Contribution ID: **75**   Type: **Poster**

Human and Organizational Factors

Tuesday, 23 February 2016 10:20 (30 minutes)

Synopsis

The Human and Organizational Factors Approach to Industrial Safety (HOFS) consists of identifying and putting in place conditions which encourage a positive contribution from operators (individually and in a team) with regards to industrial safety. The knowledge offered by the HOFS approach makes it possible better to understand what conditions human activity and to act on the design of occupational situations and the organization, in the aim of creating the conditions for safe work. Efforts made in this area can also lead to an improvement in results in terms of the quality of production or occupational safety (incidence and seriousness rates)(Daniellou,F. et al ,2011).

Research on industrial accidents shows that they rarely happen as a result of a single event, but rather emerge from the accumulation of several, often seemingly trivial, malfunctions, misunderstandings, incorrect assumptions and other issues. The nuclear community has established rigorous international safety standards and concepts to ensure the protection of people and the environment from harmful effects of ionizing radiation (IAEA,2014).

A review of major human induced disasters in a number of countries and in different industries yields insights into several of the human and organizational factors involved in their occurrence. Some of these factors relate to failures in :

—Design or technology;
—Training;
—Decision making;
—Communication;
—Preparation for the unexpected;
—Understanding of organizational interdependencies.

Individually, any of these failures can prevent an organization from being proactive in trying to continuously improve nuclear safety. When occurring together in some combination, they become the root causes of accidents. The root causes of nuclear accidents share much in common with the causes of accidents experienced in other industries, and the nuclear community can draw on this experience as a source of lessons learned (IAEA, 2006)

Management of the environment and the measures that ensure safety is a key concern for managers, both for ethical reasons and because safety is a legal responsibility. In order to increase the safety of personnel and manage technological risk, industrial companies have, for many years, implemented measures focused on the optimization of facilities and activities and the implementation of safety management systems. However, safety results seem to have reached a plateau where further improvement goes beyond technical approaches and procedures and requires greater attention to

human and organizational factors. Good organization provides the basis for coherent planning and consistent actions. However, it is essential to take the human factor into account, ideally from the outset, to ensure that these actions are relevant and properly implemented ("Leadership in Safety"Working Group ,2013).

The term safety culture is used to designate that part of the company culture that relates to matters of safety in high-risk working environments. More precisely, safety culture can be defined as the set of prac-

tices that are developed and learned by the principal parties involved, to manage the risks of their occupation. Within a company, it is often said that "safety is everyone's business".

Nevertheless, some people are more directly affected by issues of occupational or company safety, namely the management teams and the employees working in operations. In fact, management practices with regards to safety often have a greater influence on the culture, because management has the authority and broader decision-making powers to influence the various factors at play in risk management. Human and Organizational Factors of Industrial Safety are not only the preserve of the Safety Department. Like safety in general, they need to be integrated into each of the company's

Policies (Daniellou,F. et al ,2011).

Country or International Agency

Nigeria

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Primary author: ESHIETT, Peter B. S. (FEDERAL MEDICAL CENTRE, KEFFI, Nigeria)

Presenter: ESHIETT, Peter B. S. (FEDERAL MEDICAL CENTRE, KEFFI, Nigeria)

Session Classification: Pause and Posters