

AIR FORCE AUDIT AGENCY



AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 AIR NATIONAL GUARD MILITARY CONSTRUCTION



AUDIT REPORT

F2010-0009-FD1000

4 March 2010



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- **American Recovery and Reinvestment Act of 2009 (Recovery Act)**
 - Signed into law on 17 February 2009.
- **Purposes**
 - Create and save jobs
 - Jump start economy
 - Address unfunded facility requirements
 - Long term economic growth foundation



Introduction (Cont'd)

- **Joint Audit Effort**
 - DoDIG Directed by Recovery Act to review
 - Service audit agencies assisted

- **Magnitude**
 - 10 Air National Guard MILCON projects in the Recovery Act
 - \$50 million in Recovery Act funds



- **Installation CE Programmers' Responsibilities**
 - Oversee MILCON project planning
 - Develop cost estimates
 - Prepare DD Forms 1391 (MILCON project requirements and justification data)

- **MAJCOM CE Programmers' Responsibilities**
 - Review/validate DD Forms 1391
 - Assure estimates are in line with OSD Pricing Guide
 - Verify project is fully justified with historical or other cost data
 - Validate accuracy of Primary and Supporting Facilities Costs



Background (Cont'd)

- **Full Project Justification Recorded on DD Form 1391**
 - Describes impact on mission, people, productivity and life cycle
 - Identifies impact if project not accomplished
 - Determines AT/FP type and add 1 percent cost, justifies increased percentage
 - Adds CE mandated 2 percent LEED costs, justifies increased percentage



Background (Cont'd)

- **Economic Analysis and Certificate of Exception**
 - Requested for projects > \$2 million
 - Certificate of exception (waiver) requested when
 - Only one method will accomplish project
 - Higher headquarters directs a specific method of accomplishment
 - Legislation exempts project from EA
 - Project corrects serious, urgent, or hazardous problems/violations
 - Cost of EA clearly outweighs benefits by decision maker

- **Environmental Flight Responsibilities**
 - Gathers preliminary environmental data and documents effect
 - Assures environmental impact (if any) is known and addressed



- Determine whether CE Programmers properly planned Recovery Act MILCON Requirements.
 - Selected valid projects
 - Properly scoped and supported costs estimates on DD Forms 1391
 - Conducted environmental studies and documented on AF Form 813
 - Prepared EA or Certificate of Exception for projects >\$2 million
 - Included all required FAR clauses in contracts
 - Reported project information (transparency)
 - Achieved Recovery Act goals (fostering competition, expeditiously awarding contracts, creating/retaining jobs)



- **Conclusions**
 - ANG CE personnel did not properly plan all aspects of the Recovery Act MILCON program

- **Project Selection (Results 1, Sld. 14)**
 - Properly justified MILCON projects selected
 - Public can be assured Air Force CE selected valid projects



Audit Results Overall (Cont'd)

- **Scope and Cost Estimates (Results 1, Sld. 14)**
 - Did not accurately identify scope and support cost estimates on DD Forms 1391
 - Overstated \$7.6 million in cost estimates
 - Reducing overstated estimates allow funds to be used for other valid Recovery Act MILCON project (PMB)
 - Without proper documentation, Air Force could not support and justify \$8.7 million requirements

- **Environmental Studies (Results 1, Sld. 14)**
 - Properly conducted for all six Recovery Act MILCON projects
 - Allowed Air Force decision-makers to consider environmental factors prior to resource commitment



Audit Results Overall (Cont'd)

- **Economic Analysis or Certificates of Exceptions (Waiver) (Results 1, Sld. 14)**
 - Did not obtain and coordinate five of six economic analyses or waivers as required
 - Air Force did not have required economic detail to make informed construction decisions

- **FAR clauses in contracts (Results 2, Sld. 26)**
 - Did not include all new FAR clauses in Recovery Act solicitations at four of five locations
 - Contractors may not have all the information required to bid, accept, and perform Recovery Act projects
 - No ANG MILCON contracts awarded as of audit date
 - Will accomplish in another audit once contracts are awarded

- **Reported project information (transparency) and achieved Recovery Act goals**
 - Unable to determine as no ANG MILCON contracts awarded
 - Will accomplish in another audit once contracts are awarded



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Recommendations and Management's Response

- **Recommendations.** We made two recommendations to NGB/A4C7 and PARC to improve the MILCON planning process and FAR Clause inclusion. (Reference individual slides for specific recommendations.)
- **Management's Response.** Management concurred with the audit results. Management's planned actions were responsive to the issues and recommendations in this report.

