Smoke Trails no 22

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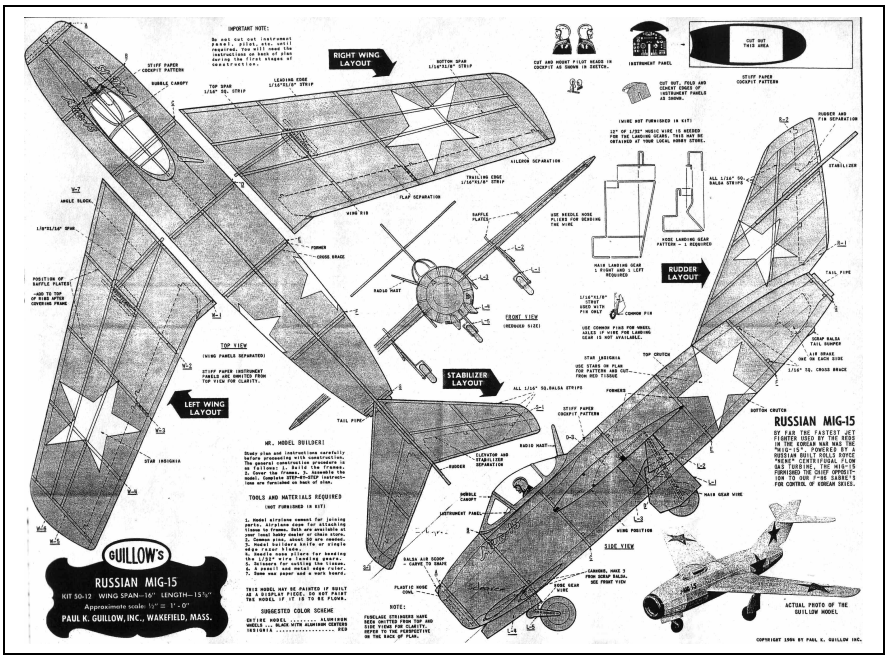
I had a disquieting email from John Emmet. Joe Mansour, you will remember, made canny use of contemporaneous films and Other Events to promote his products. John writes, "A warning for your readers: 'When Worlds Collide', the film that spawned the first Jetex 'spin-off' – the Zyra spaceship (with its impossibly rearward C of G) – is being remade by Stephen Sommers with a 2010 release date. I sense a redesign coming on next year". Oh dear, that's all we need! But if the film was pretty awful (and it was pretty awful), the Zyra was even worse. Bert Judge (who denies all involvement) says the kit was popular at the time, despite, aerodynamically, being a 'Complete Impossibility' with a glide worse than a bunch of car keys. Goodness knows how many potential Jetex fliers it put off. The Zyra, then, needs as radical a 'makeover' as the film. They will need a Technical Advisor. I await a phone call.

An intelligent and forthright commentator on the Rapier scene wonders why we persist in our obsession, as Rapiers are a 'Busted Flush'. He strongly advises psychoanalysis to save us from the delusion we can ever return to the 'Good Old Jetex/Rapier Days'. We must do better, he says, than retreat into an aeromodelling equivalent of 'Second Life' with only *Gedankenflüge* (a term Freud would surely have coined) to comfort our avatars (or is that 'aviatars'?!). A 'Busted Flush is, by way, to do with Poker and not a bathroom emergency.

Now I do understand this, but the truth of the matter is that we (or at least some of us) are simply obsessed with rocket planes. Nothing else quite scratches where we itch! The following is by no means an excuse, but it's time for me to nail my colours to the mast, my Atom 35 to my Wren and my Rapier to my Sharky:

