ANALYSIS OF THE PERCEIVED ADEQUACY OF AIR FORCE CIVIL ENGINEERING PRIME BEEF TRAINING

THESIS

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AFIT/GEM/DET/85S-16

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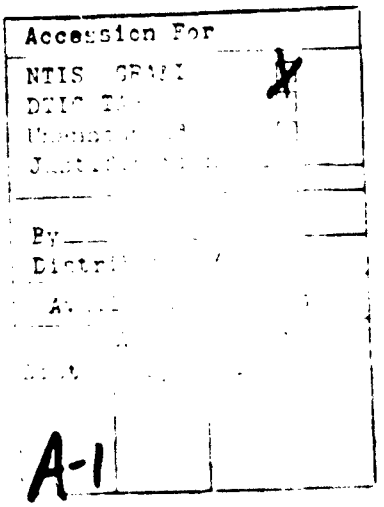

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THESIS

Presented to the Faculty of the School of Systems and Logistics

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William C. Morris

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Abstract

This study examined Air Force Civil Engineering Prime BEEF member's perceptions of the adequacy of their contingency training. Both NCO and officer members of Prime BEEF teams stationed throughout the world were surveyed to determine overall perceptions of training adequacy. The study sought opinions on: the adequacy of the training to support wartime and contingency taskings; whether or not current training programs are perceived to be established in the proper priority; the adequacy of the current amount of hands-on training; and the belief that Field 4 training at Eglin AFB provides adequate opportunities to practice the Prime BEEF mission. The majority of the responses were also broken down into subgroups of officers and NCO and these results compared.

The results indicate the majority of Prime BEEF members are undecided, but tend to agree, that current contingency training is adequate. In particular, members feel current chemical warfare, Prime BEEF orientation, rapid runway repair, and weapons training are adequate, but are uncertain about the other training areas. Members believe the majority of the training areas receive the proper priority, with the exception of Prime BEEF orientation, which seems to receive a higher priority than they believe it should. Members are unsure if they receive adequate hands-on

training, but at least 75% believe they have adequate equipment in all areas except explosive ordnance reconnaissance, expedient methods, and rapid runway repair. Over 75% believe they have adequate physical training space to practice all the various training tasks. Members indicated strong support for the current Field 4 training program and believe it is approximately the correct length. The officer/NCO comparison showed officers are more skeptical of the adequacy of the training in nearly every area considered.

ANALYSIS OF THE PERCEIVED ADEQUACY OF AIR FORCE CIVIL ENGINEERING PRIME BEEF TRAINING

I. Introduction

Overview

This section will look at the general issue of Air Force Civil Engineering, highlighting questions which have risen on the quality of the training conducted to teach civil engineering personnel their wartime skills. The specific problem to be examined by this research effort is then presented, followed by the research objectives and a statement of the scope of the study.

Air Force Civil Engineering

The key to projection of power by the Air Force is its aircraft. One of the requirements for putting these aircraft into the air is a base from which to operate. The runways, taxiways, and facilities of a modern air base are provided by Air Force civil engineers. The importance of civil engineering to the Air Force mission cannot be overemphasized.

> The Air Force . . . operates from stationary fighting platforms, which must be capable of launching and recovering aerospace forces. Therefore, we in Air Force civil engineering are part of the weapons system, and are essential to the fighting capability of that system [19:8].

Air Force Civil Engineering has evolved considerably since the days of the Army Air Corps. Civil engineers have an ongoing requirement to maintain bases and facilities throughout the world, many of which are located in extremely harsh environments. In addition, modern, sophisticated weapons require much more than a wide, grassy field and some fuel to support their operation. The need to defend United States interests requires a quickly reacting, mobile force to support the aircraft on the ground. As the mission of the Air Force has evolved and expanded, so too has the mission of Air Force civil engineers. Without first having a safe place to take off and land, the aircraft are useless. Providing these installations is the heart of the civil engineering mission. Writing on the image projected by Air Force Civil Engineers, Major Paul Hains cites the civil engineering mission as it is stated in the Air Force Engineering and Services Strategic Plan. That mission is to

> provide the necessary assets and skilled personnel to prepare and sustain global installations as stationary platforms for the projection of aerospace power in peace and war [19:8].

This "statement defines the basic responsibility of Air Force civil engineering, emphasizing the primary requirement of war readiness, the associated training, and total base maintenance" (19:8). At the heart of this mission is the civil engineering Prime BEEF team.

Prime BEEF is the readiness arm of Air Force civil engineering. In this context, "the acronym BEEF stands for

'Base Engineer Emergency Force' and the word 'Prime' denotes elite military personnel performing their wartime roles" (10:4). Originally conceived in the 1960's, Prime BEEF developed as the Air Force realized "the need for mobile civil engineering forces trained and equipped for mobility roles" (10:4). Prime BEEF has evolved over time, recognizing the increased Soviet threat with its anticipated "blitzkrieg" type of attack. This type of battle will require the capability to generate high aircraft sortie rates and continually repair runways and taxiways (10:4). In addition, the continued unrest in the Middle East, coupled with the vast petroleum reserves located there, has made that area one of vital US interest. Since the United States has no airbases in that area, the need to be able to quickly establish an airfield in that region's harsh desert environment creates a highly challenging situation for Air Force civil engineers.

With the clear need for quick response to a wide variety of situations, the Prime BEEF program was revamped in 1978. This reshaping occurred because

> the conventional war of the future will be time as well as weapons and manpower intensive. The ability to move rapidly, set up, and wage war is more decisive now than at any other time. Modern technology allows faster reaction; hence, time has become more crucial. Therefore, the entire Prime BEEF force was repostured into six types of mobile contingency force teams. These teams vary in size, speciality composition, and mission [10:4].

Prime BEEF was again restructured in 1984, in order to better meet "expanded rapid runway repair (RRR) manning

requirements; Southwest Asia (SWA) bare base operations; and AFSC-specific wartime requirements in other theaters" (4:34).

With each restructuring, training for wartime tasking has shifted or increased. Keeping up with the required training is essential to properly meet contingencies, especially with the minimum notification time anticipated. Major S. Brian McCluskey, a former Chief of the Training Division for the Air Force Engineering and Services Center (AFESC), stated during a 1984 telephone interview with an AFIT researcher

> Our first priority [civil engineering] definitely is readiness, not our day-to-day job. However, in practice the peacetime mission is overshadowing the wartime requirements. To be effective the training program should be comprehensive and detailed. BCE's must be involved and committed for good training. More hands-on training is needed and an evaluation process should be implemented [28:4].

Today, some questions exist concerning the emphasis which Prime BEEF training receives. Two research reports in the past five years have raised doubts regarding the adequacy of Prime BEEF training (21,28). Additionally, a 1982 Air Force IG report on Civil Engineering readiness cited numerous "deficiencies which could detract from the ability of Civil Engineering forces to adequately accomplish peacetime and wartime contingency missions" (11:2).

Specific Problem Statement

Because of the importance of Prime BEEF training, and in view of significant evidence that the training may not yet be fully adequate, Air Force planners need an indication of how adequate the training is and where any deficiencies exist. Obviously, one conclusive measure would be to test every Prime BEEF team member's ability to perform under realistically simulated conditions. However, time and budgetary constraints make this type of testing impossible. Although performance under simulated wartime conditions is examined on a limited scale at Field 4, Eglin AFB, and during contingencies and exercise deployments, it reaches only a small segment of the total Prime BEEF force. Additionally, analysis of this performance provides only one measure of the quality of the training which Prime BEEF members receive, and should be augmented with other indicators to determine the adequacy of the Prime BEEF training program.

Another indicator of force readiness is the perceptions of Prime BEEF team members themselves about the adequacy of their training. Although perceptions are one step removed from demonstrated fact, they can provide important insights into adequacy in two ways. First, perceptions are one determinant of attitude. Air Force Manual 50-2, "Instructional System Development," divides learning into two categories, "knowledges" and "attitudes". Attitudes are "mental states or conditions which affect motivation and

behavior" (9:7-1,note 1). Recognizing that both knowledge and attitude can affect performance, Air Force educators give careful attention to both knowledge and attitude when they prepare, conduct, and evaluate training. Research studies also indicate that attitude affects motivation and performance (24,3,18.5).

The second and more important use of perceptions is the feedback they give educators about training. Numerous studies have demonstrated that "favorable reactions to a training program generally will enhance the learning opportunities in the program" (3:143). According to Captain Neil K. Kanno, Instructor in Civil Engineering at the Air Force School of Civil Engineering, the perceptions trainees have of how well an instructional course prepares them to perform their job is an important input to the educators who develop and conduct the training program (20).

An AFIT study performed five years ago examined the opinions of senior base level civil engineering leaders regarding Prime BEEF training (21), but did not survey those actually receiving the training. In the time since that study, Prime BEEF training has undergone considerable change. The study undertaken here provides a current evaluation of the attitudes and perceptions which Prime BEEF team members have regarding the adequacy of their training in hopes of improving the knowledge which Air Force educators have to design appropriate training programs.

Research Objectives

The primary objective of this study is to determine whether the current Civil Engineering Prime BEEF training program is perceived as adequate by the officers and NCO's involved with the training. This primary objective is supported by six secondary objectives:

1. Determine if current Prime BEEF training is perceived as adequate to support the anticipated wartime and contingency tasking.

2. Determine if the majority of Prime BEEF team members believe current Prime BEEF training requirements are established in the proper priority to agree with anticipated wartime taskings.

3. Determine if the individual Prime BEEF team members believe they receive adequate hands-on training to prepare them for their anticipated wartime tasking.

4. Determine if Prime BEEF team members believe the training conducted by the AFESC at Eglin AFB provides adequate opportunities for practicing the Prime BEEF mission.

5. Establish what specific amendments Prime BEEF team members believe should be made in the Prime BEEF training program to better prepare them for their mission.

6. Determine if the officers and NCO's involved in the training program have differing perceptions regarding the program adequacy.

Scope of Study

This study makes no attempt to validate any of the previous studies done on Prime BEEF training. This report will not try to establish the adequacy of Prime BEEF training; it will report the perceptions of adequacy of those who conduct and receive the training.

II. Background on Prime BEEF

Overview

This section will examine the background of Prime BEEF, describing its mission and structure and then looking at each of the areas in which Prime BEEF members receive training. The critical role of attitudes toward training is discussed, followed by some highlights on why training is important to the military civil engineer. Finally, a review of four reports that recommend improvements in Prime BEEF training will be presented.

Mission

According to Air Force Pamphlet (AFP) 93-7, The Prime BEEF Manager's Handbook,

> The Air Force must be able to launch its aircraft during wartime. Aircraft launch, recovery and high sortie generation rates demand specific mission tasks from Air Force engineers. These include the following:
>
> a. Air Base Recovery
> b. Force beddown
> c. Operations and Maintenance
> d. Crash Rescue
> e. Construction Management [10:4].

In Air Force Regulation (AFR) 93-3, Air Force Civil Engineering Prime Base Engineer Emergency Force (BEEF) Program, the purpose of the Prime BEEF program is described:

> The Prime BEEF . . . program is an Air Force, major command, and base level program that organizes the civil engineering force for worldwide direct and indirect combat support

> roles. It identifies and posture both civilian and military authorizations and skills for the dual role of performing peacetime real property maintenance and wartime engineering requirements. The Prime BEEF program includes all military civil engineering personnel at all levels of command [7:5].

Being ready to perform these tasks anywhere in the world on short notice is what sets Prime BEEF members apart from their civilian civil engineering counterparts. The former Director of Air Force Engineering and Services, Major General William D. Gilbert, stated in 1979 that

> Military forces exist and can be justified only to the extent that they are required to respond to contingency operations in support of the national interest. As important as our other day-to-day jobs might be, they are secondary to preparedness for the conduct of military warfare. When the choice must be made between spending time and/or money on being ready to deploy versus keeping the home fires burning, the priorities should be clear. . . . Our military personnel must be totally aware of the fact that their peacetime job exists only because we need them on-board and ready at all times to do something else. . . . Our first priority mission [is to] support the combat forces [17:i].

Structure

Prime BEEF was aligned in 1978 into Contingency Force (CF) teams. These teams were organized as task related groups to be deployed as a unit for their specific Prime BEEF speciality. This structure proved to be too rigid, however, since "the CF-team capabilities frequently did not match mission requirements or deployment constraints" (4:35). The teams usually had to be substantially modified, or a special team had to be developed to meet the mission

requirements (4:35).

In 1984, all Prime BEEF units were restructured to provide greater flexibility in response to contingency operations. Now designated PB-1 through PB-26, the teams are organized and manned as follows (4:36-37; 7:48,127):

Team	Number of Personnel	Title
PB-1	13	Base Engineer Management Team
PB-2	45	Basic Support Team
PB-3	25	Limited Support Team
PB-4	12	RRR Equipment Operator Team
PB-5		Reserved for possible future team.
PB-6	3	Fire Protection Management Team
PB-7	12	Fire Protection Operations Team
PB-8	3	Limited Fire Protection Operations Team
PB-9 through PB-26	3	Speciality Teams

(Further team descriptions are available in Appendix A.)

This new structure has three distinct advantages over the previous Prime BEEF structure (4:37):

1. Provides for the best match of Prime BEEF forces against projected wartime requirements at specific sites.

2. Is adaptable to the various RRR concepts.

3. Allows many more wartime-critical engineering personnel to be assigned to mobility teams, and all with an exact match in their speciality area.

The training for the various teams depends upon their designation. The majority of Prime BEEF members receive training in all areas. As exceptions, teams involved in fire protection operations (PB-6,7,8) do not receive instruction in Expedient Methods and Rapid Runway Repair, nor do they participate in field training (7:67). The next section looks at the various training areas and explains what techniques a Prime BEEF team member practices when preparing for his wartime role.

Training

The philosophy behind Prime BEEF training is contained in the following statement from the 1978-1979 Prime BEEF Curriculum published by the Air Force Engineering and Services Center, Engineering Technology Office:

> Training Philosophy
>
> Prime BEEF training should be an active and invigorating program designed to stimulate a high state of readiness within Civil Engineering. The very nature and purpose of Prime BEEF dictates that maximum efforts be expended to conduct this training under [a] stressful environment. Acceptance of this goal is the best way to develop individual initiative and responsibility, to create within each student the understanding that he/she must work as an integral member of a well-trained team who is responsive to his/her own safety as well as the safety of others, and to ascertain the necessary confidence and skills needed to perform under combat conditions [1:1].

Training for Prime BEEF members occurs in three main areas (7:7-8,23; 28:15):

1. Training obtained through the performance of peacetime civil engineering work.
2. Specialized HQ AFESC training, including

similar type instruction conducted at PACAF, USAFE, and AAC training sites.

3. Home Station Training.

Peacetime CE Work. The day-to-day maintenance of the facilities on a modern base afford some opportunities to practice skills also required in wartime. However, many of the wartime tasks required of Prime BEEF members are not practiced during peacetime. "The civil engineering wartime requirement calls for a much different mix of civil engineering skills than exists for peacetime" (7:6). "Wartime engineering roles . . . include war damage repair, force beddown, operations and maintenance, construction management, and crash rescue and fire suppression" (7:8). Additionally, even wartime tasks which can be practiced during the day-to-day peacetime jobs become a whole new challenge when they are undertaken in a hostile environment by engineers wearing chemical warfare (CW) gear.

HQ AFESC Training. The majority of CONUS based civil engineering members must undergo periodic specialized training conducted by the AFESC at Field 4 in Eglin AFB FL (7:23). "The desired frequency is once every 24 months . . . depending on the availability of training sites" (7:23). The training period extends for five days and gives the teams hands-on training in

> repairing large and small pavement craters, EOR [Explosive Ordnance Reconnaissance] and CW defense techniques, expedient facility and utility repair techniques, overseas utility systems, and installation and operation of Harvest Eagle equipment [7:23].

In addition, selected Prime BEEF members tasked "to support locations receiving Harvest BARE shelters and equipment . . . receive special training periodically from the 4449 MOBSS" at Holloman AFB NM (25:6). (Harvest Bare and Harvest Eagle are air transportable support packages. Their contents are explained in Appendix A.)

Home Station Training. As the name suggests, this training is conducted at the member's home station. The training is divided into two categories, with five specialties in each category. Category I training is conducted using briefings, slide presentations, and movies, while Category II training is more task oriented (7:21-22). A description of the specialties within each category follows. The following are Category I topics.

Prime BEEF Orientation. All military and civilian civil engineering personnel receive annual briefings on the Prime BEEF program, emphasizing how each individual fits into the program (7:21).

Military Sanitation Training. Annual training in military sanitation is conducted by base medical personnel in accordance with AFM 161-10 and AFR 50-20. The training includes "personal hygiene, control of communicable diseases, kitchen and mess sanitation, problems of extreme climate, march hygiene, self aid and buddy care, . . . and other related topics" (7:21-22).

Explosive Ordnance Reconnaissance (EOR). Since unexploded ordnance is likely around a runway which has been attacked, Prime BEEF personnel must be able to recognize and describe unexploded ordnance to report it to the explosive ordnance disposal team (7:22). Training in this specialty is conducted annually (7:22).

Expedient Methods. This specialty involves training in three areas: beddown, field construction, and repairs/destruction methods. The training emphasis in all the areas is on beddown of forces and making the base operational as expeditiously and safely as possible (7:22).

Phase I of Personal, Work Party, and Convoy Security. "The briefing [which composes this training] consists of personal and physical security techniques used while performing Prime BEEF tasks" (7:22).

Category II training, which is more task oriented than Category I training, includes the following topics.

Government Vehicle Operations Training. Every effort is made to obtain training on actual vehicles which will be used in the contingency situation. If the home station does not have the vehicles, attempts are made to borrow the vehicles from local Army or Air National Guard bases (7:22).

Chemical Warfare (CW) Training. This individualized training teaches

> recognition of symptoms of chemical agents; ability to don, wear, and remove personal protective equipment; normal duty performance in

CW protective equipment and clothing; limitations of protective gear; and decontamination procedures familiarization [7:22].

Weapons Training. Annual qualification in the M-16 rifle or .38 caliber revolver is required (7:22).

Rapid Runway Repair (RRR). "RRR training must be conducted . . . on a quarterly basis, be as realistic as possible, and include at least one simulated bomb crater" (8:4-2). During wartime, this mission is the highest priority of the Base Civil Engineer (8:4-1). Yet, this training is the most difficult to realistically practice since trainers cannot blow a hole in the runway for each practice session (20).

Field Training. An annual overnight bivouac is required, allowing the practice of contingency skills. Included here are "camp layout, erection of available Harvest Eagle assets, military sanitation training" (7:23). Phase II training of personal, work party, and convoy security is also conducted, "which consists of exercises to reinforce lessons taught in Phase I. Personnel practice selecting defensive positions in different situations, convoy security, work party security, and personal security" (7:23).

Attitudes Toward Training

The attitudes Prime BEEF team members have toward their required training can have a significant impact on how well that training is received, and consequently the impact that training has on mission performance. Landy and Trumbo state

in their book, Psychology of Work Behavior,

> Effective training requires effective learning, retention, and transfer on the part of the trainee. This, in turn, depends upon the trainee's goals and how the training program is perceived with respect to these goals, perhaps even to a greater degree than on learning abilities [24:252].

Primary among Prime BEEF member's goals should be effective performance of the base mission to ensure the safety and survival of themselves and the country. If they believe the training they receive is not effective in helping them meet these goals, the value of that training is questionable.

As previously stated in Chapter I, studies show that "favorable reactions to a training program generally will enhance the learning opportunities in the program" (3:143). Evidence to support this belief currently exists in government training programs. The Bureau of Engraving and Printing registered significant productivity gains between 1967 and 1973. A case study examining these gains cited the Bureau's training programs as one of the significant contributing factors. Employee attitudes toward the program were quite positive. "The strength of comprehensive training efforts is testified to by the fact that Bureau employees expressed in a recent attitudes survey an overwhelming belief that they are well trained for their jobs" (18:136).

The Training and Development Handbook, sponsored by the American Society for Training and Development, ties motivation and attitude together when discussing

instructional systems or courses

> Enough research evidence exists to support the contention that attitudes and/or feelings toward the learning environment are as important as any content considerations [5:12-3].

The author further states:

> The primary focus of a[n instructional] system, then, is the learner, the trainee. . . . While the system provides content consistency and relevance, the attitudes surrounding that system--on the part of the trainer, the trainee, and management--are paramount to achieving the desired outcomes [5:12-10].

Value of Training

The importance of training is recognized by the highest echelons of Air Force Civil Engineering. In a recent interview appearing in Air Force Engineering and Services Quarterly, Brigadier General Joseph Ahearn, the Deputy Chief of Staff, Engineering and Services, USAFE, stated:

> The only reason that we have uniformed military in civil engineering and services is to fulfill the wartime mission and that's what Prime BEEF . . . training is all about - developing military skills [29:26].

Major General Clifton D. Wright, the current Director of Air Force Engineering and Services, has also emphasized the importance of training.

> We must train our people to be ready for the wartime mission. We have to take time out to practice the fundamentals of doing our job in wartime, and we must learn and become familiar with the equipment we use in wartime. Managers must know that part of their job is training. Whether we realize it or not we are training young people for wartime every day. When we deploy, often times we're on our own. Our entire mode of operations, our philosophy and our thinking must be able to handle the transition from peace to war [30:6-7].

Previous Prime BEEF Studies

1980 AFIT Thesis. A 1980 study by Captains C. D. Kohlhass and R. L. Williams examined Prime BEEF training being conducted at that time. Their thesis, titled An Investigation of the Adequacy of the Training Program for Civil Engineering Prime BEEF Contingency Force Teams, surveyed key civil engineering officer personnel to determine if they felt that Prime BEEF training was properly preparing their Prime BEEF teams for their anticipated wartime tasking (21). These researchers concluded that "current training requirements as they are presently established in AFR 93-3 for these PB CF teams do not result in adequate or realistic training" (21:89). Kohlhass and Williams found that while a Prime BEEF team training program is necessary, "base level PB exercises are not realistic" (21:91).

