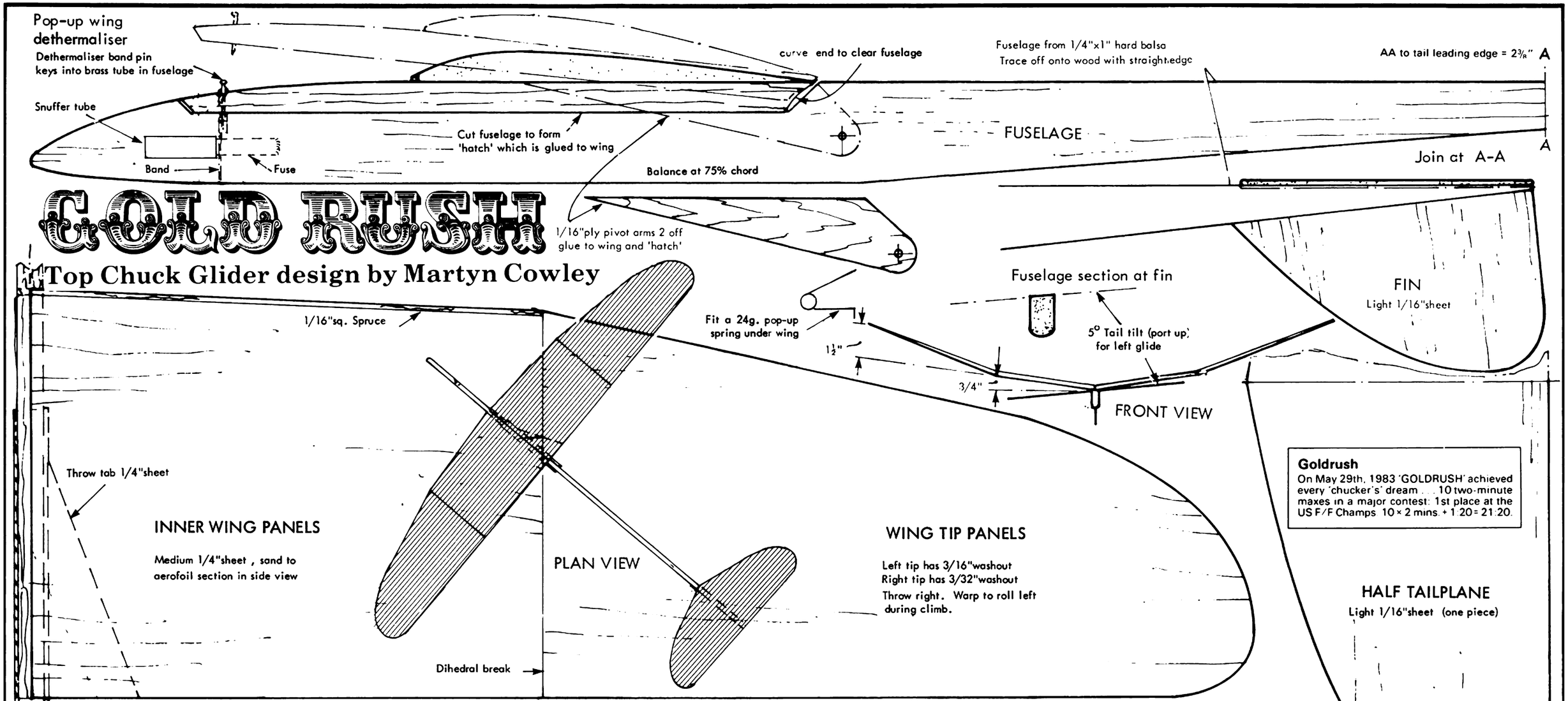
GOLD RUSH

Top Chuck Glider design by Martyn Cowley



Goldrush
On May 29th, 1983 'GOLDRUSH' achieved every 'chucker's' dream . . . 10 two-minute maxes in a major contest: 1st place at the US F/F Champs. 10 × 2 mins. + 1:20 = 21:20.

FULL SIZE PARTS SHOWN

FIRSTLY let's set this thing straight, this is not just another HLG story — being British this machine is a chuck glider commonly known as a Chucky! I've been chucking them for some 20 years, since I was a lad.

Early influences obviously focus on Lee Hines 'Sweepette 20' and Tony Salter's '18in. Slarmi' Aeromodeller Plans Service — long fuselage and under fin.

