FEDERATION AERONAUTIQUE INTERNATIONALE

COMMISSION D'AEROSTATION DE LA FAI

FAI BALLOONING COMMISSION

CIA



SAFETY OFFICER HANDBOOK

Version 01/2001

Effective date April 2001

Secretariat of FAI

Avenue Mon-Repos 24, CH-1005 LAUSANNE, Switzerland Tel: +41 21 345 1070 - Fax: +41 21 345 1077 - email : sec@fai.org Web : www.fai.org

The Safety Officer is an integral and important member of Technical Staff of any Category One Event and Premier Sporting Event.

The Safety Officer in concert with the Event Director are responsible for the safety of flight operations, refuelling facilities, on site activities before and during the event.

The Safety Officer shall normally exercise authority by advising the Event Director and other responsible officials he feels should be taken to ensure safety of flight operations, on site activities or refuelling concerns. Therefore:

SAFETY OFFICER

HANDBOOK

The Safety Sub-Committee of the CIA thanks sincerely and especially persons and writers for their contribution, without them this compilation was not possible.

1 TABLE OF	CONTENTS
-------------------	-----------------

1	TABLE OF CONTENTS	2
2	INTRODUCTION	2
2.1	QUALIFICATION LEVELS AND CRITERIA	3
3	ORGANISATIONAL CHART	4
4	DUTIES AND RESPONSIBILITIES OF A SAFETY OFFICER	5
4.1	PRE-EVENT RESPONSIBILITIES	5
4.	1.1 REVIEW RULES AND DOCUMENTS	5
4.	1.2 REVIEW POTENTIAL DANGER	5
4.	1.3 REVIEW LANDOWNER PROBLEMS	5
4.	1.4 FAMILIARISE WITH THE AREA	5
4.	1.5 RECALL PROCEDURES	5
12	EVALUATE ALL DOSSIDILITIES TO INCIDENTS	6
4.2	EVALUATE ALL FOSSIBILITIES TO INCIDENTS	0
4.	2.1 DURING LAUNCH 2.2 DURING THE ELICHT	0
4. 4	2.2 DONING THE FEIGHT 2.3 AT CONGESTED AREAS	0
т. Д	2.5 AT CONCLUTED AREAS	6
т. Д	2.5 IN TRAFFIC	6
4.	2.6 AT REFUELLING	6
4.3	EVENT RESPONSIBILITIES	7
4.	3.1 MONITOR THE WEATHER.	7
4.	3.2 PILOT BRIEFINGS	8
4.	3.3 MASS INFLATION	8
4.4	REFUELLING - PROPANE SITE	8
4.5	EMERGENCIES OR ACCIDENTS	9
5	GUIDELINES FOR LAUNCH DIRECTORS AND LAUNCH MASTERS	10
5.1	PRE-FLIGHT	10
5.2	FIELD COMMUNICATION	10
5.3	LAUNCH SEQUENCE AND SPACING	11
6	AFTER THE EVENT	12
Appe	endix 1: Report of Safety Officer	
Appe	endix 2: Rules for Refuelling	
Appe	endix 3: Incident & Accident Report	
Appe	endix 4: List of recommended and suggested Equipment	
Appe	ndix 5: Safety Officer Telephone and Time Checklist	

Appendix 6: Emergency routines Appendix 7: Checklist for the Safety Officer

2 INTRODUCTION

The definition of "The SAFETY OFFICER" in the Sporting Code Section 1, Version 1.98, including amendments issued 18/12/97, to take effect on 1st January 1998, reads as follows.

CHAPTER 5 - FIRST CATEGORY SPORTING EVENTS

5.11 SAFETY OFFICER

- 5.11.1 The Safety Officer shall be approved by the CIA.
- 5.11.2 The Safety Officer shall give advice to the Event Director on any matters regarding safety. Mandatory operational procedures for the Safety Officer are contained in the "Safety Officer Handbook" approved by the CIA.

