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Civil Engineering



**WORKING IN THE RESOURCES FLIGHT  
FINANCIAL MANAGEMENT**

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This volume in this pamphlet series describes the Air Force Engineer's role in activities required to develop, prepare, submit, and maintain a financial plan, budget estimates, and the Base Civil Engineer (BCE) financial management system; manage all manpower and personnel issues; operate and maintain automation systems and support; and all activities related to real property accountability and reporting. The 32 series of Air Force publications contains USAF policy and procedural guidance for the Resources Flight. This volume provides detailed information for performing the Financial Management mission. The financial management function is responsible for development, management, and execution of the civil engineer financial programs. This volume in this pamphlet also supports policy and guidance from SAF/FM and the 65 series of Air Force publications.

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## Chapter 1      **Planning, Programming, and Budgeting System (PPBS)**

At most bases, the Civil Engineer (CE) controls between 40 and 70 percent of the base's budget. Poor financial management by the Civil Engineer can hurt the entire base. This is why it is critical for the Civil Engineer financial management functions to become intimately familiar with the key ingredients to successful financial planning, execution, and analysis.

Perhaps the financial manager's most important job is knowing and understanding the structure of the Civil Engineer budget. To facilitate the accomplishment of the Civil Engineer objective, the financial manager must know what kind of funds are required and where to go to get them. This financial structure mastery becomes very important in the financial planning phase because the proper requirements must be in the proper portion of the increasingly important financial plan.

Because the Civil Engineer works in the Air Force Resource Management Flight, a structure that contains codes, rules, pots of money, colors of money, etc.; this complicated and, often foreign, structure creates great confusion for base-level managers, particularly Civil Engineer managers. The Civil Engineer must manage over half the base's resources in several appropriations and in numerous programs. A firm understanding of the structure or context of the budget is the necessary foundation on which a good management of US government resources can be built.

Good execution of a budget usually starts with a strong, realistic, executable financial plan. The Air Force Manpower Standard (AFMS) for the Resources Flight still ranks this as the number one process. This process should get the management attention it deserves. When it's completed, it should be kept readily accessible for use when the initial distribution of funds for the next year are received and must be executed.

The financial plan is often a missed opportunity for the Civil Engineer organization. With bogeys and unfundeds, it often is perceived as a financial management game to be played only by financial people. This is CE's only chance to formally tell the base, Major Command (MAJCOM), and Air Staff what CE does and how much it costs to do those things. This opportunity should not be lost.

## **1.1 PPBS Process**

The planning, programming, and budgeting system is the process the Secretary of Defense uses to obtain government resources, including manpower, weapon systems, and funds. A basic understanding of the system helps to clarify the role, at the base level, in the development of the Department of Defense's (DoD) portion of the President's budget.

The PPBS contains three main phases: planning, programming, and budgeting. Base-level managers are not directly involved in the PPBS; however, financial planning and execution are critical to the overall success of the process. The process involves setting strategies, assessing the enemies' capabilities, selecting the resources to meet new and existing threats, and, then, developing detailed costs for inclusion in the President's budget. This is a DoD process and is very dynamic. The PPBS is not part of public law and can be changed by DoD.

### *1.1.1 Planning*

The planning phase is the big-picture phase and covers twelve fiscal years. Its primary activities are: establish threat, determine forces, select strategy, and guide decisions. The output document of this phase is the defense planning guidance (DPG), which becomes the input to the programming phase. It tells the services to, "build a program to meet these goals with this amount of funds."

### *1.1.2 Programming*

The programming phase takes the DPG and begins to build a program, called the future years defense plan (FYDP). The plan covers six fiscal years and contains resource requirements for funds, manpower, and procurement. The output of this phase is the program objective memorandum (POM). In odd-year summers, Major Commands and the Air Staff build the POM. The programming phase matches dollars with needs, develops a six-year program, and receives feedback.

The Office of the Secretary of Defense (OSD) returns the program decision memorandum (PDM) showing which programs are approved, which to increase or decrease, and which to delete.

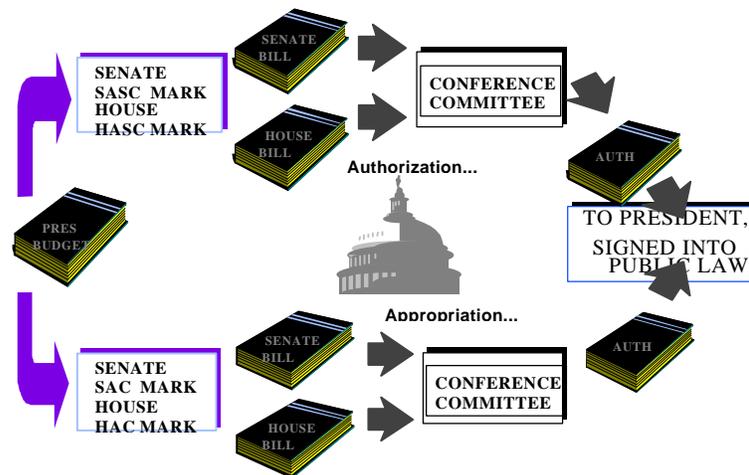
*1.1.3 Budgeting*

During budgeting phase, the PDM is used as input to produce the budget estimate submission (BES). The BES covers two fiscal years. It is sent to OSD for review. OSD then sends the program budget decision (PBD) to the Air Force and the program becomes part of the President’s budget (PB). The highlights of this phase are the final costs and a detailed budget.

*1.1.4 Congressional Approval*

The PB is submitted to Congress for approval of the first fiscal year, which becomes law when passed. The PB now becomes the amended budget estimate submission (ABES). When the ABES is finalized, it becomes the amended President’s budget (APB). It is returned to Congress to pass the second fiscal year. The cycle then begins again. Two different processes, authorization and appropriation, must take place for the budget to become public law. The process is shown in Figure 1, Budget Cycle — Authorization and Appropriation

**Figure 1. Budget Cycle — Authorization and Appropriation**



**Authorization** — The House and Senate Armed Services Committees (HASC and SASC), using their expertise in

defense programs, validate the DoD budget, authorize it, and pass an authorization act.

**Appropriation** — The House and Senate Appropriations Committees (HAC and SAC), the groups with the budgeting expertise, appropriate dollars for all federal agencies who use government funds by passing an appropriations law.

## **1.2 Common Air Force Appropriations**

Table 1, Common Air Force Appropriations, shows the coding structure of the appropriations; some of which will be discussed later in further detail.

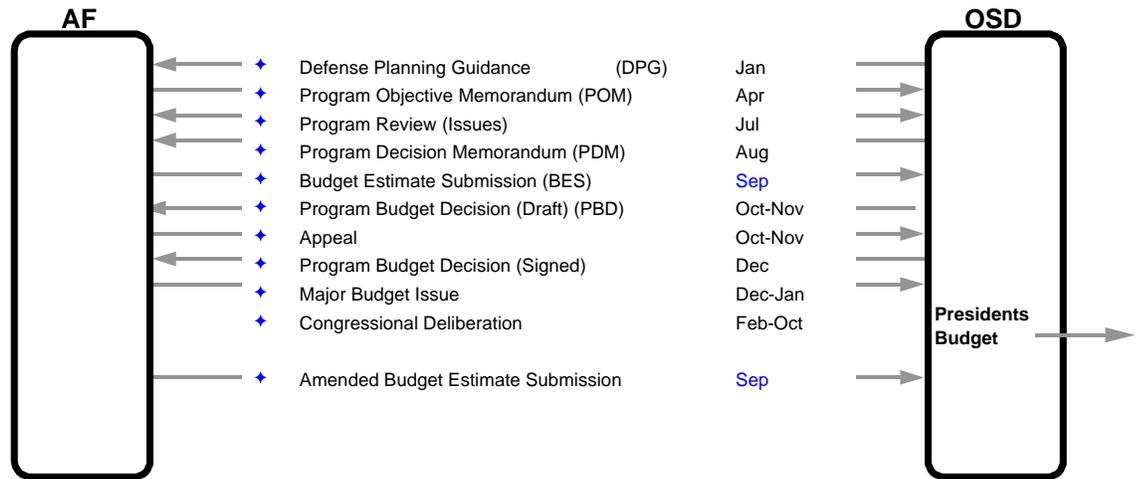
Because the government's fiscal year ends on September 30, to continue to have funds to operate, new appropriation bills must be passed by that date. In most years, Congress does not pass the appropriate laws by 1 October and the government runs out of funds. Usually, Congress passes a Continuing Resolution Authority (CRA) allowing the government to operate until the new budget is passed. Some of the rules applying during this period, approximately three to four month's time, include: mission-essential spending only and not spending at a rate greater than the prior fiscal year.

Figure 2 shows the time lines for the PPBS.

**DRAFT - NOT FOR IMPLEMENTATION OR COMPLIANCE****WORKING IN THE RESOURCES FLIGHT****Table 1. Common Air Force Appropriations**

<b>Appropriation Description</b>	<b>Appropriation Number</b>	<b>Fund Code</b>	<b>Years Valid</b>
Aircraft Procurement	57*/*3010	11	3
Missile Procurement	57*/*3020	15	3
Other Procurement	57*/*3080	17	3
Military Construction	57*/*3300	25	5
Operation & Maintenance (O&M)	57*3400	30	1
Military Personnel	57*3500	32	1
Research, Development, Test & Evaluation	57*/*3600	29	2
Reserve Personnel	57*3700	50	1
Military Construction - Reserve	57*/*3730	57	5
Operation & Maintenance - Reserve	57*3740	54	1
Military Construction - Air National Guard	57*/*3830	53	5
Operation & Maintenance - Air National Guard	57*3840	58	1
National Guard Personnel	57*3850	56	1
Family Housing Construction	57*/*7040	89	5
Family Housing Operation & Maintenance	57*7045	83	1
Conservation Programs on Military Reservations	57X5095	74	N/A
O&M, Defense Health Programs	97*/*0130.1883	2X	1
Defense Agencies O&M, Joint Chiefs of Staff	97*/*0100.1202	Z4	3
O&M Defense Medical Support	97*/*0100.1402	G2	3
O&M, Defense Agencies	97*0100.2002	16	1
Base Closure Account, Part I	970/50103.1102	20	3
DoD Base Closure and Realignment Account, Part II	971/50103.1102	2R	N/A
DoD Base Closure and Realignment Account, Part III	972/50103.1102	5F	N/A
Federal Energy Management Program	97*0100.2302	D8	1
Air Force General Gift Fund	57X8928	75	N/A
O&M, US Special Operations Command	97*0100.5602	X4	1
Military Construction, Air Force	57*/*3300	XF	5
O&M, Legacy Resource Management Program	97*0100.1102	2M	1
Defense Business Operations Fund (DBOF)	97X4930	multi	N/A
State and Private Forestry, Forest Service	57-12X1105	2N	N/A
Contingencies, DoD (Allocation to AF)	97X00100.0200	81	N/A
DoD Military Retirement Fund (AF Allocation)	97*8097.02	MR	1
Real Property Maint, Defense (AF)	97*/*0131.0200	ZW	1

**Figure 2. PPBS Time Line**



Detailed descriptions of the POM development and the BES can be found in the *PPBS Primer*.

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## Chapter 2      Operations and Maintenance Funds

This one-year appropriation finances the day-to-day operation and maintenance of Air Force mission activities. Some of the things funded with O&M funds include real property maintenance, repair, and minor construction; service contracts; utilities; travel; supplies; equipment; civilian pay; and fuel.

The O&M budget is managed under the resource management system

### 2.1      O&M Structure

The appropriation level is the highest level of the Resource Management System (RMS) hierarchy. The congressional appropriation number for Air Force O&M is 57\*3400, where \* is the last digit of the fiscal year. Appropriations are further described by a two-digit fund code. Fund code 30 indicates the O&M appropriation. The Air Forces Reserves and the Air National Guard have their own O&M appropriations with an identical structure. Specific codes are shown in Table 1.

Appropriations are the result of legislation. Moving funds between appropriations requires Congressional legislation. The USAF has some authority to reprogram funds, but that authority is small and is never delegated to base level.

#### 2.1.1      *Budget Activities*

Through the legislation appropriation process, Congress creates four budget activities (BAs or BACs) within the O&M appropriation. Funds cannot be moved between the budget activities without Congressional approval. The Air Force (USAF) has limited authority to reprogram funds between BAs, but, has not been extended to base level.

The two-digit codes for these four Budget Activity Codes [formerly, major force programs (MFPs)] are 01 - Operating Forces; 02 - Mobilization; 03 - Training & Recruiting; and 04 - Force Management & Misc.

The BAC's, correlating very closely to the MAJCOM structure, give installation commanders a single operating budget: 01 - ACC/PACAF/USAFE/AFSPC; 02 - AMC; 03 - AETC; and 04 - AFMC, AFRC, AFSOC. The budget activity is called the funds control point. It is the *lowest* level at which funds cannot be reprogrammed.

**2.1.2 Activity and Subactivity Groups**

Budget activities are further divided into 11 specific mission or functional categories called activity groups (AGs). These activity groups are further subdivided into sub-activity groups (SAGs). They further subdivide into missions or activities. Civil Engineer funds usually fall in the Base Support SAG.

AG's and SAG's are only aggregations of costs and have no Congressional fund control. Congress does review the AG's at mid-year and large deviations must be explained. No funds management/control usually takes place with AG's or SAG's at base level. Table 2 shows the BA/AG/SAG structure.

**Table 2. AF BA/AG/SAG Structure**

<b>Budget Activity (BA)</b>	<b>Activity Group (AG)</b>	<b>Subactivity Group (SAG)</b>
<b>01 - Operating Forces</b>	<b>011 - Air Operations</b>	011A - Primary Combat Forces 011B - Primary Combat Weapons 011C - Combat Enhancement Forces 011D - Air Operations Training 011E - Combat Communications 011R - RP Maint 011Z - Base Support
	<b>012 - Combat Related Operations</b>	012A - Global C31 & Early Warning 012B - Navigation/Weather Support 012C - Other Combat Operations Support Programs 012D - JCS Exercises 012E - Management/Operational Headquarters 012F - Tactical Intell and Special Activities
	<b>013 - Space Operations</b>	013A - Launch Facilities 013B - Launch Vehicles 013C - Space Control Systems 013D - Satellite Systems 013E - Other Space Operations 021R - RP Maint 013Z - Base Support
<b>02 - Mobilization</b>	<b>021 - Mobility Operations</b>	021A - Airlift Operations 021B - Airlift Operations C31 021C - Airlift Operations Training 021D - Mobilization Preparedness 021R - RP Maint 021Z - Base Support

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<b>03 - Training &amp; Recruiting</b>	<b>031 - Accession Training</b>	031A - Officer Acquisition 031B - Recruit Training 031C - One Station Unit Training 031D - Reserve Officer Training Corps (ROTC) 031R - RP Maint 031Z - Base Support
	<b>032 - Basic Skill &amp; Advanced Training</b>	032A - Specialized Skill Training 032B - Flight Training 032C - Professional Development Education 032D - Training Support 032R - RP Maint 032Z - Base Support
	<b>033 - Recruiting &amp; Other Training &amp; Education</b>	033A - Recruiting & Advertising 033B - Examining 033C - Off Duty & Voluntary Education 033D - Civilian Education & Training 033E - Junior ROTC
<b>04 - Force Management &amp; Service Wide Activities</b>	<b>041 - Logistics Operations</b>	041A - Logistics Operations 041B - Technical Support Activities 041C - Transportation 041R - RP Maint 041Z - Base Support
	<b>042 - Service Wide Support</b>	042A - Administration 042B - Service Wide Communications 042C - Personnel Programs 042D - Rescue & Recovery Services 042E - Subsistence in Kind 042F - Arms Control 042G - Other Service Wide Activities 042H - Civil Air Patrol Corporation 042R - RP Maint 042Z - Base Support
	<b>043 - Security Programs</b>	043A - Security Programs
	<b>044 - Support to Other Nations</b>	044A - International Support

**2.2 Program Elements (PE)**

A program element is a combination of manpower, equipment, and facilities related to a specific mission capability or activity. The PE is the basic building block of the future years defense plan and the smallest cost collection unit OSD requires DoD components to provide regularly. Each PE has a program element monitor at Air Staff responsible for the programming and budgeting for that PE.

The program element code (PEC) has numerous coding structures. Those in the PPBS process are listed below:

0207479F where:

02 - represents the old MFP.

074 - is an index number identifying different base, MA-JCOM or service functions.

79 - identifies specific function (see below for specific functions).

F - identifies branch of service (F = Air Force).

A shortened version is used in day-to-day operations. For example, 27479 is used instead of 0207479F.

The first three digits of a program element are the base's codes. The last two will always be the same. For example:

- **XXX76** - Real Property Minor Construction - any minor construction work (< \$500K) done by contract or in house forces. No manpower positions are actually assigned to this program element.
- **XXX78** - Real Property Maintenance and Repair - any maintenance or repair of real property done by contract or in-house; including management and design costs. Manpower positions in the zones, heavy repair, and engineering are assigned in this program element.
- **XXX79** - Real Property Services - all non-maintenance, repair, or minor construction of real property including fire protection, entomology, snow removal, custodial contracts, refuse collection, and utilities. Manpower positions for the remainder of CE (except environmental) are included in this program.
- **XXX56** - Environmental Compliance - all costs for the environmental compliance program.
- **XXX54** - Pollution Prevention (P2) - all costs for the pollution prevention program.
- **XXX53** - Conservation Resources - all costs for the conservation resources program (i.e. forestry management).
- **28093 (58093 Guard/Reserve)** - Demolition/Disposal - all costs for demolition and disposal associated with excess facilities.

The wing budget office will provide the additional program elements specific to a base.

Funds may be moved between the program elements by the installation commander. Some specific program elements have statutory rules associated with them (e.g., XX719, Child Development). In other cases, MAJCOMS have specific policies related to the distribution of funds among PEC's (i.e., XXX56, Environmental Compliance). The wing budget office is the source for most of these rules.

### **2.3 DOD Functional Categories**

Functional Categories are the third part of the FYDP (along with BA's and PE's), and represent another method of arranging data. It exists at base level, but is rarely used to manage or control funds.

The Functional Category is a two-digit code, programmatically assigned to expenditures by the BQ system based on the RCCC assigned. These codes, with CE codes in bold, are:

- 01 Mission Operations
- 02 Supply Operations
- 03 Maintenance of Material
- 04 Property Disposal
- 05 Medical Operations
- 06 (Reserved)
- 07 Personnel Support
- 08 Base Services
- 09 Operation of Utilities**
- 10 Maintenance of Real Property**
- 11 Minor Construction**
- 12 Other Engineering Support**
- 13 Administration
- 14 Bachelor Housing
- 15 Morale, Welfare, & Recreation
- 16 Payments to the General Services Administration

Although rare for CE, if Congressional expenditure restrictions exist, funds cannot be moved between functional activities.

#### **2.3.1 Responsibility Centers**

A responsibility center is a function headed by a resource manager with a significant control of resources. Each resource manager has a resource advisor (RA), responsible for helping the resource manager to make the best deci-

sions. The resource manager is the final decision maker and has accountability.

Usually, the responsibility center is the squadron and the resource manager is the squadron commander. In civil engineers, the RA is either the Resources Flight chief or the financial manager. Responsibility centers include:

- security Police,
- transportation,
- Fighter Squadron,
- munitions maintenance,
- Services Squadron, and
- Civil Engineers.

The responsibility center code is combined with the cost center code (see section 2.3.2) to create the RCCC code.

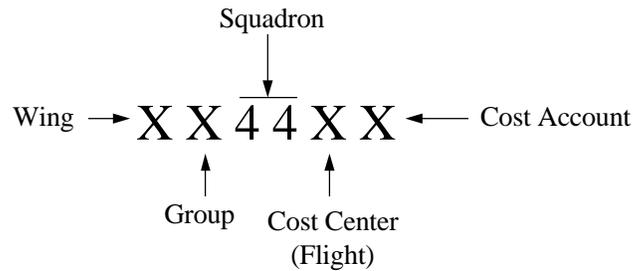
Provided all rules relating to appropriations, budget activities, and any other special rules are followed, the installation commander can move funds between any and all responsibility centers. Although this flexibility can create adversarial relationships on the base, the installation should always be working towards the Wing's mission, requiring cooperation at all levels.

### 2.3.2 *Cost Centers*

Cost centers represent the unit level at which the consumption of resources takes place. Cost centers can be further subdivided into cost accounts to help accumulate costs and better manage a function or activity. Cost centers don't always have funding targets, but they usually represent a significant organization level.

The responsibility center and cost center are combined to produce the Responsibility Center/Cost Center code. The structure is shown in Figure 3, The RCCC Code. DFAS-DE 7000.1-R lists current RCCCs.

**Figure 3. The RCCC Code**



The RCCC triggers both the program element and the DoD functional category in the BQ system. The correct use of these codes in citing funds is critical to the proper expenditure and accounting of appropriated funds. The current CE RCCC's are provided in Table 3.

Following applicable rules, the resource manager, with the advice of the resource advisor, has complete authority to move funds among cost centers.

**2.3.3**     *Element of Expense Investment Codes*

Codes, when broken out, provide information on how funds are used. They represent the program elements, responsibility and cost centers, and what items were purchased.

Program elements show what the funds supported. Responsibility and cost centers show who used the funds. The Element of Expense Investment Codes (EEICs) show what commodities were used or types of costs incurred.

Some examples of common EEIC's are: transportation, travel, supplies, equipment, utilities, service contracts, and rents or leases.

The EEIC is a five-digit character code. It is often abbreviated to three digits (609) or used with an X (39X to indicate all EEICs that start with 39). Commonly used EEICs in Civil Engineers are shown in Table 4.

**DRAFT - NOT FOR IMPLEMENTATION OR COMPLIANCE**  
**WORKING IN THE RESOURCES FLIGHT**

**Table 3. CE RCCC's**

RCCC	Description	PEC	FCAT	RCCC	Description	PEC	FCAT
XX4400	Base Civil Engineer	XXX79	12	XX4440	Heavy Repair	XXX78	10
XX4401	CE Admin Mgt	XXX79	12	thru 4443,		XXX78	10
XX4402	Readiness	XXX79	12	4445 and		XXX78	10
XX4403	Air Base Operability	XXX79	12	XX4447		XXX78	10
XX4404	Explosive Ordnance Disposal(EOD)	XXX79	12	XX4444	Entomology	XXX79	12
XX4405	BCE Reimbursements & Credits	Multi	Multi	XX4446	In-house Snow Removal	XXX79	12
XX4406	Housing	XXX79	12	XX4448	Demolition/Disposal	XXX93	10
XX4407		XXX79	12	XX4449	Minor Construction	XXX76	11
XX4408	Dormitory Management	XXX79	12	XX4450	Facility Manager	XXX78	10
XX4409	RED HORSE Support	XXX78	10	thru		XXX78	10
XX4411	Resources	XXX79	12	XX4457		XXX78	10
XX4412		XXX79	12	XX4458	Real Property Services	XXX79	12
XX4413		XXX79	12	XX4459	Self-Help Center	XXX78	10
XX4414		XXX79	12	XX4460	Infrastructure Support (Utilities)	XXX79	9
XX4416	Environmental Compliance	XXX53/56	12	thru		XXX79	9
XX4417	Restoration Planning Mgt	78008	12	XX4467		XXX79	9
XX4418	Environmental Operations	XXX53/56	10	XX4468	Purchased Utilities	XXX79	9
XX4419	Restoration Operations	78008	10	XX4469	Water/Wastewater Plant Ops	XXX79	9
XX4420	Engineering Management	XXX78	10	XX4470	Infrastructure Support	XXX78	10
XX4421	Contracts	XXX78	10	thru		XXX78	10
XX4422	SABER	XXX78	10	XX4479		XXX78	10
XX4423	Base Development	XXX78	10	XX4480	Undistributed Material Costs	XXX78	10
XX4424	Pollution Prevention	XXX54	12	XX4481	PRIME BEEF Work Orders	XXX78	10
XX4425	Fire Protection	XXX79	12	XX4482	Operation of Utilities Supplies	XXX79	9
XX4426		XXX79	12	XX4483	Emergency DSWO Supplies	XXX78	10
XX4427		XXX79	12	XX4484	Recurring Work Supplies	XXX78	10
XX4430	Operations Management	XXX78	10	XX4485	DSWO Supplies	XXX78	10
XX4431		XXX78	10	XX4486	Programmed WO Supplies	XXX78	10
XX4435		XXX78	10	XX4487	Self-Help Center Supplies	XXX78	10
XX4432	Family Housing Maintenance	XXX78	10	XX4488	Other Maintenance Materials	XXX78	10
XX4433	Medical Facility Maintenance	XXX78	10	XX4489	Other RP Services Material (RPS)	XXX79	12
XX4434	BCE Missile Support	XXX78	10	XX4490	Local or MAJCOM Use	Multi	Multi
XX4436	Maintenance Engineering	XXX78	10	thru			
XX4437		XXX78	10				
XX4438	Material Acquisition	XXX78	10	XX4498			
XX4439	Residual Material	XXX78	10	XX4499	Non-BCE Costs	XXX79	12

**Table 4. CE Commonly Used EEICs**

<b>EEIC</b>	<b>Description</b>	<b>EEIC</b>	<b>Description</b>
2X	Mil Pay & Benefits	533	CE Contract Services
3X	Civ Pay & Benefits	53310	Pvmts & Grounds Maint Services
40X	Travel	53330	Refuse Collection/Disp
421	Civ PCS	534	Environmental Svcs
43X	Passenger Vehicle Rental	535	Installation Restoration
46X	Transp of Things	536	Build Demo/Debris Removal
471	Leased Space	553	Contract Education/Training
47X	Rentals	56X	Equip Maintenance
48010	Purchased Water	570	Contract Operated Installations
48020	Purchased Electricity	592	Misc Contract Svcs
48030	Purchased Gas	600	Solid Bulk Utility Fuels
48040	Purchased Sewage Disp	604	Med/Dental Supplies
48050	Purchased SteamHeat	605	AFSF Systems Support Supplies
48090	Purchased Utilities - Other	609	Stock Fund Supplies
513	Base Produced Utilities	618	Clothing
514	Mobile Equip Rental	619	Other Supplies
521	Maintenance Facility Projects by Contr	628	Equipment
522	Repair Facility Projects by Contr	637	ADP Equipment
528	In-house Minor Construction	641	Ground Fuel
529	Minor Construction Projects by Contr	642	Utility Fuel
531	Custodial Svcs	682	Interest Penalties
532	Contract A&Engr Svcs	693	POL Non-flying

Targets or budgets predict what types of resources will be used to fill mission requirements, but situations change. Using applicable rules, the Base Civil Engineer usually has complete authority to move funds between these EEIC's.

**2.4 Funds Citation and Accounting Classification**

For accounting to correctly identify the types of funds used, they must be accurately coded or cited. These include codes already identified in this chapter, as well as other codes required by finance. Figure 4, Sample Fund Cite, provides an example of how the purchase of a piece of computer equipment for the Resources Flight would be coded. The program element does not appear in the fund cite because the RCCC code triggers the Program Element and DoD Functional Category Code in Finance's computer.

**Figure 4. Sample Fund Cite**

<b>5763400 306 6449 564411 03 637 504200</b>
<b>What does this mean?</b>
Which Service, FY, & Appropriation (57 = AF, 6 = FY, 3400 = Appn)
Fund Code & FY again (30 = Fund Code, 6 = FY)
Which MAJCOM & Base (OAC & OBAN) (64 = OAC, 49 OBAN)
Which Responsibility Center/Cost Center (564411)
Which also tells us PEC & DOD Functional Category
Which Budget Activity (03)
Which EEIC(s) (637)
Who Does Our “Banking” (504200 = ADSN)

A fund cite is used on the following documents/systems:

- purchase requests (AF Form 9);
- Obligation Authorities (AF Form 616 and 4009);
- Military Interdepartmental Purchase Requests (MIPR,) (DD Form 448);
- standard base supply system records;
- project orders (AF Form 185);
- other miscellaneous funding letters and documents;
- AFI 65-601 Volume I, *Budget Guidance and Procedures*; and
- AFMAN 65-604, *Appropriation Symbols and Budget Codes* (Fiscal Year 1998).

## **2.5 Resource Management System**

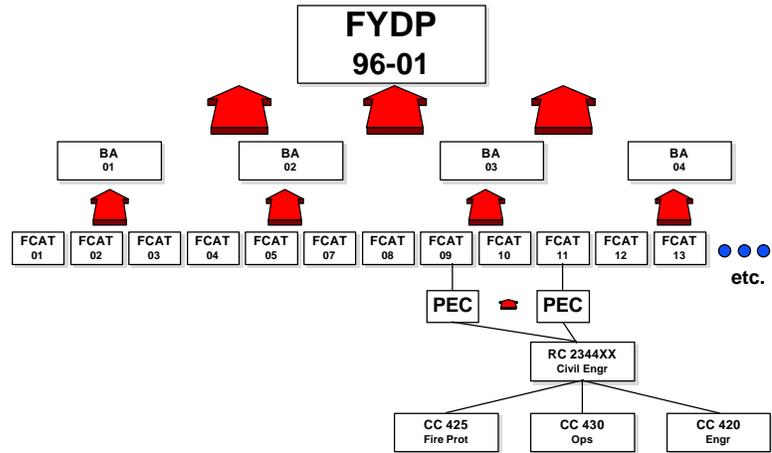
Proper coding of all civil engineer funding actions is not only important to good budget management at base level. It is also critical to the FYDP developed in the PPBS.

Figure 5, Coding under the FYDP, shows how all these codes fit together into the FYDP.

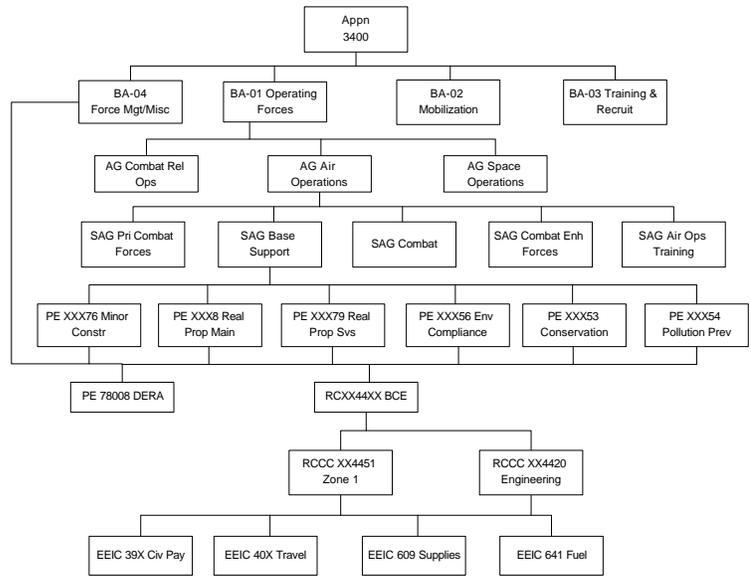
Figure 6, Appropriation 3400 Hierarchy, presents a graphic representation of the system.

Program Element Monitors at HQ USAF require accurate historical data to begin programming and budgeting effectively for future years. Improper coding hurts base level managers as funds become more difficult to justify.

**Figure 5. Coding under the FYDP**



**Figure 6. Appropriation 3400 Hierarchy**



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## Chapter 3 Military Family Housing (MFH) Funds

The two appropriations for family housing finance the day-to-day operations and maintenance of Air Force family housing activities and the construction of new family housing dwellings. Among the items funded with MFH funds are: leasing of housing, service contracts, housing unit maintenance and repair, supplies, appliances and furnishings, civilian pay, utilities, administration and support services, alterations and additions, and new family housing dwellings.

The MFH budgets are managed by the Base Civil Engineer. The structure of this appropriation is much different than the O&M appropriation.

### 3.1 Family Housing Construction

The MFH Construction appropriation is a five-year appropriation providing moneys of the Air Force Housing Construction Program.

The appropriation number is 57\*/\*7040, where \*/\* is the start and stop fiscal year of the appropriation (for example, 574/87040). The fund code for the appropriation is 89. As with all appropriations, public law must be changed in order to move funds in or out of the appropriation.

Unlike the O&M appropriation, the family housing construction appropriation contains a budget program, not budget activities. Program 710 - Construction, commonly known as P-710, is the only budget program in the construction appropriation. The budget program is broken into five budget projects:

1. new construction,
2. post-acquisition construction,
3. advance planning and design,
4. currency gains, and
5. currency losses.

Budget Program Activity Codes (BPACs) are used to identify budget projects. BPACs always begin with the letter "P," followed by a three-digit number. Family housing construction BPACs are identified in Table 5.

**Table 5. BPACs - Family Housing Construction**

<b>BPAC</b>	<b>Description</b>
P-711	New Construction
P-713	Post Acquisition Construction
P-714	Advance Planning and Design
P-716	Family Housing Construction Currency Management Account-Gains
P-717	Family Housing Construction Currency Management Account-Losses

Family housing construction’s (P-711) first purpose is to construct initial housing units, including:

- erecting, installing, assembling, relocating, or replacing family dwelling units;
- related land acquisition, site preparation, excavating, filling, landscaping, or improving sites relating to the work above;
- initial outfitting of dwelling units with major equipment and fixtures to include ranges, refrigerators, washing machines, dryers, dishwashers where authorized;
- supervising and inspecting of construction;
- constructing non-dwelling facilities associated with a family housing area;
- constructing roads, driveways, walks, and utility systems which primarily serve the housing area;
- constructing community facilities integral to a family housing area; and
- replacing damaged or destroyed family housing facilities.

Often referred to as the Post Acquisition Improvement Program (PAIP), this project (P-713) includes costs to:

- upgrade inadequate family housing quarters and rental housing;
- improve adequate public quarters;
- convert existing facilities to family housing quarters;
- alter, expand, extend, or repair family dwelling facilities, except as provided for in the family housing O&M appropriation;
- family housing real property (other than dwellings) required as a result of previously acquired units;
- retrofitting existing units to make them more energy efficient and to provide substantial savings in the utility costs such as upgrading ceilings, roofs, wall insulation, and heating and air conditioning systems to current standards; and

- alter family housing to accommodate physically handi-capped occupants.

Advance Planning and Design (P-714) provides for planning and design of family housing facilities, including:

- preliminary and site adaptation studies and
- working drawings, specifications, estimates, project planning reports, and final design drawings.

The Family Housing Construction Currency Management Account (P-716) is used to collect accounting transactions for foreign currency gains.

The Family Housing Construction Currency Management Account (P-717) is used to collect accounting transactions for foreign currency losses.

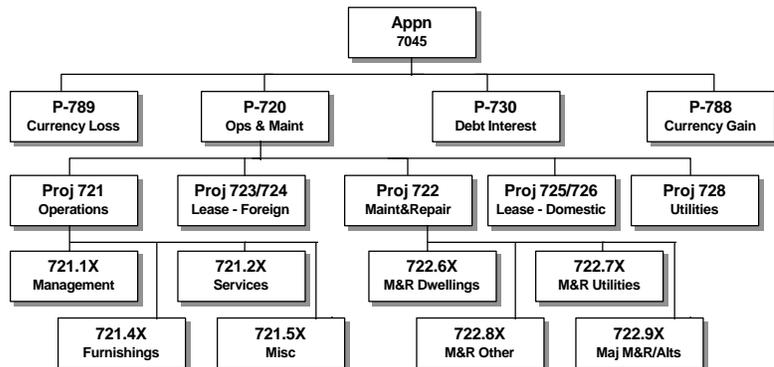
Family Housing construction undertakings are line item approved by Congress. Funds cannot be moved between budget projects or even between construction projects.

### 3.2 Family Housing Operations and Maintenance

Family Housing O&M funds are for the day-to-day support of government-owned family housing dwelling units (Category F), other family housing properties and programs (Category K), and leased housing (Category H).

A summary is shown in Figure 7, Family Housing O&M Structure.

**Figure 7. Family Housing O&M Structure**



The MFH O&M appropriation is an annual appropriation. The appropriation number is 57\*7045, where \* is the last digit of the fiscal year for the appropriation (for example, 5767045). The fund code for the appropriation is 83. As with all appropriations, public law must be changed in order to reprogram funds into or out of the appropriation.

Unlike the O&M appropriation, the family housing O&M appropriation uses four budget programs, not budget activities. The budget programs are Program 720 - Operation & Maintenance, Program 730 - Debt Interest & Other Charges, Program 788 - Foreign Currency Gain, and Program 789 - Foreign Currency Loss. Budget projects or sub-projects are used as funds control points; however, dollars can't be moved between programs. Budget programs 730, 788, and 789 are managed at Air Staff level and contain no further subdivisions.

The Budget Program is broken into five budget projects. Budget Program Activity Codes (BPACs) are used to identify budget projects. BPACs always begin with the letter "P" followed by a three-digit number. The family housing O&M BPACs are provided in Table 6.

**Table 6. BPACs - Family Housing O&M**

<b>Code</b>	<b>Budget Project</b>
P-721	Operations
P-722	Maintenance of Real Property Facilities
P-723	Operation Costs of Leased MFH - Foreign Leases
P-724	Maintenance Costs of Leased MFH - Foreign Leases
P-725	Operation Costs of Leased MFH - Domestic Leases
P-726	Maintenance Costs of Leased MFH - Domestic Leases
P-728	Utilities - Government Dwellings

P-721, Operations is for the operation and management of the family housing activity; including service contracts, equipment rentals, and purchase, maintenance, and repair of appliances and authorized furnishings.

P-722, Maintenance of Real Property Facilities provides for:

- the maintenance and repair of buildings, roads, drive-ways, walks, utility systems, and grounds;
- the maintenance, repair, and replacement of installed equipment of a housing unit; such as, water heaters,

dishwashers, garbage disposals, and furnaces and air conditioners;

- minor alterations and additions, as authorized;
- major maintenance and repair projects, as authorized;
- supplies and materials;
- the self-help stores;
- the maintenance of community antennae and cable television outlets and wiring after installation; and
- the restoration of damaged or destroyed housing facilities, as authorized.

P-723, Operating Costs of Leased MFH - Foreign Leases provides for leasing family housing facilities overseas from private owners or foreign government agencies; utilities, if not provided by lessor; and services such as refuse collection, if separately contracted by the government.

P-724, Maintenance Costs of Leased MFH - Foreign Leases provides for maintenance, if not provided for by lessor and initial alterations required and not provided for by the lessor and do not exceed 25 percent of the first year's annual rental cost.

P-725, Operating Costs of Leased MFH - Domestic Leases provides for leasing family housing facilities in the United States from private owners; utilities, if not provided by lessor; and services such as refuse collection, if separately contracted by the government.

P-726, Maintenance Costs of Leased MFH - Domestic Leases provides for maintenance, whether provided by the lessor or separately contracted by the government.

P-728, The Utilities - Government Dwellings project provides for all utilities consumed in family housing.

Funds can't be reprogrammed between the budget projects. For P-722, P-723/4/5/6, and P-728, the budget project is the funds control point; i.e., it's the lowest level at which funds can not be reprogrammed.

The budget subproject is a further subdivision of the budget project. In some cases, it serves as the funds control point. Numerous subprojects exist and are shown in Table 7.

**Table 7. Family Housing O&M Subprojects**

<b>Code</b>	<b>Project/Subproject</b>
P-721	Operations
P721.11	Management - Government Dwellings
P721.12	Management - Other
P721.21	Services - Government Dwellings
P721.22	Services - Other
P721.29	Services - Other (Non-prorated)
P721.41	Furnishings - Government Dwellings
P721.42	Furnishings - Other
P721.51	Miscellaneous - Government Dwellings
P721.52	Miscellaneous - Other
P721.53	Non-BCE Costs
P-722	Maintenance of Real Property Facilities
P722.62	Maintenance and Repair - Government Dwellings
P722.66	Self-Help Store - Government Dwellings
P722.67	Self Help Store - Other
P722.71	Maintenance and Repair of Utilities (Exterior)
P722.81	Maintenance and Repair of Other Real Property (Other)
P722.91	Minor Alterations - Government Dwellings
P722.92	Minor Alterations and Additions - Other
P722.96	Major Maintenance and Repair - Government Dwellings
P722.97	Major Maintenance and Repair - Other
P-723 \	
P-724 \	Leased MFH
P-725 /	
P-726 /	
P-728	Utilities
P-728.11	Utilities - Government Dwellings
P-728.12	Utilities - Other

The budget subproject is a five-digit code. The first three digits are the budget project, followed by a dot, followed by a two-digit shred out.

The subprojects under P-721 - Operations follow.

721.11 - Management - Government Dwellings — includes all direct administration costs to support government-owned family dwelling units at installation level; including: management office personnel, supplies, equipment, custodial services, and occupancy inspections and surveys.

721.12 - Management - Other — includes all direct administration costs to support leased and other family housing

properties and programs at installation level, including the housing referral program; includes: management office personnel, supplies, equipment, custodial services, occupancy inspections, preliminary studies, requirements surveys, and engineering construction plans made prior to OSD approval of new housing projects.

721.21 - Services - Government Dwellings — includes the costs of municipal-type services supporting government-owned family dwelling units, such as refuse collection and disposal, fire protection, police protection, entomological services, and custodial services.

721.22 - Services - Other — includes the costs of municipal-type services supporting other family housing properties and programs, such as refuse collection and disposal, entomological services, snow removal, and street cleaning.

721.29 - Services - Other (Non-prorated) — includes non-prorated services provided to general officer quarters (GOQ). If a service can be directly attributable to GOQs, and funded separately, then this subproject is used.

721.41 - Furnishings - Government Dwellings — includes the costs of government-owned furnishings provided to government-owned family dwelling units; including: replacement, increases to inventories, maintenance and repair, and moving and handling. It also provides for all for household furniture, equipment, and domestic appliances not installed, where authorized.

721.42 - Furnishings - Other — includes the costs of government-owned furnishings provided for leased housing. It also includes cost of government-owned furnishings for overseas, privately-leased, family housing; including: replacement, maintenance and repair, and moving and handling. It also provides for all for household furniture, equipment, and domestic appliances not installed, where authorized.

721.51 - Miscellaneous - Government Dwellings — includes the costs for government-owned family housing units and other family housing operational costs not included elsewhere; including: country-to-country agreements, accommodation charges, and reimbursements to other US gov-

ernment agencies. It does not include real estate taxes paid to a foreign government.

721.52 - Miscellaneous - Other — includes the costs for other family housing properties and programs, and other family housing costs not included elsewhere; including: country-to-country agreements, accommodation charges, and reimbursements to other US government agencies. It does not include real estate taxes paid to a foreign government.

721.53 - Non-BCE Costs — includes non-BCE direct costs incurred to support government-owned family housing units, providing for the contracting office and other costs as applicable.

The subprojects under P-722 - Maintenance of Real Property Facilities follow.

722.62 - Maintenance and Repair - Government Dwellings — includes all maintenance and repair of government-owned family housing units, whether provided by in-service personnel or separately contracted by the government; including: installed equipment, such as water heaters, dishwashers, and garbage disposals; furnaces; air conditioners; interior utilities; and cleaning and clearing of government quarters, after a change of occupancy.

