

INSTANT GLIDING



Anthony Edwards

Everybody who has ever had a bungee launch agrees that it is the only way to get airborne; everybody, that is, except those who started gliding in the hand-launching era, who maintain that bungeeing is but a crude imitation of the real thing. I cannot say about that, but I do know that winch launch, autotow and aerotow are rude mechanical processes that violate nature's laws and succeed by brute force alone and, when that force hesitates, one is left dangling, suspended, clawing at the very air one has tried to cheat, in some infernal attitude or above some eternal wood.

The bungee launch is different. One is either on the ground, or one is not. If not, then the launch is a Success; if one is on the ground, but moving, there is still a chance of Success, but also a distinct chance of Failure. Failure, therefore, always takes place on the ground and this accounts for the fact that, small though the pieces of wreckage may be, the pilot usually remains intact.

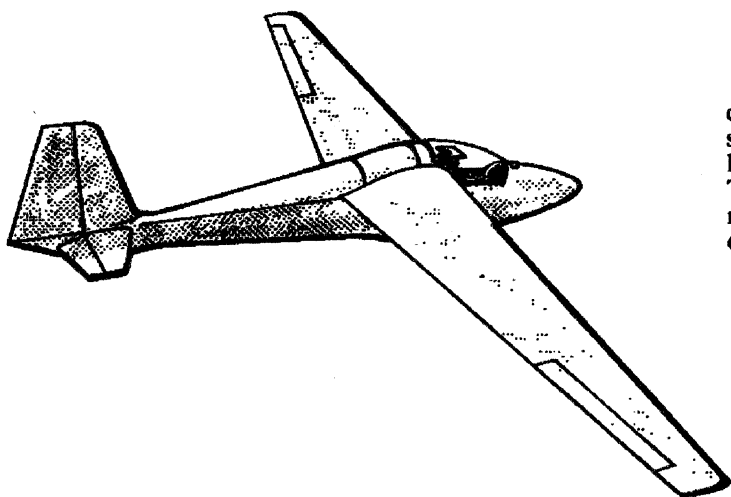
For some, bungeeing is a means and not an end, but to the true enthusiast it is an end in itself, a way of life, as was pointed out by David Carrow in his article: "Some thoughts on bungeymanship", (S&G, December 1958, p312). (As a matter of fact, that issue contains all manner of good things besides David's article: there is "Priest's Crag - being an account of the travels of four gentlemen and a Skylark from the University of Cambridge amongst the Cumbrian mountains"; an article about the Slingsby Swallow and an advertisement for Olympia 2s, both excellent expedition machines; a picture of the Southdown Club bungeeing their T-21; and, in the Cambridge Club news, mention of the fact that I have entered into a legal contract with my once and future crew, Catharina.) Of course, the fact that the launch is an end in itself does not mean that the ensuing flight (if any) is not enjoyable. A flight, after all, is a flight; but a bungee launch is a glimpse of Heaven.

Time passes. Twenty years, to be precise and here I am, stuck in the Fens, my last hope being that metrication will cause the contractors for the Cambridge Western By-Pass to make their embankments ten times too high. Too late! The bungees have gone to Scotland for Pete Whitehead to use, the Land Rover was exported to Iraq and Cockles, the best of all the Olympia 463s, has a new owner in Birmingham (she never fully recovered from Catharina driving her around a 316km triangle - not kind treatment for a mountain bird). I did not give up without a struggle; last winter I pored over the maps of Cambridgeshire looking for the least unsoarable slope in the county. I found it in the very south-west corner and it really is called Anthony Hill (you can check it on the map yourself).

From the 250ft contour it rises in one magnificent sweep to 451ft plus a clump of trees. The village of Heydon lines the ridge, which faces north-west and is nearly 1000 yards long. One afternoon in late November, on aerotow from Duxford, I noticed smoke streaming from a bonfire on Anthony Hill. The lure was too much. My original sin took over and Cockles and I crept away from the circuit. We settled down to practising beats along the hill, too high to feel the lift, too low to get back home. Inexorably down we went but each turn was smoother, each beat more perfect. Soon we were down to the ridge - of the roof of the end house. Next beat it was the bedroom, then the dining room, then - Oh! Help! - we're not going to get over the trees this time! I turned that beautiful little aeroplane on a sixpence and let her find her own way down the slope, inches above it. Thus she flew, until she could fly no more. We shed a tear together in that wide Cambridge field and knew that the time had come to part. The Arm-Chair Pilot is reduced to half an Astir and to amusing himself by seeing if his theories of cross-country flying work. But it won't be the same.

