CHORUS GULL

SCOURING THE ARCHIVES FOR A FLIGHT OF FANCY, MICHAEL PARRY PROVIDES INSPIRATION FOR THE RE-BIRTH OF BRIAN PECKHAM'S SUPERB RADIO MODELLER DESIGN

Bespatted and beautiful, the Chorus Gull unashamedly attributes its origins to Edgar Percival's G3H.

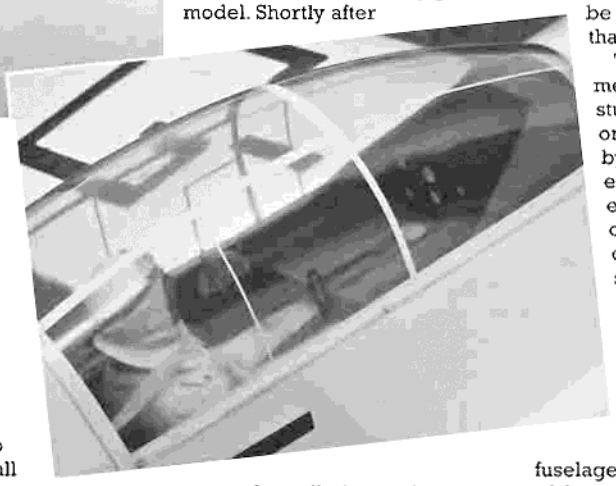
It's intriguing to contemplate how many dog owners come to resemble their respective canines. No doubt psychologists have denoted a syndrome which they can attach to such people. I wonder if they have a term to define modellers who like a particular type of aircraft? I, for some reason, find German W.W.II aircraft strangely attractive, whilst other modellers I know are obsessed with US aircraft of the same vintage. More to the point, I'm aware of one guy who has made several models of the Sopwith Camel, each one to a different scale. For me, it's these personal likes and dislikes that make modelling such a fascinating hobby.

Large canopy simply cries out for a pilot, even if there's no room for his legs (no such problem on the full-size!).

IT MUST BE LOVE!

In our club we have a member who is a steady flier, builds meticulously, not too quickly and is totally obsessed with the Percival Mew Gull. He's never built one and probably never will; nevertheless, he has a library of information on the aircraft and is on nodding terms with the famous Mew Gull pilot, Alex Henshaw. He goes by the registration of Les Bellion, and to record an interest in the Mew Gull in his presence qualifies you for a two-hour treatise on the beauty, grace, power and mystery of the aircraft. To some, this aeroplane is an interesting subject... to Les, it's a love affair!

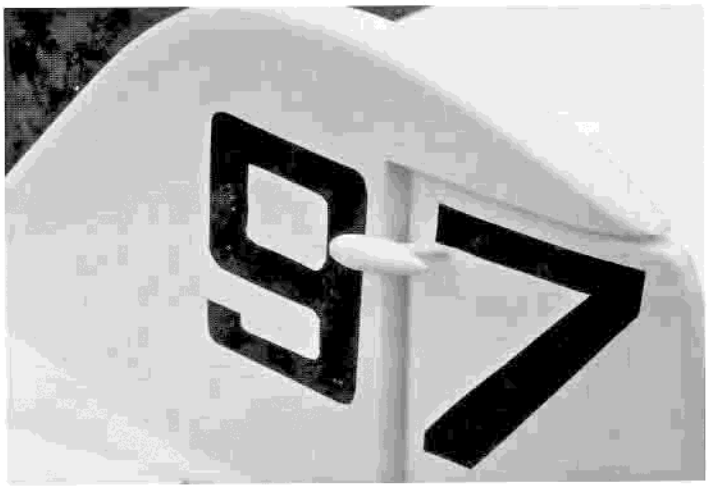
I grew a little restive last winter and was looking for a 'different' modelling subject, i.e. scale but not German W.W.II! Whilst browsing through the March 1989 issue of Radio Modeller I came across the plan feature for the late Brian Peckham's semi-scale Mew Gull, re-named Chorus Gull; according to the club elders, a very good model. Shortly after



I enrolled on a short course of Mew Gull lectures, given by 'Doctor' Bellion, during which I received the necessary scale information that would enhance the aircraft, together with a copy of 'Flight of the Mew Gull' by Alex Henshaw.

The Nexus plan was duly ordered, together with canopy and cowl, and the building board was cleared ready for action. For me, the power unit just had to be a Thunder Tiger 91FS; perhaps overdoing it a bit, but then the full-size was designed as a high speed mail plane or courier, so the additional power of the model would be in keeping with original... that's my excuse anyway!