722.66 - Self-Help Store - Government Dwellings — includes all costs of self-help bench stock-type materials issued to military family housing occupants to perform minor maintenance and repair on their dwelling units and the cost of personnel who manage the store.

722.67 - Self-Help Store - Other — includes all costs of self-help bench stock-type materials issued to maintain real property directly associated with a family housing area, such as grounds, other real property, and buildings.

722.71 - Maintenance and Repair of Utilities (Exterior) — includes all maintenance and repair of exterior utility systems that primarily serve the housing units or areas. It excludes utility lines or mains that may pass through or front on family housing locations, but serve other base locations.

722.81 - Maintenance and Repair of Other Real Property (Other) — includes all maintenance and repair of other real property facilities that are integral to a family housing area, such as roads, driveways, walks, common grounds, and community buildings.

722.91 - Minor Alterations - Government Dwellings — includes the costs of minor alterations to government-owned dwelling units.

722.92 - Minor Alterations and Additions - Other — includes the costs of minor alterations to other real property that is directly associated with a family housing area.

722.96 - Major Maintenance and Repair - Government Dwellings — includes major maintenance and repair projects on government-owned family housing units, including those damaged or destroyed.

722.97 - Major Maintenance and Repair — Other - includes major maintenance and repair projects to other real property, private housing where authorized, and buildings directly associated with a family housing area, including those damaged or destroyed.

No subprojects are associated with P-723/4/5/6 - Leased MFH.

The subprojects under P-728 - Utilities follow.

728.11 - Utilities - Government Dwellings — includes costs of utilities consumed in government-owned family dwelling units and reimbursable utility services furnished to civilian occupants of continental United States (CONUS) government quarters. It provides for water procured or produced; electricity procured or produced; gas, fuel oil, and coal (including delivery costs) procured; sewage disposal procured or produced; base-produced utilities transferred to family housing; heating and air conditioning plant operations; other utilities or fuels provided to family housing dwellings (coal, steam, etc.); and utility construction amortization costs.

728.12 - Utilities - Other — includes costs of utilities consumed in other family housing properties. It also includes costs of reimbursable utility services furnished to privately-

owned trailers located in base-operated trailer parks. It provides the same services as 728.11 above.

In Project 721 the subprojects are placed in groups starting with the same four digits; i.e., 721.41 and 721.42 are placed in a group called 721.40. This grouping is the funds control point. Funds cannot be moved from one grouping to another. For example, services funds (721.11) cannot be used to purchase dishwashers (721.41); because one is a member of 721.10 and one is a member of 721.40.

In Project 722/728, the project, not the subproject, is the funds control point. Therefore, funds can move freely between the subprojects.

MAJCOM Headquarters is authorized to move funds between projects and subprojects up to ten percent (in or out). If funds need to be reprogrammed, the MAJCOM/CE may be able to offer assistance.

AFI 65-601 Volume 1, *Budget Guidance and Procedures*, and AFM 65-604 are sources of regulations and rules for handling family housing funds.

Family Housing funds are for Family Housing. It has, traditionally, been a well-funded program and people want to take these funds and use them elsewhere. All base managers should thoroughly understand the rules.

## Chapter 4 Military Construction (MILCON) Funds

The military construction appropriation provides for the acquisition, construction, installation, and equipping of temporary or permanent public works, military installations, and facilities for the Air Force. Investment costs are provided under this appropriation. The Air Force Reserves and the Air National Guard have their own military construction appropriations. As discussed in the previous section, family housing has its own construction appropriation. The structure of MILCON is provided in this chapter.

### 4.1 Appropriation/ Fund Code

Military construction appropriations are five-year appropriations, although the authorization is only for three years.

The appropriation numbers and fund codes are:

- Air Force Military Construction - 57\*/\*3300, FC=25;
- AFRES Military Construction - 57\*/\*3730, FC=57; and
- ANG Military Construction - 57\*/\*3830, FC=53.

The \*/\* indicates the start and stop fiscal years; e.g., 4/8.

Military construction projects are a line item approved by Congress; therefore, very little flexibility exists for the re-programming of funds at any level. There is none between appropriations.

### 4.2 Budget Programs and Projects

Similar to the family housing appropriations, military construction appropriations are divided into budget programs and budget projects. Table 8 provides the program codes.

Line item funding is the primary reason funds cannot be moved between programs.

**Table 8. MILCON Program Codes**

Code	Program
Program 310	Project Planning and Design
Program 320	Major Construction Inside the United States
Program 330	Major Construction Outside the United States
Program 340	Unspecified Minor Construction
Program 350	Support Activities

Budget programs are broken into budget projects, beginning with a “P,” followed by a three-digit code. The first two digits are the same as the budget program. The project under Program 310 is P-313 - Project Planning and Design. This project is applicable for design activities carried out on prior, current, and future MILCON programs. This project provides for these services for military construction projects to the point of construction project award. At that point, the major construction projects (Programs 320, 330, and 340) provide funding. Project planning and design services include:

- investigating and selecting sites;
- developing and preparing real estate planning reports and any other data required for the acquisition of real estate;
- designing and analyzing design for construction;
- developing drawings and specifications;
- developing and preparing cost estimates;
- participating in pre-construction contract award activities;
- printing and reproducing drawings, specifications, and other documents required for soliciting bid proposals; and
- preparing as-built drawings.

The project under Program 320 is P-321 - Major Construction, Inside the United States. This project provides for:

- acquiring land and structures;
- adding to, expanding, extending, converting, and replacing existing structures;
- relocating structures from one installation to another;
- altering or repairing existing structures in the activation of an inactive installation, if feasible;
- construction and supervision services; and
- preparation of training/operating manuals.

Under Program 330, P-331 - Major Construction, Outside the United States provides for:

- acquiring land and structures;
- adding to, expanding, extending, converting and replacing existing structures;
- relocating structures from one installation to another;

- altering or repairing existing structures in the activation of an inactive installation, if feasible;
- constructing and supervising services; and
- preparing training/operating manuals.

Project P-341 - Unspecified Minor Construction under Program 340 applies when the estimated funded cost is equal to or less than \$1.5M. Projects costing less than \$500K are funded with operation and maintenance (O&M) funds. This project is usually a discretionary amount given to the Secretary of the Air Force (SEC/AF) to perform minor construction projects with an urgent and unforeseen need. Congress does not line-item approve these projects; a special process exists to obtain these funds. The project provides for:

- acquiring land and structures;
- adding to, expanding, extending, converting and replacing existing structures;
- relocating structures from one installation to another;
- altering or repairing existing structures in the activation of an inactive installation, if feasible;
- constructing and supervising services; and
- preparing training/operating manuals.

This project provides for support activities and reimbursable activities.

The projects under Program 350 are P-351 - Support Activities, providing for the acquisition of land (<\$100K) and P-354 - Reimbursable Activities, providing for construction and construction-related services for other military departments and government agencies.

Other programs include: P-378 - Foreign Currency Gains, P-379 - Foreign Currency Losses, P-993 - Refunds on Transportation of Persons and Things, and P-999 - Off-site Defense Access Roads.

Most MILCON projects are line-item approved, based on specific construction projects. Usually, it is unnecessary to refer to funds control points or funding rules based on appropriation structure.

P-341 funds can't be moved into the other projects to do major construction, even though P-341 is not line item approved.

The *Engineering Flight Manual*, AFI 65-601 Volume I, *Budget Guidance and Procedures AFM 65-604*, and AFI 32-1021, *Planning and Programming of Facility Construction Projects*, provide regulations and references for MILCON appropriations.

MILCON is a high-cost, high-interest area. Most funds are highly regulated and must be closely coordinated with the Engineering Flight to ensure proper use of these funds.

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## Chapter 5 Environmental Funds

Environmental funding comes in many different forms, some of it is fenced and some is mixed with other funds. In general, environmental management has four distinct programs: (1) installation restoration, (2) environmental compliance, (3) pollution prevention, and (4) conservation.

A discussion of the four programs and the types of funds involved in fulfilling program requirements follows. Fulfillment is discussed, not from an environmental management perspective, but a budgetary perspective. A heavy emphasis is placed on the protection of the environment. The Environmental Flight, in developing their budgets and execute their programs, may request assistance.

### 5.1 Installation Restoration

The goal of the installation restoration program is to cleanup past pollution. Usually, pre-1984 are considered to be as past pollution incidents.

The Defense Environmental Restoration Account (DERA) was created to allow the Department of Defense to do environmental cleanup; because DoD is not eligible for the EPA Superfund. Eligible expenses under DERA are consultants and studies, testing, salaries, equipment, research and development to support cleanup, cleanup actions, construction, and operations and maintenance costs for cleanup systems.

DERA money is actually part of the 3400 O&M appropriation, but it's a special case. Congress asked DoD in which form the funds should be placed for ease of execution. The Air Force is, of course, most comfortable in the 3400 O&M appropriation, so that is where the funds were placed. The appropriation has the following attributes:

1. Appropriation/Fund Code = 57\*3400, FC=30;
2. Budget Activity = 04;
3. Program Element = 78008F (at all bases); and
4. Cost Centers = 417, 419.

Bases that don't usually have funding in Budget Activity 04, cannot use DERA funds. Bases, such as Air Force materiel Command (AFMC), using BA 04 funding, cannot use DERA funds either. These funds are truly fenced, as written in the law.

## 5.2 Environmental Compliance (EC)

The Fiscal Year 1990 Defense Authorization Act required the DoD to specifically program and budget for environmental compliance. This funding has been placed throughout a number of appropriations and is not exclusively a civil engineer responsibility.

Environmental compliance first tries to fund recurring compliance requirements, like the disposal of hazardous waste and the payment of salaries. These requirements are usually called operations and services (O&S) requirements.

Non-recurring environmental compliance requirements are split into Level I - out of compliance, Level II - must be done to meet a compliance deadline, and Level III - beyond compliance.

In an out-of-compliance situation, the requirement falls into this category. An example of a Level I requirement is when an open Notice of Violation (NOV) from a state regulator dictates taking a certain action.

In many cases, action must be taken to prevent being out of compliance (receiving an NOV). These requirements fall into Level II. An example of a Level II is if underground storage tanks had to be removed and replaced with double-walled above-ground tanks by 1997 to comply with state laws.

Those requirements that do not fall into Level I or II are, usually, Level III requirements. Pollution reduction measures and natural and cultural resource programs, in general, fall into Level III.

Based on the classification of the requirements above, the Air Force Environmental Compliance funding policy becomes quite clear. Requirements are funded with the priorities 1) O&S, 2) Level I, 3) Level II, and 4) Level III.

Environmental compliance funds can appear in many appropriations; including, 3400 O&M, 3600 RDT&E, and 7045 MFH O&M. EC funds are usually found in the O&M account at base level.

Environmental compliance funding can be identified by its unique program element code (PEC). The EC PEC has the coding structure of XXX56F. The first three digits vary by MAJCOM and base. Cost centers are used in the citation of environmental compliance funds, such as 416 - Environmental and 418 - Environmental Operations.

Many EEICs are unique to environmental management. Many of these EEICs start with “534,” indicating contract environmental services. EC pays environmental licenses and permits (EEIC 683). Common examples are shown in Table 9. A more current list can be obtained from the Environmental Flight, Base Budget, or MAJCOM.

**Table 9. Examples of EEICs**

<b>EEIC</b>		<b>Environmental Shreds</b>	
521	Maintenance Projects	BJ	Environmental Assessments
522	Repair Projects	10	Hazardous Waste Mgt Activities/Disposal
529	Minor Construction Projects	12	Material Pharmacies
534	Contract Environmental Services	14	EPA 17 Reduction Initiatives
535	Installation Restoration Program	15	Solid Waste Reduction Facilities
683	Env Compliance Permits and Fees	16	Hazardous Waste Reduction Initiatives
684	Env Monetary Assessments & Fines	20	Underground Storage Tank Compliance
		30	Air Pollution Compliance
		31	Ozone Depleting Chemical Control
		32	Air Emissions Prevention
		40	DERA Funded Projects
		41	Lead Base Paint (DERA)
		50	Wastewater Treatment
		60	Asbestos Abatement
		70	Other Compliance Requirements
		71	Pesticide Compliance
		72	Radiation Compliance
		73	Noise Pollution Compliance
		74	Toxins Compliance (including PCBs)
		75	Lead Based Paint Compliance
		80	Host Nation Environmental Protection
		90	Pollution Prevention, Other
		92	Cross-cutting Commercial Applications

In the past, EC funds were just another part of the installation commander’s operating budget. If the commander

found it necessary to use those funds for other requirements, it could be moved. Starting with the FY95 budget, compliance funds were fenced just like DERA funds; nothing can be moved in or out. The Air Force cannot alter this program element.

### **5.3 Pollution Prevention**

Pollution prevention requirements all fall into Level III, which are always funded last. Because Level III's are rarely budgeted, the Pollution Prevention Program (P2) was created. This allows funding beyond compliance requirements in an effort to reduce future requirements for O&S and Level I and II funds.

Pollution prevention funds appear in many appropriations, including operating budgets and procurement appropriations.

Amount of pollution reduced and return on investment are looked at very carefully when evaluating P2 requirements. Usually these undertakings are analyzed as investments.

Usually, buying a low pollution-generating piece of equipment would not qualify for P2 funds unless it's replacing a higher pollution-generating piece of equipment. The P2 manager in the Environmental Flight and AFI 32-7001 lists examples of eligible expenses and investments.

P2 funds, appearing in many appropriations in many forms, can be identified by its PEC and/or EEIC.

P2 funds appear in procurement appropriations as well as O&M appropriations:

Aircraft Procurement - 57\*/3010, FC=11;

Missile Procurement - 57\*/3020, FC=15;

Other Procurement - 57\*/3080, FC=17;

Air Force O&M - 57\*3400, FC=30;

Research, Development, Test & Evaluation - 57\*/3600, FC=29; and

MFH O&M - 57\*7045, FC=83.

Pollution Prevention Program (PPP) funds are usually identified by the PEC, XXX54F. This is the PEC at all bases and fits into a base Budget Activity.

A series of EEICs exist to help identify P2 expenses. Table 9 provides those specifics (usually, in the 534 series).

P2 funds are just another part of the installation commander's operating budget. If the commander found it necessary to use that money for other requirements, it could be moved. The installation commander could also add to this program element if excess funds exist elsewhere; however, appropriation rules, by law, must always be followed.

#### **5.4 Conservation**

In addition to cleaning the environment and complying with state and federal laws, the Air Force also has a responsibility to protect natural and cultural resources. Natural resources funds are contained in many appropriations, including 3400 O&M.

Natural resources funds are probably the most diverse, coming from many different sources and placed into many different appropriations.

The following appropriations are used in the natural resources program.

- Conservation Programs on Military Reservations - 57\*5095, FC=74, used for the conservation of fish and wildlife on military reservations.
- Legacy Resource Management Program - 97\*0100.1102, FC=2M provides funds to support AF requirements under the DoD Legacy Resources Management Program. These funds are used to identify, manage, and protect important biological, geophysical, and cultural resources on DoD lands. Projects are approved by (HQ USAF/ILEVP). The first two digits of the appropriation number are "97," indicating DoD, not AF funds.

Additional conservation programs include:

- State and Private Forestry - 57-12X1105, FC=2N — a transfer from the US Department of Agriculture, Forest Service for forest pest suppression.
- Forestry Management - 21X5285 — managed by the Army (21), is received for direct citing documents for support of the DoD & USAF forestry management programs. O&M funds are also used to support forestry management.

- Other Procurement - 57\*/3080 — provides for investment items (>\$50K) to support the Air Force forest management program, the DoD forest management program, and the Air Force cropland and grazing.
- Air Force O&M - 57\*3400, FC=30 — Much of the natural resources funds exist as part of the environmental compliance program in the O&M account.

In the Air Force O&M appropriation, PE **XXX53** is used to record conservation resources expenses. Conservation EEICs can be provided by the base budget office.

All appropriation rules apply to this funding. Changing the law is required to move funds between appropriations. Funds in the O&M account PEC XXX53 are just like pollution prevention funds. If the commander found it necessary to use those funds for other requirements, it could be moved. The installation commander could also add to this program element if excess funds exist elsewhere. Regulations and references for managing these appropriations can be found in XXXXX, *Environmental Flight Manual*, AFI 65-601 Volume 1, *Budget Guidance and Procedures*, AFM 65-604, and AFI 32-7001, *Environmental Budgeting*.

The Resources Flight should be the experts on coding and types of money, and the execution of funds; however, the Environmental Flight is still the office of program management. They know what requirements are eligible for which types of funds. Appropriated environmental funds need to be spent quickly or they can be withdrawn by the MA-JCOM.

## Chapter 6 Procurement Funding

The Air Force uses three procurement appropriations to carry out investment programs. Day-to-day business is conducted from the operating budget (O&M) and investment business from a capital budget (procurement). The three procurement appropriations are aircraft procurement, missile procurement, and other procurement.

The aircraft procurement appropriation is used to purchase, modify, or buy spares for aircraft weapon systems. The appropriation is 57\*/\*3010, FC=11 and is a three-year appropriation.

The procurement appropriations uses another structure in the management of funds. Budget program activity codes are six-digit numbers. Each code digit gets more specific, similar to MFH projects and subprojects. BPACs for all three procurements are shown in Table 10, BPACs Procurement Funding. This appropriation is managed by AFMC. Rules vary depending on the BPAC, however, funds are usually not transferred between BPACs.

The missile procurement appropriation is used to purchase, modify, or buy spares for missile weapon systems. The appropriation is 57\*/\*3020, FC=15 and is a three-year appropriation. Missile procurement also uses budget program activity codes. This appropriation is managed by AFMC. Rules vary depending on the BPAC; however, funds are usually not transferred between BPACs.

All other investment procurement is done from the Other Procurement appropriation, also known as 3080 money. Air Force activities must use the 3080 account to purchase equipment with a cost greater than \$100K. The appropriation is 57\*/\*3080, FC=17 and is a three-year appropriation.

Other procurement also uses budget program activity codes. Civil Engineers usually use the 84\*\*\* BPAC (more specifically 84501\*, Base Procured Equipment) with the exception of the electronics for computer systems BPAC (83401\*, Automated Data Processing Equipment) and the forest management BPACs. The Vehicle BPAC is centrally managed by the supply (LG) community. Vehicle require-

ments must be identified through the Transportation Squadron and obtained through their process.

**Table 10. BPACs Procurement Funding**

<b>BPAC</b>	<b>Program</b>
Aircraft	
100000	Aircraft Weapon System
110000	Modifications
120000	Aircraft Common Support Equipment
140000	Aircraft Industrial Responsiveness
150000	Aircraft Replenishments Spares and Repair Parts
160000	Aircraft Initial Spares and Repair Parts
170000	War Consumables
180000	Procurement Other Than Air Force
190000	Other Production Charges
993000	Appropriation Refunds on Transportation of Persons and Things
996000	Appropriation Reimbursements
Missile	
200000	Missile Weapon System
210000	Modification
220000	Replacement Equipment and War Consumables
230000	Space Programs
240000	Missile Industrial Responsiveness
250000	Missile Replenishment Spares and Repair Parts
260000	Missile Initial Spares and Repair Parts
270000	HQ USAF Special Projects
280000	Procurement Other Than Air Force
290000	Other Charges
993000	Appropriation Refunds on Transportation of Person and Things
996000	Appropriation Reimbursements
Other	
81****	Munitions and Associated Equipment
82****	Vehicular Equipment
83****	Electronics and Telecommunications Equipment
<b>84****</b>	<b>Other Base Maintenance and Support Equipment</b>
<b>851001</b>	<b>Air Force Forest Management Program</b>
<b>852001</b>	<b>DoD Forest Management Program</b>
<b>853001</b>	<b>Air Force Cropland and Grazing</b>
87****	Procurement other Than Air Force
993000	Appropriation Refunds on Transportation of Persons and Things
995000	Appropriation Reimbursements, Ordinance, Vehicles and Related Equipment
996000	Appropriation Reimbursements, Electronic and Communications Equipment
997000	Appropriation Reimbursements, Other Equipment

The Other appropriation is managed by each MAJCOM. Prioritized lists are usually sent to MAJCOM from the base, and the MAJCOM builds a command list. Requirements are then funded top-to-bottom until all resources are consumed. The funds are sent to the base, but it must be used for the 3080 requirements. Funds, generally, can not be moved between BPACs by MAJCOM.

If equipment requirements are greater than \$100K, 3080 funds **must** be used. To obtain 3080 (BPAC 84\*\*\*\*) Funds, the procedures outlined below should be followed.

1. Identify requirement.
2. Fill out equipment request.
3. Take request to base supply.
4. Supply assigns a budget code = Z, so it will appear on the 3080 list.
5. Financial working group prioritizes budget code Z requirements.
6. Financial management board approves list.
7. Base budget forwards list to MAJCOM.
8. MAJCOM combines bases' list into a MAJCOM list.
9. MAJCOM funds items based on resources.
10. Budget authority received at base.
11. Requirement is firmed up and purchased.

Regulations and references governing procurement include the Base Supply Customer Service; AFI 65-601 Volume 1, *Budget Guidance and Procedures*; and AFM 65-604.

Resources Flight should provide education to squadron members about the differences between O&M and Procurement to facilitate the process.

## Chapter 7      Revolving Funds

The National Security Act of 1947 gave the Secretary of Defense the ability to establish revolving funds as a means to more effectively control the cost of work performed by DoD support activities. This is exactly why revolving fund accounts are used.

A revolving fund is an account that, once established with seed money, is self-sustained by selling products and services to customers based on a unit price. The fund should always have a balance greater than zero and it does not expire like annual appropriations.

An example of a revolving fund is the former Air Force Stock Fund. It now is part of the Defense Business Operations Fund that provides materiel to Air Force customers. Each time a product is required from base supply, they must be paid for that piece of material. This is much different than the way the Civil Engineer operates. The Civil Engineer is given an annual budget and asked to provide real property maintenance, repair, construction, and services without charge to most of the customers.

As did the other services, the Air Force used to have dozens of revolving funds. Each industrial fund used to have its own appropriation. In FY92, the DoD transferred all defense industrial funds to one fund, called the DBOF. Some of the activities that belong to the DBOF are: Defense Finance and Accounting Service (DFAS), Defense Reutilization and Marketing (DRMO), Defense Commissary Agency (DeCA), Depot Maintenance Industrial Fund (DMIF), Air Force Stock Fund (AFSF), Airlift Services Industrial Fund (ASIF, now DBOF-T or TWCF), Defense Information Systems Agency, Defense Contract Audit Agency, Defense Intelligence Agency, Defense Investigative Service and Laundry and Dry Cleaning Services.

The DBOF is divided into divisions called business areas, which are supposed to be like small corporations. The current business areas are supply management business area, depot maintenance business area, transportation business area, and base support business area.

The appropriation number for the DBOF is 97X4930; 97 denotes DoD and X denotes an appropriation that does not expire (no year money).

Regulations and references for DBOF are AFI 65-601 Volume 1, *Budget Guidance and Procedures* and AFM 65-604.

In recent years, the Civil Engineer becoming part of the base support business area and establishing a fee-for-service operations for base engineering has been discussed. Even though the Civil Engineer is not currently part of the DBOF, it's important to understand it because civil engineering has very large DBOF customers and DBOF suppliers.

## Chapter 8 Other Funds

From time-to-time, the Civil Engineer may come into contact with many of the other Air Force Appropriations that exist. These include Base Realignment and Closure (BRAC); Non-appropriated Funds (NAF); Research, Development, Test, and Evaluation (RDT&E); and Prior Year Funds.

### 8.1 BRAC

The Base Conversion Authority has set up an appropriation to handle base closures and realignments. Financing for these appropriations can come from direct appropriation, transfers from other appropriations, and proceeds from the sale of assets made available from base realignments and closures.

The three appropriations associated with BRAC are (1) Base Closure Account; (2) DoD Base Closure and Realignment, Part II; and (3) DoD Base Closure and Realignment, Part III. These appropriations provide for military construction, military family housing, operations and maintenance, military personnel, procurement, environmental compliance, and installation restoration.

#### 8.1.1 *Base Closure Account*

The Base Closure Account appropriation was created to implement Public Law 100-526 and is authorized for Round I bases. These are bases recommended for closure or realignment by the 1988 Base Closure Commission. The account expired on 30 Sep 95. Its appropriation number was 973/50103.1102, FC=20.

#### 8.1.2 *DoD Base Closure and Realignment Account, Parts II & III*

Parts II and III of the DoD Base Closure and Realignment Account appropriation were created to implement Public Law 101-510 (Title 26) and is authorized for Round II and later bases. These are bases recommended for closure or realignment by the 1991, or later, Base Closure Commission. This account does not expire.

The BRAC II appropriation number is 97X0510.1102, FC=2R and the BRAC III appropriation number is 97X0510.1632, FC=5F. Both the accounts are identically structured and similar to that of the family housing and MILCON appropriations. The accounts shown in Table 11, BRAC II and III Budget Programs and Projects, are broken

into budget programs and further broken into budget projects.

**Table 11. BRAC II and III Budget Programs and Projects**

<b>Program</b>	<b>Project</b>
100 Military Construction — construction necessary for deactivation of an active installation as a result of BRAC	P-110 - Construction P-120 - Planning and Design
200 Military Family Housing — construction necessary for deactivation of active Air Force housing as a result of BRAC	P-210 - Construction P-220 - Planning and Design P-230 - Operations P-231 - Operations - Civilian Pay P-240 - Improvements
300 Operations and Maintenance — expenses necessary for operations, maintenance, and administration required to deactivate active programs as a result of BRAC (expenses incident to closure, not regular O&M in a closure mode).	P-310 - Civilian Severance Pay P-320 - Civilian PCS P-330 - Transportation of Things P-340 - Real Property Maintenance (RPM) P-341 - RPM Civilian Pay P-342 - RPM Travel P-343 - RPM Communications P-344 - RPM Utilities and Rents P-345 - RPM Purchased Equipment Maintenance P-346 - RPM Other Purchased Services P-347 - RPM Supplies P-348 - RPM Equipment P-360 - Program Management (PM) P-361 - PM Civilian Pay P-362 - PM Travel P-363 - PM Communications P-364 - PM Utilities and Rents P-365 - PM Purchased Equipment Maintenance P-366 - PM Other Purchased Services P-367 - PM Supplies P-368 - PM Equipment P-370 - Environmental Analysis Process (EIA) P-371 - EIA Civilian Personnel P-372 - EIA Training & Temporary Duty (TDY) P-373 - EIA Supplies P-374 - EIA Equipment P-375 - EIA Contract Services - Closure Bases P-376 - EIA Contract Services - Realignment Bases

**DRAFT - NOT FOR IMPLEMENTATION OR COMPLIANCE**

**WORKING IN THE RESOURCES FLIGHT**

<b>Program</b>	<b>Project</b>
400 Military Personnel — Permanent Change of Station (PCS) moves of officers and enlisted members as a result of BRAC	P-471 - Officer - PCS Low Cost Move P-481 - Enlisted - PCS Low Cost Move P-472 - Officer - Emergency Evacuation P-482 - Enlisted - Emergency Evacuation P-475 - Officer - PCS Training Move P-485 - Enlisted - PCS Training Move P-476 - Officer - PCS Operational Move P-486 - Enlisted - PCS Operational Move P-477 - Officer - PCS Rotational Move P-487 - Enlisted - PCS Rotational Move P-478 - Officer - PCS Separation Move P-488 - Enlisted - PCS Separation Move P-479 - Officer - PCS Unit Move P-489 - Enlisted - PCS Unit Move
500 Procurement Type Items — procurement of items necessary to deactivate active installations as a result of BRAC; no budget projects associated with this program	
600 Environmental Compliance (EC) — expenses necessary for environmental compliance related to closure	P-610 - EC Overhead (ECOH) P-611 - ECOH Civilian Personnel P-612 - ECOH Training & TDY P-613 - ECOH Supplies P-614 - ECOH Equipment P-620 - EC Air Quality P-630 - EC Water and Waste Water P-640 - EC Solid and Hazardous Waste P-650 - EC Petroleum, Oil, and Lubricants (POL) and Underground Storage Tanks (USTs) P-660 - EC Asbestos, Radon, and Polychlorinated Biphenyl's (PCBs) P-670 - EC Natrual, Historical and Cultural Resources P-680 - EC Other
700 Installation Restoration (IR) — all installation restoration expenses for an affected base, a base on the closure list is no longer eligible for DERA.	P-710 - IR Overhead P-711 - IR Civilian Personnel P-712 - IR Training & TDY P-713 - IR Supplies P-714 - IR Equipment P-720 - IR Installation Restoration P-721 - Preliminary Assessment/Site Inspection (PA/SI) P-722 - IR Remedial Investigation/Feasibility Study (RI/FS) P-723 - IR Remedial Design (RD) P-724 - IR Remedial Action (RA) P-725 - IR Remedial Operations (RO) P-726 - IR State Oversight Costs (SOC)

BRAC funds are managed by budget project, except in the cases of construction. Regulations and references include AFM 65-604 and *Air Force Base Conversion Agency Closure and Realignment Handbook*.

BRAC funds are only used for costs as a result of realignment or closure. It is not intended to be used at bases in closure or realignment mode. In many cases, the Air Force Base Conversion Agency requires the spending of O&M dollars for costs such as shipping and, later, they are reimbursed using P-330 funds.

**8.2 Non-appropriated Funds**

Certain activities managed by the Services Squadron generate their own revenue, creating Non-appropriated Funds (or NAF moneys). Managed by the Air Staff and the Air Forces Service Agency, NAF receives congressional oversight, but is not actually appropriated.

Some revenue-generating organizations are not allowed to receive certain appropriated dollar support from anyone, including the Civil Engineer. O&M Support of NAF provides further details.

**8.3 Research, Development, Test and Evaluation**

The Research, Development, Test, and Evaluation fund is used at only Arnold, Eglin, and Edwards AFBs. From the Civil Engineer perspective, RDT&E is used just like O&M funds. It funds R&D and the facility and infrastructure costs to support those activities. A two-year appropriation, its code is 57\*/\*3600, FC=29. This appropriation provides for research, development, test and evaluation, operation of R&D facilities, tactical and strategic programs, technology base, intelligence and communications, and program management and support.

The RDT&E appropriation is divided into eight budget programs and further divided into program elements. The eight budget programs are:

1. Program 610 - Technology Base,
2. Program 620 - Advance Technology Development,
3. Program 630 - Strategic Programs,
4. Program 640 - Tactical Programs,
5. Program 650 - Intelligence & Communications,
6. Program 660 - Defense-wide Mission Support,
7. Program 690 - Reimbursable Funds, and
8. Program 993 - Appropriation Refunds on Transportation of Persons and Things.

Under this appropriation, BPACs are six-digit codes that begin with the program code. In the future, some real property maintenance activity funds will be managed by BPAC.

Currently, funds are managed by program element in this appropriation. The codes are:

- 65876F - Minor Construction,
- 65878F - Maintenance & Repair,
- 65879F - Base Operating Support (Real Property Services),
- 65856F - Environmental Compliance,
- 65853F - Conservation Resources,,
- 65854F - Pollution Prevention, and
- 78008F - DERA (O&M)..

RDT&E is very different from O&M; it's two-year money (not one-year) and the funds control point is the program element. Most other attributes of the civil engineer portion of RDT&E is identical to O&M. Funds can not be moved between the program elements by the installation commander. Air Staff approval is needed for reprogramming actions less than \$4M. Those bases where RDT&E is used must understand the difference in the funds control point.

#### **8.4 Prior Year Funds**

O&M does not disappear at the end of the fiscal year. Appropriations keep their fiscal year identity for five years after they expire. For example, in FY96, 5763400 funds were being used but 5703400 funds existed. Prior year funding could be used for modifications to prior year contracts, accounting adjustments, and interest fees or penalties.

The base contracting office and the base budget office know the specific rules on the use of expired appropriations.

## Chapter 9 Budget Formulation Process

The Air Force has requested budget input from CE, called a financial plan. The plan, a working document, is not merely an exercise for the financial manager; but, it has become one of the few opportunities a civil engineer organization has to communicate budgetary requirements and relate the impact of inadequate funding. It is a statement of cost objectives for the coming fiscal year. The challenge in developing a strong financial plan is to be able to forecast requirements with reasonable accuracy and to realistically anticipate the impact if certain levels of funding are not received.

The best way to develop budgetary requirements for a coming year is to decide what needs to be provided to the base and community, deciding what it takes to provide those things, and cost of providing them. The steps for developing the budgetary requirements follow.

- Step 1** — Identify products and services to be provided for the budget period.
- Step 2** — Forecast the level at which these products or services will be provided.
- Step 3** — Determine what commodities or resources are required to provide the products or services.
- Step 4** — Determine what levels of resources or commodities are required to provide products or services at required levels.
- Step 5** — Determine the cost/unit for each commodity or resource input.
- Step 6** — Roll up those costs to the total product or service cost.
- Step 7** — Place the product or service in the correct portion of the budget.
- Step 8** — Set priorities for products and services for each budget.
- Step 9** — Insert fiscal constraints (bogeys) to determine unfunded requirements.
- Step 10** — Using unit costs or metrics developed above, determine how much product or service does not get provided based on the fiscal constraint.
- Step 11** — Write narratives to unfunded requirements.
- Step 12** — Narrate any major deviations from past fiscal years.

**Step 13** — Prepare a commander’s statement that explains the requirements.

**9.1 Requirements Development and Validation**

The first, and most important, step is to determine which products or services will be provided for the budget year. It’s important to account for all services the Civil Engineer provides that require resources. To not do so will create a shortage of funds and the inability to provide necessary services.

The squadron managers are an important source. Any recurring products or services required at predictable levels should certainly be known by the flight chiefs, element chiefs, and shop supervisors.

Customers, including building managers, base committees, commanders, higher headquarters, the Facilities Board, and the Work Request Review Board (WRRB); as well as operating plans for snow removal and disaster response, etc. are additional sources. They can provide information on odd requirements or significant increases or decreases in levels of products or services to be provided.

The Financial Management element can provide an idea of what bills might be incurred next year. Also, the budget planner’s own knowledge of the squadron big picture, is important.

*9.1.1 Products & Services*

Some of the common products and services Civil Engineer organizations provide include:

- direct scheduled work orders (DSWO);
- programmed work orders;
- emergency direct scheduled work orders;
- recurring work (preventive maintenance);
- utilities (gas, electric, water, sewage, etc.);
- structural fire protection services;
- crash/rescue services;
- fire prevention services;
- grounds maintenance services;
- housing quarters;
- hazardous waste disposal;
- snow removal;
- custodial services;
- refuse collection;

- grounds maintenance services;
- road maintenance;
- engineering technical services;
- construction design;
- construction management;
- computer support;
- readiness training;
- environmental permits;
- staff/administrative support;
- materiel support;
- resource management services;
- chemical warfare training;
- facility projects by contract; and
- simplified acquisition of base engineering requirements (SABER).

Although facility projects are provided for customers, they are usually funded by MAJCOM as a capital-type project (EEIC 52X). They do not usually appear in the CE financial plan. Contract programmers keep those budgets updated in the work information management system (WIMS) Project by Contract management system (PCMS) (interfaced with the parent command). These requirements are identified and prioritized using the Facility Investment Metric (FIM).

The Facility Investment Metric is a process allowing installation commanders to assess the condition and suitability of their facilities to the wing's mission. Mission impact is the driving factor in the FIM. The process is owned by the commander, but the Civil Engineer organization administers the program as facilities experts. The process places facility maintenance, repair, and minor construction requirements into four categories.

- (1) Preservation Maintenance Level (PML) — costs required to preserve or maintain facilities at a level which will not increase or decrease the degree of degradation.
- (2) Level I — unsatisfactory facilities with minimal mission support, frequent interruptions, some operations that aren't currently possible, work-arounds, and health and safety shortfalls.
- (3) Level II — degraded facilities with impaired mission support, negative effect on operations and morale, and work-arounds.

- (4) Level III — facilities requiring investments to drive down O&M costs, timely maintenance and repair, improving energy efficiencies, consolidation, or in-activation.

**9.2 Activity Level Analysis**

Many of the common products and services are measurable; that is, they can be counted by how many or how much. All activity levels are rarely known. Some can be identified exactly. Most activity levels, however, must be a reasonable estimate or forecast.

How to forecast that activity level can be difficult. Many methods exist, both formal and informal, to help forecast activity levels. These levels include exact determination, same-as-last-year (SALY), moving average, exponential smoothing, trends and seasons, linear regression, and the customer.

*9.2.1 Exact Determination*

Exact determination is easiest, because the exact activity level is known by an existing or option year on a contract (i.e., custodial given per square foot), an operating plan, or a capital plan (i.e., computer five-year plan, equipment improvement plan). Using this method should be the first step in the budgeting process. All of the knowns are in the budget and all other activity levels must be forecast.

*9.2.2 Same-as-last-year (SALY) Method*

SALY, although not the preferred method, but perhaps one of the most widely used, is slightly better than a dart board. This method places total importance on the activity of last year, when last year may not have been a representative year. When using historical data, the conditions under which the data was collected and the situation under which the data will be applied must be known.

Special contingencies (e.g., Desert Storm), temperature extremes (e.g., bad winters), utility rate increases, closure/realignment, natural disasters/emergencies, unusually high or low prices for purchased products (e.g., utility rate changes), management changes (i.e., priority changes), laws or regulations changes, manpower reductions, significant construction or demolition, aging infrastructure/facilities, and mission changes should be considered.

Any or all of these factors can affect last year's data and cause an over-budget or under-budget estimate for the next year's budget.

**9.2.3**     *Moving Average*

A reasonable estimate of the next year can be provided using a simple average of the last few years. The more years included in the average, the less weight given to a single year.

The moving average method works best for products that are not seasonal or sensitive to trends.

**9.2.4**     *Exponential Smoothing*

Exponential smoothing provides a method for specifying how much weight to place on last year, the rest of the weight is placed on all previous years. A coefficient of 0 to 1 is used to signify the amount of weight to place on the most recent year (or time period). The exponential smoothing method works best for products insensitive to trends. The advantage of exponential smoothing is the ability to change the smoothing coefficient until the best possible forecast is derived.

**9.2.5**     *Trends and Seasons*

Certain products and services experience seasons and trends. Seasonal fluctuations have the least impact on a budget because each yearly budget covers all four seasons. However, a cycle of heavy equipment investments, which could occur every four years, should be treated as seasonal.

Trends are experienced when the activity level either increases or decreases steadily over time. As infrastructures age, maintenance and repair activity levels may steadily increase. Energy conservation programs could result in utility consumption decreasing slowly over time.

Exponential smoothing with trends/seasons can help to account for these fluctuations. Many management and statistical texts contain methods for dealing with trends and/or seasons. Most commercial spreadsheets contain a forecasting module that includes moving average and smoothing.

**9.2.6**     *Linear Regression*

Linear regression, a more complicated method used to forecast, is the building of a cost model. To perform regression, what drives an activity level must be determined and plotted on a graph.

For example, it is determined square footage drives facility maintenance requirements. The computer determines the equation for the line that best fits the data; e.g.,  $Y = 200 + .50 * X$ , where  $X = k$  sq ft of facilities. If  $X$  is known, the equation determines  $Y$  (the number of DSWOs required next year).

**9.2.7**     *The Customer*

The best source for the level of services that may be demanded next year is the customer. The same people who provided what products or services will be needed can provide a good estimate of how much of that service will be required.

The activity level is often the most overlooked variable in budget submissions. Far too often, the assumption is made that next year's activity level will be the same as last year. This isn't the case and can lead to under-funding or over-funding of the Civil Engineer function.

With over-funding, some other base organization may not get enough funding to fully support their mission.

**9.3**       **Determining the Commodity or Resource Mix**

The next step in developing a budget is to determine what commodities or resources will be required to produce these projected products.

This process is as simple as reviewing a list of commodities and deciding if any of them are required. These commodities can be thought of as elements of expense. A list of commodities should include:

- 01 civilian personnel,
- 02 travel and transportation of personnel,
- 03 transportation of things,
- 04 standard level user charges,
- 05 utilities and rents,
- 06 communications,
- 07 printing and reproduction,
- 08 payments to foreign national personnel,
- 09 purchased equipment maintenance,
- 10 purchased equipment maintenance industrial fund,
- 11 purchased equipment maintenance other DoD,
- 12 other purchases from industrial funds,
- 13 other purchased services (contracts),
- 14 aviation fuel,
- 16 other supplies,

- 17 equipment, and
- 18 other expenses.

The two-digit codes are the DoD elements of expense codes (DODEEs), which are less detailed than the Air Force EEICs.

The key to this step in the process is thinking through all possible commodities. The experts here will be the people or functions that produce these products or services. For example, the Fire Protection Flight knows best what it takes to provide fire prevention services.

**9.4 Determining the Level of Resources Required**

Once the commodities needed are identified, the quantity of each must be determined. Two sources of these quantities are functional experts and historical data and metrics.

The people who provide the service should know best how much equipment and travel is required.

The amounts of resources required can be determined by developing metrics, or measures of input as related to output. For example, determine civilian man-hours required per building (input) for fire inspection (output). By carefully using historical data, reasonable commodity levels required can be determined.

Determining the level of resources may not always be a required step in budget preparation. For example, available data allows for the calculation of the supply dollars per building fire inspection. In this case, determining exactly what supplies are required is unnecessary.

**9.5 Determining Dollars Required**

Once the budget estimating process has determined what will be provided, how much will be provided, what commodities are needed, and how much of each commodity is required; it must be determined how much each of these commodities will cost. The unit cost for the required inputs is used. For example, how much does an average civilian man-hour cost or how much does a trip cost?

**9.6 Determining Total Product or Service Costs**

For each product or service, add the commodity costs to determine the total program costs. Also, calculate what the total cost per unit of output (activity level) is. This figure will help in determining unfunded requirements.



## Chapter 10 Financial Plan Format and Terms

The previous chapter discussed how to calculate the budget. Once this is completed, the financial plan must be formatted. Understanding the terminology used in the financial plan is essential. It is also important to understand that the budget for FY N is developed in fiscal year N minus 1. Some of the terminology is:

Prior Fiscal Year (PFY)— the actual obligations on 30 Sep from the previous full fiscal year.

Current Fiscal Year (CFY)— the current annual distribution (fund target) at an (FM) determined date (usually 31 Dec).

Financial Plan Year (FPY) — the funded requirements for next fiscal year (the budget)

Unfunded Requirements (UNF) — financial requirements that don't fit within fiscal constraints

Bogey — a fiscal constraint issued by the MAJCOM indicating the expected level of funding for next fiscal year. It's usually expressed in terms of a percentage of CFY. In other words, a ninety five-percent CFY bogey indicates a five-percent budget cut from current year.

Fin Plan — the Financial Plan.

### 10.1 Financial Plan Organization

Each year the base receives a financial plan call from the MAJCOM, detailing the Fin Plan format and any other special instructions on additional submissions. Information is to be provided in certain forms called exhibits. Although submission requirements change each fiscal year, certain items, or exhibits, are usually required each year.

Table of Contents — provides an overview of the financial plan contents, including any special exhibits, requirements, or attachments.

Commander's Statement — statement by the BCE on any special programs or situations that may not otherwise be apparent in the Fin Plan.

Exhibit A (see Figure 8) — a summary (total) of budget requirements by budget activity and program element; data includes PFY, CFY, FPY, and UNF.

