

# **THOMAS** Sports Equipment



Zerox in Cordura with GQ SAC and Fury main.

#### SERVICE FROM 'A' TO 'D'

Nineteen years in our sport has provided TSE with a wealth of experience in the development and manufacture of parachute equipment...an enthusiasm and commitment producing THE complete service. A service second to none. This in turn means that you can be confident in the knowledge that with TSE you are using the best available, from that initial PLF through to SCR and beyond...

Staff qualifications are more than impressive. 4 FAA Master Riggers (4 BPA Adv. Rigger/Examiners), with a collective total of over 6000 jumps oversee all aspects of the production, maintenance and repair operation at the loft. Every care is taken to ensure that each rig from TSE meets the highest possible standards, from basic S/L to the most advanced assemblies on today's market. Mr. Walter Gubbins I.F.C. in this seasons 'Thomas Tropical Kit' gets his knees together and boogies through South American skies. The large, furry rodent sleeping under his hat was a gift from a grateful Brazilian 2 Way Sequential Team.

Suit by Symbiosis · Make-up by Mandy · Photo by Leo

# QUALITY AND RELIABILITY YOU CAN TRUST

It should come as no surprise to find out that we have supplied student freefall rigs (including AFF kit developed by TSE for use in this country), to the majority of British clubs. Of the largest military and civilian centres, APA at Netheravon, RAFSPA at Weston, Slipstream Adventures, Headcorn P.C. and Peterborough P.C., all use equipment from TSE for advanced students. If you've just come through the Cat system, the chances are that TSE were helping you progress.

And it doesn't stop there...

At the top of the range, the TSE CHASER still maintains its position as the best-selling state of the art rig in the U.K., with over 1500 now in the possession of some of the country's finest skydivers.

#### FOLLOW THE LEADERS

The British 8 way team doesn't make decisions lightly concerning new equipment. Nor do the Royal Marines. Their decision is made based upon sound knowledge and experience. TSE were pleased to supply them with all their requirements.



Produced by Roger Grove

Leather Chaser with Firelite Reserve and Maverick Main

#### THE FIGURES

Whilst our quality will never be sacrificed for bargain-basement prices, take a look at our list in this issue and you'll see just how competitive it is. GENUINE affiliation with major U.S. manufacturers together with comprehensive currency handling facilities, enable smooth, cost effective transactions to be made on either side of the Atlantic.

No matter if it's a purchase, repack or repair, TSE will come through with service, quality and a keen price...fast.

Give Chris or Derek a call on 0262 678299/602489 or write/drop in for details and information packs



THOMAS SPORTS EQUIPMENT · PINFOLD LANE · BRIDLINGTON · N. HUMBERSIDE · YO16 5XS

<section-header>QUALITYTHE NAME ALONE<br/>DEFINES ITTANDALOONDEFINES ITTANDALOONDEFINES ITSince the aler<br/>RWSuits<br/>Sweeps Cottage,Major canopy dealers<br/>in stock now:-

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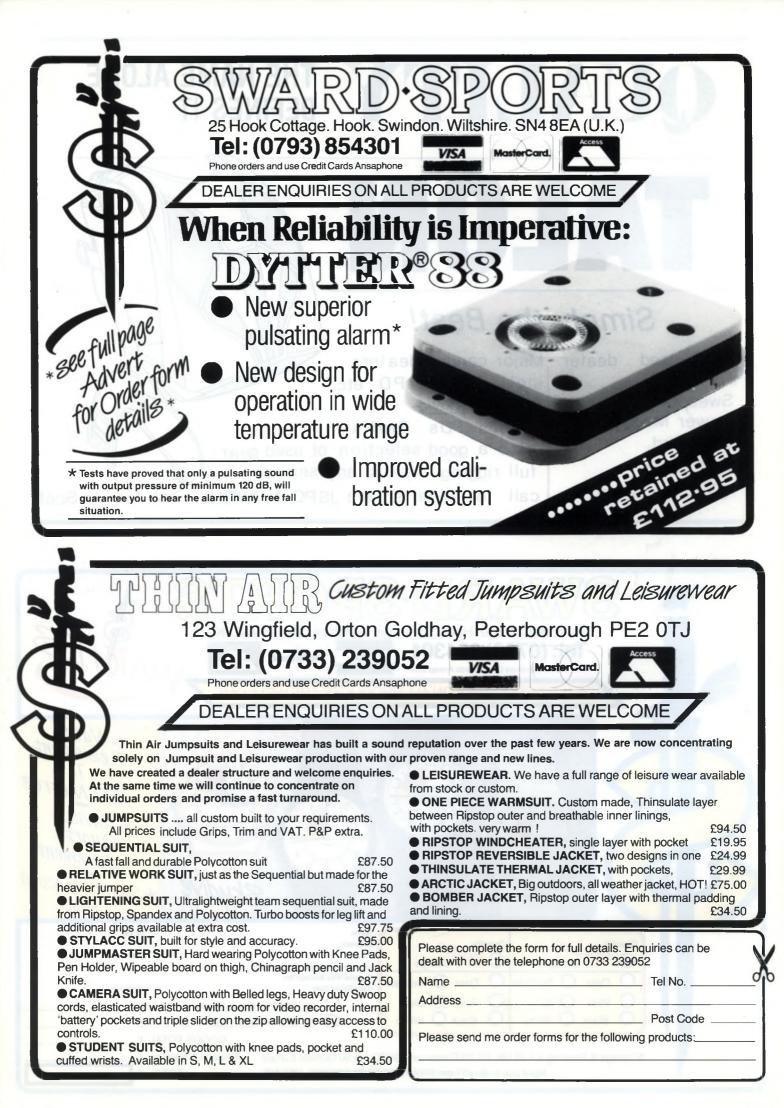
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SO YOU WANT TO BE



JOURNAL OF THE BRITISH PARACHUTE ASSOCIATION WHARF WAY GLEN PARVA LEICESTER LE2 9TF Tel. (0533) 785271

VOLUME 24 No.9

JUNE/JULY 88

#### EDITORIAL

Been having a hard time of it?...Complaints and criticisms coming thick and fast?... Well, if you're looking for a little light relief, you could always try hanging around the Hippodrome in London at lunchtime.

Jhat's where J found myself a couple of weeks ago - with a valid reason, J hasten to add. J was there to meet up with a visitor from the Perris Valley Parachute Centre - and what an event it turned out to be. You would be amazed at the number of people who choose the Hippodrome as a meeting point - which made life difficult for me to begin with. You see, J'd never actually met Martin Miller before. He, at least, had seen a photograph of me. All J had to go on was "J'll be wearing a white Perris Valley tee-shirt". Certainly, J was under a heavy disadvantage from the start.

J arrived on time to find the place swarming with tee-shirted tourists of all shapes and sizes and, as J wasn't sure whether J should be looking for a tall blond, short grey-haired or tubby-balding, J eyed up every approaching tee-shirt hopefully. By the time J had been standing on the corner for 20 minutes, anyone within the remotest vicinity of the Hippodrome and wearing a tee-shirt was at risk of being accosted as J hunted for clues. After all, J'd never seen a Perris Valley tee-shirt and ...well...pink, grey, blue and windsurfers can all look remarkably white-Perris-Valley-Skydiver-like when you're desperate. At last a white patterned tee-shirt approached, with the occupant smiling in acknowledgement. J grinned with relief, shouted hello and was just about to launch into my welcome speech when the bewildered man stepped back nervously, then continued passed me to join another white tee-shirted man standing behind. Soon someone else caught my eye, but he was carrying a copy of 'Le Monde' and speaking French (definitely not my man - though he was wearing Ron Hills and Reeboks!) Next a very tall, seedy looking chap in a white tee-shirt and long, dark coat, with a decidedly suspect looking package under his arm, came to stand next to me (J hoped he definitely wasn't my man). After a number of other embarrassing false alarms (by which time even the man selling 'The Standard' had become a hopeful) J decided it might be safer to stay quiet until J was sure.

On the verge of admitting that J'd probably got the arrangements wrong, a flustered man dashed passed and came to a stop on the corner, struggling for breath ... and yes, wearing a white Perris Valley tee-shirt. Never has there been a more impressive welcoming outside the Hippodrome (though J'm sure Martin was completely baffled by my attentions).

Anyway, all's well that ends well, and over a Pizza and Perrier we talked about the exciting news coming from the new-look Perris Valley. Under the new ownership of Steve Mack, the locals have been witnessing all sorts of improvements, with lots of changes that should interest anyone thinking of having a skydiving holiday abroad this year. Watch out for more news about what's happening there .... hopefully, we'll also be hearing what's going on at other centres overseas - as well as AJ HOME over the next few months. Start sending your news and piccies now!

> Photo Credits: Cover: Kate Cooper from 'Square One', Perris Valley at the Deland "Spring Fling Boogie '88" by Leo Dickenson Centre Pages: CRW Stack over Netheravon by Paul Applegate

> > Design and Layouts by Angel Graphics, Andover. Printed in England by Fisherprint, Peterborough.





#### Holland

Holland is hosting an International 16-way competition from August 25-28 - the 8th time the event has been staged by the Nationaal Parachutisten Centrum at Teuge.

The famous Pink Skyvan will be on hand to carry jumpers skyward over 8 rounds of the competition, in pursuit of the awards.

To enter, teams must apply in writing - before August 1st 1988 -to Nationaal Parachutisten Centrum Teuge, De Zanden 19, 7395 PA Teuge.

Camermen and women with their own equipment are required and will be entitled to free jumps in return for their photographic services. Anyone interested should contact Ron Schaap or Ad de Jong on 057 63604.



Bob Harman collects his Sexta-Diamond Wings and Freefall Badge for his 7,000th jump and for 84 hours in freefall, from Z-Hills owners George and Betty Kabeller. Ex-Red Devil Bob is now Chief Organiser at the Florida Centre.



YOU STILL HAVE TO START ON THE STATIC LINE."

Cornwall Parachute Centre is hosting a Bank Holiday Boogie on August 27/28/29.

The "Beijing Fling" Boogie - sponsored by China Airways features 3 events \*\* a S/L Round Competition (teams of three with team and individual prizes) \*\* Mix 'n Match 4way LAC (team and individual prizes) \*\* Mix 'n Match 8way speed star. There'll also be beach jumps, a B-B-Q and disco - but it's limited entry, so contact Linda Grant on 0841 540691 early to avoid disappointment.



# FROM TRAPEZE TO TANDEM MOLLY'S JUMP ACROSS TIME

At the end of last year, Molly Sedgwick, aged 67, made an historic, 12,000ft jump that was to link some eighty years of parachuting history!

#### DOLLY SHEPHERD - EDWAR-DIAN LADY PARACHUTIST

Unless you were alive in the first decade of this century you wouldn't have seen her mother, Dolly Shepherd jump, for it was in the summer of 1904 at the age of 17 and after only 30 minutes training, that she made her first parachute descent.

Rising to a height of 4 or 5,000 feet, hanging beneath a gas or hotair balloon (for aeroplanes were yet to fly in Europe!), she would release from the balloon and descend by parachute, holding only to a trapeze-bar, with a narrow webbing sling between her legs to help take the weight of her body there was no such thing as a harness.

#### MID-AIR RESCUE

With indomitable pioneering spirit she survived the many adventures which befell her - and performed the first mid-air rescue of another parachutist, above the clouds at over 11,000 feet, thus earning a place in the annals of parachuting history and the Guinness Book of Records!!

Dolly became a member of an elite group of pioneering aeronauts, who at the time were thrilling crowds with their balloon and parachuting displays. It was an exciting time, when only the intrepid few ventured into the air let alone parachuted from it!!

Dolly Shepherd, in her Edwardian Knickerbocker suit was considered most daring at the time and was the darling of the vast crowds who flocked to see those early skydivers. Over the next eight years she went on to make over 200 parachute jumps and was witness to those exciting years when the first aeroplanes began to stagger into the air.



\*Tandem Skydive .... Stuart Meacock

At the end of her life Dolly herself was thrilled to be involved with modern parachuting, flying with the Red Devils at the age of 90 and as the guest of the R.A.F. Falcons when they "dropped in" at Eastbourne just before her 97th birthday. Sadly she died soon after, on 21st September 1983 at her Eastbourne home.

### HER DAUGHTER TAKES TO THE AIR IN TANDEM

"Oh! I was born too soon", she had said with real feeling. "I should love to make a freefall!"

That wish has now been fulfilled by her daughter, Molly, who was just 50 years older than was her mother when she made her first parachute descent.

Molly gives charity fund-raising talks all over the country on "The Adventures of an Edwardian Lady Parachutist" (the sub-title of her mother's book "When The 'Chute Went Up') and it was following one of these that she was invited by ACTION ENTERPRISE to make a jump and so was, for the first time, to enjoy the feeling of freedom and exhilaration so often experienced and loved so much by her mother.

"To do this now is beyond imagination and I'm so thrilled!!"

So, nearly 80 years after her mother had performed the first mid-air rescue at over 11,000 feet, Molly made a Tandem skydive at Sibson with Tandem Instructor Dave Morris from 12,000 feet and freefell to 5,000 feet before the parachute was opened.

Molly received 'in flight' instruction and was shown how to fly the modern Ram-air parachute to an accurate and tip-toe soft landing. Indeed a far cry from Dolly's half an hour of training prior to her first jump in 1904!!

The event, in aid of the 'Dolly Shepherd Guide Dogs for the Blind Appeal', recorded on film by myself and Stuart Meacock, achieved worldwide press coverage and indeed appeared on three television programmes, including a specially made film for the BBC's 'Blue Peter'.

This is not however, the last you'll hear of Molly, for she is as indomitable as her famous mother! So taken with Skydiving was Molly, that she plans further Tandem Jumps this year, including one from a Hot-Air Balloon! In addition she continues a busy schedule of talks countrywide as well as writing a series of articles on her mother's life for future publication in 'Sport Parachutist' - Watch this space!!

Garry Gnapp

# **DIARY OF EVENTS 1988**

#### **COMPETITIONS, BOOGIES ETC.** U.K.

#### INTERNATIONAL COMPETITIONS, **BOOGIES ETC**

Date	Event	Location	Date
7-8 May	Easter Regional		12-15 May
	Accuracy Competition	lpswich	16-22 May
7-8 May	8-way Speed Meet	Abbotsley	21-23 May
7-8 May	9-way Speed Meet	Headcorn	27-30 May
14-15 May	Surprise Meet	Netheravon	,
21-22 May	Metropolitan Police Accuracy Meet	Headcorn	3-5 June
27-30 May	8-way Scrambles Competition	Langar	7-25 June
28-30 May	Scottish National		1 A halv
	Championships (Also		1-4 July 8-11 July
	Northern Regional 4-way RW		8-11 July
	Competition)	Strathallan	9-10 July
28-30 May	POPs Meet	Netheravon	orodaty
28-30 May	Flock Boogie	Sibson	
4-12 June	NATIONAL		20-30 July
	CHAMPIONSHIPS		
	(CLASSICS & CRW)	Bridlington (NEW VENUE)	28 July-7 August
16-19 June	Annual Boogie/		0.44.4
	Competition	Langar	6-11 August
18-19 June	10-way Speed Meet	Netheravon	
18-19 June	Southern Regional		17-28 August
	4-way RW Competition	Weston on the Green	18-28 August
25-26 June	8-way LAC Meet	Sibson	to Red Devils at t
25-26 June	Central Regional	anoologi LAS	21-28 August
20 200000	Accuracy Competition	Langar	
9-10 July	Duck End Accuracy Meet	Abbotsley	25-28 August
16-17 July	8-way Speed Meet	Sibson	1-4 September
18-22 July	British Collegiate		omaidae una u
to a second second second	Nationals	Sibson	2-5 September
22 July-2 August	Swansea Boogie	Swansea	22-23 &
23-24 July	Northern Regional		29-30 October
	Accuracy Competition	Bridlington	28-30 October
23-24 July	Eastern Regional 4-way RW Competition	Abbotsley	2.0 November
20-30 July	<b>RAPA</b> Championships		2-9 November
30-31 July	Big Aircraft Boogie	Netheravon	23-27 November
6-14 August	NATIONAL		
appeared on the	CHAMPIONSHIPS (RW)	Weston on the Green (NEW VENUE)	
13-14 August	LAC Meet	Cranfield	
20-21 August	16-way Meet	Weston on the Green	
22 Aug-1st Sept	Army Championships	Netheravon	
27-28 August	8-way Speed Meet	Abbotsley	
27-29 August	August Bank Holiday	Abbotatoy	
27-23 August	Boogie	Sibson	Date
3-4 September	POPs Meet	Doncaster	9-13 May
3-4 September	South West Regional		(New date)
	4-way RW Competition	Netheravon	15-19 August
10-11 September	Speed 8 Competition	Sibson	15-19 August
17-18 September	LAC Meet	Headcorn	22-26 August
17-18 September	South West Regional Accuracy Competition	Dunkeswell	14-18 November
04.05.0		(RNRMSPA)	C. MOM STAL DA DA
24-25 September	10-way Speed Meet	Cranfield	21-25 November
24-25 Sentember	LAC+1 Meet	Netheravon	

LAC+1 Meet

24-25 September

4th July Boogie Hercules Boogie

International Accuracy Competition

**RAPA** Championships

WORLD CHAMPIONSHIPS (CLASSICS) World Skydiving Convention

World Cup in Accuracy and Style WORLD **CHAMPIONSHIPS (CRW)** World Cup in 4 & 8-way RW International 16-way

**RW** Competition 'Pink Boogie'

Labor Day Boogie

**POPS** Meet International Day & Night Accuracy Meet

**CYPRUS** Championships Thanksgiving Boogie

#### Location

Teuge, Holland Malmi, Finland Texel, Holland Perris, California

Vercelli, Italy

Groninge, Holland Perris, California Moorsele, Belgium

Pfullenderf, W. Germany Bad Lippspringe, W. Germany

Nykiping, Sweden

Quincy, Illinois, U.S.A.

Vichy, France

Vichy, France

Vichy, France

Teuge, Holland Hassfurt, W. Germany Perris, California

Hong Kong

Locarno, Switzerland Cyprus Perris, California

#### **BPA COURSES**

Event	Location
Exam/Pre-Advanced Instuctor Course	Bridlington
PI/Advanced Instructor Course	Cornwall
Exam/Pre-Advanced Instructor Course	Cornwall
PI/Advanced Instructor Course	lpswich
Exam/Pre-Advanced Instructor Course	lpswich

Netheravon

### **CALENDER OF EVENTS**

	A SHARMAN CENTRE
June 11-19.	August 17-28.
RW course at the Para-Centro Locarno, Aeroporto Can-	World Cup in Accuracy and Style in Vichy, France.
tonale, CH-6596 Gordola, Switzerland. Tel:093-672651.	August 18-28.
June 16-19.	World Championships in CRW in Vichy, France.
"Bocksbeutel-Boogie" in Hassfurt, West Germany. Info:	August 21-28.
Bruno Gandziarowski, Wingertsberg 5, D-8612 Ebrach,	World Cup in 4-way and 8-way RW in Vichy, France.
West Germany. Tel: 09553-1096.	August 25-28.
June 17-19.	International 16-way RW Competition in Teuge. 8 rounds
German National Championships in Team Accuracy in	for 16-way RW teams from a Short Skyvan. Registration
Braunschweig, West Germany.	fee: Hfl 45. Price per jump from 12,500 feet: Hfl 42,50.
June 17-25.	Registration deadline is July 1,1988. Info and registration:
1988 Dutch Championships at the Eelde Airport near	Nationaal Parachutisten Centrum Teuge, De Zanden 19,
Groningen. Accuracy, Style, RW and CRW. Info: KNVvL	NL-7395 PA Teuge, Holland. Tel: 05763-604 or Ad de Jong/
Parachuting, Jozef Isrealplein 8, NL-2596 AS Denm Haag,	Ron Schaap 05763-1604.
Holland. Tel: 070-245457.	Nitrochon Çavana 18 linihigin Joon, St. 8 17 24
June 18-26.	August 27 - September 4.
CRW course at the Para-Centro Locarno, Aeroporto Can-	RW course at the Para-Centro Locarno, Aeroporto Can-
tonale, CH-6596 Gordola, Switzerland. Tel: 093-672651.	tonale, CH-66596 Gordola, Switzerland. Tel: 093-672651.
June 25-26.	September 1-4: "Pink-Boogie" in Hassfurt, West Germany.
International "Three Country Skydiving" in Vorarlberg,	Info: Bruno Gandziarowski, Wingertsberg 5, D-8612
Austria. Info: Fallschirmsportclub Silvretta, Walter Gros-	Ebrach, West Germany. Tel: 09553-1096.
singer, Harderstrasse 23 b, A-6923 Lauterach, Austria. Tel:	September 2-5.
05574-37386.	
June 25 - July 3.	Labor Day Boogie in Perris. Info: Perris Valley Parachute
	Center, 2091 Goetz Road, Perris, California 92370, USA.
RW course at the Para-Centro Locarno, Aeroporto Can-	Tel: (714)657-9576 or 657-3904.
tonale, CH-6596 Gordola, Switzerland Tel: 093-672651.	September 3-11.
July 1-4.	German National RW Championships in Ampfing, West
4th of July Boogie in Perris. Info: Perris Valley Parachute	Germany.
Center, 2091 Goetz Road, Perris, California 92370, USA.	September 10-12.
Tel: (714) 657-9576 or 657-3904.	Austrian Championships in Accuracy and Style in Wels.
July 8-11.	September 13-16.
Hercules Boogie in Moorsele, Belgium. Info: Ronny Veer-	Austrian Championships in 4 and 8-way RW in Wels,
vaet, Maalstraat 16, B-8640 Moorsele, Belgium. Tel: 32-56-	Austria.
500092.	October 28-30.
July 9-10: International Accuracy Competition "Buschoren-	International Day and Night Accuracy in Locarno, Switzer-
Pokal" in Pfullendorf, West Germany. 6 rounds. Info:	land. Info: Para-Centro Locarno, Aeroporto Cantonale,
Fallschirmsportclub Pfullendorf, Buschorenweg 6, D-7798	CH-6596 Gordola, Switzerland. Tel: 093-672651.
Pfullendorf, West Germany. Tel: 07552-8881.	November 23-27.
July 9-17.	
	Thanksgiving Boogie in Perris. Info: Perris Valley
RW course at the Para-Centro Locarno, Aeroporto Can-	Parachute Center, 2091 Goetz Road, Perris, California
tonale, CH-6596 Gordola, Switzerland. Tel: 093-672651.	92370, USA. Tel: (714)657-9576 or 657-3904.
July 22-31.	December 5-13.
Hercules Boogie in West Germany. The location of the	International Accuracy and Style Competition in Turin,
boogie is not yet known.	Italy.
July 23-31.	December 25, 1988 - January 5, 1989.
Accuracy course at the Para-Centro Locarno, Aeroporto	Hercules-Boogie in South Africa. Info: Biwi B. Derx, Post-
Cantonale, CH-6596 Gordola, Switzerland. Tel: 093-	fach 1164, D-8202 Bad Aibling, West Germany. Tel: 08061-
672651.	2584.
July 28 - August 7.	December 26, 1988 - January 8, 1989.
World Championships in Accuracy and Style in Nykoping,	New Year's dives at the Para-Centro Locarno. Info: Para-
Sweden. Info: 19th World Championships, Box 3093, S-	Centro Loccarno, Aeroporto Cantonale, CH-6596 Gor-
58003 Linkoping, Sweden. Tel: 013-139450.	dola, Switzerland. Tel: 093-672651.
July 30-31.	January 23-27, 1989.
8th International 4-way Accuracy Competition ("Rossle"	PIA Winter meeting and POPS Reunion. Cruise from Los
Trophy of the city of Stuttgart). 6 rounds. Registration fee:	Angles to Mexico for four days from \$419.00. All skydivers
DM 140. Info: FSC Stuttgart, Dieter Salzburger, Rinken-	welcome, you need not be a PIA or POPS member to go. fmi
berg 6, D-7000 Stuttgart 60, West Germany. Tel: 0711-	Dan Poynter, P.O. Box 4232, Santa Barbara, CA 93140-
423236.	4232, USA. Telephone (805) 968-7277, Fax (805) 968-1379.
July 30 - August 7.	
	January 23-27, 1989.
RW course at the Para-Centro Locarno, Aeroporto Can-	PIA Winter meeting and POPS Reunion. Gruise from Los
tonale, CH-6596 Gordola, Switzerland. Tel: 093-672651.	Angeles to Mexico for four days from \$419.00. All skydivers
August 6-11. World Shudiving Converting 99 in Onigen Illingia USA	welcome, you need not be a PIA or POPS member to go. fmi
World Skydiving Convention 88 in Quincy, Illinois, USA.	Dan Poynter, P.O. Box 4232, Santa Barbara, CA 93140-
Info: Skydive Sandwich, USA. Tel: (815)786-8200,8924.	4232, USA. Telephone (805) 968-7277, Fax (805) 968-1379.

### BRITISH PARACHUTE ASSOCIATION CLUBS AND CENTRES

#### **A1 SKYDIVING CENTRE**

We have two Islanders, (one Piston, one Turbine). We run weekend and midweek static line course every week. We also run progression courses every month during the summer and every six weeks during the winder. AFF courses and Tandem are also availlable. We are London's nearest centre with unrestricted airspace. Give us a try and we assure you of a warm welcome. A1 Skydiving Centre 'Rectory Farm', Abbotsley Huntingdon, Cambs, PE19 4UE Tel: Great Gransden 07677 7065

#### BLACK KNIGHTS PARACHUTE CENTRE

Week-end centre, first jump SL courses, radios and aeroconicals. Tandem Courses. SL & FF progression to category 10. RW and CRW instruction. Cessna 185 (inflight door). SL & FF kit hire. Accuracy pit, canteen, washing and toilet facilities. Camping and caravans on DZ, B & B local. Contact Bob Parry Patty's Farm, Hillam Lane, October Pit Longenter

Cockerham, Nr. Lancaster Tel:weekend 0524 791820 midweek 051-924 5560

#### **BORDER PARACHUTE CENTRE**

In beautiful Northumbrian countryside. 207, full equipment, free hire, RW/CRW instruction, Tandem. Visitors welcome, no membership fees. Centre has superb accommodation (booking essential). Bar, Restaurant, Entertainments. Weekend and midweek (summer). Border Parachute Centre Dunstanburgh House, Embleton Ainwick, Northumberland NE66 3XF Tel: 0665 76 588 or 433

#### **BRITISH PARACHUITE SCHOOL**

Open daily. First jump courses and accelerated freefall courses. Training for progression jumps and relative work always available. Cessna 206 and islander. Accuracy pit. Bunkhouse with showers and cafe on DZ.

British Parachute School The Control Tower, Langar Airfield Langar, Nottingham Tel: 0949 60878

#### BRITISH SKYSPORTS PARACENTRE

Open 7 days. 3 Aircraft. Accommodation. Free Camping, Bar, Canteen. RW and CRW Coaching. Experienced Equipment. Tandem rides and evaluation courses available. Progressing students very welcome. British Skysports Paracentre Bridlington Aerodrome, Bridlington East Yorkshire Tel: 0262 677367

#### **CORNWALL PARACHUTE CENTRE**

ls different, its about people, enjoyment, safety. Not just your average centre. C182, Video, Tandem jumping, finest equipment, camping, chalets, B & B, good food, friendly staff. Daily 9.00 a.m. until sunset. Please contact Secretary Linda Ruth Grant. Cornwall Parachute Centre Frans Ranch, Old Naval Airfield St. Merryn, Cornwall Tel: 0841 540691

### DUNKESWELL INTERNATIONAL SKYDIVING CENTRE

Friendly full time club with basic courses and tandem jumping available all year round. Student progression, RW and CRW instruction, accuracy pit. Student and ram air kit available. Overnight accommodation, B & B nearby, canteen, bar and camping on DZ, Cessna 206. Non members welcome.