This 1980 study also found an apparent problem in the training emphasis. Their survey respondents rank ordered the eight training areas in relative importance to the Prime BEEF mission, as shown below.

Training Area	Rank
Rapid Runway Repair	1
Chemical Warfare Defense Training	2
Field Training	3
Expedient Methods	4
Weapons Training	5
Explosive Ordnance Reconnaissance Training	6

Military Sanitation Training	7	
Training in Government Vehicle Operation	8	[21:92]

According to the analysis performed by the researchers, the "Contingency Force teams were less qualified in the top four ranked training areas than in the bottom four" (21:92-93). The two highest ranked, rapid runway repair and chemical warfare, are difficult and expensive to practice, a fact that may indicate why the team members felt less qualified in these areas.

Kohlhass and Williams found that Prime BEEF training did not receive the highest priority of CONUS Base Civil Engineer organizations (21:95). "Out of five civil engineering manhours requirements, Prime BEEF training was ranked last by the CONUS BCEs and OBCs" (21:95). (BCE stands for Base Civil Engineer, while OBC stands for Operations Branch Chief. Their positions are further described in Appendix A.)

Since the study by Kohlhass and Williams, the formal Prime BEEF training conducted at Eglin AFB by the AFESC has been initiated. Also, Prime BEEF teams were restructured to increase their flexibility. Finally, greater emphasis is being placed on training for Southwest Asia contingencies.

Functional Management Inspection. As described in a 1984 AFIT thesis, an Air Force IG Functional Management Inspection of Civil Engineering Contingency Readiness conducted in 1981-1982 "revealed major training shortfalls" (28:35). The inspection revealed that

> the Prime BEEF Home Station training program was not fully preparing Prime BEEF units for their wartime role due to varying quality and lack of realism [11:16].

The report made numerous recommendations to improve the Prime BEEF program (11:8-29).

Prime BEEF Training Curriculum Workshop. A workshop on Prime BEEF training was held at the AFESC from 19 to 23 September 1983, to "identify the Prime BEEF training requirements and recommend training standards for the period 1984-85" (2:1). Participants included both officers and senior NCOs from the civil engineering career field. These individuals had several findings, including the following (2:14):

1. Home Station program lacks motivation.
2. Eglin AFB Field 4 curriculum not organized to provide most effective training to specialized teams.

The workshop report recommend training proficiency levels and an evaluation program be established at the home station level to put more incentive into the program (2:14). They also recommended that the training conducted at Eglin be restructured to provide more specialized team training, and that the training there should be limited to only those teams with theater tasking (2:14).

1984 AFIT Thesis. Captain E. G. Smith's 1984 AFIT thesis is titled An Examination of the Air Force Civil Engineer's Prime BEEF Home Station Training Program. In his thesis, Capt Smith sought to determine the quantity of home

home station training civil engineering personnel receive annually (28:4). He compared the reported times among the various major commands, both CONUS and overseas bases.

Captain Smith discovered training times varied significantly from base to base (28:147). Annual training times varied from 393 hours to just over 13 hours, with an average annual training time of 50.53 hours per team member (28:147-148). Captain Smith also noted that "Air Force regulations require the use of the Instructional System Development (ISD) for all training development and modification" (28:152). He reported that this system was not used when home station training requirements were first developed, but ISD techniques are now being applied as a result of the Prime BEEF curriculum workshop held in 1983 (28:152). Though he did not attempt to say whether or not the reported training times adequately trained Air Force civil engineering personnel, Captain Smith questioned whether on not many of the bases with lower times could accomplish the required training (28:148).

Captain Smith recommended proficiency and evaluation standards be established for all home station training requirements, and that the high priority of the readiness mission be reemphasized with actions as well as words (28:152-153). He also recommended a study to determine if the average training time of 50.53 hours per year adequately prepares CF-1, CF-2, or CF-3 team members to accomplish their wartime tasks (28:153).

Analysis

Each of these studies raised questions about the adequacy of Prime BEEF training. Training times appear to vary widely between the various bases, and though emphasized quite strongly at the Air Staff level, Prime BEEF training appears to receive a lower priority at the base level. It appears that the emphasis placed on training at the higher echelons does not filter down to the level where training is actually performed. The lack of application of standard Air Force instructional development techniques would seem to have hampered the program, especially since there appears to be no continuity in the training program.

Each of these studies deals closely with the specific problem this research effort will address. By examining the perceived adequacy of the current Prime BEEF training program as viewed by those who receive the training, the author hopes to provide additional information to the educators who design and supervise the training process to help them prepare better programs.

III. Methodology

Overview

This chapter will describe the methodology used to answer the research questions presented in the previous chapter. Specifically, this chapter describes the population which is to be surveyed, and provides justification for the survey approach to gathering the research data. Development of the actual survey instrument is also discussed. Finally, this chapter describes the data collection plan, explaining which statistical tests were used on the data, and how the results of the tests were analyzed to satisfy the research objectives.

Population

This study sought the opinions of the officers and NCO's in base level civil engineering organizations who administer and receive Prime BEEF training. Specifically, the study surveyed individuals throughout the career field in the grades of O1 through O5 and the grades of E5 through E9. By surveying individuals without regard to job title, a broad view of the training program would result.

The opinions of base senior and mid-level civil engineering NCO's is particularly desirable for this study. These individuals are the people who conduct and receive the majority of the training. Their opinions should give a "grassroots" look at how well Prime BEEF training is

perceived as meeting the intentions of the program. The survey specifically excluded first and second term airman since their opinions could be unduly influenced by having Prime BEEF experience at only one or possibly two bases. It was hoped that by surveying mid-level and senior NCO's, a more experienced and broader view would result.

Surveys were sent on a random basis to individuals throughout the Air Force. Those individuals who serve on Prime BEEF teams 6, 7, and 8 were excluded from the survey, since all Prime BEEF team members except those on PB-6, 7, and 8 are required to train in all the Prime BEEF training areas. Because a complete return of all surveys was not anticipated, the study is based upon a sample of the population rather than a census. A representative cross section of the population was expected to respond, permitting generalization to the population as a whole.

The surveys were distributed on a random basis to individuals who possessed an Air Force civil engineering Air Force Specialty Code (AFSC), without regard to the person's position or job title. Telephone interviews with the Civil Engineering career field managers at AFMPC provided information on the total number of individuals in the various civil engineering AFSC's (22,27). With over 5300 individuals in the survey population, it was impractical to try and survey the entire population. A representative sample of almost 1500 individuals were contacted. Surveys were distributed through the mail to randomly selected

officers and NCO's with the following AFSC's:

AFSC	Rank and Speciality Area	Number in Population	Number sent Surveys
5516	Field Grade CE Officer	539	42
552X	Company Grade CE Officer	1654	392
5420C	E-9, Electrical	33	25
54299	E-8, Electrical	65	26
5427X	E-7, 6, and 5, Electrical	896	284
54500	E-9, Mechanical	22	17
54599	E-8, Mechanical	45	24
5457X	E-7, 6, and 5, Mechanical	648	188
55100	E-9, Pavements and Construction Equip.	27	21
55199	E-8, Pavements and Construction Equip.	42	24
5517X	E-7, 6, and 5, Pavements and Construction Equip.	552	156
55200	E-9, Structural	32	21
55299	E-8, Structural	61	21
55273	E-7, 6, and 5, Structural	415	117
56600	E-9, Sanitation	12	11
56699	E-8, Sanitation	21	15
5667X	E-7, 6, and 5, Sanitation	251	89
	Totals:	5315	1473

It was anticipated that some individuals would be unable to respond to the survey since the questionnaire sought responses concerning the individual's current assignment. Some of the individuals contacted are in

headquarters assignments or other positions where they do not actively participate in Prime BEEF training/exercises. A large number of surveys were distributed to insure that an adequate number of current Prime BEEF members would be contacted.

The data was limited to collection from active duty Air Force units on the assumption that these units are more current in their Prime BEEF training and receive a greater emphasis in that training than non-active duty units. Air Force Reserve and Air National Guard units were not surveyed.

Justification

Use of a survey was the most appropriate method of gathering data for this study for a number of reasons:

1. The population to be surveyed is spread over a geographically large area, making personal interviews impossible because of time and money constraints imposed upon the study.

2. The large number of personnel contacted also made a personal interview impractical.

3. Use of a survey assures anonymity of the respondents, which should encourage their honesty when responding.

4. A survey permits the gathering of considerable data without requiring too much time from the respondents. This should encourage their willingness to respond.

Instrument

A single survey format was used for the entire sample contacted. Since the questions sought responses about the Prime BEEF training areas in which all team members must participate, separate questions for the various AFSC-specific tasks were not deemed necessary.

The survey questions were developed according to the following guidlines and procedures (14:213-256; 23:1-11, 59-64,131-161).

1. The survey length was kept as short as possible to encourage ease of completion and a high rate of return.

2. Questions were worded as clearly as possible to try to prevent ambiguity and misinterpretation when completing the form.

3. The respondents marked their answers on the survey form and not on a coded answer sheet. It was hoped this would encourage survey completion.

4. Anonymity was assured to encourage truthful responses.

Some survey questions were adapted from the previously discussed 1980 AFIT thesis in hopes of adding validity to the survey instrument. In addition, the survey was pretested in February 1985 on members of the 1985 AFIT GEM class who had previous Prime BEEF experience. The survey was also pretested on six senior NCO's assigned to the 2750 Civil Engineering Squadron at Wright-Patterson AFB. The

comments and feedback received from these two test groups helped to further refine the final questionnaire.

Data Collection Plan

Two primary sources of information were used for this research effort, the literature review and the surveys on Prime BEEF training. The literature review provided the background on the development of the Prime BEEF program. It described, in detail, the recent evolutionary changes which have been taking place in the Prime BEEF program, and also reviewed several recent studies on the effectiveness of the Prime BEEF training program. The Prime BEEF training attitudinal surveys provide the descriptive and analytical data.

The primary data was gathered through the attitudinal surveys. This data was of two types, quantitative and qualitative. The quantitative questions collected demographic information about the individuals surveyed, including:

1. Military rank
2. Primary speciality area
3. Location of assignment (Conus or non-Conus)
4. Major Command
5. Time on station
6. Prime BEEF team to which assigned
7. Size of Civil Engineering unit.

The qualitative questions were used to determine the

individual opinions of the respondents regarding the Prime BEEF training they receive. The questionnaire used in the survey is located in Appendix B.

Descriptive statistics require the sample size to be at least ten percent of the total population size (6). Using the Atlas Data Base and the search capabilities of the AFIT Consolidated Base Personnel Office, a random search designed to provide at least one quarter (25%) of the total population from each AFSC was conducted. The previously discussed numbers reflect the number of usable names which were generated. A review of the job titles provided with the officers listing indicated many of the individuals were not in base level civil engineering organizations. This was especially true of the field grade officers, and resulted in a lower than desired number of individuals to contact. Overall, however, 1473 surveys were mailed out, reflecting 27.71 percent of the total population. The knowledge and experience of these individuals in dealing with the Prime BEEF program and the training it requires should make them the best judges of how adequately the training is meeting the program needs. It is assumed that the respondents gave their true and honest opinions on the questions asked.

Data Classification

The information collected contained nominal, ordinal, and interval levels of data, depending upon the type of question. The majority of the demographic questions

required only nominal responses. These included the speciality area, assignment location, major command, and Prime BEEF team. Ordinal data was collected on the questions regarding military rank, time on station, and size of civil engineering unit. Also considered ordinal level data is the rank order assignment given to the different Prime BEEF training areas by the respondents. Responses to the opinion questions were considered interval data, since they were based on the five-point Likert Scale (14:125). There are differing ideas about whether or not data based on a Likert Scale is, in fact, interval data. Mr. P. L. Gardner, writing in the Review of Educational Research, supports the use of Likert Scales as interval data in his article entitled "Scales and Statistics". Mr. Gardner states:

> If a test is constructed by psychophysical scaling methods [the Likert Scale], . . . then, it is argued the measure possesses interval scale [16:46].

For this research effort, the data gathered with the Likert Scale is assumed to be interval and is treated as such.

Data Analysis

Four types of measurement questions were used to answer the research questions posed in Chapter I. These included Likert Scale questions, rank-ordering questions, simple yes-no questions, and open-ended questions. Each type of question required a different method of analysis to interpret the results. A brief discussion of each method

follows.

Likert Scale Questions. Each of the questions answered using the Likert Scale was analyzed using the "Frequencies" sub-program of the computerized Statistical Package for the Social Sciences, (SPSS) (26). Use of this program provided simple measures of central value, or approximations of the center of the distribution of the responses. A discussion of the three most commonly used measures of central tendency follows.

Mean. The most common measure of central tendency is arithmetic mean, which is defined as "the sum of all the observations divided by the number of observations" (13:22). Mathematically, the formula is expressed as follows:

$$\bar{X} = \frac{\sum_{i=1}^{n} X_i}{n}$$

where:

$\bar{X}$ = the mean of the responses

X_i = the value of each response

n = the total number of responses

The mean is an easily understood value which gives the average response of all the data inputs for that question. However, the mean can be strongly influenced by a few outlier values which do not represent a significant number of respondents. For this reason, other measures of central tendency must also be considered.

Median. The median is simply "the numerical value of the middle case or the case lying exactly on the 50th percentile, once all the cases have been rank ordered from highest to lowest" (26:183).

Mode. The mode is simply "the value of the variable which occurs most often" (26:182).

Standard Deviation. While not a measure of central tendency, knowledge of the standard deviation of the data distribution is important for a thorough understanding of the results. The standard deviation is simply the square root of the variance. The variance is "a measure of the dispersion of the data about the mean of an interval-level variable. This statistic is one way of measuring how closely the individual scores on the variable cluster around the mean" (26:184). The standard deviation has a more intuitive appeal since its units are the same as those of the variable. The mathematical formula for the standard deviation is:

$$\sigma = \left[\frac{\sum_{i=1}^{n} (X_i - \bar{X})^2}{n - 1} \right]^{1/2}$$

where:

σ = the standard deviation.

Kurtosis. This value indicates how peaked or flat the curve is when compared to a standard normal curve. A normal curve will have zero kurtosis. A negative kurtosis indicates a flatter than normal curve, while a positive

kurtosis indicates a more peaked curve (26:185).

Skewness. Skewness indicates deviations from the symmetry of a normal curve. Zero skewness indicates a normal curve. A positive skewness indicates the values are grouped more to the left of the mean, while a negative skewness means the values are grouped more to the right of the mean (26:184-185).

The following criteria were used to analyze the Likert Scale measurement questions (15:49-50):

A. If the mean response fell within 1.0 and less than 1.5, then the conclusion drawn was that the respondents, as a group, "strongly agree" with the question statement.

B. If the mean response fell within 1.5 and less than 2.5, then the conclusion drawn was that the respondents, as a group, "agree" with the question statement.

C. If the mean response fell within 2.5 and less than 3.5, then the conclusion drawn was that the respondents, as a group, "neither agree nor disagree" with the question statement. However, if the mean response was less than 2.75, it was concluded that the respondents, as a group, "tended to agree" with the question statement. Likewise, if the mean response was greater than 3.25, then it was concluded that the respondents, as a group, "tended to disagree" with the question statement.

D. If the mean response fell within 3.5 and less

than 4.5, then the conclusion drawn was that the respondents, as a group, "disagree" with the question statement.

E. If the mean response fell within 4.5 and 5.0, then the conclusion drawn was that the respondents, as a group, "strongly disagree" with the question statement.

ANOVA. Each of the Likert Scale questions was also analyzed using the subprogram "Breakdown" from SPSS. This program permits categorization of the responses by selected groups, and performance of a statistical comparison between the means of the selected groups. This comparison is termed "One-way Analysis of Variance" (ANOVA), and "allows users to statistically test whether the means of subsamples into which the sample data are broken are significantly different from each other" (26:259). The test considers two hypotheses:

H_0: (Null hypothesis): The means of the subsamples are equal

H_1: (Alternate hypotheses): At least one of the subsample means is different from the others.

If no significant difference is found between the means of the subpopulations, the null hypothesis cannot be rejected. Deviations which occur are then attributed to sampling error. Testing is done by comparing the computed F ratio (F-calc), with a known sampling distribution of the F ratio (F-crit). If the computed F ratio (F-calc) is greater than the F ratio (F-crit) obtained from a table of standardized values, the null hypothesis that the means are

equal is rejected. Based upon the degrees of freedom which were determ ed from the ANOVA analysis, F-crit was obtained from the appendix of the statistics textbook, Probability and Statistics for Engineering and the Sciences (12). The ratios were compared at the .05 level, meaning the null hypothesis would be incorrectly rejected on an average of one time in twenty.

It is possible for the numerical analysis to determine that a statistical difference between the group means does exist, yet the means may still lie within the same level of agreement range previously discussed. In order to provide a more complete understanding of the results, both situations will be discussed when the responses are analyzed.

Rank-ordering Questions. The rank-ordering questions were analyzed by using the different measures of central tendency for each of the various areas and compiling a rank order of these areas. The ranking ordering was based upon the mean response for each area, but the median and mode response was also displayed. These questions were also broken down by the two subgroups, officers and NCO's, and their mean responses analyzed to determine if a statistical difference existed. Use of the "Frequencies" subprogram again provided the measures of central tendency, while the "Breakdown" subprogram permitted the separation of the data into two groups for the ANOVA comparison.

Yes-No Questions. Each subarea was analyzed using the Frequencies subprogram to determine how many times the

respondents marked each individual training category as being deficient in training area or equipment. The responses were summed and analyzed to compute a percentage of the total respondents.

Open-ended Questions. Each response to an open-ended question was analyzed according to the following procedure (21:34):

A. A review of the responses was conducted to identify the subject of each and a preliminary listing was made of tentative categories of these responses.

B. A final list of categories was developed from the tentative list.

C. All statements were reviewed and placed into one of the categories.

D. A tally of the frequency with which each subject was mentioned under that particular question was produced.

The reliability of the categorizations can be questioned due to the subjective grouping required by the responses, but since all responses were categorized by the same individual, the results are assumed to be valid and appropriate for representing the opinions of the individual respondents.

IV. Results

Overview

This chapter presents the results of the statistical analysis performed on the data gathered from the surveys on opinions of Prime BEEF training. The data was analyzed using the methodology described in Chapter III, employing the "Frequencies" and "ANOVA" subprograms previously described. The results are presented according to the order in which the questions were asked in the survey, with the exception of two questions (4 and 16) which are presented slightly out of their expected sequence to facilitate the grouping on questions of similar topics. In addition to the descriptive statistics of the individual question results, responses for all the Likert Scale and rank ordering questions are reported according to the rank of the respondent, either officer or NCO. Also, the three questions concerning support for the Prime BEEF program from outside the civil engineering squadron (Survey Questions 13, 14, and 15) are reported according to major command.

Overall Responses

Table 4.1 displays the participation results for the survey. Of the surveys which were returned but were unusable (a total of 89), 69 were from individuals not currently involved with Prime BEEF. Nine of the respondents whose surveys were unusable felt they had not been stationed

at their base long enough to make an assessment of the training. The remaining 11 unusable surveys were returned as undeliverable. The cutoff date for surveys to be included in the data base was 30 June 1985. The 866 usable surveys represent 16.3 percent of the total population and produced a response rate of 58.8% of the total mailing.

TABLE 4.1

Participation Results

	Number	Percentage of those distributed
Surveys Distributed	1473	----
Surveys Returned	955	64.8
Usable Surveys	866	58.8
Surveys Not Returned	518	35.2

Demographic Data

Survey Question 1. Table 4.2 displays the military grades of the respondents. The results indicate the sample favors NCO perceptions, since their percentage of the sample is greater than their percentage of the total population. Still, the officer respondents represent 11.0% of the civil engineering officer population and are therefore considered representative of officer perceptions.

Survey Question 2. Table 4.3 identifies the officer respondent's position in the civil engineering unit. Special categories were provided only for the Base Civil Engineers, Chiefs of Operations, and Prime BEEF Managers. NCO respondents were coded as "No Response".

TABLE 4.2

Current Grade of the Respondents

Current Grade	Absolute Freq	Percent of Sample	Percent of Population
Field Grade Officers	22	2.6	10.1
Company Grade Officers	220	25.4	31.1
E-9	35	4.0	2.4
E-8	62	7.2	4.4
E-7, E-6, or E-5	520	60.0	52.0
No Response	7	.8	Missing
Total	866	100.0	100.0

TABLE 4.3

Officer's Position in Unit

Position	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Base Civil Engineer	9	1.0	3.8
Chief of Operations	11	1.3	4.6
Prime BEEF Managers	18	2.1	7.5
Other	201	23.2	84.1
No Response	627	72.4	Missing
Total	866	100.0	100.0

Survey Question 3. Table 4.4 displays the NCO's primary specialties.

TABLE 4.4

NCO Primary Specialties

Speciality	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Electrical	146	16.9	23.4
Mechanical	147	17.0	23.6
Structural	134	15.5	21.5
Equipment & Pavements	112	12.9	18.0
Sanitation	69	8.0	11.1
Other	15	1.7	2.4
No Response	243	28.1	Missing
Total	866	100.0	100.0

Survey Question 5. Table 4.5 provides the respondents location of assignment.

TABLE 4.5

Assignment Location

Location	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Conus	631	72.9	72.9
Non-Conus	234	27.0	27.1
No Response	1	0.1	Missing
Total	866	100.0	100.0

Survey Question 6. Table 4.6 shows the number of respondents assigned to each of the major commands. The majority of those using the "other" response were from Space Command or the U.S. Air Force Academy.

