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TECHNICAL REPORT
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**CONSUMER AND WORKER OPINIONS OF AN
A LA CARTE FOOD SERVICE SYSTEM
INDEPENDENT OF ANY SYSTEMATIC
CHANGES IN RATION STATUS:
BARKSDALE AFB**

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March 1979

**UNITED STATES ARMY
NATICK RESEARCH and DEVELOPMENT COMMAND
NATICK, MASSACHUSETTS 01760**



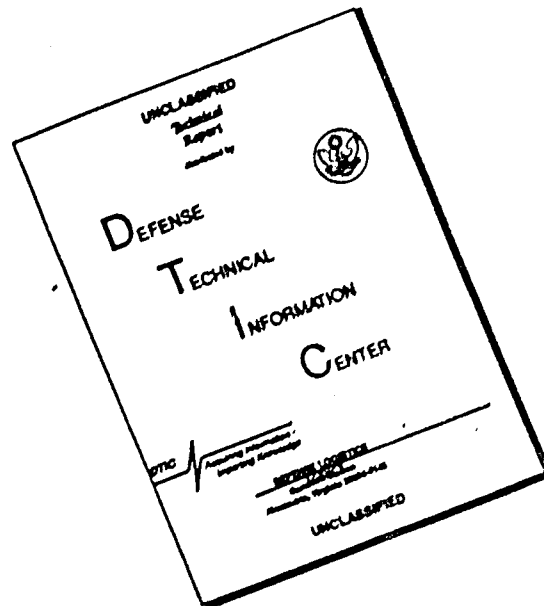
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) In an effort to study the effect of replacing the traditional flat-rate, meal priced system in Air Force food service with an item-priced A La Carte system, but without making any systematic changes in the ration status of individuals, Air Force enlisted personnel at Barksdale AFB, LA, were surveyed and interviewed both before and after conversion to an item-priced A La Carte food service system. Generally, item pricing was preferred over flat-rate, meal pricing by a majority of consumer respondents both before and after the A La Carte conversion, but to a greater extent after consumer experience with the new system than before. Better-		

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20. ABSTRACT (cont'd)

food preparation, increased food variety, and reduced waiting time in line were the three most salient factors contributing to a significant improvement in consumer attitudes toward the dining facilities from pre- to post-A La Carte. A La Carte did not save the consumers any money, on the average, and was not perceived by them as an economic advantage.

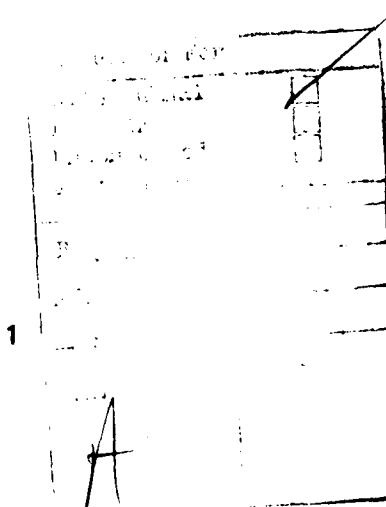
Surveys and interviews were also administered to the food service workers both before and after the A La Carte conversion. The workers were initially more skeptical of the new system than the consumers, but after experiencing it came to prefer A La Carte even more strongly than did the consumers. The three most positive effects of A La Carte cited by the worker sample were better quality food, more food variety, and much reduced plate waste, largely corroborating the consumer opinions. Although A La Carte reportedly made their jobs harder, most workers reported greater job satisfaction under the A La Carte system.

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**CONSUMER AND WORKER OPINIONS OF AN A LA CARTE FOOD SERVICE
SYSTEM INDEPENDENT OF ANY SYSTEMATIC CHANGES IN
RATION STATUS: BARKSDALE AFB**

INTRODUCTION

When joining the military, an enlistee enters into a contract with the Government under which both parties make certain commitments to one another. One commitment made to the individual is that he will be provided with subsistence. Traditionally, the Armed Forces have taken a dualistic approach toward meeting this obligation. Generally, married personnel and higher grade singles are given a daily monetary allowance (termed BAS, or Basic Allowance for Subsistence, in the Air Force) with which to purchase food. These persons are permitted to utilize military dining halls but are charged a flat rate for each meal eaten there (currently, 55 cents for breakfast and \$1.05 for lunch or dinner). The remaining personnel, mostly lower grade and unmarried, are placed in a subsistence-in-kind, or SIK, status. Instead of receiving a monetary allowance, they are authorized to eat meals in the dining hall at no cost to them.

Despite the fact that they are not reimbursed for meals obtained outside of the dining hall, the majority of SIKs have reported using the dining facility on an infrequent basis only (e.g., Branch, Meiselman, and Symington, 1974; Siebold, 1976).^{1,2} Because of these low attendance rates and rising food costs, among other reasons, the Air Force Tactical Air Command undertook a test in 1972 at Shaw AFB, South Carolina, of a modified form of the traditional food service system. It involved two essential changes: First, all airmen were placed on BAS and, second, airmen were required to pay for meals in the dining hall on an item-by-item (A La Carte) basis. These primary changes produced several secondary outcomes, some positive and some negative: On the positive side, an expanded variety of foods was made available at any given meal, and control over portion sizes was increased; however, on the negative side, longer delays through the serving lines also occurred.

In evaluating this system, assessments were made from a number of perspectives — economic, nutritional, and consumer satisfaction. The results of the latter analysis have been reported by Siebold and Meiselman (1974).³ In general, Shaw airmen expressed

¹ L. G. Branch, H. L. Meiselman, and L. E. Symington. A consumer evaluation of Air Force food service. U.S. Army Natick Laboratories Technical Report, #75-22-FSL, 1974.

² J. R. Siebold. Do people eat in dining halls as often as they say they do? U.S. Army Natick Research & Development Command Technical Report, #7T-11-FSL, 1976.

³ J. R. Siebold and H. L. Meiselman. Consumer evaluation of cash food systems: Shaw Air Force Base. U.S. Army Natick Development Center Technical Report, #75-77-FSL, 1974.

significantly greater satisfaction with the food facility than did airmen at bases with traditional food service systems. It should be noted that these results cannot be unambiguously attributed to the system changes mentioned, since at the same time the interior, and exterior of the Shaw dining hall underwent major renovations, which could have been at least partially responsible for improvements in customer attitude, perhaps interacting with the system changes. Encouraged by the success of the test system at Shaw AFB, the Assistant Secretary of Defense for Installations and Logistics directed each service to conduct its own test of the system. The Air Force implemented the modified food system at Loring AFB, Maine, in January 1975. From the viewpoint of those involved in assessing consumer and worker reactions, the Loring AFB test provided a more valid test basis than did the Shaw test. First, changes other than those directly required in implementing the test system were minimized at Loring AFB, whereas (as noted above) major unrelated changes accompanied the test system at Shaw AFB. Second, consumer and worker attitudes at Loring AFB were measured both before and after conversion to the new system, providing more reliable grounds for assessing the test effect than had been available at Shaw AFB, where comparisons were between the attitudes of the Shaw airmen after the system was instituted and those of airmen at other Air Force bases. Notwithstanding these differences, the Loring test corroborated the Shaw findings in showing a general improvement in both consumer and worker satisfaction due to the test system (Siebold, Symington, Graeber, and Maas, 1976).⁴

Two factors, however, qualified these findings. First, a longer term follow-up at Loring AFB 11 months after the system was implemented indicated a decrease in satisfaction from the relatively high level expressed shortly after the system changes were effected, among both the workers and those consumers who had previously been in SIK status. Despite this reversal, however, attitudes of these two groups still remained more positive than those elicited before the test system was implemented (Siebold, Symington, Maas, and Graeber, 1976).⁵

Second, despite the enhancement in satisfaction, the new system has not significantly increased attendance at either Shaw or Loring AFBs.⁶ Since one of the primary objectives of the test was to get people to use the dining system more often, this finding seriously qualifies the success of the system in improving customer and worker attitudes.

⁴J. R. Siebold, L. E. Symington, R. C. Graeber, and D. L. Maas. Consumer and worker evaluation of cash food systems: Loring AFB (Part I - Short term findings). U.S. Army Natick Research & Development Command Technical Report, #76-35-FSL, 1976.

⁵J. R. Siebold, L. E. Symington, D. L. Mass, and R. C. Graeber. Consumer and worker evaluation of cash food systems: Loring AFB (Part II - Long term findings). U.S. Army Natick Research & Development Command Technical Report, #7T-6-FSL, 1976.

⁶See trend reports from the respective tests: e.g., Department of the Air Force, Tactical Air Command. USAF/BAS/A La Carte Food Service Concept - Trend Data Data Report No. 14, 1975.

The next test was conducted by the Navy at NAS Alameda, California, where the system (termed CASH/A La Carte) was put into effect in March 1976. A previous survey study had shown considerable discontent among the NAS Alameda personnel with regard to installation food service (Siebold, Symington, Meiselman, and Rogozenski, 1975).⁷ Correspondingly, attendance at the NAS Alameda dining facility seemed lower than it could have been, based on self-report measures used. The two primary features of the CASH/A La Carte system implemented at NAS Alameda — an all BAS policy and item pricing — were preferred to the alternative choices by a majority of respondents. Improved food quality and greater meal variety appeared to be the most salient features of the food service system contributing to a positive change in consumer attitudes toward the facility. But as in the previous study at Shaw, there was an apparent increase in waiting time in the food service line from pre- to post-CASH/A La Carte measures. Worker opinions at NAS Alameda were more negative following conversion to the new system due primarily to the longer working hours and generally heavier work load required by the CASH/A La Carte system.

In July of 1976, Headquarters, Strategic Air Command (through AFSSO) requested that US Army Natick Research and Development Command assess consumer and worker reactions to an A La Carte food service concept scheduled for implementation at Barksdale AFB on 1 October 1976. Under the HQ SAC concept, only the pricing style would be changed from the traditional flat-rate per meal to the more innovative item-by-item style, with the ration status of all personnel remaining unaffected — all persons on BAS remain on BAS, all those in SIK status retain that status. Thus, the Barksdale conversion involves only one of the two essential changes implemented at both Shaw and Loring AFBs and at NAS Alameda. A La Carte alone can therefore be conceived as an intermediate system between the traditional military feeding system and the full BAS/A La Carte conversion.

