

# ADS



## Short Finals

Special WC Edition



But why me, Master?

BECAUSE YOUR EXPERIENCE IS IN NEED OF ADVANCEMENT,  
GRASSHOPPER.

But I have flown soarers in competition for more than two decades.  
What can there be left to learn, Master?

THERE IS MUCH YOU DO NOT YET UNDERSTAND, GRASSHOPPER.  
EXPOSURE TO NEW PASTURES SHOULD HELP IN THIS MATTER.

I cannot see the point, Master. Are not my competition launches of  
sufficient majesty to cause fellow competitors to bow in honour?

TRUE, THEY DO INDEED CROUCH LOW AND COVER THEIR HEADS.

And is not my ability to consistently land before the Royal Flag  
attached to the tow ring kisses the meadow not held in awe, Master?

TRUE, THIS IS THE SUBJECT OF MUCH WONDERMENT AMONG YOUR  
FELLOW COMPETITORS.

And do not my precision landings bring unbridled joy to the hearts of  
my fellow contestants, Master?

TRUE, YOU HAVE INTRODUCED THE CONCEPT OF SPONTANEOUS  
GAIETY TO SERIOUS COMPETITIVE MATTERS.

So why me, Master? I will not know anyone at this World  
Championship event apart from Masters Balthazar Flockhart and  
Geronimo Shering, I will only be a spectator from afar and, most  
regretfully, I do not as yet comprehend foreign tongues.

ENOUGH. GIVE MY REGARDS TO THE MASTERS AND BE AN  
OBSERVANT SPECTATOR. AND DON'T WORRY, THE YORKSHIRE  
ACCENT ISN'T THAT HARD TO LEARN.

# The 2004 F5B/D Electric World Championships

Eight days in August - notes from a novice

John Barnes

## HEALTH WARNING

If you are an experienced competitor **do not** read this article, especially if you intend to drive, operate machinery or use chat-up lines in unfamiliar surroundings. It is intended as an aid to comprehension to those yet to try competitive electric soaring. It will induce extreme drowsiness in experienced F5 competitors.

*The model rounds Base A to start its third leg of the course, but this time heads straight for him. Uh-oh. He's waited eight days for this possibility. The model closes fast on his position, seemingly inside the safety line as his head is turned almost ninety degrees from the sighting wires to keep it in view. At the final moment, doppler-shifted shriek steadying at what sounds like a metre or so over his head, his focus and sighting wires come together. Vision waits for the model to pass the wires, overruled by his senses advising him that the last-seen trajectory of the ship a nano second beforehand couldn't fail to pass them. His thumb, a mind of its own, activates the buzzer as the ship completes an impossibly tight turn a metre inside the wire. It's so close to him the 130km/hr blur curves from top to bottom in his vision. He refocuses on the model as it dwindles to Base A, stopwatch telling him that it has time for a final four-lap set. Sixteen seconds to work out how not to get fooled again. Jings, eight days already....*

## Cover:

*Grasshopper the McBarbarian. The master plan was to relax, spectate, hopefully meet a couple of people, take a few shots, learn a bit, get plenty of sleep...*

“Do you have anything planned for this morning...?”

My pause is too long, because Steve Mettam follows up the query with “...because I could do with a little help today.” It's just after 5:00am Saturday the 7<sup>th</sup> of August, and I arrived at the Knavemire, York's famous racecourse, 45 minutes ago after a gentle drive down from Scotland overnight. That's why my brain is still disengaged, because I say “Okay” before the Never-Volunteer-For-Anything-I-Do/Don't-Understand system kicks into gear. Too late now.

I've come to York to observe the 2004 Electric Flight World Championships (being held in the UK for the first time), take a few snaps, get a feel for the nature of the events—multi-task electric soaring and pylon racing—and write a few words about the event for my club magazine. I had been hoping to compete in the Sunrise-Sunset event which has traditionally been a WC opener, part of a three-man team with Alan Flockhart, Bruce's son, and Ray Pike from the Australian team, but this event was cancelled because of a lack of entries. I didn't know this at the time, but maybe the writing was on the wall for the event after the 2002 Champs in Switzerland, where the longest flight by the winning team turned out to be 9:34:22, only 3 flights required for the 15½ hour flying window. Nope, haven't a clue how they managed it either. They're electric soarers, Jim, but not as we know them.

I know a bit about thermal soaring events and the F3J and F3B international classes, but have never seen serious electric competition before, so a voyage of discovery. My club, Aberdeen and District Soarers, flies soarers and electric models of all types almost exclusively so I hope to pick up the odd spot of helpful advice from the best exponents of electric flight matters in the world, which might, just might, be of use to us sport electric flyers who've

progressed beyond Tamiya connectors. That's assuming I can get near anyone from the spectator outlands during the event. I'm therefore tickled pink about Steve's offer of a chance to get closer to the action.

Where Steve wants help is at Base B, for the UK Open soaring event which takes place on the Saturday and Sunday before the Champs start in earnest on Tuesday. There's also Open pylon racing over the weekend.

I know about the function of Base B, the far end of the 150m course which the soarers use for the distance part of their task, because I've read about it. I've never been close to one before, or heard anything from anyone who may have done the job, suggesting it's either an easy, no-brainer of a task, or something people don't own up to for fear your response to "I'd like the hand of your daughter in marriage, sir.", might be an emphatic, un-negotiable "NO!" Fortunately Steve doesn't enquire about trivial matters of previous experience or the name of my guide dog, so just before 8:00am I head out to the distant location, not a clue about what to expect or, at this point, exactly how to do it. But, hey, what could be difficult? Just press a button when a model crosses the sighting wires, don't press it if it doesn't. Easy money. Should manage that with my eyes shut, ho, ho. Such are the uncomplicated thoughts of someone who has never seen an F5B ship in action before.

Just before I depart, George Shering offers me a stopwatch. 'It'll stop you getting bored, give you something to do out there. These buttons allow you to independently time the motor runs and on-course legs which you can scrutinise using the multiplexed regressional analysis buttons to tell you which pilots are flying the course more efficiently, and these buttons allow comparison of the data at the end of each round. Oh, and that little red button allows selection of Reverse Polish or algebraic data handling protocols.' I'm sure there's a button to sort pilot's results by their inside leg measurements too. George *looks* serious, but I remind myself that there's a combination of Billy Connolly and Ricky Fulton lurking inside most Scots I've known. Jury's out. "Thanks, George".

Hello, Base B. It's only when I get close that I can see which are the support wires for the tall, vertical barber's pole which towers over me and which are the sighting wires. Fortunately there's a chair in place which helps locate the latter. A test has already been carried out on the buzzer button coiled around the pole, its cable snaking off over the horizon to the distant Control Tent where the computer wizardry which helps control the event is piled high.

Setting up Bases A and B is a time-consuming and critical task in itself to achieve absolute parallelism of the sighting wires. The centre of the Base poles is exactly 150m apart, but the soarers don't fly around the poles (that's the theory...). I vaguely remember the notion that somewhere around here should be a conceptual safety line somewhat further out from the Bases. A ship *has* to keep on the right side of this 'line' otherwise it receives a zero score for the flight. There's no actual line, but somewhere down at the Base A end will be a sighting device for a Safety Line Judge. I also vaguely remember that while this concept is called a safety feature, its real purpose was to stop ships dive-bombing the Base B position to intimidate the caller into an early buzz to get rid of the damn things before they got *too* close. In serious competition, anything goes. So, whether a ship is 10m or 10km from the Bases when it's flying the course, the location of the sighting wires is critical to ensure that their extended plane is 150m irrespective of a ship's distance. At this point I don't know that for the Open event there won't be anyone manning the Safety Line device.

The course has been laid out with Base A away to my right, closer to, but still a considerable distance from, the Control Tent and pit area, the latter behind me when I'm sat in the chair. The landing circles for the soarers are laid out between my position and the CT/pit area. The course has been set at a severe angle to the run of the field and team area, so I'm a long way off. I should have brought the sign from my cottage gate.

**This is not the end of the Worlde but you can see it from here.** The PA speakers are inaudible at this distance and I don't have a radio. I have no way of knowing

who is flying. My eyes will have to tell me everything. Dammit, the rest of me could have gone to bed. I get comfy in the chair, get a feel for the buzzer position in my right hand, George's time-analysis boredom-zapping device in my lap. Light winds, the sky a uniform grey. I watch and wait, quietly eager anticipation for something not experienced before.