CHAPTER 7 - OTHER FAI AIRSPORT ACTIVITIES

- 7.16 OFFICIALS IN CIA PREMIER SPORTING EVENTS
- 7.16.3 THE CIA SAFETY OFFICER
- 7.16.3.1 The Safety Officer shall be approved by the CIA.
- 7.16.3.2 The Safety Officer shall give advice to the Event Director on any matters regarding safety. Mandatory operational procedures for the Safety Officer are contained in the "Safety Officer Handbook" approved by the CIA.

As a reminder, a section from the Sporting Code General Section. Chapter 4

- 4.3.4.1 <u>The Event Director</u>
- 4.3.4.1.1 **The Event Director shall be in overall operational charge of the sporting event**. He shall have a Deputy Director and Technical Officials to assist him. The Event Director and Deputy shall be approved by the relevant FAI Air Sport Commission.
- 4.3.4.1.2 **The Event Director is responsible for good management and the smooth and safe running of the event**. He shall make operational decisions in accordance with the rules of the Sporting Code and competition rules. He can penalise or disqualify a competitor for misconduct or infringement of the rules. He shall attend meetings of the International Jury and give evidence if requested.

As can be seen from the above references, the Safety Officer is an integral and important member of the Technical Staff of any Category One Event and Premier Sporting Event.

The Safety Officer, **in concert** with Event Director, are responsible for the safety of flight operations, refuelling facilities, on site activities before and during the event.

The Safety Officer shall normally exercise authority by advising the Event Director and other responsible officials on action which he/she feels should be taken to ensure safety of flight operations, on site activities or refuelling concerns.

2.1 QUALIFICATION LEVELS AND CRITERIA

Potential Safety Officers should be selected taking into account:

- Piloting experience on the appropriate type of aerostat
- Experience in national or international competition as a competitor or official
- Technical knowledge of aerostats
- Familiarity with emergency procedures and first aid
- Meteorological expertise
- Ability to use appropriate language(s)

3 ORGANISATIONAL CHART



This is a sample organisational chart which shows the direct relationships for all of the parties involved with the Safety Officer.

It can be seen that the Safety Officer reports to the Event Director and has a relationship with the Weather Officer. Also it should be noted that the Launch Director and Launch Master report to the Safety Officer in this example

It is important to emphasise that the Event Director has **the final decision** on whether it is safe to fly or whether an un-airworthy balloon will be grounded. This is re-enforced in the organisational chart.

4 DUTIES AND RESPONSIBILITIES OF A SAFETY OFFICER

The Safety officer shall normally exercise authority by advising the Event Director and other responsible officials of actions which he feels should be taken to ensure safety of flight operations.

The Safety Officer is the eyes and ears of the Event Director in the areas of safety. He should have extensive weather knowledge, familiarity with balloon systems, strong knowledge of the competition rules and pilot experience.

A top rated Event Director will also have extensive weather knowledge and experience. At large events it is normal to have a professional Meteorologist on staff to advise the Director and Safety Officer and to give weather briefings.

4.1 PRE-EVENT RESPONSIBILITIES

4.1.1 **REVIEW RULES AND DOCUMENTS**

You shall review all rules and regulations which apply to the event. These include CIA rules, The Sporting Code General Section and Section One, Government Aviation Regulations and local Government Regulations. Acquire copies of all pertinent regulations.

4.1.2 REVIEW POTENTIAL DANGER

You shall with local officials or personnel review any potential dangerous areas which may be in the competition area or in it's proximity. Any restricted airspace, large power distribution areas, power stations should be reviewed and pilots advised.

4.1.3 REVIEW LANDOWNER PROBLEMS

You shall together with local resident review any potential landowner problems.

4.1.4 FAMILIARISE WITH THE AREA

You shall familiarise yourself with the flying area by a flight by balloon or light aircraft, if possible. Also it would be prudent to be familiar with the terrain within the competition area and to spend some time driving around to assess unsafe areas, potential target problems and local road conditions and traffic.

4.1.5 RECALL PROCEDURES

You shall together with the Event Director and the Organizers find out the most suitable recall procedure for the Event. You shall control that the Event Director can reach all participants with this recall procedure.