The learned 'Doctor' informed me that the Mew Gull was a stubby low-wing monoplane, only 18' 3" long and powered by a Napier 160hp Javelin engine. Construction was entirely of wood with plywood covering, except for the fabric-covered flying / control surfaces. The cockpit was aft of the wing, with the canopy faired straight into the deep rear fuselage, near the base of the integral fin. Dominated by a pair of large streamlined spats around the main wheels and a bulbous fuselage, the design was reminiscent of those GB racers of the early thirties. Actually, the spats proved to be an important feature, making the Gull one of the cleanest, lightest aircraft of its day. The first public flight was at Gravesend in Kent on March 15 1934, during which the pilot (Edgar



Percival) made a low pass at an estimated 260mph. In addition to this information, my Mew Gull historian was also able to furnish me with scale articles from a 1964 Model Aircraft, and a copy of a 1969 Aeromodeller.

MODEL GULL

Enough of the history lesson, let's get back to the model. Having studied the plan at length and read the Peckham notes, I was rather encouraged when he described the 'plane as being "designed for carefree flying by the average model pilot without any naughty habits." As I began cutting the ribs, I pondered how he might have known about my personal habits...

With a tapered wing such as the Chorus Gull, rib fabrication begins by making templates for the two end ribs. The rib blanks are then sandwiched between them, prior to carving and sanding.

Both the tailplane and elevators were formed easily, elevators and ailerons being top-hinged to provide a better fit and function. The fin and rudder can be a little fiddly but is well worth the effort. When complete, these two items alone quickly give you an idea of the size of this substantial model. As for the fuselage, well, this is the usual balsa box, with decking, and goes together with very few complications. With the various parts of the airframe taking shape nicely, I chose to test-fit the Thunder Tiger 91 to determine the finished length of the cowl. In doing so, I quickly realised that, for ease of engine access, a half-cowl design would be the best option. The latter was eventually shaped from lithoplate, the remainder of the nose formed from balsa block and ply formers. There's oodles of room for servo installation, and as I was using a fairly heavy power unit I chose to

This method is very effective, provided you make right-hand and left-hand versions, and from here on the wing goes together very quickly. For aileron control I resisted the temptation to fit micro servos and stuck to the plan, using the time-honoured method of pushrods and bellcranks - a system that seems remarkably efficient. After joining the two wing panels I added the undercarriage bearers and shaped the u/c wire, using beefier 6swg wire (original states 8swg) to accommodate my often 'aggressive' landings.

position the servos around the C of G in the hope that I wouldn't need to add any ballast. This proved to be a sound idea as the model balanced 'on the button' when completed.

COLOURING UP

While Mew Gull colour schemes are various (mainly due to the aircraft changing hands frequently), I thought it best to opt for the Alex Henshaw white scheme, with G-AEXF registration.

Mr. Bellion would, no doubt, have otherwise cut off diplomatic relations! The model was covered in Solarfilm, with registration letters being cut from green Solartrim. I used a computer and photocopier to achieve the right shape and size of the thin, elongated letters, then cut out matching templates. Positioning these on the Solartrim then cutting round with a sharp blade achieved the desired result. The numbers were formed using the same method, but cut from black Solartrim. Of goldfish-bowl proportions the Nexus supplied canopy (see Datafile) begins to look very realistic when Stickatrim frame lines are added.

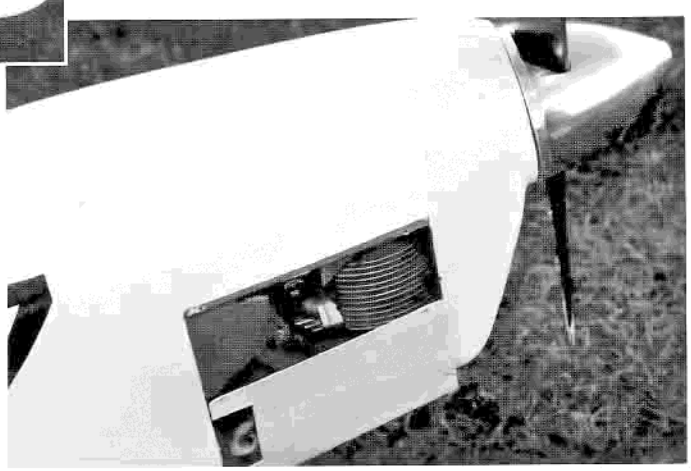
People tend to look into vast glass vessels (as goldfish are aware), so I concluded that I'd better add some detail; a standard sports pilot painted white (to simulate a one-piece overall outfit) did the job nicely. The position of the control runs mean that the cockpit floor is quite shallow, so I created the illusion of depth using a 'trompe l'oeil' technique. I painted the pilot's legs on to the flat cockpit floor, sketching the clothing creases in with a pencil having observed how my own trousers folded when seated. Depth was then created by shading with a soft pencil, increasing the intensity in the middle (and darker part) of the cockpit. Finally, I added a simple instrument panel, control-column and throttle levers, the latter being made from spare bits of wire. The result was simple but effective when viewed from a distance. Many myopic members of our club believe that it's

