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Interview with Robert Rovinsky
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U.S Federal Aviation Administration
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Robert Rovinsky is Director of IT Enterprise Services in the Office of the Chief Information Officer, Federal Aviation Administration, Government of the United States of America. Robert B. Rovinsky directs an office responsible for reviewing and improving all IT investment decisions within the Federal Aviation Administration (FAA). His office reviews and helps prepare the capital investment business cases reported to the Office of Management and Budget (OMB) as part of the annual budget process. He also co-leads the implementation of earned value management in the FAA, and his office produces the FAA's IT strategy, conducts software and process engineering reviews of FAA programs, and is responsible for forms, privacy, directives and records management. Prior to taking this assignment, Dr. Rovinsky led the team responsible for leading the investment analyses of the FAA's communications, navigation, surveillance, facilities, infrastructure, and telecommunications programs. He led, from October 1998-September 1999, an investment analysis team that reviewed all the agency's satellite navigation programs, whose total investment (FAA plus industry) exceeded 10 billion dollars. He also was program manager for air traffic flow modeling, and worked on an airspace design effort for New York City's airports. Prior to coming to the FAA in 1990, Dr. Rovinsky directed the Office of Research and Statistics for Fairfax County, Virginia, where he was responsible for all software systems used by the County and for the statistical and economic analyzes used in County decision-making. From 1977-1987 Dr. Rovinsky was the Senior Information Manager and leader of an Operations Research Group within the US Department of Agriculture's Economic Research Service. Dr. Rovinsky has consulted in the areas of information technology, statistics, and management in Egypt, Pakistan, Zimbabwe, Costa Rica, and Morocco, and has taught Operations Research, Engineering, and Statistics at several universities. He holds a doctoral

degree in Operations Research and a Masters degree in Mathematics, both from Cornell University, and has published widely on the applications of Operations Research. He did his undergraduate work in mathematics at the University of Pennsylvania, and took graduate work at George Washington University in economics and managerial accounting. Bob is married and has two young children. In Bob's spare time, he is a professional storyteller.

Editor's Note: The United States Federal Aviation Administration operates the largest - and safest - air traffic control system in the world, controlling the flights of over 45 million aircraft and 800 million passengers in 2007 over much of North America, the Caribbean, Atlantic and Pacific Oceans. FAA also operates a system with less than .14 accidents for each 100,000 flight hours, and "a passenger would have to take an US commercial flight every day for 200,000 years before their chances of being involved in a fatal aircraft accident turns positive" (Arnold Barnett, Professor of Statistics at MIT). But the FAA's program management record is less stellar. Following the firing of almost all the FAA's air traffic controllers in 1981, the US Congress gave the FAA over 30 billion dollars over 12 years to modernize its air traffic control system, but this program fell behind schedule and overspent its budget, and in the mid-1990s the Congress' General Accountability Office (GAO) put the program on its "high risk" list, where it has remained until now, affecting the agency's credibility and budget. But a new effort by the FAA is attempting to convince the GAO that the agency can manage its acquisitions on schedule and within cost and specifications, through the adoption of such program management and acquisition management best practices as Earned Value Management and Portfolio Management. In the interview that follows Dr Robert Rovinsky will describe some of these efforts.

PM World Today (PMWT): What is your role at FAA with regards to program management within the agency? What are your personal responsibilities?

Robert Rovinsky: I direct an organization responsible for helping FAA's program and project managers incorporate best practices in all areas of capital planning from earned value management to portfolio management. This includes helping those project teams that produce our major air traffic and safety projects, on which our capital investment exceeds 2 billion dollars per year, to our smaller administrative and mission support information technology project managers who among them have expenditures exceeding 200 million dollars per year.

PMWT: What types of programs and projects are you responsible for?

Rovinsky: I work directly for the Chief Information Officer, whose projects include our major information security program, a special project to implement logical access to information systems and data, and a series of IT consolidation efforts.

PMWT: It is our understanding that you have been leading an initiative to implement earned value management processes within FAA. Can you briefly describe that effort?

