

AIR FORCE CIVIL ENGINEER CENTER MILCON DATA MANAGEMENT & METRICS



"Battle Ready ... Built Right"

Table of Contents

1	Introduction	1
2	ACES-PM Data Management Roles and Responsibilities.....	3
2.1	Installations.....	3
2.1.1	Base Civil Engineer (BCE).....	3
2.1.2	Programmers	3
2.1.3	Design Manager/Construction Managers (DM/CM)	3
2.2	MAJCOMs.....	3
	Program Managers.....	3
2.3	HAF	3
	Program Managers.....	3
2.4	AFCEC/CF.....	4
2.4.1	CF Management Team.....	4
2.4.2	CF Execution Team (DM/CM).....	4
2.4.3	CF Integration Cell	4
2.5	AFCEC/CR	4
	Funds Managers (FM)	4
2.6	Project Execution Agents.....	4
2.7	AFCEC/CP.....	5
	Planning and Integration Subject Matter Experts.....	5
2.8	AFCEC/CN	5
	Facility Energy Subject Matter Experts.....	5
2.9	AFCEC/CZ	5
	Environmental Subject Matter Experts.....	5
3	ACES Data Management.....	6
3.1	MILCON Agent Codes	7
3.2	Planning Charrette.....	8
3.3	Programming Tab.....	8
3.4	Congressional Actions Screen	8
3.5	Project Facility Costs	9
3.6	Permits and Certs.....	9
3.7	Design Instructions (DI) – HAF DI Issue Time/AF DI Issue Time Under Review	10
3.8	Design Funds Management	11
3.9	Adding New Milestones to ACES	12
3.10	Adding Project Delivery Team POCs.....	13
3.11	Asset Management	13
3.12	Leadership in Energy and Environmental Design (LEED) Certification (under review)	15

3.13	Design Build/Adapt Build (under review)	16
3.14	Agent Design Turnaround	16
3.15	Design/RFP Completion	17
3.16	Bid Opening Results	17
3.17	HAF Notification/Funds Processing Time	18
3.18	Time to Award After Bid/Proposals Received	19
3.19	Project Award	19
3.20	Construction Timeline (under review)	20
3.21	Award CWE/PA Ratio (under review)	21
3.22	Construction Asset Management	21
3.23	Cost and Time Growth	22
3.24	Red Zone	24
3.25	Contract Physical Completion	25
3.26	Project Financial Closeout	26
4	Ribbon Cutter Criteria	28
4.1	Design	28
4.1.1	HAF DI Issue Time:.....	28
4.1.2	AFCEC DI Issue Time (DM/CM to Agent):	29
4.1.3	Agent Design Start Turnaround:	29
4.1.4	Design Build/Adapt Build:	29
4.1.5	Asset Management (Design):.....	30
4.1.6	LEED Silver Certified:	30
4.1.7	Design/RFP Completion:	31
4.2	Award	31
4.2.1	Time to Award After Bids/Proposals Received:.....	31
4.2.2	HAF Notification/Funds Processing Time:	32
4.2.3	Construction Timeline:	32
4.2.4	Project Award:	33
4.2.5	Award CWE/PA Ratio:.....	33
4.3	Construction	33
4.3.1	Asset Management (Construction):	34
4.3.2	Cost Growth (Non-Mandatory Changes, e.g. Customer Requested):.....	34
4.3.3	Cost Growth (Mandatory Changes):.....	34
4.3.4	Time Growth (Non-Mandatory Changes, e.g. Customer Requested):.....	35
4.3.5	Time Growth (Mandatory Changes):.....	35
4.4	Project Closure	36
4.4.1	Red Zone.....	36
4.4.2	Contract Physical Completion	36
4.4.3	Project Financial Closeout	37

Appendices

Appendix A: Glossary of Term and Acronyms

Appendix B: Required Milestones

Appendix C: Agent Codes

Appendix D: Ribbon Cutter Criteria Summary

Appendix E: Ribbon Cutter Report Schedule

Appendix F: Ribbon Cutter Scoring Process

Appendix G: RC Goal Exception Documentation Process

Appendix H: Awards and Recognition

Appendix I: References

Appendix J: MILCON Data Standards and Reporting Team

Appendix K: Document Revisions

Figures

Figure 3.1a. MILCON Agent Codes.....	7
Figure 3.1b. Supplemental Tab.....	7
Figure 3.2. Project Other Costs Screen.....	8
Figure 3.3. Programming Tab.....	8
Figure 3.4 Congressional Actions Screen.....	9
Figure 3.5. Project Facilities Cost (RPUID identification/verification)	9
Figure 3.6. Permits and Certifications	9
Figure 3.7. Design Tab (Design Instructions).....	10
Figure 3.8a. Design Funds Tab.....	11
Figure 3.8b. Project Other Costs Screen (Design Funds Spend Plan)	11
Figure 3.9. Milestones Screen.....	12
Figure 3.10. Managers Screen	13
Figure 3.11a. Technical Design Review Milestones	13
Figure 3.11b. Value Engineering.....	14
Figure 3.12. LEED.....	15
Figure 3.13. Project Delivery Method	16
Figure 3.14. Design Start Milestone	16
Figure 3.15. Design Complete/Ready to Advertise	17
Figure 3.16a. Bid Details	17

AFCEC MILCON Data Management and Metrics

Figure 3.16b. (Bid) Detailed Costs	18
Figure 3.17. Request Authority to Award Milestone.....	18
Figure 3.18. Bid Opening and Contract Award Milestones.....	19
Figure 3.19a. Contract Data	19
Figure 3.19b. Contract Line Items (Asbestos Liability Reporting)	20
Figure 3.21. CWE / PA Ratio	21
Figure 3.22. Demolition Milestone.....	21
Figure 3.23a. Construction Complete Milestone	22
Figure 3.23b. Change Orders	22
Figure 3.23c. Contract Modifications	23
Figure 3.24. Red Zone Meeting Milestone	24
Figure 3.25. As-builts and O&M Training Milestone	26
Figure 3.26a. MILCON Funding Detailed Costs Tab.....	27
Figure 3.26b. Financial Complete Milestone.....	27

1 Introduction

The Air Force establishes inter-service working relationships through agreements in accordance with Department of Defense policies and procedures. The Headquarters (HQ) U.S. Air Force (HAF) and HQ U.S. Army Corps of Engineers (USACE) and HQ Naval Facility Engineers Command (NAVFAC) partnered together to execute the AF Military Construction (MILCON) Program by establishing coordinated Program Management Plans. In essence, these plans create the Project Development Team (PDT) and implement goals used in Ribbon Cutter to evaluate the success of the team.

The HAF/A7CP office is responsible for oversight of the AF MILCON program. They provide policy, guidance and direction to the Air Force Civil Engineer Center (AFCEC), HQ USACE and HQ NAVFAC for completing the AF MILCON program. AF Major Commands (MAJCOMs) are responsible for planning and programming of MILCON projects at their installations, and shall also maintain a liaison function to communicate and coordinate program execution issues with AFCEC.

AFCEC/CF Divisions, USACE Districts and NAVFAC Field Echelon Commands, as AF design and construction agents are responsible for program management of the AF MILCON program as assigned, including their respective agency policies, guidance and direction for program management and execution as AF's design and construction agent. Additional roles are outlined in the respective agent Program Management Plans (PMP) and like agreements with the AF. The DM/CM Waterbeach office is the MILCON agent for AF installations in the United Kingdom.

AF Design and Construction Managers (DM/CM) manage the Air Force MILCON Program in partnership with assigned design and construction agents. They facilitate the program execution process and establish quality expectations by communicating AF requirements and making available the resources necessary for our AF, USACE and NAVFAC agents to accomplish the overall design and construction process.

To achieve successful accomplishment of a MILCON project, all stakeholders including the owner establishing the need (unit or downward directed new mission), the project programmers preparing scope, the DM/CM, as well as the army or navy project managers assigned to the Project Delivery Team (PDT), need to effectively understand, document, and communicate the project requirements. One of the most effective tools we have to document and communicate our project data is USAF's Automated Civil Engineer System – Project Management module (ACES-PM).

ACES-PM was developed to facilitate documentation of performance and support mandatory reporting of Air Force Capital Projects. Accordingly, ACES-PM is the authoritative source for communicating USAF Capital Project data. The responsibility for ACES-PM data management resides with the AF, but we rely on all members of PDT to communicate with each other about key project details in order to report accurate data. It is the DM/CM's responsibility to upload

project data into ACES-PM as soon as possible. Our overall evaluation of the AF MILCON program execution relies heavily on accurate data. Bottom line, all members of PDT are responsible to ensure they provide accurate project data.

It is not enough to just document project information. We must also have the ability to extract reliable, consistent data from ACES-PM for evaluation and analysis to identify trends and opportunities with the goal of improving our capabilities and processes. To assist us with data analysis and reporting, we developed Ribbon Cutter.

Ribbon Cutter is an AF MILCON Program project execution evaluation tool. The CF Integration Cell developed this product to evaluate how well the AF and its partners are achieving their goals to provide the Air Force with the best possible facilities on time and within budget. AFCEC/CF expects our project execution teams to use results from Ribbon Cutter as a basis for further review and process improvement.

The Ribbon Cutter metric focuses on four distinct categories of the project execution process – Design, Award, Construction and Closeout. Each of these categories has sub-categories to evaluate specific milestones. These milestones are pivotal points in the project process that are good indicators of how successful the project execution will be. These milestone goals are established via agreements based on historical data, negotiations, personal experience and by established Government, Department of Defense and AF policies.

The AFCEC/CF executive team reviewed each of the key milestones used in Ribbon Cutter and established a goal, a scaled point system, and weight for each of them. One alternative was a meet or did not meet goal scoring system which did not provide any incentive once it was clear the original goal would be missed (usually due to extenuating circumstances). Weights were assigned to each milestone using the teams experience and a corporate agreement with its partners of what the AFCEC/CF thought was most important. It may be necessary to periodically review and revise these weights to meet current expectations. All scores and weights assigned are eventually recalculated as a weighted mean total for a final score.

Another objective of Ribbon Cutter is to use final scores to recognize superior performance of our teams most successful at meeting established goals. In addition to the award categories available to AF personnel, The Civil Engineer annually recognizes USACE, NAVFAC, and Host Nation Agency organizations and personnel for outstanding achievement and urges MAJCOM, field operating agencies (FOA), and direct reporting units (DRU) to submit nominations for the agent awards program.

This guide will highlight the ACES-PM data management expected as well as describe our Ribbon Cutter goals and metric reporting procedures. All project execution team participants not only have a fiduciary responsibility to the tax payers, but also a shared commitment to the rest of the team and must work together to overcome challenges throughout the project execution process in an effort to provide the best quality facilities within budget and time constraints. For this team construct to work, we must first understand our roles and responsibilities.

2 ACES-PM Data Management Roles and Responsibilities

2.1 Installations

2.1.1 Base Civil Engineer (BCE)

- Ensure installation Programmers and Design Managers/Construction Managers (DM/CM) have been adequately trained in Planning, Programming, Budgeting, and Execution (PPBE) requirements and managing data in ACES-PM
- Ensure the installation's ACES-PM data is updated in accordance with (IAW) established guidelines or as a project's information changes, necessitating a data update
- Validate and communicate MILCON project planning requirements with ACFEC/CF

2.1.2 Programmers

- Load projects in ACES-PM using the latest USAF Capital Project programming guidance
- Validate National Environmental Policy Act (NEPA) actions are initiated with an AF Form 813
- Submit authorized projects to MAJCOM for further validation and prioritization

2.1.3 Design Manager/Construction Managers (DM/CM)

- Installations accept responsibility for DM/CM roles when project contracts are managed by the installation
- Update ACES-PM with current and accurate project data as it becomes available and IAW this guide

2.2 MAJCOMs

Program Managers

- Validate and communicate MILCON project planning requirements with ACFEC/CF
- Validate and prioritize project requirements and data submitted by the installations
- Validate National Environmental Policy Act (NEPA) actions are initiated with an AF Form 813

2.3 HAF

Program Managers

- Validate project requirements and data submitted by the MAJCOMs or the AFCEC
- Establish policy regarding ACES-PM data entry compliance with US Codes and USAF auditability requirements
- Process AF project approval packages and document Congressional actions
- Submit project Design Instructions, to AFCEC, authorizing project activities

2.4 AFCEC/CF

2.4.1 CF Management Team

Director, Div Chiefs

- Approve program data management policy and metrics

Branch Chiefs

- Assign projects to their team DM/CMs
- Validate and enforce approved data management standards IAW this guide

2.4.2 CF Execution Team (DM/CM)

- AFCEC/CF accepts responsibility for DM/CM roles when the project contract is managed by AFCEC/CF
- Updates ACES-PM at least weekly with current project data specified in this guide for assigned projects
- Update ACES-PM, as required, to meet on-call reporting to ensure the most accurate data is reported

2.4.3 CF Integration Cell

- Ensure ACES data entry meets compliance and auditability requirements
- Provide daily program updates and data validation reports
- Facilitate the development of project execution metrics and goals
- Manage ACES-PM data management guidance

2.5 AFCEC/CR

Funds Managers (FM)

- For projects managed by AFCEC/CF, update ACES-PM funds distribution at least monthly, and in accordance with AFCEC/CF's ACES-PM Data Management Guide
- Participate in CF data management policy and metric development

2.6 Project Execution Agents

- Leads contract and project milestone development
- Must relay accurate project data to the DM/CM
- When agent is USAF, accepts DM/CM roles and responsibilities

2.7 AFCEC/CP

Planning and Integration Subject Matter Experts

This section is reserved for future process development

2.8 AFCEC/CN

Facility Energy Subject Matter Experts

This section is reserved for future process development

2.9 AFCEC/CZ

Environmental Subject Matter Experts

This section is reserved for future process development

3 ACES Data Management

Automated Civil Engineer System - Project Management Module (ACES-PM). ACES-PM is the single official Air Force-wide database management system used to create, store, retrieve, and update MILCON project records. It is used to develop the Air Force MILCON program from MAJCOM/DRU submittals, support the MILCON submittal to Congress, answer Congressional inquiries, provide an audit trail and historical record of project activity, and as an information source for Air Force managers. Program managers will use the data in ACES-PM to update and monitor project progress, cost, and schedule. This unique and essential relational database requires all ACES-PM users ensure project data for which they are responsible is accurate and current. The AF Design Manager/Construction Manager (DM/CM) or assigned Project Manager (PM) will be the primary person managing and updating data in ACES-PM during Design and Construction Execution.

Timely and accurate ACES-PM data entry is essential throughout the course of the project. This data facilitates management assessments of project cost, major milestones, and also provides an indicator for Air Staff to position design and construction funds with our execution agents. The DM/CM must update all completed project data elements and milestones listed in this section, weekly, but no later than mid-month each month to meet the monthly Ribbon Cutter report schedule, and must have all data current and accurate no later than 15 Oct each year for final Ribbon Cutter evaluation reports.

Programming Capital Projects is not addressed in this guide due to lack of AFCEC's direct oversight of the programming process. Other data fields may also be required to support additional project management reporting. It is the DM/CM's (or PM's) responsibility to know if other ACES-PM updates are necessary. We suggest the DM/CM (or PM) use this section to supplement the guidance provided in the USAF Guide for Design and Construction, Nov 2007, and/or the Project Execution Playbooks found in the CE Portal.

The following pages show screen shots of the appropriate ACES-PM tabs for Milestones or details required for AFCEC reporting.