Exhibit A-1 (see Figure 9) — a prioritized list of unfunded requirements with justification and impact if not funded.

Exhibit A-1 is usually for MAJCOM unfundeds, which are the base's top 10.

Exhibit A-2 — a prioritized list of unfunded requirements with justification and impact if not funded. Exhibit A-2 is usually for base unfundeds, which are the base's 11<sup>th</sup> or higher priority unfundeds. These usually don't require detailed justification.

Exhibit C — usually a summary of expected reimbursements to be earned next fiscal year. These should match the reimbursable customers' numbers so MAJCOM will know the numbers are correct.

Exhibit F — completed for each program element has five sections; the first three most often required. Sections IV and V are sometimes required only by the base.

Section I — states the program element number and title. Some Section I's have a listing of base information for help in activity level analysis.

Section II (see Figure 10) — lists total program element dollar figures by DODEE. The figures include PFY, CFY, FPY, UNF and Total Requirement.

Section III (see Figure 11) — includes the bulk of the narrative in a standard Fin Plan. Section III has three components:

- (1) Description of Operations Supported — describes the purpose of the program element and the types of operations this program element supports.
- (2) Program Summary — lists each product or service (programs) with the appropriate summary data including PFY, CFY, FPY and UNF.
- (3) Program Narrative/DODEE Summary — breaks each program (product or service) into its DoD elements of expense with a narration. This is the only place a justifica-

tion of requirements is allowed. The program narrative contains:

**The Program Description** — an explanation of the product or service and to whom it is provided.

**Deviations between PFY and CFY** — an explanation of any deviations (deltas) between PFY and CFY data for each program.

**Deviations between CFY and FPY** — an explanation of any deviations between CFY and FPY data for each program.

Section IV — breaks the program element into Air Force EEICs. No program (that is, product and service) detail is given. This exhibit also requires a narration of PFY/CFY/FPY deltas similar to information provided in the Program Narrative. Because this section is commodity, not commodity-oriented, it is no longer widely used.

Section V — lists a short narrative of each unfunded requirement.

**Figure 8. Sample Exhibit A — A Summary of Budget Requirements by activity and Program Element**

<b>ACTIVITY: 1ST AIRLIFT WING</b>						<b>PAGE 1</b>	
Air Mobility Command							
Home AFB OH 12345							
<b>FIN PLAN REQUIREMENTS</b>				<b>RCS DD(1092)</b>		<b>Exhibit A</b>	
<b>FY 97 FINANCIAL PLAN</b>							
MFP/BA	DESCRIPTION	PFY ACTUAL	CFY CMD DISTR	FPY PART I FUNDED	FPY PART II		FPY TOTAL RQMT
					AIR STAFF	UNFUNDED PRIORITY I	
03	TRAINING & RECRUIT DIRECT	2,586	2,636	2,488	0	221	2,709
ALL	DIRECT TOTAL	2,586	2,636	2,488	0	221	2,709

**DRAFT - NOT FOR IMPLEMENTATION OR COMPLIANCE**

**WORKING IN THE RESOURCES FLIGHT**

**Figure 9. Sample Exhibit A-1 — A Prioritized List of Unfunded Requirements**

ACTIVITY: 1st AIRBORNE AIR MOBILITY COMMAND HOME AFB 12345				PAGE 1	
UNFUNDED FY 97 FIN PLAN			RCS: DDCOMP (AR) 1092	EXHIBIT A-1	
RANK	PEC	EEIC	DESCRIPTION	ITEM TOTAL	CUM TOTAL
1	85779F	48020	<p>UNFUNDED NARRATIVE JUSTIFICATION: PURCHASED ELECTRICITY</p> <p>JUSTIFICATION: Electricity is required for all base operations and support activities. A recent addition of 64K square feet of facilities over the past year requires additional electrical power.</p> <p>IMPACT IF NOT FUNDED: Mission will be ineffective without power. This is a must pay.</p>	62	62
2	85778F	531	<p>UNFUNDED NARRATIVE JUSTIFICATION: CUSTODIAL SERVICES</p> <p>JUSTIFICATION: Custodial Services required for up-keep of administrative facilities. Quality of workplace is extremely important to the efficient accomplishment of the mission.</p> <p>IMPACT IF NOT FUNDED: Degradation in mission accomplishment and employee morale. Wing employees may be forced to clean their own work areas at the expense of other mission tasks.</p>	24	86
3	85778F	609	<p>UNFUNDED NARRATIVE JUSTIFICATION: EMERG DIRECT SCHEDULED WORK ORDERS</p> <p>JUSTIFICATION: Funding is required for 16 additional service calls for the old electrical system in building 50. Expected cost per service call is \$100 each for a total of 1.6K.</p> <p>IMPACT IF NOT FUNDED: Building 50 provides telecommunication services for the entire base, and an emergency breakdown could result in over 16 hours without phone or data service for the base.</p>	2	87

**Figure 10. Sample Exhibit F — Total Program Element Dollars by DODEE**

FIN PLAN REQUIREMENTS		1ST AIRLIFT WING					PAGE 1
FY97 FINANCIAL PLAN		AIR MOB COMMAND					
PROGRAM ELEMENT -		HOME AFB 12345					
85778 MAINT & RPR							EXHIBIT F
SECTION II - OBLIGATION DATA		PFY	CFY	FPY	PART UNFUNDED II - D		TOTAL
TITLE	DODEE				AIR STAFF	PRIORITY I	
CIVILIAN PERSONNEL	01	0.0	0.0	0.0	0.0	0.0	0.0
TRAVEL AND TRANSP OF PERS	02	46.7	48.1	19.4	0.0	40.5	59.8
TRANSPORTATION OF THINGS	03	0.0	0.0	0.0	0.0	0.0	0.0
STANDARD LEVEL USER CHRGS	04	0.0	0.0	0.0	0.0	0.0	0.0
UTILITIES AND RENTS	05	14.0	14.0	3.5	0.0	7.0	10.5
COMMUNICATIONS	06	0.0	0.0	0.0	0.0	0.0	0.0
PRINTING AND REPRODUCTION	07	0.0	0.0	0.0	0.0	0.0	0.0
PAYMENTS TO FNIH PERSONL	08	0.0	0.0	0.0	0.0	0.0	0.0
PURCH EQUIP MAINT CML	09	0.0	0.0	0.0	0.0	0.0	0.0
PURCH EQUIP MAINT,IF	10	0.0	0.0	0.0	0.0	0.0	0.0
PURCH EQUIP MAINT OTH DOD	11	0.0	0.0	0.0	0.0	0.0	0.0
OTHER PURCHASES FROM IF	12	0.0	0.0	0.0	0.0	0.0	0.0
OTHER PURCHASED SERVICES	13	266.2	258.0	264.6	0.0	23.9	288.5
AVIATION POL	14	0.0	0.0	0.0	0.0	0.0	0.0
OTHER SUPPLIES	16	833.7	903.4	783.9	0.0	63.5	847.4
EQUIPMENT	17	0.0	0.0	0.0	0.0	0.0	0.0
OTHER EXPENSE	18	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL - O&M DIRECT & REIM-BURSEMENTS		1160.5	1223.5	1071.4	0.0	134.8	1206.2

**Figure 11. Sample Exhibit F - Section III**

FINANCIAL PLAN REQUIREMENTS		1ST AIRLIFT WING				PAGE 1	
FY 97 FINANCIAL PLAN		AIR MOB CMD					
PROGRAM ELEMENT - 85778F RP MAINTENANCE & REPAIR		HOME AFB OH 12345					
SECTION III - EXPLANATION OF CHANGES IN PROGRAM DATA						EXHIBIT F	
	PFY	DELTA	CFY	DELTA	FPY	A/S UNFR	CMD UNFR
1. DESCRIPTION OF OPERATIONS SUPPORTED: Provides real property maintenance and repair for all facilities and infrastructure systems.							
2. PROGRAM SUMMARY							
(1) CUSTODIAL SERVICES	100	-3.1	96.9	-4.8	92.1	0	23.9
(2) GROUNDS MAINTENANCE	120	0	120	5	125	0	0
(3) ESSENTIAL DIRECT SCHEDULED WORK	341.1	26.9	368	-31	337	0	0
(4) EMERGENCY WORK	64.5	7.5	72	-5.5	66.5	0	1.6
(5) RECURRING WORK	342.1	27.9	370	-24.1	345.9	0	0
(6) PROGRAMMED WORK ORDERS	82.7	-2.7	80	-50.6	29.5	0	59.3
(7) CONTRACT PROJECT DESIGN & MANAGEMENT	90.2	9.8	100	-48.7	51.3	0	50
(8) STAFF SUPPORT	19.9	-3.3	16.6	7.5	24.1	0	0
TOTAL	1,160.5	63	1,223.5	-152.1	1,071.4	0	134.8
3. PROGRAM NARRATIVE/DODEE SUMMARY:							
(1) CUSTODIAL SERVICES	100	-3.1	96.9	-4.8	92.1	0	23.9
DODEE 13	100	-3.1	96.9	-4.8	92.1	0	23.9
Program Description: Provides custodial services for base administrative facilities, allowing users to concentrate on their mission critical processes.							
(4) EMERGENCY WORK	64.5	7.5	72	-5.5	66.5	0	1.6
DODEE 02	0.3	-0.3	0	0.2	0.2	0	0
DODEE 13	1.8	0.2	2	4.3	6.3	0	0
DODEE 16	62.4	7.6	70	-9.9	60.1	0	1.6
Program Description: Provides facility & infrastructure maintenance & repair on a service call basis for emergency conditions, requiring immediate response.							
<b>PFY to CFY Delta:</b> A severe winter caused a 15% increase in emergency heat calls, requiring increased funding.							
<b>CFY to FPY Delta:</b> Normal weather conditions will be expected for next year, returning funding to near PFY levels.							

## 10.2 Formatting a Financial Plan

Micro-BAS is an automated budget feedback and planning system. When it is used, a database is built of requirements for each program by RCCC and EEIC. With the exception of the table of contents and the commander's statement, all exhibits required for submission are automatically generated.

Formatting the financial plan requires ensuring the proper products and services in their correct proportion to the budget (i.e., program elements) are included. The less work

required of MAJCOM to sort requirements, increases the likelihood required funding will be received.

**10.3**     **Prioritizing  
Programs  
(Products and  
Services)**

In the financial plan format, a decision must be made as to which requirements will be funded (contained within the bogey) and which requirements will not (unfunded requirements). To make these decisions, the products and services (programs) provided to the base must be prioritized. For real property maintenance activities, the investment policy used to prioritize requirements is readiness training and mobility equipment, utility bills, sustaining in-house services and productivity and essential contract services, essential maintenance and repair contracts, and minor construction and alterations.

Within each of these categories are many products and services. The prioritization within the categories must be a local management decision, based on local needs.

**10.4**     **Dealing With the  
Fiscal Constraint  
(Bogey)**

After determining total requirements and prioritizing them, a determination of what is funded and unfunded can be made. The method for laying in the bogey is as follows.

- List products and services in priority order with expected activity levels and dollar requirements.
- Start from the top of the list to determine how far down the funding will go. These become initial funded requirements. All products and services that don't receive funding become unfunded requirements (now prioritized).
- Tweak the requirements that are at the bottom of the funded list and those at the top of the unfunded list.
  - ◆ Determine if the validity of funded requirements is accurate and not artificially inflated (padded).
  - ◆ Determine if the activity level of some of the funded requirements can be reduced to help cover a small amount of unfunded requirements. A careful comparison of the impact of the reduced activity level of the higher priority requirement against the benefit of filling some of the lower priority requirements is essential.
  - ◆ Adjust the numbers as necessary.

**10.5**     **Determining  
Impacts**

The most important piece of information to provide managers and budgeteers is the impact if a requirement is not funded. Using information already gathered to create the

budget, the impact of an unfunded requirement can be easily determined.

The prioritized list of products and services used in laying in the bogey is used to calculate the total cost per unit of output (cost per work order, cost per square foot, etc.). This number is divided into the amount of the product or service that will not be funded to determine how much (or maybe all) of that service will not be provided.

**Example:**

\$1600 is required to perform 80 fire inspections. Cost per inspection is \$20. The impact of this service being funded at only \$1000 is only 50 fire inspections can be performed. This could possibly be tied to a quantifiable fire risk.

The impact of an unfunded requirement is extremely important part of the narrative. Managers and budgeteers must know exactly how large the impact if they choose not to fund the requirement. The narrative needs to give a realistic impact of that choice.

**10.6 Preparing Unfunded Requirement Narratives**

Using impact analysis, the unfunded requirement narrative can be prepared and incorporated into Exhibit A-1.

An unfunded narrative includes an unfunded requirement description, Program Element Code, Air Force EEICs associated with the requirement, priority (1=Base or 0=MAJCOM), priority ranking, justification of unfunded requirement, and impact if not funded.

These narratives must be clear and concise so managers can make intelligent, well-informed decisions. These narratives should be neither exaggerated nor false. Strong justification includes the use of facts and data; the relation of requirements to approved programs; the relation of requirements to regulatory guidelines; realistic impacts; assessment of risk; evaluation of alternatives; relationship of requirements to wing goals, objectives, and mission; and credibility.

- 10.6.1 *Facts and Data* Throughout the entire budget formulation, data, metrics, customer input, and cost figures have been heavily used. These cost figures are not secret. When calculating an impact, the calculations should be shown. It's very difficult to raise an objection to a factual presentation about what doesn't get accomplished if funding is not received.
- 10.6.2 *The Relation of Requirements to Approved Programs* Often, MAJCOM or the Air Staff requires a certain product or service be provided at base or expensive, new, safety supplies be purchased to provide a certain existing service. This isn't a secret either. If somebody with the funds has a requirement, this should be stated. For example, lead found in paint or its chemical composition is dangerous. If someone required removal of all lead-based paint, the relationship of the monetary requirement to that program should be included.
- 10.6.3 *The Relation of Requirements to Regulatory Guidelines* If the law requires an expenditure, it should be stated so managers or budgeteers don't go through the same process as the legislators. The simple statement that a requirement must be funded to comply with the law, is all that is needed.
- 10.6.4 *Realistic Impacts* The impact of an unfunded requirement should never be exaggerated. It is not only dishonest, it's obvious. If all unfundeds receive funds; somebody, somewhere, didn't receive funding for a higher priority requirement. CE is part of the base team. If a unit often exaggerates, it will very quickly earn a reputation as 'the boy who cried wolf,' and funding for a real, high-impact requirement might be jeopardized.
- 10.6.5 *Assessment of Risk* When requirements relate to safety, health, or the environment, they are often treated as two-sided issues – people will die or people won't die. This is not always the case. Frequently, a requirement not being funded involves some level of risk that bad things may happen. The task, for the originator of the requirement is to quantify and state that level of risk. For example, a facility is at a 40 percent or .01 percent risk of major damage. Management needs to know the level of risk to decide if that level is acceptable.
- 10.6.6 *Evaluation of Alternatives* A requirement, especially when purchasing equipment, is given more weight if evidence of the evaluation of alternatives is present. Economic analysis techniques can be used

to determine a life-cycle cost. The budgeteers should know a purchase is in the best interest of the Air Force.

*10.6.7 Relationship of Requirement to Wing Goals, Objectives, and Mission*

The Wing holds the purse strings. The Wing commander should be told what a requirement will do for the Wing. For example, if CE needs new computers, an explanation is needed of how new computers will help the squadron make the lives of the people (customers) on the base easier.

*10.6.8 Credibility*

Resource advocacy is the best place to gain credibility. It's also the best place to lose it. The Civil Engineer organization should earn the reputation of being very fiscally responsible by making the base budget office believe that, "if CE says they need it, then they must need it."

**10.7 Narration of Deltas**

Major deviations between PFY and CFY and CFY and FPY must always be explained. Usually, MAJCOM will ask for a narration of any delta exceeding ten-percent. These deviations are usually a result of improper coding of documents; reprogramming of funding; a change in activity level; or a change in a process, making it more or less cost efficient.

Changes in a base's operating environment almost always results in a change of activity level. Using facts and data, these changes should be easy to explain.

**10.8 Preparation of the Commander's Statement**

This is an opportunity often missed, because some bases don't require the squadron commanders to prepare a statement. Even so, one should be prepared. This is CE's only chance to explain special programs and initiatives, unique infrastructure requirements, facility conditions and management changes. This is CE's opportunity to tell the story. Some issues just aren't brought to the fore in the narration of the Fin Plan; they must be told in the Commander's Statement. Usually, the commander does not compose the statement alone. Many inputs should come from data and analysis acquired in the preparation of the Fin Plan. The Resources Flight chief should be a major contributor. A note should be made of any important issues needed to be included in the Commander's Statement.

**10.9 Financial Plan Time Lines**

The formal Financial Plan is prepared once a year, in the spring. The development of a sound Financial Plan is a 365-day-a-year task; it shouldn't wait for the base budget office to ask.

Each management level issues a Budget or Financial Plan call letter; laying out specific formatting requirements, budgetary changes affecting the Fin Plan process, and the fiscal constraints (or bogey). The Air Staff call is in December and issued to each Major Command. The MAJCOM call is in January and is issued to the bases. The Base call occurs in January and February and is issued to responsibility centers (squadrons).

The squadron call is issued by the Fin Plan developer and does not have to wait on the base call to be issued. People can begin working on requirements as early as the beginning of the current fiscal year. As information is received, the pulling together, formatting, and bogey management of the budget can begin.

### *10.9.1 Submission Deadlines*

Suspense dates for financial plan submissions at the higher levels are not flexible. The base budget office must pull together the entire bases Financial Plans and get the final budget approved by the deadline to MAJCOM. Deadlines for each level are generally:

- Base - late February,
- MAJCOM - mid-March, and
- Air Staff - early May.

When setting internal suspenses for the flight inputs, enough time should be allowed to pull together inputs and refine the plan. Flight managers have more to do than just the budget, so cut off dates should be flexible and negotiable.

### *10.9.2 Corporate Review*

As in any business, the “corporate board” must formally approve the Financial Plan. The base normally has two corporate boards handling financial matters, the Financial Working Group (FWG) and the Financial Management Board (FMB).

The Financial Working Group is a body consisting of the resource advisors on base. That means each responsibility center (squadron) is represented. The Civil Engineer financial manager should attend FWG meetings. This group, working as a team with the wing mission in mind, develops a set of recommendations on the Financial Plan, to include:

- implementation of the bogey,
- prioritization of unfunded requirements, and
- issues to be included in the commander's statement.

These recommendations are then presented for approval to the Financial Management Board.

It is the role of the Financial Management Board to approve the financial plan. If the FWG has done its job, the recommendations are accepted and the Fin Plan is approved. If the FWG didn't do its job, the FMB meeting can be very difficult. Approval of the Financial Plan must be annotated in the meeting minutes.

### **10.10 Time-saving Tips**

Last year's financial plan is a guide to what must be done and should be at hand after the December holidays.

The Financial Management personnel who work execution of specific programs should budget for those programs (e.g., have the utilities analyst work with the utility engineer on the utility budget); but, one person shouldn't be asked to do too much. The labor should be divided among the Financial Management staff. Delegation is a wonderful thing.

Flight managers should be involved in the process early. They're the experts. A meeting should be held where the squadron budget call is issued and roles and timelines explained. The Base Civil Engineer should attend the meeting. If the BCE thinks the Fin Plan is important, so will the flight managers. A budget worksheet given to flight managers for their programs will make their task much easier. It ensures required information is returned in a usable format. Calls should not contain financial lingo.

After the completion of the first draft, the flight managers should meet to prioritize programs and rank unfundeds.

The BCE needs time to review the final draft.

After corporate review, flight managers need a short summary briefing on the final product. If the Financial Management Board made changes that were not consistent with the submission, flight managers need to know. Otherwise, they'll think their work was ignored. Often, the FMB may not make many changes. When the flight managers see their

requirements, justifications, and numbers were included, they'll know they've been a part of the process and will be more than glad to help next year.

Budget preparation for the next fiscal year must be concurrent with the execution of this year's budget. Only a balanced workload can achieve this. A successful balance is greatly enhanced by the use of computers.

Spreadsheets, word processors, and Micro-BAS can save enormous amounts of time in the preparation of the Fin Plan. Micro-BAS, alone, can save over fifty-percent in man-hours in formatting the Financial Plan.

### **10.11 Micro-BAS & the Fin Plan**

Micro-BAS is a PC-based, automated budget feedback and Fin Plan preparation system. Micro-BAS is easy to use and can help in building a budgetary database. This allows production of any exhibit or customized budget report. The system can significantly reduce the time required by Financial Management to prepare, organize, and format the budget. The example presented in this section was generated by Micro-BAS. Micro-BAS exhibits and reports can be exported to other software.

The Standard System Group (SSG) web site (<http://www.ssg.gunter.af.mil/microbas/microbas.html>) provides details on the use, capability, and recent releases of Micro-BAS. The Standard Systems Group, Gunter Annex - Maxwell AFB, AL develops and releases the software. The base budget office may also be contacted for details.

## Chapter 11 Military Family Housing Financial Plan

The Military Family Housing Fin Plan is done separately from the O&M Financial Plan. It must be completed very carefully, because what is sent forward is in final form. No other base organizations have inputs. Usually, MFH Fin Plan includes:

- a BCE Statement;
- an Exhibit A - Fin Plan Requirements;
- an Exhibit A-1 - Unfunded Requirements;
- an Exhibit F - Section III, with
  1. personnel authorized and assigned,
  2. a P-72140 - Furnishings Summary,
  3. environmental requirements,
  4. management,
  5. services,
  6. furnishings,
  7. utilities, and
  8. maintenance; and
- quarterly phasing.

Good execution of a budget usually starts with a strong, realistic, executable Financial Plan. The Air Force Manpower Standard for the Resources Flight still ranks this as the number one process. This process should get the management attention it deserves. When it's completed, it should be kept readily accessible for use when the initial distribution of funds for next year are received and must be executed.

The Financial Plan is often a missed opportunity for the Civil Engineer organization. With bogeys and unfundeds, it often is perceived as a financial management game to only be played by financial people. This is CE's only chance to formally tell the base, MAJCOM, and Air Staff what CE does, how much it does, and how much it costs to do those things. This opportunity shouldn't be lost.

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## Chapter 12 Initial Distribution and Allocation

Forecasting how much money is required through the Financial Plan process is important, but the major workload is in the execution of the program. It is becoming increasingly critical to know what to do with the money once it's been appropriated. The distribution, management, control, and accounting of funds can't be de-emphasized. At most bases, the Civil Engineer organization manages over 50 percent of the base's funds. Poor execution by the Civil Engineer could mean disaster for the entire base. Chapters 12 through 30 explain some of the basic execution concepts and critical processes. Special emphasis is placed on the automated information systems used to manage them.

Effective execution starts with effective distribution of the operating program. Each year, the Financial Working Group's first major task is to determine the initial distribution of the base's funds. Once CE receives its funds, a smart way to distribute those funds to the squadron's different activities must be determined.

The Major Command office of the Civil Engineer suggests to the MAJCOM comptroller what each base Civil Engineer should receive. This information is sent to the base budget office along with the funding documents for the initial distribution.

The Financial Working Group/Financial Management Board must decide how to distribute that money to the base responsibility centers. Sometimes, the FMB accepts the suggested distribution of the MAJCOM. In other cases, the FMB will make changes, usually because the situation has changed since the Fin Plan submittal; management has changed; or the Installation Commander wants to take a withhold to keep for contingencies, special projects, incentives, and/or prior year unfundeds.

The most difficult of tasks is the distribution of funds within the squadron. There are many methods of budget distribution, all of which work in different situations. Some of these common methods are central control by the BCE, central control by the financial manager, no control, flight chief control, and cost center/shop control.

The centralized control of funds, widely used in times of scarce resources, has been the norm. In centralized control, one person holds the purse strings and everyone must come ask permission to receive money. The method is often referred to as “first hog to the trough” funds management. Whoever asks first, gets funding first. This environment usually leads to distrust and competition for funds between flights and cost centers. It also forces the holder of the purse strings to make all decisions regarding the validity of requirements. Considering the diverse activities contained in a Civil Engineer organization, this is a job for which no one is qualified.

Using decentralized control of funds, funds are passed down to the lowest level where products and services are being produced. It allows managers of those activities to prioritize their own requirements and work within given fiscal constraints. Each activity receives a budget and each activity gets its most important requirements funded first, not the ones that get asked for first. This method creates an environment of trust and teamwork. Each shop knows what their limit is and must ask for help from other shops (team members) when critical requirements exceed resources. This method also provides a certain amount of cost control; people tend to be more careful with money they consider to be their money.

Processes concerning the decentralization of the Civil Engineer budget are discussed in greater detail in Chapter 26. The Financial Plan was prepared six months prior and should be used to determine where to put the money when it is distributed. Ignoring the Fin Plan once the fiscal year starts results in execution without a plan and the squadron’s loss of faith in the Fin Plan process.

## Chapter 13 Stages of Spending & Terms

The operating budget accounting system focuses management's attention on the consumption, as well as the availability of resources. The operating budget must have budget authority (money) to be able to incur financial obligations. As money is spent, it can pass through different stages of spending. Table 12, Stages of Spending, shows how financial information is often presented.

**Table 12. Stages of Spending**

**PEC = 85756**

EEIC	Description	Annual	Obligated	Committed	Balance	%
40X	Travel/TDY	33.0	38.0	0.0	-5.0	115%
473	Rentals/Leases	50.0	12.1	0.0	37.9	24%
53X	Contract Services	690.0	125.6	413.9	150.5	78%
592	Misc Services	21.0	21.0	20.0	-20.0	195%
60X	AFSF Supplies	88.0	120.2	0.0	-32.2	137%
619	Non-AFSF Supplies	35.0	12.6	10.0	12.4	65%
62X	Equipment	20.0	2.3	0.0	17.7	12%
63X	ADP Equipment	50.0	48.6	12.0	-10.6	121%
641	Fuel	5.0	2.6	0.0	2.4	52%
	<b>Total</b>	992.0	383.0	455.9	153.1	85%

Budget authority is issued to installation commanders or unit commanders having program responsibility. The commander, not the comptroller or any other subordinate, is the holder of these funds. This authority can be thought of as money being distributed to bases.

To facilitate planning and internal control, planning numbers (or targets) are established by RCCC and EEIC to help track funds. These targets are not legal constraints, although it's obvious that the sum of the targets can't exceed the operating budget authority (OBA).

All the funds in the OBA are not available from the US Treasury on the first day of the year. For this reason, the base is issued quarterly authority. This means funds are dis-

tributed at the rate of approximately 25 percent per quarter. The quarterly authority number is cumulative through the year. For the last quarter of the year, quarterly authority and annual authority are equal.

If quarterly authority falls short, the base budget office or the FWG should be consulted. Usually, quarterly authority can be borrowed from somebody else on base and paid back the following quarter. This can be extremely important. A number of annual Civil Engineer contracts are funded at the beginning of the fiscal year. This requires a significant amount of the annual budget authority and, thus, quarterly authority.

Quarterly authority tends to be administrative in nature and is normally handled by financial management personnel. Quarterly authority should not be a road block for other members of the squadron. It should be handled behind the scenes, to allow squadron managers focus on an annual budget.

As money is spent, it can pass through several stages. These phases are commitments, unfilled orders outstanding (UOO), accrued expenditures unpaid (AEU), and accrued expenditures paid (AEP). The last three stages are grouped together and called obligations.

The stages of spending also influence the two different ways in which remaining funds are viewed. These are unobligated and uncommitted balances.

Commitments are defined as a specific amount of currently available funds, reserved for funding specified obligations and which authorize the creation of an obligation without the further recourse of the official responsible for certifying the availability of funds. Commitments are based on firm requisitions, purchase requests, documents requiring start of actual procurement actions, and other authorized evidence which indicate intention to incur obligations.

Examples of civil engineer commitments include:

- money set aside to buy supplies through GOCESS,
- money set aside for use with the credit card,
- money set aside for a blanket purchase agreement (BPA) for asphalt or other bulk materials, and

- money set aside for another organization to use, especially in the case of a facility contract project (i.e., money for the Corps of Engineers or the Air Force Center for Environmental Excellence).

Some of the documents used during spending include:

- AF Form 616, Fund Cite Authorization — gives another AF organization the authority to use the CE fund cite (money). Commitment is made upon certification of funds availability.
- DD Form 448, Military Interdepartmental Purchase Request (MIPR) — used to request services from other DoD departments or agencies. Commitment is made upon certification of funds availability.
- AF Form 85, Project Order — used to request services from another Air Force organization. Commitment is made upon certification of funds availability.
- Fund Cite Letter/Message — used to give other organizations authority to use CE funds or to transfer funds. Commitment made upon certification of funds availability.

Committing or earmarking money is a useful tool in the execution of the budget, but there are some dangers involved. Commitments are not acknowledged as obligations or money spent by anyone. Money in this stage tends to "fall out" because it is considered to be spent, even when it doesn't get obligated.

Whenever a commitment becomes obligated, the financial system must remove the commitment amount and record the obligation. Sometimes, the removal of the commitment amount is overlooked, giving the appearance of much less money remaining. The commitment column should be carefully monitored, especially at year-end.

Frequently, when money is committed, someone else is given the authority to obligate it. Follow up is essential. If not obligated, the funds are returned. No one wants that to unexpectedly happen the last week of September.

Commitments can tie up money; i.e., it takes away from the available balance. A unit's funds can be unnecessarily tied up by artificially inflating the estimated commitment amount.

An undelivered order outstanding is the second stage of spending. An undelivered order outstanding is defined as an obligation for the value of goods or services ordered but which have not yet been received. UOO is an obligation; however, it is not considered an expenditure because a liability for payment has not occurred. Examples of UOOs are the award of a contract for welding services that have not yet been received or the purchase of materials for delivery.

Documents used in creating a UOO include:

- AF Form 616, Fund Cite Authorization — gives another AF organization the authority to use fund cite (money). UOO is recorded when other organizations obligate CE funds (through use of the fund citation) and send the information to the Finance office.
- DD Form 448, Military Interdepartmental Purchase Request (MIPR) — used to request services from other DoD departments or agencies. UOO is recorded when the supplier sends acceptance of MIPR (at their estimated dollar amount).
- AF Form 85, Project Order — used to request services from another Air Force organization. UOO is recorded when the supplier accepts the project order (at their estimated dollar amount).
- Fund Cite Letter/Message — used to give other organizations authority to use CE funds or to transfer funds. The obligation is made upon certification of funds availability.

UOOs that become expenditures (explained next) are removed from UOO and, then, recorded as an expenditure. UOOs can also fall out. If the amount of calls on a requirements contract is less than anticipated, money may remain at the end of the year.

The third stage of spending is accrued expenditures unpaid. AEU's are recorded for services that are received, but the bill has not yet been paid. Items needed to record an AEU are the statement of receipt of goods or services and a bill from the provider.

Examples of all AEUs include the amount of contract awarded, but withheld under progress payment provisions and receipt of materials in Material Acquisition.

Documents used in creating AEUs are:

- DD Form 1155 — Statement of Services Received,
- PCN 241, Material Receiving Report — lists materials received from vendors for a day,
- vendors' bills and invoices, and
- locally-prescribed forms or documents.

An AEU is an actual expenditure, it is definitely spent, the money does not fall out.

Accrued Expenditures Paid is the last stage of spending. This stage includes all disbursements (or payments) made for goods and services. Once payment is made, funds move from AEU to AEP.

An unobligated balance is defined as money available for obligation. It is calculated as:

$$\text{Unoblig\_Balance} = \text{OBA} - \{ \text{AEP} + \text{AEU} + \text{UOO} \}$$

Commitments cannot be ignored because, as commitments become obligations, an account can become over obligated. This is why the uncommitted balance is used. The uncommitted balance shows the funds are available for use and is defined as:

$$\text{Uncommit\_Balance} = \text{OBA} - \{ \text{AEP} + \text{AEU} + \text{UOO} + \text{Commitments} \}$$

The rules for the administrative control of appropriations are simple. It is against the law to give out more funds than were received, spend more than was given, spend it before receiving it, and spend when not authorized to obligate government funds.

These laws are part of the Anti-Deficiency Act and are explained and implemented in DoD 7000.14R, Volume 14, *Department of Defense Financial Management Regulation (Administrative Control of Funds and Antideficiency Act Violations)*. Anyone having a problem complying with this law may have been poorly executing a budget for a long

time. Many management problems are usually experienced long before the law is broken.

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## Chapter 14 Financial Data Flow

To properly account for Civil Engineer funds as dollars move through the stages of spending, a complex group of computer systems is used in the management and accounting of funds. The systems critical to the management of Civil Engineer funds include:

- the Work Information Management System,
- the Accounting and Finance System (BQ),
- the Standard Base Supply System (SBSS), and
- the Base Contracting Automated System (BCAS).

WIMS has many components used to manage the Civil Engineer information required for mission accomplishment. Those components closely tied to the management and accounting of civil engineer funds include work orders, the Project by Contract Management System, Civil Engineer Material Acquisition System (CEMAS), and Financial Management subsystems.

### 14.1 Work Order System

The work order system is the heart of the entire Civil Engineer organization. It:

- provides a method for keeping track of work requirements,
- provides a history of work accomplished (maintenance records),
- provides data for quality and performance measurement,
- provides an audit trail for requirements,
- provides an accounting system for Civil Engineer costs, and
- provides a method for tracking costs for billing to reimbursable customers.

The work order system is integrated with many other WIMS applications; particularly, PCMS, CEMAS, and the Financial subsystem described later. The work order system also receives information from the BQ. BQ sends costs (by work order, RCCC, EEIC combination) to be run against the work orders. This data comes to system administrators on magnetic tape or directly over communication lines. Information rejected by WIMS must be rectified, or cleared, quickly.

Many financial managers now use Micro-BAS as their feedback mechanism.

BQ, SBSS, and BCAS all can talk to each other as well, thus closing the loop on financial data flow. When materials are requested from base supply, SBSS tells BQ, and money is subtracted from the correct account. BCAS also tells BQ when it awards contracts or makes purchases.

**14.1.1 Tracking Work Requirements**

The zonal maintenance shops receive all work requirements from base customers. These requirements are entered into the work order system. Depending on the type of requirement, the work order could be any of the following types shown in Table 12, Work Order Indicators.

**Table 13. Work Order Indicators**

<b>Indicator</b>	<b>Description</b>
A	In-service work
C	Contract project
D	Draft
J	Direct Scheduled
M	Material only
N	Non-BCE cost
O	OPS/SVC/RWP
R	Rental contract
S	Service contract
U	Purchased utilities
W	Other in-service
X	In-house/contract
Y	Work - Non-BCE Support

Financial Management often writes its own work orders for contract projects or service contracts. Any time a funding document (a Purchase Request such as a Form 9) is generated for a specific requirement, it should be entered as a work order.

A work order contains much information especially helpful to the Operations Flight in managing work load; such as customer name, organization, and phone number; work location; and estimated man-hours.

**14.1.2 Work Order History**

Most WIMS system administrators keep work orders for many years, stored on-line or on magnetic tape. These work order histories serve as maintenance records. The work order contains information that could also prove to be useful

in developing the budget submission. Information contained in the work order includes:

- the date the work order was initiated;
- the date the work order was completed;
- shop(s) performing the work;
- the materials used;
- the type of work (emergency repair, routine repair, or maintenance);
- facility number; and
- the work location.

Each work order has a set of shop records showing the shops assigned to that work order. The shop is comparable to the cost center in the financial system. The WIMS file containing work order shop records is MWCN.

### *14.1.3 Measurement of Performance*

Many managers use work order data to measure the performance of their organizations. Indicators such as turn-around time, customer commitments met, and performance to budget can all be calculated from work order data. Information useful in the measurement of performance includes:

- estimated hours,
- actual hours,
- date the work order was initiated,
- date the work order was completed,
- date the work was promised,
- the estimated contract cost,
- the actual contract cost,
- material cost,
- labor cost, and
- facility number.

### *14.1.4 Audit Trails*

Much of the cost data and work classification is useful for historical purposes by providing an audit trail of what work requirements are initiated and accomplished. The work order contains lots of room for comments, where special circumstances and notes can be entered. The comment section should provide a complete description of work accomplished and peculiarities associated with the requirement. This gives the auditor a “what, when, why, and how.” The work order system also requires Financial Management, when entering contracts, and Operations Flight for in-

service work to go through two official steps before work can begin or a purchase request can be drafted.

Step 1: Approval — A work requirement must be a valid requirement and within the authority of the BCE to accomplish. The BCE has a certain dollar level of authority to approve work orders. Some of that may have been delegated to Financial Management and the Operations Flight chief. Work must be approved on the AF Form 332, BCE Work Request, and/or the computer screen.

Step 2: Authorization — After a work requirement is identified as valid and is approved, it must be authorized. This can be done on the computer, as well as on the WIMS 327 form. It should be done on both. Once completed, funds can then be spent on the requirement, work started, material ordered, and a Form 9 cut.

Both approval and authorization should be done on the computer and on paper. After the 332 is approved and the 327 authorized, a copy is placed in a folder with the work order number on it and filed by fiscal year. Any special notes, memos for record, or correspondence related to the work order should be in this folder, making the retrieval of this information much easier. This is not an activity that should wait on the auditor.

*14.1.5 Cost Accounting*

One of the most critical fields in the work order file is the account code. One of the major purposes of the work order system is the cost accounting system. Each work order contains an account code. The codes describe what type of work is required. If a requirement is for two different account codes, then two work orders are required. Examples of a few cost accounts include management, operation of utilities, building and other real property maintenance, indirect costs, and minor construction.

*14.1.6 Tracking Costs and Billing*

Another very important purpose of the work order system is to track costs and use them to bill reimbursable customers. Not only do paying customers need to know how much to pay, wing leadership often wants to know costs. The types tracked include military labor, civilian labor, materials, contract, and other costs, such as purchased utilities. Another field that appears on the work order is the Refund and Reimbursement Indicator (RRI) code. This code tells

the system it's a reimbursable work order and who to bill.  
 Without this code on the work order, no customer is billed.

**14.1.7 Work Order Screens**

Representations of WIMS work order screens are shown in Figures 12 through 15.

**Figure 12. WIMS CE Work Order/Request Screen**

```

Active CE Work Order/Request                                     Page: 1
WO/Request #:          FNWZ A 21411  REPLACE PANIC HARDWARE      Rec Status: D
WO Indicator:          D DRAFT                                     Tracking Location: ENG
Work Class:            Service                                   Tracking Status:  CONTRACT
Labor Code-LUC:                                               Inst/Facility #:  FNWZ 09001
AF Account Code:                                               Requester's Name:  SSGT GIBSON
RRI Code:                                                       Organization:      7 OG
What's Reimb? All:      Mat:                                     Office Symbol:    CC
Lab:                    Contr:                                  Telephone Number: 6-4861
Gen/Sen Officer:       (G/S)                                   Facility Manager:  CREEL  LARRY A
Special Interest:      M                                         Fac Mgr Orgn:     960PG
Customer Account:      100                                       Fac Mgr Phone:    6962636
Cust/CE Priority:      /                                         Work Location:
Work/Org Priority:     /                                         Type of Service:
Project Number:                                               DSW EPS Noun:
Infrastruct. Code:                                           EPS TTS Ref #:
Risk Assess-RAC:                                             TTS Est Hours:    0.0
Deficiency: Fire      OSHA  Other                               Travel/Work Zone: /
Shops Assigned:       0                                         DIN Number:
HWR RCCC :                                                    Capitalization:    Vouch #:

(1)Keys (2)First (3)Desc (4)Prev (5)Next (8)Find
(9)Modify (15)Print (16)Retrn
(17)Menu (18)Remarks(19)Logs (20)PvScrn(21)NxScrn(22)Shops (32)Exit
    
```

**Figure 13. CE Work Order/Request Cost Screen**

```

Active CE Work Order/Request COSTS                               Page: 2
WO/Request #:          FNWZ A 21411  REPLACE PANIC HARDWARE      Rec Status: D
COSTS:                 Estimated      Actual      Pending      Tot (Act + Pend)
Labor:                 $0.00          $0.00        $0.00        $0.00
Material:              $0.00          $0.00        $0.00        $0.00
Contract:              $0.00          $0.00        $0.00        $0.00
Other:                 $0.00          $0.00        $0.00        $0.00
Total:                 $0.00          $0.00        $0.00        $0.00
LABOR HOURS:          0.0            0.0          0.0          0.0

Funded:               $0.00  CY Labor:      $0.00  PR#:
Unfunded:             $0.00  CY Mat:        $0.00  PR Amt:  $0
Military:             $0.00  CY Cont:      $0.00  Design:  $0.00
RRI PY:              $0.00  CY Other:     $0.00  Deprac:  $0.00
RRI Limit:           $0.00  CY Total:    $0.00  C/Ord:   $0.00
CY Ovd:              $0.00  CY Mil:      $0.00  # of C/Os: 0
Hours                0.0  CY Hours
Approval Type:
WO is Approved for Amt: $0  Military: 0.0 0.0
and has reached 0.00 % of this amount  Civilian: 0.0 0.0
Donated: 0.0 0.0

(1)Keys (2)First (3)Desc (4)Prev (5)Next (8)Find
(9)Modify (15)Print (16)Retrn
(17)Menu (18)Remarks(19)Logs (20)PvScrn(21)NxScrn(22)Shops (32)Exit
    
```

**Figure 14. WIMS CE Work Order/Request Dates Screen**

Active CE Work Order/Request DATES (YY/MM/DD format)		Page: 3
WO/Request #: FNWZ A 21411 REPLACE PANIC HARDWARE		Rec Status: D
Estimated Start: 88/03/04	Request taken: 87/08/04	by: MRA
Estimated Complete: 89/03/04	Time taken:	
Required Completion:	Last Modified: 93/10/01	by: MSY
Adjust Req Complete:	Request Approved: 87/09/10	
Request Date: 87/08/04	Req. Disapproved:	
Work order closed: by:	Appv/Disappv by: DE2	
Work order reopened: by:	WO Approved: 87/09/10	by: DE2
Labor started:	Work Authorized:	by:
Labor last charged:		
Last mat trans:		
Last shop closed:	Moved to History:	
Material complete:	To Off-line Hist:	
Tracking Suspense: 87/10/10		
MILCON FY:	First THF Trans:	
	First CCX Trans:	
	Last CCX Trans:	
(1)Keys (2)First (3)Desc (4)Prev (5)Next (8)Find (9)Modify (15)Print (16)Retrn (17)Menu (18)Remrks(19)Logs (20)PvScrn(21)NxScrn(22)Shops (32)Exit		

**Figure 15. WIMS Miscellaneous Information Screen**

Active Miscellaneous Information		Page: 6
WO/Request #: FNWZ A 21411 REPLACE PANIC HARDWARE		Rec Status: D
MWR RCCC :		Number of Pending Transactions
UNIQUE 2: MRA		Labor Cost: 0
UNIQUE 3:		Material Cost: 0
UNIQUE 4:		Contract Cost: 0
UNIQUE 5:		Other Cost: 0
UNIQUE 6:		
UNIQUE 7:		
UNIQUE 8:		
UNIQUE 9:		
UNIQUE 10:		
(1)Keys (2)First (3)Desc (4)Prev (5)Next (8)Find (9)Modify (15)Print (16)Retrn (17)Menu (18)Remrks(19)Logs (20)PvScrn(21)NxScrn(22)Shops (32)Exit		

## 14.2 Project by Contract Management System

Money for facility projects by contract, EEIC 52X money, is usually received on a project-by-project basis from the parent Major Command. The PCMS is a database containing facility project requirements. Most facility projects start as work orders until a determination is made that they must be completed by contract. The Engineering Flight then enters the requirement into PCMS and begins to program the project.

