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MALMSTROM AIR FORCE BASE  
OFFICERS' OPEN MESS:  
A PROBLEM ANALYSIS AND MARKET STUDY

By

John L. Barry

B.B.A., University of Notre Dame, 1984

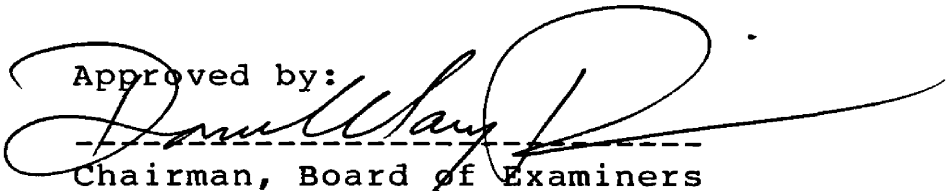
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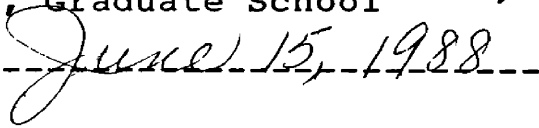
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I greatly appreciate the advice regarding the customer survey provided by Colonel Richard Keen, Wing Commander, 341 SMW, and Colonel Edward Burchfield, Vice Wing Commander, 341 SMW.

I would like to thank Mr. Thomas Bradshaw, Non-Appropriated Funds Manager, and his staff, for their assistance in gathering scarce information. I would also like to thank Mr. Robert Wiley, Officers' Open Mess Manager for his recommendations and advice.

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CHAPTER I  
INTRODUCTION

The Malmstrom Air Force Base Officers' Open Mess (OOM) has had difficulty maintaining profitability over the past year. Compared to other bases in the Strategic Air Command (SAC) Malmstrom's OOM has the highest percentage of eligible active duty officers as members. Despite this accomplishment, Malmstrom was among the least profitable SAC bases through the third quarter of 1987.<sup>1</sup>

Part of the reason for this poor financial performance has been a reduction in sales. According to Bob Wiley, manager of the OOM, it is the chief problem.<sup>2</sup> This study examines the magnitude of this revenue reduction and the impact it has had on the main operating segments of the OOM. A market analysis was also conducted in an effort to determine the causes of, and possible solutions to, the drop in sales.

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<sup>1</sup>William D. Reilly, ed. Open Mess Comparative Analysis Summary-3rd Qtr., FY 87 (August 1987): 3, 8.

<sup>2</sup>Mr. Robert Wiley, manager, Officers' Open Mess, interview by author, Malmstrom Air Force Base, September, 1987.

### Background

Air Force Open Messes are established on Air Force installations and constitute a vital part of the Morale, Welfare, and Recreation (MWR) Program. Normally the Open Mess is operationally divided between an NCO club, which primarily serves enlisted personnel and noncommissioned officers, and an Officers' Club which caters primarily to officers.

In addition to providing food, beverage service and entertainment for its members, the Open Mess also functions as a center for social events, protocol, and community relations.

Membership in the OOM, or Officers' Club, is limited to certain military and civilian personnel. Active members often provide the majority of the members. Those eligible for active membership are active duty commissioned officers permanently assigned to an Air Force base. Associate and honorary membership is extended to adult dependents of Air Force officers, retired officers, disabled veterans, Department of Defense civilian employees, and others as specified in Air Force Regulation 215-11.<sup>3</sup> Other individuals such as visiting officers in temporary duty status, visiting retired officers and guests also use the club on a non-member basis

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<sup>3</sup>HQ AFMPC, Directorate of MWR, Open Mess Division, Morale, Welfare, and Recreation Air Force Open Mess Program (Washington, D.C.: Department of the Air Force, 20 June 1985), 8.

### Organization

Responsibility and line authority for the OOM is defined in detail in Air Force Regulation 215-11. Responsibility is essentially divided between the Base Commander, the Chief of MWR, and the OOM manager. Figure 1 gives an overview of organizational responsibilities.

The base commander ensures that open mess activities and policies are in harmony with other Air Force policies. Some of his responsibilities include approving hours of operation and memberships, ensuring compliance with Air Force alcohol policies, and maintaining wholesome standards at parties and social functions.<sup>4</sup>

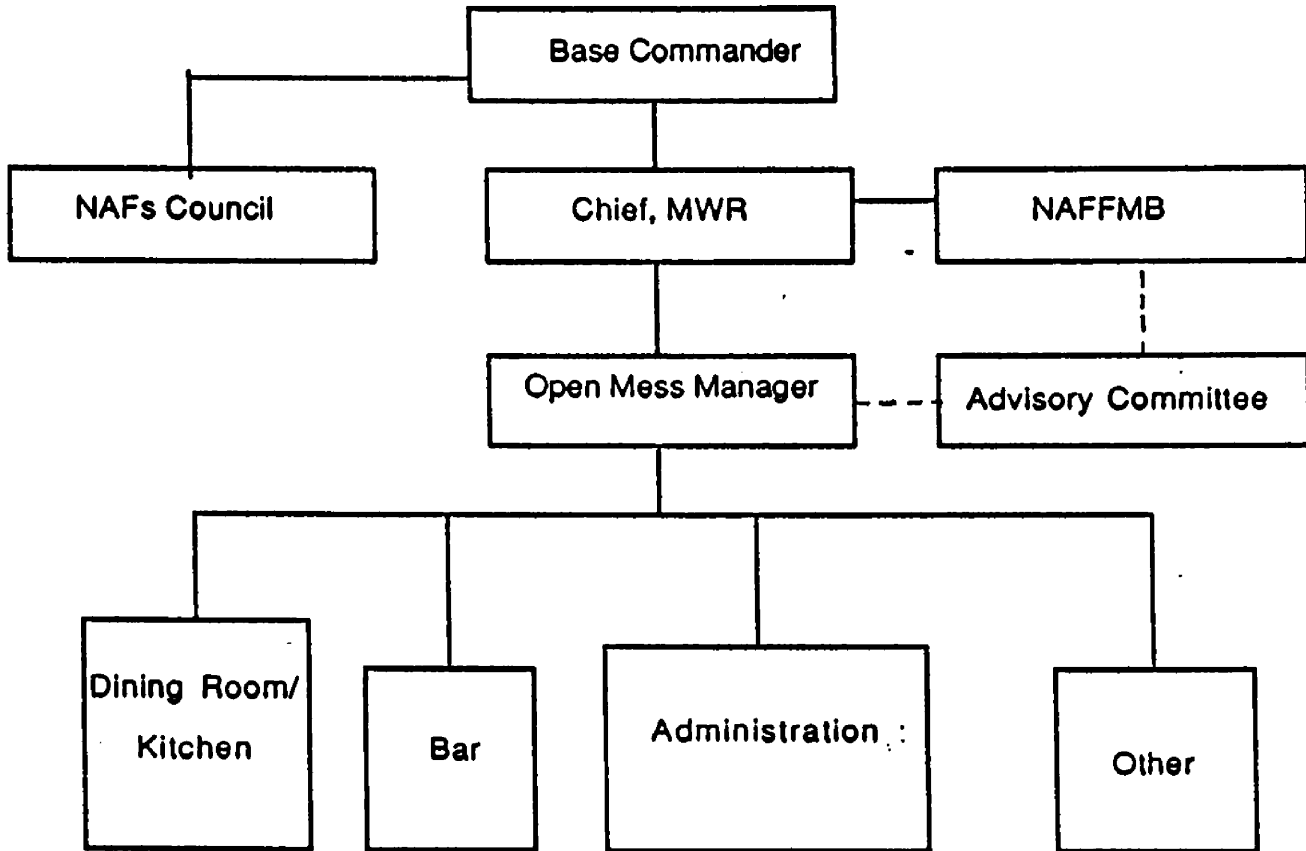
The Chief of MWR supervises the Open Mess. Some of his major duties include comparing financial needs with budgets, providing necessary support for the manager, and briefing the advisory committee on open mess matters. This individual also ensures that the OOM manager receives the training necessary to perform his duties.

The club manager is responsible for the day to day operations of the OOM. His duties are quite broad, but some of the most important include receiving and distributing funds and assets, budgeting, and development of employee training programs. The manager must also schedule entertainment and social functions, and set prices for all

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<sup>4</sup>Ibid., 21.

**Figure 1 Small Open Mess Organizational Structure.**



NAF -- Non-appropriated Funds

NAFFMB -- Non-appropriated Funds Financial Management Branch

MWR -- Morale, Welfare, Recreation

items and services offered for sale.<sup>5</sup>

Each OOM also has an advisory committee composed of individuals who are representatives of the Open Mess membership. Committee members are appointed from each representative unit. The committee provides feedback to the management concerning members' needs and desires, and the committee is briefed on changes and updates to OOM policies. The base commander determines how often the committee meets.<sup>6</sup>

#### Funding

The OOM differs from off-base establishments in that it is not entirely self-supporting. Expenses are covered by two sources. Nonappropriated funds (NAF) come out of club earnings, and cover some of the expenses incurred. Congress also appropriates certain additional funds for the support of morale, welfare, and recreation activities. The OOM receives a portion of those funds to cover specified items.

Nonappropriated funds at the OOM are generated by membership dues and sales of the various operating centers (dining room, informal lounge, cocktail, and barber shop). Membership dues are \$14 per month for active and associate

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<sup>5</sup>Ibid., 22.

<sup>6</sup>Ibid., 6.

members, and \$5 for retired members.<sup>7</sup>

Appropriated funding covers OOM real property, which essentially consists of the building, installed equipment, and nonexpendable property such as heating and plumbing fixtures. Any property purchased (with either source of funding) is maintained with appropriated funds once it has been permanently built into the real property.

Appropriated funds are also used to pay for equipment, supplies, and utilities with certain restrictions regarding the designation of the OOM as an essential feeding facility. The Malmstrom OOM is designated as an essential feeding facility, and therefore all equipment used in the preparation of food is provided for and maintained by appropriated funds. Similarly, supplies are provided for the dining facilities as long as those supplies are normally provided to military dining facilities. The cocktail lounge and casual bar receive no support through appropriated funds, and therefore utilities for the OOM (gas, electricity, heat, water, and refuse collection) are covered by appropriated funds on a pro-rated basis.

Finally, because it is designated an essential feeding facility, the club is permitted to buy its food from the commissary service which often sells at a discount from

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<sup>7</sup>Mr. Robert Wiley, interview by author, Malmstrom Air Force Base, September, 1987.

market prices.<sup>8</sup>

In July, 1987, Malmstrom MWR received a message from SAC headquarters regarding reductions in appropriated fund support for revenue generators such as the open mess. The four SAC bases in or near with metropolitan areas were required to reduce appropriated funding by 25 percent from fiscal year 1985 levels. While Malmstrom does not fit this criterion, the base's funding was limited to that spent in fiscal year 1986.<sup>9</sup>

The practical implications of this restriction on the OOM are probably not as foreboding as its underlying message. Concern about the federal deficit has mounted since July, and a reduction in funding for all SAC revenue generators is an increasing possibility. According to Tom Bradshaw, Non-Appropriated Funds Supervisor, the elimination of all appropriated fund support for open messes is a likely possibility within the next five years.

