QUALITY OF LIFE PLANNING BULLETIN

Prepared for: U.S. Air Force/Directorate of Engineering and Services and
Dept. of the Army HQ U.S. Army Corps of Engineers

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Quality of Life Bulletin/Manual
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Introduction

CHAPTER 1

INTRODUCTION

A. PURPOSE OF THE BULLETIN/MANUAL

1-1- Introduction. The purpose of this bulletin/manual is to help planners prepare the Quality of Life (QOL) component of a Base/Installation Comprehensive Plan. It is one of a series of manuals that serve the U.S. Air Force's and U.S. Army's planning processes. The document defines the concept of Quality of Life and provides specific direction to installation planners and contractors so they can integrate Quality of Life concepts with land use and facilities development planning as well as with other related disciplines. Figure I-I illustrates where Quality of Life fits in the comprehensive planning process, but the scope and extent of the concept are more pervasive than can be shown on this figure alone. Every effort must be made to incorporate the wide-ranging definition of Quality of Life into as many other components of the planning process as possible.

1-2. Primary Users. Primary users of this bulletin/manual are the community/master planners charged with developing a Base Comprehensive Plan under U.S. Air Force regulations (AFR 86-4) or an Installation Comprehensive Plan in accordance with U.S. Army regulations (AR 210-20).

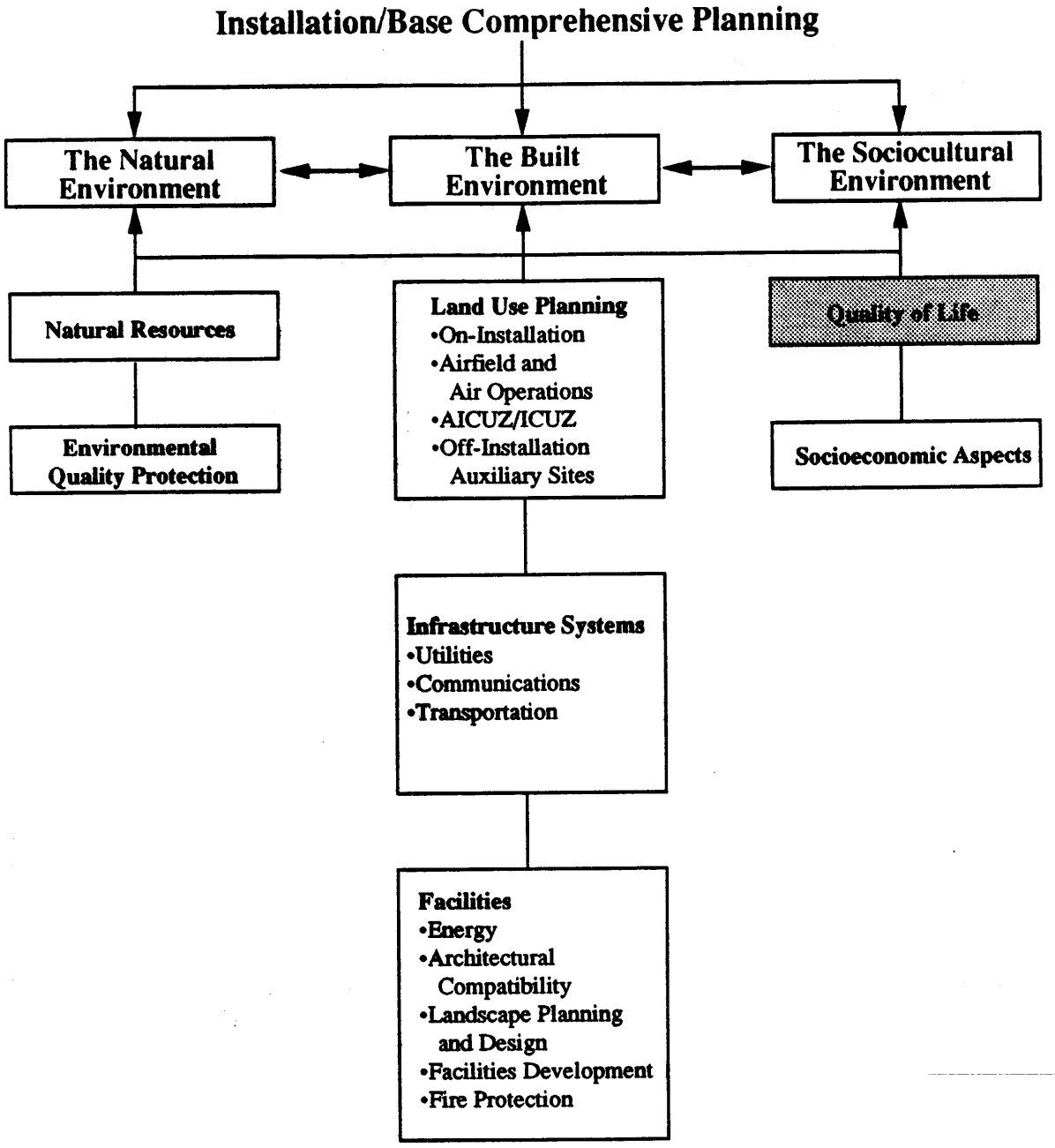
AFR 864 and AR 210-20 guide the planning process

a. The base or installation planner should act as the facilitator in integrating Quality of Life considerations into the comprehensive plan. Because of the significant and uniquely pervasive influence of QOL issues, however, the bulletin/manual should also provide guidance to installation commanders, MWR personnel and all other persons interested in or charged with enhancing the Quality of Life at military installations. The bulletin/manual distinguishes between those QOL considerations that typically can be addressed as part of the comprehensive plan and those program considerations that are beyond its charge and require Command attention.

The planner is the facilitator

Comprehensive Planning Components

Figure 1-1



1-3. Comprehensive Planning Goals. The primary purpose of the comprehensive planning process is to guide the development of the installation. The expressed Army and Air Force goals of this process are to:

- Provide effective and efficient use of installation resources to support the mission.
- Direct the long-range development of the installation.
- Integrate a number of interrelated functional programs derived from other components of The Plan.
- Relate mission planning to policies, programs and specific projects for installation facilities systems.
- Relate the development and operation of the installation to the social, cultural and economic aspects of the surrounding civilian community.
- Provide the basis for all decisions on siting of facilities and setting of priorities, and for preparation of the Five-Year Defense Program (FYDP) and other capital improvement programs, and for long-range facilities renovations and replacements.
- Make optimal use of the latest developments in energy-efficient concepts/systems/technologies.
- Protect the natural and human environment.
- Provide the highest possible quality of life for the Air Force/Army community.

B. HOW TO USE THE BULLETIN/MANUAL

A framework for planning for QOL

1-4. Bulletin/Manual Organization. The QOL bulletin/manual contains a framework for planning for QOL and suggested means of preparing and implementing a QOL Component Plan. It addresses those activities that most contribute to Quality of Life on and off the installation.

a. **Chapter 1 Introduction**. This chapter introduces the concept of Quality of Life and presents some common terms.

b. **Chapter 2. Quality of Life as Part of tile Comprehensive Planning Process**. This chapter defines QOL and describes nine key factors that comprise one's perception of QOL The chapter also explains how QOL goals and objectives interrelate with other Plan Components.

c. **Chapter 3. Analysis and Program Development.** This chapter describes the step-by-step process to be used by the planner to prepare a QOL Component Plan' including goal definition, data collection, survey of installation personnel, analysis of existing programs and facilities and QOL Plan preparation.

d. **Chapter 4. Implementation.** This chapter discusses funding sources and the setting of priorities to insure that QOL objectives are made an integral part of the planning process.

e. **Appendices.** The Appendices include an example of a QOL Component Plan and Questionnaire from Shemya AFB, Alaska, as well as a comprehensive reading list on Quality of Life-related topics.

1-5. **Terminology.** Non-specific military terms have been used wherever possible in this document. In some cases, generic terms were devised to avoid using terms specific to the Army or Air Force. Please refer to the table below for the specific Army and Air Force definitions of these generic terms.

Generic	Army	Air Force
Installation	Post	Base
The Plan (product)	The Installation Comprehensive Plan	The Base Comprehensive Plan (BCP)
Comprehensive Planning (process)	Installation Comprehensive Planning	Base Comprehensive Planning
The Planner	Master Planner	Community Planner
The Engineer	Director of Engineering and Housing (DEH)	Base Civil Engineer (BCE)
Major Command	MACOM	MAJCOM

2

Quality of Life as Part of the Comprehensive Planning Process

CHAPTER 2

QUALITY OF LIFE AS PART OF THE COMPREHENSIVE PLANNING PROCESS

A. BACKGROUND

2-1. Purpose

a. Despite the inclusion of broad-based QOL objectives in previous military installation plans, those plans often have focused on physical facilities and functional relationships directly connected to the primary military mission. This can appear to indicate a lack of commitment to other program elements, mostly those that are not facility-oriented or which are loosely defined as vital to enhancing Quality of Life. Comprehensive plans for civilian communities are similarly criticized.

b. In order to address these concerns in the services' approach to installation planning, it is necessary to define Quality of Life, to explain why it is so important to the military (and civilian) planner, and to show how QOL considerations can be integrated successfully into the planning process. The usual definitions of Quality of Life include insights into human behavior derived primarily from economics, psychology and sociology.

2-2. QOL Benefits

a. Although Quality of Life may never be defined to everyone's satisfaction, it is widely accepted that "good" Quality of Life, or high morale or happiness will produce many positive effects for the military, such as:

Quality of Life equals happiness

- Improved productivity
- Optimum recruitment and retention of personnel

- Better mission-readiness
- Lower costs, particularly personnel costs
- Greater job satisfaction.

But there are considerable problems in documenting the actual effects of "good" QOL, in factoring which programs are most cost-effective (that is, which give the most satisfaction for the least cost), and which programs are under the control of the installation planners and/or the individual installation user/resident.

Benefits of "good" QOL are difficult to prove quantitatively but few dispute the need to improve QOL at military installations

b. Rather than attempt to defend the inclusion of QOL issues in military plans by objective or quantitative studies, this bulletin/manual will simply assume that higher quality living and working environments in the Air Force and the Army will increase the likelihood of attracting and retaining more qualified people. Similarly, better Quality of Life on installations is assumed to contribute greatly to the satisfaction of spouses and other family members, which in turn adds to the satisfaction of military members. A perceived "high" QOL also will attract civilians to work on military installations.

B. DEFINITION OF QUALITY OF LIFE

2-3. Definitions

a. Webster provides an introduction to the concept of "Quality of Life", as follows:

- "Quality": degree of excellence
- "Life": the sequence of mental and physical experiences that make up the existence of the individual.

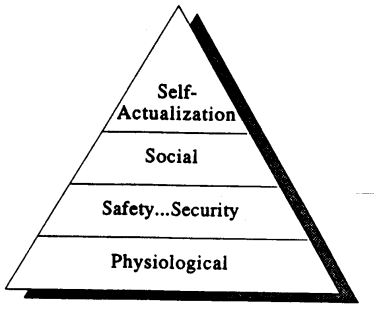
While a start, the separate definitions barely begin to indicate the complexity of the phrase and, paradoxically, almost mean too much. Unfortunately, there is no one compact definition.

b. Attempts to measure Quality of Life have gone through three stages, first focusing on economic well-being, then adding in a broad array of so-called objective or data-based socioeconomic indicators, and finally including subjective grounds or attitude evaluations.

Three approaches for measuring QOL:

- ***economic well- being***
- ***data based indicators***
- ***attitude surveys***

c. Economic well-being is defined generally as greater purchasing power in order to acquire more of the desired material goods and services. It is usually a function of income and cost of living, including family size, age, sex, education, position and other factors which determine not only income but also desires. It has been shown, of course, that many persons have a seemingly insatiable appetite for improving their life situations. According to the research and writings of Dr. Abraham Maslow, a foremost psychologist from the `50's, when certain wants are satisfied, others always seem to surface. As people meet lower-level needs (physiological, safety and security) they move on to such higher- level needs as belongingness, esteem and self-actualization (see Figure 2-1).



Maslow's Hierarchy of Needs
Figure 2-1

d. The second approach to defining QOL focused on identifying ways to measure objectively such indicators as educational achievement, health services, political participation, leisure time, crime rates and a number of other conditions that express mankind's wants. Many of these numerical indicators still require qualitative assessment and, with so many indicators involved it is difficult to account for all their interconnections and interdependencies.

e. The third approach to assessing QOL has been subjective measurement based on the assumption that society exists to meet the needs of people in it; to find out whether those needs are being met, we should simply go out and ask them. Generally, the technique includes attitude surveys which focus on such terms as happiness, satisfaction, sense of well-being,

aspirations and the like. As expected, there also are difficulties with this approach. Not only do different people have different opinions about their state of happiness, but major differences may also exist between what people perceive to be true and what is objective reality.

f. With all three approaches, it is never obvious how to rank the various findings. **The final assessment of success in measuring QOL will really be-the responses by the military in Its efforts to Improve QOL based on what military people seem to want or are looking for.**

g. Quality of Life is a statement that summarizes perceptions about physical, social, health, economic, political and environmental features of life. It is a composite measure that integrates many considerations about life, and is usually qualitative, not quantitative. Quality of Life is therefore a contextual concept, having no independent or absolute value. It is a statement about the relative well-being of an individual or group.

C. FACTORS THAT CONSTITUTE QUALITY OF LIFE

2-4. Introduction

a. The list of QOL factors that follows was derived from many sources including such research/library topical areas as cost and standard of living, health status indicators, life-style, quality of (work) life, job satisfaction, social indicators, social values, recreation, and environmental psychology. Research attempting to distinguish the relative attractiveness of cities and metropolitan areas, major sociological statistical studies and regular reports by polling consultants such as The Gallup Organization were also examined. Previous studies by the military services also contribute to the definition of factors.

b. The factors are presented without regard to order of importance. Which factors are more significant will vary by installation. With these qualifiers in mind, the nine QOL factors to be discussed here are:

- Economic Well-Being
- Social Well-Being
- Educational Opportunities
- Health Care
- Housing and Neighborhood Environment
- Environmental Quality
- Leisure Activity
- Community Support
- Aesthetics and Base Appearance

c. Each of these factors is illustrated in Figure 2-2 and will be discussed separately in the sections below. Examples of how to improve QOL under each factor are also included, more to help define the factor than to imply a full range of solutions or recommendations. **Please note that only a portion of those factors affecting one's perception of QOL fail within the purview of the Installation planner. This chapter defines the full scope of QOL factors; later sections of the bulletin/manual will focus on the subset of factors that can be directly Influenced and Implemented by the Installation planner.**

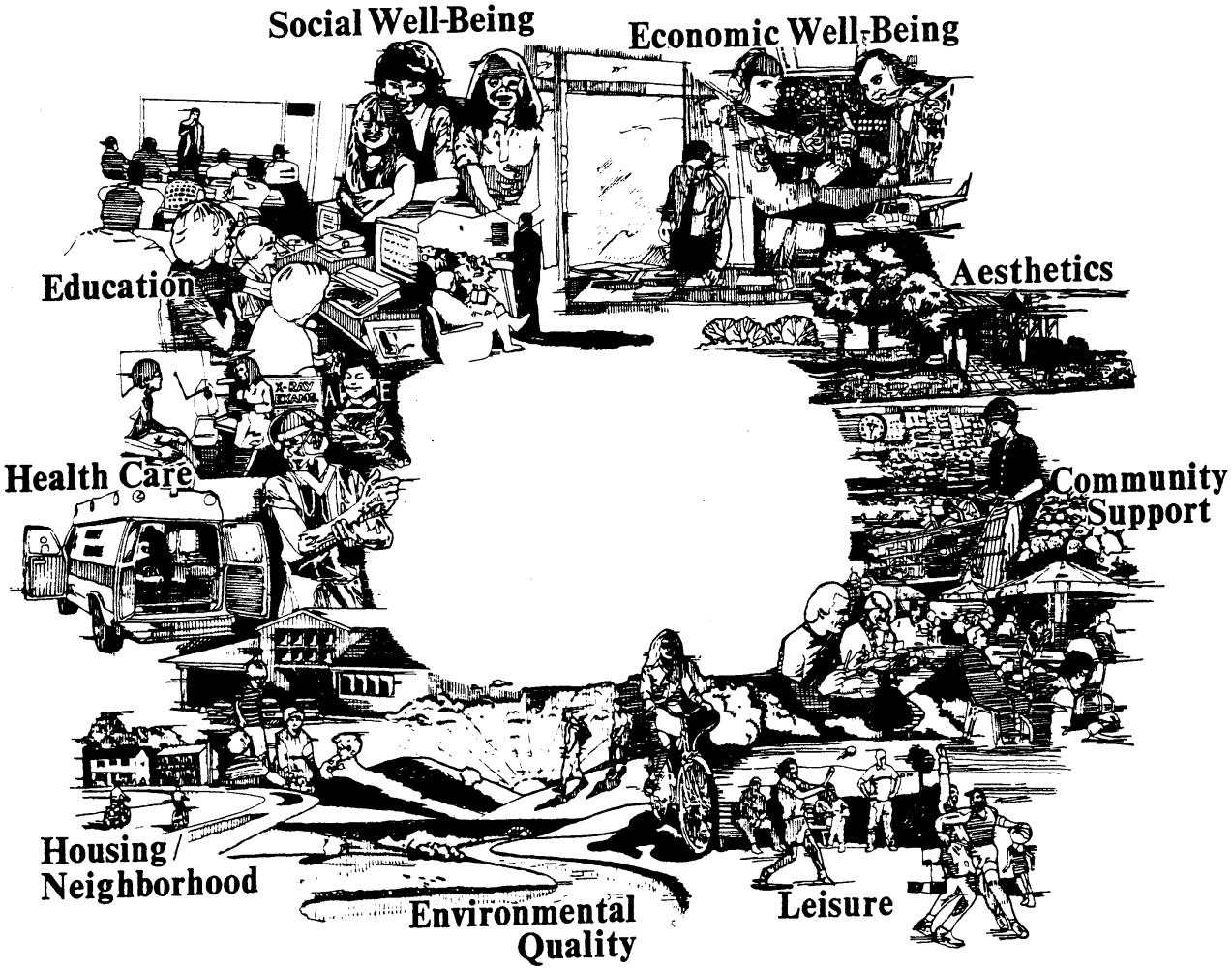
Only a portion of QOL factors fall within the purview of the planner

2-5. Economic Well-Being

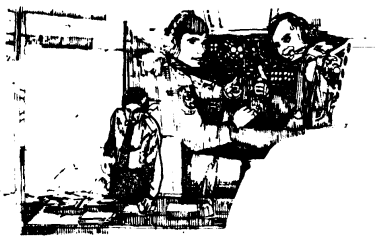
a. Economic well-being typically is associated with job satisfaction and equality of opportunity as well as with income. Job satisfaction has been defined by the federal government as:

> "Feelings about, or attitudes toward, the job one performs. This may be an overall evaluation, `all things considered,' or it may relate to specific aspects or features of one's work, such as its meaning or significance, its challenge, its material rewards."

