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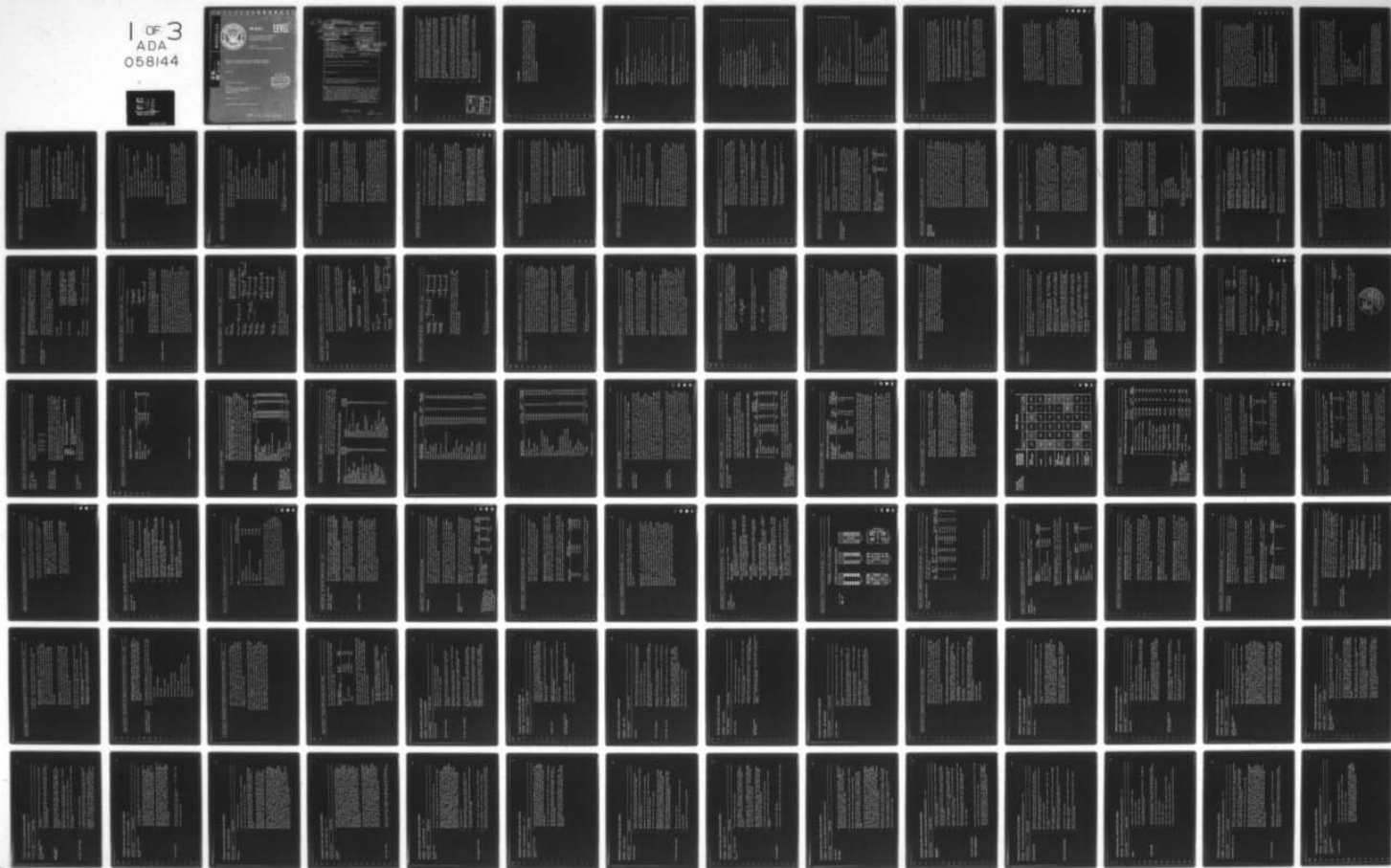
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CIVIL ENGINEERING LABORATORY
Naval Construction Battalion Center
Port Hueneme, California 93043

Sponsored by
NAVAL FACILITIES ENGINEERING COMMAND

REDUCING VANDALISM IN NAVAL BACHELOR ENLISTED
QUARTERS, VOLUME III: PROJECT METHODS & RESULTS

April 1978

An Investigation Conducted by

BOSTI
THE BUFFALO ORGANIZATION FOR SOCIAL &
TECHNOLOGICAL INNOVATION
Buffalo, New York

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Results of a study on the extent of vandalism in Naval BEQs are presented in three "stand-alone" volumes. Volume 1 summarizes vandalism damage which was found to be a problem of high incident rate and high maintenance cost. Volume 2 focuses on concepts for remedial programs to combat the problem. Volume 3 proposes administrative measures to deal with the problem.		

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This volume has been prepared with the immeasurable assistance of:

1. 105 Commanding Officers who completed and returned lengthy questionnaires regarding characteristics of their bases, their BEQs and the property damage on their bases.
2. 262 BEQ Managers who completed and returned equally lengthy questionnaires regarding their training and experience, management problems and the possible motives for vandalism.
3. 50 Public Works Officers and Facilities Maintenance Supervisors who carefully estimated the costs of repairing almost 30 different types of damage. (Our schedule allowed us to use only 34 of these responses.)
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The contents of this report reflect the views of BOSTI, its consultants, and its principal authors, Christine Brady and Michael Brill. The contents do not necessarily reflect the official views or policy of the United States Navy, nor do any of the recommendations constitute a change in NAVFAC policy or documents.

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INTRODUCTION

In December 1976, the Buffalo Organization for Social and Technological Innovation, Inc. (BOSTI), was selected by the Civil Engineering Laboratory, Naval Construction Battalion Center, Port Hueneme, California to conduct a study entitled REDUCING VANDALISM IN NAVAL BACHELOR ENLISTED QUARTERS.

The objectives of the subsequent fifteen-month project were to:

1. Determine the nature, extent and cost of property damage due to vandalism in Naval BEQs.
2. Identify various options for preventing, or reducing the cost of such property damage.
3. Design a demonstration program to test the effectiveness of these options before selecting any for extensive use.

The results of the study are documented in a three-volume final report, of which this is the third. The first two volumes are:

VOLUME I: PROJECT SUMMARY. This document is a 40 page summary of the major project findings and recommendations and the project methods. This volume is intended for the reader who wants a quick, but nevertheless complete, overview of the entire project.

VOLUME II: DEMONSTRATION PROGRAM AND DESIGN GUIDELINES.

In this document the patterns of property damage due to vandalism in BEQs are described; ideas for preventing (or reducing the cost of) such damage are presented according to the specific problems they address; and a demonstration program to evaluate the effectiveness of these ideas is recommended. This volume includes as an introduction, all of Volume I.

In this particular volume, VOLUME III: PROJECT METHODS AND RESULTS, the sources of data used in the study, the methods of data analysis and the results are documented in detail.

Toward the end of the vandalism study, a more limited study of theft and theft-related property damage was added to the original scope of services. It was prompted by BEQ Managers' reports that theft in BEQs is a common problem and that some property damage was in fact due to theft rather than vandalism. Thus the purpose of the add-on study was to determine the extent of losses due to theft and theft-related property damage which might effectively be addressed through environmental design. Its results are documented in a fourth volume: VOLUME IV: ANALYSIS OF THEFT AND THEFT-RELATED PROPERTY DAMAGE.

SECTION I: PROJECT METHODS

INTRODUCTION

This section of the report has two parts. Part 1: DATA AND DATA BASE BUILDING, includes descriptions of first, the data sources and types of information used in the study, and second, the structure of the data base, data coding and the sample.

Part 2: METHOD OF ANALYSIS, includes descriptions of first, the methods used to characterize bases and BEQs, second, the methods used to estimate the frequency and cost of vandalism, and, third, the methods used to determine the relationships between the frequency and cost of vandalism and base/BEQ characteristics.

PROJECT METHODS: DATA AND DATA BASE BUILDING

INTRODUCTION

The principal purposes of this study were to identify, and design a way of evaluating the effectiveness of, options for reducing the number or cost of vandalism incidents in Naval Bachelor Enlisted Quarters (BEQs). To identify such options, it is necessary first to have a clear picture of the types of damage occurring. To design a way of evaluating the options, it is necessary to know, as precisely as possible, how many vandalism incidents they will prevent and how much of the vandalism cost they will reduce. Thus the purpose of the data analysis in this study was to create a profile of vandalism incidents occurring in BEQs: What damage occurs, when and where; how often and with what cost; and, to the extent possible; why the damage occurs.

The following discussion describes:

1. The sources of information and the types of data used in this study.
2. The data base that was created: the characteristics of the sample, the data coding procedures and the structure and content of the data base.
3. The methods of analysis of the data base.

PROJECT METHODS: DATA AND DATA BASE BUILDING -- Cont.

DATA SOURCES AND
DATA COLLECTION

Before this project was undertaken, there was no single, central source of information regarding vandalism in BEQs. In addition, different Naval personnel had knowledge of different aspects of the overall problem. Therefore, several data sources and methods of data collection were used, and some proved to be more useful than others. (All the information, however, was provided by the Navy.)

Seven sources of data were eventually used.* They are:

1. Commanding Officers' Data
2. BEQ Managers' Data
3. Public Works' Data
4. BEQ Residents
5. NIS Reports
6. Site Visits
7. Vandalism Incident Reports

Each is described on the following pages.

*The last three sources of information, (NIS Reports, Site Visits, and Vandalism Incident Reports), were actually used first in the project, but were found to be insufficient in some respects. The results of this project are based almost entirely on the information provided by the first three sources, (Commanding Officers, BEQ Managers and Public Works).

PROJECT METHODS: DATA AND DATA BASE BUILDING -- Cont.

1. Commanding Officers' Data

Information about the nature, extent and cost of property damage due to vandalism, and the management and physical qualities of the BEQs on each base, was provided by each base commander (or his designate) completing a questionnaire* addressing these issues.

The questions answered by the Commanding Officers pertained to:

- . Building elements most frequently damaged (type, location in BEQ)
- . Average cost of damage (number of incidents per year, average material cost, average number of hours to repair)
- . Layout of the BEQs (as per definitive drawings)
- . Size of buildings (number of floors, number of berths)
- . Size of base (number of BEQs, number of berthed personnel)
- . Density of BEQ (percentage occupancy)

* A copy of the COMMANDING OFFICERS' QUESTIONNAIRE is in Appendix 1 of this report.

PROJECT METHODS: DATA AND DATA BASE BUILDING -- Cont.

- . Age, physical conditions and maintenance of BEQ
- . Surveillance in BEQs
- . Transients and fluctuations in occupancy
- . Command management procedures (re: vandalism)
- . Berth assignment methods
- . Level of command involvement
- . Budget procedures for repair and maintenance
- . Actions taken to reduce property damage
- . Record-keeping
- . Suggestions for reducing property damage
- . Mission of base

2. BEQ Managers' Data

The Commanding Officers' questionnaire elicited information about the nature, extent and cost of the most frequent property damage, and about the base and its BEQs. However, first-hand information about when, how and why property damage occurs; the nature and extent of unreported property damage and BEQ management procedures could more easily be

PROJECT METHODS: DATA AND DATA BASE BUILDING -- Cont.

supplied by BEQ Managers. Therefore, a separate questionnaire* for BEQ Managers was designed. Its questions pertained to the following issues:

- . Times at which vandalism incidents occur (hour, day, month)
- . Why at these particular times
- . Inspections, frequency and type
- . Command attention given to vandalism
- . Tenant council utility
- . Possible motives for vandalism
- . Frequencies of different major types of vandalism
- . Reporting procedures
- . Unreported vandalism
- . Suggestions for preventing vandalism
- . BEQ Managers' training and tenure
- . Number of buildings and berths managed

* A copy of the BEQ MANAGERS' QUESTIONNAIRE is in Appendix 2 of this report.

PROJECT METHODS: DATA AND DATA BASE BUILDING -- Cont.

3. Public Works' Data

50 Public Works' Officers and Facilities Maintenance Supervisors were asked to estimate the costs of repairing almost 30 different types of damage. (A copy of the questionnaire is in Appendix 3 of this report.)

34 responses were received in time to be used in the project. They were used to calculate average labor and overhead costs for repairs. Our original intention was to also use the material costs for different kinds of repairs, but we received enough Commanding Officers' responses in sufficient detail to make this unnecessary.

4. BEQ Residents' Data

One of the hypotheses tested in this project was the notion that absolute frequencies of incidents of property damage by BEQ space is not an accurate representation of that space's involvement, and that a more accurate reporting would correct for the time spent by enlisted men in these spaces. Therefore, during the site visits, 16 enlisted men were given time/space questionnaires to fill out which recorded how much time per day they spent in each space, on an average day. (A copy

PROJECT METHODS: DATA AND DATA BASE BUILDING -- Cont.

of this questionnaire is in Appendix 4 of this report.)

As is discussed on page 40 of this report, the hypothesis was found to be correct -- more "public" BEQ spaces in which less time is spent are more frequently vandalized.

5. Naval Investigative Service (NIS) Reports

NIS prepares quarterly reports regarding the nature and cost of the most serious property damage to Naval installations. Property damage in BEQs is included in the categories of Base Living Quarters and Buildings/Grounds. NIS summaries of property damage incidents in these two categories, between 4/73 and 3/75, were analyzed. Although these summaries were interesting, they were insufficiently detailed in two respects for this study:

- a. The specific location of the damage was not included. BEQs, BOQs and Family Quarters were included in the NIS category of Base Living Quarters. We were interested only in BEQs and needed to know the specific spaces within the BEQ in which the damage was occurring.
- b. NIS investigations are confined to the most serious property damage incidents, for example, those whose material cost is at least \$100. The material cost of most incidents occurring in BEQs is less than \$100, but the labor cost is high.

PROJECT METHODS: DATA AND DATA BASE BUILDING -- Cont.

6. Site Visits

Two senior Masters-at-Arms were temporarily seconded to this project to increase the number of site visits which could be made, and to provide some special knowledge and perspective to the interviewing of base personnel about sensitive issues.

The Masters-at-Arms were trained by the BOSTI staff in Buffalo. The following areas were addressed as the focus of the site visits:

- . Relationship between Security/Public Works/BEQ Administration in handling property damage
- . Availability and contents of property damage records
- . Extent and pattern of self-help work in repairs
- . Analysis of the various design and layout alternatives
- . Policy toward perpetrators and the percent of perpetrators found and methods of restitution used
- . Programs in-place to deal with property damage
- . Salvaging and reuse in BEQs of discarded materials (Comshaw)
- . Level of command attention to property damage and vandalism

PROJECT METHODS: DATA AND DATA BASE BUILDING -- Cont.

- . Analysis of various BEQ management procedures
- . Utility of tenant councils
- . Durability of architectural accessories and their reasons
- . Inspection procedures
- . Successful programs which have curbed vandalism
- . Problems with transients

The Masters-at-Arms were trained to conduct the site visits by BOSTI staff, and provided with an interview protocol (see Appendix 5) for use during the site visits.

7. Vandalism Incident Reports

Approximately 800 vandalism incident reports from 3 bases were analyzed early in the project and the results were later used to describe and estimate the extent of infrequent incidents. However, to have collected and analyzed incident reports from a large sample of bases would have required more time from Naval personnel and BOSTI staff than was available for the study. We therefore asked Commanding Officers and BEQ Managers to describe the most frequent types of property damage occurring in the BEQs on their bases, and to estimate the average number of incidents occurring each year.

PROJECT METHODS: DATA AND DATA BASE BUILDING -- Cont.

DESCRIPTION OF SAMPLE

Commanding Officers of 105 bases, out of the 130 contacted, completed and returned their questionnaires. (This is an 80% response rate.) Between them, these responses provided information about vandalism on bases in thirty different states, including Alaska and Hawaii.

On 101 of these 105 bases, at least 1 BEQ Manager also completed and returned a questionnaire. Thus, for 4 bases we received only the data requested from the Commanding Officer.

62 (59%) of the 105 bases returned complete sets* of BEQ Managers' Questionnaires, that is, all the BEQ Managers at these bases completed questionnaires.

38 (37%) of the 105 bases returned incomplete** sets of BEQ Managers' Questionnaires, that is, only some of the BEQ Managers at these bases completed questionnaires.

*The number of BEQ Managers responses per base ranged from 1 to 18 questionnaires returned.

**For one base we were unable to determine whether the set of BEQ Managers Questionnaires was complete.

 PROJECT METHODS: DATA AND DATA BASE BUILDING -- Cont.

From two bases we received only completed BEQ Managers' Questionnaires.

Overall, 262 BEQ Managers representing 106 bases completed and returned questionnaires.

REPRESENTATIVENESS OF THE SAMPLE

Although Commanding Officers of 105 bases returned questionnaires, only 89 provided cost and frequency data in sufficient detail to be used. However, these 89 bases accounted for an estimated 83.3% of the personnel berthed in BEQs on all 130 bases of concern. Thus, our data base included information about vandalism occurring in BEQs in which a large majority of personnel are berthed and is believed to be highly representative of the overall nature and extent of the problem.

As is shown in the table below, the sample of bases was also highly representative on the basis of size, as measured by the average number of personnel berthed.

BASE SIZE	% OF ALL BASES	% OF SAMPLE BASES
Small (1-100 personnel berthed)	27%	24%
Medium (101-1,000)	44%	44%
Large (1,001-2,000)	19%	17%
Extra large (2,001 +)	10%	15%
	100%	100%

PROJECT METHODS: METHOD OF ANALYSIS -- DESCRIPTIVE DATA

QUANTIFYING
DESCRIPTIVE
DATA

In order to build a complete picture of BEQs Navy-wide, both C.O.s and BEQ Managers were asked to answer a series of questions regarding the characteristics of their bases and BEQs. For example: What types of BEQs are on base? What is the berthing policy? For most of these questions, a limited set of responses was provided. For instance, there are only six major types of BEQs and three major berthing policy procedures (unit integrity, berth availability and by rank). These types of questions are called closed-ended and are best quantified and analyzed by computer since potential responses are limited and can be easily coded into machine-readable form. In this way, the computer enables you to store the large amounts of data generated in an organized fashion without losing any information and then to analyze the information in a cost and time efficient manner.

SPSS, the Statistical Package for the Social Sciences, a set of packaged computer programs was then used to count responses by individual questions (e.g., finding out the number of bases housing Welton-Beckett BEQs or the number of BEQ managers who have attended Management Training School) and to display or print out the designated analysis. Additionally, SPSS programs aid in searching for relationship between different types of data. This method of analysis is discussed in the section entitled INFERRENTIAL DATA.

PROJECT METHODS: METHOD OF ANALYSIS -- DESCRIPTIVE DATA -- Cont.

The results of these analyses are presented in Section 2 of this volume.

CONTENT CODING

Some questions were asked of C.O.s and BEQ Managers in which possible responses were not provided for on the questionnaire. These questions included: suggestions of specific design or management changes which should be instituted to prevent vandalism, perceptions of the reasons for vandalism and programs presently in use to combat vandalism. These are called open-ended questions since innumerable responses could be made. Open-ended questions are best analyzed by "hand" rather than by computer to be sure to get the fullness of each person's responses.

To organize or content-code the answers to these questions, all responses were first listed. Responses with similar ideas were then grouped together. A category "label" was then applied to each of the groupings (e.g., increased surveillance, management policy, design change, etc.). For instance, the following suggestions were given as ways to prevent vandalism: Increase security patrols, install T.V. monitors, have a strong BEQ Advisory Committee and better training for BEQ Managers. It can be seen that the first two suggestions are similar in that they both suggest ways to prevent vandalism by increasing sur-

PROJECT METHODS: METHOD OF ANALYSIS -- DESCRIPTIVE DATA -- Cont.

veillance. In content coding, these were grouped together under the category of surveillance. The third suggestion, a strong BEQ Advisory Committee would best be grouped with other strategies which included Increased Involvement by BEQ Residents and the last suggestion, better manager training, under the category of Management Policy. All open-ended questions were content-coded in this way. The results are presented in later sections of this volume.

ESTIMATING THE FREQUENCY
AND COST OF PROPERTY
DAMAGE DUE TO VANDALISM

In order to estimate the Navy-wide frequency and cost of vandalism from the many sources of information used in the project, the frequencies and costs of six different cost elements* were factored together.

THE ELEMENTS OF COST

These cost elements are:

- . Frequent incidents
- . Notorious incidents
- . Infrequent incidents
- . Unreported incidents
- . Administration
- . Overhead

* Not included in these costs, but which are still costs which the Navy bears, are the following:

- . "Down-time" or underutilization of unrepai-
red space and equipment
- . Inflation from 1976

PROJECT METHODS: METHOD OF ANALYSIS -- DESCRIPTIVE DATA -- Cont.

These are defined in the following manner:

- . Frequent Incidents -- Are those which were reported to us as being among the three most frequently occurring incidents in a BEQ space. For example, kicked-in doors in sleeping rooms, holes punched in ceiling in recreation room.
- . Notorious Incidents -- Are those which seldom occur but are major and public (Example: lounge furniture slashed and thrown through plate glass window).
- . Infrequent Incidents -- Are those which do not occur frequently enough at each base to have been included in the descriptions of most frequently occurring incidents. (See Frequent Incidents above).
- . Unreported Incidents -- Are acts of vandalism which do not get recorded by BEQ managers, for a variety of reasons.
- . Administration -- Is the reporting, investigating, legal or other action, and the monitoring of repairs or restitution.
- . Overhead -- Supports space and vehicles, tool maintenance, insurance, tool purchase, and incidental costs of Public Works repairs.

The method used to calculate these costs is described in the following discussion.

METHOD OF CALCULATION

Commanding Officers of 130 bases in the United States which have BEQs were asked to describe the three most frequently occurring vandalism incidents in each BEQ space, (sleeping rooms, lounges,

PROJECT METHODS: METHOD OF ANALYSIS -- DESCRIPTIVE DATA -- Cont.

heads, hallways/corridors, vending areas, other). For each type of incident they described, the C.O.s were asked to estimate:

1. The number of incidents occurring annually (FREQUENCY)
2. The average number of hours required to repair one incident (REPAIR TIME), and
3. The average cost of materials used in repairing one incident (MATERIAL COST).

Labor and overhead costs were calculated as a function of repair time: \$10.62 per hour of repair time was assigned to account for labor and \$5.30 per hour of repair time was assigned to account for overhead. (These costs were derived from an analysis of costs reported by 34 Public Works Officers and Facilities Maintenance Supervisors.)

The annual frequency and cost of all incidents reported by the C.O.s was calculated on the basis of the above data and then multiplied by 4.0 to provide estimates of the annual frequency and cost of all property damage* due to vandalism on all 130 bases of concern. The 4.0 multiplier includes adjustments for

* Not including NOTORIOUS incidents which account for less than 0.5% of the total cost.

 PROJECT METHODS: METHOD OF ANALYSIS -- DESCRIPTIVE DATA -- Cont.

extrapolation of the C.O.'s data Navy-wide, for infrequent incidents and for unreported incidents. The calculation of each of these adjustments resulting in the final multiplier is described below.

 EXTRAPOLATION OF C.O.'S
 DATA NAVY-WIDE

Commanding Officers of 89 of the 130 bases provided the requested information. These 89 bases account for an estimated 83.3% of the personnel berthed in BEQs on all 130 bases. We therefore assumed that our data on FREQUENT incidents was underestimated by 16.7% and adjusted it as follows:

Letting,

F_{CO} (130 bases)

= Estimated annual frequency or cost of the most frequently occurring incidents in each BEQ space on all 130 bases of concern, and

F_{CO} (89 bases)

= Estimated annual frequency or cost of the most frequently occurring incidents in each BEQ space on the 89 bases whose C.O.s completed the questionnaire.

Then,

F_{CO} (130 bases)

= $.167 (F_{CO} (130 \text{ bases})) + F_{CO} (89 \text{ bases})$

F_{CO} (130 bases)

= $.167 (F_{CO} (130 \text{ bases})) = F_{CO} (89 \text{ bases})$

 PROJECT METHODS: METHOD OF ANALYSIS -- DESCRIPTIVE DATA -- Cont.

$$\begin{aligned}
 F_{CO} (130 \text{ bases}) (1 - .167) &= F_{CO} (89 \text{ bases}) \\
 F_{CO} (130 \text{ bases}) &= \frac{F_{CO} (89 \text{ bases})}{(1 - .167)} \\
 &= \frac{F_{CO} (89 \text{ bases})}{.833} \\
 &= 1.20 (F_{CO} (89 \text{ bases}))
 \end{aligned}$$

Therefore, the estimated annual frequency and cost (for all 130 bases of concern), of the most frequently occurring incidents in each BEQ space is 1.20 times the frequency and cost estimates provided by the 89 bases who responded.

