



AVIATION WEEK Program Excellence

Evaluation Team Meeting

Washington, DC

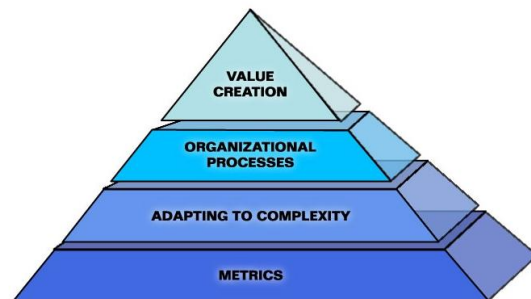
August 25, 2009

*Written by Carole Rickard Hedden
Program Excellence Project Leader*

The AVIATION WEEK Program Excellence Evaluation Team's purpose is to identify top-ranking aerospace and defense programs – in terms of performance, but also in terms of leadership capability. Program leaders are invited to submit an application for evaluation based on four key criteria: value creation, organizational processes, managing/adapting to complexity, and metrics.

The 2009 Program Excellence process began with 62 nominated programs. Based on reviews of performance and base analytics, this group was narrowed to 23 nominees and 22 final submissions.

Originally launched in 2004, the Program Excellence effort was established with two purposes: to provide data and lessons learned that would allow leaders to improve program performance, and to accelerate the development of bench strength across the program



management profession. This is accomplished through the evaluation of strong programs, many of which have recovered over time from crises, the sharing of lessons learned, and the development of a seminar and forums that coalesce members of the professional community. The evaluation criteria were developed by a team of industry, government agency and academic sponsors based on key performance issues identified across programs.

Participating in the Evaluation Team meeting and process, sponsored by PricewaterhouseCoopers with Glenn Brady and Matt Letstukis, this year were Ron Hornish, chair, Rockwell Collins; Harold "Skip" Burns, Raytheon; Charles "Chuck" Mills/Nick Kuzemka, Lockheed Martin; Charles "Chuck" Allen/Roger Besancenez, Boeing; John Chino/Tom Williams, Northrop Grumman; Jack Jacobs/Dan Fuller, Honeywell Aerospace; Jesse Stewart, Defense Acquisition University; Ed Hoffman and Lewis Peach, NASA Academy of Program/Project Engineering Leadership; and Aaron Shenhar, Rutgers University.

For 2009, the key issues for this community identified by the evaluation team focused on the lack of a standard on how to measure program manager success. Key concerns identified by the Evaluation Team include:

- A stronger bench in program management than existed in 2004; however, due to the economic down cycle and anticipated cuts from the Defense Dept., this bench strength may be underutilized during the coming three years. This situation could recreate the situation faced in 2004.
- Core competencies for program leaders have evolved and today form a path that begins with a cost-accounting position and progress through the executive program manager who functions as a chief executive officer for the program, responsible for people, resources, profit/loss, and an extended enterprise.
- Key skills today vs. the past include leading virtual and co-located teams, financial analysis/earned value, combined technical/business acumen, execution through the full life of a program (pre-proposal through stand-up, execution, delivery, revival, sustainment, close-out of contract). A notable issue is the ability to define life cycle cost and manage to life cycle cost versus delivery "to the spec".
- Major concern was cited with regard to the lack of time at the entry levels of program management (individuals who normally have seven or more years experience) to think through probabilities, opportunities. Instead, these early level leaders are faced with "working the list". The result is ownership of the task versus the success of the overall effort.
- Other skill gaps included: ability to generate and control requirements; planning around cost, milestones and execution at the development stage; skills to negotiate the complexity as a program moves from one phase to another; identifying and filling resource requirements (people, tools, facilities, suppliers, etc.).
- Despite the common use of matrix organizations, evaluation team members cited the need to develop effective leadership skills in an indirect or matrix organization.

Team members shared key aspects of preparing program leaders that involve several common themes:

- Learning based on a combination of teach/talk/read and experience in a stair step type fashion.
- Use of a nine-block grid to track every program leader within the organization across positions/skills and time. A third dimension would be the risk of losing a specific individual on that grid.
- An increase in customized consulting by a veteran group of program leaders to programs based on skill gaps and specific complexities (e.g. global supply chain or scope management).
- Focus on assessing the cultural aspects of the program team – how we work together – as a key component of program success.
- Focus within each organization on building a community that provides user-friendly access to subject matter experts, lessons learned, case studies. Knowledge management continues to be a driving cause within the aerospace and defense enterprise.
- Organizations are increasingly using a “pooled succession” plan so that a program leader in one business unit may be assigned to a completely different technology/business area based on overall skills.
- As part of leadership preparation, most organizations are establishing a role of deputy at every key position within the program – allowing a high potential individual to experience the position as part of her/his development.

The evaluation of the 2009 submissions indicates continued improvement is needed in categories of program execution:

- Concurrent engineering/sloppy handoffs of engineering responsibility (either within the organization or outward to a supplier)
- Lack of continuous process improvement built into the program rhythm.
- Negotiations surrounding scope control and opportunities.
- Roadmapping – the ability to set a path with gateways of maturity for assessment at every level of the program.
- Supply chain integration, visibility, sourcing.
- Submissions indicated they have measures in place but did not quantify them in a manner that allowed for assessment by the team.

Recommendations made to improve the program in 2010 include:

- Nominees must include name of customer who will be asked for input on performance of the program.

- Continue to drive down the “write up” factor – the cool factor of how a program is written up does affect the scoring and cannot be fully eliminated.
- Revised submission form must focus on what makes this program unique – we are asking that the program prove its value via metrics and basic criteria, but need to include why this program is “excellent”; this to focus on unique processes and “how” success was created.
- Team wants to increase the focus on value creation. For R&D/SDD this would include the scientific/technical value. Value creation should include dollar return (where applicable), but also competitive positioning and return to the customer.
- Data/metrics must include numeric evidence – may be expressed in % vs. true number, but this is required. Also, what metrics may need to be considered for the future? What have been the metrics that allowed the program team to anticipate and take action – beyond the standard metrics of schedule, budget and performance? The overarching objective here is to identify the metrics that have contributed to the success of the program and performance against those unique measures.
- Under scope of program, include some contrast between program’s originating objectives vs. objectives as of today; also include concise statement of deliverables.
- Under organizational processes, highlight knowledge management and resource identification and allocation as part of planning.
- Under complexity, add in how the program dealt with estimating the unknown and/or complexity factors.
- In terms of Evaluation Team processes, project leader needs to arrange score sheets by category versus alpha listing and include company/organization identification on form.

About PricewaterhouseCoopers

PricewaterhouseCoopers (www.pwc.com) provides industry-focused assurance, tax and advisory services to build public trust and enhance value for its clients and their stakeholders. More than 146,000 people in 150 countries across our network share their thinking, experience and solutions to develop fresh perspectives and practical advice.

PricewaterhouseCoopers' Aerospace and Defense (A&D) practice consists of a global network of more than 70 partners and 2,000 client service people who are dedicated to providing our firm's latest research and points of view on emerging industry trends. We understand the global environment in which our clients operate, as well as the regulatory restrictions and contract management requirements specific to the industry. We have broad-based, cross-functional capabilities that help our clients manage and address complex business problems. Our industry professionals can assist you in maximizing the opportunities and meeting the challenges inherent in today's Aerospace and Defense industries.