



**AIR FORCE TACTICS, TECHNIQUES
AND PROCEDURES 3-34.1**

1 NOVEMBER 2007

**SERVICES CONTINGENCY
BEDDOWN AND SUSTAINMENT**



DEPARTMENT OF THE AIR FORCE

BY ORDER OF THE SECRETARY OF THE AIR FORCE **AIR FORCE TACTICS, TECHNIQUES AND PROCEDURES 3-34.1**

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Tactical Doctrine



SERVICES CONTINGENCY BEDDOWN AND SUSTAINMENT

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PURPOSE: The Air Force Tactics, Techniques, and Procedures (AFTTP) 3-34 series of publications provides Services (SV) planners the basic tools required to identify and employ consistent standards and expectations for beddown development and sustainment support for expeditionary bases. This AFTTP is not intended to provide a definitive design or layout applicable for every type of deployment.

APPLICATION: This publication applies to all Air Force (AF) military and civilian personnel (including Air Force Reserve Command [AFRC] and Air National Guard [ANG] units and members when deployed in Title 10 status). The doctrine in this document is authoritative, but not directive.

SCOPE: The SV Community must be able to rapidly respond to the full-spectrum of mission requirements within the Air and Space Expeditionary Force (AEF) construct. This publication provides Component Headquarters SV planners, beddown officers and senior noncommissioned officers (SNCOs) information on the overarching principles, processes, procedures, and organizational framework through which SV plans, directs, and executes the support mission in deployed conditions. An expanded list of resources used to develop this AFTTP is in [Attachment 1](#).

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Chapter 1

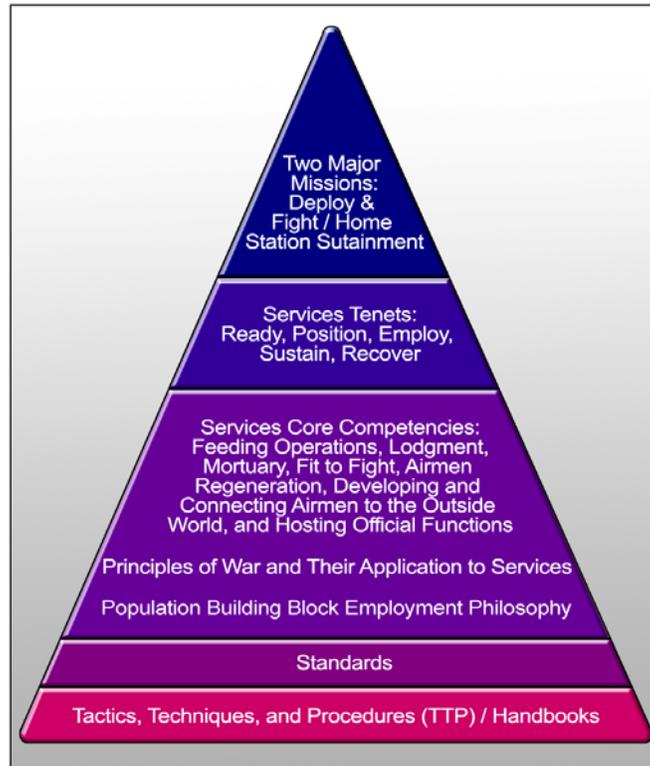
INTRODUCTION

1.1. Overview. This AFTTP provides SV planners with an overview of the beddown assets, tasks, and basic procedures required for AEF bare base operations. It introduces the AEF concept of using Force Modules (FM) for planning AEF deployments. While each deployment location has its special requirements, there are common, basic approaches for providing services at all locations. Adapt the layouts and procedures within this publication to meet local conditions. Other branches of the US military's Services and Morale, Welfare, and Recreation organizations may approach Joint Service bed-downs differently. However, the basic requirements are similar and will be addressed as they apply to AEF bare base deployments and the use of FMs. Information on specific subjects will be provided in much greater detail in subsequent AFTTPs in this series.

1.2. Services Doctrine. SV doctrine can be thought of as a pyramid similar to the one depicted in [Figure 1.1](#). The multiple levels within the pyramid demonstrate how to build an efficient and effective agile SV war fighting force. The first layer of the pyramid sets the foundation for our SV profession by establishing tactical guidance. Performance of our tactical methodology is measured against a standard to ensure high quality and efficient operations.

1.2.1. AF SV establishes these standards in conjunction with Component Numbered Air Forces (hereafter referred to as NAF-C), Component Major Commands (hereafter referred to as MAJCOM-C), and other professional hospitality institutions.

1.2.2. After the standards and methodology are defined, the troops still need to get to the fight. Therefore, the SV deployment philosophy involves a building block approach of packaging together critical and non-critical skills that are sized to support deployment location population increments.

Figure 1.1. Services Doctrine Model.

1.2.3. SV is a warfighting organization and the timeless proven principles of war are just as applicable to us as any other warfighting unit. Every warfighting unit brings with it certain unique core capabilities. SV core capabilities, or core competencies, are Feeding Operations; Lodgment of Forces; Mortuary Affairs; Keeping Airmen Fit to Fight, Airmen Regeneration, Developing and Connecting Airmen to the Outside World; and Hosting Official Functions. All of the previous levels in the pyramid enable these five SV core competencies. The competencies describe how SV organizes, trains, equips,

readies, positions, employs, sustains and recovers its forces. At the pinnacle of the pyramid is the accomplishment of the SV missions: deploy and fight and home station sustainment.

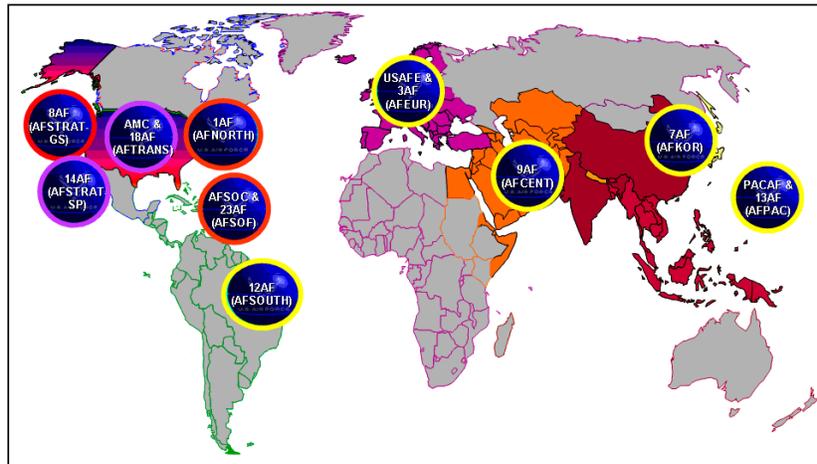
1.3. The Command and Control (C2) Enabling Concept. The Air Force Forces (AFFOR) C2 Enabling Concept defines a MAJCOM-C and a NAF-C headquarters. These elements were formerly called Air Force Component Headquarters [AFCHQ] and War Fighting Headquarters [WFHQ]), respectively. The MAJCOM-C and NAF-C headquarters organizations will be integrated into the existing MAJCOM-C and NAF-C structures defined in [AFI 38-101, Air Force Organization](#). United States Air Forces Europe (USAFE), Pacific Air Forces (PACAF) and Air Mobility Command (AMC) will function as MAJCOM-Cs (**Figure 1.2**). They will support the Unified Component Command (UCC) at the strategic level of war. They will have subordinate NAF-Cs that will function at the operational and tactical levels of war. These NAF-Cs are 3rd Air Force in Europe (AFEUR), 13th AF in the Pacific (AFPAC), 7th AF in Korea (AFKOR) and 18th AF under AMC's transportation responsibility (AFTRANS). In addition, AFKOR will function at the strategic level of war in its role as an AF component to United States Forces in Korea (USFK). Please note that there is not a separate MAJCOM-C staff within these MAJCOMs. The MAJCOM staff performs MAJCOM-C tasks and responsibilities at the strategic level.

1.3.1. **Figure 1.2** shows the 9th AF under Central Command (AFCENT), 12th AF under Southern Command (AFSOUTH), 1st AF serving the North American continent (AFNORTH), 7th AF in Korea (AFKOR), 8th AF Strategic-Global Strike (AFSTRAT-GS), 23rd AF's Special Operations Forces (AFSOF) and 14th AF's strategic space component (AFSTRAT-SP). These NAF-Cs perform both MAJCOM-C and NAF-C tasks and responsibilities supporting the combatant commander (CCDR) at the strategic, operational and tactical levels of war.

1.3.2. **MAJCOM-C.** The MAJCOM-C headquarters is commanded by the AF component commander which is the senior AF component headquarters element designed to support the AF component commander, at the strategic level. The MAJCOM-C tasks and responsibilities (e.g. protocol, public af-

fairs, strategic level theater security cooperation [TSC], legal, etc.) at the strategic level are accomplished by the MAJCOM staff.

Figure 1.2. Air Force Components.



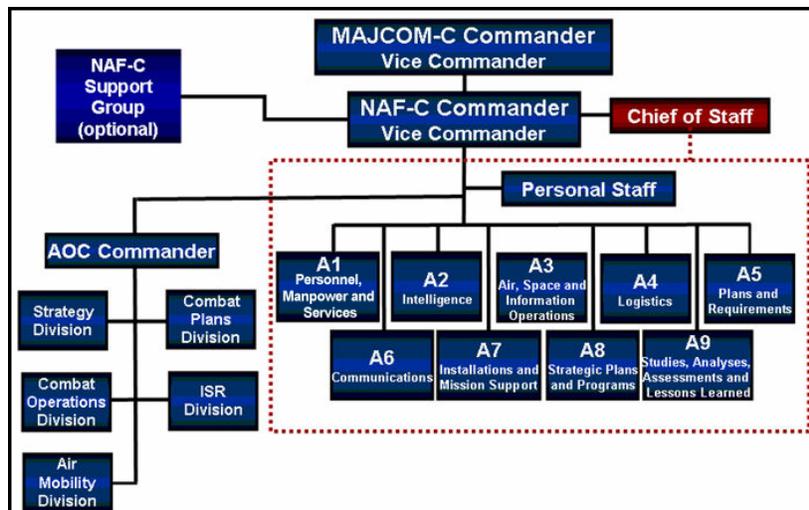
1.3.3. **NAF-C.** The NAF-C headquarters supports the AF component commander at the operational and tactical level. The NAF-C will include, but not be limited to, an air operations center (AOC) weapons system and AFFOR staff.

1.3.4. The MAJCOM-C (strategic) and NAF-C headquarters (operational and tactical) functions are part of any AF component command structure. However, the tasks and responsibilities of the MAJCOM-C and NAF-C headquarters may be merged into one organization if and when feasible.

1.3.5. **Mission of MAJCOM-C and NAF-C headquarters.** The MAJCOM-C and NAF-C headquarters must provide centralized command and control over all AFFOR assigned or attached to the CCDR. MAJCOM-Cs and NAF-C headquarters will be providing the CCDR visibility over Service force activities, and contribute to joint theater solutions on a variety of issues, including theater strategies, administration and logistics, personnel, security cooperation, joint communications, joint basing, joint training, and prioritization.

zation of resourcing efforts. This concept outlines a structure that enables the Commander of Air Force Forces (COMAFFOR) to completely focus his/her efforts and the efforts of the AFFOR staff and AOC on the priorities of the CCDR or Joint Forces Commander (JFC), while minimizing the burden of organize, train and equip functions (e.g. dormitory construction, lodging management, etc.). These functions will be realigned to the appropriate MAJCOM or a centralized functional organization. This concept also outlines the key C2 elements and tasks (the COMAFFOR, the COMAFFOR's staff, and the AOC). **Figure 1.3** shows the structure of the MAJCOM-C and NAF-C organization. (Note: ISR in the below structure is Intelligence, Surveillance and Reconnaissance).

Figure 1.3. MAJCOM-C and NAF-C Internal Structure.



1.3.6. Concept Principles of the MAJCOM-C and NAF-C headquarters. The MAJCOM-C and NAF-C headquarters mission is to plan, command, control, execute and assess air, space and information operations capabilities across the full range of military operations.

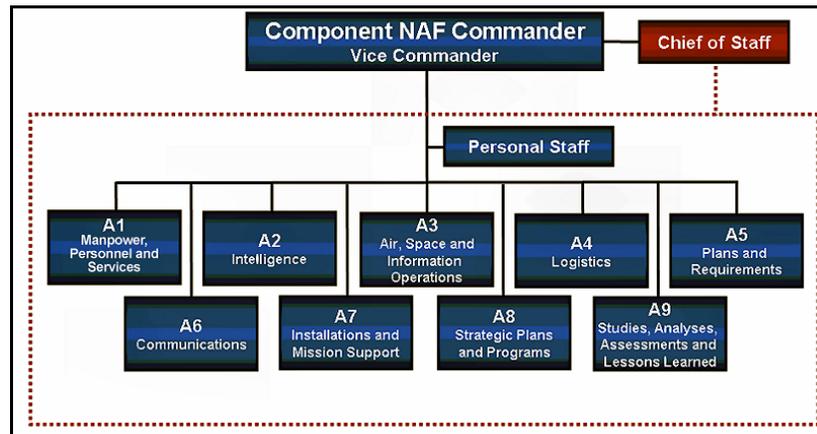
1.3.6.1. The MAJCOM-C and NAF-C headquarters have the capability to plan, integrate and command and control our capabilities to deploy, maintain, sustain, employ and reconstitute or redeploy air and space power in support of US and Unified Component Command (UCC) strategies. Each MAJCOM-C and NAF-C headquarters is sized and tailored to the specific mission and theater of operations. The NAF-C is able to plan, exercise, execute and assess across normalized steady-state operations. The NAF-C is also able to surge to a wartime scenario until augmentation is available, making maximum use of reachback and support relationships to minimize manpower requirements.

1.3.6.2. Management functions are minimized or eliminated to enable the CCDR to concentrate on component tasks and exercise command of assigned and attached forces. Management functions not retained at the MAJCOM headquarters are transferred to lead commands or field operating agencies that will support AF units as necessary to ensure all have the required capabilities to function. AF units (e.g., wings) have a “direct liaison authorized” (DIRLAUTH) relationship with supporting MAJCOMs and field operating agencies to assist with day-to-day management functions. The DIRLAUTH relationships may change once units are chopped to a gaining CCDR. The MAJCOM-C is responsible for establishing appropriate DIRLAUTH relationships for the contingency environment and ensures the COMAFFOR is aware and engaged in ensuring attached and assigned forces have the resources necessary to complete their assigned tasks. This concept addresses the structure and responsibilities of the MAJCOM-Cs and NAF-Cs, not the MAJCOMs, centers and agencies. In the case where MAJCOM-C functions are integrated into a MAJCOM (e.g. USAFE, Pacific Air Forces [PACAF], AMC, Air Force Special Operations Command [AFSOC]) the MAJCOM staff will accomplish strategic level component tasks and responsibilities.

1.4. The AFFOR Staff. The AFFOR Staff consists of the A-Staff and Personal staff. They assist the COMAFFOR in TSC activities, service, joint and combined exercise, planning, force beddown and sustainment. The AFFOR staff is also responsible for the operational and administrative support functions. The AFFOR staff is traditionally organized with a command section,

Personal staff, A-staff (A1 through A9), as well as a variety of cross-functional teams that support the COMAFFOR as the Service component commander. Its staff structure aligns with MAJCOM staff structures to the maximum extent possible. An organization structure code used in both the MAJCOM-C and NAF-C staff usually has the same title. The COMAFFOR may link two-letter A-staff offices (e.g. A3/5, A4/7, A5/8 etc.). **Figure 1.4** is an example of the generic AFFOR A-Staff organization structure. SV fall under the A1–Manpower and Personnel section (as A1S – SV).

Figure 1.4. AFFOR Staff Structure.



1.5. Joint Operations and Sister Services Counterparts. The US military fights as a joint team. With its theater-wide perspective, the AF can readily appreciate the challenge of synergistic integration of joint force capabilities. To meet that challenge, SV planners must understand how joint forces are organized and how the AF fits into that organization. Such an understanding is crucial to properly supporting AF leaders as they bring the awesome capabilities of air and space power to bear in achieving national security objectives.

1.5.1. The President and Secretary of Defense (SecDef) exercise authority and control of the armed forces through a single chain of command with two

distinct branches. The operational branch runs from the President, through the SecDef, directly to the commanders of the UCCs. The administrative branch runs from the President, through the SecDef directly to the secretaries of the military departments. In the operational branch, the CCDRs of the unified commands, are the vital link between those who determine national security policy and strategy and the military forces who conduct the operations that achieve national strategic objectives. In the administrative branch, the Service commanders are responsible for ensuring that their forces are trained and equipped to carry out the missions directed in the operational branch by the CCDRs, and their subordinate joint force commanders.

1.5.2. Joint forces reside in the operational branch of the chain of command, and are designated as either a unified command, subordinate unified command, or joint task force. The President, through the SecDef—and with the assistance of the Chairman of the Joint Chiefs of Staff (CJCS)—establishes these Joint force commands to support and protect our nation's interests. All Joint force structures consist of a Joint Force Commander (JFC), a joint staff (J-staff), and are normally composed of significant forces from two or more military departments. Joint forces are established on either a geographic or functional basis. Currently there are nine unified commands—five are geographically established and four are established functionally. Geographically established joint commands have an area of responsibility (AOR). Functionally established joint commands provide functions, such as strategic lift and space-based support, to other—usually geographic—JFCs.

1.5.2.1. At the top of the Joint force hierarchy is the unified command. It is a Joint force command, with a broad and continuing mission under a single CCDR. The CJCS transmits operational orders from the President and SecDef to the unified CCDRs to perform military missions. The UCCs carry out or direct missions in support of our national security, using the organizational structure they command, the forces provided them from the SV, and the authority granted them by the President and SecDef. Part of that authority is to establish subordinate organizations. When authorized by the President or SecDef, through the CJCS, CCDRs may establish subordinate unified commands, also called sub-unified commands.

1.5.2.2. Generally, sub-unified commands focus on specific areas of interest within the larger command. Like unified commands, sub-unified commands are established as either geographic or functional, have functions and responsibilities similar to those of unified commands, and operate on a continuing basis.

1.5.2.3. A third type of joint force is a joint task force (JTF). It is a joint force command established to accomplish limited objectives, normally of an operational nature. JTFs may be established by a unified commander, sub-unified commander, or an existing JTF commander on a geographic or functional basis. JTF commanders are responsible to the JTF-establishing authority. JTF staffs are normally augmented with representatives from the establishing authority. Unlike unified and sub-unified commands, which operate on a continuing basis, JTFs are dissolved when their mission has been completed or they are no longer required.

1.6. Interface with Component Forward and Rear Headquarters. The US military is currently deployed to more locations than it has been throughout history. SV personnel support operations ranging from war to other contingencies such as peacekeeping and humanitarian efforts. One major lesson learned from those operations is that, regardless of the phase of the operation, planners must be familiar with the command and supporting structure of the theater, the supporting MAJCOM, AF and Department of Defense (DoD) support agencies. With the growing number of countries being added as deployment locations, it is becoming harder to identify all the various lines of support across combatant theaters and areas of responsibility. Know what resources are out there to help you. When you actually arrive at a location, contact the various levels of command and support organizations to let them know that your unit is there and then determine *who does what for whom and how* and the best way to reach them (phone, fax, e-mail, message, etc.). Each location is different and theater organizations can vary, sometimes even within the same operation.

1.6.1. Confirm what your theater's supporting structure is and if they are the lead for sustainment issues. Some forward units may primarily work bed-down and initial operations, while more rearward units work sustainment. Determine if there is a forward deployed operations center and supporting

base SV function for your theater; e.g. a Combined Air Operations Center (CAOC). If not, contact the next office in the chain of command with a SV staff (e.g., [Central Command Air Forces-Rear](#) at Shaw AFB). Once contacted, establish who will provide functional direction and determine if [Headquarters Air Force Services Agency Operations Directorate \(HQ AFSVA/SVO\)](#) offices monitor or provide direct support for specific functions (i.e., food ordering). Some commands and component commands may brief you on current theater support methods prior to departing for theater.

1.6.2. Determine with Civil Engineering (CE) what the shelter replacement policy is and who initiates what paperwork to upgrade shelters to other types of facilities. Sometimes this may be solely a CE effort with SV input, or other times it may be a combined SV, CE, Contracting, and Logistics Readiness effort through a theater support office (which could be controlled by the Army or Navy). [AFPAM 10-219 V6, Planning and Design of Expeditionary Airbases](#), is an excellent reference used by CE planners.

1.7. Upward Reporting Requirements. Certain reports are required during field exercises and real world deployments. These reports may be required daily or monthly, depending on the directive that governs each report. These reports are important since the information they contain is used to make improvements to the overall operation. The following paragraphs describe in detail what and when reports are required.

1.7.1. **SV Situation Report (SV SITREP).** The SV SITREP is a narrative report that keeps addressees informed and enables higher levels of command to prepare for potential effects of ongoing situations. SV reports are submitted weekly, or more frequently if required, for the duration of the activity or operation. SITREPs evaluate significant factors relating primarily to readiness, programs, and logistics. The report's content should highlight key activities and build on previous reports. Duplicating or including information to fill in the blank is not desirable—**brevity is paramount**. SV SITREPs are required in accordance with (IAW) [AFI 10-214, Air Force Prime RIBS Program](#). The template for the report is located in AFI 10-214, Attachment 2.

1.7.2. **After Action Reports (AAR) and Lessons Learned Reports.** These reports must be documented in the AF After-Action Reporting System

(AFAARS). [AFI 10-204, *Readiness Exercises and After-Action Reporting Program*](#), provides procedures for documenting exercise and operations results, identifying and correcting problems, identifying trends, and disseminating results. AFAARS applies to all AF elements that participate in the CJCS Exercise Program, other joint exercises, AF exercises, and real world operations. It also applies to humanitarian, base closure, peacekeeping, and noncombatant evacuation operations (NEO). Headquarters United States Air Force (HQ USAF), MAJCOMs, field operating agencies (FOAs), and direct reporting units (DRUs) must establish internal after-action reporting procedures that ensure AFAARS objectives are met, problems are solved, and results are disseminated.

1.7.2.1. The preferred method for submitting lessons learned, observations, and summary reports is in the Air Force Instructional Input Program (AFIIP) format. This may be accomplished by either using the AFIIP off-line software or the Advanced Lessons Management System (ALMS) On-Line program found on the Air Force Center for Knowledge Sharing Lessons Learned (AFCKSLL) web sites at <https://afknowledge.langley.af.mil> for the Internet or <http://knowledge.langley.af.smil.mil> for the SECRET Internet Protocol Router Network (SIPRNET) site. The alternate method of reporting for AF only events is a word document file that contains the same information required with the AFIIP software. An electronic word document template for these reports may be downloaded from the AFCKSLL web sites.

1.7.2.2. The lesson learned is the most common type of submission. A lesson learned is defined as a technique, procedure, or practical work-around that enabled a task to be accomplished to standard based on an identified deficiency or shortcoming. For lessons learned that identify a problem requiring action at HQ USAF level, MAJCOMs, FOAs, DRUs, and Air Staff agencies, a lessons learned report will be forwarded to HQ USAF/XOOT not later than (NLT) 30 days following an exercise or operation. IAW [AFI 214, *Air Force Prime RIBS Program*](#), the Air Force Services Agency Directorate of Operations (HQ AFSVA/SVO) maintains the Prime RIBS Manager's Guide and posts lessons learned updates on <https://www-r.afsv.af.mil/ASPs/docman/DOCMain.asp?Tab=0&FolderID=OO-DP-AE-12-35-31&Filter=OO-DP-AE-12>. HQ AFSVA/SVO serves as the functional

manager to review Allowance Standards for SV war reserve material (WRM) and home station training (HST) requirements. This office coordinates with AF Component Commands to cross-feed after-action reports and lessons learned from exercises, real world contingencies and Air Reserve Component (ARC) Deployed For Training (DFT) end of tour reports/host unit AARs. AARs are posted and viewed through the Agency website. HQ AFSVA/SVO researches all AARs and submits suggested corrective actions to ensure synchronization and fusion with joint doctrine, AF doctrine, and the Agile Combat Support core competency.

1.7.2.3. Issue Reports are similar to lessons learned in that they identify a shortcoming, deficiency, or problem identified during an operation or training event, but do not include a work-around or solution. Issue Reports are submitted using either the AFIP off-line or ALMS on-line software. Include the word "Issue" in the report title (example, "Issue - Spare Parts Kits for Deployed Assets Were Obsolete"). For issues that identify a problem requiring action at HQ USAF level, MAJCOMs, FOAs, DRUs, and Air Staff agencies, prepare and submit an Issue Report to HQ USAF/XOOT no later than 30 days following an exercise or operation.

1.7.2.4. Observation Reports document a technique or circumstance that significantly impacted an operation or training event and should be shared with the AF and joint community. Observation Reports are submitted using either the AFIP off-line or ALMS on-line software. Include the word "Observation" in the report title (example, "Observation - Unit Designed Scheduling Template Reduced Deployed Workload"). The proper formats for these reports can be found in [AFI 10-204, *Readiness Exercises and After-Action Reporting Program*](#).

1.8. Accountability of Personnel and Resources. It is well documented that "people are our greatest resource." That statement is especially true at a deployment location. Accountability for our people and other resources is high priority while deployed. Commanders are held responsible for knowing where each airman is at all times and this responsibility is shared with direct line supervisors in the chain of command. Everyone is responsible for safeguarding equipment and other resources. Equipment abuse and squandering of resources greatly affect the outcome of any contingency operation. For a

successful tour of duty, supervisors should appoint responsible and knowledgeable people as overseers of deployed personnel and resources.

1.8.1. SV designated deputy and SNCOs will need to work many issues, including keeping close tabs on control and accountability of assets. They may have to take steps to obtain new equipment or return old equipment. They will normally determine whether the organization has to obtain a theater contract or some type of contract augmentation support to maintain, repair, and replace failing equipment.

1.8.2. Accountability of personnel is one of the most important initial considerations after arriving at a deployed location and it is the primary mission of the unit's Personnel Support for Contingency Operations (PERSCO) team. Force accountability allows commanders to determine when they have force closure; when they have the forces needed to accomplish their mission. Proper force accounting allows commanders to plan for additional combat support needs such as beddown space and feeding capability. Should an emergency occur at home station or the deployed location, commanders must also be able to locate their people quickly. Coordination with the contingency contracting office, should also account for all contractor personnel assigned to support operations at the deployed location. —◆—

Chapter 2

BEDDOWN PLANNING

2.1. Overview. To ensure that the beddown is accomplished right the first time, initial Lead wing, other core support units, SV planners and Prime Readiness in Base Services (RIBS) team leaders must take the extra effort to obtain all available deployment information and consider applicable general planning factors. Deployment planning for AEF teams is a rigorous process of checking and crosschecking plans against available information and resources.

2.2. Deployed Planning Assumptions. The Agile Combat Support (ACS) concept of operations (CONOPS) assumes that once access conditions are established through Global Strike and Global Persistent Attack, there will be a need for persistent and sustained operations if war-winning effects are not initially achieved. ACS also assumes that sustainment begins on day one and must remain continuous from deployment, through employment and redeployment to mitigate the need for operational pauses. Within the initial AETF force modules (Open the Base, C2, Establish the Base) expeditionary forces must possess a certain level of self-sustainment. Optimal execution of ACS depends on integrated planning and execution. Each NAF-C will be fully networked with its sister components' planning and execution centers, facilitating an assured, integrated common operating picture and ensuring the availability of decision-quality information. **SV-specific** assumptions are listed in the following paragraphs.

2.2.1. Worldwide. Operational commanders will accept a reduced level of service from the day full mobilization commences (M-day) through M+30 to only what is needed to ensure mission accomplishment and life support. After M+30, levels of service will be increased commensurate with quality of life programs wherever and whenever possible.

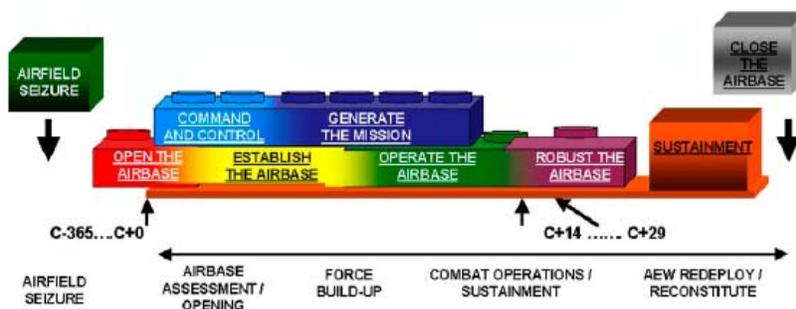
2.2.2. Overseas AOR will rely primarily on in-place forces, assured host nation support, and increased AEF projection capabilities. Assured host nation support is typically that which is covered under formal diplomatic agreement and for which necessary resources have been provided or ear-

marked and provisions made to identify, train, and exercise them in peacetime. Emergency essential civilian employees and contract personnel performing critical support activities overseas shall remain in place.

