

Leadership, Outreach, and Stovepipe Demolition

Strengthening Safety in the Twenty-first Century

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Chairman Braman, President Simmons, Members of the Executive Committee, Members of the Conference Committee, Sponsors, Exhibitors, Ms Pfledderer, distinguished leaders of the global Safety Community, fellow safety practitioners, ladies and gentlemen, and friends:

It is a distinct honor to talk with you today. My intent is to give you an overview of how we are handling the complexities of Safety Systems and Safety in general in the Department of the Navy (DON), in hopes that you may find some analogues that are useful to your particular set of challenges. Let's start with a quick snapshot of how the DON is organized and then move into the areas of greatest challenge.

Unlike the Army and the Air Force, the Department of the Navy contains two uniformed services, the Navy and the Marine Corps. All together, active and Reserve Sailors and Marines and Department of the Navy civilians number about 800,000 people, with an additional 600,000 dependents. The top leadership is the Secretary, Mr. Ray Mabus, and the Undersecretary, Dr. Janine Davidson. They have three main Assistant Secretaries, one for Manpower and Reserve Affairs, who takes care of the people issues; one for Research, Development and Acquisition, who takes care of the hardware and equipment procurement issues; and a third ASN who worries about Safety, Energy, Installations, and Environment – he is my Boss, Mr. Dennis McGinn, and he has a Deputy Assistant Secretary for each of those categories.

Interestingly, of all the different subdivisions in the Department of the Navy, Safety is unique inasmuch as it pervades all the other functions of the enterprise, so our shop gets to worry about virtually everything that goes on in the Department. I imagine this is true for most organizations: it seems to be both an additional responsibility and an opportunity.

We like to say that there are three reasons for having a superb Safety program, each one sufficient in itself to justify our existence:

The first is warfighting excellence. To the degree that any unit – Marine battalion, submarine, helicopter squadron – is operated safely, its people are properly trained and equipped, its equipment is appropriate and well maintained, there is a cohesive awareness of each person's role and how it fits in with others'. These are exactly the qualities that make that unit more lethal in combat.

The second reason for a superb safety program is a moral imperative: we owe it to our young men and women. These magnificent young patriots – our Sailors and Marines – volunteer to support and defend the Constitution against all enemies, and to give their lives if necessary. It is unthinkable that they should have anything but the safest possible environment to work and thrive in.

And the third reason is obvious. These are scarce times when money is short. A good safety program avoids future costs, pure and simple.

I wish I could report that we are doing a perfect job of safety execution, but we're not.

Since the 9/11 attacks, we have lost nearly twice as many Sailors and Marines to safety mishaps as we have to enemy fire. Nearly twice as many dead from avoidable safety incidents than we lost in combat.

The safety casualty numbers are dropping steadily, but not fast enough. There is only one conscionable goal, and that is Zero: zero fatalities, zero injuries, zero mishaps.

So, what are we doing to improve?

First, we must capitalize on the amazing technological breakthroughs of the last few years.

The challenges we face are daunting.

Our mishap reporting system is hopelessly obsolete, relying on manual procedures almost unchanged in half a century.

Our safety data bases are numerous and unconnected.

We have extremely restricted analytical capability which is also obsolete.

And we have an outdated safety management system.

Our approach to these obstacles is a system called Risk Management Information – RMI, a cloud-based environment of systems using commercial off-the-shelf tools. RMI lay fallow as a concept for years, and was fully funded three years ago. We have progressed through the incredibly complex Defense procurement system, and the first increments of RMI are being introduced to the fleet now.

RMI offers a streamlined reporting system that reduces the time to report a mishap from hours to minutes. We're confident that this will go a long way toward improving the under-reporting of minor mishaps that currently plagues the fleet, and we believe that if we can capture the minor mishaps, as well as the near-misses and hazards, we will have far greater insight into mishap avoidance.

RMI also offers an analytical and distribution function that will consolidate our disparate data bases. A powerful team of Predictive Analysts will then use state of the art mega-data tools to identify trends and leading indicators. The objective is to transcend the old process of explaining mishaps ex post facto, and move to a new level where we predict, and prevent, mishaps before they occur.

RMI will also offer an integrated safety management system that will reduce manual requirements and improve efficiency.

Second, we must rationalize the workforce.

As all of you know, Safety is a very broad discipline, involving industrial hygiene, radiation safety, occupational safety and health, fire prevention, construction safety, weight handling, operational and explosive safety, safety in acquisition, and recreational and off-duty safety, to name a few categories. The Department has about 5,000 civilians on the safety team, and twice that number in uniform. Four years ago we embarked on a detailed examination of these workers and their jobs. The challenges we unearthed were sobering.

Qualification was inconsistent. Some workers were superbly experienced and qualified to do their jobs, while others were underqualified or even unqualified.

There was no clear identification of the requirements for each job.

There was no consistent record of worker qualifications.

Career management and workforce development were not systematized.

Succession planning was often neglected – a particularly dangerous situation in view of the aging workforce in the Defense sector.

Our approach to the situation was to initiate a thorough and detailed analysis of every single one of our safety billets throughout the enterprise, classifying each one and identifying the precise qualifications required.

Next we researched and recorded the individual qualifications of each billet incumbent.

This permitted us to do a gap analysis and adjust the training and education pipeline so that it will align qualifications with the needs of the safety community.

Meanwhile, we laid out a professional development roadmap from new hire to master practitioner. Employees can use the roadmap to plan their career and their training.

We included a universal succession management approach.

We did all this analysis and planning with existing resources, which meant that it took a long time and a lot of effort, but the overall effect on morale has been very gratifying.