It soon arrives. The first ship launches at Base A, climbing majestically to a considerable height in a few seconds then... a description which doesn't *begin* to convey what it actually does. Yeah, yeah, the height thing is okay, but... wow, this *is* worth seeing. And hearing. From my position the model appears to be rising vertically from the launcher, but it obviously isn't. It has to be more like one half of a lop-sided inside loop, the model launched directly away from the Base A/B line. As the model reaches the top of the climb/loop, inverted and heading back towards Base A, it half rolls and accelerates in a dive like there's no tomorrow, motor/prop *really* unwinding now, and *screeeeeam*s down the course on its first lap. With the motor running, the silly bugger having left it too late to switch off. Of course not, Sherlock, but it takes me a moment to work out that at my distance from this action there's a significant time delay between what I'm watching and what I'm hearing. And what a sound. All prop noise to start with, then a segue into greater stridency as airframe noise joins the band. The revs rise dramatically but progressively as the model climbs and the prop unloads, but this is only Rossi on a warm-up lap, gravity taking its toll on the model's obvious desire to be the first electric soarer in space. As the model dives for the course, it's Valentino going for pole. The banshee wail rockets to a Doppler-aided crescendo before dropping instantly to just the muted shriek of a high-velocity approaching object. **INCOMING!** I suffer sensory dislocation as the conflicting inputs from my eyes and ears fight for priority.

Just in time I remember what I'm here for. I've already worked out that I can only align the sighting wires with one eye focussed on them. Trouble is, the tiny model, high and edge-on sideways to me as it approaches, is

bloody hard to see against the mid-grey backdrop with *both* eyes glued to it. As my head rotates from right to straight ahead, I close my right eye, focus my left on the model, then the wire alignment, then somewhere in between the two as the model executes a tight, left-hand 180 degree diving turn and wails back to Base A. All of this, my contribution, has taken a fraction of a second to complete. Somewhere is a vague recollection of the blur *just* passing the wire (only one to see when they're aligned) and me hitting the buzzer. Well, I assume it's buzzing somewhere because I can't hear anything courtesy of my distance from civilisation and the noise of the model. So, more accurately, I hope I've activated the silent, click-free, personality-free pushbutton correctly.

I hope for the same thing about 7-8 seconds later when the model, completing its 2<sup>nd</sup> leg, wumps around Base A and streaks back to Base B. Much lower, closer and hence seemingly much faster now, I bodge the blur/wire alignment trick but still hit the button as the blur goes past me because it's using slightly more distance past the Base for this turn (I work out why later). I'd also taken the precaution of picking a secondary reference point before things started in earnest, the wires aligning perfectly with a tall tree/house combination on the opposite side of the racecourse with my eyes straight ahead. I watch the model as it whistles off to complete a 4<sup>th</sup> leg, clear Base A and start its 2<sup>nd</sup> climb to altitude. The 2<sup>nd</sup> of 10. And this is the first pilot of 62 entered in the Open event. A picnic hamper would be nice. I have 3 fluffy mints hibernating in a pocket. Ah well, all part of the learning curve. Maybe I can break them into smaller mints...

## **F5B OVERVIEW**

The two-task flight facing an F5B pilot is deceptively straightforward. He faces a precise flight time of 13 minutes 20 seconds. The countdown starts when a model leaves the launcher's hand. This 13:20 is split into two timeframes. The first of these, 3:20, 200 seconds, is the first task for a pilot, the task for which the 150m course has been laid out. At

the end of 200 seconds, the 10 minute timeframe of the duration task starts. Stooage around for 10 minutes using as much motor run time as necessary to remain aloft that long. Simple, eh? Oh, and at the end of the duration task there's just the formality of a precision landing as close to 10 minutes (13:20 total) as possible to tuck under the belt. With a model only fractionally larger than my 340g HLG but fractionally heavier at 2kg+.

### THE DISTANCE TASK

Within 200 seconds a pilot has to complete as many legs of the course as possible, a leg being simply a glide from one Base to the other, a glide from A to B and back to A therefore being 2 legs. A model can only score legs when its motor is off, hence all climbs to height are done off-course, i.e. outside the 150m sighting plane envelope which runs to the horizon, at the pilot's position at Base A. Why not climb at Base B too? An option, but impossible for the pilot to judge when to shut off the motor when entering the course. It's only at Base A, his location, that a pilot can accurately judge this matter, model accelerating hard under power until a moment before it crosses the Base.

A pilot has a maximum of 10 climbs allowed to execute this task. It's officially called the Distance Task. Yeah, right. While this is a technically correct title, it doesn't *begin* to bring home the nature of the beast. I know what the multi-task **F3B** distance task is, and how *it's* flown. 4 minutes to do as many legs as possible (same 150m course, by the way) from a single launch. I also know what an F3B speed run looks like. Launch and do 4 legs of the old course as fast as possible. Top F3B times for this bit are in the mid-low teens bracket (normal mortals yet to reach F3B superstardom level take their loved ones for a lazy weekend in Paris when they crack 20 seconds).

To complete *their* distance task, **F5B** pilots essentially carry out, or try to, 10 F3B speed runs. The faster ships, 40+ legs, achieve *this* feat by throwing in one or more much higher climbs and running six-leg sets (a set the name for each motor-off run through the course).

From the Base B position it's dynamically brilliant to watch, judge, the attempts to achieve this. And part of the devil is in the detail, the different strategies necessary (but not always followed) to end the course run efficiently as the 200<sup>th</sup> second approaches. 201 seconds is one second into the duration task. If a pilot is still flying the course, *that* leg doesn't count *plus* time's been wasted in not climbing to height for the duration task (before its timing starts) during the last unattainable leg attempt. A pilot has his eyes always riveted on the model so is very dependant on additional assistance to manage a number of tactical matters. It's very much a team endeavour throughout a flight.

Damn, can it get any better than this. Actually yes, but it takes new-boy a while to discover the biggest jaw-dropper of the event from his perspective. Meantime, back at the course...

The first pilot completes the distance course task and climbs to altitude to start the duration task. As soon as the 200 seconds are up for the first team, the second team to fly starts moving to Base A from a holding station not far from that Base, a 2 minute prep time window to get into position and launch commencing as the team moves into place. If the 2 minutes is exceeded without a launch the pilot scores a zero for that round. Ah, forgot to mention, once *all* pilots have flown, that's one round completed. On the first day it's hoped to get one round of the Open event flown.

It's not long before I begin to hate white models. Against the uniform mid-grey background I keep losing sight of them on the course. The Klingon effect, white starships with a great cloaking capability. Maybe it's a switch on the transmitter. Edge on from the front, side or rear they can disappear instantly. With a fuselage cross-section at its widest point just large enough to accommodate a 4 stick pack of sub C cells, and a maximum wing thickness of around 10-11mm, it's not hard to see why. From just 150m away, if a launcher is holding a model edge on to me I can't make out who in a team is holding the model. In the air a model can be much further away. Tricky

stuff. I get better at re-acquiring lost targets as the morning progresses, my senses slowly adapting to the dynamics of the task.

One thing I don't get used to is models, on the duration task, powering up when they're close to me. As mentioned, the landing circles are behind me, the light wind keeping my back cool. This means that the area I'm inhabiting is (a), on the landing approach and (b), below the chunk of sky the models will gravitate to as the duration task time diminishes. At duration speed the ships are silent. The morning tranquillity is peppered with unexpected explosive blasts close by as low ships power-up to altitude. The robotic dancing does wonders for my blood circulation.

The rapid throughput of pilots during the morning is impressive, little chance to do anything other than watch and buzz, the grey screensaver slowly morphing into a sun-lit blue one with white fluffy bits. The sun's over my left shoulder, white models now the easiest to track, at least against the blue bits. Continual focus, a determination not to cock-up anybody's flight with a missed or undeserved buzz, so much so that I'm surprised by the arrival of a noon break in the Open event. Noon already? How did 4 hours slip by virtually unnoticed? Time, the Master of cloaking devices. I meander back to the pit area, George's neglected stopwatch a tempting frisbee. Nice one, George. Almost had me there. The verdict's in.

Initial impressions. Terrific, hugely entertaining grin-from-ear-to-ear stuff. I've seen about as many variations in flying the course as there have been pilots. Some variations suggest it's been as entertaining for the pilot as it's been for me, but the overall standard of flying has been very good. And thank God I'm part of it. From the distant spectator area I think I'd have rapidly lost interest in the seemingly repetitive runs through the course and gone off to watch daisies grow. It'd be like watching a Formula One race from the next county. And Base B is the best educational seat in the house. A few models through the course have really impressed. Mr Embryonic isn't sure why yet,

more experience necessary for the subtleties of course and model mastery to become apparent.

The Open soaring event has stopped at noon to allow the first round of pylon racing to take place. I had wondered where the pylon course was located, no signs of another course on the Knavemire. It turns out to be in the same vicinity as the 150m F5B course. I hadn't noticed the pre-measured markings for the giant pylon-course pylons, yet to be erected. This means that the pylons for Bases A and B for the F5B course have to be laid down, a surprise given the scrupulous measurement which went into their initial installation. Some of the F5B ships have been carrying out consistent precision Base B turns with a don't-blink overrun of just 2-3 metres on the high first-second leg turns, meaning small errors of sighting wire alignment could be significant.

