

> HANS-WERNER GROSSE

Platypus talks with the chief initiator of the ETA project

PLATYPUS: Younger pilots know of you mainly through your association with ETA, the 31-metre super-ship. What has been the best thing about this project for you?

HWG: Developing ETA has kept me engaged and has given my wife Karin and me enjoyable flying for 10 more years. The performance gain compensates for my ageing. (Well, almost.) Now at 87 I can't outrace the gifted youngsters every day, but I can try. Look at the On-Line Contest speeds. For general cross-country flying ETA is the best glider available. The max glide saves the day when others have to land out. For competitions it might be a good idea to fly it as a single-seater with ballast. I could even imagine flying it with the engine removed, to have more variability with the ballast.

ETA is very docile and does not spin. Some of the owners are pretty old now, so if you are young and have a place in the Worlds or a big nationals, ask an ETA-owner to let you

fly with him in his ETA. It will be the chance of your life – and the old guy will have fun. One might have to persuade the IGC to drop the anachronistic rule of “one nationality only in the cockpit”. Look at the nationalities in sailing contests and Steve Fossett and his co-pilots.

PLATYPUS: What has been the worst thing about this project for you?

HWG: My greatest disappointment was that ETA was not welcomed by the IGC. ETA was designed with 950kg all-up weight. All safety flight and ground tests were successful; 1,500 hours of flight time with my prototype No 1 proved that ETA had no operational shortcomings and could very well integrate into Open Class competitions. On take-off, self-launching, we even climbed better than others.

The IGC was persuaded to replace an unlimited Open Class that met equivalent safety standards to other gliders – a system which had worked well – with a weight-limited Open Class. After years of work and millions of euros, we were ordered to reduce the design All-Up Weight to 850kg to fly in national or world contests. We achieved that goal. But with our two extra square metres we cannot fly at the same wingloading as the ASW 22 and Nimbus 4. On booming days these ships creep away from us. Luckily there are enough days with English weather around.

PLATYPUS: What is “in the works” on this project? What are the most exciting current developments?

HWG: Bruno Gantenbrink's single-seater Nimeta – Nimbus 4 fuselage and ETA wings – seems to be the best-performing glider in the “Weight-Limited Open Competition Class”. He is extremely happy with it, although he had almost no training in the new ship. He even won a high-speed day at the 2009 German Nationals, but then he is a very good pilot. We shall know more at the 2010 season's end.

PLATYPUS: Any other plans?

HWG: To improve our performance above 170km/h IAS on very good days, I plan to test shorter wingtips to decrease the wing area,

thereby increasing the wingloading. Ask me next year.

PLATYPUS: Will the results achieved with ETA cause benefits to be passed on to other designs?

HWG: That's already happened. Walter Binder learned a lot when building the ETA fuselage, controls and spars. The different versions of his EB 28 would not have been the same without his ETA experience.

I hope to persuade people that we need to impose no limits to make the Open Class really open. Dinosaurs were not forbidden millions of years ago; they just proved to be too bloody big!

PLATYPUS: What kinds of competition do you enjoy these days?

HWG: My favourite is the On-Line Contest. OLC is worldwide, running without bugs, and you can see in the evening how the weather was and what others have done with the weather. It has given a boost to cross-country flying in many countries. I have only one complaint: by the OLC Rules, pilots are persuaded to fly yo-yos along preferential orographic lines or convergences. Yo-yos may be good for high-speed training, but they get boring after a while. To cater for developed pilots, OLC should award additional points for FAI triangles and quadrilaterals.

PLATYPUS: You may remember that when I bought your ASW 22 in 1986 after you had achieved many records in it, I was required to put your name on my insurance policy for a while. Lloyds of London were delighted to read, under Details of Past Crashes, “Shot down by RAF 1944.” Tell us more.

HWG: As an 18-year-old boy I was in heaven when my fatherland gave me the chance to train in all those aircraft that aces like Ernst Udet had demonstrated in airshows before the Second World War. Finally, I was checked out in my dreamship, the Junkers 88 with the latest electronics, and was ready to enter combat as a dive-bomber pilot in 1943. However, dive-bombing enemy ships in the Mediterranean had been found to be ineffective, so we were retrained in torpedo-bombing. We did not know what we were in

ETA was originally designed for an all-up weight of 950kg but to be allowed to fly in major contests was required to shed 100kg, which penalises ETA in strong conditions. “Luckily there are enough days with English weather,” says Hans-Werner Grosse



for: within three months we twice lost all our crews. I survived a night ditching on 6 June, 1944 with a burning engine 35km south of Toulon. When most of my friends were killed during the invasion of France in June 1944 I was in hospital in Paris. Sometimes it helps to be shot down at the right time.

