or other training and subsequently are designated as seaman apprentices and assigned to the deck force aboard ship.

There are no commonly accepted standards used to select deck force personnel for duty in the service activities. Some are permitted to volunteer, some are assigned based on their prior experience, and some are assigned, without regard to qualifications, to fill service activity requirements. Some are assigned after they fail to perform effectively in other departments. Billet vacancies in the service activities occur most frequently in the laundry's manual labor-type positions. Therefore, in practice, personnel considered for these billets frequently are not screened for specific qualifications.

2. Qualifications

As a management tool, the Department of Defense categorizes all enlisted military personnel in one of four general mental level groups, I, II, III, and IV, based on GCT scores. The following table shows the percentage of SH personnel, by paygrade, in each of these mental groups along with those of all Navy enlisted personnel. Group III is divided into "upper" and "lower" to distinguish between average and below average.

TABLE 1

DISTRIBUTION OF PERSONNEL BY MENTAL GROUP

Ship's Servicemen Compared to Navy Population*

Pay Grade	Cate- gory	Mental Groups				
		Percentage of Population				
		I	II	Upper III	Lower III	IV
E-9	SH	3	29	25	25	18
	Navy	19	59	15	5	2
E-8	SH	1	21	29	32	17
	Navy	11	58	18	9	4
E-7	SH	-	11	17	31	41
	Navy	7	49	21	14	9
E-6	SH	-	7	14	28	51
	Navy	7	43	20	16	14
E-5	SH	1	15	15	22	47
	Navy	16	52	13	10	9
E-4	SH	2	34	26	21	17
	Navy	13	58	16	8	5
E-1/3	SH	2	38	23	25	12
	Navy	7	44	21	16	12
TOTAL	SH	1	20	19	25	35
	Navy	10	49	18	13	10

*Includes USN & USNR.

Source: Pers-A12, Report E580, 30 June 1971.

It is noted that 60% of SH personnel are Group IV/low: 1 Group III compared to 23% of the Navy population. Group II includes the largest percentage of Navy personnel (49%) but includes only 20% of SH personnel.

The largest percentage of ship's servicemen in paygrades E-1 through E-4 are in Group II, however, in paygrades E-5, E-6, and E-7, the largest percentages are in Group IV. One reasonable assumption is that many first term ship's servicemen in the higher mental groups apparently do not reenlist. This would account for the large number of SH2's and above in lower Group III and Group IV.

The mental levels indicated in the table tend to support comments received from numerous sources, Supply Corps officers and enlisted personnel, that a significant number of ship's servicemen do not have the capability to learn and perform in those service functions requiring higher level supervisory and management expertise.

E. Manning Levels

The shortage of personnel is probably one of the more significant factors contributing to the problems encountered in the rating and the service functions it supports. Effective operation of the number and variety of services, each requiring different skills, is seriously hampered by the lack of personnel. The situation is particularly serious when such shortages create vacancies in one or more of the specific job areas such as barber, tailor, records keeper, leading petty officer, etc.

The increased emphasis in expanding and improving personal services to improve shipboard habitability has had a significant effect on those ratings involving interpersonal relationships. This is particularly true of the ship's serviceman rating where total effort is devoted to providing health, comfort, welfare and convenience services. Increasing and expanding services without appropriate provision for adequate numbers of trained and/or experienced personnel in each service area has created an incompatible condition which most afloat activities have not been able to cope with successfully.

The following table indicates the requirements and active duty personnel for ship's servicemen rating compared to the total Navy enlisted population as of 30 June 1971.

TABLE 2
PERSONNEL REQUIREMENTS VS. TOTAL ON ACTIVE DUTY

Category	Ship's Servicemen			Navy		
	Reqmts.	On Duty	%	Reqmts.	On Duty	%
Petty Officers	4535	4194	92.5	344635	341650	99.1
Non-rated	610	157*	24.9	194105	200648	103.4
Totals	5145	4346	84.5	538740	542298	100.7

*Includes designated strikers only.

Source: NAVPERS 15658, 30 June 1971.

Petty officer strength in the rating was at 92.5% of requirements compared to 99.1% for the total Navy population. The requirements for undesignated strikers in the service functions is not determinable nor is it possible to ascertain the number of undesignated strikers filling

SH billets. Investigation indicated however that undesignated strikers are used frequently to fill SH billets. Considering rated personnel only, the rating was operating with a 15.5% personnel deficiency as of 30 June 1971.

The general shortage of rated personnel is most apparent in the afloat activities. The following table indicates SH personnel requirements and inventories according to type of duty as of 30 June 1971.

TABLE 3

DISTRIBUTION OF PERSONNEL BY TYPE OF DUTY VS. REQUIREMENTS

<u>Type of Duty</u>	<u>Reqmts.</u>	<u>On Duty</u>	<u>%</u>
Afloat & all Billets counting as Sea Duty	3759	2810	74.8
Shore Duty	986	931	94.4
Neutral Time	120	102	85.0
Transients, Patients, Prisoners, students, & others	280	503	180.0
Totals	5145	4346	84.5

Source: Pers-N Report R51812B, 30 June 1971.

Until recently, SH personnel could be required to serve up to eight years in sea billets. The current policy is to limit sea tours to a maximum of six years. A problem noted by Pers-B215 is that SH personnel rotating to shore, either for duty or discharge, cause vacancies in sea billets for which replacements cannot be provided immediately because sufficient numbers of rated personnel on shore duty are not eligible for reassignment to sea duty. This is particularly true in the lower paygrades.

Table 3 indicated that sea billets were 74.8% manned, however, manning levels vary considerably from ship to ship. Some have 100% or more while others have 50% or less of allowed personnel. Table 4 on the following page lists a selected sampling of various types, classes, and sizes of ships to indicate the range of SH manning levels as of 31 August 1971.

The shortages and overages noted in table 4 are not necessarily caused by deficiencies in the personnel detailing function but are attributable to a number of interrelated and uncontrollable factors. For example, a ship could suddenly have 100% or more of allowance as previously undesignated strikers are advanced to SH3. The normal policy is to transfer excess personnel, however when such personnel have six months or less obligated service remaining, it is considered economically unfeasible to reassign personnel merely to eliminate overages. Normal attrition, therefore, is permitted to resolve temporary over-allowance situations.

TABLE 4

ALLOWANCES vs. ON BOARD SHIP'S SERVICEMEN*
SELECTED SAMPLE OF AFLOAT UNITS

	<u>Allow.</u>	<u>O/B</u>		<u>Allow.</u>	<u>O/B</u>
AD-14	13	6	DD-931	6	3
AD-19	13	8	DD-933	6	2
AD-38	16	17	DD-945	3	1
AE-27	4	1	DDG-4	6	1
AE-28	4	5	DDG-5	6	3
AF-58	4	5	DDG-7	6	2
AF-59	4	0	DDG-8	6	1
AFS-1	9	5	DDG-24	6	1
AFS-3	9	3	DE-1035	3	1
AG-153	4	3	DE-1041	8	1
AG-154	9	7	DE-1043	8	1
AO-98	3	6	DEG-2	3	4
AO-107	3	5	DEG-4	3	1
AO-145	3	7	DLC-8	6	3
AOE-3	11	5	DLC-12	6	2
AR-6	12	8	DLC-21	6	7
AR-8	10	6	DLC-33	5	2
AS-12	20	14	DLC-34	5	3
AS-31	22	11	LCC-11	10	3
CG-11	14	16	LKA-112	8	4
CG-12	14	9	LKA-114	8	6
CLG-4	17	12	LFA-248	11	2
CLG-5	17	9	LFA-249	11	10
CVA-34	21	11	LPD-2	9	3
CVA-60	50	22	LPD-4	10	13
CVA-63	32	16	LPD-7	9	4
CVS-11	16	12	LPD-10	10	4
CVS-14	16	20	LPH-2	10	4
DD-716	5	1	LPH-11	10	5
DD-727	6	1	LSD-31	6	2
DD-775	2	4	LSD-33	6	1
DD-788	5	6	LST-1166	3	1
DD-826	5	1	LST-1167	3	4
DD-881	5	1	LST-1173	3	4
DD-888	5	2	LST-1184	4	1
DD-890	5	6			

*31 August 1971

Similarly, temporary shortages may be caused by unforeseen circumstances. Unpredictable losses occur because of sickness, hardship transfers, early releases, etc. Such losses cannot be planned and therefore replacements are not available immediately. For example, detailers program replacements to coincide with normal rotation schedules. If personnel leave prematurely for any reason, it is difficult to speed up the replacement process. In addition to the time required for normal processing procedures, replacements coming from shore duty usually are granted a 30-day leave prior to returning to sea duty.

Another factor affecting ship's personnel inventories is the system used to fill vacant billets whereby priorities are assigned by fleet commanders through the enlisted personnel distribution offices. Ships scheduled for deployment, for example, have a high priority for getting replacements. If adequate replacements are not available, ships with lower priorities will be adversely affected.

Regardless of the reason for personnel shortages, investigation indicated that ships operating with a small percentage of SH personnel allowed are not able to provide adequate services. Some service functions must be shut down and others are reduced to minimum operational status. The extent to which specific services can be provided is dependent upon the qualifications of the assigned personnel. For example, it may be possible to use a barber, tailor, or store clerk in the laundry but seldom is it possible to use a laundryman in the position of barber, tailor, or store clerk without considerable aining.

F. Training

i. Formal Training

There are no Class "A" service schools for SH personnel and formal specialized training is therefore limited to that in Class "C" schools. Pertinent information on these Class "C" schools is shown in table 5 on the following page.

In addition to the schools listed in table 5, individual commands use the services offered by commercial vendors to provide training in vending machine repair, and two courses are available to E-7's and above in commissary store and navy exchange management.

Numerous comments received during the course of fleet visits pertained to lack of formal training opportunities. With the exception of the barber school, the table below indicates there is considerable potential, which is not being used, to increase the number of personnel with formal training.

a. SH Store Clerk

A three-week Class "C" school¹ was established for SH personnel shortly after ship's store record keeping responsibilities were transferred from storekeepers to ship's servicemen. Therefore, prior to 1969, there

¹NAVPERS 91769, Change 2, Formal Schools Catalog. Bureau of Naval Personnel, July 1971.

TABLE 5

SHIP'S SERVICEMAN CLASS "C" SCHOOL DATA

<u>Course</u>	<u>Duration (Weeks)</u>	<u>Location</u>	<u>Approx. Sessions/ Year</u>	<u>Maximum Capacity</u>	<u>Output FY71</u>
SH Store Clerk	3	Norfolk	12	300	67 (a)
SH Store Clerk	3	San Diego	14	252	140
Barber	4	San Diego	12	120	53 (b)
Laundry/ Dry Cng.(c)	4	Fort Lee	8	200	71
Tailor	8	Fort Lee	10	200 (d)	8

(a) School transferred from Newport, 1 January 1971; Newport figures not available.

(b) Barber school established February 1971.

(c) Catalog lists these as two courses: 2 wks. laundry and 4 wks dry cleaning but dry cleaning course actually is 2 wks. Courses combined in table because students complete both phases.

(d) Maximum number from all military services; no official limit on Navy students.

Source: Formal Schools Catalog, NAVPERS 91769; Pers-B2152; and individual school commands.

was no formal training available to SH personnel in record keeping or resale store operation and administration. The course title, "Store Clerk," is somewhat misleading because there is a distinct difference between the store clerk and the ship's store records keeper. The jobs of store clerk and records keeper are generally not performed by the same individual except perhaps on smaller ships. The store clerk course, emphasizing record keeping, was adapted from and therefore is very similar to that previously included in the storekeeper Class "A" school curriculum which pertained to ship's store records.