The data is electronically sent to the MAJCOM where they make funding decisions and transfer funds. Most MA-

JCOMs insist the project be entered into PCMS. Their policy usually is; “if it isn’t in PCMS, then it isn’t a project.”

The Environmental Flight has a similar process for environmental requirements. They must enter environmental requirements into the A-106 module in WIMS-ES (Environmental Subsystem).

Both PCMS and WIMS-ES are the responsibility of two other flights; however, Resources has a vested interest in ensuring information is entered. Resources should work with Engineering and Environmental Flights to ensure all required tasks are completed for a funding request.

### **14.3 Civil Engineer Material Acquisition System**

CEMAS identifies, orders, tracks, stores, and issues materials. This system is operated and managed by the Material Acquisition Element in the Operations Flight. The system can generate orders through base supply government operated civil engineer supply store (GOCESS), contracting, or a contract operated civil engineer supply store (COCESS).

CEMAS talks with many other systems, including SBSS, BCAS, BQ, and the work order system.

From SBSS, CEMAS receives information about any base supply activity involving the Civil Engineer. This information comes via magnetic tape or over communication lines through a daily process called D10.

CEMAS talks to the base contracting system many times each day, sending material orders and receiving feedback on order status. The system administrator and material acquisition personnel decide how often to communicate with BCAS.

CEMAS sends information usually weekly, on magnetic tape or communication lines on material transactions to Accounting and Finance through a process called P2T. This process will be explained later.

Both CEMAS and Work Orders are WIMS programs and it’s easy for them to communicate. Material costs are obtained from CEMAS through material transactions. As material is purchased, CEMAS creates its own material transaction to run against a work order when the computer has

available time (called background processing). CEMAS will also print the computer-generated form, 2005s (supply requisitions), to take to base supply for processing.

#### **14.4 Financial Subsystem**

The WIMS Financial Subsystem is the set of computer tools used most frequently in CE financial management; it manages and uses information in the following modules:

- General Officers' Quarters Cost Management,
- Cost Accounting,
- Purchase Request Tracking,
- Shop Rates,
- Refund & Reimbursement Customer Management,
- Base Produced Utilities, and
- Transaction Management (Rejects).

The specifics of these programs with respect to the processes they help manage will be provided in greater detail.

The Financial Management Subsystem requires information from a number of sources and provides information to accounting and finance.

WIMS both receives information from BQ and sends information to BQ. Any cost transactions processed against a Civil Engineer account are sent via the ABQ16A process.

Cost transactions go against either a work order (indirect) or an account code (direct).

Each RCCC/EEIC address in the BQ system can have a two-character B- indicator assigned to it, indicating the transaction should be sent to WIMS and how the transaction will be processed in WIMS. When the transactions arrive in WIMS, they take the form of a three-character transaction ID to help WIMS programs determine how to process the transaction.

Table 14 summarizes the B-indicators and the associated WIMS Transaction ID.

**Table 14. B- Indicators and WIMS Transaction ID**

<b>B- Indicator</b>	<b>Transaction ID</b>	<b>Type Transaction</b>
BW	CCC	Contract Project Costs
BW	CCS	Service Contract Costs
BW	CCO	Other Costs
BN	CCN	Non-BCE Costs
BD	CCD	Direct Costs (ETA)
BI	CCI	Indirect Costs (ATA)
Not from BQ	CLU	Labor Transactions
Not from BQ	CWM	Material Transactions

Cost transactions not accepted by WIMS are termed rejects. Some of the most common reasons for rejects are the wrong work order number, a shop not loaded in shop records, the wrong RCCC, and an incorrect EEIC.

The first two can be corrected in WIMS . The last two must be coordinated with finance personnel, because the indicative data belongs to the accounting and finance system. Once CE receives the correct information, it sometimes can be corrected in CE via URATFIX transactions.

A complete list of possible rejects is contained in the WIMS documentation.

WIMS uses BQ transactions to update the cost accounting system and to maintain shop rates.

The financial management subsystem sends no information, electronically, to any other computer systems. However, it does generate the Schedule of Reimbursements and Refunds (SF100-451 report) each month. This report must be sent to accounting and finance to process reimbursements and refunds. If this report is in error, or is not processed by finance, reimbursements are not received.

The WIMS financial management subsystem requires labor and material cost information through the WIMS work order system to manage the cost accounting system and shop rates. Because both are WIMS programs, the communication is easy.

The financial subsystem also receives copies of CE's operating budget ledger and allotment ledger (budget feedback products) for review.

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## Chapter 15 Cost Accounting System

The Civil Engineer cost accounting system was established by Public Law 81-216. The system accumulates costs incurred in the operations and maintenance, repair, renovation, and construction of Air Force real property facilities, regardless of fund source. The system uses much of the data and interface capability explained in the Financial Data Flow (see Chapter 14).

The report (HAF-CE(SA)7101) should be submitted twice a year, in March and September, to the MAJCOM; who forwards command reports to the Air Staff.

The report provides useful management information in terms of cost per output. The cost report provides a better view of total costs, because it isn't concerned with fund sources. It is the only way the Air Force can provide a financial statement. The Real Property element uses account codes extensively to record capital assets. Financial Management supports the financial statement through the cost accounting system.

The cost accounting system distributes all expenses into specific accounts based on the account code contained on the work order on which the expense was incurred or directly to an account code from the Accounting and Finance interface (ABQ16A).

### 15.1 Account Code Hierarchy

The account code, a five-digit number, has a hierarchy that allows costs to be rolled up to higher level account codes. For example, account code 53000 is for Utility Plants and Distribution Systems Maintenance; 53010 is for Maintenance of Electrical Generating Plants, and 53015 is for Maintenance of Electric Distribution Systems.

Lower level account codes are direct charge account codes. Costs are charged directly to lower level codes and the non-direct charge account codes (like 53000) are an aggregation of the direct charge account codes. A 53000 account code is never on a work order, because it's not a direct charge.

Account code 99999 is the highest level account code and reflects total distributed costs. This is the control account

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for account codes 10000, 20000, 30000, 40000, 50000, 60000, 80000 and 90000. Each of these high level account codes are the control account for the accounts, subordinate to them, as shown on Table 15, Cost Account Codes.

**Table 15. Cost Account Codes**

<b>Acct Code</b>	<b>Description</b>	<b>Unit of Measure</b>	<b>Direct Charge?</b>	<b>Quantity Status</b>
10000	Management	None	Y	N
20000	Utilities Operation	None	N	N
21000	Purchased Utilities	None	N	N
21010	Purchased Water	Kgal	Y	I
21020	Purchased Electricity	MWH	Y	I
21030	Purchased Gas	MBTU	Y	I
21040	Purchased Sewage	Kgal	Y	I
21050	Purchased Steam/Hot Water	MBTU	Y	I
21060	Purchased Propane/LPG	MBTU	Y	I
22000	Fuel Oil Issued	MBTU	N	D
22100	Solid Fuels Issued	MBTU	Y	D
22200	Solid Fuels in Coal Yard (non-ADD)	None	Y	N
23000	Heating Plants (> 3.5 MBTU)	MBTU	N	I
23010	Operations of Heating Plants	None	Y	N
23020	Fuel Oil Issued - Heat Plants	MBTU	Y	D
23030	Solid Fuels Issued - Heat Plants	MBTU	Y	D
23040	Purchased Gas - Heat Plants	MBTU	Y	I
26000	Electric Generating Plants	MWH	Y	I
27000	Sewage and Waste Systems	Kgal	N	I
27100	Industrial Wastewater Systems	Kgal	Y	I
27500	Water Plants and Systems	Kgal	Y	I
28000	Air Cond/Refer Plants (>100 tons)	Tons	Y	S
29000	Utilities - Other	None	Y	N
30000	Shop Rates Accounts (all non-ADD)	None	N	N
30100	Military Personnel Costs	None	Y	N
30200	Civilian Personnel Costs	None	Y	N
30400	Material Costs	None	N	N
30410	Bench Stock	None	Y	N
30420	Bulk Issues	None	Y	N
30440	Individual Equipment	None	Y	N
30460	Tool Crib	None	Y	N
30470	Tool Kits	None	Y	N
30480	Tool Issues	None	Y	N

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<b>Acct Code</b>	<b>Description</b>	<b>Unit of Measure</b>	<b>Direct Charge?</b>	<b>Quantity Status</b>
30500	Mobil Equipment	None	Y	N
30600	Contractor Maintenance	None	Y	N
30900	Material Variance	None	Y	N
40000	Services	None	N	N
41000	Custodial	Ksqft	Y	S
42000	Refuse Collection & Disposal	Kcuyds	Y	I
43000	Design (A-E) and Contract Insp	None	Y	N
44000	Entomology Services	Ksqft	Y	S
45000	Rentals, Leases, Payments to GSA	None	Y	N
48000	Fire Protection, Detect & Supp Sys	None	Y	N
49000	Other Services	None	Y	N
50000	Buildings & Other Real Prop Maint	None	N	N
50100	Misc	None	Y	N
51000	Building Maintenance	Ksqft	N	S
51020	Buildings - RDT&E	Ksqft	Y	S
51030	Buildings - Hospital & Medical	Ksqft	Y	S
51040	Buildings - Unaccompanied Housing	Ksqft	Y	S
51050	Buildings - MWR	Ksqft	Y	S
51070	Buildings - All Other	Ksqft	Y	S
52000	Other Real Prop Facil Maintenance	None	N	N
52010	Pavements, Roads, Sidewalks, etc	Ksqyd	Y	S
52020	Golf Course Facilities	None	Y	N
52030	MWR Facilities	None	Y	N
52050	Railroad Trackage	Klin ft	Y	S
52080	Other Structures & Facilities	None	Y	N
53000	Utility Plants and Distr Systems	None	N	N
53010	Maintenance Elect Gen Plants-Prime	None	Y	N
53015	Maintenance of Elect Distribution Sys	None	Y	N
53020	Maint Heat Plants (>3.5MBTU)	None	Y	N
53030	Maint Heat/Steam/Hot H2O Dis Sys	None	Y	N
53035	Maint of Gas Distribution Lines	None	Y	N
53040	Maint of Sewage and Waste Systems	None	Y	N
53050	Maint Industrial Wastewater Systems	None	Y	N

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**WORKING IN THE RESOURCES FLIGHT**

<b>Acct Code</b>	<b>Description</b>	<b>Unit of Measure</b>	<b>Direct Charge?</b>	<b>Quantity Status</b>
53060	Maint of Water Supply	None	Y	N
53070	Maint of AC Plants (>100 Tons)	None	Y	N
53080	Maint of Other Utility Plants	None	Y	N
59000	Grounds and Natural Resources	None	N	N
59010	Grounds	Acres	Y	S
59020	Golf Course Grounds	Acres	Y	S
59030	MWR Grounds (no Golf Courses)	None	Y	N
59100	Natural Resources	None	Y	N
60000	Indirect Costs	None	Y	N
80000	Class MC Work	None	N	N
80010	Class MC Work - O&M	None	Y	N
80020	Class MC Work - RDT&E or DBOF	None	Y	N
80030	Class MC Work - NAFs	None	Y	N
83000	Class MC Work - P300	None	Y	N
84000	Class C Work - P321/331	None	Y	N
90000	Inactive Installations	None	Y	N
99999	Total Distributed Cost	None	N	P

Not all types of costs are charged to an account code. The type of charge codes that can be assigned to each account code are shown in Table 16, Charge Codes.

**Table 16. Charge Codes**

<b>Code</b>	<b>Detail</b>
F	Labor, material, other (vehicle costs, donated labor, etc.)
H	Labor, material, contract, other
J	Material only
K	Contract costs, government furnished materials
L	Material, other
M	Other only

In fulfilling the goal of the accounting system to collect a cost per unit, a quantity and unit of measure is required. Table 17, Status Code for Quantities indicates the unit of measure for each account code. Financial management, together with real property, utility engineers, and contract management personnel must ensure quantities are entered monthly for utilities purchased, utilities produced, and service contracts.

WIMS programmatically determines all other quantities.

Each account code has an assigned status code. The code shows if the quantity remains static over time, whether they change, or they don't exist. These codes are shown in Table 17.

**Table 17. Status Code for Quantities**

<b>Code</b>	<b>Detail</b>
I	quantity increases
S	quantity is static
N	no quantity exists (used for the higher level (non-direct charge) account codes
D	quantity decreases
P	assigned to 99999

**15.2 WIMS Cost Accounting Process**

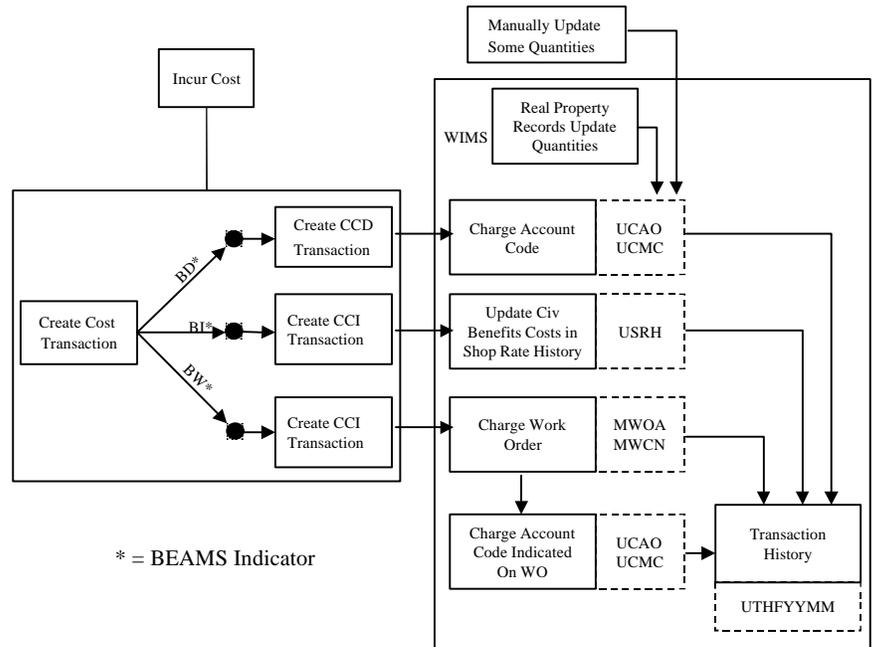
The cost accounting process is summarized in Figure 16.

The nine steps in this process follow:

- Step 1. Civil Engineer incurs some labor, material, contract and other costs.
- Step 2. For cost centers not working on work orders, WIMS distributes their labor costs to 10000, Management.
- Step 3. For cost centers working on work orders, WIMS distributes labor costs to the account code on each work order using the shop rate.
- Step 4. WIMS distributes material costs without a work order to 10000.
- Step 5. WIMS charges material costs with a work order to the account code on that work order.
- Step 6. Contract costs are distributed by WIMS to the appropriate work order or account code after receiving transactions from BQ (ABQ16A).
- Step 7. Any rejects are cleared by financial management and/or accounting and finance.
- Step 8. Most quantities are updated by WIMS.
- Step 9. The remaining quantities are entered by financial management.

End-of-month, semi-annual, and annual cost reports are generated by WIMS.

**Figure 16. Cost Accounting Process**



The WIMS files listed below help in the management of the cost accounting function. The system administrator can provide the specific locations of these files on the system.

**UCAR**, Cost Account Reference File — the master list of account codes, control accounts, type charge, status, etc.

**UCAO**, Cost Account Data — contains costs for each cost account/work order combination fiscal year-to-date and is used to generate the semi-annual HAF-CE(SA) 7101 cost report required for submittal semi-annually. Quantities are updated in this file.

**UCMC**, Current Month Cost — contains same information as UCAO except for only the current month.

**UCWW**, Cost Account Changes — contains any account code changes that have occurred on work orders (for audit purposes).

### **15.3 Military Family Housing Cost Accounting**

Family housing has its own accounting system. It pays particular attention to the category of housing, shown in Table 18, MFH Categories.

**Table 18. MFH Categories**

Category	Detail	Includes
F	government-owned dwelling unit	Housing quarters, government-owned trailers
K	other	Private housing, non-dwelling MFH facilities, miscellaneous properties
H	leased	Costs for leased quarters
L	summary	Costs for all categories above

MFH account codes, the same as the budget project codes used in their funding, are summarized in Table 19.

**Table 19. MFH Account Codes**

Account Code	RRI Code	DESCRIPTION of FUNCTION
72111	QA	MFH - Management Government Quarters
72112	QB	MFH - Management Other
72121	QG	Services - Government Dwellings
72122	QH	Services - Other
72811	QK	Utilities - Government Quarters
72812	QL	Utilities - Other
72141	QN	Furnishings - Government Quarters
72142	QP	Furnishings - Other
72151	QR	Miscellaneous - Government Quarters
72152	QS	Miscellaneous - Other
72153	QT	Non-BCE Costs
72262	RA	M & R Dwelling - Government Quarters
72266	RC	Self-Help Store - Government Quarters
72267	RD	Self-Help Store - Other
72271	RG	M & R Utilities - Exterior
72281	RK	M & R Other Real Property
72291	RM	Alter/Add - Government Quarters
72292	RN	Alter/Add - Other
72296	RQ	Major M & R - Government Quarters
72297	RR	Major M & R - Other
72300	Q3	Operations - Foreign Lease
72400	R4	Maintenance - Foreign Lease
72500	Q5	Operations - Domestic Lease
72600	R6	Maintenance - Domestic Lease
71100		MFH - New Construction
71300		MFH - Post Acquisition Construction
71400		MFH - Advance Planning/Design

**15.4 Cost Accounting  
Summary**

The BQ financial system is commodity based, but WIMS cost accounting system is output based. This provides a much clearer picture of CE consumption of funds. It is imperative data is accurate because this provides an advantageous opportunity for a valuable management tool.

**15.5 References**

Further information on cost accounting can be found in WIMS on-line documentation.

## Chapter 16 Financial Feedback and Reports

Financial feedback, important in the effective execution of the budget, gives an idea of what resources are available, planned versus actual budget, and what accounting errors may have been made. Many paper products exist. They come from base supply, accounting and finance, and the CE's WIMS. A current trend is toward automated products. Users receive a data file and can create reports with exactly the information they require. Any information available that will help effectively execute the budget should be used. Automated tools and inquiries can quickly sort through a large amount of data and pull out all the information needed.

- 16.1 Feedback Products** Some of the most commonly used feedback products in Civil Engineering are listed below, along with the sources.
- Operating Budget Ledger,
  - Allotment Ledger,
  - RC Manager's Report,
  - Open Document Listing, and
  - Micro-BAS.
  - PFMR/OCCR Reconciliation (D11),
  - Daily Document Register (D04), and
  - Base Supply Due-Out List (M09).
  - BCE Current Month Cost Report,
  - Account Code Quantity Edit Report,
  - BCE Integrated Transaction Listing,
  - Shop Rate Reports,
  - Schedule of Reimbursements and Refunds, and
  - BCE Material Transaction List.
- 16.2 BQ Feedback Products** The BQ system also provides useful information to help effectively execute the budget.
- Operating Budget Ledger (OBL SH069-191)** — Accounting and Finance usually produces this report weekly (sometimes, more often). It is the most complete summary of the O&M funds and includes information on the four stages of spending; as well as, annual and quarterly targets.
- The report usually is sorted by PEC and has a line entry for each RCCC/EEIC combination. The report includes data addresses (FSR/PSR) for each line; an easy reference for accounting and finance if there is a problem with an entry.

**Allotment Ledger (SH069-202)** — the ledger provides information similar to that found on the OBL; except, it is for non-O&M appropriations including MFH, MILCON, BRAC, and DBOF.

**Open Document Listing (ODL) (SH069-731)** — Obligations and commitments are provided by document number and work order. It is useful in tracking contract payments and keeping track of commitments; especially, during year-end close-out. When a contract is paid in full, it falls off this listing.

The **OBL/Allotment Ledger/ODL** (an example is given in Figures 17, 18, and 19) can be obtained from the Generic Extract Tape formatted in WIMS, allowing users to write WIMS reports.

**Micro-BAS** — Micro-BAS is an automated feedback system. The base budget office can download all OBL and Allotment Ledger data onto a floppy disk or a dedicated circuit connected to allow access. Micro-BAS, runs reports from the data. The user designates the required data and format. Some system features include:

- ability to pull only data relevant to information needs;
- ability to create summary slides;
- ability to sort by what is needed;
- access to all OBL-type data, including AEP, AEU, UOO, commitments, and balances;
- ability to pull an Open Document Listing;
- ability to pull the BQ address table; and
- ability to use BQ data to generate an automated Financial Plan submission.

With the proliferation of networks, a Micro-BAS data file can be e-mailed by the base budget office as often as updates are needed. Many bases have their own download capability, allowing them to do their own downloads as needed.

Figure 17. Sample Operating Budget Ledger

PREPARED 95 JAN 03 13:59										OBL DETAIL REPORT		AS OF 94 JUL 07			
AFO 0 OAC/ASN 65NR FC/APPRO 30															
FO	FSRA	PSRA	FT	ESP	SMA	TV	MFP	PEC	SMC						
YY	SC	EEIC	RC/CC	ANNUAL AUTH	QUARTERLY AUTH				AEP/COLL	AEU/UNCOLL	UOO/UFO	GROSS OBLIGATIONS	UNOBLG BALANCE	COMMITMENTS UNCOMMITTED BALANCE	
00	000046	005271	L		T	5	04	41894						.00	
		408	234436						616.00	.00	.00	616.00	216.00-	216.00-	
00	000046	001658	L		T	5	04	41894						.00	
		409	234436						8441.59	.00	.00	8441.59	1458.41	1458.41	
00	000046	007505	L		S	5	04	41894						.00	
		473	234436						884.00	.00	.00	884.00	16.00	16.00	
00	000046	001660	L		S	5	04	41894						.00	
		532	234436						15720.41	.00	.00	15720.41	20.41-	20.41-	
00	000046	001662	L		S	5	04	41894						.00	
		592	234436						16558.36	.00	.00	16558.36	441.64	441.64	

Figure 18. Sample Allotment Ledger

PREPARED 94 DEC 30 10:18										COMPLETE ALLOTMENT LEDGER			AS OF 94 JUL 07		
AFO 0 OAC/ASN 7822 FC/APPRO 83										BPAC/PROJ/FMS			72262		
FO	FSRA	PSRA	FT	ESP	SMA	TV	MFP	PEC				GROSS	UNOBLG	COMMITMENTS	
YY	SC	EEIC	RC/CC	ANNUAL AUTH	QUARTERLY AUTH				AEP/COLL	AEU/UNCOLL	UOO/UFO	OBLIGATIONS	BALANCE	UNCOMMITTED BALANCE	
44	000045	002720	X		S	5	01	11894						.00	
	522	234406						14073.41	14073.41	.00	.00	14073.41	.00	.00	
44	000067	000689	X		S	5	01	11894						.00	
	529	234406						1129.17	1129.17	.00	.00	1129.17	.00	.00	
44	000045	002721	X		S	5	01	11894						.00	
	529	234406						22.88	22.88	.00	.00	22.88	.00	.00	
529														.00	
								1152.05	1152.05	.00	.00	1152.05	.00	.00	



The Standard Systems Group manages and distributes this software. The base budget office can be contacted for more information. It is an extremely powerful feedback mechanism.

**Correcting Inaccuracies in BQ Data** — If a correction to incorrectly coded documents or incorrectly identified costs is required; finance should be written a letter indicating what data is incorrect and what the correct codes are. A letter of correction should include information concerning:

- FSRA/PSRA - (addresses from OBL),
- RCCC (both the incorrect and correct one if it needs to be changed),
- EEIC (both the incorrect and correct one if it needs to be changed), and
- amount of cost to be changed.

### 16.3 Feedback Products From Base Supply

Because of the amount of supplies and equipment purchased through base supply, it's important to receive feedback from that system.

**PFMR/OCCR Reconciliation (D11)** — This is the most useful feedback product for financial management from base supply. To purchase materiel from base supply, an account, called a project fund management record (PFMR), must be created. Each PFMR may have a number of cost centers attached to it. These are called organization cost center records (OCCR or orgs). This product shows how much money has been spent in the account and how much is left. Monitored weekly, more money should be loaded to the PFMR (account) as required.

**Daily Document Register (D04)** — This document is simply a daily list of transactions at base supply. It gives an idea of what items people are buying, how much they cost, and how often they're buying them. This report is often used by shop personnel to help them track their spending.

**Base Supply Due-Out Listing (M09)** — This monthly report lists all items due in from base supply. It includes fund codes, estimated delivery dates, costs, status, and purchase order numbers.

### 16.4 Feedback Products from WIMS

WIMS produces many products that used to be produced by the old BEAMS system.

**BCE Current Month Cost Report (PCN SF100-461) —**

As mentioned in Chapter 15, this report lists costs and quantities by account code. It summarizes cost by work order within each account code.

**Account Code Quantity Update/Edit List (PCN SF100-454) —**

This report lists any account code quantities. It points out any static quantities that erroneously changed or any increasing quantities that did not change (and should have).

**BCE Integrated Transaction Listing (PCN SF100-467)**

— This daily report shows all transactions that came over from accounting and finance (ABQ16A) and highlights any that rejected. Figure 20 is an example.

**Shop Rate Reports (PCN SF100-474/475) —**

These reports give details on the civil engineer shop rates by cost center (SF100-474) and by category (SF100-475). These reports will be further explained in chapter 19.

**Schedule of Reimbursements and Refunds (PCN SF100-451) —**

This product reports all reimbursable costs for use by accounting and finance in processing appropriation vouchers. It should be delivered to finance soon after the end-of-month close out.

**BCE Material Transaction List (SF100-466) —**

This product lists all material transactions processed through CEMAS, including those transactions through base supply received on the D10.

Figure 20. Sample BCE Integrated Transaction Listing

PREPARED 94 AUG 25 17:12 SF100-467		BCE INTEGRATED TRANSACTION LIST										AS OF 94 JUL 31		PCN			
INSTALLATION: DYESS AIR FORCE BASE CMD CMB										REJECTED TRANSACTIONS							
TRANS SEQ IDENT DATE	CONTROL REJECT INSTL DATE	C	WORK ORDER	EFF DATE	DOCUMENT NUMBER	EEIC BAAN	QUANTITY	RC/CC	CST DES	AFO CODE	FUND CODE	OAC	OBAN	YR YR	F Y	COST AMOUNT	A&F NR &
PROJECT CONTRACT COST:																	
CCC 4180	FNWZ 940701	A	61360	4180	CJV94110	52204	0	234423	W	0	31	78	22	4	2	249,356.85-	174
REJ: NO RECORD FOUND MWCN FNWZA61360423																	
REJ-NR 94070118071967																	
CCC 4180	FNWZ 940701	A	61360	4180	SJV94110	52990	0	234423	W	0	31	78	22		2	249,356.85	174
REJ: NO RECORD FOUND MWCN FNWZA61360423																	
REJ-NR 94070118071985																	
CCC 4189	FNWZ 940708	A	61360	4188	S0008471	52990	0	234423	W	0	31	78	22		2	642.43	179
REJ: NO RECORD FOUND MWCN FNWZA61360423																	
REJ-NR 94070816564981																	

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## Chapter 17 Managing Funding Documents, Funds Requests, and Working With the FWG

Funding documents and funds requests, both formal and informal, originate daily from the Financial Management office. Knowledge of these documents, when to use them, and how to track them is important; as is maintaining a strong working relationship with the financial working group.

### 17.1 Funding Documents

Funding documents are what make CE liquid and allow the squadron to purchase goods and services. To avoid inconvenient time delays over paperwork, these documents must be correctly executed and tracked. There's nothing more frustrating to a squadron than to work hard to justify and receive funds quickly; but, not be able to spend the funds because of sloppy or lost paperwork.

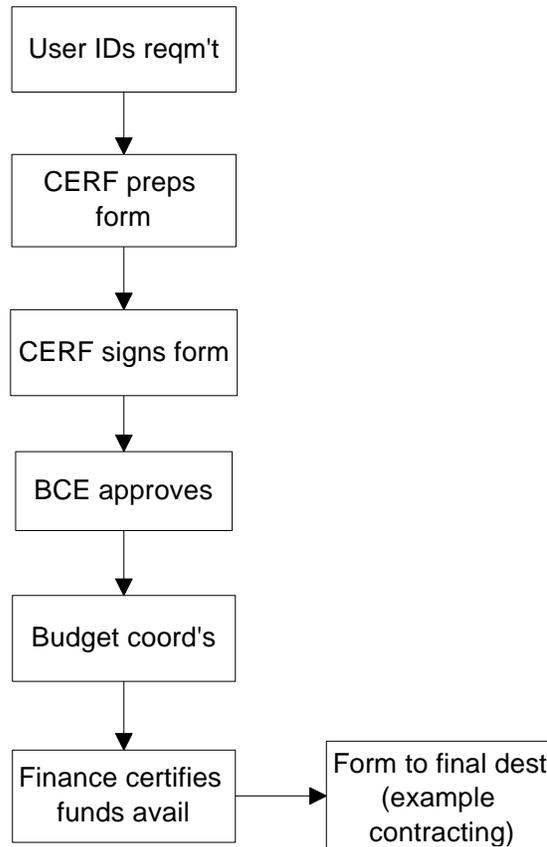
#### 17.1.1 *Managing Funding Documents*

Types of funding documents include:

- AF Form 9, Purchase Request used to buy almost anything through contracting.
- DD Form 448, Military Interdepartmental Purchase Request (MIPR) used to purchase goods and services from other defense departments or agencies.
- AF Form 616, Fund Cite Authorization used to give one Air Force organization permission to use another agency's fund cite to purchase goods and services for that agency.
- AF Form 85, Project Order used to purchase goods and services from other Air Force organizations.
- Funds Message used to give someone permission to use a CE fund cite by message.
- Funds Letter used just like a message, only it's a letter.

The best way to fill out a form correctly is to find a previous form filled out correctly and use it as an example. Files should contain funding documents used in the past. Figure 21, Funding Document Flow, shows the process through which a typical funding document must go.

Figure 21. Funding Document Flow



17.1.2 *Tracking Funding Documents*

The time spent preparing one of these documents will be wasted if the document is lost. As a minimum, a log book should be used to log each document prepared, tracking where the document was left and when. WIMS Purchase Request Tracking database is more efficient than a log book, because it allows for a quick status check or analyze a bottleneck in the process.

**17.2 Funding Requests (Unfunded Requirements)**

In times of tight operating budgets, significant management time is spent putting together out-of-cycle funding requests. Whether for the installation commander or the MAJCOM, the request should be clear, concise, well justified, and, most importantly, credible. The term usually associated with these requests is unfunded requirements.

*17.2.1 Managing  
Unfunded  
Requirements*

Each quarter, the base budget office usually asks for unfunded requirements, a task that should have been started during the past three months. The squadron should be in the practice of identifying unfunded requirements as they arise, not when base budget asks. Base budget should be given unfunded requirements as often as they'll accept them. Usually, when excess money shows up unexpectedly, the budget office uses the most current list from their files for funding.

Funding requirements should not depend on fiscal constraints. Requirements are requirements, regardless of how much money is available.

The preparation of an unfunded requirement narrative during budget execution is no different than during the financial plan process. It contains rank or priority, PEC/EEICs, title of unfunded, description of requirement, justification, and impact if not funded.

The impact if not funded is the most important part of the justification. Methods for developing good justification are found in Chapter 10. Narratives should be written by the functional experts. These are their requirements.

The difference between a true unfunded requirement and a wish list item, is quite simple: need verses want. Wish list items are easy to spot. They usually arise all of a sudden, at the top of someone's list at mid-year or year end when money will be available; never before. Also, there's usually one person who is the advocate of this requirement and is fighting to the death for it. Before wants are met, all the squadron's and base's needs must be met.

Although not as common as standard funds requests, sometimes MAJCOM can be approached directly for funding, especially if it's to support a MAJCOM/CE directive or initiative. These requests should be prepared just like any other unfunded requirement.

*17.2.2 Tracking and  
Prioritizing  
Unfundeds*

Squadron members will become very frustrated if they spend a great deal of time preparing unfunded requirement narratives or funding requests, only to have them forwarded somewhere and not tracked. Funds requests should be tracked just like purchase requests; a folder with all unfunded requirements in priority order should be maintained.

The squadrons unfunded requirements should be prioritized at least every quarter, with the assistance of flight chiefs and the BCE. It is essential the BCE's priorities are listed, not those of one individual. A good priority list ensures that CE's most important needs will be looked at first.

**17.2.3 3080 Requirements**

Even though they will compete for different funding, equipment requests for items costing greater than \$100K should be treated just like an unfunded requirement. Narratives should be prepared by the users of the equipment, because the FWG will prioritize all 3080 requirements.

**17.3 Financial Working Group Participation**

Because the Civil Engineer budget is usually over 50 percent of the base's budget, financially; BCE financial management is closely scrutinized and should be one of the most powerful members of the FWG. As an FWG member, FM should:

- be known as being always prepared,
- not be the whiner,
- be credible,
- be a team player (giving in now could pay large dividends later),
- show the group that Civil Engineers are fiscally responsible and customer focused, and
- brief the BCE on the FWG in preparation for the FMB.

Interestingly, there are many rules for the preparation of funding documents, but no rules about tracking them. There are many rules about when to prioritize unfunded requirements; but, no rules on their preparation or how often they can be submitted. A financial manager really must manage, because there are no checklists or regulations to use as references; only good management sense.

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## Chapter 18 Reimbursements and Refunds

CE often has tenants on a base who work out of a different appropriation (or part of the appropriation) than the host Civil Engineer Squadron. Tenants are usually responsible for their own real property maintenance, repair, minor construction, or services. Instead of asking these customers to go out and hire or contract for their own Civil Engineer Squadron, these services must be provided for them and the customer then asked to reimburse costs.

### 18.1 Reimbursement Concept

Reimbursements are defined as: amounts collected, or to be collected, for goods or services provided to others that may be applied to an appropriation account as a source of funds to cover obligations incurred, or to be incurred, in procuring the goods, replenishing material from stock, or performing the services.

Some examples of common Civil Engineer reimbursable customers include:

- Military Family Housing;
- revolving funds (DBOF);
- commissary (DeCA also in DBOF);
- defense medical;
- non-appropriated fund activities (NAF);
- other services (Army, Navy, DLA, etc.);
- US government agencies (US Postal Service);
- Reserves and Air National Guard;
- non-government or private interests (credit union, banks); and
- individuals (damaging property, paying rent).

Work can be done for reimbursable customers by reimbursement and direct cite. If reimbursable, work is done using CE labor (at shop rate) and materials, for which the customer reimburses the Civil Engineer.

If a customer needs a specific service, for which work must be contracted for that customer only, that customer's fund cite is placed on the funding document. It does not go through the reimbursement process. The direct cite method is much simpler, saves everyone time, and should be used when possible.

Each tenant on base has a support agreement with the base, outlining what services are provided free and what services are reimbursable. These support agreements, which help avoid surprises between CE and the customers, should be kept current by the Real Property Element and reviewed with the customer periodically. This document should be the source and basis for reimbursements (see DODI 4000.19).

Real Property is the Civil Engineer office of primary responsibility for support agreements. The base plans office (LGX, XO, or XP) is the office responsible for the actual accomplishment of support agreements.

*18.1.1 Obligation Authority*

When reviewing or reporting program status, the difference between money available to do mission work and money available to do reimbursable work should be known. Many managers are surprised when they find out there is a difference. Obligation authority involves:

1. Direct Obligation Authority (DOA),
2. Reimbursable Obligation Authority (ROA), and
3. Total Obligation Authority (TOA).

The Direct Obligation Authority is the funding target for doing direct mission work. It is often referred to as the direct program. This is the money to do all the real property maintenance activities on the base at no charge to anyone.

The Reimbursable Obligation Authority is the funding target to do reimbursable work, thought of as accounts receivable. The complicated part of ROA is that it is not received until the reimbursement is earned (realized). At the beginning of every month, an estimate is done to make ROA immediately available for use in filling customer orders. Without an estimate, DOA must first be spent, then reimbursement requested.

The Authorized Anticipated Reimbursement Program is the annual anticipated reimbursement program amount. The support agreements are usually the source of this figure.

Total Obligation Authority is expressed as:

$$TOA = DOA + ROA$$

Most managers are used to dealing with TOA, only. Many bases load the entire anticipated ROA at the beginning of

the fiscal year, making it appear that the Civil Engineer has more money available. Actually, that money is only available to do reimbursable work.

Total Actual Authority (TAA) is expressed as:

$$\text{TOA} = \text{DOA} + \text{lesser of (ROA and Anticipated ROA)}$$

**18.1.2**    *Sales and  
Reimbursement/Ref  
und Indicator (RRI)  
Codes*

Each reimbursable customer has a sales code assigned. This is an account receivable. Reimbursements are shown by customer's sales code in the financial records.

The RRI is a field in a work order indicating the work is reimbursable and identifies the customer. Whoever writes the work order is responsible for putting the proper RRI code on the work order.

Table 20 shows common customer sales codes and defines some of the commonly used RRI codes. Locally defined codes can also be created.

**NOTE:**

If the work order does not have an RRI code on it is not reimbursable. The schedule of Reimbursements and Refunds is generated from work orders with RRIs on them.

**NOTE:**

For MWR facilities, the first position of the RRI is an "S". If the second position is blank or numeric, then the military cost will be reimbursable. If the second position is alphabetic, the military cost will not be reimbursed.

**Table 20. Customer Sales Codes**

<b>Sales Code</b>	<b>RRI</b>	<b>Description</b>
52	Qs & Rs	Family Housing
58	S4	Defense Commissary Agency
82	F	Defense Medical
83	C1	Defense Logistics Agency
91	S, S1, S2	Non-appropriated Funds
93	T & others	Commercial Interests (Banks)

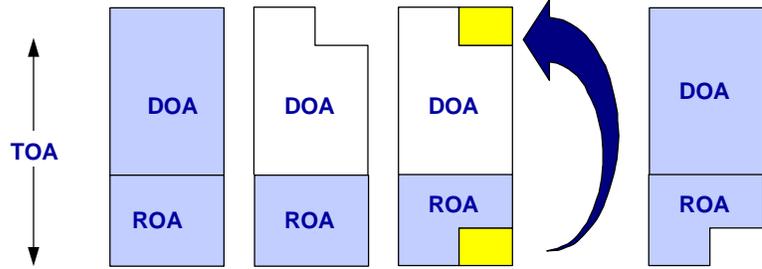
*18.1.3 Reimbursement Process*

The reimbursement process is quite complex and resembles, in many respects, the stages of spending. A supplier goes through three steps in the reimbursement process. These are (1) incur cost, (2) show cost, and (3) recover cost. Similar to stages of spending, reimbursement amounts are recorded in ROA section of the financial records in four stages. (1) anticipated reimbursements, (2) unfilled orders (UFOs), (3) filled orders uncollected (UNCOLL), and (4) filled orders collected (COLL).

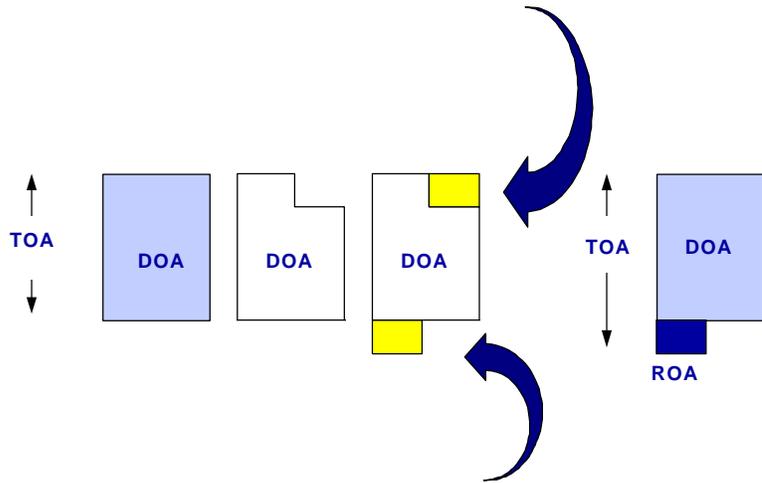
Some bases still load the entire reimbursable program in the ROA target at the beginning of the fiscal year. Orders received by the provider are recorded in the UFO column. Services received but not paid are placed in the UNCOLL column. Finally, once the bill is paid, costs move to the COLL column.

Reimbursement authority is being managed two different ways. At some bases, the entire year's ROA is given up front. At other bases, reimbursement authority is given as reimbursements are realized. Figures 22 and 23 show these two methods.

**Figure 22. Reimbursement — Method One**



**Figure 23. Reimbursement — Method Two**



At the beginning of each month, a UFO is established to create some ROA through an estimate. Usually, a specific written request, MIPR, or Project Order is required to set up such an estimate. It is also common practice to refer to a support agreement or even historical records. Finance takes the estimate and sets up a Miscellaneous Obligation/ Reimbursement Document (MORD), validating the UFO and setting it up in the accounting records. A MORD is a document that sets up an anticipated obligation or reimbursement obligation.

Military Family Housing provides the best example in explaining reimbursements, because the Civil Engineer is actually the customer and the supplier. The financial manager sees the accounting records of both.

To record credits to the CE DOA and obligations in the ROA, a set of four unique RCCCs is used. Each RCCC cor-

responds to one of the DoD functional categories used by civil engineers. These four unique RCCCs are given in Table 21.

**Table 21. Unique RCCCs**

<b>RCCC</b>	<b>DoD FCAT</b>	<b>Description</b>
XX440E	09	Utilities
XX440N	10	Maintenance & Repair
XX440V	11	Minor Construction
XX4405	12	Other Engineering Services

**EXAMPLE:**

Purchase 50K of supplies for a MFH minor construction work order. The following shows the affects on the CE program and the MFH program, after the reimbursement takes place using the method from Figure 23.

**Example Matrix**

	<b>EEIC</b>	<b>RCCC</b>	<b>Target</b>	<b>Obl</b>
Direct (FC 30)				
1)	619	564451	100.0	50.0
2)	619	56440V	0.0	-50.0
Reimb (FC 30)				
3)	619	56440V	50.0	50.0
TOA (FC 30)				
4)	619	N/A	150.0	50.0
Direct (FC 83)				
	619	564406	1200.0	50.0

Under-earning and over-earning reimbursements can create numerous problems especially when Anti-Deficiency Act is violated.

The BCE routinely obligates funds against the direct program in anticipation of reimbursements. If the BCE does not realize those reimbursements, total obligations in the direct program may exceed DOA. This results in an Anti-Deficiency Act violation. This also leaves the customer holding fall-out money at the end of the fiscal year.

