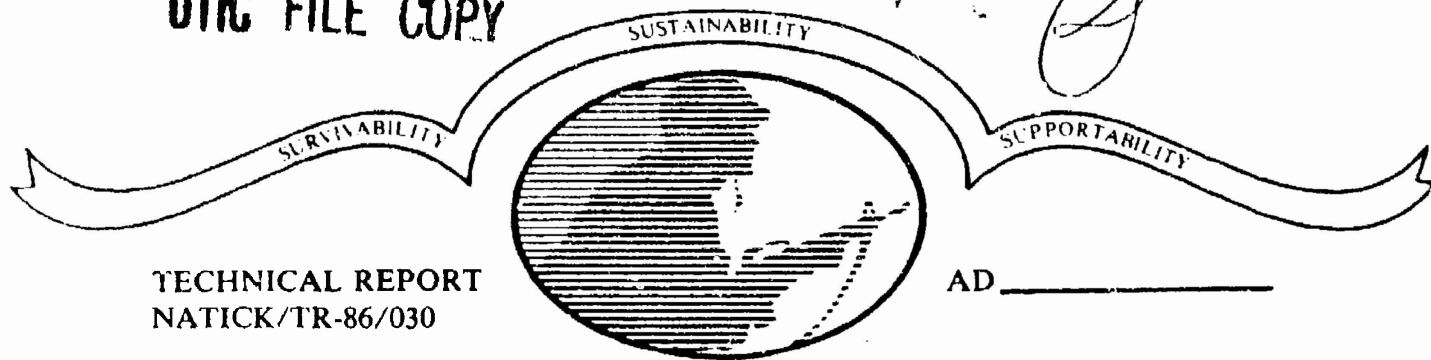


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IMPROVING U.S. NAVY FOODSERVICE MANAGEMENT TRAINING

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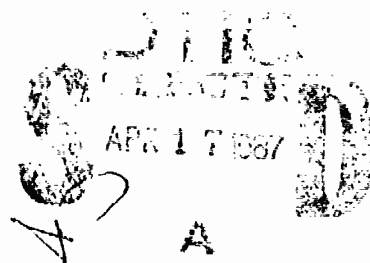
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DECEMBER 1985
FINAL REPORT 1981-1984

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UNITED STATES ARMY NATICK
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Two major training systems were implemented at an Enlisted Dining Facility afloat and one ashore in an effort to improve U.S. Navy foodservice management training. First, a videotape training center was established at both sites, complete with a series of several relevant videotapes. Production of original tapes on topics unique to the Navy was also initiated. Results indicated a high degree of acceptance of this training approach, which reduces the need for personnel to leave the EDF to obtain training. However, this technique can only supplement rather than replace other types of training.		

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like on-the-job training and lectures.

Secondly, a customer feedback system was developed and implemented at each site. With this system, EDF managers can elicit feedback from their customers as to the strengths and weaknesses of their operations. They can also report findings back to the customers to show that they care about customer satisfaction. This system was also well received by EDF managers. However, becoming aware of complaints does not guarantee success in overcoming them.

In addition to these major innovations, techniques for increasing worker and manager motivation were assessed. A profile of the factors important to effective food service management was also developed. Finally, the encouraging results of a pilot test of recruitment of trained and motivated food service students at vocational/technical schools was reported.

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PREFACE

This study was conducted by the Behavioral Sciences Division, Science and Advanced Technology Laboratory (SATL), of the U.S. Army Natick Research and Development Center, in response to the United States Navy Requirement NM 81-22, Navy/Marine Corps Foodservice Management Training/Development Program during 1981-1984. The study was conducted at a model Enlisted Dining Facility (EDF) afloat (the aircraft carrier U.S.S. Independence) and a model EDF ashore (at the Naval Operations Base in Norfolk, Virginia).

The authors wished to thank LTJG R. J. Stahurski, food service officer of the Independence, and LT John Johnson, food service officer at Norfolk, for their cooperation. We also wish to thank all the other USN food service managers for their assistance and all the Navy personnel who completed questionnaires and interviews. We also wish to thank Ms. Karen Campetti, Mr. Robert Swain, and Mr. Charles Greene for their assistance with data reduction and analysis.



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TABLE OF CONTENTS

	Page
PREFACE	iii
LIST OF ILLUSTRATIONS	vii
LIST OF TABLES	vii
INTRODUCTION	1
TRAINING WITH VIDEOTAPES	2
ADVANTAGES	2
IMPLEMENTATION	3
EVALUATION	3
VIDEOTAPE SOURCES	8
A CUSTOMER FEEDBACK SYSTEM	9
PURPOSE OF THE SYSTEM	9
DESIGN OF THE SYSTEM	9
IMPLEMENTATION OF THE SYSTEM	12
CUSTOMER EVALUATION OF FOODSERVICE MANAGEMENT	12
METHOD	16
RESULTS	16
MOTIVATION OF FOODSERVICE MANAGERS	19
EFFECTIVE FOODSERVICE MANAGEMENT	20
MS RECRUITING	22
RECOMMENDATIONS	23
REFERENCES	26

TABLE OF CONTENTS (Cont'd)

	Page
APPENDICES	
A. VIDEOTAPE QUESTIONNAIRE	27
B. REVIEW OF FOODSERVICE TRAINING FILMS	31
C. PLANNING A MENU - VIDEOTAPE SCRIPT BY BRUNO A. KOCH	35
D. CUSTOMER FEEDBACK SYSTEM	57
E. FOOD SURVEY CARD	67
F. USN FOODSERVICE CUSTOMER SURVEY	69
G. MOTIVATION QUESTIONNAIRE	71
H. MANAGEMENT FACTOR QUESTIONNAIRE	73

LIST OF ILLUSTRATIONS

Figure	Page
1 Closed Customer Feedback Box	10
2 Open Customer Feedback Box	11
3 Customer Response Form	13
4 Customer Feedback Analysis Worksheet	14
5 Customer Response Progress Tracking Chart	15

Table	Page
1 MS Evaluation of Training Videotapes	3
2 Foodservice Topics Suggested by MSs for Additional Videotapes	4
3 Strong Points of the Videotape Training Technique Cited by MSs	5
4 Weak Points of the Videotape Training Technique Cited by MSs	6
5 Ways to Improve the Videotape Training Technique Cited by MSs	6
6 Training Techniques That Are Better Than Videotapes Cited by MSs	7
7 Customer Ratings of Sample Meals	16
8 Customer Survey of Dining Facility	17
9 Customer Evaluation of Dining Area Conditions	18
10 Effective MS Motivators	19
11 Factors Important for Effective Foodservice Management	21

IMPROVING U.S. NAVY FOODSERVICE MANAGEMENT TRAINING
Part II: Recommendations for Improving On-Site Training Ashore and Afloat

INTRODUCTION

In order to recommend ways to improve the U.S. Navy foodservice management training program, participants in this two-part project focused on these major elements, both ashore and afloat: (1) An evaluation of the current training system including its strengths and weaknesses; (2) a definition of the scope of what an effective management training program should include; (3) an examination of techniques with potential for effective training; (4) an implementation of some of these techniques at dining facilities both ashore and afloat; (5) an evaluation of the effectiveness of these implemented techniques for improving management training, and (6) an examination of ways to motivate managers toward superior performance. This report is concerned with topics (4), (5), and (6).

Rosenthal and Mezoff point out these five major benefits of good management training:

1. It motivates managers.
2. It builds managers' self-confidence and self-esteem.
3. It can help reduce stress.
4. It can improve work relationships.
5. It can help new managers work through role changes.

Improved training should, therefore, lead to improved managerial performance on the job. This should, in turn, improve the performance of subordinates in Navy dining facilities. Improved dining facilities could have a major impact on morale throughout the Navy.

TRAINING WITH VIDEOTAPES

One of the principal problems mentioned repeatedly in Part I of this series was the lack of opportunity for Mess Specialists (MSs) to attend centralized training schools. When many Enlisted Dining Facilities (EDFs) are already undermanned, it is difficult to send personnel away for further training. As a result, many NCOs reported being thrust into management positions without adequate training. But if MSs can't always be sent to a training site, then the training can be sent to them. Certainly correspondence courses, Food Management Team (FMT) visits, and formal training on site (e.g., the Program for Afloat College Education or PACE) are good measures in this direction. But in addition, this study sought to explore the possibilities for on-site training inherent in the new videotape technology. This technology is recognized in the civilian world as the state-of-the-art⁴ training technique for food service.

Advantages

Here are some of the advantages of using training videotapes:

1. They are more cost efficient than having training at a central site, provided that equipment is available at many sites.
2. As with correspondence courses, they allow trainees to proceed at their own pace, provided they have individual access to the equipment.
3. They are superior to correspondence courses in grabbing students' attention and lowering resistance to learning.
4. They convey information about procedures, actions, and interactions better than any lecture or verbal material ever could ("a picture is worth a thousand words").
5. They are readily available. Many companies sell or rent an entire series of foodservice training videotapes. Some tapes, of course, have little

direct bearing on military foodservice. Any many uniquely military topics have no existing videotapes which deal with them.

Implementation

Complete videotape equipment packages were presented to a model EDF ashore (at the Naval Operations Base in Norfolk, Virginia) and a model EDF afloat (in the aircraft carrier U.S.S. Independence). Each package included a videocassette recorder/player, a monitor with stand, a camera (so that EDF managers could produce their own training tapes), and a set of already produced foodservice training videotapes. The project officer of this study presented some of the training tapes to assembled groups of MSs and then distributed a Videotype Questionnaire (see Appendix A), which they could use to evaluate the concept of training videotapes as well as the value of each of those presented.

Evaluation

Tables 1 through 6 present the results of the 75 MSs who viewed these films and completed the questionnaires. In Table 1, the first two means are

TABLE 1. MS Evaluation of Training Videotapes

	MEAN
The videotapes presented some information I didn't already know	1.63
Would like to have more training videotapes available	1.70
VIDEOTAPE TITLE	MEAN
Creative Hamburger Sandwich Preparation	5.29
Kitchen Safety: Preventing Machine Injuries	5.68
Basic Nutrition	5.01
Food Poisoning - Preventatives	5.17

based on a 3-point scale where 1 = "agree," 2 = "unsure," and 3 = "disagree." The means indicate moderate agreement that the videotapes presented new information (1.63) and that MSs would like to see more training videotapes (1.70). The remainder of this Table presents mean ratings of four films shown, based on a 7-point scale where 1 = "very bad," 4 = "neutral," and 7 = "very good." All four films were rated between 5 (somewhat good) and 6 (moderately good). The film on kitchen safety received the highest rating (5.68).

When asked to suggest other foodservice topics on which they would like to see additional videotapes, MSs mentioned several (see Table 2). The percents in this Table are based only on the 31 MSs who answered question #3

TABLE 2. Food Service Topics Suggested by MSs for Additional Videotapes

TOPIC	MSs CITING (%) ¹
Sanitation	29
Foodservice Records	26
Preparation of Food/Presentation	16
Creative Cooking	16
Nutrition	16
Baking	13
Accident Prevention	10

¹ Percents are based on only the 31 MSs who agreed that more training videotapes should be made available.

on Appendix A, i.e., the MSs who agreed on question #2 that more videotapes should be made available. Only those topics cited by at least 10% of this

sample, i.e., at least three MSs, were included. Sanitation (29%) and foodservice records (26%) headed the list.