DISC, Dunkeswell Airfield Nr. Honiton, Devon Tel: 040 489 350



#### EAGLESCOTT SKYDIVERS

A weekend club which caters for all levels with a great club atmosphere. 1st jump, RW, CRW tuition. Cessna 182, camping, B & B, unbeatable pub and grub. Alternative adventure activities by the sea. 18 Weirside Way Silverleaft Estate, Barnstaple Devon, EX37 7RB Tel: 0271 75000

#### EAST COAST PARACHUTE CENTRE

Single engine aircraft, twin when necessary. Student and advanced parachute kit hire. Style, accuracy and relative work instruction. Weekend courses (pre para training available mid-week). Non members welcome. East Coast Parachute Centre

East Coast Parachute Centre Oakington Airfield (Military) Longstanton, Cambridge Contact address: W.P. Slattery 8 Burns Crescent Chelmsford CM2 OTS Tel: 0245 268772

#### **FIFE PARACHUTE CENTRE**

Full time 9 to dusk. Caters for first jumps, progression. RW, CRW, tandem. Facilities include bar, restaurant, two aircraft, camping facilities, B & B locally, numerous bad weather facilities nearby. Fife Parachute Centre Fife Airport, Glenrothes, Fife Tel: 0592 756609/753792

#### FLYING TIGERS SKYDIVING CENTRE

Beginners' courses, AFF, tandem, RW,CRW instruction, kit hire. Restaurant, bar, camping available, accommodation nearby. 180 Islander and Gazelle always available. Open weekends and evenings. Flying Tigers Skydiving Centre

Flying Tigers Skydiving Centre Goodwood Airfield, Nr. Chichester West Sussex Tel: Kevin McIlwee 0243 780333

#### HALFPENNY GREEN PARACHUTE CENTRE

The Midlands' only full-time centre. Open 6 days. Islander, C182, accuracy pit, SL/FF kit hire, RW,CRW, AFF instruction. Washing/Toilet facilities, restaurant all day, camping available. 9 miles Wolverhampton.

Halfpenny Green Parachute Centre The Airfield, Bobbington Nr. Stourbridge, West Midlands Tel: 038 488 293

#### **HEADCORN PARACHUTE CENTRE**

Full time, 9 to dusk, very active midweek. All levels of instruction/progression, AFF, RW, style, Accuracy. Experienced staff, 2 Islanders, video, team rates. Canteen, free accommodation. Everybody welcome. Headcorn Parachute Club The Airfield, Headcorn, Kent Tel: 0622 890862

#### HEREFORD PARACHUTE CLUB

Beginners' courses with full progression. SL/FF Aeroconicals, AADs, Radios, RW/CRW coaching, tandem, full kit hire, cutaway rig. Visitors (C licence plus) welcome. Canteen, bar, toilets, showers, accommodation, accuracy pit, 2 C206s. Closed Mondays.

Hereford Parachute Club Shobdon Airfield, Nr. Leominster Herefordshire, HR6 9NR Tel: 056 881 551

#### **IPSWICH PARACHUTE CENTRE**

Open 6 days a week (closed Tuesdays). Islander and Cherokee V1 permanently available - Student, RW and CRW instruction by full time staff, accuracy pit, excellent rigging facility. Food, accommodation, camping and bar on drop zone. Ipswich Parachute Centre Ipswich Airport, Nacton Road Ioswich, 1P3 90F

lpswich, 1P3 9QF Tel: 0473 710044

#### LINCOLN PARACHUTE CENTRE

Full time approved centre - special student/group course rates. Helmet radios and AADs on all student equipment. Hot drinks, snacks, limited accommodation available. No club membership or kit hire charges. Lincoln Parachute Centre Sturgate Aerodrome, Upton Gainsborough, Lincs, DN21 5PA Tel: 0427 83620

#### LONDON PARACHUTE SCHOOL -CHARITY PARACHUTING

Weekend club for student parachutists. Farmland DZ, height restriction, no accommodation. Not every weekend, advise telephone beforehand. GQ Aeroconicals, radios, boots, jumpsuits, helmets loaned free.

London Parachute School/ Charity Parachuting PO Box 30, Abingdon Oxon, OX14 1DX Tel: Abingdon 0235 24725 (24 hrs)

#### LONDON SKYDIVING CENTRE

1st jump courses. S/L, AFF, tandem. Full time centre. Skyvan and Cessnas. New clubhouse with showers, accommodation, canteen, bar, kit hire, camping. Easily accessible from London and the Midlands, close M1 (J13 14) **The London Skydiving Centre Cranfield Airport, Cranfield Bedford, MK43 OAP** Tel: 0234 751866

#### **MIDLAND PARACHUTE CENTRE**

Skydive MPC. Great weekend club. Islander, free kit hire, video and tandem plus S/L and progression/RW jumping. Bunkhouse and showers, bar and cafe on airfield. All welcome. Hone DZ of the Slug Brothers! Midland Parachute Centre Long Marston Airfield Stratford-upon-Avon, Warks Tel: 0789 297959

#### NORTHERN PARACHUTE CENTRE

#### (Leeds Bradford/Merlin)

Open every weekend. Islander, accuracy pit, clubhouse, cafe on camp. Friendly atmosphere, non members made very welcome. CRW/RW instruction, air video available. B & B and free camping off camp. Norther Parachute Centre

Norther Parachute Centre Topcliffe Airfield, Nr. Thirsk Tel: 0748 832521 Ext 5367

#### NORTH WEST PARACHUTE CENTRE

Situated in fabulous Lakeland Scenery. Open weekends and Bank Holidays. Student progression, RW,CRW,BN Islander, kit hire, accuracy pit, canteen, toilets, shower. Bunkhouse and camping on the airfield

North West Parachute Centre Cark Airfield, Flookburgh Nr. Grange-over-Sands, Cumbria Tel: Weekends 044853 672/555 Tel: Weekdays 0772 720848

#### PETERBOROUGH PARACHUTE CENTRE

Full time centre. Shorts Skyvan, RW instruction. Ground to Air and Air to Air Video, unrestricted altitude, accommodation, free camping, bar, food, AFF, tandem. Fifteen years' unrivalled experience. Peterborough Parachute Centre Sibson Airfield, Wansford Peterborough Tel: Elton 08324 490

#### **RN & RM SPA**

S/L progression, free fall progression AFF, accuracy pit, CRW. Training by Europe's most experienced and successful jumpers, air to air video, kit hire (round and square), Cessna 182 (inflight door). Bar, canteen, free showers, camping. Dunkeswell Airfield, Dunkeswell Honiton, Devon Tel: Luppitt 040 489 697

#### SCOTTISH PARACHUTE CLUB

Open weekends and most public holidays. C206 and C207, all types of training, best of facilities including: Fan Trainer, Gravel Pit, 2 Training/Lecture Rooms, Air to Air Video, Electronic Pad, Canteen, Lounge Area, Packing Tables. Scottish Parachute Club Strathallan Airfield, Auchterarder Perthshire Tel: 07646 2572 weekends

#### THE SPORT PARACHUTE CENTRE

Young progressive centre, operated by skydivers for skydivers. Student and RW progression/AFF/Tandem/RAPS courses. Weekend and midweek evenings at present. Full-time soon. Cherokee 6 A/C, new club building unrestricted altitude. Canteen and accommodation available **The Sport Parachute Centre Tilstock Airfield Whitchurch, Shropshire Tel: 0948 841111** 

#### **SWANSEA PARACHUTE CLUB**

Everyone welcome. Open Wednesday-Sunday 08.30-last light. S/L Square courses. AADs, radios/AFF/WARP/air-to-air video/Tandem/licensed cafeteria/toilets/camping and caravans. C207, unrestricted altitude. Holiday area. Swansea Parachute Club Swansea Airport Fairwood Commmon, Swansea West Glamorgan, SA27 7JU Tel: 0792 296464

#### **THRUXTON PARACHUTE CLUB**

Open daily, everyone welcome. Full-time staff and rigging loft. Cessna 206 and Islanders. SL and FF kit hire. RW and CRW instruction, pit on DZ. Canteen, washing and toilet facilities. Thruxton Parachute Club Thruxton Airfield, Andover Hants, SP11 8PW Tel: 0264 772124

#### WILD GEESE TRAINING CENTRE

Open 7 days a week, accommodation, full meals, student courses, training to CAT. 10 standard, RW and CRW Instruction, kit hire, Cessna 182 plus 206, night jumps, charity fund raising. Non members welcome.

Wild Geese, Northern Ireland Contact: Dave Penny, 27 Drumell Road Agh#dowey, Coleraine Co. Londonderry Tel: Head Office 026 585 669 DZ 02665 58609

#### **ARMY PARACHUTE ASSOC.**

The Commandant JSPC Airfield Camp, Netheravon Salisbury, Wilts SP4 9NF Tel: Bulford Camp 09803 3371 ext. 245/277

#### **BADMINTON PARACHUTE CLUB**

Badminton, Avon Tel: 045 421 486 Contact: John Davis, New Villas Badminton, Avon Tel: 045 421 249/379

#### **BLACKPOOL PARACHUTE CENTRE**

Blackpool Airport Blackpool Lancs Tel: 0253 41871

#### **DONCASTER PARACHUTE CENTRE**

Doncaster Airport Bawtry Road, Doncaster Tel: 0302 532636 537085

#### **OXON & NORTHANTS** PARACHUTE CENTRE

Hinton-in-the-Hedges Airfield Steane, Nr. Brackley, Northants Contact: M.E. Bolton, 85 Oak Park Road Wordsley, Stourbridge West Midlands, DY8 5YJ Tel: 0384 393373

#### RAFSPA

Weston-on-the-Green, Nr. Bicester, Oxon Tel: 086 989 343

#### **THE RED DEVILS**

Queen's Parade, Aldershot, Hants Tel: 0252 24431 ext. 4600/4699 Contact: Red Devils, Browning Barracks Aldershot, Hants.

#### SILVER STARS PARA TEAM RCT PARACHUTE CLUB

Azimghur Barracks, Colerne Nr. Chippenham, Wilts, SN14 8QY Tel: 0255 743585/743446/743240

#### SOUTH WEST SKYDIVING CLUB

It may be small, but is's friendly. A weekend club in a popular holiday area. Some summer weekday evenings. Student S/L and F/F, progression jumpers welcome. RW and CRW. Free camping and caravanning on A/F. Bar and Cafe. **Cornwall Flying Club Cardinhan, Bodmin Cornwall** Tel: 020882 419

## OVERSEAS CLUBS & CENTRES

#### CYPRUS COMBINED SERVICES

PARACHUTE CLUB(CCSPC) CJSATC Pergamos Camp, BFPO 58 Tel: from UK 0103574 530000 ext. 337/245 Contact: Club CCI JOINT SERVICES PARACHUTE CENTRE, HONG KONG Borneo Lines, BFPO 1 Tel: 0-983 7221

RAPA JSPC(L),4791 SEENELAGER Belefeldstr. Normandy, Kaserre Tel: 01049 5254 82 2378

## OTHER ORGANISATIONS AFFILIATED TO BPA

#### **ACTION ENTERPRISE LIMITED**

Now based permanently at Sibson Airfield: Skyvan Turbine Islander, Cessna, Rapid Progression Courses, Tandem Skydiving. Sibson Airfield Wansford Peterborough PE8 6NE Tel: 08324 677

#### BRITISH COLLEGIATE PARACHUTE ASSOCIATION

Johnathan Borrill 46 Albert Grove Lenton Nottingham, NG7 1PA

ABERDEN UNIVERSITY ASTON UNIVERSITY BATH COLLEGE OF HIGHER EDUCATION BRISTOL UNIVERSITY BRISTOL UNIVERSITY GUY'S HOSPITAL HATFIELD POLYTECHNIC IMPFRIAL COLLEGE KINGSTON POLYTECHNIC LECCESTER POLYTECHNIC LEICESTER POLYTECHNIC LEICESTER UNIVERSITY MANCHESTER POLYTECHNIC MIDDLESEX POLYTECHNIC NEWCASTLE UNUVERSITY NEWCASTLE UNUVERSITY PALES JOINT CHAIR MUNIVERSITY BELFAST READING UNIVERSITY BELFAST READING UNIVERSITY SHEFFIELD POLYTECHNIC SOUTHAMPTON UNIVERSITY SUFFOLK COLLEGE SURAFY UNIVERSITY SUSFOLK COLLEGE SURREY UNIVERSITY SUSFECK COLLEGE SURREY UNIVERSITY SUSFECK COLLEGE SURREY UNIVERSITY UNIVERSITY COLLEGE UNIVERSITY OF KENT UNIVERSITY OF KENT WARWICK UNIVERSITY YORK UNIVERSITY

#### POPS UK

Hon Treas/Sec Graham St Clair 37 Fetti Place, Witney Oxfordshire Tel: 0993 704095

#### SCOTTISH SPORT PARACHUTE ASSOCIATION

Richard Buchan, Lynemore, Madderty Crieff, Pethshire, PH7 3NY Tel: 0764 83 255 Organisers of The Scottish Nationals. All visitors assured of a warm, Scottish welcome.

#### **SLIPSTREAM ADVENTURES**

With 4 full-time AFF Instructors (5 more on call) and 8 AFF Rigs at our disposal, Slipstream offers you outstanding instruction. We operate full time with the use of all Headcorn's facilities. Slipstream Adventures The Airfield, Headcorn Kent, TN27 9HX Tel: 0622 890641/890862 also Thurston Parachute Club Tel: 0264 772124

### LIST OF CLUBS AFFILIATED TO BPA AS OF 11th APRIL 1988 AND CLUB CHIEF INSTRUCTORS

#### CLUB

Army Parachute Association (I.S.P.C. - N) A1 Skydiving Centre Ltd **Badminton Parachute Club The Black Knights Parachute Centre Blackpool Parachute Centre Border Parachute Centre British Parachute Schools British Skysports Paracentre** Cyprus Combined Services Parachute Club (CCSPS) **Capital City Parachuting Cornwall Parachute Centre Doncaster Parachute Centre Dunkeswell International Skydiving Centre Eaglescott Skydivers East Coast Parachute Centre Fife Parachute Centre** Flying Tigers Skydiving Centre Halfpenny Green Parachute Centre **Headcorn Parachute Club** Hereford Parachute Club Ltd. **Ipswich Parachute Centre Joint Services Parachute Centre (Hong Kong)** Northern Parachute Centre Leeds Bradford/Merlin **Lincoln Parachute Centre** London Parachute School/Charity Parachuting **London Skydiving Centre** Midland Parachute Centre Ltd. **Northern Ireland Services Free Fall Club** North West Parachute Centre Ltd. **Oxon and Northants** Parachute Test Team (Blue Knights) **Peterborough Parachute Centre Peterlee Parachute Centre The Pilgrims Parachute Team Queens Regiment Free Fall Team Rhine Army Parachute Association REME Parachute Team Royal Air Force Sport Parachute Association (RAFSPA) Royal Artillery Parachute Team** Royal Navy and Royal Marines Sport Parachute Association (RN & RMSPA) **The Red Devils Scottish Parachute Club Shropshire School of Parachuting** Silver Stars Parachute Team (RCT) South West Skydiving Club The Sport Parachute Centre - Tilstock **Swansea Parachute Centre Thruxton Parachute Club Ltd. The Trail Blazers** Wild Geese Skydiving School

#### CCI

**Pete Lambson Arthur Collingwood** Gerry O'Hara **Phil Cavanagh Geoff Horan Kerry Noble David Hickling Dave Johnston Bob Charters Dave Turner John Fisher Dave Ruffell** Ian Louttit **Gary Lawry Pat Slattery Mike Skeet Grant McLaughlin Brian Laithwaite Chris Francis Mac McCarthy Tony Knight Matt Patrick Trevor Dobson Dave Tylcoat** Sean Lambe Matthew Mortlock (Steve Thomas W/E) **lim Sharples Tim Andrewes Dave Prince Mike Bolton Dave lones Ronnie O'Brien lim Barnes Geoff Ellis Bill Sharp lim** Coffey John Horne **Steve McBrine Tim Andrewes** Stan Wood **Andy Sinclair Rob Noble-Nesbitt Des Palmer Ieff Chandler Andy Philip** Lyn George **Dave Howerski Kevin Daykin Keith Skelley** Ian Marshall



If you've missed the Norm Kent spectacular, 'FROM WINGS CAME FLIGHT' we have plenty in stock in VHS and Beta. We are also distributing three of his earlier films, 'AIR BEARS, RIDE A CLOUD AND FREAK BROTHER CONVENTION' on a single compilation tape for just £34.95 as well as the 126 WAY WORLD RECORD and WALLY GUBBINS Videos.

The Watches are now in production and proving highly popular. They come in two designs, four colours and can be ordered with or without a date feature. Once again please see the separate advertisement in this issue.

You will find a separate advertisement in this edition of the magazine which identifies each product and gives total cost.

We have been involved in the development of both the existing range of suits and new products.

SWARD SPORTS are now forming a close relationship with THIN AIR, long regarded as Jump Suit manufacturers par excellence.

Colours Available: BLACK, RED, NAVY, ROYAL, PINK, GREEN, YELLOW, BURGUNDY, SILVER. Where asked, please state the main colour only, all items come with suitable, complementary trim. Custom Colours available, NO extra charge.

Qty.			Qty.	
,		£96.99	Log Book Holder, Basic, for book, stamps, documen	
		£96.99	Colour	
		ed Wrist Mount	Log Book Holder De Luxe, padded with move pocke	ts £11.99
		£5.50	Colour	
		£3.95	Log Book, Lots more information including dive shee	ts international £4.99
		son inc Skydiving	contacts and much more. Tick colour and format optio	ns
		rg' £12.50	□ Grey/Red □ Blue/Yellow □ Pink/Purple	
		photos and text	2 jumps/page up to 6 jumps/page	
		includes basic sight £58.00	Packing Mat with pocket D Black/Silver colour	£8.95
		£69.95	Dest Cards, set of nine high quality Wally Gubbins ca	rds £3.99
		ht £12.50	Posters 3ft x 2ft	
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	Black/Navy Black/Red		□ Wallet, Parapack, fits in the Hip Pocket, zipped and o	ther pockets £3.99
	r Lens and Kroops see order fo		Colour	
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	L colour choices Black		Wallet, Wrist, wraps around wrist, towelled with key a	
		and colour £24.95	zip pockets, velco fastening . Colour	£2.45
		w Pink Purple Lightblue	Watch, Quartz, Swatch type, water resistant, sweep	second hand £14.50
		S D M D L	□ Watch, As above with date feature,	£17.45
		ble with hood from £24.99	$\Box$ Altimeter design $\Box$ 'Skydive' with picture design	
* Jackets, Bre	eathable Nylon with hood, pock	ets and choice	$\square$ Black $\square$ White $\square$ Pink $\square$ Blue tick options	
of lining wea	therproof	from £24.99		
* Trousers. B	ireathable Nylon, choice of linin	g and pockets from £24.99	VIDEOS VHS Beta	
Tick for On	der Form, available on request		From Wings Came Flight by Norm Kent	£39.95
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		£2.50	126 Way World Record	
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g AIR LENS		SMOKE MIRROR	Number boxes in order of colour preferred (i.e. 1,2.3)	210.95
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Orders over £50.00	£2.95	£3.95	£7.95			
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#### PARAFLITE

ParaFlite, An American Company that produces a wide range of parachute equipment both for Military and Sport applications, is looking at producing canopies that will carry extremely heavy loads. The aim is to produe a system that is capable of delivering 10,000 lb. of cargo to a designated target area. A canopy that has a 90 ft. span and 33 ft. chord giving a surface area of 3000 sq.ft. has been test dropped with a payload of 2,200 lb. The system is controlled by the company's Para Point cargo delivery system which steers the canopy in response to radio signals from the ground or by homing on a ground based beacon.

The test programme involves a series of drops with gradually increasing payloads.

#### JUMP SHACK

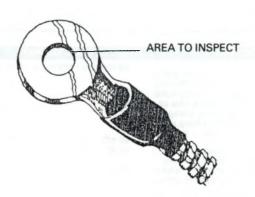
Jump Shack have issued a notice informing jumpers of the Racer to inspect the rigs 3-Ring riser releases to ensure that none have cable housings with sharp edged retainer eyelets.

The notice was issued after a Racer's riser released during opening shock. The jumper, a member of the French national four way team, jettisoned the other riser to release the canopy and then landed without any problems under her reserve.

Inspection of the rig by John Sherman, manager of Jump Shack, traced the failure to a burred "housing retainer eyelet". This is the fitting on the end of each 3-ring release housing.

The burred eyelet was rough enough to have sawed its way through the nylon locking look which holds the assembly closed when assembled. Approximately 150 jumps had been made on the rig since it was built several months ago.

Sherman said that the problem was limited to Racers built since 1st December 1987 and carrying serial numbers 47700 and higher. By Mick Thurman Chairman of the Riggers Committee



A sketch of the retainer showing the location of the loop-damaged burr.

Jump Shack issued a notice recommending the inspection of all Racers built after that date. The notice says that each eyelet should be inspected with a magnifying glass. If rough edges are found, they should be smoothed with an emery cloth.

The eyelets used in the construction of 3-ring releases are crimped to the end of the hosing and are actually terminal connectors manufactured for the electrical industry. Many rig manufacturers use an eyelet with a larger inside diameter and install a grommet to prevent loop abrasion.

Jump Shack believe that loop abrasion can still occur even with a grommet installed because if the grommt is set incorrectly it can have a rough edge on the inside. The company say that eyelets without grommets are easier to inspect for smooth edges.

#### **MORE MESH PROBLEMS**

Another canopy manufacturer has reported problems with the mesh used in the construction of its reserve parachutes.

Eagle Parachute Inc. is investigating the discovery that one of its round reserves has substrength fabric.

The company issued a safety notice on April 19th urging the

inspection "before use" of certain 20ft and 26ft reserves built in 1982. The notice further recommends that the reserves be inspected every 45 days instead of the normal 120 days.

Fifteen 20 ft canopies, which have the part number 81-1040, are affected by the notice. The serial numbers of the canopies are: 0018, 0021, 0027

0028, 0033, 0036 0047, 0048, 0049 0051, 0059, 0060 0061 and 0064.

Twenty six of the 26 ft canopies are involved:

0023, 0024, 0025 0031, 0032, 0044 0045, 0046, 0052 0053, 0054, 0072 0073, 0074, 0075 0076, 0083, 0084 0088, 0089, 0090 0091, 0092, 0093 0094 and 0095.

The part number for these canopies is 79-1003.

The notice said that the defective reserve had "understrength fabric in panels in contact with the vent covering mesh." This implies that the company suspects the fabric has been damaged by contact with the mesh.

The notice also stated that "investigation is continuing," and that it may be amended in light of the results of the investigation.

#### **ON THE HOME FRONT**

The BPA Riggers Committee are currently looking at producing a "standard" for the manufacture of "Rigging Line Connector Links".

The use of this method of attaching the lines from the canopy to the risers is preferred by some jumpers because it allows the slider to be pulled easily to the bottom of the risers, especially on three riser systems, was banned after reports that a number had broken on deployment.

When the standard is approved this type of link will be permitted

provided that they are manufactured to the given specification.

Another project presently in the pipeline is the complete updating of Section 15 of the BPA Operations Manual. This Section covers the training and qualification of Riggers.

The rewrite is taking place because of the need to "stay with the times" with respect to parachute equipment technology and how best to qualify Riggers.

As well as outlining how to become an Approved Rigger, using one of two qualification schemes, the rewrite also updates the type of work to be carried out. Much of the work on older type equipment such as C9 repair and the manufacture of deployment sleeves has been replaced with work on Ram air canopies and the production of modern deployment devices.

Much more emphasis is also placed on the assembly and packing of parachutes, especially reserves.

It is hoped that the new Section 15 will encourage more people to look at obtaining a Riggers rating and also improve the standards of those who qualify.

# PIA to Meet on Ship Again **Jumpers Invited to Join Cruise**

The Parachute Industry Association voted to site their winter meeting on Norwegian Cruise Lines' MS Southward leaving San Pedro (Los Angeles), California, on January 23, 1989 bound for Mexico. Last January's meeting was on the Mardi Gras which sailed from Fort Lauderdale to the Bahamas.

The meeting/skydivers' fun cruise is not limited to PIA members. Members of POPS (Parachutists Over Phorty Society) plan a reunion at the same time and place. Cruise Meeting Director Dan Poyner stressed that all skydivers are invited.

A major selling point for the fourday cruise to Mexico was price: Cost for meals, cabin, cruise and entertainment start from \$419.00. Members usually spend more for a twoday land-based meeting.

Michael Ray, PIA President, is lobbying USPA to schedule their Board meeting in Los Angeles from 20-22 January so that it will dove-tail with the PIA Meeting/POPS Reunion. This scheduling would permit board members to join the cruise (at their own expense) while it would encourage PIA and POPS members to attend the USPA meeting.

Time is running out as the ship is filling fast. Jumpers who wish to join the cruise must send a deposit of \$35.00 as soon as possible. The balance is due November 10th and the deposit is fully refundable until that date.

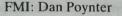
For information, brochures, or booking, contact:

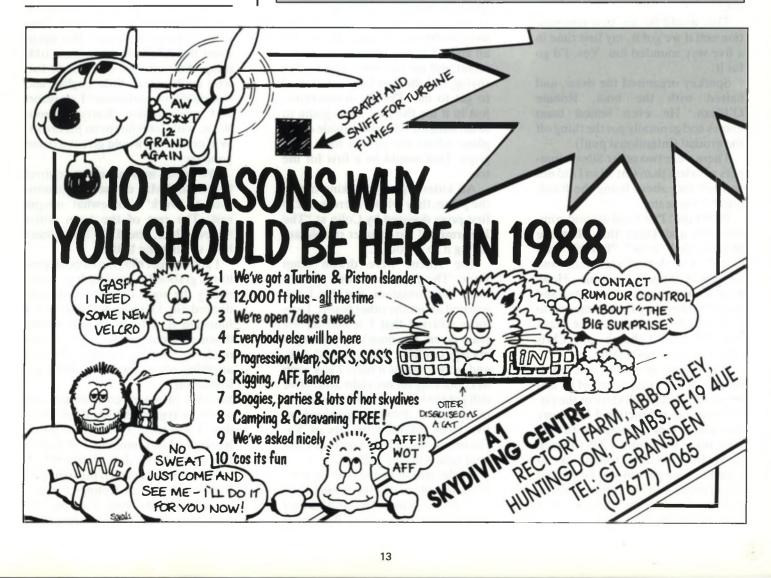
> Linda Appleton, Santa Barbara Travel,

> 1028 State Stret.

Santa Barbara, CA 93101. USA.

Telephone (805) 966-3116. Or call her with your credit card number to put a deposit on a cabin.





# Sibson Easter Boogie

Photos: Stewart Meacock.

#### Easter '88 at Sibson

"It's not the taking part, it's the winning that counts" said Max Guthrie, "Team Coach".

Having eventually got Cat 8 after 134 jumps and two years effort, plus another 18 months and God knows how much money WARPING my way (slowly) to Cat 9 I thought I would give the Bank Hols a miss.