2.2.3. Deployed contingency locations. The use of WRM assets (e.g., Base Expeditionary Airfield Resources or BEAR) will be made available. Limited startup kits may deploy organically with lead Prime RIBS unit type codes (UTCs) (e.g., the Single-Pallet Expeditionary Kitchen (SPEK), initial mortuary affairs kit, and SV automation startup kits).

2.3. Force Module (FM) Concept. It has been long understood the key determinant for SV to begin supporting Airmen is the *population number*. Consumption rates, cycle times, planning and material requirements are usually based on the number of Airmen being supported. Therefore, it makes sense to base positioning of SV forces on a population driven building block philosophy. SV UTCs change as technology and world situations dictate. However, one thing has remained constant: each UTC is designed to provide critical and non-critical positions that give specific effects to a certain population number. These UTCs are placed together at a beddown location in sufficient number to provide complete SV support (e.g. C2, food, lodging, mortuary, etc.) to the Air & Space Expeditionary Forces (AETF) FMs (Figure 2.1).

Figure 2.1. AETF Force Modules.



2.4. Force Modules. The AETF FMs provide packaged combat and combat support forces for presentation to a unified CCDR. The AETF FM consists of six scalable, modular elements: Open the Airbase, Command and Control, Establish the Airbase, Generate the Mission, Operate the Airbase, and Robust the Base. The AETF FMs provide a methodology for the presentation of forces required to open, establish, and operate the required airbases. The following paragraphs will look at the specific functions and tasks assigned to each module of the AETF FM construct.

2.4.1. Open the Airbase. The objective of this module is to employ those capabilities required to open an airbase. It accomplishes this by inserting combat and combat support forces into an operating location capable of conducting tasks required for the effective stand-up of initial airfield operations and the reception of follow-on forces. The module provides capabilities specific to the conduct of airfield operations, C2, airfield survey, and air traffic control.

2.4.2. Command and Control (C2). The C2 Force module provides the permanent C2 capability through the establishment of the Air and Space Expeditionary Wing or Group structure. This capability assumes control of the operating location from the Open the Airbase module to C2 capability within hours of arrival. The initial SV management team arrives as part of the C2 module. Top priorities include planning the SV portion of the beddown operation to ensure activities will be sited properly to support the projected population.

2.4.3. Establish the Airbase. The Establish the Airbase module contains limited capabilities that are designed to integrate and extend capabilities of the C2 module, and replace the Open the Airbase capabilities. Included are capabilities designed to support most missions or weapons systems. This is the largest AETF FM and contains the required functional capabilities to bring the beddown to Initial Operational Capability (IOC), ready to receive the main mission or weapon system. During the first seven to ten days of this FM, SV lodges the force, establishes dining facilities and transitions from meals ready-to-eat (MREs) to heat and serve unitized group rations (UGRs), ensures a mortuary affairs capability and begins initial laundry support through self-help laundries from WRM or local contract.

2.4.4. Generate the Mission. The Generate the Mission FM like the other five FMs, is modular and scalable; but, unlike the other five FM capabilities that are capable of performing their mission without regard to the follow-on mission, this module is effects-based and capability-dependent. The mission platforms that make up the Generate the Mission module (such as fighter, bomber, tanker, airlift, etc) are capable of deployment upon minimal strategic warning, and will typically begin to arrive on or about C+2 and are capable of mission-generation within 36 hours upon arrival. This module also contains mission systems, operators, maintenance, munitions, petroleum oils and lubricants (POL) operations and medical support.

2.4.5. Operate the Airbase. The Operate the Airbase FM is required for permanent C2 and mission support capability. It expands the infrastructure by enhancing medical capability, including rapid evacuation of patients, providing mobility weapons storage, enhancing fuels storage and distribution and has refueling and defueling capability. It contains mission support forces needed to achieve full operating capability (FOC) and to make the initial operating capabilities of the airbase mature and robust. In this module, SV expands life sustaining programs and introduces quality of life (QoL) activities such as recreation, fitness, Non Appropriated Fund (NAF) resale, and Army Air Force Exchange Service (AAFES) support. The initial stages of this FM are used to plan for sustained operations to include transition to semi-permanent facilities.

2.4.6. Robust the Airbase. The Robust the Airbase FM contains those support forces that would typically not arrive until 30 days after an operating location is established. This module provides additional Expeditionary Combat Support (ECS) forces to robust the capabilities already in place from the previous FMs, to include establishing Learning Resource Center (LRC) operations, until a rotational operation can be implemented. The Robust the Airbase FM is considered part of the baseline structure for the AETF.

2.5. Planning for Sustainment. A base is considered a long-term location by Joint doctrine theater construction standards and timeframes. This allows for replacement of WRM assets after a certain interval or as needed. For such long-term locations, there may be few limits to allowing larger scale sustainment improvements. Joint doctrine drives the basic requirements that

each branch of the armed forces follow when establishing planning factors for replacement of shelters, including those that SV uses. However, even though there are limits within the doctrine, there are no hard and fast requirements that prevent a theater from improving contingency mission capabilities within established mission budgets and priorities. It is very important to work with the component command's SV organization when making decisions. They have the long-range vision and responsibility for their theater. If a base, whether called an airbase or joint service base or camp, will be designated as a prime mission support location for more than 24 months, SV and CE planners usually try to obtain equipment and shelters (such as hard-wall or constructed facilities) to replace WRM assets. IAW [AFI 25-101, War Reserve Materiel \(WRM\) Program Guidance and Procedures](#), this normally is determined after the six-month point of a deployment. However, Expeditionary Services Squadron (ESVS) and Air Expeditionary Wing (AEW) commanders can often determine even earlier than six months whether the location is to be used for a longer period. If the base will be a long-term location, sustainment efforts usually involve obtaining more permanent supporting structures and utilities, using contracts to augment or replace some support services, and replacing WRM equipment with commercial equipment.

2.5.1. Transitioning to Sustainment. Transitioning to more permanent facilities, equipment, and services usually requires a parallel plan to return high demand/low density WRM assets and relieve military support personnel. Sometimes contract support for equipment and personnel can be used to make up for shortfalls in the normal deployment UTCs ([Attachment 2](#)).

2.5.2. Deployment numbers are critical and must be closely watched from initial planning through sustainment. What is the total population to be supported? What other units will be arriving and what are their responsibilities? The deployment tasking messages will give you information on what other SV UTCs will also respond and when. You need to determine how much equipment, personnel, and what team kits you will need to support during the contingency. Contact the other teams and work on final details. **CROSSCHECK!** Compare your tasking messages and planned resources with the other supporting units. SV units should check the Deliberate and

Crisis Action Planning and Execution System (DCAPES) for their various support UTCs. Different base Personnel Readiness Units (PRUs) sometimes issue different instructions, orders, and transportation requirements based on their understanding of other messages. PRUs may not have some of the theater guidance that affects tasking orders.

2.6. Beddown-Site Planning for Sustainment. Site planning and layout for SV planners takes coordination and support. There are many issues to factor in, especially force protection and surges. During sustainment the base population will need all available temporary facilities and permanent facilities in place. Modular facilities are better suited for the extended wear and tear and they provide more protection since they are hard-walled. When making your long range layout plans, consult Security Forces (SF), CE and Explosive Ordnance Disposal (EOD) for safe distance criteria.

2.7. Quality of Life Planning. Fitness, recreation, NAF resale items, a movie theater, education, and LRC all add to the quality of life (QoL) at a bare base. Realistically most of these functions cannot be supported during the initial FM flow until lodging, food service, hygiene, and laundry services are supported during the Establish phase. Meeting QoL needs should be reviewed after the transportation flow becomes more steady state. While this is happening, review what is really important at your location, as users' priorities may be dictated by the unique nature of the bare base and the ability to obtain equipment/support by contract (before UTC equipment sets arrive). Some locations present such long and strenuous work and acclimatization periods (to heat or cold), or high threat conditions that support for fully equipped fitness facilities will need to be delayed. Establish a recreation tent, small library, and movie theater when possible. A recreation tent or medium shelter can support self-directed activities (such as paperback books, playing cards, and games), video games, and large screen TVs and videos. It also provides a location to help organize and support self-directed programs for darts, volleyball, football, soccer, etc. Usually high on the priority list, both for members of the AF and other branches of the Armed Forces, is obtaining even a limited AAFES field exchange type support or NAF resale operation for the sale of necessities and popular health, hygiene, food, and reading materials. —◆—

Chapter 3

LOGISTICS

3.1. Overview. Logistics is the science of planning and carrying out the movement and maintenance of forces. In its most comprehensive sense, it includes those aspects of military operations that deal with: design and development, acquisition, storage, movement, distribution, maintenance, and disposition of materiel; movement, evacuation, and hospitalization of personnel; acquisition or construction, maintenance, operation, and disposition of facilities; and acquisition or furnishing of services.

3.2. War Reserve Materiel (WRM). To meet the lighter and leaner Air and Space Expeditionary Force (AEF) philosophy, legacy WRM assets (i.e., Harvest Eagle and Harvest Falcon) have been upgraded for deployability and functionality. To keep up with the various changes to deployable assets, the overall program for managing and updating bare base assets were placed under the BEAR WRM program. BEAR is part of an overall AF strategic effort to shift from a threat-based force to a capabilities-based force. The capabilities-based model focuses more on configuring forces and materiel into packages that are flexible enough to support the full spectrum of military operations, not just major theater war. BEAR meets the AF's requirements of a light and lean capability to support its air expeditionary FMs. BEAR sets also reflect lessons learned from recent expeditionary operations during which housekeeping and utilities packages deployed and required significant tailoring to meet mission needs. BEAR set are right-sized and have a variety of playbook options.

3.2.1. If a deployment site becomes long-term, SV managers determine if WRM shelters and equipment need replacement. Some WRM Systems, such as the BEAR sets listed in [Table 3.1](#), may need replacing because of age or condition, may be needed to support other efforts, or may be needed for QoL enhancement during long-term deployments.

3.2.2. During sustainment operations, theater managers provide direction on what WRM to return and how to return it. In addition to base-directed efforts, theaters will normally have central contracts to reconstitute and return

equipment. Work with theater planners as well as base Logistics Readiness to determine what WRM needs to be returned. Coordinate with CE to obtain more permanent facilities and obtain equipment either separately or as a part of an installed package. Document all your actions in continuity files to provide follow-on rotations with information on what WRM will be leaving and what is budgeted to replace existing WRM resources.

Table 3.1. BEAR Systems for FM Deployment.

<i>Designation</i>	<i>Type Support</i>	<i>Description</i>
BEAR 150 (B-150) or Swift BEAR Set (UTC XFB1A)	Open-the-base housekeeping set	<ol style="list-style-type: none"> 1. Stand alone package that supports up to 150 personnel when opening a bare base. 2. Consists of shelters with environmental control, small commercial power units and hygiene facilities.
BEAR 550 Initial (B-550I) Set (UTC XFB1H)	Initial housekeeping set to transition into Establish-the base	<ol style="list-style-type: none"> 1. Stand alone package provides a robust camp with environmentally controlled billeting, feeding and hygiene to support 550 personnel in small shelters (tents). 2. Billeting is on cots with insect netting at 12 people per tent with one environmental control unit (ECU) per tent. 3. Feeding initially will be from a SPEK. 4. Hygiene consists of latrines and shower shave units. 5. High and low voltage electrical and water distribution system is included. 6. Small shelters for administration, morgue, and supply functions.
BEAR 550 Follow-On (B-550F) Set (UTC XFBBF)	Follow on housekeeping to support Establish-and Operate-the base modules	<ol style="list-style-type: none"> 1. An additive package to B-550I increases support to handle up to 1,100 people. 2. Provides environmentally controlled billeting, feeding and hygiene to support 550 personnel in small fabric shelters. 3. Billeting on cots with insect netting at up to 12 people per tent with 1 ECU per tent.

<i>Designation</i>	<i>Type Support</i>	<i>Description</i>
		<p>4. Feeding is done in a field kitchen.</p> <p>5. Hygiene consists of latrines and shower shave units.</p> <p>6. High and low voltage electrical and water distribution system is included.</p> <p>7. No additional small shelters for base support functions.</p>
BEAR Industrial Operations (IO) Set (UTC XFBRC)	Establishes base infrastructure	<p>1. Stand alone package that supports up to 3,300 personnel and three fighter aircraft squadrons or their equivalent.</p> <p>2. Supports a single location with up to six expeditionary airfields.</p> <p>3. Consists of small, medium, and large (4,000 and 8,000 square foot) shelters for supply, engineering, vehicle operations and maintenance, packing and crating, and other general purpose functions.</p> <p>4. Provides high voltage electrical power generation and distribution and environmental control.</p>
BEAR Initial Flightline (IF) Set (UTC XFBIF)	Establishes flightline operations infrastructure and support	<p>1. Provides the facilities, equipment and supplies for aircraft flight operations, maintenance, crash-rescue, and other flight operations related activities for one aircraft squadron or its equivalent at a bare base location.</p> <p>2. Consists of 8,000 and 4,000 square foot shelters, aircraft hangars, small and medium shelters for maintenance (avionics powered/non-powered aircraft generation equipment, fuels laboratory, propulsion), fire emergency service operations/crash rescue, aircrew alert, squadron operations, storage, and general purpose functions. Provides a latrine and field lavatory.</p>

<i>Designation</i>	<i>Type Support</i>	<i>Description</i>
		3. Requires an Industrial Operations Set or a 550 set tasked for prime power and base infrastructure support.
BEAR Follow-on Flightline (FF) Set (UTC XFBFF)	Establishes flightline support for additional aircraft squadron	<ol style="list-style-type: none"> 1. An additive to the IF Set. 2. Includes limited facilities, equipment, and supplies needed to support flight operations and maintenance needs for a subsequent squadron equivalent. 3. Consists of aircraft hangars for a propulsion shop and small and medium shelters for powered/non-powered aircraft equipment and general purpose functions.
BEAR 550 Kitchen (UTC XFBKA)	Playbook Option for the B550I and B550F.	<ol style="list-style-type: none"> 1. Standard food service facility. 2. Built using TEMPER Tent sections (seven for dining and 10 for food prep) 3. Include three reefer boxes and associated water and power distribution equipment.
Self Help Laundry (UTC XFBLS)	Playbook Option for the B550I and B550F.	<ol style="list-style-type: none"> 1. Designed for continuous operation to serve up to 550 personnel. 2. Consists of 10 washers, 20 dryers, water heater, pumps, and 3K gallon bladder. 3. Set up inside a single SSS, with pumps, water heater and bladder outside the tent.

3.3. Contract Support. Based on information gathered from deployment documents and other sources, SV units should identify possible contracting needs and sources at the location. Seek guidance from your MAJCOM prior to establishing a support contract. Also, check for existing theater, host nation, Joint service contracts or other support plans, agreements, contracts, or sources of supply. Support may be available through civilian or host nation contracting, but may require use of interpreters. Check on the general availability of interpreter support for contracts. When contractors are planned to support SV' efforts, develop contingency plans to maintain essential services if contract operations are terminated during increased threat condition. For-

mulation of a Force Protection (FP) condition Delta Manpower Mitigation Plan is critical and necessary to ensure there isn't a break in essential services. Do not take anything for granted; what was established or done during prior rotations might not be appropriate during the current rotation. Request authorization to obtain a Government Purchase Card (GPC) to help alleviate hardships during emergencies.

3.3.1. There are many things to consider when deciding to contract. Do not think that the contracting office has all the answers or remedies to problems that may arise. **Attachment 2** lists items to consider when deciding to contract. During the contract planning stage, contact the MAJCOM and the on site contracting office, meet with the deployed SV staff, and go over previous lessons learned reports, after action reports, and any pass-on logs or reports for any additional information dealing with contracts and contractors.

3.3.2. **Air Force Contract Augmentation Program (AFCAP)**. AFCAP was initially conceived and implemented to provide CE and SV personnel a contract force multiplier. The intent was to augment CE, SV and Logistics capabilities during worldwide contingency operations. For example, contractors could relieve active duty and air reserve component personnel from sustainment tasks to ensure fundamental military missions remained fully staffed and operationally ready. You can find more information about AFCAP on the internet at <http://www.afcap.com/>.

3.3.3. **Expeditionary Contracting Squadron (ECONS)**. As mentioned before, AFCAP is a contracting program set up for sustainment. Using the onsite contracting office is another way of obtaining contract support and the ECONS open solicitation contracts are managed out of the wing ECONS office. The different services contract augmentation programs are speedy, but some control is lost and they may be expensive. ECONS contracts take longer to award (15 to 30 days), but SV maintains total control and they are much cheaper. Check with the MAJCOM before awarding any contract since they are the approving authority.

3.3.4. **Construction Capabilities (CONCAP)**. The Navy's civilian augmentation program, called CONCAP, provides the Navy and Marine Corps a responsive contracting vehicle to respond to global contingencies and natural

disasters. Like AFCAP, it frees uniformed personnel to perform purely military duties. CONCAP's primary focus is construction operations at permanent Navy bases, but it can be used in the event AFCAP is not available for large-scale construction at expeditionary beddown locations.

3.3.5. Logistics Civil Augmentation Program (LOGCAP). LOGCAP is the Army's equivalent to AFCAP and it is managed and administered by the Army Materiel Command. It is a special contingency program to maintain a worldwide contract on a multiple-region basis. It enables the Army to contract quickly for combat support and combat service support needed in a contingency. This contracting program is used while deployed on an Army base operating support (BOS) site. All requests for increases in service to meet AF needs are channeled through the Army's LOGCAP officer. Military Interdepartmental Purchase Requests (MIPR) can be used to pay for increases in standards above those stated in the Army's contract. This method is preferred over increasing the Airmen population at the base to provide enhanced services and standards.

3.4. Communications Equipment. There are a wide range of communications capabilities available at a bare base and SV personnel should be prepared to take advantage of those, from deployment through sustainment. While deploying Communications Squadrons (CS) may vary in their capability to support deployed units, lessons learned revealed recurring problems can be avoided with proper planning. For instance, many SV units deployed with a shortage of land-mobile radios (LMRs) and never improved their capabilities during early sustainment, while others obtained LMRs and cell phones to enhance mission accomplishment. Also noted was an initial lack of computers with up-to-date software to support the deployment mission. This was occasionally due to computer and radio support packages being broken up to support satellite units. Another problem was not having a sufficient number of computers connected to the local area network (LAN). And, when additional computers and laptops were ordered, they arrived without dual-power capability so expensive transformers had to be purchased to allow them to run on local power. Again, knowing what to expect and anticipating these type problems may help planners overcome or avoid these challenges.

3.4.1. **Computer and Phone Support.** Priority must be given to ensuring computers and phone lines are available to support the functions that must have direct communications with CONUS support organizations. These functions include the subsistence warehousing and dining hall operations, LRC, the commander, and the SV control center. Next, request additional computers and phones for troop morale purposes, additional SV computers tied into the LAN, and local base phone connections between SV support center operations. When new computers are needed to meet these requirements, ensure the CS orders computers and related hardware with dual-power capability.

3.4.1.1. LRC and Morale Computers and Phones. Work with the CS to install morale phones and computers. Use a planning factor of 10 computers and phones per 1,000 deployed personnel and request that a limited number of phones have Defense Switched Network (DSN) capability for calling military installations.

3.4.2.2. Determine if there will be a contract commercial phone bank, such as those provided under the AAFES-AT&T worldwide military contract, an independent contract initiated by theater communications, or through company sponsored efforts by various commercial networks. Also determine if the company will support lower rates for the location, especially when using calling cards that could be obtained from AAFES or SV. Some commercial networks even provide free morale call services and cell phones.

3.4.2. **Radio Support.** SV operations are wide ranging, not only in the community support complex, but also across the base where they may have flightline feeding, flightline subsistence offloading, search and recovery (S&R) operations. If the CS cannot obtain secure LMRs, request cell phones for the primary SV support areas and the commander. Determine if non-secure local frequency radios can be purchased to support major functions. If so, you may be able to use NAF to purchase radios used to coordinate NAF activities.

3.4.3. **Other Communication Support.** Work with the CS to determine if audio-visual and communications equipment can be pre-wired at any available large multiuse facility that will be used for entertainment. This should

include wiring for speakers and microphones, cable for computers and multimedia projectors, limited phone lines, and LAN connections to use with computers. Consider wireless applications to allow broadcasting of performances and meetings.

3.5. Vehicles and Specialized Equipment. Most deployed SV units find themselves short of vehicles and low on the priority list to obtain additional assets. Vehicle and specialized equipment authorizations must be addressed early to support subsistence warehousing of food and water, as well as for lodging support to move mattresses and beds around the base. Subsistence needs included large flatbed or stake-side trucks, 10K and 4K forklifts, and trucks with refrigerated or insulated boxes (depending on travel distances) for long hauls. For lodging, obtaining an all terrain vehicle (ATV) initially and pickups or stake-side trucks during sustainment is usually a challenge. Numerous locations required contract vendor support, as well as much larger vehicles to transport escorts on base (usually requires a small bus or a large van). Even Mortuary operation support was considered problematic, since there were limited numbers of covered vehicles suitable for transporting transfer cases with human remains. Larger or specialized covered vehicles may not always be required. Look at the situation and determine if there are other vehicles that could meet your requirements. Smaller pickups with a long bed and fiberglass cap (or topper) are commonly available and should be considered part of the overall base vehicle operations leasing program. Such vehicles can be used as a primary provider for SV support of medical laundry (for clean linen) and medical feeding efforts, along with mortuary use.

3.5.1. Coordinate with Logistics Readiness to determine whether there is an overall WRM vehicle shortage affecting support to SV and whether there is a WRM solution. During sustainment, bases should work with Logistics Readiness to ensure all valid vehicle authorizations are filled to the maximum extent possible.

3.5.2. Leasing of vehicles by Logistics Readiness should be expected to make up for shortages that hinder SV operations. If there are problems with vehicles leased from local, off-base sources, (i.e., wrong vehicle type, size, or recurring maintenance), the Vehicle Control Officers/NCOs should im-

mediately contact Logistics Readiness to ensure timely resolution with the local vendor. As a temporary alternative, Logistics Readiness at some locations can obtain larger numbers of leased vehicles and material handling equipment (such as forklifts, gator-type utility vehicles, and small box-bed vans and pickups) to make up for shortages of WRM vehicles during sustainment. If obtaining AFCAP support for food, lodging, or fitness-recreation support, also consider using AFCAP for vehicle and special equipment support. Keep in mind that leased vehicles, particularly overseas, may have manual transmissions and some AF personnel may not be trained to operate them. AFCAP can be tasked to provide this type of training to qualify SV personnel while deployed overseas; however, units should anticipate that leased general purpose assets will have manual transmissions and should train their personnel to meet this requirement prior to deployment. In addition to 10K and 4K forklifts, other specialized equipment for offloading and materials handling is usually required by SV to handle subsistence, transfer supplies to/from refrigerated vans and storage containers, and provide for trailers. SV vehicle control, food service, and contingency lodging personnel should coordinate planning and then budget for vehicles and specialized equipment to meet transportation-related and materials handling support. Pallet jacks, insulated containers and trailers, hand trucks-dollies, mobile carts, and portable roller conveyors can all be obtained during sustainment to support SV operations. —◆—

Chapter 4

FOOD SERVICES

4.1. Overview. As a SV core competency, efficient and sustained feeding operations are absolutely essential to mission success during contingency conditions. But, simply providing food does not necessarily raise morale. The accomplishments of deployed personnel can be directly attributed to the quality of food service they receive. In fact, good food and good service top the list of “morale builders” in almost all deployments and its value can not be overstated. This chapter outlines some of the basic planning factors and assumptions of successful field feeding.

4.2. Food Service WRM. As mentioned in [Chapter 3](#), most of the WRM needed for food service operations is contained in the BEAR 550I and BEAR 550F sets. Field feeding initially will be from a Single Pallet Expeditionary Kitchen (SPEK) and may be augmented by the playbook option BEAR 550 kitchen. Food service structures included in the 550I can be used with the SPEK or the Containerized Deployment Kitchen (CDK). Planners can also reference AFH 10-247, Volume 2, *Guide To Services Contingency Feeding Operations* for more details and options of facilities available to accomplish the food service mission.

4.2.1. SPEK. The SPEK is a lightweight, quick response kitchen, designed to provide hot meals using “heat and serve” UGR rations for approximately 550 people in support of AEF deployments. The SPEK comes in two versions, the BEAR or WRM version (UTC XFB1H) and the Homestation SPEK (UTC LWRRF). The Homestation version includes a 3-section TEMPER tent; while the BEAR version comes in an expandable “EISU-90” container and includes California Medium Shelter. Only the BEAR SPEK provides tentage for seating space.

4.2.1.1. The SPEK is capable of providing hot meals within 4 hours after rations arrive. It is best utilized for Prime RIBS units at austere contingency locations for periods of 30 days or less. It operates on a combination of diesel fuel/JP-8 and a small amount of electricity. Other components included in the SPEK are flooring, various utensils and support equipment, prep-tables, a

2-kW generator, and the heart of the kitchen—a Tray Ration Heater (TRH)—and a three-compartment sink that is heated by a diesel-fired Babington Airtronic Burner (BAB). As the name implies, all components of the Homestation SPEK (UTC LWRRF) is deployed on a single 463L air cargo pallet, while the BEAR SPEK (UTC XFB1H) comes inside an EISU-90. However, no rations, fuel, water, dining tables or chairs are included with the Homestation SPEK (UTC LWRRF) and will have to be sourced elsewhere. **Figure 4.1** shows the exterior of the two SPEKs (Homestation SPEK – UTC LWRRF on the left; BEAR SPEK – UTC XFB1H on the right). As mentioned earlier, a major difference between the two SPEKs is the shelter itself.

Figure 4.1. Exterior of Homestation and BEAR SPEKs.



4.2.1.2. If the deployment is expected to last longer than 30 days, planners should order the playbook option BEAR 550 kitchen and the SPEK should be located near the site where the BEAR 550 kitchen(s) will be positioned. Once BEAR 550I/F kitchens become operational, the SPEK may remain in place to augment heat and serve capability if required or be relocated for alternate site feeding (e.g., flight line). If the BEAR 550I/F kitchens have sufficient feeding capacity and the SPEK is no longer required, it should be reconstituted and returned to WRM or deployed elsewhere. The SPEK can be deployed by air or ground transportation. Set up of the SPEK requires eight personnel about four hours and four personnel 1½ hours to make the kitchen operational. After set up and arrival of rations, 2½ hours are required to prepare a meal, using UGRs (UGRs are not included with the SPEK). Po-

table water, diesel fuel, and waste disposal are also not included but are required for the SPEK to sustain itself.

4.2.1.3. The SPEK requires a clear and level area of at least 25 feet by 30 feet. Ideally, the area under the TEMPER tent/expandable EISU-90 should be completely cleared of all underbrush, rocks, and branches, and must not present any depressions or sharply raised areas.

4.2.1.4. Major components of the Homestation SPEK (UTC LWRRF) and BEAR SPEK (UTC XFB1H), besides the structures and semi-hardened rubber mat flooring (Homestation SPEK only), are the Field Sanitation Unit (FSU) and the Tray Ration Heater (TRH). Both of these items are designed to operate at temperatures ranging from -20° to 120° F and relative humidity ranging from 20 to 80%. [Figure 4.2](#) shows the interior of the two most common SPEK versions (BEAR SPEK on the left; Homestation SPEK on the right).

Figure 4.2. Interior of BEAR and Homestation SPEKs.



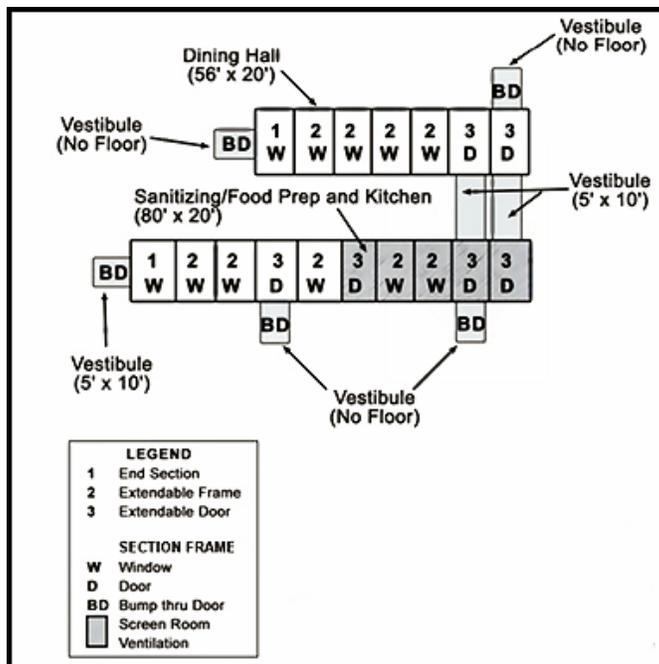
4.2.1.5. FSU. The FSU is an electrically powered field sanitation system that is easy to use. Pulling the single start-up knob, fires up the diesel-fired BAB. The FSU is designed to heat water in 3 separate 38-gallon basins, (wash, rinse, and sanitize). The sink is thermostatically controlled; once you pull the start-up knob all three compartments will heat up to their required temperatures and maintain those temperatures without further adjustments. The FSU

is constructed of sturdy, corrosion resistant materials to withstand harsh field conditions. The system can be easily moved by 2 people, and is equipped with drain boards on either side for ample room to sanitize pots and pans. Adjustable legs allow for use on an uneven surface, and have an externally activated drain.