Third, we must integrate safety into the acquisition process.

Over the years, the Defense acquisition process has grown exponentially in size and complexity. Vast layers of rules and regulations imposed by well-meaning people trying to insure against fraud, waste and abuse in procurement have incrementally reduced the agility and responsiveness of the system. It now takes years to move from concept to delivery, even with relatively straightforward systems.

Safety oversight was initially left out of the process, so that as a procurement item moved from concept to delivery the safety input came too late. Faced with the vast expense of retooling production to correct a safety hazard, decision makers understandably opted to accept the risk and press on.

Our approach to this challenge has been continually to emphasize the value of a safety input at the very beginning of the process – before a blueprint is even begun, when the requirements are being identified. We have succeeded in having safety expertise included at each milestone review, but we will need considerably more resources to provide the detailed monitoring needed throughout the process.

Fourth, we must continue to elevate the cultural awareness of safety throughout the enterprise.

We have made progress, as is reflected in the gradually diminishing instances of safety mishaps, but we still have far to go. There are some communities that have a long and proud history of self-sufficiency and resilience under pressure that can conflict with safety tenets.

The success of the safety program over the years leads some to conclude that we are headed in the right direction so additional rigor is unnecessary. This complacency is especially vexing.

The absence of a powerful analytic tool has made it difficult to focus on leading indicators of mishaps – we expect RMI to go a long way toward correcting this deficit.

Our approach to this challenge is emphasis on leadership engagement and education and training. Again and again, we rely on the exhortation and example of our senior leaders to put safety at the center of all our endeavors. This is essential, but not sufficient. Each level of leadership down to the deck plates must assume responsibility for reinforcing safety awareness by what they say and what they do. Let me give you an example of safety awareness in action. In the first video clip, you will see one of the most dangerous situations possible during air operations on a carrier flight deck: a parted arresting cable. These cables are made of steel wire as thick as your wrist and strong enough to stop an aircraft weighing many tons and landing at a hundred miles an hour in a few yards. When a cable parts, the kinetic energy released is enough to cut a steel stanchion

in half. Flight deck sailors are trained to be constantly alert for dozens of emergencies, none more deadly than this. Watch how this sailor responds to the cable whiplash, and its inevitable rebound. This is a very unusual emergency. To handle it with this level of aplomb that sailor must have been mentally practicing and re-practicing his reaction for a long time, until it became almost instinctive.

VIDEO: sailor and cable

<http://www.bing.com/videos/search?q=F18+carrier+trap+missed+flip&&view=detail&mid=9645F5B54CE24A857F0A9645F5B54CE24A857F0A&rvsmid=9645F5B54CE24A857F0A9645F5B54CE24A857F0A&fsscr=0&FORM=VDFSrv>

In the next clip, you see a flight crew confronted with a parted arresting cable on landing. They are trained to add full power as soon as they feel the aircraft touch the deck. This may seem counter-intuitive, but it is the difference between life and death for the five crewmembers on this E-2C.

VIDEO: E-2C cable failure <http://www.cnn.com/videos/us/2016/07/10/uss-eisenhower-hawkeye-plane-landing-accident-orig-bpb.cnn>

This is safety awareness and preparation at its best.

To help the process forward, we are focusing on education and training in the classroom also. The Defense Department is distinguished by its emphasis on training. At any given time, about ten percent of its members are enrolled in some kind of formal training. We have begun a process which will examine every curriculum and syllabus throughout the Department to insure it includes safety content. The idea is not to bolt on a safety component to the training, but to weave safety philosophy and awareness into the curriculum as a whole, the way a thread is woven into a cloth.

The goal is to achieve a subconscious awareness of safety that complements and enhances the conscious component. An encouraging analog is the way the military changed its attitude toward leadership, and then embraced the proposition that the quality could be taught, from the lowest ranks to the highest, both by doctrine and example.

Fifth, we must expand our outreach efforts.

It has been argued that the most pernicious shortcoming of the Services, the Defense Department, the Executive Branch, and the US Government as a whole is stove-piping. With such an enormous and intimidating array of responsibilities, it is perfectly understandable that there is a tendency to reduce challenges and projects to small increments that are more manageable – “eating the elephant one bite at a time.”

An unanticipated outcome is that different sections of organizations focus so narrowly on their immediate tasks that they are oblivious to progress being made on the same or similar projects elsewhere.

Our approach to stovepipe demolition is a constant emphasis on cross-boundary communication. Personal interaction among practitioners has to be encouraged by leadership whenever possible. Conferences like this one are invaluable, not just because of the formal agenda but because they offer an opportunity for practitioners to renew existing relationships and develop new ones.

The proliferation of personal and social media holds great potential for facilitating professional contacts and shared insights.

Safety initiatives can be used to enhance outreach. For example, when RMI is fully operational, it will afford a useful medium of communication among the services, as an interagency connector, with the private sector and with our overseas friends and partners. After all, when two countries use the same weapons system there is no reason why they can't combine data bases and both profit from the increased sophistication of their preventive analytics.

Similarly, everyone understands the enormous role human factors play in mishaps. If one organization, or nation, uncovers a useful insight into the operation or modification of human factors, why should everyone not benefit? The tragedy of privately owned motor vehicle accidents and off-duty mishaps is a universal burden, regardless of the nationality of the victim. Any effort to join forces to find solutions can only help, and that is what outreach offers.

In short, safety is a universal issue of the highest seriousness that demands a holistic and comprehensive approach. There are plenty of strategies we can bring to bear, but the most promising is collaboration and cooperation across the spectrum of endeavor.

Thank you for your attention. If you have any questions I'd be happy to take them.