High-Reliability Attitudes in Marine Corps Aviation

Presented to the 5th International High-Reliability Organizing Conference
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*Note, this material represents the views of the author and does not imply DoD, USMC, or USN endorsement*
Overview

• High-Reliability attitudes; mission planning through execution
• Marine Corps Mentoring Program
• Human Factors Councils, Force Preservation Councils and the attitude-behavior link
• Attitudes and performance in Navy primary flight training
• Attitudes and behavior in Marine Corps Martial Arts Program
• High-Reliability Team Training and the effect of attitudes on personal and team reliability
High-Reliability Attitudes

• Attitudes in Marine Corps aviation:
  – *“The orientation of an aircraft's axes relative to a reference line or plane, such as the horizon.”
  – *“A state of mind or a feeling; disposition”

• The term “high-reliability attitude” not formally used in the Marine Corps, however, the Marine Corps makes efforts to facilitate mission-focused attitudes

• Aligning mission-oriented attitudes with principles of HRO can build HR attitudes

Source: http://www.thefreedictionary.com
High-Reliability Attitudes

• A framework of high reliability principles may help shape attitudes & improve a Marine Aviator’s ability to
  – 1) Examine all aspects of a mission for potential failure points
  – 2) Be reluctant to rush to a snap judgment in the face of complexity
  – 3) Maintain an ongoing awareness of operations and test planning assumptions against unfolding operations in real-time
  – 4) Incorporate expertise and recommendations from other team-members, regardless of rank
  – 5) Build a capacity for adaptability, flexibility, and resilience, including backup options
High-Reliability Attitudes

• Attitudes begin to shape what we pay attention to (H-R vs. L-R attitude)
  – Mission-focused (external) vs. self-focused (internal-not to be confused with self-awareness)

• H-R attitude required for proper mission planning & must maintain operational and safety focus throughout mission execution

• Maintain H-R attitude through mission debrief
  – Despite fatigue, a proper debrief builds lessons-learned for improved performance, and a L-R attitude can result in operators “dropping their packs”
    • “Why do we need to debrief, anyway?”
Focus on Attitudes in the Marine Corps

“One must put himself in the place of those whom he would lead; he must have a full understanding of their thoughts, their attitude, their emotions, their aspirations, and their ideals; and he must embody in his/her own character the virtues which he would instill into the hearts of his/her followers.”

– Gen John A. Lejeune, 18 Jan 1921

• Marine Corps Mentoring Program (MCMP)
Marine Corps Mentoring Program

• Helps Marine leaders improve their ability to interact with their Marines on a personal and professional level, help them set goals to improve the individual and team performance.

• Emphasizes the end-goal of behavior, but is shaped by the right attitude

• Emphasizes the requirement for developing a relationship between the mentor/mentee
  – This requires the right attitude between both parties in order for it to be effective in driving behavioral changes
Human Factors Councils

• Non-punitive organizational safeguard to identify high-risk aviators and develop intervention strategies

  – High-risk Aviator: An aviator who poses a greater than average risk because of persistent performance deficiencies, situational stress, medical condition, one who shows a history of poor judgment, or a pattern of high-risk taking behavior.

  – High-Risk categories include “Below average nugget or transition aviator”, “Best pilot”, “Consistent poor performer”, “Over-stressed aviator”, and “Over-confident senior aviator”
Human Factors Councils

• Overconfident Senior Aviator:
  – High-risk Aviator with a "been there-done that" attitude.
  – Willful violator of rules
  – Overestimates ability
  – Actions appear to be linked to attitudes in many cases

• Human Factors Board
  – Follow on forum for personal interviews after high-risk aviator is identified
  – Worksheet includes areas for comments on the aviator’s degree of professional attitude
  – Intervention strategies focus on numerous areas, depending on the main areas of concern, and reshaping attitude plays a major role with the overconfident aviator
Force Preservation Councils

• Modeled after Human Factors Councils
  – Non-punitive forum to identify high-risk personnel in organizations without aircraft, such as infantry and other ground units

• Attempts to identify personal life stressors or areas of performance deficiencies that might indicate future performance problems

• Experience has shown that attitude can be tied to performance problems, personal life stressors, and the ability of the Marine to compartmentalize and overcome the problems
Attitudes in Primary Flight Training

