

SAFETY TRAINING AND ANALYSIS

The Navy has focused on the identification and reduction of mishap causal elements related to Human Factors. In 1996, the naval Safety Center completed a review of several years mishaps which concluded that approximately 4 out of 5 mishap causal factors were related to a human factor. The identification of a mishap crew's deficiencies or problems (human factors) historically have been only partially known prior to mishap. Navy aviation leadership is continuing to implement intervention strategies to increase human factor awareness and knowledge. They include; instituting **Human Factor Evaluations**, improving **Safety Information management**, highlighting **Leadership and Accountability**, assessing the **Organizational Effectiveness and Culture** of aviation commands, **Standardization of Operating Procedures** within aircraft communities, and institutionalizing the **Process of Operational Risk Management**.

- **Operational Risk Management (ORM)** – CNO/CMC instruction was promulgated last year. ORM is a process in which risk is weighted against mission.
- **Human Factors QMB** – Board is chaired by a Flag Officer, senior Navy and Marine Corps officers, and subject matter experts comprise the membership. The QMB identifies human factor issues and action needed.
- **Human Factors Taxonomy** – Tool to identify human factor involvement in aviation mishaps.
- **Aircrew Coordination Training (ACT)** – Continued emphasis on inter-cockpit, or cross-cockpit (in the case of single seat aircraft) coordination and communication to support each other.
- **Maintenance Crew Coordination** – P-3 community has recently adopted a crew concept to improve maintenance practices and safety.
- Incorporation of new systems such as Ground Proximity Warning System (GPWS) in FA-18s – increasing aircrew situational awareness.

Naval aviation has also identified and budgeted for technological improvements that will either enhance human awareness (ground proximity awareness systems, collision avoidance systems) or aid in mishap cause determination (flight data and cockpit voice recorders). Fully realizing the benefits of these will be long-term process.