

## Project Delivery Team Accomplishments

Army Transformation...Objective Force...Rebalancing...Modularity

These words from the Army Campaign Plan are widely used, and may even be considered commonplace. But their effect on the U.S. Army, Alaska (USARAK) has been nothing short of electrifying. Fort Wainwright, USARAK is at the cutting edge of Army Transformation and the Global War on Terror. Now home to the 1<sup>st</sup> Brigade Combat Team, 25<sup>th</sup> Infantry Division (formerly 172nd Stryker Brigade Combat Team), Fort Wainwright has seen an explosion of growth as the Army transforms to become a leaner, more responsive fighting force.

The Alaska District's challenge: support USARAK in their commitment to provide housing for the 6,500 Soldiers and 6,400 family members stationed at Fort Wainwright. In 2005, the U. S. Army Garrison Alaska realized they were facing a critical

***Mission: Design, award, and construct \$42M project in 15 months***

shortage of housing units to support the growing mission at Fort Wainwright. The Alaska District Army Family Housing project delivery team (AFH PDT) jumped into action to support Army Soldiers. The PDT developed a plan that focused on customer needs, and succeeded in providing the first phase of new homes less than a year after contract award. This unprecedented success was achieved while the PDT maintained tight control of budget and





quality; resulting in the contract experiencing **0% cost and schedule growth.**

The project “Construct Replacement Housing - Southern Cross” is part of a larger program of fifteen ongoing projects to construct 1,057 Army housing units within five

years. The team was faced with several competing requirements. Projects in construction were given priority for resources while maintaining the goal of having acquisition documents and

***Effective balancing of competing demands***

designs ready to advertise in time to meet customer and USACE driven deadlines. Likewise, during the design phase portion of design-build projects, the team had to meet specific dates for reviews, over-the-shoulder meetings, and pre-construction activities. Project difficulty was compounded by site conditions that feature ice fog, stringent environmental regulations, an active seismic zone, and greatly abbreviated construction seasons due to an 8-month long winter with extreme cold that typically pushes to -60° F.

***Synergy between teams: customer, end user, designer, and contractor***

Finally, they had to meet interim construction milestones required for turnover of completed buildings. It was an intense challenge for the team to maintain balance among so many varying, time-sensitive requirements, and it required great flexibility to juggle the often conflicting tasks.

The duration established by the Consolidated Command Guidance for a project as large as Southern Cross is 820 days, but this project was to be completely turned over to the customer within 447 days of notice to proceed. By maintaining customer focus - the Army

Soldiers in theatre fighting to bring democracy to Iraq while their families remained at home in a brutal subarctic climate - the PDT was successful in meeting all project requirements.

Communications were central to the team's success; however, with Fort Wainwright located 360 miles away from many of the team members in the Anchorage area, maintaining contact was challenging. The team used several tools to combat this problem, including the Resident Management System, DrChecks, electronic mail, telephone, teleconference, and travel for special situations. Formal

***Teamwork and partnering***

communications were relegated to the role of documenting critical decisions and results. These methods were successful and teams developed strong personal ties, which in turn reduced time lag and misunderstandings. Having multiple projects at different stages of completion also contributed to a positive camaraderie by providing a sense of community. Team spirit was maintained and turnover of team personnel was minimized.

The team started with a strong level of commitment to successful outcome and maintained it throughout project, from charrette through construction. No formal partnering session was conducted. The PDT coalesced into a core team of members who were willing to assume critical non-traditional roles. Construction personnel, who traditionally just reviewed



Requests For Proposals (RFPs), instead first assisted in drafting the requirements, and then they worked directly with the designers to resolve any remaining issues. Additionally, selection criteria were adjusted so that potential contractors

were evaluated on their proposed method for turning over units expediently.

After award, key contractor personnel and their designers were brought into this positive atmosphere where they were able



to work directly with the people behind the RFP requirements. In response, the contractor's personnel opened communications in the reverse direction, greatly facilitating conflict resolution. Thus, process improvements critical to fast-tracking the design were made to work while maintaining quality.

***Integrated & coordinated management***

The design phase was an extraordinary example of informal partnering which continued through the construction phase of the project. The fast-tracked design was released for construction in four definable features of work to include demolition, site preparation,

***Innovative approaches***

building, and landscaping. To execute this mission, the PDT established methods for accelerating the design phase of the Design-Build projects and methods for the contractor to provide phased turn-over of units seamlessly. Fast-tracked design and construction featured informal over-the-shoulder reviews, elimination of 65% design submittals, decreased Government review periods, and using product data in lieu of prescriptive specifications.

Construction continued year round in subarctic conditions with temperatures that reached -46 degrees

***Sharing lessons learned***

Fahrenheit. The entire PDT (including the customer) maintained a high level of involvement, which accelerated resolution of issues and resulted in immediate transfer of lessons learned to



other projects. It took great commitment, trust, and, at times, sacrifices from all the team members to make this approach work. Shared goals, reinforced by the personnel relationships, created the willingness to take these kinds of risks. Success simply would not have been possible without their efforts.