TABLE 4.6

Major Command

Command	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
AFLC	67	7.7	7.7
AIC	67	7.7	7.7
SAC	189	21.8	21.8
PACAF	88	10.2	10.2
AU	4	0.5	0.5
USAFE	102	11.8	11.8
AAC	20	2.3	2.3
AFSC	37	4.3	4.3
MAC	124	14.3	14.3
TAC	151	17.4	17.4
Other	17	2.0	2.0
Total	866	100.0	100.0

Survey Question 7. Table 4.7 provides information on the length of time on station, in months, that the respondent has at his current assignment.

TABLE 4.7

Time on Station

Time (in months)	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Less than 6	71	8.2	8.2
6 to 12	200	23.1	23.1
13 to 24	237	27.4	27.4
25 to 36	192	22.2	22.2
37 to 48	78	9.0	9.0
More than 48	86	9.9	10.0
No Response	2	0.2	Missing
Total	866	100.0	100.0

Survey Question 8. Table 4.8 shows the assigned Prime BEEF teams of the respondents, based on definitions provided in AFR 93-3. They are grouped as follows follows:

Conus
Core Team . . . . . PB-1 through PB-4
Special Team. . . . . PB-9 through PB-26

Non-Conus
PROF Team (Primary Recovery and Operations Force)
Theater Mobile Team
Theater RRR Team

The majority of the respondents in the "other" category were assigned to SAC's Strategic Aircraft Recovery Team (SART) or SAC's Launch Support Team (LST).

TABLE 4.8

Prime BEEF Team

Team	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Core Team	285	32.9	33.9
Special Team	247	28.5	29.4
PROF Team	66	7.6	7.9
Theater Mobile Team	46	5.3	5.5
Theater RRR Team	45	5.2	5.4
Other	151	17.4	18.0
No Response	26	3.0	Missing
Total	866	100.0	100.0

Survey Question 9. Table 4.9 provides information on the number of military personnel assigned to the respondent's civil engineering unit. Responses were grouped as indicated in the table.

TABLE 4.9

Unit Size

Size of Unit	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Less than 150	74	8.5	9.5
151 to 250	318	36.7	40.8
251 to 350	244	28.2	31.3
351 to 450	81	9.4	10.4
451 to 550	42	4.8	5.4
More than 550	20	2.3	2.6
No Response	87	10.0	Missing
Total	866	100.0	100.0

Attitudinal Response Data

Responses to these questions sought the respondent's level of agreement with the statement portion of each question. The answers were coded for computer analysis according to the following scales:

Code	Level of Agreement
1	Strongly Agree
2	Agree
3	Neither Agree nor Disagree
4	Disagree
5	Strongly Disagree

The table title indicates the subject matter to which those answering the survey were responding.

Survey Question 4. Table 4.10 indicates the respondent's opinions on the adequacy of the training

guidance provided in AFR 93-3. An additional response category was provided for those respondents who felt they did not know how adequate the guidance was in AFR 93-3. When computing the mean, median, and standard deviation for this question, answers marked "I Don't Know" were eliminated from the computational process since these reponses were not part of the Likert Scale and would tend to skew the data. Table 4.10 provides the results.

TABLE 4.10

Results of Opinions on the Belief that Training Guidance provided in AFR 93-3 is Very Adequate

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	24	2.6	2.9
(2) Agree	313	36.1	37.4
(3) Neither Agr/Dis	150	17.3	17.9
(4) Disagree	113	13.0	13.5
(5) Strongly Disagree	24	2.8	2.9
(6) Do Not Know	213	24.6	25.4
No Response	29	3.3	Missing
Total	866	100.0	100.0

Mean	2.679	Mode 2.000	Kurtosis -0.352
Median	2.420	Std Dev 0.945	Skewness 0.678

	Mean	F-calc	F-crit
Officers	2.993	20.942	3.84
NCO's	2.586		

F-calc > F-crit. Therefore statistically different opinions.

Survey Questions 10 and 16. Tables 4.11 and 4.12 display respondent's opinions on the priority Prime BEEF training receives in relation to other civil engineering requirements.

TABLE 4.11

Results of Opinions on the Belief that Prime BEEF Training Receives a Low Priority Compared to Other CE Duties

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	94	10.9	10.9
(2) Agree	174	20.1	20.1
(3) Neither Agr/Dis	97	11.2	11.2
(4) Disagree	324	37.4	37.5
(5) Strongly Disagree	176	20.3	20.3
No Response	1	0.1	Missing
Total	866	100.0	100.0

Mean	3.363	Mode	4.000	Kurtosis	-1.042
Median	3.708	Std Dev	1.302	Skewness	-0.436

	Mean	F-calc	F-crit
Officers	3.042	20.041	3.84
NCO's	3.481		

F-calc > F-crit. Therefore statistically different opinions.

TABLE 4.12

Results of Opinions on the Belief that Routine Duties Receive a Higher Priority than Prime BEEF

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	111	12.8	12.8
(2) Agree	210	24.2	24.3
(3) Neither Agr/Dis	161	18.6	18.6
(4) Disagree	296	34.2	34.2
(5) Strongly Disagree	87	10.0	10.1
No Response	1	0.1	Missing
Total	866	100.0	100.0

Mean	3.042	Mode	4.000	Kurtosis	-1.113
Median	3.193	Std Dev	1.225	Skewness	-0.175

	Mean	F-calc	F-crit
Officers	2.653	34.804	3.84
NCO's	3.193		

F-calc > F-crit. Therefore statistically different opinions.

Survey Questions 11 and 12. Tables 4.13 and 4.14 display the results of opinions regarding the quality of the overnight bivouac each Prime BEEF team takes. This question also provided a response for those whose base does not have an overnight bivouac. When the means, medians, and standard deviations were calculated for these questions, responses from individuals who indicated they had no overnight bivouac were again eliminated from the computational process.

TABLE 4.13

Results of Opinions on the Belief that Overnight Bivouacs are Realistically Conducted and Allow Practice of Anticipated Wartime Skills

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	73	8.4	8.5
(2) Agree	274	31.6	31.9
(3) Neither Agr/Dis	150	17.3	17.4
(4) Disagree	176	20.3	20.5
(5) Strongly Disagree	83	9.6	9.7
(6) No Annual Bivouac	104	12.0	12.1
No Response	6	0.7	Missing
Total	866	100.0	100.0

Mean	2.897	Mode	2.000	Kurtosis	-0.998
Median	2.707	Std Dev	1.188	Skewness	0.248

	Mean	F-calc	F-crit
Officers	2.801	1.710	3.84
NCO's	2.927		

F-calc < F-crit. Therefore statistically similar opinions.

TABLE 4.14

Results of Opinions on the Belief that Field Training sees Greater Emphasis Placed on Defensive Skills than on Anticipated Primary Prime BEEF Duties

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	89	10.3	10.4
(2) Agree	210	24.2	24.5
(3) Neither Agr/Dis	244	28.2	28.5
(4) Disagree	181	20.9	21.1
(5) Strongly Disagree	28	3.2	3.3
(6) No Annual Bivouac	105	12.1	12.3
No Response	9	1.0	Missing
Total	866	100.0	100.0

Mean	2.799	Mode	3.000
Median	2.816	Std Dev	1.050
Kurtosis			-0.750
Skewness			-0.014

	Mean	F-calc	F-crit
Officers	2.953	6.710	3.84
NCO's	2.731		

F-calc > F-crit. Therefore statistically different opinions.

Survey Questions 13, 14, and 15. Each of these questions sought opinions on how much support the respondents feel they receive for the Prime BEEF training program from agencies outside the civil engineering unit. Tables 4.15, 4.16, and 4.17 display the results from the respective questions. In addition, Tables 4.15A, 4.16A, and 4.17A display a breakdown of the mean responses to these questions as sorted by Major Command.

TABLE 4.15

Results of Opinions on the Belief that
Major Command Support is Very Good

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	77	8.9	8.9
(2) Agree	335	38.7	38.8
(3) Neither Agr/Dis	287	33.1	33.3
(4) Disagree	116	13.4	13.4
(5) Strongly Disagree	48	5.5	5.6
No Response	3	0.3	Missing
Total	866	100.0	100.0

Mean	2.679	Mode	2.000
Median	2.568	Std Dev	1.000
Kurtosis			-0.170
Skewness			0.474

	Mean	F-calc	F-crit
Officers	2.853	10.134	3.84
NCO's	2.611		

F-calc > F-crit. Therefore statistically different opinions.

TABLE 4.15A

Beliefs in Major Command Support Sorted by Major Command

Major Command	Mean	Major Command	Mean
AFLC	2.597	AIC	2.702
SAC	2.759	PACAF	2.534
AU	3.250	USAFE	2.784
AAC	3.550	AFSC	2.730
MAC	2.642	TAC	2.510
OTHER	2.647		

F-calc = 2.622 F-crit = 1.830

F-calc > F-crit. Therefore statistically different opinions.

TABLE 4.16

Results of Opinions on the Belief that
Wing and Base Commanders give High Priority to
Prime BEEF Training Requirements

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	58	6.7	6.7
(2) Agree	277	32.0	32.2
(3) Neither Agr/Dis	254	29.3	29.5
(4) Disagree	180	20.8	20.9
(5) Strongly Disagree	92	10.6	10.7
No Response	5	0.6	Missing
Total	866	100.0	100.0

Mean	2.966	Mode 2.000	Kurtosis -0.768
Median	2.876	Std Dev 1.108	Skewness 0.241

	Mean	F-calc	F-crit
Officers	3.273	25.479	3.84
NCO's	2.851		

F-calc > F-crit. Therefore statistically different opinions.

TABLE 4.16A

Beliefs in Wing and Base Commander Support
Sorted by Major Command

Major Command	Mean	Major Command	Mean
AFLC	2.627	ATC	2.836
SAC	3.074	PACAF	2.628
AU	3.000	USAFE	3.343
AAC	3.250	AFSC	2.595
MAC	3.016	TAC	2.980
OTHER	3.059		

F-calc = 3.573 F-crit = 1.830

F-calc > F-crit. Therefore statistically different opinions.

TABLE 4.17

Results of Opinions on the Belief
Other Base Level Organizations Adequately Support
Prime BEEF Training Requirements

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	56	6.5	6.5
(2) Agree	382	44.1	44.4
(3) Neither Agr/Dis	208	24.0	24.2
(4) Disagree	162	18.7	18.8
(5) Strongly Disagree	53	6.1	6.2
No Response	5	0.6	Missing
Total	866	100.0	100.0

Mean	2.738	Mode 2.000	Kurtosis -0.533
Median	2.480	Std Dev 1.035	Skewness 0.522

	Mean	F-calc	F-crit
Officers	2.651	2.177	3.84
NCO's	2.768		

F-calc < F-crit. Therefore statistically similar opinions.

TABLE 4.17A

Beliefs Sorted by Major Command that other Base
Level Organizations Adequately Support Prime BEEF Training

Major Command	Mean	Major Command	Mean
AFLC	2.567	ATC	2.478
SAC	2.633	PACAF	2.770
AU	2.250	USAFE	3.157
AAC	3.400	AFSC	2.378
MAC	2.549	TAC	2.903
OTHER	2.647		

F-calc = 5.013 F-crit = 1.830

F-calc > F-crit. Therefore statistically different opinions.

Survey Question 17. Table 4.18 displays the results of the respondent's opinions on how well the overall Prime BEEF training program prepares them to perform their assigned wartime and contingency duties.

TABLE 4.18

Results of Opinions on the Belief that Prime BEEF Training Adequately Prepares One to Perform Assigned Wartime Tasks

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	77	8.9	8.9
(2) Agree	335	38.7	38.8
(3) Neither Agr/Dis	287	33.1	33.3
(4) Disagree	116	13.4	13.4
(5) Strongly Disagree	48	5.5	5.6
No Response	3	0.3	Missing
Total	866	100.0	100.0

Mean 2.679	Mode 2.000	Kurtosis	-1.113
Median 2.568	Std Dev 1.000	Skewness	0.006

	Mean	F-calc	F-crit
Officers	2.853	10.134	3.84
NCO's	2.611		

F-calc > F-crit. Therefore statistically different opinions.

Survey Questions 18 through 27. These questions each listed one of the ten primary training areas in which every Prime BEEF member must train. Tables 4.19 through 4.28 display the results of the respondent's opinions on whether they perceive the training which they receive in each of the specific training areas is adequate.

TABLE 4.19

Results of Opinions on the Adequacy of Prime BEEF Chemical Warfare Training

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	130	15.0	15.0
(2) Agree	401	46.3	46.4
(3) Neither Agr/Dis	128	14.8	14.8
(4) Disagree	148	17.1	17.1
(5) Strongly Disagree	58	6.7	6.7
No Response	1	0.1	Missing
Total	866	100.0	100.0

Mean	2.541	Mode	2.000	Kurtosis	-0.533
Median	2.254	Std Dev	1.138	Skewness	0.626

	Mean	F-calc	F-crit
Officers	2.632	2.172	3.840
NCO's	2.504		

F-calc < F-crit. Therefore statistically similar opinions.

TABLE 4.20

Results of Opinions on the Adequacy of Prime BEEF Expedient Methods Training

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	72	8.3	8.4
(2) Agree	276	31.9	32.2
(3) Neither Agr/Dis	198	22.9	23.1
(4) Disagree	207	23.9	24.2
(5) Strongly Disagree	104	12.0	12.1
No Response	9	1.0	Missing
Total	866	100.0	100.0

Mean	2.994	Mode	2.000	Kurtosis	-0.989
Median	2.907	Std Dev	1.178	Skewness	0.149

	Mean	F-calc	F-crit
Officers	3.209	10.997	3.840
NCO's	2.910		

F-calc > F-crit. Therefore statistically different opinions.

TABLE 4.21

Results of Opinions on the Adequacy of Prime BEEF Orientation Training

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	100	11.5	11.7
(2) Agree	395	45.6	46.0
(3) Neither Agr/Dis	187	21.6	21.8
(4) Disagree	126	14.5	14.7
(5) Strongly Disagree	50	5.8	5.8
No Response	8	0.9	Missing
Total	866	100.0	100.0

Mean	2.570	Mode	2.000	Kurtosis	-0.284
Median	2.333	Std Dev	1.060	Skewness	0.630

	Mean	F-calc	F-crit
Officers	2.609	0.506	3.840
NCO's	2.551		

F-calc < F-crit. Therefore statistically similar opinions.

TABLE 4.22

Results of Opinions on the Adequacy of Prime BEEF Field Training

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	96	11.1	11.2
(2) Agree	314	36.3	36.6
(3) Neither Agr/Dis	193	22.3	22.5
(4) Disagree	189	21.8	22.0
(5) Strongly Disagree	67	7.7	7.8
No Response	7	0.8	Missing
Total	866	100.0	100.0

Mean	2.787	Mode	2.000	Kurtosis	-0.849
Median	2.601	Std Dev	1.140	Skewness	0.287

	Mean	F-calc	F-crit
Officers	2.800	0.053	3.840
NCO's	2.780		

F-calc < F-crit. Therefore statistically similar opinions.

TABLE 4.23

Results of Opinions on the Adequacy of Prime BEEF Government Vehicle Operation Training

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	83	9.6	9.7
(2) Agree	324	37.4	37.7
(3) Neither Agr/Dis	200	23.1	23.3
(4) Disagree	180	20.8	21.0
(5) Strongly Disagree	72	8.3	8.4
No Response	7	0.8	Missing
Total	866	100.0	100.0

Mean	2.807	Mode	2.000
Median	2.613	Std Dev	1.128
Kurtosis			-0.798
Skewness			0.331

	Mean	F-calc	F-crit
Officers	2.850	0.411	3.840
NCO's	2.795		

F-calc < F-crit. Therefore statistically similar opinions.

TABLE 4.24

Results of Opinions on the Adequacy of Prime BEEF Military Sanitation Training

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	72	8.3	8.4
(2) Agree	337	38.9	39.3
(3) Neither Agr/Dis	210	24.2	24.5
(4) Disagree	165	19.1	19.2
(5) Strongly Disagree	74	8.5	8.6
No Response	8	0.9	Missing
Total	866	100.0	100.0

Mean	2.804	Mode	2.000
Median	2.595	Std Dev	1.109
Kurtosis			-0.706
Skewness			0.403

	Mean	F-calc	F-crit
Officers	2.894	2.188	3.840
NCO's	2.760		

F-calc < F-crit. Therefore statistically similar opinions.

TABLE 4.25

Results of Opinions on the Adequacy of Prime BEEF Personal, Work Party, and Convoy Security Training

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	52	6.0	6.1
(2) Agree	261	30.1	30.4
(3) Neither Agr/Dis	202	23.3	23.5
(4) Disagree	247	28.5	28.8
(5) Strongly Disagree	96	11.1	11.2
No Response	8	0.9	Missing
Total	866	100.0	100.0

Mean	3.086	Mode	2.000
Median	3.074	Std Dev	1.130
Kurtosis			-0.984
Skewness			0.044

	Mean	F-calc	F-crit
Officers	3.145	0.837	3.840
NCO's	3.065		

F-calc < F-crit. Therefore statistically similar opinions.

TABLE 4.26

Results of Opinions on the Adequacy of Prime BEEF Explosive Ordnance Reconnaissance Training

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	60	6.9	7.0
(2) Agree	276	31.9	32.1
(3) Neither Agr/Dis	223	25.8	26.0
(4) Disagree	194	22.4	22.6
(5) Strongly Disagree	106	12.2	12.3
No Response	7	0.8	Missing
Total	866	100.0	100.0

Mean	3.012	Mode	2.000
Median	2.919	Std Dev	1.150
Kurtosis			-0.918
Skewness			0.189

	Mean	F-calc	F-crit
Officers	3.021	0.034	3.840
NCO's	3.005		

F-calc < F-crit. Therefore statistically similar opinions.

TABLE 4.27

Results of Opinions on the Adequacy of Prime BEEF Rapid Runway Repair Training

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	169	19.5	19.7
(2) Agree	332	38.3	38.6
(3) Neither Agr/Dis	137	15.8	15.9
(4) Disagree	143	16.5	16.6
(5) Strongly Disagree	78	9.0	9.1
No Response	7	0.8	Missing
Total	866	100.0	100.0

Mean	2.568	Mode	2.000	Kurtosis	-0.775
Median	2.285	Std Dev	1.232	Skewness	0.525

	Mean	F-calc	F-crit
Officers	2.589	0.113	3.840
NCO's	2.557		

F-calc < F-crit. Therefore statistically similar opinions.

TABLE 4.28

Results of Opinions on the Adequacy of Prime BEEF Weapons Training

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	144	16.6	16.7
(2) Agree	403	46.5	46.9
(3) Neither Agr/Dis	121	14.0	14.1
(4) Disagree	122	14.1	14.2
(5) Strongly Disagree	70	8.1	8.1
No Response	6	0.7	Missing
Total	866	100.0	100.0

Mean	2.501	Mode	2.000	Kurtosis	-0.401
Median	2.210	Std Dev	1.166	Skewness	0.722

	Mean	F-calc	F-crit
Officers	2.483	0.047	3.840
NCO's	2.502		

F-calc < F-crit. Therefore statistically similar opinions.

Survey Question 28. For this question the respondents rank ordered the ten Prime BEEF training areas according to the priority they felt each one should receive. The highest priority area was ranked 1, the lowest priority area was ranked 10. Tables 4.29 through 4.38 present the results.

TABLE 4.29

Opinions on the Priority Chemical Warfare Training Should Receive

Priority	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Highest Priority	299	34.5	35.2
(2)	147	17.0	17.3
(3)	110	12.7	13.0
(4)	90	10.4	10.6
(5) Middle Priority	58	6.7	6.8
(6)	53	6.1	6.2
(7)	35	4.0	4.1
(8)	25	2.9	2.9
(9)	19	2.2	2.2
(10) Lowest Priority	13	1.5	1.5
No Response	17	2.0	Missing
Total	866	100.0	100.0

Mean	3.106	Mode	1.000	Kurtosis	-0.375
Median	2.354	Std Dev	2.399	Skewness	1.099

	Mean	F-calc	F-crit
Officers	3.517	9.849	3.840
NCO's	2.954		

F-calc > F-crit. Therefore statistically different opinions.

TABLE 4.30

Opinions on the Priority Explosive Ordnance Reconnaissance Training Should Receive

Priority	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Highest Priority	11	1.3	1.3
(2)	83	9.6	9.9
(3)	140	16.2	16.6
(4)	126	14.5	15.0
(5) Middle Priority	108	12.5	12.8
(6)	99	11.4	11.8
(7)	109	12.6	13.0
(8)	56	6.5	6.7
(9)	72	8.3	8.6
(10) Lowest Priority	37	4.3	4.4
No Response	25	2.9	Missing
Total	866	100.0	100.0

Mean	5.308	Mode	3.000	Kurtosis	-0.963
Median	5.060	Std Dev	2.352	Skewness	0.294

	Mean	F-calc	F-crit
Officers	5.423	0.637	3.840
NCO's	5.279		

F-calc < F-crit. Therefore statistically similar opinions.

TABLE 4.31

Opinions on the Priority Expedient Methods Training Should Receive

Priority	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Highest Priority	51	5.9	6.2
(2)	64	7.4	7.7
(3)	93	10.7	11.3
(4)	80	9.2	9.7
(5) Middle Priority	109	12.6	13.2
(6)	115	13.3	13.9
(7)	96	11.1	11.6
(8)	109	12.6	13.2
(9)	68	7.9	8.2
(10) Lowest Priority	41	4.7	5.0
No Response	40	4.6	Missing
Total	866	100.0	100.0
Mean 5.544	Mode 6.000	Kurtosis -0.963	
Median 5.639	Std Dev 2.509	Skewness -0.086	

	Mean	F-calc	F-crit
Officers	4.535	52.817	3.840
NCO's	5.913		

F-calc > F-crit. Therefore statistically different opinions.

