UNCLASSIFIED

AD NUMBER: AD0477671
LIMITATION CHANGES
TO: Approved for public release; distribution is unlimited.
FROM: Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 1 Jan 1966 Other requests shall be referred to the Office of Naval Personnel Support Activity, Personnel Research Lab, Washington, DC 20390
AUTHORITY
21 Jan 1967 per Naval PPSA ltr (67-18)

THIS PAGE IS UNCLASSIFIED

477671

NAVAL PERSONNEL PROGRAM SUPPORT ACTIVITY

PERSONNEL RESEARCH LABORATORY

WASHINGTON, D.C. 20390

WRM 66-28

JANUARY 1966

NEW APPROACHES TO MESS COOK MANAGEMENT AFLOAT

BY
THOMAS B. TURNER

This document may be further distributed by any holder only with specific prior approval of Personnel Research Laboratory

AN ACTIVITY OF THE BUREAU OF NAVAL PERSONNEL

Information contained in this report represents findings of the Personnel Research Laboratory and does not necessarily reflect Bureau of Naval Personnel policy.

WRM 66-28 JANUARY 1966

NEW APPROACHES TO MESS COOK MANAGEMENT AFLOAT

BY
THOMAS B. TURNER

This document may be further distributed by any holder only with specific prior approval of Personnel Research Laboratory

PERSONNEL SYSTEMS RESEARCH DEPARTMENT
PERSONNEL RESEARCH LABORATORY
NAVAL PERSONNEL PROGRAM SUPPORT ACTIVITY
WASHINGTON, D. C. 20390

FOREWORD

This study was accomplished under Objective No. PF016010801

SUBMITTED BY

C. S. SCHULLER

Director, Personnel Systems Research Department

APPROVED

C. O. WILLIAMSON
Commander, U. S. Navy
Director

G. G. BURGESS
Technical Director

ABSTRACT

This report describes an exploration of new ways of managing mess cooking afloat and, specifically, the management system presently in use aboard the U. S. S. ALBANY (CG-10).

Aboard many ships, Class A, technically trained personnel are diverted to mess cooking duties when non-designated SN or FN are unavailable. The ALBANY plan and plans similar to it permit such personnel to work in their rating or contimue OJT by establishing a messmen division of non-designated strikers. Benefits of such a plan are increased morale of technical personnel, more efficient food service management, and increased apprenticeship opportunity for personnel interested in a Supply career.

The ALBANY and similar systems offer a sound solution and effective remedy to the diversion of technically trained personnel to mess duty. It is recommended for the endorsement of the Bureau of Naval Personnel and the approval of fleet commanders.

PREVIOUS PAGE WAS BLANK, THEREFORE NOT FILMED.

TABLE OF CONTENTS

		Page
Abstract		iii
List of Tables		vii
List of Figures		vii
I.	THE PROBLEM AND ITS BACKGROUND	1
	A. The Problem	1
	B. Background	2
II.	METHODOLOGY	3
III.	DISCUSSION	4
	A. Findings	4
	B. Results	31
IV.	CONCLUSIONS	33
V.	RECOMMENDATIONS	34
Bibliography		35
Appendix A -	COMCRUDESLANT Letter	37
Appendix B -	U.S.S. ALBANY (CG-10) Interim Report	39
Appendix C -	U.S.S. ALBANY (CG-10) Final Report	42
Appendix D -	Interview Form	45
Appendix E -	Normal Duties of Mess Cooks Across a Sample of Eleven Ships	47
Distribution List		48

PREVIOUS PAGE WAS BLANK, THEREFORE NOT FILMED.

TABLES

Page

1. Gross Similarities of Mess Cooking Policies on Eleven Ships 5

2. Responses by Years in Service of 16,348 Enlisted Men on Survey Question Asking Total Time Served as a Mess Cook in the Navy 10

3. Responses by Paygrade of 16,348 Enlisted Men on Survey Question Asking Total Time Served as a Mess Cook in the Navy 11

4. Staffing Criteria for General Mess Auxiliary Support Afloat 22

5. Representative Numbers of Non-Designated Strikers On Board Various Types of Ships 26

FIGURES

1. Comparison of Responses on the Mess Cook Question of 5,334 First Term Enlistees As Against Their Intentions to Reenlist 12

2. Split-Shift Working Hours for Enlisted Messmen . . 18

3. Computer Analogue to Determine Flow Rates of SN/FN Through a Hypothetical Ship System 24

4. Advancement Bottleneck if Commissaryman (CS) is Only Input Rating for Messmen 28

5. Supply Department Afloat 29

I. THE PROBLEM AND ITS BACKGROUND

A. The Problem

The Commander Cruiser-Destroyer Force, U. S. Atlantic Fleet, in a letter to the Chief of Naval Personnel, dated 8 January 1965, recommended that research be conducted into means of exempting highly skilled, technically trained manpower from messman duty aboard ship. COMCRUDESLANT stated that, "We must avoid diversion of technically trained men, who have received one to two years specialized training, at a time when CRUDESLANT is at 55% of ET allowance and 50% ST allowance."[1] The letter, then, indicated a two fold problem:

1. How were high standards of on-the-job training for technical specialists to be guaranteed, and,

2. How were the mess cooking functions aboard ship, considered to be a handicap to OJT, to be manned without the technically trained men when non-rated seaman and fireman allowances could not meet the messman quotas.

COMCRUDESLANT had a number of possible solutions for both of these problems.

One, he suggested that a Food Service Group be formed on a permanent basis, and that it be used as a source of strikers for Commissaryman and possibly other supply ratings.

Secondly, he described an experimental program of permanently assigned messmen which CRUDESLANT had sponsored. The program was in operation aboard the USS ALBANY (CG-10), had been so for the year previous, and certain favorable advantages had already been reported. For example, food service management had improved and Class A graduates were continuously utilized in their field of specialty. "Regardless of what solution is reached," the letter continued, "it is considered essential that some changes be made in our past and present way of running the General Mess."[2]

Later in this report the ALBANY and similar programs will be discussed at length. Here, it should be said that COMCRUDESLANT seemed to have primarily requested BuPers to consider rating structure changes.

---

[1] COMCRUDESLANT ltr FF4-10/dy 1223 SER 00/111 of 8 January 1965, Subj: New Approach on General Mess Food Service.

[2] Op. cit., COMCRUDESLANT ltr.

The initial problem then branched into areas of supply management policies, personnel distribution policies of EPDOPAC, EPDOLANT, and EPDOCONUS, and the latest engineering advances in food service automation.

B. Background

Although this report mainly deals with mess cooks afloat in passing some mention should be made of the work done to replace messmen ashore with contract civilian personnel.

At the 1964 General Aviation Technical Training Conference (GATTC), an extensive mess cooking pilot program with contract civilian personnel was described. Basically, only shore activities with more than 20 military messmen were to use the civilian replacements. By November 1, 1966, 1016 enlisted men at 27 shore activities will have been replaced by contract civilian personnel at a cost of from 3.5 to 4 million dollars a year.

Two recommendations resulted from the GATTC conference:

(1) Reduce the mess cooking tours of duty to 2 months.

(2) Avoid the use of "A" school graduates for mess cooking duty.

This contract messmen system was mentioned at the Department of Defense Appropriations Hearings for 1966 and won the approval of the committee.

This shore program is showing itself both workable and practical. However, the same system is not applicable to messes afloat since civilians cannot be contracted to Naval ship duties.

II. APPROACH

Briefly, the research design was:

1. By personal visit or telephone to discuss traditional management procedures for mess cooking with Navy subsistence and supply personnel.

2. Study Naval regulations and instructions pertinent to messmen policies.

3. Search out peripheral management and engineering improvements which might alleviate many of the onerous duties of messmen.

4. Observe mess cooking on a cross section of Navy ships with emphasis on:

   a. Manpower needed for efficient food service functions.

   b. Conditions which might make mess cooking a morale depressant.

   c. Variations in mess cooking management presently used to avoid use of technically trained personnel.

5. Evaluate the ALBANY program in the light of its application or possible application other ship types.

III. DISCUSSION

A. Findings

In September, 1965, eleven ships were visited in the Norfolk area. Appendix C is the standardized form used by the interviewer to collect management standards of mess cooking afloat, and Table 1 is a summary of the data received.

It was found that each ship had comparable duties for its messmen. These duties involved vegetable preparation, cleaning and maintaining messing areas, serving food, disposing of garbage, breaking out stores, operating scullery and pot washing sinks, maintaining salad bar and beverage dispensers, compartment cleaning (where messmen were housed together) and, in most cases, hand washing dishes and cutlery difficult to clean by automatic dishwashing methods.[3]

The general staffing criteria of 1 messman for every 20 men served was followed by most ships (See Navy Regulation 1818.3.) On those ships without permanent messmen, each department on the ship had a quota of messmen which it provided the S-2 Division. The level of automation on all ships which would ease the conditions of mess cooking did not go beyond the standard BuShip's dishwasher installation, potato peeler and various other electrical cutting, slicing and mashing devices.

Differences among ships primarily exist in the scheduling of the hours spent in mess cooking and in benefits given mess cooks to compensate for excessive working hours. On those ships without a split-shift system, the work day runs from 0500 to 1900 hours. In the split-shift system, alternate teams of mess cooks work from 0500 to 1400 and from 1000 to 1900 (See page 17 for a more detailed explanation.)

---

[3] See Appendix E.

TABLE 1

Showing Gross Similarities of Mess Cooking Policies on Eleven Ships

Ship	No. of Messes		No. of Personl Needed:		Aver. Length of Assign. & Means of Assign.	Aver. No. of Hrs Spent on Mess Duties per (In Hours)		Special Considerations Given Messmen (MS)
	Enl:	CPO:	CS:	MS:		Day:	Week:	
Enterprise CVAN-65	2	1	56	124	3 mos; each dept has a quota	12	84	Berthed together; when in port MS crew is divided into three groups and rotated so that 1/2 have liberty every evening
America CVA-66	2	1	59	105	3 mos; each dept has a quota	8	56	Split shift with 1/2 ashore every evening when in port; berthed together
Randolph CVS-15	1	1	32	66	3 mos; most jr men in dept and mast cases assigned	14	98	21 hrs off once a week, 72 hrs off every other week; berthed together
Long Beach CGN-9	1	1	16	41	3-6 mos (shortage of non-rated pers); must have been on board at least 6 mos	14	75	1/2 mess crew works 5 days, other 1/2 works 7 days - rotate so that 1/2 has week-end liberty every 2 wks (applies only in port)
Newport News CA-148	1	1	35	45	3 mos; must have been on board at least 3 mos	14	70	Split shift (modified); evenings free with open gangway
Tidewater AD-31	1	1	18	22	3 mos; each dept has quota; try to exempt tech ratings	14	70	Half MS crew given liberty on port week-ends; evenings free with open gangway
John King DDG-3	1	1	5	13	1-3 mos (tech ratings serve 1 mth, non-tech ratings 3 mos)	14	70	Half MS crew given liberty on port week-ends

TABLE 1 (continued)

Ship	No. of Messes		No. of Personl Needed CS:	MS:	Aver. Length of Assign. & Means of Assign.	Aver. No. of Hrs Spent on Mess Duties per Day: (In Hours)	Week:	Special Considerations Given Messmen
Steinaker DD-863	1	1	8	11	3 mos; volunteer MS must serve at least 6 mos; quota filled from non-rated personl; some choose assignment	8	55	Split shift program of NEFFST; own berthing compartment; cash award for Food Serviceman of the Month
Sea Leopard SS-483	1	0	3	2	6 wks to 2 mos; SN and/or FN serve; subs get very few non-design. strikers	12	65	2 days off every two weeks when in port
Aucilla AO-56	1	1	9	5	3 mos; quota by depts; try to use non-design. strikers	14	70	Open gangway after work
Denebola AF-56	1	1	8	10	3 mos; deck, op, eng and sup depts have quota which must be filled on 1st of every mth	15	75	Split shift with every other afternoon off and week-end duty roster

Complaints were received from various Supply Department personnel that mess cooking was a catch-all for men who were discipline problems or were readily dispensable and could be spared by their departments. Supply personnel felt that the application of such criteria did not bring the best workers to mess cooking. In relation to this, CONSERVLANT expressed grave concern over the possibility of there being a permanent Food Service Group. It was believed such a group would catch most of the lower mental level men who form the greatest percentage of discipline cases in the Navy. (See page 13 for data which substantiates these observations.)