Parched, for the first time I meet the delightful girls manning (sorry girls, 'womanising' doesn't work!) the makeshift cafeteria in the biggest marquee and, presently penniless, negotiate a tab for my consumables. The girls are brilliant. Over the 8 days of the event they are always cheery and helpful towards Mr Tab, good-natured bartering each day over the expanding amount I'm in hock. 7:00am start, 9:00pm finish some days too. Girls, if you don't get a lazy weekend in Paris after this there ain't no justice. Start a campaign.

I wander around the pit area, a stranger, taking a peek at things and trying not to look like I'm about to nick 'em and run, then watch some of the pylon racing. A fascinating discipline, as much of a technical challenge as the F5B ships. The speed of these racers is very impressive. They don't seem *quite* as fast as Brian Johnson's 10 cell, brushless Speed 400 size VIP pylon racer I saw at the Scottish Nationals last year, but they're much bigger and heavier and, unlike the VIP, run the pack flat in one sustained burst of a minute and something for the 10 laps of the 400m triangular course they run. The VIP would melt. Officially, 4km in just over a minute for the fastest ships. They actually travel much faster than that would suggest because they

track a considerably greater distance outside the pylons and slow as a race progresses and the pack depletes. The first few laps are eye-wateringly fast. I'd thought these were 7 cell ships (they will be from 2005). Turns out there's a 425g pack weight limit for F5D, not a restriction on the number of cells, so packs likely to be 10 cells+ depending on the cells used.

I also note that the teams, 3 flying at a time, don't launch together. So not directly a race against each other, a race against 3 clocks which fire up as each ship passes a start line after launch. The event is labour-intensive. 3 timers and 9 pylon judges (3 monitoring each pylon) plus an official who stands with the teams and ensures teams launch in the right sequence and delay interval. It's spectacular stuff. Sabine Konrath, Mrs Kontronik, is CD for the pylon racing. She and Brian Johnson would get along like a house on fire, both highly experienced, no-nonsense CD's with that uncanny combination of sympathetic ears allied to a YourBallsMoveWithUs™ cricket bat.

Some time into this pylon round, one of the ships decides it's had enough of racing and needs nourishment. Where's the café? BANG-BANG-THUD. It goes through the roof of the main marquee at one corner, just to the left and behind the girls, and out through the wall into the ground. Thank God no-one is hit. I peruse the marquee holes. Plasticised, heavy-duty material. The hole in the ground suggests quite an impact. Very lucky. I pop in and check with the girls, still recovering from the bang-bang part which would have been very loud inside the marquee.

Resuming the pit walk, I greet Master Flockhart. Bruce is concerned about me not getting relief during the morning, an hour or so considered a long enough stint apparently. That's okay then, because I feel like I've only been out there for... what exactly? Trite to say 5 minutes. It's not a time thing. I don't have a word for it. It's that strange way personal time has of stopping when one is focussed on something totally absorbing. Modellers and programmers alike know the feeling of surprise—when something requiring total concentration has been accomplished—

when a glance at the clock reveals it's four in the morning, day having earlier faded to night unnoticed in a parallel universe. Perhaps the ageing process also has this feeling of surprise, its perception of time similarly suspended. (Grasshopper's glass is never half empty.)

Bruce introduces me to one of the Italian pilots, Remo Frattini. Remo's holding a model with the most intricate colour scheme I've ever seen on a soarer. In fact 'colour scheme' doesn't do it justice. It's drop-dead spectacular. As is the prop/hub/spinner. Remo shows how it works, the blades folding flush with the fuselage when closed. This is flush as in all the way from prop root to tip, no gaps in between. And when folded, the blade root is shaped to flush-fill most of the hole in the spinner. Hand-made, commercially unviable with the man-hours it takes (of course I asked). Exquisite detailing, streamlining. Bruce whispers that Remo is one of the favourites for the event. Later, pointing to the back of a silhouette in the German tent, Bruce says, "Wolf Fickenscher", Wolf another favourite apparently.

I bump into fellow ADS member George Thompson, George in the area and deciding to pop by to see how electric models which don't have a Speed 400 in them perform. No time for an extended natter because the Open soaring event is about to resume. Once the first pylon round is finished, a decision is taken to move the course further away from the pit area. With the time-consuming measurements involved, not a rush job, so Round 1 of the Open soaring event restarts at 2:00pm. This time I've brought refreshments with me. That afternoon I get my first major fright.

A model on course towards Base B, I suddenly notice a couple walking slowly towards me. 15m on the course side. I drop the buzzer and sprint to them, proffer a breathless (the fright, not the run) explanation of the nature of the event and the potentially hazardous spot we're in and would they *pleeeeee* come with me quickly. "Oh yes, we read about it in the paper." I get them to the Base, check that no-one's going to be on a landing approach in the next few moments and point them the safest route towards the Control Tent.

When I look back to the Base the model is patiently circling, the centre of the circle in line with the pole. Very funny. I run past Base A to the team group (the US) and proffer a breathless (*could* be the run now) explanation of what's happened and that they'll get a re-flight. With my in-depth knowledge of the rules I'm just guessing the re-flight bit but will quit if they don't (they do). A smile, a calm reply helps sooth my rattled nerves. I make a note of the face so I can check later about the re-flight stuff and jog back to Base B. I don't want to waste time because pilots queued to fly have cooling battery packs. Flights continue until the first round of Open is completed at 4:30pm, me as hyped as a long-tailed cat in a room full of rocking chairs, routinely surveying the area for walkers between each run.

One of the highlights of the round has been one model which stood out from all others by virtue of the fact that it had no choice. Bless me, a flying wing. A rapid, stately cruise through the course, wide, elegant turns at the bases, it looked majestic. It made a very welcome change, a delight to watch in flight.

Another highlight has been the jaw-dropping bit I alluded to earlier. The afternoon session is my first chance to watch what F5B ships do *after* they exit the course. *What* a surprise. This is something I had to see. I wouldn't have believed it otherwise. A little bigger than a HLG and a wing+tail area loading of 75g/dm<sup>2</sup>. 25oz/ft<sup>2</sup> in real money. That's why they get through the course so fast. So one thing I *hadn't* expected was that in duration trim they'd float around like a modestly ballasted Gentle Lady. There may be lots of deft stick work to achieve that effect on something essentially dihedral-free and neutrally stable, but the effect is something to behold. I've never seen a soarer type with such a huge performance envelope. And soarer is right. These ships thermal soar very well too. In the very light afternoon winds the approaches to the landing circles seems so slow and precise, the only evidence they aren't Gentle Ladies being the touchdowns, inertial mass on the drums to play out some of the flights with 'Clattery Thump'. Worth the trip down just to see *this*.

More refreshment-laden wandering around the pit area as I unwind, a nod or a few words exchanged here and there, me grinning, expressing my initial reaction to seeing F5B in action for the first time. I meet Ulf Herder, Ulf an electronics engineer (possibly not the right term) for Schulze. Ulf outdoes my grin, seems genuinely amused by my kid-in-a-toy-factory response. I am to learn quite a lot from Ulf before the WC is over. One thing I get a hint of immediately is a quiet passion for what he does and for what he's involved in here.

A short drive back to the Racecourse Centre where I'm lodged for the WC (£22/night inc. brekkies). The Centre doesn't do evening meals, but they do for a couple of nights for the Champs. I get cleaned up and join Bruce and Elaine Flockhart and Ray and Erica Pike (Team Oz) for a meal. Champs tend to be family affairs. Later I'm chatting with a delightful German couple before introductions are made. Uwe and Diana Plettenberg. The pleasure is mine. If there's a Rolls Royce of motors, it has to be Plettenberg. I have a couple of older motors, one of which has had serious use over the years and still performs as well as the day it came out of the box. The same passion for what they develop, manufacture, what they're involved in here, just like Ulf. There's obviously more goes into these products than just nuts and bolts. As a reward for my brainless questions—when you've done Base B it's expected—Diana gives me a 2004 catalogue. Dammit, I was planning to sleep tonight. Wonder if Ulf has a 2004 catalogue...





John Barnes

*Team Italy pilot Remo Frattini and Bruce Flockhart. Beautiful artwork on the Italian models.*



John Barnes

*The clever prop/hub/spinner design used on the Italian models to reduce drag with the blades folded.*

## SUNDAY

“Base B?” I don’t know if Steve’s expected help has arrived. “Yes, please.” has me heading for the Base for an 8:00am start for the 2<sup>nd</sup> round of Open. I’m not there long though. The first model completes the course then goes in hard a hundred metres or more away on my left. It seemed to go from control to no control a couple of seconds before impact. A few more models fly before the scoring system crashes. Big-time as it turns out. At the Control Tent area there are mutterings about interference as well. It takes many hours before the scoring problem is resolved, help from the teams aiding the investigative efforts of the lads running the system. A very serious issue, the F5B World Championships, starting Tuesday, under threat from this problem (Pylon has it’s own scoring system).

