

Vintage Combat

The First Ten Years


1989 - 1998

Compiled by Mick Lewis



Articles

1990



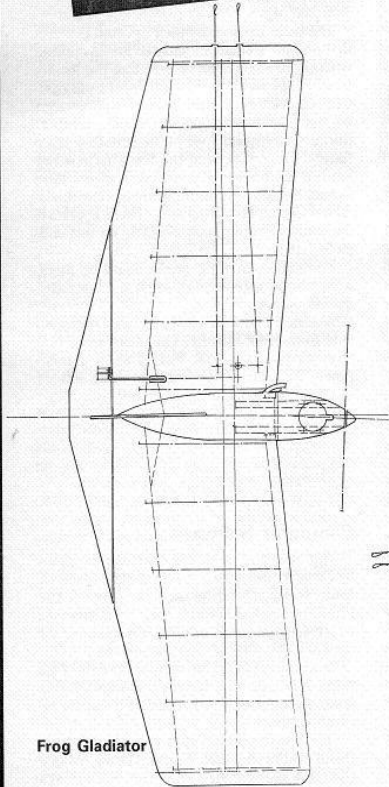
LOOK BACK IN *Anger*

Frank Smart surveys the Vintage Combat scene.
How can you resist . . . ?

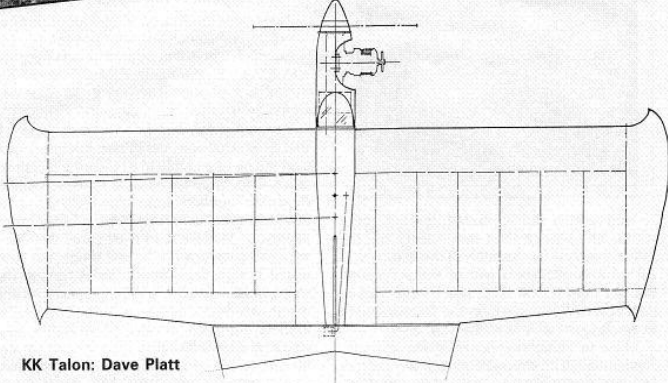
IT had to happen. Perhaps as a reaction to the ultra-fast, super-tight turning (and often expensive) F2D craft of today, a healthy flurry of activity has resulted in the appearance of Vintage Combat models in the current control line circuit. And who knows – a dash of nostalgia may well have had a lot to do with it, too.

Choosing a cut-off-date as late as 'pre-1971' opens up a vast field of likely subjects. Competitors are now making serious moves towards choice of subject, perhaps slightly adapted to suit flying styles and available motors.

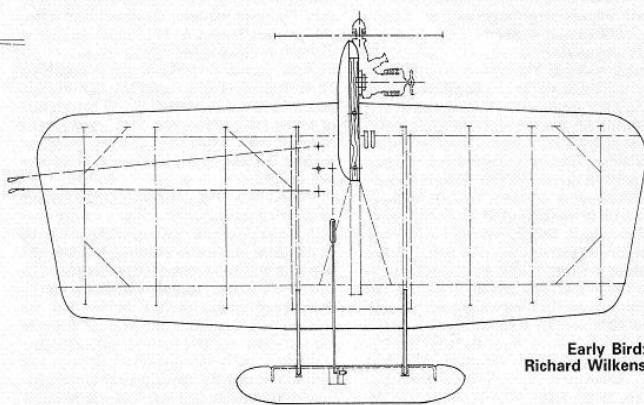
Interest in Vintage at Three sisters on 1st April exceeded that in F2D. Strong support was



Frog Gladiator

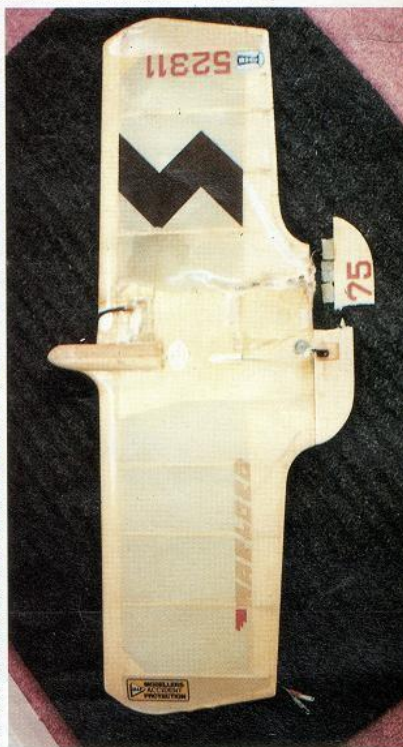
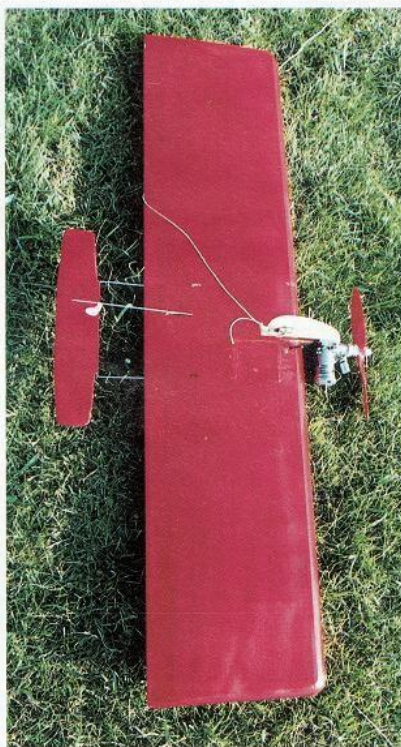
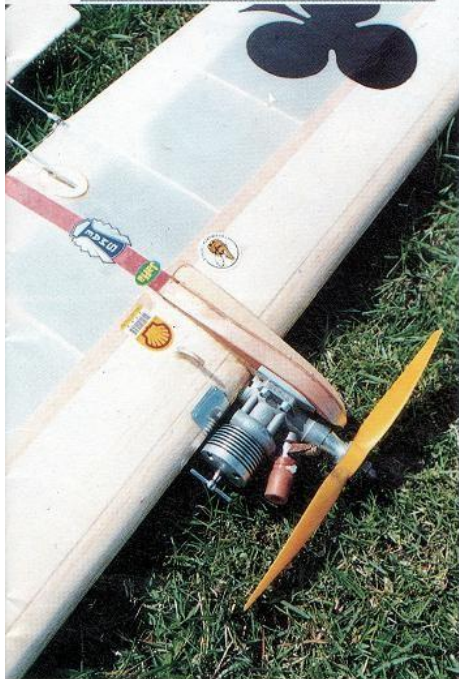


KK Talon: Dave Platt



Early Bird:
Richard Wilkens

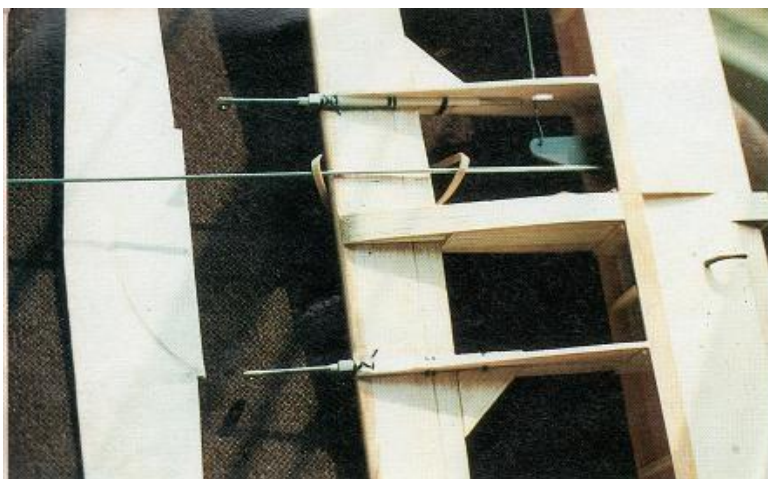
Opposite page: A nice pair – Frank's duo of Chaos combat craft from 1963. Below: Oliver Tiger IV provides the urge. Right: 'Original' Liquidator during restorative surgery.



Above: The Chaos duo again, seen at the Peterborough meeting on 1st April. Centre right: Dave Willis also chose Chaos but went for ST G21-15D power. Far centre right: Warlord is another potentially-winning choice. Despite battle damage seen here, this one finished its bout at Peterborough. Right: Steve Malone readies his PAW 2.49 TBR Warlord.



June 1990



Top left: Note 0.040in ply on top of Chaos' elevator; underneath too; guarantees something left to control model even after 'wind-air' removes outboard sections! **Top right:** Robust components of PAW 2.49 TBR – a fine choice. **Above left:** Simple wing construction – benefits from thread binding with cyano at strategic points, such as at tips. **Above centre and right:** Centre section and engine pod close-ups reveal straightforward layout; easy access to mounting bolts and nuts very much an asset.

also evident at Peterborough Vintage Day the following weekend. Several 'faces from the past' were in evidence! Peterborough results were as follows:

- 1 Steve Malone Warlord PAW 249 TBR Nylon covered
- 2 Dave Harrison Chaos PAW 349 19D Nylon Covered
- 3 Frank Smart Chaos PAW 249 TBR Nylon covered
- 4 Stuart Vickers Warlord PAW 349 19D Iron-on fabric

What's the choice?

Enormous, as our table shows. For Peterborough, Steve Malone chose the Warlord for durability – and because of its excellent contest record. I decided to go for the model with largest wing area to allow room for structural alterations, so Chaos (a 1963

design by ex-Aeromodeller editor Peter Freebrey) and the Ruter-Ess from 1968 were built.

Remember, whichever you choose, that the majority of models suitable for Vintage Combat were designed for contests involving two models per bout. Current 'Vintage' rules demand one model per bout, with three models permitted for each event; so strength is an absolute must, especially bearing in mind the 'ground point' penalty rule. My aim was to try building techniques in current Russian style – without foam, of course! Low wing loading is essential, so try for a finished weight of 16-17 ounces. The original specification of Chaos quoted 17-18ozs; mine came out an ounce under that, thanks to the following modifications:

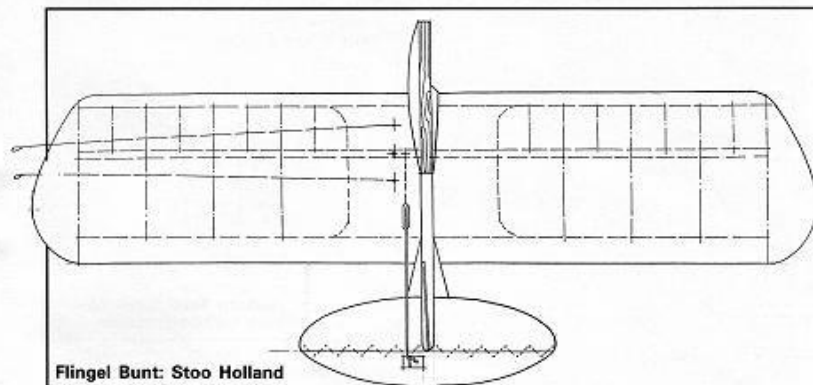
- (a) Substitute a single 1/8in ply bellcrank

mount, laminated from two layers of 1/16 ply, for the double 1/8in ply mount specified. Piano wire leadouts are replaced by seven-strand wire. The pivot bolt is trimmed to minimum length.

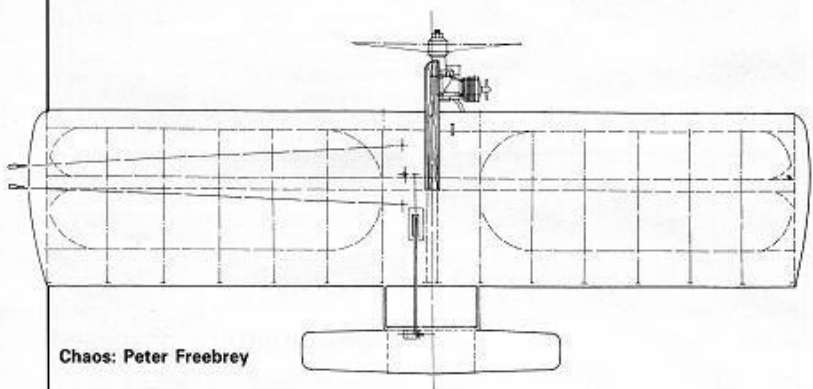
- (b) Ply boom supports are omitted; engine bearers are shortened, and the 1/1in sq beech spacer omitted.

- (c) A light, pre-formed leading edge (LE), reinforced on the back edge with 0.04in ply, is laminated from tapered spruce, 3/16in diameter at maximum width. This replaces the specified construction.

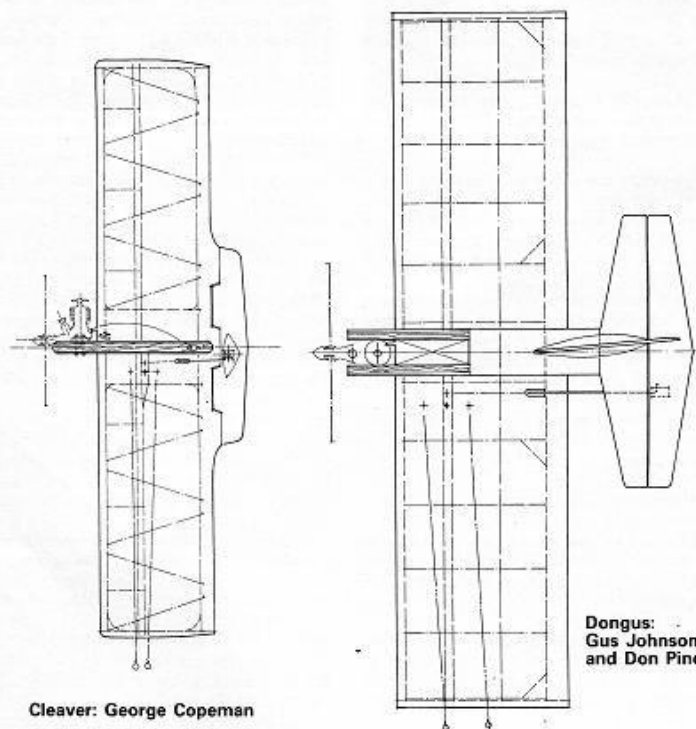
- (d) The double 1/2 x 1/4in balsa spars are replaced by spruce or lime equivalents, 1/2 x 1/8in maximum, tapered and bound at the tips with strong thread, cyanoed to fix.