Sunday looked too good to miss so midmorning found me driving into the car park at Sibson to be greeted with "Ah there's Pete Male, he'll go for it". Sparkey has a way of volunteering one for things. They all know that I can never say no in any case.

An impromptue SLAC meet (did they mean my attitude?). No, carefully they explained; Speed, Launch, and Accuracy was to be the game we would play today. Teams of five, four to launch, fifth person to get in and all within a time limit of 10 seconds, three nominated to go for the disc.

This would be my first competition and if we got it, my first time in a five way sounded fun. Yes, I'd go for it.

Sparkey organised the draw, and liaised with the boss, Ronnie O'Brian. He even issued team names and generally got the thing off the ground (intentional pun!).

There were two other Sibson jumpers with less than Cat 10 so I did not feel too bad about being the handicap for my team.

Well I did. I've been around competitions and know that all those things called "zoos", "funnels" and "zaps" cause lots of arguments and accusative finger pointing. However, for the chance of some fun and being in a five way I was prepared to go for it. So it seemed were Dave "the Dentist" Leharne and Chris "I've got long legs" Hollis.

Ronny gave us a brief, one senior on each team to take care of us and we were to keep well clear of the pit. At least one instruction I felt more than competent to comply with. We were using the centre's 206 (Skyvan in Spain), the first round was to launch a four person star (it looked round to me, but never mind call it a star if you want), the fifth person to dock within the time limit.



\*Winning Team "ALIENS" Back row L-R: Babsi Fritz, May Guthrie, Peter Male Bottom row L-R: Mike Pennock, Tony Dean Photo: Stuart Meacock

I enjoyed the dirt dives and practising from the mock up, having beautiful blond Babs, a non-english speaking woman, grabbing all sorts of my bits and then trying alternatives. Is this what being a Sky God is all about? Trying to keep our plan a secret and sus the other team's, the spying and the psyching out started to get to me. I'm not competitive, just in it for the fun! I was going to float, hanging onto the outside of the plane whilst the others took their grips. That would be a first for me too.

All kitted up and walking out to the plane, they tell me there is a £250 first prize donated by Colin at "The Papermills"! No wonder people are taking it so seriously.

The Aliens were drawn team three. The first two teams did not make the formation, not that I was worried about the other teams. I was more worried that I would let my team down. For once in my life I got my legs out first, struck a good arch, and before I knew it there I was, with Max docking on my right arm. (I've still got the bruise). A moments look of complete disbelief appeared on five faces followed by lots of Ya-Hooing to break off. You really can hear voices in free fall!

By the end of round one we were in second place, the only team to format in time, although our accuracy would need working on. Bobs mob got a five-way but it took 17 seconds to build.

Now things really started to get serious, the weather was closing in, the no hopers in second place, time to get round two done? We calculated the Aliens had less than 1000 jumps between us, one Cat 9, two who could speak little english and one photocopy salesman! Last resort had one jumper, Barry Nelson-West, with 1000 jumps to his credit. Win or not, we would give it a damn good try.

We went into a secret squirrel huddle and Max devised a "guaranteed to work", somewhat unique exit. The rest of the team either believed him, could not understand him, or knew no better.

I got my feet out, into a good position, grabbed a passing leg, fortunately the right one, the fifth man docked (in 11 seconds) and then I funneled it. I found myself upside down on someones back but we had made it. Nothing in the rules said anything about having to hold the formation!

Monday dawned cold damp and windy, a typical British Bank Holiday. I was torn, I wanted to go on having fun and jumping, but now in first place did we dare chance it?

The weather decided the issue and it was with mixed feelings I found myself elected Team Captain and collecting the coveted plain brown envelope. I like money but the achievement was worth much more. My first five-way (twice), my first competition, my first win, and two good dives with good people.

Many, many thanks to all at PPC and in the Sport for all the help, advice and encouragement over the years, far too many to name, but Colin for the dosh, Sparkey for organising it, Max for believing in me, and Ronny for his patience. To Lynn 'I'll sell you a jump suit" Wilton, Charlotte "I've got a big, fat, felt pen" Innes' bird Clare, Joyce and Alain the Jock for judging down at the pit.

Best Individual Accuracy: **Rav Karlins** 

#### The Teams:

1st 18.18 ALIENS Pete Male, Max Guthrie, Tony (Dino) Dean, Barbara Fritz, Mike Pennock.

2nd 27:28 LAST RESORT Barry Nelson-West, Steve Ashenden, Bob Cawte, Fran Hunter. Dr. Johnathon Warwick.

3rd 41:89 **BOB LINGS BUT NEVER MIND** Bob, Denis O'Brien, Andy Pay, Michelle Walla, Jeff Burnett.

4th 47:89 JAMMY SODS Dave (the Dentist) Leharn, ...... Willor, Ray Karlins, Dennis and Tony Jones.

5th 50:97 **TIN DAYS** Chris (Long Legs) Hollis, Sparkey, Dave Stallion, Steve Hastings, Judy Slater.

6th 59:74 JANS WOBBLY BITS Jan Lawford, Ken Langstone, Pete Clarke, Mellissa Harvey, Gary Hayes.







### **British Parachute Schools**

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Led by Dave Morris. Come and have fun. Informal Seminar Sat/Sun 10.00 am. Sat night Bar, B-B-Q and Disco Party.

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Starts 10.00 am Saturday. Medals. Saturday night Bar, food, Party Disco.

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Come to Langer and join in the FUN. All visitors welcome. Fun jumping and Team training during Meets. Progression Courses available midweek. Canteen, Bunkhouse, 2 aircraft etc. 'Phone for more details: C.C.I. Dave Hickling.

#### Dear Carol,

I have compiled a list of observations on our Journal, that I hope you will find constructive and useful. They are not in any particular order, but how I noted them when flicking through the March issue.

UKRESP

Photographs: very good, especially the colour prints. Simon Ward and Leo Dickinson and others of their genre simply cannot be criticised for their willingness to take such shots.

Cartoons: excellent! Phil Wells really is a genius, how about producing an 'Andy Capp' style book of his cartoons?

Advertisements: very useful, although it does get a bit boring seeing the same ones in every issue: any chance of encouraging the advertisers to vary on occasion? For instance, Lofty Thomas's ad is well over a year old now, and I'm sick of the sight of it.

Second-hand kit ads: probably the best medium for discovering what is available, and what sort of price to pay for it (as a cat. 8/C licence holder, I am on the point of buying my own kit, and 2nd-hand looks like the market my Bank Manager will force me to look in).

Clubs and Centres: again, very good: how about giving the CCI's name or at least a contact name, as it is rather hard to 'phone up a club to discuss jumping there when you don't actually know anyone: a known name helps to break the ice (but not at Netheravon!)

Correspondence: isn't a lot of it critical? Still, it is a popular and important part of the journal, and most of it is well worth reading.

Meets/Boogies/Other reports: good interesting reading: encourages jumpers to go to other meets in the future (watch the acronyms, however: what on earth is a LAC meet?). Video reviews and so on are again, very useful (I personally found 'Symbiosis and Friends' a good training aid as I am now just into RW training). I also think that Wally Gubbins should be laid to rest, at least for a bit, and that Pete and Leo should concentrate on more serious projects for a while: perhaps Wally will become refreshed after a rest period. He just doesn't seem funny any more, despite the effort put into the production by the two sky-gods.

Kit-news: essential, and should be expanded: a diagram of the 'upsidedown' three-ring cutaway would be useful, the Roo-chutes work was confusing to read, and no supplier was named for the Javelin. In my own particular case, I want to buy safe trustworthy kit, I want to ensure the huge amount of money I will be spending will be well spent, and I want to know more about what I am spending it on. Velcro v. flaps v. as little of anything as possible in container design is a hot subject, and someone somewhere must have views on it worth printing, to help me make my mind up. Parachute canopy design and performance statitics would be useful: I imagine buying a piddly little Firelite would result in scaring the living daylights out of me, whereas the other extreme, an accuracy canopy, might not have the forward drive needed to be safe in windy conditions. Therefore, a middle-ofthe road Pegasus-type canopy looks to be my best choice. Printing articles in this sort of area, even if they are 'just' personal opinions, would be useful.

Finally: and this is definitely my most important criticism: Minutes of meetings: I have worked in a number of groups where the minutes were only circulated to committee members, and this is not good. Therefore, for the minutes of BPA meetings to be printed in the Journal for all to see is all to the good: however, they are not easily digestible in their present form.

Can I suggest that the full minutes (plus the agenda list) be made available, (on receipt of an administrative charge?) from the BPA office and that the Journal restricts itself to reporting in clear language, the items of interest? For instance: List the meetings that are being reported.

Incidents (including fatalities): what happened, when and what were the conclusions of the inquest/safety committee or whoever: There are two reasons for this, neither of which implies we are vultures wanting to gloat 1. I want to know what went wrong, so I can ensure it doesn't happen to me and 2. I resent knowing no more about what happened than the 'Sun' or the 'Daily Mirror' is prepared to sensationalise. I much prefer to read the facts. Then, if I wish to gloat, I can do so at my non-jumping friends who are not privy to the full story.

Bans: who has been banned, why, and for how long.

Clubs: a club is now cleared for RAPS? who, and where?

And so on and so forth.

I realise one argument against this is that 'personal opinions' are then reported, but as the Journal is the official organ of the BPA, surely this is then an opinion of the BPA? I guess it will keep you busy interpreting the agenda/minutes of the various meetings, which you may not be too keen on, but as I have stated, I do find the present reporting system to be very unclear, although better than nothing.

Anyway, I hope there is something useful in this little lot for you. I thought your first solo magazine was a damn' good start, and I hope the innovations you plan to introduce to the Journal can include some of the above.

I look forward to seeing a great magazine each and every time and to having it delivered in a plastic envelope (I'll even pose to the postman!!)

With best wishes,

Bill Parker

P.S. According to my FAI cert., my licence no. is 7759, whereas my BPA card gives it as 17159. Therefore, I shall quote my BPA no., which is 344024!

#### Dear Editor,

I thought I would send a message of thanks through the mag. Before you all drop the mag or turn the page, this is not your standard student "to all at the DZ" thank you, epistle.

The Parachute Association of Ireland would like to use your journal to extend our thanks to Steve Eversfield for spending his time, effort, money and skill to stand on a pile of gravel in County Kerry for the Easter weekend.

We (the P.A.I.) had been giving some thought to our representative in Korea Oct. 87 and to our future representative in Korea in '88, and to the fact that nobody has been doing any accuracy since the Seventies. So, asking the John Hitchin half of your JNCSO institution, we were given a list of people who might be able to assist us. Serendipity caused us to ask Steve.

Steve was asked if he would come over and coach a bit in the areas of accuracy and accuracy judging. This was agreed, and for an airfare and a few hops, Steve was on his way.

Meanwhile our gang decided to take advantage of all these would be accuracy jumpers in one place at one time, so they called it the Nationals. Eventually the day, the jumpers, and Steve, all arrived. Paula came with Steve and was promptly given a job.

The end result was, that at a great deal of personal cost to himself and Paula, Steve judged, directed and advised, coached and generally stood in the pit for three days while we jumped off the nationals and some tried to absorb a little advice.

We found Steve to be skillful and knowledgeable in the area of his chosen discipline, and of more importance to us, we found him to be patient, interested and effective in the more difficult skill of imparting this knowledge to a very assorted mix of interest and skill levels.

During the whole weekend, I noticed Steve make two mistakes, one was to turn down an offer of a beer and the other was to accept an offer to do an r.w. jump without asking advice about his fellow jumpers. Hard luck mate!

Well Steve! You already have our admiration and our gratitude and if you promise not to tell anybody the scores, we will send on the dancing girls and the beer as well. Yours

> Joe Davis-Bassett P.A.I. D-59 B.P.A. D-7135

Dear Editor,

*I am writing with regard to the excellent CRW seminar held at Netheravon on the 16th and 17th April.* 

Even though the met forecast was, to say the least, not good, over 60 people were in attendance, surely putting to rest the rumour of no interest in CRW by the members of our sport.

Saturday the 16th, weatherwise, was abysmal, but the lectures we received brightened up the day no end, with particular mention to the following!

Chris Scofield and Mark Greenfield who did the bulk of the organising and lecturing.

- Pete Halfacre Judging
- Graham Storey Equipment
- Andy Usher Sequential
- The Trail Blazers and the Red Devils

- practical assistance.

I personally, felt that a seminar of this kind, had been long overdue and considering I had no previous experience with CRW, by the end of the weekend, with only Sunday when we could actually put the theory into practice, I had docked 4th on a four stack and landed a bi-pod and a biplane. This was achieved with the excellent tuition given by two members of the Red Devils, namely Zip Hunt and Joe Willoughby. The biplane was landed with Mick Warrent who, like myself, is a novice at CRW. and this surely demonstrates the standard of instruction we had been given.

Thanks should also go to Major Jim Steele for allowing the seminar to take place at Netheravon and to CCI Pete Lambson for his unreserved assistance and enthusiasm.

From my experience this weekend, there is obviously abundant interest in CRW and more seminars of this calibre in the not too distant future would be of great benefit and perhaps a system similar to WARP devised for CRW.

Thanks again, one and all, for a marvellous weekend. Blue skies

> Steve Collier D 4885

Dear Carol,

I would like to thank everyone at Colerne, near Bath (home of the Silver Stars) for the great times I've had there, progressing up through the system to FAI 'C'. Particular thanks must go to the CCI, Sgt. 'Jeff' Chandler, for all the help and encouragement I've received from him since my first jump eighteen months ago.

I have now moved to Cranfield, and will be gracefully destroying the reputation of that DZ with my 'upsidedown turkey' RW technique, but rest assured, the Purple Protec will fly over Colerne again whenever I can get back down there.

Once again, thanks to all the guys for their friendliness and their patience and tuition, and I don't care if I never see your Amstrad PCW again Jeff!

Bill Parker 344024

Dear Carol,

Congratualtions on your excellent first issue of S.P.

Having said that I felt compelled to write this letter to the correspondence page disagreeing with much of your review of Wally Gubbins new video "The Wally Stuff".

I accept that a critic's opinion is exactly that, but I feel that making comparisons with Norm Kent's film "From Wings Cam Flight" is very unfair, because their budgets were a world apart, and their themes completely different.

I think that the 'Wally Stuff' is, as was intended, a lightweight, fun movie, in line with the rest of the Wally series.

I do tend to agree with a few of your criticisms, particularly relating to the World Formation Record in Belgium, but overall the film is a lot of fun, and I've personally seen students and skydivers alike laughing out loud to the 'Wally Stuff' at various DZ's around the country, so surely the film works.

In the Wally Stuff, Pete, Leo and Wally have gone for longer, protracted sketches than in the other Wally movies, with a short story line flowing through each sketch. Lots of ingeneous film work, skydiving skill and bottle has gone into their work.

I therefore hope that potential buyers are not scared off, and that they buy a copy to make their own minds up and to keep the Bank Manager from Wally's door, so that he can continue to keep us entertained. After all, professional film makers for our sport are few and far between, and need to be encouraged and supported to enable them to carry on - if only for our own selfish sakes.

**Rob Colpus** 

Dear Carol,

I felt compelled to write in support of the latest Wally video following your slating review. As one of the many who have been involved with the making of the Wally series, I was very disappointed to see 'The Wally Stuff' torn apart.

Faced with the difficult task of reviewing 'The Wally Stuff' and 'From Wings Came Flight' together, I feel you unfairly sensationalised your opinion, which after all is a skydiver's opinion.

They are as different as chalk and cheese and after showing them both to people who know nothing about skydiving, the Wally series always maintains interest whilst presenting our sport in a fun way.

The positive P.R. gained for our sport, due to Pete's ego or not, cannot be ignored and to write-off 'The Wally Stuff' in such a hap-hazard way shows little forethought. The target market in this case, is not the skydiver but Joe Public!

I sincerely hope that your comments do not spoil any venture that Leo and Pete might be thinking of for the future. Yours,

D.T.C. Morris.

Continued on Page 18.....

#### ....CORRESPONDENCE

#### Dear Ed,

Thanks to everybody, apart from Geoff (you didn't think I was gonna be nice did you?) at W.O.T.G. for an ace 2 weeks.

I'm on the YTS in the RAF at the moment so I didn't think I'd get the Advanced Parachuting Course. So I was mega excited when I did.

Rain and low altitude meant very few lobs. It got to the stage when the only thing to look forward to was the next episode of 'Neighbours' (sorry lads, but its gen.) and from "Wings came flight"! I got onto my Intro Tandams on the first Wednesday and Squares by the end of the course. I must admit to having a bottle problem before my lst 'throw away', in fact I was ready to pack my bags. But everybody told me to give it a go and do at least one. I'm so glad I didn't give in when the going got tough because I can't wait to get my knees in the breeze again now.

Tah, to the Falcon Display Team (especially Ali Wright and wife Sharon) who let me go in the Herc and watch them jump out of the ramp. There was a lot of "yahooing" all round.

Well from me and Shaz. Blue skies and a few fluffy bits Judith Southam B7915

#### Dear Carol,

Recently for the first time in 5 years I didn't manage to land on the DZ. I had visited a different DZ and had a radio spot. Luckily being surrounded by farmland I had a safe landing and would have done so even if I had had a reserve ride (I have a 26ft Lopo).

Last week, at a different DZ, I had another radio spot and landed off yet again. Instead of taking a chance on whether I could cross all the obstacles between me and the upwind DZ I chose a nice large field (about 800 yds square). Had I had a reserve ride, I would have landed in an industrial estate and maybe not so safe.

After that experience, I queried with the chief pilot at my normal DZ, the accuracy of such devices and the reply astounded me.

I was told they are only accurate to 1/2 mile and not only that, they are illegal to boot, and that a radio spot invalidates my BPA Insurance.

If this is true, perhaps someone can enlighten me as to why clubs using this equipment are allowed to continue to operate.

Blue skies

(avoiding the necessity of radio spots)

Dave Fisher D6076 POPS 340



# \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*

#### Hi Carol,

Nice Mag. we like it! Could you please publish a thank you for me, I would be grateful. We are a team who call ourselves The Cannon Balls "no laughing" and have jumped at our local DZ JSPC Lippspringe for many years, like all good things this must end no tears, please! We are posted elsewhere, so by way of the Mag I would like to say farewell and say thank you to all our English, German and Dutch friends.

Most of all I would like to say a big thank you to Maj. Bob Card for putting up with our parties, that some times 'flared up' and to the Riggers, Les Gearing and Geoff Bennet, for the good quality work that they tried to do. To the Pilots for being good Eggs. We will return.

PS. Here is a picture of me docking on a tandam. My brother is the passenger and Steve Apps is the Instructor. Steve Slater took the picture over Bad Lippspring. My brother loved it. Thanks again. LCpl Pemb Ammo Ops HQ 5 Ord BN BFPO 16

#### Dear Ed

Damn, caught red-handed by the BPA's self-appointed, ever-vigilant watchdog, David Backbeard.

It was rather complicated and expensive to take "Gash Bucket" to The Bahamas for me to do an ego jump - I mean water jump - in front of such a big audience. Incidently, 11.2 people watched me according to BBC's figures, so my ego was wellsated. For anyone wishing to repeat the jump, it cost the BPA the following:- First a hefty bribe to Stan Woods at Dunkeswell to borrow the plane for 10 days. His replacement was a soaking Helicopter, but luckily the BPA subs did not have to cover that.

Next the "Bucket" was flown to Middle Wallop at a cost of £38.06. There, special permission was granted to land a USAF C130 onto which the "Bucket" - minus wings, of course, was loaded. At a special discount negotiated by the BPA of only £6,000 per hour and a 13 hour flight, we landed at Freeport in Grand Bahamas where we loaded up Stan's booze.

Then the wings were glued back together and we flew with the BBC cameraman to Sweetings Quay and Manta Hole where I jumped out after having thrown a toilet roll first as a WDI, since by now the BPA's allocated budjet for this PR exercise was almost spent.

And..... if I had been bitten by the 6ft Tiger Shark that was lurking in the Hole, I would have sued the BPA for backing the project in L<sup>+</sup>, first place.

Perhaps I will have the pleasure of meeting David BPA 317584 at our next BPA - subsidised rave-up in January when we can discuss a theory of mine relating to mandatory IQ tesing for all membership.

Leo Dickenson.

Something to say? Have you any views on the sport that you'd like to put to other readers? Got a gripe about something? Send your letters to: The Editor, *Sport Parachutist*, c/o BPA, Wharf Way, Glena Parva, Leicester, LE2 9TF.

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# **Getting hooked on CRW**

Well the last thing I ever thought I'd be writing to the magazine about was Canopy Relative Work as this was one skydiving discipline that I knew very little about. Not only that, it frightened me more than a little.

That all changed over the weekend of the 16th and 17th of April when a seminar on SAFE CRW took place at Netheravon. The event was organised by Chris Schofield. Chris is an ex member of the Royal Marines display and CRW competition team and so is very qualified to do the job.

Over 60 jumpers attended for the weekend with five of these never having done any CRW at all. Among the others was agreat wealth of experience with some people having done over 1000 CRW hook-ups. There were also a number of BPA judges, namely Jim Steele, Pete Halfacre, Tony Makepeace and Ken Mapplebeck. John Haddon another judge, observed from the ground as he is not ready yet for jumping CRW. Some established 4 way teams also attended including the Trailblazers, Red Devils and the Golden Lions who had travelled down from Scotland. Assisting with the teaching were some of the Royal Marines team who had just returned from a training camp in Florida, with a lot of experience and new ideas.

The seminar began on Saturday morning with everyone registering their name, total jump number, number of CRW jumps and their aims for the weekend. These aims varied from needing a CRW intro to wanting to learn sequential. It was obvious though, that everyone's main aim was to "LEARN" about this exciting and exacting discipline.

After the registration everyone went off to get all their kit checked and those who needed cross-connectors got them fitted while Chris and

#### By Judy Cunningham

Mark Greenfield put everyone into four way teams with a nominated team leader. After everyone was briefed on who was working with who, the groups then split up for individual briefs by the team leaders on what was to be attempted on the first skydives.

The weather on Saturday was none too kind, so it was plan B which was a lectures programme. Graham Storey gave an excellent talk on all the various aspects of the kit used by CRW jumpers. This was followed by judging brief by Pete Halfacre and a talk on canopy wraps by Chris Schofield. During this Chris was ably assisted by Mark Greenfield who gave some excellent demonstrations.

At about 4.30 p.m. we had a break in the weather which gave us a chance to go into a jump programme and I'd never seen so many people having an "office" stop before going to the pen to be checked out.

The weather was kind for about  $1\frac{1}{2}$  hours during which time it would have been possible to bottle the enthusiasm and put the adrenalin that was flowing on tap. Everyone was mad keen to get in the air but the weather was not on our side. In the end a decision was made and the Bar was opened.

What a night it was to be!!! Many a story was swapped while the ale that was flowing in plentiful supply was sunk. Most of the day's briefs were swapped and I know I wasn't the only one whose voice box and legs had given out by the end of the night.

Chris had been ever so generous by saying a start in the lecture room on Sunday morning at 10.00 a.m. due to such a bad met, but what a shock to be awake at 8.00 a.m. feeling fine and with jumpable weather. (I am not sure which was the biggest shock feeling fine or the good weather). It's amazing how, once an aircraft starts up, people appear.

It was now the time to put into practise all those briefs we'd had. Yahoos were heard as the groups got airborne and people did their first base and pins and four stacks started appearing in the sky. Even more yahoos as two stacks were turned into bi-planes then downplanes. I have never seen so much CRW before and the vibes around the whole DZ were great, with everyone nattering to each other how much they were achieving.



\*Judy Cunningham goes for her first 3-stack with Yosser Hughes and Pete Lambson.

At 2.00 p.m. the cloud dropped to 2000ft so back to the lecture room for Andy Usher's lecture on CRW Sequential. Many ideas were discussed on building various formations and Andy gave a lot of advice through his own practical experience. I am afraid that was a little advanced for me, but one day you never know.

At around 4.00 p.m. the weather decided to clear nicely for us so off we went again. I've got to add this bit now:- I actually managed to dock third. I was ever so impressed with myself but I have to confess it was with the help of a morethan-ably put together base and pin by Pete Lambson and Yosser Hughes - and Pete's excellent vocals - that made it all happen.

Lots of other people managed to achieve their aims and the slightly more experienced people got to attempt a 16 stack. Chris gave everyone a very thorough brief and even though it only built to 13 it was the largest stack that guite a few had ever been in. A variety of canopies were used in the stack and over the weekend including Contacts, Furys, Raiders, Cruislites, PD's, Wildfires and Firefly's.

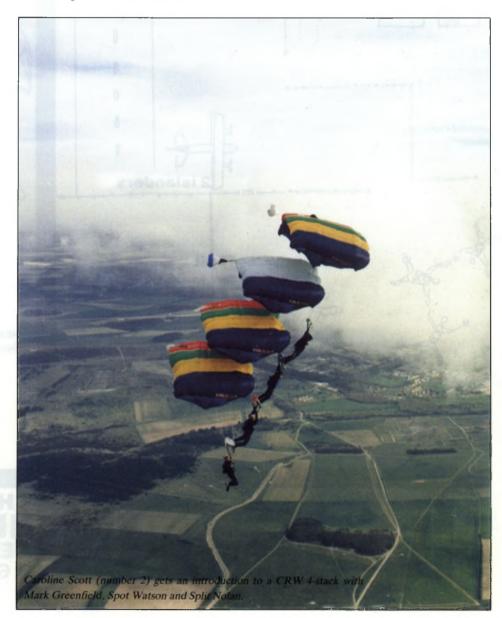
Chris said at the opening of the seminar that we had achieved one of the main aims by just being there. This was because a number of officials in the sport feel that there is no real interest in CRW in the UK. I don't know about you all out there but the enthusiasm that was shown over the weekend proves to me that there are a lot of UK jumpers keen to learn and promote SAFE CRW. If you are interested in learning more about CRW or want to be introduced to CRW then ask your CCI to talk to other CCI's and maybe STC or Council and let's have another Seminar.