MSs were also asked to state the strong points of using videotapes in foodservice training (see Table 3). In this table, only points cited by at least 4% of the total sample of 75 MSs, i.e., at least three people, were

TABLE 3. Strong Points of the Videotape Training Technique Cited by MSs

POINT	MSs CITING (%) ¹
Good presentation of detail	20
Technique allows for better understanding	16
Good to see and hear subject matter	9
Convenient to set up	5
Shows the importance of foodservice	4
Constant repetition improves learning	4

¹
Percents are based on all 75 MSs who answered the questionnaire.

included. The most common points mentioned were that the videotape approach is a good way to present details (20%) and that the technique enhances understanding of subject (16%).

MSs were also asked about the weak points of the videotape technique for training in foodservice (see Table 4). Only points mentioned by 4% or more of the total sample are included. The most common complaints, that watching several at once was boring (19%) and that there was no group discussion (11%), related merely to the way videotapes were used during the sample session prior to administering the questionnaires. In other words, in normal use these objections could readily be overcome by an instructor structuring the

sessions differently. The other complaints were more pertinent to the films themselves, e.g., some complained that the films weren't realistic (8%), were somewhat redundant (5%), or had poor humor (4%).

TABLE 4. Weak Points of the Videotape Training Technique Cited by MSs

POINT	MSs CITING (%) ¹
Boring to watch several at once	19
Lacks group discussion, question and answer time	11
Not realistic; poor acting	8
Contains material already learned	5
Poor humor	4

¹ Percents are based on all 75 MSs who answered the questionnaire.

MSs were also asked how the videotape training technique might be improved (see Table 5). No suggestions were very common, but some did suggest that the

TABLE 5. Ways to Improve the Videotape Training Technique Cited by MSs

POINT	MSs CITING (%) ¹
Need better presentation of material	7
Should be produced in color	4
Should be slower and more specific	4
Need more illustrations	4

¹ Percents are based on all 75 MSs who answered the questionnaire.

material could be presented better (7%) and that the tapes should be in color (4%), include more specific detail (4%), and use more illustrations (4%).

When MSs were asked which training techniques are superior to videotapes (see Table 6), only one was cited by a majority -- 77% mentioned on-the-job training. Fifteen percent said videotapes were the best, but between 16-39%

TABLE 6. Training Techniques that are Better than Videotapes Cited by MSs

	MSs Citing (%) ¹
Better training techniques than videotapes:	
ON-THE-JOB TRAINING	77
OBSERVATION	39
GROUP DISCUSSION	35
LABORATORIES	31
LECTURES	25
FILMSTRIPS	16
VIDEOTAPES ARE BEST	15
ROLE-PLAYING	13
INDEPENDENT READING	11
COMPUTERIZED INSTRUCTION	9
SLIDES	7
GAMES AND SIMULATION	5

¹ Percents are based on all 75 MSs who answered the questionnaire.

cited the techniques of observation, group discussion, laboratories, lectures, and filmstrips as being better. Ranking all 12 techniques in terms of declining percents of MSs who said they were better, videotapes ranked seventh.

In summary, MSs rated positively the videotape technique as a whole and the sample films used to demonstrate it. They suggested other topics, such as sanitation and foodservice records, on which additional films would be useful.

They listed a number of strong points for the technique and some weak points which could readily be overcome. For example, fewer films per session could be scheduled and more time for discussion could be allowed. Although MSs rated the videotape technique highly, they believed other techniques like on-the-job training, observation, and group discussion were superior. However, these other techniques are already in use. The videotape technique is not meant to supplant them but rather to supplement them.

Videotape Sources

Some sources for videotapes on foodservice training are listed below.

Commercial Sources. National Educational Media, Inc., 21601 Devonshire Street, Chatsworth, VA 91311.

Culinary Institute of America, Hyde Park, NY 12538.

Department of Defense Sources. Naval Education and Training Support Center, Atlantic, Building W-313, U.S. Naval Station, Norfolk, VA 23511.

Naval Photographic Center, Washington, DC 20374.

Defense Audiovisual Agency, Washington, DC 20374.

For a list and brief description of some of the relevant films available through these various sources, see Appendix B.

Original Films

The two model dining facilities were given equipment with which they could produce their own training films. The value of this approach is that the film could use actual equipment and settings that would later be used by trainees. However, the drawback is lack of personnel with expertise in planning, scripting, and directing such films. In this project, the attempts at producing videotapes locally with untrained personnel proved disappointing.

Therefore, professionals were commissioned to produce a sample film on a military topic suggested by the Navy Foodservice Systems Office, a topic on which commercial films would not be available, namely, the U.S. Navy System for

Menu Development. See Appendix C for the complete script of this film. Such films can be produced through the U.S. Army Training and Doctrine Command's Training and Audiovisual Support Center (TASC) at Fort Eustis in Newport News, Virginia.

Therefore, this important training technique could be implemented on a wider basis by purchasing commercially available videotapes, obtaining copies of DoD videotapes, and producing new videotapes on subjects, especially those unique to the military or Navy, which are not already available.

A CUSTOMER FEEDBACK SYSTEM

Purpose of the System

One of the main problems in the foodservice industry is lack of an adequate system for foodservice managers to obtain feedback from their customers.⁵ Yet managers can only satisfy customers if they become aware of what customers want and what their complaints are. To improve as managers, they need continually to keep in touch with customer attitudes. Virtually everyone is familiar with the common paper-and-pencil questionnaire approach. But this approach turns many people off. It is time-consuming and by itself provides no mechanisms by which managers could give feedback in turn to the customers. Therefore, this project implemented a new system which would (1) attract the customer, (2) be simple to use, both for the customer and the manager, and (3) allow managers to report results back to the customers. This system is a revised form of one used earlier by the Air Force.⁶

Design of the System

Rather than use a paper and pencil questionnaire, a sort of balloting box was devised (see Figures 1 and 2). Closed and packed for carrying, the Customer Feedback Box was 36 inches long, 7 inches wide, and 7 inches deep. Set up, it presented a question (about the meal, about the EDF, etc.), a nine-point response scale with faces expressing different degrees of positive and

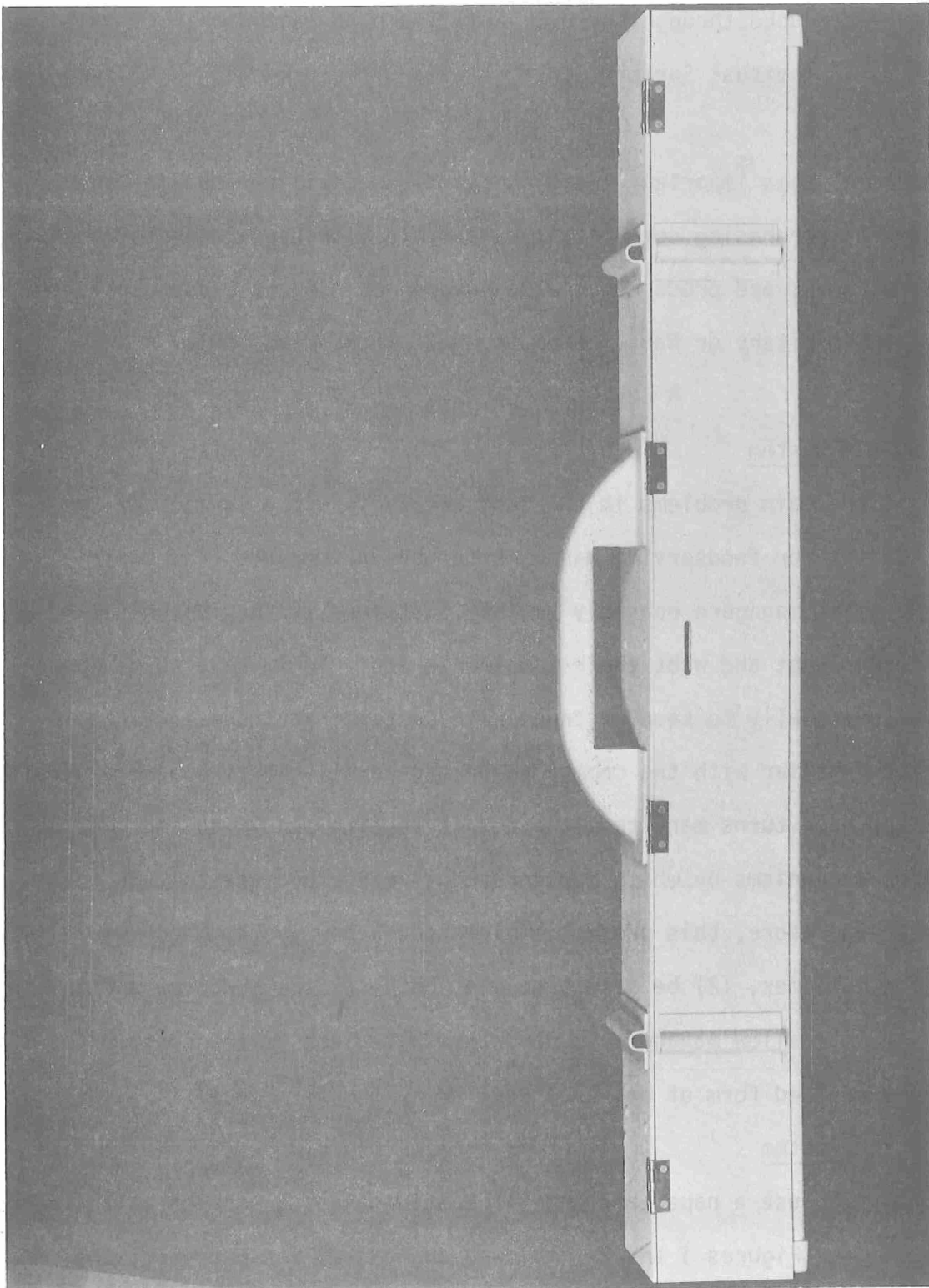


Figure 1. Closed customer feedback box.