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Audit Results 1

ANG MILCON Planning

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- **Condition (Table 1, Sld. 15)**
 - All six ANG MILCON projects reviewed were valid and had properly conducted environmental studies. However:
 - All six locations had DD Form 1391 errors: three overstated cost estimates, three lacked cost support, and three improperly scoped projects
 - Five of six locations did not obtain and coordinate economic analyses or waiver as required



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Audit Results 1

ANG MILCON Planning (Cont'd)

| Project Title Installation | Valid Project* | Project Amount (000) | Over Stated (000) | Lacked Support (000) | Proper Scope | Environ. Analysis Completed | EA or waiver |
|--|-------------------|----------------------------|-------------------------|----------------------------|-----------------|-----------------------------------|-----------------|
| Arm and Disarm Aprons Atlantic City IAP NJ | Yes | \$ 4,300 | | \$ 4,300 | No | Yes | No |
| Mobility Processing Center Birmingham IAP AL | Yes | 2,300 | | 255 | Yes | Yes | No |
| Add/Alter Fire Station Forbes Field KS | Yes | 4,100 | | 4,100 | Yes | Yes | No |
| Replace CE Maintenance Complex Fort Smith MAP AR | Yes | 7,800 | \$ 1,498 | | No** | Yes | No |
| Fire Station Phase II Salt Lake City IAP UT | Yes* | 5,100 | 5,100 | | No** | Yes | No |
| C-5 Avionics Shop Shepherd Field WV | Yes | 4,300 | 1,000 | | Yes | Yes | Yes |
| Total | | \$ 27,900 | \$ 7,598 | \$ 8,655 | 3 | 6 | 1 |
| * Improperly used \$5.1 million in Fire Station Phase II project funds to construct EOD office and mobility processing center ** DD Forms 1391 included unrelated construction projects | | | | | | | |

Table 1. MILCON Project Planning Errors



ANG MILCON Planning (Cont'd)

- **Examples**

- Fort Smith MAP AR: Improperly included \$1.5 million in unrelated construction (e.g., base gate) as part of approved CE Complex project
- Salt Lake City IAP: Improperly used all \$5.1 million in Fire Station Phase II project funds to construct EOD office and mobility processing center
- Shepherd Field WV: Overstated C-5 Avionics project costs by \$1 million (23 percent) due to inaccurate unit cost calculations
- Birmingham IAP AL: Could not support \$255,000 in utility, site improvement, pavement, and communication costs



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Audit Results 1

ANG MILCON Planning (Cont'd)

- **Cause**

- AFI 32-1021 did not provide specific instructions on developing and maintaining documents to adequately support project accuracy and completeness
- MAJCOM CE programmers lacked procedures
 - Documenting and validating DD Forms 1391 scoping data
 - Requesting documentation to recalculate historical costing method line items
- Insufficient guidance (AFI 65-501 and AFMAN 32-1089) for completing EA or waiver. Did not identify
 - Who should initiate, coordinate, and maintain
 - When initiated
 - What details required for justification



ANG MILCON Planning (Cont'd)

- **Impact**

- Public can be assured Air Force CE selected valid projects and conducted environmental studies
- Project costs overstated by \$7.6 million
 - Overstated funds could be used for other valid Recovery Act MILCON projects
 - Eliminating overstatement results in PMB
- Without proper documentation, Air Force could not support and justify \$8.7 million in Recovery Act MILCON requirements
- Air Force did not have required economic detail to make informed construction decisions



ANG MILCON Planning (Cont'd)

- **Audit Comment**

- Related recommendations included in the Air Force Report of Audit, F2010-0008-FD100; accordingly recommendations are not included in this report for:
 - AFI 32-1021 and AFMAN 32-1089 guidance/specific instructions
 - MAJCOM procedures
 - Required checklists
 - SAF/FMC insufficient guidance



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Audit Results 1

ANG MILCON Planning (Cont'd)

- **Recommendation 1.** HQ ANG/A7C should require installation and MAJCOM programming personnel to:
 - a. Revise scope and reduce the overstated costs totaling \$7.6 million
 - b. Develop and maintain documentation for the \$8.7 million in unsupported construction costs
 - c. Complete an EA or obtain a waiver for the five MILCON projects