The working conditions of messmen aboard all ships, including the latest carriers or modernized destroyers are arducus. The length of the working hours, the monotony and menial nature of the work easily lead to fatigue, disillusionment, and low morale. The work soon becomes drudgery. Master-at-Arms must constantly apply pressure to keep up the quality of cleaning, etc., evidencing the lack of motivation which the work itself engenders in messmen. There is evidently nothing in mess cooking to encourage initiative and this factor tends to create resistence on the part of those who have to serve as mess cooks.

In October 1965, a detailed study of the ALBANY system of mess cooking management was made under operational conditions aboard USS ALBANY (CG-10). The ALBANY system is described under a special subsection (see page 15). However, for purposes of comparison, the significant differences between the ALBANY's program and the previous systems of mess cooking management on ships studied at Norfolk are:

1. Direct assignment to the S-6 Division - "Upon reporting aboard, seamen and firemen without Class A school training are assigned on a semi-permanent basis to the S-6 Division. In the case of the ALBANY the length of assignment in the S-6 Division has varied from 3 to 24 months. Personnel remain in the S-6 Division until they are replaced by new untrained seamen and firemen. Then, they are transferred to a division of their choice if it is feasible in view of their qualifications and the needs of the ship."[4]

2. Exemption of technically trained personnel - "The major advantage to this system is that highly trained personnel, e.g. FT's, ET's are not diverted from the work for which they were trained. This innovation has undoubtedly had a positive effect on the morale of these technicians, as well as improving the overall effectiveness of the ship, and increasing savings through more efficient personnel utilization. In view of the shortage of trained "technicians" and the increasing length of training time, the new system appears to be a significant improvement."[4]

---

[4]Trip report, Henry C. Rosicky, PRL, dtd 19 October 1965, Subj: Report on trip to USS ALBANY (CG-10)

3. Split-shift watch schedule - (See page 17 for its developmental history and its plan format) - "In connection with the new approach to manning the general mess a split-shift watch schedule has been installed. The split-shift watch schedule allows messmen greater liberty opportunities than they previously had, and provides rest time from fatiguing and monotonous work. It also affords the individual opportunity to devote time toward training in a career field. This split-shift schedule is a positive means to improve morale and manpower utilization."[5]

The ALBANY system, then, is a distillation of many concomitant factors at work simultaneously - the demands of the Command to free technically trained men for their OJT, the experience of Supply personnel in attempting to successfully manage messmen, and the work done by the Northeast Field Food Service Team to shorten mess cook's work hours.

The organizational structure of the ALBANY plan when compared against nine of the eleven ships visited in Norfolk is decidedly more acceptable from the standpoint of good management. The points in question are whether the present system should be modified, whether it could be modified, and how this modification could be most successfully accomplished.

In answer to the first question - whether the present system should be modified - evidence is presented from a recent Navy survey which gives some substantiation to the hearsay that mess cooking is a morale depressant. To the question of whether the present system could be modified, three different management plans are presented together with the feasibility of transferring these plans to other ships and the subsequent effect such changes would have on staffing and Navy careers.

Finally, recommendations are made, in view of the evidence, of ways and means for the Bureau of Naval Personnel to take some immediate action in endorsing the ALBANY and similar systems and of areas to pursue in exploring the problem further.

---

[5] op. cit., Trip report, Henry C. Rosicky, PRL

1. Mess Cooking - Morale/Punishment

a. Morale

There is evidence from the Navy Personnel Survey 65-1, summarized in the following tables, which indicates that mess cooking does in fact create a morale problem.

Tables 2 and 3 show the answers of 16,348 enlisted men on the following survey question:

"What is the TOTAL time you have served as a Mess Cook in the Navy?

A. None at all
B. 3 months or less
C. 4 - 6 months
D. 7 - 12 months
E. More than 12 months
F. Don't Recall"[6]

Figure 1 shows a graphical breakout of the 5,334 first term enlisted men out of the 16,348 men surveyed and the comparison of their responses on the mess cook question against their intentions to reenlist.

Table 2 shows, that across years in service:

1. The majority of all Navy enlisted men spent three months or less as mess cooks.
2. Navy enlisted men tended, in previous years, to spend slightly more time as mess cooks than they do today.
3. Approximately 30% have spent no time as mess cooks at all from 1960-65.

---

[6]Basic Report: Navy Personnel Survey, 65-1; Personnel Surveys Division, Plans and Programs Support Service, Wash., D.C.

Table 2

Showing Responses by Years in Service of 16,348 Enlisted Men on Survey Question Asking Total Time Served as a Mess Cook in the Navy

Years in Service:	Number Respond-ing:	% Serving No Mess Cooking Duty At All:	% Serving 3 Mos or Less:	% Serving 4-6 Mos:	% Serving 7-12 Mos:	% Serving More Than 12 Mos:	% Don't Recall
A) Less than one year	1704	50	39	7	1	0	3
B) 1 - 4 yrs	7653	34	42	17	4	1	2
C) 5 - 9 yrs	2819	33	37	18	6	2	3
D) 10-14 yrs	1950	28	40	18	6	2	6
E) 15-19 yrs	1556	22	37	21	7	4	8
F) 20 + yrs	666	18	39	22	7	5	9

TABLE 3

Showing Responses by Paygrade of 16,348 Enlisted Men on Survey Question Asking Total Time Served as a Mess Cook in the Navy

Paygrade:	Number Responding:	% Serving No Mess Cooking Duty At All:	% Serving 3 Mos or Less:	% Serving 4-6 Mos:	% Serving 7-12 Mos:	% Serving More Than 12 Mos:	% Don't Recall
E-2	1467	43	37	13	3	1	3
E-3	4538	34	40	17	5	2	3
E-4	3840	36	39	16	4	2	2
E-5	2949	33	38	17	6	3	3
E-6	2188	28	41	18	6	2	5
E-7	1198	21	44	21	7	2	6
E-8	249	20	45	21	3	3	8
E-9	109	17	45	22	6	2	6
Total All Pay grades:	16,538	33	40	17	5	2	3
Total By Critical* Ratings:	5,096	32	44	17	4	1	2
Total By Non-Critical Ratings:	11,445	33	38	17	5	2	4

* i.e. ET, DS, CT, AQ, AT, AX, FT, MT, ST, RM, RD, TM, IC, PT, MM, BR, BT, QM, SM

Figure 1

COMPARISON OF 5,334 1st TERM ENLISTEES' MESS SERVICE AGAINST THEIR INTENTION TO REENLIST

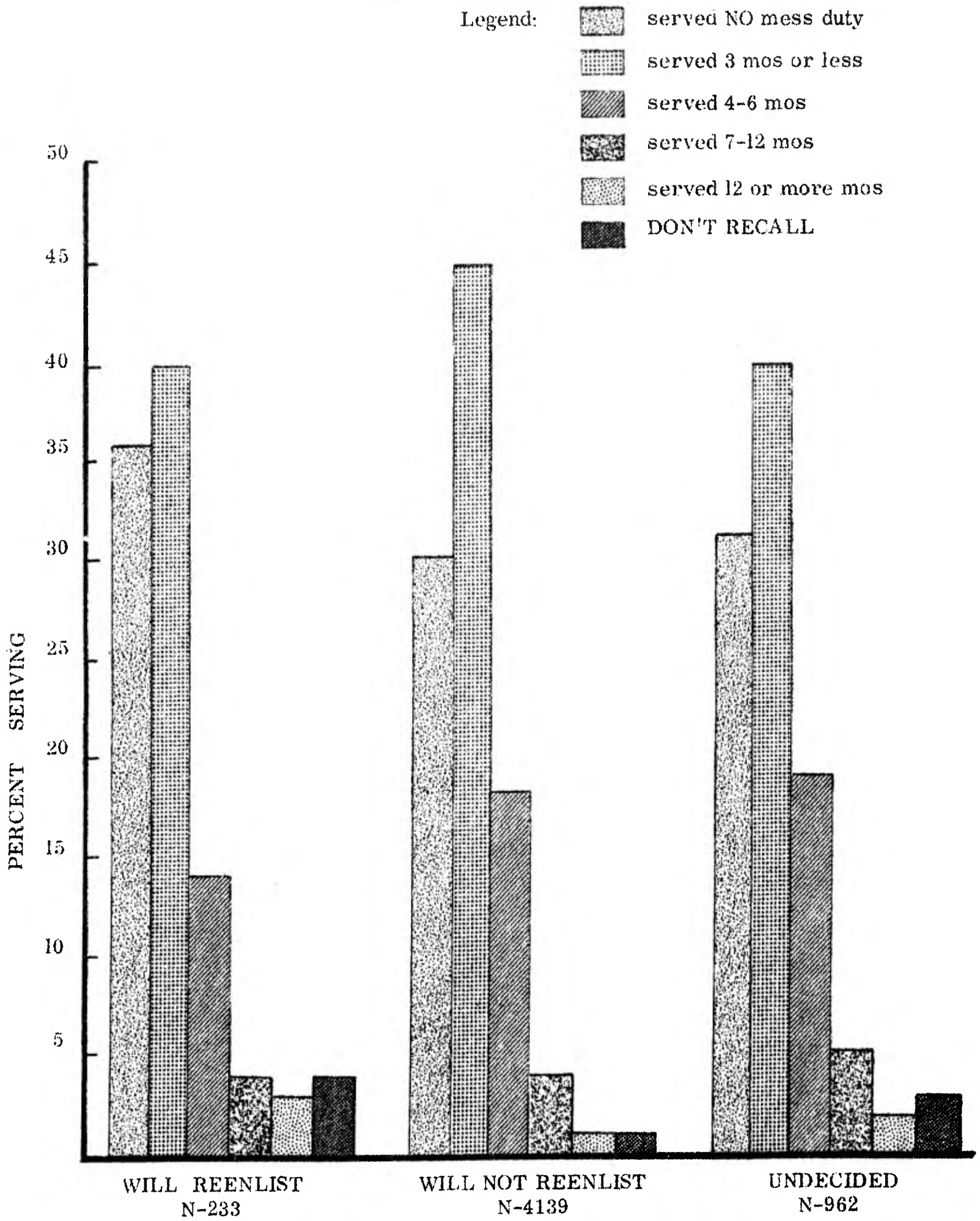


Table 3 confirms the conclusions of Table 2 in that:

1. The trend of less service as mess cooks today and more service in years past is confirmed.

2. E-3 and E-4 personnel (those most immediately affected by mess cooking) show:

a. 35% serving no mess cooking duty at all

b. the majority of those that do serve, serving 3 months or less.