During the enforced break the pylon course is erected and more racing takes place, but I’m off on a mission. Livingstone tracks down the innovative flying wing and its adventurous owner. Kenichi Ueyama is the Japanese Team Manager. “Ken.” I’m shown the model, some of the details of its development challenges explained. A parallel-chorded swept wing, Ken tells me that the parallel bit allows long moulds, wing panels of any length, so there’s a 1.5m slope version, a much bigger span thermal soarer version, etc. The F5F (10 cell) model I’m holding has a pusher layout, motor at the rear of the fuselage pod driving big folding blades. It has to be bungee launched, technically illegal but fortunately something Steve has allowed for the Open event. This one is a 4 servo wing, flaps and ailerons. There are also 6 servo versions. Fun bits have included stopping the tips of the giant prop blades latching together when folded and not opening when powered up, and a yet-to-be-resolved issue with the folded blades sometimes acting as a spontaneous elevator input as the air flow over them tumbles and spirals, causing the model to nod its head in agreement in level, high speed flight. Outstanding model, Ken. Thanks. ADS reporter sans camera, we agree a photo session at some time, neither knowing that Destiny has decided she won’t grant a second chance.

I also get a look at the highly regarded Avionic F5B ship. Designed and manufactured by Sergey Sobakin, one of the Russian F5B pilots in York. I’m hugely impressed with the quality, the detailing, and the immense lightness and strength. The fuselage weighs just 60g yet I can’t flex the very slender tail boom. Sergey says the moulding has to be done under high pressure to achieve this. I forget to ask if this is carried out at elevated temperatures as well, but I’d imagine so. Sergey also makes pylon racers and a number of other model types. The Avionic F5B ship can be had with the 4 servos (VOLTZ for ailerons, JR 161s for flaps) already installed or sans servos with servo cut-outs in the wing. 800 and 600 euros respectively at the time of asking. Ah, but what’s the price to an impoverished old man whose children work up the chimneys and wife at the docks to bring a crust to the table? “800 euros!”

Back at the Control Tent there’s an absence of multi-lingual cursing. The Open event starts afresh at 2:30pm. A substantial, sunny side wind at 90 degrees to the course. This’ll be interesting. Also interesting is the fact that if the weather holds it’ll be a very late finish. Before going out I make a crack to Steve about how impressive it’ll be watching the models against a star-lit backdrop. Big mouth. By the time the 2<sup>nd</sup> round is completed at 8:45pm it’s getting dark and the odd twinkle is starting to fire up.

The side wind, from behind me and trying to convince my hair its future lies to the west, has been a challenge for many. Models flown with a course pattern of continual right-hand turns have obviously decided the club scene in Harrogate is preferable to York’s. I don’t know how the pilots keep them in sight because I’m struggling and I’m closer to them at some points. In some cases the whole model disappears behind the thickness of the wire as I buzz. But other models track the course as if there is no side wind, running an invisible slot-car track as each completed set appears an overlay of the last. Superb skills. For the second time I see a model which completes the 3<sup>rd</sup>/4<sup>th</sup> diving turn very low, something different

about the turn to almost every other ship. I can't put my finger on what it is yet, but there's a strangely familiar feel to the sensation as well. Mmm...

Around 5:30 I get relieved, promise I won't be long. Pinocchio heads back to the Base an hour later, watches the star prophecy take form as the round concludes. A help-out with breaking down the equipment, the speakers, the big digital display counter, the batteries, all stored in vans. I get back to the Racecourse Centre an hour later and immediately head off to the pub opposite the Centre entrance with Bruce, Ray and the girls. The Fox and Roman. Look it out if you're ever in York. Great service, great food and my introduction to Erdinger beer. Served in chilled, tall, sensuous glasses. Superb stuff.

Another great day, but the weather forecast for the week ahead is not good.



John Barnes

*Sergey Sobakin with the beautiful 'Avionic' F5B ship. Used by many pilots at York. A long waiting-list so plan ahead.*

*Japanese team manager Ken Ueyama and 'KU2', his design for the 10 cell F5F class. Looked terrific in the air. Pity the fine weather and warmth didn't last.*



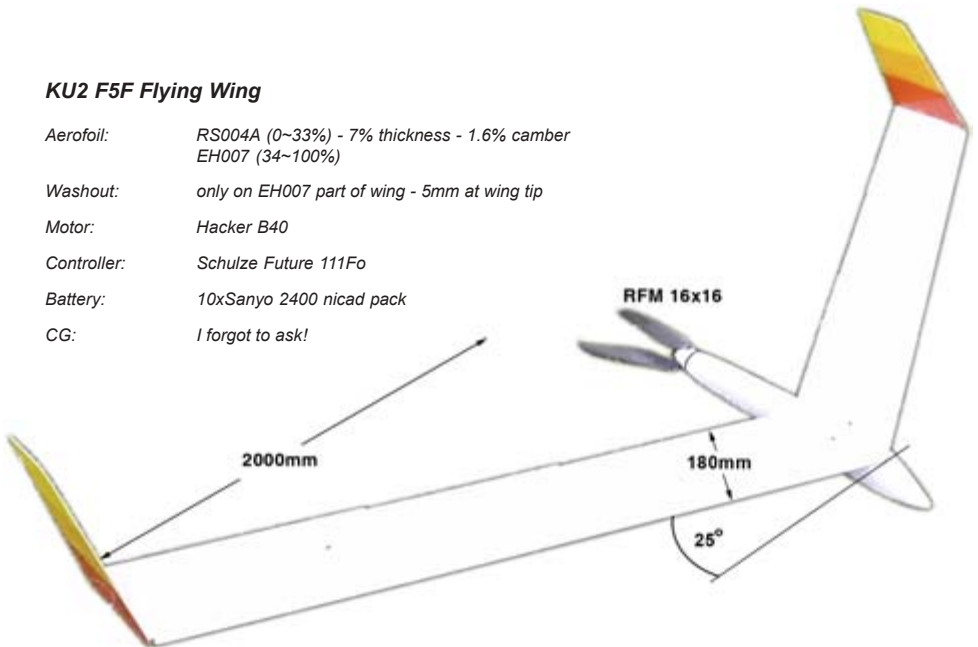
Stephen Mettam



Kenichi Ueyama

### **KU2 F5F Flying Wing**

- Aerofoil:** RS004A (0~33%) - 7% thickness - 1.6% camber  
EH007 (34~100%)
- Washout:** only on EH007 part of wing - 5mm at wing tip
- Motor:** Hacker B40
- Controller:** Schulze Future 111Fo
- Battery:** 10xSanyo 2400 nicad pack
- CG:** I forgot to ask!



## **MONDAY**

I check in for duty. "Yes, Please." Grey, murky, increasingly wet weather most of the morning. Remarkably, the pylon folk decide to fly in these conditions. God knows how they manage it. It's very, very tough on pilots and helpers. Flying only pauses when the rain gets really heavy. I couldn't do it. They all deserve a medal. I spot Ulf at one of the pylon stations, nip out to loan him my broly then chase up waterproof jackets for the other two dampening samurai's with him.

Plans for a 3<sup>rd</sup> round of the Open soaring event are scrapped. Aside from the weather, the opening ceremony for the World Champs is scheduled for the afternoon. The enforced break gives me time for a wander, a brief chat with two Romanian gentlemen, attending because Romania is the country the World Champs will be held in two years from now.

A chance to chat about life in general with Ulf Herder. Battery life, that is. Ulf gives me the lowdown on his views of how nimh cells have to be dealt with to release competitive horsepower from them, how they should be stored, charged. Not for the faint of heart, this stuff. And completely unnecessary for sport flying. Undesirable as well. There are risks to hammering cells beyond their limits of containment, as I've already discovered. Remo had a pack come apart at the seams in a model while waiting to fly over the weekend. The cells don't grenade. They go off like shotgun cartridges, the crimped, electrically-positive end-plate stamped 'Exit' for the contents and it to depart the theatre in an orderly fashion. But let's keep this matter in perspective. Of the several hundred competitive flights which took place before and during the World Champs, Remo is the only pilot I know of who suffered a problem like this.

I tell Ulf I've had the Schulze high-end competition charger on order for a while now, no sign of it yet. 'Oh, that one is for YOU?' Ulf explains the hold up is due to existing chargers being updated with the latest software for WC entrants. I ask him to sign it for me before it leaves the factory. I forget to ask about the 2004 catalogue...