In fiscal year 1987, appropriated funds covered \$16,400 in laundry and linen service, \$11,876 in miscellaneous supplies, and \$5,575 in equipment purchases for the Malmstrom Officers' Club. The sum of these expenditures, \$33,851, was the equivalent of 11 percent of total sales for the year. For fiscal year 1987 the OOM's Non-appropriated

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<sup>8</sup>HQ AFMPC, 23.

<sup>9</sup>Mr. Thomas Bradshaw, manager of NAFFMB, interview by author, Malmstrom Air Force Base, October, 1987.



Fund income statement shows a loss of \$33,342. It is clear that this loss would have doubled had appropriated funding not been available to cover these expenses.<sup>10</sup>

#### Malmstrom Officers' Open Mess

Non Appropriated Fund (NAF) Income statements for the Officers' Club divide operations into four basic areas: the dining room, the bar, bulk beer sales, and club accounts.

The bulk beer account consists of selling kegs of beer for use elsewhere. Although it is profitable, sales are negligible due to a limited market so the account will not be discussed at length.

The bar account provides sales and expense information from the club's two bars. The casual bar, or "Whiskey-01" is a basement level room with a seating capacity of 72. A small bar provides drinks and condiments, and meals can be delivered from the main floor dining area. A pool table, juke box, pinball machine, and television are available for entertainment. The atmosphere is casual. "Whiskey-01" serves as a place to meet after working hours for drinks and relaxation. On the main floor is the more formal cocktail lounge or the "Fireplace Lounge," with a seating capacity of 64. It offers a larger bar and more formal surroundings than "Whiskey-01." This bar is only open during special functions and during weekends, and provides beverages for

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<sup>10</sup>Ibid.

the dining room.

Also on the main floor is the dining room. This area is used primarily for serving dinner. The room seats 111 and provides a formal dining atmosphere. The dining room account includes all sales from dinners and associated expenses, as well as revenues and expenses generated in the adjacent ballroom. The ballroom is the largest room in the club, and can seat up to 127 people. This room is used for serving lunches, and for special functions such as Christmas parties, change of command ceremonies and wedding receptions. A stage is available for speeches and entertainment. When special events are scheduled during lunch hours, the dining room is used for serving lunches. There is a dance floor with a capacity of about 115 people.

The club account includes all other revenues and expenses associated with the OOM. The revenues are generated from five areas: fees and charges, dues and assessments, amusement machines, concessions income (from the Club Barber Shop) and admissions. Dues and Assessments provide the majority of revenues in this account, and are derived from the monthly membership fees.

The expenses in this account are those expenses which cannot be specifically allocated to the various operating segments. These overhead expenses are broken into six categories. Personnel expense includes managerial salaries, custodial and office personnel, training, taxes and

insurance for these employees. Support function expense includes accounting services, Civilian Personnel Office and credit card expenses. Material Related Expense covers supplies, postage, and vehicle operation. Entertainment Expenses include entertainers' fees, and associated advertising. Depreciation Expense covers depreciation on facilities and equipment. Finally, Other Operating Expense includes utilities, general advertising, taxes, subscriptions, flowers and decorations.<sup>11</sup>

The OOM, because of appropriated funding and monthly membership fees, would seem to have a cost advantage over its off-base competitors. According to a fiscal year 1987 goal statement, the club attempts to pass these savings on to its members by keeping prices at or below 80 percent of prices at comparable off-base restaurants such as Jakes and the Black Angus.

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<sup>11</sup>Lennie M. Bane, Eric J. Batway, Lee-Walker Cox, Anthony M. Dearth, and Scott R. Howell, "A Study of the Malmstrom AFB Officers' Open Mess" (M.A. diss., University of Southern California, 1987), 8.

CHAPTER II  
REVIEW OF LITERATURE  
USC Study

In April, 1987, Lennie M. Bane, Eric J. Batway, Lee-Volker Cox, Anthony M. Dearth, and Scott R. Howell conducted an analysis of the OOM at Malmstrom for the University of Southern California's Systems Management program. Their final work, "A Study of the Malmstrom AFB Officers' Open Mess," is an exploratory research paper. The chief purpose of the study was to identify problems; no attempt was made at proposing solutions. The data presented was only descriptive, no inferential statistical tests were conducted. The OOM was under different management when the study was conducted.

The study examined the OOM from a systems analysis approach. The operations at the OOM were described as a process, with inputs described as OOM members, guests, labor, supplies, and the advisory council. Outputs were described as a restaurant, bar, entertainment, events and a meeting place. External factors included competition, Air

Force regulations, the chain of command on base, and even weather conditions.<sup>12</sup>

After describing the organizational breakdown and operating segments, the paper concluded that the major problem at the Officers' Club was a lack of adequate planning. The paper did not fully explain how this conclusion was made, but apparently their findings were based on the results of a market survey of all active duty officers on base.

The applications of the survey was limited. Active duty members account for only half of the total membership, so conclusions drawn cannot be applied to the entire customer base. However, the paper provides several key insights to participation at the Officers' Club by active duty officers.

The survey was very broad. Information was sought to determine demographic data, frequency of visits, and money spent per visit. Additional questions sought attendance at specific activities, overall attitudes toward the OOM, and advantages and disadvantages of the club. Finally, some questions focused on officers' tastes in food and activities.

The survey response rate was over 50 percent and demographic data indicated that the response group was nearly identical to the population when broken down by rank.

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<sup>12</sup>Ibid., 6.

A number of interesting findings resulted from the survey. The officers graded the overall quality of the OOM on a scale of A through F, or 4.0 to 0. The average was a "C+"; colonels rated the club a perfect "A," and scores descended accordingly by rank. The lowest score was given by lieutenants, a 2.32 out of 4.0, captains rated a 2.45, majors scored a 3.0, and lt. colonels ranked the club a 3.43.<sup>13</sup>

One of the most alarming statistics was the apparently low frequency of visits. Forty-four percent of those responding said they visit the club two times or less per month, and a full 32.8 percent visit only three to six times per month. Thirty-seven percent of those who do attend claim to spend less than \$5.00 per visit, and another 35 percent spend only \$6.00 to \$10.00 per visit. Most second lieutenants visit the OOM two times or less per month, while over two-thirds of first lieutenants, captains, and majors visit the club six times or less per month. Lieutenants, captains, and majors account for 93 percent of active membership.

According to the survey, officers spent 48 percent of their money on dining, 28 percent on special functions, and 24 percent on beverages. Attendance was also observed for a week at lunch, dinner, the casual bar, and the fireplace

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<sup>13</sup>Ibid., 11.

bar. Lunch and dinner accounted for 67.6 percent of total patronage, the casual bar accounted for 23.5 percent, and the fireside bar was 8.9 percent.

Most lieutenants indicated that they attended the OOM for mandatory visits or visits that they perceived to be mandatory. The majority of captains and majors attended for food, while lieutenant colonels and colonels attended for food, fun and mandatory activities.

The OOM's greatest advantages were determined to be the location of the club and the food. Among the more frequently cited limitations listed were the hours of operation, atmosphere, service, (presumably referring to waitresses and waiters), and activities available. Hours of operation were seen as the greatest limitation by lieutenants, captains, and majors.<sup>14</sup>

Though it was not clearly stated, the USC study apparently blamed poor planning because of the low attendance, spending, and overall grading evaluation of the club. These seem to indicate a lack of incentive to attend the club. A lack of appropriate activities, unpopular hours of operation, and general low usage were attributed to a lack of planning as well.

This paper attempts to determine what specific factors discourage members from using the club. It further attempts to measure the extent of dissatisfaction with these factors.

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<sup>14</sup>Ibid., 14.

The survey concentrates on measuring customer satisfaction with various aspects of each operating section of the club. The survey attempts to elicit responses from a wide range of OOM members, not just officers.

Where it is appropriate, possible solutions to the problem of falling sales will be suggested. The USC paper attempted to determine the problems, several potential problem areas were identified. The study indicated that customers do not seem to attend frequently enough. The next section of this paper measures the extent of this apparent problem. The USC program also suggested certain features which may discourage members from patronizing the club; one such condition was the hours of operation. The market analysis reported in this paper tests many of these suggestions.



CHAPTER III  
FINANCIAL ANALYSIS  
Current Outlook

Essential to this study is the premise that inadequate sales at the Malmstrom OOM are at least part of the problem of low profitability. The purpose of this section is to test that premise. Specifically, segmented and break-even analysis were conducted, and sales were compared to the industry sales through ratio analysis.

Table 1 is a segmented analysis for the Malmstrom OOM for fiscal year 1987. The contribution margins and segment margins have been calculated for the various operating segments, and for the club as a whole. The contribution margin ratios and segment margin ratios represent the proportions of sales revenues remaining to cover the fixed expenses of each segment, and the common fixed costs of the club, respectively.

Although the dining room resulted in the only negative segment margin in 1987, the bar, bulk beer, and club accounts combined did not generate adequate segment margins to offset the large dining room loss.

Table 1

Segmented Income Statement  
Malmstrom AFB OOM  
Fiscal Year 1987

	Consolidated	%	Bar	%	Dining Room	%	Bulk Beer	%	Club	%
Sales	307,948		64,759		240,612		1577		1000	
Less Variable Costs	<u>154,332</u>	50.24	<u>26,350</u>	40.69	<u>126,287</u>	52.49	<u>1065</u>	67.5	<u>91.2</u>	91.2
Contribution Margin	153,332	49.76	38,408	59.31	114,324	47.51	512	32.47	87	8.8
Less Direct Fixed Expenses	<u>186,895</u>		<u>30,548</u>		<u>156,347</u>					
Segment Margin	(33,563)	(11)	7860	12	(42,021)	(17)	512	32	87	8.7
Less Common Fixed Expenses	<u>114,845</u> (148,408)									
Plus Additional Revenues*	<u>115,066</u>									
Net Income	(33,343)									
Break Even	606,390		51,506		329,082					
Margin of Safety	(183,376)		13,253		(88,470)					

\*Additional revenues come from three sources

1. Host Account 113,441 From dues, fees, amusement machines, concessions and admissions, interest, service charges and returned checks charge.
2. Dining Room 1,323 From gratuities and miscellaneous income.
3. Bar 302 From miscellaneous income.

The common fixed expenses represent those costs enumerated earlier in the discussion of the club account. For accounting purposes these common fixed costs are included in the club account. They were separated in this analysis however, because they contribute to the services of each separate operating center. The remaining segment margins in each operating center go first to cover those common fixed costs, and any remainder would contribute to net income.