Our transfer to Norway did not change the situation on the Russian front. We had lousy torpedoes and the sinkings reported by our inexperienced crews filled many lines in German war reports, but did not show up in Allied statistics. Thank God that's all past and must never happen again.

In the half-century after Lilienthal and the Wright Brothers, aviation devastated Europe and killed millions. Something went wrong with our dreams. But enough dreamers worldwide wanted to show that there is more to flying than Boeings and Focke-Wulfs. Gliders hidden in barns came into the open. New ones were designed and built. Before pilots and enthusiasts had finished their education and formed families they secured airfields and defended them against "developers".

Public curiosity about what could be done in gliders by top pilots in cross-country flying was widespread. Flights of 300km found their way into the media. My 1,460km flight in 1972 from Luebeck to Biarritz achieved half a page in the *New York Times* and I got feedback even from behind the Iron Curtain.

But if a young eagle today plans to fly a continental record from Denmark or Sweden to Biarritz with a better glider and instrumentation, with GPS and engine, winglets and ballast, he will probably hear from IGC that he should wait another year or two until all the rules and regulations have been sorted out by a well-meaning person in New Zealand. If this happens, I hope we will have a People's Uprising! If we are not enthusiastic enough to follow our dreams, how can we persuade the general public that gliding is a gift from Heaven?

PLATYPUS: *Before you embarked on the ETA project, you were famous for the world records you set, especially in Australia. But the world records are now being set on other continents and not in conventional thermal-flying.*

HWG: Klaus Ohlmann has really shown us what you can do in waves in South America. This is just another world of soaring. Other pilots could experience the fantastic views and awesome speeds flying together with him in a two-seater in the Andes. That would be relatively safe. But beating his records is another story. Just trying to get famous is not

good enough. Even Klaus needed years to develop his knowledge and skills.

Since we have continental records now, go for them first. There is plenty of room for improvement. Most of the performances to beat have been flown years ago without GPS, engines, winglets and all the goodies we have now.

If you want to improve your cross-country efficiency, fly in lots of closed contests – that is, competitions based on one site for a week or so. Here you see why other people outfly you in decentralised contests and everyday flying such as the online contests, National Ladder and so on. Some people are so in love with beating the other so-and-so's that they don't fly at all outside comps, and they have fun until they are stopped by the doctor. I stopped competition flying in the mid-1970s, but recently came back just to see if I was missing anything.

Most of the reasons for my being fed up with competitions (illegal use of turn and banks and flying overweight) have been sorted out. But I still hate gaggles, tactical start-line games and low approaches in close company with other pilots that have not been to enough funerals. With my attitude you may place well on one or two days, but you'll never again win a contest. You can, however, learn enough to fulfil your gliding dreams: flying individual self-set tasks, to places you have not been to before, to bring back films with which to bore your neighbours for hours.

PLATYPUS: *So you see competitions not as an end in themselves, but as a way to acquire the skills with which you can achieve your own dream-flights?*

HWG: Yes! For years I have been dreaming of a flight from Luebeck to the Mediterranean. That would, by far, not be as long as my flight to Biarritz in 1972, but what a dream! Starting at the Baltic, creeping under low cu's over the German flatlands, climbing up to the Black Forest, crossing to the Swiss Jura and Alps and then enjoying with my wife Karin (I never fly without her) an endless glide to Montpellier or further.

Compare that with beating the other fellow by five seconds!

In former years I got away too late, or was too slow and four times had to land around Grenoble. If 2010 is a better year, and we succeed, we might have a problem: are we running out of dreams?