The store clerk schools did not operate at capacity during fiscal year 1971, see table 5. However, this is one of the more important training programs available to SH personnel because it covers those areas of responsibility and knowledge which become increasingly important as ship's servicemen advance in rate. It is significant to note that less time is devoted to training SH personnel in the area considered most important in career development, and emphasized in advancement examinations, than is devoted to any one of the manual or hand skill occupational areas which apply generally only to the lower paygrades.

The primary purpose of the Class "C" school is to provide training to fleet personnel who come from two sources: (1) those sent TAD and who are returned to their respective commands upon completion of the course, and (2) those transient personnel who are subsequently available for reassignment upon completion of training. Though training is for afloat duty, approximately 19% of San Diego graduates during fiscal year 1971 were assigned to various shore billets. Some of the student quotas were filled with SH personnel rotating from sea to shore duty thus accounting for most graduates assigned to shore duty.

Almost all students, graduates, and other personnel interviewed or responding to questionnaires, were unanimous in stating the course was too short. Some indicated there was not enough time available to assimilate all material covered and others indicated some material should have been covered in more detail. San Diego school instructors concurred that time limitations did not permit extensive and complete coverage considered necessary to provide a working knowledge in all subject areas.

The curriculum includes a broad range of subjects covering all facets of ship's store operations and administration as well as an orientation in all service activities, i.e., barber, tailor, etc.¹ To cover all subjects, instruction in some areas must be limited to little more than a briefing. The objectives of the course and curriculum outline with time allocated to each subject are included in Appendix E.

School administrators expressed concern about student capabilities and qualifications as evidenced by the failure rates. The failure rate for the San Diego SH store clerk course was 28% for fiscal year 1971. During the first six months of its operation covering the last half of fiscal year 1971, the Norfolk school's failure rate was 30%. The Norfolk school indicates that its failure rate for the first half of fiscal year 1972 has dropped to approximately 18%. Further study would be necessary to ascertain whether this significant decrease from 30% was the result of improvement in the quality of students or lowering the passing standards or a combination of both.

There are no entry requirements for admission of fleet personnel to the course; it is open to undesignated strikers, strikers and rated personnel in all paygrades.² Consequently, some students have prior experience in ship's store operations and therefore have a basic knowledge which they are able to relate to the course objectives. Students without experience or exposure to ship's store operations must be taught the fundamentals before they can learn the more complex aspects of the course. One of the problems faced by the schools is in developing instructional techniques to accommodate heterogeneous student groups possessing varying degrees of experience, knowledge, aptitude, and learning capability.

¹NAVPERS 94175, Curriculum for the Ship's Serviceman Class "C" School (3 weeks). Bureau of Naval Personnel, 1969.

²Op. Cit. NAVPERS 31769.

Adding to some of the teaching problems already noted, instructors indicated some students need training in basic arithmetic. This is supported by basic test battery scores which indicate that a significant number have low arithmetic and clerical aptitudes. Using the aptitude test scores as indicators, it would appear that students with low scores would have difficulty in understanding and comprehending the predominant mathematical aspects of the course.

To further complicate the teaching problem, this Class "C" store clerk course was recently made available to recruit graduates. Twenty student billets per month, ten each to Norfolk and San Diego, are allocated to those recruit graduates recommended by the recruit training centers. To be considered for selection, recruits must have attained a combined ARI-GCT score of 100 with the minimum GCT score set at 45. The schools indicated a certain amount of success in training recruits, however they maintained that it was difficult to teach recruits in classes which also included SH2 and SH1 petty officers.

To be fully effective, the current Class "C" store clerk course should narrow its training objectives to enhancing and developing the managerial and administrative skills of ship's servicemen, particularly career personnel. An "A" school should be established for SH personnel to teach the fundamental aspects of the rating. The emphasis of the rating, particularly SH2 and above, is in the clerical and administrative functions relating mainly to the resale operations. Class "A" school training, therefore, should emphasize those basic clerical and administrative responsibilities which apply to the entire rating as outlined in the qualifications for advancement.¹

Implementation of an "A" school would provide numerous benefits to the rating. Though impossible to measure definitively, some of the anticipated benefits, both short range and long range, include: (1) assist in reducing striker shortages by providing an additional input source to the rating direct from recruit training centers, (2) increase the number of personnel in the higher mental groups by virtue of criteria utilized in selecting "A" school students, (3) simplify teaching techniques because the curriculum would be designed to meet the need of a homogeneous student body, (4) utilize the clerk "C" school solely in expanding and reinforcing the skills of experienced and/or career personnel, (5) motivate first termers to better performance through an in-depth understanding of their responsibilities, (6) raise the reenlistment rate of first termers by providing an early incentive to consider the career potential of the rating, (7) enable ship's servicemen to improve the professional quality of service activities, and (8) improve the proficiency of career petty officers.

b. Barber

Although barbering has been one of the specialty areas since the rating was created in 1943, barber training was not available until February 1971 when a four week school was established in San Diego.

¹Op. Cit. NAVPERS 18068C.

Space and equipment limitations restrict enrollment to ten students at any one time; the maximum output for the school is 120 barbers per year. According to the school, it is still experiencing "growing pains" in developing its curriculum and acquiring a teaching staff necessary to provide graduates trained in the variety of cutting and styling techniques to accommodate current grooming standards for all cultural groups.

Student quotas are divided evenly between the fleets and recruit training centers with each providing five students per month. There are no minimum requirements for fleet trainees; recruit graduates recommended for training must have attained a minimum combined score of 90 on the GCT-ARI tests. The school's location on the west coast seriously restricts the number of fleet students enrolled from east coast activities because of time, travel, and cost considerations.

Barber billets are restricted to SH2's and below and SH1 personnel assigned the NEC for barber, SH-3122, lose the NEC upon advancement to SH1. It is therefore reasonable to expect a large turnover among barbers; many are first termers who will not reenlist and others are career personnel who will ultimately advance to SH1. As of 30 June 1971, there were 347 barber billets compared to 354 SH personnel identified as barbers by NEC. 31 December 1971 figures indicate requirements for 877 barbers. There were 375 SH personnel with the NEC and, in addition, there were 168 undesignated strikers holding the entry NEC for barber, SH-3120. Consequently, the shortage of barbers totaled 334 as of 31 December 1971. The school's limited capacity does not permit it to provide a sufficient number of barbers to meet requirements. Based upon subsequent experience gained at the San Diego school, it may be feasible to consider the establishment of a second barber school to be located on the east coast. In addition to increasing the number of trained barbers, an east coast facility would minimize the time, travel, and cost factors which currently serve to limit training of east coast personnel.

An alternate approach to increasing the number of barbers is to consider recruiting barbers at advanced paygrades for limited enlistments. This would be in accordance with current research concerning recruitment at advanced paygrades.¹

c. Laundry/Dry Cleaning

The Navy does not now have facilities for training personnel in laundry and dry cleaning operations and therefore uses those of the Army's Quartermaster school, Ft. Lee, Virginia. The four-week course is divided into two-week segments with one segment devoted to laundry and the other to dry cleaning. Though students may be enrolled for either segment, investigation indicates all students attend both.

¹Exploratory Development Research, Work Unit No. PF55.521.010.02.04, "Recruitment at Advanced Paygrades." Naval Personnel Research and Development Laboratory.

The school is intended primarily to train fleet personnel but it is also used to train recruit graduates recommended by the recruit training centers. Pers-B2152 indicated that only four recruits were enrolled during the five month period ending 30 November 1971. Training center classification interviewers indicated few recruits volunteer or are willing to be considered for this training because most have greater aspirations.

Eight classes with a capacity for 200 students were conducted during fiscal year 1971 but only 71 students attended. Location of the school and personnel shortages were cited by many commands as reasons for not enrolling students. To provide convenient and additional training opportunities, training facilities are being established in the San Diego area and should become operational during 1972. In addition, plans are being developed to provide additional training on the east coast to benefit Atlantic Fleet activities.

d. Tailor

The Army's Quartermaster school, Ft. Lee, Virginia is used to provide an eight-week training program in textile repair to personnel assigned to tailor billets. The course is open to fleet personnel and to recruit graduates recommended by the recruit training centers.

Few commands use the school because of its location and more important, many cannot spare the personnel for the length of time required to complete the training. Investigation indicated that few ships have tailor shops and that tailoring service is not always considered essential, e.g., only eight students completed the training during fiscal year 1971. When a qualified tailor is not available, the tailor shop is closed.

e. Vending Machine Repair

The Navy does not provide formal training in vending machine repair however individual commands recognize the need for such training to assure continuous operability of vending machines during underway operations. Many activities therefore make arrangements with commercial suppliers of the equipment to provide appropriate training. If vending machine repair cannot be made, the service is simply discontinued.

f. Navy Exchange Management and Commissary Store Management

Training programs in navy exchange and commissary store management are administered by the Navy Resale Systems Office. Enrollment is restricted to, but mandatory for, SH personnel selected to fill corresponding billets.

The navy exchange management course requires six weeks and attendance is limited to E-9's, E-8's, and E-7's. Navy exchange management billets are being written for E-6's and plans are underway to alter entry requirements to include admission of those SH1's selected to fill navy exchange management billets.

The commissary store management course is four weeks in length and attendance is restricted to E-9's and E-8's plus those E-7's selected to fill commissary store management billets.

Both training programs are designed to meet shore billet requirements and therefore the training is of no immediate benefit to the afloat activities. However, graduates of either course, upon returning to sea duty, can adapt many of the acquired skills to shipboard use, particularly to the resale operation.

2. Shipboard Training

A significant number of ship's servicemen are not afforded the opportunity to attend one of the Class "C" schools and therefore must develop necessary skills through on-the-job training (OJT) and/or formal shipboard training programs. The effectiveness of such training varies considerably and is dependent upon several factors.

Ships operating with personnel shortages do not always have personnel qualified in all occupational areas to provide adequate OJT. As a result, non-rated and untrained personnel are used to maintain an operation and learning is accomplished through trial and error. For example, the laundry is frequently operated without qualified leadership because the available rated personnel are assigned to resale or record keeping duties. In some instances, inadequately trained or inexperienced personnel are used to provide OJT. Results are unsatisfactory because training is limited to the extent of the instructor's capability and often may include incorrect procedures and techniques.

Formal shipboard training programs are normally considered essential and required for all ratings. Accordingly, they are required for SH personnel and guidance for such training is available.¹ Formal shipboard training, however, is conducted somewhat infrequently. The lack of experienced personnel precludes professional training and personnel shortages necessitate long working hours which reduce, or eliminate, the amount of time that might normally be used for training purposes.

The lack of personnel, quantitative and qualitative, is a major deterrent to effective OJT and formal shipboard training efforts. Improvements can be achieved only through long range efforts to increase the number of qualified SH personnel in all occupations associated with the rating.

G. Navy Enlisted Classifications (NEC's)

Navy enlisted classifications are used to reflect special knowledge and skills that identify personnel and billets when the rating structure is insufficient by itself for manpower management purposes.² The following NEC's are used to identify special skill and knowledge requirements in the ship's serviceman rating:³

¹NAVPER 94428, Instructor's Guide, Shipboard Training Course for Ship's Serviceman. Bureau of Naval Personnel, 1969.

²Op. Cit. NAVPER 15105U.

³See Appendix A for NEC definitions.

SK-2813 - Commissary Store Manager
(Applicable to SHC's and above and assigned only after completion of required training.)

SH-3111 - Navy Exchange Manager
(Applicable to SHC's and above and assigned only after completion of required training.
Note: Billets being written for SH1's and plans underway to assign NEC accordingly.)

SH-3112 - Clerk

SH-3122 - Barber
(Applicable to SH2's and below; dropped at SH1.)