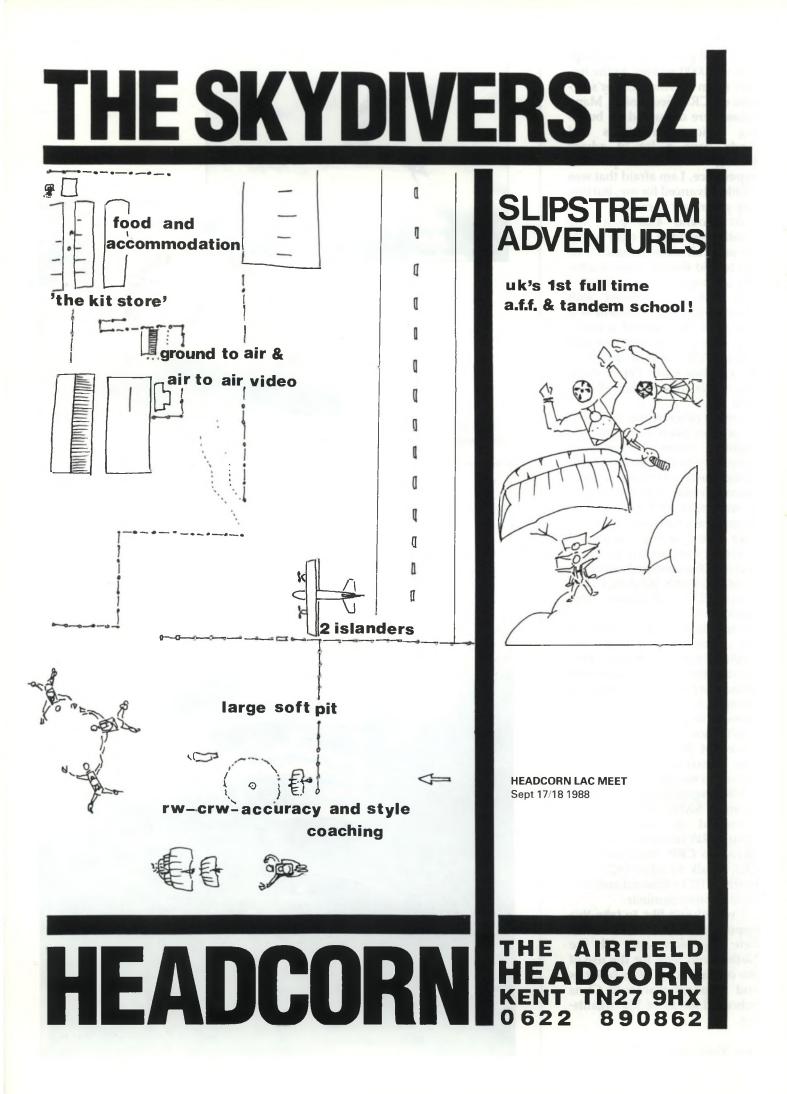
I would just like to take this opportunity to thank Jim Steele, Pete Lambson and all the Netheravon Staff for the use of the centre and all of its facilities and a special thanks to Chris Schofield for all of his organising.





\*Skippy Morns and Ian Cashman transition from a base and pin into a bihand during the CRW seminar at Netheravon.





# Swansea 4-way meet

The first regional meet of the year began dubiously when each of the four team captains drew their own team out of the hat in an attempt to determine team jump order. That turned out to be the only activity of the day as the traditional Bank Holiday weather confined us to dirt-diving.

On Saturday, though, the weather broke and we launched into the first two rounds of competition. It was evident from the start that Gola, with their wealth of experience and ability (it says here...) were likely to take the Gold and the fight for Silver would be between Swansea Mafia and Interaction. We in Icarus (local scratch team) thought we could be in contention for the Bronze, but decided to settle for 4th!

Easter Sunday dawned with wall-to-wall blue skies. We were airborne just after 8 a.m., shortly followed by phone calls from local residents complaining that they couldn't hear their lawnmowers! Unfortunately the noise problem was slightly reduced when G-DISC was prematurely withdrawn and we had to continue the meet with G-PARA alone. The meet was further slowed down now and then by teams taking anything up to two hours to get back to the manifest. (Orienteering award goes to John Lennon!).

By Monday morning we had just two rounds left to complete, including the dreaded leg-locks. Unfortunately the winds picked up with only Interaction left to complete the final round, but by this time there was no doubt about the teams' places and they sportingly took a zap.

Unluckiest competitor of the meet must have been Graham Godding, who followed up his cutaway on Saturday with taking an interesting blow to the head in freefall on Sunday, courtesy of Jakey. There were three other reserve rides during the weekend, including John Curtis, rigger extraordinaire, having a total. In the best Blue Peter tradition, it was one he'd prepared earlier!

The medals (obtained from Lofty Thomas) were presented by Sue Dixon - Dave Howerski was at pains to assure the medalists that to date there were no safety notices out on them.





\*Gola - the winning team - in action. Photograph by Dick Fothergill.

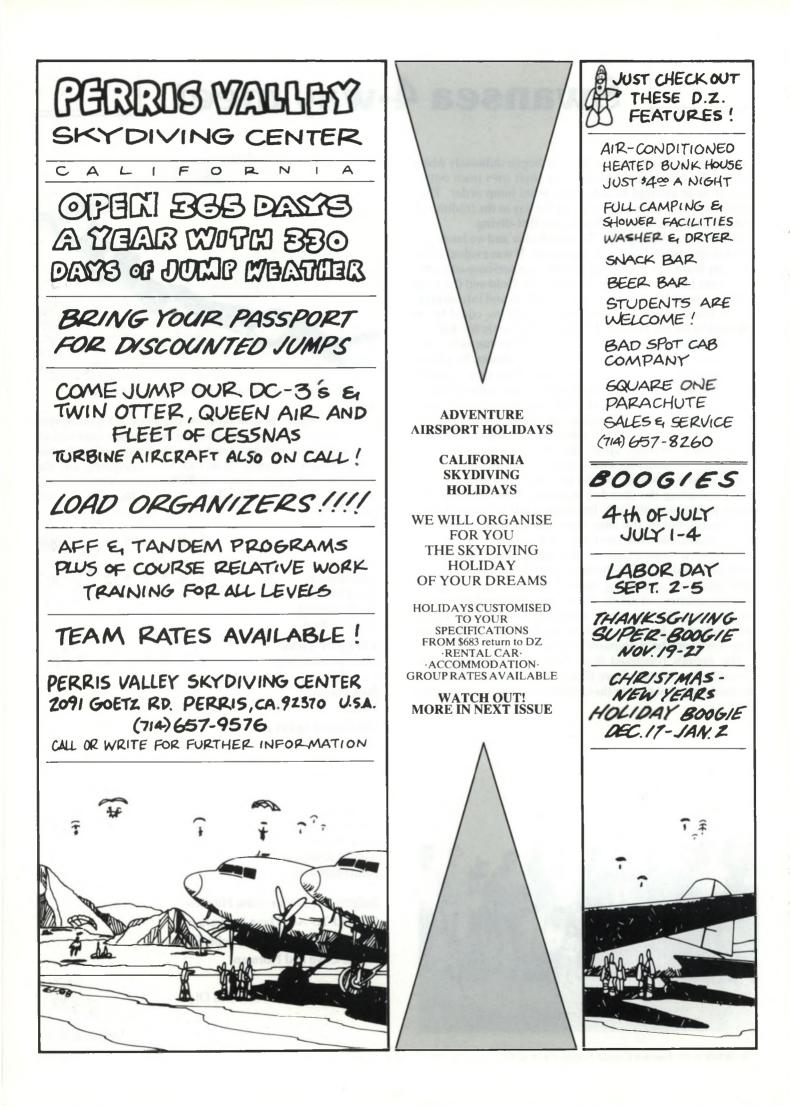
In all, despite the low turnout, the weekend was enjoyed by everyone and was a thoroughly worthwhile experience. Competitors of a higher standard were always willing to pass on their advice to those of us with less experience, and the judges were happy to assist us with the technicalities of competition. Thanks to all concerned:

	1	2	3	4	5	6	Total
GOLA Tim Homer Tony Butler Andy Stewart Mark Wilson	7	8	7	7	7	2	38
INTERACTION Graham Godding Chris Lynch Nick Power Jakey	3	6	5	5	2	0	21
SWANSEA MAFIA Dave Howerski Alun Jones John Lennon Bob Smith	4	2	5	4	4	1	20
ICARUS Stuart Ashford Sue Camm Adrian Roberts John Matthews	2	2	1	0	2	0	7

Judges: Sue Dixon, John Hitchen Ground-To-Air: Dave Buchanan Air-To-Air: Glyn Jones, John Hitchen Pilots: Clive and Norman

(My thanks also to Steve and Olga)

\*Medallists at the Swansea Central Region 4-way meet.



Bob Smith "Official Theory of Gravity Trial" on a Cessna 207 G-Para at Swansea.

# BOOGIE TIME IN THAILAND

#### Geoff Sanders & Dawn Rivers

Whilst most of us were walking back from the pit under a 3000 foot grey ceiling, muck sticking to our trainers, a breeze and slight drizzle hitting us lightly in the face, thankful for the thick gloves and warm wear, there was something happening that every skydiver needs to take those winter blues away. Yes believe it or not, those promises we've all heard, blue skies all day long, warm steady winds, large aircraft, guaranteed skydiving every day, in fact actually was happening. The First International Parachuting Convention in Asia namely the "THAI BOOGIE" organised by THOMAS FROM from Sweden was under way.

Skydivers from nineteen different countries joined together at Hua Hin airport, which was situated next to the beach and used solely for the Boogie. 120 miles north was Bangkok, from where the Royal Thai Air Force flew in 3 C123's to have at our disposal for the next nine days. The C123 is basically a smaller version of the Hercules C130 taking about 60 jumpers. The crews were very supportive and friendly.

It was soon evident where the largest contingent of skydivers were from, what no hassle, good vibes, great partying nation, (some can actually skydive too), no not the British, the Norwegians were there in force. As well as most of the European countries, skydivers from America, Australia, New Zealand and South Africa also arrived. Sadly there was a lack of British skydivers. Apart from myself, only Dawn Rivers, Dave Bell and Gary Willard arrived from England. Reinforcements however, were sent in from Hong Kong with Matt Patrick, Martin Robson, Pauline Richards, Geoff, Peter and Neil, well saved guys.

There was a wide range of different levels of experience from none to advanced. To accommodate this, Thomas had arranged for Jack Gregory, Raul Torres, Betty Hawkins, Bob Harman, Heidi Mauchle and myself to organise. The local jumpers consisted of Thai Navy, Army, Air Force and Police, many with a great deal of skydiving experience and competence, but lacking in RW skills: ie 5000 jumps in style, accuracy and CRW but maybe 250 RW jumps, seemingly no civilians skydived. All were integrated with different groups and benefited immensely, some docking on 40 plus size formations, while others remained in smaller groups and were coached intermediate RW. Those skydivers that wanted to do large formations had the benefit of Jack and Raul, co-organisers of 126 way world record formation in Belgium last year, and subsequently built a 27 way which was a new Asian record. Getting bigger by the jump, never reaching 50 but very close.

Bob Harman, ex Red Devil and currently CCI at Z Hills, organised a 19 way International dive with mixed experience, making the completion a great achievement.

Photos by Skyhigh Film - Peter Degerfeldt & Goran Widenby

THE INTERNATIONAL SKYDIVING CONVENTION

#### **"THAI BOOGIE - '89"**

WITH WORLD RECORD ATTEMPTS 06-27 JANUARY 1989

Once again, in cooperation with **THE ROYAL THAI AIRFORCE** and **THAI AIRWAYS INT. LTD.**, it is a pleasure for us to invite skydivers from over 30 countries around the world to participate in a truly international boogie in Thailand.

The boogie is planned for 500 jumpers of varying experience. Everybody shall be able to jump as much as they want, or more, under perfect conditions. We shall have enough first-rate loadorganisers to keep all jumpers busy and learning. The weather is perfect in January, warm with blue skies every day, all day long.

Altogether, we have 13 full jumping-days, divided in 2 phases: A. 6 days at Hua-Hin Airport, 200 km south of Bangkok, on the beach and only 10 mins. from our hotel. Aircraft: C-123 (60) and Skyvan (20). B. 7 days at Chiang-Rai Airport, in northernmost Thailand, "The

**B.** 7 days at Chiang-Rai Airport, in northernmost Thailand, "The Golden Triangle", even closer to hotel. Aircraft: C-130. Here we shall make very serious attempts to set a new world record for largest formation, whatever that may be at the time. The WR-attempts are to be organised by Jack Gregory and Raul Torres. Thailand requires a via (over 15 days). Apply at Thai embassy.

**Cost:** From Europe/USA/Canada; US\$ 1.900. From Australia/New Zealand/Japan; US\$1.850. From Hong Kong/Manila; US\$ 1.350.-Prices cover: Return airfare on Thai Airways regular flights, all transfers within Thailand. double-occupancy in deluxe hotels with buffet breakfast, registration/check-in and 25 SKYDIVES. Remit payment through bank, to: Union Bank of Switzerland, Bahnhofstrasse 45, CH-8021 Zurich, Switzerland. All payments to be marked: Account no. 342.662.60J, Thai Boogie. Your booking will be confirmed by Thai Airways International Ltd. Unfortunately, **ONLY** the first **500** booked can come. **DO IT NOW!** Pauline Richards

Betty, an experienced international skydiver, and ex staff at Pope Valley Parachute Ranch California, together with Heidi, also a very experienced international relative worker, and late of Z Hills where she worked for a period of 4 years, took time to manifest, competing to see who could tell you to kit up and get out to the aeroplane in as many languages as possible, a very close competition. The latter also achieved her 3000th jump, no cream pies were available, over ripe bananas made a suitable replacement - Drawbacks of an Eastern Boogie!

The Thai Army and Air Force contingent wanted to jump together on occasion and learn 8 way sequential. I helped them acquire the basics.

Luc Lauwers brought over an AFF graduate from Belgium, Eric, who also happened to be the World Motor Cross Champion, after 25 dives Eric was doing 8 way sequential achieving his SCR and SCS.

Between loads there was time to sample the local dishes cooked on the DZ under shade, fresh fruit and cold drinks to refresh you served with the delightful Thai friendliness, definitely the home of the smile.

DOFIE INTE IN Thailand



\*Exit over Siam Park, Bangkok 50-way demo.



\*International 19-way over Hua Hin beach

A minimum of 13,000 feet on every jump can be quite tiring so at the end of another blue sky day instead of taking the bus ride back on that 10 minute journey, why not take a load over and jump onto the hotel beach, a pleasant way of ending a great day, and a private demo for all the guests. The Regent Cha Am Beach Hotel was totally in a class by itself, boasting 2 swimming pools and 4 restaurants, with superb Thai seafood, also 2 cafes with either Asian or Western Menus. The excellent accommodation in individual cottages, was accompanied with facilities such as gym, sauna etc. Thai International Airways also sponsored evening Cocktail Receptions outside, of course, by the pool with live music. The manager, all 16 stone of him, impressed by the demonstration of skydiving skills every night, decided to join us the next evening making a tandem jump onto his hotel beach. The Chief pilot of our RTAF crew also made a tandem jump with Jack. Thomas From's son Joel also entered the sport as a tandem passenger with Stein Fryknoe from Norway.

After 5 or 6 days non stop jumping at Hua Hin one needs a change of scenery so the RTAF organised a demo into Siam Amusement Park and Zoo, Bangkok, and also an accuracy and CRW competition from Sikorsky Helecopters with international teams against Thai teams.



\*Sunset roomdive, Jack Gregory in centre.



\*Spectacular sea views under canopy.

Two C123s ran in over the park at 16,000 ft, 3 passes from the first aircraft unloaded 6, 10 way starts and a 50 way attempt from the second, filmed by Peter Degerfeldt and Goran Widenby from Sweden, who had been shooting 3D stills and video throughout the Boogie, recorded the largest formation in Asia and a great spectacle of canopies vieing for the small and hard landing area. Very well done with the experience available. The competition took place in the afternoon and those not competing got time to relax and enjoy the local Thai hospitality.

Later that afternoon the RTAF supplied a C130 Hercules for another demo. Although may-be not the best RW workers in the world, the Thais showed their skill by taking all the medals in the competition with a brilliant display of CRW and accuracy. The prizes were distributed later by the Head of the RTAF, a 4 star General. A very proud race, and not missing a chance to relate to the nation, a 1 hour documentary was shown on national TV that same evening, showing the demo and competition with a blow by blow account of CRW and accuracy techniques. Shame we couldn't understand them, but very impressive.

#### Boogie time in Thailand

That evening we flew back to Hua Hin and exited at 17,000 ft from the C130, with little time to organise a great deal we built a 38 way and some nice 10 and 12 group pieces.

Skydiving continued for the rest of the trip, some people were already jumped out due to the fantastic weather, and took odd days to laze on the beach, swim at the hotel or visit Hua Hin and look around the old market place, buying gifts and generally taking in the local culture. The hard core continued to skydive right up till the last sunset load achieving 40 plus skydives in 9 consecutive days. The last load giving some of the inexperienced an opportunity to build something bigger than they had been in before, Raul organised a 35 way attempt over the Hotel beach, not complete but great fun and excellent visuals.

Thai Airways sponsored the last evening at the Cha Am and it was an unbelievable setting, a beach party with a live Rock and Roll band, flowered garlands for all skydivers, dignitaries and RTAF crew, and catering and drinks to an extremely high standard. This was followed by Bob Harman and the band giving us his rendition of the "Thai Boogie Blues" - well nothing is perfect!



\*Participants in front of a C123

The Norwegians made a presentation to the organisers of some bewildered looking Thai figures carved in wood, obviously how they saw the organisers on the de-briefs. The Hotel also presented everyone with gayly coloured skydiving T shirts, a nice gesture.

The following day we returned to the Narai Hotel a first class hotel in central Bangkok and all had a chance to attend organised sight seeing tours around the city, visiting some of its many temples and places of interest and in the evening possibly more pleasing to many, the night clubs.

The Thai authorities and military were impressed with the success of the boogie and are presently behind hosting the same next year possibly with the RTAF supplying C130's for the boogie culminating in a world record formation attempt. Hope to see you there.

# SKYDIVE, AVIGNON SOUTHERN FRANCE

The parachute centre at Pujaut is situated in beautiful countryside surroundings just outside the old fortress town of Avignon in Southern France. It is approximately 8 hours drive from Calais and can be reached directly via the main southern motorway routes. This friendly drop zone provides first class facilities which must rate amongst the finest in Europe. Good, plentiful accommodation, showers and toilets are available on the airfield along with an excellent restaurant which serves inexpensive meals throughout the day and evening.

Camping is available should you prefer.

Parachuting facilities include air to air video, ground to air video, accuracy pit, on-site rigger and shop, separate 'round' and 'square' packing halls, and tandem. Jump aircraft are Pilatus Porter, Cessna 206 and 185 (with in-flight door) and all are permanently based at the centre. Jump prices are 110FF for 3,500m (approx. 12,000'). A French Parachute Federation membership card is also necessary (300FF). However, it is possible to pay a supplement per jump, if you prefer, in order that you can choose the most economical approach, depending on the number of jumps you intend to make.

The centre is open all week throughout most of the year and offers the finest facilities for team training, progression, or simply a parachuting holiday with friends or a club.RW and CRW standards are high and Pujaut is used by many British and European teams for training and preparation for national and international events. For those who would like a short break from parachuting during your stay, Avignon is only some 10 minutes away by car and has plenty of shops, bars, restaurants, historical sites and leisure amenities.

If you would like more information about parachuting in the sun and blue skies above Pujaut, just telephone the number below or write direct. We look forward to welcoming you.

Centre de Parachutisme 30131 Pujaut FRANCE.

Telephone: Centre 90 26 41 83 Telephone: Clubhouse 90 26 46 96 Dial 010 33 first when calling from the UK.

# Come and experience

# SKYFEST '88

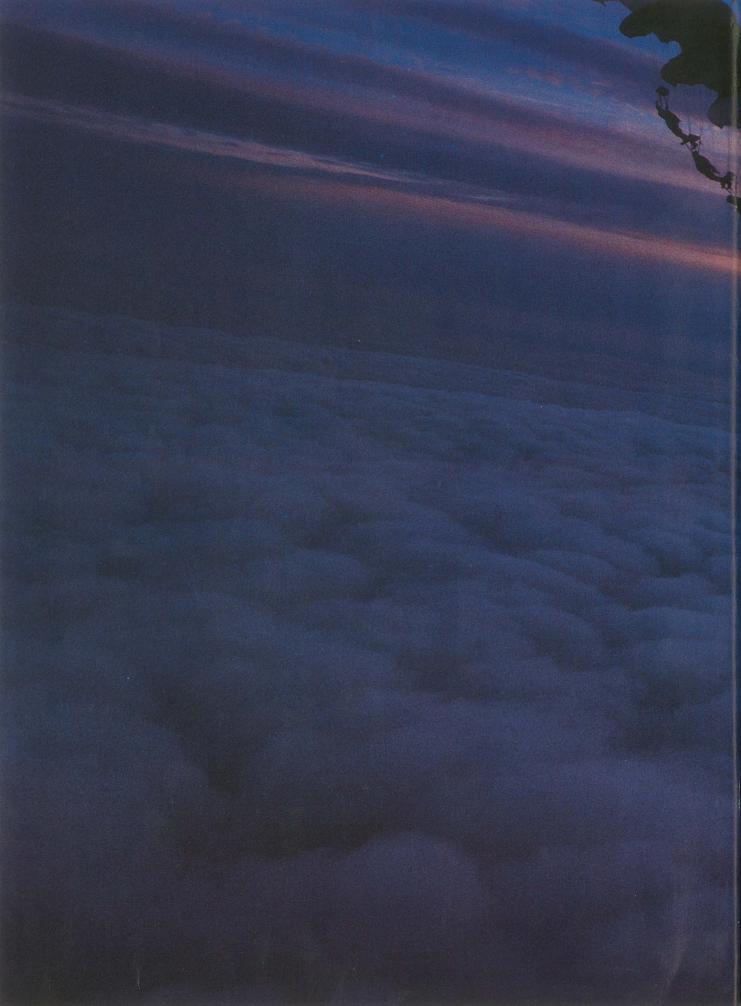
at NETHERAVON

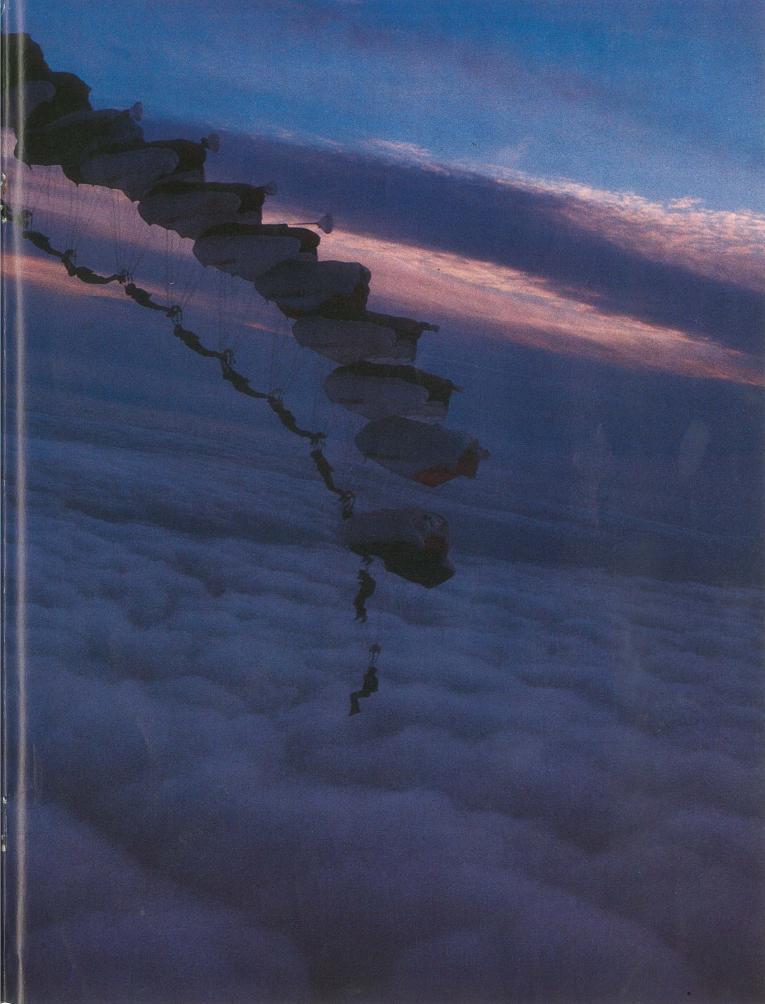
# July 30-31

Skyvan, 2 x Islander, Cessna 206.

Load Organizers B.B.Q. DISCO

Photograph by Leo Dickenson





# Skydiving, Money and Sponsorship

The stories surrounding the French World Champion 4way Tag Heuer Team are legendary. All expenses paid training camps out of CASAs in Mexico with packers, physiotherapists, 2 rigs each, sports psychologists etc. etc.

The arrival of Aziz Abdulojeh into the sport with the phenomenal resources of a group of companies reportedly earning 7 million Dollars gross profit a week, changed the nature of top class competition over a period of just three years or so. The actual sum of sponsorship money involved is unknown, but would be 'petty cash' for the group.

This kind of sponsorship is obviously a dream for 99.999% of skydivers. But was it really sponsorship?

I doubt very much whether the Tag Heuer Corporations' balance sheets show a very healthy profit from the investment. The same applies to Visions and their Coors money, which helped keep them together for 8 years and plenty of medal ceremonies. The unlimited resources of the US Forces for the Golden Knights (who arrived in Brazil in their own Hercules) keep them in the air all year.

No, this isn't 'sponsorship'. Sponsorship is a contract whereby the sponsor can show a tangible and justifiable return on his input of funds. This level of money is support. The distinction is important because it affects the way in which any individual or Team is to approach a potential sponsor and hope to achieve anything.

Of course, the primary reason for a company wishing to enter a sponsorship contract will be to increase sales. It is a pure marketing exercise and these days is a high-tech, highly researched, multi-media effort.

Media is the key word here. Without exposure, paid for via advertising or arranged via PR or promotional activities, any company cannot help to increase sales. Brand awareness is what is required.

As skydiving has no TV or other media coverage other than documentaries, it is very hard to 'sell' to a company, as are all minority sports or others with no TV coverage. In many cases, the quite high financial support can be attributed to an individual's involvement in the sport, who also works for the sponsoring company. Abercrombie Clothing put £250,000 into Polo for example.



rces of the US in Brazil in their ip is a contract e and justifiable ioney is support. fects the way in bach a potential mpany wishing to ease sales. It is a high-tech, highly

Derek Etherington is a consultant to the Sports Council on sponsorship, and reports that in 1987 there were a record number of companies making enquiries. In 1986 about 1750 were involved, as opposed to 900 in 1981. In 1987 another 140 or so were added.

Television has been the single most important factor in the increase in money involved. The number of hours of televised sport have more than doubled from 1200 in 1975 to 2711 in 1986. Channel 4 has been successful in promoting minority sports, including parachuting, and this is in part because for TV producers, sport is a relatively cheap way to fill the screen at about £20,000/hour as opposed to £72,000/ hour for light entertainment.

Twelve sports take up 80% of TV coverage, and the top twenty are snooker, cricket, horse racing, soccer, tennis, golf, athletics, bowls, boxing, equestrian, darts, wrestling, motor racing, ice skating, rugby union, cycling, rugby league, gymnastics, motor cycling and yachting.

With this kind of money and coverage, it is obviously not even going to be in the near future that we are likely to see any significant funds put into the sport as a whole. What could happen is a Team of sufficient standard which presented itself professionally through its governing body, getting the support it needs to get into the medals at World level. The likelihood of this happening is entirely dependent on the personnel involved and their committment, (as with any Team), the research done, and the amount of work put into the presentation and package.

Bear in mind, for example, that Whitbread, who sponsor athletics, bowls, table tennis, equestrian, golf, horse racing, darts, soccer, yachting, rowing, speedway, basketball,

\*(Above and top right) There are other forms of aerial sponsorship competing against Skydiving, all with a high profile and which are cost effective.

rugby union, tennis, squash, snooker, angling and rugby league, are approached daily by a lot of hopefuls. You'll only get out what you're prepared to put in, and continue to put in.

Any company putting several thousands of pounds into any sport will expect a lot in return. Are you really prepared to do that, or are you just after free jump tickets? If the latter, forget it, because all you do is rip off the people who are prepared to take it seriously and professionally, and you'll spoil the reputation of the sport.

It is likely that this is one of the reasons that a large sponsor like Kronenborg 1664 or Coloroll are prepared to stick with the Military Teams.

The Institute of Sports Sponsorship, and the Sports Council Advisory Service are there for help, and should be approached by serious sponsorship pitchers.



