

NTS & FARM SAFETY WORKSHOP

26th April 2018
10.30 - 3.30pm

 **NTS**Ag
NON-TECHNICAL SKILLS IN AGRICULTURE



UNIVERSITY OF
ABERDEEN

What are non-technical skills?

- ▶ Non-technical skills (NTS) are the social and cognitive skills needed, alongside technical knowledge and experience, to perform safely and effectively at work.



The use of NTS can prevent accidents and injuries, which is why they are important in high-risk working environments such as aviation, off-shore drilling and nuclear power. Failures in NTS have been linked to patient mortality in healthcare, aircraft crashes in aviation and large-scale disasters in the oil industry, such as Deepwater Horizon.

Agriculture is a high-risk industry that requires farmers and farm workers to handle various hazards, such as operating heavy machinery, keeping livestock and working at height.

The aims of this workshop are:

- ▶ Share NTS research conducted within offshore drilling, aviation and agriculture by the University of Aberdeen.
- ▶ Discuss the relevance of NTS within agriculture, the skills that might be most important, and the factors that could influence those skills.
- ▶ Share information on NTS training.
- ▶ Discuss farm safety and the importance of both technical and non-technical skills.
- ▶ Consider how NTS might be applied within agriculture.

MORNING SESSION

TIME	ACTIVITY	NOTES
10.00 - 10.30am	Refreshments and networking	Tea and coffee will be provided.
10.30 - 10.45am	Welcome <i>Dr Amy Irwin</i>	
10.45 - 11.00am	Non-technical skills (NTS) in industry <i>Dr Ruby Roberts</i> Dr Roberts is a human factors consultant specialising in non-technical skills. Having completed her PhD in organisation Psychology looking at offshore drillers situation awareness, Ruby has continued to broaden her expertise in a range of high risk, high reliability industries.	Dr Roberts will be giving an overview of what non-technical skills are, why they are vital for both safe and effective performance, and what transferable lessons there are across industries. She will then provide some insight into how these non-technical skills are understood in a range of industries, giving particular focus to the oil and gas industry.
11.00 - 11.15am	NTS in aviation <i>Oliver Hamlet</i> Oliver is currently undertaking the first year of a PhD in human factors and organisational psychology. His research is currently focused on the categorisation of the non-technical skills of helicopter pilots in offshore and search and rescue environments.	Oliver will discuss non-technical skills within aviation. He will cover notable lapses in NTS and how they contributed to major airline accidents over the last half decade, discuss the current landscape on NTS research in relation to aviation and the apparent lack of research surrounding helicopter NTS, and finally he will discuss his current research and the need to continue expanding NTS research into domains of high-risk.
11.15 - 11.30am	NTS in farming <i>Dr Amy Irwin</i> Dr Irwin is a Lecturer in Psychology at the University of Aberdeen. Her research interests include non-technical skills, safety climate and the impact of incivility at work. She has conducted research examining non-technical skills in multiple industries over the past decade, including healthcare, aviation and farming.	Dr Irwin will discuss NTS in the farming context. This will focus primarily on research that identified the NTS considered relevant by farmers. There will also be a brief discussion of a recent study examining farmer perception of risks when operating a tractor.
11.30 - 11.45am	Q&A for NTS research presentations	An opportunity to ask Ruby, Oliver and Amy questions about their presentations.
11.45 - 12.00pm	Comfort break	
12.00 - 1.00pm	Focus groups to discuss application of NTS in farming	Participants will be split into groups to discuss the presentations thus far and to discuss answers to some set questions. The aim of these focus groups is to get your opinion on the relevance and importance of various skills, together with your thoughts on which factors could impact those skills in practice.

AFTERNOON SESSION

1.00 - 1:30pm	Lunch	Sandwiches, tea & coffee provided
1.30 - 2.00pm	Developing NTS training <i>Dr Ruby Roberts</i> Dr Roberts is a consultant for People Factor Consultants Ltd (PFC).	Dr Roberts will discuss the training of NTS theory in the classroom, its application to simulation exercises for industries, and the integration of NTS, technical training and simulations.
2.00 - 2:45pm	NTS, health and safety in industry <i>Iain Sutherland HSE</i> Iain is an HSE Inspector based in Inverness.	Iain will set the industry context of a poor record of managing health and safety risks. He will also underline that good technical skills are essential, where NTS fit in the hierarchy of safety management, and the need for NTS to be integrated with safety by design.
2.45 - 3.15pm	NTS, training and the IOSH <i>Alan Plom,</i> Vice Chair of IOSH Rural Member of Farm Safety Partnership Board Involved in agricultural health and safety for 42 years, including 32 years in HSE, ending as Head of Agricultural Safety Section 2005-11	Alan will discuss NTS and the use of NTS in training. He will also cover the broader role of IOSH in terms of disseminating information, guidance, and applying the outcomes of the research within the industry, nationally. Alan will also discuss the scope and means to raise awareness of any guidance produced.
3.15 - 3.30pm	Thanks <i>Dr Amy Irwin</i>	

USEFUL LINKS

Dr Amy Irwin (MA, MPhil, PhD) is a lecturer at the University of Aberdeen. Her research interests include non-technical skills, safety climate and the impact of incivility at work. She has conducted research examining non-technical skills in multiple industries, including healthcare, aviation and farming. To find out more about Dr Irwin's research, go to her staff profile or Twitter page.

University of Aberdeen staff profile:

<https://www.abdn.ac.uk/psychology/people/profiles/a.irwin>

Twitter: @Dr_Alrwin

The Industrial Psychology Research Centre (IPRC) specialises in the application of psychology principles and methods to examine safety and human performance in industry, with a strong focus on human factors. To find out more about the work that the IPRC does, go to the website: <https://www.abdn.ac.uk/iprc/>

Non-Technical Skills in Agriculture (NTSAg) aims to apply psychological research about non-technical skills to the farming industry. To find out more about the research and events associated with NTSAg, visit the website or Twitter page:



research.abdn.ac.uk/nts-farming/



[@NTS_Ag](https://twitter.com/NTS_Ag)

The Health and Safety Executive (HSE) is responsible for the encouragement, regulation and enforcement of workplace health, safety and welfare. The HSE's work ranges from shaping and reviewing regulations to producing research and enforcing the law. To find out more about the HSE, visit the website: <http://www.hse.gov.uk/>

The Institution of Occupational Safety and Health (IOSH) is a professional body for people responsible for health and safety in the workplace. The IOSH provides support, research, training and advice to its members. To find out more about the IOSH, go to the website: <https://www.iosh.co.uk/>

People Factor Consultants provides safety-related training and consultancy. They combine technical and non-technical skills training and assessment to help individuals, teams and organisations achieve optimum levels of performance. To find out more about People Factor Consultants, visit the website: <http://peoplefactor.co.uk/>