3. And in addition, Critical and Non-critical ratings serve comparably the same amount of time as mess cooks (i.e. the average across pay grades is fairly consistent with the samples of each pay grade) and, therefore, preferential treatment to Critical ratings is not in evidence.

Figure 1 shows that those enlisted men who express an intention to reenlist served slightly less time as mess cooks than those men who state they will not reenlist and that those that are "undecided" served more time in months than either of the other two groups. Such evidence certainly indicates that reenlistment rates could be affected by mess cooking as much as 5%. In other words, reenlistment might be increased by 5% if first term enlistees were not required to perform mess cooking duties.

Other evidence that mess cooking is a morale depressant can be taken from its traditional image as a form of punishment. The evidence that follows corroborates the personal communication of several supply personnel and itself should be considered apart from mess cooking's effect on reenlistment intention.

b. Punishment

There is strong indication gathered from discussions with personnel who are directly concerned with general mess management that mess cooking has frequently been used as punishment for minor delinquency in the Navy. Some ships, such as the LONG BEACH (CGN9) have attempted to change this practice, but for the most part mess cooking is used as punishment for minor offenses. This in itself indicates the low esteem held for it by administrators and enlisted men alike. With such a reputation to overcome, any new system of mess cooking management would have to concentrate on the "reward" factors and minimize the menial and domestic.

An average of about 85% of all confinees in Navy brigs are non-designated strikers - indicating that those men unable to or indifferent to acquire a strikers designator tend also to be somewhat delinquent prone. Research done elsewhere (see Stephenson, 1965, pg 2) found that delinquents tend to be those enlisted men with fewer years of formal education and tend to receive low GCT scores.

On the side of supply management, this would indicate that to populate a mess cook squad with Group IV enlistees would be in the worst interests of the Supply Department. On the side of the command, the normal attempt to dilute the influence of personnel inexperience, lack of education or intelligence on ship efficiency would be crippled by concentrating such men in one section. On the other hand, there is little doubt but that in view of these considerations careful personal attention must be shown any future messmen division if food service is to remain adequate.

There is no justification for giving mess cooking as a cause of delinquency, however, there is sufficient reason for a concerted attempt to make its duties seem less like punishment. The ALBANY system seems to have done just that.

2. New Solutions to Mess Cooking Management

a. Research Performed in the Fleet and by BuSandA

This report has the advantage of following upon an extensive experimental program at the fleet level. Given impetus by COMCRUDESLANT, both the ALBANY and the Northeast Field Food Service Team research in revising the traditional procedures of mess cooking management have been applied under operational conditions.

Two years have passed since the initial research was done - the present program is a distillation of a trial and error application of many alternative solutions.

In this section, the work done by the various groups attacking the problem will be discussed and certain valid objections still remaining will be reported.

1) U.S.S. ALBANY (CG-10)

In February 1964 the U.S.S. ALBANY (CG-10) received permission from CONCRUDESLANT to run a year's experimental program on a proposed new food serviceman system. In an interim status report, (see Appendix B) after the project had been extended six months, to COMCRUDESLANT dated 24 April 1965, the ALBANY listed the basic features of its food servicemen or messmen system:

a) The formation of a separate messmen division (S-6 Division) within the Supply Department.

b) Only non-designated seamen and firemen are assigned to the S-6 Division.

c) This assignment is on a semi-permanent basis - messmen are given a choice at regular intervals of remaining in or leaving the S-6 Division.

The report noted that significant contributions to combat readiness were realized, such as:

a) On-the-job training of designated strikers proceeded uninterrupted by messman duty.

b) The continuity of operations has improved the mess deck service and cleanliness, plus the overall administrative workload.

At the time of the report, the system had been in use for a little over a year and certain disadvantages were already noted.

These were:

a) Movement into and out of the messmen division was slow when non-designated seaman/fireman input is low.
b) Most of the men consider the work menial.
c) Advancement opportunities are few.
d) The working hours were long.[7]

In its final report submitted to COMCRUDESLANT on 15 November 1965, the ALBANY stated that the basic features of the system, as outlined in its interim report, remained in effect and the inherent advantages continued to be realized.

The major disadvantage as noted in the interim report - that of the long working hours - was remedied by adopting the split-shift watch schedule prior to Mediterranean deployment in the summer of 1965.

In addition it was noted that the general ability level of the enlisted men in the S-6 Division tended to be higher than would ordinarily have been assigned to mess cooking by the department quota system.

However, certain "soft spots" were still present in the system. SA,SN/FA,FN input into the system was slow and the split-shift system seemed to require a slight increase in the number of the SA,SN/FA,FN allowance. Both of these system weaknesses have been explored by PRL and are covered later in this report (see pages 21 thru 30).

The report ends with an endorsement of an "official adoption (of the plan) aboard all cruiser type ships . . . Further testing of the system, as related to smaller ships (e.g., destroyer type ships) is recommended, in view of their lower and less flexible manning levels. It is also recommended that the division to which "messmen" (or food servicemen preferably) are assigned be called the "Food Service Division."[8]

The ALBANY system, then, has these basic features:

a) Assignment of non-designated strikers, reporting on board, to the S-6 Division for a six month minimum tour.
b) Two crews of messmen working on a split-shift basis.
c) Increased incentive to perform efficiently, to acquire a rating designator, and to use free time toward self-improvement and advancement, is an "esprit de corps" by-product of the formation of a separate Food Service Division.

[7&8]Final report, USS ALBANY (CG-10), 07 NPF/4400SER 1803 of 15 November 1965, Subj: Messmen Assignment System

The heart of the ALBANY system, then, is the separate status of the S-6 Division and the split-shift system. The separate status of the S-6 Division is reported later.

The development of the split-shift system by the Northeast Field Food Service Team is discussed in the following section.

2) Split Shift Watch Schedule

In 1963 the Northeast Field Food Service Team conducted several work sampling studies of general mess personnel. During these studies it was found that under normal operations the messmen were productively engaged in mess work only 60% of the 12 to 14 hours they were required to be on duty. The messmen workload pattern showed that there were two slack periods, 0900-1030 and 1400-1530, with a peak load between 1030-1400. By adjusting these work hours, a split-shift was developed. Figure 2 illustrates the resulting work schedule.

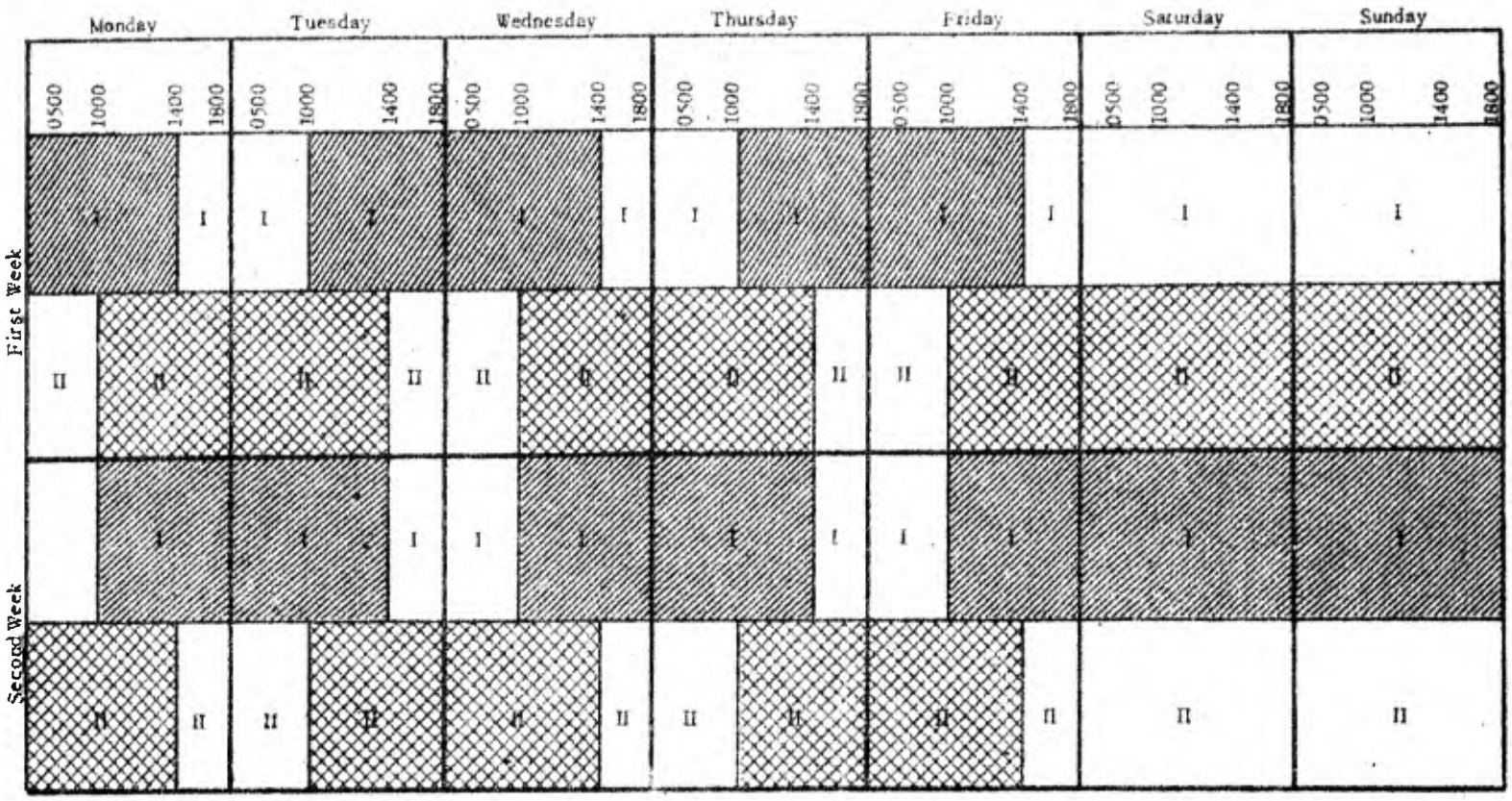
The messmen were divided into two sections, the first section working from 0500-1400, the second section overlapping with the first and working 1000-1800 or until secured.

In this manner all the messmen were on duty during the peak workload period and only half of them on duty during the slack periods. The net result was a cut in the messmen work day from 12 - 14 hours per day to 8 - 9 hours with every other weekend off. According to its developers, in order for the system to work effectively, there must be enough mess gear to feed the entire crew without rewashing during the meal and dishwashing done only after the meal is completed. Secondly, the messmen should not be available for working parties, fire watches, or head and compartment details during their work hours. Reportedly under this system ships have received a 75-100% volunteer assignments to mess duties. Also, men who have been to Class "A" School were exempted from mess cooking duties and not eligible to volunteer. The developers claim that the advantages of this program are: Increased motivation, productivity, efficiency, morale, and shorter work hours, decreased administrative workload, fewer special requests for time off, and fewer disciplinary cases.