The World Championships Opening Ceremony is held later, inside the marquee because of the heavy rain. The Lord Mayor of York, Janet Looker, does the honours and takes a tour of the assembled teams, guided by Nick Neve, ending up being shown what an F5D pylon racer and F5B soarer actually are, US pylon racer Troy Peterson and UK pilot Mike Seale providing background information on their respective disciplines. The rain eases off at last as the ceremony comes to a close. Next day the local paper carries a great shot of Janet and Mike with the F5B ship and details of the WC. There are also flood warnings for York.

The Racecourse Centre B&B is also housing a number of the organising and operational teams for the WC, plus the four man FAI International Jury, a body present at any WC event to adjudicate on everything except why the universe is expanding. Jan Bassett (left end of the corridor in a big room full of cameras, computers, printers and Bob Mahoney), editor of the BEFA magazine, has the unenviable task of putting together a regular newsletter for the event. The 1<sup>st</sup> edition carries results of the Open and Pylon events, so I retire to my room to see how things panned out.

Travis Flynn, the US pilot, has won Pylon with incredibly consistent flying given the huge variability on weather conditions faced. 72 seconds and a whisker in all 3 rounds (a pilot's score being the sum of times achieved). Germany and Austria are 2<sup>nd</sup> and 3<sup>rd</sup>, Dirk Belting and Peter Meisinger as fast as Travis but not quite so consistent. 300 points are given to a pilot who cuts a pylon more than once or fails to complete the 10 laps for some reason. The results sheet suggests many pilots have not had a good time. With only 3 rounds and no discard, a 300 rules one out for the champagne. 900's indicate the possibility of much late-night pit work before the WC's start to resolve problems. There are quite a few 900's.

The Open soaring results take longer to review. The 'Open' refers to the fact that F5B soarers (the heavy hitters), F5F (10 cell class, much bigger models) and 7 cell soarers (fly what you bring) were flying. I didn't know this

the first day I did Base B and had pondered the big variability in climb rates and speeds through the course. The top 2 pilots in the 1<sup>st</sup> round have achieved 45 legs. 6¾km in around, I'm guessing, 2½ minutes actual time on course. 11¼ F3B speed runs. The top 12 pilots have 40 legs or more. NASCAR race winners have the best word for this. Awesome! For the 2<sup>nd</sup> round, the number of pilots with 40 or more legs drops to 9, 44 legs the maximum. The side wind had to have some effect.

No sign of Remo or Wolf at the top end. Let's see, Remo had the pack failure so a zero for the 2<sup>nd</sup> round, and Wolf seems to have run into problems on the duration task in the same round. A smile when I check Ray Pike's scores. I know that Ray's ambition for the WC is to crack 30 legs on the course. Forget any comparison with the leg numbers above. Ray's told me that at home he practices with a 14 cell pack of GP3300s because he has to self-launch. Here he's using 17-18 cell packs (18's the maximum possible under the 1100g pack weight rule. Finding 18 light ones is the trick). Late practice with an 18 cell pack back home has been hampered by the discovery that the jump in power causes the motor mount former to shear loose and spin with the rest of the rotating bits. An early task at York is having the controller reprogrammed with a tiny time-delay on start-up to reduce the kick. In the 2<sup>nd</sup> round Ray's managed 31 legs. Good for you, Ray.

Gordon Brown, the F5B scoremeister, collects me with a conspiratorial, "There's something you should hear." Down to the big room at the other end of the corridor, where Gordon introduces me to Guntmar Rueb, one of the German F5B pilots. I recognise Guntmar immediately, one of the key players in helping to resolve the scoring system crash yesterday. Guntmar knows I'm new kid on the block at Base B. It's the World Championships starting tomorrow, no place for inexperience. I get the low-down on tricks a pilot can pull (theoretically, of course) to deceive the Base men into not buzzing (hence a re-flight) if the pilot has run into technical problems on course. It's not really trickery, just competitive tactics. It's not the pilot's responsibility to keep the

Base men awake. Neat stuff. Thanks, Guntmar. Extremely helpful to know. And essential. Gordon arms me with a talking count-down timer, vital for monitoring tactical flying jokers on the course. Now I'll *know* when the 201<sup>st</sup> second arrives, my part finished for a flight.

One pilot tactic Guntmar doesn't mention. Can't. It's strictly a matter between the pilot and Base B man. But I've heard of it. Aim for the Base B man, scare him to get an early buzz. I don't know what I'll do if it happens. I scare easily. I've had practice...

... dropped into 18m seas in a storm. Not actually in the water, in a personnel basket lowered 4m too low while attempting to retrieve a mooring line, four crests passing through before the basket was raised, enough time between crests to really appreciate the majesty of nature as the troughs stopped falling away and the next seemingly vertical walls rushed to embrace. You don't see that every day (a memorable initiation for a non-swimming kid with a fear of heights on his first trip offshore). Fallen 20m+ in a drilling derrick. Crushed unconscious between two large masses moving slowly together ("*R2D2, where ARE you?*"). Actually one was fixed and the small 15 ton one was moving but it's at such times the meaning of Relativity becomes clear. Hot-dipped in tri-ethylene glycol at 400F. Run 100m to the centre of an expanding, circular, ground-hugging natural gas cloud venting from a well as my Libyan friend, at the well and with less first-hand experience of how gas clouds and sparks like each other, struggled to cock a recalcitrant Very pistol (he'd just waved back to my jumping and screaming from the truck. I'd gone for drinks). Discovered the novelty of weightlessness and multiple g's in a helicopter attempting to land on a platform at night in 140km/hr winds. Lifted a friend from a trawler one night, the 36m Manitowoc crane boom bringing the personnel basket level with me, 10m from my seat in the cab, before slewing in over the platform deck, him grinning at me, a signal for me to pause, him taking his hands from the ropes and, still grinning at me, stepping backwards... Observed the sun expand into a red dwarf in the early hours of one morning while staring at the huge, bottomless black hole at the pointy end of a rifle 10cm from my eyes when I'd forgotten about the curfew in Tripoli, a tiny part of my consciousness trying to decipher the "PeePERZ" greeting from the equally black soldier towering over me (I didn't have papers).

And the graduation test for terror. An inane decision to break with tradition and help out with domestic chores. The washing machine on its last spin cycle as Dear Wife arrives home to Mr Initiative and his cheery proclamation of support for the domestic war effort, the starship *USS Cheery* phasored to oblivion by, "You did separate the whites from the coloureds, didn't you?"

I ask Guntnar if there'll be the same stunning 45 leg runs during the World Champs that have been achieved in the Open event. 'More', says Guntnar, 'We'll be using our number one packs for that. 48 legs maybe.' Really? Mmm... I'm new to F5B/D, not the competition arena itself, and this sounds like something which might, just might be part of the delightful psych-out-the-opposition stuff which is part and parcel of any competitive event. I decide to keep Guntnar's forecast to myself for now.

What I've seen so far, the Open events for soarers and pylon racers, has been a taster for things to come. Tomorrow is the first day of the World Championships. I haven't had a tingle down my spine like this since I stood in the William's garage at Silverstone a few years back just before the start of the British Grand Prix. There's just something magical to me about top level competition in any sport.

It's hard to sleep.



Team Italy talks serious tactics. L-R, Piermario (about to fly), Remo, Claudia (TM) and Alessandro. "So what's it to be tonight then? The chip shop, Chinese takeaway or the Fox and Roman again?"



Jan Bassett

Base A. Alessandro launches while Piermario and Remo (caller) stand behind the Base, in line with the sighting wires. I'm 150m off to the left at Base B. Note the direction of the shadows. At this time of day pilots had to fly the far end of the course almost straight into the sun, so a good chance that Dick Whitehead, the Base man, learned some cute new Italian cursing.



Jan Bassett

Base discipline. Once Alessandro has launched, he moves behind Remo and Piermario immediately. Good teamwork. In the warmth the air was jam-packed with tiny flying insects which went everywhere, so if the caller suddenly got an eyefull the back-up man could ensure an unbroken run of pilot input. Fortunately the little buggers (the insects!) didn't sting, because I was coated in them for hours. They really liked line dancing on my glasses...



