# Sport Parachutist

VOL. 2 NO. 1 SPRING 1965 THREE SHILLINGS

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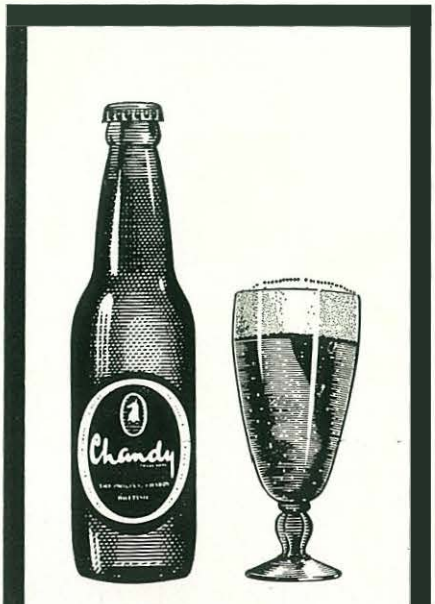


Blue sky, hot blazing sunshine, small white "umbrellas" growing bigger, gently cascading and floating to the Dropping Zone.

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# Sport Parachutist

**JOURNAL OF THE**
**BRITISH PARACHUTE ASSOCIATION**

7c Lower Belgrave Street, London, S.W.1.

(SLOane 7907)



**Diane Knipe who was third in the 1964 Ladies National Championships event, and was a member of the National Team at Lentkirch for the World Championship.**
*Photo by Public Relations, BAOR.*

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*We wish to thank* **H. Clarkson & Co. (Home) Ltd.,** *the insurance brokers of IBEX HOUSE, MINORIES, LONDON, E.C.3, for the excellent article on page 32, and also Lt. E. A. J. Gardener for his article on page 8.*

# Extracts from the Second Annual General Meeting

THE CHAIRMAN welcomed the Council and Members of the Association and expressed his appreciation at so many members being present. The Chairman then continued with his Statement. At the end of his Statement he proposed that a vote of thanks be made to the Daily Telegraph for their financial help with the National Championships. The motion was carried with the unanimous support of all those present at the meeting.

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Sir Godfrey Nicholson, on behalf of the Council and Members, recorded his appreciation of the help of Lord Kindersley, Colonel Whitbread and many others, for their great help in connection with this year's World Championships.

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The Treasurer then told the Council and Members of the expense of Office accommodation, and warned them of the likelihood that extra staff would soon have to be employed to help with all the administrative work. Moreover, despite the continuing generosity of the Association of British Aero Clubs, a further increase in rent was inevitable.

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The Editor then asked that Members producing copy for the magazine should keep to the copy date given. If copy arrived late, it became very difficult to get the magazine out in time.

One of the main points aimed at in the magazine, he said, was to endeavour to maintain an equal balance of technical and non-technical articles.

The Revenue of the magazine, the Editor continued, was due to the sale of advertising space and subscriptions. He said he very much regretted not being able to give the magazine free to the newly-joined Members.

The Editor then thanked Group-Captain Caster and Miss Braby for their help towards getting out the magazine.

He suggested that the normal yearly subscription of £2 should be increased to £2 10s. to include the magazine (which at present costs subscribers 12s. per year). He asked the Council and Members for their opinion on this, and the increase was generally accepted by a show of hands.

The Editor ended his Statement by asking the Members whether they had any criticisms to make about the magazine, and if so, to let him know.

**The Chairman,** Colonel R. D. Wilson, then made a Statement regarding the safety regulations, policy and progress of the Association.

He told the Council and Members of the Association that he personally hoped to produce a British Parachute Association hand-book on Sport Parachuting.

He also reminded Members that copies of the official safety regulations were available for those who did not already have them.

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**The Vice-Chairman,** Mr. J. R. Trustram Eve, then began his Statement on Accident Enquiries and Legal Matters. He stressed again the importance of knowing and using the safety regulations.

The Vice-Chairman announced that as a result of two fatalities this year, two enquiries had been carried out. He emphasised that it was the duty of the Association to do all in its power to prevent accidents and that this was the purpose of such enquiries. The reports had been sent to the Ministry of Aviation as confidential documents, and also to the Members of the Council for their decision as to what action should be taken concerning the accidents and the lessons learnt.

The Vice-Chairman then asked the Members to send in full reports of **all** accidents, however minor, so that data could then be built up. He believed that research into this data would result in the prevention of a great many accidents.

He outlined the progress being made by solicitors on the Association's behalf and went on to say that it was their immediate advice that all Clubs **must** invite their Members to sign indemnities. He told Members that a form of indemnity would, it was hoped, be enclosed with the Membership forms.

Finally, he invited any club with problems on this subject to consult the Hon. Secretary-General, and he asked Clubs to send copies of all such documents to the office so that the solicitor could be fully aware of the current situation.

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**Accident Reports**

Dr. C. Robertson asked the Chairman of the progress of accident reports being submitted by Parachute Clubs. The Chairman replied that he had received two excellent reports from two British Parachute Association Instructors. The Chairman reminded the Members that Clubs and individuals must send in information on accidents for processing. Report forms were at present being finalised and would be sent out to Clubs and Members in the New Year.

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**Dance**

It was suggested that a dance could be held. The Chairman replied that this was a very good idea, but that at present, B.P.A. Staff could not be spared to organise it. If the speaker wished to take it on himself, with a team of his helpers, then the Chairman saw no reason why it should not take place. Mr. P. Lang told the Chairman that a dance had been held in the past, but that the finances only just balanced.

Mr. O'Farrell suggested that a dance could be given during the Championships at Aldershot. The Chairman agreed that it would be an excellent idea, but pointed out that it would entail a great deal of work and organisation, but if the speaker was prepared to organise a working party and run it, all Members would be very grateful. The Council looked forward to hearing his working party's plans and would give them their full support.

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# £25 PRIZE

**The £25 prize copy sent to a Magazine Subscriber has not yet been acknowledged and the prize-money is therefore unclaimed.**

**The copy in question was clearly marked "Prize Copy" in red by your Editor and most carefully sent off amongst all the others.**

**If it is not claimed by March 30th, 1965 the money will be used again for a similar prize contest—details in the June issue.**

**Check your copy NOW!**

back row
Sgt Snowy Robertson, Sqn Ldr M. C. Stamford
front row
Sqn Ldr Mike Norman, Sgt Andy Sweeney, Sgt Jake McLoughlin, Flt Lt Peter Hearn
Taken immediately after the record drop


# A day out in Kuala Lumpur

**by Squadron Leader M. C. Stamford, RAF**

APART from being one of the most attractive sounding place names in Malaysia, a day out in Kuala Lumpur devoted entirely to Sport Parachuting sounds even more attractive—and it was!

Much has been written, mainly by our dedicated American friends, on the careful planning and organising required to produce a good sky diving display—and most of it is good stuff. Hence, to embark upon a 400 mile return journey in one day on the strength of two telephone calls and make a good show seemed the height of optimism. To return with two national records and a "snag-free" programme was something of an organiser's pipe dream—but we did just that!

It all happened on 30th August, the eve of Malaysia Day celebrations in the capital, and the occasion of the Kuala Lumpur Flying Club open day. A week prior, my chief sent for me and said he was not able to spare any RAF support but suggested I may provide a team of sky divers as a purely private venture.

I was grateful for the opportunity because, as yet, sport jumps are rare and costly in this part of the world. In the first ever Malaysian Championship at Kluang a week before, Flight Lieutenant Peter Hearn and Sergeants Andy Sweeney and Jake McLoughlin finished 1st, 2nd and 3rd. It cost them 80 Malay dollars (about £10 sterling) to hire the aircraft plus a 120 mile car journey and a night stop. My primary condition of negotiation with KL, therefore, was that it must be on a strictly "no-cost" basis. Our hosts were most agreeable and the arrangements for air lift, jump aircraft and DZ appraisal (KL Airport) took up the phone calls.

All efforts to obtain a twin-engined aircraft failed and with the largest available being a Single Pioneer of the RMAF, the team was automatically limited to four. This was no problem because in addition to the three mentioned, I invited Sgt. "Snowy" Robertson to complete the group.

We assembled at Changi airfield on the 30th at 0730 local for an 0800 take off and were quite prepared for the usual disappointments of aircraft snags, duff weather, etc., but no, our taxi, a well appointed executive type Dove, was waiting for us—a happy start!

The flight to KL, stopping at Kluang, was made in ideal conditions over truly beautiful country and apart from some ribald comments on my map-reading (promoted to the right hand seat) it was delightfully uneventful. The party was six strong, young Sergeant Gordon Flint having joined us for DZ duties, hopeful of a jump if the opportunity arose. I popped my unchristened Irvin 32′ TU on board, also hopeful, but my primary tasks were team manager and commentator.

We had a good look at the airfield whilst in the circuit and approved of the flat green carpet 400 yds x 120 yds with a white circle more or less dead centre—just the job! Our jump pilot, Squadron Leader Mike Norman, RMAF, met us off the aircraft and lost no time in discussing the programme details although he readily admitted he had not dropped free fallers before. I therefore suggested a pre-display practice drop, apart from the desirability, it would be an extra jump—there were smiles all round when he agreed. We then let him into the secret—the Malaysian record stood at 11,500 ft., set up by Australian Army jumpers at Kluang. He sparked immediately and said he was game to try it in the afternoon after the

practice. We swung into action immediately—Met. gave us light and variable with little cloud—so we plumped for 9,000 ft. The team were aboard in a trice with the usual banter about the middle of the circle—and we promised a flare for the streamer plus one for the actual. We never saw the streamer! They remained quiet about this afterwards until a wee boy brought it back from way off the DZ. Then the aircraft vanished for 50 minutes after which time we spotted a wee speck, very high, but slap on the planned run-in track. The flare was lit, cautiously timed to last over the vital 5 minutes, and a little later out they came. There was a hub-bub from the small pre-lunch crowd and we thought we heard the PA system mention 13,000 ft. but shrugged this off as probably a pre-amble for the afternoon. Flint and I had discovered that the attractive white circle with KL in the middle was solid concrete, so we placed a white cross a tidy 20 yds to starboard. None the less they all seemed to set up for it after opening and it seemed a long time before they interpreted our "cats on a hot tin roof" routine below—meant "go for the cross". They then pulled out all the stops and one after the other plopped down within 10 yds of the target. The delay had semed a good long one and so after the customary ear-popping and "fishermen's tales" of link-ups, missed batons, etc., we enquired the height—13,000 ft. and a new record!

That was as far as we got for a moment because the Single Pin landed beside us and Mike Norman, all smiles, leaned out and yelled in an admiring tone—"I banked after the last man left and watched you disappearing smartly—gave me a funny feeling—rather you than me I thought." Then with a quick crack about 15,000 ft. later (with less fuel) he taxied off. I asked Peter Hearn—how and why? He shrugged in his usual phlegmatic way and said—"well at 9,000 ft. he put his thumb up and I nodded, whereupon he opened the taps and started climbing—I thought he was going after 10 or maybe 12 but at 13, I patted him on the shoulder and he levelled off". The run-in had been so good that Mike had only needed one 5 degree correction—all were full of praise for his airmanship.

The next thought was for a cold drink and some food—regrettably display parachutists are used to tea and buns and going in the back flaps of marquees—but not this time. It was around 88°F in the shade and the iced fresh limes lined up and waiting, tasted like nectar, to say nothing of the reserved table and sirloin steaks to order which followed. The group were in top gear but with only one chute each and the extra jump—there was little time for re-packing before the main show. The packing started in the open with seemingly hundreds of curious observers—and then it happened! The rains came! In torrents! Three of them made the shelter of the clubhouse, but alas, not poor "Snowy". A long waterproof packing sheet was thrown over him and the entire length of his assembly. The onlookers from various dry vantage points, were highly amused by his bunny like activities as he burrowed his way up and down the gear beneath the sheet. He emerged to a great cheer, very bedraggled and shook himself down like a wet white-haired terrier, mumbling all the while—"It was b—— hot under there." Perspiration and rain were the one and same but the "Snowy" smile remained undiminished.

All the birds were not only wet but walking—the cloud base was on the deck—outlook hopeless! The Club Captain, smiling wryly, told us the local police had been swamped with reports of parachutists with fancy coloured chutes descending on KL—not difficult to understand in the current situation but fortunately all the authorities were pre-warned. The experienced club aviators cheered us up with the forecast that it would clear as quickly as it had clamped—and it did! At precisely 4 p.m. the SEP roared forth bent on improving the 4 hours old record.

The No. 1 commentator handed me the microphone with a warning that it was suspect, even so I wasn't quite prepared for the large spark which disappeared down my throat just as I was trying to electrify the crowd! Actually I was endeavouring to convey the atmosphere in the aircraft just prior to "P" hour and had said the Spotter would probably be saying to the pilot—*! *?/*—"What the hell's that?" It was out before I could switch off—with language barriers it is doubtful if all understood my apologies which followed.

The controller confirmed the aircraft was approaching at 15,000 ft. and the crowd was agog with excitement. The visibility was nigh perfect so that the exits could be easily detected. Trailing yellow smoke they treated the crowd to a wonderful exhibition of relative work and aerobatics for almost 70 seconds. Then they separated for the pull and all popped within seconds of each other in neat line astern. Their four different canopies and weights made the right of way simple. McLoughlin had his Orange and Black Conquistador and the other three had Red and White candy stripes ranging from TU, Double T to Double L. All set up nicely for the cross and came in very gentlemanly one after the other averaging 15 feet apiece—not bad for a display whose primary aim was height and not precision.