3.1 MILCON Agent Codes

Historically, storage space in databases cost money. In an effort to reduce the amount of data stored, programmers create codes or acronyms to identify items. Figure 3.1a is a screen shot of the Ribbon Cutter database page listing all agents by location and the corresponding code used to identify them in ACES for AFCEC managed projects.

Updating Agent Codes in ACES – During the programming stage of a project, the project programmers will identify the expected Design and Construction agent (DA/CA) when adding the project data to ACES. This selection is based on the location of the project and experience of the agent typically doing the type of work requested and more recently decided based on Joint Basing areas of responsibility as well.

It is possible the DA and the CA will be different from what was planned. The reasons for a change can vary. Figure 3.1b shows the ACES data fields the DM/CM will validate or update. For AF MILCON, the DA and CA are typically COE, NAVFC, or AFCEC.

It is necessary to make sure “AFCEC” is entered as the PM, in ACES, for all projects assigned to AFCEC. If the PM is not “AFCEC”, AFCEC will not track or report updates for those projects.

The three letters, MILCON “Agent” Code, identifies the district, FEC, or AFCEC Division responsible for executing the construction project. Typically, the Air Staff will update these fields when they issue a Design Instruction (DI), but it is the DM/CM’s responsibility to make sure these values are correct as soon as they receive the project assignment.

By keeping the agents accurate in ACES, we are able to recognize great performance and give credit where it is due, as well as identify opportunities to share best practices, improve processes, and provide training when appropriate.

Agent values:

- Base is executing:
- DA/CA reflects MAJCOM
- Agent is "XXX"
- PM is the Installation Code

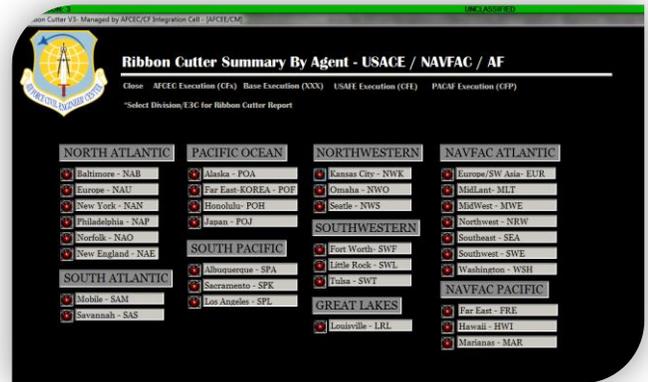


Figure 3.1a. MILCON Agent Codes

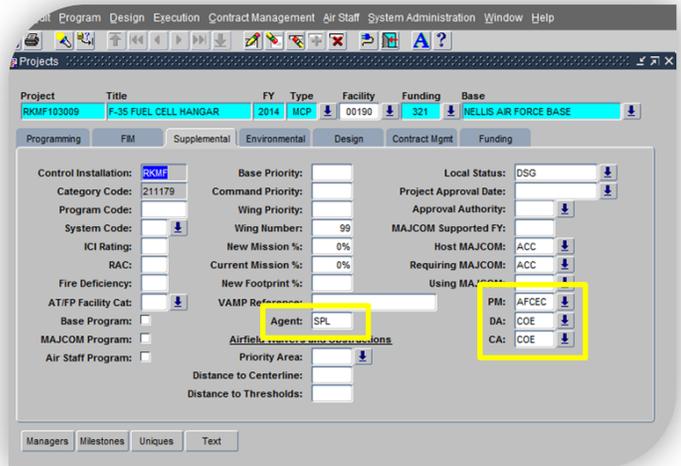


Figure 3.1b. Supplemental Tab

COE/NAVFAC is executing:
 DA/CA shows as "COE" or "NAVFC"
 Agent reflects the three letter district symbol
 PM is "AFCEC" or Installation code

AFCEC is executing:
 DA/CA shows as "AFCEC"
 Agent reflects 3-letter AFCEC Division symbol
 PM is "AFCEC"

3.2 Planning Charrette

A Planning Charrette is typically accomplished to develop/validate DD Form 1391 before submitting it to Congress for budget approval.

Installations and MAJCOMs are the OPR; however, AFCEC will coordinate with them and issue planning instructions as needed.

When a Planning Charrette is proposed, the DM will add a "Planning Charrette" item to the Project Other Costs screen. The DM will add the planned costs and date funds are expected to be obligated. Update actual values if different than the estimates. If a decision is made to not complete the Planning Charrette, remove the amounts from this screen.

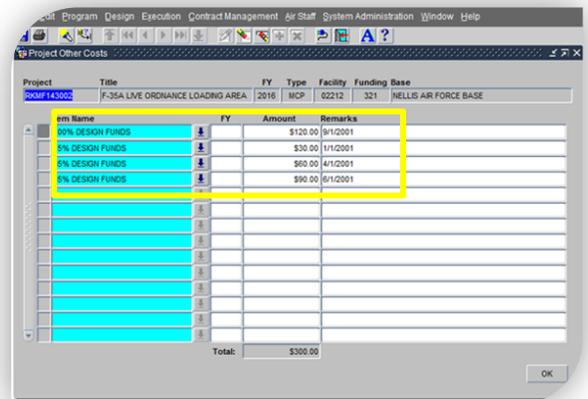


Figure 3.2 Project Other Costs Screen (Planning Charrette)

3.3 Programming Tab

(Figure 3.3) For reference only. No DM/CM updates required.

When the DM receives the initial DI, verify the PA and category code. Release the project back to the installation if updates are required. The original PA will not change on this screen when Congressional actions "rebaseline" the amount authorized or appropriated.

The current authorized and/or appropriated PA will be shown on the Congressional Actions screen.

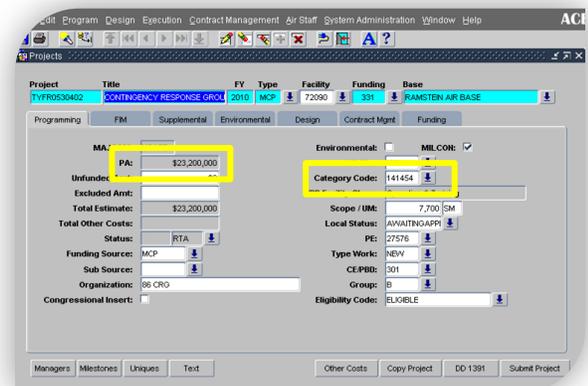


Figure 3.3. Programming Tab

3.4 Congressional Actions Screen

For reference only. No DM/CM updates required.

HAF documents the project amount authorized and appropriated by Congress on these screens (Figure 3.4). CMs must verify PA amount when the initial DI is issued and before awarding project contract.

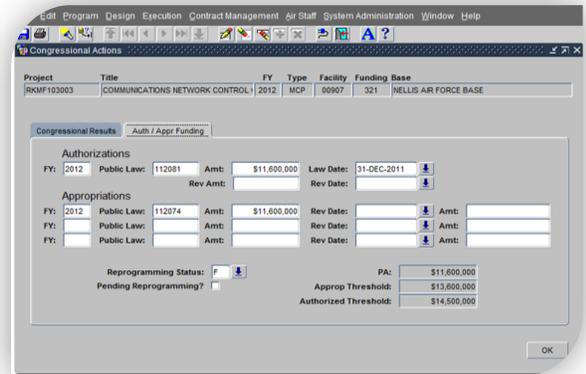


Figure 3.4 Congressional Actions Screen

3.5 Project Facility Costs

DM/CM must validate/update the Base (code), Facility (number), and Category (code), in the Project Facility Costs, Facility field when the Initial DI is received or at the Planning Charrette when applicable for all line items/facilities entered (Figure 3.5). Coordinate changes with the base programmer. These values help identify/verify the project facility Real Property Unique Identifier (RPUID) in the Defense Analytics and Integration Support Platform.

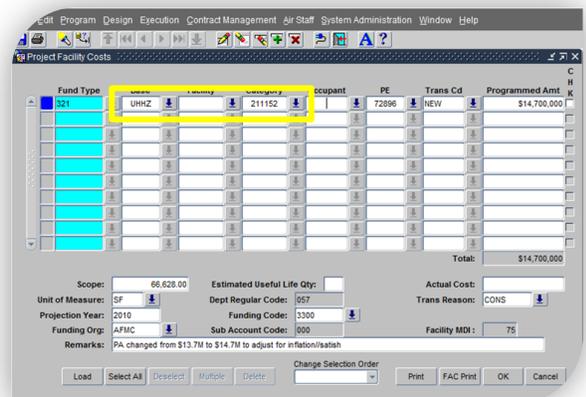


Figure 3.5. Project Facilities Cost (RPUID identification/verification)

Upon design contract award, the base Real Property office must assign a facility number to the project facility in order to start tracking Construction In Progress facility capitalization costs.

RPUID is used to determine compliance with the FMR (Volume 4 Chapter 6) for CIP account identification and reconciliation. The DM must work with the Installation Real Property Office to establish a facility number and RPUID for new construction. The RPUID and new Bldg number must be included in the Field Design Instruction issued to the DA or CA. This information will help the agents effectively report CIP information.

3.6 Permits and Certs

From the Environmental tab select the Permits/Certs button. The DM/CM is responsible for validating and updating the status of permits and certifications associated with their projects. (Figure 3.6)

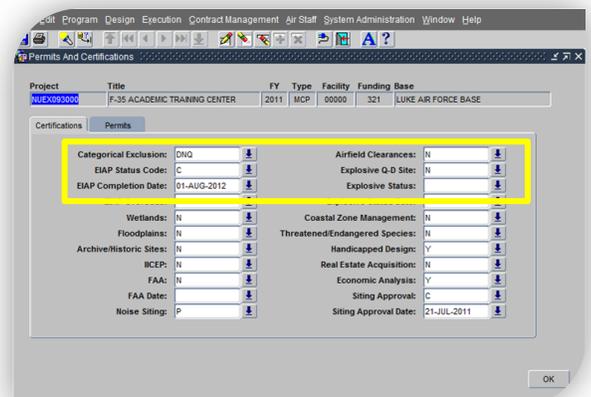


Figure 3.6. Permits and Certifications

All projects must have an EIAP assessment accomplished (Ref AFI 32-1023). AFCEC cannot fund construction projects without a completed EIAP analysis.

When projects require Department of Defense Explosives Safety Board (DDESB) approval or where airfield safety is a factor, early site selection and processing approval packages are essential. Update these status fields as required using the drop-down menu to select the appropriate values to

indicate the requirement is not required, in progress, complete, etc. This will indicate the requirement was considered and does not apply or was sufficiently addressed and appropriate actions started.

IAW AFI 65-501, *Economic Analysis (EA)* - Real Property repair projects only require EAs if the repair costs equal or exceed 75 percent of the facility replacement cost. An economic analysis must be submitted with all relocatable facility acquisition requests in accordance with AFI 32-1021, Planning and Programming Military Construction (MILCON) Projects. When required, use the down arrow button to select the date the base completed this analysis.

3.7 Design Instructions (DI) – HAF DI Issue Time/AF DI Issue Time Under Review

This performance metric evaluates when HAF issues the Initial DI to AFCEC and how long after that, our DM/CM issues an initial field DI to the agent.

When the AF’s budget is approved, the Air Staff will authorize design for MILCON projects included in the budget for FY+2 by issuing DIs. Only Air Staff PMs update Date of Original USAF DI (a.k.a. Initial DI) field on the Air Staff, Design Instruction screen, and visible on the Projects, Design tab (Figure 3.7). The DM/CM can view all HAF issued DIs on the DI History screen (not shown). The HAF DI Issue Time goal is issue DIs 18 months prior to the programmed FY for CONUS and 24 months prior to programmed FY for OCONUS projects.

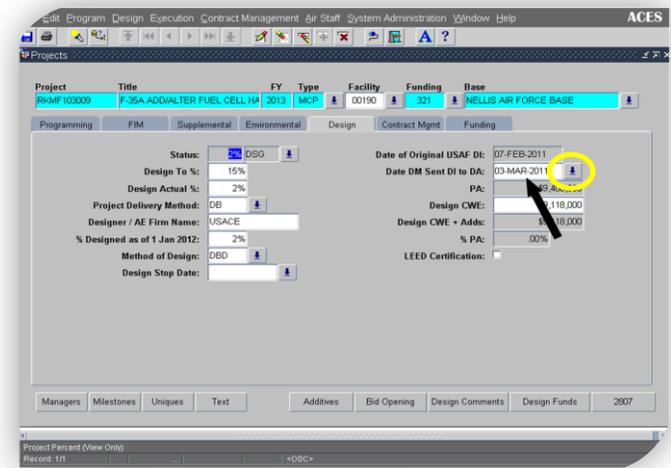


Figure 3.7. Design Tab (Design Instructions)

Note: Regardless of when the Air Staff issues the initial DI to the agent, Ribbon Cutter’s goal is 18/24 months to achieve RTA. The goal is to get HAF to issue the DI 18/24 months prior to the year of execution to allow sufficient time for design development and be ready to execute the construction contract in the programmed fiscal year.

The DM/CM will update the Date DM Sent DI to DA (a.k.a. Field DI) field, shown in Figure 3.7, within seven days of receiving the “Initial DI” indicated in the Date of Original USAF DI field above. DM/CM can only track one Field DI on this tab and it is reserved for the initial Field DI. DM/CM can track other Field DIs using offline applications, or adding user defined milestones in ACES.

The AFCEC/CFT Integration Cell provides daily updates for new DIs and tracks all active project DIs. An active project DI is a DI with a design percent authorization greater than zero.

3.8 Design Funds Management

It is critical we manage our MILCON Planning & Design resources to make sure we do not issue funds (or increments) to our agent, if our agent is not ready to execute those funds within 90 days.

A. **Update “Funds Required” field.** (Figure 3.8a)
 This field will indicate the total requirement for the design contract and will be used to validate funds distribution.

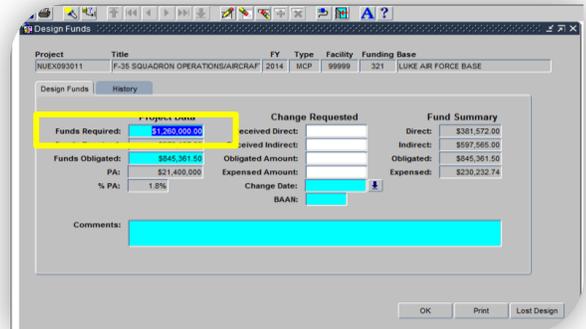


Figure 3.8a. Design Funds Tab

- 1) As soon as the HAF issues a DI, the DM will update this value. The initial estimate can be based on the programmed amount. If the value is expected to be greater than \$1M make sure HAF initiated the Title 10, section 2807, Congressional notifications.
- 2) Update as soon as the Agent provides an initial estimate and any time the total amount changes until the design contract is financially complete.

When design execution payments are incremented, the DM will update the funds increments and dates required in the Project Other Costs Screen.

B. **Design funds Spend Plan.** (Figure 3.8b) When the DM receives the Agent’s estimate for design costs and schedule, the DM will update the fields shown (as required).

