

How Bob Bienenstein's 1948 "Challenger" Drowned in a Sea of Uncertainty.

I make no excuses for updating this account of bizarre goings-on amongst the strange SAM35 community known as "The Crazy Rubber Band". At Woodbury Common in 1998 Peter Michel and I (along with several others) had massive fly-aways from a flight



area near the northern-most car park where members of the "The Crazy Rubber Band" had set up camp. Early in the day his Ed Bennett "Thin-Man" (Classic Elastic), carrying the only "pull the pin" Tomy DT system left in his squadron, went AWOL. All his other timers started automatically upon model release so he really snafu'd when he forgot to pull the pin. With a fifteen mph breeze from the north-west any thermal would put him in deep trouble. "Thin-Man" boomed from binocular vision long before the tracker signal faded forty-five minutes later, by which time it was well on the way to France. The lift would surely decay over water and dump him in the sea. It was not even worth looking! Peter was not a happy bunny but at least, within an hour of launch, he knew "Thin-Man's fate and he could get on with the rest of his life.

My destiny, that day, was somewhat different. At 6 pm, competing in the Vintage Rubber Champagne fly-off, I launched a Bienenstein "Challenger" (as seen in the photo, also at Woodbury) from an adjacent path into a nailed-on thermal just as Hipperson let go from the car park one hundred yards away. This triggered the release of four more vintage leviathans close by and the unspoken watchers observed in reverence as the fleet angled skyward, as would a silent volley of patriot missiles seeking unwelcome intruders during the gulf war. It was an awesome vintage armada which collectively clawed its way to colossal heights before individually gliding, criss-cross, ever higher, with all six eventually to be lost to the naked eye.

Only timekeepers having exceptional eyesight or tripods could expect vision to be maintained for over eight minutes in the closeting haze as the fleet disappeared down range. All that remained was the percussive tick, tick, tick of tracker signals that disturbed that collective wretched happiness (a singular emotion that only comes with losing a model plane to a massive thermal) and even their signals variously faded to nothing over the next half hour or so. Mine died at thirty-five minutes. Upon reflection, we all knew that visibility on that evening would be about eight to twelve minutes. This being so, why did most of us fly without a long burning fuse DT to save the models from an uncertain fate? In that fifteen mph breeze, the air-time equated to a good eight miles, probably more. "Crazy Rubber Bander's", Ed Bennett and Rex Oldridge, had timed "Challenger" for just over eight minutes before lost visual acquisition. Peter Michel

unofficially saw it for another minute or so. Meantime, I concentrated on getting a reliable compass bearing. Two hundred and ten degrees across South Devon seemed to be the consensus, and in discussion afterwards Chris Strachan confirmed his “Lanzo” had taken an identical bearing above a shared skyline landmark

(From now on, dear reader, you may wish to consult this map of South Devon and have a box of tissues handy.) Packing up the flight gear, I unfurled my ordnance survey map and loaned Chris' larger scale version. Accounting for magnetic variation and using a borrowed protractor, the long line marked on the map says that in the time it took for the tracker signal to die, "Challenger" would have overflown the Drill Hall on Exmouth Sea Front, five miles away, crossed the Exe estuary and headed on down the coast towards Dawlish and Teignmouth. To eliminate the possibility that it may have landed in Exmouth or perhaps in a tree somewhere closer, Peter and I motored off down the line all the way to the afore-mentioned Drill Hall, alighting every mile or so to deploy a Yagi and listen for the bug. Nothing! After an hour we repaired to the pub for supper.

Unlike the "Thin Man's" certain fate, convivial bar-room chatter, and the line on the map, persuaded me that I was still in with a chance as the flight line was exactly parallel to the coast, so at 10 pm I decided that I would go listen for bugs in the night. After all, I can do driving, navigating and listening in the dark. If lucky, visual foraging could resume in daylight. Dave Beales said he was fed up with the pub anyway and regarded a prospective search and rescue mission as a true return to childhood adventures so he took the navigators seat, complete with maps and torch. “Crazy” breeds “Crazy”!