SH-3142 - Tailor

SH-3154 - Laundryman and Dry Cleaner

SH-3155 - Laundryman

SH-3156 - Dry Cleaner

1. Inventory of SH Personnel with NEC's

The following table indicates the inventory of SH personnel, by paygrade, for each NEC as of 30 June 1971. In addition, the total SH population is shown to indicate the percentage of personnel in each paygrade holding an NEC.

TABLE 6

INVENTORY OF SHIP'S SERVICEMEN WITH ASSIGNED NEC'S

NEC	Number by Paygrade							Total
	E-9	E-8	E-7	E-6	E-5	E-4	E-1/3	
2813	11	11	6					28
3111	14	20	8					42
3112	1	42	191	331	177	82	16	840
3122					136	135	83	354
3142			11	48	25	8	1	93
3154		12	87	354	271	59	4	787
3155				4	6	22	2	34
3156								0
<u>Totals</u>	26	55	303	737	615	306	106	2178
SH Population	23	113	390	1093	1095	1475	152	4346
% Assigned NEC	93	75	78	67	56	21	70	50

Source: Pers-B25, Report E594A, 30 June 1971.

The largest number of SH personnel are in paygrade E-4 but only 21% are identified with an NEC despite their advancement to this grade after having passed an advancement examination in one of the four specialty areas of the rating, i.e., clerk, barber, tailor, or laundryman/dry cleaner. SH3's normally work in one of these occupational areas and therefore it is important that the skills of SH3's be identified for effective detailing. Presently, the assignment of personnel by NEC to billets requiring specific skills cannot always be accomplished because the skills of all personnel cannot be determined. This confirms complaints made by numerous commands that personnel with required skills are not always assigned to meet specific billet requirements.

2. Inventory of NEC Billets

The need to identify personnel by skills is determined largely by billets which are written to identify special skill and knowledge requirements. Personnel and billet identification are therefore inter-related and the need for better identification of SH personnel by NEC is illustrated in table 7 on the following page. Total billet allowances for each NEC, by paygrade, are shown along with personnel inventories as of 30 June 1971.

Table 7 indicates personnel shortages for all SH NEC's. The most significant shortages appear in paygrade E-4, i.e., 692 SH3's with NEC 3154/3155 are required but only 81 SH3's are identified with either of these NEC's.

When an individual becomes qualified in a skill, his command is responsible for recommending assignment of the appropriate NEC.¹ Table 6 showed that approximately half of all SH personnel held an NEC. This indicates that the procedures for assigning NEC's as set forth in the Navy Enlisted Classification Manual are not always being followed. As noted earlier, however, personnel recommended for advancement to SH3 are recommended on the basis of qualifying in one of the specialty areas of the rating and presumably meet the practical factors indicated in the Manual of Qualifications for Advancement.² Accordingly, individuals recommended for advancement apparently meet the basic qualifications for one of the SH NEC's.

To achieve maximum effective utilization of trained and experienced personnel and to enable efficient distribution of such personnel to billets requiring special skill and knowledge, added emphasis must be given to the assignment of appropriate NEC's to SH personnel. Further, to attain 100% skill identification of SH3 petty officers, all should be automatically assigned the NEC corresponding to the advancement examination which they passed. Pers-B25 indicated that such automatic assignment of NEC's would be feasible and could be accomplished.

¹Op. Cit. NAVPERS 15105U.

²Op. Cit. NAVPERS 18068C.

TABLE 7

SHIP S SERVICEMEN NEC BILLET ALLOWANCES COMPARED TO INVENTORY

NEC	<u>E-9/8</u>		<u>E-7</u>		<u>E-6</u>		<u>E-5</u>		<u>E-4</u>		<u>E-1/3</u>		<u>Totals</u>	
	<u>All</u>	<u>Inv</u>	<u>All</u>	<u>Inv</u>	<u>All</u>	<u>Inv</u>	<u>All</u>	<u>Inv</u>	<u>All</u>	<u>Inv</u>	<u>All</u>	<u>Inv</u>	<u>All</u>	<u>Inv</u>
2813	71	22	6	6									77	28
3111	78	34	27	8									105	42
3112	-	43	203	191	574	331	560	177	189	32	-	16	1526	840
3122							201	135	575	135	67	83	843	354
3142			-	11	18	48	64	25	33	8	-	1	115	93
3154/3155*	12	23	87	87	98	358	237	277	692	81	419	6	1459	821
3156													-	-

*Combined to simplify and provide realistic comparison. Over 95% of billets are identified with NEC 3155 (Laundryman) whereas 95% of personnel are assigned NEC 3154 (Laundryman/Dry Cleaner). Personnel with NEC 3154 qualify to fill NEC 3155 billets.

Source: Pers-B25, Report R51320A & E594A, 30 June 1971.

3. Utilization of NEC's

SK-2813 - Commissary Store Manager
SH-3111 - Navy Exchange Manager

Source ratings for these two NEC's include commissaryman, storekeeper, and ship's serviceman. The NEC's apply only to shore billets and are assigned to E-9's, E-8's, and those E-7's selected to fill E-8 or E-9 billets. As noted elsewhere, navy exchange management billets are being written for SH1's and accordingly, the SH1's selected to fill such billets will become eligible for NEC SH-3111. Formal training is mandatory prior to the assignment of either NEC. The selection of personnel to fill the respective billets is a coordinated effort between the supply ratings detailers (Pers-B215) and the Navy Resale Systems Office. Except for personnel shortages as indicated in table 7, no particular problems were noted with respect to the management of these NEC's.

SH-3112 - Clerk

This NEC is used to identify those ship's servicemen with clerical and administrative skill and knowledge, particularly required to perform in the resale operations. The definition for this NEC emphasizes procurement, receiving, and record keeping duties.¹ Billets identified by this NEC, however, include a variety of jobs, i.e., vending machine operator, store clerk, cashier, store manager, soda fountain operator, leading petty officer, etc. The apparent discrepancy between NEC definition and billet titles associated with the NEC is not significant because the principal objective to identify specific skills and knowledge is being met. For example, SH personnel working in resale operations, regardless of job, must be able to keep records and perform related administrative duties to qualify for advancement to SH3 in accordance with the requirements established in the qualifications for advancement.² The shortage of personnel identified with this NEC is the most significant problem associated with its management.

SH-3122 - Barber
SH-3142 - Tailor

Both of these NEC's define and identify specific hand skill occupations associated with the ship's serviceman rating. Billets and personnel can be identified appropriately and easily. Outside of personnel shortages, there are no problems in the management and utilization of these NEC's.

SH-3154 - Laundryman and Dry Cleaner
SH-3155 - Laundryman
SH-3156 - Dry Cleaner

Three NEC's are used to identify billet and personnel skill requirements in laundry and dry cleaning operations. The knowledge factors

¹See Appendix A.

²See Appendix D.

for fabrics and special cleaning processes may be more complex for dry cleaning, however most tasks in the laundry and dry cleaning operation are very similar. There are similarities also in equipment and equipment operation. A qualified laundryman can acquire the necessary dry cleaning skills with minimal training. A further indication of similarities is noted in the qualifications for advancement which do not distinguish between knowledge and practical factors applicable to laundrymen and dry cleaners.¹

Ships without dry cleaning equipment use NEC SH-3155 to identify billet requirements, and personnel assigned either NEC SH-3155 or SH-3154 qualify to fill these billets. Ships with dry cleaning equipment apparently identify billet requirements by using NEC SH-3154. This was evident in table 7 which indicated there are no billet requirements for NEC SH-3156, dry cleaner, nor are any ship's servicemen assigned this NEC.

Billet requirements for dry cleaners and personnel skills can both be identified adequately by using NEC SH-3154 and therefore it appears the NEC SH-3156, dry cleaner, can be eliminated to simplify management of billets and personnel in laundry and dry cleaning operations.

H. Qualifications for Advancement

The Manual of Qualifications for Advancement² details the knowledge and practical factors for the rating and serves as a guideline for developing rate training manuals and for preparation of advancement examinations. The factors differentiate the specialty areas of the rating for SH3's, i.e., specific factors pertain only to personnel performing in specific jobs such as barber, tailor, etc. The factors for SH2's and above are applicable to all personnel in the rating.

The qualifications for advancement were revised in July 1971 as a result of an advancement qualifications workshop conducted in Newport, Rhode Island, August 1970. Most changes resulting from this workshop were of a minor nature except those pertaining to cobbler requirements; these were eliminated.

No particular problems were noted in the stated knowledge and practical factor requirements. However, as indicated elsewhere, a general problem appears in the enforcement of qualification standards because investigation indicated that ship's servicemen are often advanced in rate despite their inability to meet practical factor requirements.

I. Advancement

Ship's servicemen experience little difficulty in advancing to SH3 and SH2. However, the opportunities for advancement to SH1 and above are restricted because of average length of service, reenlistment rates and other factors. The following table indicates the number of SH personnel on active duty compared to allowances by paygrade, as of 30 June 1971.

¹ See Appendix D.

² Op. Cit. NAVPERS 18068C. See Appendix D.

TABLE 8

SH ALLOWANCES BY RATE COMPARED TO ON BOARD STRENGTH

<u>Paygrade</u>	<u>Allowance</u>	<u>On Board</u>	<u>%</u>
SHCM	48	28	58
SHCS	155	113	73
SHC	363	390	107
SH1	973	1093	112
SH2	1296	1095	85
SH3	1700	1475	87
Total PO's	4535	4194	92
SHSA & SHSN	610	152	25
Totals	5145	4346	84

Source: NAVPERS 15658, 30 June 1971.

The total number of SH personnel, including designated strikers, is less than that necessary to meet petty officer requirements. Shortages of SHCM and SHCS petty officers are somewhat offset by overages in SHC and SH1 petty officers, i.e., the policy is to use personnel in the next higher or next lower rate to fill billet requirements when sufficient numbers in the required rate are not available.

The ratio of the number of SH petty officers allowed at each paygrade is compared to the total distribution of all Navy petty officers in the following table.

TABLE 9

RATIO OF BILLET ALLOWANCES BY PAYGRADE
SH Personnel Compared to Navy Population

<u>Paygrade</u>	<u>Allowances</u>			
	<u>Ship's Servicemen</u>		<u>Navy</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
E-9	48	1.1	3815	1.1
E-8	155	3.4	9328	2.7
E-7	363	8.0	36834	10.7
E-6	973	21.5	77373	22.5
E-5	1296	28.6	101225	29.4
E-4	1700	37.5	116060	33.7
Totals	4535	100	344635	100

Source: NAVPERS 15658, 30 June 1971.

There are no major differences noted although the ratio of SH3's is higher than that for the Navy thus proportionately reducing the number of billets in the higher grades. If Navy averages prevailed, there would be 172 fewer SH3 billets with an equal number distributed among the higher grades. The proportionately large number of billets in the lower skill levels in the rating account for fewer billets in the higher paygrades. It is doubtful that an increase in the number of billets in the higher paygrades would have any material long range effect on promotional opportunity.

A factor related to advancement is the average length of service. Ship's servicemen have an average length of service exceeding that of the general Navy population as indicated in the following table.

TABLE 10
MEAN AND MEDIAN YEARS OF SERVICE
SH Personnel Compared to Total Navy Population

Paygrade	Years of Service			
	Ship's Servicemen		Navy	
	Mean	Median	Mean	Median
E-9	24.6	24.0	22.6	22.0
E-8	22.5	22.4	19.7	18.5
E-7	19.2	18.4	16.8	16.0
E-6	16.1	16.1	12.7	12.2
E-5	10.8	9.6	6.4	4.2
E-4	4.1	2.1	3.4	2.6
E-3	3.3	2.1	2.2	1.5
E-2	1.8	.8	1.5	.8
E-1	*	*	1.2	.6

*Numbers insignificant to compute meaningful data.