INFREQUENT INCIDENTS

Infrequent incidents are those incidents reported and repaired which do not occur frequently enough at each base to have been included in the Commanding Officers' descriptions of most frequently occurring incidents. Our prior analysis of property damage reports from 3 bases indicated that 14.1% of all incidents did not occur frequently enough to be grouped such that the number of incidents in any one group represented at least 3% of the total number of incidents. We have therefore assumed that 14.1% of the reported and repaired incidents occurring on all 130 bases would not have been included in the descriptions of most frequent incidents provided by the C.O.s, thus the following adjustment was made:

 PROJECT METHODS: METHOD OF ANALYSIS -- DESCRIPTIVE DATA -- Cont.

Letting,

$$F_{\text{INF} + \text{CO}} \text{ (130 bases)}$$

= Estimated annual frequency or cost of all reported and re-paired incidents occurring in BEQs on all 130 bases

And where $1.20 (F_{\text{CO}}(89 \text{ bases}))$

is as previously defined, then

$$F_{\text{INF} + \text{CO}} \text{ (130 bases)} = .141 (F_{\text{INF} + \text{CO}} \text{ (130 bases)}) + 1.20 (F_{\text{CO}} \text{ (89 bases)})$$

$$F_{\text{INF} + \text{CO}} \text{ (130 bases)} - .141 (F_{\text{INF} + \text{CO}} \text{ (130 bases)}) = 1.20 (F_{\text{CO}} \text{ (89 bases)})$$

$$F_{\text{INF} + \text{CO}} \text{ (130 bases)} (1 - .141) = 1.20 (F_{\text{CO}} \text{ (89 bases)})$$

$$F_{\text{INF} + \text{CO}} \text{ (130 bases)} = \frac{1.20}{(1 - .141)} (F_{\text{CO}} \text{ (89 bases)})$$

$$= \frac{1.20}{.86} (F_{\text{CO}} \text{ (89 bases)})$$

$$F_{\text{INF} + \text{CO}} \text{ (130 bases)} = 1.40 (F_{\text{CO}} \text{ (89 bases)})$$

Therefore, the estimated frequency and cost, (for all 130 bases of concern in 1976), of the frequent and infrequent incidents is 1.40 times the frequency and cost estimates provided by the 89 bases who responded.

PROJECT METHODS: METHOD OF ANALYSIS -- DESCRIPTIVE DATA -- Cont.

UNREPORTED INCIDENTS

The eleven site-visited bases and three others contacted by telephone estimated the percentage of all vandalism occurring on the base which goes unreported.

For each of these bases, the total number of incidents and the number of unreported incidents occurring in 1976 were estimated, and then the average percentage of incidents unreported was calculated as follows:

$$\frac{\text{Estimated No. Incidents Unreported (14 bases)}}{\text{Estimated total No. Incidents Occurring (14 bases)}} \times 100$$

$$= \frac{32,499}{50,050} \times 100$$

$$\text{Average percentage of incidents unreported} = 65\%$$

We have therefore assumed that 65% of all vandalism which occurs goes unreported, and adjusted the figures as follows:

Letting,

$$F_{\text{INF} + \text{CO} + \text{UNR.}} \\ (\text{130 bases})$$

= Estimated annual frequency or cost of all vandalism incidents on all 130 bases of concern

and where $1.40 (F_{\text{CO}(89 \text{ bases})})$ is all previously defined, then:

$$F_{\text{INF} + \text{CO} + \text{UNR}} \\ (\text{130 bases})$$

$$= .65 \left(F_{\text{INF} + \text{CO} + \text{UNR}} \right) + 1.40 \left(F_{\text{CO}} \right) \\ (\text{130 bases}) \quad (\text{89 bases})$$

PROJECT METHODS: METHOD OF ANALYSIS -- DESCRIPTIVE DATA -- Cont.

$$\begin{aligned}
 & F_{\text{INF+CO+UNR}} \text{ (130 bases)} - .65 \left(F_{\text{INF+CO+UNR}} \text{ (130 bases)} \right) = 1.40 \left(F_{\text{CO}} \text{ (89 bases)} \right) \\
 & F_{\text{INF+CO+UNR}} \text{ (130 bases)} (1-.65) = 1.40 \left(F_{\text{CO}} \text{ (89 bases)} \right) \\
 & F_{\text{INF+CO+UNR}} \text{ (130 bases)} = \frac{1.40}{.35} \left(F_{\text{CO}} \text{ (89 bases)} \right) \\
 & = 4.00 \left(F_{\text{CO}} \text{ (89 bases)} \right)
 \end{aligned}$$

Therefore, the estimated annual frequency or cost of all vandalism incidents* on all 130 bases of concern is 4.0 times the frequency and cost data provided by Commanding Officers of the 89 bases who responded.

* Not including NOTORIOUS INCIDENTS, which account for less than 0.5% of the total cost.

PROJECT METHODS: METHOD OF ANALYSIS -- DESCRIPTIVE DATA -- Cont.

ADMINISTRATIVE COSTS

Administrative costs of vandalism are those costs incurred by the Navy because of time spent by Naval personnel to report and record that an incident has occurred, carry out an investigation, punish or arrange for restitution from perpetrators where they are found and to arrange for appropriate repairs to be made (and to ensure that repairs are correctly completed). On most bases, for a vandalism incident which is reported, time is spent dealing with one or more aspects of the incident by BEQ staff, Security and the Executive Officer and/or Commanding Officer.

As an estimate of the administrative costs incurred by the Navy because of the time spent by these Naval Personnel, we have assigned \$9.31 per reported incident.

This figure represents the dollar cost to the Navy of supporting the average BEQ Manager for 1 hour. It was derived by calculating the average annual cost of support of a BEQ Manager on the basis of ranks reported by 163 BEQ Managers. This average annual cost of support was divided by 2000 hours* to provide the average hourly cost of support of \$9.31.

* We assumed that a BEQ Manager works 50 weeks per year and 40 hours per week.

PROJECT METHODS: METHOD OF ANALYSIS -- INFERENCEAL DATA

In addition to describing the cost and frequency of vandalism, it is important to understand the relationships which may exist between vandalism and characteristics of bases and BEQs.

For instance, these questions may be asked: "Does base size influence the cost and frequency of vandalism?" or "What BEQ management policies are associated with lower rates of vandalism?" To answer these types of questions inferential statistics are used.

Inferential statistics allow for "manipulating" two or more variables to examine patterns between the variables.

More specifically, to examine the relationship between the frequency and cost of vandalism and characteristics of bases and BEQs, a cross-tabulation procedure was used. A cross-tabulation is a joint frequency distribution of responses to two or more classificatory variables, e.g., vandalism cost (high, low) by base size (extra large, large, medium, small). These joint frequency distributions are then statistically analyzed by a test of significance, i.e., the chi square statistic. This statistic aids in determining whether a systematic relationship exists between two variables. SPSS was used to obtain a χ^2 to evaluate potential relationships to vandalism.

 PROJECT METHODS: METHOD OF ANALYSIS -- INFERENCEAL DATA -- Cont.

The chi square (χ^2) is obtained by first computing the cell frequencies which would be expected if no relationship is present between the two variables. These expected cell frequencies are then compared to the actual values according to the following formula:

$$\chi^2 = \sum \frac{(f_o^i - f_e^i)^2}{f_e^i}$$

Where f_o^i equals the observed frequency in each cell and f_e^i equals the expected frequency calculated as:

$$f_e^i = \left(\frac{c_i j_i}{N} \right)$$

Where c_i is the frequency in a respective column marginal of the joint-distribution table, r_i is the frequency in a respective row marginal of the joint distribution table, and N stands for the total number of valid cases. As can be seen from the formula, the greater the discrepancies between the expected and actual frequencies, the larger chi-square becomes. Therefore, small values of chi-square indicate the absence of

PROJECT METHODS: METHOD OF ANALYSIS -- INFERENCEAL DATA -- Cont.

a relationship. Conversely, a large chi-square implies that a systematic relationship of some sort exists between the two or more variables under study. The probability level of obtaining the observed χ^2 and the discretion of the researcher are important in determining the degree to which a systematic relationship exists. In general, however, a statistically significant relationship exists if the probability level is less than .05, i.e., there are less than 5 chances in 100 that a relationship does not exist. A probability level of .20 or less, (i.e., there are less than 20 chances in 100 that a relationship does not exist), does allow for the possibility of an existing relationship, though not very strong.

These cross-tabulation procedures and the test of significance require variables to be of a classificatory nature. Some response categories easily allow for classification. For instance, a "yes" or "no" response to a particular variable is easily identifiable as a 2-way classification format. Likewise, restriction of responses to high, medium or low is identifiable as a 3-way classification. Cross-tabulation procedures allow for an N-way classification format, but large N-way classifications are not the most economical way to analyze data.

PROJECT METHODS: METHOD OF ANALYSIS -- INFERENCEAL DATA -- Cont.

This is especially true with variables where potential responses could be quite numerous, e.g., numerical values. N-way classification of a variable of this type would result in small frequencies in the classification system making the data largely uninterpretable. Therefore, the researcher must then impose some classificatory schema upon the data based on their knowledge of the data.

SECTION II: PROJECT RESULTS

INTRODUCTION

In the previous section of this report, we described the sources of information used in this project and the methods used to analyze the information.

In this particular section, the results of our analyses are presented. It is divided into six major parts, reflecting the nature and extent of the results:

1. **FREQUENCY AND COST OF VANDALISM;** The estimated annual frequency and cost of vandalism; what is damaged, where, when; why and how damage occurs.
2. **CHARACTERISTICS OF BASES AND BEQs:** Base size, budgets for BEQ operation and base missions. Physical and management characteristics of BEQs.
3. **RELATIONSHIP BETWEEN VANDALISM AND CHARACTERISTICS OF BASES AND BEQs:** Characteristics of bases and BEQs which show relationships to vandalism and the nature of these relationships; characteristics which do not show relationships to vandalism.
4. **ACTIONS TAKEN TO REDUCE VANDALISM:** The types of actions taken on bases to reduce the cost of property damage due to vandalism in BEQs.
5. **COMMANDING OFFICERS' SUGGESTIONS AND COMMENTS:** Suggested actions for reducing vandalism costs; comments on the reasons for the problem.
6. **BEQ MANAGERS' SUGGESTIONS AND COMMENTS:** Suggested actions for reducing vandalism costs; comments on the reasons for the problem.

PROJECT RESULTS: FREQUENCY AND COST OF VANDALISM

**ESTIMATED ANNUAL
FREQUENCY AND COST OF
VANDALISM NAVYWIDE**

Approximately 99,000 sailors are berthed in Bachelor Enlisted Quarters (BEQs) on 130 stateside Naval Bases.

It is estimated that almost 179,000 incidents of property damage due to vandalism occur each year in these BEQs, at an estimated cost of almost \$8,000,000 in 1976.

**VANDALISM COSTS AS A
PERCENTAGE OF TOTAL
BEQ OPERATIONS BUDGET
(INCLUDES MAINTENANCE
AND REPAIR)**

In order to express the estimated cost of vandalism on the 130 Stateside Naval bases which have BEQs as a percentage of the BEQ operations budget for these bases, it was necessary to extrapolate from information provided by those Commanding Officers who participated in the study.

C.O.s of 73 bases reported both their budgets for maintenance, repair and operation of BEQs in 1976 and the average number of personnel berthed in the BEQs. The budgets ranged from \$500 to over \$2,000,000. The average number of berthed personnel ranged from 5 to over 3,000.

We extrapolated from this data by first calculating the number of personnel berthed at the 73 bases, then calculating the percentage of personnel berthed at all 130 bases represented by this sample.

PROJECT RESULTS: FREQUENCY AND COST OF VANDALISM -- Cont.

No. personnel berthed at 73 bases	=	61,000
No. personnel berthed at 130 bases	=	99,000
% all personnel berthed at bases who provided BEQ operations budgets	=	$\frac{61,000}{99,000} \times 100 = 61.6\%$

We then assumed that the BEQ operations budgets reported by the 73 bases represented only 61.6% of the total BEQ operations budgets for all 130 bases and estimated the total budget as follows:

BEQ Operations Budget for 73 bases = \$ 8,411,225

BEQ Operations Budget = 61.6% BEQ Operations Budget
(73 bases) (130 bases)

Therefore:

BEQ Operations Budget (73 bases)	=	BEQ Operations Budget (130 bases)
<u>61.6%</u>		

<u>\$8,411,225</u>	=	\$13,654,586
<u>.616</u>		

Thus, the estimated 1976 budget for operations, maintenance and repair of all Stateside BEQs is almost \$14,000,000.

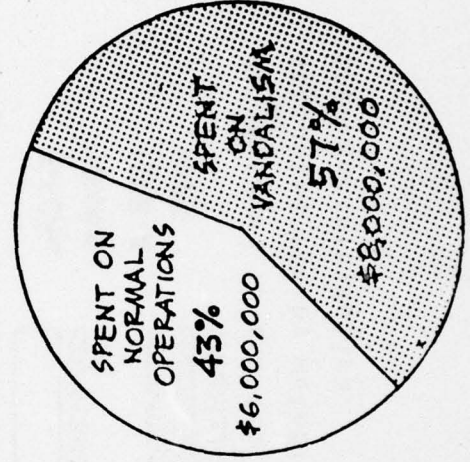
PROJECT RESULTS: FREQUENCY AND COST OF VANDALISM -- Cont.

Finally, to express the total estimated cost of vandalism in 1976 as a percentage of this budget:

$$\frac{\text{Estimated 1976 Cost of Vandalism}}{\text{Estimated 1976 Cost of BEQ Operations}} \times 100 = \% \text{ Of BEQ Operations Budget Spent on Vandalism}$$

$$\frac{\$ 7,924,000}{\$13,655,000} \times 100 = 58\%$$

Our conclusion is that slightly more than half the total budget for BEQ maintenance, repair and operations is spent, directly and indirectly, on the consequences of vandalism in BEQs.



PROJECT RESULTS: FREQUENCY AND COST OF VANDALISM -- Cont.

TRENDS OF M & O COSTS, INCLUDING VANDALISM

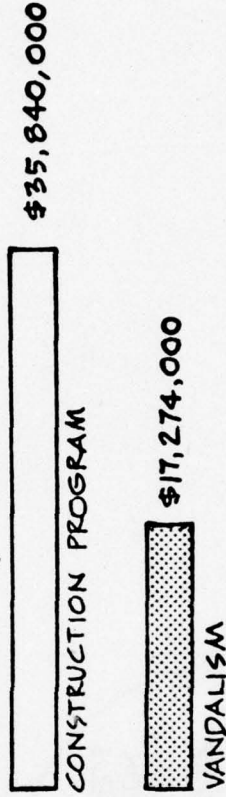
As reported by over 100 base Commanding Officers, the percentage rise in maintenance, repair and operations costs (which includes vandalism) were:

1974 to 1975:	10%
1975 to 1976:	12%
1976 to 1977:	15%

VANDALISM COST AS A PERCENTAGE OF BEQ CONSTRUCTION PROGRAM

The Navy BEQ Construction Program projected costs for FY 1978 and FY 1979 were examined. Construction for overseas bases and Marine Corps bases were excluded. If vandalism costs grow at their current rate, then vandalism costs will be 48% of the total Naval BEQ construction, modernization and rehabilitation budget for these two recent years.

FISCAL YEARS 1978 & 1979



THE COMPONENTS OF COST

As is shown in the table below, most of the vandalism cost is accounted for by material and labor, followed by overhead and then administration.

PROJECT RESULTS: FREQUENCY AND COST OF VANDALISM -- Cont.VANDALISM COSTS* BY CATEGORY

<u>CATEGORY</u>	<u>ESTIMATED COST (1976)</u>	<u>% COST</u>
Material and Labor	\$ 5,941,000	75%
Overhead	1,398,000	18%
Administration	585,000	7%
TOTAL	\$ 7,924,000	100%

*Figures are rounded.

PROJECT RESULTS: THE ELEMENTS DAMAGED

Damage to forty-seven different building elements was reported. However, the damage sustained by only five elements accounted for almost 55% of the total damage cost. These five elements are: doors and door frames (13%), ceilings (12%), window screens (11%), door hardware (10%) and vending machines (8%). The damage sustained by only fourteen of the forty-seven elements accounts for almost 90% of the total damage cost. In the table below, these fourteen elements are ranked, from highest to lowest, according to the percent of the total cost* they represent. The estimated cost of damage to each is also shown.

RANK ORDERED DAMAGED ELEMENTS

<u>ELEMENT DAMAGED</u>	<u>ESTIMATED COST (1976)</u>	<u>% COST</u>	<u>CUM. %</u>
Doors and Door Frames	\$ 932,000	13%	13%
Ceilings	843,000	12%	25%
Window Screens	801,000	11%	36%
Door Hardware	694,000	10%	46%
Vending Machines	592,000	8%	54%
Walls	492,000	7%	61%
Sofas and Chairs	369,000	5%	66%
Lights	349,000	5%	71%
Washing Machines and Dryers	259,000	4%	75%
Lockers	233,000	3%	78%
Urinals	180,000	2%	80%
Thermostats	164,000	2%	82%
Curtains and Blinds	150,000	2%	84%
Window Glass	146,000	2%	86%
SUB-TOTAL	6,204,000	86%	86%
All Other Elements	1,099,000	14%	100%
*TOTAL (Without Administrative Costs)	\$ 7,303,000	100%	

* Material, labor and overhead cost only. Administrative costs are not included. Administrative costs add \$585,000 to the total.

PROJECT RESULTS: THE ELEMENTS DAMAGED -- Cont.

As is shown in the table below, the average cost per vandalism incident varied according to the specific element damaged. The lowest average cost per incident reported was for damage to exit lights (\$9), while the highest was for damage to ceilings (\$165).

DAMAGED ELEMENTS RANK-ORDERED BY ESTIMATED AVERAGE PER INCIDENT COSTS

Element	Average Cost Per Incident	Element	Average Cost Per Incident
Ceilings	\$165	Speakers	\$37
Door Louver/Vent	132	Window Screen	36
Fountains	125	Lamps	32
Door Hardware	94	Faucets, Pipes and Drains	29
Doors and Door Frames	83	Sinks	27
Thermostats	83	Ash Receivers	27
Wire and Conduit	78	Sprinkler Heads	25
Vending Machines	78	Lockers	23
Beds	69	Toilets	22
Washing Machines and Dryers	67	Floors	22
Partitions	59	Window Hardware/Frames	19
Vacuums and Buffers	57	Fire Extinguishers	18
T.V.	57	Urinals	18
Curtains and Blinds	51	Mirrors	18
Window Glass	50	Paper Holders	17
Shelving	47	Lights	16
A/C and Heating Vents	45	Linens and Towels	14
Soap Tray/Dispenser	43	Coin Changers	13
Phones and Booths	43	Signage and Bulletin Boards	12
Tables	42	Shower Curtains	11
Sofas and Chairs	40	Switches and Outlets	11
Fire Alarms	38	Recreation Equipment	10
Walls	37	Shower Heads	9
		Exit Lights	9

DAMAGED ELEMENTS RANK-ORDERED BY THE PERCENT OF TOTAL COST EACH REPRESENTS

RANK ORDERED BY DAMAGED ELEMENT	ESTIMATED COST (1976)	PERCENT COST	CUMULATIVE PERCENT
Door and Door Frames	\$ 932,000	13%	13%
Ceilings	843,000	12%	25%
Window Screens	801,000	11%	36%
Door Hardware	694,000	10%	46%
Vending Machines	592,000	8%	53%
Walls	492,000	7%	60%
Sofas and Chairs	369,000	5%	65%
Lights	349,000	5%	70%
Washing Machines and Dryers	259,000	4%	74%
Lockers	233,000	3%	77%
Urinals	180,000	3%	80%
Thermostats	164,000	2%	82%
Curtains and Blinds	150,000	2%	84%
Window Glass	146,000	2%	86%
Sprinkler Heads	105,000	1%	87%
Floors	105,000	1%	88%
Paper Holders	90,000	1%	89%
Shower Heads	71,000	1%	90%
Door Louvers/Vents	70,000	1%	91%
Lamps	63,000	.9%	91.9%
Head Partitions	60,000	.8%	92.7%
Fire Extinguishers	60,000	.8%	93.5%
Sinks	56,000	.8%	94.3%
Linens and Towels	53,000	.7%	95%

RANK ORDERED BY DAMAGED ELEMENT	ESTIMATED COST (1976)	PERCENT COST	CUMULATIVE PERCENT
Mirrors	\$ 44,000	.6%	95.6%
Phones and Booths	42,000	.6%	96.2%
Toilets	40,000	.5%	96.7%
Ash Receivers	34,000	.4%	97.1%
HVAC Vents	32,000	.4%	97.5%
T.V.s	32,000	.4%	97.9%
Faucets, Pipes and Drains	32,000	.4%	98.3%
Switches and Outlets	27,000	.3%	98.6%
Soap Tray/Dispenser	16,000	.2%	98.8%
Fountains	11,000	.2%	99%
Fire Alarms	10,000	.1%	99.1%
Beds	9,000	.1%	99.2%
Tables	9,000	.1%	99.3%
Vacuums and Buffers	6,000	.08%	99.4%
Recreation Equipment	5,000	.07%	99.5%
Window Hardware and Frames	5,000	.07%	99.5%
Signage and Bulletin Boards	3,000	.04%	99.6%
Shower Curtains	3,000	.04%	99.6%
Speakers	2,000	.03%	99.6%
Exit Lights	2,000	.03%	99.7%
Wire and Conduit	2,000	.03%	99.7%
Coin Changers	< 1,000	.01%	99.7%
Shelving	< 1,000	.01%	99.7%
TOTAL	\$ 7,303,000	99.7%*	99.7%*

*Error due to rounding.

PROJECT RESULTS: LOCATION OF DAMAGE

The location of property damage due to vandalism was analyzed on three levels: by base, by BEQ type and by BEQ space.

THE LOCATION OF
DAMAGE BY BASE

The 1976 cost of vandalism was calculated for each base from the data provided by the Commanding Officers. The range in cost was extremely wide, from approximately \$145 (.001% of total vandalism cost) for the base with the lowest reported costs to almost \$1,000,000 (12% of the total vandalism cost), for the highest. The bases were than rank ordered, from highest to lowest, on the basis of the percent of total vandalism cost each represented. It was determined that 35 (27%) of the bases represented 90% of the vandalism cost. Most of the very large bases are included in this group: an estimated 48% of all berthed personnel reside at these bases. (The relationship between base size and vandalism is discussed further on page 59 of this report.)

THE LOCATION OF
DAMAGE BY BEQ TYPE

Since most bases of study housed more than one BEQ type, base-wide vandalism data could not easily be assigned to a particular BEQ type on base. Therefore, BEQ type was measured by the predominance of a BEQ type in a particular base. Vandalism, when measured by either frequency of incidents on base or vandalism costs during 1976, was not affected by type of BEQ on base. This limited analysis did show that Type C is slightly over-vandalized and Type F (Melton Beckett) is slightly under-vandalized but the differences were not large enough to recommend discontinuing or encouraging one type of BEQ design, rather than another.

PROJECT RESULTS: LOCATION OF DAMAGE -- Cont.

THE LOCATION OF DAMAGE
BY BEQ SPACE

Almost 60% of the damage (by cost) occurred in two BEQ spaces: sleeping rooms (38%) and hallways (20%).

In the table below, BEQ spaces are ranked, from highest to lowest, according to the percent of total damage cost each represents. The estimated annual number and cost (1976) of incidents occurring in each space is also shown.

ESTIMATED ANNUAL FREQUENCY AND COST OF VANDALISM BY BEQ SPACE

BEQ SPACE	ESTIMATED COST (1976)	% OF COST	ESTIMATED ANNUAL NO. OF INCIDENTS	% OF INC.
1. Sleeping Rooms	\$ 2,769,000	38%	57,000	32%
2. Hallways	1,443,000	20%	25,000	14%
3. Other*	978,000	13%	27,000	15%
4. Lounges	775,000	11%	21,000	12%
5. Heads	678,000	9%	37,000	21%
6. Vending	660,000	9%	11,000	6%
TOTAL	\$ 7,303,000	100%	178,000	100%

However, if you consider the amount of opportunity to vandalize, as measured by the time enlisted men spend in each space, the order changes. The change in order is shown in the table on the following page.

* BEQ spaces included in this category are: T.V. and recreation rooms, tobtries, laundries, offices and grounds.

PROJECT RESULTS: LOCATION OF DAMAGE -- Cont.