The following ships and stations have adopted the split-shift work hours for messmen: ARCADIA (AD23), CASCADE (AD16), YOSEMITE (AD19), ALLAGASH (AO97), GOLDSBOROUGH (DD20), FLETCHER(DD445), JENKINS (DD447), EPPERSON (DD719), VANCE (DER387), FORSTER (DER334), CHARLES A BERRY (DE1035), NAS Lakehurst and NAS Willow Grove - in addition to the other ships covered by this report. Since its October, 1965, publication in the Navy Food Service Bulletin of the Navy Subsistence Office, it is probable that many other ships have since tried the system.

FIGURE 2

SPLIT-SHIFT WORKING HOURS FOR ENLISTED MESSMEN



I — Section I working hours. First week = 43 hours; second week = 68 hours; average work hours per week = 55 hours.

II — Section II working hours. First week = 68 hours; second week = 43 hours; average work hours per week = 55 hours.

I or II — Section I and II off duty hours (Liberty)

3) U.S.S. STEINAKER (DD-863)

A food service improvement program was organized while the ship was in the Boston Naval Shipyard in May 1964, for FRAM I conversion. In April 1965, the plan was fully implemented upon the ships departure from the shipyard.

Briefly, the plan was formed around new ideas about equipment and personnel. A study was made of maximum efficiency in the arrangement of service equipment and messing tables so that presently 74 men can be seated at one time and traffic flow is more orderly. Stainless steel was used throughout the food service spaces to reduce maintenance and the man hour work requirements.

The personnel portion of the program centered around a permenent Food Serviceman division. The stated objective for this permanency was to provide stability of personnel with resulting higher standards of interest in food service and cleanliness. This plan replaced the standard mess cook arrangement whereby the constant personnel turnover and the inherent disruption to divisional as well as food service management was eliminated.

The Food Service Team is composed of eleven Food Servicemen, (fifty percent of whom are permanent) and a primary duty Mess Deck Master at Arms. A man who is interested in striking for any Supply Department rating is allowed to begin training for these ratings as a permanent food serviceman for a period of about six months. During this time, he becomes acquainted with basic supply department operations, starts his basic training courses and generally prepares himself for the field in which he wishes to work. Certain inducements are built into the program to provide additional incentive and compensation. The usual daily liberty granted all Food Servicemen has been improved by a more equitable work schedule. The Food Servicemen were divided into the two section split shift system, where, during in port periods, two sections are on board during the week day noon meals when the work load is the heaviest. Liberty commences for one section at 1400 and expires at 1000 the next morning. Weekend duty alternates and provides each section with one liberty in every two weekends. This is essentially the same split shift watch schedule as that depicted in Figure 2 and developed by the Northeast Field Food Service Team.

Special attention has also been given by the STEINAKER to improving the habitability of the Food Service Team. A new berthing compartment on the main deck forward, above the mess deck, has proved to be ideal in location and size. This compartment has twelve berths to provide for eleven Food Servicemen and a Mess Deck MAA. Modular berths were installed in the shipyard to provide spaciousness and each individual berth with its own air supply vent, bunk light and bunk partition. The STEINAKER has looked into the possibility of air conditioning the Food Service Team compartment and as soon as the proper authority can be obtained, the air conditioning will be installed. As an additional incentive, a fifteen dollar Food Serviceman of the Month Award is made based on the results of votes cast by the Executive Officer, PO1's, CPO's and Mess Deck MAA. Such awards are paid from the ships Welfare and Recreation Funds. In order to insure that only outstanding performance is given this additional reward, it is not mandatory that it be made every month. Finally, white serving uniforms are provided the Food Servicemen, which in turn protects their service uniforms and uniform allowances. To date, one Food Serviceman has been advanced to a cook's job as a striker and additional strikers in other supply ratings are said to be forthcoming.

The STEINAKER command has reported that the results of the program have exceeded expectations and have resulted in the following notable achievements:

a. The food preparation and service section of the Annual Supply Inspection was graded 'outstanding.'

b. The response of the crew and their commentary on the meals have been excellent.

c. Increased efficiency in manpower utilization has been achieved by stability of personnel, generous use of easily cleaned stainless steel, and improved arrangement of service equipment.

4) U. S. S. LONG BEACH (CGN-9)

The unique personnel requirements of the modern nuclear ship and the consequent effect upon mess cooking manning is best illustrated by U. S. S. LONG BEACH (CGN-9). With such a great number of men in technical ratings, LONG BEACH is hard pressed to exempt such ratings from mess cooking. However, it has found a system whereby a quota can be set for each Department's personnel contribution to mess cooking. According to an index of its importance to the military readiness of the ship, each Department is rank ordered and a mess cook quota is determined.

For example, the Nuclear Power Division has no quota at all whereas the other divisions of the Engineering Department have to contribute the major portion of the total quota needed from the Department.

Also, the ship's command has stated that personnel with poor disciplinary records, personnel undergoing punishment for an offense against the Uniform Code of Military Justice, and personnel who have been on board less than three months should not be detailed to duties as messmen. Clean white uniforms are provided the messmen and are scrupulously inspected for cleanliness. This provision of uniforms is a unique feature not followed on most ships visited. The Mess Deck Master-at Arms are transferred to the Supply Department for six months temporary duty, allowing for some continuity in quality of food service functions.

If the efficiency of a division or department is seriously impaired by the transfer of personnel to duty as messmen in accordance with the prescribed quotas, the Department can forward a request for reallocation of its quota, making the quota flexible and commensurate with the influx and outflow of non-rated personnel.

Another feature to be considered is the compartment cleaning duties not always a part of mess cooking. On LONG BEACH the mess cooks are allocated for duty as compartment cleaners in the chief petty officer berthing compartments. Any design to improve the management of mess cooking should also consider these peripheral duties which might affect personnel requirements.

5) Automation

The Naval Supply Research and Development Facility, Bayonne, New Jersey, has suggested several improvements in galley conditions to make mess cooking less onerous. These are:

a) Use of mechanical pot washers where feasible.

b) Insulating heating equipment to reduce enervating heat now being radiated into galleys.

c) Use of automatic controls and mechanical storing tending devices for equipment to reduce manpower requirements.

d) Develop semiautomatic clean-in-place methods for cooking equipment.

e) Develop automated galley and bakery equipment to reduce manpower requirements.

The last suggestion has already reached a technical development planning stage at the Bayonne laboratories. The staff, in association with the FMC Corporation, has designed an automated scullery which reduces manpower requirements for dishwashing to zero. It is a completely self-contained machine in a stainless steel, 7 by 12 by 6 foot high cabinet which takes the complete set of mess gear, discharges garbage, separates, washes and stacks each individual type of mess gear.

The laboratory has also developed an automated serving line which would reduce the manpower needed to presently serve Navy meals. The automated scullery is in a proximate stage of receiving its appropriations and production. However, projected units will only number 100 by 1972. Obviously, no immediate remedy to mess cooking management can be seen in any of these proposed solutions since their payoff is primarily in the future.

b. Effect of Mess Cooking Revision on Staffing and Navy Career Patterns

1) Saffing the S-6 Division

If a separate system of staffing the messmen division, according to the Albany plan, is to be adopted, then some provision must be made for allowing a steady input and predictable output from the Division. The present staffing criteria, as listed in Table 4, are based on the old system of divisional quotas and does not reflect the needs of a split shift and permanent messmen division. New criteria would have to be based on the following requirements of an S-6 division:

TABLE 4

Showing Staffing Criteria for General Mess Auxiliary Support Afloat

Ship Type:	# PO for Master-at-Arms	In Vegetable Preparation	# MESS-MEN In Serving Line & Mess Hall	In Scullery & Misc.	TOTAL STAFFING (Enlisted)	For Ship Population of:
Air Craft Carriers (1 MS for every 25-30 men)	7	12	16	27	62	1351-1650 Men
	8	14	18	33	73	1651-1950 men
	9	16	20	39	84	1951-2250 men
Cruisers (1 MS for every 20-25 men)	5	10	14	20	49	801-1100 men
Destroyers (1 MS for every 20 men)	2	2	4	4	12	161-320 men

a) Permanent assignment upon coming on board ship,

b) Six months turnover in personnel, and

c) Split shift watch schedule.

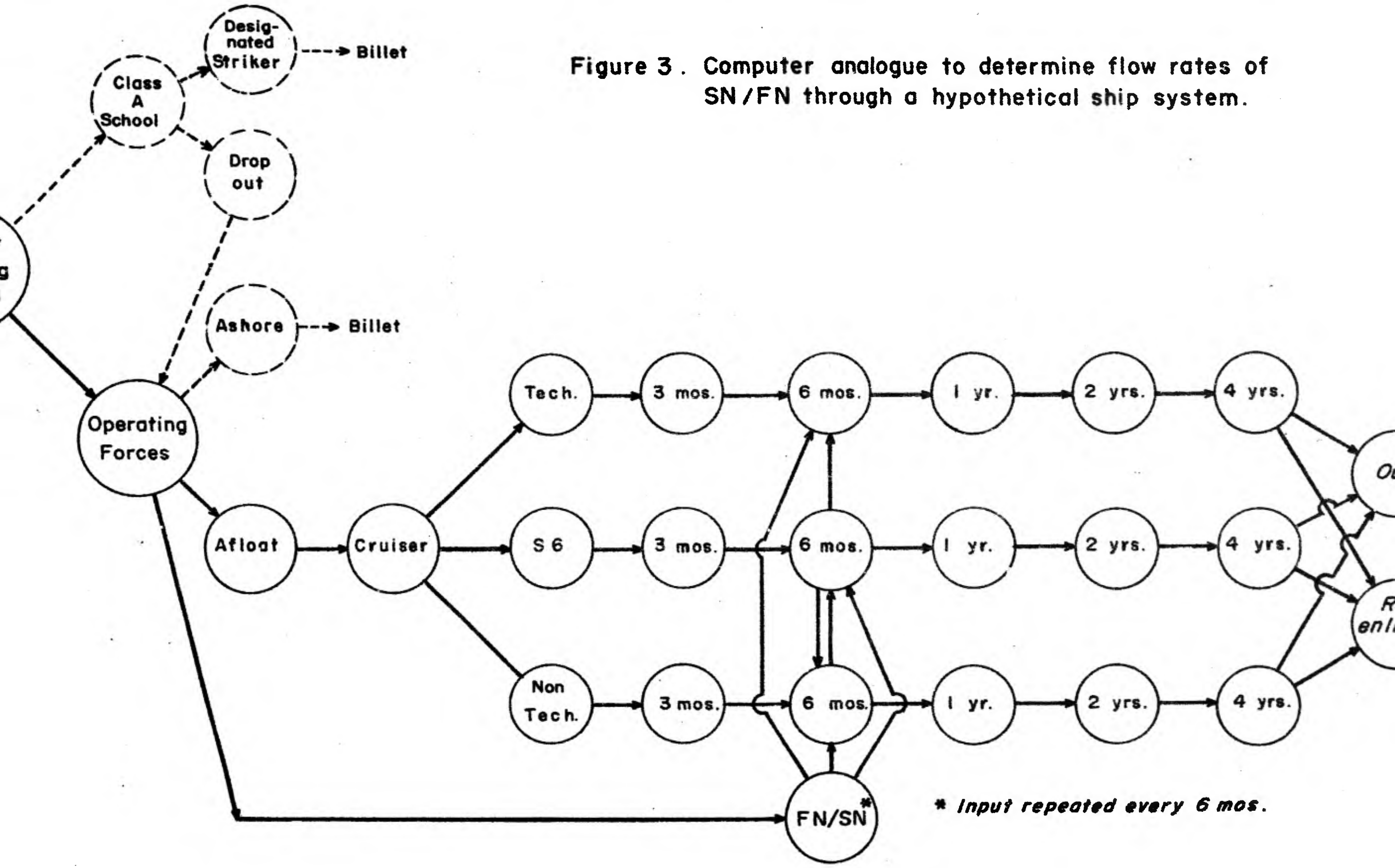
It is at present uncertain whether a split shift watch schedule would require more men since the Pacific group of ships report no such need.