By 10.30pm we crossed the river Exe near the foot of the M5 motorway and headed down the other side of the estuary towards Dawlish where we could get back on-line. Within a couple of miles of said resort we decamped every half mile or so and listened. Nothing! Into Dawlish. Nothing! Beyond into Holcombe. Nothing! On to Teignmouth. Nothing! Now, with waning enthusiasm, Dave reckoned that this was about the limit but I figured we had only just entered thirty-five minute territory (Over eight miles as the crow flies) and our luck might soon change. We crossed the causeway into the small village of Shaldon on the south side of Teignmouth harbor and resumed the search. Nothing! Up and beyond the inlet to a huge headland, heading south again and stopped (we both agreed) for the last time. At 11.35pm, one and a half miles beyond Shaldon I exited the car more in hope than anticipation!

Guglielmo Marconi has a lot to answer for! "Challenger" was coming in loud and clear. Five icons (signal level) from the Yagi meant it was pretty close. Reverting to the Rubber Duck confirmed a positive signal which got even stronger in the vicinity of a coastal dwelling. Midnight is not a good time to knock up the natives so we contented ourselves listening for weaker signals up and down the road and confirmed the strongest reception was indeed right outside aforesaid abode. Cheered enormously by our efforts and knowing that "Challenger" would still be close-by in the morning, we bombed back to the camp-site along the A380 to blissful (and for me, somewhat truncated) sleep.

Despite Dave's generous offer of company for the following morning's search I decided to go it alone rather than inevitably spoil a friend's day away from the flying field. It was to be a long hard day and I haven't had so much fun since our pet pig ate my sister! At 5.30 am I crept from my bed leaving my caravan mate Eric Cooper completely unaware of my prior return and my current departure ('e sleeps 'eavy, so I left a note). I programmed Keith Horry's borrowed "Eagle" GPS giving me a second line to follow, the same as on the maps used last night. Traversing the same route to Shaldon, I was quite hyped at the prospect of a fruitful retrieve. Outside the very same residence, at first light, I switched on and listened. Nothing! Which ever way I pointed the Yagi. Nothing! Up the road and down the road for one mile, two miles. Nothing! Nothing! Nothing! Yet there was something! Very faint and on a different bearing from last night! If the "Challenger" lives on, it's not in this territory!

OK! So now it's thinking time. Several possibilities occurred to me. It was in a tree last night and now it's not, hence a presently weaker signal, someone has taken it indoors, or it's in a car and has started touring Devon with a new owner! I decided upon a local ground search to eliminate the former two, but parking-up on this coastal road was simply impossible so, returning to Shaldon, I left the car in a public car park, setting off down the beach, south, to the original source of signal, towards and below the residence already visited on this fruitless morn. The incoming tide meant no way through, so I tried the coastal path! There's no gold in them hills, just lots of pain. After Devon's equivalent of fell-walking for about a mile and a half, I arrived again just as the lady of the house returned from walking two giant dogs. Aha, they thought! "Breakfast?"

Explaining my mission was not so difficult simply because this lady realized, whilst trying to appreciate that a Vintage Free Flight reproduction model plane might barely fly from Woodbury over and beyond Exmouth to South of Shaldon, a 19 stone strangely dressed giant (headband, shorts and sneakers), carrying a funny radio, home made look-alike television aerial and a plastic carrier bag (for food, drink and accoutrements) could possibly tell anything other than the fascinating truth because such a story would be otherwise inconceivable.

This very nice lady was even un-phased by my request to search her garden and enquire about the terrain. Now it was clear, her garden terminated in a 150 ft drop through dense foliage and tall trees to treacherous rocks below. She smiled disbelievingly when I asked how one might search the area. It was, on reflection, a damn silly question. Deploying the

radio locator for the n'th time that day I got a positive but distant signal from the bottom of her garden on a bearing directly down the coast, south towards Torbay.