RERANKING AS A FUNCTION OF OPPORTUNITY

ORIGINAL RANKING OF BEQ SPACES BY FREQUENCY	RERANKING OF BEQ SPACES FACTORED IN OPPORTUNITY	% TIME SPENT IN SPACE	RATIO OF % VANDALISM/ % TIME SPENT IN SPACE
Sleeping Rooms	Other	3.4%	4.41
Heads	Hallways	5.2%	2.69
Other*	Heads	12.1%	1.74
Hallways	Sleeping Rooms	43.1%	.74
Lounges	Lounges	19.0%	.63
Vending	Vending	17.2%	.35

It is clear from the table above that the more public spaces are "over" vandalized: "other" spaces are vandalized more than four times as frequently as would be predicted on the basis of their use; hallways are vandalized almost three times as frequently as would be predicted. Heads are considered relatively public spaces because most head damage occurs in large, common heads.

VANDALISM SCENARIOS

In the previous discussion, property damage due to vandalism has been presented by first, the elements damaged and second, the location of damage. This section addresses the question "Which building elements in which BEQ spaces should be the target of remedial measures?" In order to answer this question, the forty-seven building elements reported damaged were grouped into seven

*Other is defined on previous page.

PROJECT RESULTS: LOCATION OF DAMAGE -- Cont.

general categories: space enclosures, doors, windows, fixed attachments and electrical, service equipment, furnishings and bathroom fixtures/plumbing.

Then the percent of damage, (by cost), sustained by each of these building element categories in each BEQ space was calculated. The seven building element categories and the six BEQ spaces generate forty-two possible BEQ space/building element category combinations. On the following page, these combinations are displayed as a matrix, and the percent of total damage cost each "cell" of the matrix represents is indicated.

As is shown in the matrix, damage in only twelve of the forty-two cells accounts for almost 90% of the total vandalism cost.

In the table on the page following the matrix, these 12 scenarios are ranked, from highest to lowest, according to the percent of total cost each represents. The estimated 1976 cost of each is also listed.

REQ SPACE
BY BUILDING
ELEMENT MATRIX

BUILDING ELEMENT DAMAGED	REQ SPACE						
	SLEEPING ROOMS	LOUNGES	HEADS	HALLWAYS	VENDING AREAS	OTHER SPACES	
SPACE ENCLOSURES	.1%	3%	.4%	14%	.6%	.5%	
DOORS	21%	.9%	<.1%	.6%	0	.6%	
WINDOWS	6%	.8%	.1%	1%	<.1%	5%	
FIXED ATTACHMENTS AND ELECTRICAL	2%	.5%	.3%	2%	0	4%	
SERVICE EQUIPMENT	0	.1%	.4%	1%	6%	4%	
FURNISHINGS	7%	6%	0	.5%	<.1%	.1%	
BATHROOM FIXTURES AND PLUMBING	0	0	8%	0	0	0	

PROJECT RESULTS: LOCATION OF DAMAGE -- Cont.

<u>RANK ORDERED VANDALISM SCENARIOS</u>		<u>(MATERIAL, LABOR AND OVERHEAD COSTS ONLY)</u>	
SCENARIO	ESTIMATED COST (1976)	% TOTAL COST	CUMUL. PERCENT
1. Doors in Sleeping Rooms	\$ 1,540,000	21%	21%
2. Space Enclosures in Hallways	1,046,000	14%	35%
3. Service Equipment in Vending	610,000	8%	43%
4. Head Fixtures	591,000	8%	51%
5. Furnishings in Sleeping Rooms	496,000	7%	58%
6. Windows in Sleeping Rooms	470,000	6%	64%
7. Furnishings in Lounges	420,000	6%	70%
8. Windows in Other Spaces	342,000	5%	75%
9. Fixed Attachments and Electrical in Other Spaces	290,000	4%	79%
10. Service Equipment in Other Spaces	256,000	4%	83%
11. Space Enclosures in Lounges	193,000	3%	86%
12. Fixed Attachments and Electrical in Sleeping Rooms	177,000	2%	88%
SUBTOTAL	6,431,000	88%	88%
13. All Other Damage	873,000	12%	100%
TOTAL	\$ 7,304,000*	100%	

* 1. Administrative costs add \$585,000 to this total and....

2. Total material, labor and overhead cost is actually closer to \$7,303,000. The error is due to rounding.

PROJECT RESULTS: FLUCTUATIONS IN VANDALISM WITH TIME

BEQ Managers were asked whether the number of vandalism incidents fluctuates with the time of day, time of week and time of year, and, if so, what the reasons are for such fluctuations.

The results are as follows:

**VANDALISM FLUCTUATES
BY TIME OF DAY**

1. As shown in the table below, 163 (97%) of BEQ Managers said that more vandalism incidents occur during off-duty hours, that is, during the evening or overnight.

<u>TIME OF DAY</u>	<u>NO. BEQ MANAGERS</u>	<u>% BEQ MANAGERS</u>
Mornings	1	< 1%
Evenings	60	36%
Over Night	103	61%
No information	5	3%
TOTAL	169	100%

The two major reasons given for this pattern are: a) boredom and frustration due to the lack of readily accessible recreational facilities, and b) lack of supervision of BEQs during these hours.

PROJECT RESULTS: FLUCTUATIONS IN VANDALISM WITH TIME -- Cont.

VANDALISM FLUCTUATES BY TIME OF WEEK 2. 154 (91%) of BEQ Managers said that more property damage occurs on weekends than at other times of the week.

<u>TIME DURING WEEK</u>	<u>NO. BEQ MANAGERS</u>	<u>% BEQ MANAGERS</u>
Weekdays	9	5%
Weekends	154	91%
No information	6	4%
TOTAL	169	100%

The three major reasons given for this pattern are: a) pay-day, b) weekend liberty and c) alcohol. Many BEQ managers reported that when the sailors get paid they go out drinking and/or go on weekend liberty and are destructive when they return to the BEQ.

VANDALISM FLUCTUATES BY TIME OF YEAR 3. 52 (20%) of the BEQ managers reported that vandalism varies over months. Of these 52, 22 (41%) reported higher than normal incidence in May-June, and 25 (46%) reported higher than normal incidence in July-August.

It should be noted that this pattern coincides with large fluctuations in the transient population of many bases. 52 (49%) of the bases in the sample reported large fluctuations in transients. 31 (60%) of these 52 reported higher

PROJECT RESULTS: FLUCTUATIONS IN VANDALISM WITH TIME -- Cont.

than normal fluctuations in May-June, and 39 (75%) bases reported higher than normal fluctuations in July-August.

The other most frequently cited reason for variation in the incidence of vandalism over months is the weather:

- a. Many BEQ Managers at bases which have extremely hot summers reported that vandalism increases during the summer months. Their opinion is that the extremely hot weather, and quite frequent breakdown of air conditioners, makes tempers short.
- b. Many BEQ Managers at bases which have severe winters reported that vandalism increases during the winter months, because sailors are confined to their BEQs, with very little to do, for long periods.

PROJECT RESULTS: WHY AND HOW VANDALISM OCCURS

**THE MOTIVES FOR
VANDALISM**

BEQ Managers allocated the incidents they reported to one of six categories of motive or cause. The six categories are:

1. Accidental Property Damage
Man falls asleep in a lounge chair and burns the carpet with his cigarette.
2. Angry/Malicious and Intentional Property Damage
A man kicks in the face of a vending machine that "stole" his money or throws a rock through a window.
3. Intentional, But Not Malicious Property Damage
Men sitting around talking about their girl friends, then spray-paint their girl friends' names on the hallway wall.
4. Property Which Is Worn Out/Replaced
Lounge sofas "wear out" because they're poorly maintained and subject to very heavy use.
5. Theft Losses
Government or personal property is stolen for reuse or sale, such as pool cues or public address speakers.
6. Damaged During Theft
Window to a sleeping room is broken during forced entry to steal a sailor's color television.

PROJECT RESULTS: WHY AND HOW VANDALISM OCCURS -- Cont.

The table showing incident allocation by motive or cause is:

TYPE	NUMBER OF INCIDENTS IN 1976 (Figures Rounded)
1. Accidental	43,000
2. Angry/Malicious	34,000
3. Intentional, but not Malicious	29,000
4. Worn Out	29,000
5. Stolen	27,000
6. Theft-Related Damage	27,000

Note that BEQ Managers believe that 40% (43,000 plus 29,000 incidents) of all vandalism incidents are accidental or due to materials or furnishings being worn out. In both of these categories, there is no intent to cause property damage. The project staff believes that these "motiveless" incidents can be approached in any anti-vandalism program. Therefore the proposed demonstration projects and design guidelines (see Volume II), are applicable to all six types of vandalism.

PROJECT RESULTS: WHY AND HOW VANDALISM OCCURS -- Cont.

REASONS FOR INTENTIONAL
PROPERTY DAMAGE

BEQ Managers most frequently cited alcohol abuse as the reason for intentional property damage. Other frequently cited reasons were: boredom and frustration due to inadequate or inaccessible recreational facilities, lack of supervision during off-duty hours and anger, frustration or anxiety.

Less frequently cited reasons were: the youth and immaturity of residents; partying/skylarking; drug abuse; not caring about property; high transient populations; old and inadequately maintained BEQs; overcrowded BEQs; and disliking the Navy once enlisted.

METHOD OF DAMAGE

Although Commanding Officers and BEQ Managers were not asked specifically how damage occurred, most included the information in their comments. This information was used in developing design guidelines and presented with them as appropriate (see Volume II). The most frequently cited methods of damage are: punching, hammering and kicking (doors, walls and ceilings), ripping off (wall and head fixtures) and burning, and slashing (furniture and carpets).

PROJECT RESULTS: CHARACTERISTICS OF BASES AND BEQS

INTRODUCTION

This section describes the characteristics of the bases and BEQs of study. It is intended to provide the reader with a complete picture of the context in which vandalism takes place and to present a description of the data-base from which recommendations and conclusions have been drawn.

This section is divided into two parts: the first part will describe base-wide characteristics: size, mission and budgets for BEQ operations. The second part will describe physical characteristics of the BEQs such as type, age and condition as well as management characteristics and policy.

CHARACTERISTICS OF BASES

Base size was measured by the average number of berthed personnel residing on a base. As is shown in the table below, the sample of bases in this study (N=105) was highly representative of all Navy bases (N=130) which met our two criteria for inclusion in this study: bases which are located in the United States and also contain BEQs.

BASE SIZE	NUMBER OF ALL BASES	% OF ALL BASES	NO. OF SAMPLE BASES	% OF SAMPLE BASES
Small (1-100 pers.berthed)	34	27%	25	24%
Medium (101-1,000)	56	44%	46	44%
Large (1,001-2,000)	24	19%	18	17%
Extra large (2,000 +)	13	10%	16	15%
	N=127	100%	N=105	100%

bases*

* Only 127 bases are represented here since four bases which are geographically close to one another, were originally thought to be only one base.

PROJECT RESULTS: CHARACTERISTICS OF BASES AND BEQs -- Cont.

Base size, as a variable, was used in two important analyses:

- 1) to examine vandalism costs as a function of base size (page 59) and 2) to project costs and vandalism incidents from a sample to the all-Navy population (page 18).

Budgets for BEQ Operations: C.O.s were asked to provide information on the amount of money the Base Command received in its budget for maintenance, repair and operations of Bachelor Enlisted Quarters for four consecutive years, 1974-1977.

The table below presents, on a yearly basis, the number of bases reporting their budgets for maintenance, repair and operation of BEQs and the total amount appropriated during these years.

BUDGET YEAR	NUMBER OF BASES REPORTING	TOTAL BUDGET
1974	59 bases	\$ 4,526,957
1975	74 bases	7,343,956
1976	73 bases	8,411,225
1977	75 bases	9,119,076

Budgets for BEQ operations, as a variable, were used in several analyses: 1) to examine vandalism costs as a percentage of

PROJECT RESULTS: CHARACTERISTICS OF BASES AND BEQs -- Cont.

total BEQ operations budget (page 29) and 2) to describe the percentage use or trends in the budgets of BEQ operations (page 32).

Base Mission: C.O.s were asked to state the primary mission of their bases. 93 C.O.s provided information to this question. The responses varied greatly in the level of detail supplied in their answers. Responses ranged from the most general (e.g., training) to highly specific base missions (e.g., oceanographic research). Attempts were made by project staff and Naval Personnel to categorize the missions so that base mission, as a variable, could be related to vandalism costs. It was assumed that base mission would reflect the degree of training, the ratings and type of activities and, to some extent, the educational background of the enlisted men on base. Unfortunately, no appropriate categorization of base mission was possible at this time. Therefore, there are no results related to base mission.

PROJECT RESULTS: CHARACTERISTICS OF BASES AND BEQS -- Cont.

PHYSICAL
CHARACTERISTICS
OF BEQS

There are six main types of BEQs:

TYPE A - OPEN BAY

The Open Bay BEQ is composed of a large room with berths. There are no partitions dividing the berths. There are common head facilities.

TYPE B - OPEN BAY WITH PARTITIONED CUBICLES

This type BEQ is composed of a large room separated by half-height partitions dividing the large space into semi-private berths. There are common head facilities.

TYPE C - ROOMS

This type BEQ is composed of individual rooms with doors opening to an interior corridor. There are common head facilities.

TYPE D - ROOMS WITH OUTSIDE CORRIDORS

This type BEQ has rooms on an exterior corridor. These are common in warmer climate areas of the country. The head facilities are shared by members of the room.

TYPE E - ROOMS WITH INSIDE CORRIDORS

This type BEQ has rooms on an interior corridor. The head facilities are shared by the members of the room. (It is the same style as Type D but the corridors are within the building.)

TYPE F - ROOMS WITH PRIVATE LOUNGES (The Welton Beckett or Marine Model)

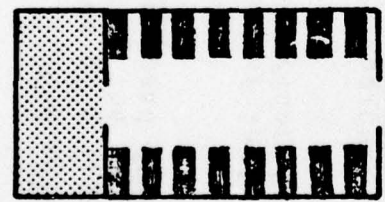
This type BEQ is composed of generally four (4) rooms and four (4) toilet facilities surrounding or adjacent to a private lounge area. Entrance to the quarters is from an exterior corridor or stairwell.

PROJECT RESULTS: CHARACTERISTICS OF BASES AND BEQs -- Cont.

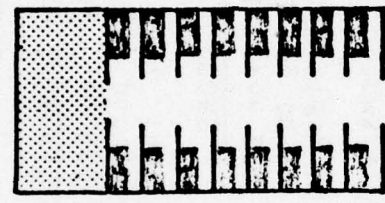
TYPE OTHER: Includes all BEQ types which could not be categorized according to this classification.

DIAGRAMS OF THE SIX MAJOR BEQ TYPES:

▒ Toilet
■ Bed



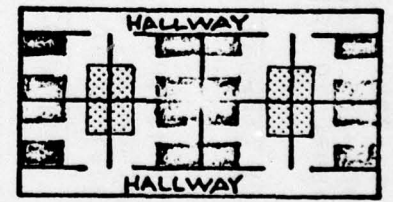
TYPE A



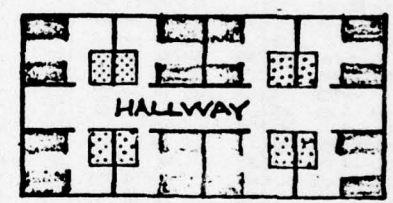
TYPE B



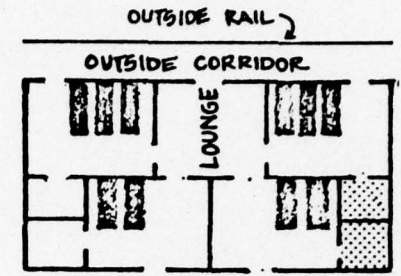
TYPE C



TYPE D



TYPE E



TYPE F

PROJECT RESULTS: CHARACTERISTICS OF BASES AND BEQS -- Cont.

PHYSICAL CHARACTERISTICS OF BEQS

The table below presents the physical characteristics of each of these BEQ types.

BEQ TYPE	NO. OF BEQ BLDGS. ¹	NUMBER OF BERTHS	AVERAGE % OCCUP'CY	ELEVATORS	AVERAGE AGE	PHYSICAL COND. ²	NO. OF BASES
A	76	9,402	44%	None	35 yrs.	3.5	23
B	53	8,669	66%	None	27 yrs.	3.0	23
C	316	49,688	82%	3 Bldgs.	20 yrs.	2.4	85
D	16	2,956	67%	11 Bldgs.	11 yrs.	1.3	8
E	67	7,342	87%	5 Bldgs.	15 yrs.	1.5	26
F	90	12,563	99%	6 Bldgs.	5 yrs.	1.2	32
Other	67	8,560	85%	None	14 yrs.	1.8	21

¹A BEQ building may house more than one BEQ type.

²A score of 1=good; 3=fair and 5=poor physical condition.

PROJECT RESULTS: CHARACTERISTICS OF BASES AND BEQs -- Cont.

MANAGEMENT CHARACTERISTICS OF BEQs

Method of Berth Assignment: C.O.s reported the following berth assignment methods to be used on their bases:

<u>BERTH ASSIGNMENT METHOD</u>	<u>NUMBER OF BASES</u>	<u>PERCENTAGE OF BASES</u>
Unit Integrity	50 bases	47%
Berth Availability	33 bases	31%
Other (e.g., service rating)	20 bases	19%
No Information	2 bases	2%

BEQ Tenant Advisory Council: All bases have BEQ Tenant Advisory Councils. BEQ Manager comments, however, indicated that the activity level of these councils between the bases varies greatly.

Frequency of Inspections: The following table shows the frequency of inspection in the BEQs:

<u>FREQUENCY OF INSPECTION</u>	<u>NUMBER OF BASES</u>	<u>PERCENTAGE OF BASES</u>
Daily	29 bases	27%
Twice Weekly	13 bases	12%
Weekly	54 bases	51%
Bi-Weekly	6 bases	6%
Monthly or Less	4 bases	4%

PROJECT RESULTS: CHARACTERISTICS OF BASES AND BEQS -- Cont.

Who Conducts Inspections: BEQ Management Staff or the C.O. conducts inspections on the majority of bases (78%), while at 23 bases (22%) the tenant commands conduct inspections.

C.O. Inspections: Most BEQ Managers (70%) reported that the C.O. of their base had inspected their BEQs during the past year. On 11% of all bases (n=12) the C.O. had not inspected any of the BEQs on base during a one-year period. Most C.O.s (65%) who did inspect the BEQs, did so less frequently than once every three months.

Record Keeping: C.O.s of 71 bases (68%) reported that no property damage reports were kept, while 31 bases (30%) reported that record keeping of property damage was occurring on their bases.

Number of Buildings and Berths Managed: On most bases (57%) BEQ Managers are assigned to be responsible for 2 or more BEQ buildings. On some bases (43%), BEQ Managers are responsible for only one BEQ building. The majority of BEQ Managers (56%) are responsible for less than 200 berthed personnel while 17% of BEQ Managers are responsible for more than 500 berthed personnel.

PROJECT RESULTS: CHARACTERISTICS OF BASES AND BEQs -- Cont.

CHARACTERISTICS
OF BEQ MANAGERS

BEQ Management Training School: Only 70 managers, or 27% of all managers questioned, have attended training school. The remaining 74% or 192 managers did not attend training school. On 65 bases, none or most of the BEQ managers did not attend BEQ management training school.

Length of Tenure: Most BEQ managers (72%) have less than one year of experience in their present job. On 34 bases (32%) none or the majority of BEQ managers have been in their present job for less than one year.

BEQ Manager Perception of Property Damage: The following table presents the extent to which BEQ Managers perceive property damage to be a problem in their BEQs:

<u>EXTENT OF PROPERTY DAMAGE</u>	<u>NUMBER OF BEQ MANAGERS</u>	<u>PERCENTAGE OF BEQ MANAGERS</u>
Major Problem	62	24%
Minor Problem	98	37%
Not a Problem	99	38%
No Information	3	1%

PROJECT RESULTS: RELATIONSHIP OF VANDALISM TO CHARACTERISTICS OF BASES/BEQS

In addition to determining the nature, extent and cost of property damage due to vandalism, the relationships between environmental factors and vandalism rates were also explored. Two rates of vandalism were computed for each base: frequency of incidents and cost by base per year, both divided by number of men berthed. This allows comparison across all bases without regard to size.

USING COST AS THE
MEASURE OF VANDALISM

Analyses of the data, using cost data, showed the following relationships to exist:

Higher costs of vandalism are associated with:

- large berthing capacity and large numbers of men on a base.
- large transient populations and high fluctuations in the number of transients at bases.
- BEQ managers who have not attended BEQ manager training school and with little experience (less than 1 year) as BEQ managers.

Lower costs of vandalism are associated with:

- Bases where C.O.s personally conduct inspections more frequently than once a year.
- Bases where host commands, rather than tenant commands conduct all inspections.

PROJECT RESULTS: RELATIONSHIP OF VANDALISM TO CHARACTERISTICS OF BASES/BEQS -- Cont.

In addition, other factors were examined, whose results are surprising. A possible rationale is offered for each:

. Berth Assignment Methods: Unit integrity as a method of berth assignment was more frequently associated with higher vandalism costs than was assignment of berths through availability. Since base size often dictates the method of berth assignment, this relationship most likely reflects the already existing relationship between base size and vandalism.

. Surveillance: Extensive surveillance of BEQs as reported by C.O.s is more often associated with bases having high vandalism cost than bases with low vandalism costs. This may be a function of the need for surveillance on bases where vandalism is high.

The following factors did not show a relationship to rates of vandalism, as measured by cost by base per year:

. Per Diem, as measured by whether authorizations were granted for per diem during 1976.

. Emergency Loading, as measured by whether initiation of "emergency loading" procedures occurred during 1976.

PROJECT RESULTS: RELATIONSHIP OF VANDALISM TO CHARACTERISTICS OF BASES/BEQs -- Cont.

. Frequency of Inspections, whether occurring daily, weekly or less frequently. Linked to the facts that lower costs are found where C.O.s inspect more frequently and where host rather than tenant commands inspect, this may indicate that the important issue is who inspects, rather than how frequently.

USING FREQUENCY AS THE MEASURE OF VANDALISM

Using frequency of incidents on a yearly basis by base, resulted in finding no significant relationship between high or low rates of vandalism and the following factors:

- . Base Size
- . Transient Occupancy
- . Per Diem
- . Emergency Loading
- . Surveillance
- . Berth Assignment Method
- . Frequency of Inspections
- . C.O. Inspections
- . Personnel Conducting Inspections
- . BEQ Managers Length of Training
- . BEQ Manager Attendance at Training School
- . Climate

PROJECT RESULTS: RELATIONSHIP OF VANDALISM TO CHARACTERISTICS OF BASES/BEQs -- Cont.

. Type of BEQ (i.e., Melton Beckett or rooms off corridors, etc.). Since most bases of study housed more than one BEQ type, base-wide vandalism data could not easily be attributed to a particular BEQ type. BEQ Type, measured by the predominance of a BEQ type on a particular base, in general, did not affect the rate of vandalism.

Since many factors were found linked to cost of vandalism at bases, but none to frequency of incidents, it is believed that while the frequency of vandalism occurs evenly throughout the Navy, the types of incidents and the elements damaged are very different at the bases experiencing higher costs of vandalism. And further, that the bases with high costs have special characteristics which place social stress on the BEQ occupants with the results that their respect for property decreases and their anger increases.

PROJECT RESULTS: ACTIONS TAKEN TO REDUCE PROPERTY DAMAGE

As is shown in the table below, most (79%) bases reported that they had taken one or more actions to reduce property damage due to vandalism in their BEQs.

ACTION TAKEN TO REDUCE PROPERTY DAMAGE	NO. OF BASES	% OF BASES
Yes	83 bases	79%
No	16 bases	15%
No information	6 bases	6%
TOTAL	105 bases	100%

The 83 bases which reported that they have taken action, described 155 actions between them. These actions were categorized according to the issues they address. The issues are listed below, then, starting on the following page, the actions taken addressing each issue are presented.

Issues addressed:

- . BEQ POLICY AND MANAGEMENT, including Berthing Policy, Resident Education, Resident Involvement, Inspections, and Repair, Restitution and Punishment.
- . BEQ STAFF, including Training and Assignments.
- . BEQ SECURITY, including Limiting Access to BEQs, and Security Watches and Patrols.
- . BEQ MAINTENANCE

ACTIONS "IN-PLACE" TO REDUCE VANDALISMCATEGORY: BEQ POLICY AND MANAGEMENTISSUES ADDRESSEDACTIONS TAKENBERTHING POLICY

- Separated known troublemakers from others.
- Assigned senior POs to rooms throughout.
- Assignments by unit integrity.

RESIDENT EDUCATION

- Alcohol education/treatment programs have cut down some incidents of property damage by personnel 'under the influence'.
- Attempting to educate residents that they are tearing their home down when committing vandalism.
- Notes, pictures and articles in Command Newspaper about BEQ habitability improvement and about vandalism.