The additional revenues are really "common revenues" (generated mostly through membership fees) and therefore logically should be considered as an offset to any remaining margins. In 1987 these "common revenues" of \$115,066 just offset the common fixed costs of \$114,845. Since the segment margins amounted to a \$33,563 loss, they almost entirely carried through as a loss to net income.

A break-even point was also conducted for the club as a whole, and for the major revenue generators (bar and dining room). The break-even point represents that level of activity where total revenue equals total expenses, or where:

$$\text{Sales} = \text{Variable Expenses} + \text{Fixed Expenses} + \text{Profits}$$

(where Profits = 0)

In a restaurant, the level of production activity is difficult to define due to a widely varied sales mix; however, percentage ratios are available. In the case of

the consolidated club financial data, Table 1 yields:

$$x = .5024(x) + 301,740 + 0$$

where  $x$  = Break-even point in sales dollars

$$x - .5024(x) = 301,740$$

$$x(.4976) = 301,740$$

$$\text{Break-even sales} = x = 606,390$$

A simplification yields:

$$\text{Break-even sales} = \text{Fixed Costs}/1 - (\text{Var. Costs}/\text{sales})$$

$$\text{or Fixed Costs}/\text{Contribution Margin Ratio}^{15}$$

$$= \$301,740/.4976 = \$606,390$$

Solving for break-even sales in the dining room yields a break-even of  $\$156,347/.4751 = \$329,082$ . Actual sales for the year were  $\$240,612$ .

The bar account yields a break-even sales volume of:  $\$30,548/.5931 = \$51,506$ . Total sales for the bar account were  $\$64,759$ .

Table 1 also gives a margin of safety in the major segments. This figure is simply the surplus of actual over break-even revenues.<sup>16</sup> Sales in the bar could fall by  $\$13,253$  and the account would still break-even. The OOM as a whole had a negative margin of safety of  $\$183,376$ , while the dining room had a negative margin of  $\$88,470$ . This means that without a reduction in the break even point for these

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<sup>15</sup>Ray H. Garrison, Managerial Accounting (Plano, Texas, Business Publications, Inc., 1985), 210.

<sup>16</sup>Ibid., 216.

accounts, sales will have to increase by these amounts if the break even point is to be attained.

Before making recommendations based on these techniques, certain assumptions must be made clear. First, it is assumed that the sales mix between the segments will remain constant. Because consumer tastes, competition and other factors change, these factors must be explicitly considered when any conclusions are drawn. A second limiting assumption is that all costs can be accurately divided between fixed and variable elements. In the case of the OOM, the cost-of-goods was considered the only variable cost, all operating costs and depreciation accounted for the fixed costs of each segment. While certain operating costs such as personnel expense may actually be semi-variable with respect to sales, they are considered fixed costs for the purpose of the analysis.<sup>17</sup>

When using industry standards as a base of comparison, it was necessary to find a sector that had the same unique features as the Malmstrom Officers' Club. The Officers' Clubs at the twenty-five SAC bases were chosen as a basis for comparison. They have a limited clientele like Malmstrom, and the operating restrictions are similar to those at the Malmstrom OOM. Finally, consolidated sales and membership data were not available for other Air Force commands or services. The most recent SAC data available

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<sup>17</sup>Ibid., 221.

were the cumulative year-to-date information as of the end of the third quarter of fiscal year 1987 (Appendix A).

The bar account appears healthy with a positive net income and safety margin equal to \$13,253 (Table 1). However, relative to other SAC bases the bar account reveals room for improvement. Through the third quarter of 1987 the bar had an 11.9 percent return on sales, which ranked 23rd of the 25 SAC bases. The SAC average return was 23.01 percent (see appendix A). The losses in the dining room cannot be attributed solely to industry wide problems; through the third quarter of fiscal year 1987, Malmstrom's return on sales of -17.2 percent ranked last among the 25 bases. The average return was -6.5 percent.

#### Possible Solutions

It is clear that the Officers' Club is experiencing great difficulty. Performance in the bar and dining room must be improved. The bulk beer and club accounts, though profitable, contributed only \$599 toward covering common fixed costs. Management needs to focus attention on improving performance in the bar and restaurant.

The club as a whole is below break even sales as is the dining room account. In the bar account sales are above break-even but there is still potential for an improved segment margin, based on the above analysis and industry comparison.

There are three basic approaches to improving

performance in these areas. The formula for break-even sales was given previously. One solution to improving actual sales relative to break-even sales in each account would be to reduce the break-even point. The formula indicates that this could be achieved by first, reducing fixed costs or second, increasing the contribution margin ratio (reducing variable costs as a percent of sales). The third option to improving actual sales relative to break-even is to work for an increase in actual sales without altering the existing cost structure. A financial analysis reveals the practicality of implementing each of these approaches at the Malmstrom OOM.

#### Fixed Expenses

Appendix A contains condensed income statements for the twenty-five Officers' Clubs through the third quarter of 1987. The top block of data gives information for the consolidated club accounts. The second and third blocks yield margin and personnel expense information for the dining room and bar accounts. Table 2 gives a breakdown of the various fixed expenses of the consolidated club accounts on a per member basis.

Malmstrom's personnel expense of 49.24 percent appears relatively high versus the SAC average of 45.04 percent. An analysis of the data also seems to indicate that clubs with relatively large net incomes also had low personnel costs as a percent of sales. This further supports the notion that

Table 2  
 Fixed Expenses per Member  
 SAC Bases  
 FY 1987 through 3rd Quarter

<u>Base</u>	<u>Support Function</u>	<u>Material Related</u>	<u>Entertainment</u>	<u>Promotional</u>
Andersen	69.15	87.24	21.41	16.00
Barksdale	12.37	26.01	3.48	14.56
Beale	20.87	14.83	8.21	19.10
Blytheville	35.03	8.87	5.92	18.36
Carswell	19.16	13.42	6.81	11.88
Castle	19.80	13.05	3.64	19.64
Dyess	22.45	9.18	2.11	14.34
Ellsworth	18.96	10.65	4.86	11.83
Fairchild	31.67	19.39	3.21	9.51
F.E. Warren	29.58	13.83	5.84	11.12
Grand Forks	32.91	18.09	5.44	17.64
Griffiss	22.44	11.36	7.91	19.93
Grissom	22.65	13.51	22.47	9.82
K.I. Sawyer	25.99	12.28	5.54	16.27
Loring	32.94	26.72	5.18	20.56
<b>Malmstrom</b>	<b>18.53</b>	<b>17.56</b>	<b>1.16</b>	<b>6.72</b>
March	22.63	14.26	5.65	8.00
McConnell	26.03	5.30	2.11	14.47
Minot	30.13	15.28	8.34	14.96
Offutt	12.91	15.89	4.70	14.55
Pease	31.23	21.26	3.37	23.20
Plattsburgh	18.94	20.67	2.90	36.42
Vandenberg	31.02	13.51	3.24	28.43
Whiteman	24.82	17.13	5.22	13.07
Wurtsmith	25.87	14.77	5.66	15.23
<b>Average</b>	<b>26.33</b>	<b>18.16</b>	<b>6.18</b>	<b>16.22</b>



Malmstrom can reduce its personnel costs. In the dining room Malmstrom is spending too much on personnel costs. At 56.04 percent of sales, Malmstrom is the highest in SAC. In the bar account, Malmstrom's personnel expense is 33.34 percent of sales, which is very close to the SAC average of 33.02 percent. The OOM then could probably reduce its break-even point by focusing on controlling personnel costs.

An analysis of the other major fixed costs (Table 2) for the club points out that Malmstrom is below the SAC average in per member expenditures for support function, material related, entertainment, and promotional expenses. Therefore, there is probably little room to reduce these costs in an effort to lower the break-even point.

It was pointed out that entertainment and promotional expenses were not excessively high. A further analysis reveals that they may actually be too low. Both expenses were less than half the SAC average and may be contributing to the low sales.

#### Contribution Margins

Appendix A gives gross profit margins for the OOM. Malmstrom's overall margin of 49.78 percent ranked twenty-third among the twenty-five bases, and was below the 52.25 percent average. The dining room margin of 47.69 percent is slightly below the SAC average of 49.29 percent, while the bar account at 58.48 percent is far below the 67.83 percent average.

It is possible that price competition at Malmstrom is more severe than at other bases, or that Malmstrom's remote location makes its cost-of-goods higher than the other bases. If this were the case then similar results would be expected from the NCO club, which has similar constraints. For the same period the NCO club had a 46.27 percent gross margin in the dining room versus the SAC average of 49.57 percent, yielding results similar to the OOM.<sup>18</sup> But the bar account showed a 63.08 percent margin, not far behind the SAC average of 66.65 percent. This account has a far better showing than the OOM.

Management then, may be able to lower the break-even point by increasing the gross margin through higher prices or through better purchasing procedures. Part of the following survey examines the practicality of a price increase by examining current attitudes toward existing prices.

#### Sales Revenues

The final method to meet the break even point is to increase actual sales to the current break even point. Another look at the margin of safety in the dining room account (Table 1) shows that if monthly sales in the dining room were increased by \$6.58 per member, the account would be close to break-even sales. Specifically, with the current

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<sup>18</sup>Reilly, 7.

1,120 members:

$$\$6.58 \times 12 \times 1120 = \$88,435.20$$

The following formula demonstrates a quick way to compute the impact of a change in sales on net income.

$$\text{Change in sales} \times \text{Contribution Margin Ratio} = \\ \text{Change in net income}^{19}$$

$$\text{In this case: } \$88,435.20 \times .4751 = \$42,015.56$$

Clearly, this increase in sales would very nearly eliminate the negative segment margin of \$42,021. Currently, the average member spends \$17.90 at the dining room, so break even sales would require that each member increase spending at the dining room by 37 percent, given the current cost structure.

To measure the need for increased sales, recent sales levels must be compared with recent industry sales trends. Once again, SAC bases provide the basis for this comparison.

One relative measure of sales performance is total asset turnover. This is the ratio of sales to total assets at a given time. The figure is a measure of the utilization of those assets in generating sales, and is meaningful only when compared to an industry standard.

The turnover for SAC OOMs is depicted in Table 3. The average turnover was 1.05 Malmstrom's turnover of 1.00 was therefore not abnormally low. It appears from these figures that the OOM management is doing an adequate job of

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<sup>19</sup>Garrison, 205.