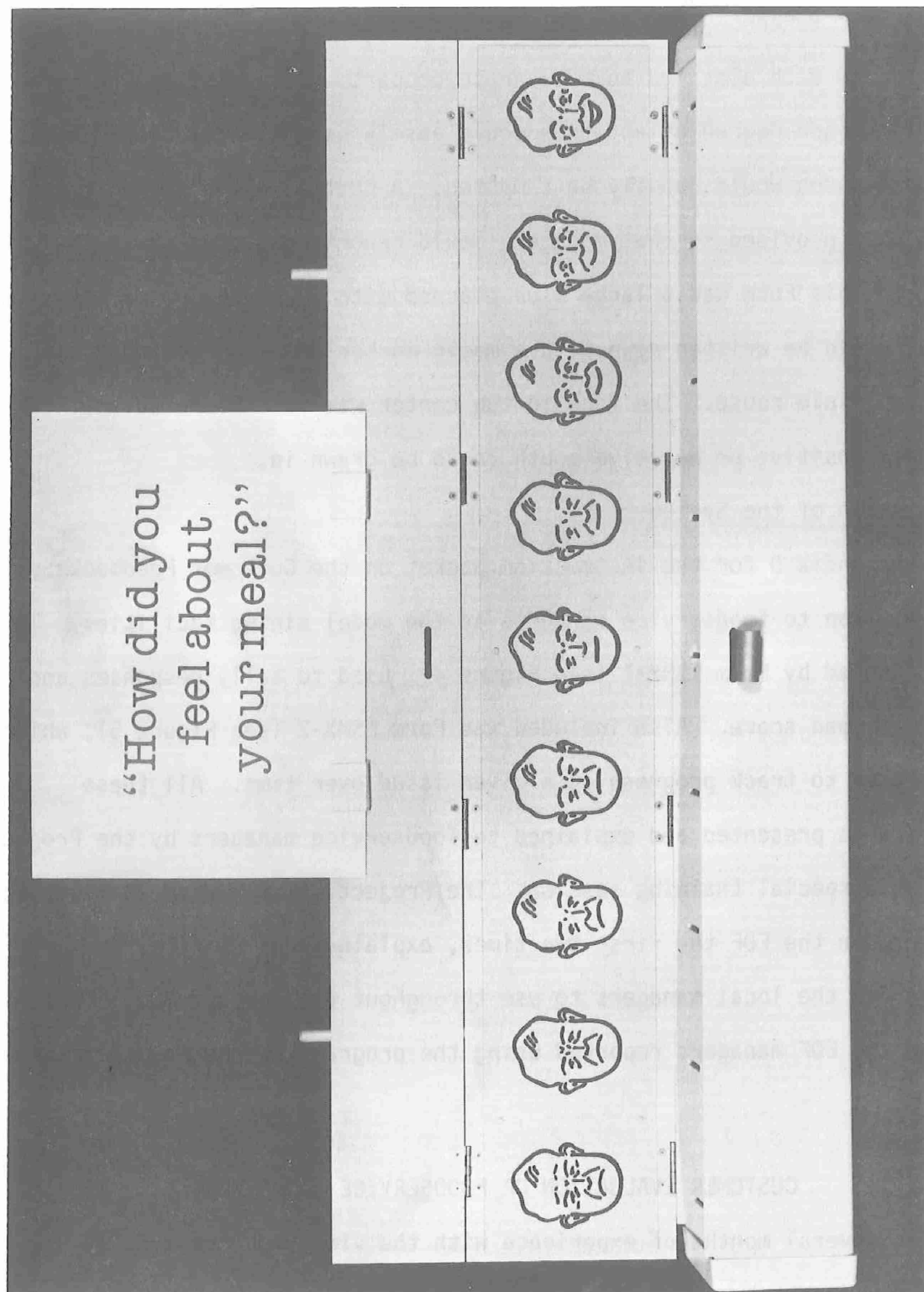


Figure 2. Open customer feedback box.

negative attitudes, and slots for casting "ballots", which could be poker chips or other small tokens. The box could be locked in this position to prevent tampering, and each slot led to a separate compartment so that the numbers representing each degree of attitude could easily be tallied later. Then average attitudes would readily be computed. A Customer Response Form (see Figure 3) was provided so that managers could report results back to their customers. This Form was a large blue placard with a cellophane cover so that responses could be written down with a magic marker and then erased, thus allowing multiple reuse. The face in the center was left blank so that the appropriate positive or negative mouth could be drawn in.

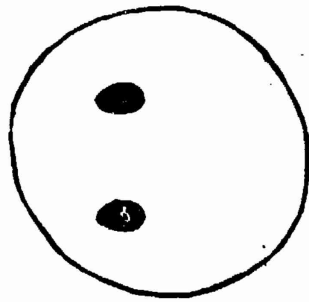
Implementation of the System

See Appendix D for the instruction packet on the Customer Feedback System which was given to foodservice managers at the model dining facilities. This was accompanied by Form FSMX-1 (see Figure 4), used to tally responses and calculate a mean score. Also included was Form FSMX-2 (see Figure 5), which would be used to track progress on a given issue over time. All these materials were presented and explained to foodservice managers by the Project Officer at a special training session. The Project Officer then administrated the program in the EDF the first two times, explained the results, and left the materials for the local managers to use throughout the test period. During this time the EDF managers reported using the program frequently and finding it useful.

CUSTOMER EVALUATION OF FOODSERVICE MANAGEMENT

After several months of experience with the videotape training system and the customer feedback system, customer attitudes towards the EDF were evaluated. It was assumed that managers interested in feedback would have relatively satisfied customers.

Our Customers Said



about our _____

we say _____

Figure 3. Customer response form.

SURVEY QUESTION _____

DATE _____

TIME _____

DATA ANALYSIS WORKSHEET				
	COLUMN I (Distribution) # of Chips Per Face	COLUMN II Face #	COLUMN III (Multiply Col I by Col II)	COLUMN IV Σ
1		X 1	-	
2		X 2	-	
3		X 3	-	
4		X 4	-	
5		X 5	-	
6		X 6	-	
7		X 7	-	
8		X 8	-	
9		X 9	-	
	COLUMN I TOTAL		COLUMN III TOTAL	MEAN (AVERAGE)

FSM X-1

- (1) ENTER NUMBER OF CHIPS PER FACE IN CORRESPONDING SQUARE IN COLUMN I.
- (2) WHEN THE NUMBER OF CHIPS FOR EACH FACE HAS BEEN ENTERED IN THE APPROPRIATE BOX, MULTIPLY EACH NUMBER BY THE NUMBER NEXT TO IT IN COLUMN II AND ENTER EACH PRODUCT IN THE CORRESPONDING BOX IN COLUMN III. (IF THERE ARE NO CHIPS FOR A FACE, ENTER A ZERO IN THE CORRESPONDING COLUMN III BOX).
- (3) ADD THE FIGURES IN THE NINE BOXES IN COLUMN I AND ENTER THE TOTAL IN THE BOX AT THE BOTTOM OF THIS COLUMN.
- (4) ADD THE FIGURES IN THE NINE BOXES IN COLUMN III AND ENTER THE TOTAL IN THE BOX AT THE BOTTOM OF THIS COLUMN.
- (5) DIVIDE THE COLUMN III TOTAL BY THE COLUMN I TOTAL. ENTER THE RESULT IN THE BOX LABELLED "MEAN." THIS IS THE AVERAGE.
- (6) TO FIND THE PERCENTAGE FOR EACH FACE ON THE SCALE, DIVIDE THE FIGURES IN EACH COLUMN I BOX BY THE COLUMN I TOTAL.

Figure 4. Customer feedback analysis worksheet.

	DATE	N	MEAN $\bar{X}$
A			
B			
C			

WHAT OUR CUSTOMERS SAY ABOUT:

	General Foodservice
	Breakfast
	Lunch
	Dinner
	Evening meal
	() Food Item
	() Other
	() Other
	() Other
	() Other

% Responses to sample									
1	2	3	4	5	6	7	8	9	
A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	
20									
19									
18									
17									
16									
15									
14									
13									
12									
11									
10									
9									
8									
7									
6									
5									
4									
3									
2									
1									

Figure 5. Customer response progress tracking chart.

FSM 1-2

Method

Food survey cards (see Appendix E) were distributed at four meals -- two lunches and two dinners -- at each site, resulting in 163 responses at the EDF afloat and 172 at the EDF ashore. Foodservice customer survey forms (see Appendix E) were distributed at two meals -- one lunch and one dinner -- at each site, resulting in 85 responses afloat and 79 ashore.

Results

The average customer ratings for each of the four meals and the overall average rating are reported in Table 7. These ratings were based on a nine-point scale where 1 = "dislike extremely" and 9 = "like extremely." The

TABLE 7. Customer Ratings of Sample Meals

MEAL	FACILITY LOCATION	
	AFLOAT	ASHORE
Lunch 1	3.93	6.82
Lunch 2	4.05	6.45
Dinner 1	4.41	5.66
Dinner 2	4.12	6.18
Average	4.12	6.27

average rating afloat was "dislike slightly" and that ashore was "like slightly." The difference between the ashore and afloat scores is related to the more cramped and less attractive facilities aboard ship, as will be seen below. But in both cases, there is considerable room for improvement.

The customer survey of the EDF (see Table 8) produced similar results. Responses in this table were based on a 7-point scale where 1 = "very bad" and 7 = "very good." The afloat EDF averaged an overall 3.70 ("neither bad nor good"), while the ashore EDF averaged 5.18 ("somewhat good"). The lowest

TABLE 8. Customer Survey of Dining Facility

ITEM	AFLOAT MEAN	ASHORE MEAN
A. Hours of operation	3.84	5.03
B. Quality of food	3.15	4.85
C. Amount of food	3.79	4.74
D. Variety of food at a single meal	3.46	4.98
E. Variety of menu over last two weeks	2.85	4.56
F. Temperature of food	3.38	4.98
G. Speed of service	2.40	5.41
H. Cleanliness of dining facility	4.64	6.01
I. Courtesy of cooks	3.20	5.02
J. Courtesy of mess cooks or contract foodservice workers	3.36	5.00
K. Appearance of serving line	4.09	5.45
L. Cleanliness of mess cooks or civilian foodservice workers	4.26	5.66
M. Cleanliness of cooks	4.15	5.51
N. Appearance of dining area (decor)	4.25	5.70
O. Lighting	5.19	5.89
P. Dining facility overall	3.39	5.33
Overall Mean	3.70	5.18

ratings afloat were for speed of service (2.40) and menu variety (2.85), while the lowest ashore were for menu variety (4.56) and amount of food (4.74).

These and many other low-rated qualities had constraining factors that were to a large extent beyond the control of the EDF manager. The two highest ratings afloat were for lighting (5.19) and cleanliness (4.64), while those ashore were for cleanliness (6.01) and lighting (5.89). In contrast to low-rated qualities, these and other higher-rated ones were more under the control of the

EDF manager. In other words, the EDF managers were earning relatively higher scores for factors more under their control and receiving lower scores for items with factors they couldn't help. The main exceptions to this were two factors afloat which scored below the midpoint (3.5) of the scale -- quality of food (3.15) and temperature of food (3.38). Furthermore, even the better scores show some room for improvement.

In Table 9 are the responses on the customer survey regarding conditions in the dining area. These means are based on a four-point scale where

TABLE 9. Customer Evaluation of Dining Area Conditions

ITEM	AFLOAT MEAN	ASHORE MEAN
Q. How frequently the dining area is:		
A. Too noisy	2.72	1.64
B. Too crowded	3.57	2.00
C. Too hot	2.77	1.53
D. Too cold	1.60	1.33

1 = "almost never" and 4 = "almost always." In every case, the afloat EDF was rated worse, earning an average overall rating of 2.67 (between "sometimes" and "often") on the frequency of these negative conditions. By contrast, the EDF ashore earned an average of 1.63 (between "almost never" and "sometimes"). But as mentioned earlier, crowding, noise, and temperature extremes are largely beyond the control of EDF managers, especially afloat. Thus the lower ratings afloat reflect the restraints which are inherent in shipboard life.

Overall, the results of these customer surveys indicate that some on-site training with videotapes and some use of the Customer Feedback System can not, by themselves, solve all the problems of foodservice management training. The overall system needs improvement. The two innovations described here are but

two tools which can help improve the system. More are needed, such as those² discussed by Salter, Knight, and Symington.

MOTIVATION OF FOODSERVICE MANAGERS

Effective performance depends upon good motivation as well as training. In fact, improved motivation can improve the effectiveness of training as well as of later implementation of what has been learned. To learn how MSs thought that managerial motivation could be improved, the brief questionnaire in Appendix 6 was administered to all the MSs available at the two model dining facilities. Thus responses were collected from 26 MSs afloat and 38 ashore.

The means in Table 10 are based on a 5-point scale where 0 = "not an effective motivator" and 4 = "extremely effective motivator". Factors with ratings of at least 3 ("very effective motivator") by one or both groups of MSs include recognition, awards, written commendation, customer feedback, flexible working hours, higher managers taking seriously one's suggestions, NEY award consideration, the Navy paying for one's civilian training courses, and the opportunity to earn certification in foodservice. Many of these ideas could be implemented or further expanded to improve foodservice managers' motivation and, hence, performance.

