

How far has Non-Technical Skills (NTS) training and implementation come in 30 years?

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Who we are?

What we do?



Capable. Safe. Competent

My experience & my role

Background



Piper Alpha

Poor communication, leadership and decision making were implicated in Lord Cullen's examination of the Piper Alpha disaster, which resulted in the loss of 167 lives. One outcome was the recognition and gradual introduction of non-technical skills (NTS): stress management, communication, situation awareness, decision making, teamwork and leadership.

Background - Piper Alpha



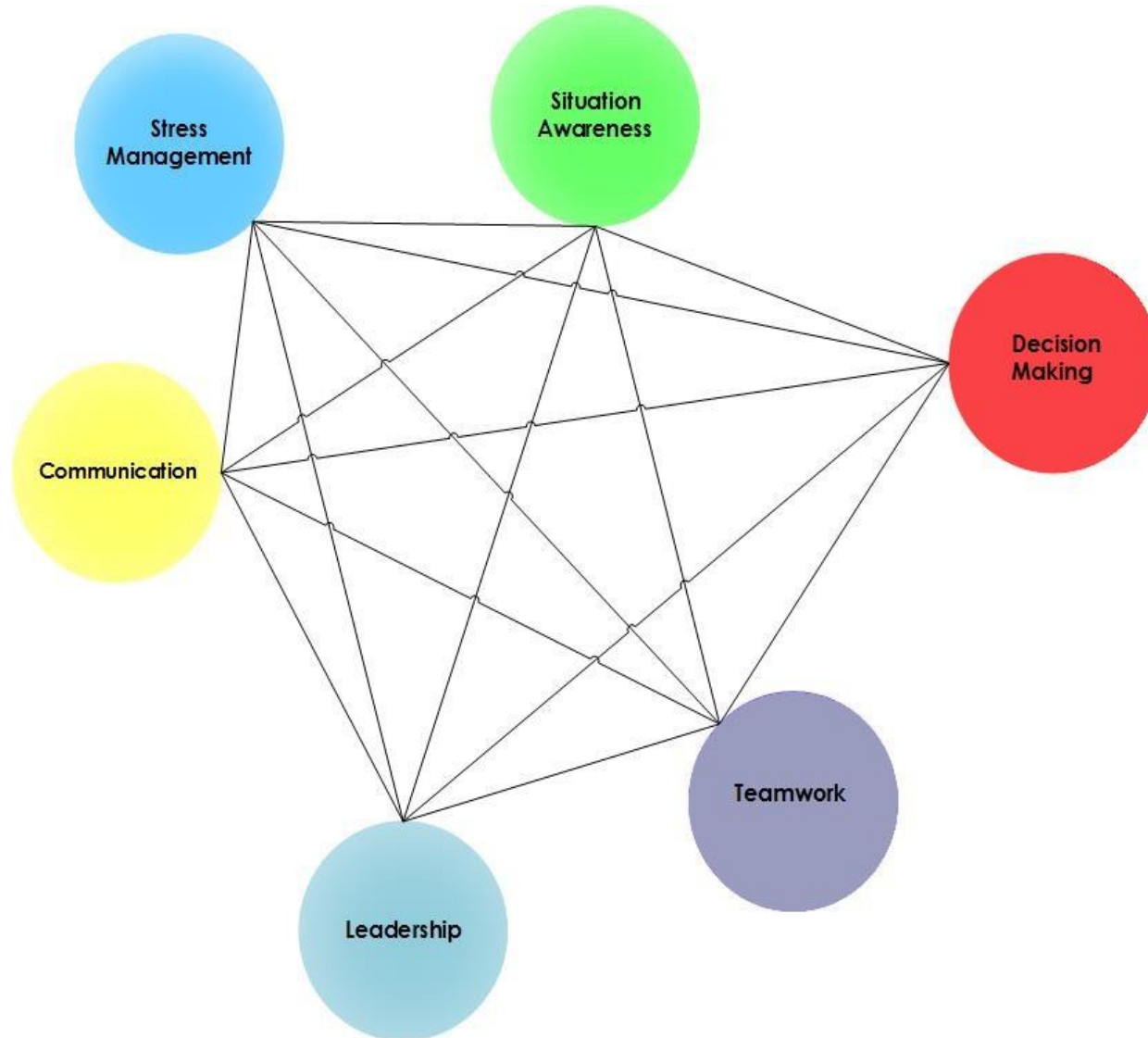
Lord Cullen's examination of the Piper Alpha disaster identified:

- ⊗ Poor communication**
- ⊗ Leadership**
- ⊗ Decision making**

One outcome was the recognition and gradual introduction of non-technical skills (NTS)

- ⊗ Complement technical skills**
- ⊗ Required for safe and effective performance**
- ⊗ Use in daily operations to do your job well**
- ⊗ Cognitive (situation awareness & decision making), social (teamwork, leadership & communication) and personal resources (stress management)**

What are Non-Technical Skills?