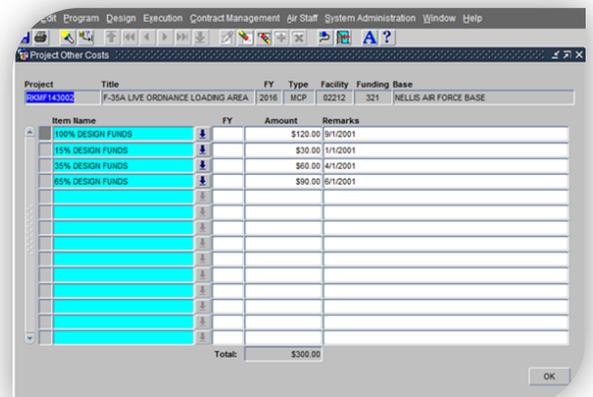


Figure 3.8b. Project Other Costs Screen (Design Funds Spend Plan)

- 1) Select from the drop down list of values one or all of the planned design fund increments.
- 2) Update the dates and amounts as required. The total amount must equal the design Funds Required amount.
- 3) Update actual values when obligated.

These details will help us establish a quarterly spend plan for MILCON design execution and support justification for requesting additional funds and/or reallocation of available resources.

3.9 Adding New Milestones to ACES

When a project is loaded in ACES, ACES adds a standard template of milestones to the Project Milestones tab. If a required milestone is not preloaded, select required milestones from the drop-down list of values. If no space is available on the Milestone screen, select Insert Record to add a new milestone. Table 3.9 lists the mandatory Ribbon Cutter Milestones. Figure 3.9 highlights the add record button on the Project Milestones tab.

It is necessary for the DM/CM to coordinate with the PDT the project delivery schedule as soon as possible and update the Estimated milestone date for all required milestones. Updating the Estimated date field serves two purposes. First, it identifies the delivery schedule. This schedule is useful for planning TDYs, furniture orders, as well as other funds planning requirements. In addition, it helps the Integration Cell identify missing or incorrectly typed milestones.

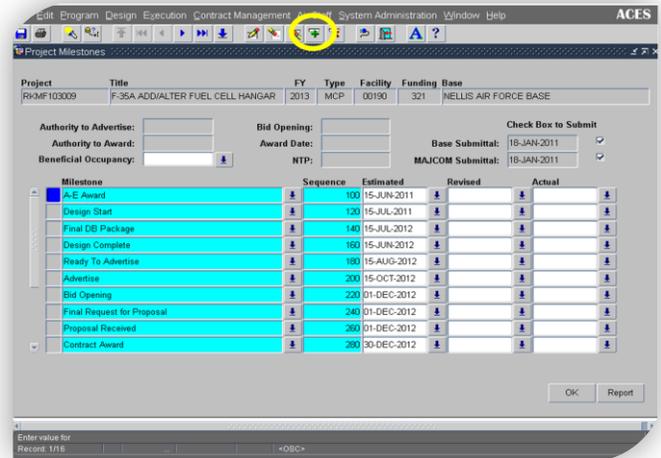


Figure 3.9. Milestones Screen

Design Start
Technical Design Review
Demolition
Design Complete
Ready to Advertise
Bid Opening
Request Authority to Award
Contract Award
Red Zone Meeting
Construction Complete
Beneficial Occupancy
As-builts & O&M Trng/Manual Submissions
Financial Complete

Table 3.9. Mandatory Milestones

The DM/CM is able to load as many milestones as they need to effectively manage and report on their projects. If it is necessary to “manually” load required milestones, we suggest selecting the milestones from the dropdown list of values. If the required milestone does not exist in the dropdown list, you can type the milestone name. When you type a mandatory milestone name, make sure you spell it exactly as shown above or report queries will not recognize the milestone and ignore the values.

3.10 Adding Project Delivery Team POCs

The DM/CM must fill in Managers fields and keep them current.

As a minimum, use the following Primary Roles:

- a. Programmer
- b. Design Manager
- c. Construction Manager
- d. DM/CM (When the Design and Construction Manager is the same person)
- e. MAJCOM Manager
- f. AFCEC Funds Manager
- g. Agent Funds Manager
- h. Base Civil Engineer

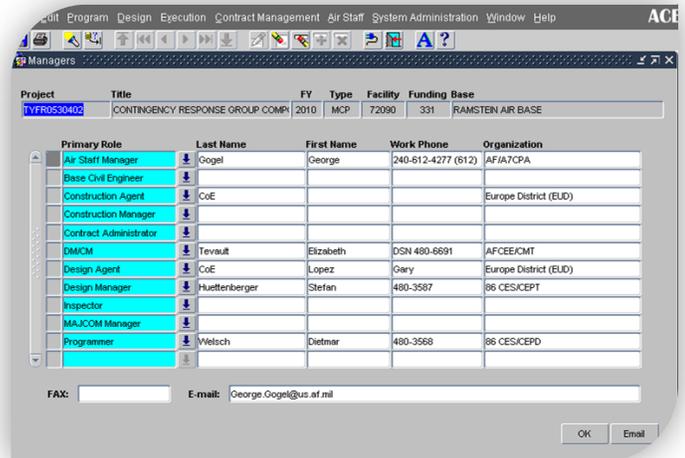


Figure 3.10. Managers Screen

Make sure the name spellings for all fields are the same for all projects assigned (i.e. do not use Jim for one project and James for another. This applies to all fields typed manually. For Organization, type your squadron/office symbol (i.e. 42CES/CEP). Use your DSNXXX XXX-XXXX in the Work Phone field (if your “Blackberry” is your work phone, enter that number).

3.11 Asset Management

Technical Design Review/Demolition milestones are used to evaluate three actions:

- The PDT did a Life-Cycle Cost review, and
- The PDT considered and included Value Engineering (VE) for all projects (AFI 32-1023 requires an informal (in-house) VE for all projects >\$2M and formal (3rd Party) VE for all traditional designed projects >\$10M), and
- The PDT determined if Demolition is required, or not, as part of the project scope (if not, the PM is required to validate by adding the date 1/1/2001 to the Demolition milestone).

A. Updating Asset Management Milestones

- 1) If not entered in the Milestone already (Figure 3.11a), use the drop down menu to select *Technical Design Review* milestone and insert the Actual date using the drop down calendar.
- 2) If not entered in the Milestone already (Figure 3.11a), use the drop down menu to select *Demolition* milestone and insert the Estimated date using the drop down menu.

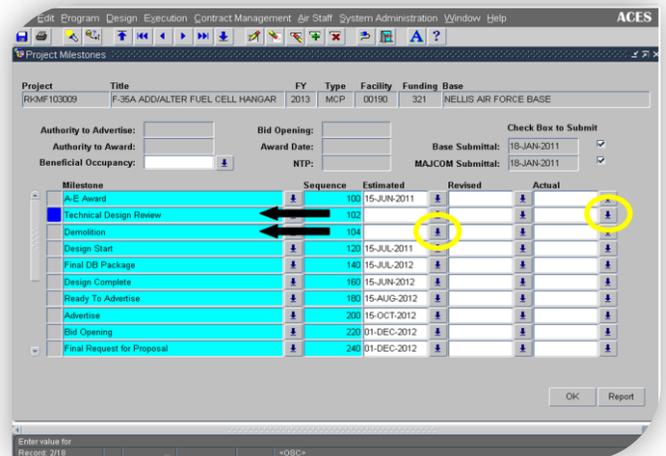


Figure 3.11a. Technical Design Review Milestones

Instead of scrolling to calendar year 2001, you can type in 1-Jan-2001 in the Estimated date field if demolition is not required.

- B. *Updating Formal VE Data*** – The *Office of Federal Procurement Policy Act* (Title 41 U.S.C. Section, 1711, Public Contracts), requires each executive agency to establish and maintain cost-effective value engineering procedures and processes. For formal VE studies, the DM/CM can update the Value Engineering tab (Figure 3.11b). RC does not require this data; however, the DM/CM shall ensure these values are available for validation as required.

Figure 3.11b. Value Engineering

Value Engineering is intrinsic to Design Build execution methods. As long as controls are in place to track this requirement, our goal is LEED certification, and we validated the initial Life-Cycle Cost, the DM/CM can use the actual RFP date for the “Technical Design Review” milestone. For Design-Bid-Build the DM/CM will enter the actual date both VE and Lifecycle Cost reviews are complete.

- C. *Updating Demolition Milestones*** – AFCEC/CF tracks and manages facility demolition not only to meet Title 10 reporting requirements, but also in an effort to gauge our contribution towards the USAF CE 20/20 initiatives. By 2020, reduce by 20 percent the amount of the Air Force physical plant that requires funds. We will track demolition in ACES when maintainable facility demolition is required for the construction of the new facility, or to reduce the facility footprint, and reportable to congress when included on the DD Form 1391 (reference the DD Form 1391 Facilities Costs tab, Supporting Facilities data fields).

We established the demolition milestone date entry of 1-Jan-2001 (referred to as 1/1/2001) to help us determine if reportable demolition was required or not. Updating a Demolition milestone date of 1/1/2001 for projects without demolition, or where demolition will not be completed, or where demolition has occurred under other contract already, helps us validate ACES data, make sure this validation/update was not overlooked, and facilitates more accurate demolition reports.

When the DD1391 specifies demolition and we later determine demolition is not required, report this to the HAF PM, enter 1/1/2001 in the Demolition Milestone s fields and note this in the CM Comments screen in ACES (i.e. site changes, insufficient funds, contract changes, etc.). The note should include the scope and UM of demolition not completed. If demolition was completed under another project/contract and is not in the current project scope, identify the contract used to accomplish the demolition in the CM Comments screen. Report this change to the HAF PM for further notifications. Additionally, when the PDT decides to retain a facility that was committed to Congress, MAJCOM/BCE needs to approve a waiver

to retain facilities or substitute another for demolition and place comments in the CM Comments screen.

MILCON Programmers should take care to validate demolition of facilities owned by a Host Nation are authorized and approved for demolition and are within project scope before including the details in the DD1391. In addition, the PDT will validate the demolition is appropriately programmed when they receive the project for execution and update ACES accordingly.

Once a facility is committed to Congress for demolition, we must promptly remove it from our inventory (an exception being a facility that belongs to our host nation). AFI32-1021 says demolition funded as part of a MILCON project shall be directly related to the project (e.g., in the footprint of the new construction or no longer needed because of the new construction).

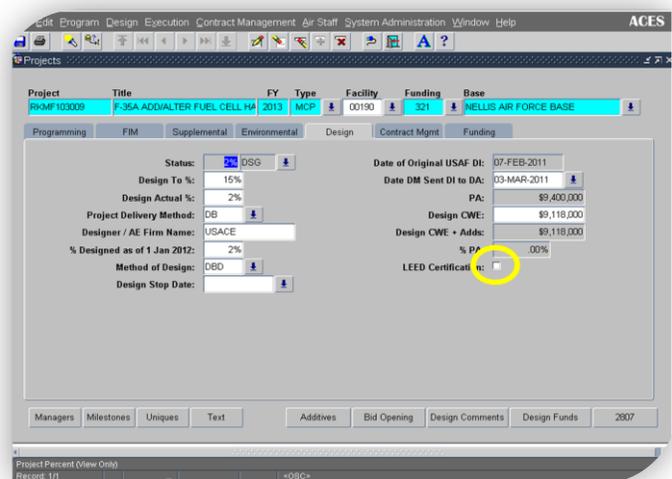
The DM/CM can track other project demolition milestones when useful for project management. When used to track non-reportable demolition, prefix the milestone with specific description of the demolition (i.e. plumbing demolition, interior demolition, site demolition, etc.). Use the “Demolition” milestone (Figure 3.11a) to track only reportable demolition (as noted on the DD1391).

The CE Portal, Demolition Playbook at the link provided, contains more information about our Demolition policies and procedures.

<https://app.eis.af.mil/a7cportal/CEPlaybooks/ENG/PM/Demolition/default.aspx>

3.12 Leadership in Energy and Environmental Design (LEED) Certification (under review)

The Air Force Sustainable Design and Development (SDD) Policy memorandum requires that MILCON vertical new construction and major renovations projects (with climate control) can achieve LEED Silver level certification. In the case of building additions, this applies to portions of the facility within the scope of the project only. The policy further requires that other MILCON projects (horizontal, utility, and industrial) achieve a benchmark level of LEED credits, guidance for which is in the Air Force Sustainable Design and Development (SDD) Policy memorandum.



The screenshot shows the ACES software interface for a project. The project title is '7-35A ADD/ALTER FUEL CELL HA' and the base is 'NELLIS AIR FORCE BASE'. The 'LEED Certification' checkbox is checked and highlighted with a yellow circle. Other fields include 'Status: DSG', 'Design To %: 15%', 'Design Actual %: 2%', 'Project Delivery Method: OB', 'Designer / AE Firm Name: USACE', '% Designed as of 1 Jan 2012: 2%', 'Method of Design: OBD', 'Design Stop Date: ', 'Date of Original USAF DI: 07-FEB-2011', 'Date DM Sent DI to DA: 03-MAR-2011', 'PA: \$9,400,000', 'Design CWE: \$9,118,000', and 'Design CWE + Add: \$9,118,000'. The 'LEED Certification' field shows '00%'. The interface also includes tabs for 'Managers', 'Milestones', 'Uniques', 'Text', 'Additives', 'Bid Opening', 'Design Comments', and 'Design Funds'.

Figure 3.12. LEED

Select the *LEED Certification* checkbox on the Projects, Design tab (Figure 3.12) to validate the project is LEED Silver certifiable or LEED Certified or to indicate High Performance and

Sustainable Building Requirements (HPSB), as defined by UFC 1-200-02 requirements, will be met.

Note: In order to accomplish LEED silver certification, the LEED certification requirement must be included in the approved DD1391 scope.

3.13 Design Build/Adapt Build (under review)

Project Delivery Method - Programmers use experience and often communicate with the PDT to determine the best project delivery method to execute the project and update the Project Delivery Method field. When HAF issues a DI, the PDT validates the method selected is still appropriate and updates the Project Delivery Method field (Figure 3.13) as required. Although Design Build (DB) methods vary, for this requirement, we will not distinguish between the different types.

The AFCEC goal is to execute the program using 75%* DB Project Delivery Method. Projects executed in the UK are typically DB.

One important benefit of selecting the design-build method is to shift project delivery risks from the Air Force to a single design and construction agent. You will also see cost saving by managing a single contract versus a design and separate construction contract. And, by shifting the design responsibility to the design-build contractor, we should minimize claims for design errors.

Another expected benefit is value engineering. As the design progresses the construction team is involved. This dynamic can enhance the design teams understanding of what it takes to install and/or maintain the design choices and helping to make choices that are most efficient for the operation and maintenance of the facility. The goal is to reduce the cost of our initial investment and reduce the overall cost for USAF facility management.

* When we published this document, there was no official USAF or DoD mandate to achieve this or any execution method goals. AFCEC established this goal based on current perceived and factual benefits of using the DB acquisition process.