Nine QOL Factors
Figure 2-2



b. A survey by the National Opinion Research Center concerning commitment to work found that at least two-thirds of those surveyed would continue to work even if they already had enough money to live as comfortably as they like for the rest of their lives. Obviously, if this is accurate, then work is more than just monetary reward, which has been proven over and over in other studies. Job satisfaction also changes over time, by age, sex, race, education, occupation and employment status.



c. Income, of course, still plays an important role in job satisfaction, but a sense of meaning ranks highest in most surveys ("Work is important and gives a feeling of accomplishment"). About half of respondents in one survey picked "meaning" as most important to job satisfaction. Income and promotion chances each received a fifth of the votes. Security ("No danger of being fired") and hours of work were considered of lesser importance. A similar survey of military personnel would probably differ slightly but not considerably from these overall civilian surveys.

d. An attitude survey conducted by the Air Force isolated nine factors for measuring "general satisfaction with various dimensions of quality of Air Force life." The first six, and perhaps even the eighth, are primarily related to economic well- being or job satisfaction. These are:

- Economic standard: satisfaction of basic human needs, and the ability to maintain an acceptable standard of living.

- Economic security: guaranteed employment, retirement benefits, protection for self and family.

- Free time: amount, use and scheduling of free time.

- U.S. Air Force, Conference on Families September 1980.

- Work: doing work that is personally meaningful and important, pride in work, job satisfaction, occupation.

- Leadership/supervision: superior/subordinate relationships, levels of interest, concern, communication, decision-making.

- Equity: equal opportunity, a fair chance at promotion, and an even break in job/assignment selections.

- Personal growth: to develop individual capacities, education/training, the chance to further develop individual potential.

- Personal standing: to be treated with respect, prestige, dignity, status.

- Health: physical and mental well-being of self and dependents, quality and quantity of health care services provided.

e. Despite the importance of economic well-being to Quality of Life, most of the implementation techniques are beyond the installation level of responsibility -- and certainly beyond the planner's scope of responsibilities. Congress plays the most significant role with its control over salaries, benefits and types of military projects to be undertaken. There are, however, still many activities at installation level that would enhance economic well-being and the planner should be aware of those opportunities. Some examples of economic program areas include:

- Home Ownership. Advice and assistance to all personnel so they can participate in investment clubs and/or acquire homes or other properties, thus allowing

military personnel to enjoy the same benefits of ownership and equity appreciation that civilians do.

- Joint Civilian/Military Activities. Many installations already do so, but more should encourage joint activities with local community civilians in order to show the benefits of the military to the community. This would help the local areas to appreciate the military more, which eventually would be reflected in greater on-the-job self-esteem for military personnel.

- Pay Comparability.

- Utility Guarantee. Work with utility companies to reduce or eliminate required utility deposits (electric, water, garbage, telephone) for families moving into new communities.

- Job-Sharing. Encourage use of part-time employment and job-sharing to help meet spouse employment needs and increase summer-hire programs for dependent teenagers.

- AAFES Credit. Expand Army/Air Force Exchange Service (AAFES) credit program/limits and add major purchase items (appliances, furniture) to authorized inventory.

- Family Programs. Investigate sources of federal, state and local funds available to support military as well as civilian family programs.

- Employment Information. Develop spouse/family employment information for each installation.

2-6. Social Well-Being

a. There are numerous statistical measures used to evaluate social well-being. The five major crime rates, for example, are used in surveys of livable cities. In addition to health, recreation and education indicators discussed in other sections below, analysts also use divorce rates, welfare recipient rates, incidence of single parents, attendance at cultural facilities, library book rates per capita, and many others to measure social well-being.

b. Many measures are beyond the control of the planner. With the use of focused small group research techniques, it is possible to develop many programs similar to civilian community efforts. For example, better housing design and aesthetic considerations at military installations could improve the sense of community cohesion often associated with social well-being. Programs for integrating families living off the installation into their communities would alleviate many of the usual difficulties of moving into new surroundings.

c. The Conference on Families report noted that permanent changes of station (PCS) were a major cause of family concern. Moving causes "severe family stress due to spouse employment problems, loss of friends, new schools, new communities and a new job environment for the member." The report listed a number of remedies for PCS problems, again some solvable only at higher levels but also some implementable in part locally if sufficient attention is paid to them at installation level. The recommendations included:

- Support Systems. Encourage overseas volunteers by providing incentives for the families of volunteers.

- Quarters Cleaning. Examine installation quarters cleaning options.

- DITY Moves. Provide more information about, and increase flexibility of, Do-it-Yourself (D~ moves.

- Precede Sponsor. Allow families to precede sponsor to new location and move into base quarters when available.

- House-Hunting Trip. Provide a fully-funded house hunting trip for member and spouse in conjunction with PCS.

- Language Training. Provide foreign language training and foreign culture orientation for family members going overseas.

- Moving Reimbursement. Increase travel and per diem reimbursements to offset moving and relocation expenses.

- More TLFs. Improve existing and construct more temporary lodging facilities (TLFs).

- HHG Moves. Upgrade program quality for moving Household Goods (HHG) by increasing weight allowance, deleting weight limitations on overseas moves, increasing government and contractor liability limits and, most importantly, improving contractor performance.

- INTOR/OUTOR Program. Improve INTOR (Individualized Newcomer Treatment and Orientation) and develop OUTOR (Outboard Orientation) programs. These programs will provide information on new assignment and facilitate transition to new base. Programs should place more emphasis on family needs.

d. Other social well-being recommendations focus on communications as a way of building community unity and support. For example, does everyone have the opportunity to learn about and take part in installation community affairs? Are there forums for voicing grievances and improving the installation community? Recommendations included:

- Town Meetings. Encourage Senior Installation Commanders to host family "Town Meetings."

- Remote Information. Provide an information package for spouses of members being assigned to unaccompanied tours overseas.

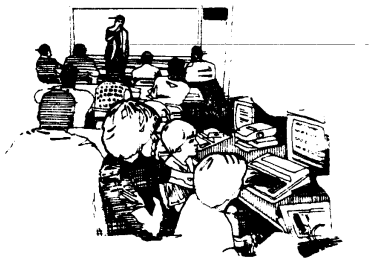
- AFAS Letter. Recognize and thank agencies such as the Air Force Aid Society (AFAS) for their revitalized role in supporting Air Force people and families, and encourage their continued support.

e. Other recommendations stress the needs of families:

- Family Information. Provide information for families directly to families, and information about family needs, concerns, programs, and trends to commanders and supervisors.

- Parenting Programs. Establish on-installation parenting training to emphasize parental responsibilities.

- Child/Youth Programs. Expand current child development programs and create a youth development program.



2-7. Educational Opportunities

a. Typically, educational issues include such concerns as:

- Is appropriate modern education available for every child, youth and adult?

- Are educational facilities uncrowded, properly equipped and in good physical condition?

- Are there highly qualified, motivated, well-paid teachers?

b. There are a number of accepted standards of educational excellence such as class size, testing scores, college achievement and so forth. The military has developed its own facility standards, such as those included in AFM 86-2 Standard Facility Requirements and the Army's Architectural and Engineering Instructions (AEI).

c. Educational opportunities off the installation can also vary widely by location. Personnel with special skills or knowledge may be interested in and willing to teach their skills, expertise or languages, to others. At nearby educational institutions all types of classes may also be available and of value to installation personnel.

d. The education-related recommendations included:

- Employment Education. Provide spouse and family employment education programs.

- VA Family Benefits. Permit transfer of Department of Veterans Affairs education benefits to member's spouse and children.

- Overseas Schools. Improve the quality of overseas school facilities and education programs.

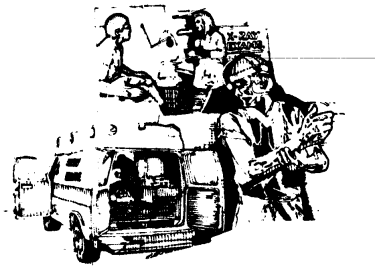
- Seminars/Event-Oriented Training. Conduct installation-level informational programs (for example, financial management, PCS/TDY family problems, dual career issues) and "event-oriented" family training (for example, marriage, retirement/separation, divorce, moves).

- Spouse Education. Expand educational opportunities for spouses.

- Personal Financial Management. Revitalize the Personal Financial Management Program (PFMP) and re-emphasize its availability to members and their families as well as to commanders, senior enlisted advisors, and first sergeants who need to be sensitive to their people's financial problems and potential solutions.

2-8. Health Care

a. The Conference on Families found that "Families are concerned with the quality and availability of medical services for dependents. Military health care programs have not kept pace with those now common in the private sector. Family dental care is a must."



b. The recommendations for health included:

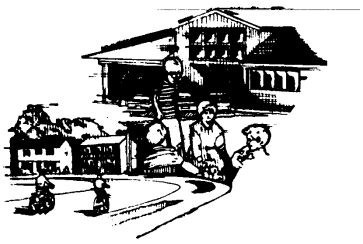
- Medical Entitlement. Provide dependent medical and dental care as an entitlement, or a full-support CHAMPUS medical and dental program as an alternative.

- Family Practice. Establish Family Practice concept at all USAF hospitals and clinics.

- Preventive Care. Establish and emphasize family preventive health care programs.

- FAST Program. Provide professional care for family members with alcohol, drug, or domestic violence problems through the Family Assistance and Support Team (FAST) concept and other programs.

2-9. Housing and Neighborhood Environment



a. Housing is a significant element in measuring QOL and has already been mentioned under economic and social well-being. The typical military (or civilian) objectives include:

- Ensuring the availability of adequate housing for every family.

- Ensuring continuous planning for improvement of residential areas, parks, highways and other community essentials.

- Ensuring that parking, traffic and transportation problems are being properly addressed.

b. Other issues related to housing (and planning) also occur indirectly in the category of community support. If the trend to living off the installation continues, as seems to be the goal of

Congressional funding and the desire of most military families, the influence of the installation planner on the regional living environment could become more limited.

2-10. Environmental Quality

a. Environmental quality covers a broad range of activities. Other bulletin/manuals treat various aspects of it as it relates to planning on the installation. The major topics of interest here include climate and weather, air and water quality, noise, congestion and density of development.

b. Climate is an often-measured component of QOL when evaluating civilian communities, but civilians often are able to choose their locations to match their specific preferences. Military installations, however, may have to be located in harsh climates for strategic reasons. There are many architectural and siting techniques for improving microclimates in most areas. For example, tree planting for shading, roof overhang treatments, fencing for dust and wind control, and proper placement of buildings and activities will lessen exposure to harsh climates. People react to weather differently, however, and programs should be tailored to the desires of people at each installation as determined through surveys or similar techniques. Much of the recreation planning and design within the military is oriented to outdoor, summertime activities. This places the added burden upon people in such locations as the northern tier installations to be creative in their design solutions.

c. Air quality and water quality are subject to regional constraints. Monitoring programs often are required to ensure that appropriate standards are being met on the installation and within the surrounding region. Each installation can assist in efforts at improving livability, for example, through programs to reduce transportation dependency and by designing facilities and housing to promote the most efficient practicable transportation patterns.

d. At some installations, especially those installations with airfields, noise can be a serious problem. Proper design and placement of new facilities can alleviate noise problems, but retrofit of poorly placed and/or reconstruction of existing facilities can be a major problem.

e. Congestion and development density are important environmental QOL factors in civilian communities and are likely to be a concern on military installations as well. Again, perceptions and tolerances vary. Whether these are problems at specific installations needs to be addressed on a case-by-case basis.

2-11. Leisure Activity

a. A variety of recreational opportunities typically are available on an installation. These can be gathering places such as gymnasiums or baseball fields, or may be places allowing more solitary recreation such as hiking and kayaking. Recreation areas can improve the health of installation personnel and broaden the range of social opportunities on the installation. Typical concerns include:

- Are there enough supervised playgrounds and facilities for outdoor activities, and are they in the right location?
- Is there full opportunity to take part in arts and crafts, photography and other hobbies?
- Is there ample occasion to enjoy music, art and dramatics?

b. Recreational facility standards and types abound in the private, public and military sectors (See AFM 86-2 and AEI). The requirements and shortfalls under desired criteria can be measured easily. But space and facilities can be limited, and conversely many existing spaces and facilities are underused during the week and

overused on weekends and special occasions. Or some facilities are improperly located, on marginal lands or "leftover" spaces. Emphasis often needs to be placed on wintertime activities where active programs are required to offset climatic conditions.

2-12. Community Support Services

a. Community support services include commercial and institutional facilities such as banks, credit unions, thrift shops, commissaries and exchanges, both on and off the installation. Most of the activities can be grouped under the word "shopping", which is an important component of Quality of Life. Shopping is much more than just the exchange of money or credit for goods and services. It can be recreational, social, entertaining and diverting, or it can be uncomfortable, boring and discouraging.

b. Most installation facilities have concentrated on the utilitarian aspects of shopping and, were it not for price or locational advantages, would probably be under-used. Much more could be done in terms of facility design and placement, display of goods and general enhancement of the shopping experience on most installations. Nevertheless, these facilities cannot satisfy the entire shopping experience. If more families live off the installation, then they'll shop in their own neighborhoods as well. Also, variety and diversity are important parts of the shopping and dining experience.

2-13. Aesthetics and Installation Appearance

a. Installation appearance and character are factors of importance to many disciplines and subject areas, including:

- Facility condition
- Architectural character

- Landscape design
- Transportation systems design and performance
- Utility systems design
- Natural features
- Cultural features
- Historical features
- Urban design

b. Studies have shown that people may have genetically transmitted predispositions or innate preferences for specific natural surroundings, such as:

- Grass landscapes
- Water in the landscape
- Open spaces
- Prospects or long, sweeping vistas
- Refuges or hiding places.

c. There has also been a great deal of research on color, including beneficial aspects of sunlight. New fields such as photobiology and color therapy, and old specialties such as consumer preference studies, have documented the importance of color in the environment. Sunlight also has been found to suppress the production of a hormone called melatonin which may affect mood, fertility and other body functions.

d. Other bulletin/manuals also discuss aesthetics and installation appearance; e.g., those on Architectural Compatibility and Landscape Planning and Design. It is the planner's job to articulate the needs and desires of the installation residents as well as the Commander with respect to appearance and design, and to increase overall awareness of the concepts involved.

D. RELATIONSHIP TO OTHER COMPREHENSIVE PLAN COMPONENTS

QOL Relationships
Figure 2-3

2-14. Introduction. Once QOL goals/and objectives are defined, the QOL Component Plan must be prepared as a unique but still integral part of the larger comprehensive plan (see Figure 2-3). It is imperative that the QOL Plan be consistent with other plan components. It is also important that the QOL Plan influence the ongoing, day-to-day comprehensive planning process. QOL goals and objectives should be respected; QOL programs and the needs of installation personnel, families and civilians should be a priority; QOL programs should be implemented in a timely manner.