I think I've taken chuck gliders to every model event I ever attended (even when I flew combat) so that I always had something to fly and run around after between competition flights. Typically in England where it is always blowing half a gale, I usually entered chuck glider when it was just too windy to fly anything else. With this background, I prefer large models, (I have flown 24 × 5in. wings) for stability in turbulence and primarily for visibility in the air downwind, *and* after landing on those long flights on a windy day. I don't believe you lose too much altitude by using a larger model, especially by comparison to their superior glide. I find they are more likely to glide their way out of trouble if you do make a mistake. An 18in. model typically puts you on the ground quicker than a sackful of spanners if you miss the core.

I've always preferred weighty models — it's all that rough weather. Personally I think they throw better — nothing is worse than almost ripping your arm off, overthrowing a real lightweight.

In England I always used drop-off weights to DT with no problems — but here in California the thermals play for keeps! I lost several models, then tried all manner of tip up tails and hinge methods, but could never get really consistent flights. I think pop-up tails never seat exactly the same twice. Plus — I use a potentially dangerous trim. Right launch with wash-in on inboard right panel, model gliding left! That may sound like a spiral dive waiting to happen, but it's great for trimming the throw part of the climb, just like a power model, rolling left while turning right. The glide is then just like any rubber model trimmed to fly Right Left using side thrust against warp. Any stalls from poor trim or turbulence tend to wing-over into wind and transition into a smooth glide, still giving a chance of a good flight.

My best models, using warp and tail tilt to give a left glide, have always needed just a touch of right rudder to hold the glide open. This opposite rudder comes on stronger if the model tightens up in a stong lift and prevents it spinning in. You see — we aliens do things differently!

As Chuckies are finely tuned with minute adjustments to tailplane and rudder, I was naturally keen to find a DT method that would leave these surfaces firmly in place — hence the pop-up wing! Even I was surprised how effective this type of DT is on a Chucky. There is no doubt that it saved my model from a fly away several times during the F/F Champs. I was typically D.T'ing at 2:40-3:00 mins on each flight and despite chasing on a motor bike, some of the big thermals had the model specked-out overhead at perhaps 1000ft. plus. On DT the model looks as though it has self-destructed with the wing remaining horizontal, while the nose drops 45°, sticking the tail high in the air — and conveniently out of harm's way as it hits the ground. That pop-up wing brought my model down out of the thermals faster than a mouthful of roofing nails!

Stan Stay immediately spotted a further benefit for the nomadic jet-setting chucky flyer — simply by removing the hinge pin, the wing comes off making the model very transportable — even in a suitcase. Just a drop of 'Hot-Stuff' gives temporary pin fixing for a day's flying on arrival.

Now, if you're looking for a history of this particular model, hold on tight. I built it on Wednesday evening and flew it for an hour on Thursday night. I don't believe in over training! From the first test glides the model looked very promising. But trying for high times with a rearward CG gave occasional long low pullouts — a real killer for consistency. Adding nose weight, retrimming and adjusting warps resulted in the last half dozen flights between 55-57 secs just before dark. The model was over-elevated for an ideal throw at this CG, but I wanted a conservative trim.

On Sunday, (same week!) at Taft I had two low power launches to check that nothing had changed. I entered the contest and did 2:00, 1:20, 2:00, 1:30 2:00 and then flew off with seven straight maxes to equal Bill Blanchard's 1974 magic 10 maxes — the goal for all Chucky flyers. I must confess I drew inspiration from having witnessed Mike McKeever and Jim Lueken's previous attempts at the record.

I think I must have been more tired at this stage than I realised because my eleventh flight was a real gamble. Even before I launched I had my doubts about the air. I simply relaxed too soon and blew it with a 1:20. Next year after I get to the ten, I'm going to take a couple of minutes time-out to get serious!

One final comment: standing out in the dirt ready for my eighth or ninth flight, my mind suddenly locked on the fact that the tailplane was still only held on to the fuselage with ¼in. double-stick transfer adhesive — a technique I use with new models for first flights in case incidence needs adjusting before gluing. At that stage I chose to leave things as they were for the rest of my flights. Matter of fact, I still haven't glued it on yet!

I made no other test flights between contest flights, and in fact had not adjusted the model at all since I set it up that Thursday night. To me that confirms this pop-up wing DT system is reliable!