RESIDENT INVOLVEMENT

- Strong BEQ Advisory Committee
- By using a "staff low profile" attitude, getting the job done without being seen. Absolutely no harrassment of residents.
- A very strong command supported BEQ advisory committee has proven to be our best anti-vandalism tool. (VERY frequent comment)
- Damages to property with the exception of theft, usually originate from dissatisfied individual living or assigned in quarters contrary to his taste. So, we do the best we can do

ACTIONS "IN-PLACE" TO REDUCE VANDALISMCATEGORY: BEQ POLICY AND MANAGEMENT -- Cont.ISSUES ADDRESSEDACTIONS TAKEN

accommodate the individual by letting them know that the management is very interested in their welfare, and if at all possible, we give them the choice of berthing with their friends or take immediate action if the complaint is either equipments down, etc.

- Look for activities which individuals can participate in to release tensions.

INSPECTIONS

- Frequent inspection by BEQ personnel and by CPO/ACPO (VERY frequent comment)
- Junior officers are required to perform daily inspections of the facilities.

REPAIR, RESTITUTION AND PUNISHMENT

- Identified 'vandals' are taken to COs mast and/or required to pay damage costs. (VERY frequent comment)
- Firm counseling of offenders.
- Unit responsibility for assigned areas.

ACTIONS "IN-PLACE" TO REDUCE VANDALISMCATEGORY: BEQ STAFF

ISSUES ADDRESSED	ACTIONS TAKEN
TRAINING	<ul style="list-style-type: none"> ◦ Proper training and indoctrination of senior petty officers on duty to respond to any type of grievances by occupants. ◦ Security training for BEQ managers. ◦ Continuing indoctrination of duty personnel. ◦ Improve guidelines for and accountability of watchstanders with respect to acceptable behavior and discipline within the BEQ after normal hours.
STAFF ASSIGNMENTS	<ul style="list-style-type: none"> ◦ Permanent BEQ Managers assigned to each building to improve accountability of barracks condition. ◦ Assignment of a BEQ Security Assistant on a full-time basis.
ADDITIONAL ACTIONS	<ul style="list-style-type: none"> ◦ Trying to get tenant commands to take an active interest in the BEQs. ◦ The Commanding Officer signs "Vandalism Reports". These require superiors to investigate incidents. This method forces command attention to the problem(s). Even when the investigation results in not finding a guilty party, it is felt the "advertising" results in abatement. ◦ Extra liberty for reporting incidents. ◦ Command observation and inspections.

ACTIONS "IN-PLACE" TO REDUCE VANDALISM

CATEGORY: BEQ SECURITY

ISSUES ADDRESSED	ACTIONS TAKEN
------------------	---------------

LIMITED ACCESS

- Reduction in amount of property being used.
- Sign-in cards with inventory taken.
- Desk clerk is on duty at all times and secures lounge at 2200 to avoid unnecessary damage.
- Single entry to all BEQs with security watch allowing only residents and registered guests' entry. (VERY frequent comment)

SECURITY WATCHES AND PATROLS

- 24-hour desk watch, fire and security roving patrol; base security patrols. (VERY frequent comment, .40% of all CO's made this comment)

ACTIONS "IN-PLACE" TO REDUCE VANDALISMCATEGORY: BEQ MAINTENANCE

ISSUES ADDRESSED	ACTIONS TAKEN
GENERAL COMMENTS	<ul style="list-style-type: none"> ◦ Preventive maintenance program for washer and dryer installations. ◦ Well-serviced and maintained vending machines. (Frequent comment) ◦ An effort is made to keep the BEQs in good condition. It is felt that residents will demonstrate more respect for properly maintained living spaces. ◦ All door locks are checked monthly. Minor property damage is corrected as soon as possible. ◦ Effecting immediate repairs, before personnel completely damage or break equipment. ◦ A plan of stenciling building number and room number in furniture is underway. Quarterly inventory of furniture will be initiated as soon as marketing of furniture is completed.

PROJECT RESULTS: COMMANDING OFFICERS' SUGGESTIONS AND COMMENTS

Commanding Officers were asked to suggest ways of reducing the cost of vandalism in BEQs. A wide variety of suggestions and comments were received, addressing several different issues. The issues addressed are listed below; then, starting on the following page, the suggestions and comments pertaining to each issue are presented.

Issues Addressed by Commanding Officers' Suggestions and Comments

- BEQ POLICY AND MANAGEMENT, including Berthing Policy; Inspections; Repair, Restitution and Punishment; Check-In/Out Procedures; and Resident Involvement.
- BEQ MANAGEMENT STAFF, including Training, Staff Size, and Staff Attitude.
- BEQ SECURITY, including Limited Access and Increased Surveillance.
- BEQ DESIGN, FURNISHINGS AND MATERIALS SELECTION, including BEQ Types; Materials Selection for Space Enclosures, Door and Window Glass, Doors and Furnishings; Recreational Facilities; and Vending Machines.
- BEQ MAINTENANCE
- COMMAND INVOLVEMENT

COMMANDING OFFICERS' SUGGESTIONS AND COMMENTSCATEGORY: BEQ POLICY AND MANAGEMENTSPECIFIC ISSUESUGGESTIONS

BERTHING POLICY

- Berth permanently assigned personnel separately from administrative hold personnel whenever possible.
- Service members should be credited BAQ and charged to live in BEQs.
- BEQs in the fashion of Type F as outlined previously can be extremely beneficial in the reduction of vandalism if one room in each section is occupied by a senior Petty Officer (E-6 or above). The presence of higher rated personnel living in the area has a tendency to have a direct effect on the lower rated personnel in the area. Management can have a direct effect on the reduction of vandalism.
- Practice "unit integrity" as much as possible. Although not applicable to the local situation, I have seen it work well in situations where several commands shared a single but multi-building BEQ complex.
- Separate berthing facilities for men and women.

COMMANDING OFFICERS' SUGGESTIONS AND COMMENTS

CATEGORY: BEQ POLICY AND MANAGEMENT -- Cont.

SPECIFIC ISSUE SUGGESTIONS

INSPECTIONS

- Stricter search in rooms for drugs at least once a week by security and dogs.
- Weekly inspections by BEQ managers.
- Conduct frequent inspections of BEQs, especially those where administrative hold or discipline-prone personnel are housed.
- Increase management inspections.
- Weekly inspections.
- This command has an exceptionally low rate of damage thru vandalism. Room inspections are made by the BEQ staff in company with various division C.P.O.s. Problems with individuals not keeping their rooms clean are brought to the attention of the person's division officers.

REPAIR, RESTITUTION AND PUNISHMENT

- More tenant command involvement, and seeing that tenant commands are charged for damage, if they are unable to find and charge the vandals.
- Methods to fix the responsibility for damages.
- Provide swift disciplinary action for personnel apprehended committing vandalism.
- Encourage resident responsibility for damage.

COMMANDING OFFICERS' SUGGESTIONS AND COMMENTSCATEGORY: BEQ POLICY AND MANAGEMENT -- Cont.SPECIFIC ISSUESUGGESTIONSREPAIR, RESTITUTION
AND PUNISHMENT
(Cont.)

- Collect cost of resident-caused damage from perpetrator.
- When you catch them you could force them to pay for cost of repair or replacing damaged property.
- Strict disciplinary action taken against personnel caught vandalizing government property.
- Paragraph 043114.2 NAVCOMPT Manual says: "RECOVERIES FROM NAVAL PERSONNEL. Collection or checkage of pay for loss or damage to Government property by naval personnel is not authorized unless the member concerned voluntarily consents in writing to such action..." The phraseology in this paragraph is generally translated in the field, as tacit admission that full responsibility toward the proper care and control of U.S. Government (U.S. Navy) property and equipment may be largely disregarded. Obviously this puts 'the cart before the horse'. Responsibilities should be firmly established first; then, provide or prescribe adequate safeguards to preclude erroneous or arbitrary collection actions.
- The Commanding Officer should be given the authority to force personnel to pay for vandalism costs. Any fines levied as a result of NJP are not presently applied to repair of damage.
- Implement total command integrity making each command pay for repairs to their own areas from OPTAR funds. This would cause all units to pay particular attention to their assigned areas if they have to pay for all repairs other than normal usage.

COMMANDING OFFICERS' SUGGESTIONS AND COMMENTS

CATEGORY: BEQ POLICY AND MANAGEMENT -- Cont.

SPECIFIC ISSUESUGGESTIONS

REPAIR, RESTITUTION
AND PUNISHMENT
(Cont.)

- When vandalism is proven against an individual, he should be made to bear the cost of labor and parts, or be made to repair the broken parts.
- Make personnel causing damage pay for damage.
- Be able to evict personnel from the BEQ.
- I think when furniture, or appliances, or anything in any BEQ is damaged, I would suggest a letter be written from BEQ to any command or the command involved, giving said command all information with dates of damage. After all information has been conveyed to said command, then send a bill for said damages.
- When vandalism occurs and the vandal is apprehended, insure that appropriate disciplinary action is taken.
- We really don't have much of a problem at this facility, but at my former station, we had a serious problem. To rectify the situation, if we found any new damage in anyone's room, he went to MAST and received a fine of \$50-\$100 for destruction of government property.
- NJP for all personnel caught vandalizing the premises, fining them for the entire cost of repairs. If the vandal is unknown, the senior man present in the room should be held responsible. This procedure, in the long-run, should reduce the cost of vandalism.

COMPLAINING OFFICERS' SUGGESTIONS AND COMMENTSCATEGORY: BEQ POLICY AND MANAGEMENT -- Cont.SPECIFIC ISSUESUGGESTIONSREPAIR, RESTITUTION
AND PUNISHMENT
(Cont.)

- Offenders punished and publication given to the offense and punishment.
- Make sure Managers enforce all rules and regulations fairly. I have found this does more to help prevent damage than almost any other deterrent.

CHECK-IN/OUT
PROCEDURES

- Requiring an occupant to sign his/her check-in card as to the condition of the space upon check-in stems damage. This is done during a joint inspection by the tenant and a BEQ Manager.
- Charge residents a security deposit on the room, returnable when they check out, deducting for damages.
- Exiting regulations should be strictly enforced.
- Have personnel that reside in BEQ leave deposit upon checking in to quarters.

RESIDENT INVOLVEMENT

- A strong BEQ Advisory Committee.
- A vigorous indoctrination program in attitude for successful living in the BEQs by units occupying assigned quarters.
- Increased reliance on "peer pressure" as a deterrent to vandalism. Activation of the BEQ Advisory Council has proven effective by informing the residents through "unofficial" channels of the command's current plans for the quarters and

COMMANDING OFFICERS' SUGGESTIONS AND COMMENTS

CATEGORY: BEQ POLICY AND MANAGEMENT -- Cont.

SPECIFIC ISSUE SUGGESTIONS

RESIDENT INVOLVEMENT
 (Cont.)

- by enlisting the support and assistance of the more vocal/ active residents.
- We strongly recommend that a BEQ Advisory Board, composed of representatives from all paygrades, be constituted. Our Advisory Board is very active and has provided numerous recommendations regarding Management of the BEQ, which have been instituted. We have attempted to use this board to create a "Community attitude" among our BEQ occupants. This has resulted in relatively few incidents of vandalism.
 - Provide each member/resident of a BEQ with the minimum requirements to be followed, solicit their support in maintaining their room, provide them with all basic facilities for recreation and self sufficiency (i.e., washing machines, kitchen, ironing boards, lounges, TV, games, quiet areas, etc.) and most important insist on cleanliness. Ensure each individual has a job/billet and knows that he/she is an important member of the command.

MISCELLANEOUS

- Allow in-room visitation for all sexes. If you have a lady in, you will keep your room neater.
- Install suggestion box.

COMMANDING OFFICERS' SUGGESTIONS AND COMMENTSCATEGORY: BEQ MANAGEMENT STAFFSPECIFIC ISSUE SUGGESTIONSTRAINING

- BEQ Management Training
- Improved training and lower turnover of BEQ Managers.
- Have station personnel be the only managers.
- Provide screening to insure highly motivated individuals are selected for assignment in the BEQ Management billets, and they receive formal training prior to being assigned to billet.
- NAVSTA San Diego was recently established the billet of Security Manager within the BEQ Division. An E-6 with extensive hotel security training and experience has been assigned and will be closely monitoring all aspects of vandalism, linen loss, physical security and drug control.
- BEQ Manager -- This command, for the past 2 years has had a totally inept MMI specifically assigned aboard to be the BEQ Manager. Arriving aboard with a service record full of documented incompetence, he has proven to be totally inadequate as any kind of manager. Requiring constant supervision for the most routine of tasks, he has done more to aid in the poor morale and increased minor physical damage to the BEQ than any other factor. The size of this command (90 enlisted) cannot support his removal from the position to be replaced by a more qualified individual. Bu. Pers. must be more careful in selection of individuals to such a position, especially in a small command such as this. A poor performer can easily be "hidden" in a large organization, but is a tremendous burden in a command this size.

COMMANDING OFFICERS' SUGGESTIONS AND COMMENTS

CATEGORY: BEQ MANAGEMENT STAFF -- Cont.

SPECIFIC ISSUE	SUGGESTIONS
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TRAINING
(Cont.)

° Personnel should not be assigned to a management position without considerable training or on the job training under a qualified manager. A qualified manager should immediately establish an effective training program so that his watchstanders can recognize potential trouble areas and take action to eliminate these areas. Also, a more effective managerial staff could be established if the required billets of the BEQ were established and manned by an authorized allowance in lieu of having personnel assigned to this area on a temporary basis. The tour of duty for the BEQ should be the minimum authorized for a rating under the present Sea-Shore rotation. The minimum of authorized billets should be the BEQ Officer, BEQ Managers, and the BEQ Desk Watches. The prerequisite for becoming a BEQ Manager should be at least one tour as a BEQ Desk Watch.

° I feel the Navy is on the right track as far as BEQ Management and construction goes. The design of future complexes will give the sailor more privacy and in turn will take more pride in his room and the complex as a whole. Trained management teams will soon be placed in complexes for a two or three year tour instead of the present 90-day unexperienced instructors who are in most cases doing a good job but are not around long enough to carry out good ideals. I strongly feel that 80% of all vandalism is triggered by the living conditions these men have to live in (open bay cubicles).

BEQ STAFF SIZE

° Provide sufficient manpower to operate the BEQ complex 24 hour a day, 7 days a week, without dependence on watchstanders.

COMMANDING OFFICERS' SUGGESTIONS AND COMMENTSCATEGORY: BEQ MANAGEMENT STAFF -- Cont.SPECIFIC ISSUESUGGESTIONSBEQ STAFF SIZE
(Cont.)

- Use no transient personnel in key positions.
- Provide for adequate personnel to manage and maintain BEQs.
- Change the Watch Structures of Tenant Activities. Watch standers be provided on TAD status to BEQ Management and increase the number of compartment cleaners in order for the BEQ Staff to provide much better, cleaner, and well-managed quarters to occupants. We need more senior petty officers of good management backgrounds, service-oriented type of personnel. All BEQs must be managed by NAS personnel vice TAD type from tenant activities. Vandalism is like a disease, it occurs when least expected, but can be reduced to bare minimum with efficient and active management. Eliminate some of the symptoms, for example, dissatisfaction due to discomfort.

- Increase BEQ Staff.

- Adequately man BEQs to allow an adequate master-at-arms force to patrol communal spaces during off hours.

- Increase the number of qualified BEQ Managers and Assistants for better control of BEQs.

BEQ MANAGER ATTITUDE

- Instill a sense of "ownership" and pride in BEQ occupants.
- Use only managers that are helpful to their shipmates.
- Improve individuals' sense of personal, moral responsibility for his actions and the overall detrimental effect he causes.

COMMANDING OFFICERS' SUGGESTIONS AND COMMENTSCATEGORY: BEQ MANAGEMENT STAFF -- Cont.SPECIFIC ISSUE SUGGESTIONSBEQ MANAGER ATTITUDE
(Cont.)

- ° I feel more professional management of BEQ (i.e., all MS's) take hard core military out of the BEQ staff's minds, to enforce regulations and do their jobs without being seen. Good communications between staff and residents keep them informed of what you are doing for them. Let them know your attitude, and your sincerity about trying to make their tour more comfortable.
- ° The key to reducing the cost of vandalism is good management.
- ° The BEQ staff has exceptionally good relations with the residents by always being available and helpful to the maximum extent possible.
- ° We do not have a problem with vandalism in our BEQs. We keep the BEQs clean and in good repair. We also try to work any problem or complaint out with the individual on a one on one basis.

COMMANDING OFFICERS' SUGGESTIONS AND COMMENTSCATEGORY: BEQ SECURITYSPECIFIC ISSUESUGGESTIONSLIMITED ACCESS

- Install full panic device and deadbolt locking and exit alarm and relatching system on all rear exit doors.
- Install a masterkeyed security system throughout BEQ complex (Best Lock Corporation).
- Redesign fire exits to stop using them as entrances.
- Construction should provide for single entry/exit from buildings for security control.
- Install alarm on all fire exit doors.
- NAVSTA San Diego has found single entry points to the BEQs supervised by a security watch on a 24-hour basis to be especially effective. In addition, we employ a night BEQ complex manager who patrols all BEQs until midnight.
- BEQs should be designed so access can be monitored from a single point, thereby affording management personnel the ability to keep unauthorized personnel out.

INCREASED SURVEILLANCE

- Better security watches
- Two watches per deck on each wing 24 hours a day.
- Roving Watches.
- Increase the fire and security patrols.

COMMANDING OFFICERS' SUGGESTIONS AND COMMENTSCATEGORY: BEQ SECURITY -- Cont.

SPECIFIC ISSUE	SUGGESTIONS
INCREASED SURVEILLANCE (Cont.)	<ul style="list-style-type: none"> ◦ Have the BEQ managers make rounds. ◦ Install hidden T.V. monitors on all decks with a central monitor (preferably video tape). This would greatly enhance the chances of catching personnel who willfully damage property. ◦ Increased supervision: recommend, within a given small area, one floor perhaps, the occupants take turns being responsible for overseeing and assuring no vandalism. This gives the individuals responsibility and training. ◦ BEQs should be designed so that security personnel can have ready access to individual rooms. In the seven story BEQs (Type F) personnel can vandalize the inner rooms and have the protection of two locked doors. ◦ Fire watches on each deck after working hours. ◦ Centralize lounges within the watchful eyes of the duty managers.
MISCELLANEOUS	<ul style="list-style-type: none"> ◦ Insure maximum lighting. ◦ Illuminate all potentially low traffic and auto parking areas.

COMMANDING OFFICERS' SUGGESTIONS AND COMMENTS

CATEGORY: BEQ DESIGN, FURNISHINGS AND MATERIALS SELECTICV

SPECIFIC ISSUE

SUGGESTIONS

BEQ DESIGNBEQ Types

- Modification of the Welton Beckett floor design. Specifically, the communicating fire doors between rooms and lounges have created continuing morale problems. Residents feeling insecure and vulnerable appear to be less likely to protect the property assigned to their care.
- Doing away with open bays seems to minimize damage incidents.
- Replace aged BEQs with new apartment complex units.
- Design hotel type barracks, i.e., single rooms for each occupant with private heads. If there is damage to the rooms, the chance of determining responsibility would be better.
- While it probably is not apparent from the foregoing answers, the BEQ type with least vandalism is C. When the capacity is low and residents permanent. The four modernized BEQs with 100-125 man capacity have significantly less vandalism than other types. This is believed to be due in part to the small size which fosters a feeling of community and pride in ownership. The design problem then becomes one of creating a feeling of community among residents while being large enough to gain economy of scale of operation.
- NS Mayport will open two new BEQs in October. Both will be Type F and will be more conducive to a homelike atmosphere.
- The incidence of vandalism at Mayport is relatively small and the new living conditions should lower it.
- Convert all cubicles to rooms.

COMMANDING OFFICERS' SUGGESTIONS AND COMMENTS

CATEGORY: BEQ DESIGN, FURNISHINGS AND MATERIALS SELECTION -- Cont.

SPECIFIC ISSUESUGGESTIONSBEQ Types
(Cont.)

- Conversion to individual rooms to convey a sense of propriety on the part of resident.
- Construction should provide for single occupancy with bath. This allows commands to hold one individual responsible for his/her own area.
- The single occupant room is only way to reduce to zero the level of vandalism, i.e., single accountable individual.
- Design them so individuals will have more privacy and not have to crowd four per room.
- Design and build future BEQs for one person with head in room.
- Making enlisted quarters look less like barracks and more like civilian apartments will help reduce vandalism.
- Motel style BEQs.

MATERIALS SELECTIONGeneral Suggestions

- Buy accessories of quality and function not merely by low bid.
- Install surfaces which are easy to clean.
- Use of sounder construction. The presence of light-weight/easily breakable fixtures fosters vandalism. For example, the flimsily built shelves in the lounge areas were rendered useless shortly after being loosened from the wall.

COMMANDING OFFICERS' SUGGESTIONS AND COMMENTS

CATEGORY: BEQ DESIGN, FURNISHINGS AND MATERIALS SELECTION -- Cont.

SPECIFIC ISSUESUGGESTIONSSpace Enclosures

- Gypsum wall board should be backed with 1/4" plywood or masonite to discourage kicking and punching holes in walls.
- Provide a gloss-type heavy duty paint for walls which can be easily washed without coming off.
- Make rooms more soundproof.
- No vinyl wall coverings should be used in BEQs, in lieu, use paint.
- Walls should be painted with a high quality semi-gloss enamel for cleaning purposes.
- Suspended ceilings should be a minimum of 8 feet or more from deck so they can not be punched with a fist.

Door and Window Glass

- Shatterproof window glass.
- Safety glass that would not break under normal pressure in all windows and doors.
- Glass used in entrances including doors should be safety plate or tempered glass.

COMMANDING OFFICERS' SUGGESTIONS AND COMMENTS

CATEGORY: BEQ DESIGN, FURNISHINGS AND MATERIALS SELECTION -- Cont.

SPECIFIC ISSUE	SUGGESTIONS
<u>Doors</u>	<ul style="list-style-type: none"> ◦ Deadbolt locks on residents' rooms. ◦ Dead bolt lock in doors. ◦ Solid wood or metal doors. ◦ All doors should be solid stave construction. Do <u>not</u> use a particle-filled core door.
<u>Furnishings</u>	<ul style="list-style-type: none"> ◦ Lockers with security drawer inside which could be used for storing valuables. Stronger locks and hinges on locker. ◦ Improved personal lockers and locking devices. ◦ Sturdier room furniture. ◦ Sturdier towel racks. ◦ Foot lockers rather than metal stand-up lockers. ◦ Metal mirrors rather than glass mirrors. ◦ Inexpensive disposable mattresses with fire-proof covers.

COMMANDING OFFICERS' SUGGESTIONS AND COMMENTS

CATEGORY: BEQ DESIGN, FURNISHINGS AND MATERIALS SELECTION -- Cont.

SPECIFIC ISSUE	SUGGESTIONS
VENDING MACHINES (Cont.)	<ul style="list-style-type: none"> ° Permit beer machines.
MISCELLANEOUS	<ul style="list-style-type: none"> ° Better construction, lighting especially. ° Trash chutes and trash compactors in buildings. ° Individualized heads in rooms. ° Furnishings and fixtures should be simple and heavy duty. As an example of poor design the Type F, seven story BEQs have flimsy aluminum guard rails which are easily deformed, not only creating maintenance problems, but also safety hazards. Elevators should NEVER be installed!