2-15. Natural Resources Plan. QOL concern about environmental quality is supported by natural resources planning for land, forests, croplands, vegetation, fish and wildlife on an installation. Management of natural resources can establish a beautiful and productive setting that is a source of pride and an excellent nearby learning environment. Natural resource planning can create landscape and recreation resources such as stream corridor parks or trail systems where people can gather and participate in various activities. Such planning also affects the availability of resources for vegetative cover, visual screening, shade or aesthetic quality. Similarly, historic preservation of structures and places provides a sense of heritage and identity for residents, enhancing the Quality of Life on the installation and linking it to the area's historic origins.

2-16. Environmental Quality Protection Plan. The judicious use and conservation of resources protects irreplaceable natural features and the health of installation personnel. Analysis of potential impacts of environmental factors such as air and water quality and such mitigation measures as proper quantity-distance zones, waste disposal methods, hazardous-waste handling and power plant siting provide the means for retaining and enhancing environmental quality.

2-17. Land Use Plan. QOL goals and the I-and Use Plan are closely connected. QOL concerns about aesthetics, choice and satisfaction with homes, work places and leisure activities should be addressed comprehensively but land use is the primary framework for implementing solutions. The functional relationships analysis of QOL programs can contribute to land use locational decisions that improve access, time utilization, neighborhood character and other key quality of life features on the installation.

2-18. Transportation Plan. QOL considerations directly influence and benefit from sound transportation planning. Implementation of the Transportation Plan meets functional needs and provides both a sense of orientation and a hierarchy of streets and thereby improves Quality of Life for installation personnel. A good transportation system facilitates access and circulation with minimum dissatisfaction. It also offers choices among modes of transportation so residents can walk, bicycle, drive or ride transit. It achieves QOL objectives for improvement of accessibility of facilities, ease of circulation, efficient travel, and productive use of time.

2-19. Environmental Design Guidelines -- Architectural Compatibility. The QOL Plan and Environmental Design Guidelines share a common objective of improving the living and working environments on the installation. Architectural compatibility helps to ensure the harmonious appearance of installation facilities and integrates the installation in its manmade and natural settings, which in turn contributes to pride of place and a sense of belonging. Architecture can assist in the orientation of assigned personnel and visitors by providing landmarks or distinctive structures that help them find--and enjoy--their way. QOL goals and objectives contribute by defining a shared sense of value of the built environment.

2-20. Environmental Design Guidelines -- Landscape Development Plan. Quality of Life, or a sense of well-being, can be created in part by a well-landscaped setting where users enjoy a safe, aesthetically pleasing experience. Landscape defines spaces -- contributing to the identification of neighborhoods, strengthening the form of gathering places for everyday use or events, and orientation for travelers along roads or paths. Signage and street furniture add to enjoyment and comfort in the outdoors. Architecture or landscape features often define the boundary or edge between the installation and neighboring development, creating a presence or identity for the installation and ensuring that the installation is harmoniously integrated into its setting.

2-21. Long-Range Facilities Development Plan. Planning for new construction, replacement, renovation or major alterations requires the same vision of a desired future state as planning for QOL. QOL goals and objectives should influence decisions about the amount, size, location, type and variety of facilities developed over time. QOL should be considered when the Installation Engineer determines how to minimize the noise, dust and disruption of daily life that accompany construction of facilities.

2-22. Other Components. Successful implementation of all planning components contributes to many aspects of QOL. Other components, not described above, include AICUZ, Utilities, Communications, Energy and Fire Protection. To the extent that implementation of each fulfills functional requirements (like reliability of water systems or quick response to safety hazards) it also fulfills QOL requirements for a healthy, safe, reliable, efficient working and living environment.

3

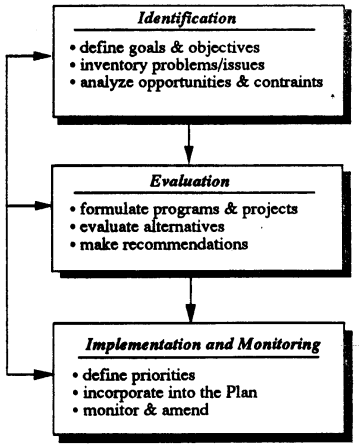
Analysis and Program Development

CHAPTER 3

ANALYSIS AND PROGRAM DEVELOPMENT

A. INTRODUCTION

3-1. The QOL Planning Process. Planning for QOL is essentially the same as other planning processes. It is a logical, problem- solving method which includes identification, evaluation, implementation and monitoring. Because QOL issues permeate all aspects of working and living at military installations, however, significant effort needs to be spent on the early phases--identifying and evaluating the opportunities and constraints at each installation. This information is then channeled into both the QOL Component Plan and other components of the comprehensive planning process for implementation. Implementation will be discussed further in Chapter 4. The major steps in the process are shown in Figure 3-1 and defined below.



Planning Process
Figure 3-1

a. Identification. This step sets the direction, documents the QOL assets and establishes the needs. It includes the identification of:

- QOL goals and objectives of the installation.
- An inventory of the QOL issues and problems, constraints and opportunities, with respect to the present and future mission and program requirements.

b. Evaluation. This step includes the analysis of the information assembled in the identification phase, and the formulation and evaluation of potential alternative actions. Some of the important activities include:

- Early formulation of concepts and programs for meeting QOL objectives.

- Evaluation of concepts and programs against a set of constraints and opportunities, both on and off the installation, as appropriate.

- Formulation of a list of possible alternatives, limited by the constraints/opportunities screening process and by programmatic limits, such as time and funding.

c. Implementation and Monitoring. In this step, the planner:

- Prepares and develops detailed programs, policies, and projects required to implement the selected course of action (or combination of alternatives).

- Identifies implementation steps available for addressing directly (through the planning process) and addressing indirectly (by facilitating the programs and priorities of others).

- Coordinates implementation with off-site considerations.

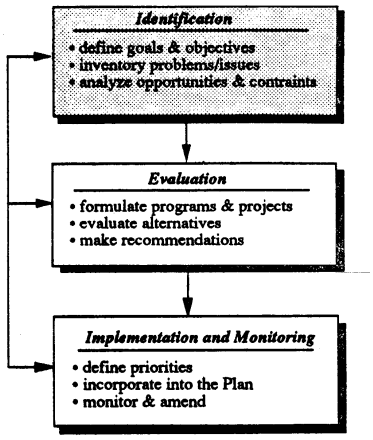
- Monitors progress and proposes/makes necessary adjustments to programs, policies and projects to better meet QOL objectives.

B. QOL GOALS AND OBJECTIVES

3-2. Defining Goals and Objectives

a. The first step in developing the QOL Plan is to define the overall goals relative to improving the installation's natural, built and socio-cultural environments. Goals should be formulated under each

of the nine QOL factors described in Chapter 2, as appropriate. Goals should reflect the unique setting and conditions of each installation. Excellent examples of specific goals for a QOL Component Plan are included as Appendix A for Shemya AFB, Alaska, pp. A1-A3.



b. As discussed in earlier chapters, certain QOL Goals, i.e., those relating to Aesthetics and Base Appearance, Leisure Activity and Housing, can generally be addressed and actions taken by the installation planner as part of the normal comprehensive planning program. Other goals such as those relating to Educational Opportunities and Health Care may be facilitated by the planner but typically require the Commander's leadership and action to initiate change. Still others, such as Economic Well-Being, may be well beyond the Command and may require military-wide changes, Congressional action, etc., and therefore are more difficult to influence.

c. As a first step in defining QOL goals and objectives for an installation, the planner should facilitate a workshop or series of workshops with all interested installation personnel to identify and describe the goals and objectives of the QOL Plan. The results should be documented and circulated to all participants for review and concurrence.

d. The following set of goals and sub-goals is provided for illustrative purpose only. Each installation should tailor the list to its own specific needs and should definitize the goals into specific objectives as costs, timelines and available resources are identified.

3-3. Economic Well-Being

Goal: Workplaces and residences that are safe, healthy and productive, increasing workers' sense of control over the environment.

Sub-goal: Design circulation systems and land use plans to optimize safe, efficient access to and movement within and around facilities.

Sub-goal: Organize facilities, operations and personnel to optimize easy performance of activities.

Sub-goal: Minimize safety and health risks through improved communications about emergency responses and procedures.

3-4. Social Well-Being

Goal: A range of QOL social programs that promote a sense of belonging and affiliation.

Sub-goal: Plan for a variety of large- and small- group associations to enhance personal and group identity.

Sub-goal: Share and exchange on-installation and' off-installation activities.

Sub-goal: Program shared use of facilities for a variety of groups or organizations.

Sub-goal: Design physical spaces on the installation to accommodate all sizes of groups and engender group association.

Sub-goal: Initiate self-help improvement activities that foster pride among residents on the installation.

Sub-goal: Provide a sanctuary for the spiritual nourishment of installation residents.

Sub-goal: Provide opportunities to enjoy various forms of entertainment.

3-5. Educational Opportunities

Goal: Educational opportunities for users of all ages.

Sub-goal: Provide for the elementary, middle, high and adult education including PMB.

Sub-goal: Offer diverse adult educational and vocational courses and materials.

Sub-goal: Provide training and laboratory programs that encourage personal development and exploration of new technologies.

3-6. Health Care

Goal: Adequate facilities and programs to maintain and improve family health profiles.

Sub-goal: Provide preventive programs as well as traditional health facilities to promote family physical and mental health.

3-7. Housing and Neighborhood Environment

Goal: Design variety and a measure of individual choices into the process wherever possible and feasible while retaining overall installation design harmony.

Sub-goal: Optimize home and neighborhood improvement program opportunities while achieving compatibility -- not uniformity -- and retaining visual harmony.

Sub-goal: Offer diverse recreation, educational, health, social and commercial leisure time activities and services.

Sub-goal: Provide a variety of pedestrian, bicycle and automobile circulation routes.

Goal: QOL programs integral with and supportive of workplace and residential activities.

Sub-goal: Plan QOL programs that are readily accessible from both workplaces and residences.

Sub-goal: Ensure availability of QOL programs at convenient hours for all users.

Sub-goal: Take advantage of opportunities for multiple use of facilities.

3-8. Environmental Quality

Goal: Installations experiencing minimal negative environmental impacts because of their strategic location or mission operations.

Sub-goal: Plan and locate facilities and access points to minimize adverse effect of wind, cold, heat and similar climatic extremes.

Sub-goal: Promote programs and events that turn harsh climatic conditions into appropriate opportunities for recreation and competition (for example, dogsled races, ice-sculpture contests, orienteering, competitions, etc.).

Sub-goal: Provide highest possible air and water quality for installation personnel.

3-9. Leisure Activity

Goal: Wide variety of recreation activities that foster health, personal growth and enjoyment.

Sub-goal: Offer both indoor and outdoor recreation facilities and activities.

Sub-goal: Offer both team and individual, competitive and non-competitive sports activities.

Sub-goal: Provide for artistic and crafts creativity.

Sub-goal: Offer library and museum activities and programs.

3-10. Community Support

Goal: A variety of commercial leisure time activities available off the installation supplemented with commercial leisure activities on the installation.

Sub-goal: Provide shopping opportunities on the installation.

Sub-goal: Enable residents to purchase personal beauty and health care services on the installation.

Sub-goal: Provide the setting and skilled professionals for assistance in business and financial services.

Sub-goal: Promote participation in local community affairs.

3-11. Aesthetics and Installation Appearance

Goal: Installations having a balance between development requirements and conservation of natural and manmade resources for the health and enjoyment of people on the installation.

Sub-goal: Conserve in their natural state areas of irreplaceable natural resources or beauty, for the enjoyment and education of installation personnel.

Sub-goal: Preserve notable landmarks and structure or areas of historic, architectural or aesthetic value to promote continuity with the past.

Goal: An attractive and enjoyable physical setting wherever possible for each installation.

Sub-goal: Ensure that the architectural and landscape design on the installation uses appropriate design concepts as well as high quality materials and construction techniques.

Sub-goal: Provide a distinct identity for the installation that is compatible in the local setting.

Sub-goal: Integrate historic and cultural features into the conservation and development plans for the installation.

Sub-goal: Ensure that all buildings, roads and open space are maintained properly and consistently.

C. GATHERING BACKGROUND INFORMATION

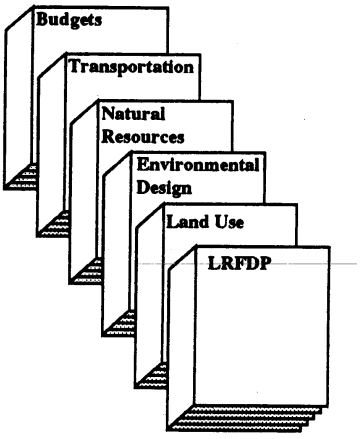
3-12. Information Sources

a. Each military installation has a history of planning for facilities and programs. The planner should thoroughly' search the installation files and bookshelves, and the memories of Base Civil Engineering/Directorate of Engineering and Housing (BCE/DEH) personnel and MWR personnel, to gain a complete understanding of all previous plans, studies and guidelines for the installation that may have a bearing on development of the QOL Plan.

b. Potential sources of information include:

- Any recent interviews or surveys of the installation organizations.

- The Land Use Plan showing the location of QOL facilities on the installation and serving as the first step in identifying the programs associated with those facilities; also, the Functional Relationships Analysis (FRA), depicting spatial and operational relationships.



- The Long-Range Facilities Development Plan containing the long-range plan for addition, renovation and demolition of facilities and an inventory of available development sites and sites constrained from development.

- The Environmental Design Guidelines for Architectural Compatibility and Landscape Development, with data about architectural and landscape features and areas of historic, cultural and aesthetic value.

- The Natural Resources Plan which addresses the availability of natural resources and recreation areas.

- The Environmental Protection Plan for sensitive resources, habitats or species.

- The Transportation Plan establishing available capacities, possible circulation routes, congested or hazardous routes, and other characteristics of land, water and air transport.

- Real property records about current facilities, their occupancy, use and square footage.

- Other studies, such as the Utilities Plan, AICUZ/ICUZ, Installation Restoration Programs, Cultural Resource Studies, maps for restoration projects, visual features and sight lines; and constraints such as Inhabited Building-Quantity Distance Zones (IBDs), utility casements, firing- range impact areas and noise zones.

- The five-year major construction program, with its priorities for new facilities on the installation that meet both the needs of the mission(s) and the objectives of QOL programs.

- The Nonappropriated Funds (NAF) annual budget for QOL-related programs and facilities.

- Recommendations prepared by others such as those in a Planning Assistance Team (PAT) Study or an Interim Planning Framework effort. These studies reflect the experienced judgment of military planning professionals regarding land use, facility siting and utilization, and urban design issues.

Programs and facilities outside the installation enhance QOL for installation residents

3-13. Regional Context. Plans, reports and documents concerning the region surrounding the installation should also be obtained. There are many existing QOL programs and facilities outside the installation that enhance the Quality of Life for installation residents. These include recreation facilities/programs, historic sites, museums, educational institutions or programs, restaurants and other commercial entertainment, social gathering places such as churches, and other opportunities for cultural exchange. The location and nature of these should be identified, especially those cited by respondents to other surveys. These facilities and programs should be listed and incorporated in an annotated regional map. While the installation cannot alter or improve many of these facilities or programs, better access to them and communication about their availability can be provided, increasing the opportunities for installation people to take advantage of them. In many cases, joint efforts can bring necessary changes to civilian activities that are beneficial to all.

D. INTERVIEWING INSTALLATION ORGANIZATIONS

3-14. Gather Data About QOL Programs and Features

a. Interviews should be conducted to gather information about facilities and operations associated with the mission(s). Additional information will be needed about the conduct of non- mission-related, QOL supporting activities. These interviews provide the planner an excellent opportunity to gain a good understanding of the function, activities, personnel requirements and locational needs of each QOL program. The product should be a listing of all QOL programs and facilities and the characteristics of each.

b. Before conducting interviews, the planner should meet with MWR staff to become acquainted with the range of QOL programs and activities and the responsible organization(s).

c. After the planner has gained a preliminary understanding of existing QOL programs and facilities on the installation, he should, in conjunction with MWR personnel, schedule interviews with the manager of each QOL-related program and discuss current QOL programs, activities, funding sources, personnel requirements and future plans. Commanders and those in charge of the overall QOL program for an installation should be encouraged to participate in the interviews.

d. At a minimum, the following topics should be covered for each QOL program:

- Program activity
- Program manager
- Number and distribution of employees and/or volunteers served by or needed to conduct each program

- Current QOL facilities used (size, capacity, physical characteristics)
- User characteristics (number, age group, sex, rank)
- Capacity and adequacy of current QOL facilities and future facility needs
- Operating costs
- Funding sources
- Parking and other special requirements
- Future QOL activity plans
- Personnel needs, operational difficulties or other requirements affecting program conduct.