METHOD

Consumer Interviews and Surveys

In order to obtain a baseline measure of consumer attitudes, a 3% sample of the total base enlisted population was drawn prior to the A La Carte conversion for both consumer interview and survey measures, and an additional 4% sample was drawn for the survey measure alone. The total survey sample therefore included 7% of the base enlisted population. The 7% sample of consumer respondents was stratified both by work unit within the base and by two criterion variables shown by similar prior studies to be significant — marital status and ration status. Both the survey sample and interview

⁷J. R. Siebold, L. E. Symington, H. L. Meiselman, and J. E. Rogozenski. Consumer and workers opinions of a proposed cash food system: NAS Alameda. U.S. Army Natick Development Center Technical Report #76-9-FSL, 1975.

subsample selected for the post-A La Carte measures nine months after the new system had been implemented were as similar in size and composition as possible to those drawn prior to the conversion.

Prior to the A La Carte conversion, face-to-face interviews were administered to 137 personnel (43 BAS married, 43 BAS single, and 51 SIK status personnel) who also completed the updated COFSS (Consumer Opinions of Food Service Systems, NARADCOM, 1974) survey. Nine months after the new A La Carte system became operational, a similar face-to-face interview was administered to 133 personnel (48 BAS married, 41 BAS single, and 44 SIK status personnel) who likewise completed exactly the same COFSS survey as had the pre-A La Carte sample. By scheduling groups of seven to nine respondents per hour during both the pre- and post-A La Carte data collection efforts, one of two Behavioral Sciences Division, Food Sciences Laboratory staff members was able to personally interview each member of the group on an individual basis for 10 to 15 minutes while the other respondents worked on their surveys. Since the average time to complete the COFSS survey is about 45 minutes, concurrent administration of the survey and interview proved most efficient for both interviewers and respondents. To supplement the pre-A La Carte sample of 137 surveyed/interviewed individuals, two mass survey sessions were held in which an additional 180 individuals (78 BAS married, 40 BAS Single, and 62 SIK status personnel) conforming to the same selection criteria as the interview sample were administered the survey alone. The post-A La Carte sample of 133 surveyed-interviewed individuals was similarly supplemented with an additional 152 individuals (77 BAS married, 32 BAS single, and 54 SIK status personnel) who were administered the survey instrument alone during two mass sessions held in the base theater.

The primary paper and pencil survey was the 1974 edition of the Consumers' Opinions of Food Service Systems (COFSS) survey, which is routinely used by the Behavioral Sciences Division in its assessments of consumer satisfaction within the military. The survey is comprised of 57 questions, covering a wide range of variables involved in dining service. Each question has a limited set of possible responses, allowing for computer scoring of the survey booklets. (A copy of the COFSS survey is contained in Appendix A.) Supplementing the COFSS survey was a brief, one-page insert to the COFSS survey, administered at the same time and to the same respondents as the larger survey. Titled Alternative Rations Systems (ARS) survey, it required respondents to "design" what for them would be the "best" and "worst" food systems and then to rate those systems on a variety of scales. (A copy of the ARS survey is contained in Appendix B.)

The face-to-face personal interview for the pre-A La Carte sample consisted of 34 questions covering four basic areas of concern: (a) the demographic characteristics of the respondents; (b) their current food habits; (c) their opinions of the dining hall and its food; and (d) their opinions of the then pending A La Carte conversion. Most of the questions required either a very objective response from a logically exhaustive set of possibilities or a subjective rating confined to a seven-point scale with predetermined anchors printed on a card shown to the respondent at the appropriate time. A few of the questions, however, were designed to permit relatively open-ended responses, which

were recorded as closely as possible by the interviewer and assigned to categories at a later time. (A copy of the pre-A La Carte interview protocol is contained in Appendix C.)

The post-A La Carte interview contained 47 questions covering the same four basic areas of concern as those asked during the pre-A La Carte interview. (In fact 32 of the questions were identical from pre- to post-A La Carte measures.) The only differences between the two measures concerned area (d) — consumer opinions of the A La Carte conversion. Five of the questions asked prior to the conversion concern any preconceptions that consumers might have toward the pending changeover; whereas, 15 of the post-A La Carte questions ask for a direct comparison of the A La Carte to the old traditional system by the respondents who had experienced both at Barksdale. (A copy of the post A La Carte interview protocol is contained in Appendix D.)

Prior to each interview/survey session, either before or after the conversion to A La Carte, the group of seven to nine respondents was given a brief introduction, told about the survey/interview procedure, instructed on some of the more complex items on the survey, cautioned to work by themselves, and told to feel free to ask questions in the event of any uncertainty. In the instructions the respondents were told to answer only those questions that they could and to leave blank items for which they had insufficient familiarity with the dining facility to answer knowledgeably. The survey and the interview typically required approximately 45 and 15 minutes, respectively, to complete.

During both the pre- and post-A La Carte data samplings, personnel receiving only the paper and pencil surveys attended group sessions at the main base theater. They received much the same instructions as did the interviewees, except, of course, those pertaining to the interview procedure.

Worker Interviews and Surveys

Interviews were conducted with food service workers at Barksdale AFB both prior to and nine months after implementation of the A La Carte system. Prior to the system change, 74 food service workers (30 military personnel, 38 contract KPs, and 6 civilian cooks) were asked their opinion of the proposed A La Carte system. In addition, they were asked what they felt the good and bad aspects of the proposed system would be and which system, A La Carte or traditional, they thought they would prefer.

Approximately nine months after the implementation of the A La Carte system 69 food service workers (36 military personnel, 28 contract KPs, and 5 civilian cooks) were interviewed. The interviewer first requested demographic information from the workers, including a description of each worker's position and his length of time in food service. Workers were then asked to comment in general on the good and bad aspects of the new A La Carte system, and more specifically on whether the new system had made their jobs easier or harder and better or worse. They were asked which system, the new A La Carte or the old traditional system, they preferred. They were asked whether

attendance in the dining facilities had increased since conversion to the A La Carte system and if anything more could be done to increase attendance. Finally, they were asked whether the food in the dining facility was better or worse since the system change. (See Appendix E for both interview forms.)

RESULTS AND DISCUSSION

Results and Discussion of Consumer Interviews and Surveys

The sample size of 305 actually obtained for the pre-A La Carte measures was 6.7% of the total base enlisted population, 137 of whom participated in both the interview and the survey, the remainder in the survey alone. The post-A La Carte sample of 277 was actually 6.2% of the enlisted population, 130 of whom participated in both interview and survey instruments, with the remainder taking the survey alone. Nearly 20% of the post-A La Carte interview sample had participated as well in either the interview, the survey, or both, prior to A La Carte, providing substantial continuity between the two samples.

Demographic Characteristics

As shown in Table 1, there were no significant differences between the pre- and post-A La Carte samples on any of the demographic variables measured, either by the survey or by the interview instruments. Similarly, there were no significant differences between the total survey sample and the interview subsample on any of the demographic characteristics measured by both, except for the percentage married. Apparently, the mass sessions for the survey alone held at the base theater attracted a lower proportion of married personnel than did the smaller interview survey sessions, but since this imbalance occurred, for whatever reason, to very nearly the same degree for both the pre- and the post-A La Carte measures, the validity of the pre/post- comparison should not be substantially affected.

Eating Habits

The data on eating habits reported here is based on self-report measures that rely on the memory of the respondents. Past data collected at Shaw Air Force Base, South Carolina, by the Behavioral Sciences Division seriously compromises the validity of such self-report measures (Siebold, 1976; Siebold & Meiselman, 1974).^{8,9} At Shaw, airmen were asked about their frequency of attendance at the dining hall for each meal using a survey/interview procedure very similar to that reported here. The actual attendance of each was, however, known quite precisely, since accurate records were kept by the

⁸See reference 2.

⁹See reference 3.

Table 1**Demographic Characteristics of the Pre- and Post-A La Carte Samples***

	Pre-A La Carte	Post-A La Carte
Mean Age (in years)	24.48 (24.53)	24.85 (24.90)
Mean Time in Service (years)	5.73 (5.47)	5.90 (6.11)
Median Grade	E-4	E-4
Percent Married (not separated)	41.1 (67.2)	42.5 (63.1)
Percent Receiving BAS	64.9 (62.8)	65.1 (64.6)
Percent Planning AF Career	36.7 (38.0)	35.0 (38.5)
Percent Uncertain of Career	26.6 (26.3)	27.7 (30.0)
Percent Caucasian	71.7	70.6
Percent Black	25.0	24.9
Percent Oriental	1.3	1.1
Percent Female	9.5	12.0
Percent High School Graduates	49.3	48.0
Percent Living on Base	58.8	60.8

*Survey data are shown above in each column and interview data are shown below in parentheses.

"cashier", not only of the attendance of each individual, but also of the constituents of each meal that he ate. When self-report measures were compared with actual fact, airmen were found to consistently overestimate their own attendance rate at every meal attended once or more by each. Airmen who had not attended a meal at all during the test period were the only ones for whom the self-report data was at all accurate. These data on current eating habits should therefore be regarded as only a very rough estimate.

Given the relative unreliability of this kind of data, however, there would appear to be a slight, but non-significant, decrement in dining hall attendance from pre- to post-A La Carte interview assessments, since the average number of estimated biweekly meals eaten in the dining facility dropped from 15.05 before A La Carte to 12.87 afterward ($F(1, 165) = 1.38, p > .10$). Table 2 shows a similar slight, but nonsignificant, decline

Table 2
Proportion of Total Meals Reportedly Eaten in the
Dining Hall by Meal Type

	Pre-A La Carte	Post-A La Carte
Breakfast		
Weekday	.53	.39
Weekend	.32	.18
Lunch		
Weekday	.53	.47
Weekend	.37	.32
Dinner		
Weekday	.35	.31
Weekend	.28	.28
After-dinner		
Weekday	.27	.19
Weekend	.21	.16

in dining hall attendance revealed by the survey data. Although the attendance decrement, however slight, is very consistent for all meals (except weekend dinners, which remained the same), only the breakfast meals for both weekdays and weekends showed a substantial decline in attendance of about 14% from pre- to post-A La Carte measures for both weekdays and weekends. This slight, but consistent, drop in reported dining hall attendance is not accompanied by a corresponding increase of patronage to other categories of eating place, however. In fact, patronage of every other category of eating place declined by

the same slight, but consistent, margin as did patronage of the dining hall. Examination of the total meals reportedly eaten by the pre- and post-A La Carte samples reveals that the post-A La Carte sample was skipping consistently more meals altogether than was the pre-A La Carte sample. While consistent across all meals during both weekdays and weekends (except for the "after evening" meal on weekdays), this tendency for the post-A La Carte sample to skip more meals was most marked for weekday evening meals and for all three major meals on weekends. It would appear, therefore, that the slight, but nonsignificant, decline in dining hall attendance reported from pre- to post-A La Carte is probably attributable to a general decline in overall eating behavior that seems largely independent of the shift to A La Carte in the dining hall. In fact, when asked directly whether they were eating in the dining hall more often or less often since A La Carte was implemented, 15.6% of the interview sample claimed to be eating there more often, 12.5% responded "less often", the remainder reporting "no change".