Thinking time again, but first I trudged more coastal path going south until confirmation that the distant signal was real and thus decided to repair to the car and breakfast. The next bit really hurts! From here on, in more ways than one, it was downhill all the way. That negative incline on two miles of Devon tarmac should have been easy! Unfortunately, it was not! I pulled a calf muscle and only just made the last 400 yards of downhill agony. Never mind though, I brought some food with me.

Breakfasted and undeterred I journeyed south passing the hamlets of Gabwell and Maidencombe, listening regularly and getting occasional signals. Through and past Babbacombe, onto the south facing headland on the north side of Torbay, you wouldn't believe the pulsating signal which good 'ol Pim Ruyter's system was pulling in, high up from an isolated observation point. I was no longer on my original line but there was no mistaking the friendly, beckoning, voice of a tracking bug.

Depending upon the polarization of the transmitter aerial, with a Yagi, one can attenuate the incoming signal by rotating the array towards or away from the horizontal and, by doing so weaken the incoming signal to determine an exact directional source. Thus with map, compass, and binoculars, and accounting for magnetic north I again set a new bearing on the map clear across Torbay towards Brixham (see map). On a detailed atlas, I could even pinpoint the golf course on the opposite shore where the compass bearing alighted from the water. Now for something really weird, before departing south I tried to re-acquire the signal. Zip! For the next ten minutes or so, big zero!

Now seemed a good time for a Kit-Kat and Coke and to try and figure out if sanity plays any part in this hobby! It doesn't! I try again. As Alice would say, "Curiouser and Curiouser!" The signal has returned. Completely confused, I'm now really (really) thinking that it is still mobile and I'm chasing a finder's car which is touring Devon. Resuming the search I passed through Torquay, Paignton and Goodrington. Nothing! Now on that same golf course seen from across the bay, at the highest north facing point in Brixham I confidently alighted and set up the rig for the final push. Nothing!

The holiday golfers were decidedly suspicious so in defiance but with waning enthusiasm I pushed south and searched the last of the new compass line to Dartmouth and as a final futile gesture returned to Torbay expecting nothing. Now the penny finally dropped! "Challenger" is in the sea, driven south along the coast by this weekend's northerly winds. The structure has probably broken up in the swell but the wing has remains wholly or partly intact because of the buoyant air pockets between the ribs. The tracker bug mounted securely on top of the centre section continues to transmit providing the wing (or fragment) is flat on the water. When it overturns and quenches the aerial in salt water, nothing! Thus with the aerial upright I searched again for that last strong signal from my prior observation point north of Torbay. My expectation was fulfilled, nothing! But wait, for one short minute a waning signal was pulled in by the Marconi inspired rig, as if to say "Good-bye Ramon! The game is up, and you just lost!"

Like a mafia mobster's unfaithful moll, "Challenger" is gone to sleep with the fishes, probably entering the briny on the rising tide from the beach a tad south of Shaldon (just about in 35 - 45 minute territory) and surfing all the way to Brixham before my passion for the chase expired. It was a good model with a good wing and a good bug and I am confident that the bug battery had expired long before the last butt or scarf joint in my wing let go and allowed bits of balsa, silk, tissue paper and rubber bands to unite with other flotsam and endlessly ply the world's oceans in the vein of an immortal albatross.

You see! Vintage model airplanes don't die! They too are immortal and will go on forever! Not like this earth-bound flier, who, totally cream-cracked, had to retrace a journey back up the A380 to a blissful caravan bed and a few hours afternoon sleep before the weekends' prize-giving in the pub the same evening. Even now, the 1998 Woodbury Weekend still had a surprise for me. Flying a "Voodoo" Wakefield, I won first prize in Saturday's Bristol and South West Vintage Precision competition with a total error of 33%. Yes, that's 33% error. If you can believe it, all other competitors failed to complete the competition due to damage or unsustainable losses, which just about sums up my weekend with "The Crazy Rubber Band". Damaged with an unsustainable loss. That pulled calf muscle plagued me for weeks and a replacement "Challenger" did not come off the building board for another 2 years.