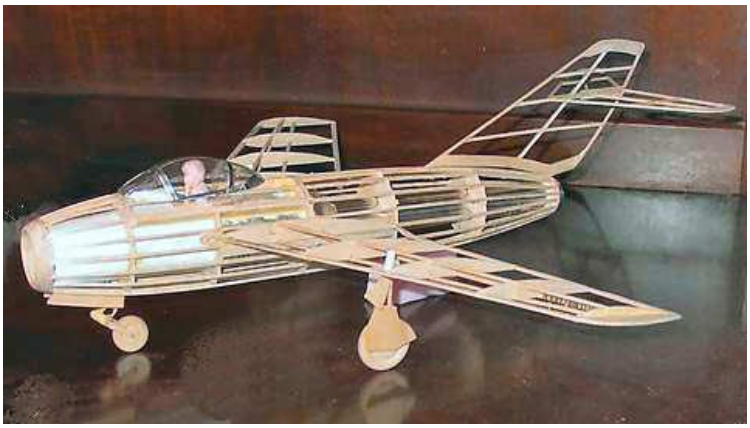
I love the old Jetex models. Why, I don't know. I remember well my first whiff of burning guano, hot asbestos and singed flesh. I recall the row I had with my big sister when she found I had used her toothbrush to clean my 50C. I still have the scars. I actually enjoy not knowing what will happen on the next flight; that, all being 'well', my models will accelerate throughout the power run and do odd aerobatics on the way. I love the fizzing and the smoke; the sight of these 'contrails' across the sky still stirs me. The uncertainty and danger is all part of the experience. I will retreat into my dotage happier because my tricky Hunter finally made some lovely low sorties over the car park and impressed the old guys; that my Wren cavorting about the sky brought back memories to some wonderful chaps in their eighties. I have received the approbation of old jet test pilots like Neville Duke; the rudeness of Peter Twiss. I am indomitable in face of mockery. If I have a couple of successful flights in a day I jabber about it to fellow addicts and go home happy. In the privacy of my own home I will watch Jetex videos and relive past glories and disasters. I will do anything to get a fix: buy up old motors, dry off crumbling pellets. I will knowingly put a Rapier from an uncertain batch into my creations just to see what happens. I have a little hope the motor situation will get better, but that is enough to keep me going. I am not alone. There are other 'Mr Toads' out there. Poop poop! (or is that fizz fizz?) Don't try and rationalise with us. You could call a psychotherapist, though.

However, the original comments, impertinent as they may be, *are* serious, and need a riposte better than the above extended 'raspberry' (or 'Bronx cheer' as its known in the US). So here goes: It can be argued that our current situation is not unlike that of 'Jet' modellers just after WW II. They didn't give up, and neither should we. This was a period when, at least in the US, 'Jet' designs were published, and kits produced, with little thought to a means of propulsion. The Guillow's MiG 15,a good example of the type, was new to me, so Marty Richey sent me the plan reproduced below in all its intricate (and true-to-scale) detail.



Marty writes: "It's typical of *most* jet kits of that time sold here in the States. Except for a couple of Comet designs, they had no prescribed power plant. Cleveland suggested a ground-based catapult; Comet sometimes recommended a whip method, but they all had landing gear so I believe the producers assumed they would be built as display models. I don't think they were in high demand in their own time, which explains their rarity today."

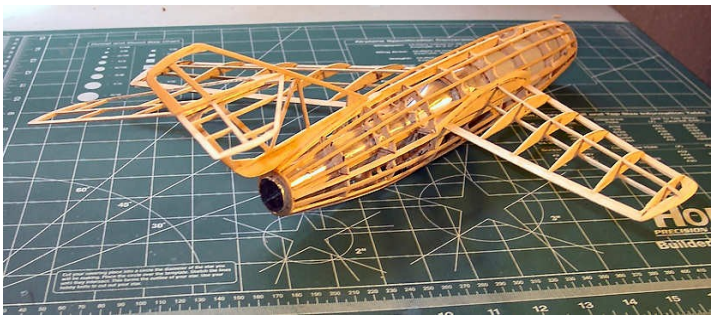
Happily, a 'short' kit of the Guillow's MiG 15 is being produced by *DPC Models* in the US (*http://dpcmodels.homestead.com/SRKS.html*) Marty comments: "At 16" wingspan it's roughly the size of the Easy Built Models; the plans are excellent, the wood and laser cutting good, there are wooden wheels (?) and an OK canopy. All this for just $11.5 – I bought two". At first sight, this MiG 15 appears over-complicated, quite a contrast to contemporaneous products from Keil Kraft and Skyleada. But it *is* nicely accurate and can be made to fly, and fly well. Marty himself has made great progress in the difficult field of 'micro-EDF' and found it an excellent test bed for his experiments.



Here's Marty again: "It builds a little heavy, but small changes can fix this, plus it has a really nice airfoil. It was a great match for a GWS 30mm EDF, requiring very few alterations. Others may want to adapt it for Rapier L2 or even L3".