Attitudes Toward the A La Carte System

Prior to the A La Carte conversion, just slightly over half of the consumers interviewed (55.3%) thought that they would prefer the A La Carte pricing style, 34.1% predicting a preference for the traditional meal pricing. This initial preference for A La Carte was further substantiated by the responses of the larger survey sample to the Alternative Rations System (ARS) survey questionnaire. When asked to choose the best food system from among an item-priced (A La Carte) system, a flat-rate, meal-priced system, or an intermediate system that would charge the individual a different flat rate for his choice of "special", "regular", or "short order" meals, 59% of the survey sample preferred the A La Carte system, 21% preferred the traditional meal-priced system, and 16% preferred the intermediate flat-rate choice. After nine months of exposure to the new system, two-thirds (66.7%) of the interview sample preferred A La Carte pricing, with only a quarter (24.2%) favoring a return to traditional meal pricing. Once again, the ARS questionnaire administered to the larger survey sample reflected exactly the same trend toward a greater preference for A La Carte following first-hand experience with the new system. Given the same three alternatives mentioned above, 64% of the respondents chose A La Carte as the "best system", 22% chose the traditional meal priced system, and 11% chose the intermediate flat-rate choice system. Clearly, the initial predilection for A La Carte must have been reinforced by somewhat favorable experiences with the system as implemented. The reason most frequently cited (by 26% of those preferring A La Carte) for the A La Carte preference was, however, better quality food, followed by greater food variety and freedom of choice (mentioned by 21% of those preferring A La Carte) and, then, finally by the opportunity to save money (mentioned by 15% of those favoring A La Carte). On the other hand, the overwhelming reason given by the minority of respondents who preferred the traditional meal-priced system was the economic advantage of getting more food for their money (mentioned by 52% of those preferring the flat-rate system).

One very good reason that "saving money" did not rank higher than third as an argument in support of A La Carte may be that, on the average, A La Carte did not,

in fact, save the consumer much, if any, money. The average amount reportedly spent for a "typical" noon meal in the dining hall under the new A La Carte system was \$1.17-12 cents more expensive than the old flat rate of \$1.05. The range of expenditure ran from \$.60 to \$2.75, but when divided into "winners" and "losers", 56% of the interview sample ended up saving money by paying less than \$1.05 for a typical lunch, whereas the remaining 44% lost money in the transition. Obviously, however, some few of the "losers" lost quite a bit more than the "winners" saved (e.g., 2 each spent \$1.75, \$2.00, and \$2.75).

Attitudes Toward the Barksdale Dining Hall and Food

It would appear, then, that at least part of the increased preference for the new A La Carte system at Barksdale may be due to factors not directly related to the change in pricing policy. As an overall indicator, the scaled rating of the general quality of the Barksdale dining hall improved significantly ($F(1, 196) = 7.83, p < .006$) between the pre- and post-A La Carte measures. Prior to A La Carte, only 26% of the respondents thought that the dining facilities were better than other military dining halls; whereas 42.2% thought so after A La Carte. When asked directly during the post-A La Carte measure whether the dining hall was better or worse than it had been before, over half of the interviewees (55.6%) said that it was indeed better, and only 6.3% said that it was actually worse (36.5, no change). Once again, when pressed to state what specifically was better about it, the most frequently given response (17%) was "better food preparation", followed closely by "increased variety" (15%). The COFSS survey data revealed that the perceived increase in variety occurred primarily for short order foods and for meat items and that this perceived increase was relatively constant both within any given meal (intrameal variety) and between meals during the course of a month (intermeal variety), for weekends as well as for weekdays. Table 3 shows the general shift in the percentage of survey respondents indicating the need for much more choice to "choice now enough" from pre- to post-A La Carte measures. Accordingly, the mean interview rating for intrameal variety following A La Carte was significantly better than that obtained prior to A La Carte ($F(1, 196) = 3.97, p < .05$), 50.8% of the interview sample indicating that it was better after A La Carte when asked for a direct comparison, and only 1.6% contending that it was worse (the remainder indicating "no change"). Direct comparisons of other dining hall quality factors from pre- to post-A La Carte produced similar responses: 50.8% of the sample stated that the preparation of the food was better after A La Carte than it had been before, with only 1.7% contending that it was worse; and 51.0% believed that intermeal variety was better under the A La Carte system than it had been before, with no dissenting votes whatever.

Table 3

Proportion of Sample Responding As Indicated

	"Much More Choice Needed"		"Choice Now Enough"	
	Pre-	Post-	Pre-	Post-
	A La Carte	A La Carte	A La Carte	A La Carte
Weekday Intrameal Variety				
Short Order Foods	26.6	17.7	28.9	38.4
Meats	31.8	23.3	23.2	31.6
Weekend Intrameal Variety				
Short Order Foods	32.2	27.9	29.3	38.0
Meats	36.1	27.0	24.1	33.7
Intermeal Variety (Month)				
Short Order Foods	28.5	19.3	30.1	39.1
Meats	36.8	25.6	21.8	31.7

Another unexpected side effect of the A La Carte conversion was a significant ($F(1, 225) = 8.23, p < .005$) reduction in reported waiting time from a mean of 10.73 minutes prior to A La Carte to 8.33 minutes after A La Carte, in marked contrast to the BAS/A La Carte conversions at Shaw AFB and at NAS Alameda, at both of which waiting time increased. When asked to speculate on the reason(s) for this perceived reduction in waiting time, the general consensus was that the shifting of the headcount/cash register checkpoint from the beginning to the end of the serving line reduced unnecessary "dead space" in the line, expediting its movement on the average over time.

Results and Discussion of Worker Interviews and Surveys

Demographic Data

Table 4 shows the distribution of the pre- and post-A La Carte samples among the different types of workers and indicates the length of time spent in food service (not necessarily limited to time spent in military food service). Ten workers (four military personnel and six contract KP's) were eliminated from the post-test sample since they had not been at Barksdale prior to the system change, resulting in the post-test sample total of 59 reflected in the table. Most of the food service personnel were represented

Table 4

Food Service Experience of Pre- and Post-A La Carte Sample Workers

Food Service Experience	Military Personnel		Civilian Cooks		Contract KPs	
	Pre-	Post-	Pre-	Post-	Pre-	Post-
	N = 30	N = 32	N = 6	N = 5	N = 38	N = 22
Less than one year	6	4	—	—	12	4
1 to 5 years	12	15	—	—	16	13
6 to 15 years	9	7	3	3	10	3
16 to 20 years	3	5	—	—	—	—
More than 20 years	—	1	3	2	—	2

in both samples although the Privacy Act prohibited determination of sample composition by name. In both samples, the civilian cooks all reported at least seven years of experience, while the largest group of military personnel and contract KP's reported between one and five years of experience.

Worker Comparison of the A La Carte and Traditional System

Military food service workers. Table 5 shows the difference between the pre-A La Carte expectations of preference and actual post-test preference of military workers for the A La Carte system. While 43% had predicted their preference for the new system, 72% reported a preference for A La Carte after exposure, a significant increase from pre- to post-A La Carte ($\chi^2(3) = 9.42, p < .05$). Note that only 13% of the military post-test sample reported preferring the traditional system. Similar preferences by Air Force military cooks for systems similar to A La Carte at Barksdale have been reported elsewhere (Siebold, et al, 1975 and Siebold, et al, 1976).^{10,11}

¹⁰See reference 4.

¹¹See reference 5.

Table 5
Military Food Service Worker Preference for the
A La Carte or Traditional System (Percent of Responses)

	Pre-A La Carte N = 30	Post-A La Carte N = 32
Extremely Prefer A La Carte	17%	38%
Moderately Prefer A La Carte	13%	31%
Slightly Prefer A La Carte	13%	3%
No Preference	33%	16%
Slightly Prefer Traditional System	7%	—
Moderately Prefer Traditional System	3%	13%
Extremely Prefer Traditional System	13%	—

In the interview prior to the system change, 37% of the military personnel reported feeling that the new system would be good because there would be less or no food waste, 17% thought that the Air Force and the government would save money, and 13% felt that the portion control necessary with an A La Carte system would lead to better accounting and, consequently, less pilferage. Seventeen percent said that the new system would provide the customers with a larger variety of food items, 13% felt that the new system would make their jobs easier and their work more efficient, 10% said that they liked the idea of item pricing, and 10% favored customers paying only for those items that they wanted. Obviously workers could and did respond with more than one anticipated positive factor. The military workers' predictions of negative aspects of the proposed system were as follows: 17% predicted that there might not be enough workers, 10% said there would be more work, 10% said the food would be more expensive for the customers, and 17% expressed concern that any new system would create difficulties at first. (Comments made by less than 8% of those interviewed have not been reported.)

The post-test sample of military workers gave similar responses to the question, "What is good about the A La Carte system?". Thirty-four percent reported that there was more variety, 25% said there was less or no food waste, 16% said there was less work under the new system, 13% reported that the food was better, 13% claimed that the Air Force saves money, 13% said that the customer saves money, and 13% felt that there were fewer customer complaints.

The military workers' complaints about the A La Carte system included the perception that there was more work under the new system and not enough personnel (44%) and that the new system cost the larger eater more money (9%).

Twenty-two percent of the military personnel found their specific jobs easier under the A La Carte system, 47% thought their jobs were harder and 31% felt their jobs were neither easier nor harder. Nine percent felt that the job was easier because there was less paperwork. However, 13% felt that their jobs were harder because there was more paperwork, 13% said there were more details to look after, and 13% said there were not enough workers to do a good job. In spite of the fact that many workers felt their jobs were harder under the new system, many (66%) felt that their jobs were better. Only one worker felt that his job was worse since the system change. The others felt that their jobs were neither better nor worse under the new system. The individuals who felt that their jobs were better cited the following reasons: there was less boredom (22%), there was a larger variety of tasks (16%), their jobs were more challenging (13%), workers received more satisfaction (13%), and there were more appealing tasks (13%).

Contract KPs. There was no statistically significant difference between the contract KPs' pre-test expectation of preference and their actual post-test preference for the new A La Carte system over the traditional one (Table 6), although there was a slight increase in the post-test preference for A La Carte. The post-test KPs were less positive about the A La Carte system than the post-test military workers, but the difference is not statistically significant.

