

Office for Nuclear Regulation

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ONR TECHNICAL ADVISORY PANEL TERMS OF REFERENCE

AIRCRAFT CRASH HAZARD ASSESSMENT

The Technical Advisory Panel (TAP) is to provide independent, objective, authoritative, professional scientific and technical advice to the H M Chief Inspector of Nuclear Installations in the area of accidental aircraft crash hazard assessment.

The TAP shall provide relevant, state of the art advice to address the particular issues or questions that are posed to it, and to obtain specialised technical opinion as needed.

The TAP shall advise on the state of scientific and technical knowledge related to each area, highlighting implications where relevant.

The TAP shall interact in a complimentary manner with other relevant scientific and technical bodies to provide expert technical advice as requested in a timely manner.

The TAP shall identify areas of uncertainty, emerging issues and knowledge gaps, and suggest research needs.

Discussions and advice provided by the TAP may be released under the government's principles of freedom of information, subject to security review and classification.

The TAP will be chaired by Dr Mike Weightman (H M Chief Inspector of Nuclear Installations) or his Deputy Dr Andy Hall (H M Deputy Chief Inspector of Nuclear Installations).

The composition of the TAP shall reflect:

- Recognised technical leadership in the fields of:
 - Accidental aircraft crash risk assessment methodologies
 - Air crash data statistics
 - Aerodrome operations and regulation (Licensing)
 - Flight operations and regulation
 - External hazard assessment methodologies
- An affiliation balance of technical expert nominees from a variety of stakeholders including academia, professional societies, NGOs, nuclear industry, wider industry, etc (technical experts nominated would be required to act according to their professional discipline in line with these Terms of Reference not as representatives of the party who nominated them);
- Independence from government

Panel members are expected to act as individuals and to provide objective, independent advice.

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Panel members should:

- Conduct themselves with integrity and honesty and not misuse their position on the TAP or information acquired in the course of their participation to further their personal interest or those of others.
- Not receive benefits of any kind which others might reasonably see as compromising their personal judgement or integrity. They should not, without authority, disclose information which has been communicated in confidence or received in confidence from others.
- When talking to the media as an expert in their own right must not claim their views are representative of the TAP or allow that impression to be created.

Proposed Technical Areas and Sub Topics

1. Methodologies for the prediction of accidental aircraft crash risk
 - a. Current practice and the state of art;
 - b. Case studies for the definition of public safety zones and precedents set;
 - c. Limitations of the Byrne methodology;
 - d. Influence of local aerodrome operations;
 - e. Influence of local flight paths;
 - f. Influence of local environmental features ;
 - g. Influence of target area and target area projections;
 - h. Consideration of skidding;
 - i. Confidence and treatment of uncertainties;
 - j. Application to random site location;
 - k. Application to site located near to airfield.
2. Base Crash Data
 - a. Data sources;
 - b. Data screening;
 - c. Data limitations and uncertainties;
 - d. Data application.

Remuneration

The attached document "Guidance on expenses entitlements for HSC/E Advisory Committee Members" provides clear guidance.