Jan Bassett

*Team Austria. Johannes Starzinger launches for multiple F5B World Champion Rudi Freudenthaler.*



Jan Bassett



Jan Bassett

*Johannes moves immediately behind Rudi, the caller in front kneeling behind the Base man. As Rudi can probably fly the course with his eyes shut, the caller's job is more likely to ensure the Base man doesn't nod off in the afternoon sunshine.*

*No guesses for what model Rudi flies. Rudi, through his company RFM, supplies a large range of equipment for electric flying. Designer and manufacturer of the high quality 'Surprise' range of electric soarers, bullet-proof spinners and props among other things.*

*How bullet-proof? ADS member Mike Baillie's Electro Junior shed a wing panel at 130m and went in vertically. It had been flying very well on a small Kontroniks motor/g'box married to an RFM spinner and 15x13 prop. The pack tore loose and punted the motor out of the front of the fuselage on impact. The motor was dug out from 40cm underground. All the model bits, including the motor, were history. The prop, on the other hand, was unmarked, although the spinner had a scratch on it.*



Jan Bassett

*Launching F5B ships is a straightforward matter, at least for anyone who can manage 100m in sub-10 second time while holding a 2kg weight overhead. Keeping the prop arc in front of one's sensitive bits—never assume a prop can't fail—severely limits the amount the arm can be pulled back, so a normal arm-back, good heave with follow-through is out of the question unless you're dressed like the Borg.*



Jan Bassett

*Team Spain. Manuel Ramos, F5F champ at home, trying F5B for the first time, wonders how the spot managed to move as he landed. Manuel here to learn, there being no better university than a World Champs.*



Ray/Erica Pike

Bruce and Richard Solomon catch up on Oz gossip while Dave Hines unpacks his box of Surprises, Hines jr. providing advice to dad on which bits go with which bits.



Ray/Erica Pike

Erica Pike, Team Oz helper, chief cook and bottle washer and trainer of the Oz cheerleader team, keeps Ray's batteries warm in one of his Surprise XI+'s. Model uses a Plettenberg F5B 10 motor with 7:1 g'box, a Schulze 18.149/199 controller and RFM 17x18 prop. Pack is 17 or 18 cell GP3300's. The prop is installed on a +7° hub, making it a 17x24! Ray says this setup works well on both 10 and 18 cell packs



Ray/Erica Pike

Team Oz pilots. L-R, Richard Solomon, Dave Hines and Ray Pike show that RFM models are highly prized competition tools. Stunning build quality (the models, that is)



Ray/Erica Pike

Dave Hines is not impressed with Erica's demonstration of how he should do the Base B turn.



Ray/Erica Pike

Ray Pike prays that he'll beat his 30 leg target in front of Father Solomon. Worked well, Ray!



John Barnes

Managing battery packs between flights is a frenetic, nail-biting activity as Jeff Keesaman, US F5B pilot, shows.



Bruce/Elaine Flockhart

Gary Freeman Jr, US pylon team, savours victory.



Bruce/Elaine Flockhart

Troy Peterson, US team, prepares for victory.



Bruce/Elaine Flockhart

Travis Flynn, US team, went out and did it.



John Barnes

Team Canada. Dave Sawers manages to grin despite the team problems. Their equipment had worked fine at altitude and sea level at home. Perfect preparation. Then everything which could go wrong did at York...



John Barnes

Team Belgium. Sebastien Maes, with the correct ceremonial sash and traditional kneeling position, considers falling on a sword if he doesn't manage a personal best with this flight. Fortunately, the Japanese team was away at the practice field...



John Barnes

*Ee, it were grand Yorkshire weather on the Monday. Ulf Herder models this seasons summer fashion for pylon judges. Hat by Wimpey, jacket by Plettenberg and broly by Burberry c/o ADS. Wasn't enough. It was getting bloody cold too!*



John Barnes

*The Mayor of York officially inaugurates the World Champs, ably supported by the FAI jury and Sabine Konrath. Nice story from the Mayor about the number of times York has been invaded... visited over the centuries by a number of the countries present. Still goes on today of course, except now everyone stays at the Marriot.*



John Barnes

*Troy Peterson, US pylon team, explains the nature of racing to the Mayor, while Nick Neve studies form for the 3:30 at Doncaster.*



John Barnes

*Team Poland await an introduction with the Mayor. One of the teams I didn't get a chance to say 'Hi' to, so no details of models and equipment used.*



John Barnes

*The Mayor has obviously launched an F5B ship before. The press gets the picture which appeared in the paper next day. Mike Seale stands by to catch his model.*



John Barnes

Mike explains the reason for the 12mm steel spike on F5B fuselages. Models stop in a metre or so on grass, and as the flight time finishes when the model stops moving (unlike thermal comps where it's the ground contact which stops the clock), it's not good to have 'em trying to slide into the next county on touchdown.



John Barnes

Nick trying to persuade the Mayor that a subscription to QEFI is the best investment she'll ever make.



John Barnes

Barry Flude, event safety man, in Billy Connolly mode. Nick blushing more than the Mayor, methinks.



Bruce/Elaine Flockhart

Team Russia. Also a business team, because Sergey Sobakin (F) and Sergey Anashin manufacture a number of the F5B and D models used at York. '800 euros'!



John Barnes

Wolf prepares his Racketworm's for official scrutineering. An onerous task, each model taking c. 40 minutes to process. As each pilot has more than one model...



John Barnes

*"Oh goody, another ashtray". Bruce Flockhart wins a trophy for his 7 cell Open result.*



John Barnes

*L-R, winners in the Open F5B event: Guntmar Rueb (2nd), Markus Möckli (1st) and Rudi Freudenthaler (3rd).*



Bruce/Elaine Flockhart

*Team Switzerland talk serious tactics. "Chip shop, Chinese or Fox & Roman?" Damn, decisions, decisions...*



John Barnes

*Just what Travis Flynn wanted, a big box to freight back to the US! Raffle, anyone?*



John Barnes

*The marquee Tab Team. Great job, girls.*

## TUESDAY

The 1<sup>st</sup> day of the World Championships. I arrive at the soggy field early. Convinced that Steve's expected help will definitely have arrived now the Championships are commencing, I want to get in an early bid for Base B, assuming that option exists. There's not been a planned arrangement between Steve and me. Each day after Saturday I've simply turned up and asked. Same today. "Yes, please." Magic. I don't know how much of it I'll get to do but anything will help progress the learning curve. And now it's just the heavy hitters on course.

It rains for most of the day, light drizzle at first then heavier. The F5D Pylon teams manage to get in 2 rounds. God knows how under these conditions. A price to be paid by some though. Model problems as laminates start de-bonding, on-board control failures, transmitter failures, losing sight of a model, slippery fuselages defying launch attempts. I'm saddened by the heroic spectacle. Models and equipment aren't designed to function under such a watery onslaught, but they persevere, resolve unbowed. Incredible. Hats off, guys. The same accolade for the course judges.

No F5B is flown. The teams spend most of the day crowded into the marquee, standing room only, sharing stories, talking tactics, playing cards, universally cursing the weather. Gordon Brown and Colin Watters, on the other hand, have a more immediate problem to resolve. Gordon and Colin handle the F5B scoring, and scoring equipment, system. Adjacent to them in the Control Tent is the frequency monitoring equipment. Outside the tent are the big PA speakers, the impressively large digital display panel, the Base buzzers, all connected by miles of cabling and fed 240v from invertors fed by 12v car batteries. None of it is waterproof. Colin getting belted when touching his laptop is a sign things are not as they should be. Gordon, Colin, Mark Haig (dept. F5B CD) and a number of other lads spend a frustrating day getting things patched up, the cursing mono-lingual now.

I drift back to the Racecourse Centre. Parts of York are flooding.



John Barnes

*Joe Dible, the charming Irish FAI jury official, whiles away a soggy Tuesday learning to play Tomb Raiders. Had become a Level 7 Master before the rain stopped. Pity Joe, a night out with Lara at Level 8 as I recollect.*



John Barnes

*Not sure what Elaine Flockhart and the other girls were discussing in the marquee, but the surrounding tables had been cleared by the boys and the one brave lad left at the girls' table had developed a Gary Rhodes hairstyle*

## WEDNESDAY

“Yes, please.” F5B, Round 1, is to start the days flying. 43 pilots from around the globe. Before I leave for the Base I study the conditions. Dry today, but a uniformly grey, worryingly low cloud-base. Trevor Wain, one of the helpers, is on hand to test the cloud-base height with an E400 Simply the Best. Mmm. It’s still pretty visible when it starts to fade, so a limit for the climb height for F5B ships on the duration task. Steve waits a bit. Trevor does another check flight. A bit higher now. We go for it.

I watch the first few models climb to height after they’ve completed the course. They level out just below cloud-base, not as high as they’d normally climb but not bad. The next ship to climb to start the duration task disappears at a markedly lower altitude at some speed, motor off but the judgement based on the height the previous models had gone to. I’m immediately out of the chair and listening, watching, waiting for the whistle of the airframe as the ship

descends. Nothing. I scan further afield. Not a murmur. The PA requests a motor start. I don’t hear anything from above, just what sounds like a distant car horn away to the south-west. Nothing. The model has gone.