The problem of permanent assignment and the six month turnover of personnel could be studies using a system developed by the Air Force called "Trend Information Projection (TIP.)" Briefly, in TIP a computer is used to predict personnel flow through an organization. As applied to the messmen problem, the personnel flow chart would take on the configuration of Figure3.

The basic requirement for an S-6 division is non-rated seamen and firemen. From recruit training these SA and FA are sent either to Class A school or to the operating forces. Since the S-6 division works on the premise that non-rated personnel should be assigned to the division immediately upon reporting aboard ship, the system is concerned only with those SA and FA who are directly assigned from Recruit Training to the operating forces afloat. In Figure 3 a cruiser is chosen to serve as an example of a single ship type in the TIP system. The group of SA and FA reporting on board from recruit training are immediately given an orientation lecture and then allowed to choose among the S-6 division or the possibility (however remote) of becoming a striker in a technical or non-technical rating. From this selection process the non-designated SA and FA base is divided among the ship's Departments. As Figure 3 shows the personnel are not only assigned to a category in TIP, but also move across time. Thus through a given number of months, additions and subtractions to and from the initial grouping or categorization would occur. Some personnel would drop out of the technical ratings and other might be selected for them, new personnel might report aboard ship, freeing others to strike for a rating of their choice. The crucial period for the S-6 division in TIP would be at the end of every six months when messmen would be given the choice of striking for a rating or continuing in the messmen division. A fresh supply of SA and FA would then be needed to replace this outflow from the messmen division and there must be some organized system of resupply or the system will collapse.

The computer could indicate how the flow of personnel should develop and then EPDOPAC, EPDOLANT, and EPDOCONUS could apply this prediction in the distribution of FA and SA to various ship types. The technical aspects of this system are best left to the experts, this report merely suggests that such a system exists and could be used to solve the messmen staffing problem under the Albany system.

Figure 3. Computer analogue to determine flow rates of SN/FN through a hypothetical ship system.



2) Cross-application of the ALBANY System to Other Ship Types

Because the ALBANY system is applicable to a CG type cruiser does not in itself imply that the same system could be adopted by every other ship type. The one primary requisite for application of the ALBANY system is that the ship considering the plan have a sufficient number of non-designated Seaman and Firemen to staff the S-6 Division.

In order to test out this prerequisite of the ALBANY management plan, a sample was taken of various ship types to show the allowance and actual on board figures of non-designated strikers. Table 5 contains this data.

At first glance it is obvious that submarines will have a difficult time accommodating the ALBANY plan to their needs. With such a small percentage of on board SN/SA and FN/FA, an S-6 Division would lack a stability of structure. All other ship types have the necessary allowances of SN/SA and FN/FA to make the system workable. However, some revision of the present policies of assigning and using SN/SA and FN/FA would have to be made in the light of what was said under "Staffing the S-6 Division" (see page 21.)

3) Paths of Advancement for Messmen in an S-6 Division

An S-6 Division presents an opportunity for personnel to familiarize themselves with Supply Department functions and use this experience in striking for Supply ratings. In mess cooking more men are exposed to a rating or ratings for which they can strike than they would have had if they had remained a member of the deck force. The S-6 Division apprenticeship would become an asset to OJT, especially for those personnel in the past unable to receive direction and guidance in choosing a rating. From this standpoint alone, the S-6 Division would offer a great service to personnel officers and to the Command who jointly have the responsibility for directing careers.

However, there is a significant problem in designing a career pattern for messmen if allowances or billets in Supply ratings prevent their becoming strikers. With approximately 18,800 mess cooks afloat and a combined third class petty officer entrance allowance for all Supply ratings of only 13,613, a bottleneck would soon occur and advancement opportunities become meager. It has been suggested that mess cooks be incorporated into the commissaryman rating for purposes of freeing other Navy men to pursue their career specialties. In answer, Pers-A showed that with a base of 18,800 mess cooks afloat, the Commissaryman rating would be overloaded with strikers of whom only 10% could be advanced to petty

TABLE 5

Showing Representative Numbers of Non-Designated Strikers On Board Various Types of Ships*

Ship Type:	#SN/SA		#FN/FA		#TN/TA		#AN/AA		Total Enlisted	
	ALL:	OB:	ALL:	OB:	ALL:	OB:	ALL:	OB:	ALL:	OB:
Destroyer Tender (AD)	95	96	85	95	5	5			623	609
Ammunition Ship (AE)	93	76	38	33	4	5			260	238
Store Ship (AF)	61	63	21	18	4	6			203	205
Amphibious Force Flgshp (AGC)	140	121	33	28	13	8			451	406
Attack Transport (APA)	95	99	24	21	10	9			313	291
Guided Missile Hvy Cruiser (CAG)	433	349	100	87	30	24			1076	987
Command Cruiser (CC)	368	254	100	72	36	18			1138	921
Guided Missile Cruiser (CG)	241	210	100	72	18	14			999	852
Guided Missile Lgt Cruiser (CLG)	307	273	100	92	20	18			917	884
Attack Aircraft Carrier (CVA)	642	510	335	242	54	38	579	362	3140	2551
ASW Support Aircraft Carrier (CVS)	351	312	228	170	23	26	296	212	1875	1555
Destroyer (DD)	73	63	26	18	4	5			279	258

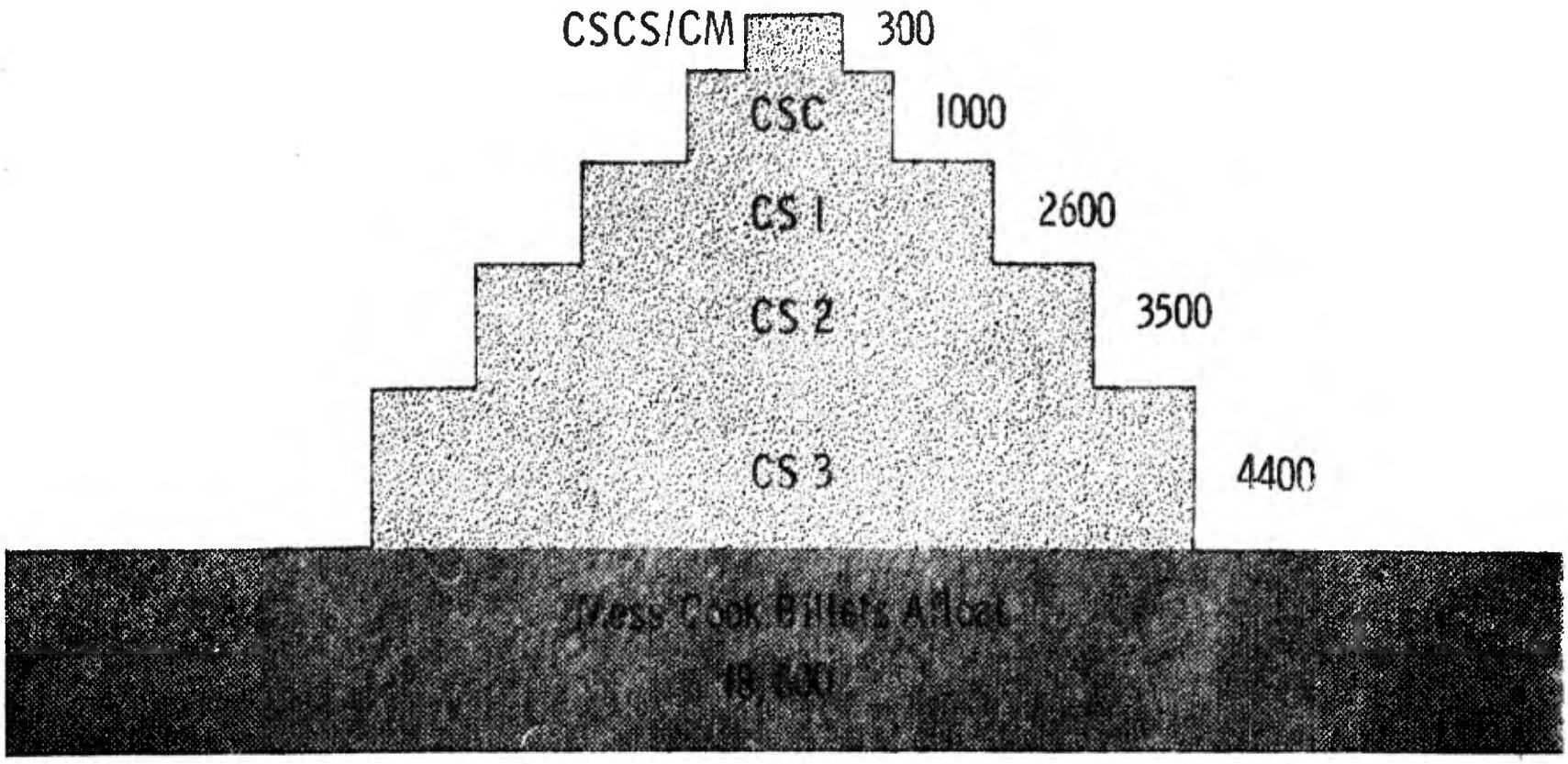
*Including Stewardsman (TN) and Airman (AN) for purposes of comparison with total on board population.