Sometimes, more reimbursements are realized than the anticipated reimbursement authority. If more authority is not asked for and received, more direct program dollars are spent and, once again can, result in an Anti-Deficiency Act violation.

Determining what costs can be collected as reimbursements or refunds, depends on who the paying customer is. The answer is found in policies and regulations. DODI 7220.9-M, Chapter 26 discusses reimbursements in great detail. Table 22 summarizes some of the key reimbursement items.

**Table 22. Key Reimbursement Items**

Cost	Customer				Notes
	Within DoD Component	To Another DoD Component	To Another Federal Agency	To Private Parties	
<b>Sale of Services</b>					
<i>Direct Civilian Labor</i>					
Payroll	N/A	Actual	Actual	Actual	
Leave and Holiday	N/A	DoD Factor	DoD Factor	DoD Factor	18%
Benefits	N/A	DoD Factor	DoD Factor	DoD Factor	15% (29.7% Priv)
Indirect Civilian Labor	N/A	N/A	N/A	OPM Rate	Local
<i>Indirect Civilian Labor</i>					
Payroll	N/A	Actual	Actual	Actual	<b>Included In An Overhead Rate</b>
Leave, Holiday & Benefits	N/A	DoD Factor	DoD Factor	DoD Factor	
Incremental Direct Cost	N/A	DoD Factor	DoD Factor	DoD Factor	
Indirect Civilian Labor	N/A	N/A	N/A	OPM Rate	
<i>Direct Military Labor</i>					
Payroll	N/A	N/A	Composite Rate	Composite Rate	
Leave and Holiday	N/A	N/A	DoD Factor	DoD Factor	14%
Other Personnel Support	N/A	N/A	DoD Factor	DoD Factor	8% Off/16% Enl
<i>Indirect Military Labor</i>					

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**WORKING IN THE RESOURCES FLIGHT**

Payroll	N/A	N/A	Composite Rate	Composite Rate	<b>Included IN AN OVER- HEAD RATE</b>
Leave and Holiday	N/A	N/A	DoD Factor	DoD Factor	
Other Personnel Suppt	N/A	N/A	DoD Factor	DoD Factor	
<b>TDY</b>	Actual	Actual	Actual	Actual	
<i>Use of DoD Assets</i>					
Asset Use Charge	N/A	N/A	N/A	DoD Factor	4%
Depreciation	N/A	N/A	N/A	DoD Factor	Straight Line
Interest on Investments	N/A	N/A	N/A	DoD Factor	Calculated
<b>DoD Prop from Inventory</b>					
<i>Stock Fund</i>	Inventory Price	Inventory Price	Inventory Price	Replace Cost	
<i>Non-Stock Fund</i>					
Replace w/ Improved Item	N/A	Repl Minus Age	Repl Minus Age	Repl Minus Age	Add 10%
Replacement-in-Kind	N/A	Repl Minus Age	Repl Minus Age	Repl Minus Age	
Replacement Not Required	N/A	N/A	N/A	Purch - Age	
Reutilization /Market Items	N/A	N/A	N/A	High Bid	
Indirect Supplies	Overhead Rate	Overhead Rate	Overhead Rate	Overhead Rate	
Packing, Crating& Handl	N/A	N/A	Actual	Actual	
Transportation	N/A	N/A	DoD Factor	DoD Factor	
<b>Sales of Materiel/Services Procured for Customers</b>					
<i>Contract Cost</i>	Actual	Actual	Actual	Actual	
<i>Contract Administration</i>	N/A	N/A	Actual	Actual	
<i>Packing, Crating, &amp; Handling</i>	Actual	Actual	Actual	Actual	
<i>Transportation</i>	DoD Factor	DoD Factor	DoD Factor	DoD Factor	3.75%

**18.2 Refund Concept**

Appropriation refunds are for selling goods and services to organizations that are financed from the same appropriation. No reimbursable authority is set up here. The supplier's AEP is credited (reduced) and the customer's is debited (increased).

Refunds are usually done by CE for in-house, minor construction. The minor construction program element (XXX76) is the customer and the maintenance and repair

program element (XXX78) is the provider. MC work is out of XXX78; then, credited to XXX78 and charged to XXX76.

The document allowing reimbursements and refunds to take place is the Schedule of Reimbursements and Refunds (PCN SF100-451) This is generated by WIMS at the end-of-the-month; it calculates and summarizes work order costs for work orders with RRI codes. A break out by RRI code allows finance to charge the proper customers. If it is run a couple days before the end of the month to verify accuracy, a clean copy can then be delivered to finance at the end of the month.

The schedule has four parts (as shown in Figures 25 - 28)

**Part I** - Reimbursement & Refund Summary is a detailed audit list of charges incurred against reimbursable and refundable work orders. It is used by CE for audit purposes.

**Part II** - Current Month & Cumulative Year Data is current month and fiscal year-to-date costs. It is used by finance in posting reimbursements.

**Part III** - Man-hour/Cost Data shows man-hour summaries and is used by CE to monitor reimbursable man-hours.

**Part IV** - Backup Data helps in finding and fixing problems. This is a list of reimbursable transactions that supports the charges summarized in Part I.

Figure 24. Sample Schedule of Reimbursement and Refunds — Part I

PREPARED 95 JAN 03 14:06		SCHEDULE OF REIMBURSEMENTS AND REFUNDS				AS OF 94 JUL 31		PCN SF100-451		
INSTALLATION: DYESS AIR FORCE BASE		PART I				CMD		CMB		
SALES CODE: 83		TYPE: REIMBURSEMENT								
RRI: C1 -DEFENSE FUEL AGENCY SUPPLY										
CTL INST	CTL CNTR	WORK ORDER	FACILITY ID /SUF	WORK DESCRIPTION	ACCOUNT CODE	FC/CC	EEIC	TOTAL COST	MILITARY EXPENSE	NET REIMB. REFUND DUE
FNWZ	A	05224	05224	7 SUPPLY CASS PUMP HOUSE	51070	104454	20000	508.02	508.02	.00
FNWZ	A	05224	05224	7 SUPPLY CASS PUMP HOUSE	51070	104454	39701	123.74	.00	123.74
FNWZ	A	05224	05224	7 SUPPLY CASS PUMP HOUSE	51070	104454	39702	19.32	.00	19.32
FNWZ	A	05224	05224	7 SUPPLY CASS PUMP HOUSE	51070	104454	51400	6.20	.00	6.20
FNWZ	A	05224	05224	7 SUPPLY CASS PUMP HOUSE	51070	104454	60900	33.90	.00	33.90
FCCC TOTAL								691.18	508.02	183.16
FNWZ	A	05224	05224	7 SUPPLY CASS PUMP HOUSE	51070	104474	20000	36.28	36.28	.00
FNWZ	A	05224	05224	7 SUPPLY CASS PUMP HOUSE	51070	104474	39701	8.84	.00	8.84
FNWZ	A	05224	05224	7 SUPPLY CASS PUMP HOUSE	51070	104474	39702	1.40	.00	1.40

Figure 25. Sample Schedule of Reimbursement and Refunds — Part II

PREPARED 95 JAN 03 14:06 SCHEDULE OF REIMBURSEMENTS AND REFUNDS AS OF 94 JUL 31 PCN SF100-451  
 INSTALLATION: DYESS AIR FORCE BASE PART II CMD CMB

SALES CODE: 83 TYPE: REIMBURSEMENT

RRI: C1 -DEFENSE FUEL AGENCY SUPPLY

CURRENT MONTH COST

EEIC	RC/CC XX440E DOD FC 9	RC/CC XX440N DOD FC10	RC/CC XX440V DOD FC11	RC/CC XX4405 DOD FC12	EEIC TOTAL
20000	.00	2612.70	.00	.00	* 2612.70
39701	.00	636.30	.00	.00	* 636.30
39702	.00	99.54	.00	.00	* 99.54
51400	.00	31.96	.00	.00	* 31.96
60900	.00	174.16	.00	.00	* 174.16
61930	.00	501.60	.00	.00	* 501.60
TOTAL MILITARY	.00	2612.70	.00	.00	* 2612.70
TOTAL OTHER	.00	1443.56	.00	.00	* 1443.56

Figure 26. Sample Schedule of Reimbursement and Refunds — Part III

PREPARED 95 JAN 03 14:06  
 INSTALLATION: DYESS AIR FORCE BASE

SCHEDULE OF REIMBURSEMENTS AND REFUNDS  
 PART III

AS OF 94 JUL 31 PCN SF100-451  
 CMD CMB

SALES CODE: 83 TYPE: REIMBURSEMENT

RRI: C1 -DEFENSE FUEL AGENCY SUPPLY

MANHOUR DATA

COST-CTR	CUR MO MIL HR	CUR MO CIV HR	CUR MO TOT HR	CUM MIL HR	CUM CIV HR	CUM TOT HR
421	.0	.0	.0	.0	30.9	30.9
441	.0	8.0	8.0	.0	16.0	16.0
442	.0	.0	.0	6.0	.0	6.0
444	1.5	1.5	3.0	13.0	8.0	21.0
451	.0	.0	.0	199.0	10.5	209.5
452	.0	.0	.0	1.0	.0	1.0
454	48.0	.0	48.0	3985.2	42.0	4027.2
465	.0	.0	.0	15.0	8.0	23.0
471	.0	4.0	4.0	34.5	63.0	97.5

Figure 27. Sample Schedule of Reimbursement and Refunds — Part IV

PREPARED 95 JAN 03 14:06		SCHEDULE OF REIMBURSEMENTS AND REFUNDS						AS OF 94 JUL 31 PCN SF100-451			
INSTALLATION: DYESS AIR FORCE BASE		PART IV						CMD CMB			
SALES CODE: 83		TYPE: REIMBURSEMENT									
RRI: C1 -DEFENSE FUEL AGENCY SUPPLY											
BACK-UP DATA BY WORK ORDER FOR JULY											
CTL	WORK	WORK DESCRIPTION		FC/CC	TRAN	DATE	DOCUMENT NR	MATERIAL COST		OTHER COST	TOTAL COST
CNTR	ORDER	MIL HOURS	CIV HOURS	MIL COST	CIV COST	CIV BENEFIT	CONTRACT COST				
A	05224	7	SUPPLY	CASS PUMP HOUSE	104454	CLU	940706				
		2.0	.0	36.28	11.71		1.38	.00	.00	.00	49.37
A	05224	7	SUPPLY	CASS PUMP HOUSE	104454	CLU	940706				
		3.0	.0	54.43	17.56		2.07	.00	.00	.00	74.06
A	05224	7	SUPPLY	CASS PUMP HOUSE	104454	CLU	940706				
		3.0	.0	54.43	17.56		2.07	.00	.00	.00	74.06
A	05224	7	SUPPLY	CASS PUMP HOUSE	104454	CLU	940706				
		1.0	.0	18.13	5.86		.69	.00	.00	.00	24.68
A	05224	7	SUPPLY	CASS PUMP HOUSE	104454	CLU	940706				
		2.0	.0	36.28	11.71		1.38	.00	.00	.00	49.37
1.0		.0		18.13	5.86		.69	.00	.00	.00	24.68

**18.3 Future Implications**

As the federal government strives to operate more like a business, the concept of fee for service occurs frequently. CE must be prepared to be able to show and collect cost from paying customers.

In the future, bills may be sent to all CE customers, whether or not they are reimbursable. This will provide cost visibility to operational commanders to help guide decision-making at installations. Chapter 30 provides more details on the Full Cost Visibility initiative.

In 1992, there was an extensive discussion about placing all base support functions, including BCE, into the DBOF to help develop customer-provider relationships with base organizations. This would make all customers reimbursable and the total budget program would be ROA. While this initiative has been stifled, it could resurface, making an understanding of reimbursements that much more important.

The support agreement has now become a critical management document. Customers will not pay bills any longer, just because CE bills them. Good communication with customers through the support agreement process can prevent surprises, ill feelings, and budgetary problems.

The base Civil Engineer provides over 80 percent of the reimbursable services on most installations. The Civil Engineer financial manager is often looked to as the expert regarding reimbursement matters. Often, even the budget office will defer to your judgment on matters of reimbursement and refunds. It is very important for the Civil Engineer financial manager to be competent in this area.

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## Chapter 19 Shop Rates

It's easy to collect reimbursement for materials purchased for a customer; what it costs is what is charged. However, customers must also be charged for labor and overhead. The CE shop rate is the vehicle used to charge for labor and other direct charges.

Shop rate is defined as dollar per direct hour value used to estimate and account for selected costs in actual time accounting cost centers. Direct hours are man-hours charged to a work order. It is often referred to as productive time. Cost centers that record the hours worked each day and what was done are actual time accounting work centers. Most people think of ATA cost centers as shops.

Shop rates are used in many ways.

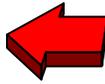
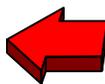
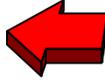
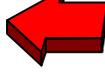
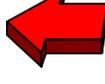
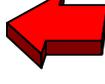
- Accounting for expended costs helps in determining a dollar value for labor performed on a job so the cost accounting system can record expenses.
- Work approval helps estimate the value of a job to determine if we have the required approval authority.
- Budgeting gives information on prior year labor expenses and helps identify cost trends for future years.
- Administer reimbursements and refunds by placing a dollar value on man-hours, providing the means to charge for labor. This is the most important reason for the shop rate's existence.

The whole point of the shop rate is to forecast what costs are going to be for next month so a fair labor price is charged to customers. The whole idea is to recover actual costs, not to make a profit or give customers a break.

### 19.1 Shop Rate Components

The civil engineer shop rate consists of six cost elements called components. These components are shown in Figure 28.

**Figure 28. Shop Rate — Six Cost Estimates**

Military Labor		<b>WIMS UMPF &amp; Grade in APER file</b>
Civilian Labor		<b>WIMS UCPF &amp; Grade in APER file</b>
Civilian Benefits		<b>BQ ABQ16A Transactions with EEIC = 393</b>
Vehicle		<b>WIMS UVEH estimated by CERF</b>
Indirect Material		<b>WIMS Material Transactions</b>
Foreign Nat'l Labor		<b>WIMS UCPF &amp; Grade in APER file &amp; pos-type = "LOC"</b>

**19.1.1 Military Labor Costs**

The military labor costs are based on the military assigned to a particular cost center. The cost of each military member is based on a composite rate, covering pay and certain benefits. The pay rate is standardized by grade, so the shop rate program does not use actual payroll costs. The composite rate represents the cost to the government for employing an average person of a particular grade. Each military grade has an hourly rate assigned to it. Composite rates, updated yearly, are found in AFI 65-603, Table A19-1

The WIMS file, (UMPF), contains the military grades and their associated hourly rates. This file should be updated annually, each time new composite rates are released. These are composite rates in AFI 65-503, not the military pay chart. At the end of each month, for each cost center, the shop rate calculation program totals the hours charged (both direct and indirect) for each grade and multiplies by the hourly rate for that grade. The sum of these costs is the military labor cost component for that cost center. Figure 29 shows an example of a cost center's military labor component calculation for a month.

**Figure 29. Calculating Military Labor Component**

	Name	Wage/Hr	Tasks	Hrs	Cost
SrA	Sanders	10	WO#12345	3	30
			Clean Restroom	2	20
			WO#34567	3	30
TSgt	Moore	20	WO#12345	3	60
			Supervision	4	80
			Dental Appt	1	20
			<b>TOTAL MILITARY COST</b>		<b>240</b>

**NOTE**

As work force management personnel (controllers) enter labor hours, they depend on the WIMS Personnel File (APER) to be accurate and personnel are assigned to the proper cost center. If the wrong grade is assigned in the APER, then the wrong costs will be recorded. The orderly room should stay current with promotions and PCS moves.

*19.1.2 Civilian Labor Costs*

The civilian labor costs are based on the civilians assigned to a particular cost center. Civilian labor costs are calculated in the same fashion as the military labor costs, but based on the actual general schedule or wage schedule. The civilian costs are calculated based on the direct and indirect hours charged and the grades of the civilians assigned.

WIMS file UCPF contains the civilian grades and their associated annual salaries by step. This file should be updated each time a new schedule is released. At the end of each month, for each cost center, the shop rate calculation program totals the hours charged (both direct and indirect) for each civilian grade and multiplies by the hourly rate for that grade. The hourly rate is calculated by the shop rate program based on the annual salary for the step 5 (also, step 5 for wage grade) rate divided by 2087 work hours per year. The sum of these costs is the civilian labor cost component for that cost center. Figure 30 shows an example of a cost center's civilian labor component calculation for a month.

**Figure 30. Calculating Civilian Labor Components**

	Name	Wage/Hr	Tasks	Hrs	Cost
WG8	Lutz	15	WO#12345	3	45
			Clean	2	30
			Restroom		
WS12	Brown	25	WO#34567	3	45
			WO#12345	3	75
			Supervision	4	100
			Dental Appt	1	25
	TOTAL		CIVILIAN COST		<b>320</b>

**NOTE**

As work force management personnel (controllers) enter labor hours, they depend on the WIMS Personnel File (APER) to be accurate, to assign personnel to the proper cost center. If the wrong grade is assigned in the APER, then the wrong costs will be recorded. Make sure the orderly room keeps up with promotions, transfers, new hires, and terminations.

Overtime is not charged directly to the customer, but is charged like overhead. If a civilian works more than the forty-hour week, the shop rate program assumes all additional hours are at a cost of 1.5 time the standard rate found in the UCPF file. If overtime is worked, civilian labor costs increase and shop rate increases and all customers will absorb the cost of overtime hours next month.

If a customer is direct citing overtime, CE receives payment for overtime and increasing labor costs. Make sure the overtime portion of the work is done on a non-reimbursable work order.

**19.1.3 Shop Rate Material Costs**

The shop rate material costs provide the civil engineer a means for charging customers for indirect material. Indirect material is material that cannot be charged to a particular work effort (work order). Craftsman often need to use a handful of nails to complete the installation of a door; but, the box of nails required to be purchased will be used on other jobs. Customers cannot feasibly be charged for the half a dozen nails used to install the door; so, the cost of the box of nails is spread across all jobs.

The most common type of indirect material is shop stock. This is material kept in the shop, in craftsmen’s tool belts, or in their trucks to help them perform their jobs. Most of this material results in a broken unit of issue, meaning the material is used on more than one job. Indirect material can include tools, special clothing, administrative supplies, and cleaning supplies.

Direct material is that material attributable to a particular job. In the example of the door installation, the cost of the door would be a direct material cost because that door is used on that job only. Reimbursable customers reimburse CE for the cost of any direct materials.

Indirect material costs are obtained from the material transactions charged to individual cost centers for certain collection work orders. Collection work orders are used to order indirect material-type items that aren’t for specific jobs. These works orders all have a work order number less than 00010.

The collection work orders included in the shop rate calculations are shown in Table 22:

**Table 23. Collection Work Orders**

<b>Work Orders</b>	<b>Title</b>	<b>Description</b>
00001	Bench Stock	Used for bench stock support, and, most commonly, for shop stock. CEMAS executes a line-item requisition to purchase shop stock such as nuts, bolts, nails, washers, etc.
00002	Base Service Store	Used to purchase administrative and cleaning supplies from the base service store.
00004	Individual Equipment	Used for individual equipment issues of special clothing, safety equipment, work gloves, etc.
00006	Common Use Tools	Used for tools maintained in a central tool crib, self-help store, or base UFIXIT store.
00007	Tool Kits	Used to purchase craftsman tool kits. Prime Beef tool kits use #00005.
00008	Tool Issue	Used for individual tool issue at the base service store.

The shop rate calculation program:

- reads material transactions,
- examines the work order number and cost center, and

- then, distributes the cost to the proper cost center if a work order numbered 00004 or 00006 through 00008 appears.

Material cost transactions involving these work orders are charged to cost centers 438 and 480. They are charged to each cost center based on that cost center's share of the squadron's total direct hours for the month. All financial transactions can be found in the UTHFYMM file, where *YYMM* is the last two digits of the year and the month number. Material transactions can be identified by the transaction ID field of "CWM." If entire units of issue out of shop stock are used to support a specific job, the material from the collection work order should be transferred to the work order for the job being performed. At year-end, materials are purchased for the shops with fallout money. This usually results in higher indirect material costs for September.

#### *19.1.4 Vehicle Costs*

Using the UVEH file updater, the average yearly vehicle cost for each cost center must be estimated annually and manually entered into the shop rate history. Vehicle costs include vehicle fuel costs plus any vehicle lease costs. Vehicle maintenance cost is not included in this component because the Transportation Squadron incurs vehicle maintenance cost.

These two methods for estimating vehicle costs are (1) the vehicles assigned method and (2) same as last year method.

Using the vehicles assigned method, determine how many vehicles are assigned to a cost center and multiply by the average cost per vehicle. The steps in this method are:

Step 1 — Determine total vehicle fuel costs for last year (EEIC 641).

Step 2 — Determine total vehicles assigned for the same time period.

Step 3 — Divide fuel costs by vehicles assigned for an average cost per vehicle.

Step 4 — For each cost center, multiply current number of vehicles assigned by the average cost per vehicle.

Step 5 — Add any lease vehicle costs to the cost center total.

Step 6 — Enter annual figure into the UVEH file in WIMS.

The same as last year method is often used to estimate vehicle costs. The Vehicle Integrated Management System (VIMS) report (PCN SB 004-203) for the month of September can be used for last year's vehicle costs.

Use the UVEH file updater in WIMS to enter the annual vehicle costs. WIMS will divide this figure by twelve and use it for the monthly vehicle cost for the next twelve months. If the vehicle costs for the new fiscal year are not updated, WIMS will print a management notice. If vehicle assignments change during the year, vehicle costs can be updated based on the average cost per vehicle.

**19.1.5**    *Civilian Benefits*

Civilian benefits are accumulated from transactions received from accounting and finance for EEIC 393. The cost is distributed to the cost center contained in the transaction. The cost center contained in the transaction is based on where civilian pay records indicate the person is assigned.

If rejects are not routinely cleared, many of the civilian benefits may not be included in the shop rate. This results in an artificially low shop rate.

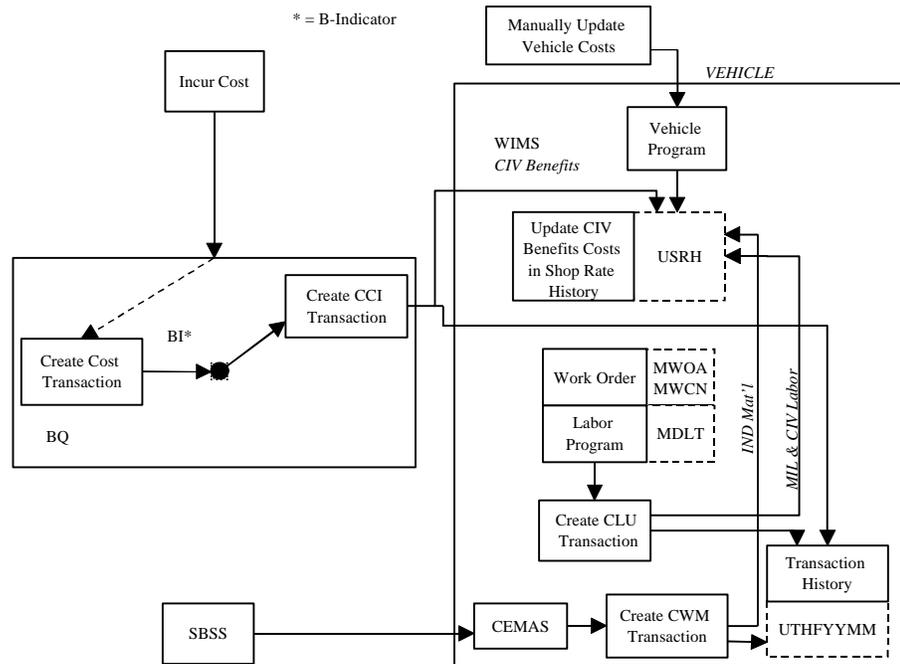
**19.1.6**    *Foreign National Labor*

Foreign national labor is recorded exactly like regular civilian labor, using the UCPF file to indicate pay rate. A foreign national employee is identified in the personnel (APER) file with a position-type field = "LOC."

**19.2**    **Shop Rate Costs and Categories**

Figure 31 below summarizes the sources of shop rate costs and the associated data flow.

**Figure 31. Shop Rate Costs and Data Flow**



*19.2.1 Cost Centers to Categories*

In theory, each cost center (or shop) could have its own shop rate; however, this becomes very difficult to manage for many reasons.

- Fluctuations and errors in shop rate data for a single cost center cause large changes in the rate charged to customers.
- More shop rates means more shop rates to validate each month.
- Many different rates confuse customers. One standard hourly rate makes it easier for customers to plan and budget.

To avoid these problems, we group cost centers performing similar types of work or having a similar cost structure are grouped. Each category is referred to with a single letter code. Each base can decide how many shop rate categories they want to establish and maintain. Table 23 lists typical shop rate categories (with cost centers).

**Table 24. Shop Rate Categories**

<b>Category</b>	<b>Title</b>	<b>Cost Center</b>
A	Engineering and Construction (Planning & Design)	420, 421, 422
B	Environmental, Environmental Ops	416, 418
C	Environmental Restoration and Ops	417, 419
D	Military Family Housing Maintenance	432
E	Medical Facility Maintenance	433
F	Water & Industrial Water Treatment Plants Ops & Maintenance	469
G	Operations and Maintenance	All other CEO ATA cost centers
H - N	Optional	Various cost centers as determined locally

**19.2.2**     *WIMS and Shop Rate Categories*

WIMS helps manage both shop rate category data and cost center data.

Each shop rate category has a record in the WIMS Shop Rate Boss File (USRB). Each data record contains the shop rate value, the cost centers included in the category, and the EEIC percentages. These percentages break out the shop rate by component. The component EEICs are:

- 2X - Military Labor,
- 3X - Civilian Labor,
- 5X - Foreign National Labor,
- 6X - Indirect Material,
- 7X - Vehicle Costs, and
- US Civ Benefits - Civ Benefits.

To add a shop rate category, the add function in the shop rate boss file updater is used. Fill in:

- the shop rate category (A-Z),
- an estimate of the shop rate, and
- and estimates of the EEIC percentages.

The shop rate working logistics file (see below) is used to choose which cost centers should be contained in the new category.

The Shop Working Logistics File (SWL, “swill”) file is used to manage cost center information for the shop rate program. This file is very important for the shop rate program and other cost-center-related software programs (i.e., work orders, labor accounting, A&F transaction processing).

The SWL file contains one record for each BCE cost center, sub-cost center, and shop code combination. Each record contains essential data used in processing numerous WIMS input transactions and output products. Once established, these records rarely require any updating. All labor summary, shop rate, and EEIC percentages are maintained programmatically. The major file contents include:

- **Cost center.**
- **Sub-cost center** — a subdivision of a cost center which can be locally defined (a one-digit, numeric field).
- **Craft code** — the two-digit, craft code identifies the craft within a specific shop. Most ETA cost centers have a single craft code assigned. Each cost center has a parent record with a blank craft code. These craft codes are also used quite often in the base supply system.
- **Functional category** — this DoD functional category is explained in Chapter 2.
- **Account code** — this account code is used to charge labor costs to ETA cost centers only. ATA cost centers' labor costs are determined by the work order on which the labor is performed; this will be blank.
- **Labor reporting code**
  - a) 1 = ATA (no labor schedule),
  - b) 2 = ETA,
  - c) 3 = ETA (Family Housing Management),
  - d) 4 = ATA (with labor schedule), and
  - e) 5 = ATA (engineering),
- **Shop rate category** — the shop rate category to which the cost center belongs.
- **EEIC percentages** — same as the shop rate boss file (programmatically taken from USRB).
- **Availability rate** — percent of a shop's total hours that are direct.
- **Normal working hours** — where normal working hours are defined; all additional hours are overtime.
- **Shop rate** — the current shop rate of the category.

To add a cost center, a record is added to the SWL file. WIMS will then ask that a twelve-month shop rate history be built for use in shop rate calculations. A per data key allows labor costs based on who is assigned to the cost center to be automatically estimated. Only indirect materials, benefits, and vehicle costs need to be estimated.

By changing the shop rate category in the SWL, the cost center will be included in a new shop rate category. The cost center takes its twelve months of shop rate history with it to the new category.

### 19.3 Shop Rate Calculation

WIMS calculates the shop rate at the end of each month. It uses data from the previously mentioned sources for each component plus the direct hours to calculate the shop rate to use for the next month.

The shop rate program uses a twelve-month, moving average to determine the new shop rate for each shop rate category.

The formula for calculating the shop rate is:

$$Shop\_Rate = \frac{\sum_{m=1}^{12} Costs(m)}{\sum_{m=1}^{12} Dir\_Hrs(m)}$$

The shop rate history file (USRH) stores shop rate cost (for each component) and direct man-hour data for each cost center for each month. The file contains data for the current month (month code = 00), plus data for the previous 12 months (month code = 01 for Oct, 02 for Nov, 03 for Dec, etc.). The shop rate calculation program draws the data from the shop rate history and applies the formula for calculating the shop rate.

The twelve-month moving average provides a certain amount of smoothing of the shop rate to prevent dramatic changes in the overall shop rate based on a high-cost or low-cost month. To further dampen dramatic changes in the rate, WIMS only allows for a maximum of plus/minus ten-percent change from the previous month's shop rate. This results in both a computed shop rate and an applied shop rate.

The computed shop rate is the shop rate calculated by WIMS.

The applied shop rate is the shop rate with the ten-percent tolerance applied. If the computed shop rate is less than a ten percent change from last month, then the applied shop

rate will equal the computed shop rate. If the shop rate changed by ten percent, then the applied shop rate will be only ten percent higher or ten percent lower than last month. The applied shop rate is the rate used to calculate reimbursements for the following month.

**EXAMPLE**

Ten Percent Lower Than Last Month

April applied shop rate = \$10/hr

May computed shop rate = \$8/hr (20% decrease)

May applied shop rate =  $10 * .90 = \$9/hr$

**EXAMPLE**

Ten Percent Higher Than Last Month

April applied shop rate = \$10/hr

May computed shop rate = \$12/hr (20% increase)

May applied shop rate =  $10 * .90 = \$11/hr$

**EXAMPLE**

Ten Percent Change from Last Month

April applied shop rate = \$10/hr

May computed shop rate = \$10.80/hr (8% increase)

May applied shop rate = \$10.80/hr

This tolerance works for CE customers by making monthly budgeting an easier task.

**19.4 Shop Rate Reports**

WIMS provides two management reports to help monitor the shop rate. These reports are the shop rate category report (PCN SF100-475) and the shop rate cost center report (PCN SF100-474).

The shop rate category report provides a recap of shop rate history and calculations for each shop rate category. This report can be used to see the results of the shop rate calculation and how last month's shop rate performed in predicting actual costs. An example of the report is found in Figure 32 on the next page.

Figure 32. Sample WIMS Shop Rate Category Report

PREPARED 94 OCT 14 10:12		SHOP RATE ANALYSIS REPORT						AS OF 94 JUL 31 PCN SF100-475			
INSTALLATION <sup>1</sup> : DYESS AIR FORCE BASE		CONTROL CENTER <sup>2</sup> : A		SHOP RATE CATEGORY <sup>3</sup> : C				CMD CMB		HOURS DATA	
		ACTUAL COST DATA									
MONTH <sup>4</sup> *	MILITARY COST <sup>5</sup>	CIVILIAN COST <sup>5</sup>	FGN NAT COST <sup>7</sup>	INDIRECT MATERIAL <sup>8</sup>	VEHICLE COST <sup>9</sup>	CIVILIAN BENEFITS <sup>10</sup>	TOTAL COST <sup>11</sup>	*	DIRECT	HOURS <sup>12</sup>	
OCT *	306,297	72,347	0	18,629	4,075	6,614	407,962	*	17,237		
NOV *	317,306	74,138	0	13,391	4,075	5,864	414,774	*	18,642		
DEC *	310,858	73,643	0	12,652	4,075	5,544	406,772	*	14,225		
JAN *	293,484	73,083	0	63,282	4,075	14,917	448,841	*	14,282		
FEB *	266,417	66,845	0	17,078	4,075	14,356	368,771	*	15,007		
MAR *	318,692	83,850	0	37,233-	4,075	16,526	385,910	*	17,058		
APR *	276,709	73,195	0	12,616	4,075	19,100	385,695	*	14,642		
MAY *	274,869	75,176	0	33,419	4,075	17,547	405,086	*	15,536		
JUN *	283,431	78,800	0	21,911	4,075	27,664	415,881	*	15,827		
* JUL *	57,979	16,191	0	4,001	4,075	19,379	101,625	*	3,376		
AUG *	342,643	74,450	0	25,701	4,075	3,505	450,374	*	20,223		
SEP *	329,069	73,235	0	28,419	4,075	6,298	441,096	*	20,419		
12 MO TOT <sup>13</sup> *	3,377,754	834,953	0	213,866	48,900	157,314	4,632,787 <sup>14</sup>	*	186,474 <sup>16</sup>		
SR DIST <sup>15</sup> %*	72.9	18.0	0.0	4.8	1.0	3.3/ .0		*			
***** CUMULATIVE FY COST DATA *****											
CUM FY											
TOT COST <sup>20</sup> :	2,706,042	687,268	0	159,746	40,750	147,511	3,741,317				
CUM FY											
DIST CT <sup>21</sup> :	2,534,671	613,611	0	169,377	31,263	82,954	3,431,876				
% DIFF											
DIST-TOT <sup>22</sup> :	6.3-	10.7-	0.0	6.0	23.2-	43.7-	8.2- <sup>23</sup>				
***** SHOP RATE COMPUTATION *****											
COMPUTED	% CHANGE FROM		APPLIED	COST CENTERS IN THIS CATEGORY ARE <sup>24</sup> :							
SHOP RATE <sup>17</sup> :	24.84	PREVIOUS MONTH <sup>18</sup> :	0%	SHOP RATE <sup>19</sup> :	24.84	441 442 444 451 452 454 464 465 471 474 475 493 494					
PCN SF100-475	VERSION DATE	930723		END PAGE	3				FNWZ END PAGE	3	

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#### NOTES :

1. INSTALLATION - base
2. CONTROL CENTER - always "A" for main installations.
3. SHOP RATE CATEGORY - tells which category the report is from.
4. MONTH - a list of months, always listed from Oct (month code 01) to September (month code 12) A \* appears in the current month. If this is an end of month report, the \* appears in the month of the calculation.
5. MILITARY COST - the actual costs for the military labor component, calculated as described previously.
6. CIVILIAN COST - the actual costs for the civilian labor component, calculated as described previously.
7. FGN NAT COST - the actual costs for the foreign national labor component, calculated as described previously.
8. INDIRECT MATERIAL - the actual costs for the indirect materials component, calculated as described previously.
9. VEHICLE COST - the actual costs for the vehicle cost component, estimated as described previously.
10. CIVILIAN BENEFITS - the actual costs for the civilian benefits component, taken from the accounting and finance EEIC 393 transactions, as described previously.
11. TOTAL COST - the sum of all the component costs.
12. DIRECT HOURS - the direct hours charged based on the labor records in WIMS.
13. 12 MO TOT - the sum of the last twelve months of shop rate history for that shop rate component.
14. 12 MO TOT (TOTAL COST) - the grand total cost for 12 months
15. SR DIST % - the percentage (for this component) of the total shop rate for the last 12 months (13./14. \* 100%). The extra value after the slash ("/") under civilian benefits is for the percentage of foreign national benefits.
16. 12 MO TOT (DIRECT HOURS) - total of last twelve months of direct hours.
17. COMPUTED SHOP RATE - shop rate as calculated by the shop rate program (can be verified by dividing 12 MO TOT (Total Cost) by 12 MO TOT (Direct Hours).
18. % CHANGE FROM PREVIOUS MONTH - the percentage change from last month, positive number indicates an increase over last month, negative number (-) indicates a decrease from last month.
19. APPLIED SHOP RATE - shop rate to be used in the calculation of reimbursements. This figure has taken into account the ten percent tolerance rule. If 18. is less than ten percent, then 17. = 19. If 18. is greater than 10%, then 17. and 19. will be different. 19. will be based on the 10% tolerance.
20. CUM FY TOT COST - the sum of actual costs for each cost component for the fiscal year to date (\* month plus all months above on the report).
21. CUM FY DIST COST - the end-of-month shop rate calculation also determines what the shop rate predicted the costs to be. The shop rate program calculates the predicted cumulative FY costs based on previous shop rates and actual direct hours. The purpose of this calculation is to allow comparison to the actual costs. The calculation program goes through the following process:
  - takes current month direct hours,
  - multiplies by last month's shop rate (which is actually the predicted hourly cost for this month),
  - continues process for each month FY to date, and
  - sums costs.
22. % DIFF DIST-TOT - this field indicates the percent difference between what the shop rate predicted costs (21) were and what the actual costs (20) were for the fiscal year-to-date.
23. % DIFF DIST-TOT (TOTAL COST) - this number is the indicator for how well shop rate is predicting cost, overall.
24. COST CENTERS IN THIS CATEGORY ARE: - this identifies which cost centers are in this shop rate category.

The shop rate cost center report gives information similar to that in the category report, except the information is provided for each cost center. The report also includes a material/man-hour ratio (which is helpful in budgeting) and the shop's availability rate. The shop rate calculation result does not appear. The cost center's shop rate is that of the category.

Figure 33 is an example of the shop rate cost center report.

Figure 33. Sample WIMS Shop Rate Cost Center Report

PREPARED 94 OCT 14 10:16		SHOP RATE ANALYSIS REPORT						AS OF 94 JUL 31 PCN SF100-474			
INSTALLATION <sup>1</sup> : DYESS AIR FORCE BASE		COST CENTER SUMMARY						COST CENTER <sup>2</sup> : A 441 SHOP RATE CATEGORY <sup>3</sup> : C			
		ACTUAL COST DATA						CMD CMB		HOURS DATA	
MONTH <sup>4</sup> *	MILITARY COST <sup>5</sup>	CIVILIAN COST <sup>5</sup>	FGN NAT COST <sup>7</sup>	INDIRECT MATERIAL <sup>8</sup>	VEHICLE COST <sup>9</sup>	CIVILIAN BENEFITS <sup>10</sup>	TOTAL COST <sup>11</sup>	*	DIRECT	HOURS <sup>12</sup>	
OCT *	26,472	11,176	0	486	733	3,419	42,286	*		1,355	
NOV *	26,561	12,371	0	1,773	733	3,637	45,075	*		1,792	
DEC *	25,595	13,913	0	1,070	733	0	41,311	*		1,492	
JAN *	27,628	13,471	0	4,960-	733	3,504	40,376	*		1,864	
FEB *	23,657	11,307	0	1,625	733	3,370	40,692	*		1,634	
MAR *	29,639	15,424	0	56,250-	733	3,849	6,605-	*		1,921	
APR *	25,076	12,788	0	1,161	733	3,520	43,278	*		1,439	
MAY *	27,295	13,467	0	815	733	3,688	45,998	*		1,634	
JUN *	29,404	14,145	0	1,230	733	13,007	58,519	*		1,665	
* JUL *	5,503	2,714	0	17	733	5,348	14,315	*		309	
AUG *	31,320	12,191	0	962	733	0	45,206	*		1,739	
SEP *	28,280	11,735	0	2,506	733	97-	43,157	*		1,805	
12 MO TOT <sup>13</sup> *	306,430	144,702	0	49,565-	8,796	43,245 <sup>14</sup>	453,608	*		18,649 <sup>15</sup>	
***** CUMULATIVE FY COST DATA *****											
CUM FY											
TOT COST <sup>19</sup> :	246,830	120,776	0	53,033-	7,330	43,342	365,245				
CUM FY											
DIST CT <sup>20</sup> :	262,914	63,557	0	17,522	3,242	8,521	355,756				
% DIFF											
DIST-TOT:	6.5	47.3-	0.0	133.0-	55.7-	80.3-	2.5-				
*****											
AVAILABILITY RATE <sup>16</sup>	61.0	DIRECT MATERIAL COSTS <sup>17</sup>	29,582	TOTAL MATERIAL COSTS PER DIRECT MH <sup>18</sup>	1.95						
PCN SF100-474	VERSION DATE 930723	PAGE	11	FNWZ	PAGE	11					

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#### NOTES :

1. INSTALLATION - base
2. COST CENTER - always "A" for main installations plus the cost center code.
3. SHOP RATE CATEGORY - tells which category the cost center belongs to.
4. MONTH - a list of months, always listed from Oct (month code 01) to September (month code 12) A \* appears in the current month. If this is an end of month report, the \* appears in the month of the calculation.
5. MILITARY COST - the actual costs for the military labor component, calculated as described previously.
6. CIVILIAN COST - the actual costs for the civilian labor component, calculated as described previously.
7. FGN NAT COST - the actual costs for the foreign national labor component, calculated as described previously.
8. INDIRECT MATERIAL - the actual costs for the indirect materials component, calculated as described previously.
9. VEHICLE COST - the actual costs for the vehicle cost component, estimated as described previously.
10. CIVILIAN BENEFITS - the actual costs for the civilian benefits component, taken from the accounting and finance EEIC 393 transactions, as described previously.
11. TOTAL COST - the sum of all the component costs.
12. DIRECT HOURS - the direct hours charged based on the labor records in WIMS.
13. 12 MO TOT - the sum of the last twelve months of shop rate history for that shop rate component.
14. 12 MO TOT (TOTAL COST) - the grand total cost for 12 months
15. SR DIST % - the percentage (for this component) of the total shop rate for the last 12 months (13./14.\*100%). The extra value after the slash (/) under civilian benefits is for the percentage of foreign national benefits.
16. 12 MO TOT (DIRECT HOURS) - total of last twelve months of direct hours.
17. AVAILABILITY RATE - the percent of the cost center's total labor hours charged that were direct hours (for the month).
18. DIRECT MATERIAL COSTS - direct material costs to support work orders 00003 and all work orders greater than 00020. It is taken from material transactions with EEICs 604, 605, 607, 609, 612, 614, 618, 619, 619XX, and 641.
19. TOTAL MATERIAL COSTS PER DIRECT MH - this is the material cost/man-hour ratio. It uses costs from WO#00001, WO#00002, and all direct material costs and divides by the total direct hours for the cost center.
20. CUM FY TOT COST - the sum of actual costs for each cost component for the fiscal year to date (\* month plus all months above on the report).
21. CUM FY DIST COST - the end of month shop rate calculation also determines what the shop rate predicted our cost to be. The shop rate program calculates our *predicted* cumulative FY costs based on previous shop rates and actual direct hours. The purpose of this calculation is to allow comparison to the actual costs. The calculation program goes through the following process:
  - takes current month direct hours
  - multiplies by last month's shop rate (which is actually the predicted hourly cost for this month)
  - continues process for each month FY to date
  - sums costs
22. % DIFF DIST-TOT - this field indicates the percent difference between what the shop rate predicted costs were (21.) and what our actual costs were (20.) for the fiscal year to date.
23. % DIFF DIST-TOT (TOTAL COST) - this number is the indicator for how well our shop rate is predicting cost overall

The shop rate reports are a source of information that can be used for shop rate monitoring and troubleshooting, shop rate values, availability rates and man-hour programming, budgeting, and performance measurement.