TABLE 10. Effective MS Motivators

ITEM	MEAN OF MS RESPONDENTS	
	ASHORE	AFLOAT
Recognition	3.40	3.21
Awards	3.31	3.43
Written comendation	3.05	2.79
Words of appreciation	2.80	2.87
Managers checking cook accuracy	1.85	2.27
Feedback from customers	2.97	3.04
Inclusion in planning and evaluation	2.52	2.73

TABLE 10. Effective MS Motivators (Cont'd)

ITEM	MEAN OF MS RESPONDENTS	
	ASHORE	AFLOAT
Daily inspections	1.77	2.69
Flexible work hours	2.57	3.08
Managers taking suggestions	3.00	3.13
NEY award consideration	3.08	2.78
Short term OJT	2.65	2.86
Navy paying for courses	2.88	3.04
FS certification	2.88	3.04
Taking names	6.47	1.56

EFFECTIVE FOODSERVICE MANAGEMENT

The same MSs who filled out the questionnaire on motivation in Appendix G also were asked to complete the questionnaire in Appendix H. This questionnaire asked MSs to rate how important each of 26 factors was to effective foodservice management. The results in Table 11 are based on a 5-point scale where 0 = "not important" and 4 = "extremely important." The factors which earned ratings of 3 ("very important") or better by both groups were recognition to cooks, preventive maintenance for equipment, customer satisfaction, managers correctly preparing reports, managers knowing how to operate equipment, having a sanitary EDF and galley, and having managers clearly define worker tasks. One of these factors, customer satisfaction, was specifically addressed earlier in this report, and the Customer Feedback System was implemented to help managers improve satisfaction among their customers. The other factors, like properly operating equipment and preparing reports, could be improved through more comprehensive training, as that suggested in this report by the use of training videotapes.

TABLE 11. Factors Important for Effective Foodservice Management

ITEM	MEAN OF MS EVALUATION	
	ASHORE	AFLOAT
Planning meeting which include FS workers	2.88	2.91
OJT provided for cooks	3.30	2.96
School training for cooks	3.22	2.75
Management training for leading MS	3.11	2.41
Management training for watch captain	3.05	2.62
FS training for FS Officer	2.97	2.62
Recognition to cooks	3.47	3.12
Recognition to managers	3.05	2.84
Communication between managers and workers	3.69	2.79
Preventive maintenance for equipment	3.36	3.34
Self inspection-evaluation program for managers	2.94	2.83
Job rotation	3.50	2.95
Customer-personnel relations	3.13	2.91
Submission of reports	3.08	2.75
Customer satisfaction	3.55	3.39
Managers correctly prepare reports	3.23	3.00
Attractive decor	3.41	2.60
Managers know how to operate equipment	3.58	3.04
Managers pointing out mistakes	3.08	2.87
Managers help with personal problems	3.14	2.72
Managers knowing a lot about FS	3.60	2.68
Managers emphasize portion control	3.31	2.39
Managers enforce progressive cookery	3.14	2.45
Sanitary EDF and galley	3.85	3.00
Managers clearly defining worker tasks	3.42	3.00
Managers having higher rank than workers	2.20	2.42

MS RECRUITING

Another way to improve U.S. Navy foodservice managerial effectiveness is to recruit more personnel with demonstrated interest and experience in foodservice. A previous report⁷ identified civilian vocational and technical schools as a lucrative recruiting source for trained foodservice students, with about 13% expressing interest in joining the Navy. To test this finding, it was recommended that the Food Management Teams (FMT) visit selected schools, make recruiting presentations there, and see how many students actually joined the Navy as a result.

Subsequent to that report, the San Diego FMT contacted five schools in its area, while the Norfolk FMT contacted three in its area. A total of 316 foodservice students in the 11th and 12th grades attended the presentations. At the end of the school year, the number who actually joined the Navy was 26, of which only three specifically enlisted as Mess Specialists. About half of the students attending the presentations were only juniors at the time, hence still in school when enlistments were counted. But 26 out of the other half (158) equals a percent enlisting of 16.5%, although the rate for specifically MS was only 1.9%.

This pilot study indicates that vocational/technical schools are indeed a lucrative recruiting source for the U.S. Navy. And there are approximately 4,000 such schools in the United States. However, it appears that a single visit is not enough to convince that many to join the Navy's foodservice program. Further study would be useful, however, to determine how many of those entering the Navy in other rates later end up in foodservice, how many of those attending the presentation as juniors actually join the Navy a year and a half later, and how successful follow-up recruiting visits and/or mailings would be in increasing the ratio who join.

RECOMMENDATIONS

Eight recommendations are listed below on training in foodservice, improving MS motivation, and recruiting trained personnel.

1. Videotape technology has been recognized in the civilian world as the state-of-the-art training technique in foodservice. Navy mess specialists (MSs) viewing sample training videotapes gave positive ratings to both this technique as a whole and the sample films shown. Therefore, it is recommended that the videotape technology be implemented more widely for training on-site, at large bases and on major ships worldwide. This would involve installing at each site a relatively inexpensive videocassette player and monitor. In addition, copies of key films should be made available on a permanent basis at each training site, while other films could be made available on a special basis through a lending videotape library. Food Management Teams could also bring special films during their visits.

2. Good videotapes for training in foodservice and management are already available from a number of commercial sources. However, commercial series include many videotapes which are not relevant to the military. They also fail to include many topics which are unique to the Navy. It is recommended, therefore, that as training sites are established, new videotapes be produced on important Navy subjects for which no tapes now exist or existing ones are obsolete.

3. Some MSs were dissatisfied with how the sample videotape sessions were structured. It is recommended that at the videotape training sites which are established, that maximum flexibility in using the equipment be the rule. That is, it should be available for both formal and informal training, for both group and individual training.

4. Although the videotape technique is clearly valuable in conveying pictorial information, MSs rated techniques such as on-the-job training,

personal observation. and laboratories higher. For verbal information, they rated group discussion and lectures higher. Therefore, as videotape training is implemented more widely, it should not supplant, but rather supplement, these more familiar techniques.

5. To satisfy foodservice customers, managers must be aware of what their customers want and what their complaints are. It is recommended that all Navy foodservice managers implement customer feedback systems at their respective dining facilities. Further, it is recommended that they keep written records to track improvements or other changes in this information.

6. It is also recommended that managers report a brief summary of the results back to their customers, perhaps with a sign or placard. By doing this and by making the suggested improvements whenever possible, managers show that they care about their customers and what they think.

7. Higher managers and supervisors should try to improve the motivation of their subordinates. This survey of MSs showed that such factors as these could be implemented or developed further to improve motivation: recognition, customer feedback, flexible working hours, higher managers listening seriously to subordinates' suggestions, and providing greater opportunity for civilian training courses and certification.

8. Initial recruiting efforts among foodservice students at vocational/technical schools have proven highly successful. Approximately 16.5% of those contacted later enlisted in the Navy, although only 1.9% specifically chose Navy foodservice on entry. It is recommended that recruiting efforts for such trained and motivated students be explored further. In particular, if a single visit can produce such results, perhaps a follow-up visit or mailing of information could boost the percent joining the Navy. Those foodservice students who joined in job categories other than foodservice should be

interviewed as to why. If the reasons could be discovered, then perhaps foodservice recruits could be boosted, too.

This document reports research undertaken at the US Army Natick Research, Development and Engineering Center and has been assigned No. NATICK/TR-~~86~~1030 in the series of reports approved for publication.

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APPENDIX A

VIDEOTAPE QUESTIONNAIRE

APPENDIX A
VIDEOTAPE QUESTIONNAIRE

Please answer the following questions about the food service training videotapes you have just seen.

1. The videotapes presented at least some information I didn't already know (CIRCLE ONE):

AGREE UNSURE DISAGREE

2. I would like to have more training videotapes available (CIRCLE ONE):

AGREE UNSURE DISAGREE

3. If you AGREE with #2 above, could you suggest some food service topics on which you would like to see more videotapes?
- _____
- _____

4. I think these other training techniques are better than videotapes (CHECK AS MANY AS APPLY):

_____ None are better, because videotapes are best.

_____ Group discussion	_____ Laboratories	_____ Games and simulations
_____ Lectures	_____ Observation	_____ Computerized instruction
_____ Role-Playing	_____ Film strips	_____ Independent reading
_____ On-the-job training	_____ Slides	

5. What are some of the strong points of the videotape training technique?
- _____
6. What are some of the weak points of the videotape training technique?
- _____
7. Any other comments on the use of training videotapes, how they could be improved, etc.?
- _____

Using the scale below, please indicate your opinion of each of the following videotapes by CIRCLING the appropriate number.

VERY BAD	MODERATELY BAD	SOMEWHAT BAD	NEITHER GOOD NOR BAD	SOMEWHAT GOOD	MODERATELY GOOD	VERY GOOD
1	2	3	4	5	6	7

- | | | | | | | | |
|--|---|---|---|---|---|---|---|
| a. Creative Hamburger Sandwich Preparation | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| b. Kitchen Safety: Preventing Machine Injuries | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| c. Basic Nutrition | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| d. Food Poisoning -- Preventatives | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX B

REVIEW OF FOODSERVICE TRAINING FILMS

APPENDIX B

REVIEW OF FOODSERVICE TRAINING FILMS

SOURCE

National
Educational
Media (NEM)

Eye of the Supervisor (M301; 12 min)

Basic management principles are presented. The emphasis is on the necessity of the manager knowing his employees and the importance of soliciting reasons for undesirable work behaviors. The manager is encouraged to seek self-improvement and regularly self-evaluate his performance. Of the management films available from NEM, this is the only one that could be considered appropriate for military viewing as the topics are relevant to any work environment.

NEM

Sandwich Preparation and Presentation (FS 107; 10 min)

Demonstrates artistry and techniques of making high quality sandwiches using such delicacies as beef tartar and smoked salmon. These, as well as some other included topics, are considered too exotic to have broad application to military populations.

NEM

Care & Cleaning of Kitchen Equipment (FS 147; 12 min)

An overview on proper use, cleaning, inspection and routine servicing of equipment is presented. Guidelines given were very general. It is felt that a more detailed approach would be more appropriate for a military audience.

NEM

Preventing Machine Injuries (FS 111; 10 min)

An effective analogy is made between machine safety hazards and the claws and teeth actions of live zoo animals. It is appropriate for military audiences and has been shown in pilot programs in the Navy and Marine Corps.

NEM

Creative Hamburger Sandwich Preparation (FS 158; 10 min)

Demonstrates imaginative ways to prepare and present this popular short order item. Special emphasis is given to use of cheeses, garnishes, and alternative accompaniments. Two of these films were purchased for use in Navy and Marine Corps management programs.

NEM

Short Order Cookery (FS 137; 10 min)

Illustrates the operation and care of the grill as well as how to prepare many types of food simultaneously. Emphasizes personal appearance required for cooking in the public eye. While short order cooking in a military environment does not require the "juggling" that a civilian environment does, the film's treatment of grill maintenance and use are thorough and appropriate.

APPENDIX B (CON'T)

REVIEW OF FOODSERVICE TRAINING FILMS

SOURCE

NEM

Stopping Food Service Waste (FS 161; 10 min)

A dramatic presentation that encourages employees to avoid wasteful habits in regard to food, dishware, and utensils. Only a few of the examples used, however, apply to military situations.