Table 3  
Comparative Sales Data  
SAC Bases  
FY 1987 through 3rd Quarter

<u>Base</u>	<u>Total Assets</u>	<u>Total Asset Turnover</u>	<u>Sales per Member</u>
F Andersen	531,871	1.22	1302
F Barksdale	522,583	1.02	235
F Beale	152,135	1.30	204
F Blytheville	81,815	1.69	193
F Carswell	287,363	1.29	196
F Castle	455,593	0.82	257
F Dyess	340,396	0.82	195
+ Ellsworth	387,798	0.73	239
F Fairchild	347,907	0.87	266
M F.E. Warren	170,024	1.38	213
+ Grand Forks	248,990	0.81	255
F Griffiss	324,036	0.70	189
F Grissom	197,380	1.26	304
F K.I. Sawyer	190,394	1.26	352
F Loring	212,067	1.20	397
<b>M Malmstrom</b>	<b>235,992</b>	<b>1.00</b>	<b>211</b>
F March	336,168	1.79	3 21
F McConnell	325,622	0.87	290
+ Minot	297,736	0.82	265
F Offutt	1,781,850	0.84	236
F Pease	438,956	1.05	427
F Plattsburgh	465,558	0.65	342
* Vandenberg	475,681	1.07	404
M Whiteman	152,525	1.24	233
F Wurtsmith	212,801	0.71	168
<b>Average</b>		<b>1.05</b>	<b>307</b>

F = Flying Mission

M = Missile Mission

+ = Both

\* = Missile Training

generating sales with the assets available.

Turnover can be deceptive, however, since an OOM with larger or newer facilities can have a small turnover compared to other bases, even if its sales were the same on a dollar basis. The converse would be true for an older or smaller club. The true limiting factor in terms of sales is the number of members belonging to a given OOM. Sales per member, therefore, is a more reasonable basis for comparison.

Through the third quarter of fiscal year 1987, Malmstrom averaged sales of \$211 per member, or \$23.44 per member per month (not including the monthly membership fee). SAC bases averaged \$307 in sales per member over the nine months, or \$34.11 per member, per month. Table 3 demonstrates that Malmstrom ranked twentieth of the twenty-five SAC bases in sales per member.

Table 3 also separates the SAC bases on the basis of the mission at each base. Each SAC base is home to either a flying wing, usually bombers or tankers, a strategic missile wing, or a combination of the two. It is interesting to note that the clubs at bases with flying missions averaged \$326 in sales per member, while clubs with missile wings averaged only \$219 per member. The combined mission bases averaged \$253 in per member sales.

Apparently flying crews find the club more inviting. Perhaps tradition has made club patronage a large part of

being on a flight crew. Missile crew members apparently find the club

less appealing; a parallel tradition may never have formed. Additional research, with attitude surveys in both groups, would have to be conducted to test this suggestion.

This is a pertinent point since Malmstrom will soon have a flying mission in addition to the missile wing already in place. If the results are similar to other combined wings, quarterly sales per member could rise to \$253. With approximately 100 new officers arriving this would add \$72,340 in sales for three quarters. In fiscal year 1987 the club as a whole had a safety margin of (\$183,376), so over a period of twelve months this figure could be reduced to (\$86,923). This assumes no change in the level of fixed costs or the contribution margin ratio as a result of the new membership.

Andersen Air Force base has had sales per member of \$1,302 which is over three times that of the next highest base. A likely explanation is Andersen's location. Located on Guam, the OOM is probably heavily used by non-member officers temporarily located at Guam en route to other destinations.

A final relative measure of sales performance is the trend in sales. In fiscal year 1987 the OOM experienced a loss of \$33,342 on sales of \$307,947. Fiscal year 1986 resulted in a profit of \$6,410 on sales of \$344,225. The

11.7 percent drop in sales contributed directly to the \$39,752 drop in net income. From fiscal year 1986, sales in the dining room fell by \$23,557 or 9 percent. Sales in the bar fell by \$16,845, or 21 percent.

#### Summary

Management can lower the break-even point by lowering personnel costs and possibly through achieving higher margins. Further research would be necessary in the personnel area to examine labor restrictions and labor needs versus sales. Increased margins would call for an examination of price competition in the Great Falls area as well as a study of current purchasing procedures and available suppliers.

Clearly the Malmstrom OOM has room to increase sales as a means of achieving break even sales, and this is the focus of the remainder of this paper. The \$6.58 per member increase needed in the dining room is achievable. Larger expenditures on entertainment and promotion may be the first step. But to bring members back to the club there must be a market study to determine what the members want, and conversely, what is keeping them away.

CHAPTER IV  
METHODS OF RESEARCH  
Survey Development

In order to determine the needs of Open Mess members, a survey was developed to measure their attitudes regarding the use of the Open Mess and it's facilities. Appendix B is the final survey which was mailed to selected members of the OOM population.

The individual questions were selected on the basis of the results of the USC study, discussion with the Officers' Club manager, the chief of Morale Welfare and Recreation, and informal verbal inquiries with various OOM members.

After an initial draft of the survey was completed, it was submitted to the chief of MWR, the base commander, the vice wing commander, and the wing commander. At each level inputs were given and questions were edited for clarity. Based on these inputs, a second draft was submitted and approved by each level of authority.

The questions are based on the Likert model, in which responders indicate their attitude toward each statement by circling their level of agreement from a scale of one to five (strongly agree to strongly disagree).



Questions one through ten focus on the three main operating centers in the club; the emphasis here is on service aspects which will likely affect customer satisfaction.

Questions eleven through thirteen focus on aspects of special functions recently held at the OOM. These functions have proven marginally successful, so further information is needed to determine how future functions might be improved.

The last two questions concern the hours of operation at the Club and demographic information. The demographic information is used to determine the validity of the sample taken, and to determine needs and attitudes of specific market sectors through cross-tabulation.

#### Sample Selection

There are currently 1,150 members of the Malmstrom OOM. To conduct the survey, a random sample of 300 members was chosen.<sup>20</sup> This was the appropriate sample size for a population of 1,150 and a level of statistical significance of 95 percent.

A random sample was chosen and the method of selection was nonsystematic. Each of the 1,150 members had an equal and non zero chance of being selected. Specifically, a table of random digits was used to determine 300 different random digits between 1 and 1,150.<sup>21</sup> Each digit was applied to the mailing list of

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<sup>20</sup> Taro Yamane, Elementary Sampling Theory (Englewood Cliffs, New Jersey, Prentice Hall, 1967), 398.

<sup>21</sup> William G. Zikmund, Business Research Methods (New York, New York, The Dryden Press, 1984), 324.

current members. All members are on the mailing list. The result was a list of 300 different members.

All OOM members receive a monthly mailing packet containing a bill (if applicable), a monthly calender of events, and additional advertising. The mailing packets for the 300 randomly selected members were selected and a survey was placed in each. The instructions on the survey (Appendix B) direct each respondent to complete the survey, fold it, and mail it. This feature maintained the anonymity of responses, and the postage paid questionnaire further encouraged members to respond.

### Study Design

The survey results have been interpreted through both descriptive and inferential statistics. The descriptive statistics transform the raw data into understandable form to facilitate interpretation. The inferential statistics provide a framework from which conclusions can be drawn from testing the statistical significance of various hypotheses.<sup>22</sup>

The first section of descriptive statistics gives the frequency of response for each question. The simple percentage of responses for each of the questions at each level of agreement (strongly disagree to strongly agree) is given. This allows for inspection of differences between the various factors.

The second area of descriptive statistics highlights the central tendency and dispersion of responses for each question.

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<sup>22</sup> Ibid., 419.

These measures are again based on the responses of the entire sample. Because this is a univariate analysis, and the population is assumed to be normally distributed, the mean is the appropriate measure of central tendency, and the standard deviation is the proper measure of dispersion.<sup>23</sup>

Each question in the survey was based on customer's attitudes toward a single variable, such as the quality of meals served. Inferential statistics are used to test whether or not customers feel that the quality of meals is good. These techniques were applied to each question. A Z test is used to test each question since the population is assumed to be normally distributed, the sample size is relatively large ( $n > 30$ ) and the population variances are unknown.<sup>24</sup>

Inferential statistics are also used to test whether significant differences exist between certain groups in their attitudes toward selected questions. The assumption of a normally distributed population is again the case and the sample size is relatively large. The population variances are unknown, but assumed to be equal. These factors make a t-test for two independent samples the appropriate test.<sup>25</sup>

For both the descriptive and inferential statistics a 95 percent confidence level was used. This level was chosen because

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<sup>23</sup> Ibid., 431.

<sup>24</sup> Wayne W. Daniel, James Citerrell, Business Statistics (Boston, Houghton Mifflin), 1986, 189.

<sup>25</sup> Ibid., 194.

this is the most widely used standard and, therefore, the most meaningful, providing a good justification without imposing undue difficulties in identifying areas to change.

The results of these tests are combined in a following section, followed by the interpretation of those results.

### Validity

The response rate for the sample selected was 25.3 percent. Representation of membership categories in the sample is representative of the population. Table 4 presents the proportion of responses in both the survey returns and in the population. The largest deviations from population to sample were in the retired category (over represented by 7 percent), Department of Defense civilian employees (over represented by 14 percent), honorary members (under represented by 14 percent), and captains (over represented by 6 percent). The significance of these differences is addressed in the interpretation of results section.

The low response by honorary members may be explained by their status. Since this sector (composed mostly of civilian dignitaries and community leaders) does not pay a monthly fee, there is perhaps less incentive to open the monthly mailed package and return the enclosed survey.

The deviations in the other sectors have no obvious explanation, they are assumed to be the result of random variation in the response rate.

Table 4

Comparison of Population and Sample Representation

	<u>Population % of Total</u>	<u>Sample % of Total</u>
Retired	15	22
Civilian	1	8
Widow	1	1
Honorary	31	17
Colonel	1	1
Lt. Colonel	3	2
Major	4	4
Captain	18	24
1 Lt.	15	13
2 Lt.	11	8

Effects of Nonresponse

The relatively small (25 percent) overall response rate, and the noted variations in the membership categories warrant further discussion of nonresponse.

The term nonresponse refers to a failure to obtain responses on some elements designated for the sample.<sup>26</sup>

Nonresponses to field research are considered to come from five primary sources: not-at-homes, refusals, inability to respond, not found, and lost schedules.<sup>27</sup>

Since this study was designed as a mailed survey, not-at-homes are not considered to be a source of nonresponse. Similarly, inability to respond (for serious illness, illiteracy and so forth) is assumed to be a minor factor in this study. Lost schedules refers to information lost after a field attempt. All surveys were returned to the University of Montana, and secretaries carefully set aside all responses; if any surveys were lost they were most likely lost in the mail. This is a possible, but probably low cause of nonresponse in this study.

Those not found is another potential source of nonresponse. Although the billing agency is notified when a member moves, there is a delay in this process. The surveys could have been sent out during this delay, resulting in the survey "not finding" the intended club member.

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<sup>26</sup> Kish, Leslie, Survey Sampling (New York, John Wiley and Sons, Inc., 1965), 532.

<sup>27</sup> Ibid., 533, 534.