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Audit Results 1

ANG MILCON Planning (Cont'd)

- **Management Comments.** HQ ANG/A7C concurred with the recommendations and stated: “Draft audit indicates costs were overstated; however the projects were executed within the intended scope and cost, based on actual bid prices. Examples cited in the draft audit report and specific actions by NGB are detailed below:

1.a.1. **“Fort Smith MAP AR:** Improperly included \$1.5 million in unrelated construction (e.g., base gate) as part of approved CE Complex project. NGB Action: Since the audit preliminary outbrief in December 2009, as directed by the auditors, and to provide transparency of ARRA expenditures, NGB/A7O project managers removed the references to gate construction from the executed ARRA MILCON project; and developed a stand-alone project to execute the gate construction. Potential Monetary Benefit: As the project has been revised, no monetary benefit to the government exists in this effort. Closed.



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Audit Results 1

ANG MILCON Planning (Cont'd)

1.a.2. **“Salt Lake City IAP:** Improperly used all \$5.1 million in Fire Station Phase II project funds to construct EOD office and mobility processing center. NGB Action: As directed by the auditors, and to provide transparency of ARRA expenditures, AF/A7C managers requested a change to the project title for the ARRA project executed at Salt Lake City, UT IAP. Per responses from AF/A7C managers, the project title change has been coordinated through appropriate OSD offices and briefed to appropriate Congressional Staffs. The project will execute the same planned construction, at same estimated cost, with a new title. Potential Monetary Benefit: As the project has been revised, no monetarily benefit to the government exists in this effort. Closed.



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Audit Results 1

ANG MILCON Planning (Cont'd)

1.a.3. **“Shepherd Field WV:** Overstated C-5 Avionics project costs by \$1 million (23 percent) due to inaccurate unit cost calculations. NGB Action: The project was bid and awarded 28 Sep 09 with a cost at award of \$2.6M, generating bid savings from the programmed amount. As with all ARRA projects, this project’s bid savings will be combined with other savings and recycled into additional projects. As always the goal of expending the \$50M provided to stimulate the American economy through construction projects will remain paramount; additional bid savings will initiate additional rounds of project definition, approval, and execution until the funds are exhausted. Potential Monetary Benefit: No monetary benefit to the government exists in this effort – the same \$50M provided initially will be expended on additional ARRA projects, per guidance provided by AF/A7CP. Actions are underway to develop and gain approval for projects from bid savings accumulated from all ARRA MILCON projects. Estimated Completion Date: 30 May 2010.



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Audit Results 1

ANG MILCON Planning (Cont'd)

1.a.4. “**Birmingham IAP AL**: Could not support \$255,000 in utility, site improvement, pavement, and communication costs. NGB Action: This project programmed at \$2M was bid and awarded 22 September 2009 with a cost at award of \$2.08M. Bid savings from other contracts were applied to allow award of this contract at a cost beyond the programmed amount. Potential Monetary Benefit: No monetary benefit to the government exists in this effort; contract was awarded within 4% of the programmed amount. Closed.

1.b. “Documentation of construction costs, including Architect-Engineer cost estimates and contract execution bid pricing are available at NGB/A7O. Closed.



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Audit Results 1

ANG MILCON Planning (Cont'd)

1.c. “NGB/A7A has requested ANG base civil engineer squadrons work with local financial management elements to perform economic analyses for the five ARRA ANG MILCON projects described, and forward the results, so the analyses can be maintained on file. Estimated Completion Date: 30 September 2010.”

- **Evaluation of Management Comments.** Management comments addressed the issues raised in the audit result, and management action taken or planned should correct the problems. The NGB/A7 did not agree with the potential monetary benefits; however, since the project savings will be used to fund other requirements/projects, we conclude the potential monetary benefit is valid and no disagreements exists requiring resolution. As for management comments in 1.a.4, we did not identify a cost savings associated with the Birmingham IAP project. In regard to management comments in 1.b, at the time of the audit, documentation was not available at any location for audit review.



