

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

2003 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 2003 was 41 countries, from a possible 65 countries. This is a response rate of 63%. See Table 2, Page 4 for other years.

2 TABLE OF RESPONSES

AAD Table 1, 2003

Country	National Sport Parachuting Organisation									Military Parachuting Organisation							National Aviation (Govt.) Authority								
	AAD Compulsory	Static Line Students	AFF Students	Freefall Students	Intermed. Jumpers	Expert Jumpers	Tandem	Display Jumpers	AAD Compulsory	Static Line Students	AFF Students	Freefall Students	Intermed. Jumpers	Expert Jumpers	Tandem	Display Jumpers	AAD Compulsory	Static Line Students	AFF Students	Freefall Students	Intermed. Jumpers	Expert Jumpers	Tandem	Display Jumpers	
Australia	1	Yes	No	Yes	Yes	Yes	No	Yes	No	Yes (FF)	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	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	No								
Brazil		Yes								Yes						Yes									
Bulgaria	2	Yes	No	Yes	Yes	Yes	Yes *	Yes	Yes *	Yes	No	Yes	Yes	Yes	N.A.	N.A.	No								
Canada		Yes	Yes	Yes	Yes			Yes		Yes						Yes	No								
China		Yes		Yes						Yes		Yes					No								
Croatia		Yes	Yes		Yes					Yes	Yes		Yes				Yes	Yes		Yes					
Cyprus		No								No							No								
Czech Rep.	3	Yes								No							No								
Denmark		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes																
Estonia		Yes	Yes	Yes	Yes	No	No	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	N.A.	Yes	Yes	Yes	Yes	No								
Greece		Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes		
Hungary		Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes	No	
India		No								Yes			Yes	Yes			No								
Ireland		Yes	No	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No								
Kazakhstan		No								No							No								
Kenya		No								No							No								
Namibia		Yes	Yes	Yes	Yes			Yes																	
Netherlands	4	Yes	Yes	Yes	Yes	Yes *	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No								
New Zealand																	Yes	Yes	Yes	Yes				Yes	
Norway		Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No								
Poland		Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No								
Portugal		Yes	Yes	Yes	Yes			Yes																	
Russia		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N.A.	Yes	Yes	No	Yes	No data	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Saudi Arabia		Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Serbia/Montenegro		No								No							Yes	No	Yes	Yes	No	No	No	No	No
Slovakia		Yes	No	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	No	No											
Slovenia	5	Yes	Yes	Yes	Yes	Yes *	No	No	No	Yes	Yes	Yes	Yes	Until Lic.	No	No	Yes	Yes	Yes	Yes	Until Lic.	No	No	No	No
South Africa		Yes	No	Yes	Yes	No	No	Yes	No																
Spain		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No															
Sweden		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Switzerland		Yes	No	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	6	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No
Uruguay																	Yes	Yes		Yes			Yes		
USA		Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N.A.	N.A.	N.A.	No	No	Yes	No	No
Zimbabwe		Yes	No	Yes	No	No	No	Yes	No	No															
TOTALS (41)		34	22	31	30	14	9	29	12	25	15	18	22	19	15	18	16	16	11	12	14	7	4	12	5

See page 2 for notes

- 1 Australia – Cypres mandatory for all up to ‘C’ Licence. Not mandatory for ‘D’ Licence.
- 2 Bulgaria – Use mandatory for all freefallers, except experts & display jumpers if freefall delay is less than 30 secs.
- 3 Czech Republic – AAD use mandatory for all students from April 2004.
- 4 Netherlands – Intermediates – compulsory only for those with lower than ‘C’ Licence.
- 5 Slovenia – Intermediates – compulsory for those who have not achieved licence level.
- 6 United Kingdom – AAD not mandatory for Static Line students jumping round canopies, (less than 1% of jumps in UK are on rounds).

3 ANALYSIS OF RESPONSES

Of the 41 countries that responded, AAD was mandatory as follows:-

National Sport Parachuting Organisation – 34 countries (83%) reported that AAD was mandatory for some class or classes or skydivers.

Military Parachuting Organisation - 25 countries (61%) reported that AAD was mandatory for some class or classes of military parachutists.

National Aviation (Government) Authority - 16 countries (39%) reported that AAD was mandatory for some class or classes of skydivers, by their government authority.

AAD Table 2, 2003

Year	National Sport Para Association	Military Parachuting Organisation	National Government Authority
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 41 responding countries shows that AAD was mandatory for the various categories of skydivers as follows:-

Static Line Students/IAD-JAD - 22 countries (54%).

AFF Students – 31 countries (76%).

Freefall Students – 30 countries (73%).

Intermediate Jumpers – 14 countries (34%) Netherlands – AAD use up to ‘C’ Licence.

Expert Jumpers – 9 countries (22%). Australia - Cypres now mandatory up to ‘C’ Licence.

Bulgaria NAC regulations require AAD use by all, except experts making freefalls of less than 30 secs.