4.2.1.6. TRH. The TRH consists of a stainless steel, sled-mounted, hot water tank and a multi-fuel BAB that operates from its own fuel source (5-gallon can). The system requires very little set up upon unpacking from the pallet. To operate, fill the TRH with potable water and connect the fuel and electrical power; the TRH is ready to work. The TRH will heat 18 tray packs (25 with out racks) to serving temperature. The TRH consists of a 30 gallon capacity heater tank with a hinged, latching lid, stabilizing skids with shock mounts, drain valve, electrical controls and BAB housing and cover assembly. The burner maintains the water temperature inside the tank thermostatically within a range of 180-200°F, and is well insulated to reduce loss from heat generated by the BAB. The THR has its own unique safety features and controls. A circuit breaker on the TRH electrical control box is one of its unique safety devices (the electrical diagram inside the box), and the mercury tilt switch will shut down the BAB in case of excessive tilt. It also features a water-level sensor to ensure that the burner will not fire without sufficient water in the TRH tank. A thermdisc-type thermostat regulates water temperature. When the temperature falls below 180°F the burner will fire back up and re-heat the water. A pull on/push off knob allows for easy and safe startup and shutdown procedure for the equipment.

4.2.2. **The BEAR 550 Kitchen (UTC XFBK4).** The 550 kitchen consists of a TEMPER tent complex that can support 550 personnel and requires an area of 200 feet x 100 feet (**Figure 4.3**). As mentioned earlier, it is a playbook option in housekeeping sets. The dining tent consists of a 7-section TEMPER tent with an area of 56 feet x 20 feet. The sanitizing, food preparation, and kitchen areas use a 10-section TEMPER tent and require an area of 80 feet x 20 feet. Three Advanced Designed Refrigerators (ADRs) are included with the 550 Person Kitchen. The kitchen weighs 35 short tons and requires 13 pallet positions to airlift.

Figure 4.3. Standard Configuration for BEAR 550 Kitchen.



4.2.3. The most common configuration for contingency operations is to combine two 550 kitchens (the kitchen from the B550I and the kitchen from the B550F). This field kitchen would have a 300 feet x 300 feet floor plan based on TEMPER tents that is capable of supporting 1,100 personnel. The modular feature of TEMPER tents allows the dining hall configuration to be varied if necessary to fit the shape, operation, and functions at the location. The dining area consists of a 13-section TEMPER tent (Figure 4.4), which can seat 120 personnel and requires an area of 104 feet x 20 feet for setup. The kitchen area consists of a 5-section TEMPER tent and requires 40 feet x 20 feet, and the sanitizing/food preparation area consists of an 8-section TEMPER tent and requires an area of 64 feet x 20 feet. Included are six ADRs and two ice machines. Figure 4.5 shows kitchen configuration for

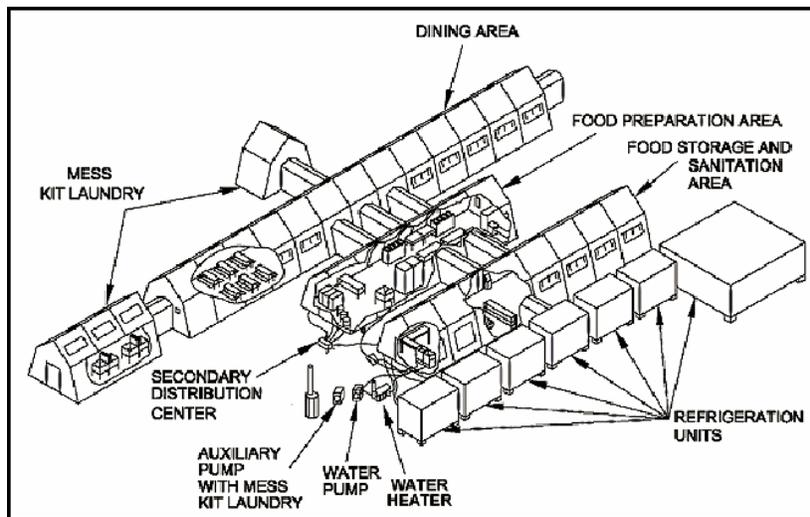
1,100 personnel. NOTE: **Figure 4.5** includes the 150-cubic foot refrigeration units. These have been replaced by the ADR-300s.

Figure 4.4. Dining Tent for 1,100-Personnel.



Figure 4.5. Standard Kitchen Configuration for 1,100-Personnel.

(Two – 550 Kitchens combined)



4.2.4. The CDK. The CDK is a deployable, fully self-sustaining, kitchen capable of preparing up to 500 meals twice a day. It is structured from a standard 8 foot by 8 foot by 20 foot ISO container with one expandable side.

4.2.4.1. The system includes electrically powered food preparation equipment assembled in an expandable single-sided tactical shelter, a water pressure control system and 250-gallon water bladder, and a 150-kW diesel generator.

4.2.4.2. The CDK provides a source for hot meal preparation until BEAR assets arrive, or can provide satellite/remote-feeding support. The CDK provides an all-weather capability (at temperature ranges from -25° F to $+120^{\circ}$ F) for preparing A-rations. Additional weather protection can be achieved by using a Small Shelter System (SSS) or TEMPER tent section ([Figure 4.6](#)).

Figure 4.6. CDK with TEMPER Tent Section.



4.2.5. Hard-sided Facilities. If available, a hard-sided structure is preferable to soft-sided structures as a kitchen due to the potential food damage caused by sand, dust, and moisture. Another concern is that the primary facility supporting food activities must have a hard, level and stable floor to allow safe operation of the kitchen equipment. Hard-sided shelters also provide an additional protective measure to control food assets, especially MREs and UGRs which are very pilferable.

4.2.5.1. The General Purpose (GP) Shelter ([Figure 4.7](#)) is an air transportable, hard-walled facility used primarily for equipment and aircraft maintenance shops. The entire facility is shipped inside a single container. When filled, the GP shelter weighs approximately 11,000 pounds and therefore requires a forklift for transport to its erection site. The building occupies a

31-foot by 48-foot area and provides about 1,400 square feet of unobstructed floor space. It takes an 8-person crew approximately 90-120 man-hours to assemble. The basic shelter consists of five arches, two end walls and an electrical system. The electrical system includes interior and exterior lighting, outlets and provisions for connection of two environmental control units. The end walls consist of column-supported panels and truck doors. Several types of fabric flashing for the various joints in the facility are provided to preclude weather problems.

Figure 4.7. General Purpose Shelter.



4.3. Coalition/Host Nation Facilities. During sustainment operations, deployed units often experience host nation (HN) infrastructure limitations when attempting to expand base facilities for new missions such as: sewage treatment, gray water disposal and solid waste management programs. These limitations are mitigated when the US and HN have a relationship that creates opportunities for service contracts, land leases and utility supplies. The SV and CE planners must take local economy, political relations and other influences into consideration when trying to solve these types of problems. Normal deployment systems/methods for sewage treatment and waste disposal may not be possible when an existing airfield is used for an AEF deployment. Surrounding populations and structures may simply prevent expansions, and existing utility systems may already be overtaxed or incapable of handling the additional load from a small military city. Working with CE

and reach-back support will help overcome most challenges when using HN facilities and infrastructure.

4.4. Modular Facilities. For locations planning to have a long-term presence, or where WRM assets require reconstitution due to condition or must be rotated to another location, plan to obtain more permanent or fixed facilities. This is accomplished in conjunction with CE to ensure all facilities, utilities, and other support requirements are planned, programmed, and budgeted for in the primary planning documents that must be approved by the theater commander. Although CE must obtain the justification and usually has the better handle on what types of structures can be obtained (i.e., modular, pre-engineered, K-Span), SV still plays the major role in determining what is needed to support food service operations. Develop a functional diagram that layouts how and where support functions will go and then work with CE to find the structures that meet your needs.

4.5. Rations and Bottled Water. Food and water are life sustaining requirements during contingency operations. For days 1-10 of most deployments, Services is responsible for providing individual bottled water with meals. After day 10, CE is responsible for providing bulk water. Food service planners must have an in-depth knowledge of how to plan, request, store, and issue rations. This section covers the sustainment of field food service operations. Additional information concerning food planning is described in AFH 10-247 Volume 2, *Guide to Services Contingency Feeding Operations*.

4.5.1. Push/Pull Concept. During the initial phase of a contingency, the distribution system pushes rations—typically MREs. When proper food service UTCs become available, UGRs are introduced. In other words, “push” means that rations are ordered for you—you have no control over when and how many rations you will be receiving. This is all decided at the Air Force Services Agency and higher headquarters level based on the expected population of the bare base. The “push” system converts to a “pull” system once personnel strength has stabilized at the bare base, the type of operations have been determined (i.e. flightline, work shifts, bomber, fighter, refueling) and feeding capabilities are determined. Quantities and types of rations are then ordered by deployed SV planners through a Prime Vendor (PV).

4.5.2. Initial Capability. During deployment, meal availability should roughly transition along the timelines illustrated by the FMs. Initial issues of MREs are supplemented with UGRs, followed eventually by the introduction of perishable/semi-perishable goods. Initial Operating Capability (IOC) for SV is considered achieved at the time the first hot UGR is served. Full operational capability is reached when a mix of UGRs, fresh, frozen, perishable, nonperishable or pre-prepared items are used to deliver all hot meals. The standard deployment meal cycles follow the UTC deployment timelines and goals shown in [Table 4.1](#).

Table 4.1. Feeding Goals for Standard Deployments.

<i>Deployment Days</i>	<i>Type Meals</i>
1-4	Meal, Ready-to-Eat (3 meals)
5-14	UGR (2 meals) MRE (1 meal)
15-29	UGR (3 meals)
30 and longer	Begin introducing UGR A-Rations (UGR-A) and A-Ration products

4.5.3. Planning Factors Based on Population. During sustainment, one of the primary efforts is determining the total number of meals to be served. Also, determine the anticipated surge figures during AEF-rotation overlaps, as well as any holidays covered by the ordering period. These situations can require additional rations and additional subsistence warehouse storage.

4.5.4. Ration and Bottled Water Safety. The US Army Veterinary Command (VETCOM) is responsible for approval of food and bottled water sources. Food and bottled water should be procured from sources on the VETCOM approved sources list (<http://www.veterinaryservice.army.mil>). During operations where approved sources are not available, contracting will consult with the Public Health Officer for food procurement and the Bioenvironmental Engineer for bottled water. The local Public Health office might be able to obtain waivers from VETCOM to have food and water sources obtained for local use only. This could speed up the process to obtain A-rations.

4.5.5. Subsistence Protection. Subsistence protection, including bottled water, from terrorist or hostile forces is now recognized as a crucial area for food service operations. The food and water chain is an area of increasing threat to the health of deployed personnel, and will receive more aggressive force protection consideration by Security Forces (SF), CE, SV, Medical Group (public health/bioenvironmental engineers), and supply point managers such as contracting and Logistics Readiness. Store food and water supplies in the same warehousing complex for better security and oversight.

4.6. Sustainment and Quality of Life (QoL). The Operate the Airbase FM brings mission support forces needed to achieve full operating capability and sustain mission generation beyond 30 days. The resources provide capabilities to bolster force protection, communications, cargo handling, and QoL activities (such as additional feeding and lodging), and provides reach-back capability for supply, US mail, military pay, etc. Sustainment is the long term operation of a base. It includes replacement of personnel and upgrade of equipment, facilities, and utilities for longer term operations. It may include enhanced contract support and transition to more permanent facilities and equipment; all of which greatly improves the QoL for deployed personnel. This section addresses some concepts for sustainment operations that food service managers have employed during past deployments. Food service managers should familiarize themselves with all the contingency assets that might be present for AF or joint service operations.

4.6.1. Use of WRM During Sustainment. After transitioning to enhanced facilities during sustainment operations, if available, some WRM assets may be retained for use in improving operations, overall support and QoL. Consider this option if you are not able to obtain a commercial dining facility (DFAC) with equipment. Sustainment operations often require food services managers to rely heavily on past training of how to estimate cooking requirements for various meals for various size populations, preparation times, and the proper use of available equipment. When shortages and challenges are identified, the innovative use of existing assets and support contracts can help ease the workloads of stressed SV personnel.

4.6.2. Meal Transitions. As stated earlier, meals usually transition along the timelines dictated by the FMs and SV feeding goals stated in [Table 4.1](#).

4.6.2.1. Sustainment efforts normally address the transition to UGR-As and A Rations. Planning transitions during sustainment falls into three categories: (1) obtaining subsistence (where you are, what rations you can obtain, how long it takes to receive them?), (2) storing subsistence (how do you receive rations, how do you offload and load rations, how long can you keep rations without spoilage?), and (3) cooking and support preparation times (can you cook all ration items on a menu, do you have time to cook and clean, can someone else clean, can someone else cook?). These areas must be considered when planning to order, cook, and serve rations. As used here, a ration is the generic term for the amount of food required for one person per day; subsistence is the generic term for food supplies; and pipeline is the whole food item distribution chain from the source point where the item is loaded to the delivery point at your location.

4.6.2.2. Obtaining Subsistence. During sustainment, most locations will have a main food-support contractor (i.e., the Defense Supply Center Philadelphia (DSCP) PV program) to meet their meal requirements. Units preparing to support sustainment operations should contact the theater NAF-C and AFSVA/SVOHF to determine if a main food support contractor serves, or will serve, their deployment. Review the [DSCP Subsistence Prime Vendor Guide Book](#) to become familiar with basic requirements of main food support contract programs. Most support and food issues are worked directly with the component with assistance from AFSVA/SVOHF as necessary. Planning should provide for a 14-day menu (i.e., Field Feeding Nutrition Analysis [14-Day United States Department of Agriculture (USDA) Food Guide Pyramid]). Theater goals are primarily based on having all food obtained from DSCP sources (for cost, security, and health reasons), but there may be exceptions within AORs. For those locations that do not have a main food support contractor, the primary source for subsistence is DSCP operational rations. Theater or local sources can provide fresh food, but only if the sources are approved by theater-recognized public health and security sources. Prime RIBS food managers should become familiar with the [DSCP Operational Rations Business Unit's Customer Ordering Handbook & Update](#). The subsistence you can obtain will depend in large part on the subsistence supply pipeline to your location. It varies by location and sometimes by the individual food item. The whole PV process could take up to 60 days.

4.6.2.3. Typically, the NAF-C will determine the minimum days of operations support (DOS) for warehousing operations. Food service managers may find that it takes more than 60 days of requisitioning and pipeline time to receive just a portion of their ordered subsistence items. When this is the case, adjust your subsistence order quantities. Provide additional space (in a subsistence breakout or main subsistence warehouse and a separate DFAC cold storage facility) to order more items up front and hold the items for longer periods of time, until there is a more reliable supply pipeline.

4.6.2.4. Some food items are not available to ship due to lengthy shipment times, or are simply not available from the contract vendor. These items will generate a not-in-stock (**NIS**) designation on the item order. There also may be substitutions that you did not plan for and did not want. Initial support from new main food support contractors is usually not a flawless operation, but should get better when problems are identified. Work problems and issues through the theater's supporting MAJCOM SV personnel and with AFSVA/SVOHF as required. Be prepared to order additional UGR-As during early sustainment to provide a full 14-day menu when generating initial subsistence requirements.

4.6.2.5. Some subsistence items may not be available for delivery due to the length of time an individual food item is serviceable. This can be due to shelf life, which is determined from storage life, expiration date, shipping condition, or perishable or freshness dates. Some food orders may require that items be sent from the Continental United States (CONUS) and the shipments bundled with subsistence being stocked at a main food support contractor's regional warehouse. Other orders could be totally filled from a regional warehouse's stocked subsistence and could be shipped directly. Depending on the delivery method from the warehouse, the shipments may or may not arrive early enough to provide an adequate storage life and be edible. If the food is arriving with too little shelf life, address the issue with your NAF-C. The normal solution is for DSCP to require the main food support contractor to obtain these items from closer sources to cut down on overall shipping times. Sustainment is the time to make sure that both your ordering menu system **and** the overall subsistence logistics support system are compatible.

4.6.2.6. Menu planning choices may be limited by the en route pipeline time, no matter what the main food-support contractor does to shorten the delivery pipeline. When certain items continue to have freshness shelf life problems, sustainment planning is the time to find alternate sources for obtaining those food items while they are still fresh.

4.6.2.7. Determine if the theater allows local purchase (from approved available sources) and use this method to get items that are not readily available through DSCP. Local purchases are accomplished using blanket purchase agreements (BPAs), but must be approved by the NAF-C and AFSVA/SVOHF. An alternative to buying fresh foods in-theater is to accept a different food packaging method for menu foods of choice. While planning sustainment menus using the AF Food Service Recipe System (an automated version of the Armed Forces Recipe System), UGR-A packaged menu options may have to be substituted for some A-Ration choices. Consider ordering bulk meats and some pre-cooked foods. These choices can not only extend the useful shelf life for some types of items, but can also greatly reduce cooking times, storage requirements, water use requirements, and sanitation needs. Using pre-cooked foods is a theater support, budgeting, manpower, and resources issue that should be worked with your NAF-C.

4.6.2.8. Storing Subsistence—Food and Water. Subsistence storage is the foundation for food service efforts. Experience shows that you must plan for and develop an effective warehouse management system in order to sustain food service efforts. Subsistence warehouse management has been identified by commanders as one of the more crucial areas requiring experienced personnel. Without developing abilities to (1) offload and transport to storage, (2) store within the appropriate storage conditions (dry, refrigerated, and cold), and (3) reload and transport to food preparation areas, some well-intentioned efforts can be LITERALLY wasted. [Attachment 3](#) provides guidance on both ordering and storage of rations and [Attachment 4](#) lists details for protecting rations from excessive heat.

4.6.3. When the quantities and types of food are known and the length of storage time determined for all your food sources, then it is time to determine what size warehousing operations you need, as well as the subsistence handling equipment and vehicles.

4.6.3.1. Menu planning and subsistence ordering are based on meals required to serve 100 percent of the base population (obtained from the PERSCO team). This number can be as adjusted for head count, locally developed feeding data, and taking into account any alternate food service opportunities such as franchised food vendors that are contracted with by SV or AAFES. By using detailed planning (versus previous 90% population standard), overall food service operations can become more efficient. However, it requires more attention when figuring quantities, ordering subsistence, and planning square and cubic footage for subsistence warehousing.

4.6.3.2. For bases with a predicted long-term presence, and bases with a shortage of refrigeration unit maintainers, sustainment improvements usually include obtaining more reliable, larger, and supportable commercial equipment and then returning WRM assets. There are numerous warehouse-related options to consider and many are listed in [Table 4.2](#).

Table 4.2. Suggested Sustainment Options for Subsistence Storage.

<i>Effort</i>	<i>Details</i>	<i>Remarks</i>
Replace WRM Refrigerated storage units	<ol style="list-style-type: none"> 1. Obtain larger, more efficient (interior-use or outdoor-use) modular or site-erected walk-in coolers and freezers. 2. Purchase or lease storage buildings, warehouses, and refrigerated shipping containers. 	<ol style="list-style-type: none"> a. Return most 300-CF refrigeration units, or relocate a few to support remote and isolated areas. b. Contracting can help procure more refrigerated storage units as equipment items. c. Ensure that refrigerant gases for new units can be readily obtained and the equipment can be maintained by CE or contract.

<i>Effort</i>	<i>Details</i>	<i>Remarks</i>
Replace WRM shelters	<ol style="list-style-type: none"> 1. Obtain large pre-engineered metal, tension fabric, or other commercial storage buildings. 2. Create a warehouse complex to meet your overall covered dry storage needs and provide cover for interior-use walk-in coolers and freezers. 	<ol style="list-style-type: none"> a. Contract with companies that specialize in food storage warehouse complexes. b. Companies should include walk-in coolers & freezers as part of a warehouse design package. c. Due to the complexity and size of the facilities, submit this with or through CE. d. If contractor is already on site and in use by CE, AFCAP can coordinate all requirements and identify adequate maintenance requirements and backup mechanical systems. e. Ensure all walk-in equipment and warehouse facilities have larger doorways to at least accommodate pallet jacks and bulk food transport carts.
Improve site safety	<ol style="list-style-type: none"> 1. Construct improved roadways between off-load sites and the warehouses and from the warehouses to the DFAC food storage and preparation areas. 2. Construct offloading docks suitable for transport and loading facilities. 	<ol style="list-style-type: none"> a. CE can improve roadways with crushed stone or paving. Submit a work order. b. Loading docks can be purchased by CE as equipment items (i.e., metal portable loading dock) and/or obtained by a contractor and erected by CE. c. Portable loading docks can be towed and erected to provide support for other SV functions and used as a temporary stage.

<i>Effort</i>	<i>Details</i>	<i>Remarks</i>
Material Handling support	Obtain warehouse and DFAC material handling equipment such as pallet jacks, bulk food transport carts, small and large forklifts, hand trucks, light-weight and portable roller conveyors, and prepared food (insulated if necessary) transport carts.	<ul style="list-style-type: none"> a. Companies in most theaters can provide this equipment. b. Consider using a contractor and have them provide a complete warehousing package for material handling equipment. c. Contractors can provide the expertise to run the warehouses and train SV personnel on forklift and warehouse operations.
Flightline Temporary Subsistence Holding Area	Construct or erect a small hardwall shelter or CONEX-type shipping container (with large doorway and hard floor) near the light line as a temporary holding area.	<ul style="list-style-type: none"> a. Transport aircraft offloading can cause subsistence items to be placed on ramp awaiting transportation to warehouse facilities. b. Use dry ice if readily available or obtain an environmental control unit to cool perishable subsistence items. Follow dry ice safety precautions. c. Ensure area is secured until SV can obtain transport.

4.6.3.4. Storing and distributing bottled water is a major concern at most deployed locations. Unless it becomes prohibitively expensive, locations may never be able to forgo the use of some bottled water, even when CE does provide potable, palatable water. For many service members, having bottled water is now an essential convenience. However, for Prime RIBS food service personnel, not having a water distribution system that can reliably provide potable, palatable water at the DFAC should be a major concern due to manpower, health, and safety concerns. Many food service equipment items are set up to use piped water. Having to carry bottles of water throughout the kitchen can present hazards, especially when equipment is all electric and designed for piped water. It also requires more personnel or longer hours to manage the water at a DFAC. By eliminating bottled water usage, DFACs

can cook more efficiently. In addition to the DFAC, water storage at warehouses creates additional workloads, storage concerns, and handling issues. Using bottled water comes at the price of having to handle excess trash, including possibly having to recycle plastic, as well as requiring more and larger offloading equipment, pallets, and protected storage. If bottles are recycled, then the contingency contracting officer (CCO) and medical personnel must insure that the bottles are not short cycled (i.e., taken out of recycling and refilled with impure local water for attempted resale to, or reuse by, the military).

4.6.3.4.1. When DFACs must use bottled water for cooking, avoid using the convenience size (personal use) water bottles and obtain water in at least 5-gallon jugs. Keep in mind that these jugs weigh about 43 pounds. If you can use water stands to hold larger containers, you may be able to obtain 10-to 20-gallon jugs that have spigots for filling smaller items. However, these can be much heavier (about 87 and 180 pounds respectively) and can be more costly to purchase.

4.6.3.4.2. CE is responsible for providing enough potable water to sustain operations in all environments for bases ranging from an austere bare base to a main operating base. In austere environments, CE must provide a minimum of 13 gallons of potable water a day per person. Despite this requirement, DFACs have used bottled water, because the potable water became unpalatable due to heat and developed inadequate residual chlorine levels. SV personnel should work closely with CE to determine the best method to provide an adequate potable water supply. For extreme arid conditions, CE may have to install several 500- to 1,000-gallon insulated and cover-protected water storage tanks at the DFACs. Insulated potable water storage tanks usually use small chillers and control pumps and can keep water fresh for several additional days. By adding cartridge filters just before the main points of service, water quality can be better than average for all DFAC food and ice production uses, except for high-volume, high temperature cleaning.

4.6.3.4.3. There are also commercial options for efficient equipment that requires fewer personnel to manage (**Figure 4.8**). SV should take actions during sustainment to improve the overall water storage and distribution

situation and help alleviate the manpower draining effort created by dependence on bottled water.

Figure 4.8. Commercial Water Storage Tanks.



4.6.3.4.4. In addition to working closely with CE to plan for adequate water for SV functions, you should be familiar with [AFPAM 10-219, Volume 5, Bare Base Conceptual Planning Guide](#). The chapter on water systems addresses in detail water sources, uses, treatment, and distribution. A large section is also describes proper water supply requirements for a bare base located in an arid environment, where even sustainment efforts may face quantity restrictions.

4.6.3.4.5. It may be possible for CE to tanker deliver or pipe better water to the DFAC during off-peak hours so that the tank water is cooler and has adequate chlorine residuals. By using several smaller tanks, you can alternate their use before water loses chlorine and becomes unpalatable. Also check with AFCAP and determine by statement of work what they can provide for insulated potable water storage systems.

4.6.4. Meal Planning Factors. Normal deployment meal preparation is based on providing three hot meals per day. The minimum day-meal requirements are: one meat entrée, two vegetables, one starch, one soup, one dessert, and three beverages. If you have available manpower and facilities, increase your menu options if at all possible. **Attachment 5** provides guidelines for initial manpower requirements. During sustainment, SV personnel must determine

their location's layout, military and support demographics, and work schedules to identify the best ways to provide meals for personnel. For bases where the DFAC is central to contingency lodging and support facilities (cantonment area) as well as flightline, operations, and maintenance facilities, all DFAC operations can be consolidated and a midnight meal provided. At these type locations, some bases have used their BEAR kitchens in a dual kitchen-dining configuration.

4.6.4.1. For locations where the main cantonment area and flight line functions are separated, many units establish two primary DFACs during sustainment; a main cantonment DFAC and a smaller flightline feeding facility, or even a full-size flightline DFAC. Flightline feeding can cover numerous requirements, such as aircrew flight meals as well as aircraft ground-crew and industrial support shop personnel (ground support meals). If flightlines support passengers and medical unit evacuation facilities, you must address these additional meal requirements. A small flightline feeding facility may not be able to handle all the requirements; it may require a flightline DFAC.

4.6.4.2. When planning for sustainment at bases with large geographic areas and where there are at least two large DFACs, food service managers' must consider the ability to manage and provide meals for both DFACs. This may not necessarily mean providing three or four hot meals at each DFAC. Even when additional personnel become available (such as through large support contracts or civilians) to support food preparation, serving, or clean-up, it may not be efficient, effective, or necessary to provide three or four hot meals at each DFAC.

4.6.4.3. As indicated under planning for subsistence, the choice of meal packaging can be very important in meeting requirements for 14-day menu planning. New planning factors allow locations with populations of more than 3,500 to order pre-cooked food items in order to meet preparation and cooking times. Using precooked food items can help prevent having to obtain more personnel and order much more cooking equipment just to meet normal meal serving timeframes.

4.6.4.4. Whether or not you use precooked meals, sustainment plans (at long-term locations) require WRM equipment replacement in favor of commercial

equipment. [AFI 25-101, War Reserve Material \(WRM\) Program Guidance and Procedures](#) addresses how the theater Logistics officer and CE are to consider transitions to more permanent resources (or contract support) and reconstitute BEAR assets when missions will extend beyond six months. There are several reasons to convert. US power generation may not be retained except for emergency operations. Therefore, using all-electric, commercial equipment that can operate off host-nation power or a commercial grade generator system means that you can stay in business. This may be the case when CE is going to replace many of the facilities on base and convert to international power production standards. They usually do this through use of a contractor to operate a commercial-based power plant at the base. The other main reason to convert is that it is often very difficult to maintain existing WRM systems due to a lack of readily available parts, and CE and SV have a very limited ability to repair and maintain the equipment. Newer commercial equipment can often be purchased with a greater, faster availability of parts, as well as service and support agreements.

4.6.4.4.1. When purchasing new equipment, check with the CCO, CE, and especially with your theater's SV personnel (including other deployed SV squadrons) to make sure which equipment, contractors, and support systems are reliable, provide support in-country, and have had no problems at other locations. Make sure that support contracts require contractors to have a stock of common parts readily available so that repairs can be made on or within two days of the service call. Having to wait several weeks for equipment repairs is an unacceptable standard during a contingency.

4.6.4.4.2. When you know (from experience or word-of-mouth from other locations) that some equipment takes longer to repair, buy a backup for critical equipment items.

4.6.5. **Other Planning Issues.** Once planning and programming regarding numbers, kinds of meals, and number of DFACs are complete, address QoL enhancements such as obtaining more baked items, frozen desserts, and varieties of beverages. These items are usually low cost and have a short turn-around, enabling a large morale benefit during deployments. Local commanders may be applying pressure to provide these morale boosters, but be aware that any purchases with contingency funds must pass tests for justifi-

cation and propriety. When possible, NAF may be used for some items. See AFH 10-247, Volume 6, *Guide to Services Contingency Planning: Resource Management and Quality of Life* regarding any restrictions on use of appropriated funds (APFs) and NAFs for funding morale-enhancing purchases. Some other food service-related efforts that have been used as morale enhancers are: holiday meals, birthday meals, ethic meals, and monthly squadron and wing cookouts ([Figure 4.9](#)).