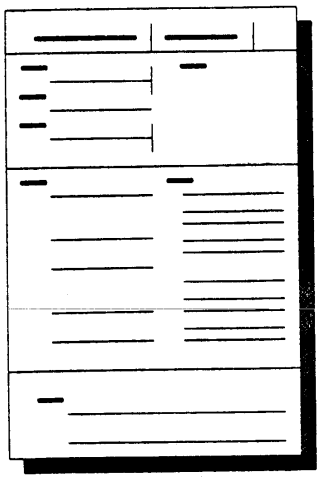
e. The planner should record the names, titles and telephone numbers of the persons interviewed so they may be contacted if further information is needed later in the planning process.

f. As soon as possible after the interviews are complete, summaries of the data for each program should be prepared. Follow-up telephone or personal interviews may be needed at this time to clarity information or fill in gaps in the data.

E. SURVEYING INSTALLATION PERSONNEL

3-15. Different Types of Surveys. Some of the more commonly used techniques for gaining useful behavioral information are surveys, questionnaires and interviews. Despite the problems involved with predicting behavior, a knowledge of the user's attitudes, opinions and preferences is very important.

a. Surveys and polls are a pervasive part of American life and come in many shapes and levels of reliability. Opinion or attitude surveys which generally rely on scientifically selected, random sampling techniques such as the Gallup Polls are consistently reported in the daily media.



Survey Format
Figure 3-3

b. Surveys are a way of communicating with installation users. If publicized and implemented, they can significantly assist efforts to improve services, facilities and morale. The intent of a QOL survey is to solicit the opinions of installation personnel and their families to learn their attitudes toward QOL programs, needs and conditions of life on the installation. A survey could be conducted for each installation when preparing a QOL Program Component. Surveys should produce information about the availability, variety, frequency of use, accessibility, adequacy, convenience, desirability and relative importance of QOL-related programs and installation characteristics. Surveys can also yield reasons why people use or do not use QOL--related programs.

c. An example of a QOL Survey used as part of the Shemya AFB, Alaska, Comprehensive Plan is included as Appendix B. An analysis of the survey findings is also included in Appendix B.

d. In addition to attitude surveys, data-structured surveys are used to evaluate the Quality of Life by city or region of the U.S. These surveys rely on published statistics in appropriate categories. A recent example used 10 categories to rank communities in the San Francisco Bay Area.

e. Obviously, the data indicators selected and how they are weighted can seriously affect the results. With computers it is relatively easy to examine the results of different evaluation criteria, but the value of data-based surveys may be limited. They rely on

quantitative data that may not be truly representative of QOL' and"' `understandably ignore other factors that are as important or more important but cannot be quantified. Coupled with attitude surveys, however, they can help the planner to determine the relative importance of factors, to identify those factors considered important by others, to rate the area where the installation is located in order to measure off-base amenities, to get people talking about their areas and how to improve them.(as well as identify how they disagree with the results), and to focus in on those measures which can be controlled and implemented.

Survey types include:
- ***Data-based comparisons***
- ***Attitude surveys***
- ***Small-group sessions***
- ***One-on-one interviews***
- ***Direct observation***

f. The locational aspects of QOL, however, may not be controllable. Although the nation's military population is geographically diversified (the majority of military personnel live on 201 major installations scattered across 43 states), it is also highly concentrated. Four states (California, Texas, North Carolina and Virginia) are home to almost 39 percent of all U.S. military personnel, and many installations are located in sparsely populated counties, thus implying less access to a wide cross-section of regional amenities.

3-16. Small-Group Research Surveys

a. Small-group surveys are used widely by marketing people to solicit opinions on new products and consumer services. Usually small group sessions with a dozen or so selected persons are asked to respond to a new product or comment on more general topics. The planner similarly could assemble a representative group of civilians and military personnel to comment on installation facilities and services. The market group should include spouses and civilians as well as a reasonable cross-section of ranks and interests -- able to talk freely and openly about problems and solutions. Obviously, the leader or monitor of such a group must be fairly skilled, knowledgeable and trusted if the technique is to provide significant outputs.

b. A variation of the small-group survey would be one-on- one interviews in order to elicit wide-ranging comments on quality of life on a given installation. A good example of a focused survey is a 1988 research project that examined the influence of the built environment on quality of life at three Air Force installations by Stan Bell in 1988.* The survey involved 52 volunteers who were each "interviewed in an open-ended way for about one hour each. These interviews were recorded and later transcribed. The responses to each of the questions were analyzed in terms of the range of topics and commonalties and the findings then revealed those aspects of the built environment that are important to the interviewees."

Use one-on-one interviews as well as small-group surveys

c. In some sense, group interview techniques are not unlike local civilian planning efforts where citizen committees get together to develop planning goals, objectives and policies and to react to the planner's proposals. The small-group or focused survey can also be used to structure installation-wide attitude surveys.

3-17. Structured Observation Techniques

a. A type of survey often used by landscape architects, park planners and other planning professionals is the structured observation survey. Usually, these surveys are used to evaluate places and the way they are used (and/or not used) in order to make corrections in that particular space or to aid in planning of future spaces.

* Bell, Stanley M. The Influence of the Built Environment Toward Quality of Life in the Air Force, January 1988.

b. For example, a survey of train stations in Germany in order to recommend functional improvements required the observers to photograph comprehensively events and interactions over a period of several months. Similar observation techniques might prove very useful for improving public spaces in military installations. Even if volunteer labor could be used, however, it would require some professional supervision by people trained in these techniques to ensure the project is correctly designed and analyzed.

c. The advantage of systematically photographing or documenting the use of facilities and services, however, may be the impact it conveys to the non-professional. It could be used with small-group research surveys, for example, to elicit more specific responses.

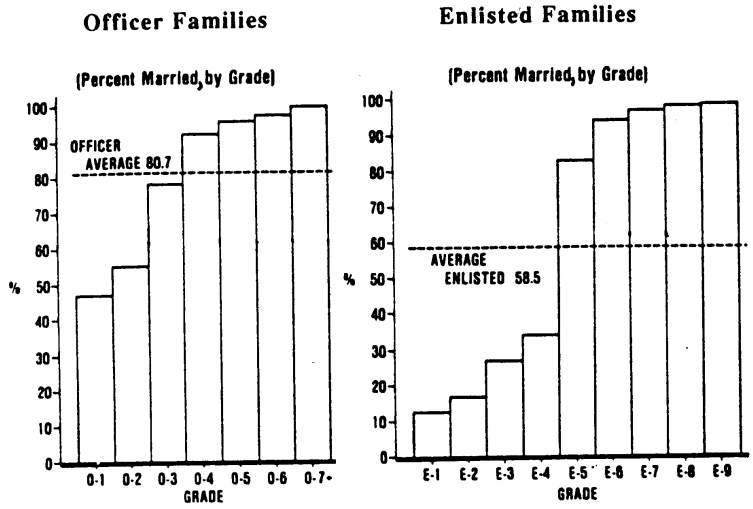
3-18. Who Is Being Surveyed

a. The type of survey technique to be used is important in terms of costs and effectiveness but just as significant is the question of who is being surveyed. Although the tendency is to classic the military person or family as not much different from the average American family when evaluating QOL, there are significant differences. Media and marketing experts who see the military as a unique market are quick to emphasize significant differences between the 2.2 million military personnel and the general public or other market areas. For example, despite recent female recruitment, the military is still more than 90 percent male compared to less than 49 percent nationally. The military median age is less than 24 years compared to more than 32 nationally.

b. Marketeers claim that in terms of its $30 billion active duty payroll, with little or no unemployment and a lower than-average cost of living, the military segment is one with "plenty of disposable income." Average annual compensation in 1986 for all personnel was $27,00(), with officers receiving $51,00() on average and enlisted personnel $22,800.

c. A significant percentage of all military personnel are also married, which adds 1.2 million spouses and nearly 1.7 million children to this market. Fifty-five percent of all military personnel are married (74 percent of all officers and 58 percent of enlisted men). QOL in the military therefore is significantly a family affair. In the Air Force these rates are somewhat higher than in the Army. When trying to identify the market for QOL services, products or facilities, therefore, there may be a need for more sophisticated identification of the target populations than the typical demographic profile provides.

% Married, by Grade (All Military Branches)



Source: Conference on Families

Figure 3-4

3-19. Distribution and Completion of the QOL Survey. Where an attitude survey is used, it should be mailed, with a cover letter stating its importance, to all heads of household on the installation, with a schedule showing a desired completion date and a map showing numerous convenient collection locations. Respondents should recognize that it is an opportunity for their opinions on QOL programs to be considered. Not all personnel will respond. For example, the Shemya AFB QOL Survey was sent to 500 base personnel and eighty completed questionnaires were returned. While not a true random sample, composite results do reveal a number of clear trends. Whether the return rate is appropriate or not will depend on such factors as how the respondents fit the overall profile and on other technical criteria. Planners can ensure a higher rate of response by making collection locations very convenient for respondents.

3-20. Analysis of Survey Results. Analysis of the attitude survey results provide the products listed below:

a. Identification of QOL users: By requesting basic demographic information in the survey, the planner can develop a profile of respondents' age, sex, pay grade, marital status and tenure in the service. Tables and/or diagrams illustrating this information should be prepared.

b. Use patterns for QOL programs: The survey will show frequency, schedule and duration of use by type of program. This information can be documented on a matrix organized by program type.

c. Profiles of who is using each facility and/or program: The user groups associated with each facility and program should be identified. Through the use of computers wherever possible, the survey will show the linkages of users to QOL facilities and programs.

d. Summaries of unmet needs or new means of meeting needs: Survey respondents will be given the opportunity to identify unmet needs or identify new facilities or programs that would meet needs. This may include expansion of existing facilities or programs or development of new ones. These findings should be itemized and summarized.

F. ANALYZING ADEQUACY OF EXISTING INSTALLATION FACILITIES AND FEATURES - OPPORTUNITIES AND CONSTRAINTS

3-21. Map QOL-Related Facilities and Features

a. The Land Use Plan developed for the installation provides a map of the location and size of all installation facilities. These facilities are directly related to QOL concerns but other features of the installation also contribute and should be mapped where appropriate. For example, the location, scale and character of a parade ground directly determines how large a gathering can occur, and indirectly what visitors' initial impressions are and what is the tone or distinctive character for an installation. Similarly, a cluster of historic buildings is a unique place with cultural and educational value.

b. Map the location in a building or open outside spaces where each program is conducted. A composite map showing recreational, educational, social, commercial and health program sites should be prepared (see Figure 3-5).

c. Historic features are revealed by the sequence of historic events and by locations of historic structures or areas associated with the events. The installation should be reviewed to identify any major structures, sites or commemorative features. Relics from events such as Indian battles and monuments to technological advances should be mapped. Historic artifacts or structures are cultural points of interest to be integrated--perhaps even highlighted--as part of the

comprehensive plan implementation. These resources can also contribute to QOL education programs. Archival research with the assistance of the State Historic Preservation Office or a review of prior planning documents for the installation will provide the necessary data for mapping these historic features.

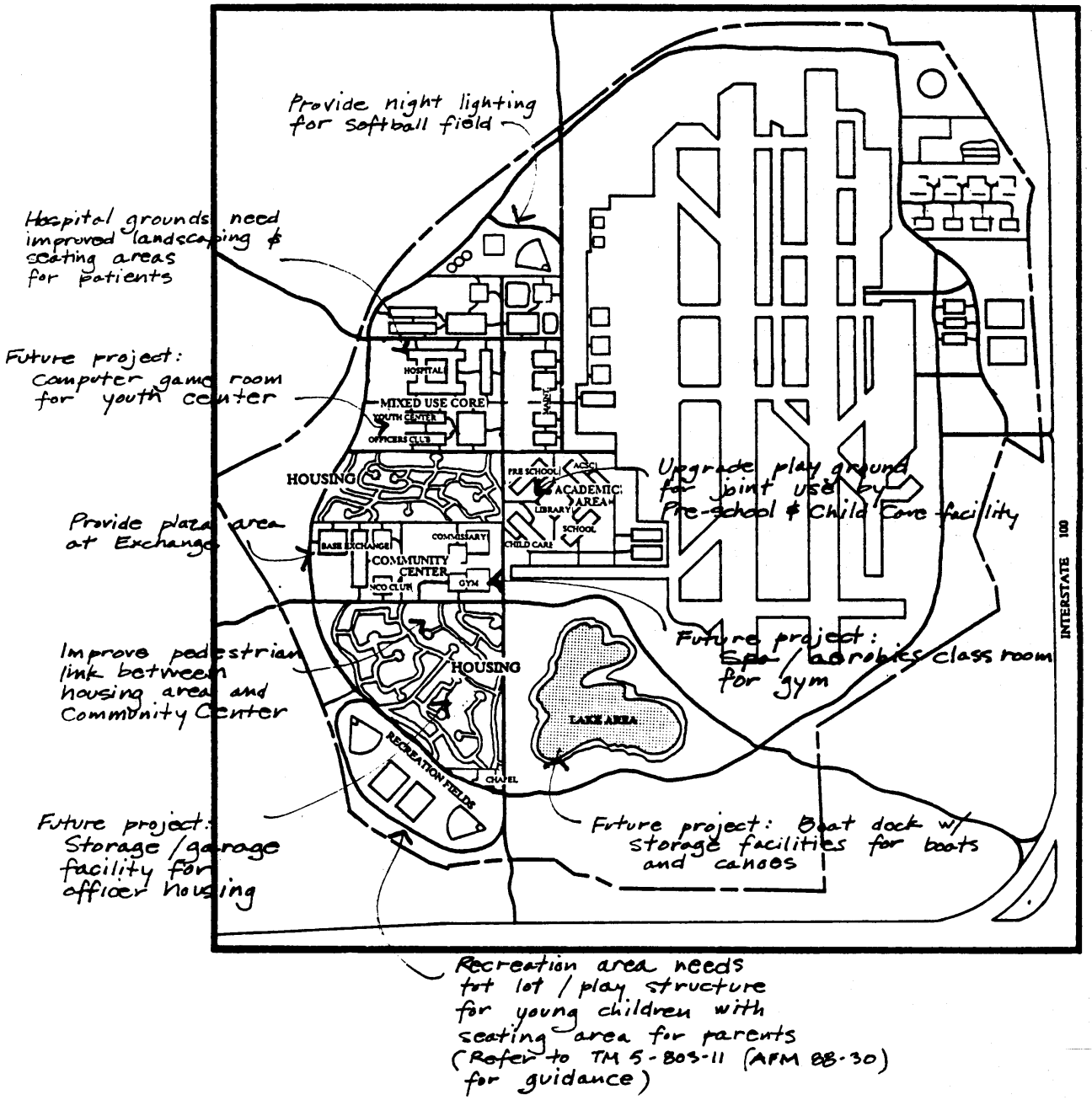
d. Museums and other socio-cultural features may also exist on or near the installation. These provide educational opportunities for residents of all ages. They should be mapped since they are part of the QOL resources available to personnel.

e. Architectural and landscape features may be addressed in documents such as Architectural Compatibility Guidelines' Landscape Planning and Design Guidelines, Tri-Services Installation Design Guidelines and local guidelines developed at specific installations. Architectural factors to be reviewed include form, scale, bulk, massing, siting, character and exterior treatment.

f. Landscape factors to be documented include form, scale, character, plant treatment and maintenance. For QOL it is of primary importance to diagram the urban design relationships at gathering places such as community centers, recreational open spaces and parade grounds. The built environment succeeds when the interplay between buildings and open space creates an interesting, attractive and functional installation. The ways that scale and arrangement of buildings define or shelter a public space influence the space's character and usefulness. Conversely, the openness or vastness of a public space influences the type of activity that takes place there. Off the installation, major historic homes, parks or recreational opportunities are of value to installation personnel. All of the features that contribute to the Quality of Life on the installation should be mapped, with associated text evaluating them.

Map of QOL-Related Facilities and Features

Figure 3-5



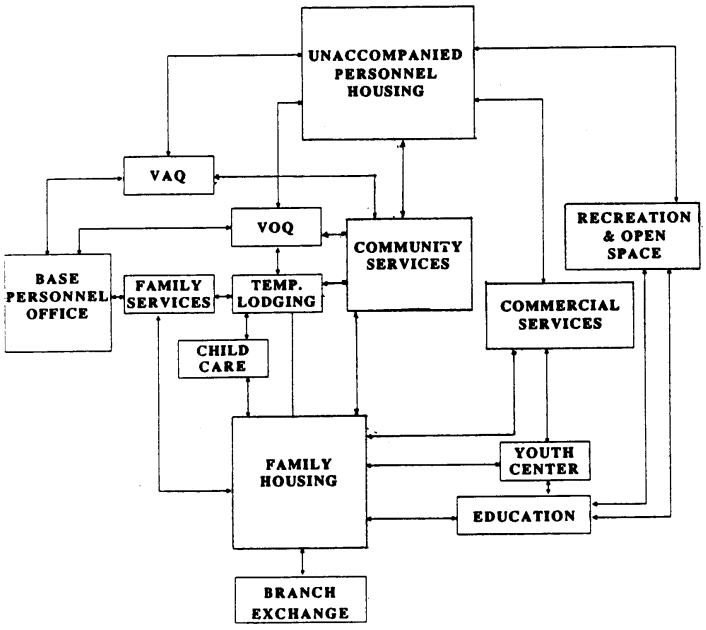
g. The successful implementation of architectural and landscape plans contributes greatly to QOL in the installation environment through the creation and maintenance of an attractive environment that promotes the well-being of installation personnel and provides identity and a source of pride for the installation. An inventory of valued architectural and landscape features of the installation will be prepared as part of the Environmental Design guidelines for Architecture and Landscape Architecture. These should be incorporated into this analysis of QOL-related installation characteristics.