NEM

Sanitation and Hygiene: Basic Rules (FS 154; 10 min)

Points out hazards in regard to poor personal hygiene and improper treatment of food. Pest control methods are also illustrated. The film is targeted at an unsophisticated audience and the subject matter is appropriate for the military food service environment.

NEM

Portion Control: A Team Effort (FS 142; 12 min)

Demonstrates techniques for measuring, weighing, preparing and serving foods in a restaurant setting. Few, if any, examples can be related to a military food environment.

NEM

Give Your Eggs a Break (FS 102; 10 min)

Shows how to prepare six egg dishes: omelet, scrambled, boiled, fried, poached and shirred. The care and handling of eggs is also described. Much time is devoted however to the preparation methods that the military does not use. Also, the kitchen equipment used for demonstration is not suitable for quantity production.

NEM

Vegetable Preparation (FS 133; 10 min)

Demonstrates how to cook vegetables while maintaining color, taste, texture, and nutritive values. While some attention is directed toward preparing frozen vegetables, the main emphasis is on fresh vegetables.

NEM

Profile of a Manager (M 313; 14 min)

Focus is on management of "critical incidents," such as worker conflict, becoming a superior to former peers, and answering to a dissatisfied boss. The professional executive environment depicted here is not seen as broadly appropriate for, or relevant to, military food service.

APPENDIX B (CON'T)

REVIEW OF FOODSERVICE TRAINING FILMS

SOURCE

Culinary
Institute of
America (CIA)

Sandwich Preparation (VT 26; 20 min)

Displays methods for making eight types of sandwiches: Monte Cristo, Reuben, turkey, beef, club, cheeseburger, hot dog, and grilled cheese. Tips on plating and garnishing are offered. (Not reviewed by Natick R&D Center)

CIA

Vegetable Carving (VT 36; 33 min)

The "how-to" of making vegetables such as turnips, carrots, scallions, and squash into flowers like gardenias, tiger lilies, roses, and daisies is demonstrated. (Not reviewed by Natick R&D Center)

US Navy

Basic Meat Cookery (22 min)

Comprehensive presentation of dry heat/moist heat methods of meat preparation.

US Navy

Soups, Sauces, & Gravies (24 min)

Fundamentals of preparing these items are explained. Soups are subdivided into light, heavy, and creamed categories.

US Navy

Food Service Equipment - Part I (20 min)

Shows operation and care of food mixer, electric, griddle, oven, steam-jacketed kettle, and deep fat fryer.

US Navy

Food Service Equipment - Part II (15 min)

Shows operation and care of vegetable peeler, vegetable cutter and slicer, and rotary toaster.

US Navy

Food Preparation Worksheet (20 min)

General information is presented along with a discussion of item choice prediction, cost reductions, and work scheduling. Specific examples are given.

APPENDIX C

PLANNING A MENU

Videotape Script by

Bruno A. Koch

PLANNING A MENU

Videotape Script

Exterior of harbor
or naval yard

NARR: These magnificent fortresses of steel and armor glide through the oceans of the world by day and by night.

Majestic in appearance and awesome in power, they make up the floating arsenal of the United States Navy.

Respective activities

The men and women on board perform many tasks. They attend to weapons, maintain machinery and care for the needs and comforts of their shipmates.

Galley

Among those dedicated to the physical and, yes, psychological well-being of the crew are the persons who procure, plan, prepare and serve the food.

Menu

These are the specialists of the foodservice division, providing the nourishment that keeps bodies healthy and spirits high. Their activity, in no small measure, is spawned by that carefully designed composition of food items known as the menu.

This program intends to focus on the planning of the menu.

Guide with LMS in
background reviewing
material

Hello, my name is _____. I'll serve as your guide, narrator, interviewer and commentator.

The familiar phrase, "there may be more to it than meets the eye," applies most certainly to the planning of a menu. Indeed, several programs, each the length of this one, would be needed to cover in detail the various facets of putting together a menu. This program, therefore, is designed to provide a basic outline of the written guides, the various management tools and other relevant factors as well as the procedural steps that are involved in planning a menu.

With this in mind, then, let us start by asking: what exactly is a menu?

Meal

Well, a menu is a carefully designed meal, reflecting both imagination and an intelligent application of established management principles. It should be aesthetically pleasing, nutritionally sound and administratively feasible.

Having defined what a menu is, we might go on asking what a menu is supposed to accomplish in the overall scheme of things?

People in line selecting food, then eating it

The menu, clearly, is at the very heart of taking care of the physical well-being of men and women in today's Navy. Attractively and appetizingly served, it represents a significant source of enjoyment and thus contributes vitally to a high standard of morale. In light of this fact, its importance in the lives of Navy personnel would seem amply apparent.

The process of planning a menu is basically the same, no matter if we are on board a ship or an ashore facility. What, then, does it entail?

LMS in background

Well, first of all, there are people. Experts. Mess Management Specialists. One of these is the Leading Mess Management Specialist, principal architect of the menu by employing both science and art. The support system includes written guides and a number of management tools.

CU's of publications

For instance, Foodservice Management, also known as NAVSUP P-486, is the authoritative reference on matters of operation and foodservice personnel, governing the conduct of menu planning and general foodservice management.

Food Service Operation, or NAVSUP P-421, sets forth definitely the principles of menu planning.

Mess Management Specialist 1 & C deals with the administrative and technical roles of the MS Petty Officer First Class and Chief Petty Officer, and Mess Management Specialist 3 & 2 discusses the various specific requirements associated with the foodservice operation.

In addition, there is Navy Foodservice, or NAVSUP P-476, a quarterly publication of the Navy Foodservice Systems Office at Washington, D.C. It contains selective, up-to-date information on practically all aspects of foodservice operation.

Local publications, such as newsletters distributed by the Navy Food Management Teams furnish information of special interest about items of local concern to area Navy foodservice establishments. The standard publications are rounded out by the Armed Forces Recipe Service, NAVSUP P-7, a file of about 1,600 recipes and recipe variations, printed on five-by-eight-inch colorcoded cards.

The Index of Recipes is an adjunct to NAVSUP P-7, offering ideas for new and interesting combinations.

Then there is NAVSUP Inst. 4061.11 series (Standard of Food Service), defining the standards of Navy foodservice operations.

Of course, the Leading Mess Management Specialist may also have a small private library, consisting of material pertinent to any conceivable issue in menu planning.

Now, important as they are, the above guides constitute only a part of the total resources which are at the disposal of the Senior Mess Management Specialist. Planning tools are available, one of which is the Acceptability Factor. This is an index of the popularity of menu items, representing the likes and dislikes of patrons as a group.

Food preference rating may be given both verbally or by filling out rating sheets.

Formal meal evaluations are another device to register patrons' reactions.

The Leading Mess Management Specialist also draws on various types of records. For instance, the Enlisted Dining Facility Control Record, NAVSUP FORM 338, provides crucial financial data.

Then there are Meal Attendance Predictions, past menus, worksheets, frequency charts, calendar of events, meal attendance records and the Food Item Report/Master Food Code List (NAVSUP FORM 1059), instrumental for choosing food items and cost considerations.

There is the listing of specific items that are restricted, information identifying the frequency of re-supply and the number of duty sections.

To narrator

These, then, are the essential tools for planning a menu.

Yet we have by no means completed the informational background needed for sound menu planning.

Visual display of factors

Other relevant factors are to be considered, such as the Basic Daily Food Allowance, or BDFA.

Personnel, both in terms of numbers and skills, must be accurately assessed, and this applies also to the availability of foods during certain seasons.

Storage facilities, very importantly, should contain a suitable balance of perishable and semi-perishable foods.

Artistic aspects, as variety in choices, texture, flavor, shape and form, together with the requirements of adequate nutrition, must be given appropriate attention.

"Think thin" is not just a slogan to be recalled when reaching out for a desert in the serving line, but must be part of the design strategy resulting in meals that make for alert and able bodies.

Finally, there are the comments, criticisms and suggestions of the Review Board which should be given due consideration.

Equipped with the information that goes along with the mentioned guides, tools and relevant factors, the Senior Mess Management Specialist sets about the task of developing the initial menu.

I want you to meet now the person who periodically faces the challenge of planning a menu.

Narrator approaches
LMS. Sits.

Here, then, is Senior Mess Management Specialist Chief _____, whom you briefly saw earlier reviewing some of the literature we outlined.

Chief, I wonder if you could share with us some of the secrets of your profession.

CHIEF: I'll try to do my best.

NARR: We've defined already the nature and function of a menu. Since our concern in this program is the cycle menu, could you explain to me what it is.

CHIEF: A cycle menu is a series of menus, planned to be used consecutively. They are also repeated, with some potential variations, over a period of time.

NARR: How long does each cycle period last?

CHIEF: Well, as many weeks or months as is practical. However, my cycle length is five weeks.

NARR: And how long do you use it?

CHIEF: Usually for a period of several months. The seasonal periods lend themselves as a convenient time frame, and they are also very practical for operational commitments away from home port.

NARR: I take it you are referring to spring, summer, fall, and winter as well as to extended deployments?

CHIEF: Yes, Sir.

NARR: Wouldn't it be easier to plan a menu for a day, or, say, a week?

CHIEF: A cycle menu has a number of advantages. It is probably the best method to improve and perfect the quality of a particular meal. Deficiencies can be corrected when the meal is served during the next rotation. Time is used most efficiently and cost control and supervision maximized. Moreover, it best facilitates loadouts and training possibilities.

NARR: Sounds very impressive.

CHIEF: You see, a cycle menu affords administrative shortcuts without compromising the all-important factors called acceptability and accountability.

NARR: Yes. Could you indicate to me what changes you might make during a particular rotation?

CHIEF: All right. Suppose a national specialty is regularly repeated. Many patrons may find that unacceptable. I could replace such a dish with one more familiar to the crew. So, sukiyaki could be alternated with grilled steak, or Yankee pot roast with hot roast beef sandwiches. Of course, the same principle would apply to other items on the menu.

NARR: I understand. Any other example you can think of?

CHIEF: There are various ways to prepare the same basic foods. Fried chicken may be followed up by chicken cacciatore, and the basic meat-potato combination can be made less monotonous by changing the potato or potato-substitute component of the meal.

NARR: I see.

CHIEF: Sometimes the lunch menu may be used for dinner and the dinner menu for lunch. Special meals, such as "Sea Captain's Dinner," "Hawaiian Night," or "Mariner's Delight" can brighten up the menu, say, two or three times during a cycle. Selective menus, offering an alternative to a less popular entree or vegetable, or combining a high-cost with a low-cost entree, represent suitable changes as well.

NARR: All right, this gives me a pretty good idea what a cycle menu is all about. Also, it sets the stage for taking a closer look at how a cycle menu is actually drafted. I believe that drafting the initial menu is part of your responsibilities?

CHIEF: That's correct.

NARR: Well, then, let's see how you go about it.

CHIEF: First, it's important to remember that planning the various items of a menu calls for integrating a good deal of data.

NARR: You're referring to the guides, tools and relevant factors outlined earlier?

CHIEF: Yes. It's with all this information in the back of my mind that I start by developing the meat block.

NARR: What's that?

Chart

CHIEF: The meat block consists of a chart listing how often I plan to serve beef, veal, pork, lamb, poultry and meat substitutes during my five-week cycle menu.

NARR: Why use a chart?

CHIEF: It's a handy device to insure optimal distribution of the various meat items.

NARR: Any special reason why you start with the meats?

CHIEF: The meat component is the predominant feature of a meal. It's the major referent, if you will, that identifies a lunch or dinner.

