The AFCAIG Process - - Service Cost Positions

Mr. Grant McVicker
Mr. Scott Adamson
Navy Cost Symposium
17 September 2009
What I’ll Talk About

- SAF/FMC & AFCAA Missions
- Organizational Structure
- AFCAA Roles & Responsibilities
- Air Force Cost Analysis Improvement Group (AFCAIG)/Service Cost Position (SCP) Process
SAF/FMC Mission

To provide expert cost, economic, and financial decision support to the Air Force, DoD and Congress, thereby enhancing Air Force warfighting capabilities and maximizing available resources.

Air Force Cost Analysis Agency Mission

To provide objective cost analyses, estimates, and information to the Air Force, DoD and Congress, thereby supporting effective stewardship of our nation's resources.
AFCAAA Personnel Location Overview

- Los Angeles AFB, CA
- Peterson AFB, CO
- Eglin AFB, FL
- Wright-Patterson AFB, OH
- Hanscom AFB, MA
- DC

Integrity - Service - Excellence
AFCAA

Key Responsibilities

- Independent Cost Estimates (ICEs), Component Cost Analyses (CCAs), and Service Cost Positions (SCPs) for Major Defense Acquisition Programs (MDAP) and Major Automated Information System (MAIS) programs
- Review and Approve Cost Per Flying Hour (CPFH) Factors
- Air Force Total Ownership Cost (AFTOC) Database
- Review Analysis of Alternative (AoA) estimates
- Cost Analysis Support to HQ USAF and OSD
- PEO Support Through AFCAA/OLs
- Conduct cost research, build cost databases, develop cost models
What is the Air Force CAIG?

The Air Force Cost Analysis Improvement Group (AFCAIG) is the corporate review group that validates and recommends the Air Force’s cost estimates for major weapon and information systems. It is composed of functional representatives from across the Secretariat and the Air Staff.
### Who is the AFCAIG?

<table>
<thead>
<tr>
<th>Position</th>
<th>Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dep Assistant Sec (Cost and Economics), Chairperson</td>
<td>SAF/FMC</td>
</tr>
<tr>
<td>Director of Budget Investment</td>
<td>SAF/FMB</td>
</tr>
<tr>
<td>Dep Assistant Sec (Mgmt Policy &amp; Program Integration)</td>
<td>SAF/AQX</td>
</tr>
<tr>
<td>Dep Assistant Sec (Policy and Resources)</td>
<td>SAF/XCP</td>
</tr>
<tr>
<td>Logistics</td>
<td>AF/A4L</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>AF/X7C</td>
</tr>
<tr>
<td>Requirements</td>
<td>AF/A5R</td>
</tr>
<tr>
<td>Test &amp; Evaluation</td>
<td>AF/TE</td>
</tr>
<tr>
<td>Programs Division</td>
<td>AF/A8P</td>
</tr>
<tr>
<td>Manpower, Organization, and Resources</td>
<td>AF/A1MP</td>
</tr>
</tbody>
</table>

Program Manager
Program Executive Officer
MAJCOM Reps
OSD CAIG Analyst
How Does the AFCAIG/SCP Process Work?

- A Cost Integrated Product Team (CIPT) is responsible for developing the recommended SCP for presentation to the AFCAIG
  - Meets early in the process to establish ground rules, etc
  - Led by an Agent of the AFCAIG (AFCAA Division Chief)
  - Members include:
    - System Program Office and Product Center Cost Staff (POE)
    - Air Force Cost Analysis Agency (CCA)
    - PEM and PEO Representative
    - OSD CAIG (invited to participate)
  - Works reconciled estimate through the AFCAA/TD prior to presentation to the AFCAIG

- AFCAIG Chairman recommends an AF SCP to SAF/AQ
  - Formal memo and report

- SAF/AQ makes final determination on the AF SCP
  - Reviewed/approved at an AF Review Board meeting
## Notional Cost IPT Schedule
### ACAT 1C

<table>
<thead>
<tr>
<th>Days to AFIPT</th>
<th>Task</th>
<th>Calculated Date</th>
<th>Adjusted Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>-180</td>
<td>Official Tasking Message</td>
<td>17-Oct-02</td>
<td></td>
</tr>
<tr>
<td>-166</td>
<td>CIPT Kickoff Meeting</td>
<td>31-Oct-02</td>
<td></td>
</tr>
<tr>
<td>-166</td>
<td>Draft CARD Submission to CIPT</td>
<td>31-Oct-02</td>
<td></td>
</tr>
<tr>
<td>-159</td>
<td>Start Data Collection/Contractor Visits</td>
<td>7-Nov-02</td>
<td></td>
</tr>
<tr>
<td>-152</td>
<td>Approval of High Cost/High Risk Items</td>
<td>14-Nov-02</td>
<td></td>
</tr>
<tr>
<td>-126</td>
<td>Interim Reconciliations</td>
<td>10-Dec-02</td>
<td></td>
</tr>
<tr>
<td>-80</td>
<td>Final CARD Due to CIPT</td>
<td>25-Jan-03</td>
<td></td>
</tr>
<tr>
<td>-80</td>
<td>Draft POE/CCA Doc Due to CIPT</td>
<td>25-Jan-03</td>
<td></td>
</tr>
<tr>
<td>-56</td>
<td>Final Reconciliation</td>
<td>18-Feb-03</td>
<td></td>
</tr>
<tr>
<td>-49</td>
<td>Draft SCP</td>
<td>25-Feb-03</td>
<td></td>
</tr>
<tr>
<td>-35</td>
<td>Final Docs to CIPT</td>
<td>11-Mar-03</td>
<td></td>
</tr>
<tr>
<td>-28</td>
<td>AF CAIG</td>
<td>18-Mar-03</td>
<td></td>
</tr>
<tr>
<td>-21</td>
<td>OSD CAIG (if needed)</td>
<td>25-Mar-03</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>AF Decision Meeting</td>
<td></td>
<td>15-Apr-03</td>
</tr>
</tbody>
</table>