TABLE 5 (continued)

Ship Type:	#SN/SA		#FN/FA		#TN/TA		#AN/AA		Total Enlisted	
	ALL:	OB:	ALL:	OB:	ALL:	OB:	ALL:	OB:	ALL:	OB:
Escort Ship (DE)	26	26	15	17	31	1			183	181
Radar Picket Escort Ship (DER)	23	23	15	14	3	3			160	153
Guided Missile Destroyer (DDG)	72	52	27	24	5	5			335	308
Guided Missile Frigate (DLG)	63	72	29	28	5	5			335	328
Amphibious Transport Dock (LPD)	78	75	58	47	6	9			390	384
Dock Landing Ship (LSD)	75	73	41	37	6	5			282	286
Tank Landing Ship (LST)	51	48	16	13	2	2			141	146
Submarine (SS)	5	3	6	0	2	3			71	76
Nuclear Submarine (SSN)	7	4	5	1	1	1			87	91

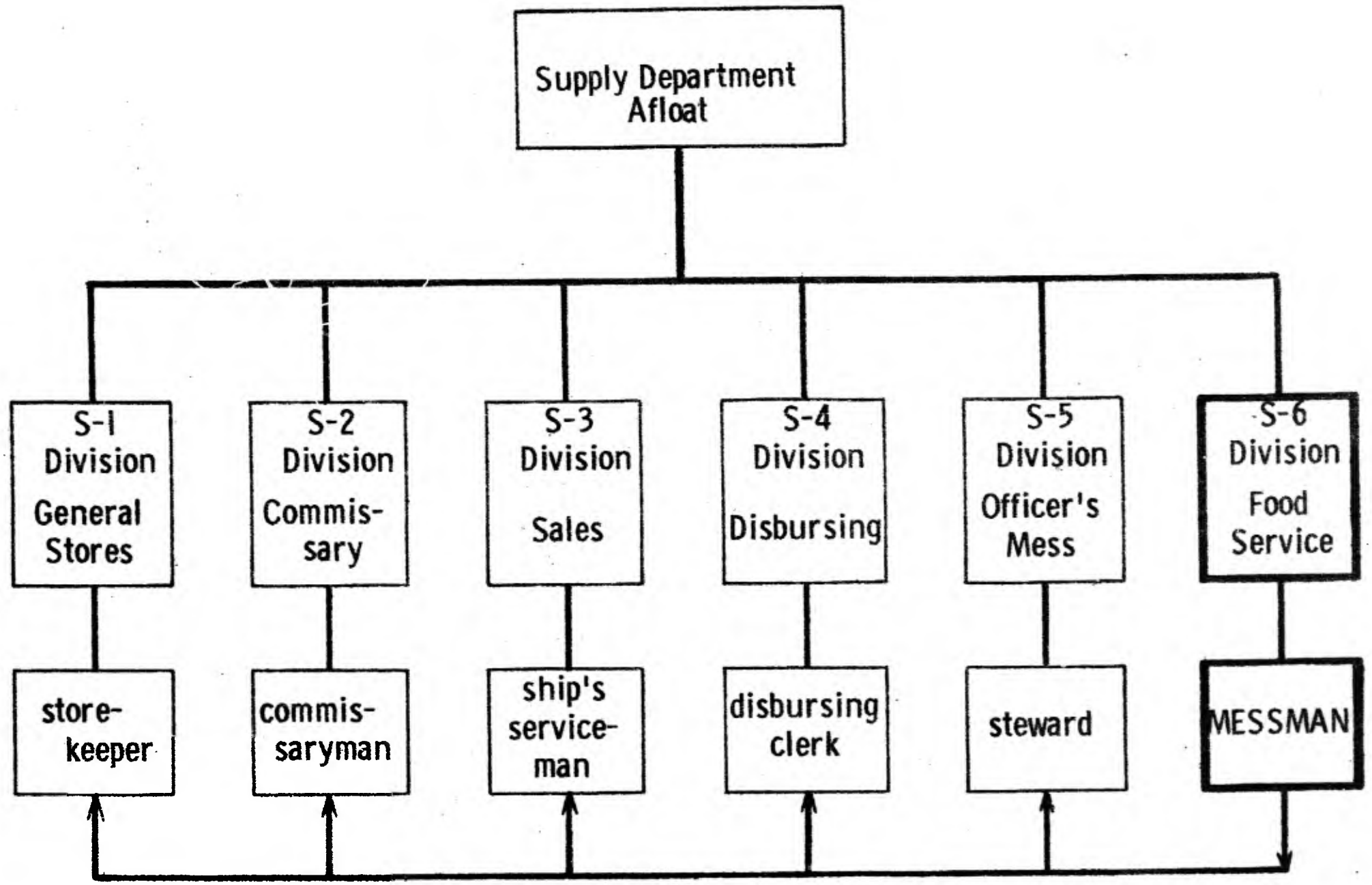
FIGURE 4

BILLETS



Showing Advancement Bottleneck If Commissaryman (CS)
Is Only Input Rating For Messmen

FIGURE 5


Supply Department Afloat
S-1 Division General Stores
S-2 Division Commis-sary
S-3 Division Sales
S-4 Division Disbursing
S-5 Division Officer's Mess
S-6 Division Food Service
store-keeper
commis-saryman
ship's service-man
disbursing clerk
steward
MESSMAN

each year. Figure 4 gives a graphic representation of the advancement bottleneck that would result.

If the messmen were diffused through four more ratings - Storekeeper, Ships Serviceman, Disbursing Clerk and Steward - the narrowness of the entry is somewhat decreased (13,613/18,800). However, under such conditions the messmen division would have to be made the only source of strikers for these ratings. Since all of these ratings are at 85% strength, and are not critical from the standpoint of personnel shortage, the only solution seems that all strikers for these ratings serve an apprenticeship in the Supply Department as messcooks. Under this system, with normal loss of some messmen to other ratings, the bottleneck would be broadened and advancement opportunities noticeably increased.

The configuration the Supply Department Afloat would take on in this plan is depicted in Figure 5 with appopriate input ratings.

4) Outlook for After Service Employment in Food Service

An important incentive for Navy enlisted men to serve in the Supply Department on a continuing basis is the excellent opportunities for employment in the civilian economy for food service personnel. According to the 1967-68 Occupational Outlook Handbook more than 150,000 openings are expected annually in the restaurant industry through the mid-1970's. "A growing population, increasing leisure time, and higher income levels, will raise the demand for restaurant services. More people will "eat out" as large numbers of housewives take outside employment and more people travel. Restaurants, hotel and motel dining rooms, school and factory lunchrooms, drugstores fountains, and even vending machines which dispense prepared foods will share in the increased business."[9]

Increasing automation will tend to reduce the number of employees needed to prepare and serve food so that those men who leave the Navy early in this career will find their experience too limited to advance in the industry. Should they remain through the later years of supervision and management as Chief Petty Officers, their civilian advancement opportunities will be noticeably increased. This incentive, plus other benefits, should make mess cooking and food service appealing as a job with a future and such information as that contained in the Occupational Outlook Handbook and other publications should be passed on to men willing to volunteer for the messmen program.

---

[9] Labor Statistics, Bureau of. "Occupational Outlook Handbook" 1967-68 Edition, (galley proof), page 778.

B. Results

Implementation of the ALBANY Plan - In view of the evidence presented in this report it can be said that the new approaches to mess cooking management are a decided improvement to previous systems. This speaks positively and highly for the changes the ALBANY and other experiments have recommended.

However, there are certain points to be considered before any action should be taken. One of these is that at least for the present, the S-6 Division requires no rating structure revisions by BuPers. It is essentially a management plan for a more effective ship's Supply Department. Secondly, the recommendations made by COMCRUDESLANT to "explore new ways of manning the General Mess and Food Service" does not imply that the "Food Service Group" be formed into a separate service rating for Supply ratings. Thirdly, experience on various ship types has shown that the formation of an S-6 Division is a command prerogative and for its own best interest should be left to the discretion of each individual ship commander. Its success totally depends upon the motivation given its workers by the command since no incentive above the command level is given for successful performance of duty in its system.

A practical course of action for BuPers would be to encourage the implementation of the ALBANY Plan by publishing the system in detail for the information of the fleet.

As a result of such endorsement, BuPers in turn would:

1. Avoid conflict between mess cooking and OJT training for its technically trained personnel.

2. Give non-designated strikers an increased opportunity to acquire the training and experience necessary to strike for a rating.

3. Form the nucleus of a group which at some future time might become a service rating for the Supply ratings.

The endorsement of BuPers, then, could come in either an official or an advisory capacity. Under an official endorsement should be included some article in the BuPers Manual which as of today contains no reference to messman duty afloat. Navy Regulation 1357.1 does, however, state that:

> "Petty officers and noncommissioned officers shall not be detailed as messmen, except when nonrated men are not available."

There is some ambiguity in this article since it does not differentiate between those men who are near petty officer grade

(designated strikers, most of whom are Class "A" school graduates) and nonrated SN, FN, etc., who either are undesignated strikers or who have little chance of achieving petty officer status during their first year and a half on duty. Revision of this article would tend to minimize the use of designated strikers - particularly those in critical ratings - for mess cooking duties.

IV. CONCLUSIONS

At the request of the Bureau of Naval Personnel, PRL has explored new ways of managing mess cooking afloat and, specifically, the management system presently in use on the ALBANY (CG-10).

While the ALBANY Plan was initiated by the ALBANY herself, its final form is a condensation of research performed by the ALBANY, the other ships mentioned in this report and the Northeast and Hawaiian Field Food Service Teams.

In view of the evidence collected for this report, the following conclusions are drawn:

1. Critical and non-critical ratings serve comparably the same amount of time as mess cooks. (See Table 3)

2. OJT for technically trained personnel is interrupted and probably harmed by diverting these personnel to mess cooking.

3. The ALBANY and similar systems apply an effective and tested remedy to this diversion of technically trained personnel to mess duty.

4. The ALBANY and similar systems offer a sound solution - both from the standpoint of good management policy and Navy training requirements - to the past structure of mess cooking management. (See Table 1)

V. RECOMMENDATIONS

In order that the above conclusions be carried into operational terms at the fleet level, it is recommended that:

1. Technically trained personnel be exempted from mess cooking duty.

2. the ALBANY system be adopted as the best of alternatives.

3. The Bureau of Naval Personnel publish and endorse the ALBANY system to all ships in the fleet and encourage commanders to seriously consider adopting the plan.

BIBLIOGRAPHY

1. Chapanis, Alphonse. The Design and Conduct of Human Engineering Studies. San Diego: O.N.R. and San Diego State College Foundation, July 1956.

2. FMC Corporation. Phase I: Component Availability Study Automated Scullery. Santa Clara: FMC Corporation, June 1963.

3. Glaser, Robert (Ed.) Training Research and Education. Pittsburgh: University of Pittsburgh Press, 1962.

4. Herzberg, Frederick, Mausner, Bernard and Synderman, Barabara. The Motivation to Work. New York: John Wiley, 1965.

5. Holdrege, Fred E. Col. USAF. OSCAR: Optimum Selection Classification, and Assignment of Recruits. Lackland AFB: PRL, July 1962.

6. Labor Statistics, Bureau of. Occupational Outlook Handbook. 1967-68 Edition (in press), Washington: Labor Department, July 1966.

7. Mayo, Elton. The Human Problems of an Industrial Civilization. 2nd Ed. Cambridge: Harvard University, 1946.

8. Merck, John W. A Markovian Model for Projecting Movements of Personnel Through a System. Lackland AFB: PRL, March 1965.

9. Naval Supply Research and Development Facility. Proposed Technical Development Plan on Automated Scullery. Bayonne: NSRDF, July 1964.

10. Naval Training Support Service. Guide for Line Officers Performing Supply Duties. NavPers 10779-A. Washington: NTSS, 1963.