3.14 Agent Design Turnaround

Design Start milestone – our goal is to have our projects ready to advertise by the first day of the programmed year provided we issue the HAF initial

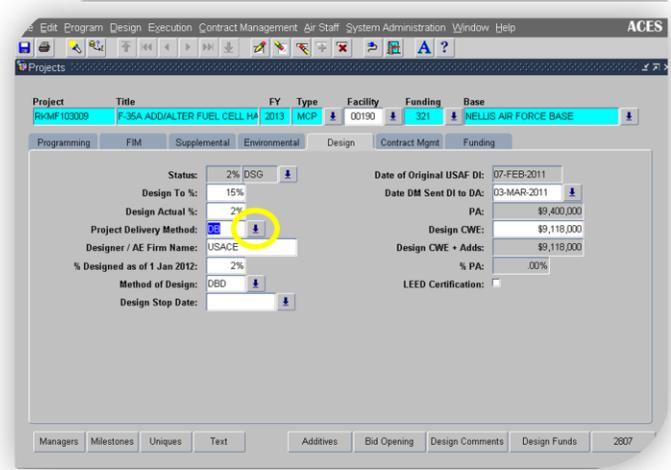


Figure 3.13. Project Delivery Method

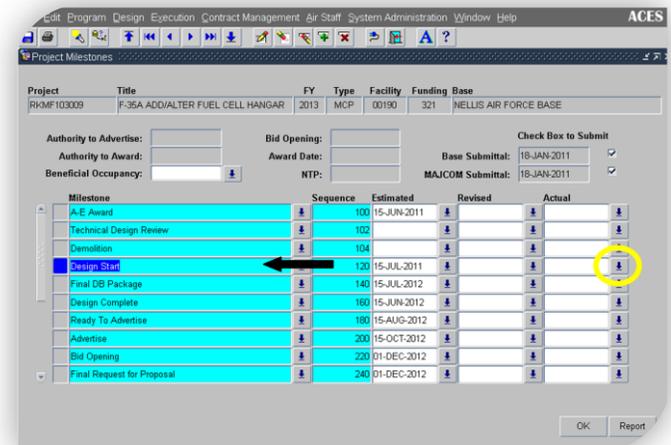


Figure 3.14. Design Start Milestone

DI and field DI on schedule. The first step of any design is getting started. Yes a profound statement, but allocating design funds in a timely manner allows us to reallocate unobligated funds where required.

Delays in the design process can result in delays in subsequent milestones. The Design Start date is the design contract Notice to Proceed date as indicated by the Agent. Insert Design Start Actual date (Figure 3.14) using the drop down calendar. From a Ribbon Cutter metric perspective, we do not need to track any other design milestones (i.e. 35%, 65%, 95%, etc.). These milestones are optional unless required by other reporting directives.

3.15 Design/RFP Completion

Design Complete milestone – The AF goal is to be RTA by 1 Oct of the project’s programmed year. For AFCEC to achieve this milestone, HAF must prepare a solid plan for out-year projects and issue Design Instructions 18/24months prior to year of execution. Our agents indicated they need this lead-time to ensure they are ready to award our projects in the programmed year. However, when HAF issues a DI late, our goal is to achieve RTA 18/24 months after the DI issued date. This means late DIs could result in an RTA beyond 1 Oct of the execution year, but still achieve a good RC score.

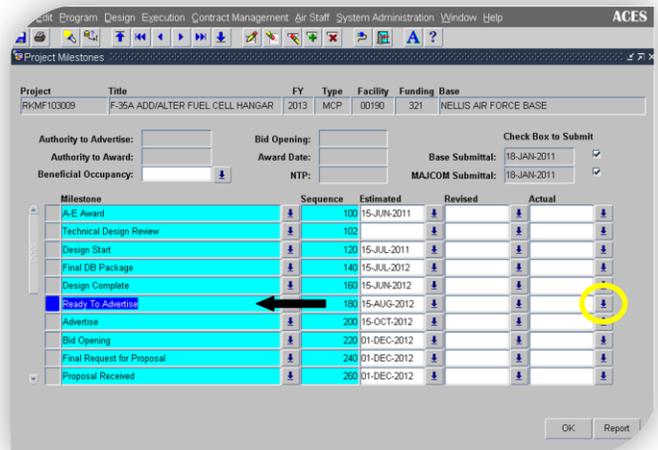


Figure 3.15. Design Complete/Ready to Advertise

ACES rules prevent RTA Actual date entry (Figure 3.15) until HAF issues the Authority to Advertise. AFCEC/CFT Integration Cell submitted an ACES IT Change Request to apply the rule to the Advertise milestone and allow our PMs to enter an RTA actual date when the PDT achieves the milestone. Until we resolve the RTA date issue, we will use the design complete actual date to evaluate the Design/RFP Completion metric. Select the actual date project is Design Complete using the drop down menu. When the DM/CM receives Authority to Advertise, select the actual date the project was RTA.

3.16 Bid Opening Results

After selecting an acceptable bid, our agents submit a bid detailed cost breakout. NAVFAC typically submits bid details in a formatted e-mail. And USACE will submit a detailed bid sheet attachment known as a “rainbow sheet”. The DM/CM will transcribe these bid details into ACES (Figure 3.16a). Fill in all applicable fields.

The method our agents used to calculate the contract costs typically do not fit in ACES neatly.

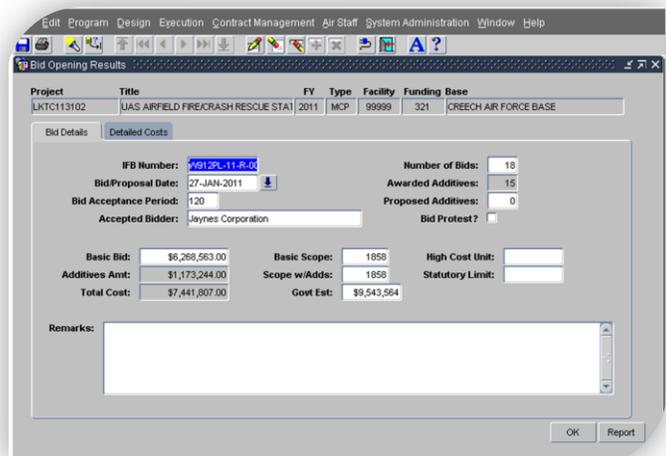


Figure 3.16a. Bid Details

Therefore, the DM/CM must use the data fields available to adjust the details to report the correct costs in ACES (Figure 3.16b). The F. Melendrez method of BID Detailed Cost management, uses a standard 3% for Contingency, 2% for Management Reserve and 5.7% for SIOH, then applies the remaining balance to Other (No SIOH) cost field to balance the total bid submitted by our agent.

When necessary, the DM/CM will apply a value to the ED % (Engineering and Design) field. For MFH projects, the ED % covers the total design effort.

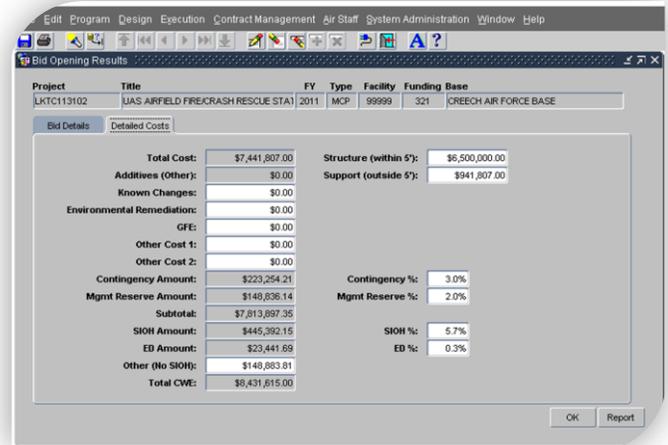


Figure 3.16b. (Bid) Detailed Costs

When a project has multiple contracts awarded at different times, enter the first (or all acceptable) contract proposal bid data. This will allow the PDT to continue forward progress and Request Authority to Award. Please note this will likely skew the CWE/PA ratio, which may warrant an exemption of that metric. Subsequent, contract bid data entries will not be necessary on this tab. When the PDT awards the next contract, the CFO team will update the funded amount in ACES and the DM/CM will add the contract data to the Contract tab and adjust the Detailed Costs tab as required.

3.17 HAF Notification/Funds Processing Time

Request Authority to Award milestone – As soon as the DM/CM receives an acceptable bid the DM/CM will process a request for award authority from HAF. Our goal for this performance metric is to get Authority to Award within 10 days of the DM/CM’s request. The challenges for getting authority, is a timely appropriation and a complete EIAP certificate. Ribbon Cutter will subtract, from the time between the actual bid date and the actual award date, the time it takes for HAF to issue the authority to award after the actual date the DM/CM requests that authority (Figure 3.17).

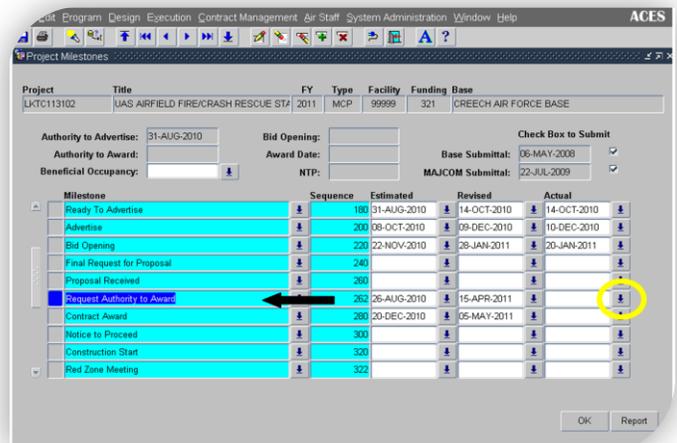


Figure 3.17. Request Authority to Award Milestone

When the ACES Bid report is ready, the DM/CM will print a copy, attach it to the authority to award request and submit the request to HAF for approval. The DM/CM will insert Request Authority to Award Actual date using the drop down menu.

Updating the Request Authority to Award milestone helps us identify projects we sent notice to HAF requesting funds and indicating we are ready to award. We use this information in our Weekly Activity Report to identify number of projects awaiting funds and ready to award.

3.18 Time to Award After Bid/Proposals Received

Bid Opening and Contract Award milestones – Our goal is to get the contract awarded within 90 days after the PDT selects an acceptable bid. The hurdles achieving this goal are receiving a timely appropriation and bid protests that block progress. As mentioned previously, Ribbon Cutter will subtract, from this period, the time it takes to get award authority from HAF.

To evaluate this metric, the DM/CM will update the Bid Opening and Contract Award Actual dates (Figure 3.18).

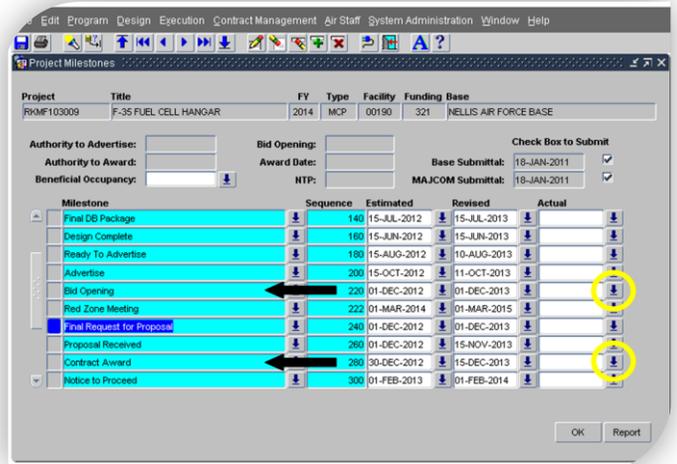


Figure 3.18. Bid Opening and Contract Award Milestones

3.19 Project Award

A. Contracts – AFCEC/CF’s goal is to get all President’s Budget (PB) projects awarded by 30 Jun of the programmed FY and all other authorized appropriated projects by 30 Sep of the programmed FY. For late appropriations, the goal is to award projects 90 days after the signed appropriation.

Contract number(s) entered must comply with FAR Subpart 204.70. To facilitate electronic contract data management, contract number must be entered as shown on the Standard Form 1442 contract award document, but without dashes. This provision is indicated in FAR Subpart 204.70.

When a contract is awarded as a task/delivery order (as indicated in the Construction Execution method field), include the primary contract number include the delivery/task order number as a suffix.

Project contract award status cannot be reported until the DM/CM updates Actual Contract Award date and all Contract data fields in ACES (Figure 3.19). When the DM/CM updates the Contracts data screen, the project status changes from “BID” to “CNS” (“CNS” also indicates “Awarded” status) and enables contract data reporting from ACES.

For many reasons the construction agent may decide to execute the project using multiple contracts. In ACES, the Period of Performance (PoP) equals the combined total of all contracts regardless if the work occurs simultaneously.

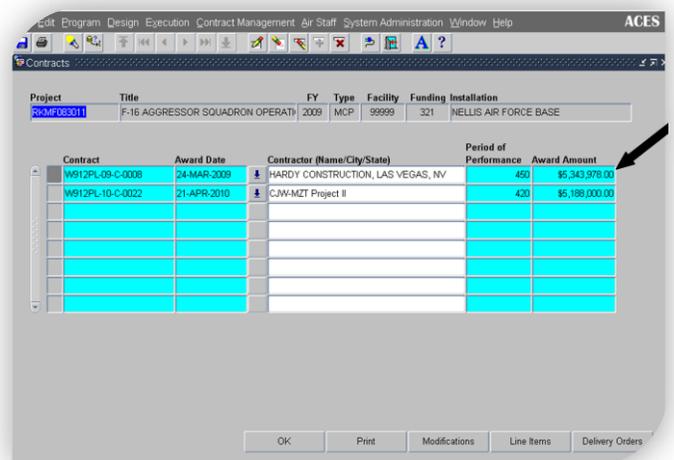


Figure 3.19a. Contract Data

Consequently, this causes inaccurate results for Ribbon Cutter when we assess the PoP at Construction Complete or BOD whichever is achieved first. In order for us to establish the most accurate PoP for Ribbon Cutter, when our agent uses multiple contracts, the DM/CM will enter the contract award date and POP for all contracts and the Notice To Proceed date for the first contract to start work. Ribbon Cutter will calculate the contract with the latest expected construction completion date and the difference between that end date and the NTP. NTP - latest construction completion date = Project PoP.

Note: When a Bid Option is executed after award, a modification to the contract will be required. Follow instructions in Paragraph 3.23 Cost and Time Growth, C. *Managing Contract Bid Options* (CBO) to exclude the cost from contract cost growth metrics.

B. Contract Line Items – Asbestos Reporting: Asbestos related contract costs will be entered in ACES by contract line item as shown in the example. The electronic copy of these deliverables will be placed in the project manager’s electronic project file in accordance with the CF File Management Plan. These items will be necessary to satisfy future audits.

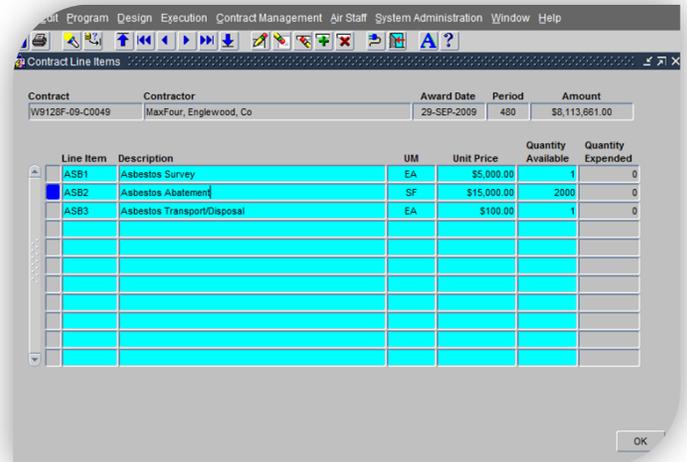


Figure 3.19b. Contract Line Items (Asbestos Liability Reporting)

3.20 Construction Timeline (under review)

Time management is essential to any mission success. We want to apply our resources as efficiently as possible so we can maximize our overall capability. Some studies support the notion there is a direct correlation between the cost of a project and the time it takes to complete it. Other studies indicate MILCON projects may not fit neatly into this expectation.