## **19.5 Shop Rate Validation and Maintenance**

The financial manager must monitor the shop rate month-to-month and perform shop rate validation. The financial manager will have five calendar days after end-of-month processing to review and validate the shop rates. When the shop rate is validated, WIMS records the date of validation and the name of the person performing the validation. All labor, material, and accounting and finance transactions are held in suspense (not processed) until the shop rate is validated or the five days expire.

### *19.5.1 Performing the Validation*

The validation is performed by running the validation program in WIMS and pressing the appropriate function key. The most important use of validation is verifying the shop rate: confirming it is reasonable and makes sense. CE customers appreciate ensuring accuracy when a new labor rate is approved.

If the shop rate is not validated within five days, the computed shop rate calculated during the end-of-month processing will be assumed correct; a management report will be printed indicating non-validation.

The shop rate validation suppression program allows the financial manager to delay validation of the shop rate for an additional five calendar days if a unique or emergency situation occurs. This program can only be run once a month.

### *19.5.2 Maintenance (Monitoring and Fixing)*

Because the shop rate is so important to the reimbursement and cost accounting programs, it's imperative to ensure accuracy. The goal of the shop rate process is to predict actual cost to recover labor and overhead expenses in the reimbursement program.

The shop rate process lends itself to classic analysis each month. The following procedure is an effective way of performing this analysis.

1. Check % DIFF DIST-TOT (TOTAL COST) on the shop rate category report. If this value is greater than 10 percent, the analysis is continued.

2. Each component % DIFF DIST-TOT is checked to determine which component(s) may be causing the problem.
3. The shop rate cost center report is checked to determine which cost center(s) is causing the problem.
4. When the component and cost center that is causing the problem is identified, a determination of where these costs originated must be made.
5. Cost sources are checked using a management report or self-generated product.
6. Costs are checked against what they should be, using manual calculations.
7. Shop rate adjustments are made to fix shop rates.

19.5.2.1 Shop Rate  
Adjustments

When problems have been identified and the shop rate must be repaired, WIMS can perform a shop rate adjustment. The shop rate adjustment program allows a transfer of actual costs and/or direct man-hours from one cost center and/or month to another. An audit trail is maintained (in file USRA) for all adjustment transactions, including information on who made the adjustment, when it was made, and why it was made. A future employee and/or an auditor may need specific information when entering the reason for adjustment. The shop rate adjustment inquiry allows a review of shop rate adjustments.

19.5.2.2 Identifying the  
Problem and  
Making a Fix

If the shop rate is determined to be invalid, components and cost centers must be examined to find the root cause of the problem. To identify cost origins, the actual data sources are examined; the problem identified; and fixed. Table 24 provides a guide to identifying and correcting common problems.

**Table 25. Solving Common Shop Rate Problems**

<b>Cost Component</b>	<b>Data</b>	<b>Data Review</b>	<b>Problems</b>	<b>Solutions</b>
Military Labor	Costs based primarily on WIMS data, no outside sources			
Personnel (APER) File	Where a person is assigned in APER determines where costs recorded A person's assigned grade determines cost recorded for each hour worked	Personnel report already exists for assigned cost center and grade. Pull custom report for specific cost centers	People assigned to wrong cost center People are assigned wrong grades	Change assigned cost centers in APER To correct previous month's error, use Shop Rate History Adjustment to change cost centers Change assigned grade in APER To correct previous month's error, transfer costs from month about to fall off shop rate history (e.g., if it's the end of April, borrow from 08), use Shop Rate History Adjustment to make change
WIMS Military Pay (UMPF) File	Provides cost of each labor hour. Cost recorded is determined by assigned grade and hourly cost listed for that grade. Costs should be manually or programmatically updated each year based on AFR 177-101.	Check data manually by reviewing data Review against APER	No or improper military labor costs are being recorded	Update UMPF to ensure no pay grades are missing Update UMPF w/proper composite rates from AFR 177-101

<p>WIMS Labor Records (MDLTY YMM)</p>	<p>Fin mgt's not responsible for these records, but use resulting transactions. An hour's cost is recorded every time a work hours is charged in labor records, both direct and indirect. Labor transactions can be found in the transaction history file (UTH-FYYMM) with a transaction ID of CLU.</p>	<p>Look at labor records in same program used by operations personnel. Write a report using report utility on UTHFYYMM file for month to be reviewed and for only cost centers (pull only CLU transaction, TRANS-ID) to be reviewed.</p>	<p>No military labor costs occurring Negative costs are being recorded in military labor</p>	<p>Ensure cost centers enter labor. If a long-term problem, run a shop rate history rebuild. Check IFS Transaction Updater or the PCN SF 100-468 listing to see if rejects have been cleared. Occurs because of loaning and borrowing personnel between cost centers. Minimize this and have cost center give work order to appropriate shop. Fix past history, move loaned military costs back to cost center that did the loaning, using Shop Rate History Adjustment program.</p>
<p>Civilian Labor</p>	<p>Civilian labor costs are primarily based on the WIMS data and do not rely on any outside sources. The data sources include:</p>	<p>A personnel report already exists on the shop rate menu in WIMS that prints who is assigned to each cost center and what their grade is. You can also write your own WIMS report using the</p>	<p>People are assigned to the wrong cost centers. People are assigned the wrong grades.</p>	<p>Change the assigned cost centers in the APER. If previous month's costs are recorded in an improper cost center, use the Shop Rate History Adjustment and move costs from the wrong</p>
<p>WIMS Personnel (APER) File</p>	<p>Where a person is assigned in the APER file determines where the costs are recorded. A person's assigned civilian grade in the APER determines the cost re-</p>			

<p align="center">WIMS Civilian Pay (UCPF) File</p>	<p>corded for each hour worked.</p> <p>The cost recorded is determined by the assigned grade and the hourly cost listed for that grade in the UCPF. The shop rate program assumes that all GS employees are step 5 and all WG/WS/WL employees are also step 5. The costs in the UCPF should be manually updated each year based on general schedule or local wage grade scale, include any locality pay in rate, to capture actual costs.</p>	<p>WANG report utility to pull only the cost centers you desire. Review this report for accuracy.</p> <p>The easiest way to check this data is to simply go into the program that allows you to update the file and make sure the cost figures are correct. Pay particular attention to the step 5 columns. Another way to check data is to use the shop rate personnel report mentioned above. This report contains not only who is assigned annual military labor cost (based on working eight hour days).</p>	<p>No civilian labor costs are being recorded, or improper labor costs are being recorded.</p>	<p>cost center to the correct cost center. Change the assigned grade in the APER. If previous months recorded costs reflect those improper grades, transfer costs from the month that is about to “fall off” of shop rate history, i.e., if it’s end of month April, borrow the missing costs from month 08 (May), because that data will disappear at the end of the next month. Use the Shop Rate Adjustment Program to accomplish this. Update the UCPF to ensure no pay grades are missing. Update the UCPF with proper pay rates. Ensure none of the pay grade or steps have zeroes as an annual rate. Check steps 5 for GS and wage grade for proper cost.</p>
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				the loaning using the Shop Rate History Adjustment program.
Civilian Benefits  Accounting and Finance Integrated Transactions	<p>Civilian benefit costs dependent on some outside sources and interfaces for proper accounting. Requires diligence with rejects.</p> <p>All transactions with EEIC 393 and TRANS-ID “CCI” are included as civilian benefit costs in the shop rate history. RCCC transaction determines in which cost center the benefit cost is included.</p>	<p>Review transaction history file (UTHFYMM) for relevant month for information on these transactions. To review benefit transactions write report to pull all transactions with EEIC of 393 from the UTHFYMM file for the relevant month and cost center(s). To compare, check the OBL or a Micro-BAS report to see EEIC 393 costs in BQ system and compare with shop rate program.</p>	<p>No benefit costs showing in some cost centers or the values seem low.</p> <p>No benefit costs are showing in some cost centers for current month, but last month’s seem to be twice as large.</p> <p>An unusually large amount of benefits appear last month.</p>	<p>Check rejects and clear. Ensure they are cleared regularly. This is the most common problem encountered with civilian benefits. ABQ16A tape may not be processing each day. Check the USEQ file to see if any tape sequence numbers have been left out, or check with WIMS system administrator. The benefit transactions for this month were run into last month. Use the Shop Rate History Adjustment program to move those costs to this month. WIMS operators may have accidentally run some ABQ16A tapes twice. Check the USEQ file to see which tape sequence numbers have been run.</p>

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<p>Actual Civilian Pay Records</p>	<p>Civilian pay uses actual civilian personnel records, not WIMS, to determine the cost center in which to record benefits.</p>	<p>Check assigned cost centers on civilian personnel roster. Check this against what APER file. Any mismatch will cause problems.</p>	<p>Civilian benefit costs showing in wrong cost center, or non-existent cost center.</p>	<p>Ensure assigned cost centers in civilian pay records match assigned cost center in APER. Make sure that the APER is correct. If not, process an SF 52 to move employees in civilian personnel system to proper cost center. If previous months incorrect, use Shop Rate History Adjustment program to move costs from incorrect cost center to correct cost center. If incorrect cost center is non-existent (or ETA), borrow costs from month about to fall off, as mentioned previously.</p>
<p>The BQ System</p>	<p>For each RCC/EEIC combination in the finance system (called an address), field called B-Indicator, tells the BQ system whether to send transaction to WIMS and how to send it. B-indicators are: <b>BD</b> - a direct transaction: costs go directly to account codes (for ETA cost centers). <b>BI</b> - indirect transaction: costs go to shop rate program to be</p>	<p>Ask finance for a copy of the address directory. This directory shows B- Indicator for each RCCC/EEIC combination. Ensure ATA cost centers and EEIC 393 addresses have “BI” loaded for B-Indicator.</p>	<p>No civilian benefit costs are showing for some cost centers.</p>	<p>Incorrect B-Indicator. Have finance update address director with BI for provided ATA/EEIC 393 addresses. Transactions are rejected as they leave the BQ system, but before they get to WIMS. Have finance check “WIMS Extract” listing and clear rejects.</p>

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	included in account codes based on hours charged to work orders. <b>BW</b> - a transaction to be included on a work order.			
Vehicle Costs	The vehicle cost file contains annual estimate for each cost center with a fiscal year code.	By simply entering the vehicle estimating program, the vehicle cost estimate for each cost center can be reviewed and updated by entering vehicle estimating program.	No vehicle costs are showing in cost center(s).	No estimate exists for cost center. Enter Shop Rate Vehicle Cost Estimator and add estimate. Update the estimate and change the fiscal year to this year if fiscal year for cost estimate is old.
Indirect Material Costs  CEMAS Material Orders	Indirect material costs are most often dynamic and cause overreaction. Sometimes actual material requirements do change drastically month-to-month. If so, costs should not be smoothed because they capture actual costs. Any material transactions for ATA cost centers with work orders: 00001 - Bench Stock; 00002 - Base Service Store; 00004 - Individual Equipment; 00006 - Common Use Tools; 00007 - Tool Kits; 00008 - Tool Issue are included.	Review the material transactions in transaction history file UTHFYMM. Write a report, pull transactions with TRANS-IDs equal to "CWM" or material transactions. Examine BCE Material Transaction List, SF100-466.	Material costs seem high this month.	Check the material transactions and verify with the shop supervisors that the material was actually received and/or used. Shops may be using line-item requisition, WO#00001 to buy materials that are actually for a specific work order. Have Material Acquisition transfer materials to correct

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<p align="center">Base Supply</p>	<p>All material transaction data is same as CEMAS. It's over daily on the D10 tape or file transfer.</p>	<p>CEMAS has utility allowing material transaction review. Transactions will show in UTHFYMM file.</p>	<p>Indirect material costs seem erratic.</p> <p>Little material costs show, or show sporadically.</p>	<p>work order in CEMAS the indirect material costs will be backed out. If costs not backed out until following month; use Shop Rate Adjustment program to balance large positive cost in the first month with large negative in following month.</p> <p>If shops erratically fed supply money, they'll be erratic in filling shop stock and tool requirements. Shops should have money when they need it. Shops may fill individual equipment or tools requirements infrequently, not every month. If this is best method for shops, leave it alone.</p> <p>Shop rate is calculated based on a twelve-month moving average, the costs will be smoothed.</p> <p>The D10s not processed each day. Check with Material Acquisition or WIMS system administrator. Material transaction rejects not being cleared by Material Acquisition. Ensure rejects are cleared in CEMAS.</p>
<p>Foreign National Labor</p>	<p>WIMS Personnel, APER</p>	<p>Check the APER to verify</p>	<p>No FN costs show.</p>	<p>Usually because not coded as</p>

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	file, contains field “position-type.” If field equals value “LOC,” labor costs captured in foreign national component in the same way as civilian labor.	position types of foreign national employees. Run report and pull positions types equal to “LOC,” ensure all FN employees included.		“LOC” in APER and costs are showing in civilian labor. Check reasons for civilian labor not showing up; FN labor transactions processed the same way. Check the UCPF file for appropriate FN pay scale and figures.
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- 19.5.2.3 **Shop Rate Rebuild** When there is personnel turnover and a lack of continuity information, shop rates have such a high rate of error they cannot be corrected. This can also occur after major computer glitches. The shop rate rebuild program works just like adding a new cost center (see section on the SWL). The computer will ask for annual costs for each of the components; then take those costs, divide by twelve, and put them into shop rate history. The “per Data” function key gives labor and benefit costs based on who is assigned to the cost center currently in the APER.

**Caution**

Rebuild should be a last resort. Also, rebuild may not solve all problems. If current months have had bad data, those same errors will arise again in a month. Rebuild should only be used when bad historical data exists and improper charges are being passed to customers.

Regular shop rate monitoring and analysis is important. An accurate shop rate is a must.

## 19.6 **Labor Accounting and Shop Rates**

Although financial management is not responsible for labor accounting, it's important for financial management personnel to understand the process by which labor costs are accumulated and charged to work orders and how this affects the shop rate. In developing that understanding, the following topics will be discussed in this chapter: types of labor accounting, direct versus indirect time, labor utilization codes, charging time to work orders, loans and borrows, and importance of accurate labor accounting.

### 19.6.1 *Types of Labor Accounting*

The decision to keep labor records is not made on an individual-by-individual basis. Instead, a decision is made to make a cost center track labor. The SWL file is used to indicate what type of labor accounting will be done for each cost center using labor reporting codes; where actual time accounting is ATA and exception time accounting is ETA.

1. = ATA (no schedule),
2. = ETA,
3. = ETA for Housing Flight,
4. = ATA for Operations Flight & Others (with schedule),  
and
5. = ATA for Engineering Flight.

There are two types of labor accounting, actual time accounting and exception time accounting.

ATA cost centers must record what they did with their labor hours each day. They account for labor because

- they do work that relates to more than one account code (for labor costs based on the account code on the work order),
- they do jobs for reimbursable customers and a basis for reimbursement is needed, and
- they need to have a means for scheduling the workforce.

Resources, Fire Protection, Family Housing, Administration and Commander, and parts of the Engineering Flight are all ETA. An ETA cost center is not required to record labor each day.

*19.6.2 Direct vs. Indirect Time*

ATA cost centers account for all hours in their work day. Time (or hours) can be classified into the two categories of direct hours and indirect hours. Direct hours are hours spent actually working on a job. The hours can be attached to a specific work order.

Indirect hours are hours spent doing things other than working on a specific job. The hours can not be attached to a specific work order. Examples of indirect hours are leave (annual and sick), military duty, appointments, supervision, and training.

Many operations managers use the availability rate to help them measure productivity and to help program labor hours for the future.

The availability rate is defined as:

$$Avail\_Rate = \frac{Direct\_Hrs}{Direct\_Hrs + Indirect\_Hrs} \times 100\%$$

An artificially low availability rate can cause artificially high shop rates (lower direct hours). An artificially high availability rate can cause an artificially low shop rates (higher direct hours).

19.6.3 *Labor Utilization Codes*

Labor utilization codes are attached to each labor transaction to describe the type of work (or non-work) was done with those hours. The LUC code is a two-digit code. Sometimes it is followed by a “-” and another number, called a sub-LUC, which further describes the labor transaction. The LUC codes are listed in Table 25.

The direct LUC for a labor transaction is based on the LUC contained on the work order to which the time is charged.

**Table 26. Examples of Labor Utilization Codes**

LUC Code	LUC Title
<b>Direct</b>	
11	Recurring Work
12	Emergency Direct Scheduled Work
13	Planning, Design, and Contract Administration
14	Urgent Direct Scheduled Work
15	Minor Construction
16	Routine Direct Scheduled Work
18	Programmed Work Orders
19	Utility Operations
20	Readiness Training
<b>Indirect</b>	
31	Supervision
32	Training
33	Leave
34	All Other
38	Overtime
39	Loaned Hours

Indirect hours are not charged to a work order. Rather, a labor transaction is created with an indirect LUC, describing what is done with the time.

By running reports on labor hours by LUC, operations managers can see how the work force is being used and its productivity. This number can also be used to help the Operations Flight determine how many hours will be available for budgeting time and helping them make better customer commitments.

19.6.4 *Charging Time to Work Orders*

When work is done on a work order:  
 1. a craftsman does the work and

2. a work force manager enters hours in the labor screen, recording the work order number (resulting in LUC):
  - ◆ WIMS creates a labor transaction based on the input,
  - ◆ WIMS puts the transaction in pending status,
  - ◆ during end-of-session runs, if the labor transaction is correct it applies labor costs to work order; otherwise, it creates a reject; and
  - ◆ after a reject is cleared, cost is applied to the work order.

*19.6.5 Loans and Borrows* Sometimes, a person assigned to one cost center is loaned to another cost center (the borrowing cost center) to help fill work hour requirements. This loaning and borrowing can cause significant problems in shop rates.

**Example**

The process for loaning (one hour) from cost center 451 to cost center 432 (assuming they are in different shop rate categories), is

1. LUC 39 (loaned labor, indirect) transaction created for 451.
2. Actual labor cost (from UMPF or UCPF) is recorded in 451.
3. Shop rate costs (one hour \* shop rate for 451) subtracted from 451.
4. Direct hour recorded in 432.
5. Actual costs recorded in 432 based on UMPF or UCPF.
6. Distributed costs will be based on the one hour \* shop rate for 432.

The last step in the process will create an imbalance between the actual and distributed costs in 432. If the individual on loan was military and 432 is an all civilian shop, a military component will be introduced into 432's rate. It will remain for the next twelve months (because of the twelve-month moving average).

This does not create a problem if the two cost centers are in the same shop rate category.

These are three easy solutions that can help in accounting for loaning and borrowing.

1. Assign the individual to 432 in the APER. If the individual is civilian, make sure the civilian pay records are

- changed so that the benefit costs will move.
2. Give some of 432's work orders to 451 and have 451 complete them.
  3. As a last resort, allow the loan and borrow to take place and then undo the cost transfers using the Shop Rate Adjustment program.

Being considerate of Operations Flight's needs and working with them will ensure a good shop rate and efficient work completion. This ensures happy customers.

*19.6.6 Importance of Labor Accounting*

Accurate labor accounting is not merely an exercise in paperwork. Measuring work force productivity is only one of its purposes. It is also necessary in the management analysis process; maintaining records and calculating shop rates, reimbursements, and charges to customers. Shop rates are, in general, not a very good measure of performance.

Management can track productivity and program labor hours based on labor history. Maintenance hours spent on specific pieces of equipment or systems is valuable in assessing the condition of the base infrastructure and facilities.

Labor accounting is the only way to calculate labor rates and to track chargeable hours. Without accounting for labor, there would be no way to charge for parts and labor. As it is, customers are often confused as to how the shop rate works in the calculation of reimbursement.

All DoD customers do not pay for the military component of our shop rate. Our non-DoD customers must reimburse the total shop rate. That is why only civilians might be assigned to family housing maintenance or medical maintenance cost centers. This way, there is no military component and the Civil Engineer will earn full reimbursement. Military personnel can be used in cost centers that do work for non-paying customers. However, although it does matter who is assigned, it doesn't matter who is sent.

The following example shows how a charge is applied to a customer.

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**Example 1:**

**Pontiac AFB - Zone 1** — Zone 1 is managed by Mr. Mitchell and there is one other em-

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ployee, Sgt. Sanders. The shop's costs and direct hour information are given below.

<b>EEIC</b>		<b>Hourly Wage</b>	<b>Hours on Work Orders</b>	<b>Monthly Cost</b>	<b>EEIC %</b>
3X	Mr. Mitchell	15	128	2400	35%
2X	Sgt. Sanders	20	112	3200	46%
6X	Shop Supplies per month			500	7%
7X	Gas			80	1%
US BEN	Benefits (both employees)			750	11%
	<b>Total Costs</b>		<b>240</b>	<b>6930</b>	

**RATE** Labor Rate = 6930/240 = \$29/hr

The shop rate for Zone 1 (assuming they are in their own category) is \$29/hr with the EEIC percentages given in the EEIC% column.

The customer, a non-DoD organization, has a problem with the air conditioning. In this case, Mr. Mitchell comes out to do the job and it takes one hour. The charge to the customer is the labor cost plus the direct materials (parts) used. The customer's account will be charged in the EEICs as shown in C.

WO#12345                      RRI=XX  
 Fix AC                      =        1.0 hrs  
 Parts                        =        \$100.00

<b>Charge to Customer</b>			
<b>Non-DoD</b>	<b>EEIC</b>	<b>Formula</b>	<b>Charge</b>
Mil Labor	200	\$29/hr*1hr*46%	\$13.34
Civ Labor	39701	\$29/hr*1hr*35%	\$10.15
US Civ Ben	39702	\$29/hr*1hr*11%	\$3.19
Vehicle	641	\$29/hr*1hr*1%	\$0.29
Supplies	60900	\$29/hr*1hr*7%	\$2.03
Direct Mat'l	61930	\$100	\$100.00
		<b>TOTAL</b>	<b>\$129.00</b>

**Example 2:**

**Another Customer Order** — The customer is a Navy organization, but the job is the same as Example 1. The bill as it is now, is shown below.

<b>Charge to Customer</b>			
<b>DoD</b>	<b>EEIC</b>	<b>Formula</b>	<b>Charge</b>
Mil Labor	200	\$29/hr*1hr*46%	<b>\$ 000</b>
Civ Labor	39701	\$29/hr*1hr*35%	\$10.15
US Civ Ben	39702	\$29/hr*1hr*11%	\$3.19
Vehicle	641	\$29/hr*1hr*1%	\$0.29
Supplies	60900	\$29/hr*1hr*7%	\$2.03

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Direct Mat'l	61930	\$100	\$100.00
		<b>TOTAL</b>	<b>\$115.66</b>

Sgt. Sanders was sent out to do the job instead of Mr. Mitchell. How does the bill change? It doesn't. No matter who performs the work, the customer's discount is the military *component* of the shop rate.

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EEIC percentages were used to break out costs into commodities for customers. The Reimbursable Obligation Authority shows expenditure in the same EEICs. The military component is deducted from the DoD customers bill. It did not matter who performed the work.

A mistake often made is using the shop rate as a performance measure.

A low shop rate does not mean an accurate shop rate. If a shop rate is artificially low, the amount of reimbursements that should be collected are not being collected and the shop is spending direct dollars to support reimbursable customers. Many managers try to use the shop rate, when it's out of control, as a measure of performance. If the shop rate is at ten percent often or it's bouncing all over the place, a conclusion cannot be drawn about its performance.

The shop rate should be accurate and in control before trying to measure the cost effectiveness of cost centers.

There are many misconceptions concerning shop rates, as well as an underestimation of their importance. Shop rates are not just one person's job.

Many myths exist concerning shop rates. Table 26, Myths and Truths, are seven concerning shop rates.

**Table 27. Myths and Truths**

<b>MYTH</b>	<b>TRUTH</b>
<p>All organizations are charged for services.</p> <p>Customers pay for overtime.</p> <p>“Send the airman to the general’s house. The military labor is free.”</p> <p>Shop rates are a paperwork exercise for the Resources Flight and really don’t matter.</p> <p>The computer does it all, shop rates don’t need to be touched.</p> <p>Loans and borrows are no big deal. The computer deals with them.</p> <p>The lower the shop rate, the better.</p>	<p>The shop rate attempts to set the cost of labor and overhead to every direct hour spent. However, only a small group of customers have to actually pay that bill.</p> <p>Unless the customer supplies a fund cite, CE pays for the overtime and spreads that across all direct hours as overhead. Civilian labor cost component will get higher, causing the shop rate to raise. This means all customers will pay for overtime as overhead.</p> <p>It doesn’t matter who is sent. It does matter who’s assigned.</p> <p>If shop rates are unimportant, so is the reimbursable program; and, also, budget execution.</p> <p>Regular maintenance is required. A quick but thorough validation each month can save future time and headaches. They can cause problems when loaning between categories.</p> <p>If a shop rate is lower than its actual cost, then insufficient reimbursement is being collected. This means too many direct dollars are being spent.</p>

Shop rates are important and deserve management’s attention. Some of the reasons shop rates are important include

- shop rates are the means of administering reimbursements and refunds for labor and overhead cost,
- shop rates help in estimating job size to determine what the appropriate approval level is,
- they help spot cost trends so better budgets can be prepared, and
- they allow for the determination of labor costs for the cost accounting system.

The BCE has overall responsibility for the shop rate, but it’s not a one-person job. Cost center managers, accounting and finance personnel, WIMS administrators, Material Acquisition personnel, work force management specialists (controllers), superintendents, shop personnel and flight chiefs all play a role. The customers should not complain before something is done about the shop rate; because, in the end, that is who the entire team is trying to please.

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## Chapter 20 Logistics and Supplies

The Civil Engineer financial manager is not responsible for filling material requirements, but it is important for Financial Management personnel to understand where the squadron spends large amounts of money daily.

This chapter reviews supply systems, supply locations in Material Acquisition, ordering materials, supply discipline, supply funds, and the P2T material distribution process.

### 20.1 Supply Systems

The Material Acquisition Element in the Operations Flight provides the bulk of the logistical support for the Civil Engineer Squadron. The systems they use to help their customers get their material requirements met include, Government Operated Civil Engineering Supply Store, Contractor Operated Civil Engineering Supply Store, base supply and several others.

Base supply was designed to support the flying mission as its first priority. Because CE's mission was considered by the supply system as a lower priority (FAD IV), the logistics community gave Civil Engineers the authority to set up a supply system for those items uniquely required for facility maintenance. GOCESS and COCESS were created to meet this need.

#### 20.1.1 GOCESS

GOCESS is a hardware store for the Operations Flight providing commonly used supplies. In GOCESS, the store stock is owned by the government. Restocking or ordering is accomplished through contracting, supply, or using IMPAC procedures. Materials can be acquired quickly and personnel and procedures are not under a contractor's control. The main disadvantage of GOCESS is that government funds are tied up in inventory.

#### 20.1.2 COCESS

COCESS uses a contractor to manage the supply store who is responsible for stock replenishment and other materials directly related to work orders. Under this concept, CE money is not tied up in inventory; however, cost/response time for items not priced in the original contract can reduce the contract's effectiveness.

20.1.3 *IMPAC*

Although IMPAC is not a supply system in itself, it has become one of the primary tools used by Material Acquisition Elements to acquire materials. Purchases made with IMPAC are input into CEMAS as CE local buy items, bypassing contracting and base supply. Procedures for administering IMPAC accounts are available through base contracting.

20.1.4 *Base Supply*

Base supply should be the first source of supply for non-CE unique items such as batteries and assets which are MICAP-reportable. Many supply organizations now refuse to accept requirements for purchases less than \$2,500, in which case the using organization must rely on IMPAC. The following are items typically purchased from base supply.

**EAID equipment** — usually purchased and then placed on someone's equipment account. It is often called NF3, code for expandability, recoverability, repairability (ERRC).

**Non-EAID equipment** — non-accountable equipment, such as, furniture (often called NF1), that does not get placed on an equipment account.

**Bulk ground fuel** — gas for vehicles and some utility fuels.

**Expendable supplies** — cleaning and office supplies, tool issue, and individual equipment (e.g., clothing for readiness and safety requirements).

**Investment equipment** — items costing more than \$100K (also known as 3080 items).

**Automated data processing (ADP) equipment** is no longer purchased through base supply. ADP requirements must be coordinated through the squadron systems administrator.

To order something through supply, the appropriate supply document for the type of items required must be completed. Forms include AF Form 2005 - Supply Requisition, AF Form 1348-6 - New Item Requisition (requires research), and AF Form 601 - Equipment Request.

The Air Force Stock Fund is actually part of the DBOF. It sells material to users and collects a fee. To account for

loss, damage, and pilferage, the stock fund must levy a surcharge (expressed as a percentage). That surcharge is updated each fiscal year. Base supply will have the current rate. Stock fund purchases are supplies purchased from base supply. The money used to purchase material is used to replenish the stock.

The local base supply squadron receives stock fund authority, similar to receives stock fund authority, similar to reimbursable obligation authority. As a result, even if money is available for purchase, base supply may have to go outside to purchase because of a lack of stock fund authority.

In addition to these traditional supply systems, other supply systems that can be used on base include COPARS, medical logistics, and imprest fund.

COPARS is transportation's supply store for vehicle-related supplies. The base hospital has its own supply system for medical-related material. Many lab-related materials are available through this system (EEIC 604). If none of the supply systems can fill requirements, material can be purchased by using a purchase request (Form 9) through contracting.

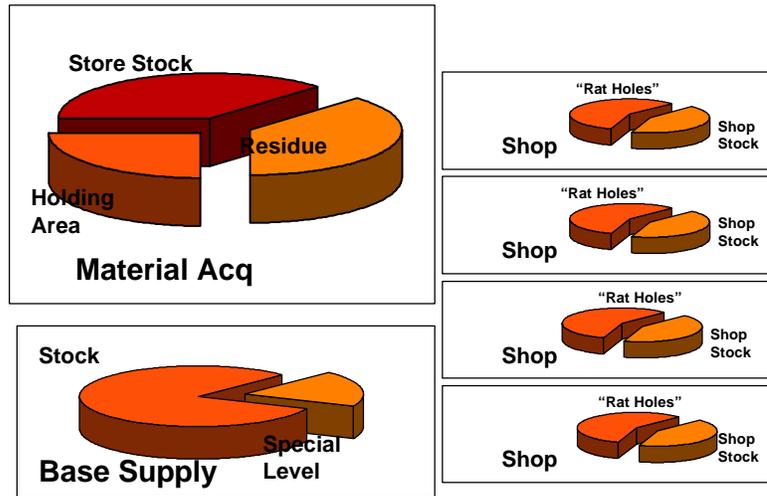
For those organizations not using the IMPAC program, urgent requirements can be made through a local vendor using an SF44. The transaction can't exceed \$2500 per day per vendor and the entire transaction must take place during the same business day; in other words, the vendor must have supplies on hand.

Sometimes, material acquisition can keep cash on-hand (imprest fund) for use in local purchases. When a purchase is made with that cash, receipts are processed through Finance. The account is charged (records an obligation) and the cash replaced.

## **20.2 Supply Locations**

When materials are purchased, they are usually stored in inventory in three areas: Material Acquisition, base supply, and the shops. Where materials are stored, who owns them while in storage, and how they are handled by accounting can be useful knowledge. Storage areas in Material Acquisition and Base Supply are depicted in Figure 34.

**Figure 34. Storage Areas in Material Acquisition and Base Supply**



*20.2.1 Material Acquisition*

The three major areas of storage in Material Acquisition are 1) store stock (bench stock), 2) holding area, and 3) residue.

Store stock (bench stock) is the COCESS and contains common-use materials kept on-hand so craftsmen can draw materials as needed. Material items with a high frequency of demand are supposed to be kept in this area. Materials in the store are charged to Work Order #00011. As materials are issued, the costs are transferred to the work order being accomplished.

In a GOCESS environment, CE owns the store and CE moneys are tied up in inventory. It is critical that materials with a low frequency of demand are not kept in the store, this needlessly ties-up funds. In a COCESS environment, a contractor owns the store stock.

The holding area is where materials already assigned to a specific job (work order) are stored while awaiting shop personnel to pick up the supplies and complete the job. Some materials in the holding area actually came from store stock when CEMAS identified a store stock item as being required for a specific job. In this case, the material is transferred from WO #00011. Materials in the holding area are charged to the specific work order for the job being performed. CE owns the materials in the holding area, re-

ardless of whether it is a GOCESS or COCESS base. This ties-up CE money. Too much material ordered too far in advance ties up funds needlessly.

Residue is where materials are stored that are not assigned to a specific work order and not a store stock item. Usually, the materials in residue are left over or from a work order that was canceled. In a GOCESS environment, any left over materials that are store stock items are returned to the store. Materials in residue are charged to Work Order #00012. Cost of residual materials used on a work order at a later time are transferred to the specific work order.

Whether it is a COCESS or GOCESS base, Material in residence is owned by CE. There is no planned use for the material; therefore, it should be closely reviewed during planning to determine how it can fill existing requirements.

### *20.2.2 Base Supply*

Base supply maintains materials in stock through the establishment of stock and special levels in the standard base supply system.

Stock refers to the locations where base supply keeps on-hand materials, including bench stocks, LP store items, individual equipment, and tool issues. These materials are property of the Air Force Stock Fund (AFSF, which is part of the DBOF). Their system accounts for these materials. Base supply owns the materials until CE formally requests the items. CE pays the DBOF for these items when they are requested.

Special levels are established in the standard base supply system for items which must be maintained in stock, but past demands do not warrant the establishment of a base stock level. Just because CE infrequently needs these materials, does not mean CE can be caught without any on-hand. These items usually have a long lead time for delivery and are critical system components. Critical electrical transformers are an excellent example of special level items. They are property of the AFSF and receive accounting in their system. When CE formally requests the items, the DBOF is paid for them.

### *20.2.3 Shops*

Often, shops account for large material inventories. The two general categories of material inventory in the shop are shop stock and rat holes.

Shop stock is where shops keep broken unit of issue supplies and other materials kept in tool belts and on trucks. This is part of the indirect material cost in the shop rate.

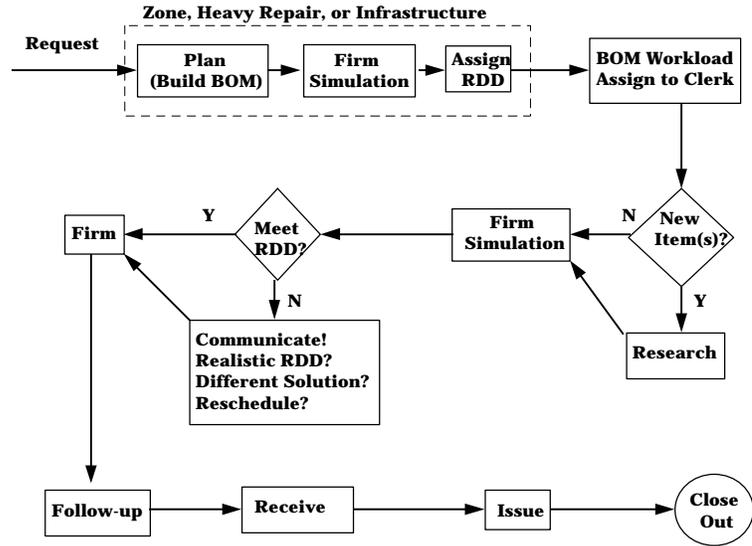
Shop stock is charged to Work Order #00001. If an entire unit of issue is used on a single work order, it should be transferred from WO#00001 to the specific work order being accomplished. CE owns shop stock materials; the cost of which is partially recovered through the shop rate. Because CE money is tied up, it's important not to keep unnecessary amounts of shop stock.

Rat hole is an unofficial location where shops keep materials they need "just in case." Materials that are tucked away "just in case" can be the cause of unneeded expenditure. Unfortunately, nobody else knows these materials exist and there is no accounting for the material; making it a popular inspection point for auditors and inspectors.

**20.3 Ordering  
Materials through  
CEMAS**

Figure 35, Material Ordering Process in CEMAS, is a flow chart depicting the process of ordering materials through CEMAS.

**Figure 35. Material Ordering Process in CEMAS**

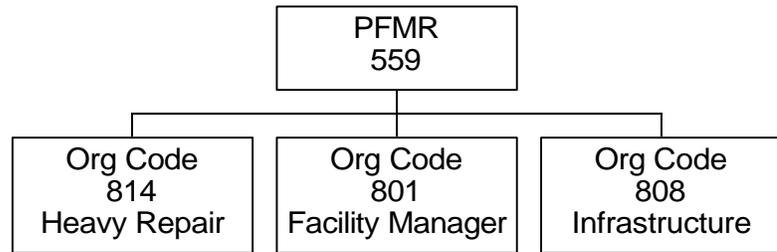


Funding of material requirements can be, at times, confusing. Base supply and GOCESS/COCESS have different processes for tracking commitments and obligations. Base supply, with its interface with the accounting and finance system, tracks the expenditure of Air Force Stock Fund purchases.

Regardless of how much money is available in the budget, Base Supply requires the opening of an account called the Project Fund Management Record (PFMR). Funds are added to the account by filling out an AF Form 1269 load sheet for the budget office. Facilities Maintenance supplies, Infrastructure Maintenance supplies, management cost centers supplies, environmental supplies (EC and DERA, each), ground fuel, individual equipment, and military family housing appliances are examples of PFMRs.

The three-digit PFMR code differs from base to base. PFMRs relating to cost center each have a set of organization codes (called orgs) and each PFMR/Org combination has an RCCC. Figure 36, PFMR Organizational, is the structure that tells the BQ system who to charge.

**Figure 36. PFMR Organization**



The three steps in the PFMR funding process are:

- Step 1 Set up a PFMR (for example, \$50K). EEIC 609 money is identified as available; but, no money is moved to commitment or obligation.
- Step 2 Order supplies (for example, \$20K). An Accrued Expenditure Paid (AEP) is recorded in EEIC 609. In the example, this would leave a balance of \$30K.
- Step 3 When the PFMR is zero, more money must be put into the PFMR to allow continued spending.

Through built-in controls and system feedback, the supply fund status of the base supply system can be monitored. Funds control in the supply system consists of not allowing someone to spend more money than is available in a PFMR. To increase the PFMR target, a load sheet is required. The system will allow organizations within the PFMR to spend more than they have, if PFMR money available.

The D11, printed daily by Base Supply, provides feedback on PFMRs. It gives the target, obligations, memo due-outs, and balances for each PFMR. Additionally, within each PFMR, each org target, obligations, memo due-outs and balances are given. Figure 37 is a sample D11.

Figure 37. Sample D11

29 SEP 87 2300 01 PFMR/OCCR RECONCILIATION (D11) GV969/87Z430 7272 7272 PAGE 8

PFMR 529 MANAGER COLU 07272

OCCR RCCC DCLU	FUND TARGET	CFY	1ST PFY	2ND PFY	3RD PFY	SUCC M
901 314480 07272		\$1,029,000.00	\$ .00	\$ .00	\$ .00	\$ .00
	OBLIG D/O					
	SUPPLIES	\$30,122.52	\$977.72	\$618.46	\$ .00	\$ .00
	EQUIPMENT	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00
	NET ISSUES					
	SUPPLIES	\$273,934.88	\$15,126.63	\$288.49	\$ .00	\$ .00
	EQUIPMENT	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00
	AVAILABLE BAL	\$724,942.60	\$16,104.35-	\$906.95-	\$ .00	\$ .00
	UNOBLIG D/O					
	SUPPLIES	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00
	EQUIPMENT	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00
902 314480 07272		\$2,229.00	\$ .00	\$ .00	\$ .00	\$ .00
	OBLIG D/O					
	SUPPLIES	\$71,954.63	\$11,126.88	\$9,142.28	\$ .00	\$49.72
	EQUIPMENT	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00
	NET ISSUES					
	SUPPLIES	\$648,381.47	\$64,128.06	\$506.39	\$ .00	\$ .00
	EQUIPMENT	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00
	AVAILABLE BAL	\$718,107.10-	\$75,254.94-	\$9,648.67-	\$ .00	\$ .00
	UNOBLIG D/O					
	SUPPLIES	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00
	EQUIPMENT	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00

**DRAFT - NOT FOR IMPLEMENTATION OR COMPLIANCE**

**WORKING IN THE RESOURCES FLIGHT**

**Figure 37. Sample D11 (Cont.)**

29 SEP 87	2300 01 PFMR/OCCR RECONCILIATION (D11)	GV969/87Z430 7272 7272	PAGE 8				
	PFMR 529 MANAGER	COLU 07272					
OCCR RCCC DCLU		CFY	1ST PFY	2ND PFY	3RD PFY	SUCC M	
OCCR TOTALS	FUND TARGET	\$1,031,229.00	\$ .00	\$ .00	\$ .00	\$ .00	
	OBLIG D/O						
	SUPPLIES	\$102,077.15	\$12,104.60	\$9,760.74	\$ .00	\$49.00	
	EQUIPMENT	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00	
	NET ISSUES						
	SUPPLIES	\$914,316.35	\$79,254.69	\$794.88	\$ .00	\$ .00	
	EQUIPMENT	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00	
	AVAILABLE BAL	\$14,835.50	\$91,359.29-	\$10,555.62-	\$ .00	\$ .00	
	UNOBLIG D/O						
	SUPPLIES	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00	
	EQUIPMENT	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00	
902 314480 07272	FUND TARGET	\$1,031,229.00	\$ .00	\$ .00	\$ .00	\$ .00	
	OBLIG D/O						
	SUPPLIES	\$102,077.15	\$12,104.60	\$9,760.74	\$ .00	\$49.72	
	EQUIPMENT	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00	
	NET ISSUES						
	SUPPLIES	\$914,316.35	\$79,254.69	\$794.88	\$ .00	\$ .00	
	EQUIPMENT	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00	
	AVAILABLE BAL	\$14,835.50	\$91,359.29-	\$10,555.62-	\$ .00	\$ .00	
	UNOBLIG D/O						
	SUPPLIES	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00	
	EQUIPMENT	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00	
DIFFERENCE	FUND TARGET	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00	
	OBLIG D/O						
	SUPPLIES	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00	

29 SEP 87 2300 01 PFMR/OCCR RECONCILIATION (D11) GV969/87Z430 7272 7272 PAGE 9

	PFMR 529 MANAGER	COLU 07272					
	EQUIPMENT	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00	
	NET ISSUES						
	SUPPLIES	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00	
	EQUIPMENT	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00	
	AVAILABLE BAL	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00	



Figure 37. Sample D11 (Cont.)

UNOBLIG D/O					
SUPPLIES	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00
EQUIPMENT	\$ .00	\$ .00	\$ .00	\$ .00	\$ .00

AVERAGE DAILY EXPENDITURE - \$2,792.28 DAYS OF DOLLAR SUPPORT REMAINING \*\*\*\*\*5

Notes:

1. PFMR given at top.
2. OCCR is organization cost center record.
3. RCCC tells which cost center to be charged
4. Fund Target is the money loaded to the PFMR (or org) fiscal year-to-date.
5. Obligated D/O is due out items (items not yet received) but are on order and money is obligated.
6. Net Issues are items issued and money is obligated.
7. Available Balance is how much money is left for that org.
8. Unobligated D/O is memo due out items (items not yet firmed) and money is not yet obligated.