Flingel Bunt: Stoo Holland



Chaos: Peter Freebrey

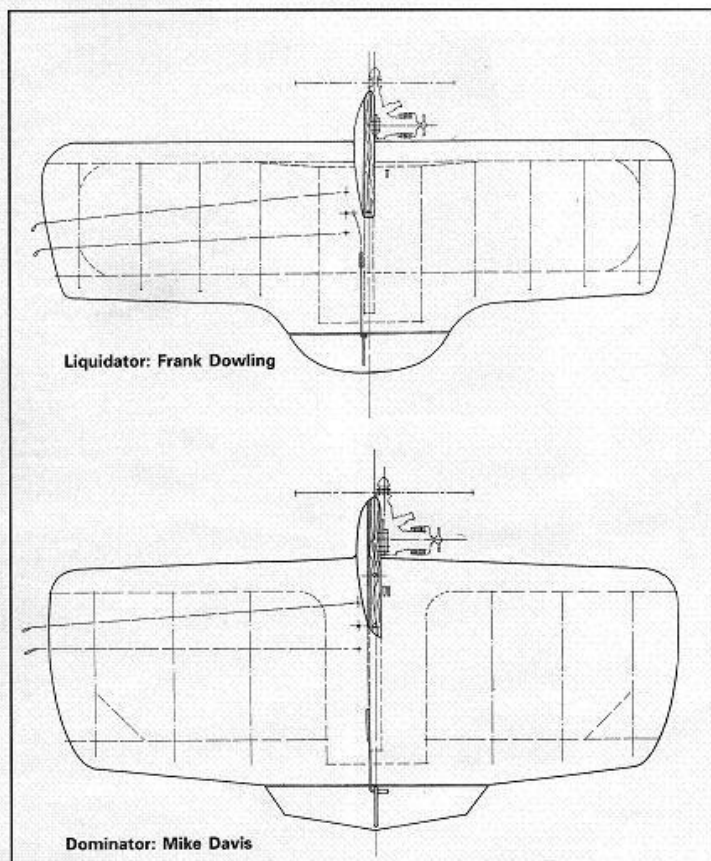


Cleaver: George Copeman

Dongus:
Gus Johnson
and Don Pinckert

Provisional Rules for Vintage Combat

- a A vintage combat model must be built in accordance with a design which was published prior to Jan 1st 1971 or was kitted prior to that date.
- b No modifications to the outline are permitted but changes to the structure are permitted to correct weak points in the original design. Such changes must be carried out using constructional techniques that were commonly used at the time that the model was in use. The use of glass, carbon, kevlar or boron fibre reinforcement is not permitted. Modern adhesives are permitted.
- c The model shall be covered in a material that was available at the time the model was in use, i.e. tissue, nylon fabric, silk fabric, terylene netting or a combination of them. The use of modern coverings such as "Solarfilm", "Solartex", "Micafilm" etc. is not permitted.
- d Control line length from the grip of the control handle to the thrust line of the model shall be 15.92 metres \pm 0.04 metres. Only two line control is permitted and each of these lines shall be of a minimum diameter of 0.34mm.
- e Streamers shall be of crepe paper, 25mm wide and 3.0 metres long, attached to the model by 2.0 metres of string.
- f A contestant will be allowed to use one model per flight with a maximum of three models per contest.
- g Two pitcrew are allowed per contestant and they will be required to wear safety helmets throughout the contestant's flight.
- h A contest shall normally be run by a referee (overall timekeeper) and one scorer per contestant.
- i A contestant's flight commences with a 30 second period for engine warming after which the engine must be stopped. This is followed by a further 30 second period for last minute adjustments and refuelling. The last 10 seconds to the starting signal shall be counted down by the referee. The flight shall last 5 minutes from the starting signal and its completion shall be signalled by the referee.
- k A contestant whose pitcrew fails to start his engine within 2 minutes of the starting signal will be eliminated.
- l Scoring will commence at the start signal and finish at the completion signal.
- m 1 point will be deducted from a contestant's score for every full period of 15 seconds that his model is not airborne during the flight period.
- n 5 points will be added to a contestant's score for each single cut of the opponent's streamer or string with knot.
- p Contestants will compete against each other in a knockout competition chosen by random draw. The losers of each of the first round of flights will be allowed to compete in a further losers re-fly round. The winners from this round will be drawn with winners from the first round to provide a second round of contests. The rounds will continue until 8 contestants are left so that quarter, semi and final rounds provide an overall winner.
- r A contestant will be eliminated from the contest by the referee if he deliberately attacks his opponent's model rather than its streamer or performs dangerous manoeuvres with his model near the opponent's pitcrew.



Eligible models

Unlimited	A.M. 369	Dec. 80,	p656-658
Shrike	A.M. 634	Sep. 56,	p484-485
Duellist	A.M. 648	Mar. 57,	p150-151
Sword	A.M. 674	Oct. 57,	p510-519
Pedro	A.M. 704	Aug. 58,	p412-413
Korm-Batt	M.A. 288	Aug. 58,	p278-279
BlackGhost	M.A. 295	Nov. 58,	p360-361
Rogue	A.M. 716	Dec. 58,	p643
Peacemaker	A.M. 687	Feb. 59,	p68-70
Razor Blade	A.M. 729	May 59,	p222-223
Dongus	A.M. 789	Feb. 61,	p74-75
Cleaver	A.M. 799	Sep. 61,	p466-467
Chaos	A.M. -	Jun. 63,	p294-296
September	M.A. 385	Nov. 63,	p334-335
Warrior	M.A. 389	Mar. 64,	P90
Sennapod			
Razor			
Blade '64	A.M. 729	Jul. 64,	p332-333
Flingel Bunt		Jan. 65,	P20, 22-23
Streamer			
Ester	A.M. 883	Jun. 65,	p280-281
Early Bird	M.A. 1022	Sep. 65,	p232-233
Dominator	A.M. 093	Dec. 65,	p581
Turncoat	A.M. 926	Feb. 67,	p74-75
Rutess	A.M. 989	Dec. 68,	p657
Liquidator	A.M. 998	May 69,	p230-231

The Proposition

A.M. Annual 55/56, p88

Schuco-Hegi

A.M. Annual 59/60, p83

Pallisandra A.M. Annual 60/61, p77

Pallisandra C/L Manual 61 p131

Zack-Zack C/L Manual 61 p131

Falco A.M. Annual 63/64, p106

Piraja A.M. Annual 65/66, p46

Kaniblie A.M. Annual 68/69, p92

Satana A.M. Annual 69/70, p32

Apache A.M. Annual 70/71, p72

Bradshaw Model Products

Wildcat

Contest Kits

Frog

Keil Kraft

Mercury

Pegasus

Top Flite

Combat King

Gladiator

Firebird

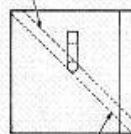
Talon

Toreador

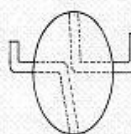
Warlord

Flite Streak

Top vent pipe to front inboard corner



Bottom feed pipe to back outboard corner



Mustard-tin tank. Traditionally reliable! Solder all seams. 1/8in diameter copper pipes used.

centre rib first; then tips then front and back edges, overlapping in normal style. 'Difficult' overlaps may be stuck with balsa cement. No pins - no dope fumes so far...

Dope and fuel proof in a well-ventilated room, or outdoors if bubbles appear they must be ironed-down between coats when dope is dry.

Ruter-Ess may be given the same treatment. Incorporate 1/2 x 1/8in spruce fuselage spars top and bottom. Engine mounts on both models are vulnerable; I chose a tougher system as shown in the photographs.

You may think some of these modifications drastic. Why not let us know?

Motor matters assessed by Steve Malone

Observation of the vintage Combat class at the 1989 Nationals left me with the definite feeling that this was not destined to be the Oliver Tiger benefit fund that I, for one, had anticipated. Whilst it is true to say that a number of competitors did use the classic Oliver Mk IV to good effect, a number of other makes were also in evidence, illustrating the fact that motor technology is just as important in this event as in FAI combat.

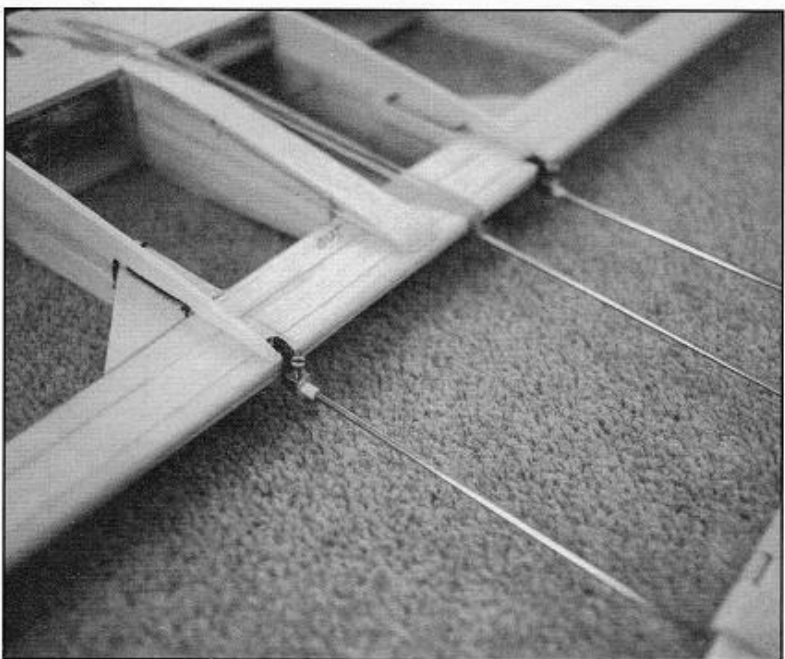
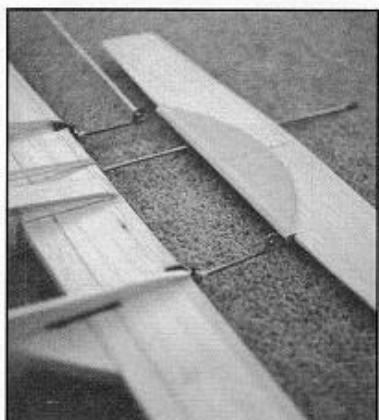
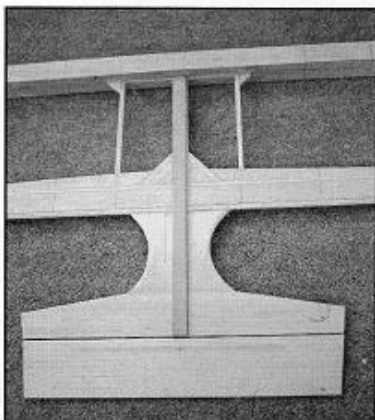
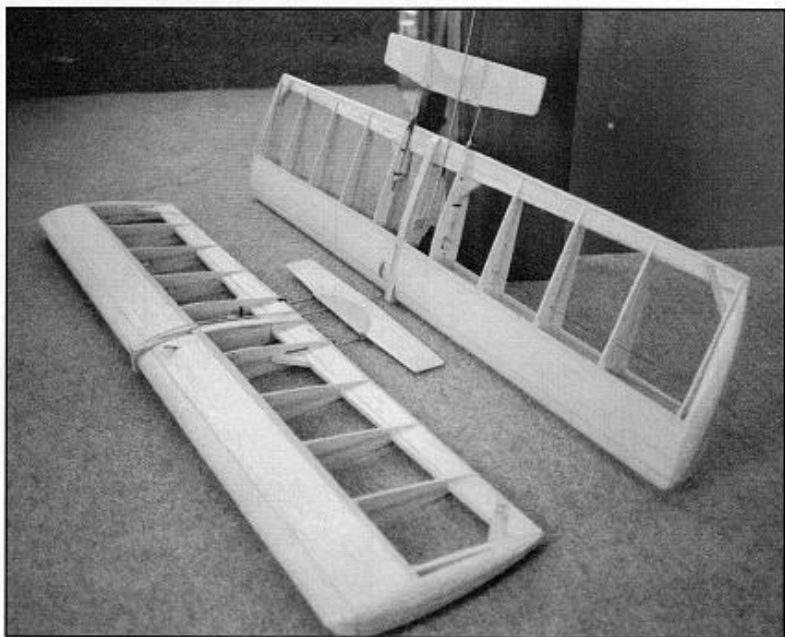
This led me to question: what criteria should one consider when selecting suitable and eligible motors for this event? Two factors spring immediately to mind. Firstly, performance. The motor must be at least as powerful as your opposition's motor, preferably without the need for any modification from standard trim. Secondly, durability. The motor must be able to withstand the abuse which combat flying inflicts. Following on from this, a good spares and repair service is essential if one is to keep the motor serviceable for competition use.

Consideration of these criteria led me to purchase a PAW 2.49 TBR, having been particularly impressed by its potential at the 1989 Nationals where it was used by both the second and third-placed competitors. I was also mindful of PAW's 'by return' spares arrangements.

Examination of the motor reveals some considerable development has taken place recently. The most obvious change is the use of a 12mm diameter counterbalanced crankshaft, running in twin ball races. The liner is of typical PAW arrangement, having three large-volume transfer ports equally spaced internally around the circumference. The steel piston is a lapped fit in the liner.

As a guide to performance, Tony Eifflaender kindly tested my motor for me prior to despatch - giving the following results:-

Aero Modeller



Eligible motors

The engine shall be a diesel of 2.5cc maximum displacement if constructed with ball/roller races or 3.5cc maximum displacement if constructed with a plain bearing crankshaft. Engines permitted under this definition (any mark or model, unless otherwise stated) are as follows:

A.M. 25
A.M. 35
D. C. Rapier
E. D. Racer
Elfin 249
Enya 15D
ETA 15
Frog 249
Oliver Tiger Mk.II,III,IV
O.S. 15D
PAW 249
PAW 19D
MVVS 2.5/1958
Rivers Silver Streak
Super Tigre G20/15D
Super Tigre G30
Taifun Orkan
Webra Mach I,II

The engine must be fitted with a domed safety spinner nut. Only section fuel feed systems are permitted. The propeller is to be a commercially available 8" diameter x 6" pitch item. Modifications to it, other than enlarging the hole in the hub, are not permitted.

Top left: Chaos models took two weeks of evenings to get this far. Centre ribs of 1/4in x 1/8in balsa are capped to 'flush up' with LE sheeting. Far left: Large tail of Ruter-Ess needs reinforcement. Bind main fuselage spars with thread close to hinge point, too. Left: Chaos elevator may be aligned horizontally with wing as shown. Shim brass is bent and soldered around wire; drill retainer hole accurately! Below left: Underside of Chaos, showing five-amp connectors and locking screws. Laminated balsa/ply fuselage is bound at TE prior to fixing last layer of balsa.

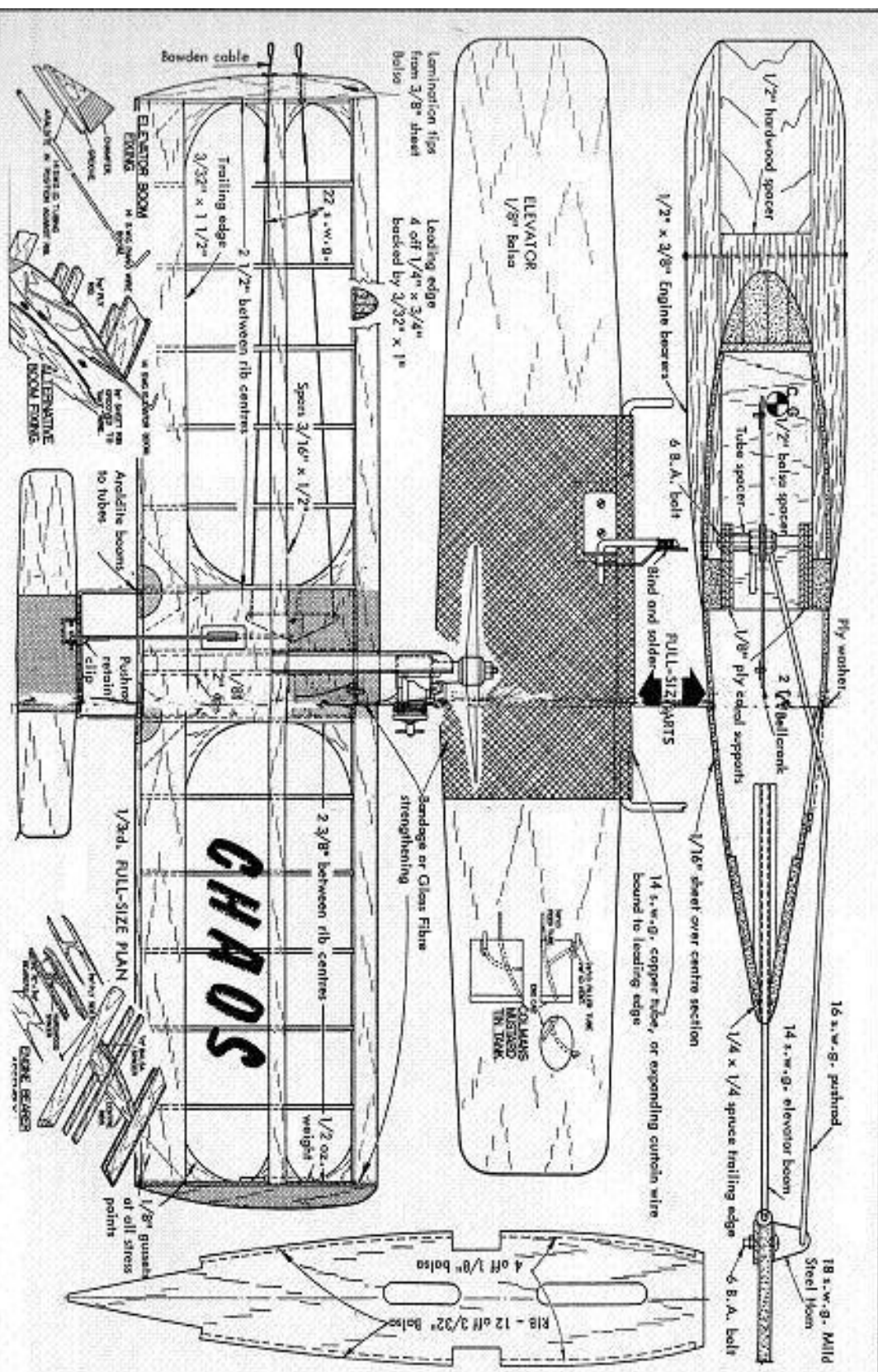
Prop	RPM
7in x 4in	19,000
8in x 4in	15,000
8in x 6in	13,600

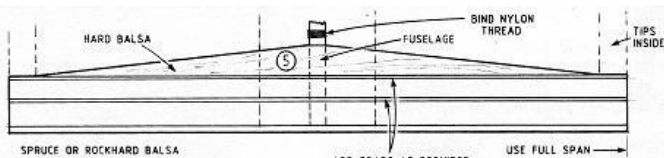
Having selected a motor, how can consistent performance be obtained? It is essential the motor is firmly mounted to eliminate any vibration. Then one must consider the fuel tank. For vintage Combat the Colmans mustard tin tank is ideal, and is still available from many model shops.