11. Navy Food Service Bulletin. Washington: Navy Subsistence Office, October, 1965.

12. Navy Personnel Survey 65-1, Basic Report. Washington: Personnel Surveys Division, Plans and Program Support Service of the Bureau of Naval Personnel, 1965.

13. Roethlisberger, F. J. Management and Morale. Cambridge: Harvard University, 1941.

14. Roethlisberger, F. J., and Dickson, W. J. Management and the Worker. Cambridge: Harvard University, 1939.

15. Rubin, B. A., and Parker, J. W. The Self-Reported Motivational Questionnaire (SMQ): A Preliminary Validation Study with a Population of Enlisted Submariner Volunteers. New London: BuMed Research Lab., February, 1961.

16. Stephenson, Richard, R. Naval Adjustment and Delinquency: A Review of the Literature with Recommendations for Future Research. San Diego: NPRA, May 1965.

17. Stokes, J. W. Food Service in Industry and Institutions. Dubuque: W. C. Brown.

18. Supply and Accounts, Naval Bureau of. BuSandA Manual, Volume III, "Supply Afloat." Washington: BuSandA.

19. Symons, Arthur. Food Service in the Army and Air Force. Harrisburgh: Stackpole, 1953.

20. West, B. B., and Ward, L. Food Service in Institutions. New York: John Wiley, 1955.

21. Whitlock, Gerald H. The Status of Morale Measurement, 1959. Lackland AFB: PRL, May 1960.

APPENDIX A

CRUISER-DESTROYER FORCE
UNITED STATES ATLANTIC FLEET

FF4-10/dy
1223
Ser 00/111
8 JAN 1965

From: Commander Cruiser-Destroyer Force, U. S. Atlantic Fleet
To: Chief of Naval Personnel
Via: Commander in Chief, U. S. Atlantic Fleet

Subj: New approach on General Mess Food Service

1. Commander Cruiser-Destroyer Force, U. S. Atlantic Fleet, has been seriously concerned over the diversion of highly skilled, technically trained manpower to messman duty aboard ship. Instances have occurred of ETSN's and EMSN's spending six months out of the first year aboard ship in the scullery, as messmen and compartment cleaning. This comes about because of a traditional way of doing things which is not applicable today, and secondarily, because of the lower number of seamen and firemen in the allowances of our latest ships.

2. It is recommended that the Bureau of Naval Personnel explore new ways of manning the General Mess and Food Service. One solution which appears to have much merit would be to make the Food Service Group a permanent group, just as the engineers, stewards and the signalmen. The Food Service Group could have one or two supervisory management rated men according to size of ship. This would probably require some additional petty officer ratings under current rather limited petty officer ceilings. The Food Service Group could be used as a source of strikers for commissarymen and possibly other supply ratings.

The first move should be to stop treating messman duty as unpleasant duty for "impressed" sailors, and to dignify it as a skilled Food Service Group with career progression for those who choose the Navy as a career. Working conditions should be comparable with those of the rest of the crew. Food preparation and service is just as important as any function on the ship; it requires its own trained men and its own skills, not the use of men trained for other work.

There are thousands of people in the United States who work their entire lives in the food service capacity at all levels and there is no reason a permanent group cannot be established in ships.

3. ALBANY is currently conducting an experimental program of permanently assigned messmen. When received, the results will be made available to the Commander in Chief, U. S. Atlantic Fleet and to the Chief of Naval Personnel. To date, ALBANY reports several advantages and that indications are highly favorable:

a. Food handling training program increased in depth and comprehensiveness.

b. Administrative workload decreased.

c. Food service improved.

d. Specialized training of school graduates continuously utilized in field of specialty.

e. Training of men after assignment to departments not interrupted by messman duty.

f. Continuity of mess deck operations significantly increased.

4. It is recognized that the proposal may not be the best one for all types of ships. But it appears most needed in CRUDESLANT where the ratio of complex equipment is high and the shortages of technically skilled men are so acute. Regardless of what solution is reached, it is considered essential that some changes be made in our past and present way of running the General Mess. We must avoid diversion of technically trained men who have received one to two years specialized training, at a time when CRUDESLANT is at 55% of ET allowance and 50% ST allowance.

C. K. DUNCAN

Copy to:
COMCRUDESPAC

APPENDIX B

U. S. S. ALBANY (CG-10)
CARE OF FLEET POST OFFICE
NEW YORK, N. Y. 09501

07:RLR:pmg
4400
Ser: 632
24 Apr 1965

From: Commanding Officer, USS ALBANY (CG-10)
To: Commander, Cruiser-Destroyer Force, U. S. Atlantic Fleet
Via: Commander, Cruiser-Destroyer Flotilla Eight

Subj: Messmen Assignment System; interim report concerning

Ref: (a) ADMINO COMCRUDESLANT msg 282122Z Dec 1964
(b) USS ALBANY (CG-10) msg 310030Z Dec 1964
(c) CO, USS ALBANY (CG-10) ltr 1626 ser 346 of 22 Feb 1964

1. As requested by reference (a), a summary report of the messmen system was forwarded by reference (b). This letter report is a detailed evaluation of the messmen system proposed by reference (c).

2. The following basic features of the system have been incorporated:

a. A separate Messmen Division, designated as S-6 Division, has been established within the Supply Department. The Commissary Officer is the division officer for both the Commissary and Messmen Divisions. The additional administrative workload for the CommissaryOfficer is not significant.

b. Designated strikers reporting for duty have not been assigned duties as messmen.

c. Non-designated seaman and firemen are being assigned to the Messmen Division upon reporting to the ship for duty. However, when the immediate needs of the ship require any special skills or talents possessed by men reporting for duty, these men are assigned direct to a division.

d. Personnel desiring to remain on duty as messmen are permitted to do so. Thus far, four individuals have requested to remain on messmen duty. Two of them have been discharged and the other two will be discharged in the near future. Three messmen have been rated as third class Commissarymen. One messman was advanced to third class Torpedoman. This man completed his practical factors on shore duty prior to reporting and studied seriously for weeks before the examination.

e. Job preference of messmen are being honored unless the man is manifestly unqualified for the rate he desires as his Navy career.

3. The following contributions toward combat readiness have been realized:

a. Individuals trained by their department for a specific job incur no interruption in their training or deterioration of their skills due to repeated duty as messmen. This was often the case under the old messmen assignment system. Refresher training to re-acclimate an individual to the job he held before serving as a messman has been eliminated.

b. Specialized training skills of designated strikers are being used continuously, thus enhancing job performance, career motivation and morale.

c. Continuity of mess deck operations has generated significant benefits in a higher level of service and cleanliness on a day to day basis. Previously, service improved to a peak just prior to the massive transfer of messmen and the receipt of new messmen.

d. An increase in the depth and comprehensiveness of training in food handling has been facilitated by the greater continuity.

e. Overall administrative workload has decreased since inter-division transfer occur only when a man is assigned permanently to the division of his choice.

f. The overall improvement in food service has promoted an increase in morale of the crew.

4. The basic problems encountered are:

a. Movement into and out of the messmen division has been slow when non-designated seaman/firemen input is low. The forthcoming Mediterranean deployment will provide a severe test when seaman/fireman input will be almost non-existent.

b. The majority of sailors do not like work on the mess decks. There are several reasons - none new - for this attitude. The primary ones are:

(1). Most consider the work menial. This attitude is fostered rather than ameliorated in the Navy, and it commences with Recruit Training. Emphasis on the vital and direct effect of the quality of messmen service on morale is necessary on a continuing basis throughout the Navy.

(2). Advancement opportunities are few. Completion of practical factors and on-the-job training is limited, with few exceptions, to those striking for Commissaryman. Thus, most men feel they are in "limbo" until assigned to a career opportunity division. Transfer on basis of performance as messmen does not completely offset this aspect.

(3). Working hours are long (0430 reveille until completion of cleaning, which is normally between 1900 and 2000) and continue unabated seven days a week, each week of the year. This is true even during holiday periods in port since the controlling messmen task is cleaning. This task does not decline significantly even when the number of men fed drops from 900 to 500. Leave for messmen is rare. ALBANY was able to grant three messmen leave during 1964 - 1965 Christmas/New Year holiday period. Liberty during daylight hours is just as rare. A "pool" of messmen is desirable to promote their morale. This would permit liberty, regular reveille, course book study and work on practical factors in their desired career field. However, the total number of rated and non-rated men assigned to ALBANY for duty has been insufficient to permit the establishment of such a motivational pool of messmen.

5. The advantages and benefits of the system as a realized in ALBANY indicate that the test system is desirable and feasible. A final written report will be submitted upon the return of the ALBANY from its Mediterranean deployment.

E. F. SCHREITER

APPENDIX C

07:NPF:tjr
4400
Ser

From: Commanding Officer, USS ALBANY (CG-10)
To: Commander, Cruiser-Destroyer Force, U. S. Atlantic Fleet
Via: Commander, Cruiser-Destroyer Flotilla Eight

Subj: Messman Assignment System; final report concerning

Ref: (a) CO, USS ALBANY (CG-10) ltr 1626 Ser: 346 of 22 Feb 1964
(b) COMCRUDESLANT ltr FF4-10 gbl 5400 Ser: 424/2801 of 12 May 1964
(c) CO, USS ALBANY (CG-10) ltr 07:RLR:prng 4400 Ser: 632 of 24 Apr 1965

1. ALBANY has tested the messman assignment system proposed by reference (c) and as authorized by reference (b). Reference (c) forwarded an interim report concerning the system. This letter is the final written evaluation.

2. The basic features of the system, as outlined in reference (c), have remained in effect. ALBANY has continued to realize the inherent advantages of the system which were listed in the interim report.

3. In addition to the features cited in paragraph 3 of reference (c), a "Blue and Gold" system of watches was initiated within the Messman Division. The two watch periods of 0500 to 1400 and 1000 to 1900 (in port and at sea) were designed to overlap during the noon meal when the workload is normally the heaviest.

4. The additional noted benefits derived from the proposed subject system are as follows:

a. There was evidence that the apparent incentive inherent in rotating personnel out of the division on the basis of over-all performance, as well as time spent therein, was real and a practical approach. Between the time of submission of ALBANY's interim report and the date of her deployment to the Mediterranean, twenty-one additional messmen were relieved and transferred to the Division of their choice. Nine of ALBANY's forty-seven currently assigned Messmen have requested to remain in the Messman Division.

b. A definitely improved self-image of individual messmen has resulted. This can be attributed to several factors. First, the individuals do not tend to consider themselves as "cast-offs" which is often the case (and often justifiable) under the standard system

whereby departments fill prescribed quotas on a phased, rotational basis, often giving up the less productive individuals, to protect their own departmental capacities. Rather, nondesignated seamen and firemen under the proposed system are inducted upon arrival aboard ship. Second, the proposed system provides messmen with divisional entity which contributes to an "esprit de corps" attitude and an increased feeling of "belonging" (heavy participation of messmen in underway "smokers" was particularly noteworthy; also, they have participated as a group in athletic events.)

c. The over-all level of capable individuals tends to be higher under the proposed system due to the less discriminate method of assignment versus the usual low-level derivative from "cast-off" assignments under the standard system.

d. Messmen assigned to food preparation areas acquired definite skills in food preparation; ALBANY's interim report cited that three messmen became rated as Third Class Commissaryman; one additional messman was rated as a Commissaryman since the interim report. Further, messmen in other food service areas acquired routines and working habits contributing to over-all improved effectiveness. (This is partially attributed to the long period that individuals were assigned as messmen during the Mediterranean deployment when rotational input of SA/FA was nonexistent.)

e. The "Blue and Gold" system of watches provides a means for overcoming the objectionable long working hours cited in the interim report. In addition to increased leisure time, it also allows some additional training time (e.g., lectures, on the job training, etc.) on a limited scale, for general military training and operational duties. In this regard, an increased use of correspondence courses was noted. This can also be attributed to the fact that a Division Officer is assigned who concerns himself with divisional training, maintaining personnel history cards, etc. The little time remaining to messmen prior to the two-watch system discouraged the use of courses and other related efforts toward self-improvement and advancement.