The team placed great emphasis on providing housing to the Soldiers and their families that satisfied the needs and desires of curb appeal; provided a sense of community and community pride; provided a safe-haven of comfort and delight;

***Measurable results  
for customer focus,  
quality, cost and  
time***

and that was properly designed and fully coordinated with quality comparable to what is available in civilian society. The first project completed, Southern Cross has proven that these stringent objectives have been met.

The Army Family Housing Team is on their way to successfully delivering over 1,000 homes with a combined PA of over \$573 million, in full accordance with project management plans, to support the Army Soldier.



## Complexity of Project & Team

*Your customer just called.*

*That \$42M Army housing project, well, the schedule has changed. Now they need the housing designed, awarded, and constructed.*

*In 15 months. In subarctic Alaska.*

*Better get moving - the clock is ticking.*

The aggressive schedule demands, the challenge of balancing quality and cost requirements coupled with construction in a harsh Alaskan environment generated significant project complexity. The PDT has excelled in meeting the needs of this time-critical engineering and construction effort, even when faced with shifting project needs and customer demands.

Maintaining the quality objectives while accelerating schedule to expedite the turn-over of homes to the Soldiers and their families was the compelling challenge of this project. The team was aware of this challenge and mitigated the issues in stages. By considering quality and schedule in nearly every major decision made on the project, the team maintained focus on project success.

***Total estimated cost of current Army housing program in Alaska District: Over \$573M***

The team assured that the customer's quality objectives were well defined and were captured in the project management plan and RFP. To maintain clarity of intent, non-critical requirements were aggressively sought out and winnowed from the RFP. Contract selection included evaluation of measures for expedited design and phased turn over of housing units.

During the design, the team coordinated continually. Daily contact was the norm, not the exception. This was a break from the traditional methods of coordinating only in specific

***Innovative approach to design-build contracting shaved months off the schedule***

“design review” stages. While the approach had some pitfalls (primarily difficulty of tracking issues), overall it was successful and the pitfalls were identified as lessons learned and mitigated in upcoming projects.

The same level of involvement continued into and throughout construction. The team was able to maintain perspective not just on the issues themselves but also on how the issue impacted project delivery overall. All available communications channels (letter, travel, telephone, e-mail, and standard electronic documentation systems) were used to minimize time lag issues throughout the project.

The team composition was very complex, reflecting the high-stakes nature of this project. The team included personnel from varied customer and stakeholder entities: US Army Garrison, Alaska; Installation Management Command; Pacific Ocean Division; Headquarters U.S. Army Corps of Engineers, Assistant Chief of Staff for Installation Management; plus private sector firms Koonce, Pheffer, Bettis; VMS; and construction contractor Osborne and their subcontractors and suppliers.

***Intricate “team of teams” exacerbated need for consistent communication***

The size of the active team varied greatly as the project progressed, but the team leader was able to maintain a core group and a positive operating culture. The program manager, program engineer, customer, multi-disciplinary engineers, architects, contract specialists, contracting officers, construction representatives, office of counsel representatives, and the contractor’s personnel all worked synergistically to keep the project on track.

Most team members are located in Fairbanks and Anchorage, which are about 360 miles apart. The prime contractor’s main office and Architectural Designers of Record are



located in Washington. This wide geographic separation was challenging, but the team overcame the challenge through effective communication to make this project a great success.

The awarded project scope for “Construct Replacement Housing - Southern Cross” is for the replacement

of 112 Junior Non-Commissioned Officers (JNCO) units with 67 JNCO units. The program amount is \$42 million. The project started with preparation of the RFP around April 2005 accompanied by a Value Based Design Charrette. The project was awarded in February 2006 and the first phase of dwelling units was turned over to the government a short 11 months after Notice to Proceed for design, in January 2007. Project completion is on schedule for May 2007, with the exception of landscaping, which will be completed in summer 2007 after the snow has melted. Time of contract award to construction complete will be 461 days. This is considerably less than the metric of 820 days for a project of this magnitude, in this climate, and was achievable only through the innovative contracting approach and team commitment to successful execution.

## **PDT Support To Accomplishing The USACE Vision**

The Army Family Housing PDT exemplifies the USACE vision to be the “world’s premier public engineering organization responding to our nation’s needs in peace and war”.

***Fast track project to deliver comfortable homes with courtyard appeal to soldiers and their families***

The PDT included the customer and stakeholders to determine and provide what is expected, and they delivered products and services that serve the public interest. These quality homes for our Army Soldiers enhance national security; the homes were constructed on schedule and on budget through synergistic application of the project management business process.

The team promoted consistent use of best practices and always sought continual improvement. The PDT broke new ground on an ultra-fast track process, which initially caused discomfort for some team members. Other team members, the contractor and subcontractors were excited to work in this environment, and that excitement proved contagious. Many of the private sector subcontractors expressed disbelief that this was a government project, or a Corps project; however, they soon got onboard with a sincere desire to do their best and incorporate lessons learned as the PDT executed the project using learning organization concepts.