The crowd loved it, even the most veteran club aviators hadn't seen a parachute over KL since a Spitfire pilot baled out nearly 2 decades ago. The crowd applauded the group all the way back to the Clubhouse where six more sirloin steaks "plus" were lined up. After a friendly chat and an invite for 1965, the Dove rolled up dead on time. The flight back to Changi passed quickly enough with a fund of Robertson stories ranging through jungle survival, the peculiar effects of some snake bites, reserves he had known and the inevitable sex.

The cars awaited us on the Changi apron and everyone parted in great spirits—no wonder—two jumps, two steaks, two records on two phone calls—all for free, ne'er a pen to paper—what a day out!

# The day we nearly saw the King of Siam

*by F/Lt. Peter Hearn*

**"How would you like to give a demo in Thailand?" the Squadron Leader had said. Well, I ask you . . . ! I was first in the queue for cholera jabs.**

It was something to do with a SEATO display which the Americans were organising in conjunction with the annual exercise in Thailand. Nobody could tell us much more about it, except that the King would be there. Not that we were worried about the details. It was free jumping.

There were four of us. Sergeants "Snowy" Robertson and Dai Hurford, myself and Squadron Leader Duggie Brown as DZ safety officer.

At a dusty airfield too far north of Bangkok for comfort, we were met by the goddam colonel in a goddam jeep.

"Goddammit!" he said as he bounced us down the road in a cloud of dust and cigar smoke. "You British boys are all gonna jump with some of my boys over here from Okinawa and some of the Thai boys from the Airborne, and you're all gonna jump right at the end of the whole show from nine thousand feet altitood with smoke and the whole goddam shoot, and everyone is gonna carry a flag of the SEATO nations in his shirt so that when you land right smack there in front of the god . . . in front of the King, you all line up and hold out the flags while the band plays national anthems and the whole goddam caboodle, how does that sound lootenant???"

"Er . . . great, colonel . . ."

"I'll say it's great!"

"What's the, er . . . dropping zone like?"

"Fine! Fine! A fine dee zee."

The next morning we went to look at the fine dee zee, with the American skydivers and the Thais. It was a bumpy, ten-mile drive away, in hilly jungle country. When we arrived, we stood and looked at it for a while. One of the Americans spoke first.

"Jeeeeeesus!"

We were on a steep mountainside. The jungle had been cleared from the slope, terraces dug, and wooden stands erected. There was a Royal Box. Immediately below, on level ground, was the DZ—a clearing three hundred yards long and two hundred wide. Beyond this, scrub jungle stretched for a mile towards a facing slope. It was a natural amphitheatre. The sort of place where the Romans could have massacred Christians.

The DZ was large enough; we had all jumped into smaller areas. It was the surrounds that added the sporting touch. This hill, for instance. It gave you the impression that when you opened up at two thousand feet over the DZ, you would be shaking hands with the people in the upper terraces. The jungle over the other side looked rather forbidding too. Worst of all, where the bamboo clumps had been cleared from the edge of the DZ, the stumps had been left standing. They were five feet high and pointed. "You'll be alright lads" Snowy assured us. "Just keep your legs together."

We went back to the billet to work out a practice programme. We were going to need plenty of jumps. "You can have all the goddam jumps you want" promised the colonel. So we planned ten. So we got three. These were not enough to reach full international accord on what we should do, let alone practise it. But they were nevertheless enjoyable, free, and above all, interesting.

The Thais, for instance . . . they were a charming,

happy, and quite unassuming bunch of lads. However, they had a motto. It was painted in bold red letters on the wall of their airborne training hangar where we repacked:—

"NEVER MIND IS THE WAY TO DIE"

This belief they appeared to follow assiduously. On one occasion we were entertained with an impromptu "cutaway" act, when one of them jettisoned a perfectly sound main canopy at about one thousand feet and pulled his reserve three seconds later. Several of them jumped without instruments—from nine thousand feet; some jumped without stability. But you couldn't help liking them. I passed one on the first practice jump, kicking on his back as happy as a baby on a rug.

As we were jumping from a U.S.A.F. C130, the leader of the American contingent had the unenviable task of stick leader. Now Alex was a first class skydiver. It was his spotting that failed to impress us. On two practices at the airfield he put us out too late and had us hanging out over the edge of the DZ like wet washing praying for a wind. Fortunately, the practice on the jungle zone was spot on. He may have been inspired by the thought of those bamboo spikes.

Overall organisation was in the capable hands of the colonel. "Just make sure you got them goddam flags in your overalls men!"

"Wouldn't it perhaps be better colonel, if you had the flags already waiting for us at the dropping zone—just in case someone doesn't quite make it?"

"Not make it? Goddammit lootenant, evryone's **gonna** make it!" So spake the goddam oracle.

The day before thedemo we heard that the King would present one hundred U.S.A. dollars to the man nearest the target. It was as good as converted to sterling, we thought. Snowy had come out on top on the airfield practices, myself on the display DZ. Roll on Bangkok . . . we thought.

Came the day. We climbed into the big belly of the 130 and sat sweating, wishing for once that the Thais wouldn't look so happy all the time. Take off, and cool air at last. We ran in over the jungle green hills for the streamer drop. There was a great pall of black smoke from the firepower and napalm displays that preceded our show. "Hope the colonel's got his goddam timings right!" someone growled.

Streamer away! But the aircraft didn't fancy orbitting around a fire-power demonstration. It roared away, and we soon lost sight of the yellow crepe wriggling in the haze. "No sweat," said Alex. "Dee Zee control will let us know where she goes."

Just above 7000 feet we ran into cloud. 7000 feet it was. Less time for tracking. If we needed to track.

Five minutes to go.

It was time we were briefed. Alex was talking on intercom over by the open door. He looked worried.

"Can't get through to the Dee Zee" he shouted above the engine roar.

"So what do we do?"

"Play it off the cuff . . ." and he stuck his head out of the door to line us up, and that was our briefing. That well worn cuff!

Quick mental check. The lazy drift of smoke from the ranges had given us a fair idea of wind drift. Not much on the surface. Probably more at 2000. If he dropped us just north east of the DZ, we could open right over the corner, giving us the full diagonal of the clearing to play with . . . well away from the bamboo . . .

"Running in . . ."

Goggles down, last check of the altimeter, and off the tailgate at a run as Alex dropped his hand.

Have you ever had the feeling that you want to climb back in and start all over again? Like when you have been dropped a mile downwind of quite the nastiest DZ you have ever seen? You waste a second refusing to believe it, another cursing the cross eyed spotter who put you there, and then you're sucking your belly in and tucking your arms to your sides and trying to track like American statistics say you can. They say those smoke trails looked impressive from the DZ. The DZ looked less impressive from the business end of the smoke trails. It was too damned far away, and not getting much closer. We were tracking into a head wind. . . . Never make it! Pull early and hope to drive in? Not with a double L. Even the TU's wouldn't get there . . .

Have you ever seen a hundred dollars evaporate?

We were still downwind of the DZ when we opened, looking across at the terraced stands looking across at us . . . "Daddy, why are those men landing in the trees?"

There was nothing to do but steam with frustration and pick a spot that looked less dense than other spots. There was a narrow track through the jungle that had been used for the tank assault. Self preservation, I found, provided an even finer incentive than the King's hundred dollars. Like falling into a tomb, I slipped silently between the walls of foliage for a perfect, dead-centre stand-up—quite unobserved, as perfect, dead-centre stand-ups are wont to be.

I reached the DZ about ten minutes later. Noddy had made it. But they had found one of the Americans first and had rushed him in a jeep up to the Royal Box to collect the dollars. Most of the others were still trying to get down out of their trees. The colonel had despatched search parties for the flags.

By the time they were gathered in, the King's helicopter was an echo in the hills; the crowd was a cloud of noisy dust fast disappearing down the road. The colonel, game to the last, lined us up. To the emptying terraces and the cleaners in the Royal Box, we presented the sweat-stained flags of the SEATO nations, while the colonel stomped around muttering "Someone's gonna have my goddamn ass for this . . ."

I hope someone did, goddamn it.

# The increasing demand for Free Fall Displays

**With the growth of Sport Parachuting in Great Britain there is an ever increasing demand for Free Fall displays. Quite apart from Air Days, the majority of County and Agricultural Shows, Charity Fetes and Carnivals seem to want "Skydivers" somewhere in the programme. From the parachutist's point of view, displays provide an excellent opportunity to demonstrate to the public that free falling is an exciting yet perfectly safe sport.**

There are two important principles to remember when giving displays. The first is that they are NOT just a matter of parachuting in public. They normally entail jumping onto restricted dropping zones which are surrounded by hazards. Errors, which under normal circumstances would cause nothing more serious than a few red faces and cost the offenders a round of beer, can prove dangerous or even fatal—not only to the parachutists, but even more important, to spectators. Such dangers can only be avoided if sufficient time and effort have been put into the planning and preparation. It is no exaggeration to say that any display is already made or marred by the time the aircraft takes off. The second is that safety regulations must NEVER be contravened; sound judgment should never be influenced by the desire not to disappoint the organisers or the public.

The various stages of preparation should be the same regardless of what size of display is to be given. I have followed the same basic pattern when giving one-man displays off the wing of a Tiger Moth at village fetes in the wilds of North Wales or when running a full time fifteen-man Regimental Display Team with its own Rapide aircraft, giving over thirty large displays in a six-month season. The only difference lies in the scale of the organisation required.

The first step after receiving a provisional booking is to carry out an inspection of the dropping zone and to discuss the matter in detail with the show organisers. The visit to the area should be made by an experienced display parachutist at least a month before the event and the best part of a day should be spent there so that

every detail can be covered. Take a one-inch Ordnance Survey map of the area and, if possible, Aeronautical Charts showing airfields, airways, danger areas, etc. Most shows have large-scale plans of their show ground areas; ask them to produce one of these for the visit. The majority of show organisers are supreme optimists who assume that you can land in an area just big enough to take the average target and surrounded by hazards. Tact is required in pointing out to them that, whereas your team is made up of experienced parachutists who normally land on sixpences, allowance must be made for the occasional error or wind change, and that the safety of their public is at stake. In fact, dropping zones of one hundred yards square or even less can be accepted by a really experienced team, but only under very strict conditions. If the overshoot areas are good and the hazards not too extensive, small DZs can safely be used provided that the wind is in certain directions. Usually it is necessary to work out several different plans which involve accepting wind speeds of varying strength depending on their direction. At the same time bear in mind that the surface wind can be affected by surrounding buildings, etc.

Never forget to find out exactly what the layout will be at the show. The DZ will probably be surrounded by tents, spectator areas and, worst of all, car parks on the day and your beautiful overshoots may completely disappear. With this in mind imagine what your DZ would look like from two or ten thousand feet—and if you are not happy, refuse to accept it. A larger alternative DZ can usually be found reasonably close by so that the crowd would be able to see everything except the actual landing. In any case such an alternative is always useful in the event of the winds being within normal parachuting limits but outside those that have been laid down for the main arena. Plot the exact position of the DZ on the map and obtain the written permission of the owner to parachute onto it. Check whether it lies under any controlled airspace or danger area.

Now work out the detailed arrangements with the show organisers. If possible give an estimation of the cost for the aircraft but arrange for the exact amount to be given after the event. If a charge is also to be made for the parachutists (which is normal and helps Club funds!) lay this down at a set rate of so much per man per jump. Then, if the display is cancelled due to bad weather, the organisers only have to cover the cost of the aircraft and, more important, the parachutists are under less of an obligation to jump in border-line conditions. All these details should be put down in some sort of written agreement.

Other points to be cleared at this stage should include detailed timings of displays (if two jumps are to be made in one day allow for time to repack, return to the airfield and fly back to the DZ), how big a "slot" is available in the programme, medical cover, crowd control, arrangements for the DZ party and commentary, accommodation (if required) and insurance. On this last point, although all British Parachute Association Members are covered by a Third Party Policy up to £25,000 for any one incident, it is usually preferable to arrange for the show organisers to have the display covered in their policy for the entire show. Together with the show organiser, visit the local police headquarters and give them the full details; they are responsible for the safety of the public at such events and it is only good manners to give them the fullest co-operation.

The last step, while still in the area is to visit the airfield which will be used as a mounting base. If the jump aircraft is to be hired from there discuss the matter with the operators and ensure that the pilot is on the Ministry of Aviation's list of pilots approved for dropping parachutists. If the aircraft is to be brought in from elsewhere, check that the correct types of fuel and oil are available, hangarage if required, and what radio frequencies are needed. Find out from the controller whether the DZ lies under the circuit or approach to that of any other airfield; in areas close to major airfields it is often possible to arrange for the jump aircraft to be controlled by radar to avoid any unpleasant mid-air incidents. The location of the nearest Meteorological Office should be obtained. Finally, check the elevation of the mounting base against that of the DZ so that altimeters (including the aircraft one) can be pre-set to the DZ elevation before take-off.

