



(Photo courtesy of Müller)
 Eric Müller smiles for the cameraman. The author of *FLIGHT UNLIMITED* talks about the joy he feels over Gene Beggs' enthusiastic advocacy of his (Müller's) spin recovery theory coupled with Beggs' further testing of it, in the article below. An IAC member from Switzerland, Müller asks: "Will America be the first country in the world to adopt this as a standard emergency spin recovery in conventional aircraft designs?"

SPIN RECOVERY

Ever since the publication of my book, *FLIGHT UNLIMITED*, in December, 1983, and the attendant interest in my "Spin" chapter, I have been delighted to see how much controversy has been stimulated by my recommended spin recovery technique — especially in the U.S.A., where yet again you have proved yourselves more open to experiment and innovation than anywhere else in the world.

Gene Beggs, whose articles endorsing this recovery technique have been appearing in editions of *SPORT AEROBATICS*, has earned my undying respect for "coming out of the closet" on spins and spin recovery, actually

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admitting that there were grey areas in his grasp of this subject even with umpteen thousand flying hours and a pocketful of pilot and instructor ratings. It should be remembered that Gene and I had never met or even spoken before December of 1983, and at the time of his reading my 1981 article, *THE SPIN: MYTH AND RE-*

ALITY, I was just some bozo from the other side of the Atlantic who was proclaiming a revolutionary and pretty hair-raising idea about letting go of the stick during a spin . . .

But the distinction that sets a man like Gene apart from others is that he cares. Like me, he cares that friends and fellow pilots are being killed by spins; he cares about constantly improving his technique and understanding of the skill of flying; and he cares about communicating his findings, in the interests of safety, even at the cost of possible ridicule and authoritarian disapproval.

Yes, Gene and I have both been there. I myself started researching

spin recoveries at least ten years ago, as an accident investigator for the Swiss FAA, when I realized that the "standard" recovery technique was not saving people's lives when they encountered accidental spin situations. Every nation has its own stan-

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ard recovery technique, most being primarily to fulfil the FAR23 certification requirements — a very modest set of test parameters for aircraft spin behavior (e.g. they call for no inverted spin tests). And when the test pilot goes through these modest spin tests they are performed under ideal conditions, he is well practiced in the recovery techniques to apply, and he is alert and ready for the autorotation.

How dreadfully different is the panic and consternation of an ordinary pilot in an inadvertent spin. How different even is the momentary confusion of an aerobatic pilot encountering an unexpected and unusual spin condition, perhaps an inverted spin or an accelerated spin in an unguarded moment during training. How many people actually practice spins in all attitudes and configurations, in order to have the confidence to slip smoothly into the recommended recovery mode no matter what the circumstances?

In fact we all know, don't we, that pilots and instructors in general go out of their way to avoid entering spins; and to our eternal shame, private pilot training on both sides of the Atlantic has now gone so far as to drop spin recovery completely from the syllabus. So this perfectly normal aerodynamic condition of the aeroplane has gained the status of some kind of ghastly nightmare. It is this irrational attitude towards spinning that I realized, all those years ago, must first be counteracted.

My first priority was to find an essentially simple method, preferably eliminating all elements of fine judgment on the part of the pilot in what would probably be a very nervous situation. And it must also be a method that worked with equal simplicity whether the type of spin be

normal, inverted, flat, accelerated, flat inverted or what you will.

It was too much to hope, of course, that I would discover a recovery method that worked with every type of aeroplane, but I did discover one that worked with all aircraft whose tail configurations were of a certain type: the low-mounted tailplane set forward of the rudder that was more-or-less standard for aeroplanes from the 1920s through to the 1960s, which for convenience I have called "conventional."

The simplicity of the method I can certainly vouch for! Taking your hands completely off the stick and kicking opposite rudder sounds almost too simple to be feasible, and it certainly knocks spots off the more usual recovery methods which call for certain specific stick positions and often for a "pause" of uncertain duration. Judgment is impaired during periods of stress, and a combination of full opposite foot and no hands is unbeatable for a guaranteed recovery from every conceivable type of spin,

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even if you have no idea which way up you are or what's going on!

But it is not an over-simplification, and there's nothing mysterious about it: it is all aerodynamically perfectly logical. And if you want to follow through the aerodynamics of it, I can recommend a very good book called FLIGHT UNLIMITED!! Seriously, though, it took us 18 pages to cover the subject in that book, and a brief synopsis has already appeared in this very magazine in my November 1981 article — which obviously made sense enough to Gene Beggs when he read it all that time ago.

He has tested the method exhaustively since that was published, and I myself have conducted over 4,000 spin tests in more than 100 different aircraft types, and it never fails to work in those which have the tail configuration I have described.

I have since tried to disseminate this life-saving technique during aerobatic instruction and, to try to reach a wider audience, by writing in magazines and in my own book. But

always I have come up against the unreasoning conservatism of those who — without taking the trouble to research it for themselves — simply condemned my method out of hand. It is particularly ironic therefore that after 10 years of condemnation, the only two instances of my words being heeded by experienced and influential pilots have occurred in the U.K. and the U.S.A. respectively — truly a case of "a prophet is not without honor save in his own country"!

Amazingly enough, although I have offered my critics the opportunity of investigating my theories in depth with me at any time, they have never yet come forward to take up that option (even the ones who showed interest never actually showed up to fly with me!). So you can imagine with what joy, and even pride, I now see U.S. Team member Gene Beggs of Beggs Aviation, Midland, Texas, wholeheartedly advocating the "hands off" recovery method and teaching it, brilliantly I am told, to an ever-increasing number of converts.

Only this morning I received a letter from a student saying that he regarded my spin recovery training as "one of the most valuable lessons" he had ever had, "possibly even life-saving." He went on to tell me how he had followed it up with Gene's advanced spin training course, involving nearly eight hours of intensive study, and now feels a new confidence in terms of spin safety. What better reward could one wish for?

Well, this article has given readers of SPORT AEROBATICS a little insight into the long history of research, and sometimes heartache, that went into this life-saving recovery method. The invitation still remains open to anybody who is still not yet convinced: just come to me and I will demonstrate. We will all contribute

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in this way to prevent the people we love from being killed unnecessarily in their aeroplanes. Will America be the first country in the world to adopt this as a standard emergency spin recovery in conventional aircraft designs?