PDT members took full responsibility to manage the success of the project, and they used effective and frequent communication of information and lessons

***Team’s mantra:  
“Why not?”  
rather than “We can’t”***

learned to ensure that project goals were not just met, but exceeded. As such, the AFH PDT personified the Vision’s focus on People, Process, and Communications.

### **PEOPLE**

The Alaska District was quick to respond to the customer’s needs for housing by the development of the Army Family Housing Team. District leaders formed a core team of individuals with the skills and abilities to successfully execute a quality project. This group of individuals remained as part of the project delivery team through the completion of

construction. This Army Family Housing PDT is dedicated to providing quality homes that exceed the customer's expectations for accelerated schedule and budget control. The team was further inspired to excel knowing that these quality homes would house families while their loved ones were deployed to war and in time of peace when the families would be united.

Trust and commitment were key characteristics of this team that allowed them to try new techniques to accelerate the turnover of units. It would have been simpler to stick with the same process, but team members elected to pursue doing the right things, the right way, for the right reasons. They understood that these new techniques could then be implemented in future projects resulting in additional success for the Army. As the project moved speedily through each phase, the team identified methods for improving tasks and areas which were problematic including technical and process related areas. These were immediately incorporated into housing projects which were in the earlier development stages. In addition to improving the housing projects, these new process have prepared the district for the implementation of transformation.

### PROCESS

This PDT exemplifies the principles of USACE Business Process. The principles were integrated into the workings of the team and became second nature when accomplishing tasks.

***Measure quality with the goals and expectations of the customer in mind***

When the team was tasked with expediting the turn-over of housing units while maintaining quality, it developed a plan for successfully executing the task. The team would brook no allowance for any slippage in order to meet the tight schedule.

The empowered PDT worked together to fulfill responsibilities, stepping across traditional boundaries as necessary but keeping other members of the team informed. The PDT built trust in each other to keep commitments, and planned for success from Day 1. There was assurance that all team members had a clear understanding of the expectations and requirements for each individual and the team to achieve this task. This team proved to be a well functioning team where members were relied on to do their part, but were also so well integrated that it was difficult to separate one part from the whole team.

The customer's goals and expectations were quantified so that there was a clear understanding among the team. These goals were further analyzed to identify the impacts to the project. This analysis at times resulted in the customer redefining and reprioritizing the quality objectives. When the team was tasked with accelerating the turn-over of housing units, the required objectives had to be revised. The team, including the customer, worked together to redefine these objectives keeping in mind safety, fiscal, schedule, legal and technical constraints.

***Enterprise AIS were critical for communication, plus schedule and budget control***

The team used several automated information systems, including the internet based Corps of Engineers Resident Management System, web-based DrChecks, P2, and Corps of Engineers Financial Management System. With many team members separated by 360 miles, these automated information systems were key in facilitating communication.

The Project Delivery Team felt fully empowered and supported by the Senior Leaders of the Alaska District. The resources required to accomplish the project were provided to include providing additional interim resources for specific tasks, as identified by the PDT. The team was able to accomplish their tasks, on time and on budget, which led to the success of delivering a quality project exceeding the customer's expectations.

#### COMMUNICATION

Effective communications and on-going partnering among all team members were essential in making this project a success. The team was empowered to come up with innovative ideas and discuss them with the team. Open communications lead to key ideas which were incorporated into the RFP to encourage the contractor to accelerate the turn-over of housing units. Once the contract was awarded, the contractor was added to the team and communication channels were developed which facilitated project execution and issue resolution.

In the meantime, the Alaska District Army Family Housing PDT was responsible for a total of fifteen ongoing housing projects. In addition to the every day open communication, the

team met on a weekly basis to discuss schedule, upcoming milestones, status of projects, issues and any other discussion warranted by the team members.

The team kept resource providers aware of status and any additional resources required to achieve a task. This was specifically evident during the design phase of the Design-Build projects. Several projects had concomitant fast-tracked designs, so the team developed a combined housing program schedule that was maintained and updated frequently. If additional resources were required during this phase of work, resource providers were immediately notified and additional resources were made available.

## **Team Awards & Honors**

### **NEWSPAPER ARTICLES**

Got housing?, published by Fairbanks Daily News - Miner on November 29, 2006

Article described the shortage of housing on the Fort Wainwright Army Post.

Building teamwork, published by Fairbanks Daily News - Miner on March 11, 2007

Article described the teamwork between the USACE, Alaska District and contractors in a Design-Build scenario.

### **TELEVISED RECOGNITION**

Channel 2 KTUU News televised on March 07, 2007

A televised news covering the open house and the astounding reviews the home received.

### **OCCUPANT RECOGNITION**

There was an Open House for "Construct Replacement Housing - Southern Cross" on March 07, 2007. Newly completed homes were open to the public to view. There were amazingly positive reviews about the floor layout, the curb appeal, and the quality finishes of the homes. A Soldier, his wife and two children, who were to be the first to occupy one of these units, also participated in the Open House. The Soldier's wife cried tears of joy; she indicated she never thought it was possible for her family to live in such a beautiful home. This moment was the culmination of what the Army Family Housing PDT had pursued diligently on this project and others: quality homes for our quality Soldiers.