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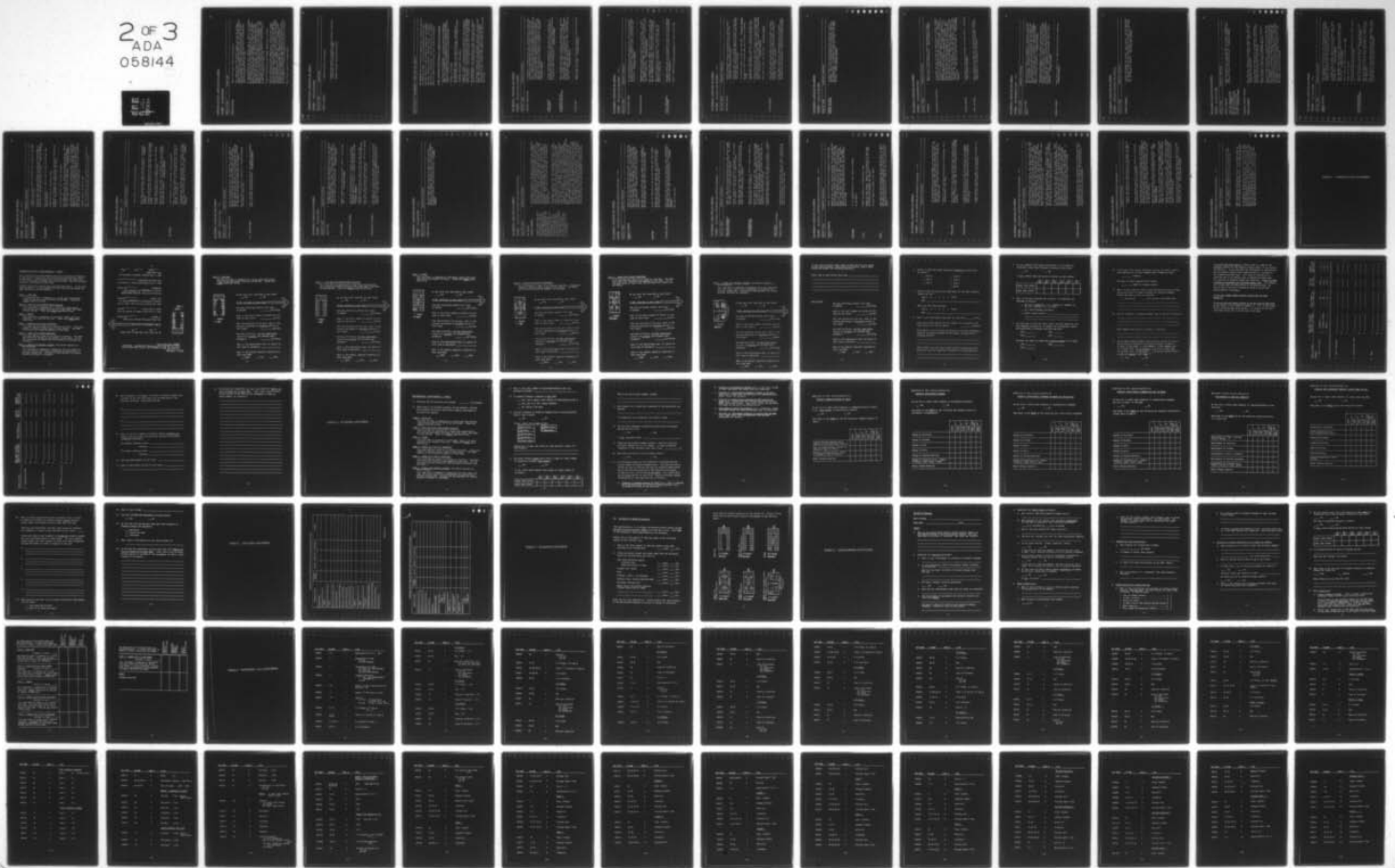
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REDUCING VANDALISM IN NAVAL BACHELOR ENLISTED QUARTERS. VOLUME --ETC(U).
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COMMANDING OFFICERS' SUGGESTIONS AND COMMENTSCATEGORY: BEQ MAINTENANCESPECIFIC ISSUESUGGESTIONSGeneral Actions

- Report and repair damage expeditiously.
- This command feels that design aspects are not the primary cause of vandalism. Vandalism grows from rooms where previous damage has gone unchecked, where men have not been strictly held accountable for their actions and where there is no interest by the command to whom that man is stationed with about the condition of his room.

In the experience of this command, age or layout of a building is immaterial if the above conditions are met. If the personnel responsible for the management of the BEQs are irresponsible in the maintenance and upkeep of their buildings, then vandalism will occur. But if the buildings and furnishings are well maintained and other listed conditions met, vandalism will be negligible except for rare incidents. Most damage would be what could be classified as accidental, such as sleeping in bed and burning a mattress, horse-playing in a room and damaging a chair, etc..

- Correct deterioration and damage immediately as found.
- Contract cleaning of BEQ common areas, although less expensive to the government, has proven to be less than satisfactory and has had a marked impact on the morale and well being of BEQ occupants. Also, damage to BEQ property has increased with the degradation of cleanliness. It is strongly recommended that the requirement to contract out janitorial services be eliminated from the Commercial/Industrial Activities Program (NAVMATINST 4860.12A) and that civilian ceiling be allocated for in-house performance of janitorial services.
- Make timely repairs to damaged BEQs.

COMMANDING OFFICERS' SUGGESTIONS AND COMMENTS

CATEGORY: COMMAND INVOLVEMENT

SPECIFIC ISSUE SUGGESTIONS

GENERAL COMMENTS

- Command attention and support.
- Indoctrinate tenant commanders on BEQ procedures and their responsibilities concerning the BEQs.
- Command interest and positive control.

PROJECT RESULTS: BEQ MANAGERS' SUGGESTIONS AND COMMENTS

BEQ MANAGERS were also asked to suggest ways of reducing the cost of vandalism in BEQs. As with the Commanding Officers (see previous section), a wide variety of suggestions and comments were made, addressing several different issues. The issues addressed are listed below. Then, starting on the following page, the comments pertaining to each issue are presented.

Issues Addressed by BEQ Managers' Suggestions and Comments

- BEQ POLICY AND MANAGEMENT, including Resident Orientation, Check In/Out Procedures, Standardizing and Enforcing Regulations, Inspections, BEQ Advisory Group, Repair/Restitution, Report Procedures/Investigations and Berthing Policy.
- ALCOHOL IN THE BEQs.
- BEQ MANAGEMENT STAFF, including Training, Legitimacy of Position, Under-Staffing, Staff Attitudes and Command Support.
- INCREASED PUNISHMENT FOR VANDALS.
- SECURITY IN BEQs, including Security Watches (having them on a 24-hour basis, on off-duty hours and in specific locations); Locks and Keys; Limiting Access to the BEQ (by design changes and by policy); Article Identification and T.V. Surveillance.
- BEQ MAINTENANCE, including Repair Time, Public Works, Maintenance Personnel, Maintenance Equipment and Rehabilitation.
- BEQ DESIGN, FURNISHINGS AND MATERIALS SELECTION, including BEQ Types, BEQ Furnishings and Materials Selection (wallpaper, T.V.s, walls, wall fixtures, door locks, window screens, furniture, climate controls, and vending machines), Recreational Facilities.

BEQ MANAGERS' SUGGESTIONS AND COMMENTS

CATEGORY: BEQ POLICY AND MANAGEMENT -- Cont.

SPECIFIC ISSUE	SUGGESTED STRATEGIES
BERTHING POLICY	<ul style="list-style-type: none"> ° Better transient quarters for personnel on reserve status/transient status -- berth transients separately from permanently assigned personnel. ° Segregate legal hold, personnel awaiting Captain's Mast and court martial, awaiting BCD and administrative type discharge from the regular transient. ° Put transit people in open bay type BEQs. (<u>Frequent Comment</u>) ° Be able to evict occupants when the violation is serious enough. ° Two men per room space is answer. Should be maximum of 2 people per room through E-6; E-7 and above, one man rooms. ° Single enlisted men with good reasons to live off base should be given that privilege. For example, if their parents live within driving distance of base. Most vandalism is committed out of frustration. (<u>Frequent Comment</u>)
MISCELLANEOUS	<ul style="list-style-type: none"> ° Coed type or hotel type barracks. (<u>Frequent Comment</u>) ° Give male and female personnel visitation rights in their lounges and rooms until certain time of night; this would only work if access to BEQ was controlled and limited to occupants and signed in guests. ° Design BEQs suitable for integrating junior and senior personnel in close proximity. Vandalism and property damage is practically non-existent in senior petty officer quarters.

BEQ MANAGERS' SUGGESTIONS AND COMMENTSCATEGORY: ALCOHOL IN THE BEQsSPECIFIC ISSUESUGGESTED STRATEGIES**REMOVAL OF BEER
VENDING MACHINES**

- ° It would help if the beer machines were taken out of the barracks. This only invites people to drink more, get wild and break things. If alcohol is such a problem to the Navy, why do they make it easier for a Navy man to get it in their own BEQs. (VERY frequent comment)

BEQ MANAGERS' SUGGESTIONS AND COMMENTS

CATEGORY: INCREASED PUNISHMENT FOR VANDALISM

<u>SPECIFIC ISSUE</u>	<u>SUGGESTED STRATEGIES</u>
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General Comments

- Strong punishment for vandals, when caught. The BEQ personnel living in the BEQ at the time should be charged for intentional damage. This may start personnel to be more on the lookout for damage or vandals. (VERY Frequent Comment)

BEQ MANAGERS' SUGGESTIONS AND COMMENTS

CATEGORY: SECURITY IN BEQs -- Cont.

SPECIFIC ISSUE

SUGGESTED STRATEGIES

General Comments
(Cont.)

- o More permanent personnel for Front Desk Watch and roving Duty Manager on a rotational basis (monthly) will maximize security control with permanent personnel, rather than temporary personnel who are constantly turning over.
- o In bigger types of BEQs, such as three or more story types, maximum security efforts should be provided -- security watches, etc.. (Frequent Comment)
- o More frequent tours of BEQs by senior petty officers and duty officers. Many BEQ OODs spend most of their time in the office. (Frequent Comment)
- o Have a security force to monitor duty BMAA.
- o Double up on watches.
- o Transit personnel held for disciplinary action should not be utilized for ID/security watches.

On a 24-Hour Basis
And on Off-Duty Hours

- o Have watch (fire or security) 24 hours a day on all decks doing a continuous tour of BEQs. (Frequent Comment)
- o Set up two petty officers for roving patrol, a duration of four hours duty, to be relieved thereafter by another party; 1600-0600 hours.
- o Have tenants of each individual barracks stand watches after working hours, particularly through the nights. This can be a great tool to reach everybody's attention.

BEQ MANAGERS' SUGGESTIONS AND COMMENTS

CATEGORY: SECURITY IN BEQs -- Cont.

<u>SPECIFIC ISSUE</u>	<u>SUGGESTED STRATEGIES</u>
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On a 24-Hour Basis And on Off-Duty Hours

- o "Toughen up" night watches with more spot checks by duty MAA of duty supervisor.
- o Place at least one Petty Officer on duty as barracks OOD in the absence of the BEQ assistant and manager; his presence would be of a manager/supervisory nature. 1 B00D per barracks.

By Location

- o More inspections of common areas by division officers and Leading Chiefs.
- o Establish watch on recreation areas.
- o Vandalism in lounges and common areas can only be reduced by frequent inspections by evening watch personnel.

LOCKS AND KEYS

- o Use better quality lock and door hardware.
- o Put combination locks or cipher lock system on doors; would take longer to break and no chance of misplacing keys or lost keys appearing in the wrong hands. (Frequent Comment)
- o Lost room keys are found floating around. Stronger penalties should be set up instead of replacing the room key. Possibly change the whole lock and charge the fee to the person who lost it or install the push button combination locks so the combinations can be changed, when an occupant gets transferred from school but is still in the area.
- o Tighten control of master key.
- o Make all personnel put locks on their lockers and make sure they lock rooms and lockers when no one is in room.

BEQ MANAGERS' SUGGESTIONS AND COMMENTS

CATEGORY: SECURITY IN BEQs -- Cont.

SPECIFIC ISSUE

SUGGESTED STRATEGIES

ARTICLE IDENTIFICATION

- o We are at present trying to stop vandalism in the rooms by marking the furniture with room numbers and then having persons in the rooms sign for the furniture. Also in the module lounges we are marking it to its appropriate area and having keys to the entrance doors made to issue to occupants of the module to keep down vandalism in the lounges.

- o We should have a project to identify all valuable property like stereo, radio, etc..

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T.V. SURVEILLANCE

- o Have a televiue system scanning all passageways and community areas and other high damage areas. (Frequent Comment)

BEQ MANAGERS' SUGGESTIONS AND COMMENTSCATEGORY: BEQ MAINTENANCE -- Cont.SPECIFIC ISSUESUGGESTED STRATEGIESREHABILITATION

- ° This particular BEQ is old and in need of modernization. Damage is done because they don't feel it will hurt anything. We should place higher priority on minor construction and alteration projects involving habitability. (Frequent Comment)

BEQ MANAGERS' SUGGESTIONS AND COMMENTSCATEGORY: BEQ DESIGN, FURNISHINGS AND MATERIALS SELECTIONSPECIFIC ISSUESUGGESTED STRATEGIESBEQ DESIGNGeneral Comments*(COMMENT FROM BOSTI TEAM:*

These general comments are presented verbatim because they are passionate and demonstrate the opposing views about how personnel should be treated in the Navy and some example of the frustration that well-meaning managers feel. Comments on both sides of the issue are frequent although the bulk of the comments favor high quality, home-type BEQs as a "natural" solution to vandalism.)

o My personal feeling is, the Navy lost control over vandalism and actually invited it by building barracks with private rooms, for immature, lower-rated individuals who have not learned to appreciate or value what's been provided for them. Open bays with cubicle facilities should be used for lower rated people. I think they offer better controls since the men are not hiding behind closed doors. Welton-Beckett facilities are the most ideal for senior P.O.s and female personnel. Rooms off hallways are the most unsatisfactory buildings. They require too many personnel to adequately operate them.

o I am going to speak mainly for this BEQ since this is the first one I have managed. This building is totally insufficient. Erected with three decks consisting of four wings with FIRE exits in each wing being used as entrances for tenants as well as outsiders. Barracks does not have elevators, neither is it equipped with PA system in individual rooms nor passageways. It is being occupied by different commands from Permanent Duty; TADs, students, Army Reserves, Restricteds, and whoever the higher echelon feels like berthing here. FIRE exits were forced to be left open by both the Fire Department and Public Works from excessive amount of damages. There is no way one roving watch, or even two, can monitor twelve wings, the lounges, and six heads where vandalism consistently occurred recently, not to include manning of the front desk for check-ins and check-outs. The question of obtaining additional personnel for watches is a futile idea. Other commands refuse to furnish people, because in this civilian-run base, the word COOPERATION is NEVER heard of.

BEQ MANAGERS' SUGGESTIONS AND COMMENTS

CATEGORY: BEQ DESIGN, FURNISHINGS AND MATERIALS SELECTIONS -- Cont.

SPECIFIC ISSUESUGGESTED STRATEGIESGeneral Comments
(Cont.)

- Vandalism on this base has decreased 100% in 4 years because we try to give personnel what they want. Three years ago all barracks were open bay. Now rooms or cubicles in each barracks are carpeted, with refrigerator in each room and bunk light for each individual. Four barracks are permanent and four are transient. Transients have more vandalism than permanent.
- New BEQs that are built with the comfort of the residents in mind and maintained in good repair are the best incentives for the residents (90%, that is) to take care of them.
- Go back to open bay so you can see things when they happen.
- Suggest the old type open barracks with individual outfit or division managing it. This was procedure in old days and there wasn't much vandalism before.

Open BayOpen Bay with Cubicles

- Have existing open cubicles, or dormitory type accommodations converted into rooms and divider converted into brick walls. This would minimize theft and improve morale. (Frequent comment.)
- Get rid of cubicles.

BEQ MANAGERS' SUGGESTIONS AND COMMENTS

CATEGORY: BEQ DESIGN, FURNISHINGS AND MATERIALS SELECTIONS -- Cont.

SPECIFIC ISSUESUGGESTED STRATEGIESBEQs with inside or outside corridors

- Make all BEQs with inside corridors with 2-man rooms or make BEQ like a Howard Johnson with outside corridors. No module type BEQs (i.e., no Welton Beckett models).
- Design should be with no interior passageways. They should be on exterior. Like motels -- showers in rooms.
- Make rooms open to inside corridors with BEQ watch at the front entrance desk. This allows traffic flow monitoring and helps prevent theft/property damage.

Welton-Beckett or Marine Model BEQs

- Design of BEQ with lounges is waste of space and leaves no accountability for furnishing.
- Welton Beckett design is very poor. Idea of private lounge for 4 rooms is good, however, young people don't appreciate or realize its planned concept. Lounge ends up as wasted space, an area to dump garbage, and totally useless to residents. The most practical and logical BEQ types are in keeping with motel/hotel concept.
- Incorporate more square feet for tenant recreation. In Welton Beckett model BEQs there isn't enough area devoted to this.

FURNISHINGS AND MATERIALS SELECTIONGeneral Comments

- Furnish people with the things that are really important to them, like chairs, curtains, furniture, etc., and have them sign for the status of the room.

BEQ MANAGERS' SUGGESTIONS AND COMMENTS

CATEGORY: BEQ DESIGN, FURNISHINGS AND MATERIALS SELECTIONS -- Cont.

SPECIFIC ISSUE SUGGESTED STRATEGIESGeneral Comments
(Cont.)

- ° Better quality of workmanship and material throughout BEQ.
- ° Vandalism has reduced since the barracks has been painted and efforts made to keep up better standards. Once people see that the manager cares, they try to take better care of the place. As for design, you can't make a silk purse out of a sow's ear. We work with what we have. The barracks has panels, cinder block, sheet rock for bulk heads; drop ceilings, ceiling tile, formica boards, etc. for overheads. There are just too many materials used to make any repairs easy or cheap.

Wallpaper

- ° It is suggested that all wall paper be removed.
- ° No wallpaper.

T.V.s

- ° Should be locked in a tamper proof case.
- ° Remove TV from lounge; people fall asleep at TV and drop cigarettes, burn couch or rug. People hang out all night at TV and most machines get broken.
- ° Provide night TV antenna in all BEQs.

Walls

- ° Keep away from the sheetrock that is used for walls as these type walls are easily damaged whether intentionally or not. The major problem with this type wall is that it is not hard enough and sustains holes in them as walls get banged quite often.

BEQ MANAGERS' SUGGESTIONS AND COMMENTS

CATEGORY: BEQ DESIGN, FURNISHINGS AND MATERIALS SELECTIONS -- Cont.

SPECIFIC ISSUE

SUGGESTED STRATEGIES

Wall Fixtures

- In the construction of future BEQs, the contract should require any wall mounted towel brackets, door stops, etc., to have some real backing, not just stuck to the wall with molly bolts. The plaster board could be of a thicker and stronger quality.

- Recess all wall mounted fixtures such as thermostats, fire extinguishers, exit signs.

Door Locks

- Use of dead bolt lock and no bevelled bolts instead of door knob on doors. If door knob is used, door should be designed so that a person cannot open it with a credit card or similar material.

Window Screens

- Expanded metal screen should be installed on the windows close to the entry door. But on first deck all windows should be installed with expanded screen with opening for fire escape.
- Screen windows with heavy mesh in areas where residents are likely to toss around baseballs and footballs.

BEQ MANAGERS' SUGGESTIONS AND COMMENTS

CATEGORY: BEQ DESIGN, FURNISHINGS AND MATERIALS SELECTIONS -- Cont.

SPECIFIC ISSUESUGGESTED STRATEGIESFurniture

° Purchase better built furniture. Our locker inserts and night stands have drawers which did not have drawer stops built in, causing numerous drawer fronts to get knocked off. These drawer fronts are made of particle board and only glued on. This unintentional damage, for the most part, has been our biggest repair item in the BEQ. Glue alone will not suffice as in many instances the amount used was insufficient, particle board absorbs much of it and the drawer fronts sometimes fall off even with careful use.

° Have the furniture replaced when it is broken or worn out, set up regular budget for furniture replacement. Or, when a guy breaks our furniture, have him replace it. Our furniture is all old now and can be broken by daily use of it.

° At this particular BEQ, money is the biggest problem. Items that are broken are replaced with sub-standard material or an item from some salvage yard. The personnel living in this BEQ complain that they have no curtains or that they have a grey metal locker when their roommate has a wooden locker complete with drawers and mirrors. Rooms that are well decorated and furnished do not show signs of vandalism. A plain green room does not make a happy environment.

Climate Controls

° Ensure that climate control thermostats can secure heating or air conditioning, not just raise or lower temperatures. Malfunctioning controls cause residents to take destructive measures to stop excessive heat/cold.

BEQ MANAGERS' SUGGESTIONS AND COMMENTS

CATEGORY : BEQ DESIGN, FURNISHINGS AND MATERIALS SELECTIONS -- Cont.

SPECIFIC ISSUESUGGESTED STRATEGIESClimate Controls
(Cont.)

- Exhaust fan should be installed on all the heads in order to prevent the peeling of paint and the accumulation of mold.

Vending Machines

- Protect vending machines in transient areas by installing expanded metal cages around machines.
- More monetary funds to construct wrought iron protective covers on vending machine islands to restrict any movement of machines and any other type of tampering except for openings to coin slot, selector buttons and article access. The cost of this protection device should more than offset the cost for machine repairs.
- Have vending machines fixed or repaired immediately when they are broke, or start stealing somebody's money. (VERY frequent comment)
- Make sure that all vending machines are always filled up and report any malfunction at once. Washers and dryers should always be in top working condition. (VERY frequent comment)
- Damage at this command is very minor. From experience, damage occurs when vending machines "steal" money, vending machines are not stocked, heads and other common use areas are dirty, or soap dispensers, paper towel racks are empty and toilet paper is not available.
- Centralize location of vending machines so they're in sight of passers-by or the front desk and provide for instant refund at the desk. (VERY frequent comment)

BEQ MANAGERS' SUGGESTIONS AND COMMENTSCATEGORY: BEQ DESIGN, FURNISHINGS AND MATERIALS SELECTIONS -- Cont.SPECIFIC ISSUESUGGESTED STRATEGIESVending Machines
(Cont.)

- ° Have one big central laundry building located within the complex instead of a couple machines on each deck of each BEQ; centralize so a closer watch can be maintained.

RECREATIONAL ACTIVITIES

- ° More recreational facilities within and in general area of BEQ, which should include pool tables, ping-pong, color TV, and a nice lounge to bring women to. (VERY frequent comment)
- ° In my opinion I think having recreation facilities will help to eliminate or minimize the vandalism. People will be busy and enjoy themselves, also will appreciate and care for the place they're staying in. Most people get frustrated if they don't have anything to do to pass time. They think of anything, such as writing on the walls, or getting drunk and then later punch holes in the walls; throw up on the deck; sometimes they create noise which ends up in a fight.

APPENDIX 1: COMMANDING OFFICER'S QUESTIONNAIRE

COMMANDING OFFICER'S QUESTIONNAIRE - FORM A

This section of the questionnaire asks you to provide information on the physical layouts of the Bachelor Enlisted Quarters (BEQs) on your base. Please answer the following questions about each of the six possible building types which follow. Not all building types will be present on your base.

The BEQ types we're asking about are described below. If you have types we haven't listed, please describe them when you reach the page requesting that information.

TYPE A - OPEN BAY

The Open Bay BEQ is composed of a large room with berths. There are no partitions dividing the berths. There are common head facilities.

TYPE B - OPEN BAY WITH PARTITIONED CUBICLES

This type BEQ is composed of a large room separated by half-height partitions dividing the large space into semi-private berths. There are common head facilities.

TYPE C - ROOMS

This type BEQ is composed of individual rooms with doors opening to an interior corridor. There are common head facilities.

TYPE D - ROOMS WITH OUTSIDE CORRIDORS

This type BEQ has rooms on an exterior corridor. These are common in warmer climate areas of the country. The head facilities are shared by members of the room.

TYPE E - ROOMS WITH INSIDE CORRIDORS

This type BEQ has rooms on an interior corridor. The head facilities are shared by the members of the room. (It is the same style as Type D but the corridors are within the building.)

TYPE F - ROOMS WITH PRIVATE LOUNGES (The Welton Beckett or Marine Model)

This type BEQ is composed of generally four (4) rooms and four (4) toilet facilities surrounding or adjacent to a private lounge area. Entrance to the quarters is from an exterior corridor or stairwell.

TYPE A - OPEN BAY

The Open Bay BEQ is composed of a large room with berths. There are no partitions dividing the berths. There are common head facilities.

Do you have this type BEQ on your base? Yes No



If NO, continue to next page.

How many buildings contain this type of berth? _____ buildings

What is the total number of berths of this type on your base? _____ berths

Over the duration of one year, what is the average percentage of occupied berths of this type? _____ percent

How many buildings, of this type berth, contain an elevator for between deck _____ buildings movement?

What is the approximate ages (in years) of this type of quarters? _____

What is the overall physical condition of this type BEQ? _____

Good _____ Fair _____ Poor _____

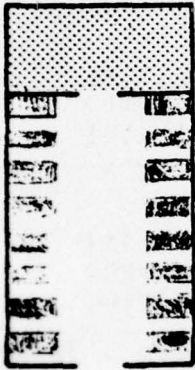


TOILET

TOILET

TYPE A - OPEN BAY

The Open Bay BEQ is composed of a large room with berths. There are no partitions dividing the berths. There are common head facilities.



TOILET
BED

Do you have this type BEQ on your base?

Yes

No

If NO, continue to next page.