\*The Red Devils - a high profile and military backing for Coloroll



\*The Royal Marines who enjoyed Kronenberg 1664 sponsorship for the demo team and specific record attempts. Ideal sponsorship duration is 2 to 3 years.

Here's a summary of all the main points surrounding successful sponsor deals.

#### THE TYPE OF OPPORTUNITY

- \* An event (new or existing)
- \* A team
- \* A club
- \* An individual
- \* Coaching or training
- \* Equipment/clothing/transport
- \* Facilities/buildings
- Proficiency award schemes
- \* The young
- \* Handicapped

#### THOUGHTS ON PACKAGING A SPONSORSHIP

- 1. Define what the opportunity you are offering can do for a sponsor - not what the sponsor's support can do for you.
- 2. Identify the consumer market that the sponsorship will reach.
- 3. Understand the typical objectives of a potential sponsor.

#### COSTS, BUDGET AND TIMING

- 1. Give as much notice as possible.
- 2. Next year's budget?
- 3. Entrepreneurial decision?
- 4. Exploting the investment maximising the opportunity.

#### THE SPONSORSHIP PRICE - NO HIDDEN EXTRAS

#### SPONSOR'S TYPICAL OBJECTIVES

- 1. Increase brand/service awareness among consumers.
- 2. Improve consumer image of company.
- 3. Increase goodwill and understanding among trade customers.
- 4. Enhance company's image in local community.
- 5. Raise employees' morale and company loyalty.
- 6. Create favourable awareness of the company among young potential future consumers.

#### **CUSTOMERS AND STAFF**

- 1. Facilities meetings/entertaining
- 2. Tickets complimentary/paid/discount
- 3. Staff involvement and responsibilities
- 4. Presentations photography
- 5. VIPs
- 6. Display opportunities/promotional distribution

Continues overleaf.....

#### SKYDIVING, MONEY AND SPONSORSHIP



\*Abbey National, another successful form of using a sport for image building.

#### PUBLICITY

- 1. Local press ads/editorials
- 2. Local radio mentions/competitions
- 3. Local television coverage/sports round-up
- 4. Programmes advertising/appreciation
- 5. Posters local/company POs
- 6. Banners

#### THE RUN-UP TO THE EVENT

#### THE EVENT AND RESULTS

#### THE FUTURE

#### **PROMOTION AND PR**

Trade, Consumer & Sales Force Activities Competitions Merchandising Licensing Books/mags Incentives Premiums Endorsements

#### PR

Personal appearances Press releases

Advertising Possible link - TV, Radio, Press, posters



\*Whatever happened to Malibu? Did they get the return that their investment warranted?

#### SPONSOR'S COSTS

Sponsorship and prize money plus....

- 1. Providing and erecting display materials at venue
- 2. Staff expenses attending events
- 3. Hospitality to guests
- 4. Free samples, give-aways, promotional material
- 5. Additional temporary staff
- 6. Management time
- 7. Proportion of fixed admin. costs (possible)
- 8. Costs of promoting sponsorship press ads, direct mail, press releases, car stickers, etc.
- 9. Research, measurement and evaluation cost
- 10. Sponsorship agency charges

#### METHODS OF COMMUNICATING

- \* Direct mailing
- \* Personal contact at the business
- \* Local media publicity
- \* 'At Homes'
- \* Talks Rotary, Round Table, etc.
- \* Invitation to events
- \* Local seminar/presentations (early evening)

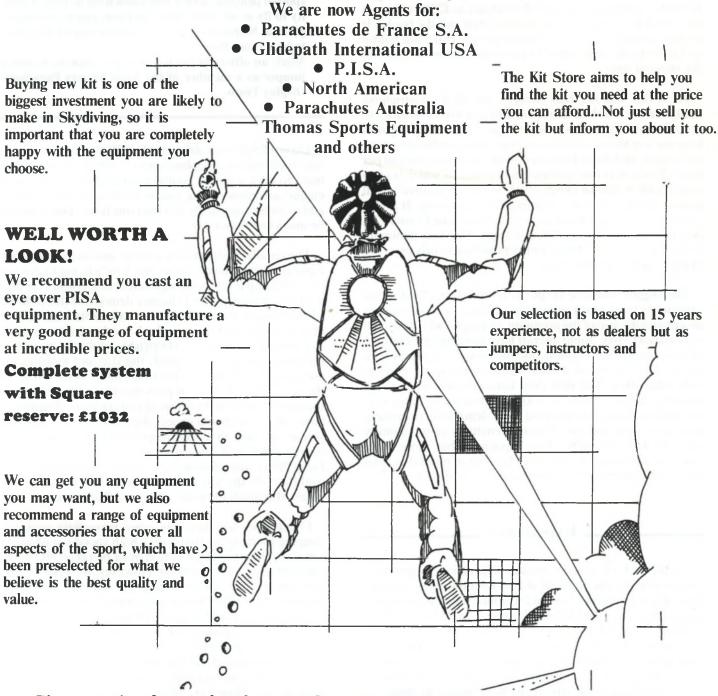
#### MARRIAGE

- \* Successful, if both sides are totally honest with each other.
- \* Agreeing a deal is the start, not the end of the relationship.
- \* Look for a long-term relationship.
- \* Agree respective responsibilities.

# THE KIT STORE

The Airfield, Headcorn, Kent TN27 9HX, England. Tel: 0622 890967 **'Purveyors of the finest Parachuting Equipment'** 

Since changing our name from 'Parachutes de France UK Ltd.' we have expanded our dealership to enable us to offer a more comprehensive choice.



Give us a ring for our brochure, or drop into our shop here at Headcorn DZ and check out our large stock of equipment and accessories.

Rob Colpus Sarah Brearley David Parker

## So, you want to be a JUMP PILOT ....

To become a Jump Pilot, you will need a Private Pilots Licence (PPL) and 100 hours as Pilot in Command (P1) of an aeroplane. If you have a D licence, you will only need 75 hours P1. To put these figures into perspective, you need a minimum of 43 hours for a PPL, which includes 10 hours P1. Translate this into cash at  $\pounds$ 50 per hour for an aeroplane with the capability of crossing a puddle, and you are looking at  $\pounds$ 2150 for the licence which will be closer to  $\pounds$ 2500 after you have paid for a medical, the licence itself and the books. It is then a further  $\pounds$ 3250 to 75 hours for the D licence holder or  $\pounds$ 4500 for the remainder to reach the minimum figure in the shortest time.

As if this was not bad enough, the BPA's restrictions really are the absolute minimum and you would be lucky to get a Jump ship at this level of experience. This is partly because you also need 10 hours experience on the aeroplane to be used, and this is likely to cost rather more than £50 per hour. This hourly rate applies to a Cessna 150, which is a two seater with a rate of climb which is barely positive at full power, and it is not used routinely as a jumpship. It is also unusual to see used the next aircraft in line, the Cessna 172, because it will only carry three jumpers. The basic minimum is the Cessna 182 with four jumpers and an hourly price tag in the region of £85 per hour.

The biggest obstacle to the potential Jump Pilot is the experience level which an insurance company is prepared to accept and the size of the premium, or excess, which the club is prepared to pay. Jump aircraft have developed something of a reputation for crashing and insurance companies tend not to share our level of enthusiasm for the sport, particularly when they find that they have recently had to sign another cheque. There is nothing intrinsically dangerous about jump flying, but it is a tad more demanding than many jumpers realise and the ultimate penalty is an involuntary collision with the earth. This happens rather more often than the companies would wish, bearing in mind that even one crash is one too many from their point of view.

## Experience \_

At the risk of causing further depression to potential Jump Pilots, many clubs would be unenthusiastic to see a Jump Pilot start with less than 250 hours 'pilot in command'. (Including the initial PPL teaching time of 33 hours, this is equivalent to £14,150 at £50 per hour). At this level of experience, you only need a 'check out' on the type of aircraft which you plan to fly, and more to the point, you have a basic minimum of flying experience which should enable you to handle a small aircraft without having to think too much about the basics of flying. By this stage it should have started to become automatic, and the pilot can take in what is happening around him. From only a few hours of experience earlier when he thought he knew it all, a few frights and a little more realism should by now have convinced him that he will never know it all; when he genuinely realises this fact of life, he is a much safer pilot.

Rub the surface of many Skydivers and you will find a Jump Pilot trying to get out. To the casual observer, it is the more remarkable in view of the generally held opinion that the turkeys who fly at DZ's are at the best 'all right' and at worst a sub-species of the greater spotted penguin, a bird well-known for its lack of ability to fly at all. Here Nigel Jackson, one of the senior pilots at Netheravon, gives an insight into what it takes to be a Jump Pilot.

Nigel, an officer in the Royal Green Jackets, is also a jumper as a member of the Trail Blazers Parachute Display Team.

Do not forget that although the PPL will license you to fly any single engine aeroplane up to 12,500 lbs weight, you will need to do a separate course to extend the licence to twin engine aeroplanes. The course itself is six hours and then add a test lasting usually just over one hour. The cost will not be much less than £800.

The parallel with jumping is close, and as a rough guide to equivalent experience, allow one hour's flying to one jump. The 250 jump level, being equivalent to 250 hours, is slightly above the minimum for D licence demos and this is the point where jumpers theoretically start to be able to get out of an aeroplane and not have to think too hard about having to stay the right way up at 2000ft(ish), while the brain is concentrating on the wind speed, the size and location of the arena and the position of the other jumpers for CRW, all at the same time. A 250 hour pilot should be able to do roughly the equivalent in flying terms. If you are being flown by a 100 hour pilot, you should expect the same level of expertise as you would find in a 100 jump Parachutist. There are, of course, pilots with low experience who would make superb Jump Pilots, and pilots with a couple of thousand hours who could not do the job so long as they had a hole in their... noses. But much the same applies to Parachutists.

Flying does not have the same immediate pressure of jumping in the sense that with a high speed parachute malfunction, the emergency action must be taken NOW, without hesitation, or you will die. However, the action contains basically the one option - dump the reserve - and the only flexibility is whether to cut away first, and whether to wait for stability (I would suggest strongly, with two high speed mals in my logbook, that you don't wait for stability, although it is desirable!)

Similar situations can occur in flying but they are less likely and normally you have appreciably more time to think about what to do. However, there is usually a wide range of options, and some of them will kill you just as effectively as a high speed mal. This is the essential difference. The overall concepts of flying and jumping are broadly similar, and reasonably competent jumpers would make good pilots. The best Jump Pilots would also make good jumpers; there are, fortunately for the general sanity and equilibrium of the sport, not many around who do jump.

## 

A factor to bear in mind if you are planning to step into the position of Jump Pilot is that most of the private pilot population of the country would give up their silk scarves to get free flying. There are only three 'free flying' activities which can be carried out with a Private Pilot's Licence, Jump flying, Instructing and Glider Tug towing. As a result, parachute clubs can be inundated with hopefuls, at least they will be if they show the slightest sign of encouragement.

## . Enthusiasm \_

Among fifty people who show an interest there is hidden probably one potentially outstanding Jump Pilot with the time and enthusiasm to make a go of it. However, there are rarely any indicators that this person has the talent and most clubs put up a barrier to newcomers in the light of experience of the number of Turkeys who are on the market. In this context, a Skydiver who turns Jump Pilot has got an outstanding advantage because he knows the score and talks the same language as the other people on the DZ. CCI's tend to recognise this fact even though they might not admit to it.

Incidentally there are proposals to change the licensing rules. PPL holders will still be allowed to fly jumpers, but if that person gets paid, he will need a Basic Commercial Pilots Licence.

What about getting the PPL? First, choose a school with some care. Be aware that many are staffed by people who were in your position not so long ago and have gained the minimum experience necessary to become instructors. They are now gaining free hours at your expense. This is not to say that many are not thoroughly dedicated and effective instructors, but some are not. Do not have the same faith which perhaps you had in your first parachute instructor. (And now you know better about that!)



The course consists of a number of preset lessons. In the first, you are shown the effects of each of the controls and how they become more effective when more air is passing over them, just as movements of the body become more effective as it accelerates to terminal. Then follows lessons on straight and level flight, climbing and descending, turning, stalling and then you put all the basic manoeuvres together in the circuit where you remain trapped for what seems like an eternity. You will be expected to fly accurate altitudes, headings and speeds, and to make contact with the ground in a seemly manner, preferably on the runway. There are major similarities to square canopy control but try to avoid putting the aircraft down in a space just large enough for a 252.

A certain amount of theoretical study is required and this is best left to bad weather days. Before long, you will be allowed to take the aircraft round the circuit on your own, not much of a problem for you, a big bottle job for the instructor who signs you up. Periods of circuit consolidation follow before you leave the area of the airfield to do navigation, practice forced landings and basic flight on instruments. The course can be completed in the minimum of 43 hours although the average is rather more than this. The secret of keeping to the minimum, apart from a dose of talent, is to take three weeks off and hope that the weather is kind.

And that is all there is to it! I hope that outlining some of the difficulties has not depressed too many potential Jump Pilots. There are short cuts to cheap flying for the ingenious; you do not need to spend as much as  $\pounds 50$  per hour, although be wary of schools who are charging much less. In building hours thereafter, it does not matter too much, as long as the aeroplane at  $\pounds 25$  per hour also has the capability of staying in the sky. The whole subject is worth pursuing; Jump Flying is good fun.

## Want to make a Static Line Square Jump or an AFF Jump? Telephone (0792) 296464 SWANSEA PARACHUTE CLUB

## C.I.P. SAFETY SURVEY 1987

The 1987 CIP Safety Survey was designed to determine how many people skydive, how many jumps they make and how risky skydiving is. A number of additional questions were asked in an effort to identify causes which affect safety and activity levels.

The survey requested information for each of the six years from 1981 to 1986 and was sent to all of the 56 nation members of the CIP. Responses were received from 39 of them.

The results show that skydiving worldwide is on the increase - albeit slowly - with 29% more participants in the sport in 1986 than in 1981. Most of the growth has been in Europe and South America.

It is estimated from figures returned that around six million jumps were made in 1986 - and a total of over 35 million over the six year period covered by the survey.

The average number of jumps per person fluctuated widely between nations - from 380 in China to an average of just two in Spain and Ireland - but the overall average was 17.

Skydiving is getting safer too, according to the poll - both in terms of the risk per person and per jump. It is likely that the increase in safety, especially since the major improvements undertaken in 1982, is the result of better student training methods and the use of modern equipment by all skydivers.

Information concerning fatalities revealed that there were an estimated 764 deaths during the six years in question (based on reported figures in survey replies). 31% were students, 40% intermediate level and 29% classed as experts.

Questions about equipment brought interesting, if not detailed, information showing that a "typical" nation is using piggyback and square canopies for 30% of their student training, piggyback and round canopies for 10% and the remaining 60% use front mounted reserves and round canopies. A "typical, nation is defined as being midway between extremes.

The two main questions left unanswered by the survey were;

**A.** Is the number of active, experience jumpers on the increase or do the figures reflect a greater number of students being trained and

**B.** How does the safety of student training jumps compare with that of non-student jumps. But it has provided a previously unseen viewpoint of worldwide skydiving and establishes a benchmark against which future studies can be compared.

### JUMPER POPULATION

YEAR	NATIONS REPORTING	TOTAL	ADJUSTED TOTAL* (56 countries)	RATE OF GROWTH
1981	37	191,431	289,733	
1982	37	197,737	299,278	3.3%
1983	37	211,962	320,807	7.2%
1984	37	223,838	338,782	5.6%
1985	38	239,738	353,298	4.3
1986 1981-1986	38	254,055	374,397	6.0% + 29%

\*This is a projection which assumes that all unreported nations factored together have the same averages as the nations which did report.

By Rob Colpus British Delegate

### AAD USE 1981-1986

	Nations Reporting	Total Jumps		alities Stu Students	dent Fatalities % of Total
No mandatory AAD use	13	15,238,266	284	88	31%
AAD use mandatory for all	4	569,889	12	3	25%
ADD use mandatory for all students	22	4,954,909	157	42	28%

	by average activity 81-1986
Nation	Number of jumps per participant
China	380
Morocco	
	· ·
Agentina	56
Switzerland	54
Israel	44
Poland	44
East Germany	39
Peru	39
Venezuela	39
West Germany	32
Republic of Korea	30
Zimbabwe	28
Belgium	26
Finland	26
Italy	26
Bulgaria	23
France	21
Mexico	20
Czechoslovakia	19
United States	19
Australia	18
Chile	15
Sweden	15
Luxembourg	14
Norway	14
Iceland	13
The Netherlands	12
Denmark	11
Turkey	11
Brazil	7.6
Japan	7.5
Dominican Republic	6.3
United Kingdom	5.4
Mozambique	4.9
Paraguay	4.25
Ireland	2
Spain	2

## Rate of Fatalities by number of jumps per fatality

Nation	Jumps per
	fatality
China	185,500
Czechoslovakia	87,988
Poland	88,449
United Kingdom	83,333
United States	73,280
Italy	58,015
France	55,563
East Germany	27,686
Switzerland	22,288
West Germany	19,462
Belgium	17,616
Brazil	13,750
Argentina	11,265
Denmark	-9,333
Japan	4,665
Venezuela	3,300
Ireland	2,000

No fatalities reported in 1986:

Turkey Sweden Finland The Netherlands Luxembourg Paraguay Zimbabwe South Korea Dominican Republic Iceland Mozambique Israel Mexico Norway Bulgaria Chile Morocco Peru Spain

Number of jumps for 1986 not reported: Australia, Canada, New Zealand.

### 1981-1986

1981-1986	
United States	64,894
United Kingdom	59,111
Finland	57,639
Czechoslovakia	57,083
Italy	47,875
East Germany	47,774
Bulgaria	42,024
Poland	41,722
Norway	41,043
France	39,934
Sweden	39,276
Turkey	38,109
China	32,460
Switzerland	30,677
Belgium	29,566
The Netherlands	29,067
West Germany	25,539
Australia	21,667
Spain	17,004
Zimbabwe	16,450
Argentina	16,037
Chile	10,700
Denmark	9,333
Mexico	8,449
Japan	8,232
Venezuela	6,537
Brazil	5,533
Iceland	3,406
Ireland	2,933
Paraguay	2,786
Dominican Republic	479
Mozambique	264
Israel	
Korea	
Luxembourg	
Morocco	
Peru	

## Rate of fatalities by number of participants per fatality

1986

Nation	Participants
	per fatality
	1
United Kingdom	17,373
Czechoslovakia	4,087
United States	3,717
France	2,997
Italy	2,041
Australia	1,678
Poland	1,585
Brazil	1,325
Ireland	900
Denmark	755
East Germany	684
Belgium	609
West Germany	565
Japan	512
China	395
Switzerland	366
Argentina	212
Venezuela	55
· onobuotu	55

No fatalities reported in 1986:

Turkey Sweden Finland The Netherlands Luxembourg Paraguay Zimbabwe South Korea Dominican Republic Iceland Mozambique Israel Mexico Norway Chile Spain Bulgaria Peru Morocco 1981-1986 United Kingdom 10,959 Spain Turkey 8,650 3,544 United States 3,332 Czechoslovakia 3,060 Norway 2,906 Sweden 2,629 The Netherlands 2,519 Finland 2,226 France 1,928 Bulgaria 1,835 Italy 1,844 Ireland 1,433 Australia 1.379 East Germany 1,233 Belgium 1,130 Japan 1,086 Poland 942 942 800 755 732 730 655 West Germany Denmark Chile Brazil Paraguay Zimbabwe 588 Switzerland China 570 454 Mexico 431 Argentina 285 Iceland Venezuela 263 167 Dominican Republic 76 Mozambique 54 Israel ----Korea ----Luxembourg ---Morocco ---Peru ----

### Nations Ranked by Total Number of Participants

### 1986

1900	
United States	111,500
United Kingdom	52,119
France	20,976
Spain	15,500
Australia	8,391
West Germany	6212
Brazil	5,300
Czechoslovakia	4,087
Italy	4,082
The Netherlands	3,773
Sweden	2,892
Norway	2,455
Denmark	2,265
Bulgaria	1,974
Poland	1,585
Switzerland	1,450
East Germany	1,368
Finland	1,284
Belgium	1,218
Japan	1,023
Ireland	900
Turkey	791
Argentina	635
Chile	403
China	395
New Zealand	250
Mexico	200
Zimbabwe	180
South Korea	158
Paraguay	157
Peru	110
Venezuela	110
Morocco	85
Luxembourg	80
Iceland	60
Israel	40
Mozambique	25
Dominican Republi	c 22

### 1981 - 1986

United States	656,350
United Kingdom	197,260
Spain	103,800
France	102,181
Australia	34,486
Czechoslovakia	24,477
Brazil	21,900
Italy	20,285
The Netherlands	17,633
West Germany	15,997
Sweden	15,775
Denmark	12,519
Norway	11,623
Poland	11,302
Bulgaria	11,012
Switzerland	8,550
East Germany	7,398
Turkey	7,088
Belgium	6,782
Finland	6,679
Japan	5,428
Ireland	4,300
Argentina	2,562
China	2,270
Chile	2,196
New Zealand	1,300
Mexico	1,294
Zimbabwe	1,176
South Korea	797
Реги	688
Paraguay	655
Venezuela	502
Morocco	388
Luxembourg	327
Iceland	263
Mozambique	217
Israel	167
Dominican Republic	152

### Nations Ranked by Total Number of Jumps

1986

1986	
United States	2,198,400
France	388,944
United Kingdom	250,000
West Germany	214,085
China	185,500
Italy	116,030
Switzerland	89,150
Poland	88,449
Czechoslovakia	87,988
East Germany	55,371
Brazil	55,000
Sweden	53,046
Bulgaria	50,256
The Netherlands	50,055
Norway	38,293
Belgium	35,232
Argentina	33,795
Finland	30,734
Denmark	28,000
Spain	24,000
Turkey	21,050
Morocco	10,601
Japan	9,330
Venezuela Chile	6,600 5,700
Zimbabwe	4,800
South Korea	4,600
Peru	4,309
Mexico	3,000
Ireland	2,000
Israel	2,000
Iceland	1,410
Luxembourg	1,146
Paraguay	760
Dominican Republic	98
Mozambique	15

\*Australia, Canada and New Zealand did not provide this information.

### 1981-1986

United States	12,784,200
France	2,116,510
United Kingdom	1,064,000
China	862,300
Italy	526.630
West Germany	510,784
Poland	500,659
Czechoslovakia	456,666
Switzerland	460,150
East Germany	286.645
Bulgaria	252,156
Sweden	235,654
Spain	204,050
The Netherlands	203,466
Belgium	177,397
Finland	172,918
Brazil	166,000
Norway	164,172
Argentina	144,333
Denmark	138,924
Turkey	76,218
Japan	41,160
Morocco	33,681
Zimbabwe	32,900
Chile	32,100
Peru	26,673
Mexico	25,246
South Korea	23,798
Venezuela	19,610
Ireland	8,800
Israel	7,300
Luxembourg	4,562
Iceland	3,406
Paraguay	2,786
Mozambique	1,057
Dominican Republic	958

\*Australia, Canada and New Zealand did not provide this information.

### Nations Ranked by Total Number of Fatalities 1981-1986

### Nations Ranked by Total Number of Fatalities 1981-1986

		Student	Inter	Expert	?
United States	197	57	92	48	0
France	53	10	22	21	0
Brazil	30	12	11	7	0
Australia	25	9	5	11	0
West Germany	20	0	0	0	20
Canada	18	10	6	2	0
United Kingdom	18	0	0	0	0
Switzerland	15	6	4	5	0
New Zealand	14	10	3	1	0
Poland	12	2	6	4	0
Spain	12	5	6	1	0
Italy	11	1	6	4	0
Argentina	9	0	5	4	0
Czechoslovakia	8	0	0	0	8
Denmark	8	2	1	5	0
The Netherlands	7	3	2	5 2 3	0
Belgium	6	1	2 2 2	3	0
Bulgaria	6	3	2	1	0
East Germany	6	0	0	6	0
Sweden	6	1	4	1	0
China	5	0	0	5	0
Japan	5	1	2	2	0
Mozambique	4	4	0	0	0
Norway	4	1	3	0	0
Chile	3	2	1	0	0
Mexico	33	3	0	0	0
Ireland	3	1	2 3	0	0
Finland	3	0	3	0	0
Venezuela	3 3 3 2 2 2 2	1	1	1	0
Dominican Republic	2	0	1	1	0
Zimbabwe	2	2	0	0	0
Turkey	2	1	1	0	0
Iceland	1	1	0	0	0
Paraguay	1	0	1	0	0
Israel	0	0	0	0	0
Luxembourg	0	0	0	0	0
Morocco	0	0	0	0	0
Peru	0	0	0	0	0
South Korea	0	0	0	0	0

TT 1. 10		Student	Inter	Expert	?
United States	30	10	14	6	0
West Germany	11	0	0	0	11
France	7	2 3	3	2	0
Australia	5		0	2	0
Brazil	4	1	1	2	0
Switzerland	4	2	1	1	0
Argentina	3	0	1	2	0
Denmark	3 3 2 2 2 2 2 2 2 2	2	0	1	0
United Kingdom	3	0	0	0	3
Belgium	2	0	2	0	0
East Germany	2	0	0	2 2	0
Italy	2	0	0		0
Japan	2	0	1	1	0
The Netherlands	2	2	0	0	0
Venezuela		1	0	1	0
Canada	1	0	0	0	0
China	1	0	0	1	0
Czechoslovakia	1	0	0	0	1
Ireland	1	0	1	0	0
New Zealand	1	1	0	0	0
Poland	1	0	0	1	0
Zimbabwe	1	1	0	0	0
Bulgaria	0	0	0	0	0
Chile	0	0	0	0	0
Dominican Republic	0	0	0	0	0
Finland	0	0	Ō	0	0
Iceland	0	Ő	Ő	Õ	0
Israel	Ő	ŏ	ŏ	Ő	ŏ
Luxembourg	Ő	Ő	ŏ	Ő	0
Mexico	Ő	Ő	Ő	Ő	0
Moroco	Ő	0	ŏ	Ő	0
Mozambique	Ő	0	0	Ő	0
Norway	0	0	0	Ő	0
Paraguay	0	0	0	0	0
Peru	0	0	Ő	Ő	0
South Korea	0	0	0	0	0
	0	0	0	0	0
Spain Sweden	0	0	0	0	0
	0	0	0	0	0
Turkey	0	0	0	0	0

N	ATIO	N: ALI	L REP	ORTIN	łG				
Ра	rticipan	ts		J	umps		Jumps per Participant	Participants per Fatality	Jumps per per Fatality
19	81 37/	/191.43	1	35/3.	318,2	04	18	2,015	36,869
		/197,73			486.5		18	2.535	51,273
		/211.96			554,6		17	2,826	50,780
		/223,83			577,9		16	2,646	42,594
19	85 38/	239.73	8		810,6		16	2,997	49,489
19	86 38/	/254,05	5	36/4,	149,7	75	17	2,887	50,607
T	otal 1,	318,76	1	21,9	087,75	9	17	2,617	46,492
E		ence of Student		ties (FF Expert	<sup>7</sup> )	AAD Student	s Req'd	Type Equip	
	TOTAL		6-250		1	23-yes		60.3 9.4	
	99	32	38	24	5	16-no		0012 211	2310
	82	18	38	21	5				
	80	24	33	19	4				
	90	29	29	24	8				
	83	21	30	23	9				
	89	25	24	24	16				
	523	149	192	135	47				
		31%	40%	29%					
10		ate Clu	bs1 - L	low or 1	10 pul		er error; lo	ost track of tim	ie and
	-Cent eroclu		altit	ude; in	correc	ct proce	aures)		
	Milita		2.1	lazarde	us la	dings -	drowning		
		nercial		uzara	743 Idi	iungs -	arowning		
	Comm	center							

## **1988 Perris Valley Skydiving Events Schedule**

1-4 July 2&3July 30 July 27 August 2-5 September 3&4 september 24 & 25 September

24 September 8-10 October

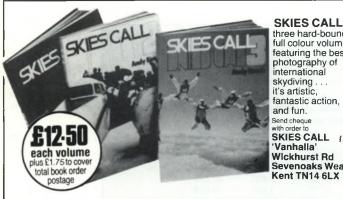
22 October 30 October 11 November

19-27 November 25 & 26 November 26 & 27 November

17 Dec to 2 Jan 25 December 31 Dec to 1 Jan 25 March to 2 April

4th of July Boogie Night Jumps -- Saturday & Sunday Night Jumps - Saturday Night Jumps - Saturday Labour Day Boogie 'California Cup' 6-Way Competition 21st Annual 'Rumble Seat' Meet, 10-Way Speed Star Competition from DC-3s (No-show exit/free flown) Night Jumps - Saturday First Annual 'Square One' 16-Way Competition Night Jumps - Saturday Hallowe'en Party Veteran's Day, All Veterans & Active Duty Military Skydive for \$11 from 12,500 feet **Thanksgiving Boogie** Night Jumps - Friday & Saturday Third Annual 20-Way Speed Star Competition Christmas/New Years Holiday Boogie Christmas Party New Year's Party Easter Boogie 1989

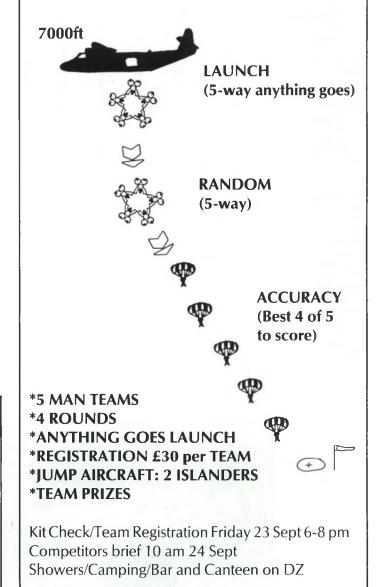
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## FRENCH STYLE 3 RING RELEASE / MINI RINGS

### INTRODUCTION

As a result of having received BPA safety information in connection with the French Style 3 Ring Release System I decided to carry out checks on equipment, employing mini rings, in use at this Drop Zone.