Table 6**Contract KPs' Preference for the A La Carte
or Traditional System (Percent of Responses)**

	Pre-A La Carte N = 38	Post-A La Carte N = 22
Extremely Prefer A La Carte	21%	36%
Moderately Prefer A La Carte	18%	18%
Slightly Prefer A La Carte	13%	5%
No Preference	13%	9%
Slightly Prefer Traditional System	8%	9%
Moderately Prefer Traditional System	13%	14%
Extremely Prefer Traditional System	13%	9%

Prior to the implementation of the new system, 32% of the KPs felt that the good aspects of the new system would be less food waste, 21% thought that the new system would make their jobs easier and enable them to be more efficient, 18% said that the new system would save money, 11% felt that the portion control necessary for A La Carte would lead to better accounting and less pilferage, 11% liked the idea of item pricing, and 8% thought that they would receive a pay increase. Concerning negative aspects of the system, 18% thought that they would have more work to do under the new system, 8% said there would not be enough workers, 8% mentioned that it would take time for people to get used to the system, 8% said that meals would take longer to prepare and serve, and 8% thought that their schedules would change.

After implementation of the system, 50% of the post-test contract KP sample felt that there was less or no food waste, 45% said that there was more work and not enough personnel, and 18% said that the food was better. It should be noted that the KP work force was reduced somewhat by a renegotiation of the KP contract prior to the implementation of the A La Carte system. It is not clear whether each contract worker had more work because of the new system, the reduction in force, or a combination

of the two. In any case, it is important to note that in spite of the increased work load, more than half (59%) of the contract personnel preferred the new A La Carte system (Table 6). Eighteen percent of the KPs felt that their jobs were easier under the new system, 32% felt their jobs were harder, and 50% felt their jobs were the same in that respect. Forty-five percent of the KPs felt that their jobs were better under the new system, 18% felt that their jobs were worse under the new system, and 36% said their jobs were neither better or worse.

Civilian cooks. There were too few cooks in either sample to do any statistical test to determine significant differences between the civilian cooks' expectations of preference and actual preference for either the new A La Carte system or the old traditional system. However, prior to the system change, all the cooks had either no preference or thought that they would extremely prefer the A La Carte system. When the civilian cooks were interviewed after the system change, however, only one preferred the A La Carte system; the other four preferred the traditional one. Prior to the change, half the cooks felt that there would not be enough personnel to handle the additional work that the A La Carte system would generate. After the system change, all of the cooks felt that there was more work with the A La Carte system, and that there were not enough personnel. None of the cooks felt that his job was either easier or better since the system change. Sixty percent felt that their jobs were made harder because of the change; 40% said their jobs were neither harder nor easier. Twenty percent felt their jobs were worse, and 80% felt that their jobs were neither better nor worse.

Attendance. Forty-six percent of all the workers interviewed felt that attendance in the dining facilities had increased since conversion to the A La Carte system, 17% thought there had been decrease in attendance, and 37% felt that attendance had remained pretty much the same or did not respond to the question. Approximately half of the workers felt that nothing could be done to increase attendance in the dining facilities. Suggestions of ways to increase attendance by the half that felt that attendance could be increased were: serve better quality food, get more help, improve the dining facility atmosphere, change the music in the dining facility, convert everyone to BAS, and establish a better relationship between military and civilian workers.

Food. Eighty percent of the civilian cooks, 70% of the military workers, and 59% of the contract KPs felt that the food was better under the A La Carte system. Except for the 10% of the Contract KPs who felt the food was worse since the system change, all other food service workers felt that the food remained the same (See Table 7).

Table 7

**Worker Opinion of Food Since Conversion
A La Carte (Percent of Responses)**

	Military Workers	Civilian Cooks	Contract KPs
Food is:	N = 32	N = 5	N = 22
Much Better	34%	20%	27%
Moderately Better	19%	20%	5%
Little Better	17%	40%	27%
Same	25%	20%	32%
Little Worse	—	—	5%
Much Worse	—	—	—
No Answer	6%	—	—

Thirty-two percent of the workers felt the variety of food was better, 31% felt that the quality was better, and 29% said the food was better prepared. Ten percent said that the food would be even better if there were more personnel to prepare it.

CONCLUSIONS

1. Item pricing was preferred over flat-rate meal pricing by a majority of consumer respondents both before and after the A La Carte conversion, but to a greater extent after consumer experience with the new system than before.
2. There was a significant improvement in overall rating of the Barksdale dining facilities by enlisted consumers following the A La Carte conversion over a similar rating measure taken prior to the conversion.
 - a. The two factors contributing most heavily to the improved consumer attitudes toward the facilities were "better food preparation" and "increased variety."
 - b. A third positive effect of the A La Carte conversion from the consumers' viewpoint was a significant overall reduction in the time reportedly spent waiting in line for food.
3. The conversion to A La Carte did not however save the enlisted consumers any money on the average and was not, therefore, perceived by them as an economic advantage.
4. The food service workers were somewhat more skeptical than the consumer sample about the success of the pending A La Carte system prior to the conversion, but later preferred it even more strongly than the consumers after nine months of exposure.
 - a. Most of the workers agreed with the consumers that the quality of the food improved substantially after the A La Carte conversion and that there was more food variety after A La Carte than there had been before.
 - b. A large majority of the workers sampled thought that there was much less food wasted under the A La Carte system than there had been under flat-rate meal pricing.
5. Although the food service workers generally felt that their jobs were harder (involved more labor and longer hours) under the new A La Carte system than they had been before, the overwhelming majority also felt that their jobs were better (more satisfying) under A La Carte because there was less boredom, a larger variety of more appealing tasks, and greater challenge involved.

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APPENDIX A

Consumers' Opinions of Food Service Systems Survey

CONSUMER'S OPINIONS OF FOOD SERVICE SYSTEMS

U. S. ARMY NATICK LABORATORIES

NOVEMBER 1974

Booklet Serial Number

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In the grid to your right, please fill in
the ovals corresponding with the Booklet
Serial Number that is stamped directly
above the numeric grid.

1. INSTALLATION CODE (To be supplied by testers.)

①②③④⑤⑥⑦⑧⑨

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

1st digit ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

2nd digit 0 1 2 3 4 5 6 7 8 9

☐ Caucasian/White

☐ Negro/Black

☐ Oriental

☐ Other (specify _____)

☐ Male

☐ Female

☐ Married

☐ Single, Divorced, or Separated

- ☐ On post bachelor quarters
- ☐ On post family quarters
- ☐ Off post bachelor quarters
- ☐ Off post family quarters

- ☐ Finished Grade School
- ☐ High School Graduate (includes GED)
- ☐ Skilled Job Training After High School
- ☐ Some College
- ☐ College Graduate

- ☐ Air Force
- ☐ Army
- ☐ Marines
- ☐ Navy

years 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

and months 0 1 2 3 4 5 6 7 8 9 10 11

11. At how many installations (besides this one) have you been assigned where you ate regularly in the installation dining hall?

0 1 2-4 5-7 8 or more
☐ ☐ ☐ ☐ ☐

12. Do you plan to REENLIST when your present enlistment ends? Darken the appropriate circle.

☐ Definitely yes
☐ Probably yes
☐ Undecided
☐ Probably no
☐ Definitely no
☐ No, retiring

13. What are your FEELINGS ABOUT THE MILITARY SERVICE? Darken the appropriate circle.

Dislike Dislike Dislike Neutral Like Like Like
 very much moderately a little a little moderately very much
☐ ☐ ☐ ☐ ☐ ☐ ☐

14. Where were you raised? Darken the appropriate circle.

☐ In the country
☐ In a town or small city with less than 25,000 people
☐ In a city with more than 25,000, but less than 100,000 people
☐ In a large city with more than 100,000, but less than one million people
☐ In a very large city with over one million people
☐ In a suburb of a large or very large city

15. In what STATE were you raised? Darken the appropriate circle.

☐ 01 Alabama	☐ 28 Nevada
☐ 02 Alaska	☐ 29 New Hampshire
☐ 03 Arizona	☐ 30 New Jersey
☐ 04 Arkansas	☐ 31 New Mexico
☐ 05 California	☐ 32 New York
☐ 06 Colorado	☐ 33 North Carolina
☐ 07 Connecticut	☐ 34 North Dakota
☐ 08 Delaware	☐ 35 Ohio
☐ 09 Florida	☐ 36 Oklahoma
☐ 10 Georgia	☐ 37 Oregon
☐ 11 Hawaii	☐ 38 Pennsylvania
☐ 12 Idaho	☐ 39 Rhode Island
☐ 13 Illinois	☐ 40 South Carolina
☐ 14 Indiana	☐ 41 South Dakota
☐ 15 Iowa	☐ 42 Tennessee
☐ 16 Kansas	☐ 43 Texas
☐ 17 Kentucky	☐ 44 Utah
☐ 18 Louisiana	☐ 45 Vermont
☐ 19 Maine	☐ 46 Virginia
☐ 20 Maryland	☐ 47 Washington
☐ 21 Massachusetts	☐ 48 West Virginia
☐ 22 Michigan	☐ 49 Wisconsin
☐ 23 Minnesota	☐ 50 Wyoming
☐ 24 Mississippi	☐ 51 Washington, D.C.
☐ 25 Missouri	☐ 52 Other U.S. territories or possessions (For example, Puerto Rico or Virgin Islands.)
☐ 26 Montana	☐ 53 Outside the U.S. or U.S. Territories or possessions.
☐ 27 Nebraska	

16. Darken the circle which indicates your PRESENT GRADE.

- ☐ E-1
- ☐ E-2
- ☐ E-3
- ☐ E-4
- ☐ E-5
- ☐ E-6
- ☐ E-7
- ☐ E-8
- ☐ E-9
- ☐ Officer

17. Do you receive a SEPARATE RATIONS ALLOWANCE (money instead of free meals)?

Darken the appropriate circle.