When satisfied you are familiar with the above items, review with the Event Director, the proposed flight activities to ensure that none of the planned activities are inherently unsafe. As Safety Officer you must be alert for any local conditions which may have been missed. It would be best if this consultation were to be well in advance of the event starting date.

4.2 EVALUATE ALL POSSIBILITIES TO INCIDENTS

The Safety officer shall together with the Event Director try to find all possible situations that can cause incidents or accidents. This for the place were the event are held in mind. They shall make a Emergency and Contingency Plan.

They shall look into what can happen during (in the following points are a few examples on points to look into, remember that local variations always exist) :

4.2.1 DURING LAUNCH

What can cause an incident at the common launch areas.

- Collisions between a balloon that have launched and a balloon on the ground ?
- Two balloons in the air ?
- Balloon flying into spectators ?
- Propane accident ?

4.2.2 DURING THE FLIGHT

What can cause an incident during flight.

- Collisions between balloons ?
- Collision with power lines or other objects?
- Flying into spectators ?
- Dropping objects on spectators ?
- Propane accident ?

4.2.3 AT CONGESTED AREAS

What can cause an incident at congested areas.

- Collisions between balloons at a target ?
- Collision with power lines ?
- Flying into spectators ?
- Dropping objects on spectators ?

4.2.4 DURING LANDING

What can cause an incident during landing.

- Collisions between balloons at landing ?
- Collision with power lines at landing ?
- Collision with other objects at landing?
- Flying into spectators ?
- Dropping objects on spectators ?
- Propane accident ?

4.2.5 IN TRAFFIC

What can cause an car incident in traffic during a task.

- Involved in collision with other car ?
- Crew hit by a car ?
- Run into spectators or other people on the road ?

4.2.6 AT REFUELLING

What can cause an incident at refuelling.

• Gas leakage ?

4.3 EVENT RESPONSIBILITIES

The following items are the basis for co-ordinated and efficient duties which should be performed by a Safety Officer during an event.

It should be noted however additional duties and areas of responsibilities may be included to increase and enhance a Safety Officers duties.

It is of great importance that a Safety Officer be in constant contact with the Event Director and other officials. This should be achieved with reliable and serviceable communication equipment, radios, cellular phone or other such devices.

An additional benefit of good communication equipment is that it allows freedom to monitor launches, propane re-fuelling facilities, flight operations, off site weather conditions and other important concerns.

4.3.1 MONITOR THE WEATHER.

If the weather is excellent or completely unflyable, the job of weather analysis is easy. If conditions are uncertain or marginal, the Safety Officer must ensure that the highest degree of skill and knowledge is used in interpreting the weather.

Some hints on how to accomplish this are:

a. Make an independent check on the weather. If there is a weather office on site you can use it, if you have a computer weather service you can call it as well as calling a aviation briefer or professional forecaster.

Unless you actually have a weather office on site, you must remember that the weather observations and forecasts will usually be for 20 to 30 Kilometres away from where you are actually located.

You should discuss the special requirements of balloons or airships with the briefer.

b. Remember that you are concerned with forecasts. You must bear in mind that the weather information you are obtaining is for use several hours after you obtain it.

The flight must be planned by the Director based on the weather data available. This is particularly difficult if you are working at a Gas Balloon event, where weather data is required for flights of 4 to 72 hours duration.

You must always be concerned with weather at the start of the flight as well as the weather at the termination of the flight.

- c. It is generally true that aviation forecasters have little information available to them on low level winds. For this reason, pibal readings at the launch field are invaluable for making decisions on tasks and many other safety considerations.
- d. Discuss any weather concerns with the Event Director during the planning period for each flight. Keep a constant watch on marginal weather conditions throughout the day so as to be able to assess any deterioration or improving trends which were not forecast.
- e. If conditions are marginal prior to any mass launch, it is suggested the Safety Officer or his delegate, proceed to potential targets or landing areas to assess local conditions which may not be known at the launch site. Advise the Event Director of low ceilings, limited visibility or gusty winds.
- f. Before Launch Time, look frequently upwind to the sky to find sudden changes in the weather.