Rovinsky: This effort arose from our attempts to improve the "business cases" of our major acquisition programs, generally projects costing more than 150 million dollars in total life cycle. [Each major Project must document its business case on a form called the Exhibit 300 that is sent each year to the Office of Management and Budget (OMB) in the Office of the

President for review. They rate its cost to benefit ratio, how well it addresses a business need, how well it is performing against its targets and many other factors and score it as "well managed" or not well managed.] In 2003 we were judged by the OMB to have an insufficient business case justification for many of our major programs, and they slashed our budget request accordingly. Our Administrator, Marion Blakey, tasked the Chief Information Officer to improve these business cases immediately. As we worked with OMB, they let us know that they considered Earned Value Management (EVM) to be a critical project management tool and we promised to examine our use of EVM and implement it where it was not being used. On the strength of that promise and many other improvements we made in 2004 OMB gave us much higher scores and all our business cases were judged well managed. But we knew we had to keep our promise and so in 2005 we assessed each major program against the American National Standards Institute (ANSI) standards for EVM, put in a strong EVM policy and guidance into our acquisition policy, set up an agency EVM Council to help manage EVM implementation and started down the road to program management transformation that we are still on today.

PMWT: What were some of the reasons for FAA's emphasis on better program management, and EVM in particular?

Rovinsky: FAA, like most Federal agencies, had a spotty record of meeting its cost and schedule targets. OMB has data that shows that over 80% of the 1000+ large federal programs fail to meet their cost and schedule targets and are forced to go back to OMB to "re-baseline" them. We were no exception. One of our executives estimated that our re-baselining cost us over 30% of our program's value. That means that if we are spending 2 billion per year in the hopes of getting 3 billion in benefits, we are actually losing about 1 billion dollars in benefits and spending 600 million more than we estimated. Our lack of an early warning system like EVM meant that the agency was constantly suffering unpleasant and costly surprises, and at a time in the project lifecycle when there was little management could do. Finally, our program managers were spending too much time trying to provide the auditors from within and outside the agency with credible information to explain these problems. And we were not meeting our internal goal of transparent processes. The implementation of EVM has gone a long way to address these problems.

PMWT: Have you seen any benefits yet? If so, what have you noticed?

Rovinsky: Our benefits have been striking. Our record in delivering programs on schedule and within cost targets is now quite good, with almost all of our programs within 10% of their variance targets and our average program ahead of its cost baseline. While almost all of the credit goes to the program managers, the executives within the FAA, and our contractors, I think that the emphasis on good business cases and the implementation of EVM and the consistency and transparency it brings has helped greatly. In particular, it has increased our credibility with those who fund us. From 2003-2005, OMB cut the agency capital budget each November more than 20 million dollars; in the last three years, we have not been cut at all. We also measured program overhead costs. This is a large expense for the FAA since developing and fielding a large air traffic control program involves testing, research, analysis and engineering. For programs that have not implemented EVM, their overhead is 5% or

more expensive than programs which are partially implementing EVM, which are in turn 5% or more expensive than programs that have fully implemented EVM. Put another way, full EVM implementation saves an average program about 5-20 million dollars over the life of the program.

PMWT: Has there been much resistance within the agency? If so, how have you addressed those concerns?

Rovinsky: EVM had a bad reputation when we started in 2003-2005. This was due to its seemingly high cost, magnified by the fact that the data was often not used. One manager told us he took the box of EVM data and analysis and used it to hold his door open. Some of this was due to poor contractor management but most was due to the lack of education among our program teams. We implemented a large training and awareness effort which continues to this day. We also sent a message to each of our contractors that we regarded EVM as an indicator of good project management and we were not going to pay separately for it, and we would evaluate each contractor's use of EVM as part of contract award. We had a few industry days where we sent this message and we were surprised at how much support we got from our contractors. We realized that they were frustrated at how little our program teams used the EVM data and they no more wanted us to overrun our budgets and schedules than we did. After all, both they and we benefit when the FAA is seen as a good steward of the federal dollar.

PMWT: Have you developed your program management policies and processes using only FAA personnel and expertise, or have you reached out to industry or other government agencies?

Rovinsky: We are fortunate to have several senior staff (in particular Dan Milano, Keith Kratzert and Giovanni Carnaroli) with years of project management and EVM expertise, and a set of project managers that had already started implementing EVM on their own. We also leverage best practices with other government agencies and with industry, especially our prime contractors and our support contractors. We learn from them and they are beginning to learn from us. We host and participate actively in the EVM Community of Interest that brings together all the Federal civilian agencies to learn from each other. I have been asked to represent the Department of Transportation at the Performance Management - Civilian Agency/Industry Working Group which is jointly chaired by the Department of the Interior and the National Defense Industrial Association. We expect this to be formally chartered by the Program Management Working group of the Federal Chief Acquisition Officer Council.