Audit Results 2

FAR Clauses

- **Condition.** Contracting personnel did not include all required FAR clauses in Recovery Act contracts or solicitations at four of five locations (Table 2)
- **Cause.** HQ ANG PARC did not provide guidance
 - Documenting new FAR clauses
 - Requirements for using each clause
- **Impact.** Contractors may not have all the information required to bid, accept, and perform Recovery Act projects



Audit Results 2

FAR Clauses (Cont'd)

| FAR Clause* (Part 52) | Atlantic City IAP** | Birmingham IAP | Forbes Field | Fort Smith MAP | Salt Lake City IAP | Shepherd Field |
|----------------------------------|--------------------------------|---------------------------|---------------------|---------------------------|-------------------------------|-----------------------|
| 203-15 | N/A | Yes | No | No | Yes | Yes |
| 204-11 | N/A | Yes | No | No | Yes | Yes |
| 215-2 | N/A | N/A*** | No | No | N/A*** | N/A*** |
| 225- 21/22/23/24 | N/A | Yes | No | Yes | Yes | Yes |
| 222-6 | N/A | Yes | Yes | Yes | Yes | No |
| 244-6 | N/A | Yes | Yes | No | Yes | No |
| 212-4 /5 | N/A | N/A*** | No | No | N/A*** | No |
| 214-26 | N/A | No | N/A*** | N/A*** | Yes | Yes |
| Total Missing | N/A | 1 | 5 | 5 | 0 | 3 |

* See slide 22 for FAR clauses reviewed

** Atlantic City has a Military Construction Cooperative Agreement with the State; therefore, Code of Federal Regulation statements are required and the FAR is not applicable

*** See slide 22 for FAR clause applicability

Table 2. Missing FAR Clauses



Audit Results 2

FAR Clauses (Cont'd)

- **Recommendation 2.** HQ ANG PARC should develop and distribute to all ANG installations a listing of the new Recovery Act FAR clauses and provide requirements for using each clause
- **Management Comments.** The NGB PARC concurred with the findings and recommendations and stated: “The NGB PARC developed and distributed to all ANG installations a listing of the applicable Recovery Act FAR clauses and provided the installations the requirements for using each clause. The PARC also posted the applicable information online on the Guard Knowledge Online web site to allow full disclosure to NGB bases and units. Closed.”
- **Evaluation of Management Comments.** Management comments addressed the issues raised in the audit results and management actions planned are responsive.



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FAR Clauses Reviewed

- FAR 52.203-15, Whistleblower Protection Under the American Recovery and Reinvestment Act of 2009
- FAR 52.204-11, Recovery Act Reporting Requirements
- FAR 52.215-2, Audit and Records – Negotiation, applicable for negotiated solicitations
- FAR 52.225-21/22/23/24, Required Use of American Iron, Steel, and Manufactured Goods – Buy American Act – Construction Materials/Trade Agreements
- FAR 52.244-6, Subcontracts for Commercial Items and Commercial Components
- FAR 52.222-6, Davis-Bacon Act
- FAR 52.212-4/5, Contract Terms and Conditions – Commercial Items; and Contract Terms and Conditions Required to Implement Statutes or Executive Orders – Commercial Items, non-applicable for non-commercial items
- FAR 52.214-26, Audit and Records – Sealed Bidding, applicable for sealed bid solicitations



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Glossary of Terms and Acronyms

| Term | Glossary of Terms |
|---------------|---|
| A4/7 | Chief of Staff for Logistics, Installations & Mission Support |
| AF Form 813 | Air Force Form 813, <i>Request for Environmental Impact Analysis</i> |
| AFAA | Air Force Audit Agency |
| AFI 32-1021 | Air Force Instruction 32-1021, <i>Planning and Programming Military Construction (MILCON) Projects</i> , 24 January 2003 |
| AFI 65-501 | Air Force Instruction 65-501, <i>Economic Analysis</i> , 10 November 2004 |
| AFMAN 32-1089 | Air Force Manual 32-1089, <i>Air Force Military Construction and Family Housing Economic Analysis Guide</i> , 1 August 1996 |
| ANG | Air National Guard |
| ANGH 32-1084 | ANG Handbook, <i>ANG Facility Requirements</i> , 25 April 2006 (Draft) |
| ARRA | American Recovery and Reinvestment Act of 2009 |
| AT/FP | Antiterrorism Force Protection |
| BRAC | Base Realignment and Closure |
| CATEX | Categorical Exclusion |
| CE | Civil Engineer |
| DD Form 1391 | Department of Defense Form 1391, <i>Military Construction Project Data</i> , July 1999 |
| DoDIG | Department of Defense Inspector General |
| EA | Economic Analysis |
| EOD | Explosive Ordnance Disposal |
| FAR | Federal Acquisition Regulation |