All suction-feed motors tend to run lean through inside manoeuvres (loops), and richer in outside manoeuvres (bunts). Motor settings are therefore a compromise between these two tendencies. This is not difficult to achieve provided a suitable fuel tank is used, and the motor is fitted with the correct size venturi.

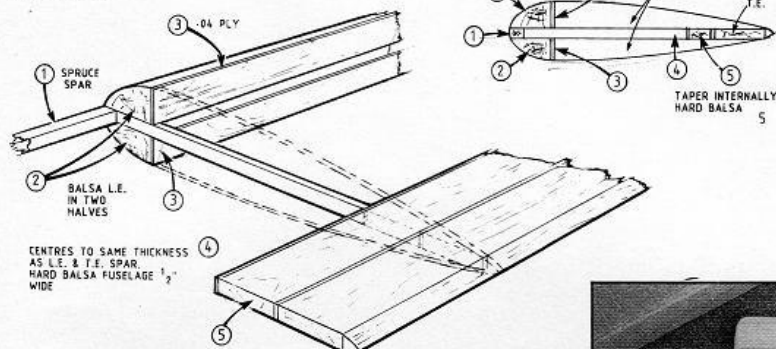
As a guide to obtaining a good setting on the ground, simply start from a rich motor setting and lean out gradually, sharply dropping the front of the model periodically. If the motor richens as the nose drops then lean out a further quarter of a turn, and repeat until no difference in engine note is detected.

The rest is really up to you, and lots of practice!





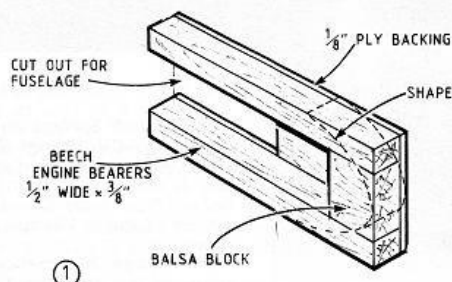
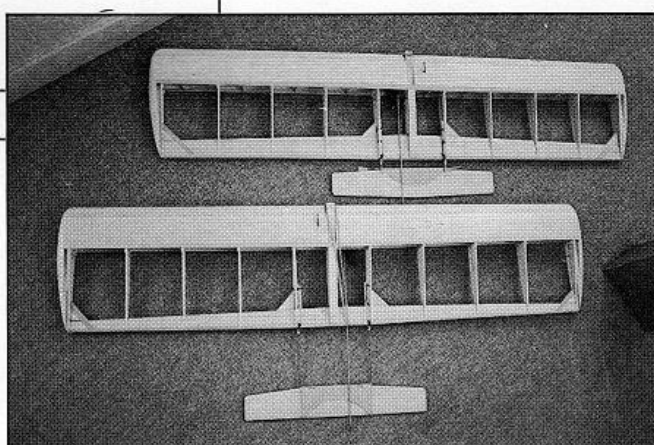
Trailing edges for straight wings – suitable for Chaos, Ruteress, September Warrior.



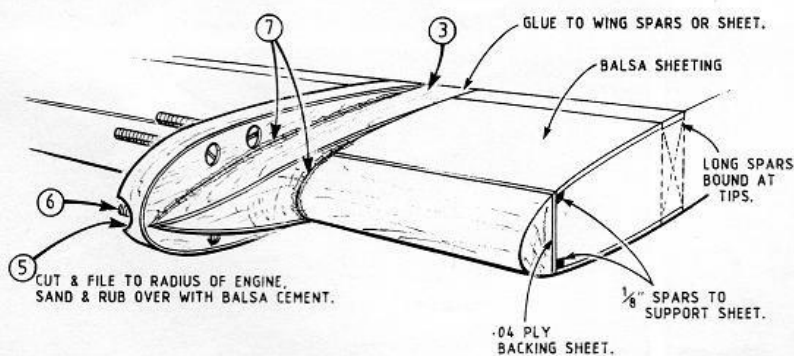
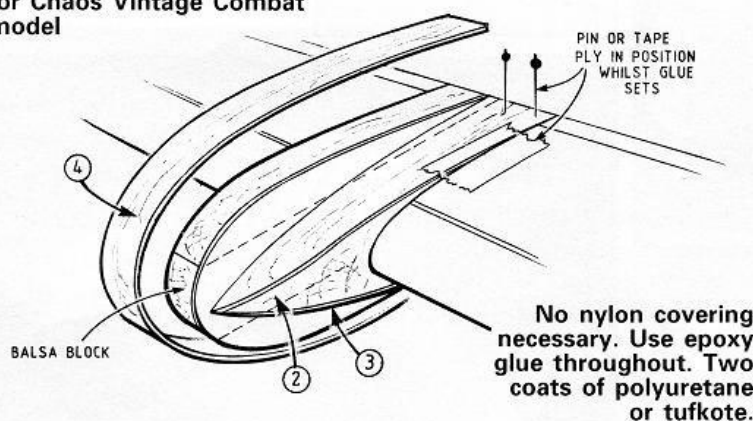
Vintage Combat hints!

Parallel spars and trailing edges produce weak points just outside the fuselage both sides. This also applies to the leading edges and the main reason for tapering spars to retain the true vintage planform and retain strength.

Flat build centre core on building board comprising items 1, 5 and tips, all glued together, then infill with a 4 rib and fuselage centres. When dry laminate leading edge flat on board with weight or cramps preferred; built up fuselage, bind a TE then add all half ribs, which can be light to medium balsa. This method overcomes the variable rib slotting on the tapered TE, adds considerable strength and results in a warp free structure.



Exposed bolt-head engine pod for Chaos Vintage Combat model



Improved Chaos models, above; compare with original drawing shown at reduced scale on opposite page.

1. Assemble pod in normal way off the model. Shape front round beavers and block.
2. Cut out and fit 1/2in med. balsa sheet backing. Do not round nose until top and bottom 1/16in ply caps have been glued in position.
- 3.
4. Wrap .04mm plywood 1/2in wide around finished pod, glue epoxy and hold in place with pins. This adds strength to front where cut out is made for the engine prop driver on the PAW. last stage at 5.
6. Drill undersize for engine bolts and screw bolts in tight fit. Use large washers. Bolts are left in model.
7. Add epoxy glue fillets.

1994



Frank Smart presents an updated version of the 1968 Swedish combat design by Staffen Larson (APS plan CL 989X) and outlines the rule changes for 1994

Frank Smart with his original Ruter-Ess Mk2 at the 1992 Cabbage Patch Nats after burning some midnight oil. Note that it is sans fins at this stage. Cabbage Patch Nats again but this time 1993. The dedicated pit team of Steve Malone (rt) and Andy Clarke attend to the model just before a mid-air removed the outboard wing and the tank.



Ruter-Ess

There is no doubt that this model, brought into the UK by Richard Wilkins, was one of the major turning points in combat design away from the conventional Razor Blade plan form. The model is instantly recognisable with its distinctive shape, average wing area, long moment arm, fins and large tail area. When built to the original specifications and flown solo with a good motor, it is fast, turns tightly and has a good recovery. It requires 100% pilot concentration. Chris Moore of Bilston MAC loves the model and often demonstrates the capabilities with his very special Super Tigre G20D up front.

However, in the rough and tumble of a combat bout, the sparkle fades. It tends to lose line tension up wind and does not like line tangles, plus the very tight turning qualities are at times a disadvantage. Line tension is very difficult to recover and they can often be seen floating out of control across the circle. If you meet with a minor collision or rough landing it's all over when only one model allowed. Even back in the sixties I clearly remember two of these being wiped out in a "two models each" contest in about 3 minutes, so what chance have you with one!

I have noted several strengthened versions in competitions over the past two seasons but the best one, unfortunately, had modifications to the original dimensions. Mike Whillance won the 1992 Nationals with an acceptably modified

version but confirmed my earlier comments about keeping it under control. This is a model that needs a lot of sorting before you go into the fray. Tackling the survival rate is the first hurdle, even if it does not come up to your expectations, you do have a good chance to make adjustments in trimming. My Ruter-ess Mk2 has now survived several tent peggings and mid-air knocks with a weight penalty of 3oz over the original 12oz design.

Construction

In 1990 I built two strengthened Chaos models alongside a Ruter-ess, but completion was put on hold until the Chaos designs had some contest time. These models served me well, 3rd place first outing, followed by an article in AM on how these were reinforced. Both Chaos models are still in use, but slowing down with minor repairs. Some of the construction ideas were incorporated into Ruter-ess, but the tail end needed a re-think. 1/2 X 1/8" spruce spars were installed on the top and bottom of the "fuselage", extending out to the hinge line and span-wise spars set in the tail to reduce flexing. I had already decided to omit the structural fins in order to fully test the tail structure. This I had done before with Boogaloo, an Orcrest clone still hanging on the wall from 1971.

If the tail mods were successful, the light tissue covered fins need only be cosmetic. Leadout rake was modified to improve line tension and I later found slight engine off-set was needed plus a bit more tip weight with less powerful motors. It needs a 60cc wedge tank because consistent runs are a must for keeping good line tension. At the time I needed to test some "ripstop" nylon. This was a mistake because it kept going from very tight to very slack - although it did hold the model together for the whole season.

The building sequence is well documented on the plan. It is vital to build the 3/16" central core perfectly flat using epoxy glue (see sketch), and then leave it firmly weighted to set for a few days. Use PVA to add the unshaped ribs to one side and again give it ample time to set whilst held flat under weights. The entire tail plane is constructed flat and covered. After fitting the top and bottom spruce fuselage spars to the wing, dry fit the tail plane and temporarily link up the controls to ensure free movement. After covering the wing, the tail can be glued

between the spars, sighting for tail-wing alignment from the rear and holding the tail in position with masking tape and pins whilst the epoxy glue sets. Then fit the pre-covered tissue fins when any final line up adjustments can be made. The fins, whilst mainly cosmetic on this model now, are essential to comply with the revised 1994 provisional rules. Fit the single top fin first, allow to set, then the two small under-fins.

At first the modifications appear complicated, but the design does lend itself to many personal adjustments within the rules such as, .08 ply fuselage strips instead of the heavier and bulky spruce, omitting the two fuselage gussets, returning to conventional 1/16" balsa sheeting at the centre section, experimenting with an all flat 1 1/8" wing section for additional steerability and line tension, omitting the spanwise tail and elevator ply reinforcing strips, reducing the

balsa content to obtain a lighter model. Even so, the model requires a really fast motor and engine feed set up to compensate for the fins/tail drag and keeping it out there doing the business.

Note: In my opinion, in conjunction with the fuselage spars, the balsa grain in the curved spacer between wing and tail should be spanwise as shown on my drawing to help reduce tail twist with such a large tail, and not as per the original where it is fore and aft.

The 1968 original Ruter-Ess was powered by the Super Tigre G20D, about the same weight as a MK111 Oliver Tiger, 5oz. My version is heavier and the MK IV (60z) Oliver Tiger and PAWS are ideal close up to the leading edge. On the original the wings do taper to the tips by 1/8", a point often missed. Aim for lightness with strength taking great care to select the lightest balsa where specified throughout, to act as packing and let the other materials hold it together.

VINTAGE COMBAT RULE CHANGES

Whilst allowing traditional structural and material modifications, the new rules require contest directors to monitor more closely for alterations which change the overall dimensions and appearance of the original model. The rules are now more specific and do not refer to other combat disciplines for clarification. The 1993 model list has been increased by 30 pre-1971 designs and supersedes the previous rule of 'published and kitted models only'. Many good "own designs" and kits did not get published as a plan.

Other models published just outside the cut

off date 1st Jan 1971 were, in fact, designed well before then. For example, APS plan No 1134. Orcrest by Steve Jones designed late 1969. A milestone in combat development winning Cranfield prior to the 1971 Nats. Models were not published until the designer went on to a new model, which made sense to stay competitive.

Rules, including the complete model list, are available from the BMFA, Chacksfield House, 31 St Andrew's Road, Leicester LE2-8RE. Send for Book N02 (combat) and include £1.50 and an A5 SAE with a 29p stamp.

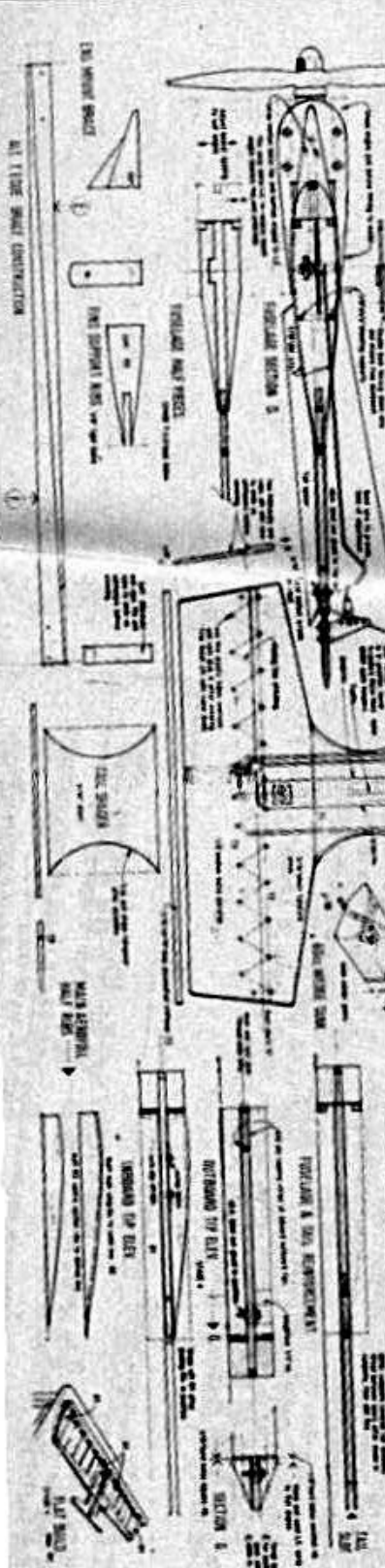
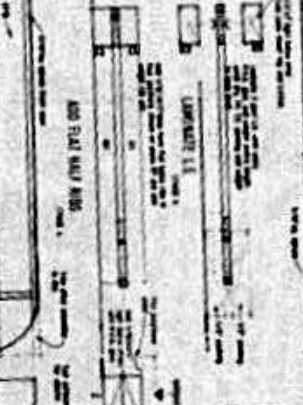
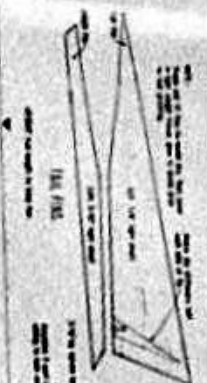
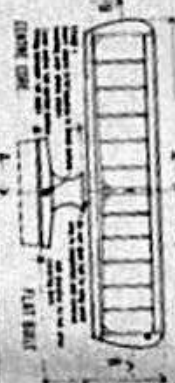
Conclusion

Vintage Combat was given a trial run at the 1989 Nationals and turned out to be a fun event with just a few people flying old models. Since then interest has risen considerably to nearly 50 entries in 1993 mainly due to the event retaining the relaxed fun element, good spectator appeal, minimal building requirements and some regular events to attend. I receive many letters confirming this but they also show concern to keep it this way. Collectively this should not pose a problem and the BMFA Committee are aware of this based on previous experience and would welcome, in writing to their offices, any reasonable constructive proposals bearing in mind it must be kept simple and easy to administer. The extra models on the list will open up more opportunities in traditional building and model selection, so it will be interesting to see the choices made for 1994. For a more detailed list of plans availability and an accessories catalogue send £1.50 and an SAE to me at 'Rosebank', High Street, Upton St Leonards, Gloucester, GL4-8DJ.