Refusals constitute the most likely source of nonresponse in this study. In a mailed survey, refusals can result from the disposition of respondents and the nature of the questions asked. Most refusals can be considered permanent.<sup>28</sup>

In order to ensure a high response rate, a random drawing for gift certificates was considered for those responding. Anonymity, however, was considered vital to this survey since the USC study revealed that many members attend the club for "perceived mandatory" reasons. This defensive attitude about the club in general lead to the conclusion that a non anonymous survey would bias responses considerably. A random drawing would have necessitated connecting names with responses, so the idea was dropped.

Follow up mailings have proven highly successful in other mailed surveys, but this idea was also rejected. First, cost was a limiting factor; postage for follow-up mailings would have been prohibitive. Waiting until the May mailing packages were delivered would have eliminated this expense, but time constraints eliminated this option. Finally, most nonrespondents were probably refusals and, as noted earlier, these tend to be permanent, so a follow-up mailing would probably have increased responses only slightly.

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<sup>28</sup> Ibid., 533.

CHAPTER V  
OBSERVATIONS AND FINDINGS

This chapter consists of two sections. The first section is an analysis of the survey results using descriptive statistics. The second section uses inferential statistics to draw conclusions based on the survey results.

Descriptive Statistics

In general it appears that most of the sample respondents were pleased with the dining facilities. In Table 5, the frequency distributions for the entire sample indicate that most respondents found the quality of meals to be good. Ninety percent of the respondents indicated that they strongly agree or agree that the meals are of good quality. There seems to be a generally favorable attitude toward the promptness and courtesy displayed by the waiters and waitresses as well. Sixty-five percent of the respondents agreed or strongly agreed that the service was prompt while 88 percent gave similar ratings for courtesy. Meal prices are perceived as being less expensive than off base competition; 69 percent agreed or strongly agreed with this statement. Eighty percent agreed or strongly agreed that the menu variety is good. The questions pertaining to the dining facilities had a generally high response rate. The measures of



**Table 5**

**Percent Frequency Distributions  
Questions 1-13  
Entire Sample**

<u>Question</u>	<u>Strongly Agree</u>	<u>Agree</u>	<u>Undecided</u>	<u>Disagree</u>	<u>Strongly Disagree</u>	<u>Non Response</u>
1. Quality of meals	35.90	53.85	0	3.85	1.28	5.13
2. Waiters/Waitresses are prompt.	21.79	43.59	12.82	12.82	7.96	1.28
3. Waiters/Waitresses are courteous.	37.18	51.28	3.85	5.13	1.28	1.28
4. Meal prices less expensive vs off base.	26.92	42.31	11.54	11.54	6.41	1.28
5. Menu variety is good.	19.23	61.54	6.41	7.69	2.56	26.92
6. Availability of Happy Hours is adequate.	7.69	26.92	32.05	3.85	2.56	26.92
7. Drink prices lower than off base. (Whiskey 01)	5.13	39.74	21.79	7.69	2.56	23.08
8. Whiskey 01 atmosphere better than off base.	8.97	11.54	29.49	12.82	10.26	26.92
9. Cocktail lounge atmosphere better than off base.	6.41	30.77	33.33	12.82	1.28	15.38
10. Drink prices lower than off base. (cocktail lounge)	6.41	38.46	33.33	6.41	0	15.38
11. Quality of entertainment was good. (all special functions)	8.97	19.23	8.97	2.56	1.28	58.97
12. Quality of food was good. (all special functions)	6.41	24.36	1.28	5.13	2.56	60.26
13. Price of special funtion was reasonable. (all special functions)	5.13	20.51	3.85	5.13	5.13	60.26

central tendency on Table 6 support these observations.

The informal lounge, "Whiskey-01", had a lower response rate, and attitudes were mixed. Thirty two percent were undecided concerning the adequacy of happy hours, while 35 percent agreed or strongly agreed that these activities were adequate. The attitude toward drink prices was mixed; 21 percent were indifferent toward these prices versus those off base. The response concerning the atmosphere versus off base competition was also mixed; 29 percent were undecided while only 20 percent agreed or strongly agreed.

The response rate for questions nine and ten regarding the fireplace cocktail lounge was somewhat higher than that of "Whiskey-01". The results are mixed, and it is not easy to make any firm conclusions regarding the atmosphere or the drink prices based on these descriptive statistics. For both questions 33 percent were undecided, and very few either strongly agreed or strongly disagreed.

The overall response rate to the three questions regarding the special functions was quite low. The question with the highest response rate had a 59 percent non-response rate. Of those who responded, only between 19 and 24 percent agreed with these statements. Considering this low response rate and mixed results, the descriptive statistics are inconclusive. The means and standard deviations reflect these wide dispersions.

Table 7 shows that most members surveyed are satisfied with the current hours of operation. The twenty respondents who were

**Table 6**

**Measures of Central Tendency**

<u>Question</u>	<u>Mean</u>	<u>Standard Deviation</u>
1	4.26	0.78
2	3.60	1.19
3	4.19	0.84
4	3.73	1.18
5	3.89	0.90
6	3.46	0.89
7	3.48	0.89
8	2.95	1.19
9	3.33	0.88
10	3.53	0.75
11	3.78	0.97
12	3.68	1.11
13	3.38	1.26

## Table 7

### Percent Frequency Distributions Questions 14-21 Entire Sample

14. Hours of operation adequate: YES : 69.23 NO : 25.64 MEMBERS NOT RESPONDING : 4

15. Membership: ACTIVE DUTY: 52.85  
RETIRED: 21.79  
DOD CIVILIAN: 7.69  
HONORARY : 18.38  
WIDOW : 1.28  
MEMBERS NOT RESPONDING : 0

16. Of Active Duty: 2LT.: 15  
1LT.: 25  
CAPTAIN: 45  
MAJOR : 10  
LT. COL.: 2.5  
COLONEL : 2.5  
MEMBERS NOT RESPONDING : 2

17. Marital Status: MARRIED : 91.04 UNMARRIED : 8.96 MEMBERS NOT RESPONDING : 11

18. Times Per Month at Off Base Restaurants : 0-3 times : 40  
4-6 times : 29.33  
7-9 times : 13.33  
10-12 times : 5.33  
More than 12 : 12  
MEMBERS NOT RESPONDING : 3

19. Times Per Month at the Officers' Club : 0-3 times : 75.64  
4-6 times : 17.96  
10-12 times : 2.56  
More than 12 : 3.85  
MEMBERS NOT RESPONDING : 0

20. Children : YES : 46.75 NO : 53.25 MEMBERS NOT RESPONDING : 1

21. Age : 20-25 : 9.09  
26-30 : 19.48  
31-35 : 15.58  
36-40 : 6.49  
41-45 : 9.09  
46-50 : 6.49  
51-55 : 11.89  
56-60 : 5.19  
60 + : 16.88  
MEMBERS NOT RESPONDING : 1

not happy with the hours suggested extended lunch hours, Monday lunches, and Sunday brunches. The response rate on this question was good, only four members did not respond.

The membership designations in the sample strongly resembled those of the population. This was discussed in chapter IV.

Fourteen percent (eleven respondents) did not reply to the marital status question. Ninety-one percent of those who did respond were married. Although no data are available concerning this breakdown in the OOM population, this intuitively seems to be biased toward married members.

The descriptive statistics indicate that 69 percent of the members eat at off base restaurants between zero and six times per month. Ninety-four percent eat at the OOM between zero and six times per month. It should be noted that one response category (seven to nine times) was deleted in error when the survey was made up. This may alter the results of the survey, but inferences were still made. The overall response rate to these questions was very high; only three members did not respond to the question concerning off base restaurants. Based on descriptive statistics there is no clearly discernable preference for the Club or off base establishments.

The respondents were well dispersed with regard to age. Most respondents were between 26 and 30 and these only amounted to 19 percent of the sample. The distribution of those with children and those without children was nearly even. For each question only one member did not respond. No demographic

information on the Club's population was available regarding those parameters, but the information will be used in the inferential statistics section and in cross tabulation.

Table 8 shows cross tabulations which were performed to determine frequency distributions for each of the special functions. The highest response in any of these categories was only nine members, so conclusions based on these cross tabulations would not be meaningful.

Further cross tabulation was performed on the demographic profile questions versus questions eighteen and nineteen. The results can be seen in Tables 9 and 10. In the general membership categories, only active duty, retired officers and honorary members had meaningful response rates. In each of these categories there appears to be a preference for off base facilities. Only active duty members claimed to eat at the club more than twelve times per month, but in each category many more eat at off base restaurants this frequently.

Among active duty personnel, only lieutenants and captains yielded a significant response; the results seem to indicate a preference for off base competition over the Club. Eighty-three percent of second lieutenants, 60 percent of first lieutenants and 56 percent of captains attend the club between zero and three times per month. The results are similar for both married and unmarried members. Members with children show no preference for off base establishments or the Club.

The five-year age brackets in question twenty-one resulted

**Table 8**  
**Percent Frequency Distributions**  
**Questions 11-13**  
**Entire Sample**  
**(by special function attended)**

<u>Question</u>	<u>Strongly Agree</u>	<u>Agree</u>	<u>Undecided</u>	<u>Disagree</u>	<u>Strongly Disagree</u>	<u>Total Responders</u>
<b>"Bad Luck" Party</b>						
Quality of the entertainment was good.	12.5	0	25	50	12.5	8
Quality of the food was good.	22.2	11.1	0	55.6	11.1	9
Price of admission was reasonable.	33.3	11.1	11.1	44.4	0	9
<b>"Bad Taste" Party</b>						
<b>NO RESPONSES</b>						
<b>Octoberfest</b>						
Quality of entertainment was good.	0	12.5	25	50	12.5	8
Quality of the food was good.	0	25	0	12.5	12.5	8
Price of admission was reasonable.	0	37.5	12.5	37.5	12.5	8
<b>Art Auction</b>						
Quality of entertainment was good.	0	0	20	40	40	5
Quality of the food was good.	0	0	20	40	40	5
Price of admission was reasonable.	0	0	16.7	33.3	50	6
<b>Wine Tasting</b>						
Quality of entertainment was good.	0	0	33.3	33.3	33.3	6
Quality of the food was good.	0	0	0	80	20	5
Price of admission was reasonable.	0	0	0	100	0	6
<b>New Year's Party</b>						
Quality of entertainment was good.	0	25	0	75	0	4
Quality of the food was good.	0	25	0	75	0	4
Price of admission was reasonable.	25	0	0	75	0	4