At least since 2003, USACE and USAF agreed to use the construction timeline. Then in 2009, based on negotiations with our agents, we updated the timeline performance periods for Ribbon Cutter. These timelines do provide us with a baseline goal to reference during contract negotiations. Regardless of how or why, we adopted the timelines goals (a.k.a. Period of Performance) listed below and our agents are typically successful negotiating these timelines for our project contracts.

- Goal:** 400 Days CONUS & 490 Days OCONUS PA < \$5M
 - Goal:** 590 Days CONUS & 680 Days OCONUS \$5M ≥ PA < \$20M
 - Goal:** 800 Days CONUS & 890 Days OCONUS \$20M ≥ PA ≤ \$50M
- (Note: We will not consider projects greater than \$50M PA for this metric)

It is the PDT’s responsibility to properly manage expectations and balance mission requirements with the reality of construction management. The PDT can negotiate timelines inside/outside this metric when necessary and request a metric exemption when appropriate.

3.21 Award CWE/PA Ratio (under review)

The goal, established in 2006, was to keep the ratio to 97% or less, at full project scope, to allow for foreign currency fluctuations and other unknown difficult to anticipate expenses, and possibly to provide an incentive to keep costs down. It is also possible to reuse these savings to award more projects. Additionally, the DM/CM uses CWE/PA ratio as a gauge for tracking Title 10, 2853 Authorized cost variation of 25 percent of the amount appropriated for such project or 200 percent of the minor construction project ceiling, whichever is less. We calculate this value at award by dividing the project award CWE by the project PA (as enacted by Congress). When evaluating this metric, we need to consider the effects of cost rescissions and projects with multiple contracts. These situations may warrant a metric exemption.

Figure 3.21 shows PA and CWE on the Contract Management screen in ACES. These values are in other tabs in ACES, but we used this screen shot to show the values together along with the CWE/PA ratio. The CWE details after award originate from the Detailed Costs tab (Figure 3.16b) and the PA typically originates from tab 9 of the DD1391. The expectation is the DD1391 fields do not change after Congress approves the project for execution. When congressional reprogramming action modifies the PA, HAF makes adjustments on the Congressional Actions screen.

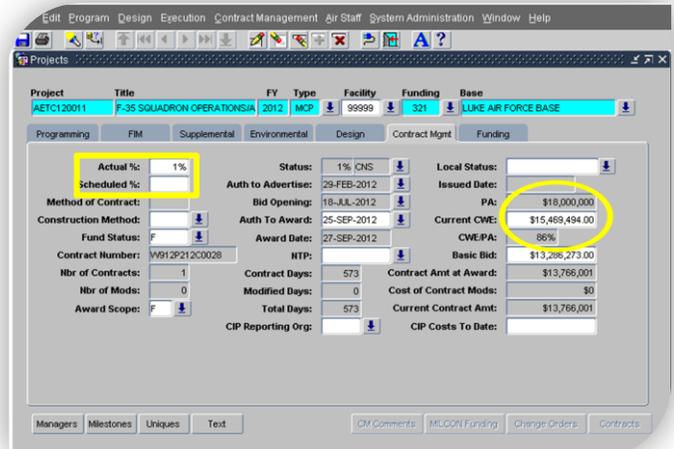


Figure 3.21. CWE / PA Ratio

The CWE/PA for projects with multiple contracts awarded at different times will not be accurate and a metric exemption may be necessary. If the PDT awards all contracts within the award FY, Ribbon Cutter can evaluate the CWE/PA metric.

3.22 Construction Asset Management

Demolition milestone – AFCEC/CF adopted the “Demolition” milestone to help us track our progress towards meeting the AF CE 20/20 goal. As a result, we only use this milestone to report demolition specified on a DD1391 (typically listed in the Facilities tab of the DD1391 in ACES). We expect all projects to have a demolition milestone

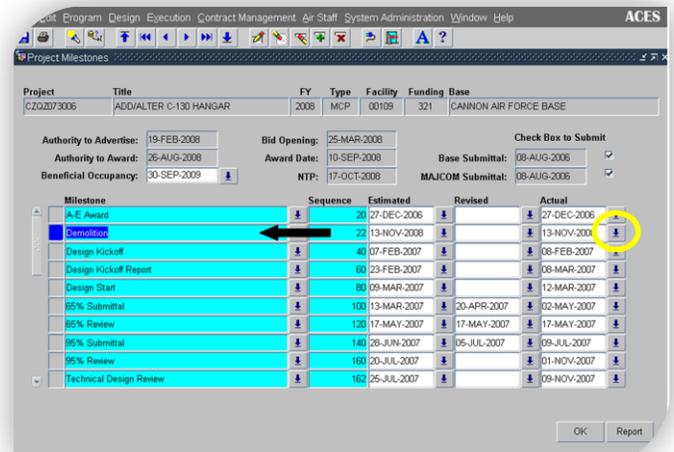


Figure 3.22. Demolition Milestone

loaded in ACES (Figure 3.22). Insert Actual Demolition date using the drop down menu.

When it is useful to help manage their project milestones, the DM/CM can add a user defined demolition milestone by prefacing the milestone with a descriptor (i.e. “Site” Demolition or “Interior” Demolition). By doing this, the user defined demolition milestone will not be confused with the official Demolition milestone when running queries for RC evaluations.

3.23 Cost and Time Growth

Construction Complete milestone and Contract Change Order/Modifications – Two essential objectives of any project are completing the project on time and within budget. AFCEC selects DM/CMs because of their proven ability to achieve this fiduciary responsibility. Although everyone’s goal for cost and time growth is 0%, it is nearly impossible to achieve that goal with a major MILCON project.

Ribbon Cutter evaluates cost and time growth when construction is complete. Enter the milestone actual date (Figure 3.23a) when all construction is complete this includes punchlist items and demolition approved in the DD1391 scope.

The CM must also indicate Actual % (Figure 3.21) complete as 100% when actual Construction Complete date is entered.

A. **Managing Change Orders** – Even when we do our best to understand our customer’s requirements, and complete meticulous design efforts, inevitably someone identifies something unexpected and requests a change order. The process of tracking change orders may be less critical than tracking the actual modification, but there are benefits to tracking the reasons for the change orders. One key benefit – we retain the ability to track potential opportunities for improvements by evaluating reason trends and applying lessons learned to future designs. On the ACES Contract Mgmt tab click the Change Orders button then enter data for all fields (Figure 3.23b).

- 1) CO Number
- 2) Date Received
- 3) Reason (code selected from list of values)
- 4) EEIC

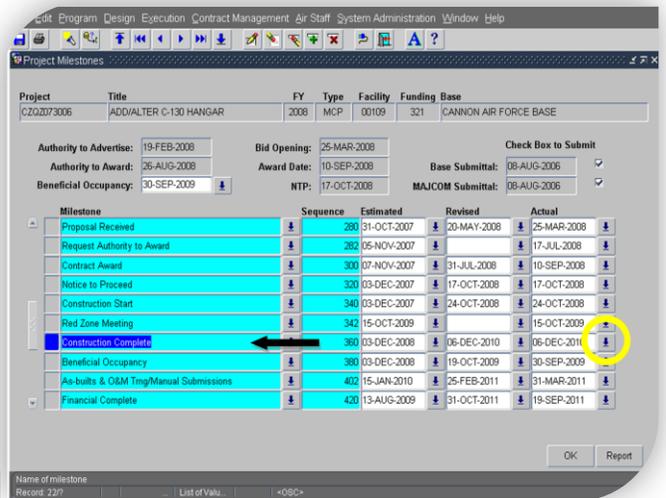


Figure 3.23a. Construction Complete Milestone

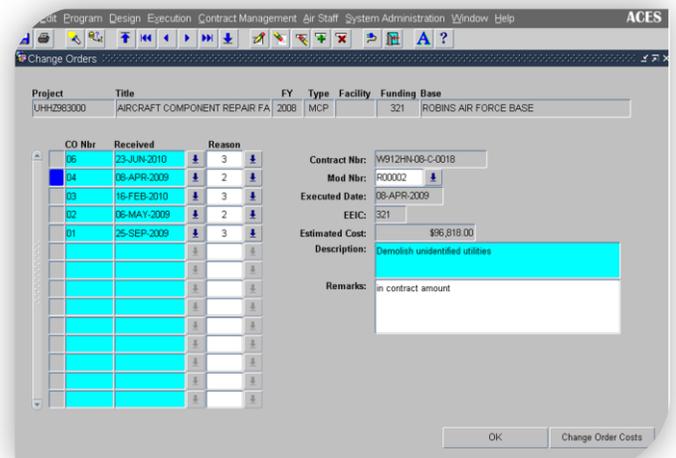


Figure 3.23b. Change Orders

- 5) Estimated Cost (when change is asbestos related, do not include any other costs)
- 6) Description (use enough detail so the next PM to design a similar project understands the value of the change when asbestos related costs are involved, Description must include “Asbestos”)
- 7) Remarks (as required to further understand the requirement)
- 8) Mod Number (If the Mod was already awarded and entered in ACES; the executed date and contract number will auto-populate)

Change orders are typically lumped into single modifications because it is more efficient for the contracting office to issue one modification for several changes, instead of one mod per change. In order to track funded change orders, the DM/CM must associate (or link) change orders with the modification issued. The DM/CM is only required to add approved change orders in ACES.

B. Managing Modifications – Once a change order is included in a contract modification, navigate to the Contracts screen, select the Modifications button, and enter the data for all fields and assign the change order(s) to the modification (Figure 3.23c).

- 1) Mod Number
- 2) Executed (award date)
- 3) Actual Cost
- 4) Days Changed
- 5) Funded FY
- 6) Originating Agency
- 7) SIOH %
- 8) Contingency
- 9) Management Reserve
- 10) Remarks (as required; when a change order is assigned the change description remarks should be sufficient)

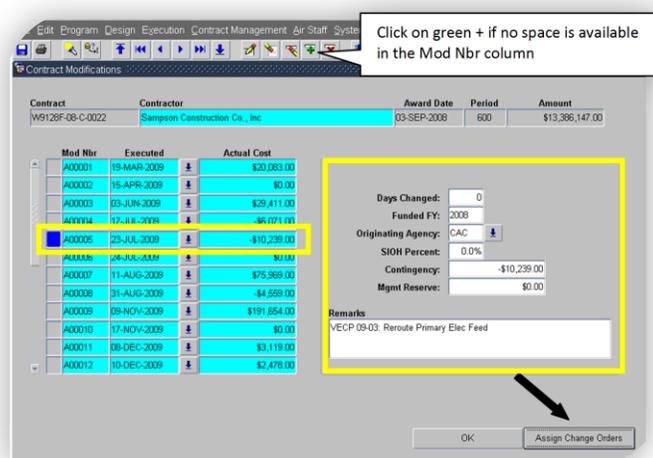


Figure 3.23c. Contract Modifications

The Days Changed field is the total number of days added to the contract by all change orders assigned to a modification. Only add days when the modification will result in a change to contract period of performance. When the modification does not result in additional days added to the contract, add zero to the field to validate the DM/CM considered the field.

C. Managing Contract Bid Options (CBO) – is like managing modifications. Bid Options executed before the option period ends, will not be calculated as cost growth. Update all modification fields as appropriate and select “CBO” from Originating Agency code list of values. In the Remarks field, enter the bid option reference and description as shown on the contract.

D. **Managing Contract Liquidated Damages (CLD)** – is similar to managing modifications. Although USAF will not recover these funds, we must account for the contract time delays. Assign a MOD number and select “CLD” from Originating Agency code list of values. The Date Executed is the date the LD assessment starts. When LDs end, as indicated by contract documentation, enter total assessed LDs in the remarks field only (do not track LD funds in any other field) and enter the number of days LDs were assessed in the Days Changed field.

When there are multiple contracts, make sure you select the most correct contract to assign the modification too. Modifications can have multiple change orders assigned. ACES assigns the contract number to the change orders once the DM/CM links it to an approved modification.

As a rule of thumb, when mandatory and non-mandatory changes are included in a mod, use the Originating Agency code that best represents to the highest percentage of mods. Match non-mandatory changes with Air Force Request (AFR) and mandatory changes with all other Originating Agency codes.

Expense mod costs to either the contingency or management reserve fields depending on availability or type of change. Generally, Contingency funds are set aside for must pays (and accessible to the agents) and we fund customer requested changes from the Management reserve. We can use Management reserves for must pays (upon agent request) after contingency funds are exhausted.

3.24 Red Zone

Red Zone Meeting milestone - The “Red Zone” concept for project close-out originated with Air Combat Command and has since received wide acceptance across the Air Force and Corps of Engineers. ECB 2004-21 endorses the process as a recognized business practice and AFI 32-1023 implements it for USAF project execution. The goal of the Red Zone meeting is to construct a milestone activities schedule to reach project completion and closeout within 120 days of beneficial occupancy. Update Red Zone Meeting Milestone (Figure 3.24) to indicate date of meeting. The Construction Agent PM co-chairs the Red Zone meeting with the DM/CM with the full Project Delivery Team.

The meeting’s purpose is to direct discussion of project elements and reach consensus on remaining project activities. Red Zone team members identify remaining tasks, assign action item champions, and construct a milestone schedule for achieving project completion and financial closeout.

The Red Zone Meeting is the pre-final construction meeting to discuss, define and achieve consensus on the construction and financial status of a MILCON project. The

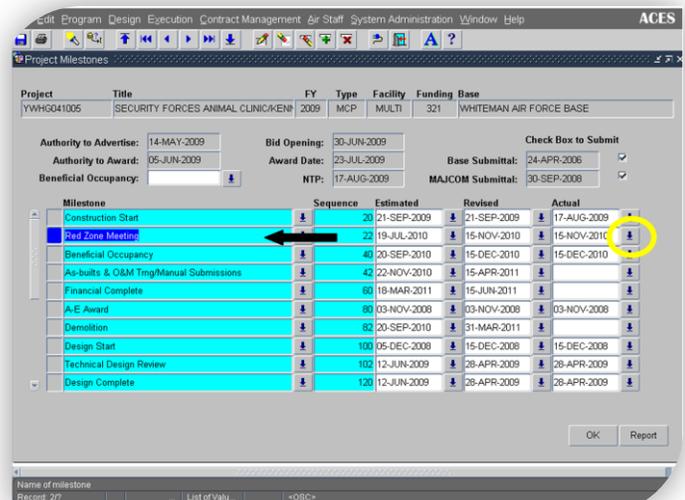


Figure 3.24. Red Zone Meeting Milestone

following are always completed at each Red Zone meeting:

1. Agree on a plan to finish on schedule, identify modifications and obstacles to closure
2. Address as-builts, O&M manuals/training, and warranty plan
3. Commit to sign DD Form 1354
4. Review contract, SIOH and contingency balance and start the process of pulling back unobligated/uncommitted funds
5. Schedule customer move in and ribbon cutting

The Red Zone meeting establishes milestones, estimated completion dates, and OPRs for all the actions necessary to complete the project. The following is a summary of key elements scheduled during this meeting:

- a. Mechanical test & balance
- b. Communication installation
- c. Preparation of lock/key plan
- d. Equipment delivery
- e. Furniture installation
- f. Landscaping completion
- g. O&M manual delivery
- h. O&M training
- i. Final cleaning
- j. Inspections
 - 1) Fire
 - 2) Safety
 - 3) Pre-final
 - 4) Final
- k. Punch list completion
- l. Contract Physical completion
- m. As-built delivery
- n. BOD
- o. User move-in
- p. Ribbon cutting
- q. Contract complete
- r. DD Form 1354 completion

3.25 Contract Physical Completion

As-Builts & O&M Trng/Manuals Submissions milestone – As-builts often do not get the appropriate attention to detail they deserve even though they are a legitimate contract deliverable. Many contractors dread updating as-builts and this can result in contract close-out delays. In some cases, we accept contractor as-builts without verifying the conditions. Then subsequent design agents incorrectly assume accuracy of those as-builts resulting in costly modifications during new construction. Additionally, our facility maintainers rely on as-builts to help them efficiently trace systems location and details to accomplish timely repairs. We rely on accurate as-builts for a number of processes. Accurate as-builts can save us time and money.