Data as of 30 June 1971.

Source: Pers-A12, Report E159H, 30 June 1971.

The average and median years service is higher for SH personnel in all paygrades in comparison to those of the total Navy population. Most significant differences are noted in paygrades E-5 and E-6, i.e., the median is 4.2 years and 12.2 years respectively for all Navy E-4 and E-5 personnel compared to 9.6 years and 16.1 years for SH personnel in those paygrades. This indicates that career SH personnel tend to reenlist despite the apparent slow rate at which they are able to advance.

The following table indicates the average length of time (length of service to advancement), computed in years, it took ship's servicemen to advance to the respective paygrades compared to averages of the total Navy enlisted population.

TABLE 11

AVERAGE LENGTH OF SERVICE TO ADVANCEMENT IN YEARS

<u>To</u> <u>Paygrade</u>	<u>Ship's</u> <u>Servicemen</u>	<u>Navy</u>
E-9	21.04	18.91
E-8	19.64	15.59
E-7	16.32	13.51
E-6	13.96	7.51
E-5	3.76	2.96
E-4	2.29	1.85
E-3	.8	.8
E-2	.3	.3

Source: Pers-A12, 30 June 1971.

Beginning at paygrade E-4, the average length of service to advancement for SH personnel is higher in all paygrades with the most significant difference noted at paygrade E-6. For example, it took the average SH2 approximately ten years to advance to SH1 compared to slightly less than five years for all Navy personnel in comparable rates.

The following table summarizes the examination and advancement experience of ship's servicemen over a two year period. The number of personnel examined, passed, and advanced as a result of the February and August 1970 and February and August 1971 examination periods are shown.

TABLE 12

SH PERSONNEL EXAMINATION AND ADVANCEMENT DATA

<u>Examination</u>	<u>Number</u> <u>Examined</u>	<u>Number</u> <u>Passed</u>	<u>Percent</u> <u>Passed</u>	<u>Number</u> <u>Advanced</u>	<u>Percent</u> <u>Advanced</u>
SH3 Barber	776	667	86	635	95
SH3 Laundryman	1912	1621	85	1578	97
SH3 Cobbler	26	23	88	22	96
SH3 Clerk	416	381	92	364	96
SH3 Tailor	45	41	91	41	100
SH3 Totals	3175	2733	86	2640	97
SH2	1267	860	68	830	97
SH1	1724	768	45	274	36
SHC	1821	634	35	218	34
Totals	7987	4995	63	3962	79

Source: Naval Examining Center, Great Lakes.

The percentages of personnel passing the examinations and advancing decreases significantly at each higher rate. For example, 97% of those passing the respective SH3 and SH2 examinations were advanced. On the other hand, only 34% of those passing the SHC examination were advanced.

The opportunities for advancement to the higher rates may be limited but it appears this factor does not provide cause for ship's servicemen to terminate their naval careers. It may, however, be a significant factor in restricting the number of first term reenlistments, discussed in the following paragraphs.

J. Retention

The ship's serviceman rating experiences a total overall reenlistment rate higher than that for the Navy. However, the reenlistment rate of first term SH personnel is significantly lower than the Navy average but the rate of career personnel is higher. Reenlistment rates of ship's servicemen are compared to Group V ratings (administrative and clerical: SH, SK, DK, CS, DP, PC, JO, PN, YN, CT, RM) and to the total Navy enlisted population in the following table. Data for fiscal years 1970 and 1971 are shown because of the significant increase in reenlistments during fiscal year 1971.

TABLE 13

SHIP'S SERVICEMAN REENLISTMENT RATES
SH Rates Compared to Group V Personnel and Total Navy Population

Group	Fiscal Year 1970			Fiscal Year 1971		
	SH	Gr V	Navy	SH	Gr V	Navy
First Term	6.3	10.0	10.3	11.3	17.2	17.0
Career	92.4	87.9	83.7	94.2	93.6	90.0
Total	29.8	30.6	26.7	42.5	44.1	38.6

Source: NAVPERS 15658, 30 June 1971.

The high reenlistment rate among career personnel is a factor bearing on advancement opportunity because the number of personnel reenlisting will affect the number of billet vacancies. The results of this research indicate that perhaps a significant number of career personnel, not adequately qualified, are permitted to reenlist.

A comparatively small number of first term SH personnel reenlist and of those reenlisting, most appear to be the less mentally gifted. This was indicated previously in table 1 and is further illustrated in the following table. The number of first term personnel reenlisting from those eligible by mental groups for fiscal year 1971 is shown.

TABLE 14

FIRST TERM SHIP'S SERVICEMEN REENLISTMENTS BY MENTAL GROUPS

<u>Mental Group</u>	<u>Eligible</u>	<u>Reenlist</u>	<u>Percent</u>
I	14	-	-
II	200	14	7.
Upper III	167	15	9.
Lower III	237	25	10.5
IV	214	37	17.3

Note: 95% of eligibles are in paygrades E-4 & E-5.

Source: Pers-P12, Report E198A, 30 June 1971.

There are a number of factors affecting reenlistments among first term SH personnel. Some include dissatisfaction with job assignment, poor working conditions, long hours, slow rate of advancement, limited opportunity for training, etc. Some factors do not lend themselves to simple resolution. On the other hand, there are areas where specific improvements can be made. For example, additional training opportunities should help ship's servicemen to better understand their duties and responsibilities. Training may also provide the needed incentive to induce additional first term personnel to become career motivated.

K. Sea/Shore Rotation

One of the most frequently expressed comments concerned the length of time ship's servicemen served in sea billets. Until recently, it was necessary for them to complete from six to eight years sea duty before becoming eligible for rotation to shore duty. Significant reductions in sea duty tour lengths were effected while this research was underway thus reducing the cause for most complaints in this area.

The current practice is to limit sea tours for SH personnel to five years. SH3's and below are subject to five year sea tours; a minimum sea tour of three years applies to SHC petty officers and above. Complaints about sea duty tours were often based on comparisons with other ratings, however the shortened tours now compare favorably with those of other supply ratings.

L. Working Facilities and Conditions

Some of the difficulties encountered in the service functions are not personnel related but do contribute to or create additional problems for SH personnel. Spaces, location, equipment and the general work environment

are factors affecting production and performance. Numerous inadequacies and deficiencies were noted which prevent ship's servicemen from carrying out their duties effectively and efficiently.

1. Laundry/Dry Cleaning

Not all ships have dry cleaning equipment but of those that do, problems associated with dry cleaning operations are very similar to those encountered in the laundry because of similarities in space and equipment. The following lists the more frequent space and equipment problems noted:

- a. Inadequate and small spaces.
- b. Poor lighting and ventilation.
- c. Inefficient layout of equipment.
- d. Inoperability of equipment due to normal wear and tear and to misuse and abuse.
- e. Lack of repair and maintenance capability including non-availability of repair parts.
- f. Inadequacy of equipment.
- g. Non-standardization of equipment.
- h. Hazardous conditions.

The foregoing conditions are not limited to older ships but to some of the newer ones as well. For example, a ship commissioned in 1970 was visited where space was adequate and numerous improvements noted but equipment layout was such that it did not provide for an efficient work flow and actually required an increased number of personnel to maintain the operation.

The problems in working facilities and conditions noted during this research are not new and have been documented previously. A comprehensive study of shipboard laundry systems was conducted by the Naval Ship Engineering Center at the request of the Commander, Naval Ship Systems Command. The detailed findings of this study are published in a report, A Review of Shipboard Laundry Systems, prepared by Ship Arrangements Branch, report number N.S. 0935-041-9010, April 1970. In addition to problems noted in equipment, space, layout, and related physical factors, the report points up numerous difficulties laundrymen face in working under these adverse conditions. Equipment problems created by the lack of experienced operators and supervisors are also indicated. The general findings and conclusions reached in the report are included in Appendix F.

2. Barber Shop

A significant number of barber shops visited, have experienced, or now experience, one or a combination of problems including limited working space, inadequate lighting, poor ventilation, and deficient equipment. For example, the barber shop on a ship less than two years old had not been provided with electrical outlets. Therefore, instead of electrical tools, initial equipment included a set of hand operated barber tools.

Frequent comments by service function personnel indicated that original equipment, including barber chairs, tools, etc., were considered substandard. To offset numerous deficiencies and inadequacies, many ships have utilized considerable ingenuity to improve the aesthetic appearance, comfort, and operational efficiency of barber shops by installing paneling, additional lighting, new chairs, etc., and have provided modern hair cutting equipment to enable the barber to provide the professional service expected.

3. Resale Facilities

The number and size of resale outlets varies considerably from ship to ship and it is generally the smaller ships which experience the most difficulty because space for resale operations is limited. When store space is small, it is impossible to effectively display all available merchandise and only limited quantities and varieties can be carried as shelf stock at any one time. Bulky, fast moving merchandise, such as cigarettes, which must be carried in a variety of sizes and brands are indicative of some merchandising problems encountered in a small store.

Store locations in most instances are satisfactory from a customer viewpoint, however the bulk storerooms servicing the stores are poorly situated and generally inadequate, particularly on the smaller and older ships. It is not uncommon to find bulk storerooms and resale stores located on opposite ends of the ship and separated by one or more decks. The risks of pilferage is high for resale merchandise and such risks increase with the frequency and distances resale merchandise must be moved. In addition to location problems, some storerooms are either damp, hot, unventilated, etc., and therefore are unsuitable for a large amount of resale stock adversely affected by extremes in humidity and temperature.

Space and equipment inadequacies and deficiencies have varying effects. Inoperable equipment generally will inconvenience the entire crew because corresponding services or goods will either be eliminated or restricted. The impact on SH personnel will not be as great in the resale activities but can be serious in the laundry where backlogs develop necessitating additional hours of work. Regardless of conditions or causes, the ship's servicemen generally are blamed and criticized for any inconveniences.

Many of the existing space, equipment, and layout problems cannot be corrected because of ships' physical characteristics and/or because it would be economically unfeasible to make necessary changes. However, steps have been taken to avoid similar problems in new ships by the assignment of supply corps officers during the design and construction phases to act as consultants and advisors in determining physical requirements for supply department functions.

M. Morale

If interview and questionnaire responses were the sole basis on which to evaluate morale, that of the SH personnel would have to be considered lower than average. Despite the number of complaints and grievances, the evidence uncovered during this research does not fully support such a

general conclusion. For example, if reenlistment rates and length of service are used as a statistical means to measure morale, there may be a significant difference between the morale of first term and career personnel. The morale of first term SH personnel would have to be considered poor because of their lower than average reenlistment rate. On the other hand, the morale of career SH personnel might be termed good or better because their reenlistment rate and average length of service are higher than the Navy averages.

Numerous complaints cited relate to various subjects covered in this report. For example, considerable dissatisfaction exists because of substandard working conditions. Working long hours, doing more than one job, and performing in jobs for which training had not been provided were complaints which may be attributable in part to personnel shortages and to failure to provide adequate on-the-job or formal training.

Most ship's servicemen appeared genuinely concerned about the lack of incentive. For example, they are expected to provide good service but there is little, if any, praise or recognition for good performance. On the other hand, any deficiency in service, whether controllable by SH personnel or not, is the cause for considerable complaint and draws criticism from supervisors and all personnel affected.

The recent increased emphasis to improve services and conveniences for shipboard personnel has had an adverse effect on ship's servicemen. Most are of the opinion that they must now work longer and harder because provisions were not made for assistance in meeting the additional requirements placed on them. They feel they derive little, if any, benefit from the improvements and changes intended for all Navy personnel.

Generally, it appears ship's servicemen are anxious to do a good job from which they can derive some pride. However, the prevalent feeling among them is that their efforts are not recognized or appreciated, their welfare is neglected, and their treatment often approaches that of "second class" citizens. These factors provide little tangible incentive or motivation for SH personnel to perform effectively.