Rick Carnrick has done just that, writing: "A couple of years ago I got a photocopy of those plans with some other stuff on eBay. The fidelity to scale is much better than Easy-Built [whose product is the Keil Kraft design slightly enlarged]. It had a homemade augmenter tube and was tissue covered. Every joint was liberally coated with cyano, so it was overweight, but it flew well and went OOS on its second flight!"

left: Rick's splendid realisation of the hitherto rare Guillow's MiG 15 with an internal Rapier L2 (above). A very pleased Rick after a wonderful flight and a long chase is shown below.



Rick's second MiG 15 (left) has a lighter augmenter tube (2.2g as opposed to 7g) and flies well with a standard L2 (as opposed to a 'proper' L2 HP). He confesses an addiction to these sorts of models and has an Easy Built MiG 15 for an L2 (or down-rated L3) should either ever become available.

To sum up: the Guillow's MiG 15 and their ilk, and published designs like Joseph Wherry's 1950 Skyrocket *(Smoky Addiction 3*), far from being 'turkeys' due to lack of any prescribed motive power, are in fact quite suited to today's needs, since they can be more easily adapted to take a Rapier, external or internal, vintage Jetex, micro EDF, or (and why not, strictly speaking), whip power.

However, marketing kits today without any indicated means of rocket propulsion is perhaps not a viable option for *Aerographics, Bluebottle Squadron* or *Shorty's Basement* et al – so let's hope the commercial pressures these guys can exert on Jan Zigmund (or Ryan Lever of Powermax) will be more efficacious than all the concitations of the ordinary modeller.

Peter Cock with an original Sharky in 1953. The markings are, I have on good authority, those of 56 Squadron. (Mike Ingram's archive).

I have been most heartened by the interest shown in my Sharkies, not least by Mike Ingram the designer. They have, like the Wrens, flown 'off the board' and go wonderfully with Rapiers. I've been asked if I can provide a 'kit' of the same, as I have for the Wren. Now making these is, I'm afraid, just not cost effective, even for £12.50 plus P&P. But I am happy to provide a 'set of parts' for both the Sharky and Wren to interested SAM colleagues – provided they are for flying, not just the mantelpiece!

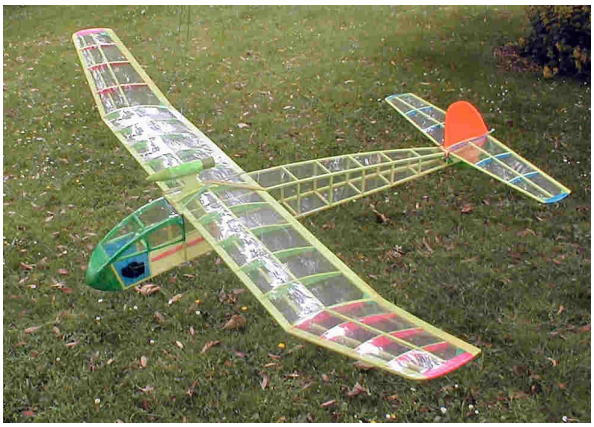
The Sparrow (left) is another of Mike's fine profile designs, and, like the Swift, (a *Tailored* silhouette 'scale' model) came complete with nicely die cut parts, a 50 motor, mounting clip, etc, and a very fine set of transfers. I do not know which squadron these fuselage flashes indicate.

There never was a Swallow; though a scale DH 108 with an internal motor (Jetex 200?) did feature in some early Jetex adverts. I have been unable to track down any details at all of this model.

The all-sheet Sparrow was designed for the Jetex 50 or Atom 35, so if built lightly it will be perfectly powered by one of those fabled L1s rated at 80 mN, if I can get my hands on some. It will be remembered that the specifications of L1s are no longer indicated on the box, so what one gets nowadays is a bit of a lottery.