Finally the FAA will be the featured civilian agency at the upcoming 20th annual International Integrated Program Management conference at which about 800-1000 attendees are expected to attend - it will be at the Hilton Alexandria Mark Center November 17-19. The FAA CIO will be a keynote speaker.

PMWT: Have you used any outside consultants to help? If so, who are some of those key resources?

Rovinsky: We have been fortunate to have some of the leaders in EVM assist us in moving forward. One lesson I have learned that I repeat in my presentations on EVM is the importance of working with consultants who have a deep understanding and empathy for the challenges of running major federal acquisitions and projects. I strongly urge those who wish to implement project management improvements like EVM is to avoid consultants who will walk around asking canned questions or delivering academic answers but instead to look for those with "dirt under their fingernails". Program and Acquisition managers will quickly figure out which consultant is which. In our case, our PMs were open to our suggestions and critiques because they know that the people we sent over to meet with them know the business they are in. The other advantage we have is that our consultants, because they are well known in the profession and are respected for their knowledge and integrity, are able to help us "socialize" our progress and concerns outside the agency, with our stakeholders, customers, critics and industry partners. This contributed to the growing credibility that we had with OMB, the Inspector General and the US Congress's Government Accountability Office (GAO).

PMWT: What is the current time frame for implementation across FAA?

Rovinsky: We met our initial commitment to OMB, to implement by December 2007 the full ANSI standard on EVM on all major FAA programs that were in development in 2005. [We did not implement EVM for the 5 or so programs that either completed 95% of their development before December 2007 or were cancelled.] Now we are continuing to move towards full EVM compliance for the handful of major programs that began after August 2005, and we are putting processes in place to make sure that no major program is approved for development until at least the first two stages of EVM – organizing and planning - are in place.

But EVM implementation, as any best practice in program management is a journey without a final destination. We have set a FY 09 goal to be recognized as a center of excellence in program management, and I think we will achieve that. We are implementing a rigorous surveillance program this year and are starting down the road to certifying our first vendor. We will be discussing this and other goals at the conference in November and at our next Industry Day in October. We also got some useful results on gaps we need to address from our recent GAO audit on EVM at the FAA. We have already implemented some of their recommendations this fiscal year and incorporated the rest into our FY 09 workplan.

Finally, our implementation of EVM has led us to find many other areas of program management that need attention and improvement and we have spent a lot of time on studies of our financial systems and how they need to be changed to support program management, on how we need to make our data more consistent and accurate, and what kinds of EVM tools we should recommend to our program managers. We have also built a program management dashboard, based largely on EVM, so that our key acquisition executives can track progress and trends in our major programs.

PMWT: What has been the investment in new program management processes and systems at FAA under this initiative?

Rovinsky: Our total cost at the enterprise level has been less than 1 million per year. We estimate that each major program is spending about 1 staff year or equivalent on EVM so our total cost is less than .5% of our total capital investment.

PMWT: Has your emphasis on improved program management using EVM resulted in any favorable reactions from either Congress' Government Accountability Office (GAO) or OMB? If so, can you reflect on those issues?

Rovinsky: We were very pleased with the reception from OMB. As I indicated above, OMB has given our capital budget requests a favorable review the last few years. They have been interested in our progress and in mid-2005 I received a nice note from Dave Muzio, a senior staffer at OMB and a long time proponent of EVM at the OMB, recognizing our agency as the leader in implementing EVM in the civilian sector. GAO, while they rigorously audited us, also has been very encouraging. When they are visited by representatives of foreign governments wishing to see examples of best program management practices, they have sent these people to visit with us. We are also working with GAO this year in an aggressive effort to show that the FAA's Air Traffic Modernization Program should be removed from their "High Risk List". Our CIO, Dave Bowen, is leading an effort that spans the agency and involves meeting a set of aggressive targets and documenting results to prove to GAO that we are institutionalizing best practices and meeting our deployment targets. Our use of EVM and portfolio management, as well as other best program management and acquisition management best practices, are among the items on the list we are tracking together that speaks to these goals.

PMWT: What has been the number one hurdle to successful implementation of better program management at FAA, in your opinion?