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IV. FINDINGS

1. The rating is comprised of a number of non-related jobs requiring diverse manual and mental skills, e.g., general manual and mechanical skills for laundering and dry cleaning; specific hand skills for barbering and tailoring; combined manual and mental skills for operation of resale outlets; and clerical, arithmetic, and analytical skills for administering (e.g., purchasing, material control, merchandising, financial records, accounting, etc.)
2. Rating series navy enlisted classification codes (NEC's) are used to identify SH personnel with special qualifications and aptitudes in the diverse occupations associated with the rating. All personnel are advanced to SH3 having qualified in one of the occupational areas but the skills and qualifications of approximately 80% of SH3's are not known because they do not carry an NEC.
3. Approximately 50% of all personnel in the rating do not carry an NEC and therefore their special skills and qualifications are not known.
4. The SH rating is at 85% of total requirements, however the percentage assigned to sea billets is less. Some ships are at 100% or more of allowance but a significant number have less than one-half of allowed ship's servicemen.
5. The recent emphasis to improve shipboard habitability has increased the demands for services and conveniences thus requiring greater efforts and a higher degree of proficiency on the part of the ship's servicemen. Additional personnel and training have not been provided to offset the added requirements.
6. Input sources to the rating are limited with few recruits having the necessary skills to become designated strikers at the time of enlistment. Most personnel come from the deck force and generally are assigned to the manual, lower skilled jobs such as those existing in the laundry.
7. Sixty percent (60%) of SH personnel attained below average GCT scores, i.e., 25% are in lower Group III and 35% are in Group IV.
8. The three-week SH store clerk course is used to train rated and non-rated personnel, ranging from recruits to leading petty officers, as a homogeneous group despite incompatibility of backgrounds and learning capabilities.
9. With the exception of the barber school, all Class "C" schools are not operating at capacity. Approximately one-half of student quotas were not filled during fiscal year 1971.

10. Record keeping and administration are the most important aspects of the rating for career development and they are emphasized in advancement examinations. However, more time is spent in formal training of SH personnel in manual and hand skills which apply generally only to the lower paygrades than is spent in formal training in record keeping and administration.

11. Advancement opportunities are limited at paygrades E-6 and above. The average ship's serviceman has completed 14 years of service at the time of advancement to SH1 compared to the Navy average of $7\frac{1}{2}$ years.

12. Compared to Navy averages, first term SH personnel reenlistment rates are low but are high among career personnel.

13. There are no billet requirements for NEC SH-3156, dry cleaner, nor are any ship's servicemen assigned this NEC.

V. CONCLUSIONS

1. The ship's serviceman rating structure, as constituted, is essentially sound and should be retained.
2. Operation of the service functions cannot be maintained at efficient and acceptable levels because shortages of personnel necessitate using untrained and unskilled personnel in positions where some degree of training or experience is essential.
3. The inability to identify personnel according to job skills and qualifications, e.g., barber, tailor, etc., prevents the effective detailing and assignment of personnel, particularly at the lower paygrades.
4. The current Class "C" SH store clerk course cannot be taught effectively because of the heterogeneous backgrounds and learning capabilities of students.
5. The long average length of service to attain the supervisory grades serves to discourage first termers, particularly those in the higher mental groups, from reenlisting.
6. NEC SH-3156, dry cleaner, is not required because personnel and billets can be adequately identified by using NEC SH-3154, laundryman/dry cleaner.

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VI. RECOMMENDATIONS

1. Establish a Class "A" school emphasizing training in the clerical and administrative functions associated with the raving.
2. Intensify efforts to maximize utilization of the present Class "C" schools.
3. Establish entrance prerequisites for the SH store clerk course to minimize the number of students lacking fundamental knowledge of service and resale activity operations.
4. A new procedure be used to assure adequate identification of personnel skills by assigning appropriate NEC's, e.g., barber, tailor, laundryman, or clerk, to all personnel passing the advancement examinations for SH3. Concurrently, encourage individual commands to recommend assignment of applicable NEC's to qualified personnel, particularly SH3's and SH2's.
5. Consider new procedures, such as direct procurement at advanced paygrades and limited enlistments, if present methods do not satisfy personnel requirements.
6. Delete NEC SH-3156, dry cleaner, and use NEC SH-3154, laundryman/dry cleaner, to identify applicable billets and personnel.

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BIBLIOGRAPHY

1. Arzigian, Simon and Couloumbis, Theodore A. Final Report - Study of the Ship's Serviceman Rating. Washington: U. S. Naval Personnel Research Field Activity, February 1961. (RS 61-6).
2. Arzigian, Simon and Couloumbis, Theodore A. Preliminary Report - Research of Structure of the Rating of Ship's Serviceman (SH). Washington: U. S. Naval Personnel Research Field Activity, October 1960. (RS 60-18).
3. COMSERVPAC Instruction 4230.1H, Procurement of Foreign Merchandise by Ship's Stores. February 1969.
4. COMSERVPAC Instruction 4230.2A, Procurement of Supplies and Services from Foreign Sources for Use Outside the United States. September 1962.
5. COMSERVPAC Instruction 4235.1E, Pacific Requisitioning Guide. May 1967.
6. Department of Defense, Armed Services Exchange Regulations. 1956.
7. Departments of the Army, Navy, and Air Force, Armed Services Commissary Store Regulation. 1952.
8. Naval Personnel Research and Development Laboratory, Master Enlisted Tape Extracts. 31 December 1970; 30 June 1971; 31 August 1971.
9. Naval Personnel Research and Development Laboratory, Minimum Pay Grade for Navy Enlisted Classifications. January 1971.
10. Naval Ship Engineering Center, A Review of Shipboard Laundry Systems. April 1970 (N.S.0935-G41-9010).
11. NAVPERS, Master Enlisted Personnel File. Bureau of Naval Personnel.
12. NAVPERS 10052-R, Training Publications for Advancement. Bureau of Naval Personnel. 1970.
13. NAVPERS 10286-F, Rate Training Manual, Ship's Serviceman 3 & 2. Bureau of Naval Personnel, 1970.
14. NAVPERS 10287-L, Rate Training Manual, Ship's Serviceman 1 & C. Bureau of Naval Personnel, 1971.

15. NAVPERS 10292, Navy Training Course, Ship Servicemen's Handbook. Bureau of Naval Personnel, 1961.
16. NAVPERS 15105-1, Manual of Navy Enlisted Classifications. Bureau of Naval Personnel, July 1971.
17. NAVPERS 15658, Navy and Marine Corps Military Personnel Statistics. Bureau of Naval Personnel, various monthly reports.
18. NAVPERS 15665A, Navy Uniform Regulations. Bureau of Naval Personnel, 1969.
19. NAVPERS 18068C, Manual of Qualifications for Advancement. Bureau of Naval Personnel, June 1971.
20. NAVPERS 91769, Change 2, Formal Schools Catalog. Bureau of Naval Personnel, July 1971.
21. NAVPERS 93902, Trainee Guide for Ship's Store Afloat "C" School. Naval Schools Command, Newport, R. I., 1968.
22. NAVPERS 94085-5 Phase V, Storekeeper, Supply Afloat, Class "C", Study Guide, Ship's Store Operations. Bureau of Naval Personnel, 1970.
23. NAVPERS 94175, Curriculum for the Ship's Serviceman Class "C" School (3 weeks). Bureau of Naval Personnel, 1969.
24. NAVRESO Publication 38A, Ship's Store Afloat Display Guide. Navy Resale System Office, 1969.
25. Naval Supply Systems Command, Navy Exchange Manual. 1954.
26. NAVSUP 94428, Shipboard Training Course in Ship's Store Afloat: Lesson Plans for Enlisted Ship's Servicemen. Naval Supply Systems Command, 1969.
27. NAVSUP Manual Volume I, Introduction to Supply. Naval Supply Systems Command, undated.
28. NAVSUP Manual Volume IV, Naval Food Service, Ashore; Retail Clothing Stores; and Commissary Stores. Naval Supply Systems Command, 1966.
29. NAVSUP P-284, Storage and Materials Handling. Naval Supply Systems Command, 1970.
30. NAVSUP P-467, Field Purchasing Manual. Naval Supply Systems Command, 1968.

31. NAVSUP P-485, Afloat Supply Procedures. Naval Supply Systems Command, 1970.
32. NAVSUP P-487, Ship's Store Afloat. Naval Supply Systems Command, 1970
33. Sass, Del H. The Storekeeper Rating: New Concepts to Improve Training, Assignment, Performance, and Utilization. Washington: Naval Personnel Research and Development Laboratory, April 1971. (WRM 71-37).
34. U. S. Naval Personnel Research Field Activity, Study of the Ship's Servicemen (SH) Rating. January 1955. (RS 55-1).

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APPENDIX A

SHIP'S SERVICEMAN NAVY ENLISTED CLASSIFICATIONS¹

SH-3111 Navy Exchange Manager

Source Ratings: SH, SK

Applicable Course: Management-Navy Exchange (A-8F-0010)

NOTES: (1) Satisfactory completion of the Applicable Course is mandatory.

(2) Assigned only to E-8/9 personnel or E-7 selected to fill E-8/9 billets.

Performs duties of retail store manager or resident assistant Navy exchange officer: Carries out exchange officer's orders; aids in hiring employees and determines kinds of merchandise to stock.

SH-3112 Clerk

Source Rating: SH

Applicable Course: Ship's Serviceman Clerk (A-823-0010 or 0011)

Procures and assists in receiving ship's store stock, maintains all required ship's store records and prepares required returns for afloat retail stores.

SH-3122 Barber

Source Rating: SH

Applicable Course: Ship's Serviceman, Shipboard Barbers (A-840-0012)

NOTE: This NEC is assigned only to E-5 and below.

Cuts, trims, and shampoos hair; shaves personnel; and maintains equipment.

¹ Manual of Navy Enlisted Classifications, NAVPERS 15105-U, July 1971.

SH-3142 Tailor

Source Rating: SH

Applicable Course: Textile Repair (A-760-0010)

Repairs and alters clothing by hand or machine sewing, fitting garment to customer.

SH-3154-3156 Laundrymen and Dry Cleaners

Source Rating: SH

Wash, iron, and press clothing and flatwork, using extractors, tumblers, presses, and flatwork ironers: Dry clean, spot, dry, and press garments, using solvents, dry cleaning machines, and pressers.

