

Appendix H Risk Assessment

- 1 At any public event there are hazards that may cause harm to people. It is necessary to identify these hazards and to minimise them. This is done through the medium of a Risk Assessment, which is therefore an essential element of the production of any safety plan.
- 2 Risk assessment need not be complicated and the simple procedure that follows should suit the needs of most air display and Special Events. However, other alternative systems can be equally effective. If you require advice on risk assessment please contact the CAA FOI (GA).

3 Risk is defined as:

The Severity of the Hazard X The Likelihood of the Occurrence

4 The five steps to risk assessment defined by the HSE are:

Step 1	Identify the hazards associated with activities contributing to the event, where the activities are carried out and how they will be undertaken.
Step 2	Identify those at risk and how they may be harmed.
Step 3	Identify existing precautions.
Step 4	Evaluate the risks.
Step 5	Decide what further actions may be required, i.e. mitigation.

Step 4 will involve a combination of the likelihood and severity of the identified risk.

5 Assessment of likelihood and severity of hazard is subjective and is based on personal experience of the activity under assessment or statistical evidence when available.

Therefore, the assessment process must be undertaken by someone who is aware of the risks associated with the activity being assessed and who will use sound judgement in the preparation of the assessment. The assessor should also be aware that, in the event of a subsequent accident or incident, the risk assessment process might be challenged.

6 The severity of a hazard should be assessed under the following headings, depending on the possible outcome should the hazard become a reality, and allocated a score:

Trivial	Minor Injury	Serious Injury	Single Fatality	Multiple Fatality
1	2	3	4	5

7 The likelihood of the hazard occurring should be assessed against the following headings and again allocated a score:

Highly Unlikely	Possible	Quite Possible	Likely	Highly Likely
1	2	3	4	5

8 Once Severity and Likelihood levels have been decided they should be entered into a matrix, as in the following example:

Hazard	Severity	Likelihood	Rating	Mitigation	M/Factor	Final Rating
Aircraft Accident Involving Crowd Casualties	5	3	15	Adhere to separation distances; ensure crowd remain inside Crowd Line.	Likelihood reduced to 1	5
Fire in Exhibition Area	3	3	9	Provision of First Aid Fire Fighting facilities	Severity reduced to 2	6
Terrorist Incident	5	2	10	Close, early liaison with police	Likelihood reduced to 1 through planning	5

The content of the above table is for example only and does not imply or infer a risk level.

9 The Risk Rating is the figure obtained when the Severity assessment is multiplied by the Likelihood assessment.

A resultant figure of less than 6 indicates a low risk; a figure between 6 and 15 a medium risk; and a figure greater than 15 a high risk.

Mitigation action should be taken whenever possible to reduce risk ratings even when the risk is low.

High risk ratings should generally be deemed unacceptable and mitigation sought to reduce the rating to an acceptable level - medium or better.

10 Organisations should record and retain the details of their risk assessment process.