The status of each PFMR should be monitored monthly to ensure the shops are receiving the required feedback to help them monitor funds status. If PFMRs are not maintained with sufficient funds, this will add to the material lead time. Operations Flight must then wait for Financial Management to load more funds against the PFMR.

The base supply system allows the establishment of unfunded requirements for base supply items. This is done by establishing a materiel requirement in a memo due-out or memo status and firming up the memo due-out when funds become available. This also allows the paperwork to be done and the requirement established ahead of time. This is very useful in executing year-end funds. Funds are not obligated until the memo is firmed.

#### **20.4 CEMAS Funding Process**

CEMAS is used to manage and track funds in GOCESS and COCESS. Like the base supply system, CEMAS requires an account to be established to allow the expenditure of funds. Under CEMAS, however, funds are actually set aside in the BQ system through a commitment to open this account. The process works a little differently for the GOCESS and COCESS environments.

In a GOCESS environment, CEMAS identifies material requirements to base contracting for eventual purchase. To set up funds for GOCESS, Financial Management must prepare an AF Form 616, Fund Cite Authorization (FCA), to issue to contracting. Establishing an FCA:

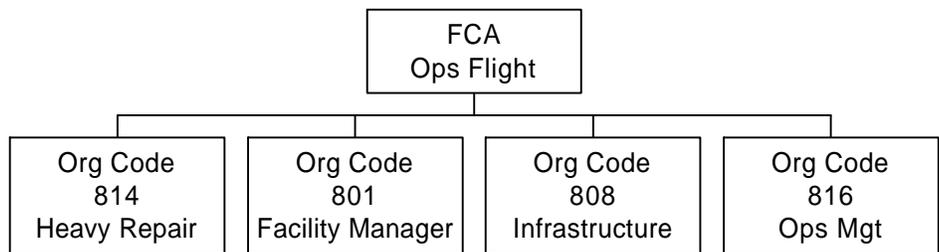
1. Sets up a commitment in the BQ system, reserving funds to purchase materials (not to exceed the amount on the 616) through GOCESS.
2. Gives contracting the authority to use Civil Engineer funds for local purchases.

The frequency in setting up an FCA is an important consideration. An AF Form 616 gives authority to obligate funds for a specific time period. For that reason, FCAs expire and an expiration date must be set. Because an FCA sets up a commitment, too much money shouldn't be committed for too long a period of time. Usually, FCAs are set for a month or a quarter. FCAs should probably be set up each quarter for the first three quarters and monthly for the last quarter of the year. This prevents tying up funds in commitments at

the end of the fiscal year, causing unnecessary fall-out funds.

CEMAS has an automated funds tracking system to help manage FCAs. Financial management should enter the CEMAS funding screen and load money to the FCA. This will set up the FCA fund target. FCAs use the same set of orgs as PFMRs (shown in Figure 38, OA Organization) Material Acquisition personnel (or Financial Management) should spread the money throughout the orgs using their best judgment.

**Figure 38. OA Organization**



The WIMS administrator determines how frequently the CEMAS system interfaces, between one and ten times daily, with the Base Contracting Automated System (BCAS). Information is sent on material requirements (orders) and award status is sent in return.

Figure 39, CEMAS FCA Status Screen, is a representation of the award status.

**Figure 39. CEMAS FCA Status Screen**

```

FUND CITE AUTHORIZATION AND ORGANIZATION RECORD Ctl Instl FNWZ
RC Number..... 4B
Fund Area / Code.... 30 30
OA Number..... 94319          PF5 - Next Record
Expiration Date..... 4273      PF7 - View More ORGS
OA Actual Balance.... 79917.20 PF9 - Update ORG Targets
OA Act % Remaining... 99.8     PF15 - Help    PF16 - Exit
Funds Cite..... 573 3400 303 7822 4B4400 01 61930 663000
Fund Cite Description O&M
*****ORGANIZATION DATA*****
ORG      TARGET      OBLIGATED      COMMITTED      MEMO-COMM      BALANCE      %USED
900      38500.00      .00      13818.78      .00      24681.22      35.9
902      .00      .00      .00      .00      .00      0.0
907      .00      .00      .00      .00      .00      0.0
915      4500.00      .00      4303.50      .00      196.50      95.7
917      .00      .00      .00      .00      .00      0.0
924      23000.00      .00      12381.12      .00      10618.88      53.9
TOT      80000.00      82.80      40920.91      .00      38996.29      51.3
*****OBLIGATION AUTHORITY DATA*****
80000.00      82.80      40920.91      .00
RESERVE AMT/PCT  DEOBLIGATED AMT  TRANSPORT AMT  ESTIMATED OA AMT/PCT  USED
38990.00  48      .00      .00      6.29  99.9
PF29 - Documentation
mfunudsf-2
  
```

The process money flow is shown in Table 27.

In a COCESS environment, CEMAS identifies material requirements to the COCESS contractor. To set up funds for COCESS, Financial Management must prepare an AF Form 9 Purchase Request (processed through finance). This sets up an FCA and

1. Sets up a commitment in the BQ system, reserving funds to purchase materials (not to exceed the amount on the Form 9) through COCESS.
2. Provides the authority to order materials through the contractor; i.e., write delivery orders against the COCESS contract.

**Table 28. Process Money Flow, GOCESS**

<b>GOCESS Action</b>	<b>Funds (CEMAS)</b>	<b>Funds (BQ)</b>
Financial Management sets up FCA expiration date for GOCESS purchases	FCA Target must be updated to reflect FCA amount	FCA amount entered as a commitment in BQ under EEIC 61930
Craftsman builds bill of materials (BOM) for specified work order and org; CEMAS identifies materials that must be ordered	Funds become memo-committed in the CEMAS	No action
Material Acquisition firms the BOM	Funds move to committed in CEMAS system	No action
Contracting awards contract (makes purchase)	Funds move to obligated	No action
Contracting sends report to finance detailing awards made for day	No action	Funds move to UOO (obligated)
Material Acquisition receives material and sends receiving report to finance	No action	Funds move to AEU (obligated)
Finance pays bill	No action	Funds move to AEP (obligated)
FCA expires end of month/quarter	Obligations change to zero, commitments remain	Left over commitments return to balance
Financial Management sets up new FCA; amount = requirement for next month/quarter <b>plus</b> leftover CEMAS commitments from last month/quarter	FCA target updated to reflect FCA amount and expiration date	FCA amount entered as commitment in BQ
Process continues with material purchases...	...	...

Even though the Form 9 does not usually expire, CEMAS requires an expiration date to be entered. Monthly or quarterly is usually acceptable.

CEMAS has an automated funds tracking system to help manage FCAs. Financial management should enter the CEMAS funding screen and load money to the FCA. This will set up the FCA fund target. FCAs use the same set of orgs as PFMRS use. The structure is shown in Figure 39. Material Acquisition personnel (or financial management) should spread the money throughout the orgs using their best judgment.

When dealing with a contractor, the BCAS interface is not critical to the process; however, it can still be used for items the contractor cannot permit.

This flow of funds is described in Table 28, Process Money Flow, COCESS.

**Table 29. Process Money Flow, COCESS**

<b>COCESS Action</b>	<b>Funds (CEMAS)</b>	<b>Funds (BQ)</b>
Financial Management sets up FCA expiration date for COCESS purchases	FCA target must be updated to reflect FCA amount	FCA amount entered as commitment in BQ under EEIC 61910
Craftsman builds BOM for specified work order and org; CEMAS identifies materials to be ordered	No action	No action
Material Acquisition firms BOM	Funds move to committed in CEMAS system	No action
Contractor takes material requirement (order)	No action	No action
Contractor delivers materials to Material Acquisition	Funds move to obligated in CEMAS	Funds move to UOO (obligated)
Contractor bills government	No action	Funds move to AEU (obligated)
Finance pays bill	No action	Funds move to AEP (obligated)
FCA expires end of month/quarter	Obligations change to zero, commitments remain	Left over commitments return to balance
Financial Management sets up a new FCA; amount = requirement for next month/quarter <b>plus</b> leftover CEMAS commitments from	FCA target updated to reflect FCA amount and expiration date	FCA amount entered as commitment in BQ

last month/quarter		
Process continues with material purchases...	...	...

There is a slight difference between GOCESS and COCESS funding processes. In GOCESS, an obligation is recorded upon awarding (ordering) materials; usually, over the phone. In COCESS, funds are not obligated until delivery of materials.

Although CEMAS OAs are structured as PFMRs in base supply, the funds control works a little differently. The system's controls and receive feedback are used in different ways.

Currently, CEMAS will not allow overspending the OA **and** an org target. If an org needs additional funds, they may be taken from another by Material Acquisition. If more money is needed on an OA, Form 616 for GOCESS or the Form 9 for COCESS must be appended.

Although CEMAS produces a daily summary of the fund status of OAs, it's easier to enter the OA funding screen and review the data real time.

The funding screen should be checked periodically to ensure the Operations Flight is liquid (has funds from the budget loaded to purchase supplies). Shop foremen should be educated on how to review the funding screen so they can keep track of their own funds status, if desired.

**20.5 P2T Material Distribution**

The P2T material distribution makes material funding documents simpler, Yet detailed cost information for cost centers and program elements is still provided.

Both the PFMRs and FCAs require coding of some sort, whether in the supply system or on a funding document. Each organization cost center record (OCCR or org) in a PFMR must have an RCCC identified. All Civil Engineer orgs should contain the cost center XX4480, Undistributed Materiel, not the cost center the org represents. The AF Form 616 or the AF Form 9 are used in GOCESS and COCESS environments, respectively.

In the fund cite block on AF Form 616, the cost center XX4480, Undistributed Materiel should be used in addition to EEIC 61930. In the fund cite block on AF Form 9, the cost center XX4480, Undistributed Materiel should be used in addition to EEIC 61910.

Any materiel purchases (EEIC 6XX) processed on a Form 9, but not through GOCESS/COCESS, need to be identified to Material Acquisition, so they can enter the transaction into CEMAS using the Non-CEMAS Material transaction. This will create a material transaction in RCCC XX4480 for the P2T procedure to process. By using these procedures for coding, all material transactions appear in RCCC XX4480. (See Table 29, CEMAS P2T Coding)

The CEMAS P2T process analyzes all material transactions and decides where the costs should actually appear. P2T creates a weekly tape with the correct distribution of costs to the appropriate RCCCs for processing on the BQ system. Summarized, the P2T process is:

1. examine each material transaction;
2. create a credit transaction (negative obligation) for RCCC XX4480 for the amount of each transaction, and
3. create a debit transaction (obligation) for the appropriate cost center using the rules in Table 29.

**Table 30. CEMAS P2T Coding**

<b>Cost Center</b>	<b>Shop Code</b>	<b>LUC is</b>	<b>Cost Distributed to RCCC</b>	<b>Cost Center</b>	<b>Shop Code</b>	<b>LUC</b>	<b>Cost Distributed to RCCC</b>
400	CI		XX4400	425	FD		XX4425
401	SQ		XX4401	426	OP or RU		XX4426
402	AO		XX4402	427	TL		XX4427
403	IO		XX4403		LG		XX4438
404	AZ		XX4404		RH		XX4439
405	AY		XX4405	458	RP		XX4458
406	HF		XX4406	480			XX4480
407	HB		XX4407			20	XX4481
408	HC		XX4408			19	XX4482
411	FM		XX4411			12	XX4483
412	FR		XX4412			11	XX4484
413	FS		XX4413			14 or 16	XX4485
416	EG		XX4416			15 or	XX4486

						18	
417	ER		XX4417	459	SH		XX4487
418	EX		XX4418	Others			XX4488
419	EM		XX4419	Other RPS			XX4489

P2T serves several useful purposes. Only one RCCC is required for FCAs. This means only one AF Form 616 or Form 9, not one for each cost center. Sometimes a cost center may perform work related to different PECs. P2T places the material costs in the correct PEC. Finally, P2T provides historical data on output (product and service) supply costs; information on how much material was used and for what it was used. P2T accomplishes this using the XX448X series of RCCCs shown in Table 30.

Two of the common problems of P2T, along with possible solutions, are provided in Table 31.

**Table 31. XX448X Series of RCCCs**

<b>RCCC</b>	<b>Description</b>	<b>PEC</b>
XX4481	Prime Beef Work Orders	XXX78
XX4482	Operation of Utilities	XXX79
XX4483	Emergency Direct Scheduled Work	XXX78
XX4484	Recurring Work Program	XXX78
XX4485	Direct Scheduled Work (non- Emergency)	XXX78
XX4486	Programmed Work Orders	XXX78
XX4487	Self-Help	XXX78
XX4488	Other Material	XXX78
XX4489	Other RPS Matr'l	XXX79

**Table 32. P2T Common Problems and Their Solutions**

<b>PROBLEM</b>	<b>ANALYSIS</b>	<b>SOLUTION</b>
Large negative obligations accumulate in RCC XX4480 each month.	One or all of PFMRs, OAs, and non-CEMAS material funding documents not using RCC XX4480, resulting in negative obligations in XX4480.	Use XX4480 or material funding documents.
Large obligations accumulate in XX4480, but never move out to the distributed cost centers.	P2T is not being processed on WIMS.	Check with system administrator.
	The P2T tape is not being delivered to finance.	Check with system administrator.
	The P2T tape is not being processed at finance.	Check with finance.
	P2T transactions are rejected at finance as they are processed into BQ.	Check with system administration and finance to ensure parameters are set correctly (e.g., fund code, OBAN)

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## Chapter 21 Utilities and Utility Sales Management

Utility costs are usually a very large part of the Civil Engineer budget and occur regularly. They are most often treated as a fixed cost or a must pay. There is no choice as to whether or not utilities are purchased. The only way to economize utility costs is through energy conservation programs and through the prompt identification and billing of reimbursable utility costs.

Utilities are defined as Air Force-generated, -produced, or -purchased electricity, natural or manufactured gas, potable or non-potable water, domestic sewage, industrial wastewater, and thermal energy (chilled water, hot water, high temperature hot water and steam). Telephone communications services and cable television are not utilities. Sometimes, refuse collection and disposal and snow removal are considered utilities.

### 21.1 Base Utility Responsibilities

If not subject to the Service Contract Act of 1965 (both), The Civil Engineer, Headquarters US Air Force (HQ USAF/ILE) develops policy, oversees execution and advocates for resources for utility services. Headquarters Air Force Civil Engineer Support Agency (HQ AF-CESA/CESE) serves as the Air Force point of contact (POC) for the management of utility rates, legal community liaison, and expert services. The MAJCOMs assist installations in utility management and report rate changes to AF-CESA/CESE. The individual responsibilities of installation commander, base contracting officer, base staff judge advocate, and the Base Civil Engineer at installations follow.

The installation commander, or appointed representative, is responsible for the acquisition of utilities at lowest cost to the government and the development of a base utility management team. The management team ensures proper coordination with the legal office, Base Civil Engineer, and contracting. The Operational, or Base, Contracting Officer is responsible for the negotiation, execution and administration of utilities contracts and the request for an audit by the Defense Contract Audit Agency of non-regulated utility suppliers. The base legal office is responsible for the litigation of utility proceedings and the review of utility contracts for compliance with the law.

The base Civil Engineer is responsible for designating focal points for engineering, operations, real property, and financial management. These individuals, along with those listed below, comprise the CE management team.

The base utility engineer is the technical focal point for utility issues. This individual can work in the Engineering Flight or the Maintenance Engineering Element of the Operations Flight. The utility engineer is responsible for the review and certification of invoices for correct charges, computing utility sales rates, as required, and the maintenance of the utility contract brochure for each contract which contains utility contracts and billings/readings for last 12 months (among many other things).

The Operations Flight is responsible for reading meters and providing readings to the utility engineer.

Financial management is not responsible for the overall utility program. It is however, responsible for many important utility matters including the consolidation of invoices and the forwarding to contracting and accounting and finance, the preparation of monthly utility reimbursement estimates, the review and identification of reimbursable customers, and any other duties as assigned by the BCE.

## **21.2 Utility Invoices**

Utility invoices are mailed directly to the utility engineer. Those that are not should be forwarded to the utility engineer, immediately. To avoid penalties, the utility engineer reviews the invoices in a timely manner. Typical items reviewed include the accuracy of the reading on the bill, the accuracy of the demand charge and the power factor, and that demand and consumption rates are properly applied.

The utility engineer also checks if budgets are modified to reflect increased usage/price changes.

The invoice is signed with statement “I certify that services covered by this invoice have been received and amount is proper for payment.”

## **21.3 Rate Increases**

Rate change requests are processed differently, depending on whether the supplier is subject to a regulatory body.

For self-regulated suppliers, rate increases shall not be recognized until parties negotiate and payments are made at old rates until an agreement is reached. Funds are committed to cover difference in case of retroactive payment.

For regulated suppliers, the base utility engineer notifies MAJCOM and financial management. Financial management sends an updated estimate to A&F.

#### **21.4 Supply and Sale of Utilities**

As discussed under refunds and reimbursements, utility bills are often paid with O&M funds. Customers are then required to reimburse for utilities.

There are general policies that exist concerning the sale of utilities. These include:

- a MAJCOM waiver to sell to non-federal parties off base;
- the installation of the meter, unless the cost to install exceeds the annual revenue expected;
- if the customer doesn't have a meter; the utility engineer must update the estimate before 30 Nov each year;
- family housing should be metered at the power entry point to the housing area; and
- BCE can allow customers to call in their own readings to Operations Flight.

All arrangements for the sale of utilities to reimbursable customers should be made in writing through use of a utility sales agreement or sales contract. Utility sales contracts are for use with non-Federal organizations. The form used for accomplishing a sales contract is AF Form 3553. The sales rate exhibit (AF Form 3555) should be attached as Exhibit B in the sales contract.

Utility sales agreements are for use with DoD and federal organizations. The form used for accomplishing a sales agreement is AF Form 3554. The sales rate exhibit (AF Form 3555) should be attached as Exhibit A in the sales agreement. The utility sales agreement should be attached to the DD Form 1144 (Inter-service Support Agreement).

Real Estate is point of contact for all support agreements.

The most critical issues for financial management concerning utility sales is who pays for utilities and how much they pay.

The utilities sales rates are calculated using a number of cost components based on cost accounting data. The sales rates should be recalculated each year by the utility engineer or if the purchase cost changes. The rates should become effective on 1 Dec. It's good business practice for the base Civil Engineer to notify reimbursable customers of new sales rates as soon as they are calculated.

The sales rate components consist of the basic cost, distribution line losses or gains, system O&M costs, other cost, military labor cost, capitalized cost, and administrative overhead. In computing the sales rate, all of these components must be calculated.

Basic costs include price per unit of service, if the utility is purchased; O&M cost of plant if base produced; and the total average cost of a combination of purchased and produced (total cost/consumption). Table 32 shows the account codes/EEICs to be included for each utility.

To determine distribution line losses or gains, estimate the loss in the Air Force transmission and distribution systems to be ten percent. Gains in the Air Force collection system are also estimated to be ten percent. The cost is increased or decreased by the appropriate percentage.

System O&M costs are determined by the Air Force O&M costs for transmission, distribution, and collection of utilities. This is divided by the unit of service. Upgrades to capacity or that add value to the system are not contained in this component.

Other utility costs include the cost of utilities used to produce or distribute other utilities, such as electricity to run water pumps.

Military labor costs are calculated separately because many customers do not reimburse these costs.

The capitalized charges category is used to recover improvements or upgrades to utility production and distribu-

tion systems. They are calculated as ten percent of the total capitalized charges, indicated in the real property records for plants and distribution systems divided by unit consumption.

The administrative overhead is calculated as three percent of total unit costs for the components above.

Table 33 summarizes which customers are responsible for paying these costs and for what costs that each is responsible.

Each month, an estimate for utilities in the BQ system (UOO) must be done to ensure there are sufficient funds to pay the bills at the end of the month. Even though the estimate is important; it is rarely exact. A letter to finance should state an amount based on estimating quantities and multiplying by price. Several of the methods, presented in the chapter on Budget can be used to derive an estimate. These include moving average, smoothing, using previous years' data, using previous months' data, and monitoring estimates.

**Table 33. Utility Component Account Codes/EEICs**

<i>Type Service</i>	<i>Basic Costs</i>			<i>System O&amp;M Costs</i>	
	<i>BCE Cost Report</i>	<i>Allotmt Ledger (MFH)</i>		<i>BCE Cost Report</i>	<i>Allotmt Ledger (MFH)</i>
	<i>Acct Codes</i>	<i>Acct Codes</i>	<i>EEICs</i>	<i>Acct Codes</i>	<i>Acct Codes</i>
Air conditioning	28000			53070	
Electricity	21020,26000,53010	72811	48020	53010	72271
Water	21010,27500	72811	48010	53060	72271
Sewage	21040,27000	72811	48040	53040	72271
Industrial wastewater	27100			53050	
Gas	21030,23040	72811	48030	53035	72271
Steam or high temp water	21050,22000,22100,23000	72811	48050	53020,53030	72271
Refuse collection/disposal	42000			51070	

**Table 34. Reimbursable Customers**

Customer	Basic Cost	Line Loss or Gain	System O&M	Other Util Cost	Military Labor	Capital Charges	Admin Overhead
Air Force facilities operated using appropriated funds	N	N	N	N	N	N	N
Civil Air Patrol & FAA	N	N	N	N	N	N	N
Housing occupants, lodging, & TLFs	N	N	N	N	N	N	N
Category A & B NAF activities	N	N	N	N	N	N	N
Category C NAF activities (over-seas/remote & isolated)	N	N	N	N	N	N	N
Credit unions occupying free space	N	N	N	N	N	N	N
Non-self-sustaining banks	N	N	N	N	N	N	N
American National Red Cross	N	N	N	N	N	N	N
Air Force Aid Society	N	N	N	N	N	N	N
USO	N	N	N	N	N	N	N
Labor organizations	N	N	N	N	N	N	N
Contractors (if utilities are part of contract)	N	N	N	N	N	N	N
Category C NAF activities (CONUS)	Y	Y	Y	Y	N	N	N
Commissary facilities	Y	Y	Y	Y	N	N	N
Other services	Y	Y	Y	Y	N	N	N
Air National Guard	Y	Y	Y	Y	N	N	N
MFH appropriation	Y	Y	Y	Y	N	N	N
Medical facilities	Y	Y	Y	Y	N	N	N
DBOF activities	Y	Y	Y	Y	N	N	N
Environmental compliance PEC	Y	Y	Y	Y	N	N	N
Non-DoD federal (post office)	Y	Y	Y	Y	Y	N	N
Public schools & colleges*	Y	Y	Y	Y	Y	Y	Y
Mobile home occupants*	Y	Y	Y	Y	Y	Y	Y
Wherry housing (Section 810. projects)*	Y	Y	Y	Y	Y	Y	Y
Credit unions*	Y	Y	Y	Y	Y	Y	Y
Other non-federal*	Y	Y	Y	Y	Y	Y	Y
*can be charged local prevailing rate if it's higher							

Utility reimbursement methods are required for both purchased and base-produced utilities. Three common methods exist for collecting reimbursements for purchased utilities: manual calculation and a letter to finance, manual calcula-

tion and transfer to reimbursable work orders, and direct citation of utility expenses.

Most bases use a letter to finance. At the end of each month, the sales rate is used to calculate each customer's utility charge. This information, including: customer, sales code, and EEICs can be put on a letter to finance where they will process the reimbursements.

Some bases choose to write reimbursable work orders and then use the cost transfer program (UXFERCST) in WIMS. OTHER costs are moved from the base-purchased utilities work order to the reimbursable work orders. Utility reimbursements will then appear on the schedule of Reimbursements and Refunds.

Some customers who are required to pay utilities may have meters installed and receive utility bills directly from the utility supplier. Family housing is almost always metered separately. Their expenses are direct cited.

Two common methods exist for collecting reimbursements for base-produced utilities: manual calculation and letter to finance and manual calculation and transfer to reimbursable work orders.

At the end of each month, the sales rate is used to calculate each customer's utility charge. This information, including: customer, sales code, and EEICs can be put on a letter to finance where they will process the reimbursements.

Some bases choose to write reimbursable work orders and then use the base produced utility cost transfer program (UBPU) in WIMS. Other costs are moved from the base-produced utilities work orders to the reimbursable work orders. Then, utility reimbursements will appear on the schedule of Reimbursements and Refunds.

To provide customers with detail utility costs for the building they occupy and the service provided, a customer-friendly spreadsheet can be developed. Sent to your customers monthly as a courtesy, it provides good information and long phone calls explaining charges may be prevented.

Many people are involved in the purchase and resale of utilities. To ensure the best use of government funds and fair and equitable resale of utility services, everyone from all over the base must work together.

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## Chapter 22 O&M Support of Non-appropriated Fund Activities

Many morale, welfare and recreation (MWR) activities use non-appropriated funds to help support missions. NAF can also refer to any other money outside the appropriation system. There are many rules and limitations as to what activities can be supported by Appropriated Funds (APFs) for particular services provides. Appropriated fund support of MWR activities must be reported to finance on a monthly basis using an AF Form 226. This chapter provides information on support categories; remote and isolated locations; funding policy — construction, maintenance, repair; and reporting requirements.

### 22.1 MWR Support Categories

Three categories have been established, based on their contribution to the mission and their revenue-generating capability. The key to determining support authorized is the activity, not the facility. A single facility may have more than one type of activity contained in it. The three categories are:

1. Category A — mission sustaining,
2. Category B — basic community support, and
3. Category C — revenue generating

#### 22.1.1 *Category A — Mission Sustaining*

Category A activities are characterized as being absolutely essential to the military mission. They must be provided in all but the most extenuating circumstances. Consequently, they must be authorized maximum APF support. Category A activities have the least capacity to generate revenue. Some Category A activities are fitness centers; libraries; parks; recreation centers; intramural and unit-level sports; unit-level programs; and common support services, such as services resource management, executive control and command supervision (ECCS), procurement, MWR logistics, human resource office, marketing, and indirect support.

#### 22.1.2 *Category B — Basic Community Support*

Category B activities are closely related to Category A activities. They are, essentially, community support programs with the capacity to generate some NAF revenue. They may be provided substantial support from APFs. This category includes essential MWR activities, providing a fundamental core of the MWR programs at Air Force bases. Some Category B activities are automotive and arts and crafts skill development, a child development center, out-

door recreation, recreational swimming pools, sports (above intramural level), youth activities, bowling centers with 12 or fewer lanes, and marinas without resale or private boat berthing.

**22.1.3**    *Category C —  
Revenue  
Generating*

Category C activities have the highest capacity to generate revenue and are considered self-sustaining; capable of funding most expenses. Category C activities are considered desirable to the military community and make a major contribution to personnel recruitment and retention. Category C activities are not authorized direct APF support except for minor construction to correct health and safety deficiencies.

A Category C activity need not show a profit, only generates revenue. Some Category C activities are aero clubs, amusement machine centers, AAFES, bingo, bowling centers with more than 12 lanes, cabins and cottages, golf courses, paid-admission motion pictures, skating rinks, snack bars, military clubs, and MWR equipment rental.

In the case of Category C activities being collocated with Category A and B activities, the support authorized is based on the activity.

**22.2**    **Support for  
Remote and  
Isolated Locations**

Category C activities at approved remote and isolated locations are generally authorize Category B level APF support, except for aircraft and ship fuels; supplies consumed during resale; equipment and supplies for Class VI and AAFES; equipment for rent; and equipment used in providing a paid service such as pin setters and golf carts. Support is based on availability of APFs.

**22.3**    **Funding Policies —  
Construction,  
Maintenance, and  
Repair**

Although AFI 65-106 outlines many detailed policies; the general policy guidance, as it relates to the Civil Engineer, is given in Table 34, APF Support Policies Summary.

**Table 35. APF Support Policies Summary**

	<b>Category A</b>	<b>Category B</b>	<b>Category C</b>
Maintenance and Repair  Ornate plumbing fixtures Decorative lighting Resurface bowling lanes Floor covering Functionally-unique items	Total Support	Total Support	Exterior and structural work to maintain facility system Routine installation grounds maintenance (no golf courses) No <sup>1</sup> No <sup>1</sup> No <sup>1</sup> No <sup>1</sup> No <sup>1</sup>
Minor construction	Total support	No support <sup>1</sup>	No support <sup>1</sup>
Utilities  Other  Lodging TLF Child Care Environmental Compliance	See Chapter 21 and AFI-32-1061 <sup>2</sup> See AFI 65-106 <sup>3</sup> See AFI 65-106 See AFI 65-106 See AFI 65-106 See AFI 65-106		

<sup>1</sup>reimbursable

<sup>2</sup>AFI 32-1061

<sup>3</sup>AFI 65-1061

## **22.4 Reporting Requirements**

Requirements for RCS: HAF-MWRSA(Q)7503 (report of APF support to NAF activities) is given in DFAS-DE 7010.1R . Three different types of support (costs) exist, each having different reporting requirements. Those types are direct, indirect, and reimbursable. Direct support must be reported by bases. The cost elements include:

- military personnel, if greater than 25 percent;
- civilian personnel, if greater than 25 percent;
- PCS travel (military included in composite rates);
- TDY travel;
- transportation of goods;
- utilities;
- facility rents and leases;
- equipment maintenance;
- minor construction (and A&E costs);
- aircraft petroleum;

- ship POL;
- other supplies;
- equipment;
- capital expenditures;
- purchased services (custodial, linen, printing, computer systems, acquisition); and
- maintenance for MWR requirements.

Indirect costs are identified and reported by the Secretary of the Air Force (SAF/FMP). The cost elements include communications — electronic, Civil Engineer maintenance and repair, data automation; and refuse collection and disposal.

Any costs for which APFs receives reimbursement are not reported.

Because many NAF activities struggle to show a profit, it's important not to support these activities when they're not authorized APF support and support these activities when they are authorized APF support.

Pressure exists to bend and break these Congressionally-set rules. All actions should pass an auditor's review, along with a good, common sense review.

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## Chapter 23 General Officers' Quarters Reporting

With the increased emphasis on fiscal responsibility in the Federal Government, a quarterly General Officers' Quarters Cost Report must be compiled to prevent any abuses.

The purposes of the GOQ report is to dispel perceived abuses, prevent actual abuses, provide justification for high costs, solicit general officer cooperation in the operation and maintenance of quarters, and allow for Congressional oversight (Reference AFI 32-6003, *General Officer Quarters*).

The Congressional philosophy, "we want to see the costs," is forcing the services to micro-manage GOQs. As a result, USAF philosophy is full disclosure. Previous cost reports have been based on expensed accounting; which is, basically, when the bills are paid. New reports are funds management reports based on obligations from the allotment ledger.

The most important issue relating to GOQ management is cost limitations. The total of all maintenance and repair (M&R) obligations on each GOQ is limited to \$25,000 per fiscal year, unless specifically reported to and approved by Congress. The \$25,000 was effective for FY85 and future years. Prior approval is required to exceed this limit. Congress may reduce or deny any requests in excess of \$25,000. Prior approval is also required when the total M&R costs will exceed 125 percent or \$5,000, whichever is less of the previously approved amount in the budget submittal or as requested out of cycle. All requests to exceed the cost limit will be signed by the MAJCOM Deputy DCS or higher and forwarded to HQ USAF/CE.

The \$15,000 limit for major M&R no longer applies to GOQs. However, all other MFH is governed by the \$15,000 limitation. Rules governing improvements remain the same. \$3000 minor alterations/improvements may be done with maintenance money (P722). This applies towards the \$25,000 limitation because maintenance funds are used. Prior Congressional notification is required for any improvement project exceeding \$3000. The statutory limit of \$50,000 applies; but, modified by area cost factor.

The following guidance exists in the preparation of the GOQ cost reports.

A separate report for each family quarters occupied by a general officer during the reporting period should be prepared quarterly for review by the general officer occupant. This can also be done monthly, or as requested.

The report that substantiates all requests for prior approval to exceed the \$25,000 Congressional limit or other approved limit must be submitted.

The following costs must be included in the report.

**Maintenance and Repair Obligations** — Includes obligations for all M&R, major and minor, on all structures and grounds intended for exclusive use of the general officer. There are no exceptions or exclusions. The total dwelling unit O&M obligations reportable each fiscal year cannot exceed \$25,000 without prior congressional approval. This is the sum of all maintenance repair and minor alterations for the fiscal year.

**Improvement Work** — This is all improvement work beyond the MAJCOM approval authority and using P-713 funds.

**Total projected/actual quarters cost this fiscal year** — Is the total O&M costs and improvements costs. This total is not subject to any specific limits.

**SHIP** — Show program as indicated.

**23.1 General Officer  
Quarters Cost  
Report (PCN  
SF100-453)**

WIMS generates an automated GOQ cost report. If the WIMS work order system is being used correctly, the GOQ report can be produced at the stroke of a computer key. However, some bases don't use the report or have to do changes by hand.

Costs directly chargeable to GOQ units are automatically identified by a GOQ indicator in the work order. This report reflects all costs incurred during the fiscal year for maintenance of housing units occupied by general officers. A separate report is generated for each GOQ.

Maintenance and repair includes all costs to the dwelling, grounds, and all structures on the grounds for the exclusive use of the general officer, family, and guests. Costs to the dwelling include service calls, routine M&R, minor alterations/improvements, and major project work, whether in-house or by contract.

Other chargeable costs include M&R to structures such as garages, storage buildings, shelters, and other structures; utility repairs where identifiable to the GOQ; maintenance and improvement of walks, driveways, and other paved areas for the exclusive use of the general officer, family, and guests; and maintenance and improvement of all grounds. The grounds include the general officer's traditional yard. Sometimes, the yard is halfway to the next quarters; sometimes, 50 feet from the house; or sometimes to the hedge or fence (regardless of distance from the house). Grounds should be defined and any changes to what has been done must be justified.

**23.2 DD Form 2405,  
General or Flag  
Officer Quarters  
Management  
Report**

The actual form, DD Form 2405, is used to report GOQ costs each quarter. This report is intended to collect and report data for family housing occupied by general or flag officers. A separate report will be prepared for each set of family quarters occupied by general or flag officers for at least one day in the reporting period. The report will include all costs incurred for the quarters during the fiscal year, even if it has not been assigned to a general or flag officer for the entire year.

The report is dated the end of the fiscal year and will be submitted by November 15, following the end of the fiscal year.

Two copies of the report will be submitted by the Air Force to the Deputy Assistant Secretary of Defense (Installations). Bases submit their reports to their MAJCOM.

**23.3 Responsibilities**

An issue of great concern at base level is the different responsibilities involved in gathering costs, preparing the report, coordination with occupants and final submission.

The housing officer is responsible for:

- knowing what work is being accomplished in GOQs;

- verifying correct accounting of work by reviewing GOQ Cost Report, monthly;
- reviewing DD Form 2405, GFO Quarters Management Report;
- understanding the contents of GOQ analysis and being able to explain each of the costs listed (the BCE normally briefs the occupant on the cost analysis).
- full disclosure; and
- signing the Housing report.

The financial manager:

- collects and tracks costs,
- develops the Analysis and Management Report,
- coordinates with Housing on work requests, and
- briefs the BCE on costs when asked to do so.

The GOQ Reports are required by Congress and are very important to the USAF in the trustful relationship with Congress. Therefore, the effort should not be short changed and a battle over responsibilities should be avoided.

The form used to prepare a quarterly cost report is shown in Figure 40, Sample GOQ Report.

**Figure 40. Sample GOQ Report**

<b>QUARTERLY COST REPORT FOR GENERAL OFFICER QUARTERS</b>		
FY: _____	QUARTER: _____	REPORT DATE: _____
INSTALLATION: _____		QUARTERS NUMBER: _____
OCCUPANT: _____ ( Name & Rank )		POSITION: _____
<b>A. OPERATIONS COSTS:</b>	<b>THIS QTR</b>	<b>FY TOTAL</b>
1. ADMIN & MGMT (AC 721.11)	_____	_____
2. SERVICES (AC 721.21 & .29)	_____	_____
3. UTILITIES (AC 728.11 - .12)	_____	_____
4. LEASES (AC 723, 725)	_____	_____
5. FURNISHING (AC 721.41 - .42)	_____	_____
6. MISC (AC 721.51 & .53)	_____	_____
7. SUBTOTAL	_____	_____
<b>B. MAINT/REPAIR/MINOR ALTERATIONS:</b>		
1. MINOR/ROUTINE M&R (AC 722.62,.66-.67)	_____	_____
2. MAJOR M&R (AC 722.71,.96,724,726)	_____	_____
3. GROUNDS MAINTENANCE (AC 722.81)	_____	_____
4. MINOR ALTERATIONS (AC 722.91 - .92)	_____	_____
5. SUBTOTAL	_____	_____
6. CONGRESSIONALLY APPROVED M&R THRESHOLD IF DIFFERENT FROM \$25,000:	_____	_____
<b>C. TOTAL QUARTERS O&amp;M COST:</b>		
_____	_____	_____
<b>D. IMPROVEMENTS (AC 713):</b>		
_____	_____	_____
<b>CERTIFIED BY:</b>		
_____	HOUSING MANAGER	_____
_____	DATE	_____
_____	BASE CIVIL ENGINEER	_____
_____	DATE	_____
<b>REVIEWED BY:</b>		
_____	OCCUPANT	_____
_____	DATE	_____

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## Chapter 24 Contract Project Funds Management

Much of the Civil Engineer's facility and infrastructure requirements are accomplished through contracts. The Engineering Flight usually manages maintenance, repair, minor construction, and construction requirements. These become a part of a **contract project**. A better understanding of the process of managing and executing contract project funds is gained by understanding the Engineering Flight's delivery process. Once these areas are understood, the funds process and financial management responsibilities can be discussed (for references, see AFI 32-1021, *Planning and Programming of Facility Construction Projects* and AFI 32-1022, *Nonappropriated Fund Facility Construction Projects*).

### 24.1 Engineering Delivery Process

The Engineering Flight's mission is to provide cradle-to-grave management for all projects accomplished by contract. This is accomplished through program development, comprehensive planning, design, and construction management.

All work requirements for the Civil Engineer should enter the squadron through the zonal shop. This is the customer's Civil Engineer single point-of-contact. In reality, requirements may also enter the squadron through the installation or group commanders or from base committees or commissions.

Zonal maintenance must make a determination of whether the requirement can be filled using zone resources. If it can't, it's passed to the work requirements review board. The WRRB will decide if these requirements will be satisfied in-house or through a contract.

The engineering work flow goes through eight stages.

**Stage 1 — Requirement Identification.** Work requirements can come from both internal and external customers.

Internal customers are Civil Engineer personnel in Operations, Environmental, Housing, Fire Protection and Engineering Flights who can identify possible facility project requirements. CE is usually responsible for identifying infrastructure requirements. Facility requirements can also be identified because CE uses facilities.

The external customers are building users. They usually identify space, environment (air conditioning and heat), and aesthetic needs.

**Stage 2 — Required Definition.** The Engineering Flight is responsible for further defining the requirement, including determining the validity of the requirement and classifying the work (i.e., maintenance, repair, minor construction).

**Stage 3 — Program Development.** The Engineering Flight is also responsible for developing the program, a task usually performed by contract project programmers. They determine the approval required and the project's relative priority.

In determining the approval, programmers determine the programming avenue (what kind of money to use) and required approval based on cost, work class, and urgency. When a project is approved, it is not necessarily funded; availability of funds is independent of approval. Approved projects are normally given funds in priority order.

The base has two corporate bodies, the Facilities Working Group and the Base Facilities Board, who prioritize facility project requirements. They are very similar to the Financial Working Group and the Financial Management Board.

**Stage 4 — Design.** Once a firm program has been developed and approved, the project enters the design stage. Detailed specifications, drawings, and designs are developed.

The Engineering Flight uses either in-house personnel or an A-E firm to design contract projects: if performed in-house, the Engineering Flight personnel perform and review the design and then forward it, along with a Form 9 (Purchase Request) to contracting.

The Engineering Flight can also contract the design effort and then review the result.

The design process involves not only the design, but also a series of design reviews, whether performed in-house or by the A-E. The length of time needed for design reviews de-

depends on the method of design, the type of project, and experience factors. The typical time frame is 90 to 120 days.

Prior to final review, major design review are held at 30-percent, 60-percent, and, 90-percent completion.

**Stage 5 — Funding.** Funding can come from the MAJCOM or from local sources.

**Stage 6 — Contracting.** The contracting process is often difficult for the Civil Engineer. Engineering personnel, usually, don't understand the contract processes or don't speak the same language. An effort should be made to take the time to understand the contracting process and develop a strong and constructive working relationship with the base contracting office.

The basic minimum requirements by contracting to advertise a project are a funded AF Form 9, a government cost estimate, specifications and drawings, and the bid schedule.

Contracting will decide on one of many methods of execution.

A firm fixed price contract (FFP) awards a lump sum, or a unit price, to the contractor for known requirements. The firm fixed price contract can also be awarded with an award fee based on subjective evaluation. The contractor has full risk in an FFP contract.

The invitation for bid (IFB) describes requirements clearly, accurately, and completely. This is usually done through sealed bidding and the award goes to the lowest responsive, responsible bidder. No discussions take place between the contractor and the government.

In a request for proposal (RFP), the government negotiates with contractors and evaluates the technical and cost proposals. After completion of discussions, the government requests best and final offers from contractors.

In an indefinite delivery/indefinite quantity (IDIQ) arrangement, the minimum and maximum quantities are known. The contractor is paid per unit and will always receive at least the minimum dollar amount, obligated at the time of

award. The ID requirements contract is based on a best estimate of the amount. An example of an ID requirements contract is COCESS. Funds are not obligated until work is performed. Some examples of IDIQ-type contracts are paving, roofing, painting, A-E contracts, and SABER.

The contracting process time takes about 60 to 120 days. Contracting doesn't always drag their feet; many of Contracting's steps in their process are required by law. Advertisement and negotiation can take time and, in many cases, the law says they must take time.

**Stage 7 — Construction Management.** Once a contract has been awarded, the Civil Engineer is responsible for the supervision and management of the contract. The construction management process involves site surveys, a pre-construction meeting, and construction inspection/surveillance.

**Stage 8 — Contractor Payments.** For projects costing more than \$25,000 and with a performance period of more than 60 days, the process begins with the contractor submitting a progress schedule; required within ten days after notice to proceed. The proposed work schedule is reviewed by the CE inspector and approved by the contracting officer (CO). A thorough review is very important. It is the basis upon which the contractor's progress is measured and commensurate payments are made on the contract.

Each month, separate forms (AF 3065) are prepared by both the contractor and the CE inspector to document work accomplished. At some locations, the contractor prepares his form and forwards it through the CE inspector to the CO.

The CO reviews the work accomplished, resolves any differences, and forwards an invoice to the finance office for payment to the contractor for the percentage of work accomplished against the contract.

In case of disagreements with the amount of work accomplished, the CO may withhold up to ten percent of the contract amount.

In summary, the steps in the process are:

Step 1 — Contract Progress Schedule (AF Form 3064),  
Step 2 — Contract Progress Report (AF Form 3065),  
Step 3 — approval by Contracting Officer, and  
Step 4 — monthly (progress) payments.

Changes to the contract frequently occur for even the smallest project. In many cases, these changes result in a better product for the customer. However, the task in Financial Management is to understand the cause of the changes and how the changes will be funded.