All parachute descents which are not made onto Government or Licensed airfields require prior clearance from the Ministry of Aviation. This is obtained by completing a request for a Special (Parachuting) Exemption; proformas are available from the appropriate Divisional Controller of the Ministry of Aviation to whom the completed application should be returned. (DZs which are south of a line from the Severn to the Wash are dealt with by the Southern Division, north of this line but south of a line from Carlisle to Berwick-upon-Tweed and including Northern Ireland by the Northern Division. North of the Carlisle/Berwick line by the Scottish Division.) Important points to remember when completing the proforma are to state whether the timings are BST or GMT and that the names of all parachutists, together with their General Exemption and FAI Certificate Numbers must be given (if at the time of making the application you don't know exactly who will do the drop, put in the names of all possible members of the team). When filling in the height required bear in mind whether you will infringe any controlled airspace. Permission may be given to drop through a control zone or airway provided the aircraft is in radio contact with the controller; this, however, will depend upon the congestion in the airspace at the

**Getting ready for the drop**

time. A six-inch plan of the DZ marking all the hazards and the written permission of the owner of the land must accompany the application. The application should be sent to the Ministry at least three weeks before the event. If the DZ is approved the Ministry will then send a Special Exemption. If they consider it necessary they will also issue a NOTAM which will warn all aircraft to keep clear of the area. The Ministry are always extremely helpful so give them every possible assistance when making applications.

Work out the complete programme for the display. If several shows are to be covered during the season it is as well to produce a detailed proforma to avoid the risk of missing any points. The programme should include all timings from leaving home to the expected time of return—particularly important if the aircraft has got to return to its base before night-fall. All the equipment required should be listed. The pilot should be sent the outline programme well in advance and the members of the team briefed.

The actual selection of the team requires some comment. All must be fairly experienced parachutists even on the more simple displays. As a general rule never put a man on displays until he has a minimum of forty to fifty free fall descents and has proved himself to be a proficient, sober and reliable parachutist. For the more tricky DZs the minimum experience should be nearer the hundred jump mark. Always ensure that there is a majority of jumpers with previous display experience in any team. A properly qualified DZ party must be present at all displays and they must always have a wind meter and signal panels; smoke generators, flares or a wind sock are also useful. The team must have a nominated commander, usually the most experienced parachutist. It is also a good idea to ensure that all members of the team and DZ party are uniformly and smartly dressed; this creates a far better impression than having a scruffy looking bunch of characters in a motley collection of dirty jump-suits—an unfortunate image that seems to be created by some parachutists!

The show organisers will probably want photographs and articles for publicity which should be sent well in advance. They will probably also require a commentary script unless the team is providing its own commentator —in which case ensure that he can do the job properly; a good commentary gives the finishing touch to a good display.

On the day of the display the whole team should visit the DZ so that they can see it at close quarters. The DZ party should be given final instructions on ground signals, etc. On arrival at the airfield the pilot and team should be given a one-inch map with the DZ marked on it. Contact the Meteorological Office for a forecast of cloud and upper wind conditions. As a general rule there is little point in trying to jump from above cloud if there is more than 4/8s (i.e. half cover); too much time is wasted trying to line up a gap with the opening point and in any case the parachutists may be obscured from the view of the crowd. The upper

wind forecast is useful for calculating free fall drift, which on a long delay can be considerable. If you know the height from which you will be dropping, ask for a "Vector Mean" of the wind from this height to pulling height (a Vector Mean is the average wind speed and direction over a specified height bracket). By multiplying this average wind speed in miles per hour by the number of seconds of free fall delay and dividing the result by two the approximate free fall drift in yards is obtained. Once the position of the opening point is established this distance can be plotted on the correct heading on the map to give the actual release point from the aircraft.

Before take-off carry out a final check of equipment and ensure that plenty of wind drift indicators are aboard in case the first ones tear or are lost from view. Take-off with plenty of time to spare.

The jumpmaster should drop two wind drift indicators together over the target and time their descent. If possible their point of landing should be marked with a coloured panel by the DZ party. After calculating the opening point it is advisable to drop a further two indicators over this point to check that they land in the target area—particularly if the DZ is small. The entire team should have the opening point indicated to them. With the aid of a map and protractor calculate the release point and, if possible, pass this and the desired run-in heading to the pilot.

I will discuss here only the more simple type of free fall display; if you are up to the standard where you are contemplating cut-away jumps and max-track demonstrations you should already be well acquainted with the advice given in this article. However, even a straight delay by a team is very effective, provided that they are using smoke grenades or powdered chalk. Smoke is the more effective but difficult to come by outside the Services. At all events one or the other should always be used on delays of twenty seconds or over; without it the majority of specators will not see men in free fall at all. Most crowds are quite happy if they see a team bombing in around the target following a "clear and pull" from the aircraft.

On the run in the jumpmaster must check that the target is still in position; at this stage the DZ party should be taking frequent wind readings, preferably from a point where the wind will not be affected by surrounding obstacles; if the wind rises over the limit they must remove the target without hesitation and must NEVER be influenced by persuasion from the show organisers. Normally the jumpmaster will exit the aircraft first as he has studied the position of the opening point more closely. He should get the pilot to cut the throttles before exiting so that the team are closely stacked in the air. The team should aim to exit as quickly as possible. The leader should fall in a tightly closed position so that he keeps well below the remainder; his one task should be to watch his position in relation to the opening point; if necessary he can then slowly move into a tracking position and the remainder of the team can follow suit without risk of getting below him. Apart from watching the leader the remander of the team can concentrate on limited manoeuvres relative to each other, particularly if they are using smoke or chalk, or on making a link-up. However, they must keep one eye on the leader and follow him wherever he goes. By pulling visually on him they can also achieve a stacked opening. Great care should be taken to avoid being directly over another parachutist near the pulling height.

After opening, the lower man has priority; if two men are at the same height one should slip his canopy to get lower. Smoke on the DZ is a help, but only indicates the surface wind which may be affected by obstructions. Displays are not spot landing contests and it is usually sufficient to get into the immediate vicinity of the target rather than risk a "crash and burn" landing on hard ground. During the descent each man must keep a constant check on his position in relation to other parachutists and, most important, must quickly decide if there is a risk of his not making the DZ; in this case he should aim for the most convenient overshoot as early as possible. On a very tricky display one member of our team realised that, due to a slight wind change, he might not quite make the DZ and could end up on the edge of the crowd. At about one thousand feet he therefore turned away from the DZ and landed safely in a tennis court. Unfortunately the gate was locked and a press photographer had a wonderful time taking pictures of him through the wire. Although this cost the parachutist concerned a few drinks, his quick summing up of the situation avoided a potentially serious incident.

After the display the team should aim to mix with the crowd. This usually results in plenty of free beer and also allows the public to see that parachutists are quite normal beings. However, in the general excitement never forget the pilot of the aircraft; always ensure that he gets due credit for his part in the show and wherever possible see that he is suitably rewarded in liquid form. Such celebrations should, however, be strictly controlled if another display is to be given the same day!

Parachute displays involve a lot of hard work and impose a considerable strain on the participants. With British weather it is inevitable that many have to be cancelled. But a really successful display carries its own rewards in the satisfaction that it gives to the participants and spectators alike. Impressive but safe displays benefit the entire sport while displays which misfire can cause a great deal of harm. Success can only be achieved through sound planning and strict compliance with safety regulations.

# SLITS and SLOTS

## by J. R. MITCHELL

LIKE many other branches of technology, parachute design is a combination of art and science. The professional tends to over-emphasise the science and the amateur the art, but a successful product is the result of a balanced combination of both.

If you are starting off in this new field of sport it is a good idea to have some inside knowledge of how a parachute is intended to work, but a sound knowledge is only built up from long practical experience. It is unwise for the beginner to imagine that a plain, flat canopy can be transformed into a winner with a pair of shears and a needle and thread. Even a new design has to be used many times before a Parachutist hanging beneath it can give a competent performance. This gives a chance for anyone, even with an early design of parachute, by observation and by cunning application of technique thought out in secret and practised surreptitiously, to be able to outdo another fellow who has been at it longer and has forgotten how to think things out afresh.

Let us start off with a plain parachute canopy without any pieces missing; the air has filled it and it is descending slowly (Fig. 1). Evidently the air pressure inside is keeping it inflated with the approaching air mass moving outwards and round the canopy sides. If we imagine that a very porous fabric is being used it is obvious that the pressure will be insufficient to oppose the inward pull of the rigging lines and the parachute would, in fact, collapse into a squid shape. Alternatively, it could be imagined that the rigging lines could be shortened to such a condition that the air pressure holding the peripheral hem outwards would be overcome and the parachute would again collapse. This is the principal danger of getting too many twists in the rigging lines because under such conditions the parachute might not be able to open to its full extent. The air mass approaching the parachute has to be diverted round the periphery, but if the porosity of the fabric is very low the diversion is so great that it becomes easier for the

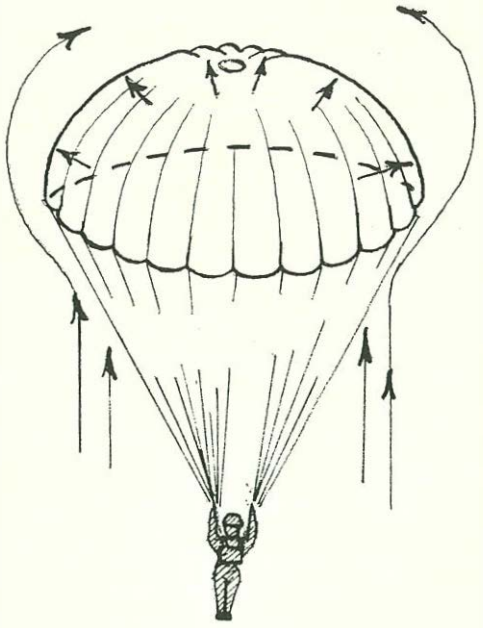

FIG. 1.

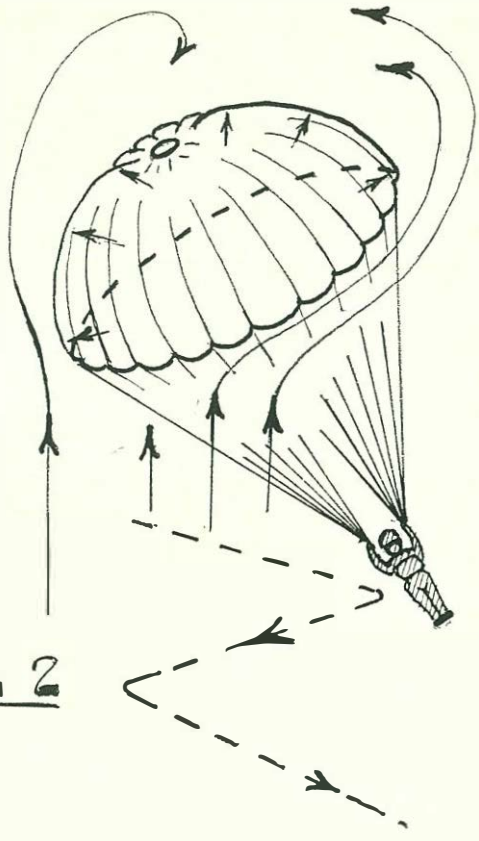

FIG 2

parachute and its enclosed mass of air to tend to move sideways instead (Fig. 2). This is the condition which prevails when we have an unstable parachute. The sideways movement of the parachute is always ahead of the person suspended beneath it and he is always trying to swing round under the parachute again, but never gets there. When an imporous parachute is used in turbulent weather conditions, this "chairoplane" motion can be quite alarming, as some of you may have found out.

Let us turn back to the steady parachute again with its even pressure all over. If we cut a part of a gore out on one side we remove the area of pressure as well, and the parachute will glide away from the position of the hole, driven by the air pressure on the side without a hole (Fig. 3). The original single blank gore parachute was discovered by accident when a parachute split during early supply dropping trials. If two slits are made on opposite sides of the parachute this drifting tendency is cancelled out, one variation of this design being the Russian Pinwheel. The size, shape and combination of rearward slots has, of course, taken many forms and it is when the problem of providing a reasonable degree of glide has to be balanced against the effects of braking and making stable turns, that the pattern of slots becomes important.

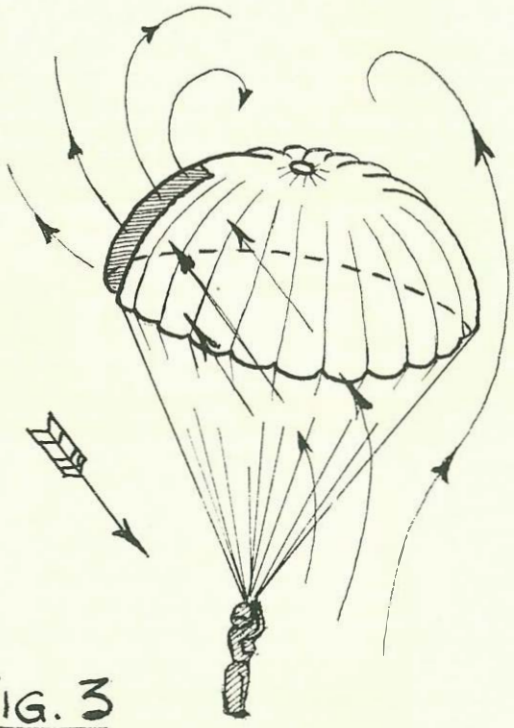

FIG. 3

There is one critical and overriding factor regarding the number and size of slots and this is where the danger arises when well meaning enthusiasts try to make their own modifications. The primary function of a sport parachute is that it must have a strong tendency to inflate and it is now being realised that when a large number of small slots are provided inflation becomes difficult. By illustration, a sheet held in the wind will inflate rapidly and remain filled, while a ribbon will twist and flutter. If consecutive gores of a parachute have one free edge with the purpose of increasing lift and braking effects they will behave well when the parachute is inflated, but will twist away from the airflow when the canopy is slack. This effect has been noticed with the Paracommander which, while being an outstanding design for glide and manoeuvrability is rather uncertain during inflation and the recommended method of assisting inflation is to pull down on the control lines connected to the side gill gores which are used for braking and turning. A study of the many flight photographs of this parachute now available will clarify this point.