NARR: Not sure I understand.

CHIEF: If somebody were to ask you what you had for dinner last night you'd probably say "steak" or "lamb chops," wouldn't you?

NARR: Oh, I see.

CHIEF: Another reason is money. Meat accounts for over forty percent of the ration cost. That makes it the largest single dollar investment in the menu.

NARR: Almost half the cost, eh?

NAVSUP 1092

CHIEF: That's right. So, after finishing the meat block I begin to transfer it to a form known as the NAVSUP 1092. As you can see, I enter the various meats, or entrees, with the help of color-coded pencils. I think I'll add a roast turkey leg for dinner on Sunday to round out this cycle.

NARR: Why use colors?

CHIEF: It helps to visualize how effectively I have distributed the various meats and meat substitutes.

NARR: A quick way to detect if meat items are properly spaced out and varied.

CHIEF: Right.

NARR: Anything else of importance in this block?

CHIEF: Yes, I must come up with a reasonable balance between meats and meat substitutes. Oh, I believe I haven't mentioned breakfast meats yet, have I?

NARR: No.

CU of breakfast
meats on chart

CHIEF: Breakfast meats are an integral part of the planning. They have to be carefully coordinated with the meats served at lunch and dinner. Patrons would not like it if they are served sliced ham for breakfast and baked ham for lunch.

NARR: Understandable. Does that take care of it?

CHIEF: Seems we've touched on the most important points.

NARR: Good. Let's do the same for the next block.

CHIEF: Ok. Potatoes and potato substitutes.

NARR: Any key points here?

CHIEF: Potatoes, first of all, are well-accepted. They can easily be served twice a day, and on occasion even three times.

NARR: Are some potatoes more popular than others?

CHIEF: Sure. I'd say that fresh potatoes, boiled, mashed, baked or fried, are probably the best liked. Of course, it's a good idea to serve also at regular intervals non-perishable potatoes and potato substitutes. That holds especially true during long sea periods.

NARR: Tell me, does variety pose a problem?

CHIEF: Not really. In addition to fresh you have dehydrated potatoes. They allow you to mix things up.

NARR: Can you illustrate?

CHIEF: Dehydrated potatoes come in sliced, diced, hashed brown, potato mix for french fries. They also come in granulated instant form. The sliced type I can grill, or serve au gratin or scalloped. The granules I can serve as snow flakes, waldorf or duchess potatoes. The diced may be used for hashed brown potatoes or in scalloped type potato dishes. Hashed brown potatoes, of course, can be used for breakfast potatoes. The potato mix product is to be used in conjunction with an automatic french fry extruder which automatically mixes and dispenses the product for frying.

NARR: Quite a bit of variety there. How about potato substitutes?

CHIEF: Here you're talking about macaroni, noodles, spaghetti and rice. Basically, they increase variety in appearance and taste in the menu. (Enters item.)

NARR: What'd you do?

CHIEF: Think candied sweet potatoes go ok with baked Virginia ham?

NARR: Fine with me.

CHIEF: Ok, that does it for the starches of this cycle.

NARR: Where do we go from here?

CHIEF: The vegetable block.

NARR: What's important here?

CHIEF: Visual appeal is imperative. People, you see, eat meals with their eyes first.

NARR: Tasting them just by looking at them, eh?

CHIEF: Right. That brings up color. One of the key elements in developing the vegetable block.

NARR: What do you have to do?

CHIEF: See, it's coordination. Meat, potatoes, gravy, vegetables and the other complementary items must be conceived in terms of the right color combinations. This is part of the artistic aspect in planning.

NARR: Appears to be one of the greater challenges?

CHIEF: You can say that. I should add, by the way, that color is also related to the vitamin content of a food. Practically, this means that variety in vegetable color makes for good nutrition as well.

NARR: Interesting.

CHIEF: The second key element is frequency. The vegetable block, I should say, is perhaps a bit more limited in variety than the meats.

NARR: How so?

CHIEF: Beef I could serve every day and each meal would look different. But carrots are carrots. No hiding that fact.

NARR: I get the point.

CHIEF: Take your basic vegetables: green beans, peas, corn, carrots, broccoli, brussel sprouts, greens, asparagus, beets and so on. What'd you have? About a dozen vegetables or so.

NARR: Quite a bit, isn't it?

CHIEF: Let's see. If you figure that for lunch and dinner you use four of them, it's not difficult to realize that you'll have to repeat yourself within the next two days or so.

NARR: Think I was mistaken, wasn't I? Any other considerations?

CHIEF: On the whole, I must make sure that I distribute fairly fresh, canned, dried and dehydrated vegetables.

NARR: Do costs matter?

CHIEF: Generally speaking, no. Asparagus may be the exception. It's very expensive. (Enters item.) How do you like buttered niblet corn and seasoned squash with grilled salisbury steak, oven brown gravy and rissole potatoes?

NARR: Makes me want to eat. I take it that's it for the vegetables.

CHIEF: I believe so.

NARR: I'm afraid we have to move on quickly.

CHIEF: Ok, why don't I cover the remaining blocks by just touching on the highlights.

NARR: Please.

CHIEF: After the vegetables come the salads and salad dressings. The Armed Forces Recipe Service has a substantial number of suggestions which make for a varied salad menu of first-rate quality.

NARR: Your salad bars, I presume, are pretty standard?

CHIEF: Correct. The same holds true for breakfast fruits, juices and cereals.

NARR: How about desserts?

CHIEF: Desserts have to be carefully planned in regard to acceptability and eye appeal. Also, climate, cooking facilities and the particular skills of personnel must be taken into account. Keep in mind, desserts are the last item on the menu. People are still tasting them when leaving the dining facility. So, they contribute vitally to the impression that patrons have of the meal as a whole.

NARR: Right.

CHIEF: After I've filled in my salads, salad dressings and desserts, I continue with the breads, breakfast pastries and beverages.

NARR: Soups?

CHIEF: Oh, yes. Soups are planned toward the end. However, this is no reflection on their relative significance. Soups must be planned to complement other menu items such as light meals, thick soups, heavy sauce-type meals and light soups. This accounts for being among the last items to be developed.

NARR: Is that it?

CHIEF: Looks as if we've covered all the blocks. Naturally, there are many more things we could talk about.

NARR: Such as?

CHIEF: Weather, for instance. I must know whether it's going to be cold, moderate or hot when I plan the menu. Obviously, you don't want to burden the crew with heavy food in tropical heat. Incidentally, did you know that a light hot soup cools down the body when it's hot?

NARR: Is that so?

CHIEF: Another problem you're always faced with is how to highlight a particular entree.

NARR: What'd you mean?

CHIEF: How do I motivate my patrons to choose one entree over another? What must I do to "sell" or perhaps popularize, a particular item? Or how can I accommodate people who want to go to a Sunday morning service but don't feel like eating breakfast first? Or those who want to sleep in?

NARR: Well, what'd you do?

CHIEF: Offer them brunch.

NARR: I see. Chief, I'm sorry we've got to stop here. It's quite clear that designing a menu is a complex undertaking.

CHIEF: Yes, it takes continued study and years of experience to plan competent menus.

NARR: I'm convinced of that. But we have to bid farewell to menu drafting. Maybe we should be doing that by looking at a few samples of your art. How about that?

CHIEF: Ok, let's do something with beef, pork, poultry, fish and, say, a miscellaneous menu.

NARR: Sounds good.

We see various recipes

CHIEF: All right, here we go with the beef. Let's start with chicken noodle soup, together with tender sliced roast of beef, fluffy snowflake potatoes, tasty natural beef gravy, tender young peas and mushrooms, tasty carrots in thick normandise sauce, chef's salad, sliced tomatoes, chilled cottage cheese, rich cherry pie and devil's food cake with chocolate frosting.

NARR: Makes my mouth water.

CHIEF: The pork menu might begin with a beef vegetable soup, followed by tender juicy pork loin roast, fluffy rice pilaf, tasty natural pork gravy, sauteed greenbeans and onions, simmered blackeyed peas, southern style corn bread, chef's salad, three bean salad, sweet apple pie, autumn delight layer cake with spicy cream frosting, chilled applesauce.

NARR: You should find plenty of customers for that. Let me ask you, what sort of menu would you recommend staying away from?

CHIEF: Ok, try not to serve a menu such as mushroom soup, creamed chicken, mashed potatoes with a light gravy, corn, squash and apple pie. Uniformly light in color. No contrast. See?

NARR: Sure do.

CHIEF: Instead consider the following: thick cream of tomato soup, crisp southern fried chicken, golden glo potatoes, thick golden chicken gravy, mixed vegetables, tender steamed broccoli, chef's salad, tangy coleslaw, chilled cranberry sauce, home-made apple pie, golden yellow cake with rich chocolate frosting.

NARR: I'll consider that any time, Chief.

CHIEF: Let's see what we can do with fish. I suggest we go as follows: rich corn chowder, broiled lemon buttered halibut steak, chicken fried beef patties, rich baked macaroni and cheese, southern style hush puppies, seasoned broccoli, seasoned waxed beans, chef's salad, tasty coleslaw with pineapple tidbits, spicy seafood cocktail sauce, creamy tarter sauce, sweet lemon meringue pie, chocolate soft serv ice cream, lemon flavored sugar cookies.

NARR: That should stimulate a few taste buds, I'd think.

CHIEF: And here we go with a miscellaneous menu: thick creamy split pea soup with ham chunks and crisp croutons, grilled Reuben sandwich, New York style egg sandwich, crisp potato chips, golden french fried potatoes, tender green beans, garden fresh corn-on-the-cob, fresh lettuce wedges, sliced ripe tomatoes, lime gelatin and celery salad, chewy butterscotch brownies, sweet peach pie, old-fashioned vanilla soft serv ice cream.

NARR: I can see many faces lighting up when seeing this one.

CHIEF: That's what it is all about.

NARR: Well, Chief, thank you for sharing your expertise with us on how to draft a menu.

CU of Narrator

After the initial menu has been drafted, the Leading Mess Management Specialist reviews it several times. This is to make sure that requisite information and factors have been duly considered, detecting errors that call for appropriate changes.

Assured that all has been done, a meeting with the Menu Planning Board is held.

Narrator with Board
in background

The Menu Planning Board is charged with a rigorous and detailed review of the initial menu. It consists of key personnel of the foodservice division. Consequently, its members bring to bear its collective wisdom. Their task is to scrutinize as closely as possible whether or not food choices are sufficiently varied, properly spaced and commensurate with galley equipment, work load and other administrative requirements.

Let us join the meeting. The Leading Mess Management Specialist, very likely, has already alerted the Board to information pertaining to certain menu decisions. Let's listen in.

A: I noticed that on Tuesday of Cycle 2 there are six items requiring steam kettle cookery. One of those items needs two kettles right up to serving time. That makes it impossible to get the meal out on time.

LMS: You're right. I overlooked that. The meal will be changed.

B: On Thursday of Cycle 6 I see three types of sandwiches that call for grilling. We are asked here to do more grill work than we can handle.

LMS: I disagree. Grilled cheese, grilled ham and cheese and grilled tuna and cheese need relatively little preparation. The three types of sandwiches won't take up more grill space than having just one. Let's go ahead as is.

C: The vegetables on Saturday of Cycle 3 are the same as Friday's.

LMS: Very good, I missed that one. Ok, let's change it to lyonnaise carrots and whole kernel corn.

CU Narrator

NARR: Well, this gives us an idea as to the typical exchanges taking place when the Planning Board meets. It would seem obvious that it figures into the planning process in a very vital way.

