

**Fédération Aéronautique Internationale (FAI)
International Parachuting Commission (IPC)**

2004

IPC AAD SURVEY REPORT



IPC TECHNICAL AND SAFETY COMMITTEE

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1 SURVEY AIM & DISTRIBUTION

The aim of this survey, which was first undertaken in 1994, is to try to determine the degree to which AADs are being used by skydivers worldwide and to attempt to monitor any movement in the use of the devices.

The response for 2004 was 37 countries, from a possible 72 countries. This is a response rate of 51%. See Table 2, Page 4 for other years.

2 TABLE OF RESPONSES

AAD Table 1, 2004

Country	National Sport Parachuting Organisation								Military Parachuting Organisation								National Aviation (Govt.) Authority							
	AAD Comp	Static Line	AFF Students	Freefall Students	Intermed. Jumpers	Expert Jumpers	Display Tandem	Display Jumpers	AAD Comp	Static Line	AFF Students	Freefall Students	Intermed. Jumpers	Expert Jumpers	Display Tandem	Display Jumpers	AAD Comp	Static Line	AFF Students	Freefall Students	Intermed. Jumpers	Expert Jumpers	Display Tandem	Display Jumpers
Australia	Yes	No	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No
Austria	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes		Yes	Yes	Yes	Yes	Yes								
Belgium	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes								
Bulgaria	Yes	No	Yes	Yes	Yes	Yes *	Yes	Yes *	Yes	Yes	n/a	n/a	Yes	Yes	n/a	n/a	No *							
Canada	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes								
Cyprus	No								No							No								
Czech Rep.	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	No
Denmark	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes																
Estonia	Yes	Yes	Yes	Yes	Yes		Yes		No							No								
Finland	Yes	Yes	Yes	Yes	No	No	Yes	No	No							No								
France	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Germany	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No							
Greece	Yes	Yes	Yes	Yes	No	No	Yes	No	No							No								
Hong Kong, China	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	See Note							See Note								
Hungary	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes	No
India	No regul.								Yes			Yes	Yes	Optional	Yes	Optional	No reg.							
Italy	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No								
Kazakhstan	No								Yes							No								
Kenya	No								No							No								
Lithuania	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	No
Luxembourg	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes																
Netherlands	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes	No	No							
Norway	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No							
Poland	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	
Portugal	Yes	Yes	Yes	Yes			Yes																	
Romania	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No							No								
Saudi Arabia	Yes		Yes	Yes	Yes	Yes	Yes	Yes								Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Serbia/Montenegro	Yes		Yes	Yes	Yes				Yes		Yes	Yes	Yes			Yes		Yes	Yes	Yes				
Slovakia	Yes	Yes	Yes	Yes	Yes		Yes		No							No								
Slovenia	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	No	No	No	No	
South Africa	No								No							No								
Spain	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No							Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sweden	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Switzerland	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No								
Turkey	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
United Kingdom	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No
USA	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N.A.	N.A.	N.A.	No	No	Yes	No
TOTALS (37)	32	28	32	32	18	11	29	13	23	17	18	21	19	13	19	14	14	10	13	12	9	4	12	6

See page 2 for notes and comments from countries

3 NOTES AND COMMENTS ON RESPONSES

Australia	Operational Regulation 5.1.16 – All freefall descents made by parachutists who do not hold a Certificate Class 'D' (Australian) must be made with equipment fitted with an operational activation device. O.R. 6.1.14 – An automatic activation device set to operate at a safe height: a) the main parachute; or b) being an automatic activation device approved by the Director of Safety, the reserve parachute; shall be used on all freefall descents by a student parachutist, other than tandem descent. O.R. 5.8.12 – A Tandem descent shall not be made unless the equipment is fitted with an operational activation device.
Belgium	See the number of fatalities for the last three years!
Bulgaria	(1) Expert & display jumpers may not be required to use AAD (on a case-by-case basis). (2) Government does not regulate parachuting.
Cyprus	Even though AAD is not compulsory everyone uses AAD (Cyprus)
Czech Rep.	Use of AAD is mandatory for all students from April 2004.
Germany	The use of VIGIL AAD is also approved in Germany. Number of non-AAD users is decreasing.
Hong Kong, China	AAD is a very good system. We have been compulsorily using it since 1995.
India	AAD should be must for all student jumps and jumps involving Style, Freely and FS.
Lithuania	Compulsory for A,B,C categories (up to 500 jumps). AAD not used for round canopies, Static Line.
Luxembourg	In Luxembourg you must have AAD to jump.
Netherlands	There were 2 saves, plus 8 correct and 3 incorrect AAD fires).
Norway	Use of AAD – approx. 93% for both intermediate and expert NSP jumpers.
Poland	Most of the skydivers in Poland would like to use AAD but they are too expensive.
Portugal	Very important
Saudi Arabia	We use AAD on all our canopies, whether for students or skilled jumpers. The jumper who does not carry an AAD is not allowed to jump. It is important and essential equipment. During 2004 there was no case of an AAD firing, due to low number of jumps made, the strict procedures for canopy opening height and the restrictions on risk.
South Africa	AAD cost is the restricting factor in South Africa.
Spain	4 AAD fires – 1 life saved. A/ AFF Level 4 student in flat spin until AAD fired. B/ Jumper with 15 jumps, low pull and AAD fired. Jumper landed with both canopies. C/ Experienced jumpers, 2-way; lost track of altitude, low pulls, AADs fire, double canopies out.
Turkey	We do believe in its importance, therefore its usage is compulsory countrywide.
United Kingdom	AADs are not compulsory for parachutists jumping Static Line round canopies (though less than 1% of jumps are on round canopies).