After a lengthy delay, competitively punishing for the pilots queued to fly, the round resumes. The aircraft loss has rattled me. At Upton-upon-Seven, the first F3J thermal soaring World Champs, one of the Australian models dived vertically into the roof of a cottage in a neighbouring village. The police arrived at the flying field in no time

flat, not amused one bit. I spend the rest of the morning casting anxious glances at the long avenue which connects the site to the main road for signs of blue flashing lights, tension easing as the hours roll by. Vanished. To this day I don’t know if its been found.

The 1<sup>st</sup> round is completed around noon, the Base’s laid down for F5D to rattle in 3 rounds. When I get back to the Control Tent, Nick Neve asks me what I saw when the model disappeared. I tell Nick I think the pilot got caught out by a lower-level patch of cloud, impossible to detect with the uniform grey. The pilot is Michel Uzan, Team France. I tell Michel what I’ve told Nick

The weather is much improved now, low cloud-base long gone. The 2<sup>nd</sup> round of F5B is scheduled to resume at 4:00pm, but the best laid plans... The pylon racing must have overrun because Steve agrees to Sabine’s request for more flying time. The F5B round is cancelled at short notice. *This* raises some F5B temperatures. With good cause. F5D has

completed enough rounds to qualify as a WC event. F5B hasn’t, and the forecast for the next few days is not good. Much multi-lingual muttering no doubt pervades the pit area. I see the point, agree with it, but considering the appalling conditions the WC pylon racers have flown in so far maybe they’re due a break. They’ve certainly earned it. At least it’ll help dry out the airframes.

Ironically, between 4:00pm and 8:00pm, when the 2<sup>nd</sup> round of F5B could have been

completed, the 4<sup>th</sup> round of pylon for the day (6<sup>th</sup> round overall) doesn’t take up much airtime.



*C'mon, Steve, it's either one or the other*

But it's not all bad news. The unexpected break in F5B flying allows Team Belgium time to party. A *Chouffe* party. An Open party too, everyone invited, at which I make two exciting discoveries on behalf of ADS connoisseurs.

**Discovery #1.** Chouffe turns out to be a Belgian beer manufacturer which sponsors the Belgian Team (yes, you read that right). The van has come laden with samples of the brew. Two types, Blonde and Brune, or White and Black as the Belgian lads refer to them. 8% and 8.5% explosive limit respectively. I'm told it's traditionally made, no added chemicals (a free-range beer in egg terms), so the significant side benefit, I'm advised by the Chouffe crash-test department (Team Belgium), of no hangover the next



morning irrespective of the amount consumed the night before. And what a magnificent taste. No bitterness, just a Teflon-coated indulgence

of impressively complex sensory proportions, the taste buds slowly peeling away the centuries to the time of its creation at the monastery (*"Quick, Brother Luc, whip up another batch of experiment 5. They've laid down their swords and started singing!"*). I love it. Highly recommended. 10/10, Chouffe. I get the impression that Chouffe parties might be a regular feature at serious electric competitions—i.e. anywhere there's a gathering of electric flight fans—so worth bearing in mind for the future.

Stringently putting my first glass to the test, I stand with Ken, the Japanese TM, gazing out over the vast expanse of Knavemire grassland inside the track itself, colours saturated in the

evening sunlight. Ken wishes he could somehow take it back with him. Says that there's nothing like this in Japan now, concrete (and probably golf courses) winning the battle. He has a 500 mile journey just to *practice* flying F5B. Heady, inspirational stuff, this sport. As is the glass I've emptied.

**Discovery #2.** While queuing for the refill (double-blind testing), I spot a handy size biplane in the back of the van. A Protech Ultimate. Depron. 3-D capability I'm told by Luc Van Tricht, Team Belgium helper, F5B pilot himself, designer/developer of the Ultimate and Protech's representative in York. It would be nice to see it fly, so I get a promise for a demo later in the week if time allows. Later in the week? With it calm and sunny now? My resolve firmed by the 2<sup>nd</sup> glass, Luc's weakened by his umpteenth, he eventually graciously concedes defeat (this is taking up drinking time, remember). A 3S pack of Kokam 600s in the ship, Luc steps a few paces to the field and gently swings his arm, the Ultimate droning away at walking pace. I've read of indoor 3-D flying, even outdoor stuff, but, like F5B and D, have never seen it. Now I see it, and how. To start with, there's most of the FAI aerobatic schedule carried out in a 10mx10m box. Mostly at walking pace, although when throttled up from daisy height the Ultimate vertically reaches the top of the box in the twinkle of an eye. Hovers, everything, including what look suspiciously like unique Chouffe-inspired manoeuvres. Luc



hands the Tx to a team mate who continues the dazzling display. One aspect of its flight envelope which really impresses me is the way it can be slowed to a crawl and retain perfect manners. And I mean crawl, slower than the models I've seen flying

at the winter indoor events in Inverurie, and only a hint of wind here. When the pack starts to run down, the Ultimate is flown back to Luc's hand. Thanks, Luc. Great demo. No, I'll get this round.

Luc uses the 600 pack outdoors, a Kokam 3S 340 pack indoors. 8 and 5 minutes of highly aerobic flying time respectively. It's an absolute hoot to watch, so therefore to fly. Put this one at the top of the Must-Have-Fun list. You won't be disappointed. I get details of Luc's power train/prop to ensure a match-up with the one I'll be getting.

Ah, I thought I came in one vehicle. That Chouffe is something else. Trevor Wain spots my predicament and offers a strong coffee in his nearby caravan. I spend the next hour or so chatting with Trevor about his design-stage plans for a postal electroslot series. BARCS rules or BEFA rules. Or a combination of the best bits from each. Trevor has some good ideas on the subject.

Ray Pike has achieved 35 legs in round 1. ☺

*Team Germany. Brilliant organisation, teamwork and flying. Heinz Kugler (33) gets launched by Stefan Nemmert, Wolf in front of Heinz as caller, TM behind. Huge depth of experience in this team. Note the sighting device, a tool used by many of the teams.*



Jan Bassett

*Team Spain. Manuel Ramos strides purposefully out to the flightline for his first ever WC F5B flight, Maria Luisa Martin caller and stop watch whiz and Marco Cantoni, Swiss pilot, helping out and launching.*



Jan Bassett



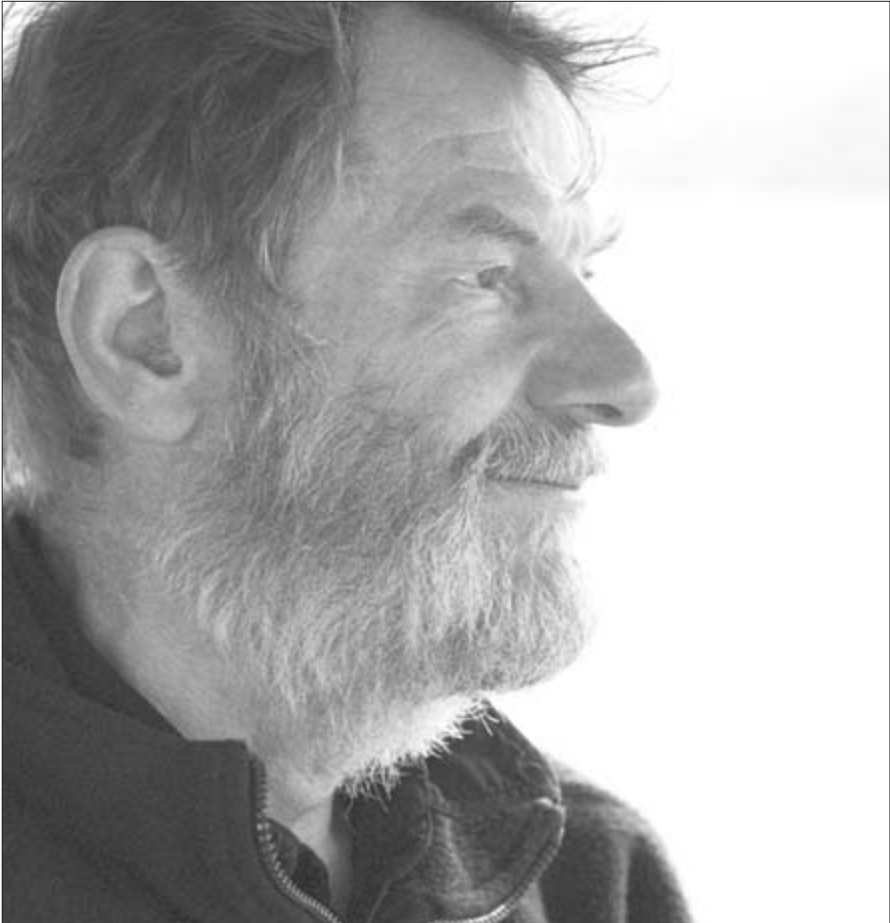
*Team Russia. Sergey Sobakin on the sticks while his team mate, Sergey Anashin, launches the Avionic.*



Jan Bassett

Jan Bassett

*Team Denmark. Claus Tonnesen waits to fly with TM Allan Andersen and Mr Launcher, Jens Damhoj. Really handy to have Jens on your team. Alongside him I looked like Twiggy, so if I was the official timer I'd agree with anything Jens said!*



John Barnes

*Steve Mettam, F5B CD, wonders if blindfolded white-water rafting would be a more relaxing pastime.*

## THURSDAY

I stop asking. It's raining and bloody cold, but as the morning progresses things start to look more promising. Nick Neve decides it's time I meet someone from the organisation I'm a very distant member of, so with a, "Jo, have you met our Base B man yet?", I meet Jo Halman, BMFA competition secretary. A charming lady, it's Jo's first experience of F5 competition too so we compare observations. She seems as impressed as me.