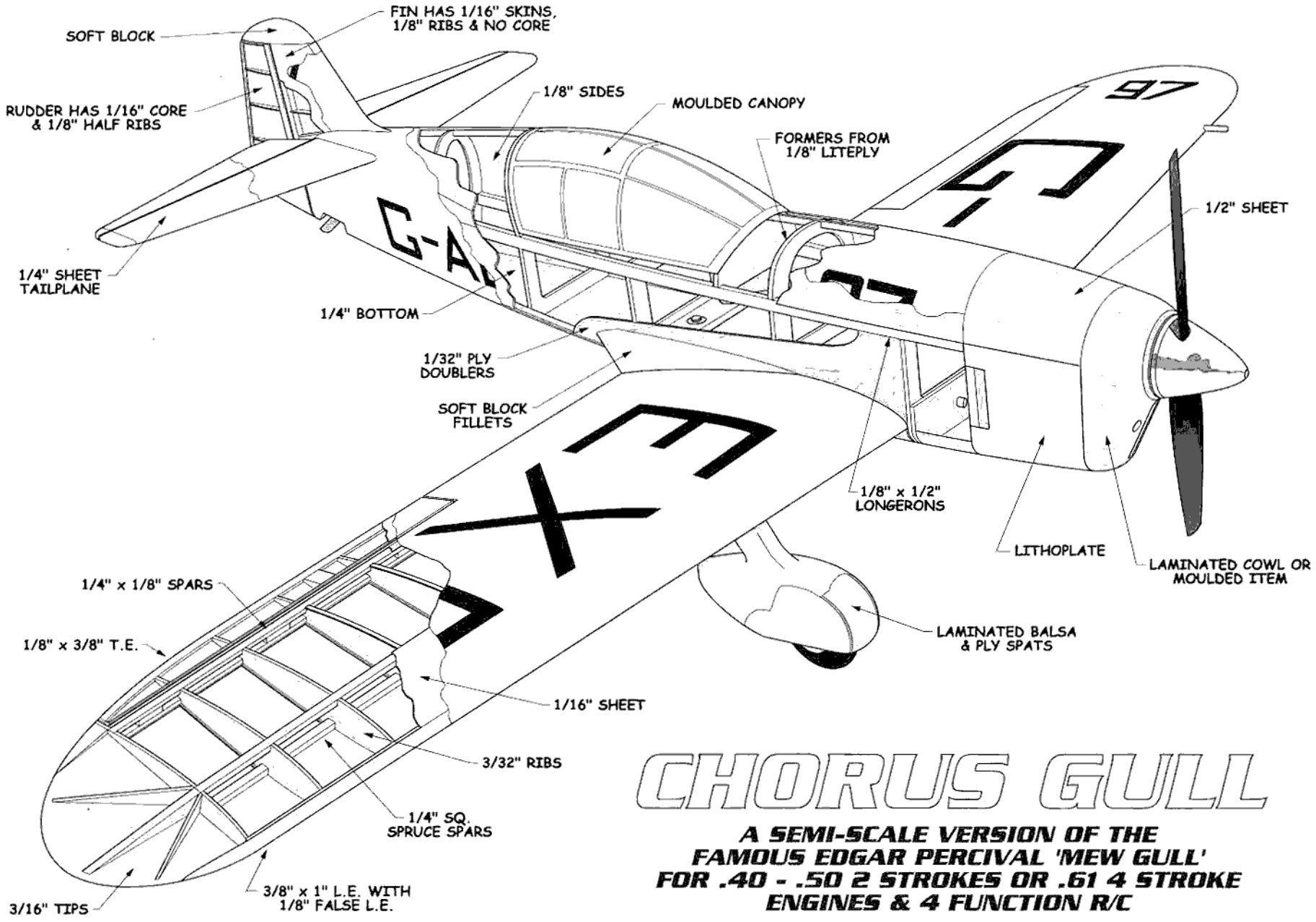
TOP LEFT: A Henshaw lookalike suits the occasion beautifully.

TOP RIGHT: Fin and rudder can be a bit fiddly, but the finished article is well worth the effort!

Classic thirties profile is a joy to behold, and the apple of Delyn's 'Doctor' Bellion's eye!

A lithoplate half-cowl was used in preference to the original; looks really good and offers excellent engine access.





CHORUS GULL

A SEMI-SCALE VERSION OF THE FAMOUS EDGAR PERCIVAL 'MEW GULL' FOR .40 - .50 2 STROKES OR .61 4 STROKE ENGINES & 4 FUNCTION R/C

a full body pilot, complete with legs. Others, who have the services of a reputable optician, comment that the pilot is a little small. Allegedly, Mr. Percival had the canopy enlarged so that he could fly with his head encased in his trademark trilby hat. I was quite pleased with my humble efforts although I realise that I have a lot to learn about cockpit detail.