4.3.2 PILOT BRIEFINGS

During each pilot briefing, be sure the following are adequately covered:

- a. Weather it is very important that the best possible weather briefing is given.
- b Airspace restrictions, such as local airports or special airspace.
- c Powerlines, telephone wires or other hazardous obstacles in the launch or target areas.
- d. Any other available information concerning hazards in the local flying area or any area the balloons may transit.
- e. Ensure pilots and crew are provided with the lost balloon and weather recall information, phone number and/or radio frequency.

4.3.3 MASS INFLATION

The period prior to mass inflation's presents an ideal opportunity for random inspection and monitoring of balloons, crews and equipment. Take time to note any deficiencies or rule violations. If immediate action to ensure safety is required then advise the pilot of the corrective action necessary.

- a. Ensure balloons that appear to be damaged are in airworthy condition. Pilots of unairworthy balloons will be asked not to fly by the Event Director in consultation with the Safety Officer. The local Aviation Authorities may be notified, if necessary, to prevent operations of un-airworthy aerostats.
- b. The Safety Officer, in consultation with the Event Director, have **the right and responsibility** to prevent a balloon from taking off, as part of any event, if they believe that the flight could be unsafe due to the visible condition of the balloon.
- c. If there is an unanswerable question concerning the airworthiness of a balloon, **it should not be allowed to fly** until everyone is satisfied the balloon is in fact airworthy.
- d. Not only in mass inflation, but always, be sure balloon and basket are tied up with proper knots or/and carabiners, not to the trailer, but directly to the retrieve vehicle, car or truck.
- e. It goes without saying that the pilot must be sober, free from drugs and in good health.

4.4 **REFUELLING - PROPANE SITE**

- a. The Safety Officer should monitor the propane refuelling site, prior to, and during the Event. This will help ensure propane rules and procedures are being followed by all pilots, crew, volunteers and propane suppliers.
- b. If the Safety Officer finds the installation of the refuelling site is against the safety requirements, he may, in concert with the Event Director, request implementation of changes, always in accordance with the local regulations.
- c. It is of great importance that safety equipment, proper gloves, fire equipment and an emergency shut-off are present. Also ensure that proper fire extinguishers or fire vehicles are present at all refuelling times.

d. For refuelling, propane cylinders must always be taken out of the basket. In some brands of basket, it is very difficult to take out the cylinders; in those cases the basket must always be taken out of the retrieve vehicle.

4.5 EMERGENCIES OR ACCIDENTS

- a. Report all accidents, incidents or emergencies immediately to the Event Director
- b. Render assistance at the scene, if you are nearby or present.
- c. If not at the scene of the accident proceed to the scene when directed. If you are the first at the accident scene, evacuate all persons and public and inform the necessary rescue services.
- d. Take down and note all relevant information or evidence which may help the Director or the authorities, in any investigation. Ensure no evidence is removed or tampered with prior to the Aviation Authorities arrival.
- e. Remember you may represent the Event Director, Officials, the CIA and the FAI at the accident scene. Be professional, helpful and honest so as to reflect a positive relationship with all authorities involved.

The Safety Officer may assist officials, pilots, sponsors or the general public in anyway that will make the event safe, successful and enjoyable.

The goals of the CIA Safety programme are to minimise the number of balloon accidents and to minimise the potential for damage for persons and property. This goal can only be achieved by an understanding of the principals of flight safety and the conscious elimination of unsafe acts and conditions.

An Event must be organised and run to provide the safest possible physical environment for the flying activities, while absolutely minimising the pressures on the individual pilots to meet goals beyond their own flying capabilities.

The result of this effort will be a lessening of the physical danger to pilots, passengers, spectators, crews, organisers, sponsors, landowners etc.

A SAFE event today will ensure another event to be held in the same location tomorrow.

ADDENDUM :

When more than one balloon is to be launched, it is good safety practice to have persons regulating the launches.