Robin Noble Nesbitt has pointed out that the primary problem encountered with this type of kit is the relatively high pull force required to effect release. The secondary problem observed was that of the release of the right side cable first (short side). In order to examine these observations I carried out some tests of my own, replicating Robin Noble Nesbitt's methodology where possible.

### METHOD

The cutaway pad on the kit under scrutiny was removed from its velcro and a hand held weighing device was attached to the cable. Various weights of jumper and a cross section of varying types of system were used. In all cases the jumpers were attached to a suspended training harness and were told to use their right arm only.

### RESULTS

The results were recorded. Each jumper's weight (in lbs), together with their experience, system used, test pull (in lbs) and any remarks on their test were carefully noted. Every jumper tested their own kit and one other piece of equipment used by a jumper whose weight was significantly different from their own. There were four cutaways performed on every system.

The forces recorded varied from 28lbs at the top end of the scale to 8lbs at the bottom for mini rings and 4lbs for standard rings. The average pull force was II.75lbs but this figure is somewhat distorted by a couple of stiff pulls of 28lbs and 20lbs and a more realistic representation was given by the medium figure of around 10lbs. In all cases jumpers were able to release themselves with one hand but, as was pointed out earlier, jumpers were required to exert substantially more effort (2-3 times) to effect release from the mini ring system than from the standard 3 ring system. A number of right side first releases were noted using both mini rings and standard rings but in each case the problem was more severe with the French style system.

### CONCLUSIONS

In all cases tested, the jumper was able to effect release with one hand.

Although the amount of force required varied considerably it did not seem to be correlated in any way with the jumper's weight or experience. What is more significant however is that there was a clear positive relationship between stiff pulls and equipment which had not been properly maintained, for example on one of the trials there was a reduction of 14lbs pull force (from 28lbs to 14lbs) after the cutaway cable was removed from its housing and oiled.

On close examination of right side first releases it is my opinion that these result from a contraction of the cutaway cable housing. Obviously there is a shorter length of cable from the cutaway pad to the right side than from the cutaway pad to the left side. When the release drill is performed the cutaway housing contracts and as a consequence of the greater length of housing to the left side this contraction takes longer for the left than for the right. On the standard ring system the cable may be released before the entire contraction process has taken place but on the mini ring system there is much more tension on the cloth loop gripping the cable which is not therefore released until complete contraction has been brought about. One of the worst scenarios I could envisage resulting from the problem of right side first activation would involve the Stevens system whereby the reserve could be activated before the complete cutaway process had been completed.

In conclusion, I believe that two very important points have arisen as a result of this test:

1. Equipment should always be properly maintained and both the cutaway cable and its housing regularly cleaned.

2. All jumpers should familiarize themselves with the cutaway procedure on whatever kit they may be jumping so that they know exactly how far they have to pull the cutaway pad to effect complete release and also what pull force they are likely to have to use.

IAN MARSHALL, D1577

WILD GEESE SKYDIVING CENTRE 116 CARROWREAGH ROAD, GARVAGH, CO. LONDONDERRY, N. IRELAND 

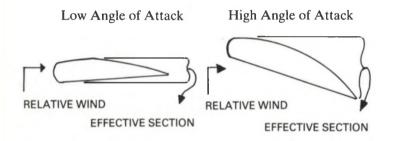
## An introduction to Aerodynamics Part 2

**HOW YOUR SQUARE** 

In Part 1, we looked at the forces acting on a canopy in flight. In part 2, we will go on to look at how these forces change in response to control input ie, what happens when you haul the toggles down. We will also consider some more practical aspects, like why it hurts when you land in a turn, and why your attempt at a landing flare doesn't always work.

### ANGLE OF ATTACK

This is the angle at which the canopy meets the relative wind. It must not be confused with 'Angle of Incidence', the angle at which the canopy is inclined forwards to generate forward movement. Angle of Incidence is fixed (unless you pull down on risers), Angle of Attack changes constantly. Any variation in airspeed or any fore and aft (longitudinal) oscillation will affect angle of attack. The pilot of an aeroplane can vary angle of attack independently of airspeed by using the elevators on the tailplane and changing the power settings of his engine. A parachute pilot can only vary airspeed, but produces a change in angle of attack as a consequence.



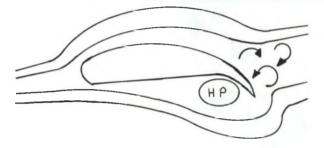
Small effective wing section therefore low lift, low drag.

Large effective wing section therefore high lift, high drag.



FULL FLIGHT

In this configuration, the canopy is offering minimum resistance to the flow of air around it, therefore creating minimum form drag. Also, the difference in pressure between the upper and lower surfaces will be small, so induced drag will be low. Low drag, therefore high speed.



### HALF BRAKES

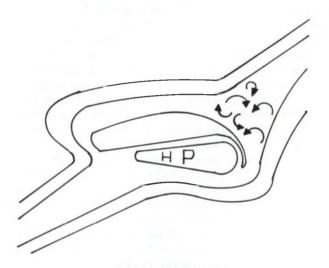
When you apply half brakes, you pull down the tail creating an obstruction to the smooth flow of air off the tail section, an immediate increase in form drag. Also, air is now unable to flow smoothly beneath the canopy so a small area of high pressure forms, increasing the pressure differential between top and bottom surfaces, hence an increase in induced drag. This increase in drag reduces forward speed, steepening the glide angle, changing the direction of the Relative Wind and effectively increasing the angle of attack, and as we have already said, increased angle of attack = increased lift. Therefore, by applying brakes, you have lost some forward speed but gained some lift.

NOTE: There is a popular misconception that by pulling down the tail of the canopy with the control lines, you are also lifting the nose - this is NOT so, all you have done by applying brakes is pull down the conrol surface ie the area between the D lines and the tail. You have changed the angle of attack, but by reducing airspeed and changing the direction of the Relative Wind, NOT by adjusting the canopy trim.

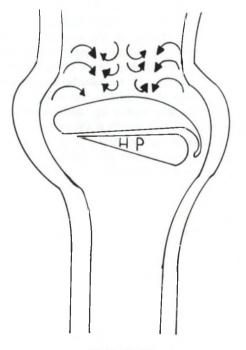
As you continue to apply brakes , you reach the point where the increase in lift from the increased angle of attack is offset by the loss of lift caused by the reduced airspeed. With most canopies, the point at which angle of attack and airspeed combine to create maximum lift occurs at about  $\frac{1}{4}$ -  $\frac{1}{2}$  brakes. As you approach full brakes, that is, the slowest airspeed at which the canopy is capable of generating lift, the canopy is starting to change its character. Generating very little lift and following a steep glide angle, it is now starting to function as a drag parachute rather than a gliding

## **CANOPY WORKS**

parachute and the area of high pressure below the canopy is starting to build up rapidly. This rapid pressure build up creates a proportionate increase in induced drag, and the tail being by now well down creates a big increase in form drag. This major change in the drag coefficient in response to small changes in toggle settings at low airspeeds is why the canopy is more responsive in deep brakes.

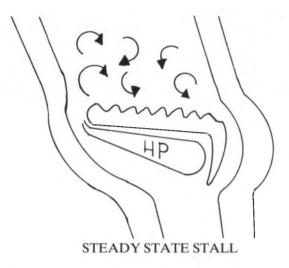


FULL BRAKES



### THE SINK

In this configuration, airspeed has become so low that the canopy is generating no aerodynamic lift at all, and is functioning solely as a drag parachute. Because it has a very small surface area compared to a round canopy, it makes an inefficient drag parachute so rate of descent is very high and the high pressure area below the canopy is expanding rapidly. By Ray Ellis Part 3 in next issue



The high pressure 'bubble', expanding rapidly in the sink, cannot escape backwards because you are holding the tail down. It cannot escape sideways because of the stabilisers, so it has only one place to go - out the front. The sudden popping out of this bubble of pressurised air causes an oscillation - ever seen anyone on an unmodified round? - and the canopy rocks backwards, giving the familiar sensation of the stall. At this point the air continues to escape out the front, pushing the canopy backwards and establishing the Relative Wind from behind, and the canopy starts to plane along on its bottom surface. Going backwards, no air can get into the cells, so they depressurize and collapse. This condition is called a 'Developed Stall'. It is quite stable and once established, not scary, but there are a couple of things to remember if you want to try it. You are travelling backwards quite quickly, so keep checking over your shoulder to make sure you aren't reversing into a canopy collision. Also your rate of descent is high, so think about recovering the stall at a sensible height to avoid a collision with the planet. Stall recovery is easy - all you need to do is allow the tail to rise sufficiently to allow enough air to escape backwards to restore forward movement. Once you have achieved this, the cells will rapidly repressurize, restoring the aerofoil shape, and you are back in business.

NOTE: There is often confusion between a 'Steady State Stall' which we have just discussed and a 'Dynamic Stall' which we will discuss later. These terms both describe the entry into the stall and are considerably different, although in both cases the end result is a 'Developed Stall' as just described. They start off different but end up identical.

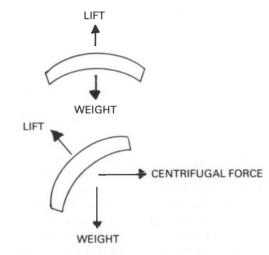
### TURNS

Lets look at the sequence of events in a turn from the jumpers point of view. From stable forward flight, you decide to turn left, so you pull down the left toggle. The canopy starts a turn to the left, and as it does so it also starts a bank to the left. As the turn continues, the rate of descent starts to increase. If the turn is continued, speed starts to increase as well.

As left toggle is applied, there is an immediate increase in both form and induced drag on the left side - as described in HALF BRAKES above but affecting only the left side of the canopy, which slows down. The right side now starts to over-

## AN INTRODUCTION TO AEROD YNAMICS - PART 2

take it and the canopy enters the turn. There is now a difference in speed between left and right sides. Because the right side is travelling faster than the left side, it is generating more lift, so moves up in relation to the left side, causing the canopy to bank. As the canopy starts to turn, another force comes into play - Centrifugal Force, which, acting outwards from the centre of the turn, tends to push the canopy outwards.



In level flight, the lift created by the canopy is directly opposed to the weight, which is acting straight down. In a turn, with the canopy banked, the weight is still acting straight down but the lift is now inclined and a proportion of it is now being used to oppose the centrifugal force. With only a proportion of the lift being available to oppose the weight, the rate of descent must increase. As rate of descent increases, forward speed must also increase as we discussed in theory of flight.

The turn rate, and therefore the bank angle and increase in descent rate and speed, depends on the toggle displacement. If you pull the toggle down three inches, you get a small variation in drag value between left and right sides of the canopy, therefore a slow turn rate, shallow bank angle and minimal increase in descent rate and speed. With one toggle in the keeper and one by your knee, you get maximum variation in drag value, maximum turn rate, steep bank angle and therefore a radical increase in descent rate and speed - the aerodynamic explanation of just why sharp turns near the ground are so painful!

### **EFFECTS OF INERTIA**

Earlier we discussed what happens during steady application of brakes. What we left out was an important force which affects the canopy considerably for brief periods -INERTIA. To paraphrase Newton (that guy really had it together!), if something is moving, it tends to keep moving. If something is still, it tends to keep still. The heavier the object, or the faster it is moving, the more pronounced the effect. (For fans of Albert Einstein, E=MC2.)

Lets say you are happily cruising along in full flight, and decide you want to slow down, so you bang the toggles down to ½ brakes. For all the reasons we talked about earlier, the canopy slows down. BUT - the canopy only weighs 10lbs or less, so it has very little inertia, so it slows rapidly. Because you weigh a lot more than the canopy you have much more inertia so you take a lot longer to slow down. For a short period, you are travelling faster than the canopy. Exactly how much faster depends on how much brake you applied. During this period, because you are 15 feet or so below the canopy at the end of the rigging lines, you swing forward, which actually ROTATES the canopy temporarily into an artificially nose-high attitude, giving a high angle of attack. High angle of attack, therefore high lift - reduced rate of descent - and high drag - reduction in speed. The canopy will quickly stabilise itself, you swing back from out in front to your normal position beneath the canopy, and continue your flight on a stable glide angle at the new speed.

If you now decide to go back to full speed and let the toggles back up, the reverse happens. The canopy rapidly accelerates, leaving you behind and rotating around you into an artificially nose-down attitude, giving a low angle of attack low lift therefore rapid increase in rate of descent, and low drag therefore rapid acceleration.

These effects are most noticeable when doing CRW - a small toggle movement produces noticeable vertical movement immediately as the angle of attack changes, then horizontal movement a moment or two later as the canopy stabilises at the new speed selected. And of course, every square jumper is familiar with the flared landing which uses this effect to produce a rapid reduction in both rate of descent and forward speed just prior to touchdown.

Another effect can be seen watching a novice accuracy jumper on final approach to the disc. Deciding he is overshooting be bangs on more brake. He swings forward, and as well as producing the aerodynamic changes we have discussed, the temporary change in the attitude of the canopy affects his perception of the glide angle and he thinks he is still overshooting, so applies even more brake. As the canopy starts to stabilize he realises he has overdone it so quickly lets up, almost invariably too much. The cycle of overcorrection quickly builds up and almost before he realises it he is oscillating wildly without a clue to where he is going. The answer is easy - make your toggle movements slow and gentle, to minimize the change in attitude, then wait for the canopy to stabilise before making your next correction.

### FLARED LANDING

Lets look at how a misunderstanding of these effects of inertia can cause you embarassment when you try your flare to land. By now you will have realised that to get the reduction in forward speed and rate of descent which you want for an easy landing, you need the canopy to be rotated into a high angle of attack, and this rotation is caused by the jumper swinging forward as brakes are applied. To get the rotation, you need a fairly abrupt toggle movement applied at fairly high speed.

Some common faults in the execution of a flared landing are: 1. Insufficient airspeed. If you attempt to flare at a low airspeed, you won't get much swing forward, because your body obviously is not moving fast enough to produce it. What you get is actually a 'Steady State Stall' which we discussed earlier, and you end up on your back - embarrassing and/or painful. YOU MUST HAVE AIRSPEED TO FLARE - don't attempt it from <sup>3</sup>/<sub>4</sub> brakes.

2. Insufficient toggle movement. If you pull the toggles halfway down then hold them there, you get some rotation but not as much as you want, so you touch down with forward speed and either have to run or fall on your face. Landing with some airspeed may not be a bad thing - for instance, it isn't as dangerous as landing on your back in a stall, and if it happens to be a windy day you will need some airspeed to counteract the wind. For instance, if the wind is 10mph and you reduce your airspeed to 5mph in the flare, your groundspeed would be 5mph BACKWARDS and you will have to either PLF or fall on your ass. In top limit winds when you may have little or no groundspeed even at maximum airspeed, you hardly need to flare at all - this is really a matter of judgement which, provided you understand the principle, will soon improve with experience.

3. Toggle movement too slow. If you don't pull the toggles down fast enough, you get a gradual speed reduction. There is time for the inertia of your body to be overcome so you don't get enough swing forward and again you only get a partial flare. Again, in some conditions this may not be a bad thing - see para 2 above.

4. Flaring too high. This is probably the most dangerous mistake you can make on landing. Having executed a good flare, as we have seen, you get a high angle of attack and therefore, a rapid reduction in rate of descent and forward speed. The problem is that this is a temporary condition produced by the swing forwards rotating the canopy into an artificial nose-up attitude, and it will only last while you have airspeed. The moment you run out of airspeed, the canopy will stall, and because the canopy is already steeply angled backwards the stall will be very abrupt. This condition is called a 'Dynamic Stall'. Ideally your feet will touch the ground a micro-second before this happens, but if you are still 10 feet in the air, you are in a lot of trouble and you must initiate stall recovery immediately.

NOTE: There is often confusion between the two types of stall which we have discussed, Steady State and Dynamic, so lets briefly recap and summarize the differences. A steady state stall is entered via the sink from low airspeed, following a comparatively gentle increase in the brake setting. There is no moment of high lift prior to the stall. A dynamic stall requires an abrupt toggle movement at fairly high speed and is preceded by a moment of high lift and high drag. The stall will be comparatively abrupt as there is no transition through the sink.

### GUSTS, WIND SHEAR AND TURBULENCE

The effect of any change in the airflow around the canopy can be to change the angle of attack without any control input from you, producing an unwanted flight manouvre. For instance, consider a sudden gust. As the gust strikes the front of the canopy, it will push the canopy back further than it pushes you back - partly because the canopy has a greater surface area and partly because the canopy has less inertia to overcome. This has the same effect as you flaring and if it is severe enough can even cause the canopy to enter a Dynamic Stall.

If you decide to land close to the downwind side of a build-

ing or similar obstacle, you can encounter wind shear. As the canopy enters the relatively calm air in the lee of the obstacle, it suddenly accelerates, rotating around your body low angle of attack and a loss of lift, probably too close to the ground to do much about it.

Turbulence, or a tumbling movement of the air, can cause the air to strike the canopy at unusual angles, producing sudden changes in angle of attack which can cause a dive earthwards as wind shear or a stall, as gusts. In an extreme case it can even strike the top of the canopy causing the cells to close. If that happens the cells depressurize and the canopy simply collapses. Turbulence is always difficult to predict obviously things like buildings and trees can cause it but it can also be caused simply by ground friction. The air in contact with the ground is slowed by surface friction and the air just above tumbles down ahead of it, causing sometimes quite severe turbulence up to 20 or 30 feet just where you don't expect it.

The stronger the surface wind the more severe these effects are likely to be, so the message is simple - don't jump in high winds!

So far we have discussed how your canopy actually works, and looked at several practical problems where a knowledge of theory may help your practical canopy control. In Part Three we will go on to look at canopy design - how to choose a canopy with flight characteristics best suited to your kind of parachuting.



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## **BRITISH PARACHUTE ASSOCIATION**

Wharf Way, Glen Parva, Leicester **COUNCIL MEETING** 

### Wednesday 10th February 1988

Present:

- J.T. Crocker Chairman BPA D.T. Hickling - Vice Chairman BPA, Chairman Development Committee
- A.G. Knight Chairman STC S. Eversfield Chairman Competitions Committee J.K. Lines Chairman Finance Committee T. Andrewes Club Representative

- J. Curtis J. Steele
- P. Lambson
- D. Howerski
- Susan Dixon
- J.J. Thomas
- G. O'Hara W.J. Meacock
- S. Treble
- N. Dixon K. Noble

In Attendance: C.W. Port - Secretary General, BPA A.K. Butler - JNCSO, BPA J.H. Hitchen - JNCSO, BPA

### Observers: 14

Apologies:

G. Douglas, D. Buchan - SSPA

### Minutes of Previous Meetings Meeting 9th December 1987

Proposed by T. Andrewes and seconded by J. Steele that the above Minutes be accepted as a true record.

Unanimous

Matters Arising (a) A/C Passenger Liability

D.T. Hickling stated that the information which he had managed to obtain was that if the passenger liability was already held then there would be no problems with the Association as a corporate body, organising championships, courses etc. In any other situation each case for application for passenger liability would be dealt with as it arose.

D. Howerski volunteered to see whether he could obtain any additional information on this subject. It was unanimously agreed that the Association should look very

closely at obtaining passenger liability, or ensuring it already existed when anything was planned where the BPA as a corporate body was involved.

(b) Minister of Sport - Correspondence The Development Committee had accepted the task of replying to the open letter to all governing bodies of sport which had been sent out by the Minister.

Additionally a letter from Mr. Smith, of the Sports Council to the Minister, which preceded the Ministers correspondence, had been received via the CCPR. This had been passed by C.W. Port to the Development Committee Chairman.

(c) Mr. M. Cooch - Student Descents C.W. Port had written to Mr. Cooch as directed but to date no reply had been received.

Capital School of Parachuting had closed down, this being the case the earlier decision taken by Council that defunct DZ's affiliations be cancelled was and remains in force in respect of Capital School of Parachuting. D. Turner had been approached to see whether he would be able

to jump those students who had been trained. NB. C.W. Port contacted Mr. Turner on 11th February and he

stated that he (Mr. Turner) had taken on board all the MENCAP people who had been trained but not jumped. Additionally Mr. Turner stated that his understanding of the situation was that Mr. John Eaton had agreed to jump other

students on behalf of Mr. Cooch. C.W. Port had written to Mr.

Eaton today to clarify the situation. The Secretary General was directed to write again to Mr. Cooch, Menorement of the relevant sections of the Articles and Mermorandums of Association and invite him to attend the next Council Meeting, 23rd March 1988, to discuss the matter, together with the statement that Mr. Cooch's membership status would be discussed.

In the interim period it was proposed by D.T. Hickling and seconded by J. Steele that Mr. Cooch's membership be suspended until the next Council Meeting.

Unanimous

### Minutes of 9th January 1988

Proposed by T. Andrewes and seconded by J. Steele that the Minutes of the above meeting be accepted as a true record.

Matters Arising 1(a) Annual General Meeting - Dinner Dance Following this meeting the Secretary General had submitted full income/expenditure on the above, together with a short report in order that Council members could submit ideas for venue, form of the annual conventions etc. To date three replies had been received but no suggestions had

been forwarded for alternative venues.

Deen forwarded for alternative venues. The hotel management had contacted C.W. Port to state that the weekend of 6/7th January 1989 was booked and enquiries had been received for the weekend of 13/14th. However the management had offered to wait until the 11th February before accepting any other booking in order to give the Association time to decide on its venue.

It was agreed to go firm on the venue for the annual functions. However, it was also agreed that a small sub-committee be formed to look at the whole format of the weekend. Any input should be submitted to this committee as soon as possible.

(b) Annual Subscription Fees As directed the recalculation of fees based on the Annual General Meeting decision of £25.00 had been distributed to all Council. These would now be sent to all Clubs for information. (c) Renewal Certificates

In consultation with Mr. McFarlane an additional programme was being written for the computer so that as a renewal was entered a renewal certificate would be printed. This would contain all the information presently held on file. In consequence a short note would go out with the certificate asking for any additions and/or changes to be sent to the office where these would be outered and nu undated artificate each out. would be entered and an updated certificate sent out.

Committee Reports
1. Safety and Training Committee
A.G. Knight presented the Minutes of the meeting of the 14th
January 1988.

Rigging Course - Netheravon. It was agreed that Mr. I. Robertson should be paid the £10.00 per day subsistance in addition to his travel expenses. A letter of thanks is being despatched. A.C. Centre of Gravity. A letter will be sent on this subject to the Civil Aviation Authority

A letter will be sent on this subject to the UVILAWARD AND A sentence, which will be compiled by J.T. Crocker and G.C.P. Shea-Simonds. Ratified

2. Competitions Committee Meeting S. Eversfield presented the Minutes of the meeting of the 2nd February 1988.

(a) No report had yet been received from the competitors who had been funded by the Association to attend the World Cup of Champions in Seoul. C.W. Port was directed to contact the two (b) The CIP delegate and Alternate Delegate had submitted reports to Council on the CIP meeting held in Nykoping in

January

Ratified

3. Finance Committee Meeting J.K. Lines presented the Minutes of the meeting of 20th January 1988

Ratified

Carried

4. Development Committee Meeting D.T. Hickling presented the Minutes of the meeting of 27th January 1988.

(a) It would appear from replies to date that it would be almost impossible to provide the membership list required for a possible

Impossible to provide the memory sing its required for a possible sponsor. (b) The Secretary General had prepared a detailed work schedule to include weekly, monthly and annual returns which he had to compile and submit. A similar schedule would be prepared on Development and Coaching.

### (c) National/Regional Centre

The Chairman asked that if anyone had any input on the above to please send this to him as soon as possible as the deadline for submission to the Sports Council was April. It was agreed that this subject would be a main agenda item for

It was agreed that this subject would be a main agence term of the next Council meeting. J. Curtis stated that in his considered opinion any National Centre would become a "white elephant". Proposals for a National Centre had been mooted, discussed and shelved as far back as 1965/66.

Additionally he felt that with the past record of Sports Councils promises of funding, any promises to fund such a centre could not be relied upon.

(d) Pursuits Magazine - Advertising C.W. Port had conducted a "phone round" on the above subject, the result of the voting on the proposal to advertise in the journal

was: For 13

Against 1 Non Contactable 4

### (e) BPA HQ

The Secretary General had, as directed, removed the partitioning in the Council room in an effort to enlarge the Council room area. (f) In response to a request from the Council (via the Chairman J.T. Crocker) the Secretary General had agreed to take on the title of Development Officer on a temporary basis, until such time as a final decision on an appointee has been taken. A vote of thanks was given to D.T. Hickling for taking up the tasks

of Development Officer as a temporary measure and for the daily time being spent at the HQ's building.

### 5. Club Representative

T. Andrewes stated that he had spoken to several people following the AGM/DD and would input the information to the sub-committee.

48

### 6. Roval Aero Club (1) The response to the CAA's proposals had been distributed to

all Coucil

(2) Youth in Air Year

D.T. Hickling had attended the launch of the above, in the presence of HRH The Duke of York, on the Associations behalf.