3-22. Analyze Locational Relationships

a. Analyses of the locational relationships between QOL-related facilities and the adequacy of facilities being used for QOL programs may reveal that users are separated substantially from facilities they use or wish to use, or that one facility is isolated from other related facilities, making use of these facilities inconvenient (see Figure 3-6). For example, child care may be far from the location of night classes making attendance at night classes too time-consuming or unfeasible.

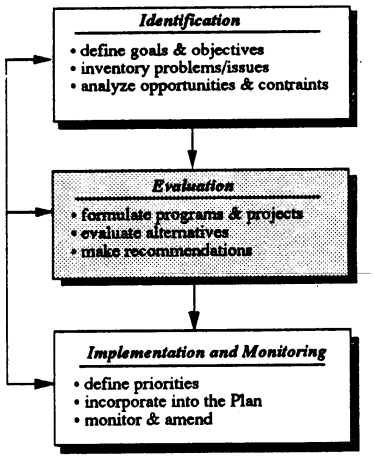
b. Information gathered from this analysis should be used for future facility sitings and location of activities. If several educational programs are undertaken in one location, a new one should perhaps be located there as well. The analysis also will point out program sites that are dysfunctional and which should be relocated or redeveloped in the future to better respond to user needs. For example, if an activity occupies adequate square footage but is so distant that users spend a large amount of time traveling on the installation every day, a new location for the activity would probably be indicated.

QOL-Related Locational Relationships
Figure 3-6



G. PREPARING THE QOL PROGRAM COMPONENT

3-23. Formulate QOL Plan. Based upon the analysis of the existing installation facilities, programs and features and using the results of the attitude survey, the planner should prepare a draft QOL Plan. This plan should address the nine QOL factors described in Chapter 2 and recommend specific programs and/or new facilities to enhance quality of life on the installation. As an example, the QOL Component Plan for the Shemya AFB BCP included as Appendix A contains specific recommended facilities and programs under twenty-one topical areas (see pp. A18-A26). Figure 3-7 illustrates how the planner might portray all the necessary information and recommendations on one overall master chart to be included in the QOL Plan.



3-24. Evaluate Alternatives and Make Recommendations. The planner should convene a workshop with all responsible installation personnel to review the draft QOL Plan, evaluate alternatives for satisfying QOL Goals and Objectives, and assess the implications of each recommendation on staffing, funding and potential benefit. Remember that a number of QOL recommendations are likely to go well beyond the charge of the installation planner and Command assistance, support and initiative will be required for successful implementation of the QOL Plan. The workshop should be used to achieve consensus on recommended programs and projects, and a Final QOL Component Plan should then be prepared and distributed to all personnel involved in plan implementation.

QOL Component Plan• Sample Action/Assignment Matrix

Figure 3-7

QOL GOALS	SPECIFIC OBJECTIVES	RECOMMENDED PROGRAM AND/OR PROJECT	RESPONSIBILITY		
			Planner	Command	Other
1. Overall Goals					
2. Economic Well-Being					
3. Social Well-Being					
4. Educational Opportunities					
5. Health Care					
6. Housing & Neighborhood	• plan QOL programs that are readily accessible from housing areas • ensure availabiltiy of QOL programs at convenient hours	• relocate day care center • expand bicycycle path system • extend hours of exchange outlets on weeknights	● ●	 ●	 ●
7. Environmental Quality					
8. Leisure Activity	• offer indoor & outdoor recreation • offer both team and individual activities • provide for artistic & crafts creativity • offer expanded library & museum activites and programs	• add two new lighted ballfields • organize softball league • convert Building 100 to arts & crafts studio • establish arts & crafts program • expand library/museum faciltiy	● ● ●	 ● ● 	 ● ●
9. Community Support					
10. Aesthetics					
11. Other					

4

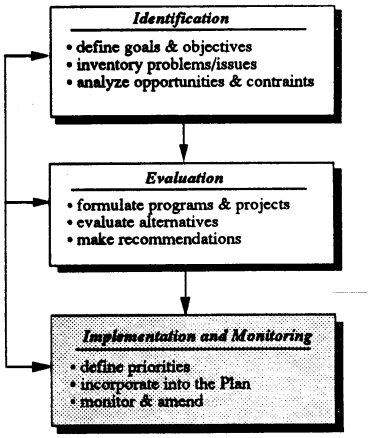
Implementation

CHAPTER 4

IMPLEMENTATION

A. PURPOSE

4-1. Scope



a. Implementation is the result of matching recommended programs to available funds to accomplish both the short-term and long-range objectives of the installation. The major goals of the QOL implementation process are:

- To ensure that the QOL objectives are incorporated in all the relevant planning components.
- To ensure that recommended QOL programs are available to the extent desired by installation residents, subject to funding and other constraints.
- To promote development of QOL-related facilities as needed to support the programs.
- To regularly monitor users, programs and facilities to determine their suitability and effectiveness with respect to QOL goals and objectives.

b. Be ca use QOL is such an all-encompassing concept, its implementation is unlike other military programs or projects. Most QOL goals and objectives should be implemented through other plan components. Others are more a function of attitude than a specific program or project. Many programs can also be implemented through volunteers. Examples of programs and activities that could be implemented were included in the nine QOL factors described in

Chapter 2. (See also Appendix A for examples of QOL programs and activities recommended for Shemya AFB, Alaska.) Some of these activities, such as new or expanded recreational activities, will require funding from the principal sources described below.

c. If performed properly, the data collection effort and especially the survey results will identify many problems and opportunities at each installation. In many cases, the solution to the problems expressed will be obvious but not easy or feasible to implement. For example, one survey found significant dissatisfaction with the workplace and housing environments. The top four complaints with the workplace were inadequate HVAC, poor office image, little or no privacy, and offices that were too small. Similarly, small size and lack of privacy were identified as problems with housing on the installations. All these problems are technically solvable but not without cost and some may not be solvable under presently observed military standards or regulations.

Common concerns of military personnel include:

- ***Workplace***
  - ***inadequate HVAC***
  - ***office image***
  - ***privacy***
  - ***size***
- ***Housing***
  - ***privacy***
  - ***size***

d. For problems which are mostly physical, the QOL Component Plan can serve a number of functions. For example, the QOL Plan can:

- Identify the problem and present it as a statement to be resolved in other components of the Plan, especially if the only solution is physical or financial.

- Restate the problem so that it can be solved, at least partially, by programmatic solutions.

- Recommend ways to change the financial or regulatory environment so that the problem can be solved. For example, identify the procedures to be pursued by the command structure in order to procure the necessary funds.

Implementation Goals:

- ***Incorporate QOL factors installation-wide***
- ***Satisfy program needs***
- ***Promote development of facilities and programs***
- ***Monitor facilities and program use***

- Serve as the "spokesperson" of the problem. Although many problems seem obvious when stated, there often needs to be a "champion" for that problem's solution. Many times nothing is done about a well-known problem until it is publicized, until it is "in writing" or until the numerical extent of dissatisfaction is known.

B. RESOURCES FOR QOL PLAN IMPLEMENTATION

4-2. Funding Sources

Funding Sources:
- ***Separate MILCOM projects***
- ***NAF***
- ***O & M funding***

a. Sources for financing projects include the Military Construction Program/Military Construction Army (MCP/MCA) funds, Operations and Maintenance (O&M) funds, and--primarily -- Nonappropriated Funds (NAF).

b. MCP/MCA projects are major construction projects (over $200,000) for capital improvements to provide facilities that can house QOL programs. These facilities may be provided as part of the Capital Improvements Plan (CIP) for the installation, with the funding and construction of the facilities being justified for other reasons in addition to meeting QOL objectives.

c. O & M projects are funded by lump sum appropriation to each service, which in turn distributes the funds to each major command. These funds are used for minor construction, repair, renovation and maintenance.

d. NAF projects are funded through the services' shares of revenues generated by facilities such as commissaries, exchanges or bowling alleys. Such discretionary funds are the primary source of funds for many QOL facilities and programs.

C. PHASING

4-3. Funding Policy

a. Since 1980, the Department of Defense has followed a consistent programming policy for constructing community-type or MWR facilities (see Figure 4-1). This policy prescribes a single source of funding for construction of community facilities in accordance with guidance provided in the DOD Military Construction Authorization Bill for Fiscal Year 1980 (Pub. L. 96- 125). Facilities at new installations or facilities to be expanded because of a mission change are funded by appropriations. Where DOD personnel overseas do not have ready access to civilian communities or commercial alternatives normally available in the United States, their MWR facilities also are funded from appropriations. The footnotes to the funding chart in Figure 4-1 reflect these distinctions. Additionally, it is recognized that from time to time Service-unique situations that need immediate or more specific attention may require exceptions to the basic funding policy. These exceptions are reviewed case by case.

b. Although policies for providing construction funds are in place, similar approaches to providing funds for new or expanded programs in existing facilities may not be as well-known. In many cases imaginative programs may be as vital and just as satisfactory as new facilities. The MWR facilities listed in Figure 4-1 therefore should be thought of in terms of programming needs and not just as physical entities when planning for Quality of Life.

4-4. Setting Priorities

a. Priorities must be assigned to all types of QOL-related facilities or non-funded programs in order to establish a schedule of funding requests for resources and program implementation. The funding level, personnel or other resources required for each QOL-related facility or program should be determined and based

Figure 4-1: Funding Sources for MWR Facilities

Type of Facility	MILCON Appropriated[1]	NAF or Other
Gymnasium/Fieldhouse/ Physical Activities Complex	X	
Recreation Center/Day Room/ Multipurpose Recreational Facility	X	
Multipurpose Auditorium/Theater	X	
MWR Administrative Office/Supply Center	X	
Family Assistance/Service Center	X	
Child Care Center	X	
Swimming Pool	X	
Library	X	
Open Mess (Club)	X[2]	X
Exchange Resale Facility	X[3]	X[4]
Arts and Crafts/Automotive Self-Help Garage/Skill Development Center	X[5]	X
Bank	X[6]	X[7]
Credit Union		X[7]
Thrift Shop		X[7]
Commissary Facilities		X[8]
Book Store		X
Package Beverage Store		X
Rod and Gun Club		X
Aero Club		X
Temporary Lodging Facility/Guest House	X[9]	X
Cabin/Cottage/Recreation Site Lodge		X
Outdoor Recreation Pavilion Facility		X
Bowling Center		X
Skating Rink (ice or roller)		X
Youth Center		X
Playing Courts/Fields	X[10]	X
Golf Course/Facility		X
Riding Stable		X
Campground		X
Amateur Radio Facility		X
Bathhouse		X
Marina, Boathouse		X
Outdoor Theater		X
Bandstand		X

Footnotes to Figure 4-1

1 Appropriated funds may be used for all community facility construction related to the establishment, activation, or expansion of a military installation or relocation of facilities for convenience of the government; replacement of facilities denied by country-to-country agreements; restoration of facilities destroyed by acts of God, fire, or terrorism; and to correct life safety deficiencies. In the case of installation "expansion," a major increase in authorized and assigned personnel strength over a short period of time is necessary before appropriated fund construction can be programmed. Such expansion must be the result of a mission change or influx of new units or systems. For example, a 25 percent increase in a 1-year timespan satisfies these criteria. In contrast, personnel increases resulting from an evolutionary expansion occurring over several years does not satisfy these criteria.

2 Consolidated open mess facilities (including modular construction) outside the United States.

3 Exchange facilities required in areas of military conflict; or as integral parts of air terminal, hospital, housing or other construction projects.

4 Exchange administrative/storage/maintenance facilities outside the United States and all laundries, dry cleaning plants, bakeries, dairies, or similar facilities operated by an exchange in support of a military mission.

5 Arts and craft/automobile self-help garage/skill development centers outside the United States.

6 Banks at locations where on-installation banking services are required, but where the patronage base is insufficient to provide these services on a self-sustaining basis.

7 Private funds.

8 Surcharge trust funds.

9 Authorized overseas where avoiding the expenditure of other appropriated funds (such as temporary lodging allowance, basic allowance for quarters, station housing allowance, and furniture support) would save appropriated funds.

10 Playing courts and fields constructed as a part of a gymnasium, fieldhouse, or physical activities complex.

Source: Hearing Before a Subcommittee of the Committee on Appropriations. One Hundredth Congress, First Session. 1987.

on an estimate of annual availability of funds and other resources. An implementation schedule can be prepared that lists as many projects or programs each year as resources will accommodate. Figure 4-2 is an example of a QOL Plan implementation schedule that the planner should develop.

b. Setting priorities for QOL programs is one of the more difficult tasks to perform, as has already been noted in previous chapters. A major resource for setting priorities is the report of survey results describing what people think they need or want. For some projects there are also per capita standards or criteria developed by the military (and often similar to civilian standards) which attempt to determine the adequacy of specific facilities.

c. It is difficult to show the absolute need or cost effectiveness of a project based on QOL objectives alone. Nearly all programs will require other justification as well. As noted earlier, although everyone feels that a good working environment or smaller classrooms are greatly conducive to good QOL, there are usually so many other variables involved it is difficult to prove what is essential to the best QOL for a military installation or for that matter a civilian community. Nevertheless, arguments for better QOL coupled with traditional project justification can be fairly persuasive.

D. UPDATING THE QOL COMPONENT PLAN

4-5. Periodic Updates. Implementation of the QOL Component Plan is an ongoing process that requires updating to respond to new information and changing conditions. The implementation schedule for QOL programs should be reviewed annually. The survey of personnel should be updated at least every five years. The implementation of other plan components, changes of mission, additions or subtractions of installation real estate and natural forces affecting the environment can each affect the appropriateness and feasibility of QOL programs or priorities.

QOL Component Plan Implementation Schedule

Figure 4-2

	FUNDING SOURCE			
	MILCOM	NAF	O & M	OTHER
FY1	• Construct Civilian Personnel Building	• Construct Baseball Field	• Repair Library	
FY2	• Construct Swimming Pool		• Upgrade Dorms	
FY3	• Construct Teen Center	• Construct Credit Union	• Addition to Recreation Center	
FY4		• Construct New Commissary		
FY5		• Replace Aero Club		
BEYOND				

A periodic process of review of the QOL Plan should be undertaken to ensure its consistency with current conditions and to maintain its vision and coherence.

4-6. Feedback Mechanisms Other mechanisms are helpful for monitoring and updating QOL programs. A written or verbal complaint system is a helpful gauge of program user satisfaction. Use of an open telephone line for expressions of concern or periodic community meetings may be desirable avenues for learning about user satisfaction. Existing organizations on the installation such as Junior Officer Council, Enlisted Council, etc.- should be used as forums to gain periodic feedback on the effectiveness of (QOL programs and future priorities.

Feedback mechanisms for monitoring QOL programs:

- ***written/verbal complaint system***
- ***open telephone line***
- ***community meetings***
- ***existing organizations***

Appendices

APPENDIX A:

Sample QOL Component Plan
(Shemya AFB, Alaska)

QUALITY OF LIFE COMPONENT PLAN

I. INTRODUCTION

"Quality of life" deals with abstract concepts that are strongly influenced by individual values and perceptions, and are difficult to measure (Clark, undated). Several of the many ingredients that contribute to perceptions regarding quality of life at Shemya, including the island's extreme isolation and forbidding weather, are beyond the Air Force's ability to control. These factors make the Air Force's quality of life programs especially crucial to morale, since there is essentially no surrounding civilian community in which to pursue leisure time activities -- or to offer a contrast with the work environment -- and most outdoor activities are frequently precluded by inclement weather. In this generally bleak and frequently dreary base setting, interior spaces are often cramped and in some cases substandard.

Fortunately, many tools are available or potentially available to compensate for these factors through quality of life programs. While opportunities are constrained by available funding and a base population of limited size, a diverse and comprehensive program drawing from several different component plan. has been outlined in the BCP to address varied quality of life needs.

The Quality of Life Component Plan:

A. Presents goals and objectives;

B. Details existing conditions to provide insights regarding some of the problems, challenges, and opportunities posed in maintaining a productive living and working environment;

C. Describes existing quality of life facilities and programs, integrating results of a survey of base personnel;

D. Reviews facilities and programs in comparable remote environments; and

E. Offers recommendations for facilities and pro- grams designed to enhance the quality of life at Shemya Air Force Base.

II. QUALITY OF LIFE GOALS AND OBJECTIVES

Following are excerpted Base Comprehensive Plan Goals and Objectives pertaining to quality of life. These goals and objectives were contained in the Scope of Work developed for the project by the Air Force.