Figure 4.9. Special Occasion Meals.



4.6.5.1. Special Coffee and Ice Cream Machines. These are relatively low cost items that can be obtained through standard supply channels or supported in theater. Be aware that these machines may require additional maintenance, cleaning, parts, and specially prepared food items to support them (e.g., a variety of coffees, creamers, sugars/sweeteners, flavors, and freezer mix ingredients). Parts, water sources, and electrical power are also concerns that must be addressed before ordering.

4.6.5.2. Adjunct Food Contracts. These are food vendors or concessionaires that are not part of an AAFES vendor support contract. They provide a specialty food or specialized, sometimes prepackaged food item. When AAFES is not providing a vendor for burgers, pizza, hot dogs, Oriental, Hispanic, or other specialty food items, SV can provide this adjunct food option through NAF employees or a vendor contract. Some vendors are brand-name commercial vendors that are in-theater, but not on an AAFES contract ([Figure 4.10](#)). This is an area normally handled by recreation or fitness resale operations working with contracting to meet a special area of demand (specialty

coffee house, fitness-type sports drinks and energy bar cafe, ice cream parlor, and doughnut shop products). However, the food service manager should determine if the popular specialty item can be routinely provided at the DFAC. The DFAC menu should not be limited in variety in order to build up a NAF activity.

Figure 4.10. Services Adjunct Food Contracts.



4.6.6. Flightline Feeding. A flightline feeding operation may be required at aircraft beddown locations. If possible, the flightline kitchen should be located in the main field kitchen to maximize manpower. However, a separate facility may be justified based on geographic separation, high flightline population, limited shift break capability (partly time-distance based), transient aircraft, and need to manage a surge capability. These are all reasons to plan for a flightline feeding capability and possibly a DFAC. Manpower for the flight kitchen is included in the current capability of the Prime RIBS UTC. There are several types of meals offered that should be covered in your planning such as flight meals, MREs, sandwich meals, and frozen meals.

4.6.7. Medical and Patient Feeding. This is an area where each location may be different based on the size of the medical unit, its primary function, typical patient injuries treated, and resources for medical evacuation. Sustainment operations for medical and patient feeding follow two schedules—one for SV and one for the Medical Group. When the Medical Group begins sustainment operations, SV should be prepared to begin sustainment support as well and efforts of both must be coordinated. There are sustainment ac-

tions that the medical unit must take with SV to obtain food carts, distribution carts, insulated meal trays, and meal accessory packets, as well as additional miscellaneous accessories. SV may have to obtain additional or different strainers and blenders to meet some of the preparation needs.

4.6.7.1. Initial planning provides for three meals (UGRs and A-Rations) per day for 90% of the patients being treated, 100% of convalescent patients, and 100% of patients at a base with an aeromedical staging facility. Flight meals will be needed for aeromedical evacuation patients based on the planned number of evacuees per day. Dietetic personnel should augment SV to prepare all special diet meals for patients. Dietetic personnel determine, order, and prepare medically unique ration items. SV planners must coordinate with dietetic personnel to ensure medical feeding requirements are identified appropriately.

4.6.7.2. During sustainment, SV must be aware of what type meals the dietetics staff may need in order to plan for and order items that are common ration items. Some meals, such as those that require tube feeding, of course are obtained and managed by the Medical Group. Patients on feeding tubes are fed with commercial tube feeding formulas ordered by Medical. However, most menu needs can be met by SV working with the dietetics personnel. Sustainment purchases by or for SV should include insulated carts and chests, sometimes heated or cooled, to carry the meals to the medical unit, as well as the transportation for these temporary carriers. This could be a vehicle, a vehicle and trailer, or a separate special trailer with a standard pintle-hook tow bar. Additional small beverage containers or dispensers may be required for transport and use at the medical unit.

4.6.7.3. There are generally nine classes of meals that the standard SV kitchen can support. These are listed in [Army Field Manual 4-02.56, Army Medical Field Feeding Operations](#), and are available to the dietetic personnel (of all branches of the armed forces). The manual also includes information on using some MREs for diet support. Additional information can also be found in AFH 10-247, Volume 2, *Guide To Services Contingency Feeding Operations*.

4.6.8. Equipment Expansion. Sustainment food service actions must be worked in concert with facility and utility upgrades. Contract-supplied equipment may replace or augment WRM assets. If turning in WRM shelters and moving to fixed facilities, order new food service support equipment to replace WRM equipment that will be returned. Based on standard meals and the requirements by population, determine kitchen storage, preparation area, cooking, and serving area needs. Work with CE to ensure that any equipment items ordered are compatible with the available and planned electrical systems. The Defense Government Supply Center (DGSC) Customer Valued Contracting section provides support to identify main support contract vendors that supply equipment for out-of-CONUS locations (direct shipped to the location when possible). Also, ensure CE is providing adequate water support piped to the DFAC complex to replace bottled water whenever possible. Replacement cooking equipment should provide for an all-electric capability.

4.6.8.1. The size of the DFAC should be based on [AFH 32-1084, Facility Requirements](#), as well as DFAC storage planning factors. Calculate requirements based on the served population (POPSUM). DFACs generally follow Golden Eagle standards as adapted for theater use. An example of an adaptation is that deployed DFACs should be based on 4- and 6-person tables with no booths and no two-person tables.

4.6.8.2. Storage at a DFAC is a major planning issue. Careful consideration and coordination with the NAF-C and AFSVA/SVOHF will eliminate any unforeseen problems.

4.6.8.3. Most DFACs require added space at their facilities to handle the immediate needs for items that cannot be stored at the main subsistence warehouse. Sustainment is a time when food SV managers should identify and obtain storage, such as shipping boxes, site-erected storage units, and commercial storage containers. These may be obtained as equipment-type items for lease or purchase. When placed in rows near DFACs, they can cut down on noise and wind and provide additional force protection as a barrier ([Figure 4.11](#)). However, make sure they are anchored as some are relatively light and can be blown into structures by high winds.

Figure 4.11. DFAC Storage Containers Provide a Barrier Wall.

4.7. Contract Support. As with ordering equipment separately, ensure that equipment ordered as part of a building system package (including any refrigeration equipment for the subsistence warehouse or DFAC) is heavy duty, commercial equipment supportable with replacement parts. Whenever possible, obtain a maintenance or service contract to maintain equipment. This will require food service personnel to qualify as quality assurance evaluators (QAEs) and obtain training from the CCO for monitoring the contract. Keep good QAE records and maintain a continuity file to turn over to the next AEF rotation. Food service managers should order backups for critical equipment items and parts (as deemed necessary with CE) when there is a known inability to make rapid repairs on the equipment.

4.7.1. Due to repeated turnover of personnel, incoming managers face a crisis whenever critical equipment breaks unless very good records were kept in (SV and CE) continuity briefings, continuity files, and comprehensive food service manager computer files. Consider using long-term support contracts for warehouse management and food service management during extended sustainment. This can alleviate many of the continuity-based problems. When use of long-term AFCAP or theater contracts is allowed, sustainment planning should identify that future rotations can cut back on the number of SV personnel. However, remember that QAE training must be obtained prior to arriving on station.

4.7.2. Some theater contracts with SV QAE oversight can provide better overall operational support, including replacement of equipment, for long-

term sustainment operations. Long-term, large installations actually benefit from better continuity in planning and purchasing by contract than by constantly rotating AEF Prime RIBS UTCs. During planning, if an ESVS commander determines that use of a full scale or limited support contract is justifiable, the commander should coordinate with the theater's SV deployment planners and identify possible contract requirements in early sustainment planning and budgeting documents. This will normally require an estimated contract cost for the support. Provide the local contracting office any functional facility and operational diagram layouts with the SOW when contracting for new facilities, equipment, and a food service contract operation.

4.7.3. Theater SV planners may determine (or theater policy may already allow) limited contract support to augment a portion of the food service operation or provide facilities, equipment, and vehicles. The ESVS commander and food service managers should then consider the full range of contract options, such as civilian augmentation, theater contracts for equipment and facilities, and use of an AFCAP contract. Determine if CE is already using a theater or AFCAP contract for facilities or CE support services. There can be economies of scale by having one good contractor performing and integrating work efforts. —◆—

Chapter 5

LODGING AND LAUNDRY-LINEN

5.1. Overview. Members of a Prime Readiness in Base Service (RIBS) team are responsible for establishing and maintaining a solid field lodging and laundry operation at a deployed location. The type of deployment and location determines the method of operation used. SV personnel will also need to consider what actions to take if fixed facilities are available instead of WRM shelters; if personnel need to be lodged by organization instead of on a first-come first-serve basis. This chapter will help planners prepare to provide the best service possible, regardless of the situation. Most AEF wing sized deployments follow basic FM phasing requirements that provide mission IOC within 10 days and SV IOC within 14 to 30 days. SV full IOC provides lodging with up to 12 personnel per TEMPER tent and a self-help laundry, if laundry BPAs are not available. Follow-on UTCs that provide SV with a FOC is usually obtained between days 30 and 60, depending on the flow of equipment and threat constraints. FOC is intended to provide a full self-help laundry and an organizational laundry support that is usually supported with a combination of laundry equipment and local contracts. Lodging standards also improve from 12 personnel per tent to eight personnel per tent, or equivalent sized shelters.

5.2. Lodging Operations. The capability to beddown forces is first identified using existing facilities and equipment (dormitories, family housing, etc.) or commercial quarters. When fixed assets are insufficient or not available, WRM assets are used for planning surge capability for main operating, collocated operating, forward operating, or bare bases. Primary bedding is sleeping bags until QoL improvements are made. For Collocated Operating Bases (COBs), Forward Operating Locations (FOLs), and Bare Bases (BBs), limit the number of front desk operations per beddown location to the minimum number absolutely necessary to meet mission requirements. Control all bed space assignments and terminations through the lodging desk.

5.2.1. Lodging WRM. Lodging WRM is materiel required in addition to primary operating stocks and mobility equipment to attain the operational

objectives in the scenarios authorized for sustainability planning in the Defense Planning Guidance. Broad categories are: consumables associated with sortie generation (to include munitions, aircraft external fuel tanks, racks, adapters, and pylons); vehicles; 463L systems; materiel handling equipment; aircraft engines; bare base assets; individual clothing and equipment; munitions; and subsistence. The following BEAR assets are key components to lodging.

5.2.1.1. BEAR 150 Housekeeping Set, also known as Swift BEAR (UTC XFB1A). This housekeeping set supports a maximum of 150 personnel for approximately 5 days. It provides austere shelter (12 persons per tent, cots and environmental control), basic hygiene, low voltage electrical generation and distribution, and forklift support. The set weighs 44 tons and requires 17.5 pallet positions (one C-17) to airlift.

5.2.1.2. BEAR 550 Initial Housekeeping Set (UTC XFBH1). The BEAR 550I provides billeting and self-help laundry to support 550 personnel. The set includes 48 small shelter systems (SSSs) for billeting 12 people per tent on 576 cots and two SSSs for the self-help laundry. The set weighs 229 tons and requires 78 pallet positions (six C-17s) to airlift.

5.2.1.3. BEAR 550 Follow-On Housekeeping Set (UTC XFBBF). The “550F” can be deployed after or in conjunction with the 550I to support an additional 550 personnel. It provides additional billeting, latrine, ECU, high and low voltage electrical generation and distribution, water distribution and camp lighting. The set weighs 188 tons and requires 61 pallet positions (five C-17s) to airlift.

5.2.2.. BEAR Shelters. Shelters are the arguably the number one concern when setting up the base. BEAR equipment packages have a variety of shelter systems to support and maintain a deployed air base. The next few sections explore these shelters and some of their major components.

5.2.2.1. Small Shelter System (SSS). An all-purpose tent, commonly referred to as the Alaska Small Shelter System (**Figure 5.1**), is the designated replacement for the TEMPER tent, through attrition. It can be used for billeting, work areas, latrines/showers, storage, etc. When fully erected, the shelter measures 32.5 feet long, by 20 feet wide, by 10 feet high (650 sq ft), and

multiple shelters can be interconnected. The site should be flat and well-drained, with no more than 11 inches of slope across the floor area. Compared to the TEMPER, the SSS is lighter, more vector proof, easier to heat/cool and repair, and can withstand steady 50-knot winds and gusts up to 60 knots. Setup takes 6 people about 2 hours.

Figure 5.1. Small Shelter System.



5.2.2.2. Medium Shelter System (MSS). A medium sized all-purpose shelter selected to replace general purpose shelters and is used as a warehouse, maintenance area, and kitchen ([Figure 5.2](#)). Constructed of synthetic fabric over aluminum arch sections with rubberized floor mat, the MSS provides tighter protection from dust and insects and takes up less shipping space than GP shelters. It can withstand steady 60-knot winds and gusts up to 90 knots. Measures 52 feet long by 30 feet wide and 15 feet high. Site should be flat and well-drained, with no more than 18" of slope across the floor area. Setup is accomplished with 6 people in about 4 hours.

Figure 5.2. Medium Shelter System.



5.3. Sister Services Assets. **Table 5.1** compares the Army's Force Provider and the Navy's Camp 750 housekeeping sets to the AF's BEAR set.

Table 5.1. BEAR Housekeeping, Force Provider, and Camp 750 Sets.

<i>US Air Force</i>	<i>US Army</i>	<i>US Navy</i>
BEAR 550 Housekeeping Set (550 Person Set)	Force Provider (550 Person Set)	Camp 750 (750 Person Set)
Stand alone warm-weather, personnel support package	Assembled by task-organized Quarter master Company	Provides complete living facilities for 750 personnel (75 Officers, 613 enlisted, 62 person complement)
Setup varies depending on mission. Typical PRIME BEEF complement can achieve initial operational capacity (IOC) within 72-hrs.	Setup of std module: 63 personnel take 120 hrs to complete (varies depending on required site preparation, climate, layout configuration & personnel experience levels.	Setup (initial) within one day, followed by additional improvements over 2-5 days.
<i>Billeting Subsystem</i>	<i>Billeting Subsystem</i>	<i>Billeting</i>
SSS/TEMPER (48) (UTC XFBB7)	TEMPER Tents (44)	GP Medium Tents (62)
Environmental Control Units (72) (UTC XFBD5)		
<i>Admin Facility Subsystem</i>	<i>Admin Facility Subsystem</i>	<i>Admin Facilities</i>
SSS (4)	TEMPER Tents (6)	GP Medium Tents (3)
		GP Medium Tents (1) – Dispensary
<i>Shower Subsystem (UTC XFBL7)</i>	<i>Shower Subsystem</i>	<i>Shower</i>
SSS (2)	TEMPER Tents (6)	12-head shower unit (6)

<i>US Air Force</i>	<i>US Army</i>	<i>US Navy</i>
BEAR 550 Housekeeping Set (550 Person Set)	Force Provider (550 Person Set)	Camp 750 (750 Person Set)
6 stalls w/2 shower heads ea/12 sinks (2)	Portable shower/shave stands	
	M-80 Water Heater (1)	
<i>Laundry System (UTC XFBL9)</i>	<i>Laundry System</i>	<i>Laundry</i>
Self-Help Laundry (Playbook Option)	Portable Water System (1)	Container ISU 90; washer/dryer (2)
10 Washers and 20 dryers per 550 personnel	Blackwater Containment (1)	Modular GP Tent (2)
	3,000 gallon storage tank and pump (optional)	
SSS (4)	TEMPER Tents (6)	GP Medium Tents (3)
		GP Medium Tents (1) – Dispensary
<i>Latrine</i>	<i>Latrine</i>	<i>Latrine</i>
SSS (2)	Containerized Latrine	4-hole burnout head and Latrine (15)
Field Latrine w/6 seats & 2 sinks (2) (<i>UTC XFBL9</i>)	24 toilets, four urinals and eight sinks	

5.4. Permanent Facilities. As the sustainment lengthens and as the population stabilizes, you can expect CE to start making the site more permanent. Hard-walling the different types of shelters is one way of improving the QoL for both the community and facility managers.

5.5. Coalition/Host Nation Local Assets. The first step in planning for lodging contingency operations is to determine if there are any known existing facilities or services that could be used for contingency lodging, shower, shave, or latrine support. Even some austere bases have existing facilities

and utilities that can be used initially for expedient lodging (**Figure 5.3**). Determine if there are any known environmental hazards that could restrict operations or require theater logistics, contract, or engineering support before the facilities or sites are usable. There may be host nation restrictions on use of certain types of facilities due to location, environmental pollution, loss of service to existing inhabitants, or other support concerns. (e.g., environmental problems and digging restriction may prevent CE from installing latrines and shower/shave units without first upgrading sewage systems or tying into existing sewer lines. This can cause initial delays in installing latrines and shower/shave units and could cause additional problems with locating contingency lodging).

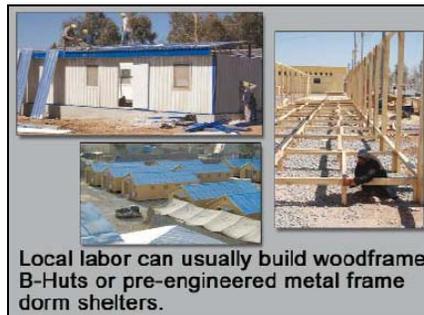
Figure 5.3. Hangar Facility Used for Initial Field Lodging.



5.6. Locally Constructed or Portable Modular Buildings. SV commanders must determine with CE, CCOs, and theater planners if local contracts are available to provide modular buildings to improve QoL. Some locations have found that local contracts can provide raw materials or labor needed to replace WRM facilities. Simply put, local labor is able to construct many single story contingency buildings and shelters. However, since local construction standards, skills, and materials are sometimes poor. SV personnel at earthquake-prone or severe-weather locations may not be able to consider using locally constructed facilities. Other locations have found that trailers or

modular facilities are available, and these can be a good choice for many SV facilities, especially contingency lodging. For a long-term presence, especially if bad or extreme weather conditions are a problem, it may be a more sound approach to order and erect larger pre-engineered metal buildings, modular structures, heavy-duty fabric shelters, and K-Span structures as pictured in [Figure 5.4](#). These facilities can provide SV with space for larger storage, contingency lodging (especially transient lodging), DFACs, and multi-purpose fitness and recreational functions.

Figure 5.4. Contract Support Used for Contingency Upgrades.



5.7. Site Layout. The basic layout concept is to have the flightline operations facilities and shops, heavy equipment and industrial support, and aerial port operations along the ramp. Administrative offices are located between the ramp facilities and the lodging facilities. Lodging should be located in areas that are high, dry, have relatively flat ground, and have good drainage. To minimize noise and dust, keep main roadways to flightline and industrial areas away from lodging areas ([Figure 5.5](#)). Some locations will have areas for future expansion of lodging. In some cases this is not feasible and lodging support for newer missions may have to be on the other side of a ramp, to a geographically separated area, or near industrial or storage areas (that are free of excessive noise, dust, and lighting). While this can create duplication of efforts and facilities, it may be unavoidable if there is insufficient land to allow for onsite expansion. Ensure supporting UTCs are sized to account for lodging communities that are geographically separated from main base support services.

Figure 5.5. Normal Layout by Groups.

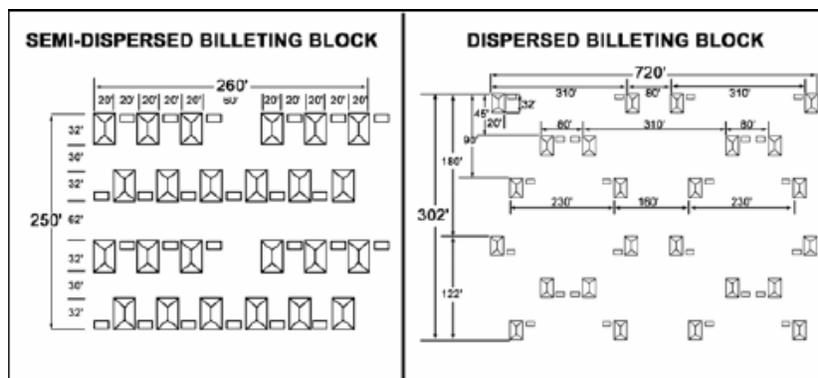
5.7.1. Force Protection and Safety Issues. Coordinate with SF before final layout of lodging facilities and SV community support functions. **Figures 5.5** and **5.6** illustrate differences in layout of lodging blocks (more often referred to as *billeting blocks* by CE). One location used staggered (semi-dispersed) rows, whereas the other employed symmetric rows. Applying different layouts may be required for weather conditions, but using semi-dispersed layout is usually dictated by the threat level.

Figure 5.6. Separate Lodging Community Away from Main Base.

5.7.2. Facility group layouts-number of tents per group. For higher threats, facilities may have to be dispersed into fully dispersed or semi-dispersed

layouts. This can greatly affect the size of the entire lodging community and increase the installation time and efforts for the utility systems that must support the more dispersed facilities. Some dispersal plans may not be fully supportable with the existing utility kits. **Figure 5.7** shows the dimensions necessary to support semi-dispersed and dispersed billeting block layouts for 24-tent/288-person layouts. A primary limiting factor for dispersing facilities within the lodging/general SV support areas is the base electrical and plumbing systems. Work closely with CE if dispersal is required. Modernization efforts that use SSSs versus TEMPER tents should not affect the spacing, but changes to and upgrades of the electrical systems could affect the ability to disperse layouts. BEAR modernization efforts are underway and will affect layout of lodging facilities. Legacy Harvest Eagle based systems and deployments that had to incorporate some older joint service assets have typically been laid out in smaller clusters. Meet with CE to determine if they have adequate resources that make it possible to create the lodging complex as a symmetric block instead of in an older cluster layout.

Figure 5.7. Semi-Dispersed and Dispersed Billeting Blocks.



5.7.3. Accountability of Personnel. Ensure that SV UTC manning matches the flow of incoming personnel. It will help to meet arriving personnel and identify permanent party and transients who might stay over. Lodging managers should work with PERSCO to develop an accurate head count of permanent party personnel. Brief arriving passengers as a group, issue lodging

assignments and linens, and help with luggage issues. Be sure to brief on safety and quarters responsibilities. After the briefing, permanent party personnel may be turned over to first sergeants or their sponsors for additional processing questions.

5.7.3.1. **Locator System and PERSCO Support.** It is best to operate a locator system to account for personnel in base shelters as well as commercial quarters or contingency quarters. Tracking of personnel information and assignment to a bed space is handled on an AF Form 245, *Employment Locator and Processing Checklist* if lodging software is not available.

5.7.3.2. Lodging offices are required to maintain AF Form 245s alphabetically in a file. They will provide one copy of the AF Form 245 to the individual's unit (for development of an alpha roster) and one to the PERSCO team to assist in the management of deployed personnel. PERSCO and SV will maintain alpha rosters for all deployed personnel on location. The AF Form 245 may also serve as a hand receipt for equipment issued from the lodging office, or use an AF Form 1297, *Temporary Issue Receipt*. If initially there are no AF Form 245s, use 3" x 5" cards maintained in alphabetical order, a logbook, or an electronic spreadsheet/database. As a minimum, include the individual's name, grade, Air Force Specialty, and tent number/contract quarters information in the book. Reserve a page for each tent or contract quarter. Assignment tracking is important not only for personnel accounting, but also for issuing or tracking initial support assets (i.e., cots, bedding [except unit sleeping bags], furniture or equipment).

5.7.4. **Quarters Assignments.** During the initial phase of deployments, most units will want their personnel to be lodged close to each other. It is easier for the units to control and account for their personnel when lodged together. Lodging managers should make every effort to assign unit personnel in their own sections and workers that work the same shift together. Lodging managers should ensure crew rest and crew integrity is maintained. Similar type aircrews, and aircrews scheduled on the same flights, should be kept together. Set up aircrew quarters in an area adequately separated from noise, lighting, traffic, and other disruptions that would interfere with crew rest.

5.8. Laundry/Linen Operations. Even during the initial phase of deployment, you should have already ordered or have on-hand heavy-duty, high-efficiency washers and dryers as part of a WRM laundry system. REMEMBER that higher spin rate washers require shorter drying times. Make up for any shortages in these systems and consider obtaining package systems within the modular structures. The installed units should be high-efficiency, commercial-duty washers and dryers wired for either dual power or to match the predominant power supply used on base. Equipment should have spare parts and maintenance contracts when available. Order and stock spare washers and dryers. Determine how many spare washers and dryers are needed based on rates of use and any savings from not having to contract for additional capacity. Meet with CE and determine a realistic, acceptable standard for repairing machines and having machines out-of-order. You may find that having 20-40 percent of a type of machine (washer or dryer) down for a certain number of days is acceptable. You also need to establish a system for self-identifying or having someone report equipment that is out of service. Users should be able to quickly notify you that a repair or replacement is needed.

5.8.1. Self-Help Laundry Planning Factors. The BEAR 550I has a playbook option UTC XFBLS that has two self-help laundry centers that combined have 10 washers and 20 dryers to support 550 personnel (**Figure 5.8**). The system is equipped with benches, laundry products with instructions for basic *Do's and Don'ts*, folding tables, trash receptacles, and temporary hanging racks/lines/hooks. If self-help laundries become a minor gathering place, then consider providing some amenities, such as a covered porch with additional chairs, small tables, additional lighting for reading or card games, and even a rudimentary sound system for radio and music from Armed Forces Radio and Television Service (AFRTS) or other accessible channel.

5.8.2. Sustainment Operations. Sustainment is the time to ensure you have enough capability to provide laundry support even if there are problems with contracts. It means working with CE to overcome problems with providing self-help laundries with improved power and water. After living in austere conditions and having no laundry support except self-help washers and dryers—SV planner's can raise the QoL of laundry and linen support by using

civilian contractors. The major emphasis for sustainment laundry and linen support is to obtain contracts to support linen and, when possible, for laundry if able to obtain three to four day turnaround on clothing. If limited by on-base water and power problems, then seek off-base contracts. Having adequate self-help laundry centers is still a requirement even with adequate contract support. Providing deployed personnel with the ability to quickly wash and take care of items is not only a convenience, but can greatly cut down on the number of items included in standard contracts.

Figure. 5.8. Self Help Laundry.



5.8.3. Establishing Contract Laundry/Linen. The first thing to check when considering a contract is the availability and adequacy of contract laundry services. Meet with your Contracting Officer to determine available methods (example: local contract, central theater contract, one of the three contractor augmentation program, etc.). Based on populations and organizations, calculate total weekly laundry loads based on types of laundry service required (personal, medical, and organizational), as well as linen/bedding service requirements.

5.8.3.1. The War and Mobilization Plan (WMP) Services Supplement planning factors for laundry are: (1) personal laundry of 17 pounds per person per week (pppw), (2) medical patients and medical personnel of 32 pounds pppw, and (3) organizational bulk laundry of 10 pounds pppw (determine if

there are any short or long term geographic, weather, or medical factors that would require adjusting the WMP factors). For arid regions, the availability of water could affect laundry services during the initial beddown until all sources are developed. Determine if contract, medical, self-help and organizational laundries, or a combination of these will be required. If contract services are provided, then the main issue is to site facilities and develop procedures for pick-up and drop-off of clothing, linen, and bedding.

5.8.3.2. Location of Drop-off/Pick-up Points(s). Locate drop-off and pick-up points at easy to find locations. Laundry services guidelines must be established and posted where customers can clearly see them.

5.8.3.3. Types of Service Required/Available. So far, this section has covered two types of laundry service available during the sustainment phase. Self-help service that provides personnel the equipment and supplies for washing their own clothes; locally procured commercial units, which SV maintains and cleans certain organizational linen. In addition to these services, you may deal with the following types of service.

5.8.3.3.1. Dry Cleaning. This service may or may not be available depending on the deployment location. If a contractor is accessible, try to obtain dry cleaning service as a QoL improvement.

5.8.3.3.2. Medical Support. Medical laundry support will be required when a medical unit is located on the base. Normally, one two-washer commercially procured unit can wash 100 pounds of clothes at the same time. The time for a complete cycle varies by setting, and the medical cleaning cycles tend to run longer than standard linens. Medical cleaning may require a 40- to 55-minute cycle and some products can not be washed together, preventing maximum loading of commercially procured units. Based on the medical population for an expeditionary medical system (EMEDS) unit, calculate how many two washer/two-dryer commercially procured units will be required. **Table 5.2** outlines planning factors for various size EMEDS.

5.8.3.3.2.1. Whether you obtain armed forces (preconfigured) commercially procured laundry systems or work with CE to create a commercially procured system, the equipment is less of an issue than providing effective medical laundry support. Medical laundries have higher cleanliness needs

and present greater hazards (i.e., medical biohazards) than normal laundry. Some biohazard clothing and linens must be segregated and maintained separately prior to cleaning, this presents logistics problems for the medical unit, SV, and the transporters. Obtain contract support when possible, but keep in mind that using off-base contractors may cause security and cleanliness concerns.

Table 5.2. Planning Load Factors for Various Size EMEDS.