5. The following "soft-spots" in the system are worthy of note:

a. ALBANY's interim report anticipated a severe test of the system due to a low input of SA/FA during the SIXTH FLEET deployment. While deployed, the input of new nondesignated personnel was, in fact, nonexistent. This condition has continued in CONUS since ALBANY's return from deployment (due to unusual circumstances,) thereby lengthening the average period of assignment of individuals to the Messman Division to approximately six months. This has caused some dissatisfaction on the part of those messmen who desire to move out of the Messman Division. Moreover, during such one-input periods there is a demand for those personnel from the Messman Division who

appear as likely qualified candidates for other ratings. In some instances this has been detrimental, both to the ship and to the individuals concerned.

b. A critical point in measuring the effectiveness of the "Blue and Gold" watch system is the extent of reduced service provided during the morning and evening meals. Its success may depend on an increase to the normally prescribed manning levels and will require individual ship analysts. Such factors as physical layout of messing areas and extent of reduced services acceptable to each ship must be examined. ALBANY did not evaluate the minimum acceptable manning level. The manning level was increased in preparation for the Mediterranean deployment and remained at this higher level throughout the deployment.

6. ALBANY's experience with the evaluated system has, in summary, been highly satisfactory. Its official adoption aboard all cruiser type ships is recommended. Further testing of the system, as related to smaller ships (e.g., destroyer type ships) is recommended, in view of their lower and less flexible manning levels. It is also recommended that the division to which "messmen" (or food servicemen preferrably) are assigned be called the "Food Service Division".

7. Other alternatives and modifications to current official messman assignment policies exist which require separate study and analysis. The following are examples:

a. The establishment of a permanent messman rating. On the surface, this appears to be a less desirable solution to the evaluated system. Although it might provide for some efficiency resulting from specialization, the level/quality of person attracted to such a rating might offset the foregoing advantage.

b. Restricting assignment to the Messman Division to personnel desiring a Commissaryman rating. Although some premanency is obtained and other certain advantages are apparent, such a system would be dependent of the limiting factor of persons interested.

c. Use of those physically disqualified for military service but qualified for handling (upon change of current legislation/ regulations.) This is not recommended for shipboard use since psychological and social disadvantages of such a "group" are obvious.

JACK L. WOHLER

APPENDIX D

FOOD SERVICE INTERVIEW FORM

SHIP: _____ HULL NO: _____

Officers consulted:

1. CO _____

2. XO _____

3. Sup Div Officer _____

General evaluation of quality of cooking, serving and facilities for preparation of food on board ship:

1. Number of galleys on ship _____

2. Number of messes on ship: Enlisted _____ Chief _____

3. Number of personnel assigned to each galley:

Galley #1 CS _____ Galley #2 CS _____
MS _____ MS _____

4. Average length of assignment to mess cooking _____

5. Reason for assignment or reassignment (e.g. disciplinary) to mess duty:

6. Number of hours spent on mess cooking:

a. Day _____

b. Week _____

7. Normal duties of messmen:

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

8. Benefits or special considerations given messmen:

9. Level of automation in galley and scullery (list equipment):

a. _____ d. _____

b. _____ e. _____

c. _____ f. _____

10. Recommended solutions:

a. Split Shift:

b. Food Service General Rate:

c. Automated Scullary:

d. Permanent Assignment by Choice:

e. Exemption of Technical Ratings:

f. Six Months Enlisted Duty:

g. Other

ADDITIONAL COMMENTS:

APPENDIX E

NORMAL DUTIES OF MESS COOKS ACROSS A SAMPLE OF ELEVEN SHIPS

1. Break out stores and maintain storeroom.
2. Clean and set tables.
3. Keep condiments on tables filled.
4. Clean mess hall and passageways.
5. Prepare salad and maintain salad bar.
6. Dispense milk and refill containers.
7. Serve food at steam table.
8. Prepare vegetables for cooking.
9. Wash dishes and cutlery (either by dishwasher or by hand.)
10. Wash pots in deep sink.
11. Dispose of trash and garbage.
12. Clean compartments of Chiefs, etc. (on some ships.)
13. Serve as nite mess cooks where mid-nite meal is served.
14. Keep Bake Shop in clean condition and aid bakers.
15. Keep First Class Mess in clean condition and serve food.
16. Aid Commissarymen as requested (e. g. making hamburgers).

UNCLASSIFIED
Security Classification

DOCUMENT CONTROL DATA - R&D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY *(Corporate author)*
Naval Personnel Program Support Activity
Personnel Research Laboratory
Washington, D. C. 20390

2a. REPORT SECURITY CLASSIFICATION
UNCLASSIFIED

2b. GROUP
N/A

3. REPORT TITLE
New Approaches to Mess Cook Management Afloat

4. DESCRIPTIVE NOTES *(Type of report and inclusive dates)*
Final

5. AUTHOR(S) *(Last name, first name, initial)*
Turner, Thomas B.

6. REPORT DATE
January 1966

7a. TOTAL NO. OF PAGES
48

7b. NO. OF REFS
21

8a. CONTRACT OR GRANT NO. N/A

b. PROJECT NO. PF016010801

c.

d.

9a. ORIGINATOR'S REPORT NUMBER(S)
WRM No. 66-28

9b. OTHER REPORT NO(S) *(Any other numbers that may be assigned this report)*
N/A

10. AVAILABILITY/LIMITATION NOTICES
This document may be further distributed by any holder only with specific prior approval of Personnel Research Laboratory

11. SUPPLEMENTARY NOTES
N/A

12. SPONSORING MILITARY ACTIVITY
Chief of Naval Personnel

13. ABSTRACT

This report describes an exploration of new ways of managing mess cooking afloat and, specifically, the management system presently in use aboard the U. S. S. ALBANY (CG-10).

Aboard many ships, Class A, technically trained personnel are diverted to mess cooking duties when non-designated SN or FN are unavailable. The ALBANY plan and plans similar to it permit such personnel to work in their rating or continue OJT by establishing a messmen division of non-designated strikers. Benefits of such a plan are increased morale of technical personnel, more efficient food service management, and increased apprenticeship opportunity for personnel interested in a Supply career.

The ALBANY and similar systems offer a sound solution and effective remedy to the diversion of technically trained personnel to mess duty. It is recommended for the endorsement of the Bureau of Naval Personnel and the approval of fleet commanders.

DD FORM 1 JAN 64 1473

UNCLASSIFIED
Security Classification

Security Classification

14. KEY WORDS	LINK A ROLE	LINK A WT	LINK B ROLE	LINK B WT	LINK C ROLE	LINK C WT
Mess Cook Food Service Supply Department Technical Ratings						

INSTRUCTIONS

1. ORIGINATING ACTIVITY: Enter the name and address of the contractor, subcontractor, grantee, Department of Defense activity or other organization *(corporate author)* issuing the report.

2a. REPORT SECURITY CLASSIFICATION: Enter the overall security classification of the report. Indicate whether "Restricted Data" is included. Marking is to be in accordance with appropriate security regulations.

2b. GROUP: Automatic downgrading is specified in DoD Directive 5200.10 and Armed Forces Industrial Manual. Enter the group number. Also, when applicable, show that optional markings have been used for Group 3 and Group 4 as authorized.

3. REPORT TITLE: Enter the complete report title in all capital letters. Titles in all cases should be unclassified. If a meaningful title cannot be selected without classification, show title classification in all capitals in parenthesis immediately following the title.

4. DESCRIPTIVE NOTES: If appropriate, enter the type of report, e.g., interim, progress, summary, annual, or final. Give the inclusive dates when a specific reporting period is covered.

5. AUTHOR(S): Enter the name(s) of author(s) as shown on or in the report. Enter last name, first name, middle initial. If military, show rank and branch of service. The name of the principal author is an absolute minimum requirement.

6. REPORT DATE: Enter the date of the report as day, month, year; or month, year. If more than one date appears on the report, use date of publication.

7a. TOTAL NUMBER OF PAGES: The total page count should follow normal pagination procedures, i.e., enter the number of pages containing information.

7b. NUMBER OF REFERENCES: Enter the total number of references cited in the report.

8a. CONTRACT OR GRANT NUMBER: If appropriate, enter the applicable number of the contract or grant under which the report was written.

8b, 8c, & 8d. PROJECT NUMBER: Enter the appropriate military department identification, such as project number, subproject number, system numbers, task number, etc.

9a. ORIGINATOR'S REPORT NUMBER(S): Enter the official report number by which the document will be identified and controlled by the originating activity. This number must be unique to this report.

9b. OTHER REPORT NUMBER(S): If the report has been assigned any other report numbers *(either by the originator or by the sponsor)*, also enter this number(s).

10. AVAILABILITY/LIMITATION NOTICES: Enter any limitations on further dissemination of the report, other than those imposed by security classification, using standard statements such as:

(1) "Qualified requesters may obtain copies of this report from DDC."

(2) "Foreign announcement and dissemination of this report by DDC is not authorized."

(3) "U. S. Government agencies may obtain copies of this report directly from DDC. Other qualified DDC users shall request through _____."

(4) "U. S. military agencies may obtain copies of this report directly from DDC. Other qualified users shall request through _____."

(5) "All distribution of this report is controlled. Qualified DDC users shall request through _____."

If the report has been furnished to the Office of Technical Services, Department of Commerce, for sale to the public, indicate this fact and enter the price, if known.

11. SUPPLEMENTARY NOTES: Use for additional explanatory notes.

12. SPONSORING MILITARY ACTIVITY: Enter the name of the departmental project office or laboratory sponsoring *(paying for)* the research and development. Include address.

13. ABSTRACT: Enter an abstract giving a brief and factual summary of the document indicative of the report, even though it may also appear elsewhere in the body of the technical report. If additional space is required, a continuation sheet shall be attached.

It is highly desirable that the abstract of classified reports be unclassified. Each paragraph of the abstract shall end with an indication of the military security classification of the information in the paragraph, represented as *(TS)*, *(S)*, *(C)*, or *(U)*.

There is no limitation on the length of the abstract. However, the suggested length is from 150 to 225 words.

14. KEY WORDS: Key words are technically meaningful terms or short phrases that characterize a report and may be used as index entries for cataloging the report. Key words must be selected so that no security classification is required. Identifiers, such as equipment model designation, trade name, military project code name, geographic location, may be used as key words but will be followed by an indication of technical context. The assignment of links, roles, and weights is optional.

Security Classification