Goal III: To provide the highest possible quality of life for the Air Force community.

Objective III-A: Plan for convenient, dependable, and comfortable transportation. On-base transit should be based on and encourage pedestrian travel, incorporating design elements to increase interest/aesthetics/ comfort, while diminishing adverse climatic factors.

Objective III-B: Plan communications linkages with other population centers. Include the potential use implications of cable television, regional radio reception, etc., as means to retain currency in national affairs/trends, to promote education at all levels, and to facilitate the objectives of base and local planning.

Objective III-C: Provide for maximum recreation and leisure time opportunities. Plan for a variety of outdoor and indoor, active and passive activities. Minimize adverse impacts of environmental conditions upon the leisure requirements of the base and local community.

Objective III-D: Plan facilities that are compatible with the environment. Dominant development trends in the United States frequently disregard the contrasting climate and natural beauty of the environment. Sound, environmentally sensitive planning should guide the development of the base.

Objective III-E: Plan/design an efficient and aesthetically pleasing living and working environment.

(A) Through the use of sound planning and urban design principles, careful attention will be given to massing and special relationships in order to develop an efficient, interesting, and aesthetically pleasing overall form for the base.

(B) Develop a basewide aesthetic identity which emphasizes Air Force tradition and esprit de corps, and is at the same time compatible with the character and culture of the surrounding region.

(C) Through the use of sensitive design, clearly distinguish the various major functional areas of the base (housing, recreation, operations, etc.).

(D) Plan a basewide signage program.

(E) Working within the overall aesthetic theme, design community details (street furniture, lighting, etc.) which are compatible with large architectural forms.

Objective III-F: Consider the social/psychological needs of base inhabitants.

(A) Design for people's response to their environment.

(B) Address the ever-present human wish for privacy, security, freedom, variety, order, etc.

(C) Plan/group facilities to create/reinforce a sense of community, belonging, pride, etc.

III. EXISTING CONDITIONS

The following discussion is intended to furnish an overview of the unique Shemya base environment created by the combination of isolation, remoteness and adverse weather, and to provide insights into some of the problems, challenges, and opportunities posed in maintaining a productive living and working environment. These observations and recommendations also take the place of the "Community Profile" section of the Base Comprehensive Plan, since there is no civilian community in which Shemya is located, or to which base personnel directly relate.

A. Tour of Duty

Presently, a member of the Air Force at Shemya is expected to complete a one-year tour of duty isolated from spouse, family, and friends, and remain on the island with only one opportunity for leave, usually halfway through the tour. Anchorage, the nearest metropolitan area, is over 1,500 miles away.

While turnover of personnel is of concern at any military installation, the typical one-year tour of duty at Shemya can be contrasted with the two- to four-year tours typical of most other bases.

B. Climate

The harsh climate at Shemya encourages most people to spend a considerable amount of time indoors. When the weather is nice, however, people should be encouraged to be outdoors, and facilities should be provided to accommodate outdoor activities. These should include conveniently located outdoor seating areas, sited to take advantage of available sun with shelter from the wind. Some areas may have cover to provide shelter from the rain, but be open on one or two sides. A variety of outdoor environments at diverse locations should be provided.

Mobility on the island is frequently hindered by strong winds, with people occasionally confined to single buildings. This suggests a need to connect housing and support services with enclosed pedestrian corridors wherever possible. It also supports the advisability of clustering housing near the Community Center area as much as possible.

Because so much time is spent indoors, a variety of spatial environments should be provided. Stormy weather increases the need for individuals to be able to retreat to the warmth and security of a private, more intimately-scaled environment. Conversely, there is also a need for larger indoor public spaces. In extremely harsh weather, these spaces can become almost a substitute for being outdoors.

Existing facilities at Shemya, particularly those designed for habitation, are predominantly on the intimate side of the spatial scale. There are very few indoor public spaces of significant volume, except for the large hangars at the airfield which are used for storage or as places of work rather than for leisure use. The theater and chapel also have relatively large volume spaces, but with fixed seating are essentially single purpose facilities.

Notably lacking at Shemya is a major public indoor space which can serve as a social focal point for residents of the island. Such a space could become the symbolic center or heart of the community -- the place to go to see or be seen. It should be spacious with high ceilings; open with views to the outside; and light, with substantial natural daylight, and artificial light when natural light is not available. The space should be large enough and have an environment suitable for growing large plants, including a few trees. This would provide a striking and welcome counterpoint to the absence of large vegetation in the natural landscape of the island.

Because of the predominantly small or confined spaces, minimum access to daylight, and limited sunlight, interior background colors should be subdued, but light. Accent colors should be used to differentiate and provide visual interest and variety. (They could be used for orientation/ identification in Building 600.)

C. Natural Landscape

The natural landscape on Shemya, while limited in variety of landform and vegetation, has a beauty which seems relatively unappreciated. Facilities are scattered all over the island, with roads extending throughout the base. Evidence suggests that the fragile natural environment has been treated as expendable in the siting of buildings and roads. New roads seem to have been cut through the

landscape wherever they were needed, left to deteriorate when no longer required, and have not been revegetated. There appear to be many abandoned building sites and paved areas (including the old airstrip), but new facilities are often located on virgin sites. Reuse of previously disturbed and abandoned sites should be considered for new facility siting to preserve natural areas. One example of this approach in the Land Use Component Plan is to devote the old, abandoned airfield area to industrial uses.

It is particularly important to limit development in or adjacent to the existing watershed. Locating high security facilities with minimum disturbance in these areas may, however, serve to reinforce their preservation. Thus, the location of the DoD Anders antenna farm in the watershed area seems compatible with the goal of restricting access into the watershed, since the antenna farm is a secure area. It also represents a passive, low impact use.

D. Consolidation and Restoration

To the degree possible, as existing facilities become obsolete or need to be replaced, consideration should be given to consolidation and grouping at accessible locations. As the old storage buildings below the airfield are replaced, it would seem appropriate to locate the new storage facilities together, either next to the area where the material to be stored arrives, or else at a location central to areas where the material will be used. Functional consolidation does, however, need to be balanced with security and survivability considerations that may dictate a certain degree of dispersal of facilities.

As remote facilities are replaced, the old abandoned facilities should be removed, and the site restored to a more natural state. To control drainage and erosion, exposed earth and unpaved areas should be minimized. Roads most frequently used or necessary for emergency access should be paved. Parking areas should be clearly defined and contained.

All of these efforts will contribute to an overall upgrade in the visual quality of the island. A general island-wide clean-up is recommended. A clean-up program has been initiated by the 509th GEOS, and has continued through October 1987.

The base, as a whole, resembles a permanent construction camp. Discarded construction materials, scrap metal, logs, and other unused material should be collected and at least concentrated in areas

where they can be screened or buried. Deteriorated asphalt surfaces should be removed and reseeded. A general revegetation program should be instituted.

E. Signage

Signing is poorly coordinated. Various types of signing should be differentiated into categories such as:

- Identification
- Directional
- Informational
- Command/Warning

Some relatively important messages, apparently understood by most residents of the base, are not at all clear to visitors, such as limited access into the DoD Anders antenna farm, and one-way circulation on the loop drive in front of Building 600. Signage concerns are addressed in the Base Signage Component Plan.

F. Architecture

The quality of architecture, whether in a city, a private residence, or an Air Force Base can have a strong influence on the level of satisfaction people have with their surroundings. Effects are both direct and indirect. On a direct level, people deal every day with how well buildings and rooms function for their given use. At a more subtle level, people are affected by the indirect aspects of color, form, order, and texture.

Detailed attention is devoted to appropriate materials, scale, texture and color in the Architectural Compatibility Guidelines Component Plan, which includes a separate Exterior Master Paint Plan. The following, however, are observations concerning existing architectural design as it may pertain to quality of life at Shemya.

(1) Presently, there is no prevailing architectural style for structures on base. Variety of this sort is usually an asset when buildings are in good shape and relate to each other.

(2) Different "generations" of building activity do have characteristic styles and building materials -- these materials have exhibited varied success in the Shemya environment.

(3) Most buildings have no ornamentation and little fenestration, often in response to severe weather conditions regularly experienced.

(4) Many buildings have been added to with little consideration of existing building form or pedestrian circulation.

(5) Building entrances frequently are not readily identifiable and well-lit.

(6) Large, simple geometric shapes read well from a distance and serve as landmarks (e.g., Cobra Dane).

(7) Strong colors are appealing (such as Cobra Dane). They are probably most effective above ground level where dirt and mud are not splashed. Light colors are attractive, but quickly show discoloration (such as rust on water tanks and roof leaks down the side of lighter trailer units). Gray seems to maintain its value best, but on overcast, rainy day. the need. for color is apparent. Color needs to be controlled, however, to avoid adding a garish appearance to an already visually chaotic arrangement of facilities.

G. Social Interaction

Besides the formal recreational and entertainment pursuits available on base, a number of informal attractions exist. "Rails and farewells" at the air terminal, mail call, new movies, the infrequent arrival of a rock band, and new items at the BX all encourage socializing and interaction. In addition, the MWR group plans recreational sports contests, special dinners are held at The Club, and the chapel sponsors a banana split might once a month, with over 100 people served on occasion.

IV. QUALITY OF LIFE FACILITIES AND PROGRAMS

Virtually all base facilities are relevant to quality of life concerns in the sense that they are used by base personnel, or contribute to their perception of the local environment. Thus, several related component plans, such as the Land Use and Transportation Plan, Long-Range Facilities Development Plan, Architectural Compatibility Guidelines, and Base Signage Master Plan, have been devised in a manner that addresses quality of life concerns, including shelter from the weather, design that is compatible with environmental values, and improving the base's general appearance through use of color and improved signage. This section of the Quality of Life Component Plan addresses those facilities that are more specifically and directly oriented toward quality of life programs, and also includes living and dining areas, because of their importance to morale and welfare.

It provides an assessment of each facility cited, and its use as of the time field work was conducted.

A. MAC Warehouse Hangar No. 3 (Bldg. 521)

Building 521 is a former SAC facility that has-been converted to a NAC supply warehouse with completion of the new SAC hangar at Building 751. Living quarters at Building 521 include a 6,300 square foot Visiting Airmen's Quarters, consisting of shared rooms on two floors. There are gang latrines with laundry facilities, and small lounge and kitchen areas. This dorm currently houses visitors, and provides additional capacity beyond that available at Building 600. The lounge and kitchen areas do not appear to receive frequent use, likely resulting from the transient status of those housed there.

Another remnant of SAC occupation of the building is an enclosed squash court and a basketball hoop that provides for casual, half-court play on a concrete surface. These facilities are separated from the VAQ by a fence. The squash court appears to beseldomly used, while the basketball court appears to be used relatively frequently, in spite of the clutter of stored materials around it, and the lack of showers, except in the VAQ.

B. Airmen's Dorm/UPH/Officers' Quarters/VOQ (Bldg. 600)

With over 175,000 square feet of living space, Building 600 provides the vast majority of existing base housing. Most of this housing fails to meet Air Force standards, mainly because of the lack of semi-private facilities. In the questionnaire administered for the Base Comprehensive Plan, housing was one of the principal concerns expressed, with responses overwhelmingly in favor of semi-private rooms (private rooms and shared bathrooms), and the need for greater privacy repeatedly emphasized. Individuals often complained of difficulties caused by roommates having different schedules, especially conflicting work schedules. Another observation was that mixed floors could be possible with semi-private rooms. The desire for semi-private rooms was the clearest point of consensus in the overall questionnaire results, and was the most strongly supported step for improving morale.

About half the respondents expressed a desire to fix some of their own meals if the Base Exchange sold groceries and individual dorm areas had a galley kitchen. While not specifically addressed in the survey, another observation is that dormitories generally lack lounges where people can gather, or merely get away from their rooms without having to travel a significant distance. Such areas where

attractive views outside can be taken advantage of are also needed. A further concern is the need for a separate lounge or gathering area devoted to officers and managerial personnel.

With construction complete on the new UPH facility for 258 personnel (Building 599), and a new UEPH facility programmed for FY90, opportunities will be created for reorganizing Building 600 housing space to accommodate many of these concerns. (Design for a major renovation of Building 600 is about to be initiated.)

C. Air Force and Other TV Stations (Bldg. 600)

This facility, which is just over 3,000 square feet, provides for delivery of television programming. It may need to be moved as part of the new Composite Facility's development. If so, it might be integrated with other X~ communications facilities to establish a "media center." Over four-fifths of questionnaire respondents indicated a preference for improving cable television, with a desire expressed for more stations, a satellite disk, 24-hour service, and more, current programming.

D. Base Exchange (Bldg. 600)

The Base Exchange (BX) includes a 3,510 square foot store and 5,625 square foot warehouse. The BX, which is administered through the Army/Air Force Exchange Services (AAFES), is the principal commercial facility on the base. In addition to providing essential goods, shopping can be a very popular leisure time activity, and facilitate social interaction.

Like several other quality of life facilities, the BX also provides important supplementary employment opportunities. These offer potential. for generating additional income, and vocational training. The existing BX is relatively small and cramped. It could be expanded to include such features as a larger clothing area, video rental, dry cleaners, thrift shop, bookstore, plant store, and, if cooking facilities are furnished in dorms, a commissary, or at least an expanded selection of food.

A credit union outlet is located in a separate room across from the BX.

E. Snack Bar (Bldg. 600)

Approximately one-half of survey respondents indicated they use the "Chemy-Inn" for dining at least once a week. The 2,215 square foot facility includes a service counter, and tables' and chairs from which a wide screen television can be viewed. Beer is served and personnel frequently watch TV while

consuming snacks and refreshments in a leisurely fashion. Recent efforts to vary the available menu have been well-received. While the snack bar is already popular, if it is expanded, developing a layout where one is not compelled to watch TV may be desirable to provide an alternative. The snack bar is also important for some shift workers who may miss regular dining hall hours.

F. Blue Fox (Bldg. 600)

The "Blue Fox", which provides for cafeteria-style dining, is the main dining hall on base. Nearly all questionnaire respondents reported using it, with three-fourths eating there seven days a week. It too is a significant source of supplementary employment.

The facility's appearance is much improved, following its- 1987 renovation. The renovated dining facility incorporates a "food fair" concept, providing a selection of different types of food, and an upgraded general appearance. The change appears to have been well received.

G. Post Office (Bldg. 600)

Postal facilities are not normally thought of in the context of quality of life facilities. Particularly in isolated locations, however, such as many rural Alaskan communities analogous to Shemya through their remoteness, the post office serves an important social function. In addition to being a place where people across the social spectrum meet, it represents a psychological link to the outside and, in the case of Shemya, family and friends "back at home."

The existing postal facility is just under 2,000 square feat in size. It could be enhanced through introduction of tables for wrapping and addressing materials to be sent, and reading materials received. About one-third of questionnaire respondents requested postal service improvements, with more frequent deliveries and expanded hours for package pick-ups the primary concerns.

H. Library (Bldg. 600)

The existing library is just over 1,900 square feet, consisting of a reading room and a lounge. Additional area is needed for books and study spaces. Roughly one-third of questionnaire respondents indicated they use the lounge, and one-fourth use the reading room.

A new library is included among elements proposed to be incorporated in the new Composite Facility, although budgetary constraints may not allow this to be accomplished initially. An expanded reading area with comfortable chairs could also serve a social function as a quiet, informal gathering place.

As technological advances continue, educational. materials are increasingly available in new media forms. The new library should be designed to respond to these developments by accommodating such features as instructional videocassettes. The library could also serve as a career learning center, with programs more closely linked to training needs for base personnel.

A feature of the existing library that should be maintained is the display of interpretive materials, which includes examples of local wildlife. Enhancing the display would be an excellent XWR project.

I. Gymnasium (Bldg. 601)

Building 601, located just north of Building 600, contains an 8,750 square foot facility that also includes showers, lockers, and an office. The gym will be an integral part of the new Composite Facility. The recommended concept design proposes to link the gym with a new pool and other recreational facilities, and Building 600. (Refer to the discussion on the Community Center in the Land Use Component Plan.)

In the survey conducted, volleyball was the most popular activity noted among gymnasium users. Besides free play, teams are organized for sports such as basketball and volleyball. Several individuals commented they felt the gym floor was too hard.

J. Semichi Theater (Bldg. 602)

This building consists of a relatively large room with seating, and a concession area. The facility is over 9,000 square feet in size. Movies are shown six nights a week. Nearly two-thirds of questionnaire respondents indicated they use the theater during the weekend, and over one-half on weeknights. A number of individuals commented on the projector sound system needing improvement. (A new sound system was subsequently installed.) An extra projector to prevent waiting for each reel to be rewound, and to furnish back-up equipment in the event of any breakdowns, would also be desirable.

The theater has a stage that can accommodate the performing arts. The theater also has sufficient capacity to support basewide meetings. The facility currently is seldom filled to more than a third of its capacity, however.

A new theater to replace the existing facility is included in the recommended concept design for a new Composite Facility.