<i>EMEDS Designation</i>	<i>Amount of Laundry (pounds per week)</i>
EMEDS Basic = 4 Beds	1,000
EMEDS + 10 = 10 Beds	2,000
EMEDS + 25 = 25 Beds	3,600
EMEDS + 50 = 50 Beds	9,000
EMEDS + 114 = 114 Beds	20,920

5.9. Sustainment and Quality of Life Planning. The Prime RIBS contingency lodging manager's primary goals for sustainment operations are to improve field lodging conditions; promote health, safety, and morale; and also meet mission and AEF rotational surge requirements. Enhancements for QoL must be made with consideration for promoting health, safety, and morale. Lodging managers seldom have the luxury of being able to lease three- and four-star hotels or large fixed facilities for deployments. Most deployments will use WRM deployment packages from the AF or Army. Depending on whether your location becomes a long-term support location and allows upgrading to permanent facilities or remains a short-term location that retains WRM assets, there are several approaches to improving QoL. Deployment funding is usually limited, so the quality of contingency lodging will usually be expected to be lower than in CONUS.

5.9.1. Basic QoL Improvements. Basic ways to improve QoL for deployed personnel within shelters and facilities revolve around several factors such as individual/individualized space, individual storage, improved beds, common areas with shared furnishings, and added amenities. Each of these factors can be juggled to help improve QoL and comfort. There are also basic ways to

improve QoL outside of each person's lodging area by improving or providing for common covered rest areas, walkways, and access and convenience to support facilities (latrines, shower-shave areas, fitness and recreation, laundry and dining facilities, etc.). Except at large, long-term locations that take on forward operating base (FOB) status with fixed facilities, control of contingency lodging will remain primarily with SV, working with unit first sergeants. This is especially important to remember when you are working with joint service and coalition forces.

5.9.1.1. It is wise to review and adjust allocation of space as necessary for each AEF rotation for increase-decrease in mission forces. Units and first sergeants must provide correct information on the number of personnel in their units and accurately forecast the number of personnel coming in to replace them during a rotation. A large difference in space per person between various units creates morale problems and can waste critical resources.

5.9.1.2. There are basic minimum standards that should be sought during sustainment. Contingency lodging space is based on a standard 20-foot by 32-foot, four-section TEMPER tent, or a 20-foot by 32.5-foot, five-section SSS. Sustainment planning should provide lodging requirements as outlined in [Table 5.3](#). If more permanent type facilities such as prefabricated or hardwall facilities are planned and budgeted for, obtain a suitable facility within contingency construction budgets. Facilities should be sized to meet minimum requirements.

5.9.4. When purchasing sustainment items, necessities such as twin bed frames, linens, mattresses, and lockers should be purchased with appropriated funds (APF)s. Determine if amenities (such as iron and ironing boards, desks, chairs, etc.) are necessities to be funded from APFs. It may be possible to purchase items like alarm clocks or clock radios and bed lamps; however, these items are not necessities or even normal amenities for contingency operations, especially when there are power limitations. Some of these items are personal preference items (i.e., not commonly used or wanted by all members), and can become noise or light nuisances within a small confined shelter without partitions. For visiting Distinguished Visitor (DV) quarters, provide alarm clocks if clock radios are not feasible due to lack of available radio stations.

Table 5.3. Contingency Lodging—Basic Minimum Standards.

Deployment phase	Space		Bedding	Storage and other	Amenities
	SF per person	Persons per fabric shelter			
Initial Beddown Surge	40	20	Sleeping bag & cot	None	None
Operate	~55	12	Sleeping bag & cot	Wall lockers	None
Operate (Flight Crews)	80+	No more than 8	Sleeping bag & cot	Wall lockers	None
Sustainment using fabric shelters	80+	8	Twin bed w/frame & mattress, blankets, linens, & pillows	Wall lockers	One common area w/limited or no rations per shelter. To have several small chairs & one iron/ironing board.
Sustainment using fabric shelters (cont.)	N/A	8	Bunk beds w/mattress, blanket, linens & pillow	Wall lockers & shared night stands	One fabric shelter to be used as common area shared by 10 fabric shelters.
Sustainment using pre-fabricated or hardwall facilities	80+	—	Twin beds w/mattresses, blankets, linens, pillows	Wall lockers & night stands	One common area per floor w/TV-DVD, desk & chair, small chairs, & one iron/ironing board.

Deployment phase	Space		Bedding	Storage and other	Amenities
	SF per person	Persons per fabric shelter			
Sustainment (flight crews)	~105	No more than 6	Twin beds or bunk beds w/mattresses, blankets, linens, pillows	Wall lockers & night stands	Limited partitions; several small chairs, 1 iron/ ironing board or same as Sustainment using prefabricated facilities.
Sustainment (flight crews in hardwall shelters)	~110		Twin beds w/mattresses, blankets, linens, pillows	Wall lockers & night stands	One common area per floor with TV-DVD, desk & chair, small chairs, & one iron/ironing board.
Rotational Surge (using spare bunk bed spaces)	Try to provide 40+	No more than 16	Beds w/mattresses, blankets, linens, pillows	Any lockers that fit	Share w/existing personnel

Rotational Surge (using any available shelter)	Try to provide at least 40	Use whatever size shelter that available	Cots & sleeping bags or beds w/mattresses, blankets, linens, & pillows if available	None	None
Deployment phase	Space		Bedding	Storage and other	Amenities
	SF per person	Persons per fabric shelter			
Visiting DV plus common area	~110	4	Twin bed w/mattress, blankets, linens, & pillow	Wall lockers & night stands	Partitioned rooms w/desk & chair, clock radio, iron & ironing board; common area with 1 or 2 lounge chairs, small couch, TV-DVD, & table

Installation & Senior Group CCs (for a common area for small working meetings)	~110 to 150	4	Twin bed w/mattress, blankets, linens, & pillow	Wall lockers & night stand	Same as DV. Partitioned rooms w/desk & chair, clock radio, lounge chair, iron & ironing board; common area with several folding chairs, two lounge chairs, table, & TV-DVD.
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5.9.4.1. Due to the potential for rapid population growth during the Establish- and Operate-the-Airbase phases of deployment, there may be a mix of expandable shelters, trailers, WRM shelters, and some existing fixed facilities used for contingency lodging. During sustainment, new hardwall structures may be added.

5.9.4.2. Prime RIBS lodging managers must work with first sergeants to allocate amenities and space. Take additional efforts to prevent both perceived and actual difference in levels of support and quality, which could lead to morale problems.

5.9.5. Sustainment is a time to improve the accessibility of various support areas (e.g., DFACs, recreation, latrines, shower and shave units, etc.) for personnel in contingency lodging. If the sustainment mission population is lower than the initial beddown estimates, this provides an opportunity to expand and alleviate tightly-spaced tent city communities and regroup personnel by mission and function, after mission populations stabilize.

5.9.5.1. Maintain good records regarding numbers of personnel supported to allow replacement and upgrade planning of latrines, showers, and shave facilities that support the lodging complex. Even though most unit populations may remain relatively stable, there is occasionally a rotational surge when one AEF rotation is arriving and the other departing, after a short overlap. There is no set way to handle this overlap surge. Sometimes the major surge

population can be accommodated with extra space provided by bunk beds. Sometimes larger multipurpose shelters within the community area can be used with cots and sleeping bags or spare frames and mattresses.

5.9.5.2. A common QoL concern during rotational changeover is to ensure that the incoming rotation does not inherit dirty living quarters from the outgoing rotation. SV lodging managers must work closely with first sergeants to ensure all quarters are cleaned and areas around them are maintained. If contract support personnel are available, they can help with general cleanup, trash removal, and moving furnishings and bedding for any space or equipment reallocations.

5.9.6. If all units do not rotate at the same time, which is common with joint operations, avoid moving large groups of personnel in a mass shuffle in order to reallocate space and reorganize units. If mass shuffles are required, try to limit them to once a rotation (for the rotation being moved). Of course, there is less resistance to mass shuffles if the moving personnel are going into an area that is more desirable to them. Again, this may be accomplished by providing more amenities, a more convenient location, more living space, and common areas outside the shelters. —◆—

Chapter 6

MORTUARY AFFAIRS

6.1. Overview. The AF Mortuary Affairs (MA) program provides support across the full range of military operations and is divided into three distinct programs—Current Death Program, Concurrent Death Program, and Temporary Interment. Components of these programs include search and recovery (S&R), identification, transportation of remains, management of government mortuary facilities and mortuary services. See the following publications for more detailed information concerning mortuary affairs; [JP 4-06, *Mortuary Affairs in Joint Operations*](#), [AFI 34-242, *Mortuary Affairs Program*](#), and [AFI 34-244, *Disposition of Personal Property and Effects*](#).

6.2. Current Death Program. The current death program operates worldwide during peacetime. Under this program, human remains are returned to a place designated by the person authorized to direct disposition (PADD) for permanent disposition. The decedent's personal effects (PE) are shipped to the person eligible to receive effects (PERE) in accordance with Service regulations and procedures.

6.3. Concurrent Return Program. Under this program, eligible personnel are provided with professional mortuary services, supplies and related services during peacetime and contingency or wartime operations. The Concurrent Return Program provides for search, recovery and evacuation of remains to a mortuary, where remains of eligible personnel are identified and prepared as designated by the PADD and shipped to the final destination for permanent disposition. **NOTE:** This program may continue during a major military operation if tactical operations and logistics permit.

6.4. Temporary Interment. Temporary interment is only permitted as a last resort; every effort should be made to evacuate remains as soon as possible. Situations that may require temporary interment include weapons of mass destruction, hostilities, transportation shortages, a large number of remains that overwhelm manpower capabilities, insufficient capability to decontaminate remains, or insufficient refrigeration space. Unit commanders must obtain permission from the geographic CCDR to conduct temporary interment

operations. When circumstances warrant temporary interment, every effort should be made to return human remains to the respective nation as soon as possible. When interment is required, separate interment sites should be established for burial of US, allied, coalition and enemy deceased. When interment occurs and remains are to be transferred from interment sites, commanders will maintain records and provide information for friendly or enemy deceased for which they have responsibility.

6.4.1. Selection of Temporary Interment Site. The site should on high ground with good drainage, free of large obstacles, away from main roads and populated areas, free from flood zones and have adequate soil depth above the water table. CE will determine what equipment is available to perform required tasks for the types of soil and local conditions. The layout should be site specific and not necessarily strictly follow book values for spacing and depth. Enough space must be provided between rows to prevent equipment from caving in or sliding into the trenches when excavating and covering the remains. Engineers may also be required to assist SV personnel when placing row markers. The location of temporary burial sites should be determined during the "Operate the Airbase" FM. The primary and alternate sites for temporary burial locations should be clearly identified using grid coordinates. The site selection should be coordinated between CE and SV. **Note:** In operations in which US Army forces are involved, the Army component commander is ordinarily assigned responsibility of operating temporary interment sites.

6.4.2. Interment Site Dimensions. Temporary burial sites do not contain individual graves, but will consist of straight rows (trenches). The number of remains will determine the number of sites needed. No more than 10 remains, head to foot lengthwise, will be placed in each trench. The rows will be 70 feet long, 3 ½ feet deep and 3 feet wide. For contaminated remains, the depth should be 6 1/2 ft and trenches should be 80' long. A distance of 3 feet between trench rows will be maintained. The base civil engineer will provide mechanical trenching, or other earth moving equipment, with operators. Separate rows will be used for US, allied and enemy decedents.

6.4.3. Support from Other Organizations. There will be a number of organizations ready to help when needed. The following organizations are avail-

able to assist: US Army, AF mortuary, the AF Services Agency, CE, Logistics, Transportation, SF and the AF Medical Examiner (AFME).

6.5. Beddown Operations. Preliminary mortuary capabilities should arrive during the initial 24 hours of a deployment with the LWRRA team and the LWRRG kit. Support for S&R builds with the flow of UTCs within the overall FM flow for deployment.

6.6. Roles and Responsibilities. Each Service is responsible for MA support, to include identification and disposition of human remains and PE, for its own personnel unless otherwise directed by the geographic CCDR or mutual support agreements between the Services. In all cases, the direct initial contact with family members of deceased personnel is performed by the parent service. The Coast Guard is the only service that does not provide MA capability to its units overseas during combat operations; it relies on the geographic CCDR for support. The Army also provides ground force collection point (CP) support and general support (GS) to Coast Guard units as needed. However, the Coast Guard provides or arranges its own MA support in the CONUS and during peacetime.

6.6.1. The Armed Forces Medical Examiner (AFME) System. The roles and responsibilities of the AFME are outlined in Title 10 US Code Section 1471, [DODD 5154.24, *Armed Forces Institute of Pathology \(AFIP\)*](#), [DODI 5154.30, *Armed Forces Institute of Pathology Operations*](#), and implemented by multi-Service regulations ([Army Regulation \(AR\) 40-57/Bureau of Medicine and Surgery Instruction \(BUMEDINST\) 5360.26/Air Force Joint Instruction \(AFJI\) 44-111, *Armed Forces Medical Examiner System*](#)). In general, the AFME has the authority to conduct a forensic pathology investigation, including an autopsy, of the death of any military member serving on active duty where the Federal government has exclusive jurisdictional authority, including where the circumstances surrounding the death are suspicious, unexpected, or unexplained. Normally, the AFME operates as a supporting agency to the CCDR. The AFME coordinates with the CCDRs and SV to determine if support is required.

6.6.1.1. In wartime, the AFME will review every case to determine the cause and manner of death. AFME secures information for completion of military

records, protects the welfare of the military community such as in the investigation of novel wounding agents or possible “friendly fire” or when the service member is an aircrew member and the death occurs during flight operations but not as a result of hostile fire. The AFME, in consultation with relevant law enforcement, intelligence, and safety agencies, and the geographic combatant or subordinate JFC, has the authority to order such autopsies in the operational area or upon the return of human remains to other locations (CONUS/ Outside the Continental United States [OCONUS]).

6.6.1.2. When a detainee death occurs, the commander of the detention facility or the unit exercising custody over the individual will coordinate with the AFME, who will determine whether an autopsy will be performed. The human remains shall not be released from US custody without authorization from the AFME and the responsible commander.

6.6.1.3. The AFME has the expertise in the fields of forensic sciences and provides consultative support to the Services in the identification process. These techniques include anthropological comparison, dentition comparison technology, and deoxyribonucleic acid (DNA) testing. The AFME also provides medical certification for cause of death and manner of death. SV and combatant commands may request from the AFME assistance in the identification of any human remains.

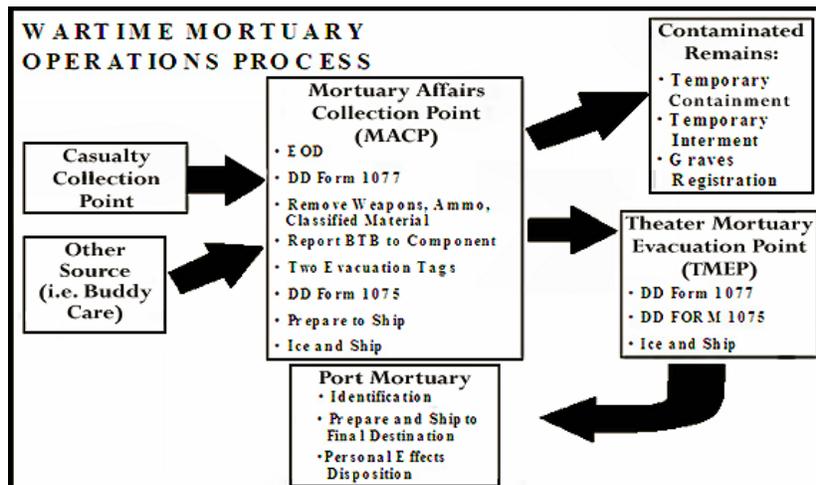
6.6.2. Port-of-Entry Mortuary Facility. Dover Air Force Base port-of-entry military mortuary is operated by the AF and handles most human remains returned from OCONUS. Human remains are embalmed (if necessary), dressed, casketed, and prepared for shipment. Coordination is made with SV to arrange for disposition of the human remains as directed by the PADD. During military operations or mass casualty/fatality incidents, the CONUS military port mortuary can be activated to completely process human remains. This can include autopsy and/or medical examination when supported by the AFME. The Federal Bureau of Investigation also provides support for identification of human remains as required.

6.7. Health and Safety Concerns. Ideally, human remains should be left in place until a trained investigator can document their location, condition, etc. However, for humanitarian, jurisdictional, and practical reasons, there is

usually pressure to promptly remove human remains from a scene, so the Interim Safety Board and/or recovery/rescue personnel may not wait until the full Safety Investigation Board has assembled. Additionally, in some climates, it could be essential to the health and safety of those working in the vicinity of the wreckage to promptly remove remains.

6.8. Flow of Remains. Figure 6.1 illustrates flow of remains and subsequent paragraphs outline the flow of remains from the CCP to the Port Mortuary.

Figure 6.1. Flow of Remains.



6.8.1. Casualty Collection Point (CCP). The CCPs are normally located near a medical facility and managed by medical personnel. A SV representative will normally coordinate with the CCP to begin actions to receive remains. A competent medical authority is required to declare death at the CCP.

6.8.2. Mortuary Collection Point (MCP). The MCP's main purpose is to move remains, including PE found on the person and other accompanying PE, to the Dover AFB port mortuary as quickly as possible for processing and identification (bag, tag, encase and ship). Inventory all PE to include items attached to the remains (rings, necklaces, etc) and items found in the

pockets (wallet, money, etc). Rings, watches, necklaces, ID (dog) tags should not be removed from the remains, but must be included on the inventory. PE removed from pockets and inventoried must be placed in PE bags (Ziploc) and attached to the remains.

6.8.3. Theater Mortuary Evacuation Points (TMEPs). TMEPs are established to evacuate all remains and accompanying PE to a government mortuary.

6.8.4. Aerial Port. The aerial port will receive remains from the TMEP, record them on DD Form 1077 and ice remains for shipment if practical. The remains will be shipped to Dover AFB port mortuary. **Note:** Remains may flow directly to Dover AFB port mortuary.

6.8.5. Port Mortuary. SV specialty teams will receive remains at the port mortuary at Dover AFB. Members will be given port mortuary training for the tasks being performed at the mortuary.

6.8.6. Personal Effects. The Mortuary Officer is totally responsible for handling and disposing of the PE of deceased personnel. Mortuary personnel have no authority to arbitrarily destroy personal effects. If remains are being shipped to a port mortuary, all PE should be shipped with the remains to the port mortuary. Port mortuary personnel should contact HQ AFSVA/SVOM to obtain instructions from the authorized recipient and if any problems arise with shipping remains or PE. **Note:** CENTCOM procedures take precedence when the Army is the executive agent of the Mortuary.

6.9. Facilities and Equipment. BEAR housekeeping sets include one TEMPER tent or small shelter system designated for mortuary purposes.

6.9.1. Site Selection/Location of the MCP. The MCP should be physically separated from the main living and working areas and should have natural or artificial cover to screen it from casual view. The location should have an access road for vehicles and sufficient space for processing and holding areas. The MCP should have a water supply, proper drainage, a power source, adequate lighting, good ventilation, and refrigerated storage capability. The layout of the MCP follows a strict configuration that ensures no steps are overlooked. Refer to JP 4-06 for detailed information on facility layout. A perimeter should be established to prevent unauthorized personnel and news

media from entering the area. AFH 10-247, Volume 4, *Guide to Contingency Planning: Mortuary Affairs Search and Recovery* offers more detailed information about site planning.

6.9.2. Water, Power, Waste Products. CE will ensure the MCP has running water and power. The water run-off will be captured in a containment berm underneath the tent. The containment berm encompasses the circumference of the tent. The run-off will be pumped into a containment bladder for later disposal or a sump may be used. The sump should be lined with a CBRN protective cover to prohibit seepage into the ground.

6.9.3. LWRRG UTC Mortuary Items. Listed in [Table 6.1](#) are items included in the LWRRG UTC. All items are to be packed in the transfer case along with recreation items also listed in this UTC.

Table 6.1 LWRRG UTC Mortuary Supplies.

<i>ITEM</i>	<i>QTY</i>
Pouch, Human Remains	10
Case, Transfer	1
Hammerless Survey stake 20" (100 per case)	10
Flags 2 colors (324 per case)	4
Piggy back splicer (100 per case)	1
Convertible gear bag (Back-Pack)	5
Certificate of Death Overseas (DD Form 2064)	100
Collection Point Register of Deceased Personnel (DD Form 1077)	50
Convoy List of Remains of Deceased Personnel (DD Form 1075)	50
Interment/Disinterment Register (DD Form 1079)	50
Log Book, Record	1
AFI 34-242, AF Mortuary Affairs	1
Joint Pub 4-06, <i>Mortuary Affairs in Joint Ops</i>	1
Bed Sheets (dozen)	1
BAG, PLASTIC, 18 X 12 IN. (MX)	1
Tags, Cloth w/ Tie (HD count)	50
Gloves, Leather Workman's (Lg)	40

<i>ITEM</i>	<i>QTY</i>
Bag, Plastic, 36 X 54 In (MX)	1
Bag, Plastic, 6 X 8 In (MX)	1
Gloves, Surgical (Med) (50 Ct)	6
Gloves, Surgical (Sm) (50 Ct)	6
Mask, Surgical (50 Ct)	6
Apron, Plastic (Ea)	15

6.10. Search & Recovery (S&R). S&R capabilities are primarily built when sustainment operations begin, but SV personnel should train to provide at least an initial cadre capability for S&R during the establish the airbase phase of beddown.

6.10.1. Most response team preparations have historically been based on the response to a mishap involving military personnel and military aircraft. However, deaths caused by other fatal occurrences (i.e., ground transportation mishaps, fires, enemy or terrorist attacks, or natural disasters) could require S&R. Response to these events should be handled with procedures similar to those involving aircraft mishaps. Develop base and unit OIs that define roles of the major responding members. Be aware that wing plans for disaster responses will also cover many aspects of responses where S&R operations will be employed. The wing plans and unit OIs must be compatible. S&R pre-planning should address: (1) having a workable team roster with recall procedures; (2) an updated list of supporting agencies (including AFSVA/SVOM); (3) standard sets of reporting procedures and locations; (4) a full set of checklists for confirming availability of the equipment, supplies, communications, and transportation requirements; (5) standard safety and security procedures; and (6) identifying the types of facilities for holding, tentatively identifying, and examining remains.

6.10.2. Based on the type of terrain and scatter of wreckage and remains, determine the possible and feasible primary method or methods for search and recovery. Details on actual search methods (i.e., standard area sweeps, lane sweeps, grid searches, crater-impact area searches, and building room-hallway searches) are presented in AFH 10-247 Volume 4, *Guide to Services Contingency Planning: Mortuary Affairs Search and Recovery*, Section 4.

6.10.3. Required Personnel. Maintain competent, trained S&R team and ensure the team is appropriately staffed to conduct continuous S&R operations with 26 personnel operating at any given time (2 teams of 13-persons each).

6.10.4. Select team leaders from the SV organization based on experience, training, physical ability and mental attitude. Ensure team members are trained in human anatomy and the ability to recognize portions of human anatomy.

6.11. Mortuary Affairs Decontamination Collection Point (MADCP).

The Army, as the Executive Agent for Mortuary Affairs, has dedicated decontamination teams and is responsible to respond to all contamination events. They are responsible for decontamination and certification of remains as decontaminated prior to transport out of the AOR or within CONUS. If a chemical, biological, radiological, or nuclear (CBRN) threat exists, they may set up a MADCP. The Joint Mortuary Affairs Office (JMAO) acts as the theater central point of contact for coordination for this operation.

6.11.1. Air Force SV personnel may be assigned to support MADCP operations. These personnel must be thoroughly trained in CBRN defense and use of personnel protective measures and personnel detection. Although all SV personnel have knowledge of and capability to utilize protective gear (MOPP levels), the first personnel considered to support MADCP operations are the specially trained Fatality Search and Recovery Teams (FSRTs). These teams will conduct operations under the guidance of the Army MADCP personnel.

6.11.2. FSRT capability resides both in the active duty and Air National Guard (ANG) components. (See [Chapter 9](#) for more information on FSRT). Each component has ten 11-person teams specifically trained to conduct search and recovery operations in a CBRN environment. These teams must rely, however, on other duty specialties to provide specific information regarding the threat and required MOPP level to operate safely.

6.12. Other than MADCP Operations. If a CBRN incident occurs, and the Army cannot respond, the SV Mortuary Officer must ensure recovery site operations outlined in FM 4-20-64, Mortuary Affairs Operations, are followed. Once contaminated remains are determined safe to handle by EOD,

the recovery may begin, and remains are placed in a chemical-biological (CB) human remains pouch, if available. If not, double bag the remains, to minimize the spread of contamination. The remains must be appropriately tagged, including annotating applicable forms and markers to indicate the type of contamination. Personnel evacuating contaminated remains to a MADCP must remain in PPE and vehicles or other transportation used to evacuate contaminated human remains must be monitored and decontaminated as required. If remains cannot be transported to the MADCP, temporary refrigerated storage (contain) is the first option. If not possible, permission for temporary interment must be gained from the theater combatant commander. —◆—

Chapter 7

FITNESS AND SPORTS, RECREATION, LEARNING RESOURCE CENTER (LRC), AND EXCHANGE SUPPORT

7.1. Overview. SV forces must be prepared to fulfill their mission across the spectrum of conflicts and under a full range of environments. In addition to providing core capabilities of feeding operations, lodgment of forces, and mortuary affairs, SV forces are also required to keep Airmen fit to fight, regenerate Airmen, keep Airmen connected to the outside world, and host field exchange programs. This chapter addresses some common aspects of delivering these important morale, welfare, and recreation services to a deployed population. Keep in mind throughout this chapter that the quality of the service you provide is only limited by manpower, equipment, and inventiveness you can apply to the deployed situation.

7.2. Force Module Phase. Planners should expect that the major components of the SV capability for supporting fitness, recreation, resource centers, and Exchange support will begin arriving in the Operate the Airbase force module. While obviously subordinate in priority to the more immediately necessary functions such as food service and lodging, build up for these morale boosting services should be provided as soon as feasible. Personnel and UTC support for these recreational functions is based on the deployed population and not the number or type of aircraft deployed to the location. Keep in mind that the level of recreation you can provide will partially depend on the local threat and level of hostilities at your location. Hostile environments often do not allow fully functioning fitness and recreational activities. Use the information in [Table 7.1](#) as a guide for what to expect.

7.3. Beddown Support. Upon arrival at the deployed location, begin reviewing, and modifying your predeployment plans as necessary to meet site conditions. Many predeployment plans can be implemented with minor modification, except as influenced by the flow of resources or changes that may have occurred while in transit. If deployed to a joint task force, immediately determine who is currently in charge of the location.

Table 7.1. WMP 1 Services Programming Chart.

<i>SPORTS & FITNESS</i>	<i>RECREATION</i>	<i>LIBRARY</i>
HOSTILE ENVIRONMENT		
None. Intense labor conditions will not allow fitness activities.	Paperback books, playing cards & board games.	Paperback book Kit.
LOW SCALE HOSTILITIES		
Self-directed programs with deployment kits. Initiate a fitness center facility.	Establish recreation tent, library, movie operation & resale operation.	Paperback book kit, Periodic kit, Video (20 per 100 people), CDs (10 per 100 people).
SUSTAINMENT		
Self-directed and directed programs, leagues and tournaments. Mirror home station programs where possible.	Expanded programs and activities. Ticket and tours program and lounge operation where possible.	Paperback book kit, Periodic kit, Core Reference – 22 Titles, Education support (DANTES and CLEP materials, plus materials to support locally sponsored courses). Videos (20 per 100 people), CDs (10 per 100 people).

7.3.1. Establish points of contact with other base units to ensure mutual support despite what may be various plans and levels of authority.

7.3.2. It is important to maintain control of resources. Although Logistics or CE is ultimately accountable for WRM assets, SV is responsible for assets under their direct control. As in other elements of beddown, accountability for pallets, crates, containers, and special packing materials is essential for reconstitution. Controlled items must be accounted for prior to transferring to gaining units.

7.4. Facilities and Shelters. Fitness, recreation, and resale/exchange facilities should be laid out in a centralized area near main paths of travel to dining facilities. If serving a joint operation, determine with other service counterparts what assets are being shipped in and where they should be posi-

tioned to better serve overall resale, fitness, and recreational needs. When possible, plan to locate satellite resale functions near the flightline and primary work areas.

7.4.1. Fitness and recreation facilities are usually erected from TEMPER tents, general-purpose shelters, or the newer Small or Medium Shelter Systems. When possible, establish a large SV resale operation or an AAFES Direct Operation Exchange–Tactical (DOX-T) in highly secure facilities with hard-walls, such as an expandable shelter container, modular facility, or mobile trailer unit. If hard-walled facilities are not available, tents (one for resale and one for storage) may be used, but must be secure.

7.4.2. Fitness, recreation, resale, theater, education, and library facilities/services all add to the QoL at a bare base. Realistically, most of these “sustainment” functions cannot be initially supported at the level desired by patrons because delivery of higher priority mission equipment precludes it. **Figure 7.1** illustrates the difference between initial and a more sustained level of support.

Figure 7.1. Interim Program versus Full Scale Fitness Facility.



7.4.3. Meeting QoL needs should be reviewed after transportation flow becomes predictable. Until then, determine what the current highest priorities are at your location. Users' needs will be somewhat governed by the unique environment of the bare base and your ability, or lack there of, to obtain equipment and support by contract before all UTC equipment sets arrive.