LESSON FROM HISTORY

With the prospect of a test flight nagging at the back of my mind I went to the original text, penned by Alex Henshaw, to see if there were any particular vices associated with the Gull. He states "The Mew Gull was not an aerobatic aircraft, but as a very high performance machine, it was adequately stressed if not abused." He also preached that he would never demonstrate aerobatics unless he had practiced the manoeuvre beforehand in safe circumstances (sound advice for us all). He found that the Mew had very sensitive elevators, firm to stiff ailerons that stiffened up still further with speed, and good rudder control. Such were his enthusiastic practice sessions that after one, a colleague, Bill Humble, commented: "Christ, Alex, I think I need a drink. It's bad enough flying the Mew but to roll the bloody thing!"

SKY'S THE LIMIT

With the model complete I commissioned club test pilot Gareth Williams, and undertook a session of engine pre-running. I decided to conduct the first tests with the engine upright and the model inverted. Imagine my surprise when the engine started first time, with excellent throttle response. Power produced was impressive, and after running a tank of fuel through the motor we decided to go for a test flight. After an impromptu photo session out on the strip, Gareth opened up the throttle and experienced some difficulty keeping the model on the ground as it soared into the air.

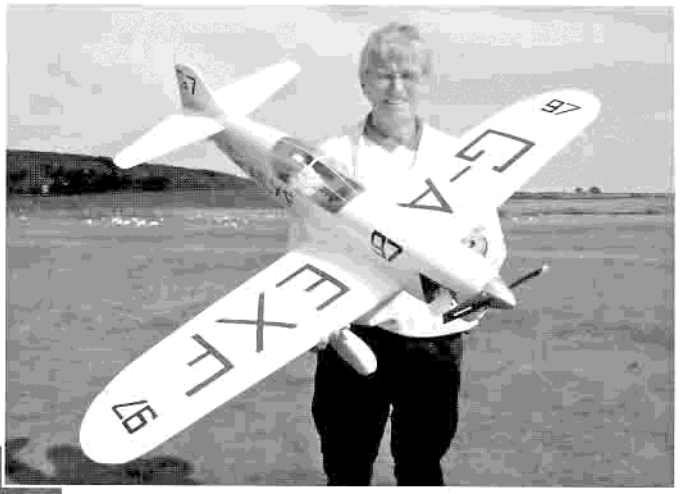
A Thunder Tiger 91 FS lurks underneath that sleek front end... a little too much power in the final analysis.

Normally a man of few words, Gareth was positively babbling as he stated "I want one." The model flew in a very stable mode, responsive to controls and very aerobatic. It's a tiny bit over-powered, indeed Gareth was able to do most manoeuvres (he omitted a bunt!) on quarter throttle. The session closed with Gareth enquiring about the possibility of acquiring such a model after one of my prolific winter building sessions.

Some days later I flew the Mew Gull for myself and, with the 91FS behaving impeccably, I was very pleased with its performance. She's rock steady, responsive and goes where you point her. I soon became aware of the problems associated with four-strokes regarding vibration as screws securing the cowl bailed out during flight, and a metallic sound from the engine was traced to the loss of two mounting bolts.

Cameraman Alex Whittaker captured the beauty of the model in flight. In its natural environment it looks most impressive, catching the eye as it turns, thundering down the strip in a low pass or simply burbling over the fence for a safe and smooth landing. With engine run-in and on song, I look forward to further aerobatic delights, hopefully in full view of the knowledgeable Les 'Mr. Mew Gull' Bellion!

I think you'll agree that it's a fine-looking model, and hopefully you'll be inspired to build one of your own. As Brian Peckham said in closing his 1989 article: "Get cracking - even a slow builder could be in the air before summer..."



Ever noticed how R/C pilots come to resemble their aircraft?

As befits her appearance, Chorus Gull has impeccable manners; rock steady, responsive and she goes where you point her.

Brian Peckham's design is a real masterpiece... the plan sits here amidst these pages and is begging for your attention - what on earth are you waiting for?

DATAFILE

Name:	Chorus Gull
Designed by:	Brian Peckham
Built by:	Michael Parry
Aircraft type:	Semi-scale commercial
Wingspan:	61.5"
All-up weight:	$7^{3}/_{4}$ lb
Rec'd engine:	61 four-stroke, 40 - 60 two-stroke
Control functions:	Rudder, ailerons, elevator, throttle
Hardware:	Canopy (ref. CANRM356) - £7.50. Cowl (ref. COWRM356) - £9.50. Both available from the Nexus Plans Service. Tel. 01322 660070