Industry attitudes towards NTS



 **Common sense**

 **Soft skills**

 **Not required in every role**

 **Mistakes due to lack of technical training**

 **We can do our own NTS training**

Our Simulator



Why PFC created the simulator?

- ⊗ Challenges of carrying out offshore assessments
- ⊗ Recognition of impact of non-technical skills in incidents



Benefits of simulator training?

- ⊗ Enhance and increase safety and performance by testing:
 - ⊗ Routine knowledge and skills
 - ⊗ Non-routine work (i.e. black starts, generator failures etc.)
- ⊗ Experience and expertise



Responsible Electrical Persons' (REPs) training course



REPs are safety critical personnel who are responsible for the electrical safety/integrity of the installation

Course stats:

- 280 REPs since 2011
- 60% Non-technical skills 40% technical skills
- 4 simulation-based exercises
- Feedback (group + one to one) on technical and non-technical performance
- Offshore (30)



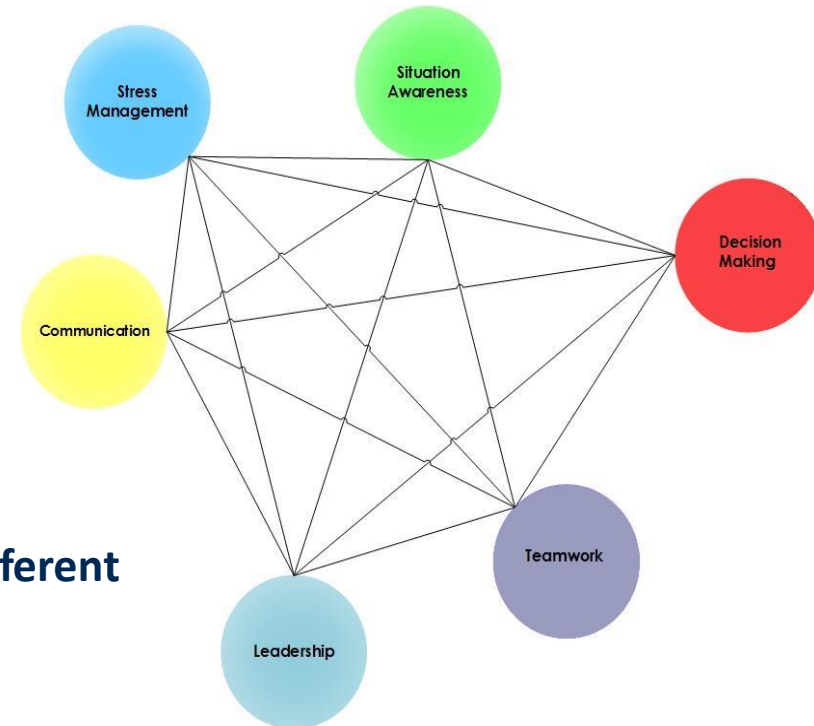
Learners perceptions of NTS

Which of these 6 NTS do you think you will perform well when in the simulator?

87% Communication
63% Situation Awareness
46% Stress management
39% Leadership

Every feedback session has some aspect of communication

How people perceive themselves tends to be different to how they actually perform