7.4.4. Plan to improve facilities once operations have reached full operating capability. Submit work orders to CE requesting facility improvements.

7.4.4.1. Hard-walled shelters not only protect equipment, but can also provide force protection features.

7.4.4.2. Modular buildings make great facilities for housing computers with built in delicate electronics. These shelters can typically seal out dust and water very well.

7.4.4.3. A low cost alternative is to utilize coalition or host nation assets. When coalition or host nation facilities are used, establish a memorandum of understanding in writing to determine who will be responsible for what and file it for future rotations to use.

7.4.4.4. Attempt to secure a contract for cleanup, towel support, and trash pickup. Order quality vacuum cleaners and have contract help use them as needed to keep sand and dirt away from equipment. Develop a monitoring system that allows users, military volunteers, and contract helpers to keep track of and report maintenance or cleanliness problems with individual machines and surrounding areas.

7.5. Keeping Airmen Fit to Fight (Fitness). Fitness personnel design exercise programs, procure equipment, maintain equipment, provide mental and physical health maintenance, stress relief, and healthy diversions from combat activities through self-directed and directed exercise programs. Fitness operations adapt both outdoor and indoor facilities to provide exercise opportunities that keep Airmen fit to fight. Initially, fitness infrastructure is austere, but progresses in scope as equipment is procured and facilities are improved.

7.5.1. Fitness Equipment. Planners should expect that fitness equipment at remote locations will be used 24/7. This, combined with the harsh environmental conditions, will result in the need for more frequent repair and replacement than equipment at a CONUS base. To be proactive, fitness personnel should try to obtain high quality equipment and provide more frequent and aggressive operator-level care and maintenance.

7.5.1.1. Most equipment can normally be obtained using the Defense Logistics Agency (DLA) main support contract. Coordinate with your NAF-C for use of the theater equipment support contract and consider recommendations and experience from nearby bases. This is particularly useful when seeking repair and service contracts, which may be difficult to get. Also, look for opportunities to pick up used equipment from nearby closing bases/units. Ask your NAF-C about redistribution of used equipment as this is usually a faster way to obtain quality items and parts.

7.5.1.2. Depending on the outside temperature and weather conditions at your location, you should expect to have robust cardiovascular training equipment such as stationary bicycles, treadmills, elliptical total body machines, stair steppers, and recumbent stationary bicycles. You will find that some brands of equipment will hold up better than others and is more suited to the austere environment. Free weights for instance are relatively trouble-free, while equipment with moving parts (such as treadmills) are very susceptible to blowing sand and will require constant service and shielding from the elements.

7.5.2. Self-Directed vs Directed Fitness. The Fitness and Sports program should contribute to readiness and improve productivity by promoting total fitness, esprit de corps and quality of life for deployed personnel. To fulfill this intent, activities must have differing levels of involvement and support. The degree of planning and effort involved in providing programs to customers depend on the nature of the activity, mission requirements, customer demand, and available resources. A short deployment may allow only limited programs, while contingencies lasting 6 months or longer require more structured programs (i.e., intramural sports, instructional classes, etc.). Customers can receive service through directed and self-directed activities. Usually a balance of the two works best.

7.5.2.1. Directed activities involve oversight by recreation specialists of SV facilities and equipment. To obtain the desired service, the activity provides customer assistance through either staff or contract services. A popular example is a "combat aerobics" class lead by a fitness specialist or trained instructor.

7.5.2.2. Self-directed activities allow customers to use facilities and equipment provided by the activity without the assistance of fitness and recreational staff. In self-directed programs, players abide by rules they establish and monitor themselves. For example, half-court basketball games.

7.5.3. Importance of sports calendar and programming. Fitness and sports programs are important recreational activities for deployed individuals as well as for the entire AF. Program effectiveness has a positive impact on unit esprit de corps, fitness, and health. There is no restriction in offering the following core sports programs: softball, basketball, volleyball, and flag football. To maximize participation, unit commanders, first sergeants, and section supervisors must be informed. Most intramural programs are seasonal and the calendar is usually kept along the same time frames as collegiate calendars. Geographical locations and weather conditions will invariably affect the schedules for some sports.

7.5.4. Budgeting Forecasts. A 180 day deployment will seem to fly by; however, large quantities of supplies and equipment are consumed. Deployments are hard on equipment because it is used so frequently—expect a treadmill or PlayStation game to be used 18 to 20 hours a day. Every SV rotation should attempt to leave the place in better shape than it was when they arrived. To ensure troops arriving on the next rotation enjoy their tour, the outgoing rotation must correctly budget for the supplies and equipment that are used regularly. [AFH 10-247, Vol 6, Guide to Services Contingency Planning: Resource Management](#) describes in detail the APF and NAF budgets required to robust QoL and sustain operations.

7.5.5. The mission at some locations may require long and strenuous work days, or extreme weather conditions may divert environmental control equipment from morale facilities, making it impractical to support fully equipped fitness facilities. When faced with these scenarios, establish a recreation tent, small library, and movie theater if possible.

7.6. Recreation. Airmen regeneration and recreation provides entertainment and creates diversions from work stress and family separation anxiety by providing decompression and regeneration of Airmen. Recreation provides multiple mediums, virtual, tactile, creative, developmental, directed and self-

directed in its programs. Recreational programming begins in earnest once the base is open for operations.

7.6.1. The overall goal for a deployed recreation and regeneration program should be to develop capabilities that support a variety of activities and obtain permanent facilities that provide better support (**Figure 7.2**).

Figure 7.2. Determine What People Want and Get It.



7.6.2. Recreation comes in many forms and types. Programs should range from self-directed to competition events, along with the capability to provide indoor and outdoor locations; library service for magazines, books, video and sound tapes and CDs; movies, TVs and large screen TVs with more movies; live satellite events and news; phones and computers for morale contacts; simple or electronic games; and tables for foosball, pool, and ping pong. Always ensure you have a large number of replacement balls, paddles, cues, chalk, etc. At some locations, the population size and changes to the mission will require certain facilities to be taken away or added even throughout sustainment.

7.6.3. Equipment List of the LWRRG UTC. The LWRRG has a minimal amount of equipment and supplies that is authorized for purchase before you deploy. It's only enough to get the operation going, for sustainment more items will have to be in the budget and once approved ordered. **Table 7.2** is

a comprehensive list of equipment and supplies (these items are not included in the kit—you must purchase them locally and pack them with the primary components).

Table 7.2. List of Recreation Equipment and Supplies.

<i>Miscellaneous Items</i>	<i>Quantity</i>
Clipboard (Ea)	4
Pencil, #2 Med (Bx)	2
Marker, China Black (Bx)	2
Tablet, Paper, 8 X 10 1/2 (6-Pk)	2
Paper for printing (Bx)	2
Pens (Bx)	2
Paper, Clips (Bx)	1
Tape, Pressure Sensitive (Rolls)	5
<i>Recreation Items</i>	<i>Quantity</i>
Game, Checkers Set (W/Board)	5
Game, Chess Set (W/Board)	2
Dominoes, double nice	5
Game, Table Asst.	5
Card Deck, Pinochle	12
Card Deck, Standard	48
Dartboard, bristle	2
Darts, steel tip (set of 3)	8
Game, Checkers Set (W/Board)	5
Game, Chess Set (W/Board)	2
Dominoes, double nice	5
Game, Table Asst.	5
Card Deck, Pinochle	12

Card Deck, Standard	48
Dartboard, bristle	2
Darts, steel tip (set of 3)	8
<i>Theater in a Box</i>	<i>Quantity</i>
VCR/DVD Combination	1
Video Projector	1
Projector Bulb	1
Speakers (10")	2
Speaker Wire	1
Screen (Fast Fold) 54" X 74"	1
Box, Custom Divided (HD w/ Lid)	1
Microphone, Handheld w/On-Off Switch (Shure SM58-S)	1
Microphone Extension Cable (XRL to 1/4" Jack)	1
Extension Cord (50 Ft)	2
<i>Computer Support</i>	<i>Quantity</i>
Computer Laptop	4
Carrying Case, Laptop	4
Portable printer w/spare toner	4
Extension Cord (25 Ft)	4
Power Strip / Surge Suppressor	4
USB mouse for laptops	4
Admin supplies	1

7.6.4. Programming Recreational Events. Develop morale building events such as open microphone comedy routines, chances to display individual or group musical talents, casino nights, as well as coordinated slide shows highlighting previous base activities. Additional events may include Super Bowl parties, Mardi Gras Festivals, St. Patrick's Day parties, and Reggae Night events. Recreation programs are managed as resources become available,

allowing perhaps the addition of Movie Nights, regular Armed Forces Network broadcasts, ping pong, volleyball courts (with tournaments), horseshoe pits, half-court basketball (utilizing AM-2 matting), foosball, darts and card games (to include tournaments). Provide recreation items such as footballs, Frisbees, chess games, and dominoes.

Figure 7.3. Casino Night.



7.6.5. Vending and Amusement Machines. If your location is not restricted by local culture regarding gambling, you can provide add nominal games-of-chance by obtaining slot and amusement machines. The theater and AFSVA determine the use and availability of AFSVA slot machines, vending machines, and amusement machines in theater. If these machines can be used in theater, first attempt to obtain AFSVA assets. If these are unavailable, obtain local vendor-operated vending and amusement machines, unless there is a conflict with similar AAFES machines.

7.6.6. Scheduling Events. Scheduling events can be cumbersome, especially if SV planners are not coordinating with other competing activities. For example, if the Fitness Center has scheduled an Easter Egg Fun Run on the same day and time the Recreation Center has scheduled an Easter Egg Hunt, one, or possibly both events, may not have the support it would have had if the scheduling was coordinated between the two centers. To prevent sched-

uling conflicts, SV planners should conduct and attend staff meetings regularly.

7.6.7. Knowing Your Customer. Knowing Your Customer. One of the best ways to maximize your programming efforts is to know the customer. By the time you reach full operating capability, it should be known what the customer likes and dislikes. If previous after action reports showed that there was not interest in BINGO during previous rotations, don't put it on the calendar. Get to know customers' likes and dislikes by having one-on-one talks and conducting surveys. Surveying the target audience helps ensure a large percentage of personnel will appreciate the hard work put into the support provided.

7.6.8. Marketing Tools and Calendars. Good marketing and research will help provide successful and effective recreational programs. Use marketing experts to create, publicize, and coordinate your fitness, sports, and recreation activities. Marketing includes surveys, polling, fliers, bulletin boards, local web pages, and handouts. Coordinate with other locations on what has worked in the past and with AFSVA for additional marketing ideas. Also review the Recreation Programming resource library on the AFSVA community of practice website for flyers, program descriptions, planning elements, and weekly and monthly calendars for deployed operations (<https://afkm.wpafb.af.mil/ASPs/CoP/OpenCoP.asp?Filter=OO-DP-AE-12>). After your events are planned, post them on a public events calendar to provide lead-time for the troops to plan to attend. This is particularly important for holiday events which generally have multiple organizations sponsoring events. Creating a 15-month planning calendar—with events for the current three months and tentative events for the subsequent 12 months—covers an entire rotation and allows continuity for the next.

7.6.9. Promotional programs during deployment differ from those at home station since professional marketing personnel are not available to assist. However, this should not limit your creativity to promote your fitness or sports activities. Your marketing should include a mix of advertising, publicity, personal contact, and internalizing in the field. SV members in charge of these activities must ensure programs and activities are effectively promoted.

7.6.9.1. Advertising may be contracted in some deployed locations. Advertising is any form of non-personal promotion that is usually paid for and identifies you as the originator. Examples include: ads, posters, flyers, and radio and television spots. In addition to various bulletins, place ads in the base newspaper (if available). Flyers are perhaps the best method for advertising and should be produced professionally if a contract is available. Display in all SV activities and other frequently visited base activities such as the field exchange, field lodging check-in tent, field dining facility, post office, or the base bulletin board. Some deployed locations in USAFE and PACAF have access to the AFRTS, which offers excellent opportunities to advertise.

7.6.9.2. Publicity differs from advertising since it does not identify the originator. A paid ad in the base newspaper is a form of advertising. A SV member writing a review of a program is a form of publicity. Advertising is better for informing about upcoming events, while favorable publicity helps to generate a good image because the endorsement comes from a third party. Work with your unit SV commander and deployed public affairs representative to use both techniques.

7.6.9.3. Personal contact is the most effective method of promotion, although it reaches fewer people. A personal presentation about a program carries more impact than an ad in the paper. Use this method to brief first sergeants, commanders, incoming personnel, and attendees at commanders' call.

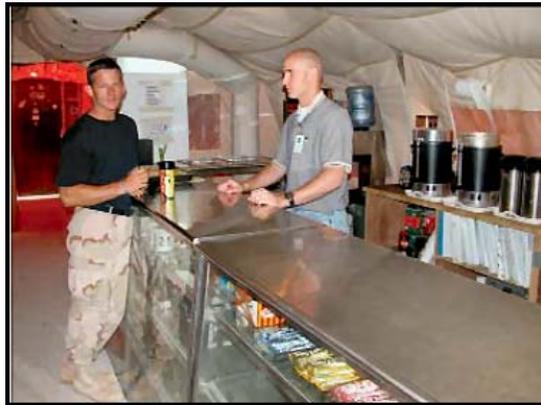
7.6.9.4. One of the most overlooked means of effective promotion management is to inform and support your own SV personnel. Use your contacts to help get the word out through their channels and contacts. Direct your promotion efforts toward other SV members and ensure all are fully briefed on upcoming programs.

7.6.10. Resale Operations. Resale operations can be a great morale booster, especially if the resale items meet customers' needs. Many fitness minded Airmen shop for products that enhance their fitness and health.

7.6.10.1. SV Resale Operations. NAF resale operations are normally established on or about day 15 of the deployment and conducted as a part of the lodging, fitness center and recreation center operations. Initially, these resale

operations focus on providing health and hygiene items for deployed personnel. Most deployed personnel will begin to need these items between days 15 and 30 of the deployment.

Figure 7.4. NAF Resale Operations.



7.6.10.2. Once the NAF resale operation is able to provide a stable supply of health and hygiene items, the resale stock can then be expanded to include morale items like sodas, candy, magazines and souvenirs. The expansion normally occurs about day 30 of the deployment. If an AAFES exchange is established, the SV NAF resale operation may be reduced to only include morale and souvenir items. It is essential to coordinate with AAFES with regard to what items will be sold through the NAF resale operation. More detailed information can be found in AFH 10-247, Volume 6, *Guide to Services Contingency Planning: Resource Management*.

7.6.11. Morale Phones. Telephones and computers are an important element for Airman Regeneration, particularly for sustainment operations. Morale phones allow deployed personnel to make frequent and real-time contact with families and friends. Almost as popular are morale computers to send personal electronic messages, but also to transmit time-sensitive family business documents and ease the burden on relatives back home. Planners must

work closely with Communications personnel to ensure there are adequate phone lines, computers and servers to sustain these operations.

Figure 7.5. Morale Phones and Computers Boost Morale



7.6.12. Professional Entertainment. SV schedules distinguished visitor appearances and entertainment through the Armed Forces Entertainment (AFE) program, using either AFE directly, the United Service Organizations (USO), or a combination tour. The AF is the executive agent for AFE. In recent years, AFE presented more than 1,200 shows at 225 sites worldwide, including Iraq, Afghanistan and other parts of Southwest Asia. Various musical artist (country, rock, rhythm and blues, Latin, and rap) perform live as well as comedy groups and sports stars. SV efforts have provided for visits from distinguished military and government officials and tours by talented military members and military bands (such as Tops in Blue and the Army and USAFE rock and regular bands).

7.6.12.1. Logistics of “Putting on a Show.” The logistics of putting on a show is enormous. Some shows are easier than others depending on the amount of people, supplies and equipment needed in the show. A one-man comic show will be much easier to manage than say a World Wrestling Entertainment show with multiple participants and lots of equipment. Deployed SV planners usually do not have to worry about how entertainers will get there, but must worry about where they will set-up and stage their show.

Working with the different sections at the deployed location will help make the show a success with the troops.

7.6.12.2. Travel, Clearances, and Facilities. As mentioned previously, deployed planners do not have to worry too much about the entertainers before their arrival, but once they arrive, they will need a place to freshen up, change clothes, eat, sleep, set-up and entertain. Some deployed locations may have satellite locations that are on the schedule for the entertainers to visit. In those instances, SV planners must secure all necessary clearances for travel and schedule transportation for the entertainers. This may take weeks of coordination, planning, and approvals.

7.6.12.3. Types of Entertainers/Entertainment. There are many types of entertainment to choose from and the following paragraphs briefly discuss some of the traditional types. Keep in mind that command support, budgeting, planning, requests and approvals all play a big part in making the process work.

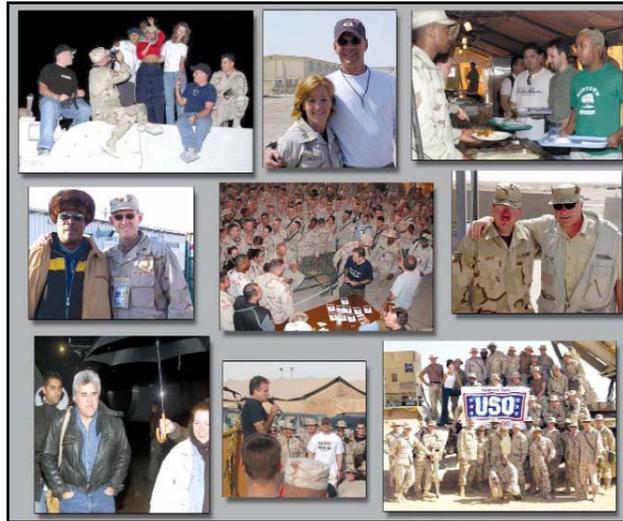
7.6.12.3.1. Deployed Personnel. One of the easiest ways to put on a show with a tight budget is to use deployed personnel. Many troops are talented singers, dancers, and comedians. It is usually not too difficult to stage a talent show with an enthusiastic crowd.

7.6.12.3.2. Armed Forces Entertainment (AFE). If you have command support and approval, working with AFE can ensure top quality performances by some well-known artists. It is not uncommon for big name “stars” to visit the front lines and other deployed areas. The Air Force Tops in Blue performers and other contracted bands are usually available and ready to help raise morale through AFE. Similarly, the United Services Organizations (USO) has been serving the US Armed Forces since 1941 and have provided legendary talent from Bob Hope to the Dallas Cowboy cheerleaders to entertain the troops. Remember, careful planning and coordination is the key.

7.6.12.4. Requesting Entertainment. To request professional entertainment ([Figure 7.6](#)), route the request through the AFE country coordinator. The ESVS commander will likely be the coordinator if there is only one base in the country. The ESVS commander forwards all requests to the regional co-

ordinator. This process is important for routing all issues to include complaints on current acts or requests for future acts.

Figure 7.6. Professional Entertainment.



7.7. Keeping Airmen Connected to the Outside World. One of the most valued resources at a deployed location is any program or facility that minimizes the mental impact on Airmen of being thousands of miles from home. As stated earlier, emails and morale phones are great tools. However, SV has many other programs that can contribute to keeping Airmen connected to their “normal” life. One such program is the Learning Resource Center (LRC).

7.7.1. The LRC’s main mission is to centralize access and use of worldwide education, knowledge, and information for deployed personnel. LRCs provide for intellectual pursuits for both continued professional development and mental diversions from the daily realities of combat. Every effort is made to bring connectivity between Airmen and their family, their professional military education, and recreational reading. The LRC organizes digi-

tal and hard copy access (when available) to various media and shows that even when deployed, education does not have to stop. An effective LRC allows Airmen to experience quiet time for contemplation and introspection. Lessons learned suggest that collocating the Library-LRC with other functions hampers education because it creates noise and other distractions. During the Establish the Airbase phase, planners should begin considering which on-site locations provide the quiet environment needed to make the LRC suitable for studying and learning.

7.7.2. Each LWRR8 is augmented by a TFRR8 (LRC Education Support UTC) to provide educational capabilities including DANTEs, CLEP, Professional Military Education (PME), correspondence courses and other distance learning. The LWRR8 UTC is also augmented by a 6KTDO (Work Group Manager UTC) to support library and testing capabilities.

7.7.3. On the morale side, the LRC can provide DVDs, audio books, and hardcopy books. Airmen should also be able to just come in to relax and read the newspaper or favorite magazine. Another excellent morale booster is setting up a "Hearts Apart" program that provides deployed parents opportunities to video tape themselves reading a book to their children, along with a free DVD and mail sleeve. And, some locations offer self-paced courses for learning new languages; a great pastime while deployed.

7.7.4. Creating Atmosphere. Planners should continue to improve the atmosphere for education, learning, and study by providing adequate quiet space for intensive research, classrooms, and even counseling. Establishing or moving the Library-LRC operation into hard-walled facilities can go a long way towards creating a suitable atmosphere.

7.7.5. Managing Assets. The Library will require separate racks and shelves for paper-based educational materials and various forms of electronic media. The LRC is usually responsible for maintaining accountability of library assets from the supporting MAJCOM's library. When there are qualified personnel assigned, the LRC can provide personnel with educational assistance (enrollment in distance learning courses, tuition assistance, GI Bill, educational counseling, and Community College of the Air Force [CCAF]); upgrade training counseling, administering exams, and PME assistance from

the Air Force Institute for Advanced Distance Learning (AFIADL), Air War College, Air Command and Staff College, and Squadron Officers School. When qualified, the LRC can become an authorized DANTES Test Control Facility. Testing may also include Certification Tests and SNCO Academy correspondence course tests. Testing centers, although not a direct responsibility of SV, are normally connected to LRCs. As the LRC assumes responsibilities, it will have to grow the electronic resources to keep up with requirements. An often overlooked piece of equipment is a safe. When setting up the LRC for testing, ensure a safe is available to store controlled testing materials.

7.7.6. Internet Cafes. The number of laptop or desk-top computers available, information technology support, and internet connectivity capability will determine if opening an Internet café is feasible. Coordinate with the Communications experts on the availability of the Internet and possible assets you may be able to sign-out.

7.7.7. Expanded Library Operations and Educational Requirements. The level of educational support will vary depending on need and ability to provide accredited or certified support. Education support is a communications equipment-intensive effort that requires telephone lines; staff, instructor and student computers; internet access; printers; large TV with VCR, CD, and DVD players; multimedia projectors; and numerous desks and work stations. Qualified LRCs require a room to provide a controlled testing capability for paper or computer-based test materials.

7.7.8. Expanding to Full Education Support. Library-LRC support requires adequately trained personnel who can qualify as test control officers; manage formal computerized library inventory management systems; and develop and manage capabilities for online integrated library, library access, research, and professional library resource systems. The ability to provide personnel who have these qualifications is extremely difficult, especially for each rotation cycle. In CONUS, PACAF, and USAFE, these personnel are typically civilians who receive degrees and hours of training to qualify for and remain current as librarian and education services personnel. Determine with theater and supporting MAJCOMs if it is possible to transition these rotating UTC positions into civil servants who will volunteer for long-term

or annual tours. This will help provide much needed continuity of operations. If civilians are not available, seek an AFCAP contract for long-term sustainment support. If seeking civilian contract support at joint service bases, explore opportunities with sister services.

7.8. AAFES Resale Operations. If possible, an AAFES exchange operation should be established at the deployed location. Most AAFES exchange operations are established around day 60 of the deployment. Class VI supplies (personal demand items) are AAFES items for sale to troops and authorized individuals. Class VI supply support can be limited to basic health and comfort items or expanded to include food and beverages and entertainment items. The availability of Class VI items can enhance morale. Each Theater establishes a memorandum of understanding (MOU) outlining responsibilities for supporting AAFES operations with the AOR. SV and CE planners are typically responsible for siting an area for the exchange and providing facilities and utilities.

7.8.1. Direct Operations Exchange-Tactical (DOX-T) Operations. As with any operation, planning is required to ensure Class VI supplies are available to the troops at the time and place required. The concept of obtaining resale items from AAFES is divided into three phases, these phases are described below.

7.8.1.1. Predeployment Phase. The predeployment phase is also referred to as the loading and shipping phase. During this phase military planners working with AAFES will determine the stock assortments and quantities of each item to be shipped for a particular Tactical Field Exchange. The assortment of Class VI items will be tailored to fit the situation. They can include items to entertain the troops and to make daily life more comfortable. These items will be ordered by AAFES and shipped to the parent exchange for consolidation and loading into containers for shipment to the deployment location. Operating supplies required for the TFE will be provided by the parent exchange.

7.8.1.2. Deployment Phase. Containers with the Class VI items are shipped to the operational area. The TFE Officer (TFEO) deploys as specified per his or her unit's tasking order. Immediately upon arrival in the operational area,

the TFEO must locate the containers shipped from the parent exchange and arrange for further movement to the TFE site. When the containers arrive at the TFE site, the TFE staff will conduct the appropriate inventories and establish TFE operations. Class VI resupply is coordinated between the TFEO and the parent exchange.

7.8.1.3. Post-deployment Phase. Once the operation has been completed, remaining inventory and operating supplies and equipment will be packaged and returned to the parent exchange. Returned merchandise and operating supplies and equipment are inventoried, accounted for, and returned to AAFES stocks. In addition, all documentation, sales receipts, and returns are reconciled. At this time, the TFEO is relieved of accountability for the TFE.

7.9. Robusting and Sustaining Operations. As operations transition from open/establish the base FMs to the robust FM/sustainment, fitness and sports take on a greater level of importance for maintaining health and building morale. As sustainment continues and personnel settle in on each rotation, recreation and education also become more important for allowing individuals to initiate or pursue military and educational improvement goals. Again, refer back to [Table 7.1](#) for fitness, sports and library programs that may be available during different deployed environments.

7.9.1. Prime RIBS sustainment planning actions are somewhat dictated by whether the deployment will be short-term or long-term. Short-term locations primarily use WRM or a limited number of deployable type containerized shelters to support activities, while long-term locations' health and morale functions may transition to more permanent structures. In both cases, QoL enhancements can be implemented with contingency appropriated funds (APFs) and nonappropriated funds (NAFs).

7.9.2. The expected quality of service for major functional areas is to attain minimum "Golden Eagle" standards based on base population. For fitness programs, this equates to obtaining the minimum number of various types of exercise equipment needed to support the population and providing fitness activities, to include group sessions with instructors. For sports and recreation, provide a good mix of individual, self-paced, small group, team sports, and larger organized group and competitive activities. Recreation managers

must understand the demographics of the deployed service personnel and develop programs that fit their needs.

7.9.3. Efforts that work during one AEF rotation may not work for the next based on demographics, weather, and availability of resources for entertainment, education, and tours. The quality of support should not be limited by remoteness. Work with first sergeants and others to make continual improvements to programs.

7.9.4. Planning for Expansion. As sustainment operations continue, expect periods of increased population. SV planners must know what types of equipment and facilities are available to meet these expanded needs. Specific facilities are not ear-marked for fitness, recreation, or the LRC. SV planners must coordinate with CE and Logistics to obtain additional facilities (tents, modular building, and common or general purpose facilities). Coordinate with reach-back sources to get authorization for additional facilities when required. —◆—

Chapter 8

PROTOCOL FIELD OPERATIONS

8.1. Overview. The integration of Protocol into Services procedures ensures a synergy and economy of force and allows for better planning for such things as DV support that typically impact the normal flow of daily efforts. This chapter focuses on the duties of the Protocol officer and enlisted UTCs. The protocol officer UTC (LWRRP) deploys in the “establish the airbase” stage of the FM construct and should arrive on or about day three. The enlisted protocol UTC (LWRRQ) is not scheduled to arrive until “operate the airbase” on or about day 15. The premise behind deploying them so early is to provide additional support to the C2 element and to establish an understanding of the local customs and courtesies. Protocol is established to assist commanders with host nation support tasks. Like everyone else in this FM, the primary mission is to get the base set-up for full reception of forces.

8.2. Unique Situations at a Beddown Operation. Most deployed protocol duties will be much the same as duties performed at home station; the difference arises from the deployment location. Other factors that may affect the way protocol duties are performed include threat level and local customs. Therefore, it is essential that protocol officers understand local customs and courtesies. Some challenges could be cultural differences in how women, enlisted, minorities are treated, and language barriers working with other coalition forces. Other challenges include: alcohol, military environment, personnel manning, threat awareness, austere living conditions, shared spaces (a desk may have to be shared between shifts), and time zone (this may lengthen the day if there is a need to reach back to other time zones). The protocol officer will coordinate with organizations like customs, immigration, and airfield operations upon the arrival of distinguished visitors (DV). Be aware that requirement notifications may be minimal to none. Building relationships with other base organizations will help lessen the impact of short-notice requirements. Also keep in mind that it is imperative to practice good operational security (OPSEC) and communications security (COMSEC) for arriving DVs in a deployed environment.

8.2.1. Protocol Functions. Deploying to locations that are performing coalition or combined operations is now the norm. Generally, protocol duties do not change very much regardless of whether the job is with coalition, joint, or AF forces. However, be prepared to work with and for military forces of other nations. For example, you might deploy as an AF representative and work for an Australian Chief of Protocol with two US Army officers. Each country has a Senior Representative Officer, usually a general officer. After arriving at your deployed location, determine the host nation relationship.