It is desirable to have a Launch Director a rated LTA pilot, although if properly trained a non-rated pilot can perform this duty.

Launch Masters do not have to be rated pilots, although this is always desirable, it is not always practical.

Launch Masters must be well trained and able to work as a team with the Launch Director and the Safety Officer.

Specific guidelines are given in the following pages :

5 GUIDELINES FOR LAUNCH DIRECTORS AND LAUNCH MASTERS

The Launch Director could be considered an Assistant Safety Officer whose primary duty is the safety of the launch.

The Launch Director has control of the launch during a **"mass ascension"** and is usually assisted by Launch Masters.

It is normal for all persons involved with the launch to wear bright orange vests, or some other type of distinctive apparel that is easily recognised.

It is usual for Launch Masters to have dual roles at most events. They may be measurers, debriefers, or spare observers.

5.1 PRE-FLIGHT

The Launch Director should prepare the layout of the launch field for mass ascensions. Balloon positions should be indicated with some kind of markers, for example, survey flags, banners, cement blocks, tyres etc. A map of the field layout should be given to all pilots at the pilot briefing.

The Launch Director will be available for all pilot briefings to assist the Event Director with questions regarding the launch and the launch field.

All Launch Masters should be introduced at the General Briefing and a description of their apparel given.

Safety and good communications are essential at all mass launches. Any sources of potential problems should be immediately reported to the Launch Director, who will be in constant communication with the Safety Officer and Event Director.

Inexperienced pilots should not launch during peak launch times but should be held, **if practical**, until there is less congestion. During competitive events, competitors should only be held for orderly and safe launch conditions.

Each Launch master will be assigned specific balloons to launch. This prevents confusion on the launch field. Specific cases sometimes require the Launch Director to assist a Launch Master or to put an experienced person next to a "first time" Launch Master for assistance.

5.2 FIELD COMMUNICATION

It is very important that, when a pilot signals a Launch master that he/she is ready to launch, he/she is completely ready...at full equilibrium. The Event Director will usually make this point several times during pilot briefings.

At sight of white flag, the Launch Master should make positive eye contact with the pilot and say to pilot "At my sign number . . . , clear to take-off,", and may apply a sticker to the Observer Report Form or may initial it. The sticker or initials do not in any way imply permission to take off. Their only purpose is for verification at debriefing.

Launch Master then goes to the perimeter of the Balloon to verify the position of other balloons in the area, both hands below waist height and at least one of them palm down. When he wants the balloon to take off, he raises one hand above his head, pointing upwards, whilst pointing at the pilot with the other.

The procedure is to be explained at the general briefing.

It is often possible to inform the Pilot where the closest balloon is to him. The worst possible scenario is to launch the balloon while standing alongside the basket. It is impossible to see what is above you when standing at the basket.

Give the pilot confidence to launch, when you tell him to go be sure to exhibit a positive and clear command, showing you are confident of launching him safely.

(Small handheld radios can be useful for communications between launch personnel before the actual start of the launch period. Ensure the radios to be used do not have any kind of delay feature included with them.)

5.3 LAUNCH SEQUENCE AND SPACING

An area of at least 30 meters square should be allowed for each balloon (40 m.sq. is best).

There are basically two ways to launch balloons, and, to some extent, it depends on the type of event as to which of the two ways you use. The first is to launch all downwind balloons first. The second is to launch balloons at random as they are ready to go. Both methods are used, successfully and safely.

It is more common to launch at random if there is competition involved. Competitors want to launch when they are ready, not when balloons downwind of them have been launched.

It must be clearly understood that for random balloon launching, a Launch Master's job becomes more difficult. Both Launch Director and Launch Master must work closely together to ensure that no balloon is launched up into a balloon passing overhead. It is also important to be sure that once they have launched, balloons climb to a minimum of 500 feet to clear the launch area.

If there is competition in your event, speed in launching may be important, but **with great care**, it is often possible to allow a second wave of balloons to lay out as each balloon launches.

Co-operation between pilots, crews and officials is an important factor on a busy launch field to enhance safety.