4 ANALYSIS OF RESPONSES

Of the 37 countries that responded, AAD was mandatory as follows:-

National Sport Parachuting Organisation – 32 countries (86%) reported that AAD was mandatory for some class or classes or skydivers.

Military Parachuting Organisation - 23 countries (72%) reported that AAD was mandatory for some class or classes of military parachutists.

National Aviation (Government) Authority - 14 countries (38%) reported that AAD was mandatory for some class or classes of skydivers, by their government authority.

AAD Table 2, 2004

Year	National Sport Para Association	Military Parachuting Organisation	National Government Authority
2004	86%	62%	38%
2003	83%	61%	39%
2002	84%	69%	28%
2001	83%	63%	33%
2000	89%	63%	19%
1999	83%	65%	17%
1998	87%	45%	19%
1997	87%	61%	32%
1996	89%	46%	24%
1995	76%	53%	18%

Fluctuation in figures may be accounted for to some degree by the mixture of responding countries from year to year.

Sport Parachuting Organisations

A breakdown of responses relating to National Sport Parachute Associations in the 37 responding countries shows that AAD was mandatory for the various categories of skydivers as follows:-

Jumper Type	No. of Countries	Percentage of 37
Static Line/IAD/JAD Students	28	76%
AFF Students	32	86%
Freefall Students	32	86%
Intermediate Jumpers	18	49%
Expert Jumpers	11	30%
Tandem Jumpers	29	78%
Display Jumpers	13	35%

It should be borne in mind that these figures relate only to the sport parachute associations in the countries reporting.

It is noted that the greatest requirement for mandatory AAD use is for the following categories of parachuting.

AFF Students
Freefall Students
Tandem

These are followed by
Static Line/IAD-JAD students

And the least requirement for mandatory AAD use is with
Intermediate Jumpers
Display Jumpers
Expert Jumpers

This usage requirement pattern is exactly as it was in the 2003 AAD Report

There are eight countries where AAD was mandatory for ALL parachutists. This is normally achieved by consultation between the National Sport Parachuting Organisation and the Government Aviation Authority.

The eight countries are – Belgium, Denmark, France, Hong King China, Luxembourg, Saudi Arabia, Spain and Turkey.

Australia requires AAD use up to ‘C’ Licence level.

Bulgaria may allow Expert and Display jumpers to jump without AAD.
This is determined on a case-by-case basis.

Czech Republic requires AAD use for all students, from April 2004.

United Kingdom requires AAD use for all parachutists, except experts.

5 MANDATORY AAD USE BY GOVERNMENT/OFFICIAL AVIATION AUTHORITY

Fourteen countries (See Table 1) reported that their government or official aviation authority required the use, for some categories of parachutists. In most cases the aviation authority followed the requirement/s of their country’s sport parachute organisation. The details can be found in Table 1.