K. Orbit Hall Gym/Polorama Lanes (Bldg. 603)

In spite of its age, outmoded facilities, and rather dreary appearance, the "Old Gym" is still heavily used. The entire facility is nearly 18,000 square feet in size, of which approximately 3,400 square feet are devoted to four bowling lanes. The remainder of the space includes two racquetball courts, one squash court, one volleyball court, men's and women's saunas, weight training facilities, an indoor jogging track (actually a loosely defined area around the perimeter of the gym), aerobics area, and administrative/ storage space. Half of survey respondents indicated they use the running track and Nautilus room; about one-third use the racquetball courts, weight room, and men's sauna; and nearly two-thirds of female respondents indicated they use the women's sauna.

The new Composite Facility is programmed to incorporate upgraded facilities for uses described above, along with several other recreational and quality of life activities consolidated into a single complex. Funding is not available for constructing new bowling lanes during the initial development phase, though.

L. Driftwood Recreation Center (Bldg. 606)

Building 606 contains a recreation center of over 8,000 square feet and an arts and crafts area of just over 4,000 square feet. The facility includes pool tables, pingpong tables, a TV lounge, morale phones, a tailor shop, a record playing area, an area for darts, a shuffleboard game, space for other games, a ceramics shop and store, a concession selling refreshments and snack food, and Morale, Welfare and Recreation offices.

Among Recreation Center users responding to the survey, the game room and TV room were most often mentioned, with pingpong/shuffleboard, the tailor shop, arts and crafts store, and ceramic shop facilities also frequently noted.

The Recreation Center is another significant source of off-duty employment. The existing facility is well compartmentalized, and numerous events planned by organizations on base are held there. Functions

supported in Building 606 are programmed to be relocated to the proposed new Composite Recreation Facility.)

M. Consolidated Open Mess - "The Club" (Bldg. 613£

Building 613, consisting of roughly 7,000 square feet of space, is primarily a dining facility and lounge. The building also contains a package liquor store and a barber shop. The Club offers more formal food service, with menus, reservations, and waiters and waitresses. Dining costs are significantly higher than at other Shemya eating facilities. Special events are often held at The Club, including special menu nights, visiting bands providing dance music, "hails and farewells", and other group activities. The facility offers opportunities for a "night out", away from the usual routine. since Shemya lacks an officers club, Building 613 offers the closest facsimile, though it is open to all ranks. The Club is also an important source of outside employment.

Over one-half of questionnaire respondents indicated that they use The Club's dining room (actually an area defined by a movable partition), with somewhat less than half using the bar and participating in special events. Bands appear to be one of the most popular attractions, though a number of individuals commented on preferences for various types of music. "Hails and farewells" were also mentioned frequently, and numerous individuals requested more special events be held.

Expansion and upgrading of The Club is programmed, but completion of the project has been delayed by problems encountered with foundation materials.

N. Civil Engineering Dorm (Bldg. 615)

Building 615 provides housing for civil engineering personnel. The over 26,000 square feet of space includes unaccompanied personnel housing (UPH) for 144. The housing consists of shared rooms with gang latrines. The exterior was upgraded during 1986, with new stain improving its appearance. Renovation to create semi-private rooms is scheduled for FY 1993 in the Military Construction Program.

O. Base Chapel (Bldg. 617£

The base chapel, just under 5,000 square feet in size, is intended to meet the needs of all denominations represented at Shemya. In addition to the main area, which is devoted to services, the facility includes smaller meeting rooms also used for instruction and counseling.

Over a quarter of total survey respondents commented that they used the chapel, with a majority participating in services there. "Banana split nights" and choir were frequently noted special activities. The chapel is one of the most popular base facilities for social gatherings. It presents one of the more pleasant interior environments, though its current level of use results in overcrowding.

Additional chapel space is also currently set aside in Building 600. An addition to the chapel has been programmed, and design was scheduled to commence during 1987.

P. Upper and Lower Camps (Bldgs. 620, 621, and 622)

Upper Camp (Building 620) and Lower Camp (Buildings 621 and 622) provide temporary housing. The facilities are composed of trailers, with Building 620 providing nearly 8,000 square feet of space, and Buildings 621 and 622 furnishing between 10,000 and 11,000 square feet each. A total of 138 personnel is housed in these facilities, which are over 25 years old. Upper and Lower Camps are to be replaced by the new UPH Building (Building 599) when it is ready for occupancy. (The Long-Range Facilities Development Plan considered whether the trailers might be sold or leased to contractors, but this was determined to not be feasible.)

Q. OAXP Dorm at Hangar #6 (Bldg. 751)

Building 751 includes 12,772 square feet of recently constructed (1984) space. It is an ALRT facility and also provides housing for visiting airmen.

R. Composite Alert and Personnel Housing at Hangar #7 (Bldg. 753)

The newly completed Strategic Air Command facility will relocate SAC personnel currently housed in Hangar #2

S. Recreation Houses --Rosie'e/Cobra Dane House/Cliff House (Bldgs. 840, 3062, and 3063)

These facilities are used and maintained by off-duty personnel as "smokehouses" and recreational retreats. While consisting of older and, at times, makeshift structures, they serve a critical function at Shemya, where opportunities for leaving the base are essentially absent for a majority of individuals. They furnish a chance to "escape" from daily routines, and offer considerable value as a morale factor. They provide privacy, group identification, and accomplishment, in that they are maintained through volunteer effort.

The buildings themselves have a ramshackle exterior appearance, and likely do not meet all building safety standards.

V. COMPARABLE PROGRAMS

Task A(1) P3 under Work Item E in the Shemya Base Comprehensive Plan Scope of Work calls for the consulting team to "...research the type of facilities and programs common to comparable remote military installations." To accomplish this task, the project team familiarized themselves with other selected Alaskan military facilities, such as the Composite Facility at King Salmon Air Force station.

A. Efforts To Investigate Comparable Military Programs

A written request for information on quality of life programs at other remote military installations was transmitted to the Air Force on October 20, 1986, and followed up through telephone conversations. While guidelines and ideas about quality of life programs planning were received through the assistance of AAC Community Planner Mr. Marvin Thomasson from Mr. Philip Clark, AICP (Base Comprehensive Planning Program Manager at the U.S. Air Force Directorate of Engineering and Services in Washington, D.C.), and contact was established with Mr. Stanley Bell, an individual at the University of Michigan carrying out a graduate research project on Air Force quality of life program planning, little specific information was received in the way of examples readily adaptable to Shemya AFB.

B. Civilian Programs

Because of similarities encountered by private industry operating in remote Alaskan locations, information on quality of life considerations was requested from major oil companies, given their successful operating experience in the state. A response was received from ARCO Alaska, Inc. explaining how the company manages living and working environments for its North Slope labor force.

Factors emphasized by ARCO include facility planning, dietary considerations, and recreational activities. Not mentioned, but of considerable importance when compared to circumstances at Shemya, is that industry personnel generally work on schedules that provide for long hours on the job over concentrated periods, interspersed with corresponding periods off duty, where employees can return home (e.g., one week on/one week off). Oil company quality of life efforts are described below.

(1) Facility Planning: Facility layouts are carefully tailored to functions being performed. Efforts are made to establish a feeling of openness in all facilities. Pastel colors and high ceilings are employed to combat the hostile climate and extended periods of darkness- during the winter (weather and daylight extremes are even greater than at Shemya). Light earth tones --beiges, tans, greens, and rusts -- have proved the most successful.

Diffused or indirect lighting sources are used in living quarters and industrial facility control rooms. Equipment areas follow industry standards of direct lighting and safety approved fixtures.

Individual living quarters consist of an area approximately 13 feet long by 9 feet wide. Furnishings include two wardrobe closets, a multidrawer bureau, a desk and accompanying chair, and a bookcase or book-- shelf. Despite the extent of furnishings, thoughtful planning and a modular approach were applied to maintain an open feeling.

A shared lavatory facility, containing a sink and dressing stand, commode, and shower stall, is located between individual living quarters.

(2) Dietary Considerations: ARCO's dining facility serves four main meals a day: breakfast from 5:30 a.m.-8:00 a.m. and 5:30 p.m.-6:30 p.m.; lunch from 11:00 a.m. 1:00 p.m.; and dinner from- 5:15 p.m.-8:30 p.m. Menus are diverse, of high quality, and varied on a daily and weekly basis. In addition to formal meal service, a 24-hour a day walk-in restaurant specializing in convenience foods (e.g., soups, sandwiches, soft drinks) is operated.

(3) Recreational Activities: Recreational activities are characterized as: (l) "organized/formal", consisting of group events or activities that are repetitive in nature, and organized to cater to specific events, take advantage of seasonal activities, or directed at catering to specific needs; and (2) "informal", consisting of activities organized- by employees and sponsored by the company through providing facilities or special equipment.

Examples of organized/formal activities are listed below.

a. Movies: Contemporary 16mm motion picture releases are shown four days a week (both morning and evening) at a 123-seat theater using state of the art projection and sound systems.

b. Television: Continuous daily entertainment is provided through 12 channels made up from cable TV, satellite TV, rural Alaska and public TV networks, and ARCO's own in-house programming.

c. Organized Contests: Organized contests are conducted seasonally, including the spring (June) marathon, a cross-country foot race for both long- and short-distance runners. Awards are given to all competitors, and winners of events organized by distance (l, 3, 10, and 26 miles), age group, and gender.

d. Fishing Derby: This activity is conducted during the summer (July), with awards given for the largest catch, by species, and the smallest fish caught (regardless of species).

e. Softball: A summer softball league culminates with a playoff series at the end of the season (July-August). Teams are organized by work facility, skill group, or social groups. Trophies are awarded for both team and individual accomplishment.

f. Volleyball: A volleyball league is conducted during the winter (September-May), with awards made in a manner similar to softball.

g. Cribbage Tournament: An annual cribbage tournament is conducted in February, with several skill levels represented, and awards made for accomplishments in each.

h. Photo Contest: A photographic contest is conducted each March with ribbons and prizes awarded for several categories, including black and white, wildlife, North Slope, open, and best of show.

i. Specialty Dinners: Special holiday meals are served on occasions such as New Year's, Easter, Memorial Day, Fourth of July, Labor Day, Thanksgiving, and Christmas. Special menus are employed with appropriate dining room decorations.

Examples of informal activities include the following.

a. Aerobics: Exercise classes open to all company and contractor employees are conducted four times a week. The Medical Department approves the program's structure, and monitors participants.

b. Nautilus/Weight Lifting: Body building activities are conducted daily by employees under direction of the Medical Department. Equipment includes five Nautilus machines, three rowing machines, five exercycles, and onenordic ski exerciser.

c. Pool/Billiards: A billiard parlor, consisting of six regulation tables, and a conversation and refreshment area, is available for employee use.

d. Saunas: Saunas accommodating up to eight occupants each are available for both men and women.- These facilities, available for use on a daily basis, have accompanying showers, lockers, and lavatory accommodations.

e. Song Fests: Conversation pits and a piano are available for individual employees or groups to pursue their musical inclinations.

f. Game Areas: Card tables, a chess table, and computer games are strategically distributed throughout the complex.

g. Seasonal Activities: In addition to special meals, seasonal employee gatherings such as Christmas caroling, tree trimming, pumpkin carving, and a Thanksgiving talent show are encouraged and supported.

VI. RECOMMENDED FACILITIES AND PROGRAMS

This section of the Quality of Life Component Plan presents a consolidated discussion of suggested program, facility, and policy recommendations touched upon in preceding sections and in related component plans. It also includes additional recommendations designed to address previously identified needs. For ease of reference, recommendations are broken down by topical area.

A. Outdoor Activities and Facilities

(1) Establish an environmental education and interpretation program in conjunction with the U.S. Fish and Wildlife Service, focusing on bird observations and counts, and habitat enhancement potentials;

(2) Formalize a system of walking, hiking, and jogging routes, with clearer demarcation and linkages between primary destinations;

(3) Expand opportunities for organized events as weather permits (e.g., races, picnics, fishing contests, relays);

(4) Develop a simple outdoor shelter(s) in a relatively protected area, with tables, seating, and a barbecue pit to take advantage of occasional good weather; and

(5) A proposed upgrade of the ballfield should expand outdoor recreation opportunities.

B. Transportation System

(1) Improve transportation convenience and safety by paving primary roads, developing right angle intersections, and reducing road grades in selected problem areas (see Transportation Component Plan);

(2) Better define parking areas, and include parking in proximity to principal outdoor activity attractions; and

(3) Remove road segments no longer needed, and restore these areas.

C. Natural Landscape

(1) Implement Installation Restoration Program (IRP) recommendations for environmental protection (see Environmental Protection Component Plan);

(2) Remove hazardous debris (munitions) from, for instance, the north beach area, to allow recreational use;

(3) Institute a general clean-up of discarded materials to augment existing efforts -- an initiative that has proven successful in other Alaskan communities is to sponsor an annual clean-up day shortly after spring break-up;

(4) Restore disturbed areas, and revegetate bare ground subject to erosion;

(5) Remove abandoned buildings not identified for rehabilitation and reuse; and

(6) Minimize disturbances to watershed area.

D. General Design Principles

(1) Establish readily identifiable and well-lit building entrances;

(2) Avoid long, monotonous, unmodulated building facades (at least for housing and support buildings);

(3) Employ large, geometric shapes for operational buildings as landmarks (e.g., Cobra Dane, fuel tanks, hangars, radar domes, etc.) to contrast with community living and support facilities; and

(4) Use already disturbed sites for new development to the extent feasible. (A more comprehensive discussion of design recommendations is contained in Architectural Compatibility Guidelines.)

E. Pedestrian Connections

(1) Develop an enclosed pedestrian connection as part of the new Composite Facility, employ wider corridors, and use color accents (see Community Center Plan Land Use Component Plan); and

(2) Cluster housing around the Composite Facility to minimize pedestrian travel distances (see Land Use Component Plan).

F. Housing

(1) Continue efforts to upgrade housing, provide semi- private rooms, and meet Air Force standards;

(2) Incorporate informal lounges in living areas to serve as gathering places, and to provide space close by for leisure time pursuits and relaxation -- arrange these spaces so that they are well-lit and offer views out-of-doors to the extent possible; creation of multiple units of small spaces to comfortably accommodate four to six people is preferable to a few larger spaces; and

(3) Provide galley kitchens in living areas to furnish opportunities for base personnel to prepare more of their own meals. (Kitchens could be incorporated with lounge areas.)

G. Indoor Spaces

(1) Given the substantial amount of time outdoor activities are limited by poor weather, indoor spaces are needed that can simulate more open, outdoor conditions, through use of high ceilings, light, indoor plants, views to the outside, etc.;

(2) A premier opportunity to introduce this kind of indoor space is detailed design and development of the new Composite Facility, where the building entry and main corridor can provide a social gathering place and community focal point (see Community Center Plan, especially the "Preferred Composite Facility Alternative");

(3) Higher ceilings, in general, create a greater sense of spaciousness (see Architectural Design Guidelines) -- several recent interior renovations at Shemya include dropped ceilings, which tend to increase one's sense of enclosure; and

(4) It is important that hallways and corridors be considered as transportation and circulation routes, and should be sized and designed accordingly.

H. Color

(1) Interior background colors should be subdued, but light;

(2) Accent colors should be used to differentiate areas and uses, and to furnish visual interest and variety effective use of accent colors at Building 600 and the new Composite Facility can aid orientation and identification (see Community Center Plan); and

(2) Exterior building color should be used to brighten an otherwise drab environment -- the palette of colors employed should complement colors already present on base, reflect variety while keeping colors to a small enough number that paints, stains, and materials (e.g., siding, trim, and roofing materials) can be readily obtained and stocked, and have proven durability in Shemya's wet and stormy climate (see Exterior Master Paint Plan in the Architectural Compatibility Guidelines).

I. Lighting

(1) Building entrances should be well-lit;

(2) Better lighting can help alleviate the relatively dreary environment present in many hallways and other confined spaces; and

(3) Diffused or indirect lighting should be used in living areas.

J. Signage

(1) A Base Signage Program has been developed as a component of the Shemya AFB Comprehensive Plan to provide greater uniformity consistent with AFP 88-40, remove excess signage and visual clutter, and improve overall base appearance -- modifications are also proposed to tailor sign messages to meet Shemya's individual needs, and to encourage wall-mounted over free-standing signs because of extreme winds; and

(2) Specialized morale signs are recommended to enhance organizational identification and esprit de corps (see Base Signage Master Plan).