TABLE 4.32

Opinions on the Priority Field Training Should Receive

Priority	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Highest Priority	61	7.0	7.4
(2)	85	9.8	10.3
(3)	62	7.2	7.5
(4)	87	10.0	10.6
(5) Middle Priority	109	12.6	13.2
(6)	103	11.9	12.5
(7)	110	12.7	13.3
(8)	110	12.7	13.3
(9)	60	6.9	7.3
(10) Lowest Priority	37	4.3	4.5
No Response	42	4.8	Missing
Total	866	100.0	100.0

Mean	5.447	Mode	7.000	Kurtosis	-0.990
Median	5.578	Std Dev	2.545	Skewness	-0.117

	Mean	F-calc	F-crit
Officers	5.120	6.027	3.840
NCO's	5.603		

F-calc > F-crit. Therefore statistically different opinions.

TABLE 4.33

Opinions on the Priority Government Vehicle Operation Training Should Receive

Priority		Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
1	Highest Priority	8	0.9	1.0
2		23	2.7	2.8
3		34	3.9	4.1
4		44	5.1	5.3
5	Middle Priority	47	5.4	5.6
6		53	6.1	6.4
7		71	8.2	8.5
8		93	10.7	11.2
9		183	21.1	21.9
10	Lowest Priority	278	32.1	33.3
	No Response	32	3.7	Missing
	Total	866	100.0	100.0

Mean	7.857	Mode	10.000	Kurtosis	-0.080
Median	8.740	Std Dev	2.390	Skewness	-1.066

	Mean	F-calc	F-crit
Officers	8.172	6.140	3.840
NCO's	7.714		

F-calc > F-crit. Therefore statistically different opinions.

TABLE 4.34

Opinions on the Priority Military Sanitation Training Should Receive

Priority	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Highest Priority	10	1.2	1.2
(2)	36	4.2	4.4
(3)	46	5.3	5.6
(4)	59	6.8	7.2
(5) Middle Priority	86	9.9	10.5
(6)	100	11.5	12.2
(7)	147	17.0	17.9
(8)	143	16.5	17.4
(9)	125	14.4	15.2
(10) Lowest Priority	68	7.9	8.3
No Response	46	5.3	Missing
Total	866	100.0	100.0

Mean	6.663	Mode	7.000	Kurtosis	-0.506
Median	6.997	Std Dev	2.246	Skewness	-0.518

	Mean	F-calc	F-crit
Officers	7.069	10.023	3.840
NCO's	6.521		

F-calc > F-crit. Therefore statistically different opinions.

TABLE 4.35

Opinions on the Priority Security Training Should Receive

Priority	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Highest Priority	52	6.0	6.3
(2)	77	8.9	9.4
(3)	81	9.4	9.9
(4)	88	10.2	10.7
(5) Middle Priority	119	13.7	14.5
(6)	109	12.6	13.3
(7)	79	9.1	9.6
(8)	94	10.9	11.4
(9)	64	7.4	7.8
(10) Lowest Priority	58	6.7	7.1
No Response	45	5.2	Missing
Total	866	100.0	100.0

Mean	5.495	Mode	5.000	Kurtosis	-0.977
Median	5.445	Std Dev	2.585	Skewness	0.018

	Mean	F-calc	F-crit
Officers	5.919	9.513	3.840
NCO's	5.302		

F-calc > F-crit. Therefore statistically different opinions.

TABLE 4.36

Opinions on the Priority Prime BEEF Orientation Training Should Receive

Priority	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Highest Priority	125	14.4	15.2
(2)	23	2.7	2.8
(3)	37	4.3	4.5
(4)	50	5.8	6.1
(5) Middle Priority	31	3.6	3.8
(6)	52	6.0	6.3
(7)	53	6.1	6.4
(8)	79	9.1	9.6
(9)	134	15.5	16.3
(10) Lowest Priority	239	27.6	29.0
No Response	43	5.0	Missing
Total	866	100.0	100.0

Mean	6.741	Mode	10.000	Kurtosis	-1.086
Median	8.013	Std Dev	3.310	Skewness	-0.649

	Mean	F-calc	F-crit
Officers	6.631	0.258	3.840
NCO's	6.762		

F-calc < F-crit. Therefore statistically similar opinions.

TABLE 4.37

Opinions on the Priority Rapid Runway Repair Training Should Receive

Priority	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Highest Priority	147	17.0	18.0
(2)	167	19.3	20.5
(3)	119	13 7	14.6
(4)	92	10.6	11.3
(5) Middle Priority	72	8.3	8.8
(6)	55	6.4	6.7
(7)	51	5.9	6.3
(8)	45	5.2	5.5
(9)	37	4.3	4.5
(10) Lowest Priority	30	3.5	3.7
No Response	51	5.9	Missing
Total	866	100.0	100.0

Mean	3.983	Mode	2.000	Kurtosis	-0.540
Median	3.206	Std Dev	2.620	Skewness	0.736

	Mean	F-calc	F-crit
Officers	3.150	34.862	3.840
NCO's	4.329		

F-calc > F-crit. Therefore statistically different opinions.

TABLE 4.38

Opinions on the Priority Weapons Training Should Receive

Priority	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Highest Priority	86	9.9	10.5
(2)	134	15.5	16.4
(3)	114	13.2	13.9
(4)	115	13.3	14.0
(5) Middle Priority	92	10.6	11.2
(6)	84	9.7	10.3
(7)	67	7.7	8.2
(8)	65	7.5	7.9
(9)	45	5.2	5.5
(10) Lowest Priority	17	2.0	2.1
No Response	47	5.4	Missing
Total	866	100.0	100.0

Mean	4.498	Mode	2.000	Kurtosis	-0.874
Median	4.157	Std Dev	2.479	Skewness	0.394

	Mean	F-calc	F-crit
Officers	5.248	30.446	3.840
NCO's	4.204		

F-calc > F-crit. Therefore statistically different opinions.

Survey Question 29. This question asked the respondents to rank order the ten different Prime BEEF training areas according to the priority he/she feels each

one actually receives at his current base. The highest priority area was ranked 1, the lowest priority area was ranked 10. Tables 4.39 through 4.48 represent the results of these rankings.

TABLE 4.39

Opinions on the Priority Chemical Warfare Training Actually Receives

Priority	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Highest Priority	258	29.8	31.6
(2)	207	23.9	25.4
(3)	107	12.4	13.1
(4)	75	8.7	9.2
(5) Middle Priority	42	4.8	5.1
(6)	34	3.9	4.2
(7)	26	3.0	3.2
(8)	24	2.8	2.9
(9)	24	2.8	2.9
(10) Lowest Priority	19	2.2	2.3
No Response	50	5.8	Missing
Total	866	100.0	100.0

Mean	3.048	Mode	1.000	Kurtosis	1.003
Median	2.225	Std Dev	2.375	Skewness	1.356

	Mean	F-calc	F-crit
Officers	2.996	0.084	3.840
NCO's	3.048		

F-calc < F-crit. Therefore statistically similar opinions.

TABLE 4.40

Opinions on the Priority Explosive Ordnance Reconnaissance Training Actually Receives

Priority	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Highest Priority	4	0.5	0.5
(2)	33	3.8	4.2
(3)	77	8.9	9.8
(4)	95	11.0	12.0
(5) Middle Priority	90	10.4	11.4
(6)	83	9.6	10.5
(7)	99	11.4	12.5
(8)	86	9.9	10.9
(9)	112	12.9	14.2
(10) Lowest Priority	110	12.7	13.9
No Response	77	8.9	Missing
Total	866	100.0	100.0

Mean	6.487	Mode	9.000	Kurtosis	-1.157
Median	6.626	Std Dev	2.472	Skewness	-0.153

	Mean	F-calc	F-crit
Officers	6.638	1.247	3.840
NCO's	6.419		

F-calc < F-crit. Therefore statistically similar opinions.

TABLE 4.41

Opinions on the Priority Expedient Methods Training Actually Receives

Priority	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Highest Priority	13	1.5	1.7
(2)	30	3.5	3.9
(3)	47	5.4	6.1
(4)	51	5.9	6.6
(5) Middle Priority	93	10.7	12.0
(6)	126	14.5	16.3
(7)	112	12.9	14.5
(8)	122	14.1	15.8
(9)	96	11.1	12.4
(10) Lowest Priority	83	9.6	10.7
No Response	93	10.7	Missing
Total	866	100.0	100.0

Mean	6.589	Mode	5.000	Kurtosis	-0.561
Median	6.737	Std Dev	2.290	Skewness	-0.393

	Mean	F-calc	F-crit
Officers	6.786	1.948	3.840
NCO's	6.531		

F-calc < F-crit. Therefore statistically similar opinions.

TABLE 4.42

Opinions on the Priority Field Training Actually Receives

Priority	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Highest Priority	42	4.8	5.5
(2)	72	8.3	9.4
(3)	77	8.9	10.0
(4)	113	13.0	14.7
(5) Middle Priority	106	12.2	13.8
(6)	111	12.8	14.5
(7)	83	9.6	10.8
(8)	85	9.8	11.1
(9)	49	5.7	6.4
(10) Lowest Priority	29	3.3	3.8
No Response	99	11.4	Missing
Total	866	100.0	100.0

Mean	5.289	Mode	4.000	Kurtosis	-0.853
Median	5.250	Std Dev	2.395	Skewness	0.061

	Mean	F-calc	F-crit
Officers	5.055	3.170	3.840
NCO's	5.397		

F-calc < F-crit. Therefore statistically similar opinions.

TABLE 4.43

Opinions on the Priority Government Vehicle Operation Training Actually Receives

Priority	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Highest Priority	17	2.0	2.2
(2)	27	3.1	3.5
(3)	50	5.8	6.4
(4)	64	7.4	8.2
(5) Middle Priority	79	9.1	10.1
(6)	60	6.9	7.7
(7)	74	8.5	9.5
(8)	90	10.4	11.6
(9)	116	13.4	14.9
(10) Lowest Priority	202	23.3	25.9
No Response	87	10.0	Missing
Total	866	100.0	100.0

Mean	7.104	Mode 10.000	Kurtosis -0.877
Median	7.706	Std Dev 2.635	Skewness -0.555

	Mean	F-calc	F-crit
Officers	6.786	4.600	3.840
NCO's	7.236		

F-calc > F-crit. Therefore statistically different opinions.

TABLE 4.45

Opinions on the Priority Security Training Actually Receives

Priority	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Highest Priority	17	2.0	2.2
(2)	30	3.5	3.9
(3)	64	7.4	8.4
(4)	57	6.6	7.5
(5) Middle Priority	94	10.9	12.3
(6)	92	10.6	12.0
(7)	99	11.4	12.9
(8)	117	13.5	15.3
(9)	102	11.8	13.3
(10) Lowest Priority	93	10.7	12.2
No Response	101	11.7	Missing
Total	866	100.0	100.0

Mean	6.531	Mode	8.000	Kurtosis	-0.821
Median	6.788	Std Dev	2.443	Skewness	-0.356

	Mean	F-calc	F-crit
Officers	6.523	0.019	3.840
NCO's	6.550		

F-calc < F-crit. Therefore statistically similar opinions.

TABLE 4.44

Opinions on the Priority Military Sanitation Training Actually Receives

Priority	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Highest Priority	4	0.5	0.5
(2)	24	2.8	3.2
(3)	28	3.2	3.7
(4)	42	4.8	5.5
(5) Middle Priority	89	10.3	11.7
(6)	87	10.0	11.4
(7)	118	13.6	15.5
(8)	133	15.4	17.5
(9)	137	15.8	18.0
(10) Lowest Priority	98	11.3	12.9
No Response	106	12.2	Missing
Total	866	100.0	100.0

Mean	7.071	Mode	9.000	Kurtosis	-0.392
Median	7.398	Std Dev	2.169	Skewness	-0.579

	Mean	F-calc	F-crit
Officers	7.656	24.102	3.840
NCO's	6.816		

F-calc > F-crit. Therefore statistically different opinions.

TABLE 4.46

Opinions on the Priority Prime BEEF Orientation Training Actually Receives

Priority	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Highest Priority	181	20.9	23.7
(2)	72	8.3	9.4
(3)	89	10.3	11.6
(4)	103	11.9	13.5
(5) Middle Priority	60	6.9	7.9
(6)	53	6.1	6.9
(7)	53	6.1	6.9
(8)	48	5.7	6.4
(9)	45	5.2	5.9
(10) Lowest Priority	59	6.8	7.7
No Response	102	11.8	Missing
Total	866	100.0	100.0

Mean	4.424	Mode	1.000	Kurtosis	-1.009
Median	3.888	Std Dev	2.952	Skewness	0.477

	Mean	F-calc	F-crit
Officers	4.844	6.099	3.840
NCO's	4.261		

F-calc > F-crit. Therefore statistically different opinions.

TABLE 4.47

Opinions on the Priority Rapid Runway Repair Training Actually Receives

Priority	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Highest Priority	174	20.1	22.5
(2)	127	14.7	16.5
(3)	95	11.0	12.3
(4)	85	9.8	11.0
(5) Middle Priority	59	6.8	7.6
(6)	56	6.5	7.3
(7)	34	3.9	4.4
(8)	36	4.2	4.7
(9)	39	4.5	5.1
(10) Lowest Priority	67	7.7	8.7
No Response	94	10.9	Missing
Total	866	100.0	100.0

Mean	4.185	Mode 1.000	Kurtosis -0.776
Median	3.395	Std Dev 2.947	Skewness 0.688

	Mean	F-calc	F-crit
Officers	3.772	6.479	3.840
NCO's	4.366		

F-calc > F-crit. Therefore statistically different opinions.

TABLE 4.48

Opinions on the Priority Weapons Training Actually Receives

Priority	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Highest Priority	90	10.4	11.7
(2)	168	19.4	21.8
(3)	148	17.1	19.2
(4)	89	10.3	11.6
(5) Middle Priority	70	8.1	9.1
(6)	61	7.0	7.9
(7)	57	6.5	7.4
(8)	24	2.8	3.1
(9)	36	4.2	4.7
(10) Lowest Priority	26	3.0	3.4
No Response	97	11.2	Missing
Total	866	100.0	100.0

Mean	4.053	Mode 2.000	Kurtosis -0.316
Median	3.355	Std Dev 2.467	Skewness 0.789

	Mean	F-calc	F-crit
Officers	3.775	3.403	3.840
NCO's	4.142		

F-calc < F-crit. Therefore statistically similar opinions.

Survey Question 30. Some bases may lack the proper equipment to effectively train for the various Prime BEEF missions. This question asked the respondents to indicate whether or not they believed their current base had the proper equipment to train for the Prime BEEF mission. Tables 4.49 through 4.58 indicate the responses as broken down by each of the ten training areas. Table 4.59 displays the number of respondents who believe they have adequate equipment in all areas.

TABLE 4.49

Opinions on Whether or Not Adequate Equipment Is Available for Chemical Warfare Training

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Equip	672	77.6	79.2
Lack Adequate Equip	176	20.3	20.8
No Response	18	2.1	Missing
Total	866	100.0	100.0

TABLE 4.50

Opinions on Whether or Not Adequate Equipment Is Available for Explosive Ordnance Reconnaissance Training

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Equip	478	55.2	56.4
Lack Adequate Equip	370	42.7	43.6
No Response	18	2.1	Missing
Total	866	100.0	100.0

TABLE 4.51

Opinions on Whether or Not Adequate Equipment
Is Available for Expedient Methods Training

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Equip	589	68.0	69.5
Lack Adequate Equip	259	29.9	30.5
No Response	18	2.1	Missing
Total	866	100.0	100.0

TABLE 4.52

Opinions on Whether or Not Adequate Equipment
Is Available for Field Training

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Equip	638	73.7	75.2
Lack Adequate Equip	210	24.2	24.8
No Response	18	2.1	Missing
Total	866	100.0	100.0

TABLE 4.53

Opinions on Whether or Not Adequate Equipment
Is Available for Government Vehicle Operations Training

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Equip	669	77.3	78.9
Lack Adequate Equip	179	20.7	21.1
No Response	18	2.1	Missing
Total	866	100.0	100.0

TABLE 4.54

Opinions on Whether or Not Adequate Equipment
Is Available for Military Sanitation Training

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Equip	656	75.8	77.4
Lack Adequate Equip	192	22.2	22.6
No Response	18	2.1	Missing
Total	866	100.0	100.0

TABLE 4.55

Opinions on Whether or Not Adequate Equipment
Is Available for Security Training

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Equip	647	74.7	76.3
Lack Adequate Equip	201	23.2	23.7
No Response	18	2.1	Missing
Total	866	100.0	100.0

TABLE 4.56

Opinions on Whether or Not Adequate Equipment
Is Available for Prime BEEF Orientation Training

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Equip	801	92.5	94.5
Lack Adequate Equip	47	5.4	5.5
No Response	18	2.1	Missing
Total	866	100.0	100.0

TABLE 4.57

Opinions on Whether or Not Adequate Equipment Is Available for Rapid Runway Repair Training

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Equip	427	49.3	50.4
Lack Adequate Equip	421	48.6	49.6
No Response	18	2.1	Missing
Total	866	100.0	100.0

TABLE 4.58

Opinions on Whether or Not Adequate Equipment Is Available for Weapons Training

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Equip	736	85.0	86.8
Lack Adequate Equip	112	12.9	13.2
No Response	18	2.1	Missing
Total	866	100.0	100.0

TABLE 4.59

Opinions on Whether or Not Adequate Equipment Is Available for All Training Areas

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Equip	184	21.2	21.7
Lack Adequate Equip	664	76.7	78.3
No Response	18	2.1	Missing
Total	866	100.0	100.0

Survey Question 31. Some bases may lack proper training areas to effectively train for the various Prime BEEF missions. This question asked the respondents to indicate whether or not they believed their current base had proper training areas to practice for the Prime BEEF mission. Tables 4.60 through 4.69 indicate the responses as broken down by each of the ten training areas. Table 4.70 displays the number of respondents who believe they have adequate training areas for all the missions.

TABLE 4.60

Opinions on Whether or Not Adequate Training Areas Are Available for Chemical Warfare Training

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Areas	752	86.8	88.6
Lack Adequate Areas	97	11.2	11.4
No Response	17	2.0	Missing
Total	866	100.0	100.0

TABLE 4.61

Opinions on Whether or Not Adequate Training Areas Are Available for Explosive Ordnance Reconnaissance Training

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Areas	669	77.3	78.8
Lack Adequate Areas	180	20.8	21.2
No Response	17	2.0	Missing
Total	866	100.0	100.0

TABLE 4.62

Opinions on Whether or Not Adequate Training Areas Are Available for Expedient Methods Training

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Areas	722	83.4	85.0
Lack Adequate Areas	127	14.7	15.0
No Response	17	2.0	Missing
Total	866	100.0	100.0

TABLE 4.63

Opinions on Whether or Not Adequate Training Areas Are Available for Field Training

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Areas	697	80.5	82.1
Lack Adequate Areas	152	17.6	17.9
No Response	17	2.0	Missing
Total	866	100.0	100.0

TABLE 4.64

Opinions on Whether or Not Adequate Training Areas Are Available for Government Vehicle Operations Training

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Areas	791	91.3	93.2
Lack Adequate Areas	58	6.7	6.8
No Response	17	2.0	Missing
Total	866	100.0	100.0

TABLE 4.65

Opinions on Whether or Not Adequate Training Areas Are Available for Military Sanitation Training

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Areas	728	84.1	85.7
Lack Adequate Areas	121	14.0	14.3
No Response	17	2.0	Missing
Total	866	100.0	100.0

TABLE 4.66

Opinions on Whether or Not Adequate Training Areas Are Available for Security Training

Adequate/Inadequcte	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Areas	719	83.0	84.7
Lack Adequate Areas	130	15.0	15.3
No Response	17	2.0	Missing
Total	866	100.0	100.0

TABLE 4.67

Opinions on Whether or Not Adequate Training Areas Are Available for Prime BEEF Orientation Training

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Areas	814	94.0	95.9
Lack Adequate Areas	35	4.0	4.1
No Response	17	2.0	Missing
Total	866	100.0	100.0

TABLE 4.68

Opinions on Whether or Not Adequate Training Areas Are Available for Rapid Runway Repair Training

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Areas	637	73.6	75.0
Lack Adequate Areas	212	24.5	25.0
No Response	17	2.0	Missing
Total	866	100.0	100.0

TABLE 4.69

Opinions on Whether or Not Adequate Training Areas Are Available for Weapons Training

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Areas	760	87.8	89.5
Lack Adequate Areas	89	10.3	10.5
No Response	17	2.0	Missing
Total	866	100.0	100.0

TABLE 4.70

Opinions on Whether or Not Adequate Training Areas Are Available for All Mission Areas

Adequate/Inadequate	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Have Adequate Areas	456	52.7	53.7
Lack Adequate Areas	393	45.4	46.3
No Response	17	2.0	Missing
Total	866	100.0	100.0

Survey Question 32. This question sought opinions on whether or not adequate time is made available to complete Prime BEEF training requirements. Table 4.71 displays the results of respondent's opinions.

TABLE 4.71

Results of Opinions on the Belief that Adequate Time is Made Available for Prime BEEF Training Requirements

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	105	12.1	12.2
(2) Agree	336	38.8	38.9
(3) Neither Agr/Dis	148	17.1	17.1
(4) Disagree	199	23.0	23.0
(5) Strongly Disagree	76	8.8	8.8
No Response	2	0.2	Missing
Total	866	100.0	100.0

Mean	2.774	Mode 2.000	Kurtosis -0.964
Median	2.473	Std Dev 1.187	Skewness 0.322

	Mean	F-calc	F-crit
Officers	3.075	22.056	3.84
NCO's	2.656		

F-calc > F-crit. Therefore statistically different opinions.