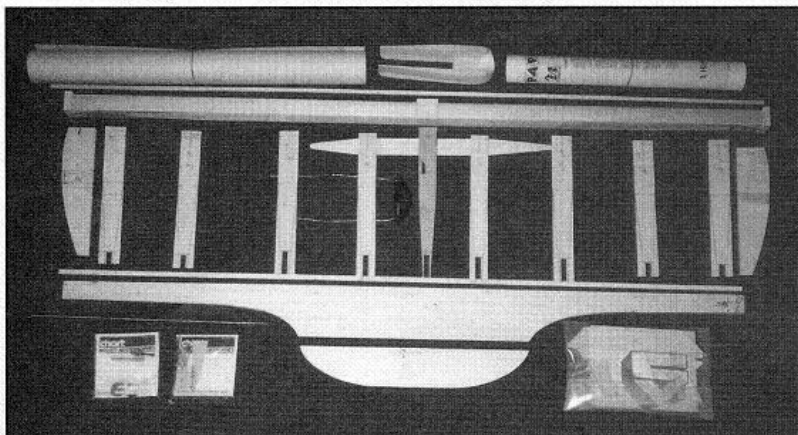
A 1991 picture of Chris Moore of the Bilston MAC with an original Ruter-Ess. Very fast and turns tightly with an STG20D.

RUTER ESS 200
 Approved by
 AERO-REGISTERED PLANS SERVICE



1995

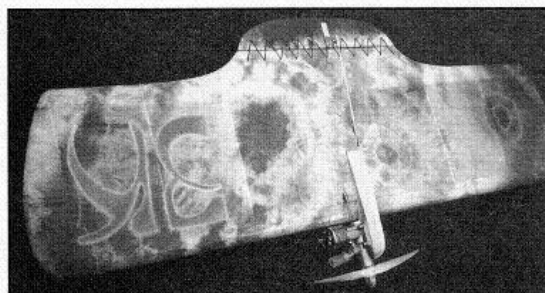
This is what you get in a beautifully prepared kit of the Super Twister from Frank Smart.



The Super twister



With so many nice little touches the model is very easy to put together.



The finished article ready for battle and finished in Alan's tie-dyed style. Note he is a member of the Three Kings club.

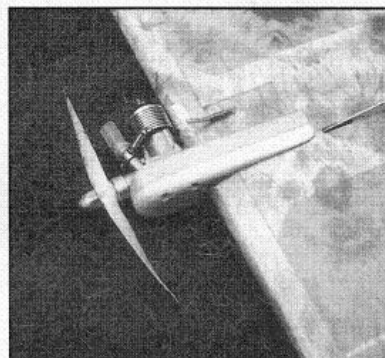
Frank Smart is well known for his support of Vintage Combat and can take much of the credit for its current growing popularity. Whilst some people build from plans others prefer a kit and for many years the market for viable combat models been unfulfilled. Only the famous Pegasus "Warlord" has been easily available, and very competitive too in the right hands. The current level of activity has

encouraged people to look for more eligible designs and a huge number of "new designs" have surfaced thanks to Frank Smart's enthusiasm and research alongside the existing Nexus Plans Service. Frank has already made kits for the "Yeti" and "Warmonger" and has now added the "Super Twister". These have all been limited edition, hand made, "super-kits" and we now know what to expect from Frank's workshop.

The first impression is of a substantial box (built by Frank) with not too much in side. A rolled plan, some history and a few well selected pieces of balsa and hardware etc. This is rather deceptive because all the hard work is done! Leading edge laminations are all in place and marked for foolproof accuracy, leadouts are ready bound and soldered on the bellcrank, the engine pod is ready built, gussets made, bellcrank mount drilled and all reinforcing ply ready to glue in place. Even the elevator has an anti-crush strip under the horn and the horn plates are pre-drilled and shaped. The centre rib is pre-laminated and slotted and the outer tip is balsa/oboeche laminated. The trailing-edge is pre-cut and "ended" for balance. The rolled plans are the usual Smart gems, crystal clear, accurate and crying out to be built.

Constructionally revised from its 1967 form, the "Super Twister" has a 1" flat plate aerofoil in place of the original full section and fewer ribs.

Alan Jupp builds this superb vintage combat kit being offer by Frank Smart



That engine pod comes assembled and fits over the leading edge which is square at that point. If you are not using a PAW just tell Frank and he will alter the bearer spacing. That's service for you.

Reinforcing is subtle and efficient. Frank doesn't supply tanks with these kits so I used the 60cc Chart uniflow with the feedpipe modified to come out underneath the leading edge instead of through it. I sat it on the lower centre section sheeting and left the top flush with the upper sheeting. "If in doubt follow the instructions" - so I did and the model virtually built itself. After covering the plan with melinex, I pinned down the leading edge using the blocks glued to the ends, and the built up centre. This is an easy answer to the usual problems with pre-shaped leading edges. The ribs are all square cut and marked top and bottom for shaping after assembly.

I used Unibond high performance waterproof woodworker adhesive because it was on special offer, and found it excellent. I feel cyano is a little brittle for combat models. Epoxy was used for high stressed areas such as centre ribs, bellcrank mounts etc. The fits are so good that the majority of the structure can be assembled dry. The finished structure was light and very rigid. After installing the tank and controls the centre section sheeting was completed and the airframe finally sanded prior to covering. I used Flair lightweight nylon with my usual tie-dye finish, stuck on with thick dope and gave the nylon four coats of thinned dope and one coat of Ronseal One Coat gloss varnish to fuel proof it. The model was ready for the Nats and would have been flown but unfortunately I developed pneumonia and spent the first couple of days being not quite "with it." In fact the first draft of this article was written in hospital.

To sum up, these kits have a "buy me" quality and most people who have seen them do just that. They are easy to build accurately and can compete in the very best company depending on the pilot. Hopefully Frank can keep up with demand.

A single kit is £16 plus £3.20 recorded delivery and two (any combination) are £30 plus £5.00. Orders or an SAE for more information should be sent to F Smart, Paperchase, 1 High Street, Tredworth, Glos. GL1 4SP.

Frank Smart offers us a new Vintage Combat design with the potential to win!

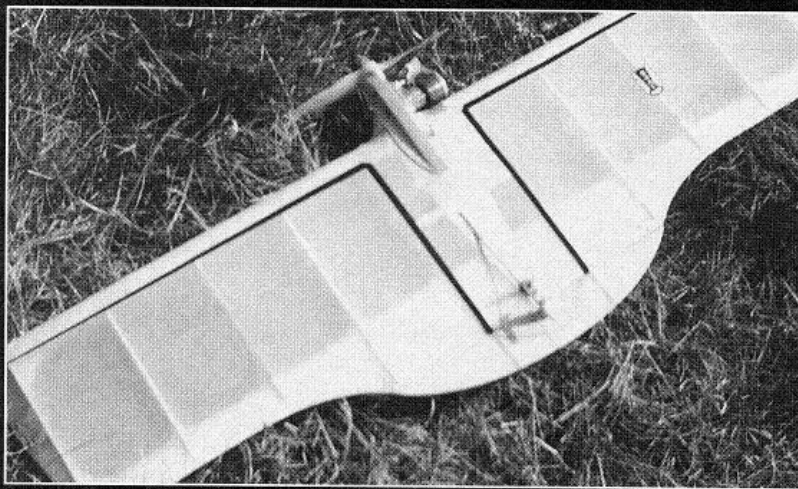
Shortly after the vintage combat event was created in 1989 an immediate search started for suitable models, the larger the better. I had had reasonable success with the new PAW 249 TBR CT1 in a 1973 wing Anticipated (own design) of 36" span - originally rejected as a tuned Oliver was not up to pulling this 16oz model around fast enough. I am often asked why the large area high aspect models never caught on then, as they technically have more going for them. In simple terms the only consistently reliable motor available was the Oliver Tiger MKIII but it had a weak crankcase and was prone to shafts going back. Not really designed for combat.

The later MKIV was specifically designed for combat with a very strong crankcase/lugs, extremely consistent and easy to handle. But it failed to perform to the MKIII standards so only a very few units made the grade. Models were compromised to around 34" span to achieve better performance and strength. Then overnight the glow motors came into their own, along with foam and film covering, setting new standards for the mid '70s. PAW engines have always been faster than the Oliver and new production techniques have put the 249 TBR PAW firmly on the map for reliability as well. They fill the gap left by the Oliver, giving excellent value for money with the ability to power larger models in Vintage and F2E events.

The Styrobat

Styrobat, by Peter Short was published in the Jan 1967 Aeromodeller as an 80% foam ceiling tile experiment based on the popular shape (Razor-Blade) by Pete Tribe. John Chamberlain won the 1967 Nats with his similar shaped Super-Twister. However foam does not fit into the rule of "materials commonly being used at the time". To be sure of meeting the rules I decided to limit the first two models I made to foam under the LE sheeting for support and the remaining materials were conventional. Once Vintage Combat caught on, construction to achieve lighter and stronger models became paramount to get the edge. The event has put back the building skills to achieve this and we are seeing less material used to produce strong, competitive models required by the "one model per bout" rule and the five minute

RIGHT: Styrobat with the wire boomed Chaos which Frank took to the '93 Nationals. Both models perform well but the one-piece Styrobat is more reliable. **BELOW:** Styrobat could now be called the 'No-Styro Bat' as it is built entirely using conventional wooden construction. PAW 249 TBR CT1, 36" span, cream silk covering and tissue graphics.



contest.

Hence the development of the MkIII Styrobat we see here with fewer ribs, sheeting omitted and a simplified structure. Silk covering did help in both lighter weight (less dope) and performance due to its "ping" tight tension even when damaged. The prototype was going well and all set to fly Richard Evans in the '93 Nats, but I take the blame for fiddling with the fuel feed line prior to the bout and only able to get a couple of laps due to the pipe

being pinched. The next outing in late 93 was the South Bristol Gala. By then I was well used to the model and flew all day to 3rd place. Each model needed field repairs to achieve the result. One model was later found to need internal repairs but stayed together on the day, without losing performance.

The original design had a balanced elevator common at the time. Having experimented with these in the 70's on the APS Hornet I decided against it as less practical, catching in the lines

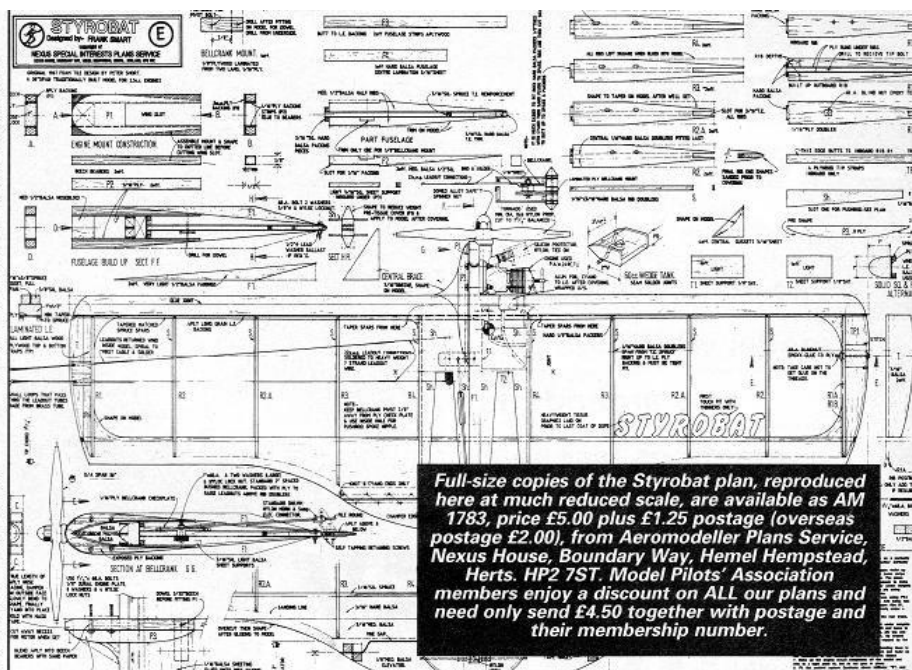
STYROBAT MK3

and damage if snagged in long grass. This has now been verified as an alternative accepted in the 1994 Rule changes. As most designers experimented with different sections it is also acceptable to change the original aerofoil to a flat section. This not only gives excellent stability, it is easier to trim and very easy to build. The fuselage profile must be maintained as part of the original design, even though the bearers have been shortened, which retains the oldie look similar to Razor Blade. The model used at Bristol, although not trimmed for tight turns gave exceptional stability, level and inverted, to give the "eyes off" quality needed for confidence. It also flies close to the grass without buffeting.

Construction

The weight maximum in the '60s ranged from 16oz-17oz with a lot at 18oz if fuel got in. If you can achieve 15.1/2oz there is a marked improvement in performance making all the difference. Selection of materials therefore needs to be a major consideration. On your first model weigh each part or make a note of the weight of the sheet or block you cut it from. Try to reduce this if necessary on your next model. Check the balance of the LE and TE and use the heaviest end outboard. Normally this, plus reinforcements, provides the necessary ballast but I usually fit a blind nut in the tip in case some weight is needed. Whist silk covering makes for a nice fast model it is very expensive and not as strong as conventional or rip-stop nylon. I keep silk for special models - for finals (should I be so lucky).

I am surprised no one is giving this model a



Full-size copies of the Styrobat plan, reproduced here at much reduced scale, are available as AM 1783, price £5.00 plus £1.25 postage (overseas postage £2.00), from Aeromodeller Plans Service, Nexus House, Boundary Way, Hemel Hempstead, Herts. HP2 7ST. Model Pilots' Association members enjoy a discount on ALL our plans and need only send £4.50 together with postage and their membership number.

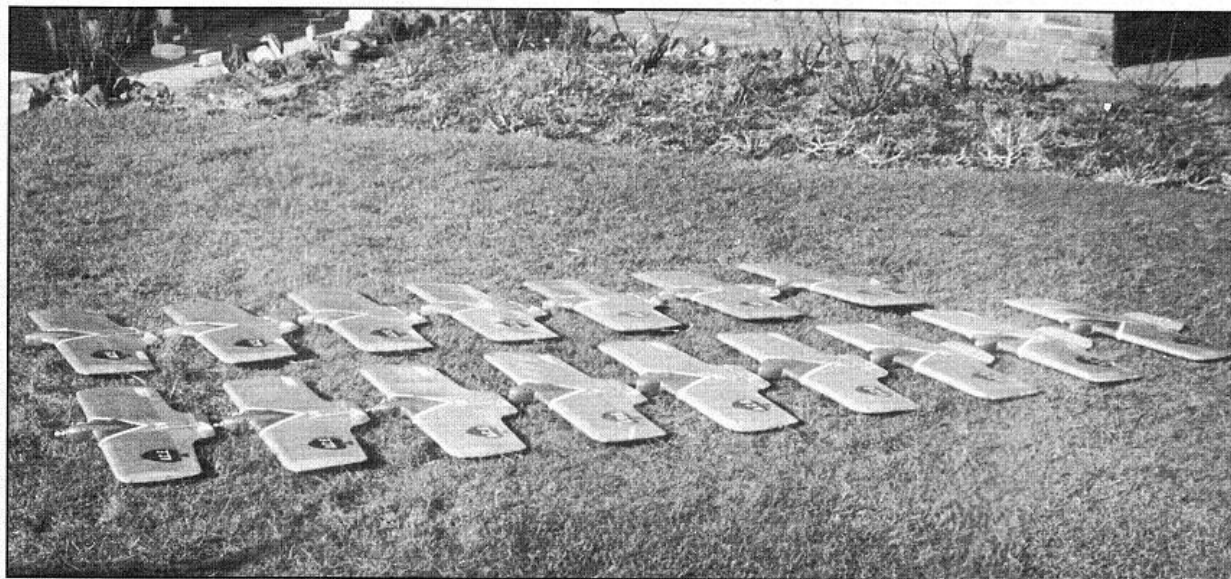
try as it has more wing area than the MKII Warmonger (most popular at '94 Nats) and most other models in current use. I hope you will give this model a whirl and feel confident that you will not only find it easy to fly but reasonably competitive for a mid-range design with few vices and good flying qualities. More construction advice is on the plan. Remember always test fly your new model without tip weight and in calm

conditions. (Nothing achieved in windy conditions). Add tip weight only if necessary to improve line tension without dropping the outboard wing. See you at the contests.