Rovinsky: Some person wiser than I said that our largest weaknesses come from our greatest strengths. In the case of the FAA, Congress gave us freedom about 11 years ago from most federal acquisition regulations. This enabled us to work efficiently and effectively to acquire new technology but it also allowed us to spend the last 11 years in our own "bell jar" isolated from the advances of the rest of the federal sector. As a result we have a lot of homegrown processes and policies that are not necessarily consistent with where the industry is going. For example, we have a process oriented Work Breakdown Structure, which is "hard coded" into our financial systems, making it hard to move towards the more modern product oriented program management and financial management systems. We also have a lot of small offices that review each program manager's outputs and we find that inefficient and hard on our PMs. And our emphasis on independent program offices has resulted in a hodgepodge of approaches that can cause inconsistency. So our freedom from acquisition standards, while a great asset to the agency, also must rank as the number one challenge to improving overall program management.

PMWT: What more have you left to do? When will you be satisfied with the state of program management at FAA?

Rovinsky: A few years ago I characterized our progress by quoting Winston Churchill's comment about the Battle of El Alamein where the British and French stopped Rommel just outside Cairo, Egypt. He said that it was not the beginning of the end of the war, but the end of the beginning. I still feel we have a long way to go. We still have to show we can do internal surveillance and establish capital planning discipline around not letting projects go into development until they have implemented the planning and organizing stages of EVM. We need to show we can self certify and prove this to ours and the rest of the Federal Civilian sector's benefit. We want to have all our program managers using EVM, and we want to continue to reduce the burden of best practices and data calls through standard tools and databases. We want to implement our standard baselining process and a product oriented WBS, improve our financial systems to be supportive of good program management, get off - and stay off - the GAO High Risk List, have all executives use our executive dashboards, and help other federal agencies implement EVM. Also, historically, neither industry nor the Government have experience in the area of using EVM for fee for service contracts. Several of our newest acquisitions will be following this model. The FAA will be working with our suppliers and EVM professional organizations to develop EVM techniques for these types of programs. We have set as a marker of success that we would see fewer and less severe audits of our programs, and that industry and other federal agencies would look to us for best practices.

We have a long way to go and I will never be satisfied until there is a clear agreement among us, our stakeholders and customers and those representing the American Taxpayer, that we are excellent stewards of the federal dollar, carefully turning each dollar into the most work possible, to make the world's safest aviation system even safer.

PMWT: There has been a lot of talk about the need to invest heavily in transportation infrastructure in the USA, including airport expansions, new air traffic control systems, security systems, etc. Are you or your team involved in the planning or management of new programs and projects at FAA?

Rovinsky: As I described above, we are indirectly involved in all Air Traffic modernization and safety infrastructure efforts, and directly involved in the information security projects. Projects involving airport expansion are almost always done by Airport Authorities or other organizations outside the FAA purview, although they often involve airport grant funds that we collect from ticket taxes and disburse to them.

PMWT: What about project management oversight and governance at FAA? Are there processes in place for outside reviews of programs and/or program management processes in the future?

Rovinsky: We are in the process of reviewing and improving our overall governance of project management. Some parts of the agency have set up PMO's and we will be seriously considering creating one in the near future. We have also received a report on streamlining our acquisition processes and have set up an Acquisition Executive Board to advise our Federal Acquisition Executive on steps we should take going forward.

PMWT: What kind of project or program management training or qualifications of FAA program and project managers will be required in the future?

Rovinsky: Right now we require major program managers to hold or obtain the PMP. We are putting in place a graded series of program management certifications and qualifications at all levels of programs, not just the ones over 20 million dollars. This is part of a broader initiative to improve our human capital around acquisition and program management run out of our Air Traffic and Human Resources offices.

PMWT: What single piece of advice would you give to another government agency, in this country or another, who might be embarking on a similar program management improvement program?

Rovinsky: I actually have three pieces of advice. First, do a careful assessment by a team of expert, experienced contractors to establish credibility with your program managers and deliver a set of assessments, plans and training that fit your needs and your auditors' and customers' expectations. Second, pay attention to your critics and stakeholders and don't be afraid to measure your costs, benefits and to hold yourselves to timelines and expectations. The biggest compliment I got was from a contractor who said we ran the effort like a project. Finally try to populate your process improvement team with folks from the inside (Line and Project management officers) and with your staff offices (CFO, CIO, etc)

Editor's note: *We appreciate Mr. Rovinsky taking the time from his important duties to answer the above questions, and wish him and his team continued success at the FAA, one of America's most important federal agencies. This interview was conducted in July 2008 in Washington, DC by PM World Today's managing editor David Pells.*