## BY AARON J. SHENHAR

ith increased pressures of global competition, budget cuts and security threats, the aerospace and defense industry must continuously look for better ways of doing business. One of the key factors for the success of the industry is the quality of its program leadership. Some months back, a survey of industry executives was conducted by Computer Sciences Corp. and sponsored by AVIATION WEEK and the Aerospace Industries Assn. (AIA). It found that 80% of the respondents consider program leadership as the top core activity in their operations. Ironically, however, 86% rate their program management effectiveness as moderate at best, and only 4% consider it excellent.

If program leadership is so important while its effectiveness is so low, the immediate question is why. And what can be done to correct this situation? It seems existing actions taken by individual companies or by the industry as a whole are insufficient to resolve this weakness. While almost every member of the AIA has established extensive internal training programs for future program leaders, most of the directors of these programs report their major challenge is to short-

en the time it takes to grow effective young leaders. Traditionally, they report, their companies used to endure many years of "on-the-job training" until their people "grew up" to become leaders of large programs. It therefore seems the industry needs a new educational model that will focus on quick development of effective

program leaders. Companies can no longer afford to wait years until their leaders grow "on the job."

Program leadership is an evolving discipline. Like any other discipline, it includes bodies of knowledge that keep growing based on research and accumulated literacy. The first question is: Do companies keep up with this expanding knowledge? A quick look at current company programs shows a consistent policy of internal breeding. Many companies are deliberately only using their internal instructors. While this may be good for standardization and for teaching "the way we do business," this policy fails to leverage much of the knowledge that exists outside the corporation. In comparison, think about disciplines such as marketing or medicine. Think how different marketing is today—with the Internet, for example—than it was 20 years ago? And what would happen if doctors only relied on their individual experiences or even on just their own hospitals' lessons? Aerospace companies must learn to take advantage of external perspectives.

A second related issue concerns the content of current program leadership training programs. Effective leaders must possess a combination of attitudes, information, knowledge, understanding, skills, insight and foresight. Yes, you may be able to grow all these on the job, but in order to accelerate leadership development, companies must carefully design their programs to make sure they deal with all these elements.

Currently, most company programs include lectures about

government regulations, congressional rules or their own company procedures. While this is valuable data, it only provides information and, at best, builds some knowledge. But this is not enough for the development of leadership skills. Some companies use their own case studies to share lessons from previous programs. Case studies may help people develop understanding of "why things happened," but they do not build insight, nor do they cultivate foresight. As we know, experience does not guarantee success.

What is still missing is the conceptual and theoretical part of program leadership. Understanding the concepts of the discipline may help future leaders gain insights into why things behave as they do, the ability to know what is wrong before it is too late, or even predict what will happen if this situation continues. Any discipline or profession includes a theoretical part, and as the old saw goes: "There is nothing as practical as a good theory." Program leadership is no exception. Company programs should strive to include theory and conceptual components to better prepare their leaders to look forward.

Finally, and perhaps most important, are current program

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perspectives. Traditional models of program effectiveness assume success is based on achieving the program's schedule, cost and requirements constraints. Many companies therefore emphasize the "get-the-job-done" approach and focus their curricula on the efficiency of program leadership, namely, "You must keep the

program on track, and if deviations occur, correct them as soon as possible."

Real program leadership, however, is an integrative activity. It involves three dimensions:

• The strategic dimension—the business success focus of the program in support of the company's strategy.

• The operational dimension—delivering the program efficiently and within its constraints.

• The team leadership dimension—motivating and inspiring team members to give their best to the program and keep growing for future challenges.

AVIATION WEEK's Program Excellence Award, which was initiated in 2004, is based on a framework that includes these three components. It is time that companies expand their leadership programs to address all the dimensions of program leadership excellence, and not just the operational part.

The aerospace industry is ready to develop and adopt a new model for program leadership and training program leaders. The new model will require developing conceptual thinking and insight (not just teaching procedure), building strategic and team leadership skills, and being open to external knowledge and sharing.

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