Maintaining organisational safety – the challenge of safety culture

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Overview – What are we talking about?

- **What organisations?**
- **What sort of safety?**
- **What stage of the organisation's lifecycle?**
- **Whose safety culture?**
- **Is the concept of 'safety culture' still valid for modern technologies?**
- **What about health, security, environment?**

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What organisations are we talking about?

- **High Reliability Organisations (HROs) – Berkeley Group;**
  - Complex organisations such as Air Traffic Control, Nuclear Power Plants, Aircraft Carriers operate reliably for long periods of time;
    - Preoccupation with failure
    - Reluctance to simplify interpretations
    - Sensitivity to operations
    - Commitment to resilience
    - Deference to expertise

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What organisations are we talking about?

- **Normal Accident Theory (NAT) – Charles Perrow;**
  - Complex systems and tight-coupling in high hazard industries make accidents inevitable;
  - Scott Sagan in his book 'The Limits of Safety – Organizations, Accidents and Nuclear Weapons' found more evidence for NAT than HRO

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What sort of safety are we talking about?

- **Safety I**
  - Traditional view of accidents (human error);
  - Causal chain of events (Swiss-Cheese metaphor);
- **Safety II/ Resilience Engineering**
  - Systems approach to accidents (MTO/HTO)
  - 'Work as imagined' versus 'work as done'
  - Focus on what goes well versus what goes wrong
- **Occupational versus Process Safety**
  - Different safety culture?

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What stage of the organisation's lifecycle?

- **Design**
  - What are the risks?
- **Commissioning**
  - What are the risks?
- **Operations**
  - What are the risks?
- **Decommissioning**
  - What are the risks?

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Whose safety culture?

- **Company employees;**
- **Contractors;**
- **Subcontractors;**
- **Different occupational/professional groups**
  - Office/Admin staff
  - Engineers
  - Managers
  - HSE personnel
- **Different national cultures**
  - Multi-national, multi-lingual personnel

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Meeting the challenges…

- **Good safety leadership;**
  - Leadership style
  - 'Safety Intelligence'
  - Willingness to implement lessons learned
- **Engaged workforce;**
  - Good upward communications
  - Willingness to speak up about safety

- **Should we think about 'Organizational Culture'?**
  - Considering relative priorities?
    - Appropriate allocation of resources (budgets, people)
  - Trade-off decisions between..
    - Production
    - Safety
    - Security
    - Health
    - Environment
    - Etc.

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Other considerations?

- **NAT**
  - Never become complacent!
- **HROs 5 principles**
  - Preoccupation with failure
  - Reluctance to simplify interpretations
  - Sensitivity to operations
  - Commitment to resilience
  - Deference to expertise

Should we be measuring Reliability/ Resilience Culture rather than Safety Culture?
- But unreliable humans can keep the system safe in an uncertain and every changing world
- 'Work as done' versus 'Work as imagined'
- How can we measure what goes right?

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Conclusions – Quote attributed to Edgar Schein

- **Good management produces safety**
  - When there are safety problems it usually means bad management somewhere in the system

At some point safety assessors have to be prepared to call the problem what it is:

► Senior executives who care more about finances than safety

► Middle managers who care more about productivity because that is what senior managers reward them for

► Supervisors who suppress employee complaints and efforts to identify safety problems because it takes too much time to look into things and to convince their bosses about critical maintenance issues that may be surfacing.

What makes safety culture so complicated is that we are trying to build safety into badly managed companies!!!

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Lest we forget

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Any questions?