Table 9

Percent Frequency Distribution Cross-Tabulation

Times per month lunch/dinner at the Officers' Club

	<u>0-3 times</u>	<u>4-6 times</u>	<u>10-12 times</u>	<u>More than 12 times</u>	<u>Total members responding</u>
Active Duty	61.9	28.6	2.4	7.1	42
Retired	88.2	5.9	5.9	0	17
DOD Civilian	83.3	16.7	0	0	6
Honorary	100	0	0	0	12
Widow	100	0	0	0	1
<u>Of Active Duty:</u>					
2Lt.	83.3	16.7	0	0	6
1Lt.	60	30	0	10	10
Captain	55.6	38.9	5.6	0	18
Major	75	25	0	0	4
Lt. Colonel	100	0	0	0	1
Colonel	0	0	0	100	1
Married	72.1	21.3	1.6	4.9	61
Unmarried	83.3	16.7	0	0	6
<u>Children?</u>					
Yes	72.2	19.4	2.8	5.6	36
No	80.5	17.1	0	2.4	41
<u>Age</u>					
20-25	71.4	28.6	0	0	7
26-30	60	33.3	0	6.7	15
31-35	66.7	25	8.3	0	12
36-40	60	40	0	0	5
41-45	71.4	0	0	28.6	7
46-50	100	0	0	0	5
51-55	88.9	11.1	0	0	9
56-60	100	0	0	0	4
60 +	92.3	7.7	0	0	13



Table 10

Percent Frequency Distribution Cross-Tabulation

Times per month lunch/dinner at off base restaurants

	<u>0-3 times</u>	<u>4-6 times</u>	<u>7-9 times</u>	<u>10-12 times</u>	<u>More than 12 times</u>	<u>Total members responding</u>
Active Duty	38.1	33.3	14.3	7.1	7.1	42
Retired	26.1	53.3	6.7	0	13.3	15
DOD Civilian	60	0	20	20	0	5
Honorary	58.3	0	16.7	0	25	12
Widow	0	0	0	0	100	1
<u>If Active Duty:</u>						
2Lt.	33.3	33.3	16.7	0	16.7	6
1Lt.	20	20	20	20	10	10
Captain	55.6	27.8	16.7	0	0	18
Major	0	100	0	0	0	4
Lt. Colonel	0	0	0	100	0	1
Colonel	100	0	0	0	0	1
Married	39.7	31	15.5	5.2	8.6	58
Unmarried	33.3	16.7	0	16.7	33.3	6
<u>Children?</u>						
Yes	41.7	33.3	13.9	5.6	5.6	36
No	39.5	23.7	13.2	5.3	18.4	38
<u>Age</u>						
20-25	28.6	42.9	14.3	14.3	0	7
26-30	40	20	20	6.7	13.3	15
31-35	50	25	16.7	0	8.3	12
36-40	40	60	0	0	0	5
41-45	42.9	28.6	14.3	14.3	0	7
46-50	20	40	0	0	40	5
51-55	37.5	12.5	25	0	25	8
56-60	100	0	0	0	0	4
60 +	27.3	36.4	9.1	9.1	18.2	11

in very low response rates, but when combined it appears that those members forty-five years or younger show a slight preference for off base restaurants. Those over forty-five show a stronger preference in the same direction. The vast majority in each age group attend the OOM only zero to three times per month.

### Inferential Statistics

For questions one through thirteen, single mean hypothesis testing was conducted to determine if the sample results had a mean that was significantly different from an undecided response.

To conduct such a test, an "undecided" response was hypothesized. Since each question was interval scale from one to five, such a response would result in a mean of three. If the actual sample mean was significantly different from this mean (i.e., the difference could not be attributed to random variation), then this null hypothesis ( $H_0$ : sample mean is equal to three), would be rejected. The alternative hypothesis ( $H_a$ : sample mean is not equal to three) would be accepted.

The appropriate test for this situation is a Z-test (developed in chapter IV). There are two methods to determine the acceptance of the null hypothesis. By looking at the observed Z-value, one can determine whether or not it falls within the critical Z limits at the 95 percent confidence level. If the observed Z should fall within these limits, the null hypothesis is accepted, if it falls outside these limits the null is rejected and the alternative accepted.

Alternatively, a sampling distribution could be created around the null value. If the observed mean should fall within the limits of this distribution, the null hypothesis would be accepted. The null would be rejected should the observed mean fall outside this area.

The first question (Table 11) rejects the null hypothesis. The membership feels that the quality of food is good. This supports the descriptive analysis. The sample mean of 4.26 is well above the critical upper limit of 3.177. Similarly, there is agreement that the waiters and waitresses provide prompt and courteous service. Question three had a mean of 4.19, well above the upper limit of 3.188, so service is perceived as being quite courteous. Questions four and five also reject the null hypothesis, so the members feel that meal prices are lower than off base restaurants, and that the variety of menu items at the Club is adequate. These tests confirm the conclusions of the descriptive analysis.

Questions six through eight refer to "Whiskey-01." In questions six and seven the null hypothesis was rejected. The members feel that the availability of happy hours is adequate, and drink prices are perceived as being lower than off base drink prices. The results of question eight failed to reject the null hypothesis, so the membership is undecided about their preference for the "Whiskey-01" atmosphere versus off base establishments. The sample mean of 2.95 falls within the critical range of acceptance.

Hypothesis tests for a Single Mean Question 1-13  
(Z - test)

Null Hypothesis  $H_0$ : Mean = 3

Alternative Hypothesis  $H_a$ : Mean = 3

Critical Z = 1.96 (95% confidence level)

<u>Question</u>	<u>Observed Z</u>	<u>Sample Mean</u>	<u>Critical Values</u>	
			<u>Lower Limit</u>	<u>Upper Limit</u>
1	13.9	4.26	2.823	3.177
2	4.39	3.60	2.733	3.267
3	12.43	4.19	2.812	3.188
4	5.42	3.73	2.737	3.263
5	8.64	3.89	2.799	3.203
6	3.88	3.46	2.770	3.211
7	4.20	3.48	2.774	3.226
8	-.33	2.95	2.692	3.308
9	3.07	3.33	2.786	3.213
10	5.75	3.53	2.819	3.181
11	4.53	3.78	2.662	3.338
12	3.41	3.68	2.610	3.390
13	1.72	3.40	2.558	3.442

Question nine reveals that the membership found the atmosphere in the cocktail lounge to be better than the atmosphere in off base cocktail lounges. For question ten, respondents found drink prices to be lower than drink prices off base.

Questions eleven and twelve show that the attitudes of the respondents as a whole did provide inferences regarding the special functions. The general attitude toward all of the special functions revealed that the entertainment was good, as was the quality of the food. But on question thirteen the results failed to reject the null hypothesis. The sample mean, 2.4, falls within the range of acceptance. The membership is undecided regarding the reasonableness of the prices of the special functions.

Additional inferential tests were conducted to test for significant differences between two means. As discussed in chapter IV, the t-test for two independent samples is the appropriate test to use.

The null hypothesis,  $H_0$ , states that the difference between the two means will be zero. If the null is true, then any variation between the means, as measured by the observed  $t$ , will not exceed the critical  $t$  at 95 percent, and will therefore be attributed to random variation.

The first test (Table 12) compared the sample means of lieutenants versus captains for the first thirteen questions. The USC study revealed a particularly poor overall rating for the

Table 12

Hypothesis Test for Two Means

Questions 1-10

t-test

Lieutenants versus Captains

Null Hypothesis  $H_0$ : Difference between Means = 0

<u>Question</u>	<u>Observed T</u>	<u>Critical T</u>	<u>Degrees of Freedom</u>
1	-1.233	2.042	30
2	-0.0630	2.042	32
3	-1.498	2.042	32
4	0.1976	2.042	32
5	-0.6311	2.042	32
6	0.4701	2.060	25
7	0.7157	2.060	25
8	-0.1637	2.056	26
9	0.5894	2.060	25
10	0.2907	2.064	24

club by lieutenants. This test sought to determine what particular feature might be responsible for this attitude. If a given response proved significantly different from the more senior officers (captains), then this may be one area for managerial attention. This is particularly important since young officers will determine the future success of the Open Mess program.

The data revealed no significant differences between the groups. In each case the observed t value was less than the critical t. Captains and lieutenants had very similar responses in each area of concern.

A second test compared the means of active duty versus retired officers (Table 13). Only questions two, eight, nine, and ten showed significant differences between these groups and retired officers. In the restaurant, the retired officers rated the promptness of waiters and waitresses more highly. The observed T, -3.118, is negative which indicates that retired members gave a higher rating, and its absolute value, 3.118, exceeds the critical T of 2.02. In both lounges, retired officers rated the atmosphere more highly than the active duty members. Finally, the retired members were far more inclined to agree that drink prices in the fireplace lounge were lower than those in off base establishments.

Question eighteen, monthly visits to off base restaurants, was tested against question nineteen, monthly visits to the Officers' Club. (Table 14). The test was run for the population

Table 13

Hypothesis Test for Two Means

Questions 1-10

t-test

Active Duty versus Retired

Null Hypothesis  $H_0$ : Difference between Means = 0

<u>Question</u>	<u>Observed T</u>	<u>Critical T</u>	<u>Degrees of Freedom</u>
1	-1.928	2.0-2.021	53
2	-3.118	2.0-2.021	56
3	-1.917	2.0-2.021	56
4	-1.980	2.0-2.021	56
5	-1.712	2.0-2.021	55
6	-0.094	2.0-2.021	42
7	-1.436	2.0-2.021	44
8	-2.749	2.0-2.021	43
9	-3.093	2.0-2.021	46
10	-3.571	2.0-2.021	46



Table 14

Hypothesis Test for Two Means

Questions 18-19  
t-test

Null Hypothesis  $H_0$ : Difference between Means = 0

<u>Question</u>	<u>Observed T</u>	<u>Critical T</u>	<u>Degrees of Freedom</u>
18 vs 19 (Attendance at off base restaurants vs Officers' Club attendance)	4.923	1.96	151
18, those with children vs 18, those without children	-1.257	1.98-2	72
19, those with children vs 19, those without children	1.087	1.98-2	75
18, those 45 and younger vs 18, those older than 45	-1.137	1.98-2	73
19, those 45 and younger vs 19, those older than 45	2.952	1.98-2	76

as a whole. The results indicate that the membership visits off base restaurants far more frequently than they visit the Officers' Club. The observed T, 4.923 far exceed the the critical T of 1.96.

Similar tests for members with children versus members without children indicated that this factor has little bearing on the number of visits to either the club or off base restaurants.

A final test of two means examined the impact of age on members' tendency to visit the club and off base restaurants. The results reveal that this factor did not have an impact on the Officers' Club attendance. However, those forty-five years or younger eat at off base restaurants more often than those over forty-five. The observed T, 2.952, is positive, and it exceeds the critical T value of 1.98 to 2.

CHAPTER VI  
RECOMMENDATIONS AND CONCLUSIONS

This chapter uses the results of the preceding chapters to make recommendations for management. Possible areas for future research are also recommended, based on the findings presented thus far.