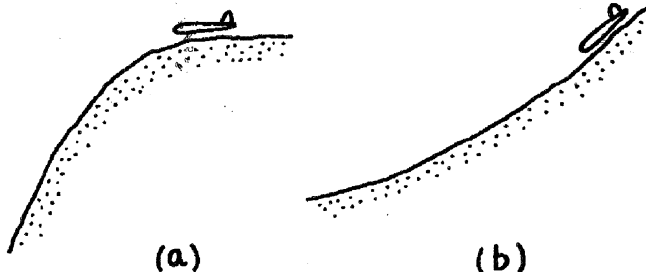
Fear of mindlessly following instructions

For many years I have resisted editorial pleas for an article on expedition bungee launching on the grounds that it might encourage some misguided enthusiast to behave like the German officer in *Those Magnificent Men in their Flying Machines*, mindlessly following instructions. But now that the equipment has been dispersed, a new dimension has been added to the plea: commit your experiences to the archives before the memory of them fades. So here, in brief outline, is a description of the equipment I used between 1967 and 1974 to launch Cockles - and various other gliders - from out-of-the-way places. Some of the expeditions have already been described in S&G "The Freedom of the Hills" (August, 1967, p294); "Huish Revisited" (August, 1969, p274); and "How we Bungeyed to the Bottom of Bincombe Bumps" (June, 1973, p174). Other expeditions were in April, 1968 (NE Scotland), April, 1971 (Huish) and March, 1974 (Lake District), besides isolated launches in Herefordshire (to soar the Black Mountains) and near the Long Mynd. I do not know how many launches were done all told, but only two were a bit on the marginal side. The first was of John Brenner in his Olympia 463 from the Black Mountains above Pandy and was caused - we realised afterwards - by the convex shape of the hill. Although the surface was grassy and smooth, some of the



energy in the bungees was dissipated as they contracted because the convex surface meant that they were firmly in contact with it. The second - of me in Cockles from a Scottish hill - was a bit slow because the site was not very steep and covered with thick short heather which slowed the bungees an unexpected amount.

The perfect launching site is a slightly concave grass slope, facing into wind, unobstructed at the bottom and with landing fields to hand. The slope does not need to be very steep, so long as it is concave with the result that the stretched bungees accelerate the glider rather than heat up the ground. Those who know the Long Mynd naturally think of it as the perfect bungee site, but in reality it is too convex at the top. We soon learnt to stop looking for Mynd-like edges at the tops of hills and started to seek out sloping fields near the bottom of hills - but high enough to soar from. Let the wind do the work of taking the glider to the top!



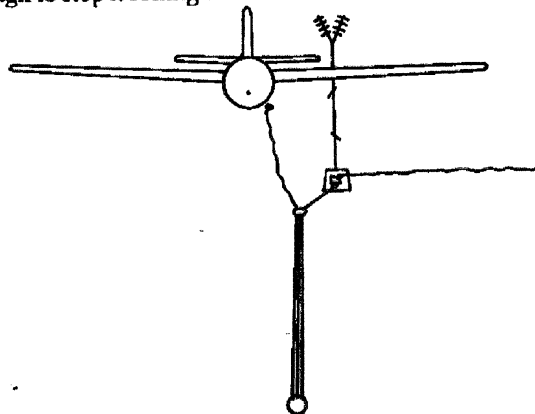
Hill profiles for static bungey launches (a) unsuitable (b) suitable.

By 1967 I had stopped using the "autobungey" launch described by David Carrow in his 1958 article in favour of the "static bungey" derivative developed by a number of Cambridge members, but especially Laurie Vandome. It is more reliable and, if the actual stretching is done by Land Rover, can be operated by one person. By this means Catharina launched me from several Scottish hills unaided.

Three (preferably) 30-yard strands of bungee are laid out in parallel and secured together at the ends. At the bottom end it is convenient to have a large ring. From the top end run two ropes; the shorter is about one foot long and ends in launching rings, whilst the longer is about 15ft long, of braided nylon, also with rings on the end. Starting at the top of the slope, first there is a land anchor from which runs a wire rope perhaps 15 yards long to a steel plate on which is bolted an Ottfur hook (facing down the hill). The rope, and the steel plate, are pegged to the ground to stop them lifting, but the restraining force is of course supplied by the land anchor. From the Ottfur's release runs a light rope along the contour of the hill.