SH-3154 Laundryman and Dry Cleaner

Applicable Course: None

Component NECs: SH-3155, SH-3156

SH-3155 Laundryman

Applicable Course: Laundry/Bath and Impregnation
(A-840-0011)

SH-3156 Dry Cleaner

Applicable Course: Shipboard Dry Cleaning Operations
(A-840-0010)

APPENDIX B

ACTIVITIES VISITED FOR COLLECTION OF SHIP'S SERVICEMAN DATA

1. Afloat:

AD-18	SIERRA	AS-36	L. Y. SPEAR
AD-37	SAMUEL GOMPERS	ATF-86	MATACO
AD-38	PUGET SOUND	CLG-11	CHICAGO
AE-25	HALEAKALA	CVA-19	HANCOCK
AE-26	KILAUEA	CVA-61	RANGER
AF-59	VEGA	CVA-67	JOHN F. KENNEDY
AFS-1	MARS	CVS-14	TICONDEROGA
AFS-4	WHITE PLAINS	DD-727	DE HAVEN
AFS-6	SAN DIEGO	DD-824	BASILONE
AKA-116	ST LOUIS	DD-944	MULLINNIX
AO-53	CALIENTE	DDG-32	JOHN PAUL JONES
AO-10	NAVASOTA	DE-1071	BADGER
AOE-2	CAMDEN	DLG-33	FOX
AOR-1	WICHITA	LSD-29	PLYMOUTH ROCK
AR-5	VULCAN	LST-1180	MANITOWOC
AR-8	JASON	SSN-575	SEAWOLF
AS-12	SPERRY	SSN-673	FLYING FISH

2. Ashore:

Administrative Branch, Navy Training Command, Great Lakes
 CHNAVPER (Pers-A49, B2152, B2244, -N212)
 CINCLANTFLT Fleet Supply Officer, Norfolk
 Classification Branch, Navy Training Command, Great Lakes
 COMCRUDESANT Force Supply Officer, Newport
 COMCRUDESANT Force Supply Representative, Norfolk
 COMCRUDESANT Force Supply Officer, San Diego
 COMCRUDESANT Force Supply Representative, Long Beach
 COMNAVAIRLANT Force Supply Officer, Norfolk
 COMNAVAIRPAC Force Supply Officer, San Diego
 COMPHIBLANT Force Supply Officer, Norfolk
 COMPHIBPAC Force Supply Officer, San Diego
 COMSERVLANT Force Supply Officer, Norfolk
 COMSERVGRP ONE Supply Officer, San Diego
 COMSERVRON SEVEN Supply Officer, Alameda NAS
 COMSUBLANT Force Supply Officer, Norfolk
 Commissary Store Area Office, Long Beach
 Commissary Store Area Office, San Diego
 Commissary Store Area Office, San Francisco
 Commissary Store, Hunters Point
 Commissary Store, Long Beach NS
 Commissary Store, Mare Island

ACTIVITIES VISITED FOR COLLECTION OF SHIP'S SERVICEMAN DATA

2. Ashore: (continued)

Commissary Store, Norfolk
Commissary Store, San Diego NS
Commissary Store, Treasure Island
Corrections Center, NS, Norfolk
Enlisted Personnel Distribution Office, U.S. Atlantic Fleet, Norfolk
Fitting Out Supply Assistance Team Atlantic, NS, Norfolk
Fleet Training Center, Newport
Laundry Assistance Team, NSC, San Diego
Military Sealift Command Atlantic, Brooklyn
Military Sealift Command Office, Hampton Roads
Naval Schools Command (SH Schools), NS, Norfolk
Naval Schools Command (SH Schools), San Diego
Naval Supply Systems Command (OGB), Washington
Navy Examining Center, Supply Ratings Department, Great Lakes
Navy Exchange, Brooklyn
Navy Exchange, Norfolk
Navy Exchange, NS, Washington
Navy Regional Finance Center, Cleveland
Navy Resale System Field Office, NSC, Long Beach
Navy Resale System Field Office, NSC, San Diego
Navy Resale System Field Office, NSC, San Francisco
Navy Resale System Field Office, NS, Norfolk
Navy Resale System Office, Brooklyn
Navy Supply Corps School, Athens
U.S. Army Quartermaster School, Fort Lee

APPENDIX C

SHIP'S SERVICEMAN PROJECT QUESTIONNAIRE*

SECTION A. PERSONAL HISTORY

1. Type of Current Enlistment: Regular__ TAR__ Reserve__ Other__
(Identify)
2. Present Paygrade: E1__ E2__ E3__ E4__ E5__ E6__ E7__ E8__ E9__
3. Years in Present Grade _____
4. Total Military Service: (a) Active Duty (Navy) _____Years_____Months
(b) Inactive Duty _____Years_____Months
(c) Active Duty (Other)_____Years_____Months
5. The following list contains all currently assigned Navy Enlisted Classification Codes (NEC Codes) for Ship's Servicemen. Check the appropriate line entry for the NEC assigned your service rating specialty or skip to the bottom of the list and check NONE or NEC NOT KNOWN.

__2811 Commissary Store Manager	__3142 Tailor
__3100 Rating Entry NEC	__3150 Laundryman (Basic)
__3110 Clerk (Basic)	__3154 Laundryman/Dry Cleaner
__3111 Exchange Manager	__3155 Laundryman
__3112 Clerk	__3156 Dry Cleaner
__3120 Barber (Basic)	__Other _____
	(Identify)
__3122 Barber	__None Assigned
__3140 Tailor	__NEC Not Known
6. Navy schools attended: (Class A, B, or C, Package, Fleet, Service, Other)
Name _____ Length of School _____Yr. Attended _____
(No. days, wks., or mos.)

Other Service Schools Attended (Army, Air Force, DOD, Etc.)
Name _____ Length of School _____Yr. Attended _____
(No. days, wks., or mos.)
7. Present Duty Station _____ Date Reported _____
(Month/Year)
8. Present Billet or Job Title _____
Number of Months Assigned This Billet or Job _____
Briefly and specifically describe the duties in your present assignment: _____

*Condensed here to save space; original questionnaire afforded adequate space for responses.

Please list all other assignments you have had in this command
_____ If none, Check here _____
(Billet or Job Title & No. Months Held)

What was your previous duty station? _____
(Name and Location)

Number of Months at previous command _____

Billet or Job Title _____

Duties and Responsibilities _____

9. Please list all other duty stations and assignments since first enlistment: Duty Station Billet Dates From/To

10. Do you have permanent change of station orders? (Check One)

Yes___ No___

If yes, to be detached when _____ Where to? _____
(Month/Year) (Act. & Location)

SECTION B. TRAINING

11. Did your last duty station have a division training program?

Yes___ No___

Does a division training program exist at your present command

Yes___ No___

(a) Number of hours of military training per week _____

(b) Number of hours of professional training per week _____

12. Has the training you have received up to the present time been adequate in preparing you for the job you are currently assigned?

Yes___ No___

If not, what training, schooling, or instruction would contribute to improvement in your ability to carry out your assigned duties and responsibilities? _____

13. Do you think there should be a Ship's Serviceman Class A School?

Yes___ No___ If yes, what subject areas should be covered? _____

14. Have you had any experience with automated supply, mechanized accounting or automated or mechanized Navy Exchange and Commissary Store operations? Yes___ No___ If yes, what type of training did you receive and where were you stationed? _____

(type of trng) (duty sta.)

15. Do you use the Ship's Serviceman Handbook in your job for reference?

Frequently___ Occasionally___ Not at all___ Explain _____

16. Do you use either the Ship's Serviceman 3 & 2 or the Ship's Serviceman 1 & Chief Training Manual in your job for reference?
(Check One) Frequently__ Occasionally__ Not at all__ Explain_____

SECTION C. SERVICE RATING SPECIALTY

17. If you are working or have worked as a store clerk, or hold a clerk NEC Code, Please answer the following: (If not, skip to question 18)
- (a) Do you think there should be a separate NEC Code for Record Keeping? Yes__ No__ If yes, why?_____
 - (b) Do you think the present fleet/service schools for teaching record keeping are adequate? Yes__ No__ Don't know__
If they are not adequate, what should be done to improve them?_____
 - (c) What kind of training have you received as a clerk? (Check One or More) On the Job__ Formal School__ Self Taught__
If school, what school_____ Yr. Attended_____
Do you know afloat record keeping and financial returns preparation and procedures? Yes__ No__ If yes, how did you acquire this skill? On the Job__ Formal School__ Self Taught__
If school, what school_____ Yr. Attended_____
Have you ever been assigned record keeping and financial returns preparation duties? Yes__ If yes, Currently_____
In the past __ No__
18. If you are working or have worked as a tailor, or hold a tailor NEC Code, please answer the following: (If not, skip to question 19)
- (a) How did you acquire your tailoring skill? (Check One or More)
On the job__ Formal School__ Self Taught__
If school, what school_____ Yr. Attended_____
(b) Do you think on the job training is sufficient to become a good Navy Tailor? Yes__ No__ Explain_____
 - (c) Do you think laundrymen can learn basic tailoring skills to perform required alterations and repairs as a part of their laundry operations? Yes__ No__ Explain_____
19. If you are working as a barber, have worked as barber in the past, or hold a barber NEC Code, please answer the following: (If not, skip to #20)
- (a) Were you designated a barber upon completion of basic training?
Yes__ No__
 - (b) If not, how did you acquire your barbering skill?_____
20. If you are working or have worked as a laundryman or hold a laundryman or dry cleaning NEC Code, please answer the following: (If not, skip to #21)

(a) Have you ever found it awkward or difficult to operate laundry or dry cleaning equipment? (Presses, extractors, washers, etc.)
If yes, Identify _____
(type of equip., name, brand, model--if known)

(b) Have you found it awkward or difficult to adjust from the laundry or dry cleaning equipment installed on one ship to that installed on another? Yes__ No__ If yes, explain some of the problems you have experienced _____

(c) Do you think it is necessary to have three different laundry
3154 Laundryman/Dry Cleaner
NEC Codes? Yes__ No__ 3155 Laundryman
3156 Dry Cleaner

If yes, why? _____

If no, which NEC Code(s) should be eliminated? _____

Why? _____

(d) Do you think on the job training is sufficient to learn how to become a good laundryman/dry cleaner? Yes__ No__

Why or why not? _____

21. Have you ever thought of changing your rating? Yes__ No__
If yes, to what new rating? _____
Briefly describe the reasons for wanting to change your rating _____

22. Are there any specialty areas within the Ship's Serviceman rating based on your present or past experience that should be identified by a new Navy Enlisted Classification Code (NEC) which are not currently or properly defined? Yes__ No__ If yes, describe the new NEC area(s). _____

23. Place a check mark in the appropriate column beside each of the following line entries which describe differences in ship's store operations found to exist from one tour of duty to another:

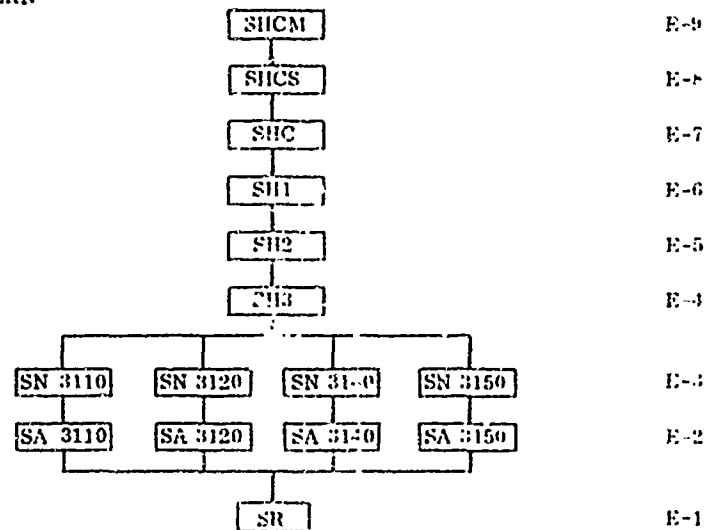
AREA OF CONCERN	MAJOR DIFFERENCE	SOME DIFFERENCE	NO DIFFERENCE
Division Methods & Procedures	___	___	___
Equip. Operating Instructions	___	___	___
Types & Uses of Equipment:			
Dry Cleaning	___	___	___
Laundry	___	___	___
Barbershop	___	___	___
Resale Store	___	___	___
Soda Fountain	___	___	___
Tailor Shop	___	___	___
Other _____	___	___	___
Record Keeping & Account- ability	___	___	___
Levels of Responsibility	___	___	___
Watchstanding	___	___	___
Other Areas of Concern	___	___	___
Explain difference	___	___	___

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APPENDIX D

SHIP'S SERVICEMAN (SH)

*CAREER PATTERN



Normal path of advancement for Ship's Serviceman (SH) to Warrant and Limited Duty Officer status is to Warrant Supply Clerk (798X) and Limited Duty Officer, Supply (370X) categories.

