



2008-March : Newsletter

## THE JUST CULTURE

I recently attended a presentation by Dr. Patrick Hudson, professor at Leiden University, during the Canadian Helicopter Corporation Safety Summit. Dr. Hudson addressed the issue of Just Culture and Non-compliance.

The Just Culture provides managers with a clear procedure for deciding whether a rule violation is to be treated as blame-free or whether some form of coaching or discipline is appropriate. Just Culture models are used in many organizations that have high-risk operations. The logic behind the model is that individuals who break the rules should not be punished if it becomes clear, following investigation, that there was no attempt at sabotage or deliberate creation of danger, nor if there were clear system-induced causes. If, however, it is apparent that the procedure was clear and workable, then the individual should be subject to some level of discipline.

The Substitution Test should also be applied in order to ascertain whether other individuals, with the same level of experience, would be likely to behave in the same way, even if the violation had been induced by the system. If there is clear evidence of shortcomings in training, selection or experience, then the failing should be regarded as a system-induced error. One last assessment examined whether the individual had a history of violating procedures and only those who were cleared by all tests could be considered blame-free and not requiring coaching or discipline. In the case of system-induced violations or errors, management/supervision has responsibility to correct root causes of system issues.

Failures to follow established rules and procedures form a major cause of accidents in the aviation industry. Attempts to confront the issue of non-compliance to rules and procedures are to be found in a wide variety of industries, including aviation, health care, railways and fire services. In a study by Boeing Aircraft of aviation accidents between 1982 and 1991, compliance with procedures was identified as the primary measure for preventing accidents in commercial aviation where well over 50 percent of all major aviation accidents could have been prevented if the pilots had followed procedures. The UK Civil Aviation Authority has replicated these findings more recently. In that study, two of the most frequently identified circumstantial or causal factors were found to be incorrect/inadequate procedures and deliberate non-adherence to procedures. At first sight, the problem appears easy to solve. All that is necessary to achieve a high level of safety, whether personal safety or related to process safety management, is to ensure the highest level of compliance to the rules and procedures among the workforce. The best way to ensure compliance is also seen as the setting of clear expectations (standards).

Studying errors and violations on the flight deck of commercial airlines in the US, found that intentional non-compliance constituted 54 percent of all errors, with procedural errors being 29 percent (83 percent in total). But they also found that in the cockpit environment, only two percent of violations were rated as consequential, while 23 percent of the procedural errors increased the risk to the flight. The most dangerous errors were those of manual proficiency (stick and rudder skills) as making such errors close to the ground can be extremely unforgiving. Taken together, these results suggest that non-compliant behavior is very frequent and, occasionally, lethal. Manual skills, while very sensitive when

there are no other barriers in place, do not appear in many accident reports just because the other barriers are present and have been effective, while non-compliance often involves the removal of effective barriers which make a serious outcome much more likely. It is for these reasons that it is important to manage non-compliance within the workforce.

More information on the topic can be found on the ALEA website Safety First section, in a paper by Dr. Hudson titled: "Meeting Expectations – A New Model for a Just and Safe Culture." A Just Culture model can be found in the SMS Toolkit.

I must point out that this is not an exact science. There has been considerable research on Just Culture and Non-compliance, and there are many different models in use today.

Managers and supervisors who wish to learn more about this topic should attend the ALEA Annual Conference. This topic will be covered in the pre-conference Unit Managers' Course and in the Safety Management System track on Friday during the main conference.

Have a question or comment? Send it to me at: [safety@alea.org](mailto:safety@alea.org).

***Remember – Safety First!***

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