- ☐ Yes
- ☐ No

18. What ONE TYPE OF COOKING were you raised on? Darken the appropriate circle.

- | | |
|---|---|
| ☐ 01 Chinese | ☐ 09 Jewish |
| ☐ 02 English | ☐ 10 Mexican |
| ☐ 03 French | ☐ 11 New England |
| ☐ 04 General American Style | ☐ 12 Polish (& Eastern Europe) |
| ☐ 05 German | ☐ 13 Soul |
| ☐ 06 Greek | ☐ 14 Southern |
| ☐ 07 Italian | ☐ 15 Spanish (not Mexican) |
| ☐ 08 Japanese | ☐ 16 Other (please specify _____) |

19. What TYPE OF COOKING OR SPECIALTY FOODS do you like best? Please darken the circles of your TOP THREE CHOICES.

- | | |
|---|---|
| ☐ 01 Chinese | ☐ 09 Jewish |
| ☐ 02 English | ☐ 10 Mexican |
| ☐ 03 French | ☐ 11 New England |
| ☐ 04 General American Style | ☐ 12 Polish (& Eastern Europe) |
| ☐ 05 German | ☐ 13 Soul |
| ☐ 06 Greek | ☐ 14 Southern |
| ☐ 07 Italian | ☐ 15 Spanish (not Mexican) |
| ☐ 08 Japanese | ☐ 16 Seafood |
| | ☐ 17 Other (please specify _____) |

20. HOW MANY MEALS DO YOU EAT DURING A TYPICAL WEEK, REGARDLESS OF WHERE YOU EAT THEM? For each meal darken TWO circles, one to indicate how often you have that meal during typical weekdays (Monday through Friday) AND a second to indicate how often you have that meal during a typical weekend (Saturday and Sunday).

	Weekdays					Weekend	
	1	2	3	4	5	1	2
Breakfast	☐	☐	☐	☐	☐	☐	☐
Mid-day Meal	☐	☐	☐	☐	☐	☐	☐
Evening Meal	☐	☐	☐	☐	☐	☐	☐
After Evening	☐	☐	☐	☐	☐	☐	☐

21. HOW MANY MEALS DO YOU EAT AT YOUR DINING FACILITY DURING A TYPICAL WEEK?
For each meal darken TWO circles, one to indicate how often you have that meal during typical weekdays (Monday through Friday) AND a second to indicate how often you have that meal during a typical weekend (Saturday and Sunday).

	Weekdays					Weekend	
	1	2	3	4	5	1	2
Breakfast	☐	☒	☐	☐	☐	☐	☒
Mid-day Meal	☐	☒	☐	☐	☐	☐	☒
Evening Meal	☐	☒	☐	☐	☐	☐	☒
After Evening	☐	☒	☐	☐	☐	☐	☒

22. WHERE DO YOU EAT when you do not eat in the military dining facility? Indicate how often by filling in one circle in each line.

	Never	Less than once a week	1-3 times a week	4-7 times a week	8-14 times a week	15 or more times a week
a. Private residence (girlfriend's house, friend's or relative's house, your home, your barracks, bringing your food, etc.)	☐	☐	☐	☐	☐	☐
b. Other installation facility (NCO Club, the exchange, etc.)	☐	☐	☐	☐	☐	☐
c. Diner, snack bar, pizza parlor, or drive-in off the installation (or having it delivered)	☐	☐	☐	☐	☐	☐
d. Bar or tavern (with alcoholic beverages) off the installation	☐	☐	☐	☐	☐	☐
e. From vending machines	☐	☐	☐	☐	☐	☐
f. From mobile snack or lunch trucks	☐	☐	☐	☐	☐	☐
g. Other (write it below and indicate how often)	☐	☐	☐	☐	☐	☐

23. Listed below are 14 GENERAL AREAS OF CONCERN. For each area indicate whether in your opinion it is very bad, moderately bad, neither bad nor good, moderately good, or very good for your dining facility.

	Area or topic	Very Bad	Moderately Bad	Neither Bad Nor Good	Moderately Good	Very Good
a.	Convenience of location	☐	☐	☐	☐	☐
b.	General dining facility environment	☐	☐	☐	☐	☐
c.	Degree of military atmosphere present	☐	☐	☐	☐	☐
d.	Desirable eating companions	☐	☐	☐	☐	☐
e.	Expense	☐	☐	☐	☐	☐
f.	Hours of operation	☐	☐	☐	☐	☐
g.	Monotony of same facility	☐	☐	☐	☐	☐
h.	Quality of food	☐	☐	☐	☐	☐
i.	Quantity of food	☐	☐	☐	☐	☐
j.	Service by dining facility personnel	☐	☐	☐	☐	☐
k.	Variety of the regular meal food (weekday only)	☐	☐	☐	☐	☐
l.	Variety of the regular meal food (weekend only)	☐	☐	☐	☐	☐
m.	Variety of the short order food	☐	☐	☐	☐	☐
n.	Speed of service or lines	☐	☐	☐	☐	☐

24. For each of the same 14 general areas, indicate whether it is a major reason for your degree of NON-ATTENDANCE at the dining facility, a minor reason for your degree of non-attendance, or not related to your degree of non-attendance.

	Area or topic	Major reason for non- attendance	Minor reason for non- attendance	Not related to non- attendance
a.	Convenience of location	☒	☐	☐
b.	General dining facility environment	☐	☐	☐
c.	Degree of military atmosphere present	☐	☐	☐
d.	Desirable eating companions	☐	☐	☐
e.	Expense	☐	☐	☐
f.	Hours of operation	☐	☐	☐
g.	Monotony of same facility	☐	☐	☐
h.	Quality of food	☐	☐	☐
i.	Quantity of food	☐	☐	☐
j.	Service by dining facility personnel	☐	☐	☐
k.	Variety of the regular meal food (weekday only)	☐	☐	☐
l.	Variety of the regular meal food (weekend only)	☐	☐	☐
m.	Variety of the short order food	☐	☐	☐
n.	Speed of service or lines	☐	☐	☐
o.	Other (please specify _____)	☐	☐	☐

25. How would you rate this dining hall in comparison to other military dining halls in which you have eaten? This dining hall is: (Darken the appropriate circle.)

Much Worse	Slightly Worse	No Better or Worse	Slightly Better	Much Better
☐	☐	☐	☐	☐

26. If you have a REGULARLY SCHEDULED ACTIVITY which keeps you from attending the dining facility at certain times, indicate how many meals per week you do not attend because of this activity. (Indicate "zero meals not attended" if you have no such activity.)

Meals not attended: 0 1 2-4 5 6-7 8-10 More than 10

○ ○ ○ ○ ○ ○ ○

27. Concerning the degree of MILITARY ATMOSPHERE which you feel exists in your dining facility at the present time, indicate whether you feel there should be MORE or LESS military atmosphere in the future.

A Lot More ☐	A Little More ☐	About the Same ☐	A Little Less ☐	A Lot Less ☐
--	---	--	---	--

28. Indicate approximately how many minutes it takes you to travel from your

	1-5 min ☐	6-10 min ☐	11-15 min ☐	16-20 min ☐	21-25 min ☐	26-30 min ☐	Over 30 min ☐
a. Job site to dining facility	☐	☐	☐	☐	☐	☐	☐
b. Living area to dining facility	☐	☐	☐	☐	☐	☐	☐

29. Is your dining facility ever:

	Never	Sometimes	Often	Always
a. Too cold	☐	☐	☐	☐
b. Too warm	☐	☐	☐	☐
c. Stuffy	☐	☐	☐	☐
d. Smoky	☐	☐	☐	☐
e. Full of steam	☐	☐	☐	☐
f. Full of unpleasant food odors	☐	☐	☐	☐

30. How often do you find:

	Never	Sometimes	Often	Always
a. Inappropriate or missing silverware	☐	☐	☐	☐
b. Not enough condiments (ketchup, etc.)	☐	☐	☐	☐
c. Serving line has run out of items	☐	☐	☐	☐

31. For each pair of items below, please indicate your opinion of THE GENERAL CONDITION OF YOUR DINING FACILITY by darkening the circle which comes closest to describing your feelings.

		Extremely	Moderately	Neutral	Moderately	Extremely	
a.	Clean kitchen area	☐	☐	☐	☐	☐	Dirty kitchen area
b.	Insect infested	☐	☐	☐	☐	☐	Insect free
c.	Clean serving counters	☐	☐	☐	☐	☐	Dirty serving counters
d.	Dirty dispensing devices	☐	☐	☐	☐	☐	Clean dispensing devices
e.	Dirty silverware	☐	☐	☐	☐	☐	Clean silverware
f.	Clean trays	☐	☐	☐	☐	☐	Dirty trays
g.	Clean dishes and glasses	☐	☐	☐	☐	☐	Dirty dishes and glasses
h.	Dirty floors	☐	☐	☐	☐	☐	Clean floors
i.	Dirty tables and chairs	☐	☐	☐	☐	☐	Clean tables and chairs
j.	Brightly lighted	☐	☐	☐	☐	☐	Dimly lighted
k.	Sunny	☐	☐	☐	☐	☐	Lacking in sunlight
l.	Quiet	☐	☐	☐	☐	☐	Noisy
m.	Crowded	☐	☐	☐	☐	☐	Uncrowded
n.	Roomy	☐	☐	☐	☐	☐	Cramped
o.	Pleasant view	☐	☐	☐	☐	☐	Unpleasant view
p.	Low number of safety hazards	☐	☐	☐	☐	☐	High number of safety hazards
q.	Unpleasant exterior appearance	☐	☐	☐	☐	☐	Pleasant exterior appearance
r.	Unpleasant interior appearance	☐	☐	☐	☐	☐	Pleasant interior appearance
s.	Colorful	☐	☐	☐	☐	☐	Drab
t.	Beautiful	☐	☐	☐	☐	☐	Ugly
u.	Relaxed	☐	☐	☐	☐	☐	Tense

32. Indicate your opinions about CONVENIENCES WITHIN YOUR DINING FACILITY.

	Extremely	Moderately	Neutral	Moderately	Extremely	
a. Convenient to enter & leave	☐	☐	☐	☐	☐	Inconvenient to enter & leave
b. Far from washroom	☐	☐	☐	☐	☐	Close to washroom
c. Inadequate table size for size of trays	☐	☐	☐	☐	☐	Adequate table size for size of trays

33. Indicate the TABLE SIZE you prefer:

2 persons	4 persons	6 persons	8 persons	More than 8 persons
☐	☐	☐	☐	☐

34. Indicate your opinion about the following SOCIAL aspects of your dining facility.

	Never	Sometimes	Often	Always
The feeling of privacy is quite good in this dining hall	☐	☐	☐	☐
Room conditions are acceptable for relaxed conversation	☐	☐	☐	☐
There is a friendly social atmosphere in this dining hall	☐	☐	☐	☐

35. Do you have MUSIC in your dining facility now? Yes ☐ No ☐

36. What is your reaction to having MUSIC in the dining facilities

Very Acceptable	Mildly Acceptable	Neutral	Mildly Unacceptable	Very Unacceptable
☐	☐	☐	☐	☐

37. Indicate the THREE types of music you would most prefer in the dining facilities

- ☐ Any type is fine
- ☐ Hard rock
- ☐ Soul
- ☐ Popular
- ☐ Rock and roll
- ☐ Jazz
- ☐ Instrumental
- ☐ Classical
- ☐ Country western
- ☐ Other (write it here) _____
- ☐ Do not want music

38. Does your dining facility use a SELF BUSSING system in which each person carries his own tray to the dishwashing area?