These are all recommendations...not hard and fast rules.

Every launch area will vary in size, shape, prevailing wind, tree cover and obstacle location. The most important thing for launch personnel to keep in mind is to always have control over the safety of the launch.

Always be aware of the overall picture.

6 AFTER THE EVENT

The Safety Officer shall submit a report, within 28 days of the conclusion of the event, to the Event Director and to the Chairman of the Safety Sub-Committee (See Appendix 1).

This report shall consist of all safety related matters that occurred during the event.



REPORT OF THE SAFETY OFFICER to the CIA - FA.I.

Date:__

EVENT DETAILS Α.

1.	Title		
2.	Organising NAC		
3.	Location		
4.	Event Personnel:		
	Event Director	Deputy Director	
	Stewards		
	Jury President		
	Members		
5.	Number of Competitors		
6.	Number of Flights Number of	Tasks Number of Fiesta Pilots	
Sz	AFETY PARAMETERS		
1.	Briefing		
2.	Weather Provided by	On field	
3.	Common Launch field	No. of Launch masters	
4.	Crowd Control by	Traffic Control by	
5.	Fire Equipment		
6.	Refuelling Area		
7.	First Aid		
<u>C.</u>	. INCIDENTS: cfr. Incidents & Accident	nts Report No.	
<u>D.</u>	. ACCIDENTS: cfr. Incidents & Accide	nts Report No.	
E.	GENERAL COMMENTS:		

<u>F.</u> <u>RECOMMENDATIONS</u>:



RULES FOR REFUELLING

- 1. **PROPANE CAN BE EXPLOSIVE!** All possible sources of ignition must be kept away from the refuelling area.
- 2. No nylon clothing, banners, flags etc., allowed in the refuelling area.
- 3. No loose strikers in the basket. They must be properly stored and disarmed.
- 4. Only two persons per vehicle in the refuelling area.
- 5. Baskets and/or propane cylinders must if possible be removed from enclosed trailers or vehicles.
- 6. Only **experienced** persons (pilot or crew chief) will be allowed to refuel.
- 7. No consumption of alcoholic beverages in the refuelling area.
- 8. Persons who appear to be intoxicated will not be allowed access to refuelling.
- 9. No dogs or other pets in vehicles during refuelling.
- 10. No radios, cellular phones, pagers or other electronic items in use.
- 11. Vehicle lights and engine turned off during refuelling.
- 12. No loitering in refuelling area after refuelling.
- 13. Always wear gloves in the refuelling area
- 14 Follow the instructions of the refuelling personnel
- 15. ABSOLUTELY NO SMOKING!



INCIDENT AND ACCIDENT REPORT

No:_____

A. <u>SUMMARY OF INCIDENT or ACCIDENT</u>

1. Date & Time	h	Min

2. Place

3. When

(Lay out-Inflation-Take Off-Landing Approach-Landing-Other)

PILOT

1. Name		Country
2. Licence No.	Issue Date	Validity Date
		PIC Time Last
3. Total Flight Time	Total PIC Time	12 months

BALLOON

1 Desistantion No	Volume	Class
1. Registration No.	volume	Class
2. Airworthness Certificate No		Date Exp

3. Name of Balloon _____ Publicity _____

4. Manufacturer of Envelope	Туре	
Burner	Туре	
Basket	Туре	
Propane Cylinders		Туре
		Туре

5. Total Flight Time _____ h ____ min. Number of flights

7. First Flight Date _____/____/____

FLIGHT

1. Number of Persons in the Basket _____=. Pic ____P2___Obs____Pass ____

2.	Take Off Tin	ne]	Landing Time		Total Flight Time		-
3.	Total Take Of	f Weight	Kg.		Fuel Weight		Kg
3.	Maximum A	ltitude		Ft.			
4.	Estimated W	ind speed – A	At Take Off		Kt		
			During flight _		Kt (Ft)	
			At Landing		Kt		
6.	Injuries	Pilot					
		Passengers					
		Others _					
7.	Damage	Envelope					
		Basket					
		Burner _					
		Instruments					
		Equipment	(Recommended)				
		Other					

8 Description & Comment:



LIST OF RECOMMENDED AND SUGGESTED EQUIPMENT

Some of the following suggested and recommended equipment may be required by law in certain countries or may be required by the airworthiness certification or flight manual.