PS. A special "thank you" to all those who returned the BMFA Vintage Combat Questionnaire designed to improve the discipline as a fun event at all levels and maintain the current level of interest.

1996

WELCOME TO **PART ONE** VINTAGE COMBAT



**Frank Smart kicks off
with a few words of
introduction for those
who would like to
take up this popular
event**

In most cases competition classes drift away into the past and only re-appear in "I remember when" articles or are found by chance in old, well-thumbed magazines. Fortunately, development has been so rapid that oldies like me still remember the good times of combat in the sixties. Don't get me wrong. The competitions were very fiercely fought. Much like the "OK Corral" with much rivalry between the good, the bad and the ugly. Imagine what we have now - 50+ entries - and double it, with a ceiling on the 1969 Nats of 130 pre-entries. The photograph taken by myself of the 1969 Finals has never been published before. It clearly shows the ritual, rarely seen today, of top flyers of that period waiting in line for a few seconds on the handle prior to the tank running out. Vernon Hunt, winner, hands over to John Shaw, 2nd place pilot. Today's Vintage Combat has re-awakened a lot of interest in combat by stipulating the use of only the designs of that era and limiting the engines which can be used. It means that a winning model/engine combination is within many enthusiast's reach and the rest is up to the pilot and his crew.

Preparation for the 1969 Euro-Champs. Vernon Hunt designed and built these 16 Warlords to see him through the event. The model is still available as a kit and performs well in Vintage Combat.

Insurance

The first essential is that both you and your pit crew must be properly insured either through a BMFA affiliated club or as a Country Member of the BMFA. You can get in touch with the BMFA (British Model Flying Association) by telephone on 01533 440028 if you wish to become a Country Member. You will be required to produce your membership card and proof of insurance at all BMFA and club events which are now becoming very popular throughout the UK.

The Rules

The next important step is to arm yourself with a current set of BMFA Rules. These hold the answers to the majority of questions asked by those wishing to get involved. By the time this article is in print, the 1996 edition will be in circulation setting out a list of eligible models and engines, plus the "dos and don'ts" on model construction, materials and modifications permitted. The cost of these Rules is small for the information and advice they contain. Learn the Rules as you would the Highway Code - especially important for your pit crew, who can easily cause disqualification. Knowing the Rules well can also help you win too.

Model choice

Even for the serious flyer, six models is adequate for a season. One model per bout encourages durable but light construction and

The author at the 1971 Nats with Twister 3's, a boomer designed in 1965 by John Chamberlain, winner in 1967 with Super Twister.



the need to survive. A challenge equal to the flying skills, but expect a few repair jobs along the way. The reason for the single model is clearly illustrated in the photograph of Vernon

Hunt's squadron of models pre-European Championships. When two models per bout were allowed, you needed twice as many models. This photograph also shows how dedicated you had to be in the 60s. Models were all test-flown prior to the season getting under way giving Vernon the opportunity to choose the best ones, leaving the others for practise. Keeping to the same design, although monotonous, has huge benefits in perfecting really good performers. If you do fancy a different design, be like Steve Jones - designer of the 'Orcrist', who flew models similar to Vernon's but built only one of any new design and compared it for some time, perfecting it to be a winner before competing with it.

Your first choice should be a model which has the minimum number of things that could go wrong, be easy to build, cover and repair. The flying wing is an obvious choice and there are plenty to choose from. Often the four finalists in a competition are all using different designs so the choice is very open with no firm favourite. As mentioned above, most of these old designs were built for a two model per bout contest. Reinforcement was kept to a minimum, so you will need to get your thinking cap on to make it last. Make a note from scratch of all the wood weights you use, so that you can repeat or lighten where necessary on the next one. Fly your new model at least two weekends prior to a contest. Testing, trimming and sorting takes longer than you think.

A few tips to be going on with

* Since my October 1984 article 'How to

Cover in Nylon', I found that it is not essential to use all those pins. Experiments with heat activated adhesives have proved successful with nylon. I use Balsarite. No need to miss your dinner either with a job you cannot put down. The glue will activate several days later when heat is applied. You will still need a few pins to hold nylon in place.

* Sellotape is good for holding spars and parts in place until the glue is set, particularly if you are using weights to ensure TE and LE, etc, are flat. Masking tape, which can be used several times, is also good for this job.

* Use Tufcote fuel proofer only on engine mounts: it will crack over open frames which flex as it is too brittle and causes fuel seepage. For open frames use the commercial clear polyurethanes - there are various suitable makes and it pays to test it before using it on a model.

* This may seem a bit obvious, but be careful to make all your model leadouts the same length and your team mates should do the same. It can be a great blessing if any lines fit any model in an emergency.

* Limit the use of Cyno glue in construction.

Waterproof PVA will give you a flexible airframe, but use 5 min epoxy for outer ribs and tips, fuselage and engine mount construction and fittings.

Next month I will cover a brief history, pit crews, engines, equipment, safety, testing and practise. See you then.

A rare photo taken after the 1969 finals at the Nats when everyone took it in turns to have a go with each other's model. Lt to rt. Frank Dowling, David Melrose, AN Other, John Shaw(2nd), Vernon Hunt(1st), Steve Smith, Steve Jones, Mick Chesterton, the late Len Smith, Richard Wilkins and John Hammersly.



GETTING STARTED IN VINTAGE COMBAT

PART TWO

Frank Smart

continues with some general advice for newcomers to this popular control line event

Re-introduction of "Vintage Combat" at the 1989 Nats Funfly brought out a few moth-eaten models, Steve Malone emerging the winner, flying an Orcrist. Since then, no other old-time C/L event has attracted so much interest, with a following which has just kept growing. The title, although a little inappropriate, does convey that any model before 1st Jan 71 is included and, for pure fun flyers, an opportunity to compete with models like ZACK-ZACK 1963, DUELIST, etc, with wire skids and which were launched from tool box lids, adds interest!

Rule changes have opened the way to



A superb example of tie-dye nylon finishing and attention to detail by Richard Evans on Frank's 1968 Parana Mk 1. A winner in the right hands. Photo by Dave Coe.



The 39" Noggin-the-Nog, a new addition to the authorised designs by Terry Mortimer. Plans for the low aspect ratio design in the foreground, Mr Pogle, expected to be ready soon. Photo by Terry Mortimer

include some famous proven designs. This year BMFA has included two new goodies: a 1965 NOGGIN-THE-NOG, 39" span and 1970 SHUFFLER, 38" span, which are sure to attract attention. For newcomers, as well as for those returning to the fold, the choice may look bewildering, but no design seems to be dominant. We frequently see four different models in the final round so just build what you fancy and have a go. I will attempt to pave the way to getting you up and running so that you can join in.

understanding of what is required. No matter how trivial the duties, you help your pilot to win, stay calm and positive in difficult situations - i.e., line tangles, fly aways, prop changes - and practise these at home. One person should be allocated the engine job, the other should be capable of taking over in emergencies, be prepared. Don't stand together: split to each side of the circle, cut down the running about. If you are the streamer man and get to the model before the E-MAN, there is usually plenty to do until he arrives - i.e., clear the streamer, check

fuel tube is on and not split, check damage to model, lines or tanks. A good pit crew soon builds up pilot confidence to get those narrow one point wins.

Engines and equipment

The most widely used motors are the 'PAW' twin ball-raced blackhead 2.49 CT and the 19D CT plain bearing version, factory tuned for combat. Both are good combat engines, reasonably priced, robust in construction and reliable. Choice will depend on flying styles and model choice. As a general rule, tail and boom designs have more weight aft, so the slightly heavier 19D is preferred. The plain short moment arm wing is therefore more suited to the lighter 2.49, where you need the engine close up to the LE for turnability. If your style is following your opponent, the 19D is excellent on a full 8" x 6" prop and I regard the 2.49, with a 7 3/4" x 6" prop, more

suitable for the hit and run style. Referral to the Rule Book will clarify whether you can use any other engine you may have unearthed.

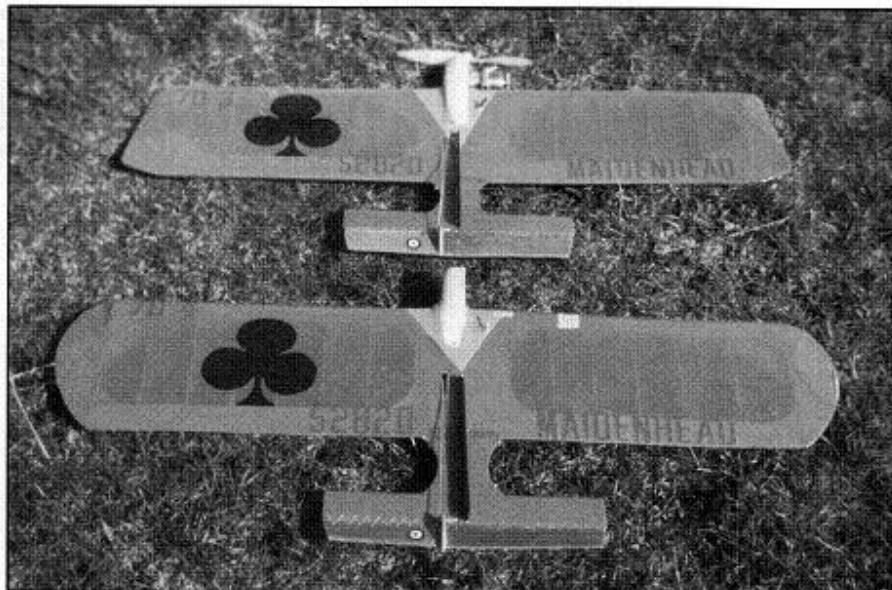
Propellers are to be given careful consideration as keeping airborne increases your chances. They must be of a flexible material to survive, even if they tend to de-pitch a little at high RPM. All the same, you should train to do a prop change in less than 15 second ground time, to avoid losing a point. TORNADO, by Grish, USA, have brought out a new bendy prop in the interest of safety as their previous white blade props, although having a better performance, were prone to shedding blades. The other propeller used on Super-Tigre 15Ds, to get the best out of them, is KAVAN yellow full 8" x 6" - similar to the old KK, although a bit scarce.

A large, carry everything, tool box is very useful but leave this for a while and make do with your small pit box or tray until you see what you need after some experience. The small pit box should carry basic needs required within the circle: Enough fuel for the bout in a see-through bottle fitted with a filter; a prop spanner and pliers; two spare props fitted with

push fit domed spinner safety nuts; a small pair of wire snips; a spare set of lines complete with handle attached and the same length as those on your model (which must be pull tested prior to starting); a ratchet screwdriver; spare fuel tube cut to correct lengths; engine spares; a small bottle of CYANO glue and activator - this glue is a fantastic step forward in field repairs; some pins, balsa wood, tape and patching materials; a balsa knife and a piece of wire to remove dirt from the motor venturi when planted in terra-firma.

Safety, testing and practise

Helmets must be worn regularly - not only at competitions. Where circles are not marked out at practise sites, it is so easy to stray into the flying circle. As a minimum you must mark your centre flying spot to avoid wandering about when your main concentration is on flying. Check that it is safe every time you fly, keeping well clear of overhead power cables. Testing is a very important part of sorting out a new model, even one you build regularly and flown many times. Make sure you fit a fuel filter to pick up tank dirt and odd bits of debris from the main carrier bottle, which should be filtered into the pitting bottle. You are wasting all your hard work turning up to fly a new, unflown model at a competition. Be well practised, tested and trimmed. Keep clear of any turbulence caused by tall trees during testing. Avoid a new engine and a new model together, but, if this is unavoidable, make sure at least that your motor is well run in. Avoid windy days for new engines and new models.



New for 1996 also is the 1970 Shuffler designed by Niel Blackburn. A design noted for good flying qualities.

To analyse and sort a model or engine you need to see how it flies without any unwanted influences. Later you can investigate how it flies in windy weather. Some designs are more effected by wind than others.

This is also time to check that line lengths are correct and all connections are good. The engine should be fitted carefully in the workshop after thorough fuel proofing.

Remember the quickest route to the rostrum is plenty of combat practise, not flying solo. Anything that is flyable will do and the weather does not matter much either. It makes you that bit better when you fly your best model in whatever conditions prevail at a contest.

(For more info send an SAE to Frank at "Paperchase", 1 High St, Tredworth, Glous. GL1 4SP)

Contest Reports

It all began in 1989 The Nats

Vintage Combat

This new event, introduced at the beginning of the year as a provisional class and with three previous competitions, was meant to show the class to a wider audience. For those who don't know, here is a brief resume of the rules which are basically to the old SMAE format:

- 1 Model design: pre-January 1st 1971, built and finished with traditional materials. A maximum of three models per contest.
- 2 Any production motor, from the period, of up to 3.5cc (but some later models are eligible).
- 3 5 points per streamer cut and -1 point for each complete 15-second period of ground time (non-accumulative).
- 4 Start motors at the signal to launch.
- 5 The bout lasts for five minutes.

With very little prior publicity before the event and entry on the day, it was encouraging to have fourteen entries. Although some of the models didn't strictly comply with the rules (solarfilm covering or designs which were slightly too recent, for example) the organisers took a lenient view. They may not be so easy-going next year! The event was flown during Sunday afternoon and evening - and again was somewhat spoiled by the high winds.

Round 1 saw McDonald disqualified for not being present, giving Herbert an easy passage to Round 2. The other victors in Round 1 were: Lyne (Canada), flying a Warlord borrowed from Vernon Hunt and fitted with a very quick MkII Oliver, Stanley, Hunt, Kizsel, Beasley and Vickers over Malone, Harkin, Smart, Davidson, Whillance and Wiseman respectively.

The first round losers repurchase was successful for Malone, Davidson and Smart; thus Whillance, Harkin and Wiseman were eliminated. Round 2 left five competitors and so an eliminator had to be flown, Vickers against Davidson, to enable the semi-finals to be flown. Vickers was successful.

The semi-finals saw Steve Malone (Orcrest, MkIV Oliver) beat Martin Kizsel (Warlord, PAW 249 BB) and Stuart Vickers (Warlord, PAW 249 BB) victorious against Mel Lyne. The third and fourth fly-off saw Mel Lyne leading Martin Kizsel on cuts when an unscheduled inverted landing broke Mel's needle valve. The pitcrew were unable to effect the repair in time and Martin gained third place by a one point margin. The final saw Steve Malone beat Stuart Vickers into second spot in a well-contested bout.

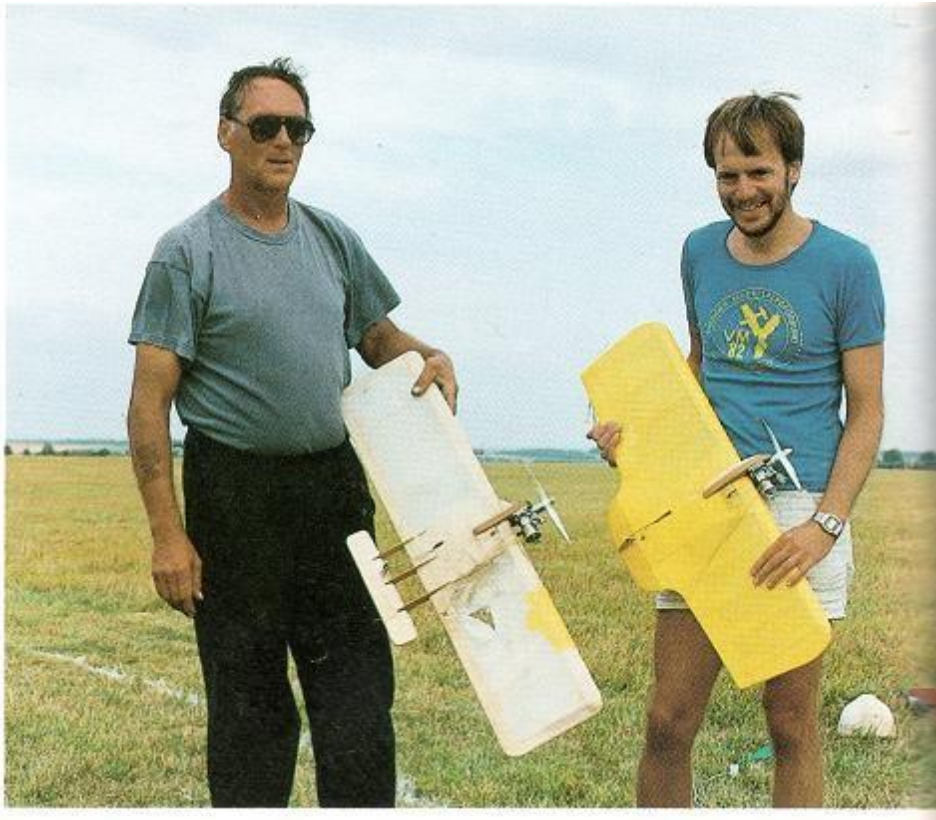
With only the first year of this class behind us, two models are already emerging as favourites; Warlord or Ruter Ess powered by either MkIV Oliver Tigers (preferably Copeman-tuned) or the PAW 19 DS/249BB. Note: the Orcrest design does not actually fall within the rules, being designed shortly after the cut-off date...