8.2.1.1. Base Level. More than likely, the AF protocol officer will work with members from sister services in a deployed environment; therefore, it is useful to know how other services deploy. The US Army deploys their personnel as a unit; however, their protocol office may not deploy at the on-set, but come at a later date when needed. This may require the AF protocol officer to cover a few DV visits until the Army officer arrives.

8.2.1.2. Combined Air Operations Center (CAOC/HQ) Level. Working in the AFFOR or CAOC on the commander's personal staff will provide an expanded view of the theater and afford the opportunity to work planning for theater wide visits, including entertainment and DV visits.

8.2.2. Distinguished Visitor. A DV is defined as: (1) Any general or flag officer, (2) any government official with rank equivalent to a brigadier general or higher, or (3) any foreign military officer or civilian designated a DV by the Deputy Under Secretary of the Air Force for International Affairs (SAF/IA). At times, persons of lower rank are appointed to fill DV positions, and may be accorded DV status; the purpose of the visit will determine if DV status should be accorded. For example, a civic leader may be accorded DV status. The commander determines the DV distinction on an individual basis. The Air Force Senior Leader Management Office publishes a relative rank list for active duty general officers and a civilian senior executive roster with DV codes for senior civilians. Consult the most current DOD Order of Precedence and AF Precedence List to determine current and correct precedence of distinguished visitors. These lists are available from HQ USAF/CVAP by phone at DSN 227-7621, commercial 703-697-7621, or by email at AF/CVAP@pentagon.af.mil.

8.2.3. Use of Funds. The key to efficient and appropriate funds handling is to properly categorize guests to determine what, if any, type of funds they are eligible to receive. It is important to note, however, that just because a group or individual qualifies for funds, perceptions should also be considered. What may be technically legal may be perceived as improper—always consider the appearance as well as the law. Consult the applicable policy directive or instruction for the most current and complete guidance. Additionally, since there will always be "gray areas" requiring clarification, consult with your organization's Financial Management section or the resource managers within SV.

8.2.4. Appropriated Funds (APFs). APFs are government funds from the public treasury which are appropriated by act of Congress to conduct the business of government agencies and activities. Appropriations for the DOD, for example, provides the main financial support for carrying out the defense and national security missions assigned to the department and its component services. Under certain circumstances, APFs may be used for discretionary expenditures related to the mission of command.

8.2.5. Contingency Funds. Contingency Funds, also called Official Representation Funds (ORF), are APFs that can be spent under the commander's authority for official representation purposes. These funds come from that part of the appropriation reserved for "Emergencies and Extraordinary Expenses." ORFs are specifically appropriated through SecDef to SecAF and are intended to "uphold the standing and prestige of the U.S. by extending official courtesies to certain officials and dignitaries of the U.S. and foreign countries."

8.2.6. Other APFs. Not all discretionary expenditures require the use of contingency authority. In fact, the major focus of the official representation authority is to project the national image outside the military organization for which the commander is responsible. Surprising numbers of expenditures for similar purposes within the organization are authorized from the normal operations and maintenance budget as routine appropriated fund expenditures associated with the organization's mission. [AFI 65-601, *Budget Guidance and Procedures*](#), Volume I, Chapter 4, discusses the types of expenditures that may be supported through the organization's normal APFs budget. When

in doubt, or if you have questions, it is best to check with either your budget officer, supply officer, SV officer, or legal officer.

8.2.7. Non-Appropriated Funds (NAFs) and Special Moral & Welfare Funds (SM&W). Another source of funds frequently used to support protocol events is SM&W funds. Appropriated funds come from the taxpayers, by way of Congress and the appropriations process. However, NAFs represent a portion of profits made by non-appropriated activities and base exchanges and are frequently referred to as "troop's money." Within the AF, base officials administer the bulk of these funds to provide for the morale, welfare, and recreation of their personnel. There are overarching principles that govern when these funds can be used, and these principles take precedence even if an event, on the surface, seems to qualify for SM&W funds. For example, events must directly support the morale and welfare of military personnel, with no discrimination as to rank or position. [AFI 34-201, Use of Nonappropriated Funds \(NAFs\)](#), Chapter 12, governs the use of NAFs and implements [Air Force Policy Directive 34-2, Managing Nonappropriated Funds](#). Air Force Handbook 10-247, Volume 6, *Guide to Contingency Planning: Resource Management*, provides further guidance.

8.3. Use of Facilities. Protocol officers have no dedicated facilities assigned in the BEAR packages. Therefore, they must rely on facility managers to assist in finding base facilities that are available for protocol activities. Temporary use of facilities may range from the use of the dining facility to host a DV luncheon/dinner with the troops, to the use of the recreation center or theater for a mass briefing. Planning and contact with the facility manager should be accomplished as early as possible to alleviate a scheduling conflict. This also provides sufficient time to prepare the facility for the visit and gives time to recruit assistance to help set-up if required. As with most events, follow-up with facility managers is a must when planning use of facilities.

8.4. Further Guidance. There are many sources for protocol guidance. The official protocol website (<https://www-r.afsv.af.mil/ILV/Protocol>) has an abundance of information as well as links to every MAJCOM Protocol office for reachback capability. The Air Force Institute of Technology offers an introductory course to new, non-experienced protocol officers, NCOs and

civilians. Protocol officers should develop continuity books, especially when in a joint environment. Two useful references for Protocol officers are the World Fact Book, which can be found on the World Wide Web at <http://www.odci.gov/cia/publications/factbook/index.html>, and the State Department's website at <http://www.state.gov/index.htm>. —◆—

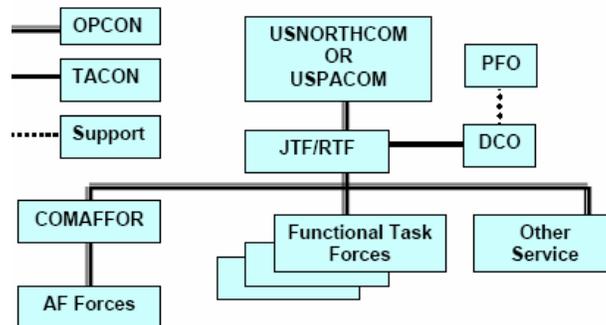
Chapter 9

HOMELAND SECURITY OPERATIONS

9.1. Overview. The AF is prepared to project US air and space power to counter and defeat terrorist threats at home. AF agile combat support (ACS) also supports homeland security (HLS) operations. ACS capabilities provide support for air protection for specified areas of the country, and provide medical and WMD support, law enforcement capabilities, as well as infrastructure support when called upon. SV trains and equips forces to contribute to U.S. defense, regardless of the nature of threat or whether supporting air, space, or cyberspace operations. This chapter covers the major aspects of SV role in HLS operations.

9.2. Command and Control (C2). [Figure 9.1](#) and [Figure 9.2](#) show how the AF fits into the command and control of HLS.

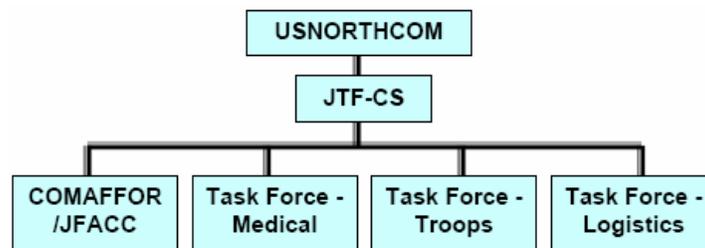
Figure 9.1. Homeland Security Operations C2.



9.2.1. Chain of Command at JTF Level. The JFC determines appropriate objectives and sets priorities for the entire joint force. In combat operations, the JFC normally exercises command authority through designated subordinate component commanders. All joint forces include Service component commanders (e.g., a COMAFFOR) and may, at the discretion of the JFC, also include functional component commanders. The JFC may execute op-

erations either through the Service component commanders, the functional component commanders, or some combination thereof. The standing JTF for civil support (JTF-CS) is normally not organized around Service components, but rather by function. The result is a JFC supported by a series of functional task forces such as Task Force (TF) Transportation, TF Medical, TF Troops, and TF Aviation. In these cases, Airmen should strive for unity of command through presentation of an appropriate AETF structure ([Figure 9.2](#)).

Figure 9.2. Notional Organizational Structure for JTF–Civil Support in USNORTHCOM.



9.2.2. Authorization for DOD Support. Defense Support of Civil Authorities (DSCA) is often referred to as civil support, which is DOD support provided during and in the aftermath of domestic emergencies—such as terrorist attacks or major disasters—and for designated law enforcement and other activities. It includes military assistance for civil law enforcement operations in very limited circumstances. However, National Guard forces operating in State status can directly assist civil law enforcement operations. DSCA missions include, but are not limited to, supporting the Department of Justice in preventing or defeating terrorist attacks; response to CBRNE incidents; response to natural disasters such as earthquakes, floods, and fires; support to civilian law enforcement agencies, including counter-drug activities; and response to civil disturbances or insurrection. In all these missions, various federal, state, or local civilian agencies are primarily responsible for the management of the particular incident. For HLS operations, the AF’s involvement is supportive and dependent on a request to the DOD from the

designated lead agency. Traditionally, DSCA operations were either considered crisis or consequence management. Crisis management activities were handled by the Federal Bureau of Investigations and consequence management by the Federal Emergency Management Agency (FEMA). That distinction is now replaced with domestic incident management, a full-spectrum perspective that sees each event as a single incident requiring an integrated response. The next three sections describe functions that may require SV support.

9.3. Services Role in Recovery Operations. Depending on the type, scale, and location of a recovery operation, SV's role may vary from advising civil authorities to conducting airbase opening and sustainment operations. The AF provides AETF FMs to open an airbase, provide command and control, establish an airbase, generate the mission, and operate an airbase. These modular and flexible capabilities can also be used to augment existing airfield facilities during a homeland security incident. In other words, the same tasks performed to support military operations are utilized for homeland security operations. SV planners must address short-and long-term support for food, lodging, mortuary, and facility issues for planning, prevention and crisis management. The following paragraphs briefly describe SV' role in recovery operations following a homeland security incident.

9.3.1. Basic Food Service Support. SV personnel may be called upon to provide field feeding operations to support a wide range of recovery operations. They may be called on to provide meals to a small group of first-responders after a hazardous spill incident, or set up a full field kitchen to support thousands of victims of a natural disaster. The support may be required for short- or long-term depending upon the circumstance.

9.3.2. Basic Lodging. Depending upon the duration of operations, the same responders and victims described in the paragraph above will most likely require shelter during recovery operations. Accommodations may be provided by contract quarters, WRM shelters, or a combination of both. If contract quarters are used, follow guidelines set forth in local operating instructions and base support plans. In the event WRM assets are used, work closely with CE and logistics to ensure all needs are met.

9.3.3. Homeland Mortuary Affairs. The typical SV support to HLS operations includes mortuary technical assistance and expertise for a mass fatality incident (MFI). A MFI is the occurrence of multiple deaths, normally five or more. Potential scenarios include aircraft mishaps, large vehicle mishaps, explosions, natural disasters, terrorist activity and armed conflict. SV personnel may be responsible for mass fatality remains processing and search and recovery operations. Installations and AF mortuaries will develop a contingency plan to support peacetime mass fatality incidents. If the incident occurs outside an AF installation and local authorities will not relinquish jurisdiction, a plan for processing remains locally must be developed.

9.3.3.1. Fatality Search and Recovery Team (FSRT). During recovery operations, trained personnel will determine if a CBRN hazard exists. The Army, as the Executive Agent for Mortuary Affairs, has dedicated decontamination teams and is responsible to respond to all contamination events. These teams are responsible for decontamination and certification of remains as decontaminated prior to transport out of the AOR or within CONUS. If a chemical, biological, radiological, or nuclear (CBRN) threat exists, they may set up a MADCP (see [Chapter 6](#) of this TTP). AF FSRT teams may assist with the recovery of contaminated remains.

9.3.3.1.1. The Air National Guard FSRT capability will be called upon first in the State role (Title 32). The ANG has 10 teams ([Figure 9.3](#)) regionally-aligned in concert with the 10 FEMA regions. As there is not a team postured in each state, the ANG teams have MOA/Us with sister states within their regions to provide this capability.

9.3.3.1.2. The active duty AF also has 10 FSRTs postured and aligned within the AEF construct: two teams per AEF pair ([Figure 9.4](#)). When needed, the FSRTs “in the bucket” should be sourced before any of the other teams. However, any team can be sourced if the circumstances warrant.

Figure 9.3. 10 FEMA Regions and ANG FSRTs.

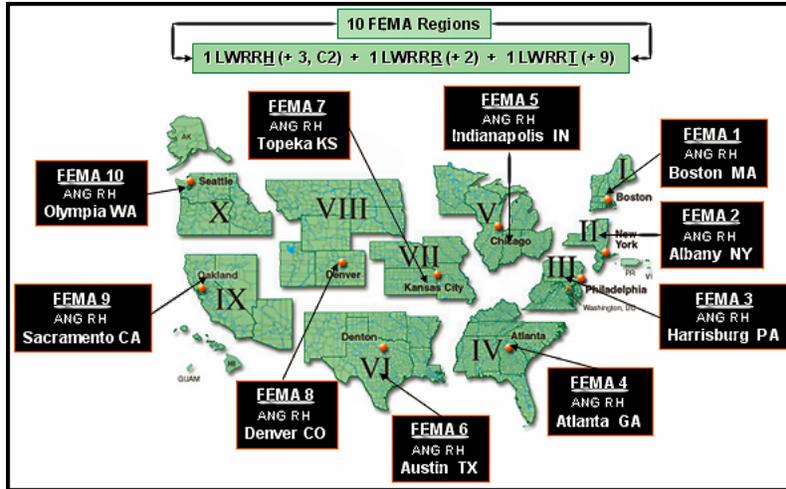


Figure 9.4. Active Duty AEF FSRTs.

11-Pers Tm LWRRR (2), RT(9)	1 / 2	3 / 4	5 / 6	7 / 8	9 / 10
Dyess	X			X	
Charleston	X		X		
Langley	Base-level Services impact of FSRT taskings coupled with normal RIBS AEF deployments will be considered by AF and MAJCOM FAMS and the AEFC prior to nominating, validating, sourcing				X
Travis		X		X	
Scott			X		X
Davis Monthan		X			
Total Tms	2	2	2	2	2

LT GEN RICHARD Y. NEWTON III
DCS/Personnel

Attachment 1**GLOSSARY OF REFERENCES
AND SUPPORTING INFORMATION*****References***

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SERVICES SUPPLEMENT TO THE WAR MOBILIZATION PLAN-1 (WMP-1), August 2006

Abbreviations and Acronyms

AAFES—Army and Air Force Exchange Service

AAR—After Action Reports

ACS—Agile Combat Support

ADR—Advance Design Refrigerator

AEF—Air and Space Expeditionary Force

AETF—Air & Space Expeditionary Task Force

AEW—Air Expeditionary Wing

AF—Air Force

AFAARS—Air Force After-Action Reporting System

AFCAP—Air Force Contract Augmentation Program
AFCC—Air Force Component Command
AFCENT—Air Forces Central
AFCESA—Air Force Civil Engineer Support Agency
AFCHQ—Air Force Component Headquarters
AFCKSL—Air Force Center for Knowledge Sharing Lessons Learned
AFE—Armed Forces Entertainment
AFEMS—Air Force Equipment Management System
AFEUR—Air Forces Europe
AFFOR—Air Force Forces
AFI—Air Force Instruction
AFIADL—Air Force Institute for Advanced Distributed Learning
AFIIP—Air Force Instructional Input Program
AFKOR—Air Forces Korea
AFME—Armed Forces Medical Examiner
AFNORTH—Air Forces North
AFPAC—Air Forces Pacific
AFRC—Air Force Reserve Command
AFRTS—Armed Forces Radio and Television Service
AFSC—Air Force Specialty Code
AFSOC—Air Force Special Operations Command
AFSOF—Air Force Special Operations Forces
AFSOUTH—Air Forces South

AFSTRAT-GS— Air Force Strategic - Global Strike
AFSTRAT-SP— Air Force Strategic – Space
AFSVA—Air Force Services Agency
AFSVA/CCR—Air Force Services Agency Reserve Advisor
AFSVA/SVO—Air Force Services Agency Directorate of Operations
AFSVA/SVOHF—AFSVA Directorate of Operations, Food Branch
AFSVA/SVOHL—AFSVA Directorate of Operations, Lodging Branch
AFSVA/SVOHR—AFSVA Directorate of Operations, Readiness Branch
AFSVA/SVP—AFSVA Directorate of Programs
AFSVA/SVPAF—AFSVA Directorate of Programs, Fitness and Sports
AFSVA/SVX—AFSVA Directorate of Force Management and Personnel
AFTRANS—Air Forces Transportation
AFTTP—Air Force Tactics, Techniques, and Procedures
AFWUS—Air Force Worldwide UTC Summary
ALC—**Air Logistics Center**
ALD—**Available-to-Load Date**
AMC—Air Mobility Command
AME—Aircraft Movement Element/Alternate Mission Equipment
AMT—Aerial Mail Terminal
ANG—Air National Guard
AOC—Air Operations Center
AOR—Area of Responsibility
APF—Appropriated Fund

APO—Air Post Office
APOD—Aerial Port of Debarkation
APOE—Aerial Port of Embarkation
APT—Air Passenger Terminal
ARC—Air Reserve Component
ARPC—Air Reserve Personnel Center
ART—AEF Reporting Tool
AS—Allowance Standard
ASF—Aeromedical Staging Facility
ASR—Available Supply Rate
ATO—Air Tasking Order
ATOC—Air Terminal Operations Center
ATSO—Ability to Survive and Operate
ATV—All Terrain Vehicle
B-150—Bear 150
B-550F—BEAR 550 Follow-On Set
B-550I—Bear 550 Initial Set
BAB—Babington Airtronic Burner
BB—Bare Base
BCE—Base Civil Engineer
BEAR—Basic Expeditionary Airfield Resources
BOS—Base Operating Support
BPA—Blanket Purchase Agreements

BSE—Battle Support Element

BSP—Base Support Plan

C2—Command and Control

C3—Command, Control, and Communications

C3CM—Command, Control, and Communications Countermeasures

C3I—Command, Control, Communications, and Intelligence

C4—Command, Control, Communications, and Computers

C4I—Command, Control, Communications, Computer

CAOC—Combined Air Operations Center

CALM—Computer Aided Load Manifesting

CB—Chemical-Biological

CBRN—Chemical, Biological, Radioactive or Nuclear

CBRNE—Chemical, Biological, Radiological, Nuclear, and High Yield Explosives

CCAF—Community College of the Air Force

CCDR—Component Commander

CCO—Contingency Contracting Officer

CCP—Casualty Collection Point

CDK—Containerized Deployment Kitchen

CE—Civil Engineering/Command Element

CIN—Cargo Increment Number

CJCS—Chairman of the Joint Chiefs of Staff

CMOS—Cargo Movement Operations Center

COB—Collocated Operating Base

COCOM—Combatant Command (Authority)
COMAFFOR—Commander of Air Force Forces
COMJTF—Commander Joint Task Force (also CJTF)
COMPES—Contingency Operations/Mobility Planning and Execution System
COMSEC—Communications Security
CONCAP—Construction Capabilities
CONOPS—Concept of Operations
CONPLAN—Concept Plan
CONUS—Continental United States
CS—Communications Squadron
DCAPES—Deliberate and Crisis Action Planning and Execution System
DFAC—Dining Facility
DFT—Deployed for Training
DGSC—Defense Government Supply Center
DIRLAUTH—Direct Liaison Authorized
DOD—Department Of Defense
DOX-T—Direct Operation Exchange–Tactical
DRU—Direct Reporting Unit
DSCA—Defense Support of Civilian Authorities
DSN—Defense Switching Network
DV—Distinguished Visitor
EAD—Earliest Arrival Date
ECONS—Expeditionary Contracting Squadron

ECS—Expeditionary Combat Support
ECU—Environmental Control Units
EMEDS—Expeditionary Medical System
EOD—Explosive Ordnance Disposal
EOR—Explosive Ordnance Recognition
ESVS—Expeditionary Services Squadron
FAC—Functional Account Code/Forward Air Controller
FAM—Functional Area Manager
FAR—Federal Acquisition Regulation
FCD—Fitness Center Director
FEMA—Federal Emergency Management Agency
FF—Follow-on Flightline
FM—Force Module
FOA—Field Operating Agency
FOB—Forward Operating Base
FOC—Full Operational Capability/Follow-on Capability
FOL—Forward Operating Location
FP—Force Protection
FRN—Force Requirement Number
FSRT—Fatality Search and Recovery Team
FSU—Field Sanitation Unit
GP—General Purpose
GPC—Government Purchase Card
HN—Host Nation
HQ USAF—Headquarters United States Air Force
HST—Home Station Training

IF—Initial Flightline
IMA—Individual Mobilization Augmentee
IO—Industrial Operations
IOC—Initial Operating Capability
ISO—International Standards Organization (e.g. ISO Container)
JANAF—Joint Army, Navy, Air Force
JANAP—Joint Army, Navy, Air Force Publication
JEPES—Joint Engineering Planning and Execution System
JFACC—Joint Force Air Component Commander
JFC—Joint Forces Commander
JMAO—Joint Mortuary Affairs Office
JMETL—Joint Mission Essential Task List
JOPES—Joint Operation Planning and Execution System
JSOTF—Joint Special Operations Task Force
JTF—Joint Task Force
LAD—Latest Arrival Date
LAN—Local Area Network
LB—Limited Base
LMR—Land-Mobile Radio
LIMFAC—Limiting Factor
LOGCAP—Logistics Civil Augmentation Program
LOGDET—Logistics Detail
LOGFOR—Logistics Force Module
LRC—Learning Resource Center/Logistics Readiness Center
MA—Mortuary Affairs
MACP—Mortuary Affairs Collection Point
MADCP—Mortuary Affairs Decontamination Collection Point
MAJCOM—Major Command

MAJCOM-C—Major Command Component or Component MAJCOM
MAJCOM HQ—Major Command Headquarters
MB—Main Base
MCP—Mortuary Collection Point/Military Construction Plan
MEFPAK—Manpower and Equipment Force Packaging
METL—Mission Essential Task List
MFI—Mass Fatality Incident
MIPR—Military Interdependent Purchase Request
MISCAP—Mission Capability
MOB—Main Operating Base
MOPP—Mission Oriented Protective Posture
MOU—Memorandum of Understanding
MRE—Meals Ready-To-Eat
MRSP—Mobility Readiness Spares Package
MSA—Munitions Storage Area
MSG—Mission Support Group
MSS—Medium Shelter System/Mission Support Squadron
MTF—Medical Treatment Facility/Military Treatment Facility
MTW—Major Theater War
MWR—Morale, Welfare, and Recreation
NAF—Non-Appropriated Fund/Numbered Air Force
NAF-C—Numbered Air Force Component or component NAF
NAT—Not Air Transportable (Cargo)
NEO—Noncombatant Evacuation Operations
NIS—Not in Stock
OCONUS—Outside the Continental United States
OI—Operating Instruction
OPLAN—Operation Plan

OPR—Office of Primary Responsibility
OPSEC—Operational Security
ORF—Official Representation Funds
ORM—Operational Risk Management
PA—Public Affairs/Probability of Arrival
PACAF—Pacific Air Forces
PADD—Person Authorized To Direct Disposition
PAO—Public Affairs Officer
PAS—Personnel Accounting Symbol
PE—Personal Effects
PERE—Person Eligible to Receive Effects
PERSCO—Personnel Support for Contingency Operations
PID—Plan Identification Designator
POD—Port of Debarkation
POE—Port of Embarkation
POL—Petroleum, Oils, and Lubricants
POPSUM—Population Summary
PPE—Personal Protective Equipment
Prime BEEF—Prime Base Engineer Emergency Force
Prime RIBS—Prime Readiness in Base Services
PRU—Personnel Readiness Unit
PSC—Postal Service Center
PV—Prime Vendor
PWRM—Pre-positioned War Reserve Material
QAE—Quality Assurance Evaluator/Evaluation
QASP—Quality Assurance Surveillance Plan
QoL—Quality Of Life
RDD—Required Delivery Date

READY—Resource Augmentation Duty
RED HORSE—Rapid Engineer Deployable Heavy Operations Repair Squadron Engineer
RIBS—Readiness in Base Services
ROC—Readiness Operations Center/Required Operational Capability
ROE—Rules of Engagement
ROMO—Range of Military Operations
ROWPU—Reverse Osmosis Water Purification Unit
S&R—Search and Recovery
SAF/IA—Secretary of the Air Force for International Affairs
SecDef—Secretary of Defense
SF—Security Forces
SIPRNET—Secret Internet Protocol Router Network
SITREP—Situation Reports
SM&W—Special Morale & Welfare Funds
SNCO—Senior Noncommissioned Officer
SORTS—Status of Resources and Training System
SOR—Statement of Requirements
SOW—Statement of Work
SPEK—Single-Pallet Expeditionary Kitchen
SSS—Small Shelter System
ST/STON—Short Ton (equal to 2,000 pounds)
SV—Services
SV SITREP—Services Situation Report
TF—Task Force
TFE—Tactical Field Exchange
TFEO—Tactical Field Exchange Officer
THR—Tray Ration Heater

TPFDD – Time-Phased Force Deployment Data
TSC—Theater Security Cooperation
UCC—Unified Component Command
UGR—Unitized Group Rations
USAF—United States Air Force
USAFE—United States Air Forces Europe
USDA—United States Department Of Agriculture
USFK—United States Forces Korea
USO—United Service Organizations
UTC—Unit Type Codes
VETCOM—Us Army Veterinary Command
WFHQ—Warfighting Headquarters
WMP—War Mobilization Plan
WRM—War Reserve Material

Terms

Air Force Contract Augmentation Program (AFCAP)—A program under which civilian contractors/commercially available resources can be used to fill critical base operating support functions/asset requirements that occur during a wide range of contingency, crisis, and wartime operations. AFCAP uses civilian contractual assistance during peacetime to locate and plan for the acquisition of worldwide commercial resources (personnel and materiel) assets to meet AF wartime support requirements.

Area of Responsibility (AOR)—The geographical area associated with a combatant command within which a CCDR has authority to plan and conduct operations.

Bare Base—A base having minimum essential facilities to house, sustain, and support operations to include, if required, a stabilized runway, taxiways, and aircraft parking areas. A bare base must have a source of water that can

be made potable. Other requirements to operate under bare base conditions form a necessary part of the force package deployed to the bare base.

Basic Expeditionary Airfield Resources (BEAR)—US Air Force systems consisting of assets formerly known as Harvest Eagle and Harvest Falcon. BEAR systems are designed to provide minimum essential troop cantonment facilities (lodging, field feeding, showers, and latrines) and operational support (offices, shops, limited shop equipment, and runway matting). Units using this equipment are expected to deploy with mobility equipment and spares peculiar to their operation in sufficient quantities to allow self-support until resupply is established.

BEAR 550 Follow-on Housekeeping (B-550F) Set—An additive set to the B-550I that increases support to 1,100 people. The B-550F provides additional billeting, feeding, hygiene, power, water, environmental control and lighting assets similar to the B-550I.

BEAR 550 Initial Housekeeping (B-550I) Set—A stand-alone set that provides a robust camp consisting of billeting, feeding, and hygiene to support 550 personnel.

BEAR Follow-on Flightline (B-FF) Set—An additive to a B-IF set and includes limited facilities, equipment, and supplies needed to support flight operations and maintenance needs for a second and subsequent squadrons deployed to an austere base.

BEAR Initial Flight Line (B-IF) Set—A set consisting of facilities, equipment, and supplies necessary to establish and support aircraft flight-related operations and maintenance activities for an initial aircraft squadron deployed at a bare base location.

C-Day—The unnamed day on which a deployment operation commences or is to commence. The deployment may be movement of troops, cargo, weapon systems, or a combination of these elements utilizing any or all types of transport. The letter "C" will be the only one used to denote the above. The highest command or headquarters responsible for coordinating the planning will specify the exact meaning of C-Day within the aforementioned definition. The command or headquarters directly responsible for the

execution of the operation, if other than the one coordinating the planning, will do so in light of the meaning specified by the highest command or headquarters coordinating the planning.

Combatant Command (command authority)—Nontransferable command authority established by Title 10 (“Armed Forces”), United States Code, section 164, exercised only by commanders of unified or specified combatant commands unless otherwise directed by the President or the SecDef. Combatant command (command authority) cannot be delegated and is the authority of a CCDR to perform those functions of command over assigned forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction over all aspects of military operations, joint training, and logistics necessary to accomplish the missions assigned to the command. Combatant command (command authority) should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate joint force commanders and Service and/or functional component commanders. Combatant command (command authority) provides full authority to organize and employ commands and forces as the CCDR considers necessary to accomplish assigned missions. Operational control is inherent in combatant command (command authority).