How many buildings contain this type of berth? _____ buildings

What is the total number of berths of this type on your base? _____ berths

Over the duration of one year, what is the average percentage of occupied berths of this type? _____ percent

How many buildings, of this type berth, contain an elevator for between deck movement? _____ buildings

What is the approximate ages (in years) of this type of quarters? _____

What is the overall physical condition of this type BEQ?

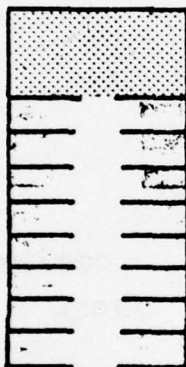
Good

Fair

Poor

TYPE B - OPEN BAY WITH PARTITIONED CUBICLES

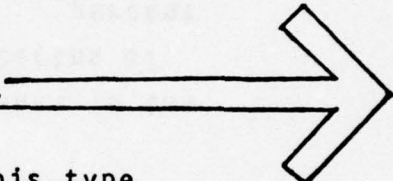
This type BEQ is composed of a large room separated by half-height partitions dividing the large space into semi-private berths. There are common head facilities.



TOILET
BED

Do you have this type BEQ on your base?

___ Yes ___ No

If NO, continue to next page. 

How many buildings contain this type of berth? _____ buildings

What is the total number of berths of this type on your base? _____ berths

Over the duration of one year, what is the average percentage of occupied berths of this type? _____ percent

How many buildings, of this type berth, contain an elevator for between deck movement? _____ buildings

What is the approximate ages (in years) of this type of quarters? _____

What is the overall physical condition of this type BEQ?

___ Good ___ Fair ___ Poor

TYPE C - ROOMS

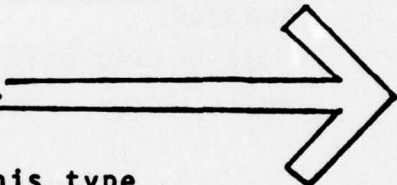
This type BEQ is composed of individual rooms with doors opening to an interior corridor. There are common head facilities.



TOILET
BED

Do you have this type BEQ on your base?

Yes No

If NO, continue to next page. 

How many buildings contain this type of berth? _____ buildings

What is the total number of berths of this type on your base? _____ berths

Over the duration of one year, what is the average percentage of occupied berths of this type? _____ percent

How many buildings, of this type berth, contain an elevator for between deck movement? _____ buildings

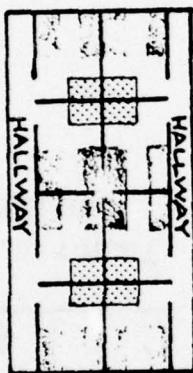
What is the approximate ages (in years) of this type of quarters? _____

What is the overall physical condition of this type BEQ?

Good Fair Poor

TYPE D - ROOMS WITH OUTSIDE CORRIDORS

This type BEQ has rooms on an exterior corridor. These are common in warmer climate areas of the country. The head facilities are shared by members of the room.



TOILET
BED

Do you have this type BEQ on your base?

___ Yes

___ No

If NO, continue to next page.

How many buildings contain this type of berth? _____ buildings

What is the total number of berths of this type on your base? _____ berths

Over the duration of one year, what is the average percentage of occupied berths of this type? _____ percent

How many buildings, of this type berth, contain an elevator for between deck movement? _____ buildings

What is the approximate ages (in years) of this type of quarters? _____

What is the overall physical condition of this type BEQ?

___ Good

___ Fair

___ Poor

TYPE E - ROOMS WITH INSIDE CORRIDORS

This type BEQ has rooms on an interior corridor. The head facilities are shared by the members of the room. (It is the same style as Type D but the corridors are within the building.)

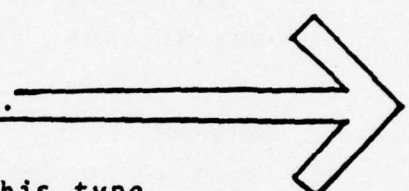


TOILET
BED

Do you have this type BEQ on your base?

Yes

No

If NO, continue to next page. 

How many buildings contain this type of berth? _____ buildings

What is the total number of berths of this type on your base? _____ berths

Over the duration of one year, what is the average percentage of occupied berths of this type? _____ percent

How many buildings, of this type berth, contain an elevator for between deck movement? _____ buildings

What is the approximate ages (in years) of this type of quarters? _____

What is the overall physical condition of this type BEQ?

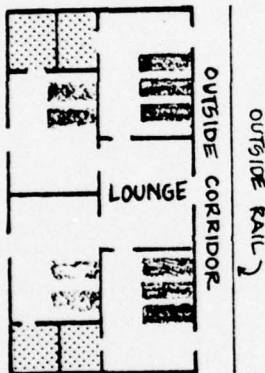
Good

Fair

Poor

TYPE F - ROOMS WITH PRIVATE LOUNGES (The Welton Beckett or Marine Model)

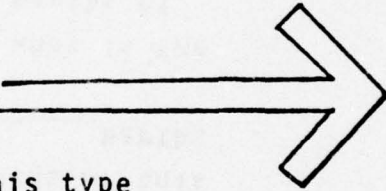
This type BEQ is composed of generally four (4) rooms and four (4) toilet facilities surrounding or adjacent to a private lounge area. Entrance to the quarters is from an exterior corridor or stairwell.



..... TOILET
[Solid Pattern] BED

Do you have this type BEQ on your base?

___ Yes ___ No

If NO, continue to next page. 

How many buildings contain this type of berth? _____ buildings

What is the total number of berths of this type on your base? _____ berths

Over the duration of one year, what is the average percentage of occupied berths of this type? _____ percent

How many buildings, of this type berth, contain an elevator for between deck movement? _____ buildings

What is the approximate ages (in years) of this type of quarters? _____

What is the overall physical condition of this type BEQ?

___ Good ___ Fair ___ Poor

If your base contains other types of BEQs which do not appear on the previous pages, please describe briefly, draw a small sketch and answer the following questions.

Other Type of BEQ (Please describe) _____

SKETCH AREA

How many buildings contain this type of berth? _____ buildings

What is the total number of berths of this type on your base? _____ berths

Over the duration of one year, what is the average percentage of occupied berths of this type? _____ percent

How many buildings, of this type berth, contain an elevator for between deck movement? _____ buildings

What is the approximate ages (in years) of this type of quarters? _____

What is the overall physical condition of this type BEQ?

___ Good ___ Fair ___ Poor

2. Which of these BEQ types often have extensive surveillance or guards?

___ Type A

___ Type D

___ Type B

___ Type E

___ Type C

___ Type F

___ Other

3. Which of the previously described BEQs has the most property damage and why?

Type A B C D E F Other

Why? _____

Which has the least and why?

Type A B C D E F Other

Why? _____

4. What is the "assignment capacity" for your base? _____ berths

What approximate percent of this number are occupied by the same persons for over 20 weeks? _____ percent

Which months last year were you forced to initiate "emergency loading" procedures because of the higher fluctuations of incoming sailors?

Which months last year were authorizations granted per diem because of the full capacity of Bachelor Enlisted Quarters?

8. In the past three years, how many requests for major repairs over \$50,000 has the Base Command made to MCON for BEQs?

_____ requests

How many of these requests were funded?

_____ number of funded requests

9. What, if any, kind of actions have been developed and carried out on your base to reduce incidents of property damage? Please describe as fully as possible.

___ No actions ___ Yes, actions described below

10. How do incidents of property damage come to the CO's attention?

What happens when such an incident is reported?

11. Do you keep property damage reports which contain (at least) the following information for property damage incidents?

a) DATE, b) BUILDING, c) ITEM DAMAGED, d) HOW DAMAGED and e) in ROOM TYPE? (As an example, we'd like to know that: "In January 1976, in building # ___ (A Welton Beckett Model) a sink was removed from a head".)

___ Yes ___ No

If you do have such reports, please send us a copy of the original records (or the reports without names, if you choose) for one year. Be assured that the information is confidential and no person's name or base identification is recorded in our computerized data base. This form of information is excellent for us to develop into a computerized data base for analysis of property damage and vandalism. Please include a method to translate your building number code. For example, let us know that building 1019-3 is an open bay BEQ. We have no way to get this information later on since this questionnaire is anonymous.

If you will supply these records, please skip to item Number 12.

If you do not have these records or do not wish to send them to us, please finish answering number 11. Fill in the blanks on the following page going across. An example of how we'd like them filled out is at the top of the page.

SPACES IN BEQS WHAT WERE THE MOST FREQUENTLY DAMAGED PARTS OF THIS SPACE? HOW FREQUENT -- (TIMES PER YEAR) AVERAGE COST OF MATERIALS AVERAGE REPAIR TIME (MAN HOURS)

EXAMPLE:

1. Room (Sleeping)	A. lockers	50	\$10	1
	B. window screens	23	\$ 3	1/2
	C. doors	12	\$75	2

1. Room (Sleeping)

A. _____

B. _____

C. _____

2. Lounge (Any kind)

A. _____

B. _____

C. _____

3. Head

A. _____

B. _____

C. _____

WHAT WERE THE MOST
FREQUENTLY DAMAGED
PARTS OF THIS SPACE?

HOW FREQUENT --
(TIMES PER YEAR)

AVERAGE
COST OF
MATERIALS

AVERAGE
REPAIR TIME
(MAN HOURS)

SPACES IN BEQS

4. Hallway/corridor

A. _____

B. _____

C. _____

5. Vending Area

A. _____

B. _____

C. _____

6. Other _____

A. _____

B. _____

C. _____

12. What infrequent, but major, incidents of property damage have occurred in the last year which are not mentioned in the previous question? Please describe two.

(1) _____

(2) _____

13. What is the total number of property damage incidents per month in all the BEQs? (Include both reported and estimate unreported incidents.)

The highest frequency month _____

How many _____

The lowest frequency month _____

How many _____

14. How many BEQ managers do you have? _____

15. What is the primary mission of your base? _____

APPENDIX 2: BEQ MANAGERS' QUESTIONNAIRE

BEQ MANAGERS' QUESTIONNAIRE - FORM B

1. How many BEQ buildings do you manage? _____ building(s)
2. What type(s) of bachelor quarters do you manage? (Please circle below the one(s) which most closely correspond to the facility type(s).

TYPE A - OPEN BAY

The Open Bay BEQ is composed of a large room with berths. There are no partitions dividing the berths. There are common head facilities.

TYPE B - OPEN BAY WITH PARTITIONED CUBICLES

This type BEQ is composed of a large room separated by half-height partitions dividing the large space into semi-private berths. There are common head facilities.

TYPE C - ROOMS

This type BEQ is composed of individual rooms with doors opening to an interior corridor. There are common head facilities.

TYPE D - ROOMS WITH OUTSIDE CORRIDORS

This type BEQ has rooms on an exterior corridor. These are common in warmer climate areas of the country. The head facilities are shared by members of the room.

TYPE E - ROOMS WITH INSIDE CORRIDORS

This type BEQ has rooms on an interior corridor. The head facilities are shared by the members of the room. (It is the same style as Type D but the corridors are within the building.)

TYPE F - ROOMS WITH PRIVATE LOUNGES (The Welton Beckett or Marine Model)

This type BEQ is composed of generally four (4) rooms and four (4) toilet facilities surrounding or adjacent to a private lounge area. Entrance to the quarters is from an exterior corridor or stairwell.

3. What is the total number of racks/bunks/berths that you personally manage? _____

4. Is property damage a problem in your BEQ?
___ Yes, and I spend a fair amount of time dealing with it
___ Yes, but it's not a major problem
___ No, there's not much

5. Do more incidents of property damage occur at any particular time of day or week?
___ Yes ___ No

If yes, check one in each column

<input type="checkbox"/> mornings
<input type="checkbox"/> midday
<input type="checkbox"/> afternoon
<input type="checkbox"/> evenings
<input type="checkbox"/> over night

<input type="checkbox"/> week days
<input type="checkbox"/> weekends

Please tell us what you think are some possible reasons for this pattern.

6. Are there certain months which have a higher or lower number of vandalism incidents than normal?
___ Yes ___ No

If yes, check which months have higher or lower number of incidents?

	Jan./ Feb.	Mar./ Apr.	May/ June	July/ Aug.	Sept./ Oct.	Nov./ Dec.
Higher than normal						
Lower than normal						

Why do you think these numbers change?

7. How frequent are inspections conducted in the BEQs which you manage?

If inspections are conducted, who conducts them?

8. Has the Base Commander inspected the BEQ which you manage during the last year?

Yes

No

If YES, how many times? _____

9. Sometimes when people damage property, they are found out and held responsible for the damage. In what percentage (roughly) of the incidents does this occur? _____ %

10. Does your base have an active tenant council?

Yes

No

11. The following pages are very important in determining why certain types of property damage occur. The questions which follow ask you to indicate the type of property damage which may or may not have occurred in the BEQ which you manage. If they do occur, we are asking how often. You should check one and only one box in each line. Types of property damage incidents we're concerned with are as follows:

- a. Property is Damaged because of Theft (e.g., door is damaged while gaining entry to a room or vending machine cover is pried off to get at the cash box).

- b. Property is Accidentally Broken (e.g., a man falls asleep in chair and burns the carpet with his cigarette).
- c. Property is Intentionally Damaged in Anger or Frustration (e.g., a man kicks in the face of a vending machine which "stole" his quarter).
- d. Property is Intentionally Damaged but NOT because of Anger (e.g., several men are sitting around and talking about their girlfriends. They find a spray can and paint the names of the girls on hallway wall).
- e. Replacement of Worn Out Property (e.g., furniture, carpet and other things are replaced because they are worn out).
- f. Personal or Government Property is Stolen from the BEQ (e.g., pool cues, fire extinguishers and personal belongings are stolen).

Questions in this section pertain to:

PROPERTY DAMAGED BECAUSE OF THEFT

Do you file a report when property is damaged because of theft
(i.e., door broken in room during a theft)?

Yes

No

How often in one MONTH do the following get damaged because of theft?

	NEVER	0 TO 5 TIMES	6 TO 10 TIMES	11 TO 15 TIMES	MORE THAN 15 TIMES	DOES NOT APPLY
Vending machine damaged while someone is stealing money from it						
Door is broken during a theft in someone's room or office						
Window is broken during a theft in someone's room or office						
Other (Please specify)						

Questions in this section pertain to:

PROPERTY ACCIDENTALLY BROKEN

Do you file a report when property is accidentally broken?

Yes

No

How often in one MONTH do the following get damaged because of accidental circumstances?

	NEVER	0 TO 5 TIMES	6 TO 10 TIMES	11 TO 15 TIMES	MORE THAN 15 TIMES	DOES NOT APPLY
Damage to Furniture						
Damage to Windows						
Damage to Door						
Damage to Walls						
Damage to Vending Machines						
Damage to Fixtures (e.g., lights, curtains, towel racks, signs)						
Other (Please Specify)						

Questions in this section pertain to:

PROPERTY INTENTIONALLY DAMAGED IN ANGER OR FRUSTRATION

Do you file a report when property is intentionally damaged?

Yes

No

How often in one MONTH do the following get intentionally damaged?

	NEVER	0 TO 5 TIMES	6 TO 10 TIMES	11 TO 15 TIMES	MORE THAN 15 TIMES	DOES NOT APPLY
Damage to Furniture						
Damage to Windows						
Damage to Doors						
Damage to Walls						
Damage to Vending Machines						
Damage to Fixtures (e.g., lights, curtains, towel racks, signs)						
Other (Please Specify)						

Questions in this section pertain to:

PROPERTY INTENTIONALLY DAMAGED BUT NOT IN ANGER

Do you file a report when property is intentionally damaged, but not in anger, in the BEQ?

Yes

No

How often in one MONTH do the following get damaged intentionally (other than in anger)?

	NEVER	0 TO 5 TIMES	6 TO 10 TIMES	11 TO 15 TIMES	MORE THAN 15 TIMES	DOES NOT APPLY
Damage to Furniture						
Damage to Windows						
Damage to Doors						
Damage to Walls						
Damage to Vending Machines						
Damage to Fixtures (e.g., lights, curtains, towel racks, signs)						
Other (Please Specify)						

Questions in this section pertain to:

REPLACEMENT OF WORN OUT PROPERTY

Do you file a report when property is replaced because it was worn out?

Yes

No

How often in one MONTH do the following get replaced because it is worn out?

	NEVER	0 TO 5 TIMES	6 TO 10 TIMES	11 TO 15 TIMES	MORE THAN 15 TIMES	DOES NOT APPLY
Replacement of floor coverings (vinyl, carpet...)						
Replacement of Furniture						
Replacement of Windows						
Replacement of Doors & Hardware						
Replacement of Vending Equipment						
Replacement of Fixtures (e.g., lights, curtains, towel racks)						
Other (Please Specify)						

Questions in this section pertain to:

PERSONAL AND GOVERNMENT PROPERTY STOLEN FROM THE BEQ

Do you file a report when property is stolen from the BEQ?

Yes

No

How often in one MONTH do the following get stolen?

	NEVER	0 TO 5 TIMES	6 TO 10 TIMES	11 TO 15 TIMES	MORE THAN 15 TIMES	DOES NOT APPLY
Recreational Equipment						
Safety Equipment (e.g., fire extinguishers, etc.)						
Cleaning Equipment						
Lounge Furnishings						
Room Furnishings						
Head Furnishings						
Personal property of other Sailors						
Other (Please Specify)						

12. There are many organizations where personnel find it easier to handle an incident of property damage without making a formal report and without having to deal with red tape.

From your own experience, how many times would you estimate this happens in a month in all the BEQs on your base? _____

Please give five recent examples of unreported property damage that you have heard about or experienced. For each example, please suggest for what reasons it might have gone unreported. Include the number of times it happens in one year.

a. _____

b. _____

c. _____

d. _____

e. _____

13. How long have you been in your present position as BEQ manager on this base?

_____ Less than one (1) year
_____ One (1) to three (3) years

14. What is your rating? _____

15. Have you attended BQ Management Training School?

Yes No

16. Do you feel that during your term here the incidents of property damage have generally

Decreased
 Stayed the same
 Increased

17. What state in the country is this base located in?

18. We welcome any suggestions you may have that will Reduce the Cost of Vandalism in Naval BEQs. These ideas could be about design aspects of the BEQs or the management of BEQs or about changes in procedures.



APPENDIX 3: PUBLIC WORKS' QUESTIONNAIRE

ESTIMATED COSTS OF REPAIRING DAMAGE FROM VANDALISM INCIDENTS IN BEQ'S

Description of Incident	No. of Hours to Repair	Labor Cost	Material Cost	Total Estimate	Comments
BUILDING FABRIC					
Room door broken (hardware not damaged)					
Room door hardware (knob and lockset) broken					
Glass of metal framed glass door broken					
Acoustic ceiling tile broken					
Holes punched in plaster/drywall ceiling					
Holes, dents in interior hallway wall					
Holes, dents in sleeping room wall					
4 x 8-ft section of drywall destroyed					
Room window glass broken (2 x 4-ft roughly)					
Lounge window glass broken (4 x 8-ft roughly)					
Recessed fluorescent fixture lens and frame broken					
ACCESSORIES AND ATTACHMENTS					
Vending machine face pried open/damaged					
Laundry room soap dispenser broken					
Fire extinguisher stolen					

ESTIMATED COSTS OF REPAIRING DAMAGE FROM VANDALISM INCIDENTS IN BEO'S (CONT'D)

Description of Incident	No. of Hours to Repair	Labor Cost	Material Cost	Total Estimate	Comments
Fire extinguisher emptied, valve broken					
Exposed conduit piping ripped from wall					
Over-sink shelf torn off wall in head					
Sink torn off wall in head					
Exit sign broken					
FURNITURE AND FINISHES					
Legs broken off couch in lounge:					
Repair					
Replace couch					
Furniture cushion replaced because of large (6 to 12 in.) rip					
10 x 10-ft carpet stained/burned by cigarettes — Replace carpet					
Private room locker door smashed; hardware broken					
End table broken in lounge:					
Repair					
Replace table					

APPENDIX 4: BEQ RESIDENTS' QUESTIONNAIRE

26

TO: RESIDENTS OF BACHELOR QUARTERS

This questionnaire is an attempt to determine which spaces in the Bachelor Enlisted Quarters (BEQs) are used most often. Your name is not necessary, these questionnaires are anonymous.

Please fill in the amount of time you spend in the following spaces on the "average" day:

1. What is the total amount of time you spend in your BEQ building in an average day? _____ hours _____ min.
2. Could you please divide this total time into the following spaces of the BEQ which you live in:

Your Room (Berthing Space)

Sleeping Time _____ hours _____ min.

Other activities in Room _____ hours _____ min.

Lounges (All kinds) _____ hours _____ min.

Head _____ hours _____ min.

Hallways, Stairs, Entranceways _____ hours _____ min.

Vending areas, Washing Machine Room _____ hours _____ min.

Bag Room, Storage Area _____ hours _____ min.

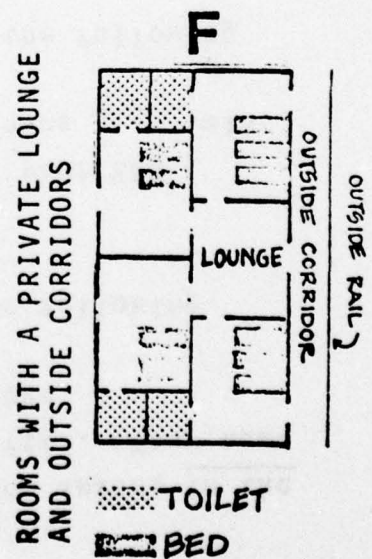
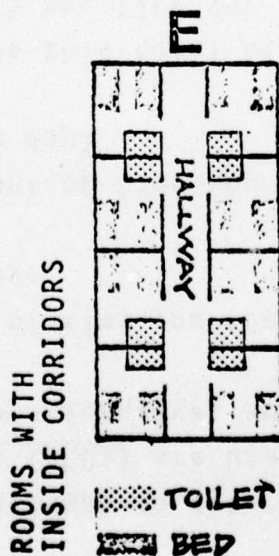
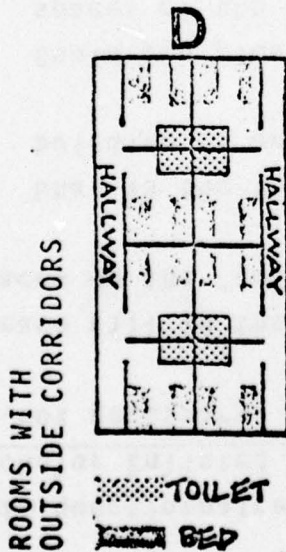
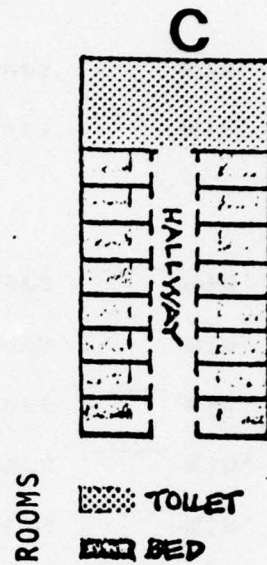
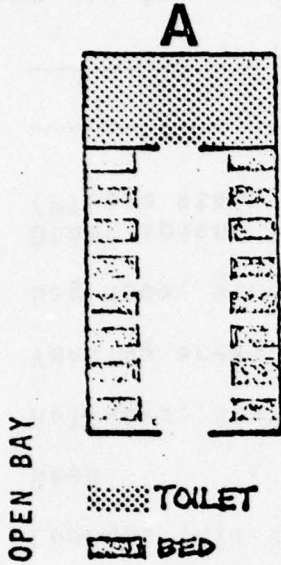
Other spaces in Bachelor Quarters
(Please state kind of room)

_____ hours _____ min.

_____ hours _____ min.

Thank you for your cooperation. Please return this questionnaire to the BEQ Resident Manager or person in charge of collection.

What type of bachelor quarters do you reside in? (Please circle below the one which most closely corresponds to the facility type.)



APPENDIX 5: INTERVIEW PROTOCOL FOR SITE VISITS

INTERVIEW PROTOCOL

BASE MISSION: _____

YOUR NAME: _____ DATE _____

ISSUES

1. What is the relationship between SECURITY/PUBLIC WORKS and BEQ ADMINISTRATION in handling property damage? Who does what when an incident is reported? Who keeps the records?

2. Questions for Security personnel:

- a. What is your involvement in incidents of property damage?

- b. In your experience, what % of property damage incidents go unreported? _____

What are the major locations of property damage that you see?

- c. Are there "enough" security personnel?

_____ Yes . _____ No

- d. What are the times/events when security needs are greatest?

- e. How many thefts of government and personal property are there each month?

How many of these also involve some property damage?
(Example: breaking a door to gain entry)

3. Questions for Public Works personnel:

a. Who contacts them when property damage occurs?

b. What percent of all repairs (not including renovation) do they do, as opposed to base initiated self-help?