Later that same year, months after this story was originally recorded, I got this account from Ron Marking, who lives in the far south-west of England. On the Wednesday following the above event, Ron had a telephone call from a Brixham resident who was walking the beach and had found his vintage model airplane that was lost in the same boomer that engulfed "Challenger". There was not very much left of the un-recognizable mess except a tangle of balsa wood and tissue paper wrapped around the rubber motor, an intact propeller and a name and address label. The tracking bug was there too and after drying out, it came back to life, albeit temporarily. It expired shortly thereafter. It too succumbed to the salt water. Proof, if proof were needed, that my chase along the South Devon coast pursuing a missing member of my own "Crazy Rubber Band" was not figment of fertile imagination.

Having first built a "Challenger" in 1993 inspired by Bob Bienenstein's success in the 1947 U.S. Championships, my three hundred square inch monster ran a four and a half ounce motor within its six ounce airframe. It generally put on a good show, limited by being slightly overweight, but when powered by one thousand turns on sixteen strands of quarter inch Tan II it could turn in prodigious performances. Was it Sal Taibi that declared "There ain't no substitute for altitood"? And so it was with my "Challenger".

It is an out-and-out competition model designed and built for duration; it would return flights just under four minutes in neutral conditions, won at Woodbury in 1996 with a flight of over six minutes and placed fifth in the Nationals of the same year. Prior to that in the '94 Nationals, it flew for nineteen minutes following a DT failure. However in the fly-off it placed no-where.

Its successor came off the building board in 2000 and immediately picked up the trend of its predecessor by placing at the '01 1066 Eurochamps. More recently it won the same champ's of '04 and '05, the latter with eight minutes dead. Finally, this year, '06, it came second in the Nationals, my first ever podium finish at the BMFA Nat's. Just to put things into perspective, at the '03 Eurobash after a storming set of qualifiers, in the flyoff it recorded well under two minutes along with at least half a dozen other flyers who were collectively fooled into picking a false thermal. A minute or so later John White flew a "Mick Farthing" (I think?) alone into a boomer and won by a country mile.



The skeletal photograph gives some idea of the simplicity of design. Both my versions had a pre-constructed main spar assembled with two thick centre ribs and built-in joiner tubes made from an RC snake. When complete the wing was divided using a razor saw. The wing joiners are fourteen gauge piano wire. This method provides for really accurate control over the central dihedral break but the main

purpose is to facilitate safe and easy transportation. An interesting corollary to this is that in year 2007, the governing body (BMFA) in the UK is considering a rule change for vintage models outlawing two piece wings and in the same proposals allowing the addition of turbulators. Two piece wings can have zero aerodynamic advantage and only add weight, thereby penalizing performance, whereas the addition of turbulators will improve many models significantly when the original designer had no knowledge of their advantage. Has the world gone completely mad, I ask myself? We have to wait and see.

"Challenger" appears to have few vices, save one! When flown in a Right/Right pattern it can develop a hammerhead stall about one minute into the glide phase. By un-warping the starboard wing inner panel and flying it Right/Left, that killer stall hardly ever occurs. Whilst Right/Right may be a more efficient pattern, a stall of that nature can be terminal so I now plump for the safer alternative. It is also much less likely to spiral in to the right if the launch is a little off wind.

As mentioned at the outset, this story has been updated to include hitherto untold detail and expanded to comment on the model and its ability in the heat of competition. There are better models on the scene in the UK, particularly the Lanzo whose virtues come, apparently, from its turbulating upper spars. However I think that "Challenger" is a far nicer model to look at and if I ever build another one I would try for less avoirdupois and less rubber to capitalize on its inherently stable flight pattern. Either way, it's a hell of a ship and for over ten years has rewarded me with splendid (if not a little painful) fun.

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