Yes No
① ②

39. Indicate how you do or would feel about having SELF BUSSING in the dining facilities:

Very Mildly Mildly Very
Acceptable Acceptable Unacceptable Unacceptable
① ② ③ ④

40. WHAT HOURS WOULD YOU LIKE THE DINING FACILITY OPEN? For each type of meal darken TWO circles, one to indicate your feeling about the time the dining hall opens AND the other to indicate your feeling about the time the dining hall closes.

	1 Hour Earlier	Opening 1/2 Hour Earlier	OK as Is	1 Hour Later	Closing 1/2 Hour Later	OK as Is
Weekday Breakfast	①	②	③	④	⑤	⑥
Weekday Mid-day Meal	①	②	③	④	⑤	⑥
Weekday Evening Meal	①	②	③	④	⑤	⑥
Weekend Breakfast	①	②	③	④	⑤	⑥
Weekend Mid-day Meal	①	②	③	④	⑤	⑥
Weekend Evening Meal	①	②	③	④	⑤	⑥

41. Is the food in your mess hall ever:

	Never	Sometimes	Often	Always
a. Overcooked	①	②	③	④
b. Undercooked	①	②	③	④
c. Cold	①	②	③	④
d. Tasteless or bland	①	②	③	④
e. Burned	①	②	③	④
f. Dried out	①	②	③	④
g. Greasy	①	②	③	④
h. Tough	①	②	③	④
i. Too spicy	①	②	③	④
j. Raw	①	②	③	④
k. Still frozen	①	②	③	④
l. Too salty	①	②	③	④
m. Full of gristle	①	②	③	④
n. Spoiled	①	②	③	④
o. Stale	①	②	③	④
p. Fatty	①	②	③	④

42. Other than times of dieting, do you ever LEAVE your dining facility WITHOUT ENOUGH TO EAT?

NEVER SOMETIMES OFTEN ALWAYS
① ② ③ ④

43. Do you serve yourself or do the dining facility personnel serve you the following items?

	SELF-SERVICE	SERVED BY OTHERS
a. Short order items	☐	☐
b. Meat items	☐	☐
c. Starches (i.e., potatoes)	☐	☐
d. Vegetables	☐	☐
e. Salads	☐	☐
f. Beverages	☐	☐
g. Desserts	☐	☐

44. Are SECOND HELPINGS PERMITTED for the following items?

	Always	Sometimes	Never
a. Short order items	☐	☐	☐
b. Meat items	☐	☐	☐
c. Starches (i.e., potatoes)	☐	☐	☐
d. Vegetables	☐	☐	☐
e. Salads	☐	☐	☐
f. Beverages	☐	☐	☐
g. Desserts	☐	☐	☐

45. For each of the following foods, indicate your opinion of the AMOUNT GIVEN IN ONE SERVING. Darken the circle under NA (Not Appropriate) if you have self service and/or second helpings are permitted.

	Much Too Small	Slightly Too Small	Just Right	Slightly Too Large	Much Too Large	NA
a. Meat	☐	☐	☐	☐	☐	☐
b. Starches	☐	☐	☐	☐	☐	☐
c. Vegetables	☐	☐	☐	☐	☐	☐
d. Dessert	☐	☐	☐	☐	☐	☐

46. For each pair of items below, please describe the FOOD SERVICE WORKERS on the serving line in your dining facility.

	Extremely	Moderately	Neutral	Moderately	Extremely	
Clean	☐	☐	☐	☐	☐	Dirty
Unpleasant	☐	☐	☐	☐	☐	Pleasant
Well Trained	☐	☐	☐	☐	☐	Poorly Trained
Hard Working	☐	☐	☐	☐	☐	Not Hard Working
Provide Slow Service	☐	☐	☐	☐	☐	Provide Fast Service

47. Indicate your opinion about the ATTITUDES of the dining facility WORKERS to make your meal as pleasant as possible.

Very Poor	Average	Excellent
☐	☐	☐

48. Indicate your opinion of the VARIETY of offerings at any particular WEEKDAY meal.

We need:		Much More Choice	Slightly More Choice	Choice Now Enough	Slightly Less Choice	Much Less Choice
a.	For short order foods:	☐	☐	☐	☐	☐
b.	For meats:	☐	☐	☐	☐	☐
c.	For starches:	☐	☐	☐	☐	☐
d.	For vegetables:	☐	☐	☐	☐	☐
e.	For salads:	☐	☐	☐	☐	☐
f.	For beverages:	☐	☐	☐	☐	☐
g.	For desserts:	☐	☐	☐	☐	☐

49. Indicate your opinion of the VARIETY of offerings at any particular WEEKEND meal.

We need:		Much More Choice	Slightly More Choice	Choice Now Enough	Slightly Less Choice	Much Less Choice
a.	For short order foods:	☐	☐	☐	☐	☐
b.	For meats:	☐	☐	☐	☐	☐
c.	For starches:	☐	☐	☐	☐	☐
d.	For vegetables:	☐	☐	☐	☐	☐
e.	For salads:	☐	☐	☐	☐	☐
f.	For beverages:	☐	☐	☐	☐	☐
g.	For desserts:	☐	☐	☐	☐	☐

50. Indicate your opinion of the VARIETY of foods offered in the menu during the course of a month or so.

We need:		Much More Choice	Slightly More Choice	Choice Now Enough	Slightly Less Choice	Much Less Choice
a.	For short order foods:	☐	☐	☐	☐	☐
b.	For meats:	☐	☐	☐	☐	☐
c.	For starches:	☐	☐	☐	☐	☐
d.	For vegetables:	☐	☐	☐	☐	☐
e.	For salads:	☐	☐	☐	☐	☐
f.	For beverages:	☐	☐	☐	☐	☐
g.	For desserts:	☐	☐	☐	☐	☐

51. Is CARRY OUT SERVICE available in your dining facility? (Disregard any flight feeding programs in this and the following two questions.)

Yes No
☐ ☐

Indicate how you do or would feel about CARRY OUT SERVICE being available from the dining facilities.

Extremely Neutral Extremely
opposed Enthusiastic
☐ ☐ ☐

52. How long do you USUALLY have to WAIT in line at the headcount station TO GET ADMITTED for a meal?

- ☐ I never have to wait in line.
- ☐ I wait between one and five minutes.
- ☐ I wait between five and ten minutes.
- ☐ I wait between ten and fifteen minutes.
- ☐ I wait longer than fifteen minutes.

53. How long do you USUALLY have to WAIT IN THE SERVING LINE after the headcount before you get your food?

- ☐ I never have to wait in line.
- ☐ I wait between one and five minutes.
- ☐ I wait between five and ten minutes.
- ☐ I wait between ten and fifteen minutes.
- ☐ I wait longer than fifteen minutes.

54. How long do you USUALLY have to WAIT AT THE DISH WASHING AREA when self-bussing?

- ☐ I never have to wait in line.
- ☐ I wait between one and five minutes.
- ☐ I wait between five and ten minutes.
- ☐ I wait between ten and fifteen minutes.
- ☐ I wait longer than fifteen minutes.
- ☐ Not applicable; no self bussing.

55. For each of the following RULES FOR BEHAVIOR darken TWO circles, one to indicate whether or not the rule exists in your dining facility AND the other to indicate whether you want the rule, do not want it, or have no opinion about it.

		Does Rule Exist?		Do You Want the Rule?		
		Yes	No	Yes	No	No Opinion
a.	Dress regulations	☐	☐	☐	☐	☐
b.	Not allowing civilian guests	☐	☐	☐	☐	☐
c.	Calling "at ease" when officer enters	☐	☐	☐	☐	☐
d.	No smoking	☐	☐	☐	☐	☐
e.	Officers and NCO's permitted to cut in line	☐	☐	☐	☐	☐
f.	Separation of officers and NCO's from enlisted men	☐	☐	☐	☐	☐

56. How important are the following factors in influencing what foods you choose to eat?

	Of Major Importance	Of Minor Importance	Unimportant
Food Appearance	☐	☐	☐
Food Variety	☐	☐	☐
Food Cost	☐	☐	☐
Familiarity With the Food	☐	☐	☐
Nutritional Value of the Food	☐	☐	☐
Number of Calories in the Food	☐	☐	☐
Your Liking of the Food	☐	☐	☐
How Well the Food Goes With Other Foods You Choose	☐	☐	☐

57. Are you currently on a diet?

Yes	No
☐	☐

APPENDIX B
Alternative Rations System Survey

ALTERNATIVE RATIONS SYSTEM SURVEY

The Department of Defense is currently considering new and different ways of providing food service to troops. In making a final decision, they must decide on three important issues. First, they must decide whether all personnel should receive BAS (Basic Allowance for Subsistence, meaning money instead of free food) or whether only some should receive BAS while others receive SIK (Subsistence In Kind, meaning free food instead of money). Secondly, the decision must be made whether a civilian contractor or the government should operate the dining halls, obtain the food, and provide the food service worker. And, thirdly, they must decide whether an individual eating in the dining hall should: (a) be charged a fixed amount for his meals; (b) be charged only for the items he takes from the serving line; or (c) be able to choose among a more expensive "special" meal, a normally priced "regular" meal, or a less expensive "short order" meal, in each case being charged for the total meal.

An important element in these decisions is how you, the consumer, feel about each of these matters. For each of the three issues mentioned above, therefore, please indicate what decisions you feel would lead to the BEST food system.

ISSUE 1. The BEST food system would have (mark one):

All individuals
receiving BAS
☐

Some receiving BAS and
others receiving SIK
☐

ISSUE 2. The BEST food system would be operated, and the food and food service workers provided, by (mark one):

A civilian contractor
☐

The government
☐

ISSUE 3. The BEST food system would charge the individual (mark one):

A fixed amount
for a meal
☐

For only the
items taken
☐

For a "special," "regular,"
or "short order" meal
☐

Assume that, in designing a new food system, the Department of Defense followed the decisions you just indicated. Then, please answer the following four questions about that food system.