### Invitations to attend Council Meeting

1. Mr. D. McCarthy Mr. McCarthy had been invited to the Council meeting but had been unable to attend. D. Howerski agreed to contact Mr. McCarthy and remind him that he should be at the next Council meeting of 23rd March.

Prior to the next discussions the observers were asked to withdraw.

2. Mr. D. Wilkinson Mr. D. Wilkinson had attended this Council meeting in order to discuss with Council the fact that student fees including insurance premiums had not been remitted to the Association. Mr. Wilkinson stated that he had at the moment an ongoing

dispute with the Chairman, J.T. Crocker (on a matter not concerned with his present attendance). The Chairman J.T. Crocker immediately suggested that in fairness to Mr. Wilkinson he would relinquish the chair during these discussions to the Vice Chairman, D.T. Hickling, and additionally would abstain from any possible vote or discussion which might take place. Mr. Wilkinson said:-

stated above.

4. Mr. Daykin

had patches.

discussed.

foregoing.

1. Mr. D. Wilkinson

1) At present the finances at Montford Bridge were very difficult. This stemmed from problems with planning appeals, the aftermath of fatalities and adverse press reports and coverage. The cash flow had been very bad due to very bad weather and the fall off in students.

2) He categorically exonerated Mr. Daykin from any involvement in the retention of fees.

 He stated that as soon as they were operational again the outstanding remittances would be paid. He admitted having received money from at least 130 students and not passing the same to the Association even though the money was held in trust. In answer to a question he said he was unable to obtain short term funding from any source.

5) In answer to a question he said that last year was not comparable with the previous years sport due to the facts as

6) He admitted this was the second time this had happened!

3. Mr. A. Oakes Mr. A. Oakes had attended this meeting in order to discuss the

2) He accepted full responsibility for the retention of the fees. Mr. D. Thorne knew nothing about this, and that he (Mr. Thorne) merely carried out the duties of CCI and would have anticipated that the whole subject of fee paying was conducted by Mr. Oakes. 3) At the time he feit sure that the HQ office had not informed him that fees had to be paid a month in arrears.

4) He further said that, on checking back through his file he had in fact received the notification (to all clubs) that fees had to be

remitted one month in arrears. 5) He said he did not have the full outstanding sum with him but did have a cheque for £500 to present which would clear a substantial part of the outstanding sum.

been paid to Halfpenny Green for students said that some money had been paid to Halfpenny Green for students trained and jumped on behalf of Parachuting Promotions, but that there was still

money owing to Halfpenny Green from Parachuting Promotions. 7) Mr. Oakes did not appreciate the seriousness of the position

prior to the meeting. He was now very worried and upset that he had exposed the Association and its members and their

Mr. Daykin said that he had not come to Council with a prepared

to be in a position against the person concerned rather than

trying to help them. It was stated by Council that in the past when a club or centre had

any problems and they had approached Council (in time) then the Council had always been very sympathetic and helpful. In cases of genuine cash flow problems etc. clubs had approached

Council with requests for time to pay, or to be given a tiding over loan, in all cases Council had done its very best to help clubs over

Mr. Daykin said that as CCI he ensured that every students name was on the pink lists and was allocated a BPA membership number from the blocks available. He could not see how he was

supposed to know that fees had been sent to the BPA. In answer to a question he stated that the club was operating only

on a part time basis. He also said that he had the annual return ready to present but

needed to check figures via the manifests. At this juncture the Council went into closed session to discuss

There was extremely protracted and in depth discussion on the

It was proposed by J.K. Lines and seconded by P. Lambson that Shrewsbury Skydiving Centre be dis-affiliated with immediate effect for failing to submit memberships to the Association in the

the foregoing. During these, in camera, discussions the Chairman J.T. Crocker handed over the Chair to the Vice

Chairman when anything concerning Mr. Wilkinson was

The final decisions reached by Council were:-

Insurance to risk. It would never happen again.

7) He regretted leaving students uninsured.

non submission of fees to the Association Mr. Oakes stated that:-

1) The club had been in a very difficult situation.

due time and thus possibly negating the insurance. In favour 12 Against 4

Abstentions 1 J.T. Crocker

Carried

A counter proposal was put. Proposed by W.J. Meacock and seconded by T. Andrewes that Shrewsbury Parachute Centre be given 60 days to remit the outstanding fees and Annual Returns In favour 4 Against 12

Abstentions 1.J.T. Crocker

Not Carried

### 2. Mr. A. Oakes

Proposed by J.T. Crocker seconded by D.T. Hickling that Mr. Oakes offer of substantial immediate part payment of fees, and a firm committment to settle the outstanding sum within 60 days, he accepted. However, any recurrence would warrant immediate dis-affiliation Unanimous

3. Mr. D. Thorne and Mr. K. Davkin It was a unanimous decision that as both Mr. Thorne and Mr Daykin had been completely unaware of the retention of fees both were completely exonerated.

Mr. Oakes was then asked to rejoin the meeting. The decision of Council was put to Mr. Oakes and Council accepted the explanations given, and had accepted that his CCI was unaware of the remittance situation.

Mr. Wilkinson was then asked to rejoin the meeting. The decision of Council was conveyed to Mr. Wilkinson by the Vice Chairman. It was further stated that Council were surprised that he (Mr. Wilkinson) had withheld payment for the second time being fully aware of the problems from the first time. Mr. Wilkinson was asked if he had any comment to make. Mr. Wilkinson replied that he had no statement to make at this time.

The Vice Chairman reiterated that Mr. Wilkinson could not run the parachute centre.

Should he wish to appeal he could do so within 28 days.

### Dorset Parachute Club

Mr. McLaughlin had attended this meeting to re-inforce the correspondence which had been circulated to all Council. There was a problem with security of tenure and the landlords had required a tripling of the rent. Since that date he had now had notification that the landlords were prepared to negotiate. In the meantime Dunkeswell had kindly allowed him to jump his students there. He had a thriving club membership and was asking for an extension of his affiliation for 28 days whilst negotiations continued. This was in light of the Council decision to cancel the affiliation of any clubs DZ which stopped operations. In answer to a question he stated that his club owed for 90 memberships. He had not known this had happened until the Secretary General had written, as he (Mr. McLoughlin) had passed the paperwork and payment side of his operation to someone else to do. The payments had not been made by this person. He categorically stated that the outstanding fees would be paid by the end of the month.

The above was accepted by Council. In addition to the above, it was stated the Doncaster Parachute Club no longer had a CCI. J.L. Thomas stated that this was the case and that as such Doncaster would now apply for re-affiliation when and if a franchisee had been found to take on the operations of the club.

### Swansea Parachute Club/Cornwall Parachute Club

Both Clubs had asked Council whether the JNCSO (J.H. Hitchen) could be released to help run competitions at Swansea and a

WARP seminar at Cornwall. In both cases Council agreed but in the latter case it must be realised that should an emergency occur then the coach might have to leave. P. Lambson stated that if this happened he would be only too happy to provide a replacement for the National Coach

Vice-Presidency PBA T. Andrewes on behalf of members who have approached him asked what the situation was when a Vice-President was elected to Council.

It was stated that there was nothing in the Articles and Memorandum of Association which would preclude anyone being both a member of Council and a Vice President at the same time

### **Display Team Registration**

This had been placed on the agenda at the request of G.C.P. Shea-Simonds Vice President PBA.

He had asked whether perhaps it might be possible for the Association to levy the Display Team Registration once every three years as is the case with registration with the Civil Aviation Authority.

The Finance Committee had discussed this previously and they felt that there need be no change in the decisions which had been made earlier by the Council on annual registration, and an annual registration fee

Flying Tigers P.C. Mr. K. McIlwee had asked for a letter from Council backing his club in a planning application. The Secretary General would draft a letter for the Chairman to

send

### Wild Geese P.C.

The club had asked that one of the JNCSO's be funded by the BPA

to go to N.I. to run an R.W. seminar for Wild Geese P.C. After discussion Council agreed that this could be too if combined with a series of D.Z. inspections. The club would have to accommodate the person who went and would have to ensure that there were sufficient people there to be instructed.

1. J. Parkins - Litigation The above had named the Association in a suit alleging

The above nad named the Association in a surface any ing negligence in 1983. The then insurers, Westgate had repudiated cover on the grounds that that incident had not been reported to them in time. This action had to be defended and the Council agreed to bring Westgate into the action as a third party to indemnify the

Association. The Secretary General had taken action a year ago when he had asked all clubs to submit to the office a photo copy of any incident which occurred on their D.2.'s. This was then forwarded to the insures to that there could be no problem as to the timely reporting of any incident, however minor it appeared at the time. A reminder on the above has been sent to all clubs again this year. Council endorsed this action.

### 2. Parachute Club Proposals

J.K. Lines had prepared and distributed a paper on the above to all Council. He stated that Part one, apart from some modification

to the wording had received cautious agreement. Part two is to be discussed in depth at a specially convened Safety and Training Committee Meeting scheduled for 18th February 1988.

Council recognised the enormous amount of work which had gone into the document to date. J.K. Lines asked that any input on specific wording for part one, or part two following STC should be sent to him in order that a final definitive document could be read and finally agreed at the part for a statement of the sent to him in order that a next Council meeting.

3. J.H.R. Sharpies - P.W. Ritchie Letters of thanks had been received from J.R.H. Sharples and P.W. Ritchie following presentations made to them at the A.G.M.

### 4 Mr. R Bias

Following contact from Mr. Bias with the Chairman J.T. Crocker, Council agreed that it was prepared to hear an appeal from M Bias and/or his representative.

C.W. Port was directed to write to Mr. Bias on this and to discover what sort of time scale he (Mr. Bias) thought would be taken up by the appeal

If this would be in the region of an hour it could be heard at the next Council meeting. Should it be envisaged that the appeal would take substantially more than an hour then it might prove necessary to convene a special Council meeting.

All documentation on this subject would be circulated to all new members of Council

### 5. Equipment Problems

a Equipment Problems had arisen with equipment supplied by Thomas Sports Equipment. J.L. Thomas agreed that the equipment should be returned to Thomas Sports Equipment for checking. In the meantime A.G. Knight agreed tyo put together and distribute a safety notice on the equipment, to the effect that the equipment be grounded until corrective work had been carried

The Council then continued in closed session.

### Post closes session information:-

1. The Council unanimously agreed to afford J.R.H. Sharples and P.W. Ritchie life membership of the BPA for their services to Sport Parachuting and the Association.

### **BRITISH PARACHUTE ASSOCIATION**

Wharf Way, Glen Parva, Leicester

Wednesday 2nd March 1988 **DEVELOPMENT COMMITTEE MEETING** 

Present

D.T. Hicking - Chairman Development Committee J.T. Crocker - Chairman BPA S. Eversfield - Chairman Competitions Committee

Susan Dixon

Observers: J. Curtis

In Attendance: C.W. Port - Secretary General BPA A.K. Butler - JNCSO BPA J.H. Hitchen - JNCSO BPA

### Apologies: J.K. Line G. O'Hara

T. Andrewes

### **MINUTES OF PREVIOUS MEETING - 27th JANUARY 1988** Matters Arising (a) Membership Forms/Membership List

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A very positive response had been received from the Services to

say that the lists could not be used. Several other Centres have said they could not co-operate. Mr. D. Turner has offered the Association some 11,000 MENCAP members names. He would Association some 1,000 microar memocar memory names, new woll like a small payment to be made to MENCAP for each person circulated. He also asked for a copy of the list for his own use. The cost would be in the region of £450. The payment would be made as and when Stonehart had paid the Association. It was agreed to recommend this to Council subject to costings. (b) BPA Sign

The Secretary General reported that the sign was now in place. (c) Channel IV Film Costs - Magazine Details D.T. Hickling reported that the information had been sent out to

the Editor for inclusion in the next issue of Sport Parachutist. He would write to the Editor on the subject of the lateness of this issue of the magazine. (d) Security HO/Fire Precautions

All window locks have been bought and fitted by the Secretary General.

The Secretary General was authorised to purchase the items suggested by the fire prevention authorities. (e) Sponsorship

D.T. Hickling stated that there are things which need to be

accomplished but he was unable to put the time into the areas where it is needed.

where it is needed. The Committee unanimously agreed that they were fully aware of the problems involved and were extremely grateful for what he had been able to do on this and also in respect of the Development Officers job. (f) Development Officer - Update The applications have been hampered by the late issue of the magazine. A notice had been sent to Clubs. To date three applications had been received

applications had been received.

(g) Shop D.T. Hicking said that he had taken a look at the shop. He recommends that quite a large range should not be re-stocked. It is the new members who are most likely to purchase from the shop. He stated he would like to carry out a costing for a colour brochure, then send out, for example, 1000 brochures and monitor the response.

NATIONAL FACILITY D.T. Hicking reported that several replies had been received. He asked that the Committee really consider the matter very carefully.

It was agreed to submit the answer to Sports Council request on the establishment of a National Parachuting Facility.

### NEW LAYOUT - FIRST FLOOR

The Secretary General had submitted a short paper on a base recommendation by Mr. Winn (a Chartered Surveyor) for charges to the layout of the first floor of the H.Q.

It was agreeed that for the moment any major alterations would be held in abeyance.

The Secretary General offered to investigate the cost of merely removing one wall, putting in an RSJ thus expanding the Council Meeting room to a reasonable size.

### **MINISTER FOR SPORT - CORRESPONDENCE**

D.T. Hicking had sent a letter to the Chairman for him (The Chairman) to send to the Minister.

### ANNUAL CONVENTIONS

Four replies had been received on this subject. It was recommended that the lunch time buffet should be cancelled. It is also anticipated that the format be changed for the Friday night. J. Curtis felt that the Instructors Convention should be more for all BPA members who would care to attend. Any further input should be puit to D.T. Hicking.

### A.O.B.

Centre.

Committee.

jump prices etc.

(a) Insurance Passenger Liability Lowndes Lambert Aviation Limited had submitted guotations which appeared to be very high. This matter would be discussed again, initially at the next Finance Committee Meeting. Any input from members would be appreciated. (b) Membership Form

(b) Weinbership Form which Sarah Brearley had produced some few years ago. J. Curtis agreed to put together an updated version of the form, together with his ideas for the use of any form.

(c) Annual National Championships For reasons beyond his control, W.J. Meacock will be unable to host the Nationals. J.T. Crocker stated that he would be sending a letter to all Council on this.

W.J. Meacock applogised most profusely but he will not have any aircraft other than a 206 from the end of this month. S. Eversfield stated that over the last years the Nationals has

been franchised out to DZs with no cost to the Association. He stated that he felt it would be best for W.J. Meacock to be able to

S. Eversfield said that an alternative venue had been offered. J.T. Crocker felt that this should be now left to the Competitions

D.T. Hickling said he felt that perhaps the offer should go out again to all Clubs to host the Nationals.

S. Eversfield stated that twice last year letters had been sent to the Clubs asking for bids, the only replies received had been from

Peterborough and A1. The Secretary General was tasked with sending out a letter to all

viable Centres who could host the Nationals. A reply must be received by 8th of March. A phone call, followed by a

confirmatory letter would suffice. Bids could be separate, i.e. Classics and/or Relative Work. The criteria are:-Unlimited Air Space, Accuracy Pit and suitable aircraft.

Additionally we would need to know the charge if any, to the BPA,

carry on his business and the Association move to another

## **BRITISH PARACHUTE ASSOCIATION COMPETITIONS COMMITTEE MEETING**

## Thursday 10th March 1988

The Chequers, Weston on the Green

### Present

S. Eversfield - Chairman Competitions Committee T. Andrewes - Club Representative

- Susan Dixon S. Treble
- P. Lambsor

In Attendance

C.W. Port - Secretary General J.H. Hitchen - JNCSO BPA

Observers:

B. Henderson, S. McBrine

### **Minutes of Meeting of 2nd February 1988** (a) Equipment

(a) Equipment The new equipment has now been delivered to the BPA HO. The Secretary General was tasked with checking all equipment including the video system and ensuring that all the containers and components were marked as BPA property. That a full check the advectory of the system and the advectory of the system and components were marked as BPA property. That a full check and components were marked as BPA property. That a full check and components were marked as BPA property. That a full check and components were marked as BPA property. and components were marked as BPA property. Inat a full check list was compiled and kept up to date. All equipment would be checked before leaving the H.Q. and then on its return. All equipment:- Video System. Anemometer, Electronic Pad outfit would be on a £200 damage deposit, to which there would be no exception; a £10 per day hire fee which would be waived when any Control was besting a regional domesticing.

when any Centre was hosting a regional competition. The equipment would be delivered and collected via T.N.T., the cost of this was to be paid by the Centre requiring the equipment, in the case of a regional meet the cost would be borne by the BPA The Secretary General was tasked with writing to Radio Rentals to see whether they would be prepared to provide 2 video recorders and five monitors for the Annual National Championships.

It had been suggested by R. King that the Association purchase a portable computer and discs in order to provide a speedy results service. The cost would be in the region of £500. It was agreed to recommend this by the casting vote of the Chairman. J.H. Hitchen would double check that the video was working. If the video needed refurbishing J.H. Hitchen would attempt to

speed up any delivery and collection. It was suggested that this should be done via an agent.

### Nationals 1988 (i) Venue

Various communications had been received prior to the

Competitions Committee Meeting from: Swansea, Bridlington, Halfpenny Green, Headcorn, A1

Skydiving.

After some discussion it was agreed to accept the bid from British Skysports to host the Classics and Canopy Relative Work. It was DZ and the Association.

The Committee agreed to the request for J.H. Hitchen to be Meet Director.

The Secretary General was tasked with writing to D. Johnston thanking him for and accepting his kind offer. The Secretary General was tasked with purchasing a new

individual accuracy cup.

(ii) Review of the Rules General Rules

These had been amended by S. Eversfield and were agreed. These had been amended by S. Everstield and were agreed Rules for Classics Events These were agreed as printed. Rules for the CRW Events Subject to slight amendments, which will be made by P.

Lambson, these were agreed Rules for the R.W. Events

Subject to slight amendments, these were agreed. A.K. Butler was asked to design a cover for the rules

World Meets

(a) J.H. Hitchen asked that he not go to the C.R.W. World Meet as he had a course.

The Secretary General would write to the Organising Committee to regretfully state that the U.K. would not be sending a Judge

### **BRITISH PARACHUTE ASSOCIATION FINANCE COMMITTEE MEETING**

Wharf Way, Glen Parva, Leicester Wednesday 16th March 1988

### Present:

J.K. Lines - Chairman Finance Committee D.T. Hickling - Vice Chairman BPA

## J. Curtis J.H. Steele

In Attendance:

C.W. Port - Secretary General BPA A.K. Butler - JNCSO BPA J.H. Hitchen - JNCSO BPA

Apologies: S. Eversfield, J.T. Crocker.

### Minutes of Meeting of 20th January 1988

### The Minutes were discussed Matters Arising

1. Removal Cost

2. BPA Shop

The Treasurer had spoken with the Chairman on this. It was agreed that it was inappropriate to complain about the quotation once the estimate had been sent in and accepted.

A full sampling of all BPA items had been photographed and a quotation was awaited for the production of a brochure. The previous minutes were accepted.

### Pension Scheme JNCSOs

In line with the previously distributed paperwork, the above was discussed

It was agreed that the increase be recommended

### **BPA Vehicle**

As directed the Secretary General had submitted a paper on this subject.

The Committee felt that there was no conclusive evidence at the moment to show that extra vehicles should be purchased for

the start of an entry of the start of the st transport. It was agreed to review the situation annually in respect of either sole/purchase.

### **CIP Meeting**

The Secretary General was able to report that he had submitted an application for Grant Aid towards the meeting. The Sports Council had sent a cheque for 75% of the estimated cost, £740.

### Membership Situation

Issue and Return of Block Numbers.

There was considerable discussion on this subject in relation to the control of issue and receipt of the block numbers. Several possible ideas were put forward but in each case it was felt that some Clubs could be penalised.

In an effort to clarify the situation the suggested membership form was also discussed. The Committee felt that this was a good idea at the present time in order that it would tidy up the whole process.

It was agreed to recommend that this should be accepted. In the interim the Secretary General would have some produced to a reasonable standard for Council to see at the next Council Meeting.

Should this be accepted the credit terms would depend upon the credit rating which had already been established with the Association by individual clubs/centres.

It was recommended that the cost of a bought ledger programme for the computer be investigated

### A.O.B.

1. Purchase of a FAX Machine In view of the increasing use of FACSIMILE COPYING it had been

suggested that the Association purchase a FAX machine. The Secretary General would discover costs of lease and/or outright purchase in time for the Council Meeting. 2. Mrs. Mantykiewicz

The Secretary General requested that Finance Committee consider a retiring gift to Mrs. Mantykiewicz. The Committee recommended this

3. Loan Application

A.G. Knight had asked that he be afforded a £10,000 loan to rebuild the packing shed. £5,000 on normal terms over 3 years and £5,000 to be repaid at the end of 12 months in a lump sum plus interest.

Collateral has been offered on the two aircraft.

With the situation since purchase of the property it was felt that the time may have come to consider whether loans should be charged at commercial rather than special rates.

charged at commercial rainer than special rates. The Secretary General would prepare a state of the accounts in time for the next Council Meeting. The application was discussed but with the information available the Committee felt that £5,000 was the most they could presently recommend.

4. Expenses of Officials

J. Curtis said that for a rigging course to be held in Gainsborough it would be necessary for those concerned to be accommodated in a local hotel and it could cost about £20.00 per day.

J. Curtis agreed to write to the Examiners and also discover the actual cost of the hotel. It was to be discussed at a later date.

5. Magazine D.T. Hickling had produced a letter and a sheet to be sent to Clubs

in order to ensure members could be insured by 1st April and this would allow them to continue jumping.

B. Channel IV D.T. Hickling stated that he might have to go to London to see the people concerned. He requested and it was agreed that should he need to take anyone then their expenses could be claimed.

## **BRITISH PARACHUTE ASSOCIATION**

Safety and Training Committee County Arms, Leicester Road Glen Parva, Leicester

Thursday 7th April 1988

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### Present:

- A.G. Knight Chairman STC A. Collingwood A1 K. Daykin Thruxton B. Laithwaite 1/2p Green R. O'Brien Peterborough D. Wielvier, PBC
- D. Hickling BPS
   D. Johnston British Skysports
   A. Sinclair Red Devils
   G. O'Hara Badminton
   S. McBrine RAFSPA
   S. Thomas London Skydiving
   Genera SPC Tithack

- L. George SPC Tilstock L. George SPC Tilstock L. Thomas Riggers M. Thurman Chairman Riggers A. Hickling Chairperson Pilots Committee

R. Shillabeer, A. Cowley, C. Thomas, C. Laithwaite, K. Lewers, C.

Waymouth, S. Hastings, P. Johnston, G. Cox, J. Prymaka, J. Farr,

It was proposed by S. McBrine and seconded by D. Johnston that the Minutes of the STC Meeting of 25th February 1988 be

MATTERS ARISING FROM STC MEETING OF 25th FEBRUARY

The Chairman informed the Meeting that a Pilots Meeting had taken place that afternoon and A. Hickling had been elected as Chairperson of the Committee, but due to the poor attendance of

the meeting it had been felt that this appointment would need to be ratified at the next Pilots Meeting. The past Chairman, J. Ball, was thanked for the work he had done in the last few years as Chairman. Mr. Knight urged that CCIs encourage their pilots to

attend the Pilots Committee where ever possible as he felt it was

The Chairman also stated that he had sent out forms to Islander Operators, a copy of which would go out with these STC Minutes, asking that a £100 contribution be made for the necessary work

to be carried out for the aft C of G to be extended on Islanders.

2.6 The Chairman stated that a petition had been sent to Council from R. Colpus requesting that the mandatory carrying of knives

should not be ratified. Council had decided that the correct forum for this kind of request was STC and Mr. Colpus had been

informed of this. S. Thomas asked for clarification and was informed by the Chairman that at this time it is mandatory for all

2.4 The Chairman stated that as the Riggers Meeting was still going on he would put this item back until the parties concerned

had arrived. This was also to apply to Item 3 (Approval of Riggers

i) The Chairman informed those present that there had been a

number of incident reports received concerning reserve rides and landing injuries, the injuries would be included in the injury survey to be compiled at the end of the year.

ii) G. O'Hara gave the Meeting details of an incident at Badminton

where a Category 7 student, jumping conventional TSE student free fall equipment had a stiff pull as a result of a bent pin. This

was caused by the back pack coming into contact with the bottom surface of the wing. The pack closure pin caught on the edge of

an inspection cover of the aircraft, bending both the pin on the

It was decided that the equipment should be looked at by the

Riggers at their next meeting, but CCIs should be aware of the

iii) D. Hickling gave details of an incident at Langar where an ex AFF student of Category nine made two low hook turns and badly

injured himself. A good deal of discussion took place concerning this and it was felt by the meeting that jumpers should be

encouraged not to do these types of manoeuvres under canopies and especially less experienced jumpers who tend to copy other

It was decided by the meeting that a Safety Information Sheet should go out warning people of the dangers of radical canopy handling nearer the ground.

iv) S. McBrine gave details of the 'In flight' door of RAFSPA's Turbine Islander coming off whilst the aircraft was airborne, the door landed on the airfield without further incident.

A good deal of concern was shown by those present as this was the third such incident concerning PBN Turbine Islander 'In flight' doors. After a great deal of discussion it was finally decided that the Chairman of STC would contact operators of these aircraft

and then write to Pilatus Britten Norman expressing the concern

more experienced jumpers under high performance ram air

problem, especially those operating 'step' exit type aircraft.

parachutists of Category 8 and above to carry knives.

Carried Unanimously

Chairman, CCIs

CCIs

CCIs

CCI's, JNCSOs

Chairman STC

**MINUTES OF STC MEETING OF 25th FEBRUARY 1988** 

Apologies for Absence: D. Howerski J. Fisher

M. Skeet D. Ruffell

K. Noble

In Attendance:

Observers:

1988

Minutes)

cover

canopies.

of STC.

J. Curtis - Council

K. Adkins, A. Hooker

accepted as a true record.

an important sub-committee.

INCIDENT REPORTS - RESUME

v) A Sinclair gave the meeting details of a fatality in Portugal at the Red Devils training camp. Two members of the team had a canopy entanglement after a normal RW jump, the lower main cutaway and landed safely under his reserve, the other jumper Tony Stewart was able to cutaway after clearing the other canopy at approximately 800 fet. the jumper impacted approx. 5 seconds later with no deployment of his reserve parachute. Sgt. Sinclair stated that a Military Inquiry was being conducted and he would keep STC informed of the outcome.

### A. Sinclair STC

At this stage the Chairman was able to return to the matters arising from the last STC Meeting. The Chairman informed the meeting of the findings of the Panel of Inquiry set up at the direction of STC and informed the meeting of the

direction of STC and informed the meeting of the recommendations of the Panel, which were:-1) That Albert Hooker, had his Examiners rating withdrawn for 2 years, after which time he may re-qualify in the normal manner. 2) That Derek Thomas, be barred from holding an Examiners rating for 3 years.

rating for 3 years. 3) That Chris Thomas, has his Examiner and Advanced Rigger ratings withdrawn for 2 years, after which he must re-qualify in the normal manner and this his Approved Riggers rating be suspended for 1 year.

suspended for 1 year. 4) That the BTSO is withdrawn from TSE and the entire concept of the BTSO be discontinued by the BPA. 5) That the Riggers Committee ought to consider implementing requirements for Riggers to document test programmes before modifying proven designs. Very lengthy and in depth discussion took place conerning the whole aspect of the Panel and their findings and recommendations

recommendations.

recommendations. Both A. Hooker and C. Thomas attended the meeting and informed those present of their views. J. Curtis asked for information on the Panel itself and was informed by the Chairman that the Panel consisted of himself and BPA Examiners; D. Prince, P. Lambson and R. Noble-Nesbitt, with assistance from J. Hitchen. It was finally proposed by G. O'Hara and seconded by S. McBrine

that the recommendations of the Investigation Panel be ratified. For 8, Against O, Abstentions 3

T.S.E. Council Carried

C. Thomas requested further information which the Chairman stated would be supplied to Mr. Thomas prior to the next Council Meeting.