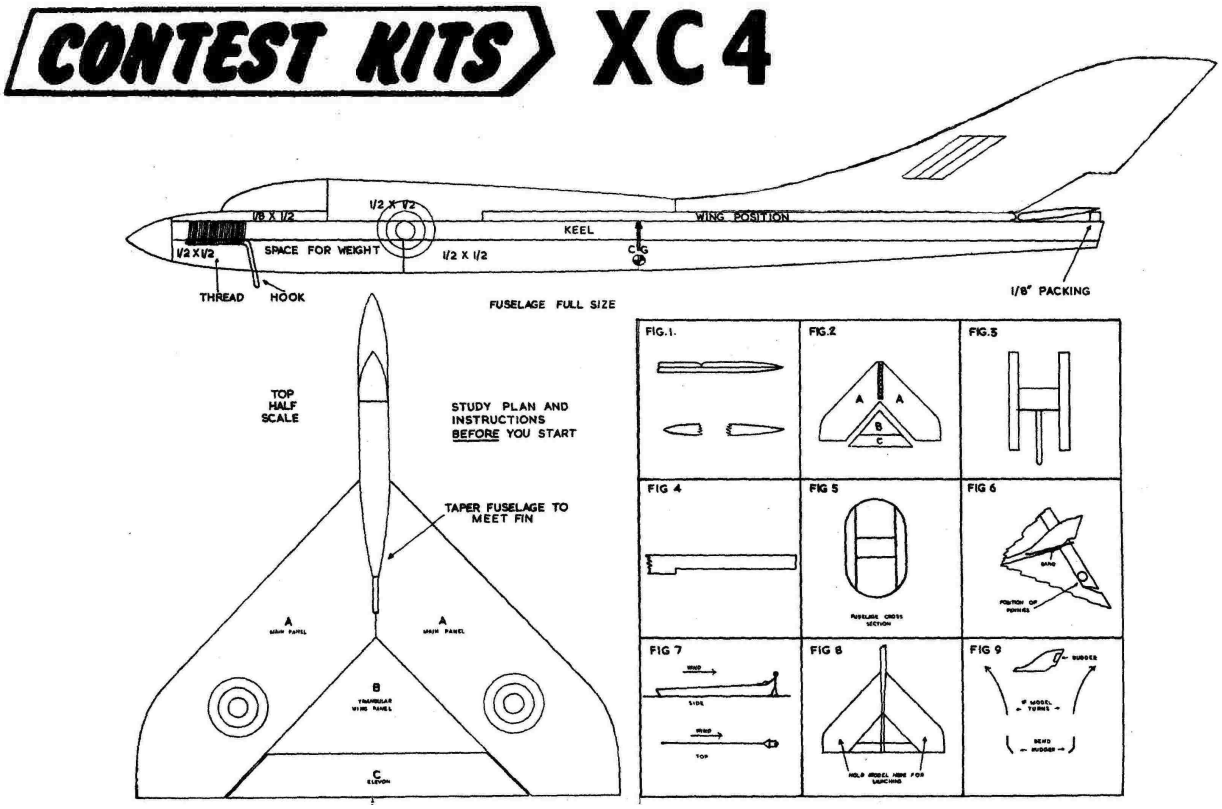
Tony Brookes, who, like John Emmet, belongs to the pantheon of well-respected former *SAM Speaks* columnists, contacted me after reading about our Rapier woes in January's article: "Concerning your five options, – there is a sixth, and thereby hangs a tale. When I was about twelve years old I built a scale Vampire from a Jetex kit. As you know, the Jetex 50 was mounted inside the fuselage and the tailpipe was represented by a rolled balsa ring, which got in the way of the jet efflux and neutralised most of the thrust. Flight characteristics were dire. So, after some thought, I decided to convert it to a glider. I took out the motor, put stringers and tissue over the gap in the bottom of the fuselage and fitted a tow hook. The model had a natural right turn, so for towing purposes I made a left turn trim tab from a bit of $^{1}/_{16}$" balsa clipped to one of the fins with a bent paper clip, and attached it to a secondary line which would pull it off when the model came off the towline. To my amazement it all worked a treat. It was my first ever towline glider and a complete success. Adjusting the bend on the paper clip eventually gave me a dead straight tow and the pull-off auto rudder proved completely reliable. So – convert your jets to towline gliders! Just be sure you can convert them back again if and when Rapiers become available once more".

Many thanks, Tony; I'm surprised you didn't advise us to propel our models with a Sparklets bulb! Tony's expedient is not unique: SAM member Charlie Mauger told me that, though he had some success running his Jetex 50 on the bench, he had great difficulty 'getting it to go' on the flying field. So he, too, put in a tow hook in his 'jets' and launched them that way. And very well they went too.



All this is a neat reversal of a more common practice that Messrs Michel & Kimber might consider an equivalent sacrilege – converting small towline gliders to Jetex. Some of these could, after all, have some pretty difficult towing characteristics –remember the KK Topper? The Veron Coronette and KK Dolphin (lovely design, inadequate wing structure) in particular responded splendidly to this treatment.