QUESTION 1. Under this food system, I would eat in the dining hall (mark one):

Never
☐

Less than
once a week
☐

1-3 times
a week
☐

4-7 times
a week
☐

8-14 times
a week
☐

15 times or
more a week
☐

QUESTION 2. Under this food system, the amount of plate waste of food would be (mark one):

Extremely
high
☐

Slightly
high
☐

Neither high
nor low
☐

Slightly
low
☐

Extremely
low
☐

QUESTION 3. In terms of the amount of money it would cost me to eat, this food system would be (mark one):

An extremely
good deal
☐

A slightly
good deal
☐

Neither a good
nor bad deal
☐

A slightly
bad deal
☐

An extremely
bad deal
☐

QUESTION 4. My overall opinion of this food system is (mark one):

Extremely
favorable
☐

Slightly
favorable
☐

Neither favorable
nor unfavorable
☐

Slightly
unfavorable
☐

Extremely
unfavorable
☐

Consider once again the three issues described on the first page of this questionnaire. This time, for each of these three issues, please indicate what decisions you feel would lead to the WORST food system.

ISSUE 1. The WORST food system would have (mark one):

All individuals
receiving BAS
☐

Some receiving BAS and
others receiving SIK
☐

ISSUE 2. The WORST food system would be operated, and the food and food service workers provided, by (mark one):

A civilian contractor
☐

The government
☐

ISSUE 3. The WORST food system would charge the individual (mark one):

A fixed amount
for a meal
☐

For only the
items taken
☐

For a "special," "regular,"
or "short order" meal
☐

Assume, once again, that the Department of Defense followed your decisions in designing a new food system. Again, please answer the following questions about this food system.

QUESTION 1. Under this food system, I would eat in the dining hall (mark one):

Never
☐

Less than
once a week
☐

1-3 times
a week
☐

4-7 times
a week
☐

8-14 times
a week
☐

15 times or
more a week
☐

QUESTION 2. Under this food system, the amount of plate waste of food would be (mark one):

Extremely
high
☐

Slightly
high
☐

Neither high
nor low
☐

Slightly
low
☐

Extremely
low
☐

QUESTION 3. In terms of the amount of money it would cost me to eat, this food system would be (mark one):

An extremely
good deal
☐

A slightly
good deal
☐

Neither a good
nor bad deal
☐

A slightly
bad deal
☐

An extremely
bad deal
☐

QUESTION 4. My overall opinion of this food system is (mark one):

Extremely
favorable
☐

Slightly
favorable
☐

Neither favorable
nor unfavorable
☐

Slightly
unfavorable
☐

Extremely
unfavorable
☐

Currently I receive (mark one):

☐ BAS (money instead of free food)

☐ SIK (free food instead of money)

APPENDIX C

Pre-A La Carte Interview Protocol

INTERVIEW PROTOCOL FOR PRE-A LA CARTE AT BARKSDALE AFB

(Enter Subject's survey I.D. number.)

DEMOGRAPHIC SECTION --- For ALL respondents:

1. Are you currently receiving B.A.S.? (no-0; yes-1)
2. Unit (No numeric score) --- Dining hall code
3. Age (How old are you, to the nearest year?).
4. Time in service (How long have you been in the Air Force, to the nearest year?).
0-10 years
5. Are you planning to make a career of the Air Force?
(no-0; yes-1; uncertain-2)
6. Are you married and currently living with your spouse? (no-0; yes-1)

FOOD HABITS SECTION --- For All respondents:

7. Do you eat any more or less often, in general, toward the end of a pay period than at the beginning of the period? (no-0; less-1; more-2)
8. During the past two weeks, where did you eat most of your meals?
9. Are there any other places where you ate more than one meal during the past two weeks? (If none, enter a Z.)
10. Would you call the past two weeks "typical" for you? (no-0; yes-1)
11. How many meals have you eaten in an Air Force dining hall during the past two weeks?
12. Have you eaten at least 5 or more meals in one or another of the dining halls since you've been stationed here at Barksdale? (no-0; yes-1)
- 1 13. Do you eat in the dining hall any more or less often toward the end of a pay period than at the beginning of the period?
(no-0; less-1; more-2)

CRITIQUE (BITCH) SECTION --- For All respondents:

14. When you came into the Air Force, you made a contract with the government in which they agreed to provide you with subsistence, either in kind or as a monetary allowance. How satisfied are you with their efforts to fulfill their part of this agreement? Please use this scale to answer. (A)
15. What is the main reason that you don't eat in the dining hall more often? (If none, enter a Z.)
16. If this were changed, would you eat in the dining hall more often? (no-0; yes-1)

- 0 17. In that case, is there anything that could be done to get you to eat in the dining hall more often? (no-0; yes-1)

1 18. What is that?

- 1 19. What other things could be done or changed to get you to eat more meals in the dining hall? (If none, enter a Z.)

20. Have you heard about any changes in the food service system here at Barksdale which are planned for the near future? (no-0; yes-1)

1 21. What specifically have you heard?

S.I.K.s ONLY:

22. If you were on B.A.S., would you eat in the dining hall any more or less often than you do now? (no-0; less-1; more-2)

B.A.S.s ONLY:

23. Would you prefer the present system in the dining hall by which you pay a flat, single price for the entire meal, regardless of size, or a new system in which you would pay just for the things you take? You can assume that a "normal" meal would cost the same under both systems. (no preference-0; item-1; meal-2)

1,2 24. Why? (If "no reason," enter a Z.)

25. Would you eat in the dining hall any more or less often than you do now if pricing was by the item rather than by the meal? Again you may assume that a "normal" meal would cost the same under both systems. (no-0; less-1; more-2)

26. Do you think you would eat in the dining hall any differently than you do now if pricing was by the item rather than by the meal? (no-0; yes-1; don't know-2)

1 27. What specifically do you think would change? (If "nothing," enter a Z.)

COMPARISON SECTION --- If answer to Question 12 was "NO," STOP; interview is now finished.

28. In general, how would you rate this dining hall in comparison to other dining halls in which you've eaten, all things considered? Please use this scale to answer. (B)
29. How would you rate just the preparation of food in this dining hall in comparison to other dining halls in which you've eaten? Please use this scale to answer. (B)
30. Do you consider the size of portions currently served to be adequate, less than adequate, or more than adequate according to your needs (on the average)? Please use this scale to answer. (C)

31. How would you rate the number of different foods available at a given meal in this dining hall in comparison to other dining halls in which you've eaten. Please use this scale to answer. (B)
 32. How would you rate the variety of foods offered day after day in this dining hall in comparison to other dining halls in which you've eaten? Please use this scale to answer. (B)
 33. How long do you typically have to wait (in minutes) from the time that you enter the dining hall until the time that you sit down at a table?
 34. Sometimes in a dining hall, a food that you are expecting to be available is not, because the cooks weren't following the menu or perhaps because it ran out. In comparison to other dining halls in which you've eaten, how often has this been happening? Please use this scale to answer. (D)
-

Note: An "X" should be entered any time a question is not asked for any reason. If a question is asked and, for whatever reason, not answered, a "Z" should be entered.

RESPONSES FROM PRE-A LA CARTE INTERVIEW AT BARKSDALE AFB

B.A.S. or S.I.K.: _____	Sur. I.D.: _____ 1. _____
2. Unit: _____	2. _____ X. <u>Sk</u> 3. _____ X. <u>Sk</u> 4. _____ X. <u>Sk</u>
D.H.: _____	5. _____ 6. _____ 7. _____ 8. _____
8. _____	9. _____ 10. _____ 11. _____ 12. _____
9. _____	13. _____ 14. _____ 15. _____ 16. _____ 17. _____
Answer to Question #12: _____	18. _____ 19. _____ 20. _____
XX. _____	21. _____ 22. _____ 23. _____ 24. _____ XX. <u>Sk</u>
15. _____	25. _____ 26. _____ 27. _____
18. _____	28. _____ 29. _____ 30. _____
19. _____	31. _____ 32. _____ 33. _____ 34. _____
	35. _____ 36. _____
21. _____	(S.I.K.s ONLY)
24. _____	20. _____ 21. _____ 22. _____
27. _____	23. _____ 24. _____ 25. _____
	26. _____ 27. _____ 28. _____
	XX. <u>Sk</u> XX. <u>Sk</u> XX. <u>Sk</u> 29. _____
	30. _____ 31. _____ 32. _____
	33. _____ 34. _____ 35. _____
	36. _____ 37. _____ 38. _____ 39. _____
	40. _____ 41. _____ 42. _____ 43. _____
	44. _____ 45. _____ 46. _____ 47. _____
	48. _____ 49. _____ 50. _____ 51. _____
	52. _____ 53. _____ 54. _____ 55. _____
	56. _____ 57. _____ 58. _____ 59. _____
	60. _____ 61. _____ 62. _____ 63. _____
	64. _____ 65. _____ 66. _____ 67. _____
	68. _____ 69. _____ 70. _____ 71. _____
	72. _____ 73. _____ 74. _____ 75. _____
	76. _____ 77. _____ 78. _____

APPENDIX D

Post-A La Carte Interview Protocol

INTERVIEW PROTOCOL FOR POST-A LA CARTE AT BARKSDALE AFB

(Enter Subject's survey I.D. number.)

DEMOGRAPHIC SECTION --- For ALL respondents:

1. Are you currently receiving B.A.S., or do you have a meal pass (S.I.K.)?
(S.I.K.-0; B.A.S.-1)
2. Unit (no numeric score) --- Dining hall code
3. Have you been stationed here at Barksdale fairly continuously since
1 September 1976? (no-0; yes-1)
 - 1 4. Have we talked to you before, or have you previously taken our
written survey about the dining hall? (no-0; interview-1;
survey-2; both-3)
 - 1 5. Did you eat at least 5 or more meals in one or another of the
dining halls prior to 1 October 1976, when the new A La Carte
system was implemented? (no-0; yes-1)
6. Age (How old are you, to the nearest year?).
7. Time in service (How long have you been in the Air Force, to the nearest
year?).
 - 0-10 years 8. Are you planning to make a career of the Air Force?
(no-0; yes-1; uncertain-2)
 - Over 10 years: (Automatically enter "1".)
9. Are you married and currently living with your spouse? (no-0; yes-1)

FOOD HABITS SECTION --- For ALL respondents:

10. Do you eat any more or any less often, in general, toward the end of a pay
period than at the beginning of the period? (no-0; less-1; more-2)
11. During the past two weeks, where did you eat most of your meals?
12. Are there any other places where you ate more than one meal during the
past two weeks? (If none, enter a "Z".)
13. Would you call the past two weeks "typical" for you? (no-0; yes-1)
14. How many meals have you eaten in the Barksdale dining halls during the
past two weeks?
 - 0-4 meals in D.H. 15. Have you eaten at least 5 or more meals in one
or another of the Barksdale dining halls since
1 October 1976, when the new A La Carte system
was implemented? (no-0; yes-1)

5 or more meals in D.H.: (Automatically enter "1".)