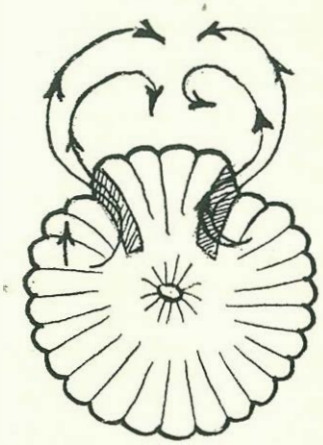

FIG. 4.

The drifting tendency of a parachute with open gores can be improved either by tilting the canopy by pulling on the lift-webs or by arranging slots to give the same effect. This is the function of the peripheral slot at the rear of the T.U. and similar designs, and greater emphasis has been given to this principle by the lifting tail idea, which has been seen on the Gemini parachute in the U.S.A. and on Jim Basnett's Scorpion in this country. Of course, the degree of drift can be overdone, especially with low porosity canopies, and the effect is to get an instability or hunting effect along the direction of

drift. The canopy begins to move faster than the man and tilts forward a little until the front gores start to buckle inwards. The increase of pressure outside the parachute against these gores reduces the drift so that the man swings forward beneath the canopy and the changing tilt helps the gores to inflate again to begin another cycle. The French 656 parachute and other similar types have been designed to reduce this tendency to variation in drift by having a horizontal slot in the forward gores. When full drive is applied the lower section is blown back while the upper part of the gore usually remains inflated. The position of this slot is quite critical and easier to fit to a block cut canopy than to the more common bias cut designs, e.g. 28 ft., T.U., etc.

The brakes function by increasing the pressure on the sides of the deflected gores and by increasing the swirl of the air masses behind the rearward gores of the parachute (Fig. 4). This latter effect can be felt in some designs by a wallowing and shaking sensation when brakes are fully applied. The degree of braking using a turbulent wake can be varied by a different spacing of the two vertical gores, as we see in the nine gore T.U. and the seven gore variation, but the better braking effect of the nine gore model is only achieved at the expense of a reduction in the normal rate of drift. There is evidently a limit to what can be achieved by having open controlling gores towards the rear of the parachute.

Turning effects are usually achieved by applying brakes on one side only (Fig. 5) but with many of the common designs there is a disadvantage in such a method of control. To change direction quickly means a certain degree of swing out by the man, because he cannot follow the parachute immediately, but if the parachute only receives its turning effort from one side, the parachute itself will tilt and the degree of swing will be increased. This means that a greater degree of recovery is required or the turn must be made earlier along the glide path if the parachutist is to hit his target. The desire to reduce the amount of swing on turns is undoubtedly the reason why the Pinwheel and the Paracommander have been fitted with side control slots. Perhaps these contributed to the high proportion of dead centres achieved during the world championships. Even so, it is wise to brake before turning unless you want to swoop to conquer (Fig. 6).

From this brief article you will see that while the effects of individual changes to a parachute can be quite simply explained, it is the combination of these various modifications and their inter-action during a descent which makes life complicated for the designer. With the usual English weather which prevails during our "summer" we can expect to have far less opportunities for testing than many of our overseas competitors, but as stated in the beginning it is the use of the knowledge available which counts in the long run. So it is up to you Jumpers to work out your own technique, using the best tools we can give you. Didn't one performer at Leutkirch nearly have a dead centre when using a reserve?

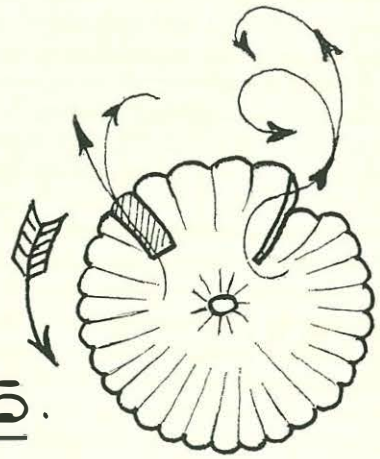

FIG. 5.

If you have any technical problems on this or kindred subjects, please send them, c/o British Parachute Association, and you will be contributing towards the substance of future articles in your own magazine.

J. R. MITCHELL.

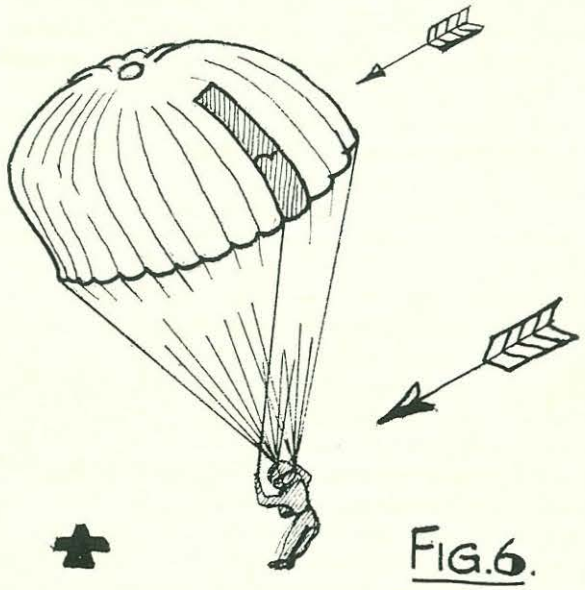

FIG. 6.

# EDITORIALLY

Thank heavens there is so little space left for editorial comment. In face of exciting articles about drops into Siam and Malaya, I find I have little to offer and say, but would like to thank all the contributors who have responded so well to appeals for articles.

There is more news available from the Service element than from the Civilian, and I must hasten to explain that this is natural—the Service authors have volunteered in that good old fashioned Army way.

Are there any masochists amongst the readership of "Sport Parachutist"? If so, perhaps I may appeal to them to join in an experience which might almost be described as giving birth—but four times a year!

Assembling each issue starts off by being great fun—then enters into a stage of tedium, followed by magnificent relief—like I said, four times . . .

The circulation increases rapidly—day by day the orders come in, and in this issue, the fourth, we shall make a profit.

All this goes to show that sex is not all-important to a successful publication—perhaps one might even say, parachuting is the greatest thrill of all!

Despite the apparent wealth of articles, more are needed for future issues. So why not think about writing one for your magazine?

Good Reading!

## B.P.A. Priorities

We have achieved much in the past two years, but the direction of our work has been dictated by urgent necessity; having now solved many of the most pressing of these problems, the time has come when we can try to plan ahead our future activities.

Would you please therefore consider and discuss with your fellow club members what questions you think should be given our priorities during 1965.

Please remember that our capacity to undertake various projects is limited by the number of persons willing to undertake the work concerned and also that certain activities such as the 1965 Championships and the final production of Safety Regulations will inevitably take up much of our energy.

Write to the B.P.A. Secretary now!

SPORT PARACHUTIST

**The point of no return. 5,000 ft. over Thruxton Airfield.**

# The Thruxton Letter

IN SPITE of the appalling weather we have experienced during the last few months it is surprising how many of our members arrive at the airfield every weekend in the hope that even a short break might enable them to get in a jump. Even when the weather did allow jumping, conditions were not always of the best: one Saturday early in January many descents were made from open cockpit aircraft with the temperature 6° below freezing point . . . it was chilly enough making the ascents but standing on the wing was a bit much! Owing to the increasing membership, and from encouragement we have received from a larger percentage of students returning really seriously to take up the Sport, we are giving serious thought to acquiring a Rapide, as during the finer weather our faithful Jackaroo is worked to death. We are also seriously thinking of finding an additional airfield and D.Z. so that we may train Students and confine it to static line descents and passing the free-fallers on to the second. One does not know how difficult it is or how unpopular we parachutists are with the flying types generally until one begins to search for an operational airfield suitable to our needs.

However, we are pressing on. A hangar-housed stabiliser has been in operation for some time which already has proved of great benefit to both students and experienced free-fallers. At the moment we are having erected a high staging, which, complete with sandpit will enable practice landings to be made from varying heights

and at varying speeds. Unfortunately the expensive cameras we purchased have not yet proved their worth: the helmet movie was smashed on its landing and although the others have produced some good photographs we have too many pictures of blank sky and farmland. Air to air photography is not as simple as we thought it was. We had wondered how the severe weather conditions experienced during the winter would have affected those wishing to take up the sport and train with us.

Naturally, many new members have booked to commence their courses in the Spring but throughout the winter we have had a constant but reduced flow of members for both weekend and five-day Monday/Friday courses. Originally, we had doubts regarding winter operations but results have shown that it has been well worth our while to retain our resident instructors at the airfield for the full 52 weeks of the year. We have no doubts at all regarding the future of parachuting and sky-diving: the interest in our sport is increasing in the mind of the general public and we are being requested to an increasing extent to provide personnel for displays throughout the country. More of our own members are graduating to Instructor status; four more have qualified from our own ranks in the past few weeks bringing the number of our instructors up to 20 of whom never less than two are always resident at Thruxton living actually in our own airfield buildings.

In December we heard from our friend and experienced paratrooper, "Chick" Dempster from Manchester, of the very large number of people in the north who wished to take up the sport. "Chick" Dempster, although a serving paratrooper, gives a great deal of his spare time to help and advises civilians wishing to know more of the sport. "Chick" decided to see if it were possible to form a club in or near Manchester to cater for the large number of enthusiasts in that area. Accordingly, the first meeting was called and was held at the Bradford Hotel, Mill Street, Manchester and was attended by some 110 people . . . all wishing to join a club and jump but not knowing how to go about it.

Such was the enthusiasm that a Committee was formed on the spot and officers elected. John Partridge accepted the position of Hon. Secretary, Don Howarth became Hon. Treasurer, Jim Reynolds agreed to look after membership whilst the indefatigable Sergeant Dempster found himself Assistant Secretary. The difficulties of forming a club were explained and six D.Z.'s were suggested on the spot. After much discussion the meeting terminated at 2 a.m. after arranging a date for the next meeting.

We were approached at Thruxton with the suggestion that we might care to send representatives to the next Manchester meeting to assist and advise. Accordingly, at the next meeting held at the B.R.P. Club, New Bridge Street, Manchester on Friday, 5th February, Eric Greaves and Carole Stephens went to Manchester and attended the meeting to assist and to offer the resources of British Sky-Diving. They found over 200 persons present and all highly enthusiastic.

It was soon evident that the difficulties foreseen were very real. It was reported that none of the original six D.Z.'s would be available. No further suggestions were forthcoming for further sites until Jim Reynolds thought he could produce one in the Wirral. This would mean a take-off point on an airfield with the D.Z. in an unrestricted zone some distance away. It was agreed that this would be inconvenient but Jim said he would investigate the position and had every confidence of being able soon to report favourably about it. Ivor Anderson brought up the question of finances and the obtaining of essential equipment.

Other speakers mentioned suitable aircraft and qualified pilots with current licences enabling them to drop parachutists. Then the all-important question of qualified instructors was raised. Eric Greaves stated that previous to his coming to the meeting he had obtained from the B.P.A. a list of qualified instructors with their addresses and regretted to report that no instructors in the country resided further north than Oxford.

Very many enthusiastic would-be members were appalled at the technicalities and essential details that had to be surmounted before a Club could be formed. It was then suggested that pending a suitable airfield becoming available ground training should be commenced. An offer was made to lend a set of judo mats, the offer of a hall was made and it was then agreed that ground training should be commenced forthwith. With instructors being available for ground training it was agreed to commence weekly sessions on two nights a week, the first to be on Thursday, 11th February and from the members present at least twenty to thirty would be starting at the first session. Should a D.Z. become available the equipment would be obtained to enable descents to commence providing a qualified instructor could be found. Failing this, ground training would be carried on in the centre of Manchester whilst numbers would travel to Thruxton to make descents from aircraft. This was considered an unsatisfactory way for the commencement but no alternative could be suggested. The meeting ended with the suggestion by Eric Greaves and Carole Stephens that British Sky-Diving would co-operate to the full to assist those in Manchester to form their own club but in the meantime offered the resources at Thruxton to be made available until such time as our northern friends are in a position to stand on their own feet and descend by their own parachutes. So much enthusiasm by so many people cannot be disregarded and some way, somehow, must be found to make parachuting and Sky-Diving available to the large number in the north of England who wish to take part in our sport.