	Recommended	Suggested
GAS BALLOONS	Altimeter	VHF Radio
	Variometer	Fire Extinguisher
	Trail Rope	First Aid Kit
	Tie off Rope	Helmet
	Sufficient Ballast	Knife
		GPS
GAS AIRSHIPS	Altimeter	VHF Radio
	Variometer	Fire Extinguisher
	Trail Rope	First Aid Kit
	Sufficient Ballast	Helmet
	Envelope Pressure Gauge	Knife
	Engine Fuel Gauge	GPS
		Compass
HOT AIR BALLOONS	Altimeter	VHF Radio
	Variometer	Fire Extinguisher
	Safety Drop Line	First Aid Kit
	Tie off Rope	Retardant Gloves
	Sufficient LPG	Helmet
	Fire Extinguisher	Knife
	Two Alternate Ignition Sources	Fire Blanket
		Envelope Temperature Gauge
		GPS
HOT AIR AIRSHIPS	Altimeter	VHF Radio
	Variometer	First Aid Kit
	Sufficient LPG	Fire Retardant Gloves
	Fire Extinguisher	Helmet
	Alternate Ignition Sources	Knife
	Envelope Temperature Gauge	Fire Blanket
	Pressure Gauge	GPS
	Engine Fuel Gauge	
ROZIERE BALLOONS	Altimeter	VHF Radio
	Variometer	First Aid Kit
	Sufficient LPG	Fire Retardant Gloves
	Fire Extinguisher	Helmet
	Alternate Ignition Source	Knife
	Envelope Temperature Gauge	Fire Blanket
	Sufficient Ballast	GPS
	•	•



Safety Officer Telephone and Time Checklist

Important times during the event:

Met Forecast	
Task Setting	
Observers Briefing	
Pilot Briefing	

Power distributors that have switched off the Automatic reconnection of the power lines during the whole Event:

Company	Responsible at Company	Phone

Contacts before competition power distributors that will switch off the power reconnection after a phone call:

Company	Responsible at Company	Phone

Contact numbers to air traffic controllers:

Controller	Phone	Open from	Open to	Contact ¹

¹ Note if contact before a flight, after a flight ...

Emergency contact numbers:

Company/Organisation	Responsible at Company	Phone

Important Radio Frequencies:

Organisation	Frequency	Note

Important phone numbers:

Function	Name	Number
Event Director		
Deputy Director		
Event Organiser		
Steward		
Steward		
Deputy Safety Officer		
Propane		
Propane		
Propane		
Landowner Relations		
Met		



Emergency routines

Inform the Emergency Service Centre the status of the accident such as;

- What has happened?
- Location? *Position with co-ordinates if possible.*
- What phone number are you calling from? *If calling from a International cellular phone do not forget the country code!*
- How many people are injured?
- What kind of injuries?
- Competition number if possible



Safety Officer's Event Checklist

Pre Event:

Getting all relevant documentation

After arrival at site:

- □ Introduce your self to the Police
- □ Introduce your self to the Fire brigade
- □ Introduce your self to the Air Traffic Controller
- □ Introduce your self to the Refuelling People
- □ Check the Refuelling Station
- Check Common Launch areas
- Check Recall procedure'
- Evaluate all possibilities to incidents

Check that the following points are covered on General Briefing:

- Recall procedure
- □ Launching procedure

During the Event:

- Check the weather situation with the metrological officer before each task briefing
- Be close to the Event Director during task setting, to be able to give him advise concerning safety maters.
- Be at common launch field to get the overall picture
- \Box Be at targets, when possible, to get the picture at congested areas
- □ If possible be at launch sites and landing sites
- □ Monitor the refuelling site

After the Event:

□ Sending the Safety Officer Report to the Safety Subcommittee