Above:

***Vintage combat finalists (with crew)
Frank Smart, Stewart Vickers, winner
Steve Malone and Andy Clark.***

1990 **Nats 2nd Dave Willis and Winner Steve Malone**



Bilston 1991

Vintage Combat

RUN FOR the first time, the event blended well with other vintage control line activities held annually at Bilston. Although there were only 9 entries, seven different well known model designs were present, all true representations to the originals. Conditions, although cold and breezy, were ideal with improvements of some sunshine by midday.

The organising clubmembers Tony Degg & Co opted for a two life system which worked well and gave everyone plenty of flying before 5.30pm finishing time for the whole event. It also gave a good opportunity to compare performances of individual models and flyers providing some notable bouts. John Alcock produced some nicely finished blue Warlords and flew well, but admitted test flying and trimming beforehand would have helped his chances.

The first round

A fast and most manoeuvrable model was a well used orange Rutteress to original construction and power, Super Tigre G20 D. by Chris Moore of Bilston club. It forced Dave Harrison/Chaos to fly his usual low level inverted tactic but Chris had the nerve to meet head-on, go under and take a small cut of the streamer. Bob Murdoch of South Bristol flew an Oliver Tiger IV version and a Flingel Bunt with Richard Evans successfully superglueing on the Rutteress tail twice in the same hour. Bob loosing only by one point of ground time with even streamer cuts to his opponent.

The semis

In the semi-finals Richard Evans/Warmonger V Richard Herbert/Chaos was won by Herbert 3 cuts to 2 taking the knots to clinch a win after 5 mins of superb combat. Likewise in the

other semi Dave Harrison/Chaos V Mick Loughlan/Chaos were evenly matched – both on models with 19D PAW motors. Mick winning through but having to change to his trusty Oliver Tiger IV-powered Warlord for the final.

The final

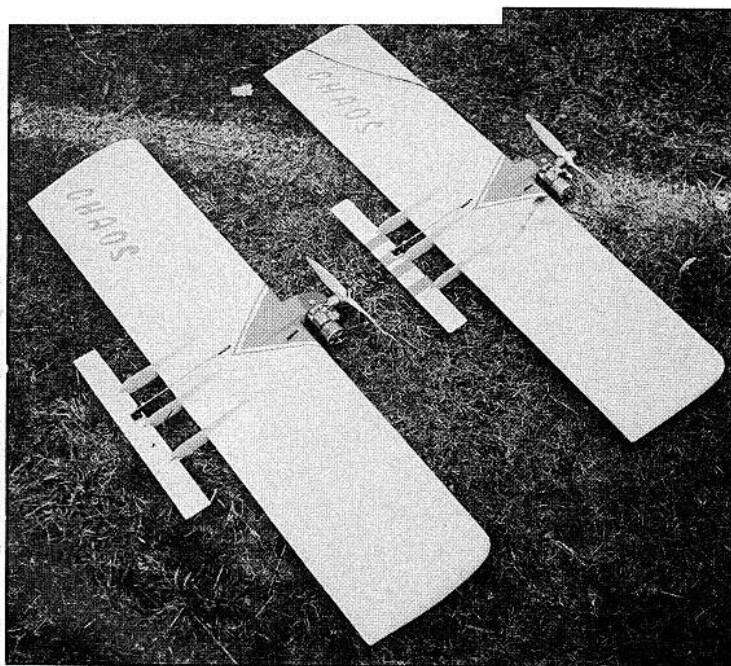
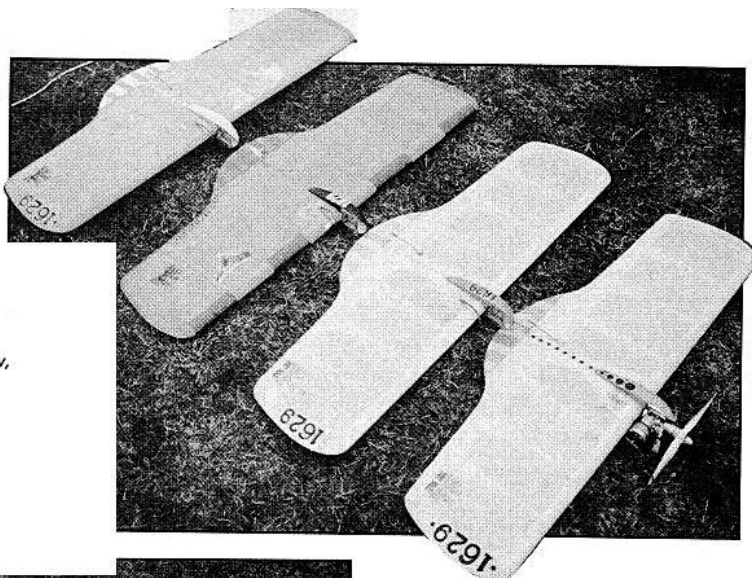
Richard Herbert/Chaos having flown all day without loosing a life would have to be beaten twice by Mick who only had one life left. The stage was set for some good combat and this it was, with a non stop final bringing spectator applause of 2 cuts to one giving Richard Herbert a well deserved victory.



Vintage Combata 9 Entries

1. R. Herbert
2. M. Loughlin
3. R. Evans

Right, 'Warmonger' models which survived the Nats weather; they're Richard Evans' who placed 3rd. Below, APS 'Calamity Jane' designs - large models with aggressive performance.



Left, two by Dave Harrison; APS 'Chaos' models are both PAW 19D powered.

Nats 1991

Vintage combat

Round 1. 31 people took part, not many notable bouts but the Evans – Kizsel bout was good.

Losers round. Stu Holland got back in. Richard Evans and Paul Stanley went out.

Round 2. This was blessed with the best weather, and some high quality flying. The Loughlin – Davidson bout was particularly good, fast and clean. The round continued on Saturday morning with just 2 bouts left.

Round 3. 13 remained, Houghton, Harrison, turner, Kizsel, Vickers, Bayliss went out. The weather was worsening.

Round 4. Holland beat Herbert. Fisher beat Loughlin. Malone beat Whillance and Truscott got the bye.

Semi's. The weather was now awful, but people wanted to carry on. Holland beat Truscott, and Malone beat Fisher. We were cold, wet and increasingly miserable.

Final. This was held on Sunday morning. Wet and windy. Malone beat Holland in a no cuts bout the scores being -1 and -2 respectively. 3rd place went to Fisher as he turned up for the bout, I presume Mr. Truscott had stayed in bed – quite the most sensible thing to do.



Rare gathering! Vernon Hunt (Warlord designer) left, Moggs Morris (Turncoat designer) centre and Stoo Holland of Flingel Bunt fame.



Vintage Combat finalists Stoo Holland (2nd) and Steve Malone who retained title for third year.

Cabbage Patch Nats 1992

Vintage Combat

Here I have been helped by a report kindly provided by David Coe. Vintage Combat, run by Dave Harrison, attracted 27 entries which included a past World Champion, National Champions, European finalists and many promising new faces. Warlord and Kaos designs are very popular with something different from Frank Smart (Rutteress), Bob Murdoch (Streamer Screamer) and Pete N Tribe (64 Razor Blade). John Dixon's Warmonger is rapidly gaining popularity campaigned by Richard Evans. John Alcock's 36" Warmonger and Dave Willis's Kaos both showed tremendous form with spectacular performances.

Most competitors used PAW engines, either the 19DS tuned or the 249TBR. Dave Harrison's ferocious, tuned and modified 19's were used to great effect to gain him third place. Interestingly John Alcock uses inboard tanks with his tuned 19's and they looked very quick in the air. Steve Bingham lent his seventies Dutch International winning, MkIV Tiger to Mick Tiernan who can still show some of his old brilliance.

Space does not allow an account of all the exciting bouts fought in true vintage style. Richard Herbert (Kaos PAW 19DS) and Steve Malome (Warlord PAW 249TBR) had to work very hard to get to the final. A classic bout ensued with both

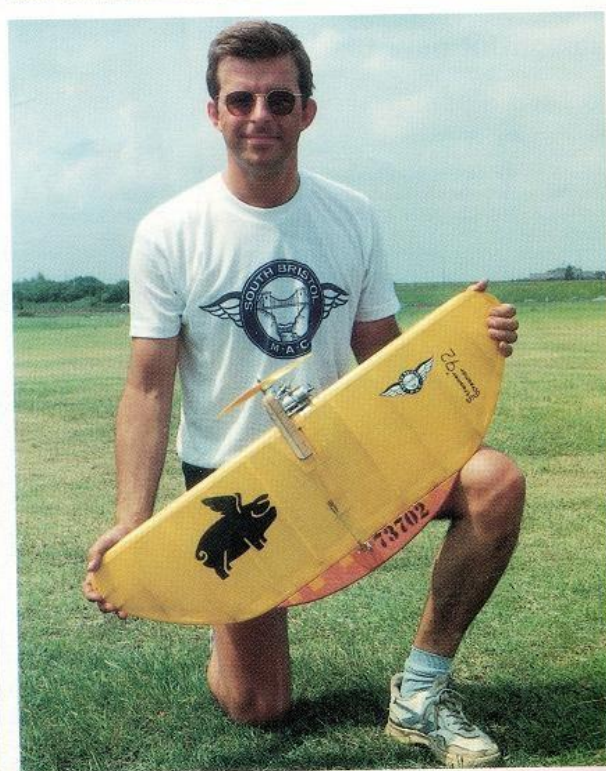
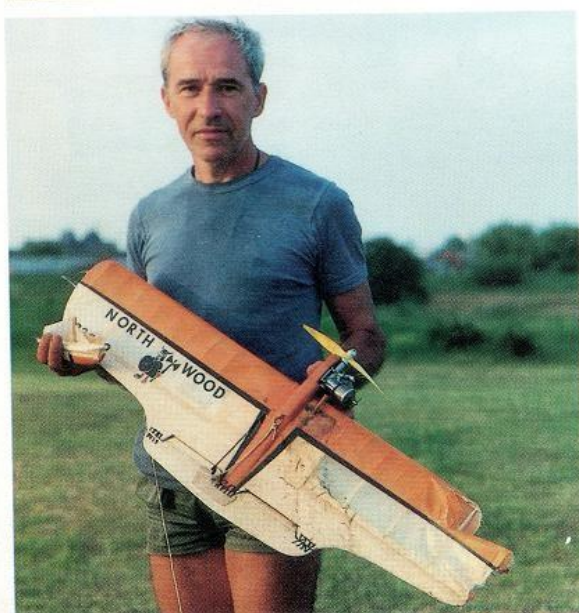
pilots attacking and hitting the steamers many times. Eventually Richard got three cuts, which was all that counted to get a well deserved win. The losers from the two semis were Dave Harrison (Kaos PAW 19DS) and Pete N Tribe (Razor Blade PAW 249TBR). As Pete could not be found for the deciding bout, Dave was awarded third place.

Prizes of kits and plans were very generously donated by Frank Smart. Frank puts in a lot of personal time and effort to provide a plans and advice service which has given a great boost to vintage combat. See the Helpline (Gloucestershire) if you want to give Frank a ring.



R Munford has returned to combat after a break of 20 years with his son who acts as pitman.

Below left, the eventual winner Richard Herbert on the left holding his Kaos/PAW 19DS and second was Steve Malone, on the right who flew a Warlord/PAW 249TBR. Below right, Mr Vintage Combat himself, Frank Smart with his Ruteress in which he has incorporated some structural changes. Bottom left, holding his battle scarred 64 Razor Blade is Pete N Tribe who was awarded fourth place. The model is built exactly as per the original. Bottom right, Bob Murdoch with his Streamer Screamer. Originally a Class B design as a free plan in AM, Bob has modified the construction.



Nats 1992

Combat by Frank Smart

VINTAGE raised the largest entry of 40, a record that hopefully is here to stay to encourage newcomers and those who have strayed from the fold. For some it was their first Nationals, others their first for many years like Richard Wilkins of Early Bird fame V. Pete Tribe of Razor Blade

fame. They met in the first round flying each other for the first time in 28yrs at Hayes, when Pete won. This time it was Wilki's turn flying Warlord against a nice Flingel Bunt, both using PAW.249.TBR motors. Steve Malone, Warlord, lost his title to Mick Loughlin's Chaos in the second round after holding it since 1989 but showed the way in tactics using his vintage models in the wind in Class A up to the final. Out of the 41 models in the BMFA, rules only 6 were used showing reluctance to try something different in case of being outperformed. Hopefully the researched models by yours truly will be accepted for inclusion to widen the choice and variety. In the final Mike Willance, flying a 'Ruterness' 19D PAW, struggled desperately with sick motor against the fast CHAOS 19D PAW flown by Mick Loughlin. Mike did well using the wind. With one cut each Loughlin came down, his pit crew failed to get him airborne quickly, jamming his lines trying to unwind them and losing on ground time.

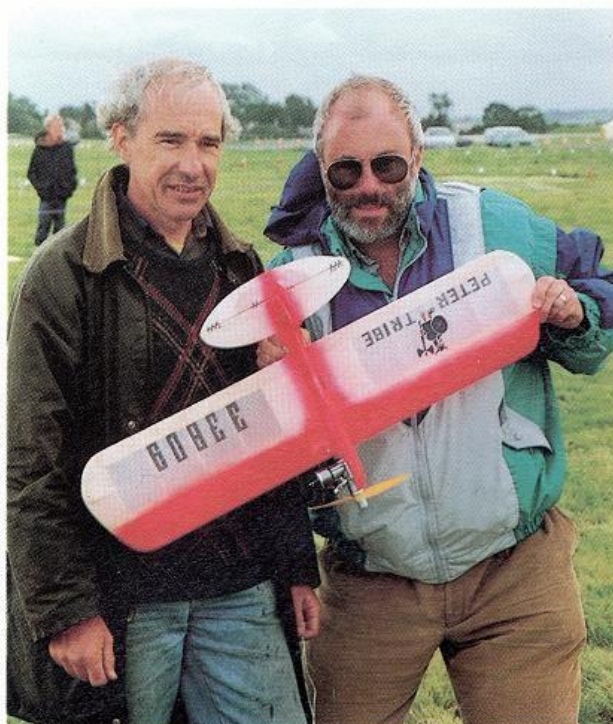
Below left, having to wait till 4pm Saturday Richard Evans flying his old Hero's model 'Warmonger' by John Dixon 1969 gave us one of the most entertaining vintage bouts against Mick Loughlin - Chaos 1963 - winning 3-1 in true vintage style.

Below right, 28 years to get even - veteran "Wilki" (at right) flew a 'Warlord' beating his vintage club mate Pete Tribe with 'Flingel Bunt'. Both used PAW.249. TBR motors in vintage combat. Photos: Dave Coe.

VINTAGE (1ST ROUND)

RICHARD EVANS - V - MICK LOUGHLIN.
(SOUTH BRISTOL U.K.) (S.E.C.A/U.K.)