From a contract management perspective, it is also useful if the contract administrator / officer understands the importance of as-builts and timely delivery of them. They must not consider as-builts as less important than other contract deliverables and hold contractors accountable for all contract requirements.

As-builts often hold up the final contract completion and we do not always do a thorough review of them. The first step to ensure accurate as-builts is to set the expectation with the construction contractor right away at the pre-construction meeting. Explain to them how we rely on these as-builts for facility management and to help establish a baseline for future designs. Reaffirm this expectation at routine progress points and again at the Red Zone meeting. Once as-builts are submitted, our agents must validate the as-builts are accurate before turning them over to the BCE.

Providing Operation and Maintenance (O&M) training and manuals for our facility maintenance teams, for all facility elements, is essential to make sure our teams are knowledgeable about operating and maintaining installed equipment and moveable parts to make sure we achieve the intended life-cycle cost of those items. Once we accept beneficial occupancy of the facility, we assume maintenance responsibility for all items listed in the acceptance agreement. If we do not properly maintain those items, we risk voiding warranties and increasing the overall cost of facility management.

A list of warranty items should accompany the operation and maintenance manuals. AFCEC is working with the agents and NexGen PMO to attempt to automate the warranty submittals to help expedite loading warranty details into NexGen (the planned successor to ACES data management system). As a minimum we can establish an excel formatted warrant document for batch updates to NexGen.

It is important to note, we highlight these often overlooked requirements to validate contract physical completion, but all deliverables indicated in the project contract, must be received to consider the contract complete. The PM will update the Actual As-Builts & O&M Trng/Manuals Submissions date (Figure 3.25) using the drop down menu to indicate all contractual terms were met.

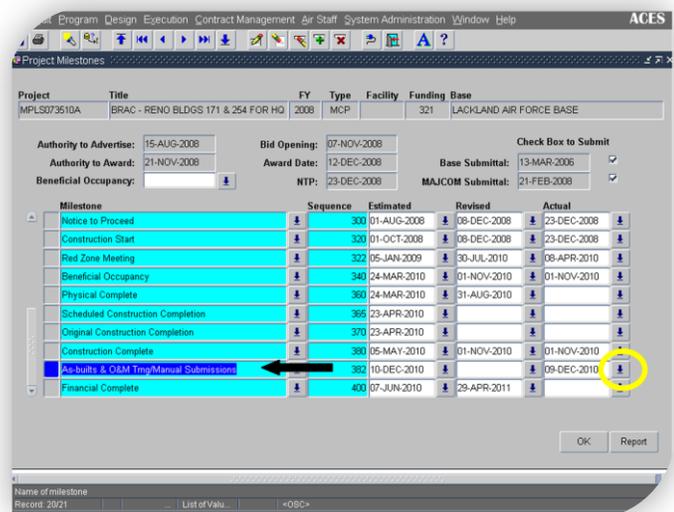


Figure 3.25. As-builts and O&M Training Milestone

3.26 Project Financial Closeout

Financial Complete milestone – Our goal is to close project contracts as soon as possible after completion of the construction contract so we can redirect remaining resources. We can ensure better financial management of our projects by establishing expectations early in the contract.

AFCEC MILCON Data Management and Metrics

We can highlight the change request process at the preconstruction meeting, do our part to facilitate the modification process, and follow up when modifications are pending. Then, as the project nears completion, we need to establish a good schedule for Financial Closeout of the project during the Red Zone meeting.

When the project is complete, the agent prepares and submits a final DD Form 1354 and final costs data is gathered. The AFCEC/CRFA should then access the Project Funding Form from the Project Programming screen in ACES-PM. The Funding Form contains two tabs; Detailed Costs and Funds Request. The DM/CM or AFCEC/CFRA should update the contingency amount, management reserve amount, other costs, supervision, inspection and overhead (SIOH), and engineering during construction design amounts fields on the Detail cost tab (figure 3.26a).

The AFCEC/CRFA must verify the Construction Work Estimate (CWE) and the Current Construction Funded (CCF) amount are equal before financial closing the project. If those values are not the same, the AFCEC/CRFA analyst will make sure all funds have been returned and documented in ACES. If the CCF is validated, the AFCEC/CRFA will let the DM/CM know of the inconsistencies, so they can research and correct the discrepancies. Typical issues are missing or incorrect contracts or modifications.

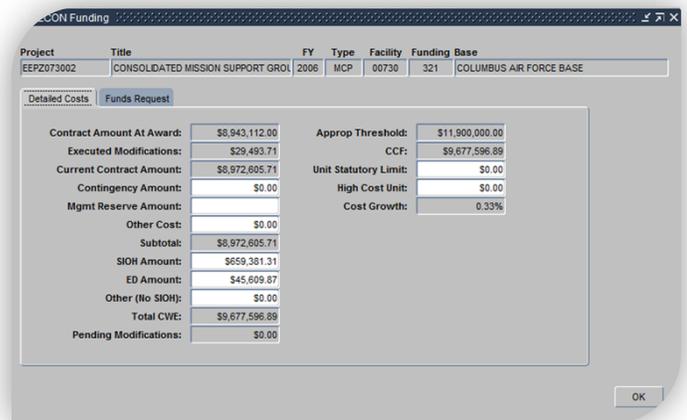


Figure 3.26a. MILCON Funding Detailed Costs Tab

A MILCON project is ready to close when the DM/CM and AFCEC/CRF are satisfied that all requirements of a MILCON project are completed such as financial obligations have been liquidated, unobligated project funds have been return to Headquarters Air Force (HQ/AF), ACES has been updated and funds released, funds obligated, funds expensed, and final CWE are equal.

The final major milestone is the Financial Complete Actual date. After the BCE received and signed the DD1354, our agents paid all outstanding bills and there are no pending claims by any contractor, our agents return all remaining to USAF, and the project CIP account is balanced and closed, update the Financial Completion Actual date (Figure 3.26b). This will move the project to History (HIS) status. Click on the save button located on the toolbar and then on the OK button.

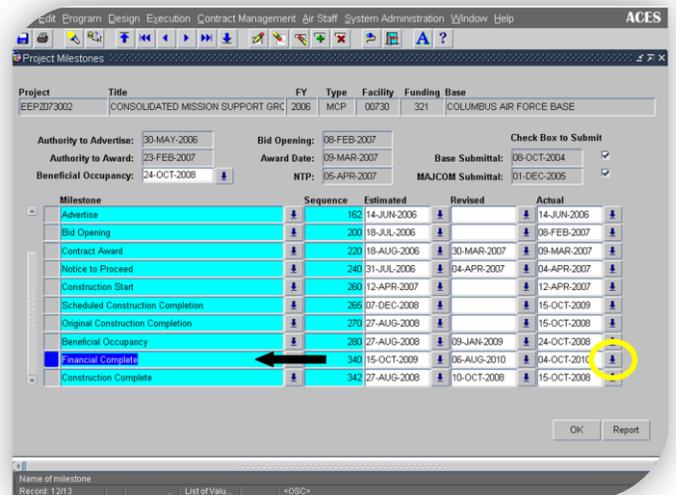


Figure 3.26b. Financial Complete Milestone

4 Ribbon Cutter Criteria

Ribbon cutter is a program/project management tool developed to help summarize the status of established goals. The AFCEC/CF Integration Cell is responsible for management of Ribbon Cutter. Ribbon Cutter, however, relies on accurate and timely information entered into Air Force Automated Civil Engineer System by AF PMs.

Ribbon Cutter evaluates four major categories (Design, Award, Construction, and Closeout) in the project execution process. Within each category, there are milestones that are key indicators of how successful subsequent steps will be. The AFCEC management team in coordination with the design and construction agents developed the metric criteria listed. The AF will review these criteria annually to determine their value and will make adjustments to established goals when warranted and in most cases when agreed to by the PDT.

Ribbon Cutter assigns points to each category assessed. Ribbon Cutter employs a scaled point system to provide more opportunities for the team to get recognition for coming close to the goals. The point values are 0-3 with 2 meeting the standard. For several AF only assessed categories, the expectation is for 100% compliance (or meets/does not meet; awarded a 2 or 0). The next section explains the overall scoring process and the Project Exemption Process section explains procedures to exempt categories/projects from scoring.

4.1 Design

Design Metrics: All Fiscal Year+1 and late prior year projects (if completed within current FY) will be evaluated under Design. Each goal will be scored as the milestone occurs in the current FY or when a milestone date exceeds the Below Goal standard regardless of status or FY (except when a project is exempted from scoring).

4.1.1 HAF DI Issue Time:

Description: HAF Metric. It is necessary for the AF to give the design agents time to design projects so we can award them in the programmed year. The HAF “Initial” Design Instruction (DI) initiates the design process by authorizing DM/CM to start the design.

Goal: AF issue DI to agent District/FEC 18 months (CONUS) and 24 months (OCONUS) prior to beginning of execution FY for PB projects. (Congressional Insert and Supplemental projects are not included in this metric.)

DM/CM ACES data entry: Enter Date of Original USAF DI date in the ACES Design tab.

(HAF DI Issue Time) Score:

	Exceeds Goal	Meets Goal	Below Goal	Not Meet Goal
Points	3	2	1	0
CONUS (PBs)	<1 Apr FY-2	1 Apr FY-2 31 May FY-2	1 Jun FY-2 31 Jul FY-2	>31 Jul FY-2

AFCEC MILCON Data Management and Metrics

OCONUS (PBs)	<1 Oct FY-2	1 Oct FY-2 30 Nov FY-2	1 Dec FY-2 31Jan FY-2	>31 Jan FY-2
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4.1.2 **AFCEC DI Issue Time (DM/CM to Agent):**

Description: DM/CM Metric. It is critical to issue the field DI to the design agent as soon as possible to initiate the design process. Any delay beyond the goal may impact the agent’s ability to complete the design/Request for Proposal (RFP) on time and could have a negative ripple effect on the rest of the project execution process.

Goal: Issue “Field” DI in seven days or less from Date of Original USAF DI to Date DM sent DI to DA.

DM/CM ACES data entry: Enter the appropriate date for the **Date DM sent DI to DA** in the ACES Design tab.

(AF DI Issue Time) Score:

	Exceeds Goal	Meets Goal	Below Goal	Not Meet Goal
Points	3	2	1	0
Performance	<4 days	4 - 7 days	8 - 60 days	>60 days

4.1.3 **Agent Design Start Turnaround:**

Description: Agent Metric. The AF expects the design agent to have our projects ready for award by the first day of the programmed year. The first step of any design is getting started. Delays in the design process can result in delays in subsequent milestones. Assume funds are made available and do not inhibit design start. Design Start date is the date design funds are initial expensed for design work and is provided by the Agents.

Goal: Achieve Agent Design Turnaround of 90 days between AF field design instruction issued to the agent and the design start.

DM/CM ACES data entry: Enter the actual **Design Start** date in Milestones tab.

(Agent Design Start Turnaround) Score:

	Exceeds Goal	Meets Goal	Below Goal	Not Meet Goal
Points	3	2	1	0
Performance	<45 days	45 - 90 days	91 - 120 days	>120 days

4.1.4 **Design Build/Adapt Build:**

Description: AFCEC Metric. Debate over Design-Bid-Build and Design-Build as the best method of executing projects continues. The current majority believes Design-Build is the most efficient and cost effective method, however consideration may be given for certain specialized projects.

AFCEC MILCON Data Management and Metrics

Goal: Use the Design-Build delivery method for at least 75% of all projects. Category score equals the percentage of projects that are Design Build.

DM/CM ACES data entry: Select code for *Project Delivery Method* in Design Tab.

(Design Method) Score:

	Exceeds Goal	Meets Goal	Below Goal	Not Meet Goal
Points	3	2	1	0
Performance	>80%	70 - 80%	<70%	

4.1.5 Asset Management (Design):

Description: AFCEC Metric. The PDT needs to consider and include during the design process provisions for managing project related facility demolition as well as Value Engineering and Life Cycle costs in accordance with AFI 32-1023. The DM/CM will report demolition when it is required for the construction of the new facility or the base footprint of the facility is reduced and when that demolition is reported to congress on the DD Form 1391. Assume Value Engineering is intrinsic to Design Build and as long as controls are in place to track this requirement and our goal is LEED certification, the PM can use the actual RFP date for the Technical Design Review milestone. For Design-Bid-Build the DM/CM will enter the date this review is complete.

Goal: Include the required demolition, Value Engineering, and Life Cycle costs in project design.

DM/CM ACES data entry: Insert *Technical Design Review* milestone actual date to confirm Value Engineering and Life Cycle Costs were addressed. Insert *Demolition* milestone with original date to confirm demolition is included in design by DD Form 1391 and enter the actual date when demolition is complete (see Construction Asset Management). For projects not requiring demolition, the DM/CM will add the Demolition milestone with an original date of 1/1/2001. The 1/1/2001 will let us know demolition is not required and validate the requirement was considered.

(Asset Management) Score:

Points	3	2	1	0
Performance		Meets Goal		Not Meet Goal

4.1.6 LEED Silver Certified:

Description: AFCEC Metric. The AF has implemented a strong policy to improve the energy efficiency of its facilities and meet the demands of budgetary constraints. The Leadership in Energy & Environmental Design (LEED) process was implemented to help achieve this goal.

Goal: Certify LEED Silver all eligible projects.

DM/CM ACES data entry: Check *LEED Certification* checkbox in the ACES project Design tab to identify a project is LEED certifiable.

(LEED) Score:

Points	3	2	1	0
Performance		Meets Goal		Not Meet Goal

4.1.7 Design/RFP Completion:

Description: Agent Metric. This goal is measured either when a project is Ready to Advertise (RTA) for design-bid-build projects, or when a Request for Proposal (RFP) is ready for design-build projects.

Goal: Achieve Ready to Advertise within 540 days (CONUS) or 720 days (OCONUS) from Agent DI Notification.

DM/CM ACES data entry: Insert actual Design Complete date in ACES Milestones. (Design Complete is used due to ACES restriction for adding RTA prior to receiving authority.)

(Design Complete) Score:

	Exceeds Goal	Meets Goal	Below Goal	Not Meet Goal
Points	3	2	1	0
CONUS	<420 days	420 - 540 days	541 - 570 days	>570 days
OCONUS	<660 days	660 - 720 days	721 - 750 days	>750 days

4.2 Award

Award Metrics: All Current Fiscal Year and late prior year projects (if completed within current FY) will be evaluated under Award. Each goal will be scored as the milestone occurs in the current or when a milestone date exceeds the Below Goal standard regardless of status or FY (except when a project is exempted from scoring). After project award, update all estimated milestone dates based on approved contract schedule.

4.2.1 Time to Award After Bids/Proposals Received:

Description: Agent Metric. The time it takes for the agent to award the project after an acceptable bid is selected. Assume no protest.