After the Menu Planning Board has reviewed the initial menu, the Leading Mess Management Specialist implements all suggested changes and submits it to the Food Service Officer.

At this point it should be noted that the Food Service Officer may have attended the Planning Board meeting, providing input at that time. Yet, let us stress that while the Food Service Officer's presence may be desirable, it is by no means required.

ISO at desk

In any event, the Food Service Officer is the highest authority in the division, with the ultimate responsibility for the menu before it is submitted to the Commanding Officer. And that makes it necessary that the Food Service Officer comprehensively review the initial menu, examining it in regard to nutritional balance, food supplies, equipment and personnel management. Upon completion of the review, the Food Service Officer returns the proposed menu to the Leading Mess Management Specialist either with notes for further changes or with approval.

CU of form

The menu is then typed on a NAVSUP Form 1080 or printed, depending on circumstances. After it has been signed by the Food Service Officer and the Leading Mess Management Specialist, the typed or printed menu is submitted for approval to the Commanding Officer.

Menu Review Board

However, let us consider first another Board that has a role in menu planning. We are speaking here of the Menu Review Board.

The Menu Review Board consists of members from all divisions on board a ship or naval base. Its size is determined by the Commanding Officer. As a result, its membership may vary from one representative from each division to a more limited or broader membership.

The Menu Review Board, under the chairmanship of the Food Service Officer, functions in an advisory capacity. It supplies suggestions, criticisms and comments. On the other hand, it is a convenient vehicle to provide patrons with an understanding of the resources and limitations of the foodservice operation.

Let's listen in for a while.

A: It seems that we have an awful lot of chicken. Would it be possible to serve it in a greater variety?

FSO: Well, first of all, if you take a close look at the menu you'll notice that chicken is served once a week. So you see it's really not offered that often as your comment implies. Keep in mind, too, that chicken is highly acceptable to the crew. However, your suggestion is well worth considering.

B: The people I represent want to know why Navy chow is so bland. They like a bit more flavor.

LMS: Taste is a very personal matter. I don't mean to sound defensive, but we have to serve every one. This explains why we spice the food just enough to be acceptable to most. The rest can be done by the individual making use of salt, pepper and other condiments on each table.

C: I'm an ice cream buff. You serve only chocolate and vanilla. I'm curious to know if we could install ice cream freezers so as to have more to choose from?

LMS: Cost considerations are involved here. Novelties are very expensive. And there may be a negative impact on nutrition. Some people just might make ice cream their entire meal. Nevertheless, we'll keep on pursuing the matter.

D: I noticed that you have no simmered pinto beans or collar greens in the sixth cycle. I happen to like them. Can you do anything?

LMS: Good point. In fact, we noticed it ourselves a few days ago. We are in the process of correcting it.

D: Thanks.

CU of Narrator

NARR: What you have just heard is probably a fairly characteristic exchange in a Menu Review Board meeting.

Keep in mind that the Review Board is an optional element in the planning process. This distinguishes its function clearly from the Menu Planning Board, which is considered an indispensable link in the overall planning.

I should mention, too, that minutes of both meetings are submitted jointly with the proposed menu to the Commanding Officer. Depending on disposition, requests may be honored immediately in the current menu or the next.

CO behind desk

And this, finally, brings us to the review of the menu by the Commanding Officer.

(Knock on door)

CO: Come in.

FSO enters

FSO: Good afternoon, Captain.

CO: Good afternoon, Lieutenant. Take a seat. I'm just about finished.

FSO: (Sits) Thank you, Sir.

CO: So, the folks from the Menu Review Board like chicken done with a little more variety, eh?

FSO: Yes, Sir.

CO: Well, see to it, Lieutenant. Otherwise things look fine to me.

(Signs menu. Hands menu to FSO.)

Good job, Lieutenant.

FSO leaves

FSO: Thank you, Sir.

CU of Narrator

NARR: Well, that about wraps it up. With the Commanding Officer's signature the official procedure has been completed. The menu is active for the designated period.

Let's conclude the planning process by reminding ourselves that knowledge, imagination, methodical thinking, experience and a considerable cooperative effort of many persons are required to develop competently a cycle menu.

It is indeed a complex task, involving both expertise and sustained dedication to bring sound nourishment as well as enjoyment into the lives of women and men in the United States Navy.

We would surely be amiss if we were to conclude this program without calling attention to a technological tool which is transforming life today on an unprecedented scale: and this is the computer. Its impact on the future will not be lost on the topic under discussion. What, to be specific, might be the likely contributions to menu planning?

The following outline provides a rough sketch as to the range of information of which foodservice personnel, especially the Leading Mess Management Specialist, will be able to avail themselves in the not-too-distant future.

First of all, the computer will furnish the Leading Mess Management Specialist with a printout of the entire operational status.

Second, when a menu is submitted to the computer, it will issue the following data:

Appropriate visual
display

1. Cost of each meal.
2. Number of stores required to cover the menu.
3. Past acceptability of each item.
4. Acceptability of each vegetable when served with a particular entree.
5. Status of equipment.
6. Approximate number of people expected for each meal.
7. Manhours required for preparing a meal.
8. Manhours involved in preparing baked goods and vegetables.
9. Calorie count for each meal marking dietary foods.
10. Recommendations for (a) meat breakouts; (b) produce/dairy breakouts, (c) bake shop breakouts and others.

Third, when a menu has been approved, the computer will assist the Leading Mess Management Specialist with:

1. Requisitions to stock point for 45-60 days (taking into account on-hand inventory);
2. Daily requisitions for the jack-of-the-dust;
3. Worksheets for each day;
4. An accounting for stock movements;
5. A financial statement of the day;
6. Up-to-date inventory for review purposes;
7. The status of meat availability and usage.

Finally, the computer will keep records, print out requirements and submit monthly and quarterly reports for menus and menu planning.

CU of Narrator

It would seem evident that the computer, then, has the potential to facilitate a more efficient use of time, superior management and training techniques in procuring sanitation, planning and preparation of meals. And such advances should serve to bring closer the ultimate goal of every foodservice division: better service to those who spend their lives in the service of their country.

APPENDIX D

CUSTOMER FEEDBACK SYSTEM

APPENDIX D

CUSTOMER FEEDBACK SYSTEM*

The importance of customer opinion is recognized by civilian and military foodservice managers. Unfortunately, little has been done to systematize the collection and use of customer data, thus many of the potential benefits of customer feedback have not been realized. Foodservice people need to know when they are doing well; they need to know when improvements are in order. Customer opinion is a major, largely untapped, source of such information.

The customer feedback system described here can provide the foodservice manager (and his workforce) with a valid report on customer satisfaction. The system has been used in a variety of military and civilian foodservice operations and found reliable; of course, whether or not the system is put to a useful purpose depends on how it is implemented by managers, and how its data are interpreted and perceived by the workforce.

The Hedonic Face Scale** is the principal data collection component of the system. There are advantages to having a customer drop a chip in a slot to indicate his opinion, as compared with a paper-and-pencil approach; not the least of these advantages is the minimum time and inconvenience to the customer. Ease of data summary and interpretation are also important positive features of the system.

The NRDC Project Team provides assistance to managers in using the Customer Feedback System; however the experimental aspect of using the system is its use by the military foodservice manager. The system has been sufficiently tested in military dining halls, but exclusively by civilians.

* Appendix D was a handout provided to EDF managers at the time of the survey.

** Hedonic scales measure degree of liking.

The Model Dining Service Program provides an excellent opportunity for the new system to be used by military personnel. To this end we describe procedures and benefits as follows, but also encourage the foodservice manager to innovate whenever the situation seems appropriate.

Instead of the traditional pencil-and-paper approach, the facial scale uses a "ballot box" form. It consists of a narrow rectangular box with nine compartments (see Figure 1). Above the compartments are faces which show graduated levels of pleasure and displeasure (see Figure 2). The middle face is neutral. The compartment below each face has a slot. Each customer participating in a survey is given a round chip which he places in the slot underneath the face that matches his degree of pleasure or displeasure with the meal or any other issue which is being questioned. A sign which poses the survey question is attached to the box above the faces.

How The Scale Can Help

Use of the scale along with any necessary follow-up procedures can provide managerial assistance in a number of areas. It can:

- * improve customer/workforce/management relationships -- Patrons are quick to state their gripes, but not as free with their praise. Obtaining a favorable response to a meal through a survey is one way of acquiring a "pat on the back" for cooks. Praise is an effective motivator and cooks do not usually receive what they deserve in this regard. Surveys also make the customer feel important because his opinion is being sought. They also provide a communication medium for workforce/management.
- * help define problem areas -- For instance, a manager may assume that customer dissatisfaction centers around food and try to remedy the situation to no avail, while investigation could reveal that customers are objecting to long lines. A problem cannot be solved until it is identified.
- * track progress -- Once a problem has been defined, subsequent surveys can indicate the effectiveness of remedial or other measures.

How To Collect Data

There are a number of factors that must be considered if meaningful information is to be obtained from any survey, including this ballot box type. The most important factor is ensuring that survey responses represent a true cross-section of the dining facility patrons. If responses are obtained from only males over 35, or females under 20, the survey data may be meaningless. A small group can only speak for the whole group when it is representative of the whole group.

For all practical purposes the best way to collect data in a dining facility is to ask for responses at intervals as patrons come off the line. This can be done systematically by taking the projected head count for a meal, divide by the number of responses being sought, and then use that number to determine who will be asked to participate. For example, if the projected head count is 500 and 50 responses are being sought, every 10th person who comes off the line ($500/50=10$) should be asked.

Another way would be to distribute chips at intervals over the meal time to all parts of the dining facility. Seats and tables should be chosen that assure relatively even distribution; that is, the survey effort should not be confined to one area of the dining facility nor to persons sitting in a group.

Care should be taken that responses are not sought from inappropriate patrons. For instance, a person eating a short-order item should not respond in regard to the main entree, nor should visiting cadets respond to questions pertaining to the operating hours.

Other very important aspects of conducting surveys concern influencing the customers and customer response anonymity. The former means that the person or persons who conduct the survey should never make any comments, gestures, or facial expressions that are other than neutral, even if they are in jest. The latter means that the boxes should be placed so that the customers'

responses are visible to as few people as possible. Also, the person(s) conducting the survey and other dining facility personnel should try to remain out of the vicinity of the response boxes as much as possible.

Surveys should be taken on a typical work day. Paydays, holidays and weekends are poor times to collect data, unless information is being sought in regard to such times or unless extensive data are being gathered.

For any survey question approximately 50 responses should be collected in order to obtain meaningful information. When attendance permits, it would be beneficial to acquire 100 responses. Not all customers who agree to respond actually will. If 50 chips are distributed, 3 or 4 will probably not be returned.

Not all customers approached are willing to participate in a survey. These patrons should not be pressured in any way to change their minds. Replies to them should be courteous and neutral.

Data Analysis

Once the chips have been collected, the next step is to record the response and analyze them. A data sheet has been provided that facilitates calculating the average, or "mean" (as the statisticians call it), of the responses (see Figure 3). The sheet will also show what is termed the distribution of these responses. The distribution will indicate whether the customers tended to respond as a relatively unified group or if there were different points of view represented.

Once the average is calculated according to instructions on the data sheet, its significance can be interpreted. In general, a rating of 6 or higher indicates approval or acceptance. A rating of below 5 indicates disapproval or nonacceptance. A rating of 5 is considered unacceptable for food items, whereas for nonfood ratings, it is considered a "so-so," or neutral response.

