

Terminal High Altitude Area Defense (THAAD)



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- **Honeywell Space, Clearwater, Florida**
 - **Mission Computer (MC) and Inertial Measurement Unit (IMU) for THAAD Interceptor**
 - **THAAD Development Phase**
 - **Design, develop, qualify new MC and IMU**
 - **Produce 35 MCs and 45 IMUs for ground test and flight test programs**
 - **Technical challenges**
 - **Very aggressive schedule**
 - **Successful, on-time flight test program was IMPERATIVE for overall program success**
 - **Two Keys to Success**
 - **Rigorous Baseline Management**
 - **Successful Rewards/Recognition Program**

Best Practice - Baseline Management

- Establish a very well documented baseline (technical and contractual), capturing and documenting all changes that might affect the baseline, and provide a methodology for assessing and communicating those changes to avoid “scope creep”, both internal and external.
- Implementation
 - Establish Project Office with Baseline Management as primary function
 - Begin Pre-Proposal phase
 - Clarify requirements before proposal
 - Document with customer in writing (redline SOW, Specs, etc. and both parties sign)
 - Proposal/Negotiation phase
 - Include documents/agreements in proposal conditions and in post-negotiation summary
 - Program Execution phase
 - Kick off meeting communicates baseline details to entire team
 - Project Office monitors and documents potential baseline changes (internal and external)
 - Generate and manage a Baseline Change Matrix
 - Weekly Baseline Management Review chaired by Project Office leader, with Program Manager, Technical Lead, Business Team leader and Contracts to review Baseline Change Matrix and status actions and progress.

- **Program Execution (continued)**
 - Share and communicate **Baseline Change Matrix** with customer
 - Project Office** issues **Program Directives** to communicate changes in work direction
 - Track **Program Directives** to closure

–Effective Baseline Management

- **Minimizes “scope creep”**
- **Keeps you and your customer on the same page**
- **Minimizes surprises**
- **Provides program personnel with clear direction for execution**
- **Enhances financial and schedule performance**
- **Happier Team – Happier Customer**

- **Recognition Program**

- Needed to focus and motivate the Team (aggressive technical and schedule requirements)
- Established a comprehensive Recognition program
- Sold to management based on financial performance
 - Large Award Fee at risk every six months
 - Award Fee based on cost, schedule, quality and technical performance
- First level recognition focused at Team Leads level
 - Leads (technical, quality, business, test, manufacturing, etc.)
 - Participation varied each six month period based on key milestones
 - Predefined success criteria each six month period
 - Monetary award tied to Award Fee percentage

Best Practice – Rewards Aligned to Results Honeywell

– Second level recognition for all team members

- **Provided Team Leads with tools to motivate and recognize sub-teams and individual contributors**
 - Recognition luncheons for sub-teams
 - Team Leader pre-defines and gets pre-approval for important task to be accomplished with criteria/date for success
 - Tools for “on the spot” recognition to reward good performance
 - THAAD polo shirts, mugs, mouse pads, leather notebooks, etc. were handed out by management team, real time in worker’s area
 - THAAD Employee of the Month
 - Nominated by peers

- **All Hands steak cookout**
 - Each six months if Award Fee > 95%

- **Results Achieved!**
 - Stimulated the right behaviors
 - Generated true teamwork
 - Rewards based on performance enhanced Team pride

• Summary

- Rigorous Baseline Management and Comprehensive Recognition Program were Key elements in the success of the MC and IMU Development Program
- Accomplished all technical, schedule, and financial objectives
 - First pass successes on complex technical designs, ASICS, and printed wiring boards
 - Software design and development on schedule and cost
 - Test equipment design and manufacture on schedule and cost
 - Four full qualifications, all with first pass success
 - Seventy two consecutive months of CPI and SPI >1.0
 - Excellent Award Fee performance