Goal: Achieve contract award in 90 days after bid opening, not including the Air Force fund process time, addressed in the following metric.

DM/CM ACES data entry: Insert actual Bid Opening date and actual Contract Award date in Milestones, and complete information in ACES Contract Screen.

(Bid to Award) Score:

	Exceeds Goal	Meets Goal	Below Goal	Not Meet Goal
Points	3	2	1	0

AFCEC MILCON Data Management and Metrics

Performance	<60 days	60 - 90 days	91 - 120 days	>120 days
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4.2.2 **HAF Notification/Funds Processing Time:**

Description: HAF Metric. Track the time HAF takes to process funds for award. Assume funds are available.

Goal: Complete the HAF notification/funds processing in 10 days between DM/CM request for authority to award and HAF authority to award.

DM/CM ACES data entry: Insert actual **Request Authority to Award** milestone date and **Authority to Award** date in ACES.

(HAF Notification/Funds Processing Time) Score:

	Exceeds Goal	Meets Goal	Below Goal	Not Meet Goal
Points	3	2	1	0
Performance	<8 days	8 - 10 days	11 - 15 days	>15 days

4.2.3 **Construction Timeline:**

Description: Agent Metric. Completing quality projects as quickly as possible is essential for military readiness. Use standardized performance periods as a baseline for negotiating construction timelines equal to or less than targets specified for the project programmed amounts shown. Assume typical projects fit these molds.

Goal: 400 Days CONUS & 490 Days OCONUS PA<\$5M
Goal: 590 Days CONUS & 680 Days OCONUS \$5M≥PA<\$20M
Goal: 800 Days CONUS & 890 Days OCONUS \$20M≥PA≤\$50M
 (Note: Projects greater than \$50M PA will not be considered for this metric?)

DM/CM ACES data entry: Insert actual contract **Period of Performance** in the contract screen.

(Timeline) Score:

	Exceeds Goal	Meets Goal	Below Goal	Not Meet Goal
CONUS				
Points	3	2	1	0
PA<\$5M	<330 days	330 - 400 days	401 - 450 days	>450 days
\$5M≥PA<\$20M	<490 days	490 - 590 days	590 - 650 days	>650 days
\$20M≥PA≤\$50M	<670 days	670 - 800 days	800 - 880 days	>880 days
OCONUS				
Points	3	2	1	0
PA<\$5M	<420 days	420 - 490 days	491 - 540 days	>540 days
\$5M≥PA<\$20M	<580 days	580 - 680 days	681 - 740 days	>740 days
\$20M≥PA≤\$50M	<760 days	760 - 890 days	891 - 970 days	>970 days

4.2.4 Project Award:

Description: Agent Metric. The expectation for all MILCON is to award projects within their programmed year. The goal assumes DIs will be issued 18/24 months prior to programmed FY for PBs and anticipate late DIs for all others.

Goal: Award PB projects NLT 30 Jun FY (90 days if Appropriation is later than 31 Jan FY) and supplemental (i.e. CI, special appropriation, etc.) NLT 30 Sep FY.

DM/CM ACES data entry: Insert actual Contract Award date in Milestones and complete information in Contract Screen.

(Award) Score:

	Exceeds Goal	Meets Goal	Below Goal	Not Meet Goal
Points	3	2	1	0
PB	<1 Apr FY	1 Apr - 30 Jun FY	1 Jul - 30 Sep FY	>30 Sep FY
Approp > 31 Jan	<61 days	61 – 90 days	91 – 120 days	>30 Sep FY
Late Adds	<1 Jul FY	1 Jul - 30 Sep FY	1 Oct FY+1 - 31 Dec FY+1	>31 Dec FY+1 ≥1 Jan FY+1

4.2.5 Award CWE/PA Ratio:

Description: Agent Metric. Keeping projects within budget begins at the programming stage, but must be kept on track through the design phase. Assume good programmed amount and no unexpected labor or material cost issues.

Goal: Ensure the award CWE is 97% or less of PA at full scope.

DM/CM ACES data entry: Enter Award CWE in the Contract Mgmt screen.

(CWE/PA Ratio) Score:

	Exceeds Goal	Meets Goal	Below Goal	Not Meet Goal
Points	3	2	1	0
Performance	<94%	94 - 97%	>97 - 110%	>110%

4.3 Construction

Construction Metrics: Projects will be scored when actual Construction Complete occurs within the current fiscal year. Construction Complete is the date that the Agent accepts the work (Liquidated Damages no longer apply). Each goal will be scored as the milestone occurs in the current FY or when a milestone date exceeds the Below Goal standard regardless of status or FY (except when a project is exempted from scoring).

4.3.1 Asset Management (Construction):

Description: DM/CM Metric. Demolish all facility area reported to congress on the DD Form 1391. Eliminate maintenance burden of unusable non-essential facilities within project scope.

Goal: Complete demolition if originally required in project scope.

DM/CM ACES data entry: Insert actual Demolition date in Milestones to confirm demolition completed. PDT must request an exemption for this metric when demolition occurs after the new facility is mission operational. The CM must update the Demolition milestone Actual date when demolition is complete even when an exemption was processed.

(Asset Management (Construction) Score:

Points	3	2	1	0
Performance		Meets Goal		Not Meet Goal

4.3.2 Cost Growth (Non-Mandatory Changes, e.g. Customer Requested):

Description: DM/CM Metric. DM/CM has the overall responsibility to minimize cost increases for AF projects. Ribbon Cutter will track all modifications to identify causes of cost growth. Keeping costs low gives the AF an opportunity to reallocate funds for other requirements. Assume no mission changes during construction. Only projects with actual construction complete dates will be evaluated.

Goal: Limit non-mandatory, customer requested change order cost growth to 2%.

DM/CM ACES data entry: Maintain current contract amount by updating all modification details as soon as possible prior to, but not later than, construction complete. Insert actual Construction Complete date in Milestones.

(AFCEC Cost Growth) Score:

	Exceeds Goal	Meets Goal	Below Goal	Not Meet Goal
Points	3	2	1	0
Performance	<1%	1 - 2%	>2 - 4%	>4%

4.3.3 Cost Growth (Mandatory Changes):

Description: Agent Metric. Agents have the overall responsibility to minimize cost increases resulting from non-AF requested changes (i.e. design errors, obvious existing site conditions, work suspension, Value Engineering changes, etc.). Ribbon Cutter will track all modifications to identify causes of cost growth. Keeping costs low gives the AF an opportunity to reallocate funds for other requirements. Assume no mission changes during construction. Only projects with actual construction complete dates will be evaluated.

Goal: Limit mandatory, non-customer requested change order cost growth to 3%.

DM/CM ACES data entry: Maintain current contract amount by updating all modification details as soon as possible prior to, but not later than, construction complete. Insert actual Construction Complete date in Milestones.

(Cost Growth (Excluding customer requested changes)) Score:

	Exceeds Goal	Meets Goal	Below Goal	Not Meet Goal
Points	3	2	1	0
Performance	<2%	2 - 3%	>3 - 5%	>5%

4.3.4 Time Growth (Non-Mandatory Changes, e.g. Customer Requested):

Description: DM/CM Metric. DM/CM has the overall responsibility to minimize delays for AF projects. Ribbon Cutter will track all modifications to identify causes of schedule growth. Keeping projects on schedule minimizes costs and impacts to military readiness. Growth is measured from end of performance period in contract to construction complete. Only projects with actual construction complete dates will be evaluated. Assume no mission changes during construction.

Goal: Limit non-mandatory schedule growth to 10%.

DM/CM ACES data entry: Maintain current contract amount by updating all modification details as soon as possible prior to, but not later than, construction complete. Insert actual Construction Complete date in Milestones and verify the NTP date on the Contract Mgmt tab.

(AF Time Growth) Score:

	Exceeds Goal	Meets Goal	Below Goal	Not Meet Goal
Points	3	2	1	0
Performance	<5%	5 - 10%	>10 - 15%	>15%

4.3.5 Time Growth (Mandatory Changes):

Description: Agent Metric. Agents have the overall responsibility to minimize contract delays resulting from non-AF requested changes. Ribbon Cutter will track all modifications to identify causes of schedule growth. Keeping projects on schedule minimizes costs and impacts to military readiness. Growth is measured from end of performance period in contract to construction complete, not including days added as a result of user requested changes. Only projects with actual construction complete dates will be evaluated. Assume no mission changes during construction.

Goal: Limit mandatory schedule growth to 10%.

DM/CM ACES data entry: Maintain current contract amount by updating all modification details as soon as possible prior to, but not later than, construction complete.

Insert actual **Construction Complete** date in Milestones and verify the **NTP** date on the Contract Mgmt tab.

(Time Growth (Excluding customer requested changes)) Score:

	Exceeds Goal	Meets Goal	Below Goal	Not Meet Goal
Points	3	2	1	0
Performance	<5%	5 - 10%	>10 - 15%	>15%

4.4 **Project Closure**

Closeout Metrics: Projects will be scored after actual Beneficial Occupancy Date occurs (BOD; also known as Building Occupancy Date. It is the date the building was placed in service as shown on the DD Form 1354 or the date our Agents accepts the construction as substantially complete and the building can be used for its intended purpose). Each goal will be scored as the milestone occurs in the current FY or when a milestone date exceeds the Below Goal standard regardless of status or FY (except when a project is exempted from scoring).

4.4.1 **Red Zone**

Description: Agent Metric. AF policy requires all projects have a Red Zone meeting to negotiate the schedule and other terms to expedite physical completion and financial closeout of the project. Only projects with actual BOD will be evaluated.

Goal: Accomplish Initial Red Zone Meeting no less than 75 days prior to the BOD.

DM/CM ACES data entry: Insert actual **Red Zone Meeting** date in Milestones.

(Red Zone) Score:

Points	3	2	1	0
Performance	76 - 90 days	60 - 75 days	45 - 59 days	<45 days

4.4.2 **Contract Physical Completion**

Description: Agent Metric. Successful project completion occurs after four events: “punchlist” items (omitting items due to seasonal requirements) are complete, as-builts transferred, all systems or equipment manuals are provided, and training is completed. The installation shall have positive control over these deliverables. The As-builts & O&M Trng/Manuals Submissions date is compared with the construction complete date. Only projects with an actual BOD that are construction complete within the current FY are evaluated.

Goal: Achieve contract physical completion within 85 days of BOD.

DM/CM ACES data entry: Insert actual **As-builts & O&M Trng/Manual Submissions** Milestone date indicating when these items are completed.

(Contract Physical Completion) Score:

	Exceeds Goal	Meets Goal	Below Goal	Not Meet Goal
Points	3	2	1	0
Performance	<55 days	55 - 85 days	86 - 115 days	>115 days

4.4.3 Project Financial Closeout

Description: Agent Fiscal Completion means all obligations are liquidated and final bills paid; all claims are released by all contractors; all unobligated design and construction funds are returned to the AF; and assets are transferred to the installation via the final DD 1354. Only projects with actual BODs that should be fiscally complete in current FY are evaluated.

Goal: Achieve project financial closeout within 18 months of BOD for CONUS and within 24 months for OCONUS projects.

DM/CM ACES data entry: Insert actual *Financial Complete* date in Milestones.

(Project Financial Closeout) Score:

	Exceeds Goal	Meets Goal	Below Goal	Not Meet Goal
Points	3	2	1	0
Performance (CONUS)	<480 days	480 - 540 days	541 - 720 days	>720 days
Performance (OCONUS)	<660 days	660 - 720 days	721 - 900 days	>900 days

Appendix A: Glossary of Terms and Acronyms

Terms:

Agent – The AFCEC Branch, USACE District, NAVFAC FEC, or Installation responsible for design and/or construction project management. Only the planned construction agent code is indicated in the Agent data field on the ACES-PM Supplemental tab. If no construction is planned for the project, enter code for agent assigned to manage project.

Construction Complete –indicates ALL construction work elements included in the project scope as specified in the DD Form 1391 (including demolition and construction punchlist items) are complete.

Design – ACES is not set up to track progress for Design Build RFP development and design effort. For the purpose of this guide, all references to design (cost, %, start, complete) will be the actual design effort for Design Bid Build projects, the RFP development for Design Build projects, or other non-construction related studies, surveys, or similar . Project Managers can use milestones to track the Design Build design effort. Preface all Design Build Design milestones with “DB” to distinguish them from other Design milestones.

Design Agent/Construction Agent (DA/CA) – Is responsible for the technical execution of project design or construction and performs the duties of the contracting officer (CO). These roles may be separated when applicable.

Design Manager/Construction Manager (DM/CM) – Installation or AFCEC Project Manager responsible for facilitating successful USAF project design and construction. The DM/CM is responsible for updating, in ACES-PM, project data shown in this guide. These roles may be separated when applicable.

District – Geographically organized field agency of USACE. Sometimes the term is used in reports to indicate the NAVFAC (FEC) or USAF (Branch) Agent assigned to manage a MILCON project.

Host MAJCOM – Major Command responsible to execute projects for all facilities located on their installations.

Requiring MAJCOM – Major Command responsible to advocate for the work necessary to support their missions. Includes work executed by other Host MAJCOM installations.

Acronyms:

CF – Facilities Engineering Directorate of AFCEC

CFF – Facilities Engineering Directorate, Operating Forces Design and Constuction Division

AFCEC MILCON Data Management and Metrics

CFM – Facilities Engineering Directorate, Mobility/Support Forces Design and Constuction Division

CFTS –Tech Services Division, Integration Cell

CRF – Chief Finacial Officer Facility Management Division of AFCEC

CND – Energy Program Division of AFCEC

DB – Design Build

DBB – Design Bid Build

EIAP – Environmental Impact Analyis Plan

FEC –Facility Engineer Command (field agency of the Naval Facilities Command)

HAF – Headquarters Unites States Air Force

MCP – Military Construction Program

NAVFAC – Naval Facilities Command

RFP – Request for Proposal

USACE – US Army Corps of Engineers

Appendix B: Required Milestones

Use the drop-down list in the ACES-PM Milestone screen to select milestones. If a milestone listed in this guide is not an option in ACES-PM, the DM/CM must manually type the milestone as shown in the guide. If the DM/CM does not spell the milestone exactly as shown here or select the milestone from the ACES-PM list of values, it will not be valid and the DM/CM will not receive credit for the update.

1. **Design Start** – Date contracting issues A&E Notice to Proceed (NTP) for design or DB RFP development or date in-house design effort starts. When necessary the CM can track “Actual” design effort for DB contracts by adding “CNS DSG Start”, “CNS DSG CMP” milestones.
2. **Technical Design Review** – Date the PDT documents the project Life-Cycle Cost review and Value Engineering assessment (in-house for projects >\$2M and formal third party report for projects >\$10M).
3. **Demolition** – Date demolition resulting in a reduction of facility area (or whole building demolition) is expected to take place. Add “Estimated” date to indicate demolition is part of the project scope. If demolition is not included in the project scope, enter 1/1/2001 in the milestone “Estimated” date field. Update the Actual Demolition date when demolition is complete.
4. **Design Complete** – Date design/DB RFP development is 100% complete, Design CWE is loaded in ACES and design/RFP package contract is closed-out.
5. **Ready to Advertise** – Date design/DB RFP is ready to send to contracting to advertise for construction.
6. **Bid Opening** – Date contracting opens bids/proposals for construction contract.
7. **Request Authority to Award** – Date DM/CM submits Requests Authority to Award to HAF.
8. **Contract Award** – Date the military contracting agency awards the construction contract. Use date shown on the contract documents.
9. **Construction Start** – Date actual construction/demolition started.
10. **Red Zone Meeting** – Date of the pre-final inspection meeting to facilitate and expedite physical completion and financial closeout of the project; is a flag for the real property office to expect a DD Form 1354 soon.
11. **Construction Complete** – Date actual construction is completed (no outstanding work).
12. **HPSB Validation Y or N** – High Performance Sustainable Building – Yes/No with “Actual” date only. Use this milestone to indicate if the project met the requirements in UFC 1-200-02, High Performance and Sustainable Buildings Requirements.
13. **Beneficial Occupancy** – Date Interim (or final DD 1354) is signed to place the facility in service (also known as Building Occupancy Certification date.) The date indicates start of USAF responsibility for some or all facility/equipment maintenance and warranty items. This date is mutually agreed to by the Project Delivery Team, but it is not contractually binding. (Liquidated Damages are not assessed and only minor punch-list items remaining)
14. **Performance Deficiency Letter** – Use “Actual” date, as required, to indicate letter submitted. Enter separate milestone for each letter submitted. When multiple letters entered, number them.
15. **Cure Notice** – Use “Actual” date, as required, to indicate Cure Notice submitted.