Tandem – 29 countries (71%)

Display Jumpers – 12 countries (29%)

It should be borne in mind that these figures relate only to the sport parachute associations in the countries reporting. In some instances sport parachute organisations do not require the use of AAD, but the government aviation body does so. If those countries, New Zealand, Serbia & Montenegro and Uruguay are added in the various categories where the government agency requires AAD use the results are changed in the following areas –

Static Line - add 2 countries – giving a total of 24 (59%)

AFF - add 2 countries – giving a total 33 (80%)

Freefall Students – add three countries – giving a total of 33 (80%)

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

4 MANDATORY AAD USE BY GOVERNMENT/OFFICIAL AVIATION AUTHORITY

Sixteen 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.

There are seven countries where AAD was mandatory for ALL parachutists.

These are – Belgium, Denmark, France, Russia, Saudi Arabia, Spain and Turkey.

Australia requires AAD use up to 'C' Licence level.

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

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

5 NOTES ON RESPONSES

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

Australia	2	Namibia	0
Austria	1	Netherlands	2 + 3 correct activations
Belgium	8	New Zealand	3
Brazil	-	Norway	0
Bulgaria	0	Poland	2
Canada	5	Portugal	0
China	0	Russia	15
Croatia	-	Saudi Arabia	2
Cyprus	0	Serbia/Montenegro	No evidence
Czech Republic	-	Slovakia	0
Denmark	4	Slovenia	1
Estonia	0	South Africa	2
Finland	0	Spain	3
France	?	Sweden	0
Germany	4	Switzerland	3
Greece	2	Turkey	-
Hungary	No data	United Kingdom	2
India	1	Uruguay	0
Ireland	0	USA	No figures
Kazakhstan	0	Zimbabwe	0
Kenya	0		

**A MINIMUM OF 62 SKYDIVERS
MAY HAVE BEEN SAVED BY AAD IN 2003.**

AAD Table 3, 2003 – Saves, year by year and cumulative

Year	Number of Saves	
2003	62	
2002	93	
2001	50	
2000	59	
1999	45	
1998	63	
1997	83	perhaps 85
1996	46	
TOTAL	501	perhaps 503

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 eight years 1996 to 2003 inclusive, emphasises the importance of the AAD in saving lives.

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

6 COMMENTS BY RESPONDENTS

Australia	Cypres now mandatory up to 'C' Licence..
Austria	There are no more round mains and reserves in sport jumping.
Bulgaria	There have been no cases of gear malfunction or human error reported, thus no AAD activation took place. It would be better for the jumpers, for their Instructors and DZ operators (and bad for attorneys-at-law) if AADs are used by all A, B and C jumpers, and by D jumpers if the delay exceeds 30 seconds.
Cyprus	Even though AAD is not compulsory, everybody uses AAD (Cypres).
Czech Rep.	Use of AAD is mandatory for all students from April 2004.
Denmark	From January 2005 it is mandatory to use AAD in Denmark.
Finland	An AAD might have saved the one person who died in 2003, but it had not yet been installed on the rig. An RSL almost certainly would have saved her.
France	AAD is mandatory for everybody since 1 st January 2003 and I am very proud of that!
Germany	The use of VIGIL AAD is also approved in Germany.
India	AAD should be must for all student jumps and jumps involving Style, Freefly and Formation Skydiving.
Netherlands	Use of AAD is mandatory for Intermediate jumpers up to 'C' Licence level.
New Zealand	Of the three AAD saves in 2003 – One was an FXC firing and student may have completed reserve activation. The other two were Cypres and would probably have ended in fatality if not on. Some dropzones in NZ make AAD use mandatory on their DZs, others for certain disciplines.
Norway	Norwegian Air Sports federation has found that a requirement for compulsory use of AAD will have small impact, as more than 91% of jumps by intermediate and expert jumpers are made with an AAD.
Poland	Most Polish skydivers would like to use AAD but they are too expensive for the jumpers.
Portugal	Very important
Spain	Of the saves – 1) Jumper with 75 jumps – could not find handle to open main, AAD fired and saved his life. 2) Freefly – 4,000 and 120 jumps – They lost track of altitude – AADs fired as mains were being deployed. 3) Freefly – 300 and 500 jumps – Lose track of altitude – AADs fire as they deploy their mains. 4) Tandem – lose track of altitude – problem to deploy main – Cypres fired and saved two lives. 5) 150 jumps – low pull – AAD fired – cut away and landed reserve. 6) 200 jumps – low pull – AAD fired – landed with two canopies.
United Kingdom	AAD is mandatory in Spain for all skydivers since beginning of 2003.
U.S.A.	AADs not compulsory for parachutists jumping Static Line round main canopies, though less than 1% of jumps are on round canopies.
	We are not sure about AAD saves since reporting is spotty and with the cutters being field-replaceable.
Zimbabwe	The cost of the AAD translates to two months salary and remains unattainable to most skydivers in Zimbabwe.

7 TABLE OF RESPONDING COUNTRIES 1994 - 2003

AAD Table 4, 2003

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

Sincere thanks to those who responded to the AAD survey for 2003.

This report is produced by the Technical and Safety Committee of the International Parachuting Commission of the FAI. Any questions regarding the report should be addressed to the compiler, Liam McNulty, e-mail- liam@goskydive.ie