Left: Howard Metcalfe's KK Dolphin with an L2. the Mylar (tut tut!) can suffer from the occasional spark!



It's strange how a controversial quasi-scientific theory, 'Morphic Resonance' appears to be confirmed by the coincidences of every day life. The XC4 featured in *Smoke Trails 20,* which was written before I saw the very similar 'SC 4' in December's *SAM (35) Speaks,* and the XC 4 itself, with a request for more information, appeared in Roger Stanton's excellent 'Nostalgia Notebook' (*BMFA News*, Dec, 2008). The 'SC 4', which also had a 'blow back' elevator and was launched in a very similar fashion, is obviously related to the XC 4 – but how? BMFA Member Barry Slater has access to a complete XC 4 kit and sent me an email with both the plans and instructions. As can be seen, its construction, with a ½″ square hardwood keel and solid balsa fuselage, is quite robust. The comprehensive instructions (an extract of which is reproduced below left) stress the need for accuracy and for the fin to be *perfectly* straight. If this is not done, we are told, with some understatement, "You will have trouble on the catapult!"

. . . To get the correct tension put the model on a table and place three pennies on the elevon with their edges on the hinge line. These should keep the elevon down—remove one penny and the other two should be pushed up. This ensures that when catapulted the elevon will be down, but will rise at the peak of the climb to give you a good glide.

Now—a part not to be left out—stick 1/8 in. packing on to the hardwood at the back so that the elevon does not quite go flat.

All done? Good—now for *flying*. Double the catapult so you have two strands 4ft. 6in. long, fix a curtain ring to one end and the other end to the top of a STOUT post (*Fig.* 7).

IT IS ESSENTIAL WHEN FLYING THIS MODEL TO REALISE THAT IT TRAVELS VERY FAST AND SHOULD NEVER BE LAUNCHED WHEN THERE ARE PEOPLE ABOUT (UNLESS THEY ARE WARNED) OR WITHIN 300 YARDS OF HOUSES.

When all is clear pull the catapult back about eight feet, This should make the model climb straight and glide gently to earth. If there is any tendency to turn, bend the rear of the rudder *slightly* the other way (*Fig.* 9).

When confidence has been gained, flat out flights can be made and a stronger catapult bought. If you can build another XC 4 or get a pal to do so, magnificent formation flights can be obtained by launching the models together from catapults placed about three feet apart. The climbing angle can also be altered by trimming down the 1/8 in. packing under the elevon—a thin piece taken off will give a faster, shallower climb.

Apropos the somewhat extreme method of launching, note the dire warning in capitals in the instructions. This must have limited the places a conscientious flyer (if any) would have been happy to fly his model!

Ballistic rocket flyer Nigel Druce shared some reminiscences in an email: "Your item on the XC 4 brought back memories of a nice model which did actually fly. My brother built one and painted it bright red. The automatic device for which they were getting a patent was really not at all sophisticated, merely a rubber band tensioned so that the elevon remained down during the fast launch stage and flipped up to about 45° at the top of the climb. The level of tension required was the weight of one or two old pennies [about 1p in decimal currency] to keep it down. Nothing more complicated than that. The launching equipment consisted of an old cricket stump attached to a length of quarter-inch flat rubber [4′ 6″ was recommended for starters] and a length of thick thread with a curtain hook at the end. You pushed the cricket stump into the ground, attached the curtain ring to the piano wire hook in the fuselage and walked backwards holding the elevon down.

You then let go and the model should soar up to 100 feet or so and glide (rather speedily) down. We flew it successfully on the beach at Chapel Port in Cornwall when the tide was out. This was probably in August 1955. On returning home, it met its end, so my brother remembers, when it hit a barbed wire fence at high speed. I will try and build one for Old Warden as a change from our scale rockets".

Many thanks, Nigel. I rather like the idea of an XC 4 at Old Warden. I could get my own back on all those flyers of large i/c powered models who launch every which way and scare me wickless. XC 4 in hand, I shall stretch the catapult to its full extent, take careful aim, warn them by shouting, "fore!!" quietly and let go, . . . followed by, "So sorry old chap, did I startle you? The elevator isn't quite right yet, I'm afraid; you wouldn't have two old pennies I could borrow would you?"