E. J. G.

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**This photo shows the lay-out of the Centre. The building with the word parachutisme on it is the Packing Room. Directly behind that with the word Centre is the living accommodation of 19 rooms, 3 persons to each room; the small white building behind that is the Offices of the centre. The long white roofed building behind the thin line of trees is the recreation room and briefing classroom and cinema. The large hangar in the background is where the Dragon sleeps. On the left side of route 6 near the road junction is the Restaurant Aerodrome where all the jump stories are told.**

# You can't say no

## A PARACHUTING HOLIDAY IN FRANCE

**by Mick Turner**

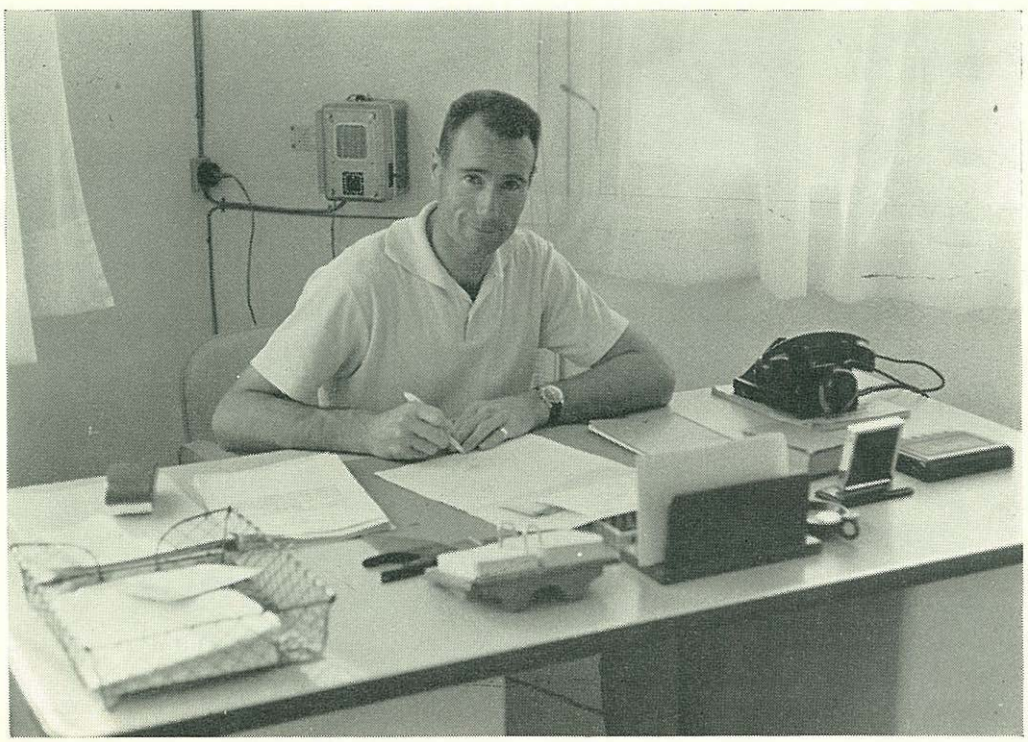
You know ideas and plans can be made in the strangest of surroundings, well this was one. I was in Canada in the winter of '63, January, almost on the shores of Hudson Bay. I was taking part in a Military Exercise and it was damn cold to say the least. We were living in tents and as I had nothing to do on that particular day, I decided to visit one of the other tents and scrounge a cuppa. This other tent was run by Joe Reddick who I had heard was a Skydiver. After my second cuppa I changed the subject around to Skydiving. On questioning Joe I discovered that he was one of the early birds to dabble in the Sport, with stories of 3 second delays from Tiger Moths with Don Hughes and Norman Hoffmann. Don Hughes now being Britain's No. 1 F.A.I. Judge and did in fact judge in the 7th World Meet. Joe told me he had made over 100 jumps and as I had at that time been jumping for a year and had not run into Joe on any of the usual airfields I was more than curious to discover just where he did his jumping. To my surprise he replied "Oh, I go over to France every so often and jump with the French". At first I thought Joe had a contact with the French Para., but he explained, "No, this is strictly a civilian centre". I was curious to say the least but my immediate thought was the expense.

I asked "How much does it all cost?" thinking it's O.K. for you pal, single Sergeant and no money problems. "Is it very expensive?" I asked. Joe answered, "Look, Mike, how much does it cost you for a 60 second delay in England?" Well, that one was easy because I could only afford one a week, "£2," I replied. "Right," said Joe, "In France, you can get 60 seconds of blue sky for 17/6." I sat bolt upright thinking that I hadn't heard properly. "Truth," said Joe, "17/6". This all sounded too good to be true. 17/6. There had to be a catch somewhere.

Equipment—that had to be it. "How much does your 'chute hire cost, Joe?" I asked. "Free, all part of the jump fees," replied Joe. I had only been jumping for a year now and it didn't take me long to discover that jumping cost money and in fact every penny you had. "O.K. then Joe, how much does the accommodation cost," I asked, thinking this must be it. "Nothing, again it's all part of the jump fees," replied Joe. Well, I was absolutely stunned. How could this be? Here I have a 60 second delay, a main and reserve parachute and my night's Kip all for 17/6, well I just couldn't believe it. Now I was getting more and more interested. Joe could see I was taking the bait and he continued, "They use a Dragon aircraft carrying 7 jumpers and a dispatcher. The aircraft has finely pitched props and climbs to 12,000 feet in under 30 minutes. I tell you Mike it's the softest DZ you have ever landed on." He had me and he knew it. He said, "Look, I'm going back over to Chalon at Easter, why don't you come along. I'm sure you will enjoy it." My head was in a whirl. I told Joe I would have to think about it and let him know. As I walked back to my tent I was already thinking like mad. This, man, was as far as I was concerned, a dream come true. I wanted to enter into competition jumping this year but desperately needed more jumps and some good instruction. Joe gave me an address to write to in France.

So a few days later I wrote to France saying how interested I was in attending the centre and could they give me details. A few weeks later I returned to England and there waiting for me was this folder. It contained a neat little calendar giving all the details of the centre and dates of stages (courses). The only trouble was it was all in French and I had to have the meat of it translated. I contacted Joe again and we decided on the 2nd stage for Perfectionnement (experienced) to do flat turns and back loops. We filled out the application form and sent it off. I was already visualising what it would all be like. About a week later I had confirmation back from Chalon stating that I had been accepted to attend and it gave the date on which we should arrive at the centre.

Now started the planning to get there. We would need passports, travellers' cheques, French currency (enough for immediate use) and to book our passage across the water. We decided to go in my old van. This is the best way to go and if you can get four of you it really cuts down the cost of travel. A week later we took off, shaking, we hoped, the uncertain weather of England off our heels. The journey over was uneventful and as we got further and further south in France I was glad to see the blue skies. I think I started to ask Joe where the place was when we still had in fact about 100 miles to go. I started looking for jumpers under canopies and Joe informed me they don't jump on Wednesdays, it's their day off. Suddenly Joe pointed into the distance saying "There it is. You see those white buildings in the distance beside the road—that's it". It was much bigger than I had expected. More buildings than I had imagined. (See photo No. 1). As we cruised down Route 6, Joe began to explain. You see the building with 'Parachutisme' written



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**Mr. C. L. Bernard, The Chef de Centre at Chalon sur Saone. This centre out of all the Parachute centres in France does the most number of jumps and is the most efficient. In 1964 there were 13,062 jumps carried out at Chalon.**

on it, well that's the packing room; the building with 'Centre de' written on it is the living accommodation. It has 19 rooms each with 3 beds, hot and cold water in each. Showers as well."

We pulled into the car park. Joe took me to the Bureau, the building behind the accommodation building. We went into the office of Mr. Bernard, the Chef de Centre. The offices were immaculate. I immediately got the impression that this wasn't just any old jump centre. I was introduced to him and I was immediately impressed. Strong and fit looking, quiet and impassive. (See photo No. 2.) Who wouldn't be impressed with someone who had completed almost 3,000 jumps. You don't meet people like that every day of the week. All my docs were handed over and examined thoroughly. I was asked what work I wished to do and what my highest jump was so far. I told him, feeling quite proud, 60 seconds. He didn't look very impressed and replied: "Before you leave here you will have done 72 seconds." I thought WOW!, thinking that I would never be allowed above 12,000 feet even with oxygen.

We were next instructed to go to Chalon town and be medically examined by a Doctor Blanc. Joe guided me down town as he had made this trip many times before. During the medical check I was examined for blood pressure, heart and chest soundings and reaction. The whole thing cost me 5 NF and I was given a certificate at the end signed by the doctor. Whilst we were in town Joe showed me the sights. It is an extremely attractive town on the river Saone. The old part of the town is built on an island formed where the Saone forks and rejoins itself, the later portions of the town spreading to the north and south. We drank coffee on the promenade and ogled the lovely ladies of France. On return to the centre which is about 5km. outside the town I handed in my certificate to Mr. Bernard and then went about the business of insurance.

In France there is no National Health Scheme so if you become injured you have to pay all expenses yourself. It is therefore required by the centre that you are fully covered by insurance. The Chef de Centre is the insurance agent at the centre and it costs you 35NF for this cover, however, this insurance lasts the full year. When you consider that the cost of an X-Ray alone is 45NF it is well worth the money. Now all you have to do is sit tight and wait for the jumping to start. You are issued with a main and reserve parachute which you have to repack and have your method of packing slightly re-adjusted to the French system, which is basically the same as ours. You will have no problem in re-adjusting. When you see the packing room you will really begin to appreciate the efficiency of Chalon sur Saone. It has six double tables permitting 12 chutes to be packed at any one time. Lockers are provided for all parachutes.

Evening came and all the jumpers left for the Restaurant de Rasins in Chalon Champergheuil. This restaurant is strictly for parachutists once the jump season starts. It has tremendous atmosphere and of

course all the talk is jump talk and what will the weather be like to-morrow. I was with them on that one, I thought that the French weather was only light winds and sunshine. The food was simply delicious. In the mornings you have a very light breakfast of coffee and bread, but the midday and evening meals are enormous. It takes the French jumper about 1½ to 2 hours to complete his meal and I am not surprised either. They talk and talk but the great thing is that all the talk is Jump talk and if you listen carefully you can learn a lot. Generally, after the evening meal the jumpers go to the Restaurant Aerodrome and drink coffee or a beer and talk some more. If you don't speak French the waitress at the restaurant has an abundant supply of blank menu cards and the ink begins to flow. The theory of the modified canopy is proved over and over again, various approaches explained, how to tell if you are on the wind line and hundreds of other jump problems.

When it is time to leave, the floor of the restaurant is littered with paper jump problems. There is then la salle de sejour. This has Television, a Record player with a stack of records, a Bar and in the next room Ping Pong and Table football

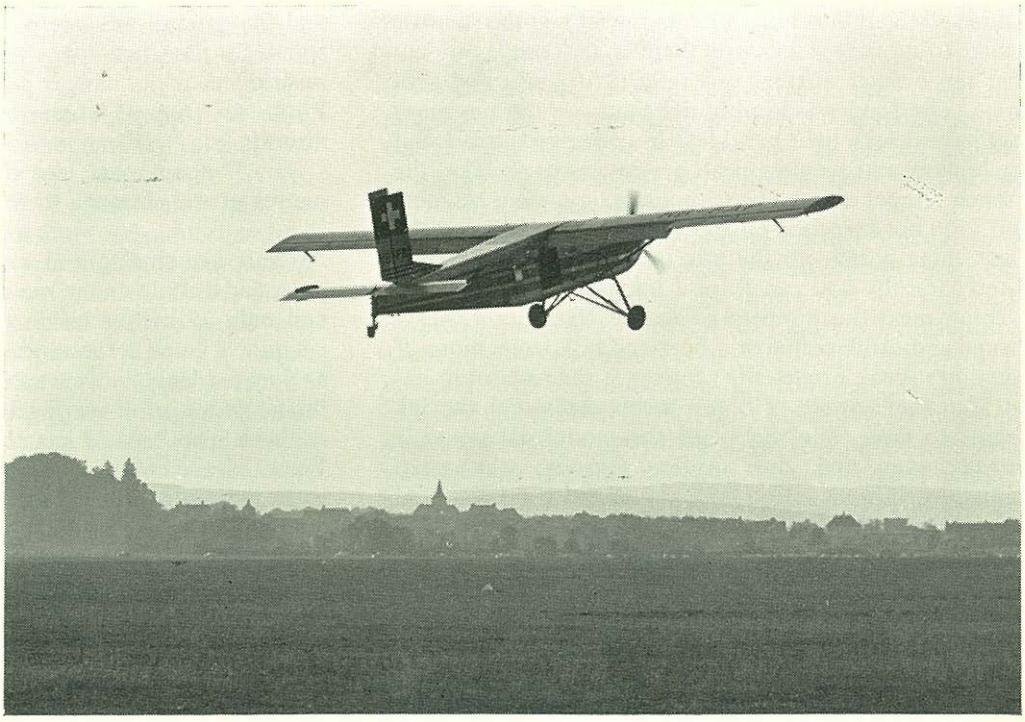
The following morning I am woken by a booming order in French telling the first stick to get dressed as jumping will begin in 20 minutes. There is a stampede in the corridor as jumpers dash to the packing room to see the jump order. The whole Centre is connected by an intercom system and you can even speak back to the Chef in his office. The benches are being placed outside for the first stick, marker panels are being put in position and the trusted ones are placing the telemeters on their stands for the Chef. Away to the left the Dragon is being pushed out of its hangar and the familiar figure of the Pilot, Mr. Distival is seen making his way towards the aircraft.

The Dragon roars into life and taxies to within 15 metres of the entrance to the packing room and that is as far as you have to walk to board her. The doors of the Aircraft are closing and away she goes in a cloud of grass and dust down the runway parallel to the main road and only 75 metres inside the airfield. You sometimes get quite a laugh at the expression on the face of motorists as they suddenly become aware of an Aircraft overtaking them and a load of waving Jumpers grinning and leering at them. The Airfield has no solid runways of any sort. We watch the Dragon circle and climb and in no time she is on the jump run and the siki (drift indicator) is seen floating down. All eyes are on the siki now, as this will determine the opening point for the later jumpers. Soon out come 1, 2, 3 jumpers and all are observed by telemeter from the ground so that absolutely nothing that goes on is missed either from the aircraft or from the ground.

Before the first jumpers are at 1,000 feet the aircraft is in on her second run. This time only 2 jumpers emerge and away goes the aircraft for the third pass and just as the first jumpers touch down the third pass are coming out of the aircraft. That is a typical example of the slick organization and system that goes on here. Before the third pass have landed the Dragon is taxying in to pick up the next stick who are ready and waiting.