Combatant Commander (CCDR)—A commander of one of the unified or specified combatant commands established by the President. The CCDR commands, the command relationship the gaining commander will exercise (and the losing commander will relinquish) over these forces must be specified by the SecDef. Operational control is the authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission. Operational control includes authoritative direction over all aspects of military operations and joint training necessary to accomplish missions assigned to the command. Operational control should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate joint force commanders and Service and/or functional component commanders. Operational control normally provides full author-

ity to organize commands and forces and to employ those forces as the commander in operational control considers necessary to accomplish assigned missions; it does not, in and of itself, include authoritative direction for logistics or matters of administration, discipline, internal organization, or unit training. Also called Operational Command.

Command and Control—The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission.

Force Beddown—The provision of expedient facilities for troop support to provide a platform for the projection of force. These facilities may include modular or kit-type substitutes.

Homeland Defense—The protection of U.S. territory, sovereignty, domestic population, and critical infrastructure against external threats and aggression.

Homeland Security—A concerted national effort to prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism, and minimize the damage and recover from attacks that do occur.

Limiting Factor—A factor or condition that, either temporarily or permanently, impedes mission accomplishment. Illustrative examples are transportation network deficiencies, lack of in-place facilities, and malpositioned forces or materiel, extreme climatic conditions, distance, transit or overflight rights, political conditions, etc.

Operational Rations—Specially packaged, processed, or prepared food for operational or emergency conditions, as identified in Food Service Catalog 8900 Stock Listing (FSC 8900 SL). Packaged operational rations, designed for individual use in the field, are sometimes enhanced with beverages and other food items.

Person Authorized Direct Disposition (PADD)—In accordance with Federal law the PADD is the person authorized to direct disposition of the remains.

Personal Effects (PE)—Personal effects are broadly defined as any personal item, organizational clothing or equipment physically located on the remains. Personal effects shipped with the remains or directly to the authorized recipient are not to be treated in the same manner as personal property. Personal property is disposed of by the SCO and usually shipped later.

Prime Vendor (PV)—A contracting process that provides commercial products to regionally grouped military and federal customers from commercial distributors using electronic commerce. Customers typically receive materiel delivery through the vendor's commercial distribution system.

Quality Assurance Evaluator (QAE)—Representative of the contracting officer who normally performs surveillance of the contract.

Reachback— The process of obtaining products, services, and applications, or forces, or equipment, or material from organizations that are not forward deployed.

Statement of Work (SOW)—A document that accurately describes the essential and technical requirements for services, including the standards used to determine whether the requirements have been met.

Swift BEAR 150 Personnel Housekeeping (B-150) Set— The B-150 set supports up to 150 personnel in the Open-the-Base FM. The set consists of small shelters with environmental control, tactical power generators, limited hygiene facilities, camp lighting equipment and MRE rations and bottled water.

Time-Phased Force Deployment Data (TPFDD). The data base portion of an operation plan; it contains time-phased force data, non-unit-related cargo and personnel data, and movement data for the operation plan, including:

1. In-place units.

2. Units to be deployed to support the OPLAN with a priority indicating the desired sequence for their arrival at the port of debarkation.
3. Routing of forces to be deployed.
4. Movement data associated with deploying forces.
5. Estimates of non-unit-related cargo and personnel movements to be conducted concurrently with the deployment of forces.
6. Estimate of transportation requirements that must be fulfilled by common-user lift resources as well as those requirements that can be fulfilled by assigned or attached transportation resources. (Joint Pub 1-02)

Unitized Group Ration (UGR)—UGRs (also called UGR-H&S) uses heat and serve shelf-stable tray entrees while the UGR A-Ration (UGR-A) uses frozen entrees. Both versions are integrated with brand-name commercial items to form a complete meal.

Unit Type Code (UTC)—A Joint Chiefs of Staff developed and assigned code, consisting of five characters that uniquely identify a “type unit.” Also called UTC.

War Reserve Materiel (WRM)—Materiel required to augment peacetime assets to support wartime activities reflected in HQ USAF war and mobilization plans until the industrial base can meet wartime demands. Also called WRM. —◆—

Attachment 2

CONTRACT CONSIDERATIONS

Table A2.1. Contract Considerations.

#	<i>Consideration</i>
1	Will the contractors live on or off base? a. If they live on base, can the base support them? b. If living off base, can they get on base during FP condition Delta?
2	What are their nationalities and does it bar them access to the base? (depending on location, certain host countries have stringent access rules for contractors)
4	Will contractors be required access passes? Who's going to get them? Will there be any delays due to access passes?
5	What is Delta Mitigation Plan if contractors are not allowed on base? What mission-critical operations will continue to function? What services provided by mission-critical operations will be reduced? What are the subsistence inventory levels and how long will they last? What are the other essential supply levels and how long will they last?
6	What is the plan if Prime Vendor (PV), supply, or laundry delivery truck is denied access to the base? (Contact the MAJCOM-C if you need rations and is unable to get them from your PV.)
7	Do you have access to an interpreter?

Note: Every unit that relies on contract support should have an effective mitigation plan in place to ensure continuation of essential operations if Force Protection conditions prevent contractors from accessing the base. The same level of service will not be sustainable, and a reduction of service should be expected until FP conditions are relaxed. —◆—

Attachment 3

RATION PLANNING/POPULATION

Table A3.1. Ration planning factors for: MRE, UGR, A-Rations.

<i>Type</i>	<i>Meals per Case or Module</i>	<i>Case or Module Per Skid</i>	<i>Weight per Skid</i>	<i>Skids per 463L pallet</i>	<i>Weight per 463L pallet*</i>
MRE	12	48	1098 lbs	8 (double stack) 6 (double stack)*	9139 lbs 6943 lbs
UGR	50	8	1110 lbs**	6 (double stack)	7015 lbs
*Used for C-130 aircraft					
**Average weight for UGRs. Check with individual weights & cube attachment for specific meal. Includes 290 lbs for 463L pallet & 65 lbs for netting (355 lbs)					
Short Ton = 2000 lbs, Long Ton = 2240 lbs, Metric Ton = 2204.62 lbs					

Table A3.2. Example of Rations Supply Chain for Iraq.

<i>Rations Supply Chain for Iraq</i>	
Average In-Transit; CONUS to CENTCOM AOR	63 Days
Operating Level at Subsistence Prime Vendor (SPV)	30 Days
Safety Level at SPV	45 Days
In-Transit from Public Warehouse Company to Iraq Zone (IZ)	11 Days (Avg)
Local Stocks On Hand (Dining Facility Storage)	7 Days (Avg)
General Stock Level	5 Days
Direct Stock Level	3 Days
Supply Chain	164 Days
NOTE: For IZ, constant 26 days of support in IZ; combination of SPV in-transit, GS, DS, and local DFAC. For the Combined Joint Operations Area, SPV to commence Dec '05. Will maintain 45 day safety level with a 30-day operating level. This allows rotation of stocks without impacting ability to maintain support (if conditions go "back"). Eight DOS of GS and DS take 150 days to consume under normal conditions.	

Table A3.3. Storage—Dry and Refrigerated.

<i>Storage Requirements—Dry and Refrigerated</i>	
Dry Storage	Three cu ft/per person. (Example: For an 8,000 POPSUM = 24,000 cu ft or 679 cu meters. Plan for 2 meter rack height = 339 sq meters. Add 20% circulation = 407 sq meters).
Cold Storage	Seven cu ft/per person. (Example: for an 8,000 POPSUM = 56,000 cu ft or 1,585 cu meters. Plan for 2 meter rack height = 792 sq meters. Add 20% circulation = 950 sq meters).
Chill/Produce/Thaw box	Minimum of 600 cu ft or 50% of the refrigeration planning factor for the mean POPSUM if the installation does not have a rations breakdown warehouse.
Freeze box	Minimum of 600 cu ft or 50% of the refrigeration planning factor for the mean POPSUM.
Rear loading dock	Minimum of 15 ft wide by 30 ft long.
Dry goods storage	Minimum of 600 cu ft or 100% of the dry storage planning factor for the mean POPSUM if the installation does not have a rations breakdown warehouse.
Miscellaneous storage space	12 ft wide by 20 ft long provided for cleaning supplies and expendable items.

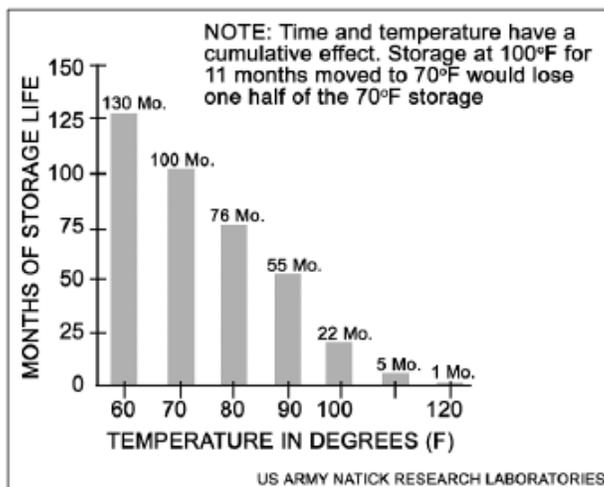


Attachment 4

RATION STORAGE LIFE VS. TEMPERATURE

A4.1. Protect rations. Rations need to be protected from excessive heat. MREs can quickly lose shelf life when exposed to the high temperatures common in Southwest Asia and Africa ([Figure A4.1](#)).

Figure A4.1. Rations Storage Life vs. Temperature.



A4.2. Inspect rations. UGR H&S and UGR-A rations have a shelf life of 18 months and 3-6 months (for the perishable portion of UGR-A) respectively at 80° F from the date of packing. Shelf life will degrade with temperature. General guidance is to check the date of the packaging and also check the condition of the packaging. Inspect for insect activity monthly during the hot months, and quarterly during the winter/cooler months. Conduct closed package condition of container inspections (cans, boxes, etc.). The "limiting items" for this ration are the *infestibles*—those items in commercial packages. Even the #10 cans of vegetables and fruits can be considered a limiting item. —◆—

Attachment 5

MANPOWER REQUIREMENTS MATRIX

Table A5.1. Manpower Requirements Matrix (Initial Guideline).

		Beddown Population Spread													
		0 to 550	551 to 1100	1101 to 1650	1651 to 2200	2201 to 2750	2751 to 3300	3301 to 3850	3851 to 4400	4401 to 4950	4951 to 5500	5501 to 6050	6051 to 6600	6601 to 7150	7151 to 7700
Equipment UTCs/PV	RF	1	2	2	2	2	2	2	2	2	2	2	2	2	2
	RG	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Fit/Rec-Prime Ven	1	1	1	1	2	2	2	2	3	3	3	3	4	4
	C2 ¹	2	5	5	6	6	7	7	7	7	7	7	7	7	7
Kitchens ²	SPEK	1	2	2	2	2	2	2	2	2	2	2	2	2	2
	CDK	1	2	3	3	3	3	3	3	3	3	3	3	3	3
	BEAR-1*	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	BEAR-F**		1	2	3	4	5	6	7	8	9	10	11	12	13
Lodging Tents ³	Surge	46	92	138	183	229	275	321	367	413	458	504	550	596	642
	Sustain	69	138	206	275	344	413	481	550	619	688	756	825	894	963
	Mortuary ⁴	1	1	1	1	1	2	2	2	2	2	2	3	3	3
Laundry ⁵	Self	1	1	2	2	3	3	4	4	5	5	6	6	7	7
	Org	0	1	1	1	1	2	2	2	2	3	3	3	3	4
	Fitness ⁶	1	1	2	2	3	3	4	4	5	5	6	6	7	7
	Recreation ⁷	1	1	2	2	3	3	4	4	5	5	6	6	7	7
	Exchange ⁸	1	1	2	2	3	3	4	4	5	5	6	6	7	7
	Logistics ⁹	1	1	1	2	2	2	2	2	2	2	2	3	3	3
Vehicles	Mortuary-1.5T Cov			1	1	1	1	1	1	1	1	1	1	1	1
	Rations-450 CF		1	1	1	1	1	1	1	2	2	2	2	2	2
	10k AT Forklift		1	1	1	1	2	2	2	2	2	3	3	3	3
	4K Forklift					1	1	1	1	1	2	2	2	2	2
	CC Supplies P/U		1	1	2	2	2	2	2	3	3	3	3	3	3

NOTES:

* BEAR-I = BEAR 550 Initial housekeeping = B-550I

** BEAR-F = BEAR 550 Follow-on housekeeping = B-550F

Use the following explanations or system planning factors with the corresponding A.5.1. Matrix superscripted designations. Substitute closest sized TEMPER/ Small Shelter System (SSS) tent if the designated system is not available.

1. C2 = SV Command and Control
2. Kitchens: SPEK is initial kitchen, supports up to 550 population for 2 hot meals per day. One SPEK, one BEAR 550I or 550F required to sustain population of 1,100; one CDK = one BEAR 550I
3. Lodging Surge = 12 Per Tent Sustainment = 8 Per Tent
4. Mortuary = Small Shelter System (SSS)
5. Laundry: Self-Help = 1,100 Organizational = 2,200 + 1 Medium Shelter System (MSS) Per Laundry
6. Fitness = Medium Shelter System (MSS)
7. Recreation = Medium Shelter System (MSS)
8. Exchange = Medium Shelter System (MSS)
9. Logistics = Small System Shelter (SSS)



Attachment 6

SERVICES PLANNING FACTORS

Table A6.1. Planning Factors.

Planning Factors	Details/Comments
<i>Beddown Planning</i>	
AETF Force Modules	<p>1. Open the Airbase. (a) Deploys on or before C-Day (b) IOC within 24 hours of arrival (c) Protects base, plans reception and beddown, setup comm, prepare airfield, work host nation issues.</p> <p>2. Command and Control. (a) Deploys on or after C-Day (b) IOC within 16 hours of arrival (c) Sets up expeditionary wing or group C2</p> <p>3. Establish the Airbase. (a) Deploys between C+1 and C+6 (b) IOC within four days of arrival (c) Round-the-clock operations and life-sustaining support/infrastructure (e.g. lodging, food service and hygiene), and mortuary and protocol.</p> <p>4. Generate the Mission. (a) Begins on or after C+2 (b) Overlaps with previous modules (c) IOC about 4 days after Open the Airbase or within two days if required. (d) Primary weapon systems (fighters, bombers, etc.) weapon operators, and maintainers.</p>

Planning Factors	Details/Comments
	<p>5. Operate the Airbase.</p> <ul style="list-style-type: none"> (a) Deploys on or after C+2 (b) IOC on or before C+14 (c) Full IOC and sustainment for up to 30 days (introduces QoL, fitness and recreation activities). <p>6. Robust the Airbase.</p> <ul style="list-style-type: none"> (a) Deploys 30 days after base is established (b) Strengthens previous modules
<i>Logistics</i>	
BEAR ASSETS	<p>1. BEAR 150 Housekeeping Set (UTC XFB1A). Weighs 44 tons; take 17.5 pallets (one C-17) for airlift. Major components:</p> <ul style="list-style-type: none"> (a) 16 SSS for billeting (b) 16 ECUs (c) 1 Latrine (d) 1 10K all-terrain forklift (e) 4 electrical power generators <p>2. BEAR 550I Housekeeping Set (UTC XFB1H). Weighs 229 tons; takes 78 pallet positions (six C-17s). Major components:</p> <ul style="list-style-type: none"> (a) 48 SSS for billeting (b) 1 SSS for mortuary (c) 1 SSS (for tactical exchange if needed) (d) 2 – 10K fuel bladder (e) 1 SPEK (f) 1 MSS (feeding facility) (g) 3 ADR-300 (h) 1 (550 person) water distribution system (i) 2 - 20K gallon water bladder (j) 72 ECU (k) 7 electrical power generators (2.7kW per person)

Planning Factors	Details/Comments
	<p>(l) Playbook Options: BEAR 550I kitchen, ROWPU, Latrine Pumper, Water Source Run (pumps, hose, fittings)</p> <p>3. BEAR 550F Housekeeping Set (UTC XFBBF). Weighs 188 tons; 61 pallet positions (five C-17s). Major components:</p> <ul style="list-style-type: none"> (a) 48 SSS for billeting (b) 1 - 10K gallon fuel bladder (c) 2 - M-80 water heater (d) 60 ECU (e) 6 electrical power generator (f) Same Playbook options as BEAR 550I/F kitchens. <p>4. BEAR Industrial Ops Set (UTC XFBRC). Weighs 267 tons; takes 81.5 pallet positions (seven C-17s). Major components:</p> <ul style="list-style-type: none"> (a) 3 MSS (b) 5 Dome Shelters (8,000 sq ft) (c) 3 Dome Shelters (4,000 sq ft) (d) 22 SSS (e) 2 - 10K gallon fuel bladder (f) 1 ADR-300 (g) 36 ECUs (h) 2 electrical power generator <p>5. BEAR Initial Flightline Set (UTC XFBIF). Weighs 248 tons; 92 pallet positions (seven C-17s). Major components:</p> <ul style="list-style-type: none"> (a) 15 MSS (b) 2 Dome Shelter (8,000 sq ft) (c) 4 Dome Shelter (4,000 sq ft) (d) 22 SSS (e) 2 electrical power generator (f) 60 ECU

Planning Factors	Details/Comments
	<p>6. BEAR Follow-on Flightline Set (UTC XFBFF). Weighs 39 tons and requires 13 pallets positions (2 C-17s). Major components:</p> <ul style="list-style-type: none"> (a) 1 Aircraft Hangar (b) 4 MSS (c) 3 SSS (d) 12 ECU <p>7. 550I/F Kitchens (UTC XFBK4) Playbook option. Weighs 35 tons; 13 pallet positions.</p> <p>8. Self-Help Laundry (UTC XFBLS). Playbook option of 10 washers/20 dryers. Weighs 18 tons; five pallets.</p>
<i>Food Services</i>	
Kitchens	<p>1. SPEK (BEAR – UTC XFB1H; Homestation - UTC LWRRF). Major characteristics:</p> <ul style="list-style-type: none"> (a) Single cargo pallet position to airlift (b) UGRs for 550 people per meal (c) 8 troops assemble & begin feeding within 4 hours (d) Ration Heater from -20 degrees to 120 degrees F (e) Needs space of 25 feet x 30 feet. (f) No seating/dining tables (BEAR SPEK includes a California Medium Shelter) (g) Needs potable water, diesel, water/waste disposal <p>2. BEAR 550 Kitchen (UTC XFBK4). Major characteristics:</p> <ul style="list-style-type: none"> (a) Playbook option in BEAR 550I and 550F (b) Serves 550 personnel (c) 7 TEMPER sections for dining; 10 sections for kitchen; 3 sections for mess kit laundry (d) 20' x 56' dining area; 20' x 80' kitchen area (e) 3 ADR-300 reefers (f) Two 550 kitchens easily configured to feed 1,100;

Planning Factors	Details/Comments
	300' x 300' when combined 3. CDK (UTC XFBK5) . Major characteristics: (a) 8' x 8' ISO container (b) 500 meals twice a day (c) 150kW diesel generator (d) 250-gallon water bladder
<i>Ration Planning Factors</i>	
	1. MREs (UTC LWMRE) (a) 12 meals per case (b) Weight per case – 22 lbs (c) Cube per case – 1.02 cubic feet (cf) (d) Cases per skid pallet – 48 (e) Cube per skid pallet – 56.1 cf (f) Weight per skid pallet – 1,056 + 42 lbs tare = 1,098 (f) Skid pallets per 20 ft van – 16 (h) Skid pallets per 40 ft van – 36 (i) Skid pallets per 463L pallet – 6 on C-130 (j) Skid pallets per 463L pallet – 8 on C-17/C-5 (j) Weight of 463L pallet empty – 300 lbs (k) Weight of 463L pallet w/6 skid pallets of MREs – 6,552 lbs 2. UGR Heat and Serve (UTC LWUGR) (a) Meals per skid pallet = 400 (50 per module x 8 modules per skid) (b) Weight per skid = 1,1100 lbs (c) Skids per 463L pallet = 6 (double stack) (40"x48"x43") (e) Meals per 463L pallet = 2,400 (e) Weight per 463L pallet = 6,960 lbs 3. Bottled Water (UTC LWWTR) (a.) 24 half-liter bottles per case (b.) 45 cases per skid – 1080 bottles

Planning Factors	Details/Comments
	(c.) 4 skids per 436L pallet – 4320 bottles (d.) ½ liter bottles need to be specified when ordering to DSCP
<i>Water Usage</i>	
	<p>1. Using BEAR mobile water distribution assets (Note: these are the amounts that CE will produce)</p> <p>Potable Water (18 gal/person/day) using BEAR</p> <ul style="list-style-type: none"> (a) Drinking – 4.0 (b) Personal Hygiene – 3.0 (c) Shower – 5.0 (d) Food Preparation – 4.0 (e) Hospital – 1.0 (f) Heat Treatment – 1.0 <p>Nonpotable Water (9 gal/person/day)</p> <ul style="list-style-type: none"> (a) Laundry – 2.0 (b) Construction – 2.0 (c) Graves Registration – 0.5 (d) Vehicle Operations – 0.5 (e) Aircraft Operations – 2.0 (f) Firefighting – 2.0 <p>Loss Factor – 10% (3.0)</p> <p>Total: 30.0 gallons per person per day</p> <p>2. Using a fixed water treatment plant:</p> <p>Potable Water (30 gal/person/day) using permanent plant</p> <ul style="list-style-type: none"> (a) Drinking - 4.0 (b) Personal Hygiene – 4.0 (c) Shower – 15.0 (d) Food Preparation – 5.0 (e) Hospital – 1.0

Planning Factors	Details/Comments
	<p>(f) Heat Treatment – 1.0</p> <p>Nonpotable Water (permanent plant) 25 gal (person/day)</p> <p>(a) Laundry – 14.0 (b) Construction – 2.0 (c) Graves Registration – 0.2 (d) Vehicle Operations – 1.8 (e) Aircraft Operations – 3.0 (f) Firefighting – 4.0</p> <p>Loss Factor – 10% (5.0)</p> <p>Total: 60.0 gallons per person per day</p> <p>3. Services unique factors:</p> <p>(a) Field kitchens = 3.3 gal/person/day (b) Kitchen cleaning = 2.35 gallons pppd (c) Kitchen beverages = 0.5 gallons pppd (d) Kitchen ice = 0.55 gallons water pppd (e) MREs = .06 gallons per meal</p> <p>4. Minimum Water Heating Temperatures</p> <p>(a) Dishwashing temperature: 140 degrees Fahrenheit (b) Rinse temperature: 160 degrees Fahrenheit (c) Disinfect: 171 degrees Fahrenheit (d) Mess kit pre dip: 171 degrees Fahrenheit</p> <p>5. Ice Requirements (by base population)</p> <p>(a) 550 personnel = 2,420 lbs per day (b) 1,100 personnel = 4,840 lbs per day (c) 2,200 personnel = 9,680 lbs per day (d) 3,300 personnel = 14,520 lbs per day</p>
<i>Lodging Operations</i>	
	<p>1. Site Preparation for Shelter.</p> <p>(a) Slope of terrain is < 18” over entire floor plan (b) Area flat, high, dry, good drainage</p>

Planning Factors	Details/Comments								
	<p>(c) Away from traffic, noise, offensive smells, and intense security lighting?</p> <p>(d) Accessible to foot, delivery, and emergency traffic</p> <p>(e) Meets THREATCON requirements</p> <p>(f) Latrine and shower/shave located nearby (but downwind from quarters and feeding facilities)</p> <p>(g) Close to potable water source</p> <p>(h) Adequate for future expansion</p> <p>(i) Adequate for conversion to permanent lodging</p> <p>2. Lodging Assignments.</p> <p>(a) Initial assignment - 12 personnel per tent</p> <p>(b) 8 personnel per tent after FOC or sustainment</p> <table data-bbox="630 940 1218 1150"> <thead> <tr> <th data-bbox="630 940 803 968"><u>People per Tent</u></th> <th data-bbox="841 940 1019 968"><u>Sq Ft per Person</u></th> </tr> </thead> <tbody> <tr> <td data-bbox="683 968 716 995">12</td> <td data-bbox="850 968 992 995">~55 (normal)</td> </tr> <tr> <td data-bbox="695 995 711 1022">8</td> <td data-bbox="850 995 1218 1087">80 (flight crews, for health conditions, theater directed such as for storage of additional equipment)</td> </tr> <tr> <td data-bbox="683 1087 716 1115">20</td> <td data-bbox="850 1087 1218 1150">40 (very short term, such as Open the Airbase/emergency situations)</td> </tr> </tbody> </table> <p>3. Potential Lodging Breakouts:</p> <p>(a) Flight crews (by type of aircraft, expected number of aircraft, and crew numbers)</p> <p>(b) Officer and Senior Officers (SNCOs)</p> <p>(c) Enlisted and SNCOs</p> <p>(d) Men and women</p> <p>(e) Civilians</p> <p>(f) Foreign military/visitors</p> <p>(g) Transient and permanent personnel</p> <p>(h) Special shift crews (example: firefighters)</p> <p>(i) Special mission/VIP requiring higher security</p>	<u>People per Tent</u>	<u>Sq Ft per Person</u>	12	~55 (normal)	8	80 (flight crews, for health conditions, theater directed such as for storage of additional equipment)	20	40 (very short term, such as Open the Airbase/emergency situations)
<u>People per Tent</u>	<u>Sq Ft per Person</u>								
12	~55 (normal)								
8	80 (flight crews, for health conditions, theater directed such as for storage of additional equipment)								
20	40 (very short term, such as Open the Airbase/emergency situations)								

Planning Factors	Details/Comments
<i>Laundry Operations</i>	
	<ol style="list-style-type: none"> 1. Personal laundry - 17 lbs per person per week 2. Medical patients – 32 lbs pppw 3. Medical personnel - 32 lbs pppw 4. Organizational bulk - 10 lbs pppw 5. Self-Help – 10 washers/20 dryers per 1,100 personnel
<i>Fitness and Recreation Operations</i>	
<p>1. Recreation, Fitness, LRC and NAF resale</p>	<ol style="list-style-type: none"> 1. Equipment <ol style="list-style-type: none"> (a) Cardiovascular equipment: 2.5 pieces per 100 people (e.g. upright stationary cycles, recumbent stationary cycles, stair steppers, and treadmills) <ol style="list-style-type: none"> (1) Computerized feedback of heart rate (2) Calories burned (3) Time (4) Preprogrammed routine options (b) Strength training equipment: 2.0 pieces per 100 people (e.g. free weights or selectorized equipment) to exercise each of the following muscle groups <ol style="list-style-type: none"> (1) Quadriceps (leg extension) (2) Hamstrings (leg curl) (3) Pectorals (flat/incline/decline bench) (4) Latissimis Dorsi (high pull) (5) Biceps (curl) (6) Triceps (tricep extension) (c) Ancillary equipment for: <ol style="list-style-type: none"> (1) Abdominal (crunch) (2) Erector spine (back extension) (3) Gastrocnemius (calf raise) (4) Deltoids (front, side, back shoulder) 2. Sustainability (spare parts/maintenance) is crucial and must be considered with the minimum number of

Planning Factors	Details/Comments						
	strength training equipment pieces.						
<i>LRC and Library Operations</i>							
	<p>1. Monthly Paperback Books/Periodical Kits (by base population).</p> <p>Paperback Kit A = 15 titles (50% fiction/50% nonfic) Paperback Kit B = 15 titles (50% fiction/50% nonfic) Paperback Kit C = 10 titles (best sellers)</p> <p>a. Paperback Kit</p> <p>(1) 1-50 adults = 1 C kit (10 titles) (2) 51-100 adults = 1 C+ A or B kit (25 titles) (3) 101-200 adults = 1 C+A+B kit (40 titles) (4) Each additional 100 adults = 10-15 additional titles</p> <p>b. Periodicals Kit. The following titles are included in the kit: Air Force Times, Newsweek, PC Magazine, People, Sports Illustrated, US News & World Report.</p> <p>(1) 1-100 adults = 1 kit (six titles) (2) 101-200 adults = 2 kits (2 copies of six titles) (3) 201-300 adults = 3 kits (3 copies of 6 titles) (4) 301+ adults = 1 kit for each additional 100</p> <p>2. Multimedia.</p> <p>(a) Video or DVDs - 20 per 100 people (b) Music CDs - 10 per 100 people (c) Core Reference for Education Support – 22 Titles</p>						
<i>Mortuary Operations</i>							
	<p>1. Mortuary Affairs.</p> <table border="0" style="width: 100%;"> <tr> <td style="text-align: left;">Storage Temp for Remains</td> <td style="text-align: right;">Maximum Storage Time</td> </tr> <tr> <td>70 degrees +</td> <td style="text-align: right;">1 day or less</td> </tr> <tr> <td>60-70 degrees</td> <td style="text-align: right;">1 to 3 days</td> </tr> </table>	Storage Temp for Remains	Maximum Storage Time	70 degrees +	1 day or less	60-70 degrees	1 to 3 days
Storage Temp for Remains	Maximum Storage Time						
70 degrees +	1 day or less						
60-70 degrees	1 to 3 days						

Planning Factors	Details/Comments
	40-45 degrees 3 to 6 days 2. Facilities Required by population (a) 550 – 1 SSS (b) 1,100 – 2 SSS (c) 2,200 – 3 SSS (d) 3,300 – 4 SSS 3. Ice Requirement (when mechanical refrigeration not available) = 1.7 lbs pppd (or 0.2 gallons of water pppd)