• Experience has shown that attitude can have a direct impact on performance in an aircraft
• L-R attitudes (negative, unmotivated, lack of interest, self-focused) appear to be linked to lower performance
• L-R attitudes often include poor mission briefs and if the decision is made to proceed to the flight phase often results in poor flight performance
  – Is the ability to perform directly related to HR or LR attitude?
    • It appears that there is a link, based on Instructor Pilot experience
• Instructor Pilots may cancel missions if it is apparent that the student has a poor/negative (LR) attitude
Attitudes in Primary Flight Training

• Requirements for a successful training mission
  – Physically prepared
    • All pre-mission requirements completed (studying, tests completed, briefing white board completed)
  – I’MSAFE checklist (Illness, Medicine, Stress, Alcohol, Fatigue, Eating)
  – Proper attitude
    • The attitude frames the mindset, motivation, and appears to put the student in the right mental environment to learn
    • H-R/L-R attitude may have more of an impact on the ability of a student to learn and integrate the learning as a behavior than it does with performance with students in very early stages of training
Attitudes and Behaviors in Marine Corps Martial Arts Program

• Combat-oriented fighting style blending numerous martial styles into one system

• Minimum belt level required for aviators

• Deep roots in the warrior ethos
  – (syn: attitude, code, character, beliefs)

• “MCMAP continually challenges Marines physically and mentally while testing and building ethical and moral character by compelling decisionmaking under stressful and punishing circumstances while choosing situation-appropriate force options.” Yi, 2004

• Emphasizes ethics and respect
Attitudes and Behaviors in Marine Corps Martial Arts Program

- One goal is to develop warriors who can make decisions on a decentralized battlefield using a range of force options.
- “Character development might be the most critical component in a Marine’s development.” Yi, 2004
- Attitude and character development appear to be linked.
  - Training in MCMAP with L-R attitude (not focused on all of the tenets of MCMAP, but simply to fight, self-focused) will build a Low-Reliability MCMAP practitioner.
MATSG-21 High-Reliability Team Training

• Personal and Team Reliability Training developed by MATSG-21 Marine Officer Control Officer-In-Charge to attempt to shape attitudes and behavior on/off-duty for student aviators

• Initial module in curriculum includes a focus on attitudes and the relationship to actions, character, and performance

• Based on experience and observation as opposed to academic research

• Uses real-world case studies & storytelling to solidify importance of H-R attitudes/behavior
High-Reliability Team Training

• Shaping High-Reliability attitudes for operational excellence (mission accomplishment with acceptable risk)

• Attitudes and Character

• Attitude:
  – “A state of mind or a feeling; disposition”*

• Character:
  – “The combination of qualities or features that distinguishes one person, group, or thing from another. Moral or ethical strength”*
High-Reliability Team Training

• Shaping High-Reliability attitudes for operational excellence (mission accomplishment with acceptable risk)
On-duty organizational performance may be improved: I will continue to take action on problems I notice which have the potential to harm others.

I am motivated to improve my organization and accomplish the mission. I notice a problem. Maybe it doesn’t affect me, but it could affect someone.

I will do something about this or find someone who can.

Take action, OWN the problem until you resolve it or make the handoff to those who can.

Increases a Marines moral strength to do the right thing. Should be accompanied with positive reinforcement.
On-Duty Real-World Example

• Junior officer passes by natural gas meter and smells gas (mercaptan)
  – Junior officer asks higher ranking officer for assistance/guidance
  – Junior officer calls base fire department
  – Fire department responds, detects gas leak, secures the gas line, and any mishap was averted
  – Junior officer took ownership of the problem, informed the right people, and saw it through to resolution
  – Example reinforces positive attitudes and behaviors
Conclusions

• The link between attitudes, behaviors, and reliability appears to be closely related.

• The term “high-reliability attitudes” not formally used in the Marine Corps, but is a valuable training tool to help shape positive attitudes toward training, risk management, and mission accomplishment/mission assurance.

• Building a training curriculum which includes a focus on H-R attitudes and behaviors may help to increase reliability in any organization.
References

• COMNAVAIRPAC INSTRUCTION 5420.2B/COMNAVAIRLANT INSTRUCTION, 5420.5C/COMNAVAIRESFOR INSTRUCTION 5420.2, *Human Factors Council and Human Factors Board Policy and Procedures*