Survey Question 33. This question sought opinions on how confident the respondents felt to perform the duties of their assigned Prime BEEF tasks based upon the hands-on training they received from both their home station and from Field 4 at Eglin AFB. Table 4.72 displays the results of the responses.

TABLE 4.72

Results of Opinions on the Belief that the Hands-on Training Received by the Respondents has made them Confident to Perform Prime BEEF Duties

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	68	7.9	8.0
(2) Agree	289	33.4	34.0
(3) Neither Agr/Dis	211	24.4	24.8
(4) Disagree	212	24.5	24.9
(5) Strongly Disagree	71	8.2	8.3
No Response	15	1.7	Missing
Total	866	100.0	100.0

Mean	2.917	Mode	2.000	Kurtosis	-0.879
Median	2.825	Std Dev	1.112	Skewness	0.181

	Mean	F-calc	F-crit
Officers	3.122	11.363	3.84
NCO's	2.836		

F-calc > F-crit. Therefore statistically different opinions.

Survey Question 34. This question asked if the respondent had ever participated in the training conducted by the Air Force Engineering and Services Center at their Contingency Training Site (Field 4) at Eglin AFB. If the respondent had participated, he/she was asked to indicate how many times he had participated in the past four years. Table 4.73 and 4.74 indicate the results of this question.

TABLE 4.73

Attendance at the AFESC Contingency Training Site (Field 4)

Attendance	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Never Been to Eglin	271	31.3	31.3
Have Been to Eglin	594	68.6	68.7
No Response	1	0.1	Missing
Total	866	100.0	100.0

Table 4.74

Attendence at Contingency Training Site within Last 4 Years

No. of Times	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(0)	43	5.0	7.6
(1)	321	37.1	56.9
(2)	144	16.6	25.5
(3)	39	4.5	6.9
(4)	13	1.5	2.3
(5)	3	0.3	0.5
(8)	1	0.1	0.2
No Response	302	34.9	Missing
Total	866	100.0	100.0
	Mean	1.420	Mode 1.000
	Median	1.245	Std Dev 0.901

Survey Question 35. This question sought the respondent's opinions on whether or not the training conducted by the Air Force Engineering and Services Center at Eglin AFB was very valuable. The question was asked in the negative, meaning a response of "Disagree" or "Strongly Disagree" indicated the respondents felt the training was worthwhile. Table 4.75 displays the results of the responses.

Survey Question 36. This question sought opinions on how whether or not Prime BEEF members should attend the training conducted at Field 4 more often than every two years. Table 4.76 displays the results.

TABLE 4.75

Results of Opinions on the Belief that the Training by the AFESC at Eglin AFB is Not Very Valuable

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	8	0.9	1.4
(2) Agree	17	2.0	2.9
(3) Neither Agr/Dis	38	4.4	6.5
(4) Disagree	289	33.4	49.2
(5) Strongly Disagree	235	27.1	40.0
No Response	279	32.2	Missing
Total	866	100.0	100.0

Mean	4.237	Mode	4.000	Kurtosis	3.022
Median	4.290	Std Dev	0.805	Skewness	-1.419

	Mean	F-calc	F-crit
Officers	4.470	24.556	3.84
NCO's	4.135		

F-calc > F-crit. Therefore statistically different opinions.

TABLE 4.76

Results of Opinions on the Belief that Members should Attend Field 4 Training more often than Every Two Years

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	110	12.7	18.7
(2) Agree	222	25.6	37.8
(3) Neither Agr/Dis	66	7.6	11.2
(4) Disagree	160	18.5	27.3
(5) Strongly Disagree	29	3.3	4.9
No Response	279	32.2	Missing
Total	866	100.0	100.0

Mean	2.618	Mode	2.000	Kurtosis	-1.138
Median	2.327	Std Dev	1.206	Skewness	0.291

	Mean	F-calc	F-crit
Officers	2.509	1.786	3.84
NCO's	2.658		

F-calc < F-crit. Therefore statistically similar opinions.

Survey Question 37. This question sought opinions on how effective the Field 4 training compliments home station training. Table 4.77 displays the results of the responses.

TABLE 4.77

Results of Opinions on the Belief that Field 4 Training Effectively Compliments Home Station Training

Level of Agreement	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
(1) Strongly Agree	79	9.1	13.5
(2) Agree	283	33.4	49.5
(3) Neither Agr/Dis	108	12.5	18.5
(4) Disagree	83	9.6	14.2
(5) Strongly Disagree	25	2.9	4.3
No Response	282	32.6	Missing
Total	866	100.0	100.0

Mean	2.462	Mode	2.000	Kurtosis	-0.120
Median	2.237	Std Dev	1.031	Skewness	0.710

	Mean	F-calc	F-crit
Officers	2.186	16.313	3.84
NCO's	2.567		

F-calc > F-crit. Therefore statistically different opinions.

Survey Question 38. This question sought opinions on how long the respondents felt the training conducted at Field 4 should last. The question was asked in two parts, first, should it be made shorter, longer, or remain the same. Second, if the length should change, how long should it be. Tables 4.78 and 4.79 displays the results. Table 4.79 indicates a large number of "No Responses" since those who felt the course length should remain the same gave no response as a suggested change.

TABLE 4.78

Results of Opinions on the Proper Course Length for the Training Conducted at Field 4

Length of Training	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Make shorter	28	3.2	4.8
Make longer	214	24.7	36.6
Remain the same	343	39.6	58.6
No Response	281	32.4	Missing
Total	866	100.0	100.0

Mean	2.538	Mode	3.000	Kurtosis	-0.245
Median	2.647	Std Dev	0.587	Skewness	-0.862

	Mean	F-calc	F-crit
Officers	2.615	3.850	3.84
NCO's	2.508		

F-calc > F-crit. Therefore statistically different opinions.

TABLE 4.79

Results of Suggestions on How Long Field 4 Training Should Last

Length of Training	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Three days	17	2.0	7.3
Four days	7	0.8	3.0
Ten days	122	14.1	52.4
Two weeks	66	7.6	28.3
Three weeks	21	2.4	9.0
No Response	633	73.1	Missing
Total	866	100.0	100.0

Mean	3.288	Mode	3.000
Median	3.258	Std Dev	0.942

	Mean	F-calc	F-crit
Officers	3.448	2.221	3.84
NCO's	3.236		

F-calc < F-crit. Therefore statistically similar opinions.

Survey Question 39. This question sought opinions on the opportunity for supervisors to practice leadership skills during the training conducted at Field 4. Table 4.80 displays the results.

TABLE 4.80

Results of Opinions on Whether or not Ample Opportunity Is given Supervisors to Practice Leadership Skills

Level of Opportunity	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Ample opportunity	359	41.5	61.8
Program too structured	222	25.6	38.2
No Response	285	32.9	Missing
Total	866	100.0	100.0

Survey Question 40. This question sought opinions on whether or not the equipment operators receive enough "hands-on" time at Field 4 to feel comfortable with their responsibilities. Table 4.81 displays the results.

TABLE 4.81

Results of Opinions on Whether or not Equipment Operators Receive Enough "Hands-on" time at Field 4

Time	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Yes, adequate time	336	38.8	62.2
No, not adequate time	201	23.2	37.4
No Response	329	38.0	Missing
Total	866	100.0	100.0

Open-ended Questions

The remaining four questions in the survey permitted the respondents to write out their opinions on the Prime

BEEF training program. The respondents were asked to provide their inputs on four basic questions:

1. What additional training areas should be covered?
2. What is the single biggest problem with Prime BEEF training as it is currently conducted?
3. What is the most favorable aspect of Prime BEEF training as it is currently conducted?
4. How should the current training for your specific wartime tasking be changed?

The responses for each question were grouped according to the methodology previously described in Chapter III. A representative sampling of the responses for each question are available in Appendix C. Tables 4.82 through 4.85 provide a numerical breakdown of the responses for each question.

TABLE 4.82

Opinions on Which Training Areas Should be Added To the Prime BEEF Training Program

Training Area	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Improved Security Trng	71	8.2	26.1
Contingency Engineering	27	3.1	9.9
Improved RRR	19	2.2	7.0
Actual Deployment Site	10	1.1	3.8
Officer Training	6	0.7	2.2
Base Denial	5	0.6	1.8
Communications Trng	4	0.5	1.5
Miscellaneous	130	15.0	47.8
No Comment	594	68.6	Missing
Total	866	100.0	100.0

TABLE 4.83

Opinions on What the Single Biggest Problem Is With Current Prime BEEF Training

Subject Area	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Disorganized	171	19.7	23.7
Not taken seriously	128	14.8	17.7
Training not sufficiently in-depth	77	8.9	10.7
Lack of realism	76	8.8	10.5
Lack of Time	72	8.3	10.0
Lack of Equipment	56	6.5	7.8
Train too often	14	1.6	1.9
Miscellaneous	128	14.8	17.7
No Comment	144	16.6	Missing
Total	866	100.0	100.0

TABLE 4.84

Opinions on What is the Most Favorable Aspect of Current Prime BEEF Training

Level of Opportunity	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
Field Training/ Hands on Experience	209	24.1	37.4
Training At Field 4	68	7.8	12.2
Teamwork/Esprit de Corps	59	6.8	10.5
RRR Training	56	6.5	10.0
Mission Accomplishment	56	6.5	10.0
Leadership/Supervision	44	5.1	7.9
Security/Weapons Trng	28	3.2	5.0
Break in Routine	12	1.4	2.1
Miscellaneous	27	3.1	4.8
No Comment	307	35.5	Missing
Total	866	100.0	100.0

TABLE 4.85

Opinions on How Tasking for Current Training Should be Changed

Subject Area	Absolute Freq	Relative Freq (%)	Adjusted Freq (%)
More field training	198	22.5	36.9
Proper equipment made more available	79	9.1	14.7
More realism	77	8.9	14.3
Recommend no changes	50	5.8	9.3
Train in other areas	30	3.5	5.6
More emphasis on survival/weapons trng	27	3.1	5.0
More realistic RRR	15	1.7	2.8
More total base involvement in exercises	10	1.1	1.9
Miscellaneous	51	5.9	9.5
No Comment	329	40.0	Missing
Total	866	100.0	100.0

V. Analysis and Discussion

Overview

This chapter will present an in-depth discussion of the results of the Prime BEEF attitudinal surveys. The first five of the secondary objectives are analyzed in turn by examining the specific survey questions which were developed to support those research objectives. The sixth secondary objective, to determine if the officers and NCO's involved in the Prime BEEF training program have differing perceptions of the program's adequacy, will be discussed throughout the chapter as each survey question is analyzed. A summary of the responses to the sixth secondary objective completes the chapter.

As was previously mentioned, the results from each of the survey questions represent an aggregate of the perceptions of the respondents.

Research Objective #1

> Determine if current Prime BEEF training is perceived as adequate to support the anticipated wartime and contingency tasking.

This research objective is very broad in focus and is supported by 20 of the specific survey questions. Survey questions 4, 10 through 27, and 32 help to satisfy this research objective. (The survey questions are available in Appendix B). Each survey question highlighted a specific aspect of the training atmosphere which impacts on how the

training is perceived. The following areas were specifically addressed to satisfy the research objective:

1. The guidance provided by AFR 93-3, Air Force Civil Engineering Prime Base Engineer Emergency Force (BEEF) Program;
2. The priority Prime BEEF training is given when compared to other civil engineering duties;
3. The effectiveness of the overnight bivouac;
4. Support for Prime BEEF training from outside the civil engineering unit;
5. Time made available to complete Prime BEEF training requirements;
6. Adequacy of the training conducted in each of the 10 different training areas.

AFR 93-3 Guidance. Analysis of the survey questions indicates the respondents are undecided, but tend to agree, that AFR 93-3 guidance is very adequate. Over 40% of those responding to the question either agree or strongly agree with the statement, with a resulting mean response of 2.675 (Table 4.10). It is, however, troublesome to note that over one quarter of the respondents did not know if they thought the guidance was adequate. This fact could indicate that a significant portion of those on Prime BEEF teams do not take the time to discover what guidance is provided, or that they do not have the opportunity due to other requirements. If this inference is correct, it suggests a need for better publicity of AFR 93-3 by the unit Prime BEEF section. Another possible inference is that the respondents know the guidance provided in AFR 93-3, but are unsure what a real contingency would require and therefore cannot determine if

the guidance provided is adequate.

The officer/NCO subgroups had differing opinions concerning this question, with the NCO's tending more to agree that the guidance is adequate. This finding could indicate the officers are less familiar with the regulation than the NCO's and so are unable to make a judgment regarding adequacy. The results could also indicate the officers are simply more skeptical of the guidance the regulation provides and are unsure how adequate that guidance would be in the uncertainity of a contingency environment. Still, a majority of those who have an opinion on the regulation feel the guidance it provides is very adequate.

While AFR 93-3 does not go into a great deal of depth on how the Prime BEEF training program should be run, it is the basic regulation guiding the Prime BEEF mission. To help meet this mission, which the regulation describes, training programs are developed. A positive perception of the guidance available in AFR 93-3 should therefore enhance the impressions members have about the training programs which it fosters.

Prime BEEF Training Priority. Both Survey Questions 10 and 16 addressed this problem, with the results being split between the two questions. Over half (57.8%) of those responding to Question 10 either disagree or strongly disagree that Prime BEEF training receives a low priority when compared to other civil engineering duties, while only 31.0% agree or strongly agree. Their mean response was 3.363, or

"tend to disagree" (Table 4.11). The officer/NCO subgroups had differing opinions on this question, with the officers very undecided (mean of 3.042), and the NCO's more inclined to disagree with the statement. It is interesting to note that the officers, who should be establishing the unit priorities, appear unsure where Prime BEEF training stands.

The results of Question 16 are less conclusive. The mean response (3.042) indicates the respondents are unsure where Prime BEEF training priority ranks compared to other duties (Table 4.12). Nearly half (44.3%) disagree that routine duties receive a higher priority, but the officer/NCO split indicates officers tend to agree that routine duties are more important.

The responses to these questions show Prime BEEF members are generally undecided about what priority the training receives at their bases. The responses to both questions displayed a strongly negative kurtosis, indicating a flatter curve and more widely distributed replys. The respondents overall believe that Prime BEEF training has a high priority, but the Prime BEEF leadership (officers) are not so sure. This uncertainity on the part of some officers could limit the attention the program receives and result in a lower quality of training. A high level of priority and interest in the Prime BEEF program may be difficult to maintain when the wartime threat can seem so vague, yet the day-to-day peacetime civil engineering problems are very real. This would seem especially true in the Conus.

The priority which the Prime BEEF training program receives at each base could easily influence the attitudes of those receiving the training. If people perceive the program receives a lower priority than other civil engineering duties, they are less likely to gain the full benefit of the program and will therefore not be as well prepared to perform their primary wartime duties.

Overnight Bivouac. Survey questions 11 and 12 sought opinions on the quality of the annual overnight bivouac. The results indicate the respondents are undecided about the realism of their bivouacs (mean response of 2.897). These results were also true of the two subpopulations where no significant differences exist (Table 4.13).

Responses to Question 12 are again inconclusive concerning how much emphasis defensive training receives during bivouacs (Table 4.14). On this question, however, the subgroups do differ slightly in their opinions, with the NCO's tending to agree that defensive training does receive a greater emphasis during bivouacs than do primary Prime BEEF duties.

The undecided responses make it difficult to draw conclusions. More realistic bivouac training would seem to more adequately prepare Prime BEEF members to perform their wartime tasks. Therefore, the undecided responses can indicate the members are not quite sure what "realistic" is, and hence are not sure if the training fits that description. These responses can also mean the respondents are unsure

exactly what skills they can expect to need, and so cannot assess whether or not they are being allowed to practice them. The members appear unsure what defensive skills they may require, so they cannot decide whether or not defensive training is overemphasized. If the members are unsure just what to expect in a wartime situation, then it is difficult for them to decide if they are being adequately prepared.

Support from Outside the CE Unit. Three questions were used to analyze opinions regarding support for Prime BEEF training from outside the civil engineering unit. The overall mean (2.679) shows members tend to agree that Major Command support of Prime BEEF training is very good (Table 4.15). The population breakdown indicates officers are less sure how good the support is, but still, nearly half those responding (47.7%) agree the support is very good, while only 19.0% disagree.

The results of Question 14 indicate members are less sure their Wing and Base Commanders give Prime BEEF training a high priority (Table 4.16). The overall mean response of 2.966 shows respondents are undecided about Wing and Base Commander support, but a breakdown by subpopulation shows officers tend to disagree that the senior base officials actively support Prime BEEF training (mean officer response of 3.273). One can probably expect officers to be more knowledgable about less obvious signs of support (or lack thereof) which Wing and Base Commanders give to Prime BEEF training. This response could mean the officers feel

greater pressure from Wing and Base Commanders to get routine civil engineering jobs completed than do NCO's, so they believe Prime BEEF training does not receive a higher priority than do routine civil engineering requirements. These responses are consistent with the responses to the previous set of questions which found Prime BEEF members undecided about what priority Prime BEEF training receives at their respective bases.

The third question on support for Prime BEEF training from outside the CE unit shows respondents tend to agree (mean of 2.738) that other base level organizations support Prime BEEF training (Table 4.17). This support can be critical to effective bivouacs and well-coordinated exercises. Positive outside support also helps Prime BEEF members feel more like a part of the larger base team. For this question, the officer/NCO responses were not statistically different.

When considered against the research objective, one can assume that if Prime BEEF members believe agencies outside the civil engineering unit support their training, their attitude toward that training will be enhanced. One can also assume that if members receive outside support for training, that training will be of a higher quality and will better prepare the member, than if training support comes only from in-house.

An interesting pattern of responses appears to be developing between the perceptions of the NCO's and the officers. The general trend indicates the officers are more

skeptical of the adequacy of the training program in the majority of the areas already examined. Reasons for this can vary considerably and will not be speculated on here, but the pattern is already clearly established and will be discussed throughout the rest of the analysis.

Availability of Training Time. Question 32 found the respondents are unsure if adequate time is made available for Prime BEEF training (Table 4.71). The officer/NCO comparison shows the subgroups differ in their opinions, with the NCO's tending to agree that adequate time is available, while the officers continue their skepticism with an average response of undecided.

The uncertain nature of the mean response can simply be a reflection of the fact that some bases may make adequate time available, while some do not. The statistical averaging procedure leaves the mean in the undecided region. Significantly, however, over half (51.1%) the respondents either agree or strongly agree that adequate time is made available, with the most common single response being agree. This indicates a majority of the respondents do feel adequate time is available for the training.

The overall central tendency of the respondents could, however, also indicate Prime BEEF team members are unsure how much time is adequate, and therefore are unsure if the amount of time devoted to the training is adequate. This is related to the problem of training realism, since it is difficult to know just what the next wartime situation will

be like. Each person's perception of the tasks he may be faced with in a wartime situation will differ. The respondent's unsure replies to this question may simply reflect the uncertain nature of contingency situations. Since a majority of the respondents do believe the training time is adequate, one can infer this feeling would have a positive effect on perceptions of the adequacy of the training program.

Training in Specific Areas. Questions 18 through 27 sought opinions on the adequacy of Prime BEEF training to prepare for anticipated wartime skills in each of ten different training areas. Also included was Question 17, which sought opinions on the overall adequacy of Prime BEEF training.

The respondents tended to agree the training was adequate in the areas of Chemical Warfare, Prime BEEF Orientation, Rapid Runway Repair, and Weapons Training (Tables 4.19, 4.21, 4.27, and 4.28). In addition, there was no significant difference in opinions between the two subpopulations for these areas.

In the remaining areas, Expedient Methods, Field Training, Government Vehicle Operation, Military Sanitation, Security, and Explosive Ordnance Reconnaissance, the respondents were undecided about how well the training in these areas prepared them (Tables 4.20, and 4.22 through 4.26). Only in Expedient Methods did the officers and NCO's statistically differ in their opinions. Even in this case,

however, both groups still fell within the undecided range.

If compared to the previously discussed 1984 AFIT study on Prime BEEF training, which examined the amount of training time spent in each area, these findings show the areas respondents tend to agree are adequate have the most home station training time devoted to them (29:148). The previous study did not determine the average time spent on Prime BEEF Orientation, but the other three areas respondents tend to agree have adequate training (Chemical Warfare, RRR, and Weapons Training) ranked in the top four areas which had the most time devoted to them. (Personal, Work Party, and Convoy Security Training ranked second in average hours devoted [28:148]). This finding strongly suggests that respondents feel more adequately prepared in the areas which have the most training time devoted to them.

The fact that the average respondent does not <u>disagree</u> that he is adequately trained in each of the areas would seem to indicate training in all areas is at least moderately effective in convincing individuals they are adequately prepared to perform wartime duties. The more time spent on an area, the better trained an individual seems to feel.

As responses to Survey Question 17 indicate, when the training is viewed overall, the respondents tend to agree (mean of 2.679) that their Prime BEEF training adequately prepares them to perform their assigned wartime and contingency duties (Table 4.18). The strength of the training received in Chemical Warfare, RRR, Prime BEEF Orientation,

and Weapons Training, appears to dominate uncertain feelings about training received in other areas. This increased confidence could be attributed to the additional training time spent on those areas. Individuals may perceive those areas as being their primary jobs when anticipated tasks are considered, so overall, they feel adequately trained in their primary areas. Or the response could simply mean that while individuals may be undecided about the adequacy of the training received in some areas, overall their training is perceived as adequate. The officers and NCO's differed in their opinions of the overall training adequacy, with officers more undecided in their response (2.853 for officers; 2.611 for NCO's). This difference continues the trend of other responses that officers feel less secure about the adequacy of Prime BEEF training.