6 AAD SAVES IN 2004

The following is a list of the responses to the question – *How many confirmed saves by AAD in your country in 2003?*

Australia	1	Luxembourg	0
Austria	0	Netherlands	2 (+ 3 correct & 3 incorrect activations)
Belgium	1	Nprway	0
Bulkaria	0	Poland	1
Canada	4	Portugal	0
Cyprus	0	Romania	4
Czech Republic	-	Saudi Arabia	-
Denmark	0	Serbia/Montenegro	0
Estonia	0	Slovakia	0
Finland	0	Slovenia	0
France	2	South Africa	5
Germany	1	Spain	1
Greece	2	Sweden	0
Hong Kong, China	0	Switzerland	1
Hungary	3	Turkey	-
India	0	United Kingdom	0
Italy	10	USA	No data
Kazakhstan	0		
Kenya	1		
Lithuania	0		
		TOTAL	39

A MINIMUM OF 39 SKYDIVERS MAY HAVE BEEN SAVED BY AAD IN 2004.

The actual figure may be higher, bearing in mind that cutters may be replaced in the field.

AAD Table 3, 2004– Saves, year by year and cumulative

Year	Number of Saves	
2004	39	
2003	62	
2002	93	
2001	50	
2000	59	
1999	45	
1998	63	
1997	83	perhaps 85
1996	46	
TOTAL	540	perhaps 542

In the nine years, 1996 to 2004 inclusive, a minimum of 540 lives may have been saved through the use of AAD.

While comparison between years is unreliable due to the differing rates of response and the mix of responding countries, nevertheless, the large numbers of saves in each year, and the cumulative total in the nine years 1996 to 2004 inclusive, emphasises the importance of the AAD in saving lives.

The actual numbers of AAD saves may in fact be higher as AAD cutters may be replaced without reporting to the national parachute organisation.

This report is produced by the Technical & Safety Committee of the International Parachuting Commission of the FAI.

Any questions regarding the report should be addressed to, Liam McNulty, e-mail- liam@goskydive.ie

7 TABLE OF RESPONDING COUNTRIES 1994 - 2004

AAD Table 4, 2003

Country	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Argentina	1		1	1							
Australia	1	1	1	1	1	1	1	1	1	1	1
Austria	1	1	1				1	1	1	1	1
Belarus			1	1	1						
Belgium	1	1	1	1				1	1	1	1
Brazil			1							1	
Bulgaria									1	1	1
Canada	1	1	1	1	1	1	1	1	1	1	1
Chile											
China, P.Rep.	1	1		1	1	1	1			1	
Croatia					1					1	
Cyprus								1	1	1	1
Czech Rep.	1	1	1	1	1	1	1	1	1	1	1
Denmark	1	1	1	1	1	1	1		1	1	1
Estonia									1	1	1
Finland	1	1		1	1	1	1	1	1	1	1
France	1	1	1	1	1	1	1	1	1	1	1
Germany	1	1	1	1	1	1	1	1	1	1	1
Greece	1	1	1	1	1				1	1	1
Hong Kong	1	1									1
Hungary	1	1	1		1	1	1	1	1	1	1
Iceland	1	1	1	1	1						
India	1	1	1			1			1	1	1
Indonesia	1	1	1	1	1						
Ireland	1	1	1	1	1	1	1	1	1	1	
Israel	1	1	1	1							
Italy	1	1	1	1							1
Japan	1						1	1			
Kazakhstan			1							1	1
Kenya	1	1	1	1	1	1	1	1		1	1
Lithuania	1	1	1					1	1		1
Luxembourg	1	1	1								1
Macedonia	1	1	1	1	1						
Mozambique		1			1	1					
Namibia										1	
Netherlands	1		1	1	1	1	1	1	1	1	1
New Zealand								1	1	1	
Norway	1	1	1	1	1	1	1	1	1	1	1
Poland		1	1	1	1	1	1	1	1	1	1
Portugal	1	1	1	1	1	1	1	1	1	1	1
Romania		1									1
Russia - USSR	1							1		1	
Saudi Arabia										1	1
Serbia/Montenegro									1	1	1
Slovak Republic	1	1	1	1	1	1	1	1	1	1	1
Slovenia	1								1	1	1
South Africa				1			1			1	1
Spain	1	1	1				1	1	1	1	1
Sweden	1	1	1	1	1	1	1	1	1	1	1
Switzerland	1	1	1		1	1	1	1	1	1	1
Thailand	1										
Turkey	1	1	1	1	1	1	1	1	1	1	1
UAE	1	1			1						
United Kingdom		1	1	1	1	1	1	1	1	1	1
Uruguay		1			1					1	
USA	1	1	1	1	1		1	1	1	1	1
Venezuela	1	1	1	1	1		1	1	1		
Yugoslavia						1	1	1			
Zimbabwe								1		1	
TOTALS	38	38	36	29	31	23	27	30	32	41	37

A most sincere thanks to those who responded to the AAD survey for 2004.