GENERAL RATING

*SCOPE

Ship's Servicemen provide direct personal services by operating and managing resale activities, such as ship's stores, commissary stores, and Navy exchanges; service activities of the ship's stores and Navy exchanges, such as laundry and dry-cleaning facilities, vending machines, fountains, snackbars, barber and tailor shops, and perform clerical and stock control functions for all activities operated. Ship's Servicemen (SH) specialize as laundrymen, dry cleaners, barbers, tailors, or clerks, and SH3 require basic knowledge of all specialties; and SH2 and above, develop and exercise administrative and managerial skills. Conceptually SH's may be considered as primarily involved in providing customers with a variety of personal services and in supervising and coordinating activities of personnel engaged in serving or performing personal services for others in a command.

NOTE: The parenthetical phrase "clerks only; others SH2" appended to a particular qualification factor indicates that the item is required for non-rated clerk personnel (SN 3110) for advancement to clerk SH3, and for SH3 barbers, tailors, and laundrymen, dry cleaners for advancement to SH2.

SERVICE RATINGS

None.

QUALIFICATIONS FOR ADVANCEMENT

Required for
Advancement to
SH

A. SAFETY

*1.00 Practical Factors

.01 Demonstrate safety regulations in storing and caring for stocks and supplies. E-1

*Denotes change

QUALIFICATIONS FOR ADVANCEMENT

Required for
Advancement to
SH

A. SAFETY - Continued

1.00 Practical Factors - Continued

- .02 Demonstrate sanitary and safety procedures in the operation, maintenance, and stocking of retail outlets E-4
- .03 Explain safety precautions pertinent to equipment and supplies common to own trade E-4

2.00 Knowledge Factors

- .01 Safety classifications of material E-4
- .02 Sanitary and safety precautions applicable to own trade E-4
- .03 Functions and safety precautions of the various types of materials-handling equipment used in supply work afloat E-4
- .04 Safety regulations pertaining to the stowage and care of retail clothing and ship's store stock; precautions to be taken when stowing materials to allow access to damage control and firefighting equipment and fittings; and danger of spontaneous combustion and precautions to be taken for its prevention E-4

B. ACCOUNTING PROCEDURES

1.00 Practical Factors

- .01 Account locally for receipts and expenditure of retail clothing and ship's store stock (clerks only; others SH1) E-4
- .02 Utilize stores accounts as they pertain to retail clothing and ship's store stock (clerks only; others SH2) E-4
- .03 Prepare expenditure documents used afloat (clerks only; others SH2) E-4
- .04 Issue and/or transfer stock in accordance with current regulations E-4
- .05 Process claims for loss of, or damage to, items accepted for servicing by ship's stores E-5

2.00 Knowledge Factors

- .01 Regulations governing the sale of stock E-4
- .02 Procedure for expending stock by survey E-4
- .03 Regulations governing the use of appropriations and funds E-4
- .04 Regulations governing responsibility and accountability for stock placed in ship's serviceman's custody E-4
- .05 Functional accounts and their uses E-4
- .06 Titles and symbols of appropriations and funds (clerks only; others SH2) E-4

*Denotes choice

QUALIFICATIONS FOR ADVANCEMENT

Required for
Advancement to
S11

B. ACCOUNTING PROCEDURES - Continued

2.00 Knowledge Factors - Continued

- .07 Basic arithmetic E-4
- .40 Regulations pertaining to material turned in to store ashore E-5
- .50 Procedures for expending other supplies under the inventory control
of the supply department E-7

C. PROCUREMENT AND STOCK CONTROL

1.00 Practical Factors

- .01 Prepare requisitions and purchase orders (clerks only; others SH2) . . . E-4
- .02 Post inventories to stock and financial records (clerks only; others
SH2) E-4
- .03 Estimate requirements for supplies required for operation of service
activities E-4
- .60 Estimate stock required by unusual operating conditions and locali-
ties E-6

*2.00 Knowledge Factors

- .01 Forms and their uses in stock control E-4
- .02 Purpose of inventories E-4
- .03 Preparation and maintenance of stock records E-4
- .04 Methods and sources of procurement for standard and special resale
stock for ship's store (clerks only; others SH2) E-4
- .05 Methods and procedures for taking inventories E-4
- .06 Receipt and expenditure entries required in stock and financial records
(clerks only; others SH2) E-4
- .07 Procedures for reconciling invoices and balancing stock and financial
records (clerks only; others SH2) E-4
- .08 Procedures for initiating procurement action for major equipment
(clerks only; others SH2) E-4
- .09 Methods of procuring commercial services (clerks only; others SH2) . . E-4
- .10 Procedures for obtaining supply department material for use sale
in ship's store operation E-4
- .11 Purpose and use of ship's stores afloat stock catalog, and ship's stores
contract bulletins E-4
- .50 Methods and sources of procurement for all material under the
inventory control of the supply department E-7
- .81 Methods and sources of procurement for stock and supplies for
Navy exchanges E-7

D. RECEIPTS, CUSTODY, AND STOWAGE

1.00 Practical Factors

- .01 Receive incoming material and stock, inspect for quality and quantity,
and determine disposition E-4

*Denotes change

QUALIFICATIONS FOR ADVANCEMENT

Required for
Advancement to
SH

D. RECEIPTS, CUSTODY, AND STOWAGE - Continued

1.00 Practical Factors - Continued

- .02 Identify and classify stock for purposes of marking and stowing E-4
- .03 Stow stock so as to prevent damage, deterioration, and pilferage E-4
- .40 Supervise working parties engaged in handling accountable stores E-5
- .60 Prepare stowage plans E-6
- .61 Demonstrate methods of handling, reporting, and accounting for
damaged or short shipments and deliveries, ... E-6

2.00 Knowledge Factors

- .01 Procedures for establishing accountability for stocks and funds E-4
- .02 Purpose and disposition of receipt documents (clerks only; others
SH2) E-4
- .03 Procedures for marking resale stock and supplies E-4
- .04 Procedures for processing dealers' bills (clerks only; others SH2) E-4

E. REPORTS AND CORRESPONDENCE

*1.00 Practical Factors

- .01 File correspondence in accordance with Department of the
Navy Standard Subject Identification Codes; type standard Navy
letter and business letter (clerks only; others SH2) E-4
- .02 Prepare and assemble required returns (clerks only; others SH2). E-4
- .60 Audit required records and returns for ship's store afloat E-6
- .61 Prepare required internal stock and financial reports E-6
- .62 Initiate routine correspondence E-6

2.00 Knowledge Factors

- .01 Retention periods and disposition of files and records for ship's store
afloat (clerks only; others SH2). E-4

F. COMMON SERVICE OPERATIONS

*1.00 Practical Factors

- .01 Identify principal parts of equipment common to own trade E-4
- .02 Provide courteous, tactful, and efficient personal services in customer
relationships common to own trade E-4
- .03 Press clothing by hand and machine (laundrymen and tailors). E-4
- .04 Spot and remove common stains from clothing (laundrymen and
tailors) E-4
- .05 Make minor adjustments on equipment used in own trade. E-4
- .06 Determine equipment requirements for efficient operation of
activity peculiar to own specialty E-4
- .07 Schedule operations common to own trade. E-4
- .08 Assist supervisor in activity peculiar to own trade. E-4
- .09 Maintain positive and helpful attitude in dealing with customers E-4
- .10 Recognize needs and requests of individual enlisted personnel to
attain customer satisfaction in own trade E-4
- .11 Establish good rapport with customers in own trade. E-4
- .60 Ensure that subordinates are instructed in how to provide responsive
services which meets needs of customers E-6

*Denotes change

QUALIFICATIONS FOR ADVANCEMENT

Required for
Advancement to
SH

F. COMMON SERVICE OPERATIONS - Continued

- *1.00 Practical Factors - Continued
 - .80 Investigate and resolve customer complaints of unsatisfactory work E-7
- *2.00 Knowledge Factors
 - .01 Nomenclature, types, and characteristics of:
 - a. Supplies common to own trade E-1
 - b. Materials serviced in performance of own trade (laundrymen and tailors) E-1
 - .02 Regulations peculiar to own trade E-1
 - .03 Working principles of machines peculiar to own trade E-1
 - .04 Effect of heat, stain removers, and cleaning solvent on various fabrics (laundrymen and tailors) E-1
 - .05 Application of Cost Control procedures to service activities E-1
 - .06 Standards of service normal to or required in own trade E-1

G. COMMON RESALE OPERATIONS

- 1.00 Practical Factors
 - .01 Service vending machines (clerks only; others SH2) E-1
 - .02 Maintain required sales room and stockroom records (clerks only; others SH2) E-1
 - .03 Maintain fountain and vending machines records (clerks only; others SH2) E-1
 - .04 Construct merchandise display (clerks only; others SH2) E-1
- 2.00 Knowledge Factors
 - .01 Cash register and cash handling procedures E-1
 - .02 Principles of displaying merchandise (clerks only; others SH2) E-1

H. LAUNDERING

- *1.00 Practical Factors
 - .01 Receive, classify, and mark all types of clothing (laundrymen dry cleaners only) E-1
 - .02 Launder clothing and other washable materials (laundrymen/dry cleaners only) E-1
 - .03 Operate various types of pressing equipment (laundrymen/dry cleaners only) E-1
 - .04 Identify types of clothing damage, determine causes, and take corrective action (laundrymen/dry cleaners only) E-1
 - .05 Sanitize and decontaminate clothing and fabrics affected by nuclear, biological, and chemical agents with laundry equipment (laundrymen/dry cleaners only) E-1
 - .06 Maintain control throughout laundering process to prevent separation of bulk lots (laundrymen dry cleaners only) E-1
- *2.00 Knowledge Factors
 - .01 Standard washing formulas for various articles, including synthetic fabrics E-1
 - .02 Recognition of washers and extractors characteristics to prevent damage to the equipment E-1

*Denotes change

QUALIFICATIONS FOR ADVANCEMENT

Required for
Advancement to
SH

*H. LAUNDERING - Continued

*2.00 Knowledge Factors - Continued

- .03 Formulas for washing with salt water. E-4
- .04 Stain removal and effect of stain removing agents on various fabrics and fibers (laundrymen/dry cleaners only) E-4
- .05 Methods of drycleaning and deodorizing clothing and nonwashable materials (laundrymen/dry cleaners only) E-4
- .06 Methods of pressing and finishing dry-cleaned garments (laundrymen/dry cleaners only) E-4
- .07 Operation of mobile laundry equipment. E-4
- .08 Washing formulas for various laundry chemicals and degree of hardness/softness of the water E-4

*I. BARBERING

*1.00 Practical Factors

- .01 Demonstrate correct utilization of barbering tools and techniques to provide customers with suitable authorized haircuts (barbers only). E-4
- .02 Demonstrate correct honing and stropping of razors (barbers only) E-4
- .03 Shave and outline neck and ears (barbers only) E-4
- .04 Sterilize barbering tools in accordance with current instructions (barbers only) E-4

*2.00 Knowledge Factors

- .01 Symptoms of common skin and scalp diseases E-4
- .02 Characteristics of head and facial features in relation to appropriate hair cut (barbers only) E-4
- .03 Types of haircuts authorized by Navy Uniform Regulations E-4
- .04 Types and textures of hair (barbers only) E-4

*J. TAILORING

*1.00 Practical Factors

- .01 Receive, tag, and log items for processing (tailors only) E-4
- .02 Preserve and care for uniforms in various climates (tailors only) E-4
- .03 Sew by hand and machine (tailors only) E-4
- .04 Sew insignia and fasteners on uniforms (tailors only) E-4
- .05 Perform minor alterations and repairs on uniforms (tailors only) E-4
- .06 Make up ribbons and medals (tailors only). E-4
- .07 Press garments (tailors only). E-4