Summary of Responses to Research Objective #1. When viewed against the original research objective, the last series of questions show Prime BEEF members tend to agree they are adequately trained, especially in areas in which the most training time is devoted. Overall, the respondents tend to agree the guidance provided in AFR 93-3 is very adequate. But the responses are inconclusive concerning the priority Prime BEEF training receives when compared with other civil engineering duties. Answers to one question show the respondents tend to disagree that Prime BEEF training takes a lower priority, but answers to the second question indicate the respondents are unsure.

Prime BEEF members are also unsure how realistic overnight bivouacs are, nor are they sure if defensive training is properly emphasized when considered against other wartime tasks. Even if it were possible to know exactly what an actual wartime scenario would be like, it would be difficult, if not impossible, to provide a realistic wartime environment when bivouacs are only conducted once or twice a year. The average response indicates members are unsure if they receive adequate time to train, though a slight majority do believe the time is sufficient.

Support for training from outside agencies appears to be positive, with the exception of the support felt from Wing and Base Commanders. This support should encourage positive perceptions about the importance of the Prime BEEF program and help to make the training more effective.

Responses to all the questions involving this research objective displayed varying degrees of negative kurtosis, indicating flatter than normal curves and a wide response distribution.

Research Objective #2

> Determine if the majority of Prime BEEF team members believe current Prime BEEF training requirements are established in the proper priority to agree with anticipated wartime taskings.

This research objective required first establishing what priority the Prime BEEF team members thought the various training areas should receive, then determining

what priority they felt the different training areas actually receive. Table 5.1 compares the responses by rank-ordering the ten training areas according to the mean response given for each area. The expanded results are presented in Tables 4.29 through 4.48.

TABLE 5.1

Comparison of Priorities for Prime BEEF Training Areas

Priority Should Receive	Area	Priority Actually Receives	Area
1	Chemical Warfare	1	Chemical Warfare
2	Rapid Runway Repair	2	Weapons Training
3	Weapons Training	3	Rapid Runway Repair
4	Explosive Ord. Recon.	4	Prime BEEF Orientation
5	Field Training	5	Field Training
6	Security Training	6	Explosive Ord. Recon.
7	Expedient Methods	7	Security Training
8	Military Sanitation	8	Expedient Methods
9	Prime BEEF Orientation	9	Military Sanitation
10	Gov Vehicle Operation	10	Gov Vehicle Operation

Tables 5.2 and 5.3 present an expanded version of the rank-ordered subject areas. The mode and median responses of each training area are also presented for comparison.

Table 5.2

Priority Training Areas Should Receive

Priority	Area	Mean	Mode	Median
1	Chemical Warfare	3.106	1	2.354
2	Rapid Runway Repair	3.983	2	3.286
3	Weapons Training	4.498	2	4.157
4	Explosive Ord. Recon.	5.308	3	5.060
5	Field Training	5.447	7	5.578
6	Security Training	5.495	5	5.445
7	Expedient Methods	5.544	6	5.639
8	Military Sanitation	6.663	7	6.997
9	Prime BEEF Orientation	6.741	10	8.013
10	Gov Vehicle Operation	7.857	10	8.740

TABLE 5.3

Priority Training Areas Actually Receive

Priority	Area	Mean	Mode	Median
1	Chemical Warfare	3.048	1	2.225
2	Weapons Training	4.053	2	3.355
3	Rapid Runway Repair	4.185	1	3.395
4	Prime BEEF Orientation	4.424	1	3.888
5	Field Training	5.289	4	5.250
6	Explosive Ord. Recon.	6.487	9	6.626
7	Security Training	6.531	8	6.788
8	Expedient Methods	6.589	6	6.737
9	Military Sanitation	7.071	9	7.398
10	Gov Vehicle Operation	7.104	10	7.706

The comparison indicates Prime BEEF members generally believe the different training areas are given the proper priority. The one major exception to this situation is the priority Prime BEEF Orientation receives. The respondents believe it should receive a low priority (9), but the perception is that it receives a considerably higher priority (4). This difference could be attributed to the fact that Prime BEEF Orientation is the only area which does not require hands-on training. For this reason, the lesson is fairly easy to administer, and permits the inclusion of many slides and movies which enhance the classroom presentation. Members may perceive that lessons in this area, which are relatively simple to understand, seem to have a greater priority since they are easy to administer and are therefore offered frequently. This perception may be a result of the type of lesson material and the frequency with which it is covered.

The breakdown of responses by subpopulation can best be

presented and discussed by first displaying the rank ordered areas as determined by the mean responses of the officers and NCO's. Tables 5.4 and 5.5 show the priorities the subpopulations feel the areas should receive, and as they perceive the areas actually are ranked.

TABLE 5.4

Priority Training Areas Should Receive
(as determined by subpopulation means)

Officers			NCO's		
Priority	Area	Mean	Priority	Area	Mean
1	RRR	3.150	1	Chem Warfare	2.954
2	Chem Warfare	3.517	2	Weapons Trng.	4.204
3	Exp. Methods	4.535	3	RRR	4.329
4	Field Trng.	5.120	4	Explo. Ord. Recon.	5.279
5	Weapons Trng.	5.248	5	Security Trng.	5.302
6	Explo. Ord. Recon.	5.423	6	Field Trng.	5.603
7	Security Trng.	5.919	7	Exp. Methods	5.913
8	PB Orientation	6.631	8	Mil. Sanitation	6.521
9	Mil. Sanitation	7.069	9	PB Orientation	6.762
10	Gov. Veh. Oper.	8.172	10	Gov. Veh. Oper.	7.714

TABLE 5.5

Priority Training Areas Actually Receive
(as determined by subpopulation means)

Officers			NCO's		
Priority	Area	Mean	Priority	Area	Mean
1	Chem Warfare	2.996	1	Chem Warfare	3.048
2	RRR	3.772	2	Weapons Trng.	4.142
3	Weapons Trng.	3.775	3	PB Orientation	4.261
4	PB Orientation	4.844	4	RRR	4.366
5	Field Trng.	5.055	5	Field Trng.	5.397
6	Security Trng.	6.523	6	Explo. Ord. Recon.	6.489
7	Explo. Ord. Recon.	6.638	7	Exp. Methods	6.531
8	Exp. Methods	6.786	8	Security Trng.	6.550
9	Gov. Veh. Oper.	6.786	9	Mil. Sanitation	6.816
10	Mil. Sanitation	7.656	10	Gov. Veh. Oper.	7.236

Summary of Responses to Research Objective #2. The two subpopulations differ most in their opinions of what priority the different training areas should receive, and differ relatively little in their perceptions of what priority the areas actually receive. The greatest single difference appears with the different opinions on what priority Expedient Methods should receive. The officers rate it fairly high (3), while the NCO's rate it more in the middle (7). A possible reason for this result could be that the NCO's feel confident in their ability to perform the tasks required in this area and therefore feel less of a need to practice the procedures. The officers, in turn, may feel a greater need to exercise the skills used in Expedient Methods and therefore feel it should be practiced more often. When viewed overall, however, the various areas generally appear to receive the priority which the Prime BEEF team members believe they should.

Research Objective #3

> Determine if the individual Prime BEEF team members believe they receive adequate hands-on training to prepare them for their anticipated wartime tasking.

Survey Question 33 was specifically designed to answer this research objective. As indicated in Chapter IV, survey respondents were undecided (mean of 2.917) about whether or not the hands-on training they receive both at their home station and at Field 4 adequately prepares them to perform their Prime BEEF duties (Table 4.72). Though the subpop-

ulations had statistically different opinions, the mean responses of both these groups still fell in the undecided range.

When responses to this question are compared with those of previously discussed Survey Question 17, which asked if the overall training was perceived as adequate, one clear inference is that the classroom addition to the hands-on training provided in the various areas helps Prime BEEF team members feel more qualified. The responses to Question 17 showed the respondents tended to agree the overall training is adequate, while responses to Question 33 indicate they are unsure if the hands-on portion is sufficient. The apparent positive effect of the classroom training is encouraging to note for educators, but must be balanced with actual hands-on practice time.

Survey Questions 30 and 31 also help to answer this research objective by indicating what training areas seem to be lacking in adequate equipment or actual physical areas in which to train.

The results show over 75% of the respondents feel they have adequate equipment in each of the areas except Explosive Ordnance Reconnaissance (56.4%), Expedient Methods (69.5%), and Rapid Runway Repair (50.4%) (Tables 4.49 through 4.59). Clearly, to properly practice the various procedures used in the different training areas, adequate equipment must be made available. The encouraging results indicate adequate equipment is available for most people in

a majority of the areas. Still, Explosive Ordnance Reconnaissance and Rapid Runway Repair, which respondents believe should receive a high priority in the training program, suffer from a lack of proper equipment. If more equipment can be made available for these areas, confidence in training should improve.

Having adequate space for hands-on training seemed less of a problem, with at least 75% of the respondents reporting adequate training space for each of the different areas (Tables 4.60 through 4.70). Over half the respondents feel they have adequate space for practice of all the training areas.

Summary of Responses to Research Objective #3. The results indicate that while adequate space is available for most training functions, and adequate equipment is a problem in only a few areas, Prime BEEF members are still unsure if they receive adequate hands-on training to feel confident to perform their wartime duties. This feeling could possibly be related to the amount of time made available, since members were unsure if they had adequate time to practice their training requirements. In total, however, problems with equipment and physical training space seem to affect only a limited number of individuals and can, in the minds of most respondents, be ruled out.

Research Objective #4

Determine if Prime BEEF team members believe the training conducted by the AFESC at Eglin AFB provides adequate opportunities for practicing the Prime BEEF mission.

Survey Questions 34 through 40 were designed to help answer this research objective. If respondants had never attended the training at Field 4, Eglin AFB, they were asked to ignore the questions in this section of the survey.

The results of Survey Question 34 show over two-thirds of the respondents have attended Prime BEEF training at Field 4 (Table 4.73), with 82.4% having been once or twice within the past four years (Table 4.74). AFR 93-3 indicates the desired attendance rate of Prime BEEF members is once every 24 months (7:23), so it appears the vast majority of bases are meeting that desired rate. A few individuals reported attending more than three times within the past four years. This reported deviation in attendance is, however, very limited.

Survey Question 35 sought opinions on the perceived value of the training conducted at Field 4, with the over-whelming response being yes, the training is valuable. Over 89% of the respondents either disagreed or strongly disagreed that the training was not very valuable (Table 4.75), with a mean response of 4.237 (disagree). The subpopulation breakdown indicated a statistical difference of opinion between the two groups, but their mean responses still fell within the same response range (disagree).

Positive impressions of the Field 4 training also surfaced in the responses to the open-ended questions, where many respondents felt the most favorable aspect of Prime BEEF training was the instruction provided at Eglin (Table 4.84).

Since current Prime BEEF guidance encourages attendence once every two years, Survey Question 36 sought opinions on how often members felt they should attend to receive optimum benefit from the program. The mean response of 2.618 indicates the respondents tend to agree that optimum benefit would require attendence more frequently than every two years (Table 4.76). Over half (56.5%) of the respondents either agreed or strongly agreed more frequent attendence would be beneficial, with no statistical difference of opinion between the subpopulations. These responses indicate many Prime BEEF members feel the training is effective and that they would benefit from greater exposure to the more specialized programs. When considered against the research objective, the opportunities appear to be adequate, but additional chances to attend the specialized training would be welcomed. The obvious constraints at this point are time and money.

Many times training programs offered on the same subjects but in different locations do not mesh well due to duplication of effort or considerable difference in techniques. Responses to Survey Question 37 indicate Prime BEEF members agree that the training at Field 4 effectively compliments Home Station Training (Table 4.77). The

subpopulations displayed a difference of opinion, with the officers more convinced than the NCO's that Field 4 training blends well with the training offered at the home station. While it is difficult to surmise from this question alone whether or not Field 4 training provides adequate opportunities to practice the mission, the data clearly indicates Eglin AFB training has a positive influence on the overall training program and does provide other opportunities to practice the Prime BEEF mission.

Survey Question 38 sought opinions on what would be the optimum length of training program at Field 4. The majority of the respondents (58.6%) felt the program should remain the same length (Table 4.78), while 36.6% felt it should be made longer. Of those who recommended the length be changed, the common response was to lengthen the program to ten days (Table 4.79). The subpopulations differed slightly in their opinions on this question, with the officers tending more to feel the program should remain the same length. This question shows that for most respondents, the program is about the right length. For most respondents then, opportunities to practice the Prime BEEF mission are not hampered by the length of the program. Still, better than a third would like to see the program lengthened.

Many formal training programs are very structured and afford little opportunity for the trainee leaders to practice their creativity or leadership skills, qualities which will be in high demand during wartime situations.

Responses to Survey Question 39 indicate a majority (61.8%) of the Prime BEEF members who have attended the Field 4 program believe it allows ample opportunity for supervisors to practice their leadership skills (Table 4.80). Also an important part of the Field 4 program is the opportunity equipment operators have to practice with the various types of machinery required in a contingency environment but which may not be available at their home station. Responses to Survey Question 40 indicate a majority of all the respondents believe the equipment operators receive adequate hands-on time to feel comfortable with their responsibilities (Table 4.81). These responses were further analyzed by determining the opinions of those whose primary specialty is Pavements and Construction Equipment. The majority of this subgroup (62.1%) also felt Field 4 provided enough hands-on time for equipment operators. While no clear majority surfaces from the responses to these two questions, the answers are again a positive indication that the program does provide opportunities to practice the Prime BEEF mission.

Summary of Responses to Research Objective #4. The clear tendency of the responses to questions on Field 4 training indicates Prime BEEF members believe the training program offered there is worthwhile and should be continued. The respondents tend to agree they would better benefit from the program if they could attend more often than every two years, but the majority do not see a need to lengthen the

course. The training appears to blend well with home station training, and members are able to practice leadership and equipment operation skills while attending the program.

The impact of the specialized Field 4 training seems therefore to be quite positive. The respondents seem to feel the program offers adequate opportunities to practice the Prime BEEF mission.

Research Objective #5

> Establish what specific amendments Prime BEEF team members believe should be made in the Prime BEEF training program to better prepare them for their mission.

Answers to this research objective were obtained through responses to the open-ended questions. Answers to Survey Question 41 resulted in seven areas which more than one respondent indicated should be added to the Prime BEEF training program (Table 4.82).

The single most common response was a desire for more improved security training. While not a new training area for Prime BEEF, the comments indicated the respondents felt current security training is inadequate to meet anticipated needs. Of those who answered this question, 26.1% felt security training needed improvement, but this represents only 8.2% of the usable surveys returned.

Other areas which the respondents felt should be added to or amended in the existing Prime BEEF program included more practice in contingency engineering, RRR training using

the latest techniques, formal officer training in Prime BEEF subjects before assignment to a regular unit, knowledge of each base's planned deployment site, formal communications training, and training in base denial techniques.

Although fewer than one-third of the survey respondents answered this question, those who did answer offer several areas which should be considered for addition to the Prime BEEF curriculum. A representative sampling of the responses to this survey question is provided in Appendix C.

Survey Questions 42 and 43 sought opinions on what the biggest problem is with Prime BEEF training, and what comprises the most favorable element of the current training. A summary of the responses appears in Tables 4.83 and 4.84.

The two areas most often mentioned as problems were apparent disorganization and a sense of the program not being taken seriously. Nearly a fifth of those answering the survey stated Prime BEEF training frequently appeared disorganized and seemed to waste a considerable amount of time. It is possible that placing the program under the direct supervision of a more senior officer in the squadron could alleviate some of the apparent confusion. Also possible is the fact that many contingency situations will, at times, appear disorganized simply because they are impossible to fully plan to the final detail. This will most certainly be the case in wartime.

Of the total number of survey respondents, 14.8% felt

the program was not taken seriously. These comments were aimed at every level of the Prime BEEF program, from the Base Civil Engineer down through the training instructors to the lowest airman. These respondents felt the time spent in training was simply filling a square and that the program did not receive the attention it should. These responses could also indicate a need for more attention to the program by senior squadron officers. Selected responses to this question are available in Appendix C.

On the positive side, Prime BEEF members felt field training and its resulting opportunities for hands-on experience were the most favorable aspect of the training. Nearly a quarter of the survey respondents highlighted this portion of the training, with the second most commonly mentioned response being the training offered at Field 4, which also emphasizes hands-on experience. Also mentioned numerous times was the esprit de corps which the teamwork demanded in Prime BEEF helps provide. Respondents felt many other aspects of the program were positive. A selection of these responses appears in Appendix C.

Comments on the positive and negative aspects of Prime BEEF clearly can affect amendments to the program. But the final survey question sought opinions on how the current training program should be changed. Again surfacing in these responses were calls for more field training and more program realism (Table 4.85). These comments closely parallel the previous high praise for hands-on training and

the criticism for the apparent ambivalence with which some people treat the program. It would seem these two areas especially should receive close consideration if amendments to the program are possible. Representative comments are available in Appendix C.

Research Objective #6

> Determine if the officers and NCO's involved in the training program have differing perceptions regarding the program adequacy.

Analysis of this research objective has been reported throughout the chapter: there is a difference in perceptions of the program's adequacy between the officers and the NCO's. As a group, the officers appear to be more skeptical of the program's adequacy and tend to a more undecided response on many of the questions. The NCO's seem to have a more positive perception of the program's adequacy and display a greater confidence that the methods and techniques being taught will properly prepare them for a contingency situation.

A possible explanation for this could be the relative age of the two groups. The largest majority of the officer respondents (168) were 1st and 2nd Lieutenants, who normally have no more than four years of service and usually are in their early to middle twenties. This contrasts with the largest NCO response group, the E-7's, E-6's, and E-5's, who can have anywhere from five to twenty-plus years of service. These individuals are somewhat older than the

largest officer group which responded, and can be expected to bring a more practiced eye to the contingency situation. The NCO's have the benefit of having received Prime BEEF training at several different bases over an extended period of time, and can therefore draw upon more experience when the need arises. The skepticism of the officers may generally reflect a lack of experience when compared to the NCO's, but is usually overcome by the new knowledge and enthusiasm which the junior officers bring to the program.

VI. Conclusions and Recommendations

Overview

This chapter provides a summary of the conclusions which can be drawn from this study on Prime BEEF training. Also presented are recommendations for further enhancement of the Prime BEEF training program, and suggestions for further research.

Conclusions

Prime BEEF members are undecided, but tend to agree, that they are adequately trained to perform their assigned wartime and contingency duties. Of the ten different training areas, the members feel most adequately trained in chemical warfare, Prime BEEF orientation, rapid runway repair, and the use of weapons. They are undecided on how well trained they feel in the other training areas, which include expedient methods, field training, government vehicle operation, military sanitation, security, and explosive ordnance reconnaissance.

The respondents tend to agree the program guidance provided in AFR 93-3 is very adequate. While troublesome to note that over one quarter of the respondents did not know if they felt the guidance provided in AFR 93-3 was adequate, over 40% of those responding felt the regulation supported the program well. The finding that over one fourth of the members do not know if the guidance is adequate may indicate

that either the respondents need to gain a better knowledge of the regulation, or that they are unsure of the wartime situations with which they will be faced and therefore cannot make an assessment regarding the regulation's adequacy.

Also supporting the results which indicate Prime BEEF members are unsure if they are adequately trained were responses which indicated members are uncertain what priority Prime BEEF training receives at their current bases. This uncertainty indicates Prime BEEF training may not receive the priority at the base level which senior Air Force Civil Engineering leaders say it should. Members are also unsure if their overnight bivouacs are realistically conducted or if defensive training receives too much emphasis while on the bivouacs. The uncertain responses again may indicate that members are not sure what a contingency situation will be like and therefore cannot assess whether or not the bivouacs are realistic. Since our most recent actual wartime environment (Vietnam) is more than ten years past, many current Prime BEEF members have little or no experience in an actual wartime or contingency environment and may therefore feel uncomfortable assessing the adequacy of their training.

The respondents generally believe the Prime BEEF program receives adequate support from the major commands, as well as from other units on the base. Members appear less sure their Wing and Base Commanders give the program a

high priority. Support for the program from these senior base leaders is important to help maintain morale and encourage an active, productive program. If members perceive the program is strongly supported by other portions of the air base community, they are more likely to feel their role is an important part of the overall base mission. This type of support may help to create a better learning environment and may result in better trained Prime BEEF team members.

The average Prime BEEF member surveyed is undecided whether or not he receives adequate time to practice the Prime BEEF mission, but the most common single response to this question indicates members do believe they receive sufficient time. A 1984 AFIT study found that training times varied significantly within and between Air Force major commands (28:147). These widely varying training times, coupled with the uncertainity of whether or not adequate time is made available, would seem to indicate a need for measurable performance standards, with corresponding recommended training times to achieve these standards.

Prime BEEF members do believe the majority of the current training requirements are established in the proper priority to agree with anticipated wartime taskings. Table 6.1 indicates the priority which Prime BEEF members feel the training areas should receive, and also the priority which they believe each area actually receives.

TABLE 6.1

Comparison of Priorities for Prime BEEF Training Areas

Priority Should Receive	Area	Priority Actually Receives	Area
1	Chemical Warfare	1	Chemical Warfare
2	Rapid Runway Repair	2	Weapons Training
3	Weapons Training	3	Rapid Runway Repair
4	Explosive Ord. Recon.	4	Prime BEEF Orientation
5	Field Training	5	Field Training
6	Security Training	6	Explosive Ord. Recon.
7	Expedient Methods	7	Security Training
8	Military Sanitation	8	Expedient Methods
9	Prime BEEF Orientation	9	Military Sanitation
10	Gov Vehicle Operation	10	Gov Vehicle Operation

Only Prime BEEF Orientation receives a considerably higher priority than members believe it should. The other nine training areas appear to be appropriately ranked, based upon the priority that members believe the areas should receive.