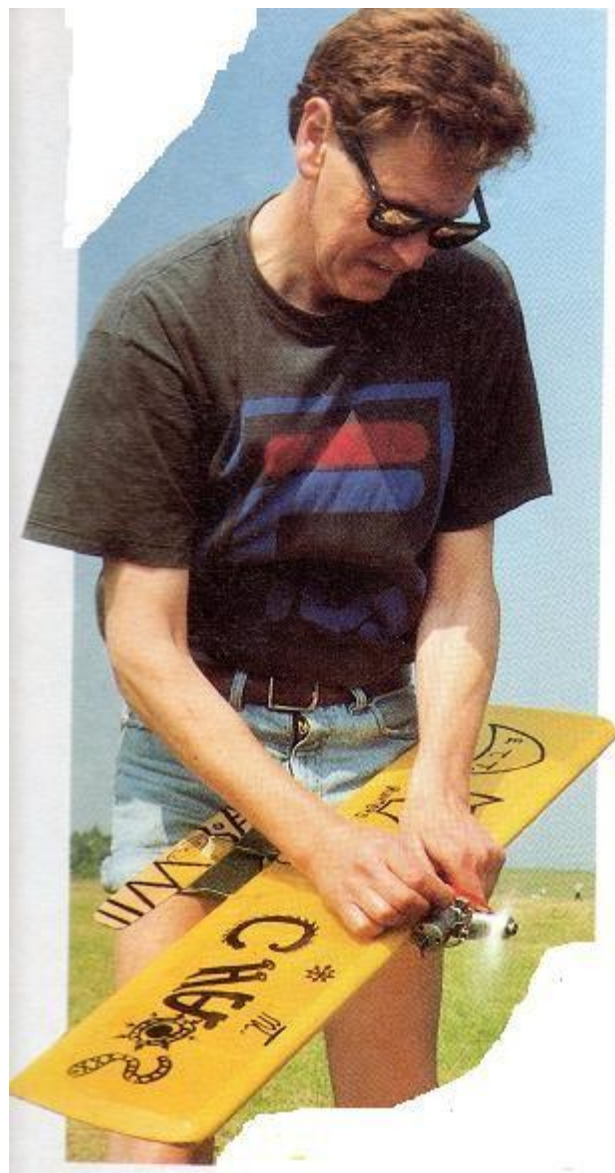
Here it was expected Mick would have the edge having had more combat practice this season. But Richard was back to his old form with a well tried year old Warmonger and secret weapon up front, Super Toger 15D. & 8x6 Kavan nylon prop. Up and away first flick so the team was well practised. Micks PAW.19D.Chaos. was honking around but evenly matched for speed and turn. Then Richard sent us back a few years with two dummy turns losing his opponent quickly and getting back to attack 2 cuts to 1 in his favour, leaving only Micks knot but he kept attacking till finally making it 3-1 just before the whistle. Cheers from appreciative audience to a good clean 5 minutes of combat without collisions in windy weather. (All that was missing was the 70's head band)



Cabbage Patch 1993

Over in the far corner of the field, Vintage Combat enthusiasts were at it all day and I'm indebted to David Coe for providing some details. The entry of 36 was the highest of any class and many PAW 19 and ball raced 249 powered the very popular Warmonger and Warlord designs. It would be impossible to record all the bouts and would take up to much space but worthy of mention was 12 year old Alex Mumford's performance in the early rounds. A chap to watch out for! The bout that stands out the most was that between Richard Evans and Steve Malone for its sheer brilliance. Here was a superb demonstration of the art of combat flying with Richard coming out the winner. Igor Dementiev from Moldova showed us not only that he is a marvellous flyer but a great ambassador for the sport and his country as he gave freely of his time to give advice and answer questions. As the rays of the sun were dying, Richard Evans was the well deserved winner.

Richard Herbert, who does some of our engine tests, shows some fancy steps whilst pitting for Bob Payne.

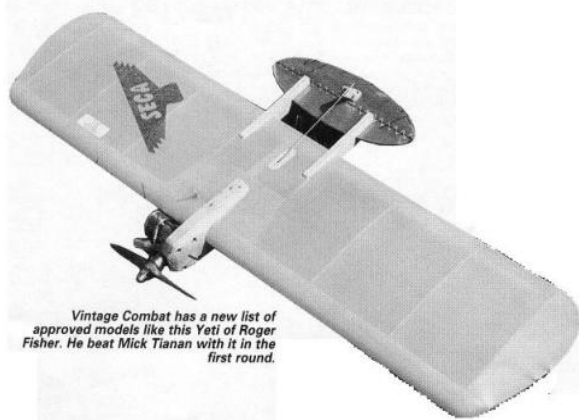


Vintage Combat – 36 flew

- | | |
|---------------|------------------|
| 1. R Evans | Warmonger/PAW249 |
| 2. I Demetiev | Warlord/PAW19 |
| 3. A Lawrence | Chaos/PAW19 |



Cabbage Patch 1994



Vintage Combat has a new list of approved models like this Yeti of Roger Fisher. He beat Mick Tianan with it in the first round.

Vintage Combat (38 entries)

- | | |
|---------------|------------------------|
| 1. A Thompson | Super Twister/PAW 19 |
| 2. C Moore | Ruteress/Warmonger/STG |
| 3. R Herbert | Orcrist/PAW 19 |
| 4. D Harrison | Yetti/PAW 19 |



Steve Tromans and Geoff Thompson battle it out in the early rounds of Vintage Combat.

The Nats 1994

Vintage

Vintage is still retaining its popularity at 46 entries, although many are questioning its direction and the reason for this years flyleaf questionnaire, which received a big response. Thank you for welcome comments and letters which will be aired at the next BMFA C/L Tech Committee, sorry if I missed anyone. The increased range of official models proved a big success. The quarter finals produced six different designs, Anduril, Warmonger II, The Yeti, Orrcrist, Ironmonger and Super Twister, followed by the semi finals Alan Thompson (67 Super Twister) v Bob Murdock (70 Ironmonger) Mick Loughlin (65 The Yeti) v Steve Malone (67 Warmonger 11). However I am sure Alan regrets switching to his twin boom Yeti in the final.

The designer John Dixon, and his pitman David Prest were on the side line with memories of those innovative boyhood days and had a real treat. At this point however I think it fair to note for those building, that John Dixon is adamant that his (The Yeti) plan form be retained i.e:- that the position of tail booms should be as plan and if a 3rd boom is introduced for strength it should be central and to the 1/4" thickness shown. I also feel sure that as a proposal to rule amendment, this will of course apply to all boom models. 3rd-4th flyoff was a draw between Bob Murdock (70 Ironmonger) v Steve Malone (68 Warmonger 11). A tough bout rendering

Steve's model unflyable. In the re-fly Steve used his immaculate yellow (69 Orcrist) but Bob clinched 3rd place with his well used model. Because models are lasting longer several people are bringing back the bright colours and graphics, in particular South Bristol and Three Kings clubs. Great. Worthy of note Richard Evan's tie-dyed nylon (68 Pirhana 1.) and (68 Warmonger 11) plus Alan Jupp's (69 Jaguar 1.) and (70 Terminator). I wonder how much I would get for my matching flairs, man!

During the model processing there were only six visual design infringements where the plan form is not being adhered to but leniency was shown, with obvious variations pointed out only this time. We had a few groans about constant line checks and pull tests but confirm that several were way out for length, one set nearly 18" too long. Obviously direct to bellcrank F2D set, over half a dozen lines

broke, one at 4lbs. Lines also broke in the air after testing to the 15kg rule for all classes except 1/2A at 10kg imposed by the C.A.A. (Civil Aviation Authority). Hard working official Alex Herring did a great job not only as an organiser but to reach the 3rd round in Vintage loosing to eventual 3rd place Bob Murdock but also flying well in F2D.

Major upsets:- In 3rd round Vintage Mike Whillance lost to eventual 4th place man Steve Malone, having a venturi removed in the air. Igor Dementiev flying an (Anduril) went out in losers to Eamonn Forsdike of Three Kings flying an (Orcrest). Stu Holland (Eire) Flying a (Warlord) made an early 2nd round exit against equal veteran Tony Degg flying an Anduril and went on to win his 3rd round bout against top seed Dave Harrison after a twin boom removal from his super model (The Yeti) - one of the disadvantages of boom and tail designs.

Results

1. Mick Loughlin (The Yeti)
2. Alan Thompson (The Yeti)
3. Bob Murdock (Ironmonger)
4. Steve Malone (Orcrest)



Above Left: Vintage Combat first place man Mick Loughlin on the right and the second spot went to Alan Thompson on the left. In the centre is John Dixon who designed The Yeti in 1965.

Right: Richard Evans with his very attractive model which flies as well as it looks. "Super" tie-dye nylon in green, yellow and black.



44

Old Warden 1994



The Vintage Combat finalists from left to right. 4th S Vickers, 1st R Herbert, 2nd J Allcock and 3rd T Degg.

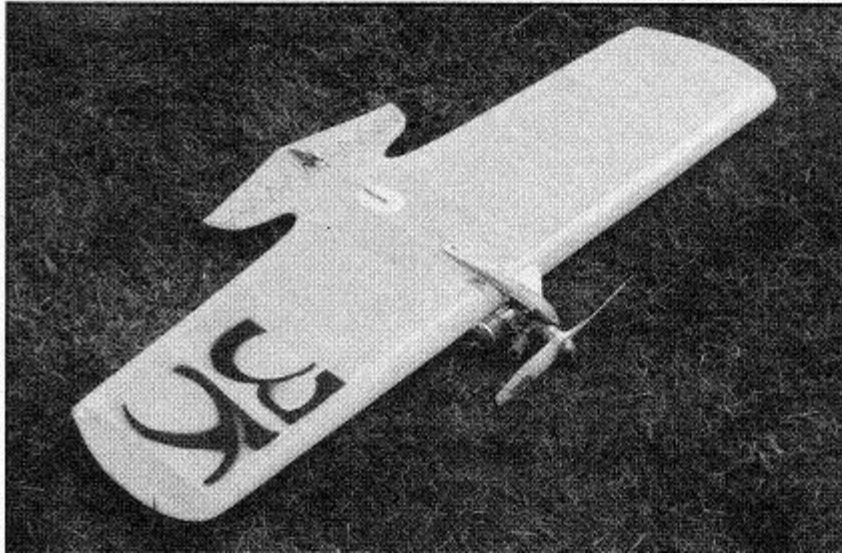
Vintage Combat by Alan Thompson

Our new position at Old Warden, down past the windsock, was worth the long walk and most fliers were happy. We attracted 13 entries (3 more than last year) with quite a few travelling long distances. Conditions were not too good for the first round with a strong wind and the bright sun down wind. Not surprisingly

it resulted in some poor bouts during which both Richard Herbert and Geoff Thompson unexpectedly lost. Still, both were hoping to get back from the losers round. This was not to be as they were drawn to fly one-another, and Richard won. "Bout of the Day" also involved Richard against Steve Malone. He took all Steve's streamer early and then came down - leaving Steve to chase for the rest of the bout only needing one cut to win, but he could not manage to get it despite hitting the streamer twice. The rest of the bouts went off well with Richard Herbert beating John Allcock in the final. For some of our contestants this was their first visit to Old Warden and they all enjoyed the day very much indeed. The final outcome was -

1 R Herbert	SECA
2 J Allcock	Bilston
3 T Degg	Bilston
4 S Vickers	Tupton

Cabbage Patch 1995



There seems to be no clear favourite model for Vintage Combat as all the finalists used different designs. A fifth type which seems to have the potential is the Piranha which was used by Alan Jupp to get into the semis. Frank Smart already kits The Yeti and Super Twister and will be doing the Piranha soon.

Vintage Combat

- | | |
|---------------|-------------------|
| 1. R Herbert | Chaos/PAW |
| 2. G Thompson | Super Twister/PAW |
| 3. M Tiernan | The Yeti/PAW |
| 4. R Fisher | Jaguar/PAW |

The Nats 1995

COMBAT by Frank Smart

Vintage Combat (54 entries)

They say you need a bit of luck in any sport. Mick Tiernan admits he got it flying Richard Evans who had the legs on him till he hit the deck loosing complete engine and pod, then coming back in the losers round after a first round pasting by Chris Moore. The other finalist Geoff Thompson, brother of Alan who normally takes the rostrum, got his notch by hard graft, not only at the Nats but over the winter practise sessions flying a Super-Twister. Mick flying a Yeti has also been very keen for the past two years, so both have had well deserved places using factory tuned 19D motors. Eliminator rounds are not good news but necessary, so it was unfortunate that two seeds Richard Herbert and Steve Malone had to meet then, Steve loosing. Newcomer Simon

Groom scrambled some Ironmongers together to have a thoroughly enjoyable Nats reaching the last sixteen. Once again the last four had different designs The Yeti 1st, Super-Twister 2nd, Warmonger 3rd and Warlord 4th. Engine scrutiny was a welcome addition by many and undertaken very efficiently by Ian Horne adding to the already professional approach by CD

Below right: Vintage Combat winner Mick Tiernan with his Yeti and the Hunters combat team.



Vernon Hunt. Also keeping things under control in a male dominated sport was Lisa Baker and her band of helpers. On the model design

side, one or two had strayed from the designers original plans, but altered or exchanged for acceptable models in lieu of disqualification.

Old Warden 1995

The first day of the Festival of Flight in September was rather blustery, but on the Sunday the windsock was absolutely limp for long periods and there was plenty of flying until rain stopped play late in the afternoon. The only contest, which finished just in time, was Vintage Combat at the far end of the field and the finalists were - 1st M Lewis (S Bristol), 2nd R Evans (S Bristol), 3rd R Herbert (SECA) and 4th A Walker (Tupton).



The happy Vintage combat finalists at the Festival. Richard Evans on the left, and Mick Lewis

The Nats 1996

VINTAGE COMBAT - RICHARD EVANS AND BOB MURDOCH

With a healthy entry of 39, vintage combat got off to an early start at 10.30 am on the Saturday. Organised by South Bristol, who had insisted on good time-keeping, the event ran very smoothly. Rules were closely adhered to, resulting in disqualifications on grounds of safety and the use of under-sized propellers.

Simon Groom, another 'old timer' out from the woodwork, put up a good fight using a good Oliver Mk IV powered 'Ironmonger'. However, the new PAW 19CT3 combat special now seems essential kit, despite its eagerness to shed crank pins! Needless to say the extensively modified motor used by Dave Harrison was the fastest present.

Model choice is as varied as ever but Frank Smart's 'Piranha' has gained popularity with top fliers. In fact, both Harrison and Malone used this design against one another in the quarter finals, Steve's comparative lack of air-speed being his downfall, both models performing equally well.

Although fast and manoeuvrable, the 'Warmonger' of Mike Whillance accumulated critical ground time due to poor re-starts and Alan Thompson breathed again. Alan's brother Geoff, despite having disposed of Richard Evans in the previous round, then went down to Steve Bingham flying a very manoeuvrable 'Chaos'.

Into the semis, and down to his ninth life, Mick Lewis did it again, beating Alan Thompson when the latter's con-rod snapped in his CT3. Steve Bingham fought valiantly against Dave Harrison but, like many before, removed the whole streamer at one go. A combat fliers' nightmare!

And so to the final, in late sunshine and calm conditions. Mick Lewis looked the underdog against Dave Harrison but forced a re-fly when both removed each other's streamer in one piece.

Against the run of play, Dave now removed all of Mick's streamer and, after some truly vintage following, Lewis equalised with a large cut. A mid-air now occurred, Mick losing half his outboard wing. The pit crew soon had him back up and he went on to take the rest of the streamer and win in a calculated line of attack. Well done Mick! It was a final greatly appreciated by the large crowd that had gathered.

A final word of praise should go to the new combat team from Sheffield who have made great progress this year.



After the battle. Winner in Vintage Combat and crew - from left to right, Malcolm Pinnock, Mick Lewis (pilot) with what's left of a PAW CT3 powered 'Chaos', and Richard Evans.



Steve Bingham launches for Mick Tiernan in the first round of Vintage Combat.



Bob Payne of SECS and Rob Murdoch (SBMAC) tangle it in an early bout of Vintage Combat. Richeard Evans photos.

Old Warden 1996

VINTAGE COMBAT AT THE FESTIVAL

Dear AM,

I thought you may like to publish this photograph of the top three pilots in the Vintage Combat event at the Nexus Festival of Model Flight at Old warden earlier in the year. It shows, from left to right, John Allcock (3rd), Geoff Thompson (2nd) and Richard Evans (1st) with their models - a 'Piranha', 'Super Twister' and 'Ironmonger' respectively. Fourth place man out of an entry of 12 was S. Vickers who flew another 'Super Twister'.