Recommendations for Management

The results for the dining room portion of the survey are not consistent with its poor financial performance. The membership believes that quality meals and services are provided at competitive prices. Despite this result, the cross tabulation and hypothesis testing reveals a preference for off base restaurants. One explanation is the presence of intangible factors. The members may simply wish to spend their discretionary income on activities unassociated with the Air Force, perhaps in an effort to escape the pressures of military duty. Further market research may be necessary to test this theory.

Another possible explanation is a lack of publicity for the club. The club is behind the industry in promotional expenditures. The sample response rate may be biased toward those with strong opinions about the club. Those who did not

respond may be apathetic because they are simply unaware of the quality product offered and low prices.

The low response rate for the "Whiskey-01" questions is indicative of a membership which is not particularly interested in alcohol. It indicates a membership concerned about how senior officers react to drinking in public. Recent Air Force emphasis on the "deglamorization" of alcohol may have a substantial impact on falling sales here. The "undecided" result regarding the atmosphere versus off base bars should encourage management to consider changes to "Whiskey-01" that better meet the needs of customers. These needs could be determined through a similar survey.

The membership did find that prices in the formal lounge were better than off base prices, and the atmosphere was found to be superior. The club does not conduct a segmented accounting analysis for "Whiskey-01" versus the Fireplace Lounge. The atmosphere in "Whiskey-01" may hurt sales relative to sales in the Fireplace Lounge.

Management should review the pricing policy for special functions. A lower price may result in higher attendance. A specific break even for each special function would have to be examined to assess the practicality of lowering prices.

Monday hours were recently eliminated because sales volume did not justify operating costs. However, management should consider Sunday brunches and extending the lunch hour for other days of the week.

The lieutenants sampled show no significant taste differences versus captains so unfortunately this study does little to find out what specific factors these junior officers are looking for.

The test between active duty and retired officers yields interesting results. The promptness of the waiters and waitresses may reflect membership dues. Active duty members pay larger dues, so they may expect better service; hence the lower ranking. This factor may also explain the more favorable responses by retired members for questions eight through ten.

However, it is also quite likely that the services provided are more suited to the retired members. The Fireplace lounge atmosphere and prices were rated favorably by the retired members, as was the atmosphere in "Whiskey-01." If management wants to increase lounge sales to active duty officers, then the services of the lounges should be redesigned to match their needs. Retired officers however, may be a more profitable segment to cater to; sales to each group could be looked at to make this determination.

The hypothesis tests concerning age tend to support these findings. Younger members tend to eat off base more frequently than older members. There is definitely an untapped market potential for younger club members, at least in the dining room.

A final note on the survey was open ended; it asked for general comments on the club. The results, naturally, were varied. But frequent comments from active duty members indicated

that the club was a "Colonels Club"; that membership was mandatory, and that the services provided simply did not reflect the tastes of junior officers.

#### Future Research

This study leaves open several areas for future research. Sales are dangerously low and appropriated funding is gradually disappearing. The club needs a study to determine what active duty members expect for fourteen dollars per month. The services examined in this study were, in general, well rated by the membership. An open ended survey or interview procedure may be necessary to determine the real desires of this market.

Another study would be the analysis of personnel costs discussed earlier. Scheduling of hours may be inefficient, or the wage rate may be above that of the market. Labor restrictions may also be a problem if wage reduction is to be considered, since the employees are funded through non-appropriated guide lines.

One survey suggested that the NCO club be merged with the officers' club. If the capacity at one facility were large enough for both NCO's and officers, then fixed costs issued fall drastically relative to the customer base if such a move were undertaken. The obvious impediment is violation of "fraternization" guide lines between officers and enlisted personnel.

Another area of research would be the sales per member figures. At bases not located near populated areas this would be

relatively high given the absence of off base competition. A financial study may determine at which bases the presence of an Officers' Club is not a justified use of taxpayers money.

A study of the contribution margin and various advertising media could be undertaken. A proper level of promotional expense could be determined given the relative impact of a small increase in sales on net income.

Purchasing procedures and pricing policies could be reviewed to determine how the contribution margin could be improved. Malmstrom is behind the other SAC clubs in this regard.

An analysis of flying bases versus missile bases might provide insight into why the OOM is more popular with pilots. The results could be used to improve clubs at missile bases.

**APPENDIX A**

**OOM YEAR TO DATE FINANCIAL DATA 3RD QUARTER FY67**

<b>CONSOLIDATED:</b>	<b>AND</b>	<b>BAR</b>	<b>BEA</b>	<b>BLY</b>	<b>CAR</b>	<b>CAS</b>	<b>DYE</b>
SALES	648762	638997	107812	138158	371877	375761	282858
GROSS PROFIT ON SALES	349983	288950	184742	78188	184822	175960	147865
GROSS PROFIT %	52.42%	40.96%	52.05%	59.74%	49.81%	46.84%	52.14%
ACTIVITY REVENUE	99233	259067	188656	73564	283477	146155	146688
GROSS INCOME BEFORE EXP	439316	528817	285398	143672	388299	322115	287753
PERSONNEL EXPENSE	378615	299183	132880	88974	299772	225800	186353
PERSONNEL EXPENSE %	50.82%	37.48%	44.23%	42.82%	50.61%	43.27%	44.88%
SUPPORT FUNCTION EXPENSE	34436	28251	20232	25110	36210	28922	32551
MATERIAL RELATED EXPENSE	43444	59418	14375	6359	25362	19069	13310
ENTERTAINMENT EXPENSE	18668	7957	8818	4247	12875	5318	3862
ENTERTAINMENT EXPENSE %	2.49%	5.17%	8.89%	8.22%	6.15%	6.53%	5.64%
PROMOTIONAL EXPENSE	7972	33268	18515	13165	22452	28751	28787
D&A (GLAC 790)	12773	3978	4652	271	4266	12222	4748
OTHER INCOME	3589	5844	3873	2188	2768	16282	5149
PACKAGE STORE DIVIDENDS	76364	38943	6948	5747	51296	12982	8631
NET INCOME	789	89372	-982	5369	28573	19822	34152
<b>DINING ROOM:</b>							
SALES	588979	433229	162224	188758	386775	385236	221838
GROSS PROFIT	298544	195488	81323	45638	142878	128687	187574
GROSS PROFIT %	50.77%	45.12%	50.13%	45.29%	46.51%	42.13%	48.49%
ACTIVITY REVENUE	38473	18833	9382	5459	5157	7862	9721
PERSONNEL EXPENSE	291888	188484	92744	54515	148996	141481	189227
PERSONNEL EXPENSE %	47.86%	41.69%	54.07%	51.33%	47.77%	45.30%	47.17%
NET INCOME	1884	-2888	-23284	-12187	-27779	-31758	-18827
NET INCOME %	0.31%	-0.64%	-13.53%	-11.48%	-8.91%	-10.17%	-4.33%
<b>BAR:</b>							
SALES	58593	188881	34548	34548	62832	68838	52791
GROSS PROFIT	39455	72184	23181	23348	41783	46585	36798
GROSS PROFIT %	77.99%	71.53%	66.87%	67.56%	66.37%	67.65%	69.69%
ACTIVITY REVENUE	0	1385	149	257	0	252	186
PERSONNEL EXPENSE	14147	37289	18388	9397	23957	22557	17664
PERSONNEL EXPENSE %	27.90%	38.49%	29.80%	27.80%	38.13%	32.65%	33.39%
NET INCOME	28173	34494	5178	7738	8923	13891	13811
NET INCOME %	39.87%	33.76%	14.90%	22.21%	14.28%	18.95%	26.11%



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CONSOLIDATED:	ELL	FAI	FEW	GRA	GRIF	GRIS	KIS
SALES	283539	302220	234183	200617	224055	240048	239499
GROSS PROFIT ON SALES	149500	155541	100011	103582	119072	140942	110929
GROSS PROFIT %	52.76%	51.47%	42.71%	51.63%	52.93%	58.50%	50.07%
ACTIVITY REVENUE	120235	111360	107526	81600	124200	62505	74620
GROSS INCOME BEFORE EXP	269825	266910	207537	185190	243281	203447	194540
PERSONNEL EXPENSE	180760	192837	121963	125885	147903	125059	130639
PERSONNEL EXPENSE %	47.00%	46.63%	35.60%	44.60%	42.38%	40.14%	44.45%
SUPPORT FUNCTION EXPENSE	22538	35078	32570	25903	26653	18550	17675
MATERIAL RELATED EXPENSE	12660	22025	15231	14234	13491	11068	8347
ENTERTAINMENT EXPENSE	5782	3050	6432	4280	9395	1840	3770
ENTERTAINMENT EXPENSE %	4.92%	3.50%	5.47%	6.44%	9.47%	3.17%	4.71%
PROMOTIONAL EXPENSE	14070	10800	12243	13882	23679	8044	11034
D&A (GLAC 799)	14932	7186	287	10401	6861	3420	4140
OTHER INCOME	3842	3360	3015	6006	1838	6073	2053
PACKAGE STORE DIVIDENDS	7576	19110	3082	15227	7080	4758	2060
NET INCOME	8352	-4079	10720	22	13607	20001	2826
DINING ROOM:							
SALES	214386	204788	123098	152856	171417	210682	190568
GROSS PROFIT	108256	91851	67065	73849	83047	115076	88982
GROSS PROFIT %	50.50%	44.85%	54.48%	48.31%	48.45%	54.62%	46.60%
ACTIVITY REVENUE	13951	7392	5692	4908	9450	13059	813
PERSONNEL EXPENSE	118708	118138	67791	83630	93184	94700	87082
PERSONNEL EXPENSE %	51.99%	55.68%	52.64%	53.01%	51.52%	42.33%	45.50%
NET INCOME	-1462	-31248	-1399	-21015	-25763	16013	-12005
NET INCOME %	-0.64%	-14.73%	-1.00%	-13.32%	-14.24%	7.43%	-6.27%
BAR:							
SALES	63223	94201	44518	46743	48804	37713	47121
GROSS PROFIT	40209	62600	26762	29363	34186	25567	30147
GROSS PROFIT %	63.60%	66.39%	60.12%	62.82%	70.05%	67.79%	63.98%
ACTIVITY REVENUE	0	137	231	0	0	176	0
PERSONNEL EXPENSE	18388	34029	14536	12802	17594	15865	15202
PERSONNEL EXPENSE %	29.08%	36.04%	32.48%	27.30%	36.05%	41.87%	32.30%
NET INCOME	15656	20557	2780	9750	9639	7523	10502
NET INCOME %	24.76%	21.77%	6.21%	20.86%	19.75%	19.86%	22.20%