_____ % of incidents or _____ % of \$ volume

c. How is the base charged for these services?

d. How much was charged last year for (non-renovation) repairs?

e. Do you keep records? (Labor, materials, other)

_____ Yes _____ No

If yes get his name and address, and tell him we'd like a copy. We'll contact him with a list of typical incidents.

f. Do you have a table of costs for different incidents of property damage that you use in estimating costs?

_____ Yes _____ No

If yes get his name and address, and tell him we'd like a copy. We'll contact him with a list of typical incidents.

g. Do they have any Public Works people permanently assigned to the base, doing work on demand?

_____ Yes _____ No

If yes, how many? _____

4. About perpetrators:

a. What is the attitude or level of effort toward catching the perpetrators of the damage?

b. What percent of perpetrators are caught?

_____ %



- c. What are the methods (formal and informal) used in having perpetrators make restitution? (In some detail: For example, do perpetrators pay for materials and labor? Do they install?....)

5. Inspections and surveillance:

- a. How frequent are inspections of BEQs?

_____ per month

- b. If damage is found, what happens?

- c. Is there full-time surveillance at any BEQ? Where?

- d. BEQ staff makeup (i.e., permanent, TAD, BEQ graduates, how many)

6. Vandalism/Property Damage Records

- a. What is the availability and contents of property damage records? Who has them? Do they include (at least) the following: (1 year of data)

- ° Type of Damage (Broke).....[]
- ° To What (a door).....[]
- ° Where (in Head).....[]
- ° In what kind of BEQ (Welton Beckett model).[]
- ° Date (January).....[]
- ° Cost, labor and materials (\$110).....[]

b. What general types of property damage are not included in this data?

c. Is there a current discrepancies list? How many items are on it and what percent are vandalism? Could we have a copy?

7. Programs to combat vandalism, or to reduce its impact:

a. What programs are in place to deal with property damage?

Are they effective? _____

b. What do the BEQ Tenant Councils do at each base?

c. Do they have a lot of self-help programs for repairs?

_____ Yes _____ No

How many things get repaired a week? _____

Do these show up on property damage reports?

_____ Yes _____ No

d. What is the general policy towards salvaging and reuse of thrown away materials (Comshaw)?

8. Do you normally have large fluctuations in the number of transients (less than 20 weeks) residing at your base?

_____ Yes _____ No

Are they in separate barracks or wings?

_____ Yes _____ No

If yes, please check during which months on table below?

	Jan./ Feb.	Mar./ Apr.	May/ June	July/ Aug.	Sept./ Oct.	Nov./ Dec.
Higher than normal						
Lower than normal						

9. Is personalization of room as accepted policy?

What are the informal realities?

10. What seems to be the level of command attention to property damage and vandalism?

_____ High _____ Medium _____ Low

What evidence do you have for this?

11. BEQ "Inspection":

a. Please inspect the BEQs -- their grounds, lobbies and hallways, heads, social spaces and some rooms.

Take pictures of any property damage you see and take pictures of general conditions which you believe might be of interest as a "goodie" or a "baddie" (either a well-used, well-maintained lounge or a hallway with damaged light fixtures and ceiling tiles).

b. Record your impressions of the BEQs that you see, next to the type of BEQ you see in the table on the next page.

The BEQ types we're asking about are described below. If there are types we haven't listed, please describe them.

MAINTENANCE
QUALITY
0-5 (5 HIGH)

UNREPAIRED
PROPERTY
DAMAGE
(# SEEN)

USE OF
SPACES
0-5 (5 HIGH)

<p><u>TYPE A - OPEN BAY</u> [Height in decks ____] The Open Bay BEQ is composed of a large room with berths. There are <u>no</u> walls dividing the berths and <u>common</u> heads are at the end or center of <u>the</u> wing.</p>			
<p><u>TYPE B - OPEN BAY WITH PARTITIONED CUBICLES</u> [Height in decks ____] This type BEQ is composed of a large room with walls dividing the large space into semi-private berths. <u>Common</u> heads are at the end or center of <u>the</u> wing.</p>			
<p><u>TYPE C - ROOMS</u> [Height in decks ____] This type BEQ is composed of individual rooms with doors opening to an interior corridor. <u>Common</u> heads are at the end or center of <u>the</u> wing.</p>			
<p><u>TYPE D - ROOMS WITH OUTSIDE CORRIDORS</u> [Height in decks ____] This type BEQ has rooms on an exterior corridor. The head facilities adjoin each room and are shared by the occupants of the room. They do <u>not</u> contain living rooms.</p>			
<p><u>TYPE E - ROOMS WITH INSIDE CORRIDORS</u> [Height in decks ____] This type BEQ has rooms on an interior corridor. The head facilities are <u>shared</u> by the members of the room. They do <u>not</u> contain living rooms.</p>			

The BEQ types we're asking about are described below. If there are types we haven't listed, please describe them.

MAINTENANCE
QUALITY
0-5 (5 HIGH)

UNREPAIRED
PROPERTY
DAMAGE
(# SEEN)

USE OF
SPACES
0-5 (5 HIGH)

TYPE F - ROOMS WITH LIVING ROOMS

[Height in decks _____]

This type BEQ is composed of generally four (4) rooms with four (4) toilet facilities. It also contains a living room area and entrance to the quarters is from an exterior corridor.

OTHER

(Please describe)

APPENDIX 6: CODING MANUAL: C.O.s' QUESTIONNAIRE

VAR NAME	COLUMN	CARD #	ITEM
VAR001	1-3	1	Questionnaire I.D. # 001-
VAR002	4	1	Questionnaire Type (1)-CO (2)-BEQ Manager
VAR003	5	1	Completeness of DATA (1) Both CO & BEQ Manager (2) Only CO (3) Only BEQ Manager
VAR004	6	1	Complete BEQ Data (1) Yes, all BEQ Managers returned Q's (2) No
VAR005	7-8	1	Number of BEQ's Questionnaires Returned 00 -
VAR006	9	1	Number of BEQ types on base
VAR007	10	1	Type A? (1) Yes If yes & data missing 9 or 99 (2) No If No = leave blank
VAR008	11-12	1	# of Bldgs. of Type A 01 _____
VAR009	13-14 15-16	1	Total # of Berths of Type A
VAR010	17-18-19	1	% occupied of Type A
VAR011	201-21	1	# of elevators

<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
			<u>A-1 Bldgs.</u>
VAR012	22-23	1	# of Bldgs - A-1
VAR013	24-25	1	Age - A-1
VAR014	26	1	Physical Condition - A-1 (1) good (2) good-fair (3) fair (4) fair-poor
VAR015	27	1	Type of Personnel (1) CPO (2) Transients (3) Women (4) Permanent
			<u>A-2 Bldgs.</u>
VAR016	28-29	1	# of bldgs. - A-2
VAR017	30-31	1	Age - A-2
VAR018	32	1	Physical Condition - A-2
VAR019	33	1	Type of Personnel - A-2
			<u>A-3 Bldgs.</u>
VAR020	34-35	1	# of bldgs. - A-3
VAR021	36-37	1	Age - A-3
VAR022	38	1	Physical Condition - A-3
VAR023	39	1	Type of Personnel - A-3

VAR NAME	COLUMN	CARD #	ITEM
VAR024	40	1	Type B? (1) Yes (2) No
VAR025	41-42	1	# of Bldgs. of Type <u>B</u>
VAR026	43-44-45-46	1	Total # of Berths of Type <u>B</u>
VAR027	47-48-49	1	% accupied
VAR028	50-51	1	# of elevators <u>B-1 Bldgs.</u>
VAR029	52-53	1	# of bldgs.
VAR030	54-55	1	Age
VAR031	56	1	Physical Condition
VAR032	57	1	Type of Personnel (1) CPO (2) Transients (3) Women (4) Permanent <u>B-2 Bldgs.</u>
VAR033	58-59	1	# of bldgs.
VAR034	60-61	1	Age
VAR035	62	1	Physical Condition

<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
VAR036	63	1	Type of Personnel <u>B-3 Bldgs.</u>
VAR037	64-65	1	# of bldgs.
VAR038	66-67	1	Age
VAR039	68	1	Physical Condition
VAR040	69	1	Type of Personnel
VAR041	75	1	Card # -1
VAR042	1-2-3	2	Questionnaire I.D. #
VAR043	4	2	Type C? (1) Yes (2) No
VAR044	5-6	2	# of Bldgs. of Type <u>C</u>
VAR045	7-8-9-10	2	Total # of Berths of Type <u>C</u>
VAR046	11-12-13	2	% occupied
VAR047	14-15	2	# of elevators <u>C-1 Bldgs.</u>
VAR048	16-17	2	# of bldgs.

<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
VAR049	18-19	2	Age
VAR050	20	2	Physical Condition
VAR051	21	2	Type of Personnel (1) Cpo (2) Transients (3) Women (4) Permanent
			<u>C-2 Bldgs.</u>
VAR052	22-23	2	# of bldgs.
VAR053	24-25	2	Age
VAR054	26	2	Physical Condition
VAR055	27	2	Type of Personnel
			<u>C-3 Bldgs.</u>
VAR056	28-29	2	# of bldgs.
VAR057	30-31	2	Age
VAR058	32	2	Physical Condition
VAR059	33	2	Type of Personnel
VAR060	34	2	Type D? (1) Yes (2) No

<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
VAR061	35-36	2	# of Bldgs. of Type <u>D</u>
VAR062	37-38-39-40	2	Total # of Berths of Type <u>D</u>
VAR063	41-42-43	2	% occupied
VAR064	44-45	2	# of elevators
			<u>D-1 Bldgs.</u>
VAR065	46-47	2	# of bldgs.
VAR066	48-49	2	Age
VAR067	50	2	Physical Condition
VAR068	51	2	Type of Personnel (1) CPO (2) Transients (3) Women (4) Permanent
			<u>D-2 Bldgs.</u>
VAR069	52-53	2	# of Bldgs.
VAR070	54-55	2	Age
VAR071	56	2	Physical Condition
VAR072	57	2	Type of Personnel

<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
			<u>D-3 Bldgs.</u>
VAR073	58-59	2	# of bldgs.
VAR074	60-61	2	Age
VAR075	62	2	Physical Condition
VAR076	63	2	Type of Personnel
VAR077	64	2	Type E? (1) Yes (2) No
VAR078	65-66	2	# of Bldgs. of Type <u>E</u>
VAR079	67-68-69-70	2	Total # of Berths of Type <u>E</u>
VAR080	71-72-73	2	% occupied
VAR081	74-75	2	# of elevators
VAR082	76	2	Card # = 2
			<u>E-1 Bldgs.</u>
VAR083	1-2-3	3	Questionnaire ID#
VAR084	4-5	3	# of bldgs.

VAR NAME	COLUMN	CARD #	ITEM
VAR085	6-7	3	Age
VAR086	8	3	Physical Condition
VAR087	9	3	Type of Personnel (1) CPO (2) Transients (3) Women (4) Permanent
			<u>E-2 Bldgs.</u>
VAR088	10-11	3	# of bldgs.
VAR089	12-13	3	Age
VAR090	14	3	Physical Condition
VAR091	15	3	Type of Personnel
			<u>E-3 Bldgs.</u>
VAR092	16-17	3	# of bldgs.
VAR093	18-19	3	Age
VAR094	20	3	Physical Condition
VAR095	21	3	Type of Personnel
VAR096	22	3	Type F? (1) Yes (2) No

<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
VAR097	23-24	3	# of bldgs. of Type <u>F</u>
VAR098	25-26-27-28	3	Total # of Berths of Type <u>F</u>
VAR099	29-30-31	3	% occupied
VAR100	32-33	3	# of elevators
			<u>F-1 Bldgs.</u>
VAR101	34-35	3	# of bldgs.
VAR102	36-37	3	Age
VAR103	38	3	Physical Condition
VAR104	39	3	Type of Personnel (1) CPO (2) Transients (3) Women (4) Permanent
			<u>F-2 Bldgs.</u>
VAR105	40-41	3	# of bldgs.
VAR106	42-43	3	Age
VAR107	44	3	Physical Condition
VAR108	45	3	Type of Personnel

VAR NAME	COLUMN	CARD #	ITEM
			<u>F-3 Bldgs.</u>
VAR109	46-47	3	# of bldgs.
VAR110	48-49	3	Age
VAR111	50	3	Physical Condition
VAR112	51	3	Type of Personnel
VAR113	52	3	Type Other (1) Yes (2) No
VAR114	53-54	3	# of Bldgs. of Type <u>"Other"</u>
VAR115	55-56-57-58	3	Total # of Berths of Type <u>"Other"</u>
VAR116	59-50-61	3	% occupied
VAR117	62-63	3	# of elevators
			<u>OTHER -1 Bldgs.</u>
VAR118	64-65	3	# of bldgs.
VAR119	66-67	#	Age
VAR120	68	3	Physical Condition

VAR NAME	COLUMN	CARD #	ITEM
VAR121	69	3	Type of Personnel (1) CPO (2) Transients (3) Women (4) Permanent
VAR122	75	3	Card # -3
VAR123	1-2-3	4	Questionnaire -I.D. # <u>OTHER -2 BLDGS.</u>
VAR124	4-5	4	# of bldgs.
VAR125	6-7	4	Age
VAR126	8	4	Physical Condition
VAR127	9	4	Type of Personnel <u>OTHER -3 Bldgs.</u>
VAR128	10-11	4	# of bldgs.
VAR129	12-13	4	Age
VAR130	14	4	Physical Condition
VAR131	15	4	Type of Personnel

<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
			<u>"MOST PROPERTY DAMAGED"</u>
VAR140	24	4	Type A V=1 Others=blank
VAR141	25	4	Type B V=1
VAR142	26	4	Type C V=1
VAR143	27	4	Type D V=1
VAR144	28	4	Type E V=1
VAR145	29	4	Type F V=1
VAR146	30	4	Other V=1
			<u>"LEAST PROPERTY DAMAGE"</u>
VAR147	31	4	Type A V=1
VAR148	32	4	Type B V=1
VAR149	33	4	Type C V=1
VAR150	34	4	Type D V=1
VAR151	35	4	Type E V=1
VAR152	36	4	Type F V=1

<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
VAR153	37	4	Other V=1
VAR154	38-39-40-41	4	Assignment Capacity Code Raw #
VAR155	42-43-44	4	Over 20 weeks 000% - 100%
<u>MONTHS - EMERGENCY LOADING</u>			
VAR156	45	4	Jan/Feb 1=Yes Others leave blank
VAR157	46	4	March/Apr 1=Yes
VAR158	47	4	May/June 1=Yes
VAR159	48	4	July/Aug. 1=Yes
VAR160	49	4	Sept/Oct. 1=Yes
VAR161	50	4	Nov/Dec. 1=Yes
<u>MONTHS-GRANTED PER DIEM</u>			
VAR162	51	4	Jan/Feb. 1=Yes Others leave blank
VAR163	52	4	March/Apr. 1=Yes
VAR164	53	4	May/June 1=Yes

VAR NAME	COLUMN	CARD #	ITEM
VAR165	54	4	July/Aug. 1=Yes
VAR166	55	4	Sept/Oct. 1=Yes
VAR167	56	4	Nov/Dec. 1=Yes
VAR168	57	4	Fluctuations in Transients (1) Yes (2) No
			<u>MONTHS</u> If "NO" leave VAR169 VAR174 blank.
VAR169	58	4	Jan/Feb. (1) Higher than normal (2) Normal (3) Lower than normal
VAR170	59	4	March/Apr.
VAR171	60	4	May/June
VAR172	61	4	July/Aug.
VAR173	62	4	Sept/Oct.
VAR174	63	4	Nov/Dec.
VAR175	64	4	Berth Assignment (1) Unit integrity (2) As berth becomes available (3) Unit integrity, except for transients (4) Other

<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
			<u>BUDGET FOR MAINTENANCE REPAIR & OPERATIONS</u>
VAR176	65-66-67- 68-69-70	4	1974 Code RAW IN \$S
VAR177	75	4	Card # = 4
VAR178	1-2-3	5	Questionnaire I.D. #
VAR179	4-9	5	1975
VAR180	10-15	5	1976
VAR181	16-21	5	1977
			<u>BUDGET FOR REPAIR OF P.D.</u>
VAR182	22-27	5	1974 Code Raw in \$S
VAR183	28-33	5	1975
VAR184	34-39	5	1976
VAR185	40-41	5	# of Requests over \$50,000 00 ___
VAR186	42-43	5	# of Funded Requests 00 ___
VAR187	44	%	Actions to Reduce P.D. (1) Yes (2) No

VAR NAME	COLUMN	CARD #	ITEM
VAR188	45	5	# of Actions Described 0-9
VAR189	46	5	Are reports kept? (1) Yes (2) No
			<u>ROOM-1</u>
VAR190	47	5	Bldg. Element
VAR191	48-49	5	Damaged Element
VAR192	50-51	5	Materials/or Types
VAR193	52-53-54	5	Frequency
VAR194	55-56-57-58	5	Average Cost
VAR195	59-60-61-62	5	Average Repair Time --- --
			<u>ROOM 2</u>
VAR196	63	5	Bldg. Element
VAR197	64-65	5	Damaged Element
VAR198	66-67	5	Materials
VAR199	68-69-70	5	Frequency

<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
VAR200	71-72-73-74	5	Average Cost
VAR201	75-76-77-78	5	Average Repair Time
VAR202	80	5	Card # = 5
VAR203	1-3	6	Questionnaire I.D. #
			<u>ROOM 3</u>
VAR204	4	6	Bldg. Element
VAR205	5-6	6	Damaged Element
VAR206	7-8	6	Materials
VAR207	9-10-11	6	Frequency
VAR208	12-13-14-15	6	Average Cost
VAR209	16-17-18-19	6	Average Repair Time
			<u>ROOM 4</u>
VAR210	20	6	Bldg. Element
VAR211	21-22	6	Damaged Element
VAR212	23-24	6	Materials
VAR213	25-26-27	6	Frequency

<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
VAR214	28-29-30-31	6	Average Cost
VAR215	32-33-34-35	6	Average Repair Time
			<u>LOUNGE-1</u>
VAR216	36	6	Bldg. Element
VAR217	37-38	6	Damaged Element
VAR218	39-40	6	Materials
VAR219	41-42-43	6	Frequency
VAR220	44-45-46-47	6	Average Cost
VAR221	48-49-50-51	6	Average Repair Time
			<u>LOUNGE 2</u>
VAR222	52	6	Bldg. Element
VAR223	53-54	6	Damaged Element
VAR224	55-56	6	Materials
VAR225	57-58-59	6	Frequency
VAR226	60-61-62-63	6	Average Cost

<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
VAR227	64-65-66-67	6	Average Repair Time
VAR228	75	6	Card #6
VAR229	1-3	7	Questionnaire I.D. #
			<u>LOUNGE 3</u>
VAR230	4	7	Bldg. Element
VAR231	5-6	7	Damaged Element
VAR232	7-8	7	Materials
VAR233	9-10-11	7	Frequency
VAR234	12-13-14-15	7	Average Cost
VAR235	16-17-18-19	7	Average Repair Time
			<u>LOUNGE 4</u>
VAR236	20	7	Bldg. Element
VAR237	21-22	7	Damaged Element
VAR238	23-24	7	Materials
VAR239	25-26-27	7	Frequency

<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
VAR240	28-29-30-31	7	Average Cost
VAR241	32-33-34-35	7	Average Repair Time
			<u>HEAD 1</u>
VAR242	36	7	Bldg. Element
VAR243	37-38	7	Damaged Element
VAR244	39-40	7	Materials
VAR245	41-42-43	7	Frequency
VAR246	44-45-46-47	7	Average Cost
VAR247	48-49-50-51	7	Average Repair Time
			<u>HEAD 2</u>
VAR248	52	7	Bldg. Element
VAR249	53-54	7	Damaged Element
VAR250	55-56	7	Materials
VAR251	57-58-59	7	Frequency
VAR252	60-61-62-63	7	Average Cost
VAR253	64-65-66-67	7	Average Repair Time

<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
VAR254	75	7	Card # = 7
VAR255	1-3	8	Questionnaire I.D.#
			<u>HEAD 3</u>
VAR256	4	8	Bldg. Element
VAR257	5-6	8	Damaged Element
VAR258	7-8	8	Materials
VAR259	9-10-11	8	Frequency
VAR260	12-13-14-15	8	Average Cost
VAR261	16-17-18-19	8	Average Repair Time
			<u>HEAD 4</u>
VAR262	20	8	Bldg. Element
VAR264	23-24	8	Materials
VAR265	25-26-27	8	Frequency
VAR266	28-29-30-31	8	Average Cost
VAR267	32-33-34-35	8	Average Repair Time

<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
			<u>HALLWAY/CORRIDOR 1</u>
VAR268	36	8	Bldg. Element
VAR269	37-38	8	Damaged Element
VAR270	39-40	8	Materials
VAR271	41-42-43	8	Frequency
VAR272	44-45-46-47	8	Average Cost
VAR273	48-49-50-51	8	Average Repair Time
			<u>HALLWAY/CORRIDOR 2</u>
VAR274	52	8	Bldg. Element
VAR275	53-54	8	Damaged Element
VAR276	55-56	8	Materials
VAR277	57-58-59	8	Frequency
VAR278	60-61-62-63	8	Average Cost
VAR279	64-65-66-67	8	Average Repair Time
VAR280	75	8	Card # = 8
VAR281	1-3	9	Questionnaire I.D.#

<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
			<u>HALLWAY/CORRIDOR 3</u>
VAR282	4	9	Bldg. Element
VAR283	5-6	9	Damaged Element
VAR284	7-8	9	Materials
VAR285	9-10-11	9	Frequency
VAR286	12-13-14-15	9	Average Cost
VAR287	16-17-18-19	9	Average Repair Time
			<u>HALLWAY/CORRIDOR 4</u>
VAR288	20	9	Bldg. Element
VAR 289	21-22	9	Damaged Element
VAR290	23-24	9	Materials
VAR291	25-26-27	9	Frequency
VAR292	28-29-30-31	9	Average Cost
VAR293	32-33-34-35	9	Average Repair Time
			<u>VENDING AREA 1</u>
VAR 294	36	9	Bldg. Element

<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
VAR295	37-38	9	Damaged Element
VAR296	39-40	9	Materials
VAR297	41-42-43	9	Frequency
VAR298	44-45-46-47	9	Average Cost
VAR299	48-49-50-51	9	Average Repair Time
<u>VENDING AREA 2</u>			
VAR300	52	9	Bldg. Element
VAR301	53-54	9	Damaged Element
VAR302	55-56	9	Materials
VAR303	57-58-59	9	Frequency
VAR304	60-61-62-63	9	Average Cost
VAR305	64-65-66-67	9	Average Repair Time
VAR306	75	9	Card # = 9
VAR307	1-3	10	Questionnaire I.D. #

<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
			<u>VENDING AREA 3</u>
VAR308	4	10	Bldg. Element
VAR309	5-6	10	Damaged Element
VAR310	7-8	10	Materials
VAR311	9-10-11	10	Frequency
VAR312	12-13-14-15	10	Average Cost
VAR313	16-17-18-19	10	Average Repair Time
			<u>OTHER - 1</u>
VAR314	20	10	Bldg. Element
VAR315	21-22	10	Damaged Element
VAR316	23-24	10	Materials
VAR317	25-26-27	10	Frequency
VAR318	28-29-30-31	10	Average Cost
VAR319	32-33-34-35	10	Average Repair Time

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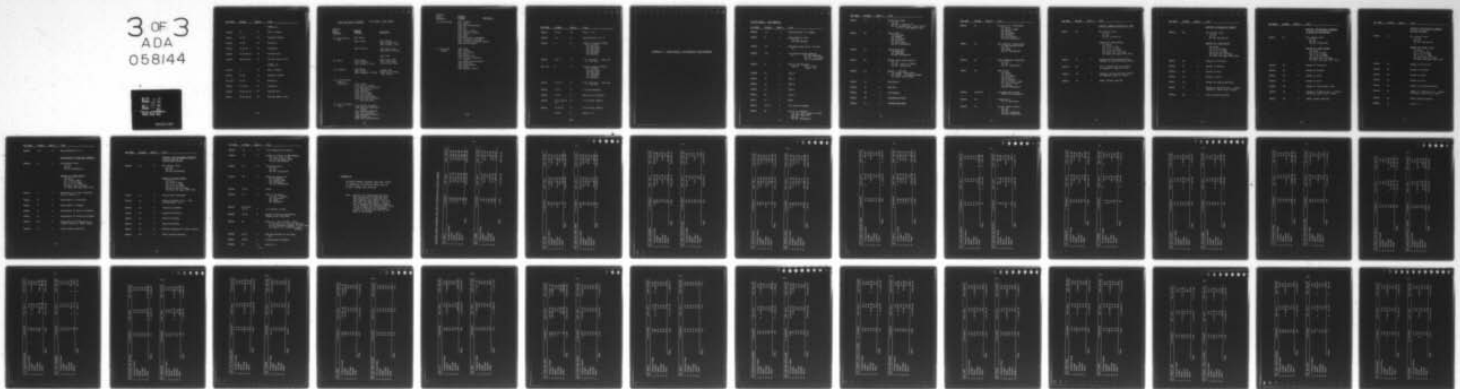
BUFFALO ORGANIZATION FOR SOCIAL AND TECHNOLOGICAL INN--ETC F/G 5/1
REDUCING VANDALISM IN NAVAL BACHELOR ENLISTED QUARTERS. VOLUME --ETC(U)
APR 78 C BRADY, M BRILL N68305-77-C-0018