**7**

**Mr. C. L. Bernard has over 3,000 jumps to his credit and I can say he has as much control in the air as an Aircraft. A first class character and if you are keen to learn he will teach you all he knows and that's plenty.**



8

**The PILATUS PORTER a real Wow of an Aircraft. Designed for rescue work in the Swiss Alps and can she climb!**

Soon it's our turn and we are checked over thoroughly before being allowed to board the Dragon. When I do get aboard I get quite a surprise, this one has bench seats running down each side, which means you don't have to sit on the floor any more. It also has internal opening doors which means a nice warm ride up to jump height. The orders for the height required are given to the Pilot, also the number of passes. Just before take-off, Mr. Bernard leans over to me and says "This time you will do no work but familiarise yourself with the airfield and the surrounding country".

Soon we are airborne and climbing fast. I have never known a Dragon to climb like this. We are soon at 2,500 metres which will give me a 42 second delay. The doors are opened and the Chef is leaning out to spot. He reaches for the correction button and I then experience the quickest, sharpest, flattest turn I have ever seen a Pilot do yet. The signal to cut is given and the Dragon literally appears to stop in the air, the first three jumpers don't waste any time, they are gone in a flash. Joe leaned over to me and said, "See how quick they get out! " No sooner had they gone than the Chef shouts "OK", the aircraft roars on and banks away sharply. In no time at all we are on the second pass and the signals are being given. We are beckoned to the rear of the aircraft and given a quick look over. The cut is given and the Chef stands back to make way.

I'm out and away, I look down and see the airfield below me, I turn and face the main road, lovely sight, I then turn and face the railway. I look at the instruments and see 4,000 ft. Where is that opening point we were shown on the photo? No sweet boy right below me. Reach in now for the pull. These French handles are on the left side for a right hand pull but the handle is so designed it is in fact in the middle of the chest. The cable comes away sweet as silk and I then experience the softest opening of my life. These French parachutes are beautifully designed. I look up and see the single blank gore and I turn her home for the target. Like all single blanks it's slow to do anything and I fall short, but again I have the slowest softest landing of my life. You see, all the French parachutes are made from low porosity material and have a rate of descent of less than 18 feet per second.

I field pack my 'chute and then I have to go and find my sleeve. They don't tie them on over here and each sleeve is numbered so you can't cheat. The stick meets on the target and we all walk in together watching out for aircraft as we go. We go back into the packing room to start repacking and find a hive of activity, all tables full and everyone seems fully employed. Yet there is no rushing and dashing about, everything just seems to happen. I was more than impressed. You put your 'chute back in your locker while you wait in order to keep the place tidy.

Well, that was my first jump at Chalon and I shall never forget it. I have done a few hundred more there since then and I hope I have not finished yet. There I was widely impressed and what with 111 jumps to my credit I thought I knew quite a bit about Parachuting and The Sport.

# B.P.A. DANCE

On Saturday, June 19th, B.P.A. is running a dance at the Queen's Hotel, Farnborough South. As this is during the Parachute Championship Finals at the Aldershot Show, we hope to see as many parachutists as possible.

The dance will be publicly advertised as it is hoped to raise some funds as well as being a social gathering for parachutists.

We are engaging a versatile band so it should be a great chance to shake, twist and get in the groove! There will be a buffet and several Spot prizes. Starting at 8 p.m. the bar will remain open till midnight. We cannot get an extension beyond this time.

Admission by ticket only—15s. each including buffet —obtainable from: Mike O'Farrell, c/o B.P.A. (cheques payable to British Parachute Association) or from the B.P.A. tent at the Aldershot Show. It would be appreciated if tickets were bought in advance as we must let the caterers know our final figure in order to prepare the buffet.

We will do our best not to refuse a parachutist who wants a ticket at the door but we will hardly be able to sell to non-parachutists at so late a stage. Dress informal.

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However in the next 10 days, and 29 jumps very much wiser, I was soon to realise that I knew very little indeed. If you are the proud owner of a Lo Po canopy or, as the French refer to them as Bas Porosity, it is possible to jump your own canopy, but only after the Chef has given it a thorough inspection. (He really does go to town on it.) You may, if you are new to the centre, be asked to jump the French equipment for the first few days, so that he can see what you are like, particularly at the moment of the pull. This is in any case an experience you should not pass off (jumping French Parachutes).

Take a look at photo No. 7. It's the Chef leaving the Dragon. It's only when you see this man in the air that you begin to get some idea of the amount of control you can achieve in the air.

**Instruments**

Take your own by all means as the continental type is in metres. Make sure you have them tested before you go.

**Opening Heights**

I recommend you pull at 2,500 feet. The first reason is that the French parachutes are designed to open slowly, so they take about twice as long to open as the American and British Parachute. The French have a very effective way of dealing with low openers. The first time you pull low you are made to carry out one automatic jump. After that, all is forgotten. However, if you open low for the second time you will find yourself standing on Route 6 and thumbing a lift north. It's as simple as that; the rules are there, if you wish to break them, you "GO".

**Landings**

Proper parachute rolls must be carried out on all landings. Standups of any sort are forbidden. At the beginning of each course the Chef always draws a picture on the blackboard of the spinal cord looking like a stairway and adds that if you do standups, in a few years this is what your spine will begin to look like. The punishment for doing standups is "you miss your next jump" and it is effective. If you insist on doing standups then you join the low opener going north.

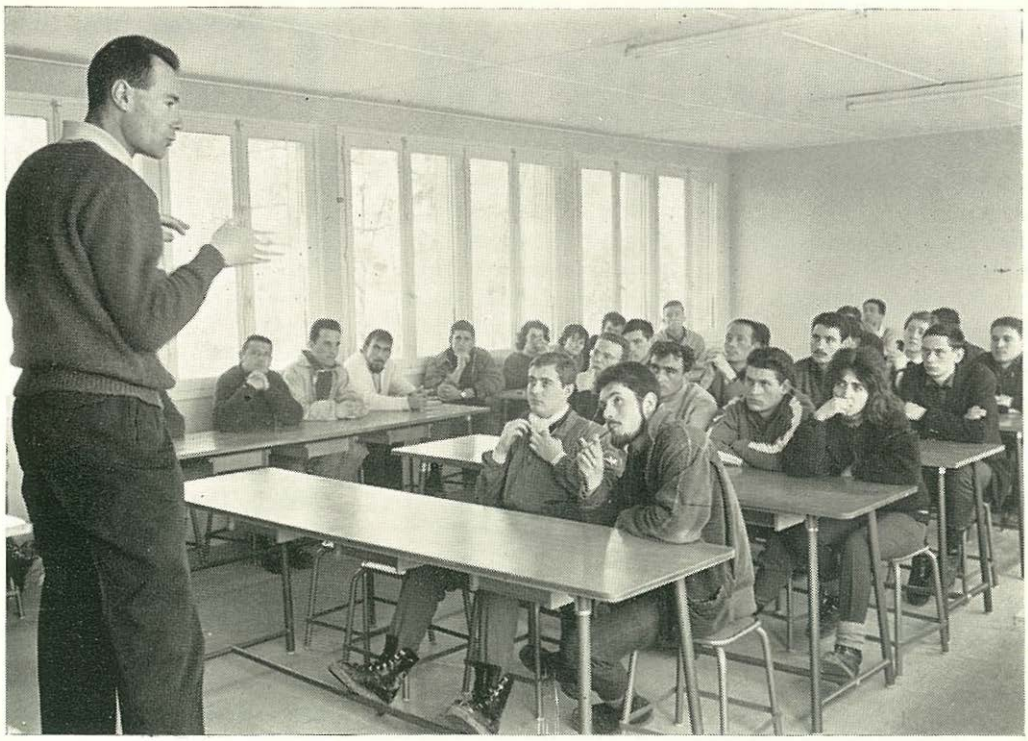
The reason for all the strictness is that at Chalon 50% of the jumpers are students, and as you all know, students are quick to adopt bad habits. It stands to reason therefore that everything the experienced jumper does the student will be inclined to copy. So everything the experienced jumper does must be done properly and will therefore be a good example for the student. If they do copy them, it will be teaching them the correct and safest method.

Well, that was nearly two years ago. Since then I have returned to Chalon on four occasions and completed over 200 jumps. The instruction I received was the best there is. In 1963 after only one visit to Chalon, I became

**You can learn the correct way and the safest way to do relative work at Chalon. Here you see the Chef and Tony Charlton warming up just before closing the gap.** **9**

National and British Army Champion. This I did not feel as a great triumph, because that year the standard was so very low, and the weather bad. My precision only averaged just under 10 feet. When I returned to Chalon in early 1964 I could only just complete a 20 second series of which two out of five were very shaky indeed.

When I left Chalon for the National Championships four weeks later and 68 jumps the wiser I was in good shape. On my last 35 jumps I had completed a perfect series every time in an average of 15 seconds. Not a startling time by world standards but I was well satisfied. During the Championships I came third overall and what a difference in standard from 1963. It really began to look as if British parachuting was beginning to catch up with the rest of the world. I can assure you I was much more pleased with my performance in 1964 than I was in 1963 even though I dropped back a few places.



**10**

**The moment the students dread, the time for debriefing. Everything that goes on in the air at Chalon is under observation. The strictest of debriefings are always carried out after each jump. Hence the attention of the class as the Chef speaks.**

Whilst I was at the Championships, I discussed Chalon and style with the runner-up, Pete Sherman, who at the time wasn't at all happy with his style. It took me about two beers and half-an-hour to talk Pete into coming back with me. (I don't know why I ever did this because later that year he was to beat me in the Army Championships both at style and precision.)

When I returned to Chalon in June to commence training for the World Championships my target in style was to be able to complete a 12 second series. A bit ambitious you might say. However, if you knew the standard of instruction you get at Chalon you wouldn't think so. What a change had taken place since I had been away. First, after much encouragement by Mr. Bernard, and I am sure at great expense to the centre, it now boasted the finest target area I have ever seen. It was a 42 metre diameter gravel pit right in the middle of the drop zone. It was pea gravel and half a metre in depth. Boy, when you land in that thing, you just sink; you can drive your lo po down wind as fast as you like and it doesn't hurt a bit. It seems the harder you hit the softer it is. Peter Sherman put a double handed hex on me and you can take it from me that he has a pretty powerful hex (how do you think he won the Army meet). You know, that canopy just wouldn't do a thing for me on that jump.

Worst of all, during the next few days my hexing of Pete was a dead loss and I had to watch him crash in three dead centres to my one. The mounds of gravel you see were awaiting spreading. A few hours later it was all nice and flat. That target now stands out like a sore thumb from two miles high.

The next surprise awaiting us was the fact that the stage just about to begin was known as a high altitude course. This meant that all jumps are 60 seconds and upwards, but best of all was that jumping was to take place seven days a week, with the prospects of completing 20 jumps a week. Just think of it, 20 a week! Then came surprise number three. There was to be a second aircraft for the centre for the high course. This was being flown in from Switzerland and it was called a **Pilatus Porter,** a turbo-prop. job with a rate of climb of 400 metres a minute. I couldn't believe it. Then I thought how much extra will it all cost. Mr. Bernard soon put me at ease as he said that the centre will run at a loss for the duration of the high course and all jumps will be the same as for the Dragon. (Take a look at photo No. 8. This is a six jump aircraft with the door on the starboard side. A quiet aircraft and could she climb!)

We were joined by three Australians, Brian Brown, Allan Jay and a guy known as George. We had, to say the least, a great stage with 60 and 70 second delays completing three series in each jump and precision to follow. We made a pact that the first two jumps of the day would be strictly style and the last jump of the day for relative work. Well, we were to have some great jumps pulling off four-man link-ups like a magician pulling rabbits out of a bag. You can learn relative work at Chalon under the personal guidance of the Chef. Take a look at Photo No. 9 and you will probably recognise

*Continued on page 35*

# Jumping at JENKINS FARM

## A report on the East Anglian Sky Diving Centre

### by Wilfred Gee

FIFTEEN MILES from the centre of London as the Prentice flies and set in one of the most delightful parts of rural Essex is the village of Navestock. It is near here on Jenkin's farm that the latest of sport parachuting clubs, "The East Anglia Skydiving Centre" has been formed.

Its proud creator who is also Chief parachute instructor is popular Pat Slattery. For Pat, ex-airborne, one time Blackbushe & Thruxton skydiver, the creation of a club on London's eastern doorstep has long been an ambition. That the goal was ever reached was largely due to the untiring efforts of Pat who gave up his job as a representative to devote all of his time to the project. Credit and the club's grateful thanks are also due to the Ministry of Civil Aviation and the British Parachute Association for their splendid co-operation. The most important thing to emerge from the Ministry negotiations was the granting of a permit allowing parts of the farm to be used as a Dropping Zone. So Jenkin's farm now enjoys the unique reputation of being the first licensed dropping zone other than on an airfield in Great Britain. I sincerely hope it will be the first of many such D.Z.s all over the country.