Chairman STC D. Hickling stated that he felt that some thought should be given, for the future, as to how manufacturing companies should be regarded with the BPA as against the 'club type' rigger. At this stage L. Thomas, stated that even if he did not agree with the findings of the Panel, he felt they acted in a very responsible way and he thanked them for their hard work.

APPROVAL OF RIGGER MINUTES M. Thurman gave details of the minutes of the last Riggers Meeting. Sgt. Thurman also stated that a number of Rigger Examiners had met that afternoon to update the Riggers Section of the Operators Manual, these amendments would be sent to of the Operators Manual, these amendments would be sent to the BPA office in time for ratification at the next STC Meeting. 3.6 The item of an incorrect reserve re-pack by an Advanced Insructor has been requested to be dealt with by STC. Instructor has been requested to be used with by one. It was proposed by D. Hickling and seconded by A. Sinclair that this Instructor be asked to attend the next STC Meeting. JNCSOs

3.7 It had been felt by the Riggers that more input was required concerning the paper by W. Sharpe, especially concerning the qualifications required to issue packing certificates. Input on this paper should be sent to the Chairman of Riggers. CCIs

3.9 Kelvar tape for the modification of Phantom reserves was still in short supply and Riggers were still awaiting supplies.

Riggers Riggers 3.10 The item on Rigging line connector links had been discussed in detail at the evenings Riggers Meeting and it was decided that the correct decision had been made to ground these until more rsearch had been made. It was stated that a colleague of A. Cowley was working on this and his input would be studied before further recommendations are made. A Condex

A. Cowley

### A1 RECTORY FARM FOR STUDENT PARACHUTING

A. Collingwood gave details of his request for student parachuting at Rectory Farm, he stated that a great deal of work involving the removal of hedges and the installation of an east-west runway had been done since their last request. A. Collingwood proposed that student parachuting be permitted

at Rectory Farm with the following provisos:
 i) All students will be equipped with ground to air radios.
 ii) All students will be equipped with inflatable life preservers.

iii) No student parachuting will be allowed if the wind is blowing to the power lines.

 iv) Only one student per pass if the wind is blowing from the power lines, unless the WDI travels further than 600 yards, in which case no student parachuting. (This ensures that no students will be put out past the power lines). v) The DZ Controller will be at least an Approved Instructor. vi) The DZ Controller will be quipped with, Cellnet telephone,

ground to air radio, talkdown system for students. DZ vehicle plus motor cycle for fast access to the brook or small pond. plus motor cycle for rast access to the brook of single power. It was stated that the JNCSOs approved the above proviso. JNCSOs, A1

The proposal was seconded by D. Hickling. Carried Unanimously

### PULL OUT/THROWAWAY PILOT CHUTES

D. Johnston gave details of his request that this item be discussed as he felt clarification was required as to at what stage a parachutist should be permitted to jump a 'Pull Out' type pilot

a paracitudes anote 2.2. chute. The JNCSOs stated that the information within the BPA was that there were far more problems associated with the 'Pull Out', the information within the 'Pull Out', especially with less experienced jumpers, than with 'throwaway' type pilot chutes. It was generally felt that this was the case, but because of possible ramifications it was felt no decision should be made at this meeting and this would be a main agenda item for the next STC.

The Chairman requested that input be sent to the BPA Office for distribution with the next agenda. All CCIs

### PERMISSIONS

D. Penny of Wild Geese informed the meeting of the problems in Norther Ireland of obtaining suitably qualified personnel, and assked for STCs help in enabling the Centre to continue to operate.

A great deal of discussion took place and many suggestions and ideas put forward.

Mr. Penny gave details of the staff at the Centre and the facilities available. It was finally proposed by D. Hickling and seconded by D. Johnston that Ian Marshall be permitted to act as CCI of Wild Geese until 1st September 1988 Wild Geese

For 10, Against 1, Abstentions O.

It was requested that the JNCSOs visit the Centre within the next three months, if possible and assess the operation. The Chairman stated that this Permission was not to be seen as a precedent, but had been permitted because of the Special circumstances in Northern Ireland and this was not to be accepted as a lowering of standards and the situation was to be reviewed by the JNCSOs.

CCIs

Carried

### AOR.

i) A request had been received from the Red Devils asking for S. Greenhaigh to be re-instated as an Approved Instructor as his rating had lapsed 12 months ago. A. Sinclair stated that it had lapsed due to military commitments, but Cpl. Greenhalgh was now working with the Team. T. Butler stated that Cpl. Greenhalgh had done well on his Instructor Course. It was proposed by A. Sinclair and seconded by S. Thomas that

subject to two Examiners signing Cpl. Greenhalgh's rating renewal he be re-instated as an Approved Instructor. A. Sinclair, JNCSOs

Carried Unanimously

ii) A request had been received from M. McQueen, requesting that he be re-instated as an Advanced Instructor as his rating had lapsed 12 months ago.

This request failed to find a proposer. It was decided that the Chairman would write to Mr. McQueen

advising him of the situation, and suggesting that he attend personally in order to present further information if he wished the Committee to consider the matter further. Chairman STC

iii) D. Peacock requested of STC that he be re-instated as an Examiner as his rating had lapsed 12 months ago. Mr. Peacock was asked a number of questions, after which it was proposed by S. McBrine and seconded by A. Sinclair that D. Peacock's Examiner rating be re-instated.

### D. Peacock Carried Unanimously

Carried

iv) A request had been received from B. Charters requesting that Bell be re-instated as a PI as his rating had lapsed in November 1987. WO2 Charters letter stated that due to the problems of working in Cyprus it was difficult to get to the UK. The request stated that Mr. Bell would attend an Examination Course during 1988

It was proposed by K. Daykin and seconded by S. Thomas that this request be permitted. B. Charters, P. Bell

For 8, Against 0, Abstentions 2.

v) The Chairman informed the meeting of a request from Charlotte Kirwan for permission to make a Tandem descent into an Air Show at Coventry Airport. After some discussion this request failed to find a proposer.

### **BRITISH PARACHUTE ASSOCIATION RIGGERS MEETING**

Offices, 5 Wharf Way **Glen Parva Leicester** 7th April 1988

PRESENT: M. Thurman (Chairman) J. Curtis A. Cowley R. Shillabeer T. Knight L. Thomas C. Thomas

APOLOGIES:

P. Applegate J. Reddick

OBSERVERS S. Thomas G. O'Hara A. Hooker J. Farr K. Adkins

IN ATTENDANCE: JNCSO's

The Minutes of the meeting held on the 25th February were accepted as correct.

Matters arising from the Riggers meeting of 25th Feb. 1988.

Recommendations from I. Robertson A number of Rigger Examiners had met prior to the Riggers meeting and discussed the updating of Section 15 of the Operations Manual. Changes were proposed to replace some of the outdated requirements for the qualification of riggers with a more up to date examination syllabus. The Chairman had agreed to rewrite section 15 and circulate the updated version to the Rigger Examiners for approval.

Square Reserve Deployment Bags The Chairman stated that he had spoken to one of the major manufacturers in the United States and that it was felt that there was no great problem with the shape of square reserve deployment bags. The Chairman stated that he would contact Jump Shack to obtain their views on the subject.

### Reserve Repacking Paper - W. Sharpe

Considerable discussion took place on this subject and though it was agreed that there was room for improvement in the way was agreed that there was room for improvement in the way people are trained and qualified to repack reserve parachutes, many of the proposals put forward may be difficult to implement. J. Hitchen felt that, because the topic was very wide ranging, more time should be allowed for people to give input and for proposals to be formulated. It was agreed to hold the item over to be active active activities time it wild be discussed to full. the next meeting at which time it would be discussed in full. W. Sharpe is to be thanked for presenting a well written and constructive paper.

Mini 3 Ring Release A report had been received from I Marshall who had conducted his own tests on Mini 3 Ring Releases. The paper expanded on and fell in line generally with the findings of R. Noble Nesbitt. It was felt that a vote of thanks should be afforded to I. Marshall.

Rigging Line Connector Links Input on this subject had been received from B. Sturtivant at Dunkerswell. The letter stated that he had fitted rigging line connector links to the main canopies of two jumpers who used three riser suspension systems because of the need to get the slider all the way down. These links had functioned perfectly for over 100 descents. The banning of the links it was felt was a drastic measure against those people who had used them for a long time with no problems.

A. Cowley said that he knew of someone who was looking into the possibility of producing an acceptable standard for the manufacture of this type of link. It was agreed that the links remain banned until a manufacturing

standard is approved. This would hopefully be by the next meeting

### TSE CHASERS

L. Thomas gave the meeting an update on the modification program being carried out by TSE in order to get the grounded Chasers with metal stiffner plates back into service. 111 Chasers had been received back for modification.

L. Thomas also informed the meeting that TSE were no longer shipping Chasers with reserves packed ready to jump unless the owner of the equipment was at TSE to test pull the reserve when the equipment was assembled.

Matters arising from last STC Meeting A. Hooker asked if the Riggers Committee would listen to his appeal against the outcome of the Investigatory Panel that had looked at the problems with TSE. The panel had made a number of recommendations one of which directly affected himself. The Riggers listened to the appeal and also to the reasoning behind the recommendations from T. Knight who was on the panel. It was agreed that as the Riggers had not yet been told of the outcome of the investigation and the issue had not yet been stiffed by STC or Coursil that there was nothing that this. ratified by STC or Council that there was nothing that this Committee could say or do and that A. Hooker should take his appeal to STC.

Safety Notices / Safety Information - 1988 All the Safety Notices and Safety Information that have been issued so far during 1988 were reviewed. With respect to SI 5/88 regarding 3 Ring Releases it was pointed out that during routine maintainance the Teflon cable should be wiped with a pure Silicon based lubricant. This type of lubricant appeared to be better than oil based lubricants as it did not attract dire dirt.

L. Thomas said that only two reserve ripcord handles that had not been properly manufactures had been found as per SI 7/88.

### Reserve Bridle Lines/Small bore reserve housings (letter R. Noble Nesbitt)

A letter hadd been received from R. Noble Nesbitt outlining a problem that had arisen with a reserve bridle line. The bridle line had almost come undone after the reserve had been deployed. The only thing that prevented complete separation had been the

### stop knot.

It was felt that because in the present day the majority of reserve bridle lines are manufactured from 1\* square weave webbing and have their ends sewn down that this was an isolated incident. Riggers should be made aware though that if knots are used then they must be properly formed. The second part of the letter covered small bore reserve

housings. Conern was expressed that there could be the chance of a stiff pull using this housing. If the ripcord is pulled through too far the shoulder of the pin may catch or jam on the ferrule at the end of the housing when the handle is pulled. It was agreed that the solution to this problem was to have a

larger bore housing. It was pointed out that the size of housing being discussed was no longer being used and that if the housing was not replaced then the jumper should ensure that the shoulder of the pin lay inside of the housing above the ferrule.

### Letter R. Peakin

A letter h. Feakin A letter had been received from R. Peakin asking for renewal of his Advanced Riggers rating. J. Curtis said that it should be first ascertained as to whether or not Mr. Peakin was a current BPA member. It was agreed that whatever the answer Mr. Peakin attend an Approved Riggers Assessment Course

The Chairman agreed to contact Mr. Peakin.

## BRITISH PARACHUTE ASSOCIATION **PILOTS COMMITTEE MEETING**

7th APRIL 1988

PRESENT: P. Howell M.P.C. A. Hickling Langar T. Knight Ipswich

IN ATTENDANCE: A. Butler JNCSO

J. Hitchen JNCSO

APOLOGIES; J. Ball

### Election of Chairman

John Hitchen started the meeting and heard that John Ball could not now commit himself to attend all the meetings required. A vote of thanks was given to John Ball for his previous work as Chairman.

Pat Howell stated that if anyone is to take the job of Chairman it should be ratified at the next meeting due to poor attendance. It was proposed by Pat Howell that A. Hickling is chairperson until at least the next meeting, when it can be ratified.

### Previous Minutes

The minutes of the meeting held on 8th October 1987 were accepted as correct with the exception of Item 3, line 5, which should read 'without remuneration...'.

Matters Arising from the Meeting on 8th October a) Extension of Islander C of G limits Tony Knight has sent a letter to Islander operators requesting donations towards the £1000 required by P.B.N. for the necessary work to be done. Replies would be appreciated and this committee would like to remind Pilots flying Islanders without external grab handles ie Mod NB/M/1221, that without the C of G extension a maximum of 4 people only can exit the aircraft at the same time, while theoretically known of G (Note: With same time - while theoretically keeping within C of G. (Note: With the extended C of G, 6 can exit together.)

### b) Weight and balance

So far only 3 Parachute Centres had sent in copies of their Weight and C of G envelopes for their aircraft. Please can all other and to a envelopes for their aircraft. Please can all other Centres send in this information to the JNCSO's a.s. a.p. The CAA are concerned about aircraft operating within weight/C of G limits. Also the JNCSO's would like to remind C.C.I's that they expect to see these documents during D.Z. Inspections.

### c) Basic Commercial Pilots Licence

The priveleges of a B.C.P.L. have now been circulated but its exact applicability to Parachute flying is unsure. Pat Howell offered to check on the latest developments with John Ball and others who have been involved with the B.C.P.L. Pat Howell proposed that from now on any communication with the CAA on matters relating to Parachute flying should go through an authorised representative of the Pilots Committee. This was accepted.

### d) Radio Procedure

There have been a few recommendations for this document. The guide to Recommended Radio Procedure for Parachute Operations is about to be adjusted and then distributed to all Clubs/Centres.

Concern was voiced about the congestion on the frequency 129.9, the JNCSO's are going to request from the CAA our own frequency.

Transponder Code The Transponder Code allocated to Parachute dropping aircraft has been noted. Already several ATC's have requested the use of the Code.

### **Pilot Radio Procedure**

Already discussed in Matters arising.

New P.P.L. Requirements The holder of a PPL is entitled to fly an aeroplane for parachute dropping provided that the PPL holder is a member of the club owning or operating the aircraft.

### A.O.B.

a) Tony Butler brought to the meeting the suggestion from the Chairman of the Development Committee that all BPA Pilots are BPA Members. It was agreed that all BPA Pilots would be made BPA Members for the duration of their BPA Pilot Rating

b) It was suggested that letters be sent to Chief Pilots of all Clubs/Centres encouraging them (or their representative) to attend the Pilots meetings The Date for the next Pilots Meeting is Thursday 13th October

1988 at 2 p.m.

## GUIDE TO RECOMMENDED RADIO PROCE-**DURE FOR PARACHUTE OPERATIONS**

### Summary

It has been shown that there is a real need for us to look at, and 'standardise' the use of R/T within our activity. The use of some or all of the following ideas will help relieve this problem.

### Introduction Purpose

1. This document is to provide Parachute pilots, A.T.S. and/or DZ Controllers with information concerning standard radiotelephony communication procedures and phraseologies as used in air/ground communications.

as used in any ound communators. 2. If these procedures are followed it will allow the maximum warning to be given to D.Z. Controllers, A.T.S., and any other aircraft in the vicinity, that Parachuting activity is about to occur. Standardise and therefore reduce the volume of communication used on joint frequencies will improve safety in the air.

Authority The recommended radiotelephony procedures are being issued under the authority of the British Parachute Association with copies sent to the Civil Aviation Authoriy for their comments.

### **General Rules**

Definitions and abbreviations ATS Air traffic service (whether a control service or an advisory

DZC Drop Zone Control. The definition of D.Z. Control, led by a DZ

Controller is clearly itemised in the B.P.A. b) The D.Z. Controller.

The Drop Zone Controller must have two-way radio communication with a) the Parachute aircraft b) ATS, if it exists on the airfield.

If the Drop Zone is unlicenced and does not have A.T.S. then the D.Z. Controller must have two-way communication with the Parachute aircraft.

Frequency The frequency depends on the Drop Zone to be used. If the Drop Zone is on an airfield with ATS available then preference is for the Parachuting communication to be on the same frequency as the airfield. The main consideration here is that other aircraft in the vicinity are aware of the Parachute aircraft and also that the Parachute pilot has a reduced work load by only having to transmit on the one frequency. Also the use of this frequency would reduce the volume of communiation on the would reduce the volume of communiation on the Parachuting/Gliding/Ballooning frequency of 129.90Mc/s. If the airfield/D.Z. has no ATS, or its own frequency, then the communal frequency of 129.9Mc/s should be used. Because of the performance of V.H.F. then the range can be up to 200n.mls depending on the aircraft's altitude. As Parachuthg aircraft normally operate up to at least 10.000 feet then the communications received by a Pilot at 10,000 an be from many D.Z's.

This document aims to encourage standard radiotelephony

procedures and therefore to reduce the amount of unrequired transmissions, thereby increasing clarity of any vial or emergency transmissions.

### **General Operating Procedures**

Transmitting techniques, transmission of letters and numbers, the standard radiotelephony words and phrases are clearly noted in the CAA's Radiotelephony Manual (CAP413), also some can be found in the appendix to this.

It should be premembered that transmissions as listed below are prhibited.

a)Signals containing profane or obscene language. b)Signals containing the improper transmission of the cell sign of another station.

c)Signals of a private nature

d)Signals of a deceptive or false nature. e)Signals not appertaining to operational requirements.

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## First flight of the day

AlBefore taxiing. While the aircraft is on the ground, test transmissions should be performed to check the readability of all stations ie.

aircraft - ATS - aircraft aircraft - DZC - aircraft

- DZC ATS DZC The ATS or DZ Controller (if there is no ATS), should then give an

The ATS or DZ Controller (if there is no ATS), should then give an All Stations call on the frequency, eg. 'All stations Langar airfield, Parachuting activity is starting'. It is up to the discretion of individual ATSs if he/she wishes to call individual stations to acknowledge receipt. If Parachuting is stopped during the day for over 30 mins then the test transmission should be repeated. If the test transmission is not acceptable then the aircraft must return to hear. If the aircraft in aircraft mast provide up of

return to base. If the aircraft is airborne when a breakdown of radio communication occurs then the target cross must be used

to signal instructions to the pilot and jumpmaster. I - indicates that parachuting is temporarily suspended, but the

aircraft may remain airborne at the discretion of the pilot, pending a further change of signals. L - indicates that Parachuting is suspended and the aircraft must land with all remaining parachutists on board.

When the aircraft is ready for departure the aircraft pilot should state clearly the height the aircraft will be at each time it flies

verhead the airfield, eg. 'G-ATCE ready for departurae, climbing 2000ft' or 'G-ATCE ready for departure climbing 2000, 5000 and 7000ft'. c)Two minutes before despatch of Parachutist.

As the aircraft approaches overhead the airfield there should be sufficient time before a Parachutist is despatched for the ATS or DZ Controller to cancel the drop, eg. 2 minutes. An example communication is:

communication is: 'Langar, CE, 2000 feet Parachuting in 2 minutes' Reply from ATS (if available) 'CE Approved' Reply from DZC 'CE Clear Drop'. It is essential that the word Parachuting is now used instead of

running in' so there is no mistaking the activity. Also it is essential that the DZC answers this first airborne communication, so informing the Pilot (and Jumpmaster) that all is O.K. on the ground. No further reply is required from the DZC for the rest of the flight because he/she is now on duty and should remain there until all Parachutists have landed. DZC will only and the communication with the all the communication. read to communicate with the pilot if any vital transmission regarding the safety of the Parachutists is required. Also no further acknowledgements from the DZC will reduce

transmissions.

If the DZ Controller does not wish to clear the Parachutists to drop then the reply should be short and succinct, eg 'CE - abort and circle' or

'CE - abort and land'.

d)Next pass

The aircraft will call each time it passes overhead the airfield in order to despatch parachutists.eq

order to despatch parachuitst,eg. 'Langar, CE, Parachuiting 5000 ft' Reply from ATS only, (if available) 'CE - Approved'. There is no need to give a time warning after the first pass because ATS and the DZ Controller know Parachuiting is taking place. Any new aircraft in the area will have been informed by ATS of Parachuiting activity. If any other aircraft appears in the dropping area then the DZ Controllers reply to the Parachute eigensfluit ba 'CE. about and diplot

aircraft will be 'CE - abort and circle.' Please note that if ATS is only advisary they may have no desire or qualification to 'approve' the despatch, therefore the reply would be 'CE - Copied'.

e)Further flights The communication required from the Parachute Pilot on further

flights is as follows: 1)information as for departure giving heights of passes Inormal calls when running in using the term 'Parachuting', as noted in the paragraph d) Next pass.

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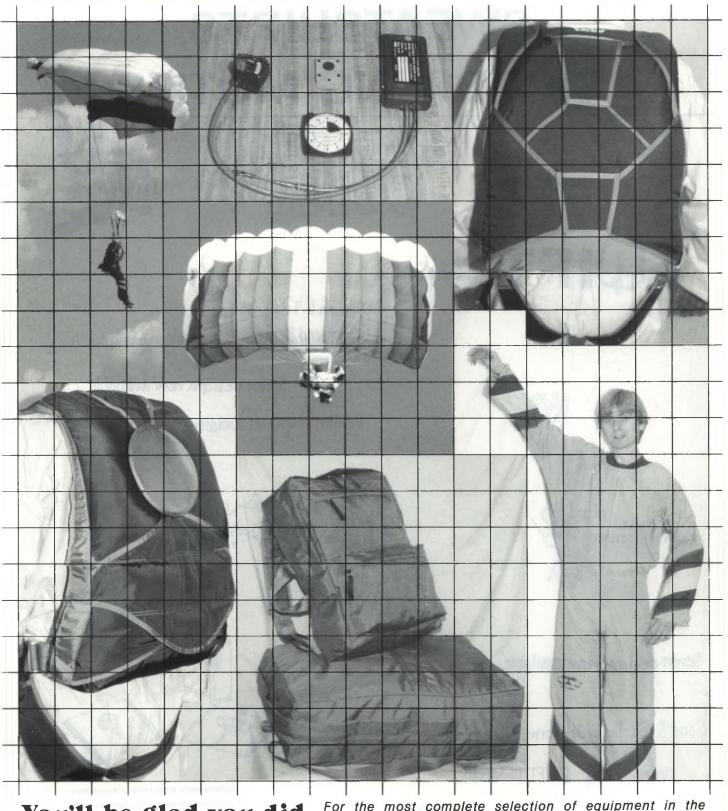
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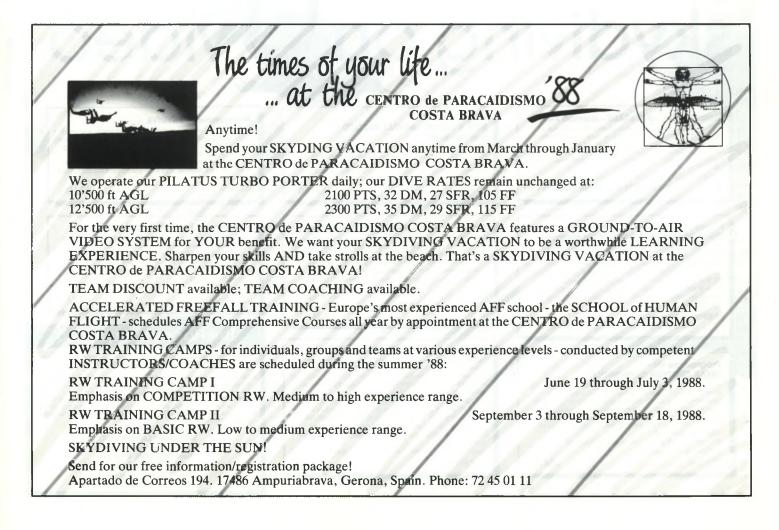
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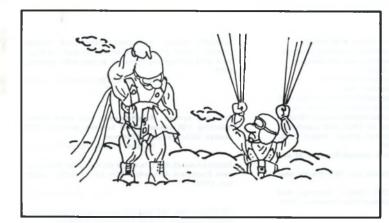
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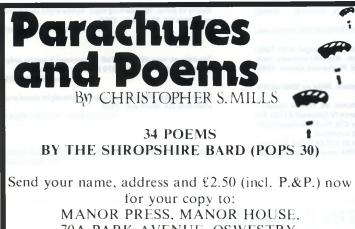
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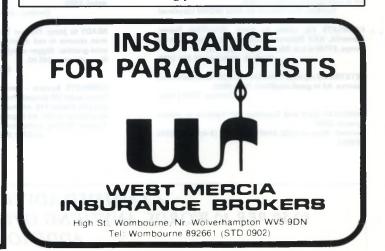
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## WARP AND PROGRESSION

## WEEK IN CORNWALL

Why not combine a Warp and Progression Week with a holiday on the beautiful North Cornwall Coast at the Cornwall Parachute Centre ? Accommodation can be arranged.

Dates to be Monday 4th July through until Saturday 9th July 1988 Further details from LINDA GRANT on 0841 540691. Everyone from the Cornwall Parachuting Centre looks forward to meeting you all.

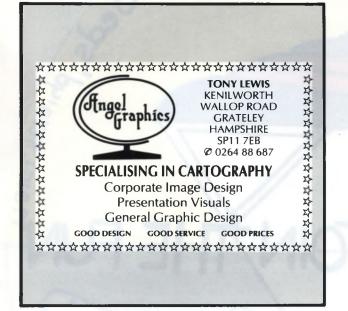


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## EFS INNOVATORS, NOT IMITATORS

--- CUT OUT AND KEEP ----



Para-Flite, Inc., is proud to introduce another first: the first square specifically designed and manufactured for <u>sequential CRW</u>.

The PURSUIT-230<sub>tm</sub> utilizes the innovative 'SWIFT' construction method (patent applied for), however, the PURSUIT is a 7-cell with 230 ft.<sup>2</sup> of area.

- Standard features of the PURSUIT include:
- 1. Automatically retracting pilot chute (patent 3540681).
- Leading edge spanwise panels (top and bottom), center 3 ribs, outside and adjacent ribs are made with heavy duty material (1.5 oz/yd).
- 3. Target center panel is doubled and a contrasting color.

Additionally, the center lines are continuous (no cascades), thicker and colored for rapid identification and easier gripping. There are heavy duty reinforcing tapes on the leading edges and all ribs are triple crossported.

The PURSUIT uses the Lissaman 7808 airfoil for high forward speed, light toggle pressure, very rapid turns and exceptional stability.

Naturally trim tabs and cross-connector straps are standard. There is even a 215 ft<sup>2</sup> version available (PURSUIT-215) for smaller and lighter CRW jumpers.

The CRW canopy of the future is here now. From Para-Flite — who else? Now available through Authorized Para-Flite Dealers world wide.





## PARA-FLITE, INC.

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URSUIT

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Photo of Jump Street CRW Team by Mike McNamara

Hang in there..... first jump student "boughs" to the art of a good landing. Photo: Simon Ward