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<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
			<u>OTHER - 2</u>
VAR320	36	10	Bldg. Element
VAR321	37-38	10	Damaged Element
VAR322	39-40	10	Materials
VAR323	41-42-43	10	Frequency
VAR324	44-45-46-47	10	Average Cost
VAR325	48-49-50-51	10	Average Repair Time
			<u>OTHER - 3</u>
VAR326	52	10	Bldg. Element
VAR327	53-54	10	Damaged Element
VAR 328	55-56	10	Materials
VAR329	57-58-59	10	Frequency
VAR330	60-61-62-63	10	Average Cost
VAR331	64-65-66-67	10	Average Repair Time

CODES FOR BLDG. ELEMENTS: IF NO INFO, LEAVE BLANK

VARIOUS
BLDG.
ELEMENTS

DAMAGED
ELEMENT

MATERIALS

(1) Space Enclo-
sure

(01) Walls

(02) Floors

(01) Carpet
(02) Plastic Tile
(03) Ceramic Tile

(03) Ceiling

(04) Hung tiles
(05) Solid ceiling

DOOR TYPE

(2) Doors

(04) Frame
(05) Hardware
(06) Louver or vent

*(06) Glass door
(07) Solid door
(08) Hollow type

(3) Windows

(07) Glass
(08) Screen
(09) Hardware & frame

WINDOW TYPE
(09) Glass window
(10) Screen

(4) Fixed Attach-
ments &
Electrical

(10) Lights
(11) Wire & conduit
(12) Switches & outlets
(13) Thermostats
(14) Speakers
(15) Exit lights
(16) Fire alarms
(17) Sprinkler head
(18) Air conditioning &
heating vents

(5) Service Equip-
ment

(19) Phones & booths
(20) Washing machines &
dryers
(21) Vending machines
(22) Coin-changers
(23) Vacuums & buffers
(24) Fountains
(25) Fire extinguishers

VARIOUS
BLDG.
ELEMENTS

DAMAGED
ELEMENT

MATERIALS

(6) Furnishings

- (26) Lockers
- (27) Lamps
- (28) Rug (unattached)
- (29) T.V.
- (30) Bed
- (31) Sofa & chair
- (32) Linens & towels
- (33) Table
- (34) Desk
- (35) Recreation equipment
- (36) Curtains & blinds
- (37) Signage & bulletin boards
- (38) Ash receivers

(7) Bathroom
(Head)

- (39) Sink
- (40) Toilet
- (41) Partitions
- (42) Mirror
- (43) Shower head
- (44) Faucets & pipes &
drains
- (45) Soap tray/dispenser
- (46) Shelving
- (47) Paper holder
- (48) Urinal
- (49) Shower curtain

VAR NAME	COLUMN	CARD #	ITEM
VAR332	75-76	10	Card # = 10
VAR333	1-3	11	Questionnaire I.D. #
VAR334	4	11	Highest Frequency Month (1) Jan/Feb. (2) March/Apr. (3) May/June (4) July/Aug. (5) Sept/Oct. (6) Nov/Dec.
VAR335	5-6-7	11	# of incidents - code raw 9 = No info
VAR 336	8	11	Lowest Frequency Month (1) Jan/Feb. (2) March/Apr. (3) May/June (4) July/Aug. (5) Sept/Oct. (6) Nov/Dec.
VAR337	9-10-11	11	# of incidents - code raw 9 = No info
VAR338	12-13	11	# of BEQ Managers
VAR339	14-15	11	Base Mission (BOSTI)
VAR340	16-17-18-19 20	11	# of Berths (BOSTI)
VAR341	21-22-23	11	Cost Factor (BOSTI)
	75-76	11	Card # = 11

APPENDIX 7: CODING MANUAL: BEQ MANAGERS' QUESTIONNAIRE

CODING MANUAL: BEQ MANAGERS

<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
VAR400	1-3	1	Questionnaire I.D. Number
VAR401	4	1	Questionnaire Type (1) CO (2) BEQ Manager
VAR402	5-6	1	BEQ Questionnaire No. for Base 01 -
VAR404	7-8	1	# of BEQ Buildings Managed 01 - [If not answered, put 01 - or figure out if possible]
VAR405	9	1	Type of BEQ Managed Type A [If circled, Code = 1]
VAR406	10	1	Type B
VAR407	11	1	Type C
VAR408	12	1	Type D
VAR409	13	1	Type E
VAR410	14	1	Type F
VAR411	15	1	Other
VAR412	16-19	1	# of Berths Managed
VAR413	20	1	Is P.D. a problem? (1) Yes, fair amount of time (2) Yes, <u>not</u> major (3) No (9) No information

VAR NAME	COLUMN	CARD #	ITEM
VAR414	21	1	Particular time? (1) Yes (2) No -- skip to 417 (9) No information - treat like 2 [If no, skip VAR415, 416]
VAR415	22	1	Time of Day (1) Mornings (2) Midday (3) Afternoon (4) Evening (5) Over night (9) No information
VAR416	23	1	Time During Week (1) Weekdays (2) Weekends (9) No information
VAR417	24	1	Months with higher/lower # (1) Yes (2) No - skip to VAR424 (9) No information
VAR418	25	1	Months -- Jan/Feb. (1) Higher than normal (2) Normal - nothing checked (3) Lower than normal
VAR419	26	1	March/April
VAR420	27	1	May/June
VAR421	28	1	July/August
VAR422	29	1	September/October
VAR423	30	1	November/December

VAR NAME	COLUMN	CARD #	ITEM
VAR424	31	1	Frequency of Inspections (1) Daily (2) Twice a week (3) Weekly (4) Bi-weekly (6) Monthly (7) Less Often (9) No information
VAR425	32	1	Who conducts inspections? (1) BEQ Manager/staff (2) C.O. (3) Other (9) No information
VAR426	33	1	Base Commander Inspected? (1) Yes (2) No (9) No information
VAR427	34	1	How often? (0) Never (1) Weekly (2) Bi-weekly (3) Monthly (4) Bi-monthly (5) 3-4 times a year (6) Twice a year (7) Yearly (9) No information
VAR428	35-36-37	1	% perpetrators found (999) No information
VAR429	38	1	Tenant/Host (1) If mentioned
VAR430	39	1	Active Tenant Council (1) Yes (2) No (3) Yes, inactive (9) No information

VAR NAME	COLUMN	CARD #	ITEM
VAR461	1-3	2	Questionnaire I.D. #
<u>REPLACEMENT OF WORN OUT PROPERTY</u>			
VAR462	4	2	Are reports kept? (1) Yes (2) No (9) No information
<u>Coding for items below:</u>			
(0) Never (1) 0 to 5 times (2) 6 to 10 times (3) 11 to 15 times (4) More than 15 times (9) Does not apply (No info)			
VAR463	5	2	Replacement of floor coverings (vinyl, carpet...)
VAR464	6	2	Replacement of Furniture
VAR465	7	2	Replacement of Windows
VAR466	8	2	Replacement of Doors & Hardware
VAR467	9	2	Replacement of Vending Equipment
VAR468	10	2	Replacement of Fixtures (e.g., lights, curtains, towel racks)
VAR469	11	2	Other (Please Specify)

<u>VAR NAME</u>	<u>COLUMN</u>	<u>CARD #</u>	<u>ITEM</u>
			<u>PERSONAL AND GOVERNMENT PROPERTY</u> <u>STOLEN FROM THE BEQ</u>
VAR470	12	2	Are reports kept? (1) Yes (2) No (9) No information
			<u>Coding for items below:</u> (0) Never (1) 0 to 5 times (2) 6 to 10 times (3) 11 to 15 times (4) More than 15 times (9) Does not apply (No info)
VAR471	13	2	Recreational Equipment
VAR472	14	2	Safety Equipment (e.g., fire extinguishers, etc.)
VAR473	15	2	Cleaning Equipment
VAR474	16	2	Lounge Furnishings
VAR475	17	2	Room Furnishings
VAR476	18	2	Head Furnishings
VAR477	19	2	Personal property of other sailors
VAR478	20	2	Other (Please Specify)

VAR NAME	COLUMN	CARD #	ITEM
VAR479	21	2	# of Unreported Incidents
VAR480	22	2	Length of tenure as BEQ Manager (1) Less than 1 year (2) One to three years (0) No information
VAR481	23	2	Training School (1) Yes (2) No (9) No information
VAR482	24	2	Property damage has: (1) Decreased (2) Stayed same (3) Increased (9) No information
VAR483	25-26	2	State
VAR484	27	2	Type of Personnel (1) CPO - Officers (2) Transients (3) Women (4) Permanent
VAR485	28-29-30- 31-32	2	# of Berths on base
VAR486	33-34	2	Number of BEQ questionnaires returned for this base
VAR487	35	2	Data use - for this Mgr. Quest. (1) Usable for "by-type" analysis (2) No-responses "mixed" for BEQ type (3) Usable for "combined" type analysis
VAR488	36-37	2	BEQ Questionnaire # for base 01 -
VAR489	40-42	2	# Unreported incidents
VAR490	75	2	Card # = 2

APPENDIX 8

ESTIMATED ANNUAL FREQUENCY AND COST (1976)
OF VANDALISM IN STATESIDE NAVAL BEQS BY
ELEMENT DAMAGED AND LOCATION

NOTE: BECAUSE THE FREQUENCIES AND COSTS
WERE CALCULATED BY COMPUTER THEY
ARE REPORTED TO A DEGREE OF ACCU-
RACY GREATER THAN THAT OF THE DATA
ON WHICH THEY WERE BASED. IN GEN-
ERAL, FREQUENCIES SHOULD BE ROUNDED
TO THE NEAREST 100 INCIDENTS AND COSTS
SHOULD BE ROUNDED TO THE NEAREST
\$1,000, AS WE USE HAVE DONE IN THE
BODY OF THE REPORT.

ESTIMATED ANNUAL FREQUENCY AND COST OF VANDALISM BY ELEMENT DAMAGED

(01) WALLS	# INCIDENTS	COST (M+L)	COST (M+L+0)
1. Sleeping Rooms	1,256	\$ 44,822.12	\$ 74,992.56
2. Lounges	3,496	69,917.80	93,666.44
3. Heads	2,244	20,897.12	29,249.92
4. Hallways	5,432	197,638.20	239,224.04
5. Vending	392	14,973.00	20,008.00
6. Other	360	28,714.60	34,960.12
TOTAL	13,180	\$376,962.84	\$492,101.08

(02) FLOORS	# INCIDENTS	COST (M+L)	COST (M+L+0)
1. Sleeping Rooms	212	\$ 3,014.64	\$ 3,440.04
2. Lounges	620	50,529.36	69,227.76
3. Heads	N.R.	N.R.	N.R.
4. Hallways	1,152	4,498.56	6,024.96
5. Vending	2,456	16,313.60	23,097.60
6. Other	300	1,893.00	2,688.00
TOTAL	4,740	\$ 76,249.16	\$104,478.36

(03) CEILING	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	696	\$ 5,408.08	\$ 6,913.28
2. Lounges	1,772	24,583.52	30,392.32
3. Heads	N.R.	N.R.	N.R.
4. Hallways	2,524	761,984.04	800,680.44
5. Vending	80	3,345.84	4,045.44
6. Other	40	372.40	478.40
TOTAL	5,112	\$795,693.88	\$842,510.28

(04) DOOR AND DOOR FRAME	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	8,940	\$679,416.24	\$817,706.88
2. Lounges	788	44,153.64	49,651.92
3. Heads	52	2,362.52	3,136.32
4. Hallways	664	32,393.12	40,007.32
5. Vending	N.R.	N.R.	N.R.
6. Other	756	18,484.24	21,939.84
TOTAL	11,200	\$776,809.76	\$932,442.28

(05) DOOR HARDWARE	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	5,952	\$548,623.20	\$654,417.44
2. Lounges	600	10,572.00	13,752.00
3. Heads	N.R.	N.R.	N.R.
4. Hallways	96	5,051.52	5,560.32
5. Vending	N.R.	N.R.	N.R.
6. Other	716	17,034.64	20,066.24
TOTAL	7,364	\$581,281.36	\$693,796.00

(06) DOOR LOUVER OR VENT	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	320	\$49,397.40	\$67,890.88
2. Lounges	N.R.	N.R.	N.R.
3. Heads	N.R.	N.R.	N.R.
4. Hallways	208	1,271.26	1,661.12
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	528	\$50,668.66	\$69,552.00

(07) WINDOW GLASS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	924	\$ 34,605.32	\$ 39,010.68
2. Lounges	868	25,606.44	30,263.76
3. Heads	36	775.28	930.32
4. Hallways	1,004	58,251.80	72,309.72
5. Vending	52	1,529.76	1,784.16
6. Other	24	989.76	1,244.76
TOTAL	2,908	\$121,758.36	\$145,543.40

(08) WINDOW SCREEN	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	12,576	\$330,927.40	\$430,307.88
2. Lounges	1,160	17,495.04	24,694.44
3. Heads	300	2,170.24	3,114.76
4. Hallways	104	1,493.32	2,148.20
5. Vending	N.R.	N.R.	N.R.
6. Other	8,056	287,096.32	340,452.96
TOTAL	22,196	\$639,182.32	\$800,718.24

(09) WINDOW HARDWARE/FRAME	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	36	\$ 762.52	\$ 943.92
2. Lounges	N.R.	N.R.	N.R.
3. Heads	204	2,700.92	3,596.84
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	240	\$ 3,463.44	\$ 4,540.76

(10) LIGHTS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	4,196	\$ 8,090.64	\$ 9,720.40
2. Lounges	1,084	22,963.16	28,358.56
3. Heads	1,464	14,931.32	20,157.12
4. Hallways	6,068	87,363.28	105,090.16
5. Vending	N.R.	N.R.	N.R.
6. Other	9,112	152,277.92	185,222.28
TOTAL	21,924	\$285,626.32	\$348,548.52

(11) WIRE AND CONDUIT	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	N.R.	N.R.	N.R.
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	24	\$ 1,742.88	\$ 1,870.08
TOTAL	24	\$ 1,742.88	\$ 1,870.08

(12) SWITCHES AND OUTLETS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	76	\$ 1,187.12	\$ 1,589.92
2. Lounges	40	544.80	756.80
3. Heads	N.R.	N.R.	N.R.
4. Hallways	2,432	18,072.48	24,651.32
5. Vending	4	62.48	83.68
6. Other	N.R.	N.R.	N.R.
TOTAL	2,552	\$ 19,866.48	\$ 27,081.72

(13) THERMOSTATS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	1,700	\$122,191.48	\$134,514.00
2. Lounges	68	7,203.24	7,743.84
3. Heads	N.R.	N.R.	N.R.
4. Hallways	204	19,127.44	21,960.20
5. Vending	N.R.	N.R.	N.R.
6. Other	16	180.96	223.36
TOTAL	1,988	\$148,703.12	\$164,441.40

(14) SPEAKERS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	4	\$ 132.96	\$ 175.36
2. Lounges	N.R.	N.R.	N.R.
3. Heads	N.R.	N.R.	N.R.
4. Hallways	48	998.24	1,256.60
5. Vending	N.R.	N.R.	N.R.
6. Other	8	654.88	782.08
TOTAL	60	\$ 1,786.08	\$ 2,214.04

(15) EXIT LIGHTS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	N.R.	N.R.	N.R.
4. Hallways	232	\$ 1,532.48	\$ 2,064.60
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	232	\$ 1,532.48	\$ 2,064.60

(16) FIRE ALARMS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	N.R.	N.R.	N.R.
4. Hallways	264	\$ 7,643.84	\$ 9,958.12
5. Vending	N.R.	N.R.	N.R.
6. Other	4	104.96	147.36
TOTAL	268	\$ 7,748.80	\$ 10,105.48

(17) SPRINKLER HEAD	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	N.R.	N.R.	N.R.
4. Hallways	124	\$ 2,495.60	\$ 3,141.60
5. Vending	N.R.	N.R.	N.R.
6. Other	4,000	92,000.00	101,484.64
TOTAL	4,124	\$ 94,495.60	\$104,626.24

(18) A/C AND HEATING VENTS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	660	\$ 23,793.60	\$ 30,577.60
2. Lounges	N.R.	N.R.	N.R.
3. Heads	N.R.	N.R.	N.R.
4. Hallways	56	1,559.96	1,862.00
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	716	\$ 25,353.56	\$ 32,439.60

(19) PHONES AND BOOTHS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	N.R.	N.R.	N.R.
4. Hallways	24	\$ 374.88	\$ 502.08
5. Vending	468	8,234.96	10,927.36
6. Other	484	27,713.28	30,112.20
TOTAL	976	\$ 36,323.12	\$ 41,541.64

01-8

(20) WASHING MACHINES & DRYERS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	400	\$ 20,024.00	\$ 26,992.36
4. Hallways	N.R.	N.R.	N.R.
5. Vending	200	10,012.00	13,496.16
6. Other	3,232	162,317.04	218,052.16
TOTAL	3,832	\$192,353.04	\$258,540.68

(21) VENDING MACHINES	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	244	\$ 5,510.04	\$ 6,792.64
3. Heads	N.R.	N.R.	N.R.
4. Hallways	N.R.	N.R.	N.R.
5. Vending	7,384	365,461.56	584,794.80
6. Other	4	215.08	346.44
TOTAL	7,632	\$371,186.68	\$591,933.88

(22) COIN CHANGERS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	N.R.	N.R.	N.R.
4. Hallways	N.R.	N.R.	N.R.
5. Vending	52	\$ 536.12	\$ 673.92
6. Other	N.R.	N.R.	N.R.
TOTAL	52	\$ 536.12	\$ 673.92

(23) VACUUMS AND BUFFERS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	N.R.	N.R.	N.R.
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	112	\$ 4,976.72	\$ 6,404.64
TOTAL	112	\$ 4,976.72	\$ 6,404.64

8-12

(24) FOUNTAINS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	N.R.	N.R.	N.R.
4. Hallways	72	\$ 9,456.72	\$ 10,283.52
5. Vending	N.R.	N.R.	N.R.
6. Other	16	499.64	681.44
TOTAL	88	\$ 9,956.36	\$ 10,964.96

(25) FIRE EXTINGUISHERS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	N.R.	N.R.	N.R.
4. Hallways	3,320	\$ 47,656.64	\$ 60,211.28
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	3,320	\$ 47,656.64	\$ 60,211.28

8-13

(26) LOCKERS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	10,164	\$191,715.00	\$233,453.64
2. Lounges	N.R.	N.R.	N.R.
3. Heads	N.R.	N.R.	N.R.
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	10,164	\$191,715.00	\$233,453.64

(27) LAMPS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	1,292	\$ 14,540.00	\$ 19,967.20
2. Lounges	680	39,373.28	43,335.64
3. Heads	N.R.	N.R.	N.R.
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	1,972	\$ 53,913.28	\$ 63,302.84

(28) RUG [UNATTACHED]	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	N.R.	N.R.	N.R.
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	N.R.	N.R.	N.R.

(29) T.V.	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	508	\$ 19,109.64	\$ 23,466.24
3. Heads	N.R.	N.R.	N.R.
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	60	6,823.20	8,731.20
TOTAL	568	\$ 25,932.84	\$ 32,197.44

8-15

(30) BEDS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	132	\$ 8,668.88	\$ 9,111.24
2. Lounges	N.R.	N.R.	N.R.
3. Heads	N.R.	N.R.	N.R.
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	132	\$ 8,668.88	\$ 9,111.24

(31) SOFA AND CHAIR	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	1,684	\$ 45,936.92	\$ 52,901.76
2. Lounges	7,456	259,306.60	313,881.60
3. Heads	N.R.	N.R.	N.R.
4. Hallways	N.R.	N.R.	N.R.
5. Vending	8	824.80	1,036.80
6. Other	60	1,023.68	1,055.52
TOTAL	9,208	\$307,092.00	\$368,875.68

91-8

(32) LINENS AND TOWELS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	3,748	\$ 42,931.64	\$ 53,397.28
2. Lounges	N.R.	N.R.	N.R.
3. Heads	N.R.	N.R.	N.R.
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	3,748	\$ 42,931.64	\$ 53,397.28

(33) TABLE	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	208	\$ 7,371.92	\$ 8,647.32
3. Heads	N.R.	N.R.	N.R.
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	208	\$ 7,371.92	\$ 8,647.32

8-17

(34) DESK	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	N.R.	N.R.	N.R.
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	N.R.	N.R.	N.R.

(35) RECREATION EQUIPMENT	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	472	\$ 4,340.48	\$ 4,933.64
3. Heads	N.R.	N.R.	N.R.
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	52	397.80	466.96
TOTAL	524	\$ 4,738.28	\$ 5,400.60

81-8

(36) CURTAINS AND BLINDS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	2,872	\$125,460.44	\$144,514.84
2. Lounges	104	5,441.04	5,928.64
3. Heads	N.R.	N.R.	N.R.
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	2,976	\$130,901.48	\$150,443.48

(37) SIGNAGE & BULLETIN BOARDS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	N.R.	N.R.	N.R.
4. Hallways	276	\$ 2,341.84	\$ 3,325.36
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	276	\$ 2,341.84	\$ 3,325.36

8-19

(38) ASH RECEIVERS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	324	\$ 2,878.44	\$ 3,566.40
3. Heads	N.R.	N.R.	N.R.
4. Hallways	960	25,051.12	30,690.64
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	1,284	\$ 27,929.56	\$ 34,257.04

(39) SINK	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	2,100	\$ 47,563.28	\$ 56,426.72
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	2,100	\$ 47,563.28	\$ 56,426.72

8-20

(40) TOILET	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	1,784	\$ 32,047.56	\$ 39,690.16
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	1,784	\$ 32,047.56	\$ 39,690.16

(41) PARTITIONS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	1,024	\$ 51,136.72	\$ 60,411.32
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	1,024	\$ 51,136.72	\$ 60,411.32

8-21

(42) MIRROR	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	2,508	\$ 36,043.16	\$ 44,218.92
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	2,508	\$ 36,043.16	\$ 44,218.92

(43) SHOWER HEAD	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	7,792	\$ 53,438.16	\$ 71,107.28
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	NR.
6. Other	N.R.	N.R.	N.R.
TOTAL	7,792	\$ 53,438.16	\$ 71,107.28

8-22

(44) FAUCETS, PIPES & DRAINS	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	1,024	\$ 23,445.84	\$ 31,025.76
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	48	350.88	478.08
TOTAL	1,072	\$ 23,796.72	\$ 31,503.84

(45) SOAP TRAY/DISPENSER	# INCIDENTS	COST (M+L)	COST (M+L+0)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	368	\$ 11,482.68	\$ 15,705.24
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	368	\$ 11,482.68	\$ 15,705.24

8-23

(46) SHELVING	# INCIDENTS	COST (M+L)	COST (M+L+0)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	8	\$ 311.28	\$ 376.80
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	8	\$ 311.28	\$ 376.80

(47) PAPER HOLDER	# INCIDENTS	COST (M+L)	COST (M+L+0)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	5,144	\$ 66,357.44	\$ 89,488.52
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	5,144	\$ 66,357.44	\$ 89,488.52

8-24

(48) URINAL	# INCIDENTS	COST (M+L)	COST (M+L+0)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	10,124	112,245.76	180,015.60
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	10,124	\$112,245.76	180,015.60

(49) SHOWER CURTAIN	# INCIDENTS	COST (M+L)	COST (M+L+O)
1. Sleeping Rooms	N.R.	N.R.	N.R.
2. Lounges	N.R.	N.R.	N.R.
3. Heads	248	\$ 2,144.44	\$ 2,756.64
4. Hallways	N.R.	N.R.	N.R.
5. Vending	N.R.	N.R.	N.R.
6. Other	N.R.	N.R.	N.R.
TOTAL	248	\$ 2,144.44	\$ 2,756.64
GRAND TOTAL (All Elements)	178,600	\$5,912,015.5	\$7,303,456.3