*2.00 Knowledge Factors

- .01 Authorized insignia and alterations. E-4
- .02 Special treatment required to alter and mend certain fabrics E-4
- .03 Navy Uniform Regulations pertaining to tailoring of uniforms E-4

*Denotes change

QUALIFICATIONS FOR ADVANCEMENT

Required for
Advancement to
SH

Z. ADMINISTRATION

*1.00 Practical Factors

- .01 Typewrite at 20 words per minute for five minutes (clerks only; others SH2) (See Performance Test Instructions). E-4
- .02 Operate duplicating, adding machines and calculators (clerks only; others SH2) E-4
- .03 Perform routine maintenance (oiling, changing ribbons, and cleaning) on duplicating, adding, calculating machines and typewriters (clerks only; others SH2). E-4
- .04 Write or print legibly, record numbers neatly and accurately, and correctly spell words used in supply work. E-4
- .05 Maintain all ship's store reference publications in a complete and up-to-date manner, (clerks only; others SH2) E-4
- .40 Establish work schedules for service operations of ship's stores. . . . E-5
- .60 Assist in the preparation of operating instructions for service and resale activities. E-6
- .61 Make recommendations for overhaul or repair of equipment and spaces during shipyard or tender availability E-6
- .62 Supervise operations of service and resale activities E-6
- .80 Plan workflow for resale and office operations E-7
- .81 Plan physical layouts of service and resale activities to ensure work of good quality and efficient service. E-7

*2.00 Knowledge Factors

- .01 Purpose of price changes. E-4
- .02 Regulations governing keys, locks, safe combinations, and car seals . . E-4
- .03 Regulations outlining emergency entry procedures to accountable spaces E-4
- .04 Regulations governing the computation and establishment of sales prices (clerks only; others SH2). E-4
- . Regulations pertaining to security of material and records, and pilferable stock and supplies in ship's store resale activities E-4
- .06 Organization and functions of a supply department afloat. E-4
- .40 Charges for services in ship's stores afloat E-5
- .41 Purpose and functions of the Planned Maintenance Subsystem including:
 - a. Weekly and quarterly preventive maintenance schedules E-5
 - b. Planned Maintenance System Feedback Report E-5
- .60 Organization and functions of a supply department ashore E-6
- .80 Regulations governing repair or alteration of equipment and buildings ashore E-7
- .81 General principles of personnel management E-7
- .82 General organization and functions of supply activities ashore E-7
- .83 Procedures for evaluating customer satisfaction. E-7

EB. ENVIRONMENT 1. POLLUTION CONTROL

1.00 Practical Factors

None.

*Denotes change

QUALIFICATIONS FOR ADVANCEMENT

Required for
Advancement to
SH

*BB. ENVIRONMENTAL POLLUTION CONTROL - Continued

2.00 Knowledge Factors

- .01 Effect of detergents and other cleaning agents on water and as a water pollutant. E-4
- .02 Methods for disposing of waste products with minimum effect on the environment E-4
- .03 Dangers to health from use of polluted materials or materials affected by pollution. E-4

SENIOR CHIEF SHIP'S SERVICEMAN (SHCS)

QUALIFICATIONS FOR ADVANCEMENT

Required for
Advancement to
SH

*1.00 Practical Factors

- .90 Serve as ship's store technical assistant to supply officer E-8
- .91 Review procurement documents to determine document accuracy and appropriate replenishment action. E-8
- .92 Review for accuracy and adequacy all outgoing reports and correspondence related to ship's store E-8
- .93 Disseminate information on safety precautions and monitor compliance. E-8

*2.00 Knowledge Factors

- .90 Regulations and procedures for:
 - a. Preparation of surveys for related equipment and materials. E-8
 - b. Determination of requirements for operating materials, spare parts, and ship's store stock. E-8
 - c. Transfer of materials and supplies between U.S. and foreign governments, other military services, and Navy Supply Officers E-8
- .91 Relationships and general responsibilities of Navy Resale System Office (NRSO), staff, commands, and activities concerned with Ship's Store functions. E-8
- .92 Navy purchasing policies and procedures E-8
- .93 Organization and functions of major supply activities, including Naval Supply Depots, Naval Supply Centers, and Purchasing Offices E-8
- .94 Scope and nature of information contained in service publications pertaining to ship's store operations, including the NAVSUP Publications, BUPERS and NAVCOMPT Manuals. E-8
- .941 Responsibility and functions of Ship's Store Assistance Teams. E-8
- .942 Procedures used in planning and preparing the material pertaining to the operation of the ship's store and all ship's service activities for a provisioning conference E-8
- .943 Uses, capabilities and limitations of equipment used in service activities E-8
- .944 Methods and procedures used in providing assistance and guidance to the fleet in preinspections, annual supply inspections, retail marketing, consumer consumption and transportation. E-8

*Denotes change

SENIOR CHIEF SHIP'S SERVICEMAN (SHCS) - Continued

QUALIFICATIONS FOR ADVANCEMENT

Required for
Advancement to
SH

1.00 Knowledge Factors - Continued

- .945 Functions, utilization and capabilities of EAM/ADP equipment used
in supply operations E-8

MASTER CHIEF SHIP'S SERVICEMAN (SHCM)

QUALIFICATIONS FOR ADVANCEMENT

Required for
Advancement to
SH

*1.00 Practical Factors

- .95 Assist supply officer in directing procurement, receipt, stowage,
issue, inventory, accountability, and establishment and maintenance
of adequate stock levels of merchandise operating material, and
spare parts to meet demands of ship's store operations E-9
- .96 Gather and disseminate information concerning availability of
merchandise and facilities required for fulfilling ship or station
mission E-9
- .97 Conduct inspections of buildings, spaces, and areas for conformance
to safety and maintenance regulations; formulate guidelines concerning
potentially hazardous conditions and practices pertaining to applicable
areas and equipment E-9
- .98 Recommend load out and cost of operating materials and merchandise
for extended deployment for items not available on resupply E-9
- .99 Assist in planning, coordinating, and preparing material pertaining
to the operation of the ship's store, laundry, or allied ship's
service activities, for a provisioning conference E-9
- .991 Monitor all maintenance procedures for ship's store service facilities
and equipment E-9
- .992 Supervise functions of ship's store and related areas E-9
- .993 Monitor customer relations in ship's store and related areas E-9

*2.00 Knowledge Factors

- .95 Procedures to prevent loss of government funds or accountable
materials E-9
- .96 Regulations and requirements for the management of Navy exchanges
and commissary stores E-9
- .97 Personnel staffing requirements for Navy exchanges, ship's stores,
service activities, and commissary stores E-9
- .98 Regulations governing purchases and audits of Navy exchanges and
commissary stores E-9

*Denotes change

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APPENDIX E

SHIP'S STORE CLERK COURSE - OBJECTIVES AND OUTLINE¹

OBJECTIVES

A. Upon successful completion of this course the student will be able to:

1. List and describe the duties of the ship's store clerk afloat.
2. Identify authorized articles that comprise ship's store stock from NRSO instructions for use in determining requirements.
3. Identify records and files maintained for ship's store records.
4. Prepare required documents for the purchase, receipt, and transfer of ship's store stock.
5. Describe the procedures regarding the accountability, physical security, breakouts and intrastore transfers of merchandise.
6. Identify the authorized patrons in accordance with regulations contained in NRSO instructions and/or directives.
7. Describe the cash sales procedures, regulations, cash sales records and the accountability required on cash sales.
8. Explain the regulations and procedures to be followed in surveying merchandise along with the preparation of required forms and record entries.
9. Plan and construct merchandise display using effective principles of merchandising.
10. Prepare invoices to cover cost of operation material.
11. Prepare and distribute the summary of material receipts/expenditures.
12. Outline the procedure for merchandise inventories.
13. State and perform the procedures involved in the closeout of the ship's store records as determined by Ship's Stores Afloat Manual NAVSUP Pub. 487.
14. Prepare, substantiate, and distribute store balance sheet, operating statement and ship's store returns.

Course Length: 3 Weeks (90 Hours) -- Instruction based on 5-day week of 30 classroom hours (6 hours per day), excluding breaks between periods. Course provides for one (1) field trip during the third week to Fleet Unit and/or Supply Center. Classroom periods average 45 minutes.

¹Curriculum for the Ship's Serviceman, Class "C" School, NAVPERS 94175, November 1969.

COURSE OUTLINE AND TIME SCHEDULE

<u>Topic</u>	<u>Clock Hours</u>	
	<u>Presentation</u>	<u>Application</u>
<u>First Week (30 Classroom hours)</u>		
Introduction and Orientation	3	0
Ship's Store Introduction, Organization and Security	3	0
Appropriations, Funds, and Accounts	2	2
Publications	2	2
Classification of Stock and Determination of Stock Requirements	2	0
Ship's Store Stock Control	2	3
Procurement	3	3
Weekly Practical and Written Examination, Review and Critique	0	3
<u>Second Week (30 Classroom hours)</u>		
Receipt and Inspection of Ship's Store Stock	2	3
Stowage, Breakouts and Intra-store Transfers	2	3
Principles of Displaying Ship's Store Merchandise	2	1
Surveys of Ship's Store Stocks	2	1
Operation of Retail Activities	1	0
Accounting for Cash	3	1
Expenditures Other than Survey	3	3
Weekly Practical and Written Examination, Review and Critique	0	3
<u>Third Week (30 Classroom hours)</u>		
Operation of Service Activities	1	1
Field Trip to Fleet Unit and/or Supply Center	0	6
Ship's Store Profits	2	2
Ship's Store Returns	6	6
Weekly Practical and Written Examination, Review and Critique	0	3
Graduation and Checkout	0	3
Three Week Totals	41	49

APPENDIX F

Findings and Conclusions from A Review of Shipboard Laundry Systems¹

1. With only a few exceptions, the existing criteria and minimum standards for shipboard laundry services are inadequate with respect to the present laundry requirements of the Fleet.
2. General and Detailed Specifications for Ships perpetuate these inadequacies.
3. Present procurement practices for laundry equipment acquisition do not adequately consider essential shipboard application factors, such as, maintainability, reliability, shock and vibration resistance, logistic support, operational variations, etc.
4. There is no effective central control for the procurement of laundry equipment.
5. General inadequacies exist in numerous areas of Plant Systems and layouts (e.g., utilities, total laundry capacity, location and configuration of laundry, arrangement of equipment, etc.)
6. There is no effective central control for the design of the total laundry system.
7. Environmental conditions in many laundries drastically reduce efficiency and at times normal work is practically unbearable. Adverse ventilation, lighting, vibration, and esthetics materially contribute to this problem.
8. Lack of attention at all management levels is responsible for the generally unsatisfactory condition with respect to shipboard laundries. This lack of attention manifests itself in the following personnel and command problems:
 - a. Insufficient levels of manning
 - b. Lack of supervision
 - c. Shortage of skilled operators
 - d. Morale problems
 - e. Inadequate formal training
 - f. Lack of implementation of existing directives
 - g. General apathy toward laundry problems

¹A Review of Shipboard Laundry Systems, Ship Arrangements Branch, Naval Ship Engineering Center, Washington, D. C. April 1970, N.S. 0935-041-9010.

The culmination of the foregoing manifestations is that over a period of years an extremely relaxed attitude has developed with respect to the laundry services to shipboard personnel.

9. The solution of the shipboard laundry problem will impinge on nearly every aspect of procurement, operation, maintenance, and logistic support.

10. Consequently, in order to effect a "whole" solution, a vigorous Shipboard Laundry Improvement Program must be established under a centralized control, or the Navy will face the inevitable consequence of a continually deteriorating condition.

The detailed findings which support these conclusions are derived from six general areas:

- A. Criteria
- B. Equipment
- C. Plant Systems and Layouts
- D. Environment
- E. Manning
- F. Management