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Critical Importance of Continuing/Recurrent Human Factors Training

Having read Rear Admiral John Lang's article in the August 2001 issue of **SEAWAYS** on the "Human Factor" being consistently ignored in the Shipping Industry I felt I would submit some thoughts on the issue that you may want to incorporate into an article.

It is now well established that the purpose of Bridge Resource Management (BRM) training is to **reduce** Human Factor incidents and accidents which make up some 75-85% of the incidents and accidents that happen in our industry. It is also well established that this type of "Human Factor Training" was developed in the late 1970's in the Aviation Industry as Cockpit Resource management (CRM) which has now been re-titled as **Crew** Resource Management. While not even mandated for a number of years - either nationally or internationally - the Aviation Industry has seen **proven results** from this training, and has determined that this type of training needs to be **reinforced** on a 6 month basis to have the desired effectiveness on Human Factor Accident Reduction.

BRM - like CRM - looks at the same Human Factor issues; Teamwork, Communications, Planning, Situational Awareness, Stress, Fatigue, and Leadership. However, the BRM "Mandate" per STCW requires only a **one-time**, 3 -Day, Lecture-based Course to "satisfy" current requirements. While this is certainly a step forward from **no** Human Factors Training, this is yet another example of what Rear Admiral Lang sees as "ignoring the human factor" - either in Accident analysis or Accident Reduction/Prevention in our industry.

Aviation clearly has the experience in this type of training. In fact, even Hospital Operating Room Teams have realized the positives of this type of training, and have begun their own - mostly with Aviation direction - called Medical Dynamic Outcomes Management (DOM). It takes a proficient Team to effectively manage operational risk and reduce Human Factor accidents - and being proficient at Teamwork is a **Skill**. All skills - even relatively simple ones - require practise and feedback before becoming settled into a person's repertoire. The Teamwork Skills needed to reduce Human Factor accidents are "thinking type" - or cognitive - skills, and these skills decay even more rapidly if not practised for periods of time. Aviation has found that there is no better way to develop, hone, and **retain** these skills than Simulator Training, where Teams operate in settings that are not only "realistic", but also provide safe sites for practise and experimentation in new or unfamiliar behaviors. Well designed simulations, video feedback, and quality Facilitators can provide Teams with precisely the kind of experience needed to become proficient at new Skills - and to become comfortable and skilled at using them. The Maritime Industry has accepted the **potential** benefits - and has developed their own Human Factor Simulator-based Training Courses in BRM at many Simulator Training Facilities.

But - realistically - if our industry is not going to ignore this whole issue, we must recognize this "fact" quoted from **Cockpit Resource Management** by Weiner, Kanki, and Helmreich:

*"Without reinforcement, the impact of CRM (and BRM - my quote!) Training decays. Data indicate that even intensive, initial CRM training constitutes only an "awareness phase" and introduction to the concepts, and that **continuing reinforcement is essential to produce long-term change in human factors practices**. Some of the most compelling*

evidence of the need for ongoing emphasis on CRM (BRM) comes from revisiting organizations where well-received initial CRM training had not been accompanied by an organizational commitment to continuing the effort. In one organization, when the Cockpit Management Attitudinal Questionnaire was re-administered more than one year after the completion of initial CRM training, attitudes had reverted back to near their baseline - pre-CRM levels...

...These findings have major operational significance as they reinforce the notion that organizations desiring to maintain the momentum provided by initial CRM training **must make a formal commitment to provide the resources necessary for continuing training and reinforcement.**"

(Highlighting is mine).

This statement and finding does not just apply to Aviation. It applies to "Us". If our industry is not going to be guilty of continuing to ignore the Human Factor Issue - and all that it encompasses relating to overall operational safety - then we **must recognize** and **take the next step**, by pushing forward with Advanced (recurrent) simulator-based BRM Training - **whether "mandated" or not.**

Yours truly,

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NOTE:

for "background", I sailed on various size tankers, both US and foreign, for 25 years - 18 of those 25 as Master - prior to becoming involved as a Consultant-Instructor in BRM Training and BRM Course Development in 1992, at various US Simulator Training facilities. Currently an Adjunct Instructor in BRM, IBS Dynamic Positioning, Advanced & AZIPOD Shiphandling, with STAR Center, located in Dania Beach, Florida.