Observations of NTS in a simulated environment

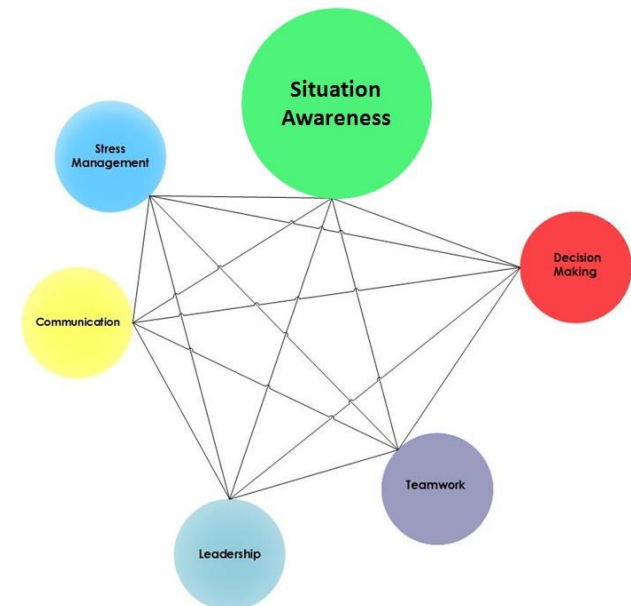
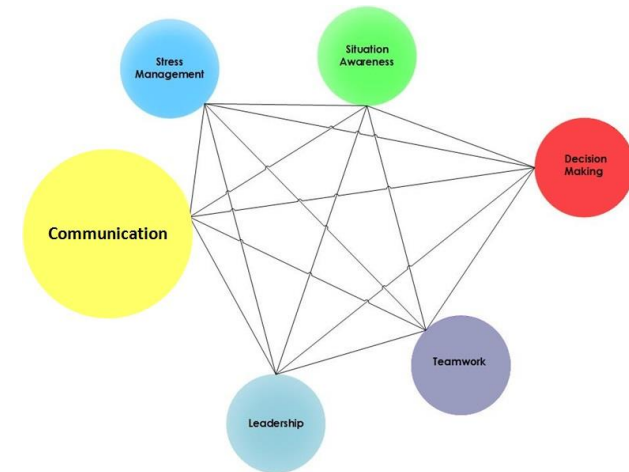


Issues with Communication:

- ⊗ Not listening/talking over others
- ⊗ Inconsistent verification
- ⊗ Not asserting themselves
- ⊗ Use of closed questions
- ⊗ Leading questions

Issues with Situation Awareness:

- ⊗ Information present but missed
- ⊗ Confirmation bias



Observations of NTS on an Offshore installation (Post NTS training)

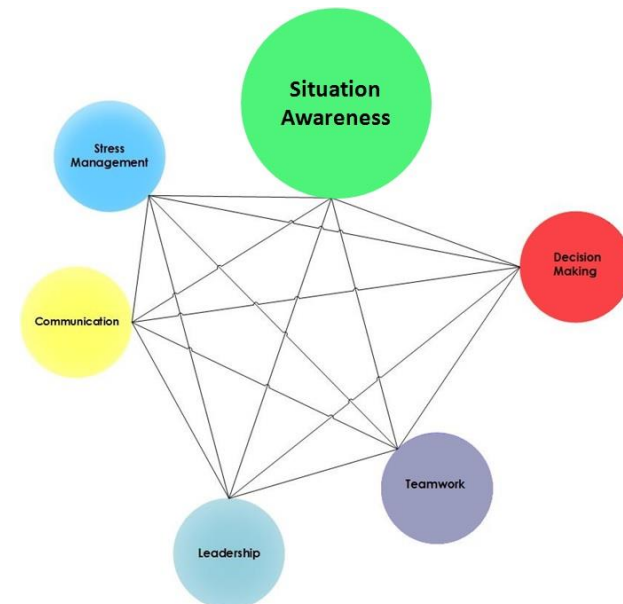
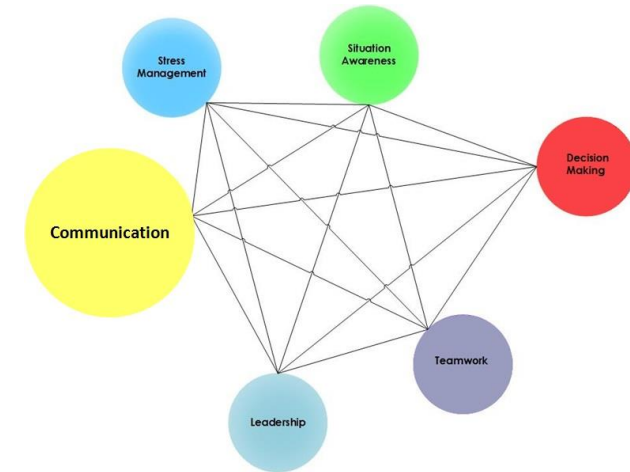


Issues with Communication:

- Answer own questions
- Interrupting others
- Terminology used during TBTs: “Easy”
“We have done this before”

Issues with Situation Awareness:

- Sterile cockpit
- What if question



Industry Recommendations



How far has NTS training and implementation come in 30 years?

REP electrical technicians and drilling teams strong introduction into NTS

Moving in the correct direction

However:

More roles throughout the Oil and Gas industry

Specific training to be carried out by trained personnel

Integrate NTS training with technical training

Make it part of everyday offshore working

Use lessons from other industries to make this process smoother

What questions do you have?

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