<<------ all formulas are generated from this input

---

**Integrity - Service - Excellence**

---

12
Some Lessons Learned

- Involve all parties early in the process
  - Establish ground rules/assumptions and discuss CARD content
  - Set technical baseline as early as possible and establish a common estimating WBS
  - Make sure CSDR Plan is being worked
- Determine the ‘product’ and set schedule as early as possible
  - Consider effects of programmatic issues, such as source selection
  - All fact finding must be complete prior to entering competition
- Understand all parties data sets, data normalization, and models
  - Imperative for comparing results, reconciling differences
- Work the uncertainty/risk analysis as early as possible
  - AF senior leaders expecting to see uncertainty distribution
- Establish a standard format for the AFCAIG briefings
- Allow adequate time at the end of the process to work budget disconnects, issues, excursions, staff SCP to OSD(CAPE), etc
**Improvement Initiatives**

  - Program Cost Estimates and Non-Advocate Cost Assessments (NACAs) updated annually
  - In process of re-writing Air Force Instruction 65-508, Cost Analysis Guidance and Procedures, which provides direction on implementation of the AFPD 65-5

- Stand up of AFCAA Operating Locations
  - Significantly improved our ability to directly interface with program office and product center cost staff

- Standard templates for AFCAIG briefings, memos, reports (on-going)
  - Senior leaders see consistent information across programs

Questions?
Why is the Reconciliation held so far ahead of the actual AFCAIG presentation?

- Gives CIPT time to run lengthy excursions on issue areas we could not reconcile
- Gives CIPT time to develop top-level crosschecks on the final Service Cost Position
- If SCP significantly different than the budget, gives CIPT time to do budget drills to fit the program within the approved budget
- Gives CIPT time to develop a concise, clear briefing for the AFCAIG and OSD CAIG (two very different briefings since the AFCAIG concentrates on the CCA, POE, SCP comparisons vs the OSD CAIG briefing is only the SCP)
Is it appropriate for OSD to be present when the Air Force’s Cost Position is being developed?

- OSD is an invited guest during the CIPT process
- OSD’s activities must not drive the SCP schedule
- No requirement for OSD analyst to share his/her estimate with the CIPT prior to publication of OSD CAIG Report
  - Early indications of OSD analyst’s estimating ideas and concerns will be encouraged, however
What happens if the CIPT cannot agree on an estimating method?

During reconciliation, the CIPT lead (AFCAA Division Chief) will attempt to reach consensus on what the SCP will be before moving on to the next WBS element.

If the CIPT cannot reach agreement on the best estimating method for a given WBS element, the issue is set aside and presented at the AFCAIG for the chairman to resolve.
What makes the CIPT process run smoothly?

- Electronic dissemination of information (especially CARD)
- Early, piece-meal submission (electronic) of documentation
- Charts prepared for items on the reconciliation agenda
  - Represent the WBS level the program is estimated to
- Providing for “real-time” estimate changes at reconciliation
- Limit revisiting decisions (unless new info provided)
- CIPT members must keep their respective chains-of-command apprised of changes as a result of reconciliations
- Planning for risk assessment throughout the process and performing risk assessment prior to the final reconciliation
- Data exchange between SPO, AFCAA, and OSD during process
Cost IPT Lessons Learned

- Standard Charts - Often Scrambling at the end to complete; need to plan for ahead of time
  - Risk Graph - with 20%, 50%, 80% CL at minimum (also put point estimate with its associated CL on chart)
- Budget Comparisons
  - Must be compared with the latest APPROVED budget (i.e. PB04, not the POM, not the latest BCP)
    - SBIR withholds included in compared budget
    - **Must do drills to adjust program to fit within current budget and present those to AFCAIG and OSD CAIG**
    - Can include additional chart with latest submittal (i.e. with latest BCP)
- Comparison with last SAR baseline for Nunn-McCurdy evaluation
- Comparison with any ORD threshold cost/price requirements
- CCDR Plan Approval Status
- Potential OSD CAIG Issues
- Risks the risk analyses may not be covering
- Sensitivity Analyses- Drivers that could have major impacts to estimate
Acquiring organization shall build program cost estimates and HQ shall provide non-advocate cost / risk assessments to decision makers

- Annually
- Milestone decisions
- Nunn-McCurdy breaches
- Source selections
- POM initiatives, disconnects, and offsets

Joint collaborative efforts highly encouraged

Collaborative training, data collection and methods development

HQ shall review cost, economic, or business case analyses presented to SECAF, USECAF, CSAF, VCSAF