The farm is owned by Mr. Ron Long who with his charming wife Helen have made the parachutists feel very much at home. Where else can you buy fresh eggs at 1s. a dozen? Through the generosity of Ron who is himself ex-airborne and a flier of outstanding ability, the centre now has a huge field stretching right to the doorstep of the club hut. Neighbouring fields provide good undershoot and overshoot areas with the usual amount of trees to provide a bit of spice to the transgressor. The club runs week-end and 5 day courses and at the time of writing, the author predicts a rosy future for the centre for it is attracting a steady stream of budding skymen together with old friends of the parachuting scene. There is a barn available for packing chutes but if the weather is fine the preference is to pack them in the open. On a summer's evening after a hard day of jumping one can detect an atmosphere of the past, and you think, this isn't the nuclear sixties, this is the world of Charles Lindbergh and Leslie Irvin and model "T" Fords. You look around and see the boys packing their chutes on the grass under the apple trees and then the sudden roar of an aero-engine draws you round the corner of a barn and you come upon Farmer Ron and some of his buddies tinkering with their vintage planes whilst chickens scuttle off in all directions. And it's a sure bet that somewhere, Pat Slattery will be crawling along a hedgerow stalking crows with a shotgun. If any reader knows of target material distasteful to cattle Pat would be happy to know about it.

The Centre's home airfield is at Stapleford Tawney about two miles away and they are affiliated with the Herts and Essex Aero Club. The parachutists have made many friends among the fliers and one they are all well acquainted with is genial Eric Thurston who usually pilots the drop aircraft. At Stapleford the centre can draw on several types of aircraft but the firm favourite is the Percival Prentice which can carry four experienced jumpers or one despatcher and two students. The writer, over 6ft. 3 in. tall with unhappy memories of extricating himself from the rear cockpit of a Jackaroo recommends the Prentice for ease of exit.

Getting Pat Slattery to talk about himself was a task which called for a lot of patience and, at the expense of having to remain sober (nearly) at booze-ups in the local hostelries, a picture of him began to emerge. Mrs. Slattery (Pat) says that Pat is a shy person but I've not personally noticed it. I can vouch that he is one of the most modest people I have ever met. His great passion is

parachuting and skydiving and when the talk inevitably turns to these topics the novice is a wise one who sits back and attempts to absorb the tips and views he gives, for these are the hard won products of over 400 descents. A crafty peep through his log-books reveal that it was only on his twentieth jump that he managed to remain stable which is encouraging news to those of us who tumble their way through the early jumps. Encouraging news also for those thinking about taking up the sport, but worried about possible injuries, for in all his descents Pat hasn't suffered a single breakage.

Pat got the parachuting bug from his father who was a paratrooper at Arnhem. So, when old enough, Pat too joined the Airborne. Having served his time with them and back again in Civvy Street he found that he still wanted to parachute, so he made his way to Kidlington where he met up with Bernard Green and the late Mike Reilly. This was in October, 1960 when parachutists and potential sky-divers still had to trek from airfield to airfield hoping to find a plane and an obliging pilot to take them up. Those were happy and impressionable days for Pat. He was moving amongst people who spoke his language and he considered himself fortunate to have joined up with a sport that hadn't even left the cradle; it was so new. Each jump was an adventure and there were few text-books, if any at all, to refer to. Parachutes lacked the variety of modifications and refinements that are available everywhere today. Pat remembers attending one contest and watching the American entrants packing their 'chutes and was horified to see them drawing long cloth tubes over the canopies and what's more, **TYING** lengths of cord so that both canopy and tube were linked. When he saw later how well they functioned he lost no time in acquiring a sleeve for his own rig. From then on, Pat recalls, it was goodbye to the customary muscle wrenching and teeth clattering opening of the sleeveless canopy which often took the delight out of even a short delayed drop.

As might be expected, Pat has built up a head full of memories of the sport over the last four years and many of the people connected with it. One jump he enjoyed immensely was at an R.A.F. Air Display at Wolverhampton. When they arrived at the Airfield they found the wind was gusting rather heavily and Bernie Green, who was stick leader and conscious of his responsibilities, decided to put it to the vote whether to jump or not. The stick who gathered round him were his pupils and they included Pat, John Clark and Doug Noaks. These three were later to become Instructors for Bernie at his school of sky-diving at Thruxton. Anyway, Bernie looked at John Clark and said "What do you think?" to which everyone yelled "Yeah!" at which Bernie looked a bit crestfallen. Bernie probably had visions of his charges being scattered all over the landscape and driving them home encased in plaster of paris. But the Patron Saint of mad parachutists must have been in the kite with them that day, for at 7,000 ft. they leapt off the wing and all touched down safely on the D.Z., some landing quite close to the target.

Having a completely free hand with the training at Jenkin's Farm, Pat has drawn on his past experiences to formulate a syllabus which in parts varies from the standard practice as used in some clubs. The ground training and instruction follows the usual pattern with particular emphasis on landing techniques. On exits, the student is encouraged to experiment with both the frog position and the full spread stable. On his first free fall the student at East Anglia goes off in a full spread without the hand clutching the rip-cord. This eliminates premature openings and the usual cartwheeling through the rigging lines. For extra safety and to give the student confidence an automatic opener is fixed to the reserve 'chute. One innovation Pat has introduced which is much appreciated is that of despatching an experienced jumper with each first-timer.

This part of Essex as seen from the air is a chequerboard of fields of various shapes, sizes and hues and, since Jenkin's farm is not a big airfield complete with tarmac runways, it could be overlooked in the excitement of a first descent. So the experienced man goes first and leads the way into the target area where the target officer is waiting to talk the student down. With our student safely on terra-firma there follows a brew-up, the making of which gives the first-timer the opportunity to talk himself into a stupor and he is then ready to listen to the Instructor's comments and congratulations. It is times like these when you see the sheer joy and wonder on a student's face after this first descent that one can understand Pat when he says that instructing is the most satisfying thing he has ever done in his life. Pat's staunchest ally is his wife Patricia. Mrs. Pat doesn't jump, she firmly believes that one member of the family should have their feet on the ground. She is a competent parachute packer though and well versed with the technicalities of sky-diving. Like all good wives, Pat doesn't complain when a week-end is a wash-out, she is now used to seeing types mooning around muttering and screwing their heads out of windows. The only stipulation she makes is that she and Pat should have at least one week's holiday a year away from airfields.

Well, what about the future? Pat himself predicts a rosy future for sport parachuting in this country for the public are becoming more and more airminded. Domestic and International airlines are packed with travellers, Air Displays up and down the country are always well attended, whilst more and more items on parachuting are creeping into the National press and Television. It is all this, coupled with a taste for adventure, which is attracting badly needed fresh blood into our sport.

So come and meet the Slatterys and jump at JENKIN'S FARM!

# The New Zealand Scene

**A letter from**

Dave Llewellyn (Ex 21 SAS),
MANAWATU Parachute Club,
47 Stanley Avenue,
Palmerston North.

THERE are six clubs operating: at Auckland (the largest) Hamilton, Palmerston North, Tauranga, Nelson and Christchurch. These are governed by the N.Z. Federation of Para Clubs, our "BPA" which consists of club delegates who meet at least annually or as specified by the President, to discuss policy, Rules and Regulations. At the time of writing there are over ninety licensed parachutists, fourteen of whom are D holders. We suffer from the same frustrations as UK clubs, equipment is one of our largest problems, because with NZ's import restrictions, it is difficult to import "unnecessary items", also a lack of suitable drop zones, and high winds. Yes, the weather this side of the globe can be just as temperamental.

As far as cost goes, actual jumping is a bit cheaper than in England. My club charges fixed rates for descents: statics up to 10's at 25/-, 11's up to 20's at 30/-, 21's up to 30's at 35/-, but when fun jumping at a foreign DZ only aircraft costs are met, and with a good pilot these can be very low. Only a few weeks ago I did two descents from 12,500 ft. and each one only cost 35/-, not bad, eh? Not too much dearer than Chalon Sur Soane.

Very little international competition is held "down under" largely because of the distances involved and the cost that would be incurred. Last year's NZ championships were held at Tauranga and were won by H. Hutchingson, ahead of twenty-five other competitors. Harvey will probably be remembered by those of the English team who were fortunate enough to be at Orange for the world champs in '62. New Zealand hopes to send a team to the 1966 championships, wherever they might be. And in future years we hope that there will be an "Australasian Championship" or even a "South Pacific" one, to include NZ, Australia and French New Caledonia. This might be building castles in the sky, but there is no harm in hoping.

So much for Parachuting in general. Now for a few lines about my club, the Manawatu Parachute Club, based at Palmerston North. We are one of the smaller clubs and at present have only seven members jumping, having lost a few people during the cold winter months, also there are two bods in Aussie on a long parachuting holiday, who from their reports of conditions over there are not likely to come back.

Rob Benton is our Club instructor and he lays claim to having the most baton passes in NZ. As far as relative work goes, the club is doing reasonably well with two others having several passes to their credit, but we have not yet done a double. However, we *have* passed a rugger ball in free fall (back to the national sport).

We are experiencing some trouble around Palmerston with DZ's as the local airport is too busy with internal air services to be really ideal, and there is a fairly strong prevailing wind. So the club migrates to Masterton, 75 miles away, to "get 'em in". This airfield is very large with all grass runways, has readily available aircraft operated by a co-operative Aero club, who are only too happy to fly us and also let us use their bunk room facilities, so it is all a "beaut" spot. The only hazard is a river on the south side, but no one has been christened in it yet, although it swept away a brand new helmet that landed in it recently, after coming off during an opening. After landing the owner's face was almost as bright as the flame orange the helmet had been painted with.

Last, but most definitely not least, our congratulations to the B.P.A. for bringing out an extremely good parachuting magazine, I hope there will be competition results published soon so that we can keep track of things on the "other side" and maybe some information on "Colonial Subscriptions".

# A Comedy of Errors

By "SUTCH" CLARK-SUTTON

MOST sky-divers can tell a spine chilling story of their "first ever" free fall. I have a story about my first spine chiller too but it just so happens it was my "second ever" free fall.

One weekend many BP's ago I made my first free fall jump under the eagle eye of Alf Card. It was an ordinary affair, quite unremarkable by the standards of those days. We boarded a tri-pacer on the Sunday afternoon and Alf gave a quick demonstration on exits then we taxied away and got airborne.

My rig consisted of an X type harness, a back pack of dubious origin, a plain khaki sleeveless canopy and an X Reserve with red handle on top and no belly-bands. The main pack was operated by a floating handle, that is to say the handle stowage floated up and down the suspension strap and was never in the same place twice. It is obvious to me now but it wasn't then that finding the handle was going to be a form of Russian Roulette. We made the run-in at 2,200 feet. Alf positioned me on the edge of the door, gave me a quick re-brief, checked the spot and shouted "GO". I clenched my teeth, closed my eyes and leapt. I counted two and grabbed at the handle; it was not there. I opened my eyes and there was the handle 3in. to 4 in. higher than anticipated. This time I pulled it and my chute opened. The rest of the descent was unremarkable.

The following weekend Dina Pennington with another instructor, who shall remain nameless, and myself motored to Stapleford Tawny, which was the venue of that year's National Championships. Our intentions were firstly to observe the stars performing, and secondly to make a jump.

On arrival I was introduced to many new faces of the early sky-diving fraternity. The late Mike Rielly being one of them. I was informed that Mike was one of the leading authorities and also chairman of the B.P.A.

While watching from the club house, word went round that one seat was available in the next lift—anybody interested?

My instructor gave an enquiring look in my direction. I nodded my head eagerly. Next minute I was donning the floating handle Mk. I and making towards the tri-pacer which was now waiting, engines running. From this point on I seemed to lose contact with my instructor. All I had was a quick briefing from Mike Rielly explaining that if the cross was folded to an "I" we were to orbit, if it was taken in, then jumping was cancelled. I was ushered into the aircraft and manoeuvred in alongside the pilot with my back facing forward. Jeremy Johnson followed, and lastly John Cope.

I was feeling like a pilchard (after canning) as we taxied away. But as we did so I noticed the anxious face of my instructor; at this moment I shuddered; what was my instructor doing out there? I felt sure he should be in the aircraft. As we continued to taxi, a quick calculation led me to assume that my instructor had obviously arranged for one of the other two jumpers to despatch me. I calculated again. How was I going to scramble from my pigeon hole alongside the pilot, to the tiny door? It would mean pushing one of the other jumpers out first. The solution to this problem soon came. The engines throttled back and the pilot shouted "What height you starting at?" Jeremy retorted "5,000 feet," and we were off. I froze; "What a situation," I thought. I suddenly

realised why I had been put next to the pilot. I was to be third man to jump! I was wearing my flying suit decorated with newly earned parachute brevet, and crest of No. 1 Parachute Training School, and it was becoming more obvious every minute that my instructor had made no such plans to have me despatched, and my fellow jumpers had assumed by my decorated flying overalls that I was a star of the early pioneers, and would obviously be taking the tri-pacer to cloud base at 9,000 feet.

For sake of shaming firstly myself and secondly my instructor I kept quiet.

The aircraft reached 5,000 feet levelled off and started its run in. John Cope being nearest the door, proceeded to give corrections from time to time by tapping the left or right shoulder of the pilot. This I absorbed, for in spite of everything I felt sure I would still jump, and so, would need all such tips as these. The aircraft continued its course with minor corrections from John Cope. Finally John shouted "Cut", the aircraft was throttled back, and much to my amazement he grasped the strut and with slight assistance from Jeremy positioned himself outside the aircraft standing with one foot on the wheel, the other on a footrest. About five seconds later he let go and fell away in a beautiful position; that is, back arched, arms and legs rigid in a spread eagle position (techniques have altered slightly since then).