The launching rings on the short rope attached to the bungees are inserted in the Ottfur and the triple bungees laid

out down the hill. Thirty yards on down from where they stop a second land anchor is placed, with a hook ready to receive the large ring on the end of the bungees when they are stretched. The glider is placed so that the launching rings at the end of the nylon rope just reach its own Ottfur. It should be chocked just enough to stop it rolling down the hill.



Arrangement of the equipment prior to stretching the bungees.



Now the pilot can get in, the bungees can be stretched onto the bottom land anchor, the glider hooked on and the ground Ottfur released by pulling its attached rope. Ping! And it is all over! In order to stretch the bungees, several short pieces of rope can be looped through the large ring and used for pulling, if there are enough strong men around. Alternatively the strands can be stretched one at a time, or a Land Rover used.

If there is ample space it is possible to stretch the bungees by Land Rover acting through a long wire, long enough so that the Land Rover can remain in position during the launch, thus obviating the need for the bottom land anchor. A very long wire is needed, however: on both the marginal launches referred to earlier the Land Rover was being used in this way and did not improve matters. It is of more use sitting quietly at the top as a

Another facet of the Arm-Chair Pilot on the right of the picture by Kenneth Mason of the *Daily Telegraph*. Anthony, a member of the Cambridge University GC and the University's Senior Proctor, was walking along Whitehall on his way to the Privy Council's office to revive the old custom when Proctors came to plead with the Crown for changes in the University Statutes. Anthony was with David Maudlin, the Cambridge University Marshal. Reprinted by kind permission of the *Daily Telegraph*.



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substitute for the first land anchor! (Laurie once managed to stretch the bungees up the hill after I had been launched, but I noticed he used my Land Rover, not his!)

The instructions for the wingtip holders are "Don't run, just let go," and for the pilot are "Fly down the slope until you see the bungees slacken, then release and pull away." Latterly I declined to take 18m gliders on my expeditions. Though we always managed to launch them satisfactorily - even in no wind - the extra weight made handling them and their trailers so much more of a burden. The Olympia 463 might have been designed for expedition launches, being light, slow and with an exceptionally short fuselage with good ground clearance. It even has its wings stuck on at a sensible old-fashioned angle so that it leaps into the air almost instantly. I shudder to think where my half Astir would end up.

Restoring confidence

And what of the flying? Never a dull moment! Let me end with an account of a flight of superlative enjoyment that could never have happened using orthodox procedures. The day after we had launched John Brenner off the Black Mountains a bit too gently I determined to restore everyone's confidence by launching from a sloping field near the Mynd in no wind. It turned out to be one of those stable summer days with the inversion below the top of the hill during the morning. If one wanted to soar, one had to get down to it. Just beyond Bishop's Castle there is a slope called Aston Hill which rises seven hundred feet in a mile and faces north. Near the top is a suitable launching field and here I rigged Cockles, throwing out all unnecessary equipment so as to keep her as light as possible.

I waited until one o'clock in case a wind sprung up, which it did not and then launched. I immediately turned into one of two gullies on the hill and found to my delight that there was just enough thermal puff wafting up it to keep me airborne. Hill soaring is much easier in no wind because you can judge when a turn towards the hill will be safe so much more accurately!

Farmer's reaction

It is customary to do a beat up past the launching crew as soon as possible after a launch, but it was half-an-hour before I could pay this debt and then only at 35kt! Round and round the gully I went, keeping to within 100ft of the top of the hill but never quite reaching it. After a while a farmer drove into the field right on top and started waving to me. I waved back; he waved harder; I wagged my wings at him as I went past; he replied by gesticulating wildly. I therefore took-off my hat and waved it vigorously out of the window, which resulted in him running for his car and driving off at high speed. As I later discovered, the kind man, thinking I was in distress, was signalling to me to land in his field and when I failed to respond to his entreaties he had rushed off to telephone the Midland GC to report my predicament and to ask if they were in radio communication with me. Alas, his name was not taken, so I could never thank him.

Eventually the thermals developed enough puff to shift the inversion and after an hour flying round that gully I climbed past hill-top height up to the level of the Mynd itself. It took another hour to cover the eight miles to the Mynd and complete a most exhilarating goal flight, at the giddy speed of 6km/h. In the clubhouse they were having tea. No one had soared all day.