Modifications to contracts can occur for many reasons; i.e., because the user changes, there are design errors or omissions, or there are differing site conditions.

Funding of modifications depends on local procedures; however, the Engineering Flight should work with the Resources Flight to secure funds on AF Form 9 through local sources, MAJCOM, or the user.

The impact of the scope of the project and funding of modifications should be considered within scope of project (project FY funds) or beyond scope of project (current year funds).

**24.2 Funding Sources for Facility Projects**

Funds come from all areas of the Resource Management system, discussed earlier in this chapter. Table 35 summarizes some of these funding avenues.

**24.3 What Is Funded**

An important question to answer is what does the Civil Engineer fund in relation to facility projects. There are both direct and special costs associated with facility projects.

Direct project costs include design (EEIC 532) specifications and drawings and studies by an A&E, on-call or selected. In-house design is an unfunded cost. Other direct costs are construction with a valid contract; a firm fixed price based on lowest bid, responsiveness, and responsibility; and negotiated modifications (change orders) within scope (prior year funds) and beyond scope (current year funds). Special engineering projects are based comprehensive plans or engineering surveys.

**Table 36. Summary of Funding Sources for Facility Projects**

<p>Real Property Maintenance by Contract (RPMC)                  O&amp;M 13400 Appropriation</p> <p>MFH (7045/7040 Appropriation)</p> <p>Others</p>	<p>Maintenance (521)                  Repair (522)                  Renovation (523)                  Minor construction (529)                  New class of work (revitalization)</p> <p>Repair and minor alterations (P722)                  Improvements (P713)</p> <p>Environmental Compliance Program (ECP)                  Non-appropriated Funds (NAF)                  Defense Business Operations Fund (DBOF)</p> <p>Base Tenants</p> <p>Overseas Programs</p> <p>Special Programs</p>	<p>Operational missions                  DoD-dependent schools                  Defense Commissary Agency                  Army and Air Force Exchange Service                  Host-nation Funding                  NATO Infrastructure Program</p>
<p>MILCON                  Design (P313)                  Construction (P321)                  Urgent Minor Construction (P341)</p>	<p>Design and Planning                  New Construction                  Restoration/replacement                  Emergency Construction                  Contingency Construction</p>	

**24.4 Role of PCMS**

The Project by Contract Management System is the database of all existing and completed project requirements. The database is managed by the Engineer Flight and is critical to the funding of contract projects. MAJCOM will look at PCMS records when their funds are required. Most MAJCOMs now use the rule: “if it isn’t in PCMS, it isn’t.”

PCMS has many benefits, including giving visibility to the engineer effort, facilitating project tracking, giving everyone access to the same information, making project coordination easier, allowing submittal to higher headquarters, and acting as a vehicle for communicating with higher headquarters for project approval and funding.

As discussed in the Financial Planning section of this chapter, facility projects (EEIC 52X) are not budgeted. PCMS is kept current and the Major Command budgets for facility projects for the entire command. The MAJCOM uses PCMS data to develop the program, approve projects, fund projects, and track the execution of facility project funds.

The program is managed by fiscal year and by program type (MFH, NAF, MED, MCP). Submittal policies vary by MAJCOM. Projects are approved based on PCMS data and the DD Form 1391, the project data sheet. Project funding is not provided to the base until the project is ready to execute, that is, the project status is ready to advertise (RTA).

Commitment funds are controlled by specific project number and authorized by letter or message. A valid contract (award) is required to obligate funds. Obligated funds are sent to the base as an operating budget authority.

Wing commanders can elect to fund facility projects “out of hide,” provided the project is within their approval authority. They can use base funds to cover facility project requirements of special importance to the wing. Other base tenants often provide funds for facility projects.

MAJCOMs also use PCMS to track the execution of a facility project. Rules must be followed and approval authorities must not be exceeded.

**24.5 What is the Role of CE Financial Management**

The four critical roles of the financial manager in the facility process are advisor, coordinator, administrator, and educator.

As the advisor, Financial Management must help the Engineer Flight in developing the budget and working funding issues through the local board structure. As the coordinator, Financial Management must deal with various local funding sources and tenants, MAJCOM funding commitment letters

and messages, issuing funds citation on AF Form 9, and handling funding obligations for contract projects. As an administrator, Financial Management pays attention to funds management recordkeeping, including the AF Form 9 ledger (or the UPRF data file), interfacing with PCMS database, and tracking contracting actions; tracking fund sources and commitment letters for each project by managing reimbursements for engineer support, including engineer labor hours, shop rates, convincing engineers to maintain labor records on WIMS, and keeping track of base support agreements. As an educator, FM must train engineers to understand the budgeting and funding system and external customers to understand the billing system for engineering support. Training should be done, in English, to help those who don't understand. Nobody wants to hear financial jargon.

The facility project process is complex and time consuming, involving a large portion of the money FM executed each year. Every base, especially its leader, must properly manage the few facility projects taking place on the base. FM must ensure rules are followed and that PCMS gets updated by the Engineer Flight. FM and the engineers are on the same team in the execution of this process.

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## Chapter 25 Year End Process Management

It is critical for Financial Management personnel to understand the actions necessary to achieve maximum use of available funds at the end of the fiscal year and the procedures used by financial managers to execute a smooth year-end close-out. It's important to know from where fall-out money comes, where it can most easily be spent, and what procedures should be used. Perhaps, most important to the financial management staff, is how to be ready for year-end close-out.

### 25.1 Sources of Year-end Funds

Fall-out money is the result of the entire annual appropriation process. There is no adequate solution to the problem of year-round fiscal belt-tightening with a windfall of funds in the second or third week of September. There are many sources of this money; including, HQ USAF, MAJCOM, other base organizations and within CE, itself.

The Air Force usually keeps a small percentage of funds for contingency purposes, such as natural disasters or truly unforeseen requirements. Also, the Air Staff requires money to run the HQ USAF organization (travel, supplies, equipment, civilian pay). When these funds are not required, they sometimes fall out.

MAJCOM keeps a percentage for contingency; as well as, money to run their headquarters. MAJCOM is also the keeper of the facility project (52X) money. When facility projects are not properly executed, committed funds are never obligated. If there is enough time left in the fiscal year (prior to mid-July). After mid-July, the money can't be used for another facility project because of the contracting lead time required. This money ends up falling out to the bases.

Every organization on the base often claims, throughout the year, that funds are needed from the wing. Upon receipt of this money, it is held in contingency. At the end of the fiscal year, if it cannot be used, it will go back to the wing and, it too, is fall-out. As soon as possible, throughout the course of the year, excess funds should be identified as excess. They then can be used for bigger projects. In general, the larger the dollar amount of a requirement, the longer it takes to execute.

CE can also generate its own fall-out money. Anticipated expenses are put in a commitment status and then not used. At the end of the year, they fall out. All requirements should be ensured they will obligate; and, if not, the funds freed.

**25.2 Spending Year-end Funds**

Even though many contracts have a long lead time to award, other types of contracts are set-up to obligate money very quickly.

The straddle bid is a common method allowing a contract requirement and Form 9 to be sent to contracting at the end of the year without any actual funds. If there are any fall-out funds, those funds will be used on the contract. If fall-out funds are not received, then the next FY funds are used for the contract. This allows contracting to start work on the contract; knowing that it will be funded, but not knowing which FY funds will be used. Straddle bid Form 9s must not be sent to finance and contracting with fund cites on them, because which FY funds will be used is unknown. Local policies should be followed on straddle bids. Usually, a certain statement must be on the Form 9 indicating it's a straddle bid. The budget and contracting offices will be of assistance.

IDIQ are contracts that have already been awarded, so no negotiation is necessary. Delivery orders are simply issued against the contracts. This process is usually very short. SABER is an excellent way to spend fall-out funds quickly. IDIQ contracts should be reviewed to determine if there are any requirements for these services.

An easy way to spend fall-out money is to top off fuel tanks. All vehicles should be sent to the gas station for a fill up. Heating fuel tanks should be topped-off in preparation for the coming fuel season.

Supplies becomes the last area where money can be spent very quickly. Funds can be executed through GOCESS/COCESS or Base Supply.

Many bases have used fall-out funds to purchase bulk items such as gravel, sand and top soil. Additionally, bases like to double-fill bench stocks to offset next FY costs. Although this is an easy way to spend fall-out money, storage space

can run short. If large amounts of supplies are ordered, storage space must be planned.

Because the Standard Bases Supply System operates out of the industrial fund, DBOF, funds are obligated once an order is placed with base supply, whether or not the item is delivered. Base supply has stock fund authority each year that can not be exceeded. Base supply must have enough stock fund authority to process a year-end request. Base supply is the most efficient way to spend fall-out funds.

In a GOCESS environment, funds are not obligated until a buyer gets on the phone and makes an award. Firming a bill of material in CEMAS, does not obligate money. Ordering must be coordinated with contracting to ensure purchases are ordered as quickly as required. If contracting can't make all the awards in time, the year-end money comes right back with even less time to be used elsewhere.

In a COCESS environment, money is not obligated until the materials are received from the COCESS contractor. The CEMAS report can be used to indicate what materials are expected to be received from the COCESS contractor. To obligate an item on order, a Miscellaneous Obligation/Reimbursement Document (MORD) must be created. Even though items have not been received, the expectation is to obligate the money based on the orders. The COCESS contract was already awarded and delivery orders are being issued.

An obligation can be made quickly, if equipment can be purchased through Base Supply. If the item must be purchased through contracting, obligation may take longer because contracting must make an award. Contracting is also having a very hectic year-end. Close coordination with contracting should be maintained. Equipment item costs more than \$100K, and 3080 funds may be required; then, O&M fallout would not be spent.

### **25.3 Close-out Procedures**

The final quarter of the year is very busy. Even so, particular attention should be paid to close-out procedures. Basically, the FM wants to make sure to not overobligate which is against the law or underobligate (turn in money). Some basic procedures that are part of the closeout process are

ensuring obligations are posted, documented, and reviewed throughout the year.

The financial manager should ensure all obligations that are expected to post are posted. Mistakes and oversights are always possible. For example, funds thought to be obligated didn't appear in the financial records. This should be followed.

Positive evidence must exist for obligation. Before obligations can be recorded, there must be positive evidence, such as approval documents.

The Open Document Listing can be used to verify obligations and to track commitments. Commitments never obligated become a generator of much fall-out money. Unwanted fall-out funds can be prevented by keeping a close watch on commitments and obligations in the ODL.

Reviews should be done throughout the year. The more reviews done throughout the year, the less painful year end close-out will be. Funds status should be carefully tracked, especially commitments and unfund requirements that may have been obligated on a Form 9 at the beginning of the year and are no longer required. By waiting until September, large requirements may not be found. Through early review, money can be programmed to an area where it's needed.

**25.3.1**    *Reviewing Requirements for Expiring FYs*

A thorough review of this year's requirements early in the year-end process is critical. Sometimes this year's requirements are not funded at year-end. Without frequent follow-ups throughout the year, funds may not become available early enough to fill large requirements.

This year's requirements must be purchased this year. Funding wish lists or nice-to-haves should not be started before first filling previously identified requirements for this FY. Seasonal requirements and materials for bench stock need to be considered before buying specialty items for next year.

A prioritized list, generated by the flight chiefs and approved by the BCE, should be used when developing a year-end strategy. As fall-out funds become available, the

list should be funded from top to bottom. A first-come-first-served approach usually results in the purchasing of nice-to-haves before critical requirements are filled.

Unfunded requirements and memo due-outs represent requirements that already exist. Unfundeds exist at base budget and they, also, will probably start with that list.

Firming memo due-outs at base Supply is accomplished by calling the budget office; it obligates funds immediately.

*25.3.2 Verifying  
Obligation  
Authority*

Any outstanding OAs should be canceled. Funds given to someone else early in the year, using AF Form 616, must be tracked to ensure they're obligated. If not, the 616 should be canceled to free the funds for other use.

*25.3.3 Facility Projects by  
Contract*

Facility projects are usually large dollar amounts. If they are not properly executed, they could, potentially, generate a large amount of fall-out money. Financial Management should work closely with the Engineer Flight and Contracting to ensure contracts advertised will eventually be awarded.

FM should be aware of the contracting cut off date to allow enough time to make an award by the end of the fiscal year. Contracting will usually stop accepting large requirements, such as facility projects, some time early in July.

Straddle bids should be ready to be awarded should additional fall-out funds become available. Also, all contract amendments and change orders should be processed to Contracting with this year's funds.

*25.3.4 Utility Billings*

Funds must be available to pay the September utility bills. However, an overly conservative approach will tie-up funds that won't get obligated. An accurate estimate of needed funds can be made by checking estimates, getting September readings as early as possible from suppliers, and estimating reimbursements.

If the monthly estimate is accurate, the money set aside should be sufficient to pay the bills. Utility engineers should get specific billing costs from the utility service provider as soon as possible. If actual billing data for September can not be provided, CE personnel should read meters as close to

the scheduled bill date as possible. These costs are forwarded to Finance. If a reading is done before the scheduled read date, the remaining utility consumption can be estimated.

After receiving the meter readings, it is very important to estimate billings for the reimbursable customers.

**25.3.5**     *Reimbursements  
and Refunds*

Reimbursements and refunds have an impact on the available funds balance of the BCE. Mismanagement of reimbursements and refunds, especially at year-end, can lead to the misuse of available resources and Anti-Deficiency Act (DOD 7000.14-R, Vol. 14 ) violations.

Refund credits directly reduce the overall obligations incurred and increase the BCE's available funds balance. Refundable services must be monitored closely and actual or accurate estimated costs reported to finance.

Reimbursement funds are made available with the provision that they must be earned. Reimbursable customers are counting on CE to do a certain amount of reimbursable work. The CE Financial Manager should review reimbursements regularly, in addition to the end of the year, to ensure all projected reimbursements are being earned.

A Schedule of Reimbursements and Refunds (PCN SF100-451) can be produced by WIMS, as required. This feature helps monitor reimbursements through year-end close-out. If there is under earning of reimbursements at the end of the year, funds equal to the amount of the unearned amount must be unobligated to prevent a DOD 7000.14-R, Vol.14 violation.

**25.3.6**     *Base Supply Stock  
Fund*

The best place to quickly obligate funds at year-end is base supply.

Because funds are not obligated until those items (e.g. asphalt, concrete, lumber) are delivered, open-end, bulk issues must be delivered before year-end.

Memo due-outs should be firmed. These are established requirements for which the homework has already been done.

25.3.7 *GOCESS/COCESS  
Close-out*

The Material Acquisition Element in the Operations Flight will usually establish and publish procedures for year-end for GOCESS/COCESS.

Contracting sets a date at which it stops accepting requirements. They need this time to make final awards and ensure paperwork reaches finance by the end of the fiscal year. A workable contracting close-out date can usually be negotiated with Contracting.

Contracting must use a competitive solicitation process for requirements that exceed \$25K. This lead time usually exceeds 60 days. There should be no plans to buy large pieces of materiel at year-end. It is too difficult.

A MORD must be set-up for all materials on order through COCESS; because, they don't obligate until receipt. Firming a bill of material doesn't mean the funds are obligated. A buyer must actually make a purchase. By setting up FCAs on a monthly, instead of quarterly basis, funds are not tied up unnecessarily.

The BCAS interface must run frequently, without fail, during September. Contracting will need requirements quickly and FM needs to get status updates from contracting. WIMS operators must monitor this critical interface during year end close out.

25.3.8 *Service Contracts*

Contract management should review all service contract obligations for services rendered and ensure finance is notified. Form 9s should be unfunded, as necessary, if money is tied-up in a service contract where all the funds will not be used.

**25.4 Preparing for  
Year-end**

The most important thing to do in managing year-end close-out is anticipation of actions. The more actions that can be anticipated, the fewer year-end surprises and headaches will result. Careful management and execution throughout the year prevents crisis management at the end of the year.

The best way to avoid oversights or careless mistakes is to make a year-end checklist, identifying requirements, responsible offices, and time lines. The example shown in Table 36, Sample Year-end Checklist, is used by Tyndall AFB.

**Table 37. Sample Year-end Checklist**

<b>REQUIREMENT</b>	<b>OPR</b>	<b>DATE</b>
Submit prioritized year-end buy list to CER	ALL	15 Jul
Cut-off date for processing Form 9 exceeding \$25K	ALL	19 Jul
Establish Memo Due-Outs in base supply	ALL	1 Aug
Review service contracts for possible deobligation	CECC (Contract Mgt)	30 Aug
Cut-off for routine AF Form 9s Emergencies must: * be in support of work stoppage, safety, or critical mission impact * include a justification letter signed by SQ/CC	ALL	9 Sep
Maintain current list of unfunded facility projects that could be funded this year	CERF/CEC	1-25 Sep
Provide budget and commercial svcs with Sept. estimates for utilities (including MFH)	CERF/utility engr	3 Sep
Finalize maintenance contracts and provide commercial svcs with estimates	CERF/CECC	10 Sep
Provide budget and commercial svcs revised Sept. estimates for MFH	CERF	10 Sep 17 Sep 24 Sep
Terminate one-time equipment rentals and contract services	ALL	14 Sep
Hand-carry COCESS purchase orders to Finance	CEOM/CERF	19 Sep
Terminate all contract maintenance of equipment (except emergencies)	ALL	19 Sep
Close out and carry other 616s to commercial svcs	CERF & others	20 Sep
Provide budget & commercial svcs with actual reimbursements for Sep.	CERF	30 Sep

Furnish commercial svcs with actual utility costs for Sep.	CERF/utility engineer	30 Sep
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The year-end process should be eased, not slowed down. The squadron should receive help in filling valid requirements with fall-out funds. Priorities should be those of the Base Civil Engineer.

At year end, communication becomes absolutely critical. Many bases have weekly meetings of the FWG in the last quarter and meet daily the last few weeks of the fiscal year. The last two days of the fiscal year, base budget sometimes sets up a command center-like operation to manage the flow of fall-out funds. CE FM should maintain a good working relationship and open communication lines with Accounting and Finance, Base Budget, Contracting, Base Supply, CE squadron personnel, and BCE.

The CE FM staff is an integral part of the year-end process; so they can provide valuable assistance in anticipating actions.

Finally, strategic thank you's pay huge dividends next year. Base Supply, Contracting, Budget, Material Acquisition, squadron members, and the FM staff should be thanked, both formally and informally, for their support.

Year-end involves many tasks. Careful execution throughout the year can make the year-end close-out much easier. However, financial close-out is not the mission in September. The wing still has a mission and it must be supported in day-to-day operations. Year-end close-out is not an excuse to stop supporting the squadron and wing mission.

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## Chapter 26 Budget Decentralization

In today's quality environment, all levels of management must be responsible and accountable for carrying out their missions. This can be difficult for managers to do when they're given people, equipment, tools, and vehicles; but, no money. Managers should be given discretionary money to allow them the flexibility to choose resource mixes to best serve their customers. Many people agree with the theory, but need information on how to decentralize. To decentralize parts of the CE budget, it's important to understand the different types of costs, which costs should be decentralized, and how to track and provide feedback for decentralized funds.

### 26.1 Types of Costs

In decentralizing the CE budget, a way must be devised to categorize costs to help in the decision of what to decentralize. A common taxonomy of costs is provided below.

Centrally-funded costs involve funds given to CE by MAJCOM, the Air Staff, or other agencies to use for very specific requirements; for example, facility and environmental projects, special contracts, and, sometimes, civilian pay.

Fixed costs involve requirements that, once funded, can't be altered; for example, annual maintenance contracts; annual (recurring) service contracts (refuse, grounds, snow removal, etc.); utilities; permits; and, sometimes, civilian pay.

Variable costs includes all discretionary costs; i.e., money that doesn't have to be spent in certain places. Some examples are travel/TDY/transportation, equipment rental, miscellaneous contract services, supplies, equipment, fuel, training/education/professional development, and overtime.

Fenced money, like some environmental funds, are provided for a specific purpose and can have fixed and variable components. Fenced money just can't be mixed with other operating funds.

### 26.2 What to Decentralize

Knowing what types of costs exist helps in deciding which types of costs should be decentralized.

Facility projects and other funds given to CE by higher headquarters are given for very specific requirements; such

as, a specific project number. These funds can't be decentralized. Funds are to be spent on the requirements for which they were specified.

Fixed costs are most easily managed in a centralized manner. If fixed costs were decentralized, they would be very difficult to track.

The best candidates for decentralization are funds for variable costs. Applying TQ principles, the lowest possible levels should be making decisions about the use of discretionary resources. It will allow work center supervisors to prioritize requirements and work within a fiscal constraint. Decentralization of these funds allows flights to receive an amount of money and be responsible for the management of that money. When it's gone, it's gone. This method gets rid of the first-hog-to-the-trough style, where requirements first-conceived get first funding, regardless of priority.

### **26.3 How to Decentralize**

Decentralization of variable funds is not an easy task. It will take some work on behalf of Financial Management's part. The most critical element of decentralization is feedback. Managers must receive a bank statement to let them know how much money remains. Setting up budget targets or boogys is simple using a spreadsheet program. What becomes difficult is how to track what each cost center is spending and derive a funds balance.

Contracts are funded with Form 9s and travel is funded with TDY orders. Both have fund cites. If the cost centers are correctly cited, the costs will be correctly recorded. The OBL report or Micro-BAS can be used to pull out these costs. EEICs need to be used to identify the various costs being decentralized (e.g., 40X, 463, or 592).

Unfortunately, supply and equipment costs cannot be pulled from Micro-BAS by cost center. The P2T process redistributes these costs to other cost centers. Base supply products must be used to determine who is buying what. If the cost centers have been input with an organization code (in a PFMR), the D11 report from base supply can be used to determine supply and equipment expenditures.

By carefully setting up org codes in CEMAS, CEMAS can be used to track how much each cost center has spent in

supplies through GOCESS/COCESS. The FCA management screens or the end-of-day reports can be used to determine who has spent what in CEMAS.

All these expenditures can be combined by cost center. Using them with the budget targets in the spreadsheet program, a determination of how much money each cost center has remaining can be made. The spreadsheet can be used to help cost centers manage their budgets through the end of the year.

Bottom-line expenditures in the spreadsheet must match the bottom-line expenditures in the financial records. This will prevent the distribution of too much money. Also, if somebody is given a budget target, it must be left there. Taking back money late in the year will result in spending money quickly at the beginning of the year. This is not a smart way to execute the budget.

When flight chiefs start to run short, they should work with each other to resolve problems; however, they may need a facilitator.

Letting flights manage their mission and their money leads to effective mission accomplishment. Most CE managers are very capable of effectively executing a budget. They can do a good job because they're closer to the CE customers.

Decentralization takes significant time and training to get it started. It will, eventually, save time. Reallocation of funds is decided by the flight chiefs. Requirements get funded in priority order, instead of first-come, first-serve or the squeaky-wheel concept. Finally, decentralization will not work unless the flights receive feedback on how they are doing.

## Chapter 27 Managing Travel and TDY Funds

With increased emphasis on training and communication, many bases are managing more and more travel and TDY money. It's important to correctly budget and manage this money.

To plan for TDY funds, the minimum number of trips to accomplish the BCE mission must be estimated. Trips for training, certification, project reviews, conferences, and staff visits should be considered. Travel expenses are computed from current rates for the appropriate mode of travel and current per diem rates for the area to be visited. When travel/TDY funds are depleted and a cost center wants to do more travel, their variable funds can be used.

To track TDY funds, travel; per diem; and miscellaneous cost (e.g., rental car, parking, ATM charges) are estimated and entered in a database or log book.

When the traveler returns, a travel voucher is filed immediately. After the traveler is paid, a copy of the settlement voucher is given to CE FM. The actual amount of expense is logged into the database or log book. Micro-BAS must be watched to make sure funds are charged correctly. In case of an error, finance must be notified.

Even though travel/TDY funds often represents a small proportion of the budget, some bases spend an inordinate amount of time managing them. Utilities, reimbursements and shop rates should not be ignored just to manage travel/TDY funds.

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## Chapter 28 Civilian Pay Management

Bases can budget and control expenses centrally (at the base budget office) or the BCE may control Civil Engineer civilian pay requirements. Manpower documents and civilian personnel expense reports can help manage civilian pay costs.

To estimate civilian pay, use the DoD Budget Guidance Manual Report - Civilian Manpower and Funding Report, RCS:DD-Comp(AR)1092,. It gives cumulative work-hours and work-years, by program element and category of employment (GS, WG, FNDH).

Adequate funding of civilian pay is ensured by carefully managing the filling of vacancies. The average work year cost and the annual budget numbers in EEIC 39X should be watched. Vacancies should be filled with caution if civilian pay money is short; although, surpluses elsewhere in the budget may be used to supplement civilian pay.

Many times, civilian pay costs rise because of the increase in overtime. Overtime should be treated as a variable cost. Overtime is performed at the expense of supplies, equipment, etc. With a decentralized the budget, cost center managers make these decisions.

In past years, managers often put excess funds in other places in the budget (supplies, equipment, TDY, etc.) and, then, used them to fund overhires, temps, and overtime. The result of this practice was bigger government. The Air Force now allocates work-years, not funds, to the base. Each year, the AF funds a certain percentage of a base's civilian manpower document authorizations and distributes these work-years to the base. The base must then manage and live within the work-year limitation, not the funding limitation.

To fund an overhire, some position must have been vacant for a period of time to allocate those work-years to the overhire. The same holds true for overtime.

Funding is distributed to installations based on the average work-year cost.

It is because of this work-year cap that bases often have funds, but still can't hire overhires.

MAJCOM computes the average work-year cost as

$$\text{Average\_Work-year\_Cost} = \frac{\text{Civilian\_Pay\_Costs}}{\text{Work-years}}$$

MAJCOM first determines the funding level. For example, 90 percent of funded authorizations; allocates work-year quota (.90\*auths).

MAJCOM then allocates civilian pay funding

Work-years \* Average\_Work-year\_Cost.

The base manages to work-year.

Most bases centrally manage their civilian pay dollars.

There's very little need for CE to get overly involved in civilian pay financing, however, it certainly helps to understand the process.

## Chapter 29 Cost Control

An important, but often overlooked, responsibility of CE Financial Management is to not only track costs, but to help control costs. This should not to be confused with controlling the funds. Cost control involves understanding costs and what drives them; then, taking corrective action if costs begin to creep out of control. This can be accomplished through quantitative cost control and cost savings.

### 29.1 Cost Control Method

By tracking costs and their cost drivers, costs can better be understood and controlled.

Costs must first be categorized before determining what might drive them. Cost types are fixed, variable, and mixed.

Fixed costs are those costs that do not change over time, regardless of any amount of activity level. Apartment rent is an example of a true fixed cost. Fixed costs can be expressed by:

$$Y = a$$

where:

a = fixed amount.

Variable costs are 100 percent tied to some sort of activity level. If there's no activity, there's no cost. Going to the movies is an example of a variable cost. One movie costs \$6. Two movies will cost \$12. If you don't go to the movies, it costs nothing. Variable costs can be expressed as:

$$Y = bX$$

Where:

b = amount (\$) per unit

X = activity level (frequency of occurrence)

Mixed costs are a combination of variable and fixed costs. There is a certain fixed cost that is incurred regardless of an activity level and a variable portion that's tied to an activity level. Cellular phone service is a good example of a mixed cost. Usually, there is a monthly service fee plus a charge for each minute the phone is used. Mixed costs can be expressed by:

$$Y = a + bX$$

Where:

a = fixed amount (service charge) and

b= amount per unit (charge per minute)

X = the activity level (minutes).

To determine X, costs and the activities to which they correlate must be determined. Costs and activity levels should be tracked throughout the year to ensure the costs follow the expected activity level.

The cause of the problem needs to be investigated. If it's an explainable event (an assignable cause), such as extremely hot or cold weather, then there should be no concern. If it cannot be explained, it may be a sign costs are not being controlled and more thorough investigation may be required.

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**Example:**

A base did a regression analysis on a spreadsheet of supply costs for emergency work orders. The mixed cost equation was determined:

$$Y = 325 + 3.0 X$$

Where:

Y = monthly budget

X = direct man-hours for emergency work

The following numbers were noted for the months March through August.

Month	Emerg Dir Hrs	Supply Costs	$Y = 325 + 3.0 X$
Mar	1000	3300	3325
Apr	900	3000	3025
May	850	2900	2875
Jun	800	2950	2725
Jul	900	3300	3025
Aug	900	3450	3025

In June, and, especially, July and August, the supply costs no longer seem to be tied to the direct hours. An investigation into why this cost is creeping out of control, may be warranted.

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**29.2 Cost Saving versus Execution**

Managers often discuss cost saving and execution. Actually, both are very good things. The differences are:

- cost saving is saving money in one area and putting it to good use in another area and
- execution is spending the money when it was said to have been needed.

Too often base officials or MAJCOM are told money is very badly needed, when, actually there are savings elsewhere that could be used.

If a request of money from MAJCOM is received and, then, not spent; it gives the impression it was not really needed. In cost control and money management, honesty is the key, ALWAYS others' goals and priorities and how they fit with squadron/group/wing goals should be kept in mind. It is important to create an environment of trust.

## Chapter 30 Full Cost Visibility

Full cost visibility (FCV) is a way to collect and report all costs necessary to accomplish work, including incremental direct cost. It is a means to obtain full reimbursement from those customers for whom services were provided, for reimbursement. Implementing FCV should help BCEs become more cost-effective through better business practices.

FCV uses WIMS software to calculate all shop production costs to compute the cost of CE services for all base customers, based on their square foot usage.

FCV identifies several different types of costs to be charged for customers.

Direct costs are billed to each customer in a building in two ways:

100-percent direct is used if a work order is in direct support of just one customer. Only that customer will be charged for the work order.

Some work orders are performed on a building with multiple customers, benefiting the entire building. These costs are spread to each customer based on the customers' percentage of square footage in the facility.

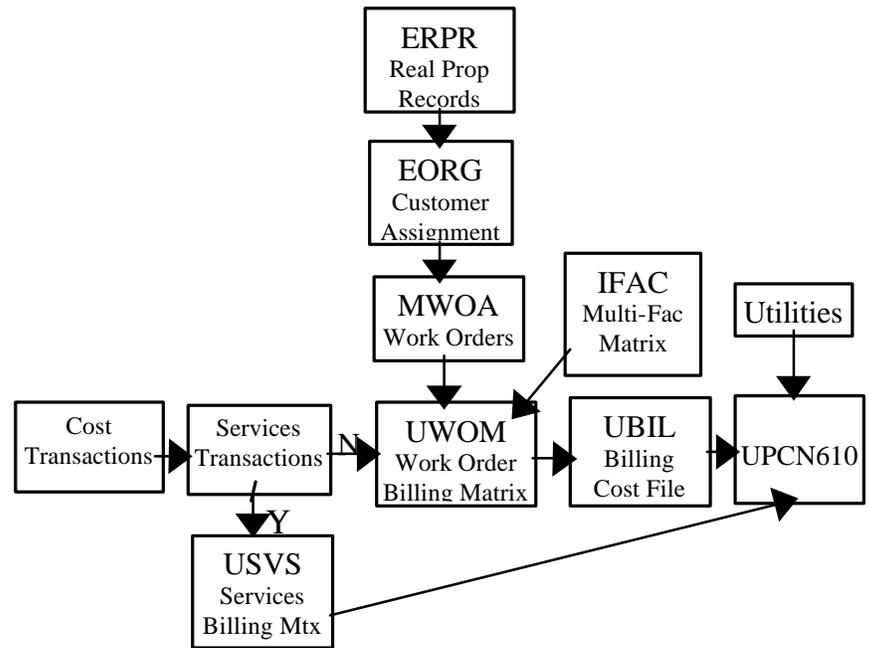
Refuse collection services are charged based on cost derived from the refuse collection contract and custodial services are charged according to the custodial contract. Grounds maintenance is charged according to the grounds maintenance contract.

Utilities are charged using a separate WIMS utilities module, using consumption data and the utility sales rate. This gives utility engineers a standard tool to provide engineered estimates for tracking and trend reporting. This program may be used alone, with or without, the rest of the FCV program.

Some work orders are performed for the good of the entire base, such as fixing pot holes in the roads. These costs are not charged to base customers. They are funded by Civil Engineer without reimbursement from customers.

Figure 41 summarizes the FCV WIMS data flow. The data called out in figure 41 is summarized by contents and by use in Table 37, FCV WIMS Data Files.

**Figure 41. FCV WIMS Data Flow**



The FCV program is still an optional WIMS program, but may be implemented Air Force-wide.

There are many potential benefits of using the FCV system. More accurate costs and reimbursements are available, including incremental direct costs previously uncollected. This should increase reimbursements. If reimbursements increase, more money is available for facility maintenance and repair.

Accurate information is received for future budgeting and resource advocacy. Customers are fully aware of services used. Energy billing is provided, promoting energy conservation.

Requirements for the next generation of financial management software are identified.

**Table 38. FCV WIMS Data Files**

**DRAFT - NOT FOR IMPLEMENTATION OR COMPLIANCE**

**WORKING IN THE RESOURCES FLIGHT**

<b>DATA FILE</b>	<b>CONTENTS</b>	<b>USE</b>
ERPR - Real Property Records	One record per piece of real property, it contains master list of valid facility numbers.	The real property records update the square footage in a facility.
EORG - Customer Area Assignment Updater	One record for each customer within a facility.	The customer area assignment record updates square footage each customer is using.
MWOA - Master Work Order File (Active)	Contains a record per work order.	Allows tracking of work and collects costs.
UMTX - Default Facility Billing Matrix	Contains a record per facility and which customers are using that facility.	Determines billing percentage for each customer based on square footage assigned within facility.
UBBI - Billing Indicator	Contains billing indicator and its percentage for each type of billing that pertains to a base.	The percentages used indicate what and how much is reimbursable for each customer.
UFND - Standard Fund Source	Contains the fund source, description, and sales code for each applicable fund source that pertain to a base.	A code used by organizations to identify type of funds to be used.
UWOM - Work Order Matrix	Contains percentages used to prorate costs for each customer by fund source and billing indicator.	Provides default when adding work order. Each work order matrix will contain percentages used to prorate costs for each customer by fund source and billing indicator.
UBIL - Billing Cost File Updater	Contains code used to signify percentage amount of reimbursement for design, labor, materials, utilities, military labor, contracts, or minor construction.	Contains a record for each work order indicating what customers are charged and what percent of the work order cost should be charged to each customer.
UBILRVP - Billing Reverse Post Program	Stand-alone program, as well as a subroutine, prompts user for control installation, control center, work order number, and effective date of the reverse post.	Reverses specific billing records from the UBIL file and writes transactions to IINF file to be reprocessed as FCV transaction.
UEOD - End-of-Day Report/Maintenance File	System creates records in UEOD file when new work orders added into the system, when modifications are made to either customer code or area amount in real property record.	Flags auditor of any of listed conditions.

**DRAFT - NOT FOR IMPLEMENTATION OR COMPLIANCE****WORKING IN THE RESOURCES FLIGHT**

<b>DATA FILE</b>	<b>CONTENTS</b>	<b>USE</b>
USVS - Services Cost Accumulation File	Contains actual services cost for each category of custodial, grounds maintenance, and refuse collection.	Used to produce facility maintenance report (UPCN610).
UPCN610 - Facility Maintenance Report	Displays each organization/customer percentage share of services cost.	Produced on an “as required” or monthly frequency; it will display all maintenance charges for FCV customers by month and year-to-date.
UPCN611 - New Work Orders Percentage Report	Runs from end-of-day report and displays all work orders where transactions will reject and new work orders and percentages that are added to the system.	Information for report produced from the UEOD and UWOM files to be created on a daily basis; signifies to financial management auditor new work orders and records needing correction.
UPCN613 - Facility Billing & Real Property Comparison Report	Contains facilities in the UMTX and EORG files.	Compares facilities in UMTX and EORG files and displays all corresponding records.
UPCN614 - Full Cost Visibility Refund/Reimbursable Report	Monthly list of reimbursements by customer.	Provide customer and accounting office detailed billing.
UPCN615 - Work Order Comparison Report	Contains work orders and facilities, invalid customer codes, any mismatch between work order and ERPR.	Provides auditor all information required to determine any problems, lack of UMTX or bad inventory control, etc.

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## Chapter 31 Organizing The Financial Management Function

Many managers are concerned about how to organize CE Financial Management to best accomplish the mission.

One method is to have personnel work separate desks. This means they work a specific set of tasks or responsibilities. This is a good idea, provided the responsibilities assigned to a desk can be accurately determined. Many managers have separate desks for shop rates, reimbursements, travel and TDY, supplies, financial planning and tracking, and utilities. This arrangement can work, but it doesn't really provide for the professional development of the staff. They will only work and learn one small part of the process.

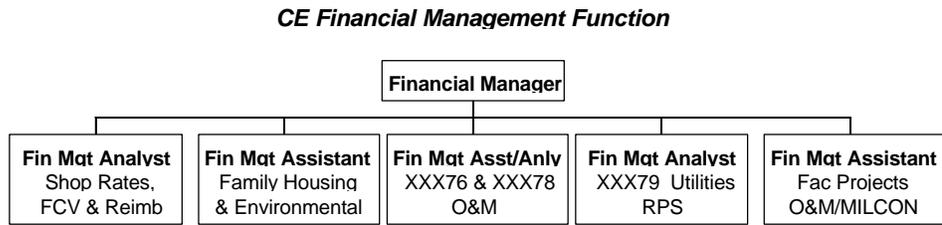
However, assigning each desk a program element or set of program elements is a method that seems to work better. One person (or more) works shop rates and reimbursements. Figure 42 shows a sample organization chart for the Financial Management Element.

Each analyst or assistant is responsible for managing, and executing, and tracking their programs. Within the CE organization, there are primary customers of these certain areas. This gives the staff an opportunity to develop a strong, working relationship with their customers. It also gives each person exposure to supplies, TDY orders, Form 9s, etc.

It's important to rotate the staff to the different desks every year or two. It's the financial manager's responsibility to prepare each staff member for the financial manager's job. Every CE FM should always be looking for their replacement.

Finally, the financial manager's job should be obtainable from the assistant/analyst positions. If a job is a GS-11 and all subordinates are GS-7s or GS-8s, they will never qualify for the job. Ensuring upward mobility exists in the office ensures good people aren't lost to other organizations for promotions. Promoting from within keeps a good, competitive staff.

**Figure 42. Sample Organization Chart for the Financial Management Function**



**Attachment 1 List of Acronyms and List of Resources**

**List of Acronyms**

ABES amended budget estimate decision  
ADP automated data processing  
AEP accrued expenditure paid  
AEU accrued expenditure unpaid  
AFMC Air Force Material Command  
AFSF Air Force Stock Fund  
AG activity group  
APB amended President's budget  
APF appropriated fund  
ASIF Airlift Services Industrial Fund  
ATA actual time accounting  
BA budget activity  
BAC budget activity code  
BCAS Base Contracting Automated System  
BES budget estimate submission  
BPA blanket purchase agreement  
BPACS Program Budget Activity Codes  
BRAC Base Realignment and Closure  
CE Civil Engineer  
CEMAS Civil Engineer Material Acquisition System  
CFY current fiscal year  
CO contracting officer  
COCESS contract operated Civil Engineer supply store  
COLL filled orders collected  
COPARS  
CRA Continuing Resolution Authority  
DBOF Defense Business Operations Fund  
DBOF-T Airlift Services Industrial Fund  
DeCA Defense Commissary Agency  
DERA Defense Environmental Restoration Fund  
DFAS Defense Finance and Accounting Service  
DMIF Depot Maintenance Industrial Fund  
DOA Direct Obligation Authority  
DoD Department of Defense  
DODEE DoD elements of expense  
DPG defense planning guidance  
DRMODefense Reutilization and Marketing  
DSWOdirect scheduled work orders  
EC environmental compliance  
ECCS executive control and command support

EEIC Element of Expense Investment Codes  
ERRC expandability, recoverability, repairability code  
ETA exception time accounting  
FCA fund cite authority  
FCV full cost visibility  
FFP firm fixed price  
FIM Facility Investment Metric  
FMB Financial Manpower Board  
FPY financial plan year  
FWG Financial Working Group  
FYDP future years defense plan  
GOCESS government operated Civil Engineer supply store  
GOQ general office quarter  
HAC House Appropriations Committee  
HASC House Armed Services Committee  
IDIQ indefinite delivery/indefinite quantity  
IFP invitation for bid  
M&R maintenance and repair  
MAJCOM major command  
MFH military family housing  
MFP major force programs  
MILCON military construction  
MIPR Military Independent Purchase Request  
MORD miscellaneous obligation/reimbursement document  
MORD miscellaneous obligation/reimbursement document  
MWR morale, welfare, and recreation  
NAF Non-appropriated Funds  
NOV Notice of Violation  
O&M operations and maintenance  
OBA operating budget authority  
ODL open document listing  
OH overhead  
OSD Office of the Secretary of Defense  
P2 Pollution Prevention Program  
PAIP Post Acquisition Improvement Program  
PB President's budget  
PBD program budget decision  
PCMS Project by Contract Management System  
PDM program decision memorandum  
PE program element  
PEC program element code  
PFMR project fund management record  
PFY prior fiscal year  
PML preservation maintenance level  
POC point of contact

POL petroleum, oil, and lubricants  
POM program objective memorandum  
PPBS planning, programming, and budgeting system  
PPP Pollution Prevention Program  
RA resource advisor  
RDT&E research, development, test, and evaluation  
RFP request for proposal  
RMS Resource Management System  
ROA Reimbursable Obligation Authority  
ROTC Reserve Office Training Corp  
RPM real property maintenance  
RRI refund and reimbursement indicator  
RRI reimbursement/refund indicator  
RTA ready to advertise  
SABER simplified acquisition of base engineering requirements  
SAC Senate Appropriations Committee  
SAF/FMP Secretary of the Air Force  
SAG subactivity group  
SALY same as last year  
SASC Senate Armed Services Committee  
SBSS Standard Base Supply System  
SSG Standard System Group  
SWL Shop Working Logistics file ("SWILL")  
TAA Total Actual Authority  
TDY temporary duty  
TOA Total Obligation Authority  
TWCF Airlift Services Industrial Fund  
UBPU WIMS utility cost transfer program  
UFO unfilled orders  
UNCOLL filled orders uncollected  
UNF unfunded requirements  
UOO unfunded orders outstanding  
USAF United States Air Force  
USRH shop rate history file  
UST underground storage tank  
UXFERCST WIMS cost transfer program  
WIMS work information Management system  
WRRB Work Request Review Board

**List of Resources**

DFAS-DE 7000.1  
AFI 65-601, Volume 1, *Budget Guidance and Procedures*  
AFMAN 65-604, *Appropriation Symbols and Budget Codes* (Fiscal Year 1998)  
AFI 32-1021, *Planning and Programming of Facility Construction Projects*

*AFI 32-7001, Environmental Budgeting  
, Environmental Flight Manual  
, Air Force Base Conversion Agency Closure and Realignment Handbook  
DoD 7000.14R, Volume 14, Department of Defense Financial Management Regulation  
(Administrative Control of Funds and Antideficiency Act Violations)  
AFI 65-403, Followup On Internal Air Force Audit Reports  
AFI 32-6003, General Officer Quarters  
AFI 32-1022, Nonappropriated Fund Facility Construction Projects*