Prime BEEF members are undecided whether or not they receive adequate hands-on training to prepare them for their anticipated wartime tasking. The uncertain response in this area may indicate the classroom addition to hands-on training helps them feel more qualified, since overall they tend to agree they are adequately trained. Relating to the adequacy of hands-on training, over 75% of the respondents believe they have adequate equipment to practice the Prime BEEF mission in all areas except explosive ordnance reconnaissance, rapid runway repair, and expedient methods. Also, over 75% of the respondents believe their base has adequate training space to practice all of the different

training areas. Thus, while adequate equipment and space are not perceived problems by most Prime BEEF members, many do feel they lack adequate equipment to train in two of the areas rated high in priority, rapid runway repair and explosive ordnance reconnaissance.

The respondents clearly believe the training conducted by the Air Force Engineering and Services Center at Field 4, Eglin AFB FL, is beneficial and provides adequate opportunities to practice the Prime BEEF mission. Over 80% of the survey respondents have attended Field 4 training within the past four years, and over 89% of those who have attended believe the training is very valuable. The members tend to agree they could best benefit from the program if they were allowed to attend more often than every two years, and they also believe the training program effectively compliments home station training. Most respondents felt the program should remain the same length, but a significant number, 36.6%, believe it should be made longer. Nearly two-thirds of those who have attended the training believe supervisors receive adequate opportunities to practice their leadership skills, and that equipment operators receive enough hands-on time with the heavy equipment.

The respondents offered a wide variety of suggestions for amending the current Prime BEEF program to help them be better prepared to accomplish their mission. The most common request was for improved security training, with other areas mentioned including more practice in

contingency engineering, practice with the latest RRR techniques, formal officer training in Prime BEEF subjects, more training for the specific base of planned deployment, and instruction in base denial techniques. Members complained of the program's apparent disorganization and a sense that it was not taken seriously by many of those involved, but felt the hands-on training opportunities offered by field training, and the esprit de corps which the program helps to build are the most positive aspects of the program. The most common requests for change sought more opportunities for field training and greater program realism.

The officer and NCO respondents generally differed in their opinions of how adequately the training program meets mission needs. As a group, the officers appear to be more skeptical of the training program's adequacy, and tend to a more undecided response on many of the questions. Reasons for this may vary, but a strong influence could be the age and corresponding experience level of the respondents. The group of NCO's surveyed generally have more time in the service and can therefore call upon more experience in the contingency field to meet mission requirements. This level of experience is generally less true of the officers surveyed, since the largest single officer response group, Lieutenants, rarely have more than four years of service.

Recommendations

The results of this study find members are not sure how adequate their training is, but tend to agree they are adequately trained. While perceptions of adequacy do not necessarily equate to levels of performance, perceptions of a program's adequacy can influence how well an individual learns from the training. Improvements in the following areas should help raise members' perceptions of how well they are trained.

1. The priority of the Prime BEEF Program must be made clear to all base personnel to ensure the program receives the proper attention. The importance of Prime BEEF training must be emphasized, in both word and deed, by senior base leaders, and obvious support given to it by other base agencies. Air Force Civil Engineers must develop a more aggressive public relations program to encourage Air Force-wide support.

2. The priority placed on the Prime BEEF Orientation training area should be reduced to better reflect the actual emphasis it would receive in a wartime situation. The time made available could be put to better use on the other training areas.

3. Every effort should be made to provide Prime BEEF members with as much hands-on experience as is possible. Deployments and exercises provide the most realistic training and should be taken advantage of whenever possible.

4. The training program offered at Field 4, Eglin AFB, should be continued and expanded to accomodate more personnel more often. The program has a very positive effect on almost all who attend it, and provides a strong foundation for all Prime BEEF members. Similar permanent training areas should be developed in each of the overseas theaters.

Recommendations for Further Study

1. A study should be undertaken to determine how much training time is necessary to adequately train for the various Prime BEEF specialities. This would be ideally performed at the specialized AFESC training site at Eglin AFB FL. Once a standard is established, this time must be made available on a consistant basis for all those in Prime BEEF. The additional time devoted to Prime BEEF training may require procurement of added manpower allocations so that the day-to-day requirements will not suffer.

2. Further study should be made into the differences in contingency training for officers and NCO's. The differences in perceptions highlighted by this study raise the question of why these perceptions exist. If the officers are justified in their more skeptical view of the training, then perhaps an improved training program is warranted. However, if the officer perceptions are unfounded, their more negative opinions could affect how Prime BEEF teams are led in the field, and could have a

negative effect on team capabilities.

3. A comparative study should be made between Prime BEEF member's perception of training adequacy and their corresponding measured performance. This could best be accomplished at Field 4, but could also be a performed as part of major field exercises. If, as previous research suggests, attitudes toward training do affect future performance, the Air Force must make a concerted effort to bolster Prime BEEF member attitudes toward their training so they may gain the most benefit possible from the programs. Such a study will require the establishment of performance standards.

4. A study similar to the one described in this thesis should be undertaken in the near future to try and assess whether or not members believe any progress has been made in the program.

Appendix A: Definitions

1. PB-1 (Engineer Management Team). A team composed of 13 members possessing "engineering skills capable of providing key base civil engineering management for force beddown, operations and maintenance (O&M), emergency and follow-on war damage repair (WDR) operations, and material and equipment acquisition at collocated operating bases (COBs), forward operating locations (FOLs), and bare bases (BBs)" (7:14,46).

2. PB-2 (Basic Support Team). A team composed of 45 members possessing "engineering skills capable of providing force beddown using expedient or existing facilities, O&M support for facilities and utilities during contingencies, and emergency and follow-on WDR. . . This team can fully support a 550-person encampment using Harvest Eagle assets. . . The PB-2 augments PB-3 and PB-4 teams for rapid runway repair (RRR) operations" (7:14,47-48).

3. PB-3 (Limited Support Team). Similar to a PB-2 team, but smaller in size. Composed of 25 members, "this team can fully support a 275 person encampment using Harvest Eagle assets. . . It also augments PB-2 and PB-4 teams for RRR operations" (7:14,49).

4. PB-4 (RRR Equipment Operator Team). A 12 member team of "pavement and construction equipment personnel which provides heavy equipment operations support during RRR, other emergency and follow-on repair actions, and force beddown" (7:14,50).

5. PB-6, 7, and 8 (Fire Protection Teams). Composed of 3 member, 12 member, and 3 member teams respectively, these teams provide fire fighting capability and rescue/fire-supression command and control (7:14,51).

6. PB-9 through 26 (Speciality Teams). Composed of 3 members each, these teams "augment PB-1, PB-2, and/or PB-3 teams to provide additional capability for expedient beddown, repair and O&M support operations" (7:15). These teams come from the following specialities (7:52):

Officer
Production Control
Exterior Electric
Refrigeration
Heating
Equipment Operations
Mason
Plumbing
Environmental
Engineering Assistant
Interior Electric
Power Production
Liquid Fuels
Controls
Structures
Metals
Entomology

7. Base Civil Engineer (BCE). "Responsible for all aspects of the base civil engineering organization's peacetime and wartime missions, including the overall management of the Prime BEEF program and has supervisory control over the Operations Branch Chief" (21:18).

8. Operations Branch Chief (OBC). "Has direct control over the majority of the base civil engineering organization's workforce that has mobility positions . . . and has supervisory control over the Prime BEEF manager" (21:18-19).

9. Prime BEEF Managers. "Responsible for the management of all aspects of the Prime BEEF program" (21:19).

10. Harvest Bare. "Nickname for an air transportable package of soft and hard wall shelters and equipment designed to support operational squadrons and personnel under bare base conditions. . . Intended to provide a broad base of logistics support for sustained operations" (7:39).

11. Harvest Eagle. Similar to Harvest Bare, but designed to support a smaller contingent of personnel (7:40).

Appendix B: Attitudinal Survey

DEPARTMENT OF THE AIR FORCE
AIR FORCE INSTITUTE OF TECHNOLOGY (AU)
WRIGHT-PATTERSON AIR FORCE BASE, OH 45433

9 APR 1985

REPLY TO ATTN OF: AFIT/LS (Capt William C. Morris, AV 785-7212)

SUBJECT: Survey on Perception of Prime BEEF Training (USAF SCN 85-31)

TO: Prime BEEF Team Member

1. We have selected you to participate in an Air Force research project which is important to Air Force civil engineers. We will use your responses to the questions in the attached survey to determine how individual Prime BEEF members perceive the adequacy of their Prime BEEF training. Your perception of how well Prime BEEF training prepares you to perform your wartime or contingency task is significant to those who design the training. Since Prime BEEF training has undergone some major revisions in the recent past, we want to know what you think about the current training program.

2. We ask that you be among those who will take about 25 minutes to provide this important Prime BEEF training information. Please answer each question as accurately and truthfully as possible. All responses will be held confidential, and no attempt will be made to identify any individual with specific survey responses. Of course, your participation is totally voluntary.

3. This survey has been approved (USAF SCN 85-31) by Headquarters AFMPC/MPCYPS.

4. Please return the completed survey form in the envelope provided within one week of receipt. We appreciate your help in this important project.

LARRY L. SMITH, Colonel, USAF
Dean
School of Systems and Logistics

2 Atch
1. Questionnaire
2. Return envelope

AIR FORCE—A GREAT WAY OF LIFE

SURVEY QUESTIONS

1. Current grade (Military only)

___ O-5	___ O-1	___ Other (please specify) _____
___ O-4	___ E-9	
___ O-3	___ E-8	
___ O-2	___ E-7, E-6, E-5	

If you are an NCO, skip directly to question 3.

2. What position do you hold within Base Civil Engineering?

___ Base Civil Engineer	___ Prime Beef Manager
___ Chief of Operations	___ Other (please specify) _____

If you are an officer, skip directly to question 4.

3. Which section is your primary speciality?

___ Electrical	___ Pavements and Construction Equipment
___ Mechanical	
___ Structural	___ Sanitation

___ Other (please specify) _____

4. The Prime BEEF training guidance currently provided in AFR 93-3 is very adequate.

___Strongly Agree ___Agree ___Neither Agree nor Disagree ___Disagree ___Strongly Disagree

___I Don't Know

5. Is your current assignment in the Conus or non-Conus?

___ Conus ___ Non-Conus

6. To what major Air Force command are you assigned?

___ AFLC	___ AU	___ AFSC
___ ATC	___ USAFE	___ MAC
___ SAC	___ AAC	___ TAC
___ PACAF	___ Other (please specify) _____	

7. How much time (to the nearest month) do you have on station at your current duty location?

_____ months

8. **To what Prime BEEF team (or, if overseas, theater Prime BEEF team) are you currently assigned?**

Conus
___Core Team (PB-1 through PB-4)
___Special Team (PB-9 through PB-26)

Non-Conus
___PROF Team (Primary Recovery and Operations Force)
___Theater Mobile Team
___Theater RRR Team

___Other (please specify)_____

9. Approximately how many people (military only) are assigned to your civil engineering squadron? _____

Please indicate your level of agreement or disagreement with the following statements. Please base your opinion on the Prime BEEF training as it is conducted AT YOUR CURRENT DUTY STATION. Indicate your answer by checking the response you choose. We need your professional opinion, not necessarily what the answer "ought" to be.

10. Compared to other civil engineering requirements at my current base, Prime BEEF training receives a low priority.

___Strongly Agree ___Agree ___Neither Agree nor Disagree ___Disagree ___Strongly Disagree

11. My base's annual overnight bivouac is realistically conducted and allows me to practice the skills I expect to need in a wartime or contingency situation.

___Strongly Agree ___Agree ___Neither Agree nor Disagree ___Disagree ___Strongly Disagree

(____ My base does not have an annual bivouac.)

12. While on annual overnight bivouac, greater emphasis is placed on defensive training than on practice of my anticipated primary Prime BEEF duties.

___Strongly Agree ___Agree ___Neither Agree nor Disagree ___Disagree ___Strongly Disagree

(____ My base does not have an annual bivouac.)

13. Major command (for example, TAC, MAC, USAFE, etc.) support of Prime BEEF training at my base is very good.

___Strongly Agree ___Agree ___Neither Agree nor Disagree ___Disagree ___Strongly Disagree

14. The Base and Wing Commanders actively support the Prime BEEF training program by giving its training requirements high priority compared to other civil engineering requirements.

___Strongly Agree ___Agree ___Neither Agree nor Disagree ___Disagree ___Strongly Disagree

15. Other base level organizations (e.g., Security Police, Base Hospital, Base Operations, etc.) adequately support Prime BEEF training at this base.

___Strongly Agree ___Agree ___Neither Agree nor Disagree ___Disagree ___Strongly Disagree

16. Routine duties at this base receive a higher priority than Prime BEEF training.

___Strongly Agree ___Agree ___Neither Agree nor Disagree ___Disagree ___Strongly Disagree

17. The overall Prime BEEF training conducted at my current assignment adequately prepares me to perform my assigned wartime and contingency duties.

___Strongly Agree ___Agree ___Neither Agree nor Disagree ___Disgree ___Strongly Disagree

The Prime BEEF training I receive in each the specific areas listed below (Questions 18 through 27) adequately prepares me to perform my anticipated tasks in a wartime situation. (Using the scale below, indicate your level of agreement with the above statement by circling the appropriate number below each subject area.)

"1" Strongly Agree "2" Agree "3" Neither Agree nor Disagree "4" Disagree "5" Strongly Disagree

18. Chemical Warfare

1------2------3------4------5

19. Expedient Methods

1------2------3------4------5

20. Prime BEEF Orientation

1------2------3------4------5

21. Field Training

1------2------3------4------5

22. Government Vehicle Operation

1------2------3------4------5

23. Military Sanitation

1------2------3------4------5

24. Personal, Work Party, and Convoy Security

1------2------3------4------5

25. Explosive Ordnance Reconnaissance

1------2------3------4------5

26. Rapid Runway Repair

1------2------3------4------5

27. Weapons Training

1------2------3------4------5

28. The following list represents the current Prime BEEF training requirements as defined in AFR 93-3. Rank order the items to reflect which one you think SHOULD receive the highest training priority, second highest training priority, etc. (Highest priority = 1; lowest priority = 10.)

___Chemical Warfare
___Explosive Ordnance Reconnaissance
___Expedient Methods
___Field Training
___Government Vehicle Operation
___Military Sanitation
___Personal, Work Party, and Convoy Security
___Prime BEEF Orientation
___Rapid Runway Repair
___Weapons Training

29. The Prime BEEF training requirements are again listed below. Please rank order the training requirements according to the emphasis you feel they ACTUALLY receive at your current base. (Greatest emphasis = 1; least emphasis = 10.)

___Chemical Warfare
___Explosive Ordnance Reconnaissance
___Expedient Methods
___Field Training
___Government Vehicle Operation
___Military Sanitation
___Personal, Work Party, and Convoy Security
___Prime BEEF Orientation
___Rapid Runway Repair
___Weapons Training

30. Some bases may lack the proper equipment to effectively train for the various Prime BEEF requirements. Please check the training requirement(s) listed below in which you feel your current base LACKS the proper equipment for effective home station training.

___Chemical Warfare
___Explosive Ordnance Reconnaissance
___Expedient Methods
___Field Training
___Government Vehicle Operation
___Military Sanitation
___Personal, Work Party, and Convoy Security
___Prime BEEF Orientation
___Rapid Runway Repair
___Weapons Training
____ My base has adequate equipment for all requirements.

31. Some bases may lack suitable training areas to effectively practice the various Prime BEEF training requirements. Please check the training requirement(s) listed below in which you feel your current base LACKS suitable areas for effective home station training.

___Chemical Warfare
___Explosive Ordnance Reconnaissance
___Expedient Methods
___Field Training
___Government Vehicle Operation
___Military Sanitation
___Personal, Work Party, and Convoy Security
___Prime BEEF Orientation
___Rapid Runway Repair
___Weapons Training
____ My base has adequate areas available for all requirements.

32. We have adequate time made available at my current duty station to complete our Prime BEEF training requirements.

___Strongly Agree ___Agree ___Neither Agree nor Disagree ___Disagree ___Strongly Disagree

33. The combined hands-on training I receive for my speciality area from both my home station and from Field 4 at Eglin AFB makes me confident that I am adequately trained to perform the duties of my assigned Prime BEEF team.

___Strongly Agree ___Agree ___Neither Agree nor Disagree ___Disagree ___Strongly Disagree

34. Have you ever participated in the Prime BEEF training conducted at the AFESC Contingency Training Site (Field 4) at Eglin AFB?

___ No If No, please skip to Question 41.

___ Yes If Yes, how many times within the last four years? _____

Questions 35 through 40 refer to the training conducted at Eglin AFB, Field 4, and do NOT refer to training conducted at your current station. Please answer questions 35 through 40 based on your most recent visit.

35. The training conducted by the Air Force Engineering and Services Center (AFESC) at Eglin AFB is not very valuable.

___Strongly Agree ___Agree ___Neither Agree nor Disagree ___Disagree ___Strongly Disagree

36. Optimum benefit from the Prime BEEF training conducted at Eglin would require attendance more frequently than once every two years.

___Strongly Agree ___Agree ___Neither Agree nor Disagree ___Disagree ___Strongly Disagree

37. The Prime BEEF training conducted at Eglin effectively compliments the training which is conducted at my home station.

___Strongly Agree ___Agree ___Neither Agree nor Disagree ___Disagree ___Strongly Disagree

38. Should the training conducted at Eglin be made shorter, longer, or remain the same?

___Shorter (If shorter, what length should it be?
___Three days ____ Four days)
___Longer (If longer, how long should it be?
___Ten days ___Two weeks ___Three weeks)
___Remain the same

39. Do supervisors receive ample opportunity to exercise their leadership skills at Field 4, or is the program too structured to permit much leadership practice?

___Ample opportunity is given. ___Program is too structured.

40. Do equipment operators receive enough "hands-on time" at Field 4 to feel comfortable with their responsibilities?

___Yes ___No

41. Is there any training area which is not currently covered by the established Prime BEEF training program which you feel should be covered to better prepare you for your anticipated mission?

____No ____Yes

If yes, please describe the area briefly.

42. What is the single biggest problem with Prime BEEF training as it is currently conducted?

43. What is the most favorable aspect of Prime BEEF training as it is currently conducted?

44. How would you change the current training you receive for your specific wartime tasking?

Thank you for answering this survey. Please return the survey in the attached envelope.

Appendix C: Selected Responses to Survey Questions 41 Through 44

Question 41: Is there any training area which is not currently covered by the established Prime BEEF training program which you feel should be covered to better prepare you for your antitipated mission? If yes, please describe the area briefly.

BASE DENIAL

-- Being in USAFE, base denial could come in handy.

-- Rapid evacuation of your set up compound

COMMUNICATIONS TRAINING

-- Communications - radio procedures, field telephones, field wire.

-- Communications security

-- Radio comm techniques. This is critical for command and control but receives little emphasis.

TRAINING IN CONDITIONS AT ACTUAL DEPLOYMENT SITE

-- I feel we will be complimenting a CE squadron in whatever theater we are sent. I think we should practice at supporting them instead of practicing bare base or setting up as a separate organization on base. I think we should practice melting in with a "base" CE.

-- Training with equipment we would use in war - revetments, foreign pumps, generators, meters, etc.

-- MOB and COB operations training.

-- Conditions in areas other than Europe!

-- Once the annual taskings are made, each CONUS team should be given a general briefing on the conditions anticipated in the theater to which they are allocated.

-- Customs, language, etc. of the indiginous personnel at primary deployment site.

-- Better knowledge of tentative actual deployment area.

-- Familiarization with existing wartime taskings. Preplanning and coordination with host base and other units deploying to that base.

-- Knowledge of base where deployed overseas.

OFFICER TRAINING

-- The Prime BEEF training at my base leaves officers little opportunity . . . to practice the drills we were introduced to in AFIT's course "Contingency Engineering". I admit that "realistic" training would be very expensive, but how can we really learn to function in a contingency environment unless we have a chance to do so.

-- Team leader responsibilities.

-- More emphasis should be placed on our command and control - increase officer training.

-- As an officer, I'm not sure what my duties would be on a mission.

-- More emphasis should be placed on adequately preparing officers for their duties/responsibilities on the PB team.

-- To begin with, there is not a training program. The Air Force is the only branch of the military that does not have formal training of their officers before the first assignment. Recommend the AF start a combat engineering tech school of send all of the AF civil engineering officers to the Army Combat Engineering School.

IMPROVED RRR TRAINING

-- RRR AM2 is obsolete. Training must be conducted to coincide with current technology.

-- Training involving the lighter types of matting (i.e. fiberglass).

-- Proper training of RRR techniques other than AM-2

matting.

-- Concrete slab RRR method.

-- They keep changing RRR criteria, but we do not have the equipment or the supplies to keep current.

-- RRR here in the States isn't as in-depth as overseas.

-- We should lay full patches instead of mini-patches. We should start practicing the new RRR methods.

-- No timed multiple crater repair.

CONTINGENCY ENGINEERING

-- Contingency engineering - to include Base Recovery, expedient methods, and base denial.

-- Expedient methods: POL pipeline repairs.

-- Site setup and planning for force beddown.

-- Expedient methods need to be more strongly addressed - problem solving for engineers.

-- Utility cutoff/restoration.

-- Tent erection, total camp setup from tent erection tr beddown.

-- Civil engineers should be concerned with expedient methods to provide various utilities to various facilities, not security and weapons training.

-- Overseas utilities training to include electrical, heating, water, masonary requirements, etc.

-- Facility repair on utility systems and structures is not covered anywhere to my knowledge.

-- Foreign utilities; how do we handle (expediently repair) them?

-- Need to know how to do expedient repairs to all base utility systems.

-- Speciality training should be incorporated to reflect overseas uniqueness, i.e. German electrical power, overseas mechanical equipment, etc.

