

# ***Smoke Trials***

## ***Roger Simmonds***

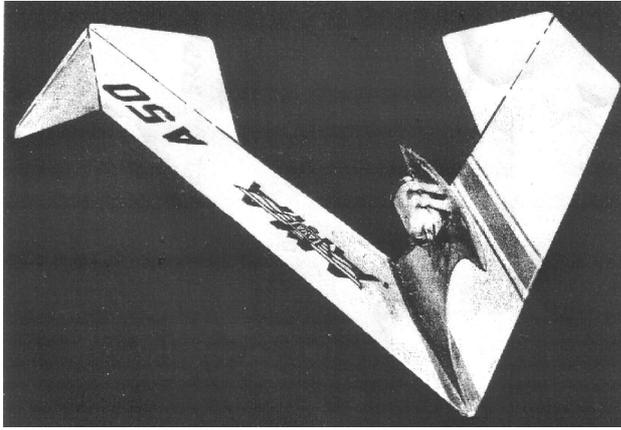
I have just returned from a splendid SAM Gala where there were a reassuring number of smoke trails in the air, from both Rapiers and real jetex motors, and I'll have some photos and a full report ready for next month. It cannot be denied that the problems with Rapiers have had some impact on our activities, but the stalwarts, Chris Richards, Andy Blackwell, John and Mark Digby, André Bird *et al* were carrying on in the face of difficulties, showing a typically stiff upper British lip, even if the one below was trembling with frustration over the inchoate communications – which are contradictory to the point of aporia – emanating from 'Castle Rapier'. We had it on good authority, and from more than one source, that Dr Zigmund had failed to find a new source of L2 casings and L2s were to be replaced by a de-rated L3 – a sort of 'L3-LT'. This at least made sense and was consistent; but then Bernard, who lives in Prague, had a long conversation with the lad himself whilst he (Dr Z) was attending a Junior Rocketry Competition. Below is a slightly edited version of Bernard's story as reported on the *Small Flying Arts* website:

"I was paid a surprise visit this afternoon by Dr Z ... here is what he told me: The problem with the paper quality for the L2 has been *more or less* [my italics] resolved! Dr. Z has found a new source for tubes of appropriately high quality paper (a shotgun shell factory apparently) and so will start production by next week or so. He hopes that within a month he will be back at full steam producing one L2 every minute or so (about 55/hour, 250/day). So that is good news for us Rapier junkies. Dr Z also told me that he is thinking about a new longer burning L2 but did not disclose more. Furthermore, he hopes that when he is going full steam again he can continue working on a mass-production line (he is currently packing each motor individually himself as he has no employees). Your Rapiers are, therefore, each worth about one minute of Dr. Z's life so treat them with love and kindness. Dr Z stopped development of the 'Euro 20k Mass-Production Machine' when the L2 paper [or case] problem appeared, but he hopes that this device will double his production rate to 500 per day.

On the future: Dr Z has some fears that the factory where he purchases his propellant is going to close; if this happens then we can expect a hiccup in production and possibly a price jump if he has to purchase from a distant and therefore more expensive source – so if you can't live without em you might wanna hoard them. Lastly, Dr Z says he is overwhelmed by a huge backlog of orders so don't expect new Rapiers soon as it will probably take a few months for the motors to show up at your favourite Rapier emporium. Any questions?"

Hmmm ... suffice it to say that this Upbeat Update has left me as confused as anybody else, and I am very suspicious of that 'more or less'! As to questions, well, one obvious one is, "what has changed in the last couple of weeks to justify Dr Z's optimism – has he tested the new cases and got some good results and statistics?" I'm sure I don't know. Meanwhile, on the evidence of what I've seen on the flying field, the smart Rapier flyers are having fun with L1s; brave souls are using L3s, and I am using up my old stocks of L2s with reckless abandon, hoping to defy the odds, and, slightly less frenetically, enjoying flying real Jetex again after more years than I care to remember.





Having had reports of problems with both L1s and L3s (low power with the former, burst cases with the latter) I've been looking for a design flexible and robust enough to handle anything. And here it is – courtesy of Gordon Rae, who kindly sent me the plan – Theodore Grzeszczak's curious 'Jet-Liner'. Being all-sheet, with a motor mounted on a cabane well away from the flying surfaces, it will be ideal for using up all those L2s of dubious provenance lurking in your flight bag!

It was first published in *Flying Models*; I have no date, but the Jetex 50B implies at least 1953. Mr Grzeszczak writes, "This all-balsa Jetex 50-powered flying wing is almost indestructible [good!] and despite its small size the flying qualities are great. Total weight was kept down by the proper selection of quarter grained balsa. The generous amount of sweepback with the upturned tips affords good longitudinal stability and the cabane area, along with the drooped tips, provides good directional stability. The placement of the jet motor gives a high thrust line, which prevents looping toward the end of the flight when the motor is delivering maximum thrust".

I have not seen this angular model on the flying field – not even in the hands of André Bird, our own arch-aficionado of idiosyncratic all-sheet designs. I would guess that if built light it will be more than adequately powered by a 'standard' L1, and can easily be resized for L3s, or any L1s of especially low power. The designer reports no peculiarities of trimming, but significantly comments; "A slight indication of stall will prevent a tight circle from developing into a spiralling dive". This is good advice which I confess to following when trimming both the Wren and the Sharky.