K. Community Center/Composite Facility

(1) A cornerstone of Quality of Life recommendations is to strengthen the concept of a Community Center in the vicinity of Building 600, as the focal point for housing, administrative, commercial, and recreational functions;

(2) The centerpiece of this' concept is to be a Composite Recreation Facility -- more than merely supporting leisure time pursuits, the facility is intended to create enclosed linkages among key functions, a central place, and a sense of community that are so critical in the isolated, self-contained Shemya environment;

(3) The Composite Facility, as originally conceived, included a swimming pool, locker rooms and showers, saunas, a weight training room, racquetball courts, a bowling alley, a running track, theater, MWR crafts learning center, MWR television lounge and games room, and miscellaneous shops and services (specific programming is still evolving in response to initial design efforts); it is to be integrated with the existing gym (Building 601), and the Base Exchange, snack bar, food storage and kitchen area, dining commons, living space, and offices in Building 600; it is also intended to organize spaces in a manner that will encourage social interaction, and establish a sense of "Downtown Shemya" (see Community Center Plan);

(4) Design of the Composite Facility has begun -- because of the project's ambitious scope, it will be important to sequence construction activities in a manner that will minimize disruptions to ongoing leisure time opportunities.

L. Base Exchange

(1) As the principal commercial facility on base, and essentially the only outlet for obtaining certain kinds of goods for members of the Air Force stationed at Shemya, the Base Exchange (BX) could benefit personnel through several additional offerings, including a larger clothing area, a video rental outlet, dry cleaning service, thrift shop, bookstore, plant store, and commissary (or at least expanded food selection) if galley kitchens are included in dorms;

(2) Shopping can also be an important leisure time function, and integration of the BX with the new Composite Facility should enhance this potential, although cramped space and limited hours of operation are constraints.

M. Dining Facilities

(1) renovation of the "Blue Fox" has significantly enhanced its general appearance;

(2) Variety should be incorporated in menus to the extent practicable;

(3) More health-oriented menus are desired by many users;

(4) More opportunities for personal food preparation should be provided through inclusion of galley mess facilities in new and renovated dorms, while furnishing a larger selection of food that can be purchased from the BX;

(5) Hours of at least the snack bar ("Shemy-Inn") should be maintained and enhanced; and

(6) "Theme nights" should be expanded as a morale measure -- several examples that can provide ideas are included under the "Comparable Programs" heading in this component plan.

N. Post Office

(1) Better recognize the post office's socializing function in a remote environment;

(2) Provide tables for wrapping and addressing materials to be sent, and reading materials received;

(3) Offer more frequent deliveries and expanded hours for package pick-ups

(4) Obtain new postal issues to promote stamp collecting opportunities; and

(5) Better integrate the post office with the new Composite Facility.

O. Library

(1) A new library originally planned as part of the Composite Facility, (but which may be deferred from design, according to most recently available information) should provide additional area needed for books and study spaces;

(2) The library could also incorporate an art exhibit area within a passive reading area -- rotating art displays might be arranged through institutions such as the Alaska State Council on the Arts or the Anchorage Museum of History and Art; local art displays could also be encouraged;

(3) The new library design should also take into account technological advances, and multi-media opportunities -- it should be integrated with media facilities to create a multi-media learning center, with opportunities for self-tutorials (e.g., instructional video- cassettes);

(4) These could include a lending library of records, tapes, and compact disks; general educational materials; career learning programs; and Air Force training and instructional materials;

(5) Develop a book exchange program; and

(6) Maintain and augment the interpretational display of local wildlife, and supplement the display with Alaskan history and Native cultural displays.

(7) If the new library is deferred from the Composite Facility design, provisions should still be made to allow it to be readily accommodated through a future expansion.

P. Media and Communications

(1) Improve cable television offerings, with additional stations, 24-hour service, and more current programming;

(2) Meld Air Force and other television facilities with other NWR communications facilities and the new library, as described above, to establish a "media center";

(3) Extend hours and opportunities for calling home on morale phones; and possibly introduce audio-visual communications that are feasible on a cost reimbursable basis;

(4) Develop a capability through military radio to broadcast short messages;

(5) Develop the capability for a few hours a week of in-house radio programming, if this can be accomplished without posing complications for on-base missions; and

(6) Support the Shemya Hard Rock Times.

Q. Indoor Sports

(1) The previously described Composite Facility is to accommodate a variety of indoor sports and related indoor recreation activities -- the new pool will significantly expand potentials for both organized activities and informal, fitness and leisure oriented pursuits, and the proposed running track should correct many of the complaints received with respect to existing indoor running facilities;

(2) Problems expressed about hardness of the existing gym floor (Building 60l)~ should be corrected as part of renovations entailed in developing the Composite Facility or addressed in a subsequent project (a floor replacement project was scheduled during 1987);

(3) The new Composite Facility should serve as a catalyst to facilitate organized team and individual activities, including co-ed sports opportunities -- these activities should be accompanied by an appropriate awards and recognition program;

(4) The potential for a "Par-T" indoor golf facility should be investigated.

R. Other Indoor Recreation Activities

(1) A back-up projector for the theater is desirable to avoid the need for complete rewinding at the end of each reel, and to provide a fallback in case of malfunctions;

(2) The ability of the theater to serve as abasewide meeting hall should be emphasized to a greater degree;

(3) A variety of musical tastes needs to be accounted for in securing live entertainment -- but bands are generally very well-received;

(4) "Hails and farewells" are also well-received, and such special events should be encouraged;

(5) Space should be allocated for a lounge area with a "coffee house" atmosphere where local musicians and other possible entertainers could get together and play -- this might consist of a once a week allocation of a dining area, recreation house, or other lounge area where others would not be disturbed.

S. Recreation Houses

Rosie's, Cobra Dane House, and the Cliff House serve specialized needs for recreation and morale -- these types of facilities should be supported to the extent they are desired and maintained by the personnel they serve, and do not present safety hazards.

T. Chapel

A planned expansion project is needed to reduce overcrowding and provide more space for meeting rooms and special activities.

U. Special Needs

(1) Since Shemya currently lacks an Officers Club, a special lounge or gathering area devoted to officers and managerial personnel is needed; reorganization of Building 600 space in light of new housing projects and the new Composite Facility should present opportunities for such a facility.

VII. CONCLUSION

At least two important trends will influence quality of life plans and programs. First, budgetary concerns at the national level have resulted in a move toward lengthening tours of duty to minimize moving costs. For remote

locations, such as Shemya AFB, lengthening the standard 12 month tour to 15 months has been proposed (although not at Shemya per se), intensifying many of the quality of life concerns described in this section of the BCP.

The second trend involves sexual composition of the base population. As noted above, while the military has traditionally been predominantly made up of males, and a substantial majority of the base populace is still composed of men, women have a growing presence. Planning for future quality of life facilities and programs should assume and take into account a growing female population on base.

Challenges imposed by Shemya Air Force Base's isolation and adverse climate necessitate special attention being devoted to quality of life concerns.

APPENDIX B:

Sample QOL Questionnaire
(Shemya AFB, Alaska)

SHEMYA AFB COMPREHENSIVE PLAN
Shemya Questionnaire

Goal:
A comprehensive plan for Shemya AFB is currently being prepared by an Anchorage planning firm, TRAA/Parr. A goal of the plan is to provide the highest possible quality of life for the Air Force Community at Shemya. The plan will make recommendations for new and improved facilities and programs, including improvements to transportation, communication, recreation and leisure time facilities. Although most of you will finish your duty tour at Shemya before the plan is complete, your first hand knowledge of "Life on the Rock" can be very helpful in identifying the improvements that will improve the quality of life for those who follow you.

Please take a few minutes to complete and return this questionnaire. Feel free to add any comments regarding the improvements you think would have the greatest benefit.

General Information:
How long have you been at Shemya? _____
When does your duty tour end? _____
How long have you been in the Air Force? _____
What is your rank? _____
Are you a civilian DOD employee or Contractor? _____
Are you Male or female? _____

Is this your first remote duty tour? _____
If not, where else have you served and how did the base facilities compare to Shemya? _____
_____
_____

Transportation:
What improvements to the following transportation facilities do you think would be most beneficial?
(check and explain)

____ Airport Terminal _____
____ Base Roads _____
____ Pedestrian Walkways _____
____ Lighting _____
____ Shelter or Enclosure _____
____ Shuttle Bus _____
____ Others (explain) _____
_____
_____
_____
_____

Communications

What improvements to communications facilities do you think would be most beneficial? (check and explain)

____ Cable Television _____
____ AM/FM Radio _____
____ Telephones (long dstance personal use)
____ Post Office _____
____ Others (explain) _____

Recreation:

What recreation and leisure time facilities do you use and how many times a week?

Old Gymnasium

____ Men's Sauna
____ Women's Sauna
____ Weight Room
____ Nautilus Room
____ Racquetball Courts
____ Running Track

New Gymnasium

____ Basketball
____ Badminton
____ Volleyball
____ Tennis

Recreation Center

____ Lapidary Shop
____ Leather Shop
____ Photo Shop
____ Arts and Crafts Store
____ Game Room
____ Ping Pong/Shuffleboard
____ Ceramics Shop
____ TV Room
____ Tailor Shop

Library

____ Lounge
____ Reading Room

Outdoor

____ Outdoor Running Circuit

Theater

____ Saturday/Sunday
____ Weeknight

Consolidated Open Mess (The Club)

____ Bar
____ Dining Room
____ Special Events (explain)_____

Chapel (explain)

_____
_____

Given the inclement weather conditions, would you use outdoor recreation and exercise fields if available?

_ Yes _ No

If yes, what facilities are needed? (explain)

_____
_____

Are there areas on the island that you visit for recreation?

____ Running Course
____ Beachcombing (where) _____
____ Others (where and what use) _____
_____

Dining:

How many days in a typical week do you eat at each of the base dining facilities, and why?

____ Blue Fox Inn Dining Hall _____
____ The Club Dining Room _____
____ Shemya Inn Snack Bar _____

If the BX sold groceries and your dorm area had a galley kitchen would you use it, how often each week and what meals? (explain when and why)

____ Breakfast _____
____ Lunch _____
____ Dinner _____
____ Snacks _____

Lodging:

If all base personnel had semi-private rooms (private room and shared bath) do you think the quality of life would be significantly improved? (explain why)

____ Yes
____ No

_____
_____

Opportunities:

What kind of facilities are you familiar with from other bases that would significantly improve the quality of life at Shemya? (explain)

_____
_____

Family Life:

If Shemya was able to accommodate families, would you bring your family?

____ Yes ____ No (explain why)

_____
_____

If a facility were established where your spouse could come and visit for a limited period of time (at your expense) would you be interested?

____ Yes ____ No (explain why)

_____

Comments:

If you could eke one change or add one facility at Shemya to improve the quality of life, what would it be? (explain why)

_____
_____
_____
_____

What other facilities do you think are needed?

_____
_____
_____
_____

Please make any additional comments below.

_____
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Thank you very much!

SUMMARY OF QUESTIONNAIRE RESULTS

To assist preparation of theShemya AFB Comprehensive Plan, a questionnaire was prepared, and distributed to some 500 base personnel. Eighty completed questionnaires were returned. While the responses represent only a minority of base personnel, and they are not a true random sample, composite results do reveal a number of clear trends. A copy of the questionnaire is included as part of this appendix. Results are summarized below.

General Information

Over 90% of those responding were Air Force military employees, with less than 10% civilians. The male to female ratio of respondents was roughly 85% to 15%Shemya AFB was noted as the first remote duty tour for three-fourths of respondents.

Transportation

Over half of all respondents identified a need for road improvements, with a majority of those specifically recommending paving efforts. Better road lighting and/or reflectors were also frequently mentioned.

Nearly a third of respondents listed the airport terminal as needing improvements. A number of people commented on overcrowding and general inconvenience created by limited space available and extended waiting periods experienced. Several individuals suggested features such as a restaurant or snack bar at the terminal.

About one-fifth of respondents commented on the need for pedestrian walkways and improved shuttle bus service. Of those favoring pedestrian walkways, there was about an even split between individuals mentioning needs for better lighting along walkways and those expressing a desire for shelter or enclosures. Corridors from Building 600 to frequently used facilities in the vicinity were most often noted. Comments about the shuttle bus included requests for expanded operating times, especially to accommodate shift workers, for schedules more sensitive to shift change times, and for better service to and from the airport terminal. Two other frequent comments concerning transportation were a desire for more frequent commercial airline service and cheaper rates, and a need for lighting in the flight line.

Communications

Over four-fifths of respondents indicated a preference for improving cable television, with a desire for more stations, a satellite disk, 24-hour service and more current programming the most frequently made

comments. Over one-half requested better long distance telephone service for personal use, with more convenient scheduling for the availability of lines and provision of pay phones most often mentioned.

Nearly one-half of respondents asked for better AM/FM radio, with greater variety in programming through more stations or other means the most frequent request. About one-third requested post office service improvements, with more frequent deliveries and expanded hours for package pick-ups the primary concerns.

Recreation and Leisure Time

For the "Old Gymnasium", half of respondents indicated they use the running track and the nautilus room; about one-third indicated they use the racquetball courts, weight room and men's sauna; and nearly two-thirds of female respondents indicated they use the women's sauna. Volleyball was the most popular activity noted among "New Gymnasium" users. Several individuals stated they felt the New Gymnasium floor is too hard.

Among Recreation Center users the game room and TV room were the most often mentioned facilities, with ping pong/shuffleboard, tailor shop, arts and crafts store and ceramic shop facilities also frequently noted. Roughly one-third of respondents indicated they use the Library lounge, and one-fourth use the reading room. Nearly two-thirds of respondents indicated they use the Theater during the weekend, and over one-half on weeknights. A number of individuals commented on the projector sound system needing improvement.

For the Consolidated Open Mess (The Club), over one-half of respondents indicated their use of the dining room, with somewhat less than one-half using the bar and participating in special events. Bands appear to be one of the most popular attractions, though a number of individuals commented on preferences for various types of music. "Hails and farewells" were also mentioned frequently, and numerous respondents requested more special events be held.

Over a quarter of total respondents commented that they used the chapel, with a majority of users participating in services there. "Banana split nights" and choir were frequently noted activities.

Only an eighth of total respondents indicated they use the outdoor running circuit, but a 3:2 majority answered they would use outdoor recreation facilities and exercise fields if they were available. Specifically mentioned most often were needs for a better softball diamond, running track and open turfed areas for field sports. Several individuals mentioned a desire for winter recreation opportunities (ice skating, cross-country skiing, snowmachining), tennis courts and some sort of golf facility.

Nearly three-fourths of respondents reported participating in beachcombing activities, with the north shore, south beach and Seal Point most often cited. Photography, fishing and use of various smokehouses were also noted in numerous instances.

Dining

Nearly all respondents reported using the Blue Fox Dining Hall, with three-quarters eating there seven days a week. Approximately a half indicated they used The Club Dining Room and the Shemya Inn Snack Bar, each on an average of once a week in the vast majority of cases. The desire for variety, and inflexible hours for the dining hall, making it unavailable for some shift workers were the most frequently cited reasons for using alternative facilities. About a half of respondents expressed a desire to fix their own dinners and snacks if the Base Exchange sold groceries and their dorm area had a galley kitchen. About 40% showed interest in preparing their own lunch and 22.5% their own breakfast.

Lodging

A response overwhelmingly in favor of semi-private rooms (private room and shared bath) was received, with the need for privacy repeatedly emphasized. Individuals often complained of difficulties caused by roommates having different schedules. Another observation was that co-ed floors could be possible in dorms with semi-private rooms. The desire for semi-private rooms was the clearest point of consensus in the overall questionnaire results, and was the most strongly supported step for improving morale.

Family Life

Over one-half of those answering responded negatively to the question of whether they would bring their families to Shemya. The rationale cited most often reflected concerns expressed by personnel about their own experience at Shemya: isolation and remoteness, limited leisure time opportunities, poor weather, etc. Shemya was characterized as particularly unsuitable for children. A significant factor tending to skew results is that a substantial portion of respondents are single.

By a similar margin, respondents favored having an opportunity for spouses to visit for limited periods of time at their own expense. A large number of individuals listed the extended separation from spouses and families as the most difficult part of their tour at Shemya. A number of people also commented they felt such visits would be worthwhile to increase their spouses' understanding of what their experience entailed. While many thought visits might be desirable, a significant percentage felt the expense involved and lack of facilities present would

make this opportunity impractical. Several respondents also expressed a preference for obtaining leave during the course of their service at Shemya to spend time with spouses and families at a more desirable location.

Other Comments

Responses under the "Opportunities" and "Comments" headings tended to fall into similar categories, and have been combined in this analysis. The single most frequently listed new facility was an indoor swimming pool. Other common responses are enumerated in order below.

- A separate club for officers and managers;
- Shemya isn't such a bad place in its current condition;
- Base housing for dependents;
- Fast food outlet and other alternatives to existing dining facilities;
- A commercial outlet for such items as clothing; the base exchange is too limited, and ordering materials is too slow to be practical;
- R & R away from the island;
- Boat trips to other islands;
- A high quality recreational- facility with a fill range of activities available;
- Additional bowling lanes;
- Saturdays off;
- More and cheaper commercial flights;
- A woodshop;
- More and better movies; and
- A bookstore and/or more current published materials.

APPENDIX C:

References

Appendix C: References

Below are listed the most useful sources of information and approaches used in addressing Quality of Life issues. Installation personnel involved in QOL goals implementation are encouraged to read more on this subject.

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