

# Organising an Aviation Event



In New Zealand there are normally around a dozen airshows (“Air Events”) every year. Some of these are repetitive events, such as Warbirds Over Wanaka, or Classic Fighters at Omaka. The organisers of these events have done it all before, and are aware of the difficulties of organising a safe and crowd-pleasing event. This article is designed to assist first-time organisers of new events by providing information, tips and traps that others have learnt in organising air displays. It can also be used as a useful reminder of things to consider by individuals or organisations that have previous experience in running shows.

This article only covers the air side of such an event. It does not discuss all the myriad of other details that must be attended to, such as parking, vehicle access, toilets, catering, publicity, and so on. Experienced event organisers will tell you that these aspects of organisation invariably take up much more time than most people think, and are a much more daunting task than the (relatively) simple task of running the air event. You should also be aware of any local body requirements, as well as the increasing interest of other agencies (eg, Police, and OSH) in such events. In particular, such agencies will be very interested in your Emergency Plan in the event something goes amiss.

## The Rules

Aviation Events, Air Shows, and Aerobatic flights are all covered in CAR

91.703 and AC 91-1. Ensure that you have read and completely understand all the information contained in the Rule and the AC.

Note that for any Aviation Event that requires the approval of the Director, a minimum of 90 days notice is required. The application form (CAA 24091/03) is available on the CAA web site, [www.caa.govt.nz](http://www.caa.govt.nz). An event approval is required for any event where more than three aircraft are involved (unless in a single formation), or where more than 500 people are spectators. If in doubt, ask!

It is strongly advised that you contact the CAA for advice before you begin detailed planning for your event. The best contacts will be your local Field Safety Adviser (see page 22), or the GA Group – see the CAA web site for contact details.

## Airspace

For any display other than a low-key event at a quiet locality, it is strongly advised that the organisers put in place some form of airspace restriction. This will enable the organisers to control who flies in the airspace during the event.

If the event is being held at an aerodrome with Air Traffic Control (ATC), it will probably not be necessary to establish restricted airspace, unless the event is a major one with a significant affect on normal air traffic. With the agreement of the airfield operator and Airways Corporation, the Control Zone (or portions of it) can be promulgated as

a Restricted Area for specified times to allow for the airshow and any practice periods. Note that 90 days notice is required for promulgation of a Restricted Area, which would normally be by way of an *AIP Supplement*.

If the event involves aerobatics or high-performance aircraft it may also be necessary to include part of the CTA above the airfield within any restricted area promulgated, and this will require consultation with the affected ATC unit.

If the event is to be staged at an uncontrolled venue, the process is basically the same, except that there will now be a requirement to specify the area to be protected. This is often done by defining a circle of a three or five nautical mile radius around the airfield or venue, up to an appropriate altitude. Again, promulgating the restricted airspace will require the approval of the airfield operator or venue owner, and the CAA will want to see evidence of consultation before designating the Restricted Area.

Even if the event does not require restricted airspace, it is strongly advised that the organisers arrange for publication of an *AIP Supplement*. This requires a minimum of 90 days notice, and there are reminders of the cut-off dates in every issue of *Vector* (see page 21). It is inappropriate to use a NOTAM for pre-planned events such as these. A NOTAM should only be used for situations of an urgent and temporary nature, such as an unforeseen aerodrome closure or significant hazard.

## Display and Crowd Lines

The requirements for display lines are well documented in the Rule and AC. At most venues, there is often little choice in where the display line and area will be. This will be dictated by factors such as airfield layout, surrounding terrain, crowd areas and visitor car parking. If there is a choice about the display line, then the following issues should be considered.

**Sun** – It is always preferable for the display line to be to the south of the crowd, so that spectators are not looking into the sun to watch display aircraft.

**Wind** – Similarly, it is always preferable to have the wind blowing along the crowd line (best), or away from the crowd (okay), but *not* towards the crowd. A wind towards the crowd has the double disadvantage of the spectators looking into wind, and also it tends to blow display aircraft towards the crowd line, which is never a good thing.

**Angled display line** – Where possible it is nice if the display line has a bend in the middle, towards the crowd. This will enable display aircraft to do a curved flypast, banked towards the crowd, without infringing the display line.

## Pilot Qualifications and Practice

Event organisers must ensure that display pilots are appropriately licensed, rated, qualified, insured, and in current practice for the event they will undertake. It should be an absolute condition of the display that the organisers sight all relevant documentation from the pilots. Failure to do so could jeopardise things like event insurance. Invariably, someone will turn up to the event having forgotten to bring some required documentation. This puts the organiser in a compromised position. The rule must be, 'no documents, no fly'.

The organisers should also insist on observing a practice of the proposed routine from each display act. Once a display has been observed and approved, it must not be changed without the consent of the organisers.

## Safety – Spectator Control

One of the biggest dangers at air events is the mixture of aircraft and spectators. The author of this article has vivid memories of watching a small child run through the propeller arc of a taxiing aircraft at an airshow. How the propeller missed the child will never be known, but it gave a huge fright to all concerned (except the child, who ran on to mother unaware of his brush with death). This incident was caused by a combination of inadequate spectator control, coupled with lack of provision for aircraft refuelling clear of the spectator area.

An absolute requirement is that there should be no spectator access to any area where aircraft are operating. Secure fencing (not a rope barrier) and marshals should always be between any spectators and any running aircraft.

Provision must be made for aircraft refuelling during an airshow. This will either be through the use of fixed pumps, or a mobile tanker. If fixed pumps are used, then either there must be controlled and secure taxi access to the pumps, or aircraft should be shut down in a clear area and towed to the pumps. Under no circumstances should aircraft taxi to pumps that are not secure from public access.

If at all possible it is recommended that event organisers arrange for a mobile tanker for airshow refuelling. It minimises aircraft ground movements, and generally enhances aircraft security and spectator safety.

## Briefings

An essential element for a good event is a comprehensive briefing that all participants (flight and ground) **MUST** attend. The briefing should at least cover:

- the event programme
- procedures
- communications.

Always provide a written copy of the brief – it reduces the number of times you have to answer the same question because someone wasn't listening the first time!

## Hints for a Better Show

Variety is the spice of life – the same goes for air events. Provide a mixture of activities. Where you have two similar aircraft types doing similar routines, then separate them in the programme, putting different aircraft in between.

Communications, both air-ground, and ground to ground, are almost invariably problems. Don't rely on cellphones, or on hand-held radios – they always run out of power just when you need them most.

Run a dress rehearsal of the ground side of the event – you will be surprised how many things you didn't think about.

Avoid giving organisational jobs, particularly on the day of the event, to anyone flying in the show. The last thing a display pilot needs is to be worrying about anything other than flying.

Depending on the size of the event, it is a good idea to nominate a suitably experienced person to act as your Safety Officer. This person should have no other tasks to perform, and has a mandate to keep an eye on all facets of the event organisation and conduct. ■