The event went off very well with many good bouts and we just managed to finish the Final before the rain came down!

Alan Thompson, Essex.



VINTAGE COMBAT LEAGUE UPDATE

The second vintage combat league meeting of the season took place at Milton Keynes on 25th May. Weather conditions were near perfect with light winds and a cloudless sky. However the bright downwind sun meant that those with the darkest glasses had a distinct advantage and often 'came out of the sun' at their unsuspecting opposition.

The organisation was smooth and unrushed throughout which meant that the finals didn't take place until 7:30pm but, as the next day was a bank holiday, no one seemed particularly concerned. After many classic bouts the final placings were:

1st	Richard Herbert
2nd	Richard Evans
3rd	Roger Fisher



Vintage Combat winners at the Milton Keynes round of this year's League contest. From left to right:- Roger Fisher (3rd), Richard Herbert (1st), Richard Evans (2nd) and Alan Thompson (4th).

Of the thirty two entries, 15 came from the newly formed Northern Vintage Combat team which included: Frank Smart from Gloucester (well, it's north if you live on the Isle of Wight!); and two guests from Canada - now that really is NORTH.

The third league meeting of the season was held during the Cabbage Patch Nats on 1 June and conditions were terrible - strong sun from a near cloudless sky and gale force winds. Those without super tuned motors struggled to fly level laps and it was obvious from early bouts that, without the horse power, many good flyers would fail to make progress. Even so some good combat did take place but few bouts didn't result in carnage of one sort or another! The wind eased slightly from the quarter finals onwards and the standard of flying rose accordingly. Included in the entry of about forty were two Canadians, an ex-pat, Stu Holland from Eire, and a Spaniard. The whole event was superbly run by Vernon Hunt and the final took place well before the sun set over the magnificent backdrop of Peterborough Cathedral.

Results:

1st	Geoff Thompson	(Seca)
2nd	Richard Herbert	(Seca)
Joint 3rd	Roger Fisher	(Seca)
	Stu Holland	(Eire)

League Positions so far:

Richard Herbert	40 points
Richard Evans	35 points
Alan Thompson	34 points
Mick Lewis	



9. It is noticeable that many combat fliers build very nice models, even though they might have a short life. An attractive collection of tie-dyed models from the Northern Vintage Combat Team.

10. Another well built model from the NVC Team, this one by Alan Waterford. Note the use of a snuff tin for a tank!

Heard at the Hangar Doors

Happenings around the world of aeromodelling

VINTAGE COMBAT

The weather dominated the fourth round of the vintage combat league at Bilton on 25 June. Many flyers had obviously heeded the forecast for a wet and windy day and just stayed in bed. Even so, an entry of twenty two was indicative of the attraction of this new format in which a pilot counts his best six out of eight scores over the season.

By mid-day only a handful of bouts had been flown and many were suggesting the event be cancelled fearing that it could not be completed - however, the rain seemed to be easing and the decision was taken to

continue. We now had the problem of streamers falling apart after contact with wet grass - Jim Carolan to the rescue with his bag of F2D (international class) streamers which are much stronger and don't fall apart when wet.

Probably due to the conditions some pilots found it difficult or impossible to get consistent engine runs, and consequently many bouts were scrappy - those who mastered the conditions best progressed to the final rounds. The final itself between Mick Loughlin and Richard Herbert was an excellent climax to an otherwise quite dreary day.

Mick Lewis

Results	
1st	Mick Loughlin
2nd	Richard Herbert
3rd	Alex Herring

DOUBLE VINTAGE

In the late sixties and early seventies combat had a very strong following in this country. When Derek Dowdeswell became National Champion in 1973 he had to overcome 133 other competitors to take the title. Last year I believe Mike Willance only had to see off about a dozen to win the F2D (international class) at the Nationals.

We all know what went wrong with F2D Combat and I don't want to go into that here - just to say that it is virtually dead even though it may appear otherwise. When we read of sixty entries at the World Championships - remember this only represents three per country! So some people of vision got together in the late 'eighties to set up a Vintage Combat class. These were the models which had been in common use before the end of 1970 powered by motors which were also in common use prior to that date. Repro motors and modern PAWs would also be allowed. Well, it's obvious, isn't it, that to be competitive in this class today the latest PAW 19 must be used and this is where we have deviated from the original intention of Vintage Combat - models are now going as fast as the Super-Tigre G20 powered foamies with which I won the Nationals in 1976 and the Euro champs the following year.

For some time there has been a school of thought that the modern PAWs should not be allowed. So where would that leave us? The best and almost universally used motor in the 'sixties was the Oliver Tiger. What would an Oliver only (and repro) event really be like? Would there be any interest in such a class? To put this to the test Alan Thompson of the SECA club decided to run an Oliver only event alongside a 'normal' vintage combat contest at Scratchwood on July 6th. As this was not a league event entries were expected to be lower than usual and this proved to be the case with eight entering 'normal' vintage and six entering Oliver only. With such a small entry Alan opted for the two life system to give everyone as much flying as possible.

The first thing you notice when flying your Oliver model is a serious lack of line tension - how did we manage in the old days? The second thing you notice is serious lack of speed and this makes you realise why developments went the way they did in the early 'seventies - lighter models, Solarfilm covering, etc. You may think that, with the shortcomings mentioned above, Oliver only combat is a non-starter. Well it won't replace 'normal' vintage but it's a real 'fun' event and would be a wonderful introduction to combat flying for newcomers. Alan is already talking about running more Oliver only events next year - and if you want a fun day out with no pressure give it a go - a repro is cheap enough at about £55.

In comparison to the Oliver event, the PAW powered models were very hard on the ears and usually the bouts resulted in some carnage but I must say that, if it's excitement you want, this is the way to get it.

What about the future of Vintage Combat? Well it's not Oliver only but neither is it, in my opinion, the continual search for more power at all costs. Hopefully all will be sorted out when we have our end of season pilots' meeting at the BMFA in Leicester.

Thanks to Alan Thompson and the SECA lads for giving us such an enjoyable day at Scratchwood. The events were well organised and, above all, brought the fun back into vintage combat.

Mick Lewis

Results

Oliver only

1st	Geoff Thompson	(Warlord)
2nd	Richard Herbert	(Chaos)
3rd	Roger Fisher	(Anduril)
4th	Alan Thompson	(Piranha)

PAW (Normal)

1st	Richard Herbert	} All flying Sequis
2nd	Geoff Thompson	
3rd	Alan Thompson	



FAR LEFT: Vintage Combat winners at the League's Scratchwood meeting in July. From left to right: Alan Thompson (3rd), Geoff Thompson (2nd) and Richard Herbert (1st). All three did well in Oliver-only Combat, too!

LEFT: Mick Loughlin pits Richard Herbert's Oliver-powered 'Chaos' in the Oliver-only event at Scratchwood. Came 2nd.

VINTAGE COMBAT LEAGUE - ROUNDS 5 & 6

After the near washout at the Bilston Gala in June we were looking forward to some better weather for Round 5 at the Nationals at Barkston Heath in August. With an entry of over fifty, things were looking really good, the first day's weather was ideal for combat and some excellent bouts were flown. The second day dawned and it was wet, very wet. As a member of the organising South Bristol Club my first thought was that it would probably clear by lunchtime - what a hope! We decided only to run the losers' re-fly round that day believing that it couldn't continue for the third day. Wrong again - if anything it had got worse. Well the contest must go on, so armed with waterproof streamers, plastic macs and flippers, bout after bout was flown in the downpour. We must thank all the competitors for the way in which they helped by turning up on time for their flights.

As always seems to happen at the Nationals, the weather improved dramatically for the quarter finals and everyone emerged from their foxholes to see what was going on. The improved weather inspired the flyers and some great combat took place - in particular the semi-final between Steve Bingham and Richard Herbert. After a fantastic display the result was four cuts all and no ground

time so a re-fly was needed. The first re-fly didn't separate these two ace pilots and it was necessary for them to do battle for a third time. Finally Steve ran out a very narrow winner. In the other semi-final Mike Loughlin had a relatively easy win over three times champion Steve Malone.

So the final was to be between Steve Bingham flying his very good 'Chaos' and Mike Loughlin flying a 'Sequi'. After being very consistent in all his previous bouts, Steve's motor had developed a slight cough which was enough to give Mike the

Results		
1st	Mike Loughlin	(SECA)
2nd	Steve Bingham	(Hunters)
3rd	Richard Herbert	(SECA)
4th	Steve Malone	(Hunters)

edge and the victory. Congratulations to Mike on his second championship in four years, a worthy winner of the splendid Dr. John Dixon trophy.

Old Warden Airfield in Bedfordshire is always a delightful place to visit, where between combat bouts one is likely to see vintage aircraft performing. On this particular occasion a Tiger Moth and a Hurricane were displayed to great effect. Much of the heat seems to have disappeared from the league contest as only a few flyers have a realistic chance of taking the championship. So in a relaxed atmosphere many entertaining bouts were

flown in Round 6 and much good natured banter took place. The most notable second round bout was between John Alcock and Richard Evans. Both flying 'Sequis' they seemed equally matched and, although John had two cuts to Richard's one, he had lost four ground points so the result was a draw. In the resulting re-flight Richard was really on form and won convincingly by four cuts to one. Bob Payne had been going well all day but even so it was rather a surprise when he disposed of Richard Evans in the quarter final.

In the semi-final, Mike Loughlin and Richard Herbert had wins over Bob Payne and Rob Fisher so, once again, as at Bilston, they were to face each other in a very close fought final. This time Mike turned the tables on his friend and team-mate and made it two straight contest wins in a row. Many thanks to Geoff and Alan Thompson for providing the winners' plaques and for organising the event so well. Mick Lewis.

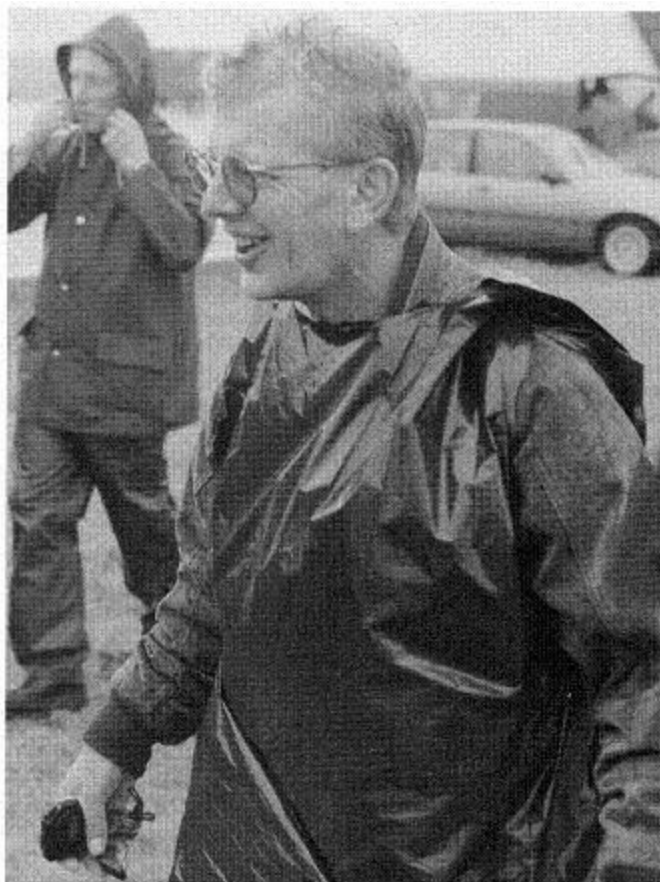
Results		
1st	Mike Loughlin	(SECA)
2nd	Richard Herbert	(SECA)
3rd	Bob Payne	(SECA)
Current League positions		
	Richard Herbert	83 points
	Mike Loughlin	57 points
	Richard Evans	52 points

1997 BMFA Control Line Nationals

Dave Clarkson splashes his way round Barkston Heath for AM



The scorers for Circle 2 in Combat. Heroines Lisa Herring and Pat Frost sat there for three long days sheltering from the rain accurately scoring each bout.



The Circle Marshall for Circle 1 in Combat, Vernon Hunt, resorted to the use of unusual waterproofing - dustbin liners!

Vintage (50 entries)

1. Mick Loughlin

2. Steve Bingham

3. Richard Herbert

S. Bristol 50th year Celebration Gala

TWENTY four Vintage Combat competitors made the journey to Berkeley in Gloucestershire for the penultimate league meeting of the season. Mike Loughlin had done his sums and knew that he was still in with a chance of catching the runaway leader Richard Herbert who was on holiday. In the event Mike was to go out in an early round when his opponent reduced his model to kit form and Richard Herbert's position was made safe.

On a perfect flying day many super bouts took place with an all day bar and free refreshments at the prize-giving - it seemed to be a perfect way to spend a Sunday and celebrate fifty years of model flying in Bristol. Richard Evans and Mark Harrison had been flying well all day and it was no real surprise when they fought their way through to the final. In the fly-off for third place we were treated to a fast and furious contest between John Alcock and Roger Fisher. John ran out the winner by four cuts to three after four minutes of top class action. By comparison the final was a subdued affair Richard Evans taking top spot by just two cuts to one.

Results

1st	Richard Evans	(South Bristol)
2nd	Mark Harrison	(SECA)
3rd	John Alcock	(NVCT)

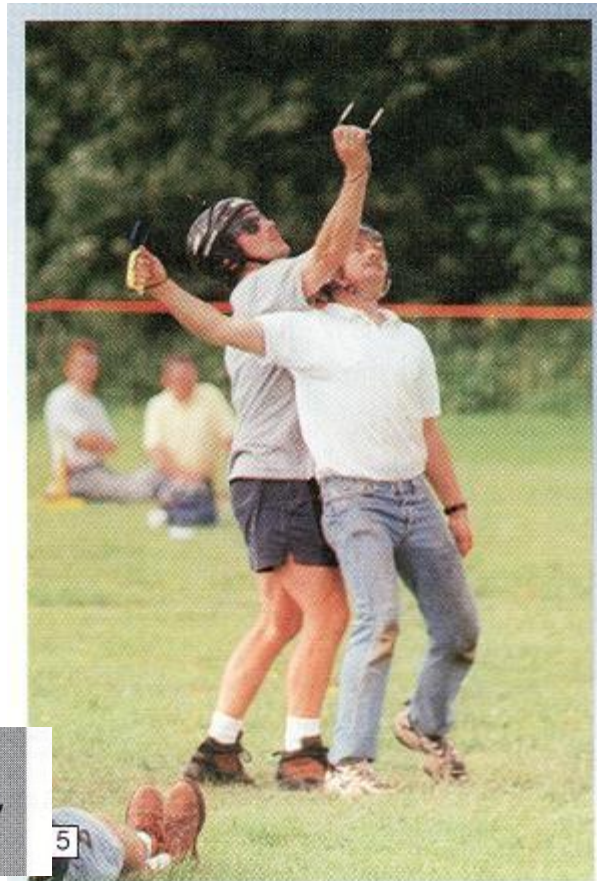
Combat at Halton

WITH the league title already decided, it would have been no surprise had the entry for Vintage Combat at RAF Halton on 12 October '97 been lower than usual but such is the following these days that twenty two pilots converged on the International Model Show. With a strong breeze and a bright downwind sun, only the best pilots would survive into the later rounds. After a quarter final victory over Richard Evans, avenging his final defeat of the previous week at the South Bristol Gala, Mark Harrison was looking good for his first win of the season. However, Mark was outflown by eventual winner Alan Thompson in the semi-final.

The final was to last all of twenty seven seconds, Alan scoring a direct hit on his opponent Richard Herbert's model, what's known in the trade as being 'bellcranked'! Hard luck this time, Richard, but congratulations on winning the first Vintage Combat League and congratulations Alan on winning this particular contest.

Results

1st	Alan Thompson
2nd	Richard Herbert
3rd	Mark Harrison



5 Richard Evans (left), came from Bristol on his wife's birthday (brave man!), here he prepares to headlock his opponent, on his way to winning Vintage combat!

Vintage Combat (34 entries)

1. R Evans
2. R Herbert
3. A Thompson
4. S Holland