16. **As-builts & O&M Trng/Manual Submissions** – Date “punchlist” items (omitting items due to seasonal requirements) are complete, as-builts transferred, all systems or equipment manuals are provided, all required training is completed and the installation has accepted all contract deliverables.
17. **Financial Complete** – Date all obligations are liquidated and final bills paid; all claims are released by all contractors; all unobligated design and construction funds are returned to the AF; and assets are transferred to the installation via the final DD 1354.
18. **Project Cancelled** – Use “Actual” date, as required, to indicate a project is no longer required and cancelled. This update will change the project status to CNX.
19. **Contract Terminated** – Use “Actual” date, as required, to indicate a project contract was Terminated for any reason. Add description of cause and contract number in the CM Comments Screen accessed from the Contract Management tab.
20. **Notice of Forbearance** – Use “Actual” date, as required, to indicate contract PoP was is has passed, we are allowing contractor to complete the work and no Liquidated Damage Clause was include in the contract. Add detailed note in CM Comments Screen.

Appendix C: Agent Codes

District (USACE)	Agent Code	FEC (NAVFAC)	Agent Code
Kansas City	NWK	NAVFAC Europe/Southwest Asia	EUR
Omaha	NWO	NAVFAC MidLant	MLT
Seattle	NWS	NAVFAC MidWest	MWE
Albuquerque	SPA	NAVFAC Northwest	NRW
Sacramento	SPK	NAVFAC Southeast	SEA
Los Angeles	SPL	NAVFAC Southwest	SWE
Alaska	POA	NAVFAC Washington	WSH
Far East-Korea	POF	NAVFAC Far East	FRE
Honolulu	POH	NAVFAC Hawaii	HWI
Japan	POJ	NAVFAC Marianas	MAR
Fort Worth	SWF		
Little Rock	SWL	USAF	
Tulsa	SWT	Installation Executed	XXX
Louisville	LRL	Services Executed	SVC
Baltimore	NAB	AFCEC	
Europe	NAU	AFCEC/CFP	PAF*
New York	NAN	AFCEC/CFE	CMT*
Philadelphia	NAP	AFCEC/CFx	CFx*
Norfolk	NAO		
New England	NAE		
Mobile	SAM		
Savannah	SAS		
Middle East	MED		
United Kingdom	DIO	UK Host Nation Agent	
Germany	LBB	Germany Host Nation Agent	

*Until USAF implements NexGen IT, we will continue to track AFCEC funded projects using the codes listed. Our data management products rely on these fields for reporting and there is a low return on investment to change them at this time.

Appendix D: Ribbon Cutter Criteria Summary

Note: Highlighted = Agent Metric	OPR	Goal	Weight
Design			3.0
Asset Management (Design)	AF PM	Confirm inclusion of Asset Mgmt elements in project DSG	0.4
LEED Silver Certified	AF PM	100%	0.6
HAF DI Issue Time (Air Staff to AFCEC)	HAF	18 months prior to FY CONUS 24 months prior to FY OCONUS	0.5
AF DI Issue Time (AF to Agent)	AF PM	7 days	0.25
Agent Design Start Turnaround	Agent	90 days	0.25
Design Build/Adapt Build	AF PM	75% of All Projects	0.5
Design/RFP Completion	Agent	Ready to Advertise within 540 days (CONUS) or 720 days (OCONUS) from Agent DI Notification	0.5
Award			3.0
Time to Award After Bids/Proposals Received	Agent	90 days	0.75
HAF Notification/Funds Processing Time	HAF	10 days	0.5
Construction Timeline	Agent	Construction timeline goals vary with project PA; metric based on contract performance period at time of award	0.25
Project Award	Agent	Award NLT 30 Jun FY (PB) Award NLT 30 Sep FY (Late Adds)	1.0
Award CWE/PA Ratio	Agent	Less than or equal to 97%	0.5
Construction			1.5
Asset Management (Construction)	AF PM	Demolition completed if required	0.5
Cost Growth (Non-Mandatory Changes, e.g. Customer Requested)	AF PM	2% Growth or less	0.25
Cost Growth (Mandatory Changes)	Agent	3% Growth or less	0.25
Time Growth (Non-Mandatory Changes, e.g. Customer Requested)	AF PM	10% growth or less	0.25
Time Growth (Mandatory Changes)	Agent	10% growth or less	0.25
Project Closure			2.5
Red Zone	Agent	Conduct meeting at least 75 days prior to BOD	.75
Contract Physical Completion	Agent	Within 85 days of BOD	1.0
Project Financial Closeout	Agent	Within 18 months of BOD (CONUS) and 24 months (OCONUS)	0.75
	Total Weight		10

Appendix E: Ribbon Cutter Report Schedule

AFCEC’s Facility Engineering Directorate (FED) Director will send *monthly* Ribbon Cutter status reports to HQ USACE and NAVFAC Air Force Account Managers, USACE District Commanders, and NAVFAC Echelon IV Commanders and Ops Officers. The AFCEC will send *quarterly* Ribbon Cutter status reports to HQ USACE and NAVFAC Air Force Account Managers, USACE Military Program Directors, and NAVFAC Echelon III Commanders. A *final* review and analysis will be coordinated with our team and forwarded to HAF/A7C when the year is completed, which he will send to HQ USACE and NAVFAC Air Force Account Managers, USACE Deputy CG and NAVFAC Commander. We will determine a proper forum to recognize and reward the top performers across the full spectrum of construction execution – including our agent teammates as well as our own staff.

Ribbon Cutter data will be up-to-date and available daily for applicable projects. Contact the AFCEC Integration Cell for “on-call” data.

Ribbon Cutter report examples:

Score Summary (.pdf; can evaluate by project, by AFCEC Branch, DM/CM, Division, and District or FEC)

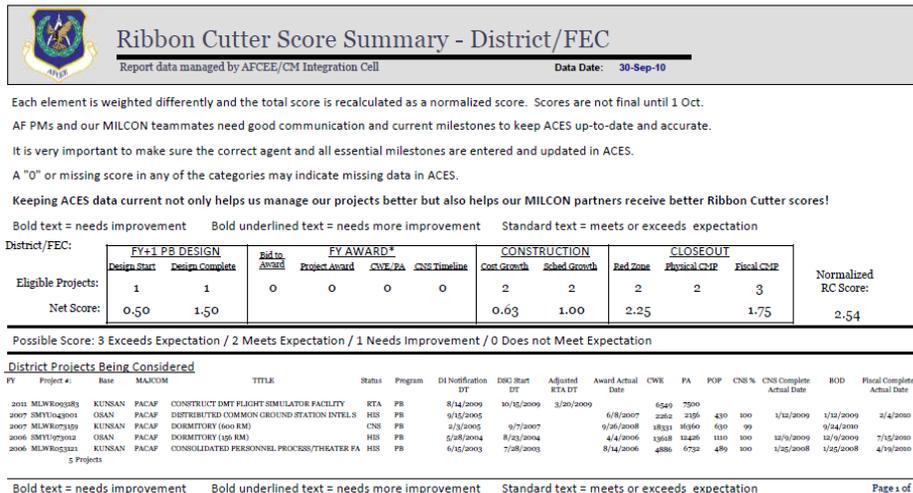


Figure E-1. Ribbon Cutter Score Sheet

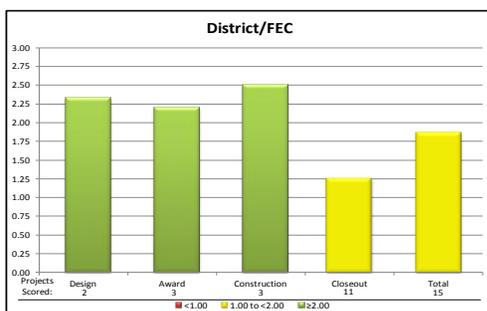


Figure E-1. Ribbon Cutter District/FEC Project Summary Chart

Appendix F: Ribbon Cutter Scoring Process

Ribbon cutter uses a weighted mean to calculate final scores. We do 100% sampling to evaluate all projects and goals. However, most sample sizes are typically too small to make an accurate conclusion of a PDT's capability. When a goal is not eligible for scoring or an exemption is approved, a value is not assigned. When variables exist that could eliminate a project from future consideration, the DM/CM must request project exemption from evaluation. Project Exemption will be discussed in the next section.

The PM and the Agent are evaluated on what they are responsible for, which represents a fraction of the total metric. No adjustment is considered or necessary for this. We will use the final results as indicators of success or opportunities for improvement and to recognize achievements.

Although we grade each milestone independently with different weights, it is necessary to "normalize" the overall score by converting the sum of all averaged scores back to our objective score of 0-3.

Score sample:

	Exceeds Goal	Meets Goal	Below Goal	Not Meet Goal
Points	3	2	1	0

Agent Design Category (five projects assessed):

1. Start with the straight average of scores assigned for each milestone 0-3.

Design Turnaround scores: $3+3+2+3+1=12$, straight average score: $12/5=2.4$

RTA scores: $2+3+2+2+0=9$, straight average score $9/5=1.8$

2. Multiply the weight by the average scores. As explained earlier we apply weights based on their relative importance to the Air Force.

Design Turnaround weighted score: $wt=.25 \times \text{avg score}=2.4$, $.25 \times 2.4=.6$

RTA weighted scores: $wt=.5 \times \text{avg score}=1.8$, $.5 \times 1.8=.9$

3. Add the weighted score in each category to get a total weighted score and then divide the total weighted score by the total weight used to "normalize" the value for the total score achieved.

Design Turnaround weighted score: **.6**, $wt=.25$

RTA weighted score: **.9**, $wt=.5$

Total weighted score: $.6+.9=1.5$

Total weight used: $.25+.5=.75$

AFCEC MILCON Data Management and Metrics

Weighted Arithmetic Mean (“Normalized” score): $1.5/.75=2.00$ (meets the Design category goal)

Note: if a category scores “0”, the weight will be added to the total weight. The weight for categories that do not have a scored project will not be added to the total weight.

4. All four categories are assessed the same way, then combined and normalized for a combined total metric score for the assigned Agent or DM/CM. See Appendix D, Ribbon Cutter Criteria.

Appendix G: RC Goal Exception Documentation Process

Not all projects fit nicely into a mold. There are a number of circumstances that will require project category exemptions such as, award delays due to bid protests; various delays caused by Status of Forces Agreements; mission changes, programming errors; etc. If you have a project that has extenuating circumstances preventing you from showing off your excellent project management skills, you can request a project exemption.

When the Project Delivery Team (PDT) determines they cannot meet a Ribbon Cutter goal, the DM/CM will submit the details in an e-mail to their Branch Chief for consideration. The e-mail should include the category of the exclusion (see Appendix D, Criteria Summary), project number and status, the reason for the request, explain steps taken to mitigate the problem, recommendation to prevent this on other projects, and identify if other milestones will be affected. The Branch Chief will review the request with the AFCEC/CF management team to decide if it is appropriate to exempt the project category from further evaluation.

After reviewing the request, the Branch Chief will indicate a metric exemption or lesson learned recommendation and their remarks in the e-mail and forward the e-mail to an Integration Cell POC for an appropriate metric exemption or lesson assessment update to our report database.

AFCEC/CF Branch Chief,

Ribbon Cutter Metric Exception for:

Project #:

Project Status:

Category: (Design, Award, Construction, Closeout)

Subcategory: (Design Start, Design/RFP Completion, Bid-to-Award, Award, PoP, CWE/PA, Cost Growth, Schedule Growth, Red Zone, Contract Completion, Financial Closeout)

Reason for missed goal:

Explain steps taken to mitigate reason for missed goal:

Steps taken to prevent this delay in the future:

Are other milestones affected? If yes, explain:

V/r,

//Signed//
AFCEC/CF DM/CM

//Signed//
AFCEC/CF Branch Chief

Exempt Metric / Lesson Learned
(Circle one)

Appendix H: Awards and Recognition

Ribbon Cutter is a project management tool that shows the PDT how successful they are at meeting established goals by providing an objective evaluation. It is possible to report Ribbon Cutter by AF, USACE, NAVFAC, Branch, DM/CM, Division/E3C, District/FEC, Resident Engineer, PM, MAJCOM, etc.

AFCEC will consider Ribbon Cutter in conjunction with all nominations related to AF MILCON execution and presented in accordance with Air Force Instruction (AFI) 36-2817, Civil Engineer Awards Program. This AFI establishes a program to award installations as well as Civil Engineer (CE) organizations, flights, teams, and individuals for outstanding achievement and contributions to the Air Force mission. It describes the criteria for each award, establishes eligibility, and explains nomination, selection, and presentation procedures.

In addition to the award categories available to AF personnel, The Civil Engineer annually recognizes the Corps of Engineers (COE), Naval Facilities Engineering Command (NAVFAC), and Host Nation Agency organizations and personnel for outstanding achievement and urges major commands (MAJCOM), field operating agencies (FOA), and direct reporting units (DRU) to submit nominations for the agent awards program.

Applicable information regarding The Air Force Civilian Project Manager of the Year Awards and The Air Force District, Division or Host Nation Agent of the Year Awards is from [AFI 36-2817](#), Civil Engineer Awards Program, Chapter 4, Design and Construction Awards. Supplemental instructions are also included at AFCEC's website [USAF Design & Construction Agent Awards](#).

Appendix I: References

US Code Title 10, Armed Forces, Chapter 169—Military Construction and Military Family Housing

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AFI32-1023, Design and Constructing Military Construction Projects, 21 April 2010

USAF Project Managers' Guide for Design and Construction, January 2008

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UFC 1-300-08, Criteria for Transfer and Acceptance of Military Real Property 16 April 2009
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Engineering Technical Letter (ETL) 08-13: Incorporating Sustainable Design and Development (SDD) and Facility Energy Attributes in the Air Force Construction Program

Automated Civil Engineering System-Project Management (ACES-PM), Version 3.0

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An Analysis of Construction Cost and Schedule Performance, Thesis
Michael J. Beach, Major, USAF
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Office of Management and Budget Circular No.A-131, Value Engineering
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Memorandum for Implementation of Red Zone Meetings, 22 July 2002 b.

USACE Engineering & Construction Bulletin, "MILCON Project Closeout, The RED ZONE Meeting,"
22 May 2002

Appendix J: AFCEC MILCON Data Standards and Reporting Team

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