-- Need more emphasis on the utility systems of Europe.

WEAPONS / SECURITY TRAINING

-- Field combat - simple military basic training. Caring for the wounded, "hitting the deck", throwing grenades, hand-to-hand combat.

-- Prime BEEF teams need to be trained on a wider variety of weapons for site security and the prevention of an enemy overrun.

-- More on security and reconnaissance.

-- Here they provide aggressive security training when in-fact we should be practicing defensive security training. Also, chemical warfare training is a farce. We should be training in chemical gear and actually laying triple R matting in this gear.

-- Defensive tactics in case the SP's are not there.

-- Air Base Ground Defense

-- Increased emphasis should be placed on maintenance and operation of weapons, work party security, and chemical warfare.

-- We should have mandatory physical training.

-- Combat tactics, with small arms and hand-to-hand training.

-- Heavy weapons training. I feel we are vulnerable with only light weapons.

-- Perimeter security.

-- Practical pistol shooting as opposed to qualification shooting (or in addition to qualification shooting).

-- More hands-on training for security.

-- Security for the work party. No security is provided when you are actually performing the RRR.

-- I'd like to see security training incorporated into the program. Prime BEEF teams may have to support their own defense at times.

-- Handling of aggressor forces. Convoy protection.

-- Defensive training should get more attention.

Question 42: What is the single biggest problem with Prime Beef training as it is currently conducted?

TRAIN TOO OFTEN / SAME PEOPLE ALWAYS GET TRAINED

-- Whenever we have field training or process through a mobility line, the same people do it so some people get little or no training.

-- All PB training should be conducted in one month and completed and not drawn out through the entire year.

-- Whenever we have an overnight bivouac, it's always the same team that goes out, thus, only a few are really trained.

-- Too much in-house training above the required schedules.

-- Too much time spent on Prime BEEF training.

LACK OF REALISM

-- Difficult to achieve realism during field training; need to get away from repeated training in familiar training area, actually get on a plane a deploy to an unfamiliar location.

-- Not realistic enough - need basewide exercises with COPS, HOSP, RIBS, EOD, etc. participating.

-- I feel there is far too much simulation and not enough real world situations.

-- Training is not made as realistic as possible. Too much emphasis is put on keeping the cost down. The Chief of Operations doesn't want to lose manhours out of his production schedule.

-- Training needs to be more realistic and last into the night. Wars are not conducted on 0730 to 1630 hours.

-- It's a paperwork game and not realistic training.

-- Too much emphasis is being placed on deploying (outprocessing) and not nearly enough emphasis on what we would do if we did deploy.

-- We are not training as we will deploy and fight. Training is artificial.

-- Our exercises are not in line with the flying ops. We get very little support from the rest of the Wing. This makes it very unrealistic.

-- Not real life. We simulate everything: environment; problems; bombing effects; etc.

NOT TAKEN SERIOUSLY

-- Support from the top.

-- We are more concerned about a team member being short one pair of socks than whether he can really perform in his specialty.

-- To non-chalant. This is a real situation, with real ammunition, real death, etc. How can we sit back and non-chalantly train for a job that will entail a life-death situation?

-- Troop enthusiasm during exercises.

-- "Who cares" attitude of a large percentage of the military.

-- It is utilized as an inspection and clean-up detail or to do menial work.

-- Too much horseplay during our security training by instructors.

-- Not taken seriously enough by members and supervisors to include the civilian work force.

-- No one, from the Wing Commander on down, pays any attention. As a suggestion, the next time an ORI is underway, close the runway for four hours and make PB simulate repair. Then, we will maybe get some support.

-- Perception that it will never be used. Too many training films. Low priority until a deployment planned.

-- BCE's are too wrapped up in the daily requirements of the Base Commander to allow adequate training of the troops. Base Commander's do not support BCE's when training is required.

-- It must be instilled in everyone that RRR and Prime BEEF is not a game. It is for real!

-- By many people Prime BEEF is viewed as something that gets in the way of the mission. We often give regular work priority. Our officers don't have much of a background in mobility, which makes it more difficult to adequately train.

-- Prime BEEF training takes a "back seat" to all other work. Civilian foreman and workers don't emphasize the importance of Prime BEEF, nor do they understand it.

-- Low base priority. At my base, it is more important to cut the grass for a VIP visit than to train.

-- I feel very strongly on this issue. I work in DEE and have 3 civilians in by chain of command before a military person. They do not understand or appreciate Prime BEEF training and work against it. The duties needing to be performed are not alleviated at all when we go to the field for a war week. The civilian supervisors complain when Prime BEEF training is held.

TRAINING IS NOT SUFFICIENTLY IN-DEPTH

-- Training is not conducted often enough, and you're rushed to absorb all of it.

-- Too much classroom training and not enough field training. We spend more time on bag inventories, personal item inventory, and practice just getting through the processing line.

-- Not enough hands-on training.

-- Not long enough, and should be conducted at least once a year.

-- Actual field time is limited. As a young officer, I would like more time learning and experiencing command and control of troops in a contingency environment.

-- Too short and needs more concentration on working in a hostile environment.

-- Too much class and not enough hands-on.

-- You need to have some Prime BEEF training every month.

-- Too much is done just by films. They show a 1940's B&W film and everybody starts laughing and then you don't learn anything. The material in them is okay but you've got to get them more current.

-- I don't believe enough time is spent with hands-on type training. Most of the training we receive such as chemical warfare, explosive ordnance reconnaissance, military sanitation, and expedient methods is trained through watching a film.

DISORGANIZED / POORLY TRAINED INSTRUCTORS

-- The Prime BEEF structure is continually changing, along with training requirements. This creates too much confusion.

-- Waiting after being recalled.

-- Instructors should be more knowledgeable and better trained.

-- Too many bosses. Not enough workers.

-- I feel that the instructors that conduct these classes/ should be sent to an instructor course. I find that most instructors just read from the manuals.

-- Coordination. Organization. Communication.

-- There is alot of wasted manhours waiting to deploy to a training area, when Prime BEEF is on recall.

-- Poorly trained leaders (especially company grade officers). Most CE officers have no background in their areas of responsibility and are thrown in to sink or swim. CE officers should have a directed duty assignment to a 6 month CE intro course after commissioning.

-- Not enough adequate guidance to perform training.

-- Alot of chiefs that want it done their way rather than according to authorized procedures.

-- Leadership and guidance outside and above CE. Lack of communications and constant changing of directions from CCU.

-- After going through the mobility line, we have to wait sometimes 1½ to 3 hours before anything else happens.

-- Commanders of other squadrons must be made knowledgeable of what Prime BEEF is and understand how it effects work on projects for their squadron.

-- Ever changing program. Increase/decrease the number in PB program. No one is sure how long they are on PB and what is expected of them.

-- Too many people telling everybody else how to do something when they really don't have the experience or knowledge to be teaching it.

-- Training between the different commands and their supplements to AFR 93-3.

-- The biggest problem is the way Prime BEEF is organized. I feel the sixty man concept that civil engineering had in the early 70's was a better conceived way of completing our wartime tasks.

LACK OF TRAINING TIME

-- Our heavy work load prevents good training sessions.

-- Civil Engineering is tasked to perform as a janitorial service for the entire base. Training cannot fit into the schedule because of the amount of work. (Of course, we could work 7 days a week.)

-- Trying to break people away during weekdays for training is like pulling teeth. Many times the weekly schedule takes priority over training.

-- Too much time spent on base beautification projects rather than training. Too much training time spent on admin procedures.

-- Takes too much time away from individual's work center. With cutbacks in civilian personnel and no increase in military personnel, training only sets the mission (primary) further and further behind schedule.

-- Morale. The day-to-day job seems more important to the troops and therefore this important training appears to interrupt the daily flow.

-- It seems we are so busy with important projects on base that not enough time is available to conduct adequate Prime BEEF training.

-- Peacetime mission has to be delayed in order to conduct Prime BEEF training.

LACK OF EQUIPMENT

-- Home station RRR training does not provide for equipment operation or crater filling and relies on an incomplete mini-kit for mat laying practice.

-- We have very severe vehicle equipment problems. Every equipment operator and Prime BEEF member should be qualified on heavy equipment. Our main shortcomings are vehicle availability and enough qualified operators when vehicles are available.

-- Training is done with old equipment or no equipment. Facilities don't exist at Field 4 to adequately conduct their training either. Also, we train as a unit but don't deploy as a unit.

-- Need Harvest Eagle kit and other equipment not readily available.

-- Lack of operational equipment to train with, primarily RRR mat, tents, and radios.

-- Limited space and equipment.

ADDITIONAL SELECTED COMMENTS

-- We need more training in base recovery.

-- Lack of training on survival.

-- Prime BEEF is too wrapped up in "playing Army". Some security training is necessary, however it is not the wartime role of civil engineering personnel.

-- Coordination with other organizations on base.

-- Lack of good runways to practice on.

-- Not enough TDY's to Florida.

-- Not enough people.

-- Bivouac utilities (generators, tent heaters, etc.) need more emphasis.

-- Training personnel on Prime BEEF but not being deployed anywhere.

-- Too much emphasis on RRR.

-- Alot of separate training sessions going on at the same time. Everyone should learn about everyone else's job.

-- Too much time is devoted to how the uniform looks, and not enough hands-on experience such as setting up tents, sanitation, weapons, etc.

-- I believe there is too much emphasis on the chemical aspect, and not enough training on field conditions or security. Also, there is too much wasted time. I think each unit should have their own chemical gear along with their A & B bags. Also need films on RRR besides the AM-2 matting.

-- Lack of communication.

Question 43: What is the most favorable aspect of Prime BEEF training as it is currently conducted?

RRR TRAINING

-- RRR training is very realistic and valuable.

-- Bomb damage repair.

-- Pavement and equipment operators are given a chance to practice their skills along with their CDC's for upgrade training.

-- Rapid runway repair is the area that receives the most attention in training. We have an excellent training area which is a concrete pad with enough area for a complete mat and a 30 foot crater.

-- The actual hands-on RRR training.

SECURITY / WEAPONS TRAINING

-- Combat arms.

-- The security training is about the best of all training received.

-- The number of ex-cops now in CE have contributed to a good security training program.

TEAMWORK / ESPRIT DE CORPS

-- Current training enhances a team concept and promotes a cooperative attitude.

-- Training by teams builds esprit de corps - essential to success in war.

-- It establishes teamwork within the squadron and everybody learns something every exercise we have.

-- Opportunity to perform as a team; demonstrate to "the Base" that we have a wartime mission/capability; allow opportunity for leadership and supervision which is not available during daily BCE operation.

-- Camaraderie - working together as a team.

-- People work together to form a team, not just 0730 - 1630.

CHEMICAL WARFARE TRAINING

-- I don't enjoy it but the wear of the chem gear.

-- Knowing that we have the equipment that can protect us from dangerous chemicals.

-- Chemical warfare training because the base DP personnel stress your survival.

MISSION ACCOMPLISHMENT

-- Watching the total concept come together as a whole. Seeing the end result.

-- It keeps us aware of why we are really here.

-- It's a reminder that we may have to deploy someday. While this does not provide adequate training, it helps mentally prepare individuals in case of a deployment.

-- Prime BEEF members are par of the wartime mission of the Air Force.

-- It reminds us why there is a military CE organization.

-- We've come a long way in the past two years. With continuing emphasis and equipment we should make great strides in the next five years.

LEADERSHIP / SUPERVISION

-- The Contingency Engineering course at Wright-Patterson AFB.

-- The officers of the squadron get to work with the airmen. Normally, most officers never have any dealings with the airmen. It's a refreshing change.

-- The Prime BEEF manager and officer are very well trained and motivated. They work very hard to produce excellent results, but they need more personnel.

-- Good leadership opportunities during deployments. Young officers ae given ample opportunity to develop their leadership skills. Also, the readiness personnel are dedicated and skilled in their field. Our overall program is excellent.

-- Current training receives a high level of support from all areas of the squadron. It's importance is recognized and not slighted. Monthly "Prime BEEF" days encourage team cohesiveness and mission awareness.

TRAINING BY AFESC AT FIELD 4

-- Field 4 at Eglin providing hands-on experience.

-- The instructors at Field 4 are highly dedicated and do an excellent job in motivating the personnel into wanting to learn the training.

-- I feel the training at Field 4 is the best. I believe once a year would benefit the whole squadron more.

-- Training conducted at Field 4 is structured to be interesting, informative, and time filling. It gives us a good break from day to day work routine.

-- Going down to Eglin. Gives you the chance to actually use the skills you've been training on at home base.

-- At Eglin, the most favorable aspect is the structured method of training. Our personnel also get an idea of how they measure up against others.

BREAK IN THE ROUTINE

-- Chance to leave the home base occasionally.

-- It is a break from base support. Civil Engineering support is a mad house and any break is welcomed.

FIELD TRAINING / HANDS-ON EXPERIENCE

-- Deployments (hands-on experience).

-- The realistic field training and MILES system.

-- The field training exercises give our personnel the opportunity to get hands-on experience.

-- Field training - it gives the younger people an idea of what to expect if they were to deploy.

-- Nobody likes war - but being able to support oneself in the field and survive makes all the training enjoyable. However, I feel that processing times are slow.

-- It makes people realize that the training situation could be an actual one.

-- Realism.

-- It allows the team to practice its wartime commitment without interference of real world problems of home base.

-- Basic usage of tents, lighting, heaters, portable generators is good.

-- Erecting tents and mat laying.

-- It enables me to acquire general knowledge of other specialty tasks that I may have to do in the field.

-- It gives personnel enough knowledge (with care and thought) to possibly survive a wartime field situation.

-- Learning the different expedient methods in the structural field.

-- The field training with realistic chemical warfare, triple R, and expedient methods.

-- The large training area.

-- Most of the time the field training is pretty realistic.

-- It provides people the opportunity to live under austere conditions and allows people to experience the confusion that may occur. It affords them the opportunity to be creative and use their ingenuity. In some cases allows them to apply, in practical terms, some things that are learned in the classroom.

-- The readiness officer at my base has done much to improve our training. Particularly, he switched the emphasis from lectures in a classroom to a hands-on approach in the field. The training is much more meaningful than it used to be.

Question 44: How would you change the current training you receive for your specific wartime tasking?

MORE FIELD TRAINING / MORE TIME DEVOTED TO PRIME BEEF

-- I would conduct the training at least twice annually.

-- More expedient methods training. RRR is necessary, but someone needs to be able to rebuild a base or build one from scratch.

-- Increase the amount of training dealing with tasks we will be performing when we get there, rather than stressing the recall, reporting, and deployment processing procedures.

-- A higher priority for time, training, and equipment at this base.

-- Have all Prime BEEF training conducted at Field 4. This way everyone would receive the same training and the training would be done right.

-- I would have extended bivouacs so that personnel would have more time to adjust to different chains of command encountered in the field. During one week deployments, time doesn't allow for the leadership structure to develop.

-- Conduct monthly training sessions instead of quarterly.

-- I wouldn't change anything. I would like to practice more.

-- Deploy teams overseas and let them work with their counterparts in field conditions.

-- I'd put more emphasis on expedient methods, and allow a lot more time for training. Presently, we have 3 days for an exercise. I honestly believe it should be a minimum of 5 or 7 days.

-- Conduct more field training and less classroom training.

-- More in-depth and more often.

-- Have more hands-on with only one instructor and smaller groups of people so everyone can get their hands on the equipment.

MAKE IT MORE REALISTIC

-- Get more involved in wartime training and stop worrying about how many pair of underwear we have in our mobility bag.

-- Incorporate CE taskings realistically into Wing exercise scenarios. Too many simulations by the Wing, especially on the flight line.

-- More realistic training under chemical conditions; actual exposure to some chemical agents.

-- Place more training on Bare Base support of Prime BEEF team members and less on speed and competition of Rapid Runway Repair training. Because without proper support of all craftsmen on a deployment, RRR won't be effectively accomplished with much success.

-- The thing which helps the most is realism. Let's get a few exercises for everyone and actually practice this so called wartime tasking.

-- Once every other year - put us on a plane - not pre-known to the PB Manager. Surprise us and allow us to make "honest" mistakes in mobility. Develop an actual runway in the Western U.S. deserts and send teams there to actually work a runway/facilities actually bombed by TAC. Good practice for TAC, good realism for Prime BEEF.

-- We are a dual-based TAC fighter wing but CE never goes to deployments in Europe. We should be part of the team!

TRAIN IN OTHER SPECIALTIES

-- We should be trained to do one job in addition to our own.

-- Every PB member would be trained on every requirement within Prime BEEF. Also, all members would learn to cook.

-- Develop some type of formal training or guidance for an OIC in the field before placing them in an actual situation.

-- Send all personnel that work in Readiness to some kind of tech school to teach them what to teach and to what

extent to teach it.

-- Rotate individuals through different jobs to get a broad knowledge of all activities, rather than picking a select few which become involved in all exercises.

-- More specialized training in the specific and related AFSC's. How many interior electricians know how to hook up airfield lighting and how many exterior electricians know how to hook up a generator?

MORE REALISTIC RRR TRAINING

-- We need to actually fill a crater rather than just simulating it.

-- Expand RRR training to include new methods and practice for the equipment operators.

-- RRR needs more emphasis. It would be nice if we had a full patch.

MORE TOTAL BASE INVOLVEMENT IN EXERCISES

-- The training we have set up in CE is excellent. However, it is not coordinated with the Wing. We have airfield attacks and the Wing Commander is never present to meet the damage assessment teams. Our scenarios are not tied in with the Wing. This is not our squadron's fault but that of the Wing exercise team.

-- Make certain training goals mandatory and brief their status at Wing and AFG standups to get better command support.

-- I would like to see a broad program that would include all base agencies as opposed to one unit training in vacuum.

MORE EMPHASIS ON SURVIVAL / WEAPONS TRAINING

-- Place a greater emphasis on wartime skills: security; chem warfare; etc. instead of using the deployments to do work on crafts in which many people are already skilled.

-- More emphasis is required on survival and combat training, not to mention chem warfare training. Got to survive to do our job.

-- Include survival training at Fairchild AFB. Place more emphasis on small arms training. Place more emphasis on security (convoy, base, personal).

-- I believe security training needs to be emphasized more. Under certain taskings, there may not be adequate security available to protect Prime BEEF personnel (i.e. bare base in SWA). Additionally, "limited" wars would preser a significant problem for Prime BEEF personnel.

MAKE PROPER EQUIPMENT MORE AVAILABLE

-- Provide more training on the Harvest Bare equipment at Holloman AFB, N.M.

-- Certain training requirements are simulated due to lack of materials. Suggest that greater emphasis be turned to this area so in the future all areas of training are adequately provided.

-- Get the equipment needed to accomplish a realistic field exercise.

-- As a mechanical engineer, teach me about tent heaters, Harvest Bare Refrigerators, etc.

-- Teach foreign systems as well as U.S.

-- Instead of movies, more hands-on equipment training.

-- Each bases have different ways of doing things. I think the Air Force should have a standard way of doing things as far as construction, latrines, showers, hardback tents, etc. This way, when transfered, the younger people will know what's expected.

-- More time to operate ecuipment for my individual speciality such as the erdiator and reverse osmosis field water units. Minimum of three days each unit.

-- I would like to see each base have a mini airfield lighting kit for the electrical team.

-- At my present duty station, we do not have th e proper equipment or training to practice our wartime skills.

SELECTED ADDITIONAL RESPONSES

-- Include training that will benefit home station - use the training hours more productively.

-- Reduce the excess lag time between when we are required to report and assembly co[illegible] time. It is killing morale. Addditionally, [illegible] of exercises is killing my schedule of CE

-- Increase the opportunity for sustained command and control under high stress environments.

-- Putting more on the work we must do and leaving the defensive training to the SP's. Leave police work to the police!

-- Have more chem warfare training.

-- Have a center set up to train you in your specialty, away from your home base, semiannually. This would give you an update on new systems to be used if deployed.

-- Prime BEEF team structure is lacking in Chain of Command. Team integrity is nil with the new 3-man team concept. We've developed 18 man flights for in-house purposes but realize that those flights will be split in war.

-- I would try to learn more about the actual locations we will be deploying to, in terms of available assets, topography, primary mission, base layout, etc. With this information, I'd be able to structure my field training exercises to achieve more realism and concentrate on specific areas characteristic of those particular bases.

-- Requires organizing CE like the Army. The civilians become the facilities engineers. Military become the combat engineers.

-- Cycle all CE personnel into a Red Horse squadron.

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This study examined Air Force Civil Engineering Prime BEEF member's perceptions of the adequacy of their contingency training. Both NCO and officer members of Prime BEEF teams stationed throughout the world were surveyed to determine overall perceptions of training adequacy. The study sought opinions on: the adequacy of the training to support wartime and contingency taskings; whether or not current training programs are perceived to be established in the proper priority; the adequacy of the current amount of hands-on training; and the belief that Field 4 training at Eglin AFB provides adequate opportunities to practice the Prime BEEF mission. The majority of the responses were also broken down into subgroups of officers and NCO and these results compared.

The results indicate the majority of Prime BEEF members are undecided, but tend to agree, that current contingency training is adequate. In particular, members feel current chemical warfare, Prime BEEF orientation, rapid runway repair, and weapons training are adequate, but are uncertain about the other training areas. Members believe the majority of the training areas receive the proper priority, with the exception of Prime BEEF orientation, which seems to receive a higher priority than they believe it should. Members are unsure if they receive adequate hands-on training, but at least 75% believe they have adequate equipment in all areas except explosive ordnance reconnaissance, expedient methods, and rapid runway repair. Over 75% believe they have adequate physical training space to practice all the various training tasks. Members indicated strong support for the current Field 4 training program and believe it is approximately the correct length. The officer/NCO comparison showed officers are more skeptical of the adequacy of the training in nearly every area considered.