AVIATING HIGHLIGHTS

- > Hans-Werner Grosse was born 1922, crashed primary glider 1939, C badge 1940
- > Joined Luftwaffe November 1940 (see text)
- > Renewed 1955 PPL at Southend-on-Sea, bought first German Tiger Moth from Ladi Marmol* to ferry it to Luebeck – almost ended up in jail, but that's another story
- > Of his 50 World Records Hans-Werner ranks highest:
 - First 1,000km goal flight, 1,032km in 1970
 - Free distance Luebeck-Biarritz 1,460km 25 April, 1972
 - First 1,000km FAI triangle, 1975 Finland
 - 1379km FAI triangle at 144km/h from Alice Springs, Australia, 1987, with Hans Kohlmeier
 - 500km FAI triangle at 171km/h from Newman, Western Australia 1989 with Joerg Hacker

**Czech gliding and power aerobatic ace 1920-1998*



Hans-Werner says: "Karin holds a power licence, was my tow-pilot and is now my reserve brain. She insists on starting the engine no lower than 400m (1,300 ft). And I obey: well, nearly always."

IF WE ARE NOT ENTHUSIASTIC ENOUGH TO FOLLOW OUR DREAMS, HOW CAN WE PERSUADE THE GENERAL PUBLIC THAT GLIDING IS A GIFT FROM HEAVEN?

BE ADVENTUROUS

Mike Bird talks to Hans-Werner Grosse who, at 90, still enjoys flying cross-country in ETA whenever he and wife Karin can



Hans-Werner Grosse advises us to bring adventure into our flying

ON THE 500KM SPEED RECORD I STARTED 12,500 FEET BELOW GLIDE PATH AND DID NOT MAKE ONE TURN

MY MOST vivid memories of Hans-Werner Grosse are from Australia in 1987. First, halfway through an air-retrieve with me in his ASH 25, upon learning from the tuggie's wing-wagging (the tug's radio being unable to transmit) that Tocumwal's runway lights might not work, Hans abandoned the retrieve. He put down safely in near-darkness on a strip of road, so new it had no lamp-posts or "road-furniture", in Jerilderie, the town made famous by Ned Kelly's boldest bank raid.

Secondly, getting down to 600 feet above the desert during a 500km speed triangle attempt out of Alice Springs: there was nowhere to land, but a thermal whisked us back into the glide-path. Hans was concerned chiefly that I should photograph the vivid red and green scenery with my new Canon camera.

Lastly, they say mad dogs and Englishmen go out in the mid-day sun: if so, Hans qualifies for UK citizenship; I recall him pounding the streets of Alice Springs at Christmas 1987 (just south of the Tropic of Capricorn; the sun vertically overhead) with a heart-monitor strapped to his bare chest. I did NOT accompany him on those occasions.

Now, at 90, he skis long distances cross-country to build endurance. His compatriots call him the "Beckenbauer of aviation", a "phenomenon".

This may give the impression of a daredevil pilot. In fact Hans is cautious in the air and meticulous in planning; in Alice

Spring in December 1987, he spent days studying satellite-radar transmissions before picking tasks. Hans then set three speed records (300km, 750km and 1,000km) with Karin on 8, 10 and 11 January 1988.

MB *What has been your happiest experience in the world of aviation?*

HWG When I was young in the thirties, flying like a bird was a dream for a whole generation in Germany. After 1945 we saw

what came out of that dream: much of Europe lay in ruins. But before the dreamers had rebuilt their houses, finished their studies and could think of a car, they came together to show the world that flying was not about Boeings and Focke-Wulfs. Hidden gliders came out of barns, new gliders were designed and built. Airfields were saved from land developers. And the best of it was that our former enemies helped us to make our dreams come true.

MB *What has been your worst experience in the world of aviation? (Apart from being shot down in the Ju 88 torpedo-bomber over the Mediterranean in 1944!)*

HWG In 2003, when I was 80 years old and having finished competition flying decades earlier, I gave my 31-metre ETA to the Polish top pilot Janus Centka to fly in the Worlds. I was hoping to watch from the back seat how competition flying had developed in almost 30 years. This was not allowed because I was not Polish or resident in Poland. The IGC missed the chance to show the public that they really meant it when they say in their rules: gliding is a way to bring different peoples together.

MB *Which gliding achievement are you most proud of?*

HWG Ray Lynskey, World Champion and the first pilot to soar 2,000km, told me that when he was a boy I became his hero after my 1,460km flight from Luebeck to Biarritz in the ASW 12 in April 1972. Klaus Ohlmann and many other top pilots said that I inspired them to fly long distances; they could still remember where they were when they heard the unexpected news of that flight.