Glossary of Terms and Acronyms (Cont'd)

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| Term | Glossary of Terms |
|---------|---|
| FONPA | Finding of No Practical Alternative |
| FONSI | Finding of No Significant Impact |
| GAGAS | Generally Accepted Government Auditing Standards |
| LEED | Leadership in Energy and Environmental Design |
| MAJCOM | Major Command |
| MILCON | Military Construction |
| OMB | Office of Management and Budget |
| OSD | Office of the Secretary of Defense |
| PARC | Principal Assistant Responsible for Contracting |
| PMB | Potential Monetary Benefit |
| ROD | Record of Decision |
| SAF/FMC | Secretary of the Air Force for Cost and Economics |
| UFC | Unified Facilities Criteria |



- **Audit Coverage**

- Performed audit at 6 locations and two USP&FO offices (Slide 33)
- Accomplished fieldwork 28 July through 15 September 2009
- Reviewed documentation from February 1997 through September 2009
- Issued draft report (slide presentation) in December 2009



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Audit Scope (Cont'd)

- **Work Performed**
 - **Validity**
 - Reviewed DD Forms 1391s and other available documentation
 - Determined potential conflict with BRAC actions
 - Discussed project selection criteria with installation personnel



Audit Scope (Cont'd)

- Cost Estimates
 - Applied accurate category code from ANGH 32-1084
 - Applied criteria from ANGH 32-1084 and any other documentation to validate scope
 - Calculated AT/FP at mandated 1 percent - unless otherwise justified
 - Calculated LEED at mandated 2 percent - unless otherwise justified
 - Reviewed documents- identifying utility, pavement, & site improvement cost development
 - Reviewed communications estimate provided by communications squadron



Audit Scope (Cont'd)

- Environmental Analysis
 - Reviewed AF Form 813
 - Determined if EA result in -- CATEX, FONSI, FONPA or ROD
- Economic Analysis
 - Reviewed documents for sufficiency
 - Validated required coordination
- FAR Clauses
 - Reviewed solicitations and contracts for each applicable FAR clause
 - Discussed issues with contracting personnel



Audit Scope (Cont'd)

- **Sampling Methodology**
 - Selected 8 locations
 - One location requested by DoDIG -- predictive analysis using critical risk factors (DoDIG audited remaining predictive analysis locations)
 - AFAA selected remaining five locations for 100 percent Recovery Act coverage
 - Two USP&FO audited for contracting issues



Audit Scope (Cont'd)

- **Computer Assisted Auditing Tools and Techniques** Excel spreadsheets to re-calculate cost estimates
 - COUNTIF, and SUM functions
 - IF/THEN mathematical formulas for identifying project overstatements/potential monetary benefit
- **Data Reliability** Did not use or rely on computer generated data to support audit conclusions



Audit Scope (Cont'd)

- **Auditing Standards**

- Accomplished audit work in accordance with GAGAS
- Included tests of management controls over:
 - Documentation of transactions
 - Document retention
 - Management oversight



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Prior Audit Coverage

- **Prior Audit Coverage.** We did not identify any reports issued within past 5 years with same objectives as those addressed in this report
 - Air Force Audit Agency
 - DoD Inspector General
 - Government Accountability Office



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Locations Audited/ Reports Issued

| Organization/Location | Installation Level Reports Issued |
|---|--|
| 117th Air Refueling Wing Birmingham AL | F2010-0018-FDD000 25 November 2009 |
| 151st Air Refueling Wing Salt Lake City UT | F2010-0022-FCI000 2 December 2009 |
| 167th Airlift Wing Shepherd Field WV | F2010-0006-FDM000 15 October 2009 |
| 177th Fighter Wing Atlantic City NJ | F2010-0010-FDN000 1 December 2009 |
| 188th Fighter Wing Fort Smith AR | F2009-0107-FBL000 16 September 2009 |
| 190th Air Refueling Wing* Forbes Field KS | F2010-0011-FBL000 30 October 2009 |
| USP&FO** Buckhannon WV | F2010-0012-FDM000 1 December 2009 |
| USP&FO** Topeka KS | F2010-0004-FBL000 14 October 2009 |

* Directed by DoDIG

**The USP&FO is responsible for contracting at ANG installations in their state



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Points Of Contact

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We accomplished this audit under project number F2009-FD1000-0659.000



Final Report Distribution

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