To be more specific in regard to food ratings, research has shown that ratings should be high 6's or 7's to show acceptability for entrees and desserts. Starches should also merit 7's and vegetables should earn 6's for good acceptability levels. These numbers, however, do not always have to be considered absolutes. For instance, an entree is rated a 6 after previously being rated a 4 can certainly be considered acceptable. The overall picture must always be assessed.

As mentioned earlier, the data sheet shows the distribution of the responses. It is found in Column I, that is, it is the number of chips recorded for each face. In most cases, the responses will "cluster," that is, most of the chips will fall among sequential numbers such as 3 through 6, 6 through 8, etc., and the average will often be one of these numbers within the cluster. This shows that the average typifies majority opinion.

Sometimes, however, the distribution will show more than one distinct cluster. When the average is calculated for this distribution it may not fall in either cluster, and so the average cannot be considered a typical value for this set of responses. Such a situation may occur, for instance, in the case of highly seasoned chili. Patrons who like their chili bland will probably give the chili low marks, whereas those who like it spicy will rate it favorably, thus, producing two clusters of customer responses. In this distribution, the average probably will fall between the two clusters and does not indicate a general opinion of the chili.

How To Begin

Some suggestions for implementation and follow-up are now in order. Conducting some meal surveys would be a good starting point, as this type of information can be used to serve a number of purposes, and concerns everybody who is in anyway involved in the facility.

Initially it would be worth the effort to collect as much data as possible in order to establish a baseline from which progress or maintained quality can be monitored. This means that a number of breakfasts, noon meals, and evening meals should be surveyed over perhaps a period of a month. The meals surveyed should be representative, that is a proportionate number of popular and not-so-popular entrees. A survey investigating how the patrons feel about their facility overall is also in order during this time period.

Once the data have been gathered and the averages calculated, the next step is to look at the meal ratings generally. Breakfast ratings are normally higher than those of the other meals, so it is often better to look at noon and evening meal ratings for a more valid indication of customer food acceptance.

If the surveys show ratings below a 6, it is time to look for causes. Two very good sources that can help identify the reasons for dissatisfaction are the customers and the workforce. Meetings are a good communication method for allowing the cooks to have input in regard to problem areas and for allowing suggestions for their remedy. Effective communication can improve management/workforce relationships as well as giving the workforce an added sense of importance. NRDC's experimental form FSM X-2 can be used at these meetings to display the ratings. More feedback can be sought from the customers either through the facial scale or by composing appropriate pencil-and-paper surveys.

The issues discussed thus far indicate some directions to take when ratings are low. What should be done if ratings are high?

The answer is not to put them in a folder and file them. They are praise and should be communicated. They are good for morale and could spur even better performance.

In the case of mixed ratings, it is especially important to emphasize the positive ones for the reasons mentioned above even though it is recognized that attention must also be paid at the same time to deficient areas. Communicating

and emphasizing high customer ratings also benefits workforce/customer relationships; the workforce will be made conscious of the fact that not all customer feedback is negative.

If answers to the survey question "How do you feel about your dining facility?" reveal overall dissatisfaction, follow-up procedures are obviously in order. The contributing factor(s) must be identified, and again, help can be sought from customers and the workforce. More survey questions that investigate physical and operational characteristics of the dining facility are included in the system which can be used along with specific food quality questions.

When the problems that contribute to general dissatisfaction are identified, a good psychological approach would be to remedy at least one situation quickly. When this is accomplished, the improvement should be actively communicated to the customers. This type of positive action should improve the customers' attitudes as they will feel their opinions matter; that is, their preferences or wishes have been heard and acted upon.

Depending on resources and talents available in the dining facility, communication to customers can take many forms: fliers, posters, notes on bulletin boards, etc. NRDC experimental FSM Customer Response Form can also be used for this purpose (see Figures 4 and 5).

It was mentioned previously that the facial scale can be used to track progress. Once a baseline has been established, subsequent surveys should be taken to determine whether and how much progress is being attained. This information should then be conveyed to those concerned and displayed in some form. A graphic method for displaying progress is also included in this system which can be used with the other methods.

The facial scale used in conjunction with the follow-up procedures described comprises the Customer Feedback System. It can be a valuable tool in

the establishment or maintenance of customer/workforce/management relationships. It can provide visible evidence of progress or maintained quality. It must be remembered, however, that no number should be considered the final word on an issue and no number will ever be a substitute for food judgement.

At this point it might be worth the reminder that there is no way to make everybody happy. No matter how excellent a dining facility is there will be people who use dining hall surveys to express dissatisfaction in their lives. Dining halls make convenient targets. This does not mean that there is no point in striving for excellence. Excellence is always the goal, and success is measured by progress toward the goal, not simply reaching it.

APPENDIX E

FOOD SURVEY CARD

We would like your opinion of the meal you have just eaten. Please circle the number next to the words which best describe how much you liked or disliked the MEAL OVERALL.

- 9 Like Extremely
- 8 Like Very Much
- 7 Like Moderately
- 6 Like Slightly
- 5 Neither Like Nor Dislike
- 4 Dislike Slightly
- 3 Dislike Moderately
- 2 Dislike Very Much
- 1 Dislike Extremely

APPENDIX F

USN FOOD SERVICE CUSTOMER SURVEY

PLEASE HELP US ASSIST THE USN FOOD SERVICE OFFICE IN EVALUATING NAVY DINING FACILITIES BY ANSWERING THE FOLLOWING QUESTIONS ABOUT YOUR DINING FACILITY.

1. FOR EACH PART OF THIS QUESTION, PLEASE CIRCLE THE NUMBER THAT BEST DESCRIBES YOUR OPINION OF THIS DINING FACILITY.

	VERY BAD	MODER- ATELY BAD	SOME- WHAT BAD	NEITHER BAD NOR GOOD	SOME- WHAT GOOD	MODER- ATELY GOOD	VERY GOOD
a. Hours of operation	1	2	3	4	5	6	7
b. Quality of the food	1	2	3	4	5	6	7
c. Amount of food	1	2	3	4	5	6	7
d. Variety of food at a single meal	1	2	3	4	5	6	7
e. Variety of the menu over the last two weeks	1	2	3	4	5	6	7
f. Temperature of the food	1	2	3	4	5	6	7
g. Speed of service	1	2	3	4	5	6	7
h. Cleanliness of the dining facility	1	2	3	4	5	6	7
i. Courtesy of cooks	1	2	3	4	5	6	7
j. Courtesy of mess cooks or contract food service workers	1	2	3	4	5	6	7
k. Appearance of the serving line	1	2	3	4	5	6	7
l. Cleanliness of mess cooks or civilian food service workers	1	2	3	4	5	6	7
m. Cleanliness of cooks	1	2	3	4	5	6	7
n. Appearance of the dining area (decor)	1	2	3	4	5	6	7
o. Lighting	1	2	3	4	5	6	7
p. The dining facility OVERALL	1	2	3	4	5	6	7

2. HOW OFTEN IS YOUR DINING AREA: (PLEASE CIRCLE ONE NUMBER FOR EACH OF THE FOLLOWING)

	ALMOST NEVER	SOME- TIMES	OFTEN	ALMOST ALWAYS
a. Too noisy	1	2	3	4
b. Too crowded	1	2	3	4
c. Too hot	1	2	3	4
d. Too cold	1	2	3	4

PLEASE FEEL FREE TO WRITE ANY COMMENTS YOU MIGHT LIKE TO MAKE ABOUT ____
THIS DINING FACILITY ON THE OTHER SIDE OF THIS FORM.

APPENDIX G
MOTIVATION QUESTIONNAIRE

Please check one ☐ Food Management Team
☐ Leading MS
☐ MSC, MSCS, MSCM, but not leading MS

If we agree that only a well-motivated workforce is productive, it is important for managers to know what will motivate food service workers. Please tell us what you think will motivate workers by rating each factor below as follows:

- 4. Extremely effective motivator
- 3. Very effective motivator
- 2. Moderately effective motivator
- 1. Slightly effective motivator
- 0. Not an effective motivator

Please write in the appropriate number next to each factor.

- ☐ 1. Recognition for good performance on the job, such as: picture on the bulletin board, name mentioned in written newsletter, etc.
- ☐ 2. Awards for good performance on the job, such as 3-day passes, tickets to events, cash, restaurant tickets.
- ☐ 3. Written commendation from supervisor.
- ☐ 4. Words of appreciation from supervisor/superintendent.
- ☐ 5. Managers checking up on cooks to make sure they do things correctly.
- ☐ 6. Feedback from customers that service is appreciated.
- ☐ 7. Being included in planning and evaluating the food service operation.
- ☐ 8. Manager conducting daily inspections of cooks.
- ☐ 9. Allowing flexible work hours.
- ☐ 10. Manager taking good suggestions from the cooks seriously.
- ☐ 11. Having the dining facility be in the running for the NEY award.
- ☐ 12. Short term (2, 3, or 4 weeks) OJT in a good-high quality civilian restaurant.
- ☐ 13. The Navy providing time and paying for courses toward a food service degree in a college or community college program (e.g., Johnson & Wales).
- ☐ 14. The chance to obtain food service certification in preparation for later civilian employment.
- ☐ 15. Taking names and kicking ***.
- 16. Please write in any other things you can think of that might be good motivators for food service workers (cooks) on the back of this sheet.

APPENDIX H

MANAGEMENT FACTOR QUESTIONNAIRE

Please check one ☐ Food Management Team
☐ Leading MS
☐ MSC, MSCS, MSCM, but not leading MS

Please tell us how important you think each factor listed below is to effective food service management. Rate each factor as follows:

- 4. Extremely important
- 3. Very important
- 2. Moderately important
- 1. Slightly important
- 0. Not important

Please write in the appropriate number next to each factor.

- ☐ 1. Planning meetings which include the food service workforce.
- ☐ 2. On-the-job training being provided for cooks.
- ☐ 3. School training in food service being provided for cooks.
- ☐ 4. Management training for the leading MS.
- ☐ 5. Management training for the watch captain.
- ☐ 6. Food service training for the food service officer.
- ☐ 7. Providing recognition to the cooks for work well done.
- ☐ 8. Managers getting recognition for work well done.
- ☐ 9. Communication between managers/supervisors and the workforce.
- ☐ 10. A preventive maintenance program being provided for all food service equipment.
- ☐ 11. A self-inspection/evaluation program for food service managers and supervisors.
- ☐ 12. Work assignments that rotate workers among food service tasks.
- ☐ 13. Customers-food service personnel relations.
- ☐ 14. Accurate and timely submission of reports.
- ☐ 15. Customer satisfaction.
- ☐ 16. Managers knowing how to correctly prepare financial reports.
- ☐ 17. Having a dining facility with attractive decor (that looks nice).
- ☐ 18. Managers knowing how to operate all equipment in the dining facility.

- 4. Extremely important
- 3. Very important
- 2. Moderately important
- 1. Slightly important
- 0. Not important

- _____ 19. Managers pointing out mistakes to the cooks.
- _____ 20. Managers helping workers under them with personal problems.
- _____ 21. Managers knowing a lot about foodservice.
- _____ 22. Managers emphasizing portion control.
- _____ 23. Managers enforcing progressive cookery.
- _____ 24. A sanitary, clean dining facility and galley.
- _____ 25. Clearly defining the job each worker is to do.
- _____ 26. Manager having higher rank than everyone who works for him.
- _____ 27. Please write in any other factors that you think are very important in effective food service management.