OOM YEAR TO DATE FINANCIAL DATA 3RD QUARTER FY87

CONSOLIDATED:	LOR	MAL	MAR	MCC	MIN	OFF	PEA
SALES	255001	230051	602218	202022	245640	1130107	460305
GROSS PROFIT ON SALES	136020	117808	341782	154075	120040	591200	230470
GROSS PROFIT %	53.60%	49.78%	56.75%	54.92%	52.37%	52.04%	51.36%
ACTIVITY REVENUE	77550	84570	202505	101007	100033	643585	124072
GROSS INCOME BEFORE EXP	214370	202370	544377	256542	237070	1234851	301142
PERSONNEL EXPENSE	102200	150170	412171	200000	150002	721174	255300
PERSONNEL EXPENSE %	48.79%	49.24%	51.21%	54.44%	45.11%	40.82%	43.04%
SUPPORT FUNCTION EXPENSE	21100	20757	42302	25200	27033	02005	33001
MATERIAL RELATED EXPENSE	17104	10004	20005	5140	14101	70370	22073
ENTERTAINMENT EXPENSE	3330	1200	10570	2054	7734	22012	3025
ENTERTAINMENT EXPENSE %	4.90%	2.75%	3.41%	4.20%	6.09%	5.20%	4.00%
PROMOTIONAL EXPENSE	13210	7531	10040	14000	13005	00030	24000
D&A (GLAC 700)	504	7011	4010	3031	11144	07522	7511
OTHER INCOME	2057	3052	10303	4012	0041	21728	0307
PACKAGE STORE DIVIDENDS	11700	0	17770	22040	11003	32550	2003
NET INCOME	-930	-25507	21441	4405	0011	210332	-7500
DINING ROOM:							
SALES	107300	103007	400747	230502	104140	020032	301002
GROSS PROFIT	08500	07703	250002	120027	07335	40137	103041
GROSS PROFIT %	52.00%	47.60%	53.30%	52.00%	47.43%	47.90%	49.40%
ACTIVITY REVENUE	1542	55	30305	11020	0325	0	0
PERSONNEL EXPENSE	00003	103005	203220	132302	105140	451030	102440
PERSONNEL EXPENSE %	52.87%	50.04%	50.03%	54.02%	54.03%	40.01%	40.56%
NET INCOME	-0733	-31700	-20512	-17107	-17254	-07252	-37330
NET INCOME %	-4.62%	-17.24%	-5.00%	-7.00%	-0.90%	-9.30%	-9.93%
BAR:							
SALES	57210	50047	120470	47350	57002	107350	00501
GROSS PROFIT	35027	20010	00010	34101	30515	130002	42025
GROSS PROFIT %	62.79%	50.40%	00.75%	72.10%	60.63%	73.12%	62.23%
ACTIVITY REVENUE	0	0	1310	047	0	0	0
PERSONNEL EXPENSE	13501	10000	47524	17100	10505	00025	22014
PERSONNEL EXPENSE %	23.74%	33.34%	30.01%	35.04%	33.00%	35.07%	32.14%
NET INCOME	15424	0040	20054	13300	10270	32532	17503
NET INCOME %	20.00%	11.03%	22.05%	27.00%	20.10%	17.30%	25.00%

OOM YEAR TO DATE FINANCIAL DATA 3RD QUARTER FY87

CONSOLIDATED:	PLA	VAN	WHI	WUR	OOM TOTAL	NCOOM TOTAL	CMD TOTAL
SALES	309014	508082	188430	150085	8091027	17157455	25808482
GROSS PROFIT ON SALES	175030	205873	99090	99090	4520300	8057001	13177370
GROSS PROFIT %	58.42%	52.33%	53.07%	66.57%	52.25%	50.40%	51.06%
ACTIVITY REVENUE	92348	102856	74040	67023	3440351	3085134	6531488
GROSS INCOME BEFORE EXP	207076	428729	174030	158523	7906720	12134000	20101010
PERSONNEL EXPENSE	150781	330030	120006	109110	5449227	7701923	13210750
PERSONNEL EXPENSE %	39.00%	50.00%	49.00%	48.20%	45.04%	33.34%	40.05%
SUPPORT FUNCTION EXPENSE	16044	38005	20054	23155	717652	1135142	1052704
MATERIAL RELATED EXPENSE	10100	10070	13040	13210	522000	821357	1344047
ENTERTAINMENT EXPENSE	2545	4075	4218	5000	154400	984355	1130701
ENTERTAINMENT EXPENSE %	0.70%	5.03%	5.03%	8.50%	5.34%	8.58%	5.04%
PROMOTIONAL EXPENSE	32013	35730	10550	13031	401033	751014	1242047
D&A (OLAC 700)	13492	8015	312	4005	200072	244503	454175
OTHER INCOME	7023	10370	2300	2007	154217	330065	404002
PACKAGE STORE DIVIDENDS	5700	6044	2771	6301	372300	673735	1046131
NET INCOME	16480	-3032	-10700	-8742	430051	307000	800451
DINING ROOM:							
SALES	231030	410210	132100	115101	6000750	7000021	14020777
GROSS PROFIT	130700	203795	64434	70200	3381000	3049030	7331410
GROSS PROFIT %	56.61%	49.61%	48.75%	60.96%	49.20%	49.57%	49.44%
ACTIVITY REVENUE	14200	21500	6505	2255	230104	144207	302301
PERSONNEL EXPENSE	100000	220300	73057	60040	3500304	3071150	7170514
PERSONNEL EXPENSE %	40.00%	51.30%	53.30%	51.13%	49.42%	49.25%	47.20%
NET INCOME	4002	-30440	-21070	-4000	-403003	-453511	-010004
NET INCOME %	1.66%	-0.91%	-15.63%	-3.41%	-6.52%	-5.90%	-0.63%
BAR:							
SALES	60100	87104	40003	32108	1010050	5015157	7534213
GROSS PROFIT	44520	61070	32232	20374	1000107	3042050	5040023
GROSS PROFIT %	65.30%	70.01%	68.70%	63.20%	67.03%	60.65%	60.01%
ACTIVITY REVENUE	1252	204	47	53	6275	12031	10300
PERSONNEL EXPENSE	10544	20545	13101	13008	530050	1001300	2210030
PERSONNEL EXPENSE %	23.02%	30.30%	20.12%	40.33%	33.02%	20.37%	29.37%
NET INCOME	24520	25330	9004	3735	373014	1055707	2320021
NET INCOME %	35.32%	20.00%	20.47%	11.50%	23.01%	33.00%	30.05%

**APPENDIX B**

**SURVEY**

**NO POSTAGE NECESSARY  
POSTAGE HAS BEEN PREPAID BY**

**University of Montana  
MCMEP MBA Program  
Malmstrom AFB,  
MT. 59402-5000**

## Officers' Club Member Survey

This survey is being conducted by the University of Montana MBA Program on behalf of the Minstrom Officers' Club. Please complete the survey so that service at the Open Mess continues to meet your needs. After completing the survey, please fold it in half with the address on the outside, seal it, and drop it in the mail. Your cooperation in completing the survey is sincerely appreciated.

The survey includes statements about various aspects of services provided at the Officers' Open Mess. Circle the one response that best matches your opinion about each statement.

Statements 1 through 5 refer to the Officers' Club Dining Facilities:	Strongly Agree (SA)	Agree (AG)	Undecided (UN)	Disagree (DA)	Strongly Disagree (SD)
1. The quality of the meals served at the Club is good.	SA	AG	UN	DA	SD
2. The waiters/waitresses at the Club provide prompt service.	SA	AG	UN	DA	SD
3. The waiters/waitresses at the Club provide courteous service.	SA	AG	UN	DA	SD
4. The lunch and dinner prices at the Club are generally lower than lunch and dinner prices at similar off-base restaurants.	SA	AG	UN	DA	SD
5. The variety of menu items at the Club is adequate.	SA	AG	UN	DA	SD

Statements 6 through 8 refer to the Officers' Club informal lounge "Whiskey-01."

6. The availability of happy hours is adequate.	SA	AG	UN	DA	SD
7. Drink prices are generally lower than drink prices at similar off-base establishments.	SA	AG	UN	DA	SD
8. I prefer the atmosphere in the "Whiskey-01" lounge to comparable off-base establishments.	SA	AG	UN	DA	SD

Statements 9 and 10 refer to the Officers' Club fireplace cocktail lounge.

9. The atmosphere in the cocktail lounge is better than the atmosphere in similar off-base establishments.	SA	AG	UN	DA	SD
10. The drink prices in the cocktail lounge are generally lower than drink prices in similar off-base establishments.	SA	AG	UN	DA	SD

Please indicate the most recent special function you attended at the Officers' Club:  
 "Bad Luck" Party     Octobersfest     Wine Tasting     New Year's  
 "Bad Taste" Party     Art Auction     I have not attended any of these

If you attended one of these functions, please circle the one response that best matches your opinion of each of the following statements:

- |   |    |    |    |    |    |
|---|----|----|----|----|----|
| 11. The quality of the entertainment at the special function was good (if applicable).              | SA | AG | UN | DA | SD |
| 12. The quality of the food at the special function was good (if applicable).                       | SA | AG | UN | DA | SD |
| 13. The price of admission at the special function was reasonable considering the service provided. | SA | AG | UN | DA | SD |

The current operating hours of the Officers' Club are:

Dining Room    Lunch - Tues thru Fri, 11:30 AM-1:00 PM  
 Dinner - Tues and Wed, 6:00-1:00 PM, Thurs thru Sat, 6:00-9:00 PM  
 Whiskey-01    Tues thru Fri, 4:00 - 10:00 PM

14. Do the current hours of operation meet your needs?  yes  no  
 If you answered no, in which area could the hours be improved, and how?
15. So that we may better serve your needs, please check the one block in each of the following categories which best describes you:
- |   |  |                                    |
|---|--|------------------------------------|
| a) Membership:  | b) If Active duty:   | c) Marital Status                  |
| <input type="checkbox"/> Active Duty                  | <input type="checkbox"/> 2Lt <input type="checkbox"/> Major  | <input type="checkbox"/> Married   |
| <input type="checkbox"/> Retired Officer              | <input type="checkbox"/> 1Lt <input type="checkbox"/> Lt Col | <input type="checkbox"/> Unmarried |
| <input type="checkbox"/> O.O.D. Civilian              | <input type="checkbox"/> Cpt <input type="checkbox"/> Col    |                                    |
| <input type="checkbox"/> Other (Please specify) _____ |  |                                    |
- d) About how many times per month do you have lunch or dinner at off-base restaurants?  
 0-3 times     10-12 times  
 4-6 times     more than 12 times  
 7-9 times     times
- e. About how many times per month do you have lunch or dinner at the Officers' Club?  
 0-3 times     10-12 times  
 4-6 times     more than 12 times
- f) Do you have children under the age of 18?  
 Yes     No
- g. What is your age?  
 20-25     46-50  
 26-30     51-55  
 31-35     56-60  
 36-40     60+  
 41-45

Please feel free to make any suggestions you think will improve any of the service provided at the Officers' Club. Thank you very much for your cooperation in returning the survey by 1 April 1978.

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