MB *Apart from success in competitions and 50 world records, what do you feel you have contributed to the sport?*

HWG a) After the reunification of Germany, helping young pilots in the former East Germany by giving the combined East German regional area clubs an ASH 25 with the purpose of training junior pilots free of charge – and not withdrawing it when it was twice wrecked – not by the young pilots, by the way, but by senior members of the gliding establishment. The goal was

that young East-German pilots would more quickly reach the performance of the western world in this modern glider than in the old Bocians. We in the German Aero Club prevented airfields and aircraft being sold off; instead they were given to the new local aeroclubs.

b) Fighting (despite heavy resistance by some younger-than-me oldies in FAI/IGC) against recognition of records continuing into the night. A competition of brains should not be replaced by a competition of guts. I may have saved some lives by that.

MB *What would your advice be to a young person taking up soaring in 2013?*

HWG After you learn cross-country flying by comparing your performance in the On-Line Contest (OLC) you should forget about flying in competitions where the point-systems are sometimes silly. Everyone can enter the OLC and see on their computers on the same day what other pilots did in the same area, and learn why the others were better or worse: flying over dry country, not using decaying thermals higher up; how far to deviate from the direct course line and so on.

When competing in the OLC, fly to places where you have never been before, even if you give away points to yo-yo pilots who always fly up and down the same race-tracks. Bring adventure back in your flying. Some closed competitions (nationals, etc) once in a while do not hurt.

MB *Where will new recruits to our sport come from?*

HWG We should recruit juniors from schools, by selling them trial weekends and school holiday packages at affordable prices. We can also recruit middle-aged people whose children have left home, by inviting them to fly in special events. This is time-consuming and not immediately successful, but it creates goodwill by word-of-mouth propaganda.

MB *Are leading glider pilots today better than those of 50 years ago?*

HWG With the knowledge of the 1960s you would end up pretty low in today's competitions. However, we had learnt a lot in the 1970s and 1980s, especially in solo record-flying. Many of my records of those years have not been surpassed in the countries they were flown in.

MB *What did you learn in your record attempts?*

HWG Never fly too fast. I never flew in Central Australia on blue days: it's too dangerous and you lose 20km/h even with the same rate of climb. For the final glide, Ingo Renner told me to work myself up from far below the theoretically-required glide path without circling. On the 500km speed record (171km/h in the ASH 25T in 1990) I started 12,500 feet below glide path and did not make one turn.

MB *Where are the biggest advances in soaring performance going to come from?*

HWG Probably the reduction of wing-profile drag by boundary-layer suction.

MB *What is the biggest threat to the health of our sport? (Apart from airspace.)*

HWG If old pilots, who in their younger days benefited from others, are not prepared to help junior pilots into the air.

MB *What are you personally looking forward to doing in aviation/soaring in 2013?*

HWG Karin and I each have a valid medical certificate. As a preparation for the coming season we do some long-distance cross-country skiing. I never fly without her. Having flown 1,800hrs in ETA with me she knows me and the glider pretty well!

As long as we enjoy cross-country soaring we will do it. Maybe we fly a bit more power than in former years, when we flew just enough hours to keep our licences current.

A topic of great interest to me is distance records. Some members of the IGC rules group flew a K-6 umpteen years ago, but they are still pestering us with the outdated ideas of 50 years ago. I favour a reduction in the number of record categories by eliminating pre-declared distance flights (out-and-return, FAI triangle, straight line distance.)

All my record flights were pre-declared. But I always felt hampered by having to gamble on a forecast based on old and inaccurate data that is many hours old; the improved, up-to-date forecast is not available at the moment when I have to make the declaration.

Gambling on the weather should not be part of our sport.

FLY TO PLACES WHERE YOU HAVE NEVER BEEN BEFORE... BRING ADVENTURE BACK IN YOUR FLYING



Hans-Werner Grosse with wife Karin, who has flown 1,800 hours in ETA with him. They prepare for a season of cross-country soaring by long-distance cross-country skiing

■ The area where younger pilots have set new world records in the 21st century is South America, with its spectacular Andean wave. However, several of Hans's records have not been beaten in the continents where they were first set. For example, the 1972 free distance of 1,460km has not been beaten in Europe. His Australian speed record of 171km/h over 500km (1990, ASH 25T) has not been broken in Australia; likewise his speed of 157km/h over 1,000km (1988, ASH 25) and the double-record in one flight of the largest FAI triangle of 1,380km and the 1,250km speed record of 143km/h (1987, ASH 25).