- 1 16. Do you eat in the dining hall any more or any less often toward the end of a pay period than at the beginning of the period? (no-0; less-1; more-2)

OMIT IF Question 3 answer was "NO":

17. Are you eating in the dining hall any more or any less often since they instituted this new A La Carte system? (no-0; less-1; more-2)

- 1,2 18. What is it that has caused you to eat there less (more) often? (If "nothing," enter a "Z".)

CRITIQUE (BITCH) SECTION --- For ALL respondents:

19. When you came into the Air Force, you made a contract with the government in which they agreed to provide you with subsistence, either in kind or as a monetary allowance. How satisfied are you with their efforts to fulfill their part of this agreement? Please use this scale to answer. (Scale A)
20. What is the main reason that you don't eat in the dining hall more often? (If none, enter a "Z".)
21. If this were changed, would you eat in the dining hall more often? (no-0; yes-1)
- 0 22. In that case, is there anything that could be done to get you to eat in the dining hall more often? (no-0; yes-1)
- 1 23. What is that?
- 1 24. What other things could be done or changed to get you to eat more meals in the dining hall? (If none, enter a "Z".)

S.I.K.s ONLY:

25. If you were on B.A.S., would you eat in the dining hall any more or any less often than you do now? (no-0; less-1; more-2)

COMPARISON SECTION --- If answer to Question 15 was "NO," STOP; interview is now finished.

26. In general, how would you rate this dining hall in comparison to other military dining halls in which you've eaten, all things considered? Please use this scale to answer. (Scale B)

OMIT IF Question 3 or 5 answer was "NO":

27. Is it any better or any worse now than it was prior to the A La Carte conversion? (no-0; worse-1; better-2)

- 1,2 28. What specifically is better (worse) about it?

29. How would you rate just the preparation of food in this dining hall in comparison to other military dining halls in which you've eaten? Please use this scale to answer. (Scale B)

OMIT IF Question 3 or 5 answer was "NO":

30. Is it any better or any worse now than it was prior to the A La Carte conversion? (no-0; worse-1; better-2)
31. Do you consider the size of portions currently served to be adequate, less than adequate, or more than adequate according to your needs (on the average)? Please use this scale to answer. (Scale C)

OMIT IF Question 3 or 5 answer was "NO":

32. Are they any better or any worse now than they were prior to the A La Carte conversion? (no-0; worse-1; better-2)
33. How would you rate the number of different foods available at a given meal in this dining hall in comparison to other military dining halls in which you've eaten? Please use this scale to answer. (Scale B)

OMIT IF Question 3 or 5 answer was "NO":

34. Is it any better or any worse now than it was prior to the A La Carte conversion? (no-0; worse-1; better-2)
35. How would you rate the variety of foods offered day after day in this dining hall in comparison to other military dining halls in which you've eaten? Please use this scale to answer. (Scale B)

OMIT IF Question 3 or 5 answer was "NO":

36. Is it any better or any worse now than it was prior to the A La Carte conversion? (no-0; worse-1; better-2)
37. How long do you typically have to wait (in minutes) from the time that you enter the dining hall until the time that you sit down at a table?

OMIT IF Question 3 or 5 answer was "NO":

38. Has this time increased or decreased since the A La Carte system was instituted? (no change-0; decreased-1; increased-2)
- 1,2 39. Why do you think that this has happened? (If "no reason", enter a "Z".)
40. Sometimes in a dining hall, a food that you are expecting to be available is not, because the cooks weren't following the menu or perhaps because it ran out. In comparison to other military dining halls in which you've eaten, how often has this been happening? Please use this scale to answer. (Scale D)

OMIT IF Question 3 or 5 answer was "NO":

41. Has this been happening any more or any less frequently since the A La Carte system was implemented? (no-0; less-1; more-2)

OMIT IF Question 3 or 5 answer was "NO":

42. Do you prefer this "new" system in the dining hall, or do you prefer the "old" system prior to the A La Carte conversion? (no preference-0; "new"-1; "old"-2)

1,2 43. Why? (If "no reason", enter a "Z".)

OMIT IF Question 3 or 5 answer was "NO":

44. Do you find yourself eating in the dining hall any differently now than you did prior to the A La Carte conversion (e.g., has the amount of food that you eat changed, or have the types of foods that you eat changed)? (no-0; yes-1)

1 45. What specifically has changed?

B.A.S.s ONLY:

46. How much do you spend for a typical noon meal in the dining hall? (Enter "Z" for "don't know".)

OMIT IF Question 3 or 5 answer was "NO":

47. Generally speaking, are you paying any more or any less for meals in the dining hall now than you were before the A La Carte system was instituted? (no-0; less-1; more-2)
-

Note: An "X" should be entered any time a question is not asked for any reason. If a question is asked and, for whatever reason, not answered, a "Z" should be entered.

RESPONSES FROM POST-A LA CARTE INTERVIEW AT BARKSDALE AFB

B.A.S. or S.I.K.: _____	Sur. I.D.: _____ 1. _____
2. Unit: _____	2. _____ 3. _____ 4. _____ 5. _____
D.H.: _____	6. _____ 7. _____ 8. _____
Answer to Questions #3: _____ #5: _____	9. _____ 10. _____ 11. _____ 12. _____
11. _____	13. _____ 14. _____
12. _____	15. _____ 16. _____
Answer to Question #15: _____	17. _____ 18. _____ 19. _____ 20. _____
18. _____	21. _____ 22. _____ 23. _____ 24. _____ 25. _____
20. _____	26. _____ 27. _____
23. _____	28. _____ 29. _____ 30. _____
24. _____	31. _____ 32. _____
	33. _____ 34. _____
	35. _____ 36. _____
28. _____	(S.I.K.s ONLY)
	XX. Sk XX. Sk Sk 25. _____
	37 38 39 40
	XX. Sk XX. Sk Sk XX. Sk
	41 42 43 44
	XX. Sk XX. Sk Sk 26. _____
	45 46 47 48
39. _____	27. _____ 28. _____ 29. _____
	49 50 51 52
	30. _____ 31. _____ 32. _____
	53 54 55
43. _____	33. _____ 34. _____ 35. _____
	56 57 58
	36. _____ 37. _____ 38. _____
	59 60 61 62
	38. _____ 39. _____ 40. _____
	63 64 65 66
45. _____	41. _____ 42. _____ 43. _____
	67 68 69 70
	44. _____ 45. _____
	71 72 73
(B.A.S.s ONLY)	46. _____ 47. _____
54	74 75 76 77 78

APPENDIX E

Worker Interview and Survey Forms

FOOD SERVICE PERSONNEL PRE A LA CARTE
INTERVIEW AT BARKSDALE AFB

1. What do you do in your present job?
2. How long have you worked in food service in your Air Force career?
3. How much do you like military service? (Show card)
4. What do you think about the new system they are planning for this dining facility?

 Anything good?

 Anything bad?
5. Will it make your job any easier or harder? (Show card)
6. Why do you think it will?
7. Will it make your job any better or worse? (Show card)
8. Why do you think it will?
9. Considering what you have heard of the new system and what you know about the old system, which system do you think you would prefer?
 (Show card)
10. Have you worked at any other military dining facility besides this one?
11. How many?
12. How does this dining facility compare with others in which you have worked? (Show card)

RESPONSE SHEET FOR PRE-A LA CARTE FOOD SERVICE
PERSONNEL INTERVIEW AT BARKSDALE AFB

MILITARY

CIVILIAN

1. Job _____

2. Time in Food Service _____

3. Military Service

Dislike Very Much	Dislike Moderately	Dislike A Little	Neither Like Nor Dislike	Like A Little	Like Moderately	Like Very Much
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4. Good _____

Bad _____

5. Much Easier	Moderately Easier	A Little Easier	About The Same	A Little Harder	Moderately Harder	Much Harder
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6. _____

7. Much Better	Moderately Better	A Little Better	About The Same	A Little Worse	Moderately Worse	Much Worse
-------------------	----------------------	--------------------	-------------------	-------------------	---------------------	---------------

8. _____

9. Extremely Prefer A la carte	Moderately Prefer A la carte	Slightly Prefer A la carte	No Preference	Slightly Prefer Trad. Sys.	Moderately Prefer Trad. Sys.	Extremely Prefer Trad. Sys.
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10. YES NO

11. _____

12. This dining hall is ...

Much Better	Moderately Better	A Little Better	About The Same	A Little Worse	Moderately Worse	Much Worse
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FOOD SERVICE PERSONNEL POST-A LA CARTE INTERVIEW AT BARKSDALE AFB

1. What do you do in your present job (Do you cook?)?
2. How long have you worked in food service for the Air Force?
3. I would like to know, in general, about this new system that's been implemented here. First, let me ask you to compare it to the old, traditional meal-priced system using this card. (Show Card A)
4. What's good about the new system in general?
What's bad about the new system in general?
5. Has the new system made your job easier or harder than it used to be under the old system, or has your job stayed about the same? (Show Card B)
6. Why?
7. Has the new system made your job better or worse than under the old system, or has it stayed about the same? (Show Card C)
8. Why?
9. In general, is there anything the Air Force can do to increase peoples' attendance in the dining halls?
10. What is that?
11. Do you think that there has been an overall increase in attendance or a decrease in attendance since the changeover to the new system, or has it stayed about the same?
12. Is the food in the dining hall any better or any worse now than before the changes were made? (Show Card C)
13. What is better (worse) about it?
14. Why is it better (worse)?

RESPONSE SHEET FOR POST-A LA CARTE FOOD SERVICE INTERVIEW AT BARKSDALE AFB

(Circle one)

MILITARY

CIVILIAN

1. Job: _____

2. Time in food service: _____

3.

Extremely Prefer A La Carte	Moderately Prefer A La Carte	Slightly Prefer A La Carte	No Preference	Slightly Prefer Trad. Sys.	Moderately Prefer Trad. Sys.	Extremely Prefer Trad. Sys.
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4. Good: _____

Bad: _____

5. Much Easier	Moderately Easier	A Little Easier	About The Same	A Little Harder	Moderately Harder	Much Harder
-------------------	----------------------	--------------------	-------------------	--------------------	----------------------	----------------

6. _____

7. Much Better	Moderately Better	A Little Better	About The Same	A Little Worse	Moderately Worse	Much Worse
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8. _____

9. (Circle one) YES NO

10. _____

11. (Circle one) INCREASE DECREASE ABOUT THE SAME

12. Much Better	Moderately Better	A Little Better	About The Same	A Little Worse	Moderately Worse	Much Worse
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13. _____

14. _____