The aircraft turned smartly round and we commenced a repeat procedure. This time I assisted Jeremy out onto the strut. No sooner was he positioned when a blurr of white appeared from Jeremy's chest pack, and away he went, not down but backwards. Jeremy's reserve had involuntarily opened while he was still clutching desperately to the aircraft. The only indication the pilot received of this mishap was his plane shuddering as the canopy slid off the tail section. He looked round with an enquiring look. I shouted back a short summary; he shrugged his shoulders and opened the thottle. Then came the embarrassing moment. I tapped his shoulder, he looked round. I nodded my head from side to side, pointed down and shouted, "Two two". I have never seen a more puzzled looking pilot. He repeated my words with an enquiring look. I confirmed his doubts.

Down we circled, catching up with Jeremy suspended beneath his 24 ft. reserve canopy. We descended to jump height and the pilot indicated the run in had started. "Wow"! The butterflies felt like 10 ft. bats. I peered round the edge of the fuselage, and there about two miles ahead was the little white cross. It seemed much larger than I had imagined. Still with more than a mile to go I gave a few hurried, nervous corrections. I knew now I was going to jump, what was more alarming, I had an urge to leave the aircraft from the strut and wheel in a similar manner as John Cope but not like Jeremy. So with still more than a mile to go I struggled out onto the wheel and strut, and much to my surprise assembled myself correctly in a very short time. Too short! The pilot peered through the perspex and gave me an agonised look. I was now beginning to realise why. We were slowly loosing altitude because of me being out at the wheel; it was now obvious I had positioned myself out on the strut one mile and two aching hands too early.

At about half a mile to go I peered through the tears of my unprotected eyes to check the target. There it was; but wait . . . it was getting smaller; my eyes watered over, I closed my eyes shook my head, opened and checked again. This time no cross at all was visible. Panic struck; the jump is cancelled, I thought, but I can't get back into the aircraft; but what else could I do but jump? Landing with the aircraft was a thought I did not cherish, even it if was possible.

The pilot was now making frantic signs with his free hand. I thought he was being rude at first, but he was indicating our height. A quick glance showed that we were below 2,000 ft., well below, and I still had not reached my estimated release point. (A release point to me was nothing more than about five hundred yards up wind, irrespective of wind speed). I clutched on, thought hard, "let go; count two, and pull", I thought to myself. So all was set. I looked back at the area where the target had once been, checked my altimeter which was now showing about 1,600 feet, and let go . . . one . . . two . . . in and p . . . It wasn't there . . . again. For some reason I did not panic, at first that was! I reached higher, still no handle. Over and over I went, cartwheels, back loops, 360° turns and turns and turns! Panic was now returning, in sheer desperation I finally reached over the back of my head and started tearing at the back of my pack, in doing so my head pushed forward. I saw the glint of metal half hidden by my reserve. I grabbed for it, and snatched it away from my panicking anatomy. What followed hurt, but it was a nice hurt. I remember seeing the canopy paying out, my feet alongside, and beyond that, the aircraft I had just left (good opening position?).

About thirty seconds later, and it was definitely no more, perhaps less, I landed approximately 100 yards from the target area. A few bodies appeared within a short time. "A bit low old chap," somebody commented, "Mike Rielly wants to see you." He did see me and grounded me for jumping against ground signals, and over delaying. I made no excuses. **I needed that month to recover.**

If Mike had known this was only my second descent, I wonder what sentence my instructor would have received.

# F.A.I. (British Standard) Certificates

**Issued by the Royal Aero Club of the United Kingdom**

The applicant must reach the following standards:—

**Certificate A**—(1) Have made at least 10 jumps.

**Certificate B**—(1) Have made at least 25 free fall jumps including 15 stable delays of at least 10 seconds, 5 stable delays of at least 20 seconds, 1 stable delay of at least 30 seconds; (2) Demonstrated ability to hold heading during free fall, i.e. prevent spin; (3) Have landed within 50 yards of centre of a target on 5 jumps with delays of 20 seconds or longer.

**Certificate C**—(1) Have made at least 75 free fall jumps including 65 stable delays of at least 10 seconds, 30 stable delays of at least 20 seconds, 20 stable delays of at least 30 seconds; (2) Completed 2 alternate 360° flat turns to left and right in free fall in 7 seconds or less; (3) Have landed within 30 yards of centre of a target on 15 jumps with delays of 20 seconds or longer.

**Certificate D**—(1) Have made at least 200 free fall jumps including 100 stable delays of at least 20 seconds, 50 stable delays of at least 30 seconds, 20 stable delays of at least 45 seconds, 10 stable delays of at least 60 seconds; (2) Completed 2 alternate 360° flat turns to left and right in free fall in 6 seconds or less; (3) Demonstrated control in free fall on vertical, horizontal and longitudinal axes of body; (4) Have landed within 20 yards of centre of a target on 20 jumps with delays of at least 30 seconds.

**Footnote**

These new standards are effective 1st July, 1965.

# Helen Flambert

**A Ballad written at Cap d'Ail on July 23, 1964**

*When Helen jumped at Hamburg*
*The sky was blue and clear.*
*The instruments showed normal*
*For the time of year.*
*The judges in their armbands*
*Stood waiting the event*
*While the competitors sat joking*
*Round a blue official tent.*
*They saw the little plane*
*Take off and circle round;*
*They saw it circle down again*
*And land upon the ground.*
*The judges with their marking pads*
*Walked over to the plane,*
*They chatted to the pilot*
*And then walked back again.*
*The competitors stopped joking*
*And stood gazing at the sky.*
*In the visitors' enclosure*
*A child began to cry.*
*For, like thistledown in summer,*
*Away across the town,*
*Helen had floated upwards*
*Instead of floating down.*
*And higher and ever higher*
*The indomitable girl rose*
*As the city streets receded*
*Beneath her dangling toes.*
*Till the stars began to twinkle*
*And the sky turned midnight blue;*
*Far below, the coast of Sweden*
*Tilted gently into view.*
*And Helen joined the firmament*
*And rides across the night*
*With her goggles and her helmet*
*And her chute all bathed in light.*
*And it's said that in Accra*
*And far away Bombay*
*People worship Helen Flambert*
*As she orbits on her way.*
*And standing in the garden*
*Gazing at the skies,*
*Her family at nightfall*
*Wait for Helen's rise.*

---

# Why insure your life ?

THE REASON for any other kind of insurance is obvious—if your car is damaged, you want it repaired; if you lose your camera, it is nice to get another one without paying for it—but nobody can replace your life.

The secret is, of course, that you are insuring the lives of your wife, your children and your dependents—the people who rely on you for the necessities of life. Other insurance is taken out through self-interest. Life insurance is the way of fulfilling the responsibilities a man undertakes on marriage and on having children.

The ordinary person can obtain substantial cover very cheaply indeed; unfortunately Insurance Companies generally refuse to regard Parachutists as ordinary people. This obnoxious view, all of us who are interested in both Insurance and Parachuting will do our best to change. The fact remains that it is very difficult to find an Insurance Company which does not charge substantial extra rates for parachuting.

Difficult it is—but not impossible. In one or two places enlightenment has prevailed and the Association's Insurance Brokers can obtain substantial cover for us on normal terms.

Protection for your family is only one function of life insurance. You may also use life policies to pay for your new car, your children's education, your house, your comfort in old age and so on. Life insurance is a very profitable method of saving—the only one which lets you claim tax relief on your paymients. What is more, the Government has announced that bonuses on life policies will not be subject to Capital Gains Tax.

There are many kinds of life insurance contracts and the terms offered by different Companies vary widely—particularly for parachutists. You need the advice of a properly qualified Insurance Broker and, if you do not already use the services of a good broker, the Association's Brokers will gladly advise you. This service costs you nothing.

In addition to life insurance, you may well feel it desirable to be covered against the risk of disability through accident. Once again our Brokers have arranged cover at especially favourable terms. A good broker charges no fees and sees that you have the best cover at the best price—a rare, but genuine, case of money for nothing.

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## YOU CAN'T SAY NO

*Continued from page 25*

Tony Charlton (National Champion 1964) being instructed in the art of relative work by Mr. Bernard. Eight seconds after that photo was taken they were linked.

Remember, each jump you do at Chalon you are continually under observation, either from the aircraft or from the ground via telemeter, or from close-up in the air. If at any time you feel things are not going well all you have to do is explain to Mr. Bernard and on your next jump, if you have the time to look around, you will see him laying about five metres away, watching you like a hawk. As soon as he has seen your error he will be gone to find someone else to look at. Thus, combined with first-class de-briefing, you learn very quickly and therefore get the maximum benefit for your money. You have to be prepared to work very hard during your stay if you want to benefit from it. If you imagine that three weeks of jumping at three jumps a day is all fun, I suggest you try it. I can assure you it's really hard work.

Now look at Photo No. 10 and notice the attention the class are paying to Mr. Bernard during de-briefing. Each student gets about 10 seconds de-brief and is told exactly what is wrong with his or her work and then he moves on to the next one. I said earlier that I wanted to achieve a 12 second series. Well, the fastest I got at Chalon was 13.1 seconds. I was quite happy, as I was steadily improving.

However, better was to come at Leutkirch, the scene of the 7th World Championships. In my third and final style jump, having already scored on two good series in an average of 13.9 seconds, my last effort was a clean 12.5 second series. This was my greatest moment in Sport Parachuting. It was only in 1962 at Orange, the scene of the 6th World Championships, that I failed miserably to score at all in style. The fact of the matter was that I now felt a Skydiver in the fullest sense of the word. If you don't believe me, take a look at Photo No. 11 and the grinning face coming off the DZ at Leutkirch in a white jump suit. I didn't know at the time I had achieved my aim, I only knew it was a good one.

**Strangers at Chalon**

Strangers at Chalon pay exactly the same rate for jumping as does the French parachutist. It is no use casually calling in and expecting to jump. You can only jump by appointment. If you wish to go to Chalon to jump it isn't necessary to go for a full stage, you can in fact go for just a weekend; however, if you want to learn, the longer you remain the more you will learn. If possible try to make it a three week stay. If you wish to attend a stage then write to the centre for a calendar of the stages and in about one week you will receive your calendar and an application form. Fill this in and return it to the centre. You will then receive confirmation from the centre saying you have been accepted and you will be given the date when you will be expected to arrive. Make sure you take your confirmation with you when you go. Also take your B.P.A. membership card, your F.A.I. Certificate and F.A.I. International Parachuting licence with you, your log book and your packing certificate.

**Types of Jumping**

Normally, and providing you are at the standard, all jumps you do at Chalon as an experienced jumper will be from 2,500 metres (weather permitting). The lowest you will ever jump is 1,000 metres. The cost of the jumps is as follows: —

(a) 1,000 metres, giving you a 12 second delay, 6.50NF.
(b) 2,500 metres, giving you a 42 second delay, 9.00NF.
(c) 3,000 metres, giving you a 52 second delay, 10.50NF.
(d) 3,500 metres, giving you a 62 second delay, 12.50NF.
(e) 4,000 metres, giving you a 72 second delay, 15.00NF.

(Note: Last year the pound sterling was worth 13.77NF.)

**What Type of Work Can You Do There?**

You can do anything you wish to ask for, from mere stabilization to relative work. The training is broken down in degrees of perfection.

1st degree is a study of stabilization;
2nd degree is a study of the derive (tracking);
3rd degree is a study of turns;
4th degree is a study of looping forwards and backwards;
5th degree is a study of relative work.

A special consideration will be given to anyone wishing to train for competition and he will be personally instructed by the Chef de Centre, Mr. Bernard.

I can only conclude that I have always thoroughly enjoyed myself at Chalon and I am sure it will be a popular place for B.P.A. members in the future. You will find that you are quite welcome there and providing you are willing to work hard at it you will find the instructors most helpful. I would add that I advise you to have completed at least 40 free fall jumps and be able to do a good stable 20 second delay before you think of going. It is extremely inexpensive and makes a wonderful holiday. You come home with your Log book filled and a sun tan to make all your friends jealous.

Last year a total of 13,062 jumps were completed at Chalon sur Saone

### OVERSEAS POSTAGE

Orders received from abroad should be clearly marked as to how the sender wishes his copy of Sport Parachutist to be sent.

The price of three shillings includes postage of 5d. for the United Kingdom only, therefore extra money should be paid for overseas postage according to the rates pertaining to the postal service required.

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# *Para-Sport Sky-Diving Centre*

Seven day-a-week instruction in first jump, general permit, style, competition precision, relative, tracking, B.P.A. instructor and advanced instructor ratings, aerial photography (have a 16 m.m. colour film taken of yourself in free-fall). Guaranteed baton passes. Full accommodation and eating facilities. Bar to 11 p.m. Friday-Saturday nights, with entertainment. Rapide jumpship. Fully modified for parachuting. High altitude oxygen jumps available by arrangement. Write to: Para-Sport Ltd., Staverton Airport, Cheltenham, Glos. (on the A.40—100 miles London, M.50—50 miles Birmingham; 50 miles Oxford).

Instructors: Brian Brown (Australian National Team), Roderick Murphy and Terry Walsh (Irish team). All our instructors have trained in France, are "D" licence holders and have jumped in world championships.

# *Special Announcement*

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# Parachute cutter at work

N.C.B. PHOTOGRAPH

Over-simplification perhaps, but coal, air and water are the basic ingredients from which nylon polymer is made.
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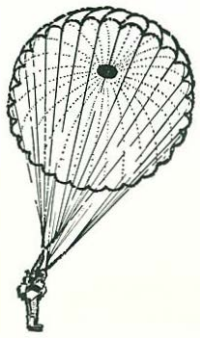
G.Q. parachutes — for use in air and water — are in steadily increasing demand. Some G.Q. products go back underground in the form of safety harness for coal miners. While they get on with the cutting, we concentrate on the design and manufacture of some of the world's finest parachutes.



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