The clouds still looking ominously grey in places, the rain stops, so F5B, 2<sup>nd</sup> round, starts at noon. It's cold and I've got on as much clothing as I can muster. It's not enough. I hadn't expected to need a ski suit In York in August. I'm also worried by the rain. It's hard enough for me to keep track of the models when it's dry. Rain on my glasses may force me to quit, a possibility I've advised Steve and Gordon of.

Steve and the cricket squad do a great job of moving teams through quickly, not many seconds between one pilot clearing the course and another launching. Not enough time to take a pee. It starts to rain again, dark clouds all around. And a rumble of thunder. I'm doing better than expected with my glasses wet, left hand holding them as close to my eyes as possible, but from the first rumble of thunder I've been

watching for a flash of lightning. I'm out of here if I see one, assuming Base B isn't the mother ship. At first the rain is moderate, pilots continuing to fly, then it really opens up, the thunder intensifying. Pilots come through for a bit longer, then a halt to proceedings thankfully arrives. Drowned rat squelches to the Control Tent complex. I light a cigarette and shiver to warm up. Jo Halman turns to me. "You know that's bad for you". I look at Jo and grin. I can't stop grinning. For the best part of 25 minutes I've



*Team USA. Steve Neu waits to fly, David Fee keeping him company as they freeze to death on Thursday. Note the towel Dave holds around the model to try and retain some heat in the pack. Some pilots were running the motor for a few seconds just before launching to get some heat back into the pack. If a pack gets too cool a model's competitive performance disappears.*



*Team Australia. TM Steve Mutch and pilot Dave Hines, apart from freezing to death, try and remember which model memory goes with which model. York in August cooler than Oz in winter...*

sat in the middle of a field, wringing wet, my back to a lightning conductor surrounded by wires, while thunder rumbled around me. Nice one, Jo. Glad you care.

The rain stops with the cigarette, for good as it turns out, and the cracking pace of flights resumes. With the 2<sup>nd</sup> round completed (a number of re-flights too), the 3<sup>rd</sup> starts immediately just before

5:00pm. By the time a halt is called it's getting dark. I'm *very* cold by this time, a slow, uncomfortable trudge back to the Control Tent. Round 3 is not quite completed, a few flights and re-flights to get through next morning. Over 8 hours at Base B. Bob Mahoney thinks it's a record. For defying the laws of hypothermia maybe. I wish I'd packed a ski suit. Still grinning though.

York continues to flood.

## FRIDAY (the 13<sup>th</sup>)

A wet start to the day, but it clears up later in the morning. It's still cold. A round of pylon racing is completed before the F5B course fires up around noon to complete the 3<sup>rd</sup> round flights from yesterday. This is the first time I've seen a flying order list. Wolf Fickenscher is first and last to fly today. It's the only time I know who's flying the course, other than the occasional glimpses of REMO writ large under a wing on one flamboyantly flown model, which could be...

The rain returns briefly. I get drenched through again, there's a short stop to the flying, then the F5B 3<sup>rd</sup> round is wrapped up. A break while the F5D racers fly another round, then back to the Base to

commence the 4<sup>th</sup> round of F5B. The flying finishes at 8 that evening, by which time I'm as hypothermically challenged as the day before. The 4<sup>th</sup> round has been completed.

I help with breaking down the equipment, then a most welcome hot meal at the Fox and Roman with Steve and Dick Whitehead, Dick a helper, timer and Base A man. Both of them hugely experienced in this game, so it's wonderful to hear the tales from days of yore, pick up some of the history of the evolutionary rule changes in F5B (F3E before electric flight won its own FAI classification) and the reasons behind them. A perfect unwinding session.

Back at the Centre, I jot down my notes of the day. And mull over Wolf's remarkable course flying. I'm pretty sure this is the model that fired up my curiosity during the Open event, on its 3<sup>rd</sup>/4<sup>th</sup> turn at B. I know what it is now. It's the pull-out from the diving turn back to Base A. It's non-linear, the model seeming to transition from banked to level flight in an exponential decay, the rate of roll slowing as the ship finally and slowly levels just above head height (mine, seated) part way down the course. Always level, never more. On rails.

And the sound. Many models have really shrieked on the run through the course. Others are less shriek and more *whoosh*. By the time Wolf's model gets to the last turn of a set it's generating an eerily quiet *whoosh*. And *that's* finally brought back where I've experienced the overall sensation before. (Hans Stuck in a Porsche 956, a 1000km race at Brands Hatch, me crouched with camera close to the outside edge of the fast, off-camber, diving right-hander at the end of the long pit straight,



'Summertime, and the living is easy....' But not in York.

astonished at the virtual absence of noise, particularly wind noise, from the Porsche on overrun despite the high corner-entry speed. Just a murmuring, breathe-out-slowly *whoosh* as the Jaguars watched it dwindle.)



Team Switzerland. TM Roger Bossard shows off his brother's RFM model. Always a huge smile when we saw each other. A real enthusiast.

Hey, Steve, are you guys using the latest Schultze 500A Stargazer, the one with the tunnelling 427 FET front end, superconductor cryogenic system and pink DIP switches?

Nah, we tried it, Chuck, but found we lost out in the climb. We prefer the old Schulze Future 149.199 unit. After a week soaking in Fosters, our electrons don't tunnel, they make a break for the fence across open ground.



Bruce/Elaine Flockhart

The Italian and US TM's offer helpful advice as Erica Pike and Steve Mutch, the Oz TM, help Dave Hines prepare.



Bruce/Elaine Flockhart



Bruce/Elaine Flockhart

Pierre Bossard, brother of Roger, getting ready to fly, while Reinhard Mockli wishes he had more Goretex.

Roger helps with the assembly of Pierre's model. Note how snug a fit in the fuselage the pack is, the latter made to fit the former like a glove.



Bruce/Elaine Flockhart

Diana Plettenberg probably thanking Guntmar Rueb and Reinhard Möckli for returning very young son Felix's exploring range of Lego bricks. Santa appeared to have delivered Lego's 2003 production run to Felix, a multi-hued floor for the Plettenberg tent and surrounding area.



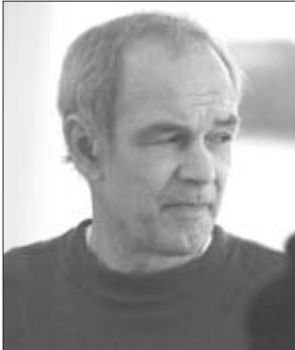
Jan Bassett

A late F5B entry by Lachlan Hines and Felix Plettenberg, Mike Proctor wondering if he's missed something.



Jan Bassett

Team Japan show that it is just possible to launch an F5B ship and not lose your hat. TM Ken stands behind Hiroyuki Sakai, caller for pilot Gen Katayama (4), while Shigeki Nagai, 3<sup>rd</sup> team pilot and laden down with a large camera bag (video and still), ten maps of York and a lavish picnic hamper manages to retain his hat despite the storm-force wind from Gen's model.



John Barnes

F5B score meister Gordon Brown enjoyed a laid-back week with scoring team mate Colin Watters, playing with wet 240v electrical equipment and reconciling score cards into the wee small hours some nights. Did a cracking job with Steve Mettam and Mark Haig in moving pilots through rapidly in the tricky weather Thursday/Friday period. Bet the team can't wait to do another major comp! ☺☺☺☺

## SATURDAY

Cloudless sunshine, negligible wind. A final round for both classes. I almost blot my copybook. F5B is scheduled to start at 9:00am. While waiting for the F5D pylon racers to complete their round, I'm merrily chatting away in the pits and lose track of the time. I tell Michel Uzan that Base B is the most fun and excitement I've experienced in 200 seconds since my honeymoon night. Michel laughingly gives a French translation to his wife, who blushes and looks away. I don't think it was translated exactly as I'd said it. More nattering, then the PA system booming asks for my presence at the Control Tent. 8:55. A "Sorry." floats over my shoulder as I clear the Control Tent on the run to the Base, the first team almost ready to fly.

An eventful morning. Not many models have flown when, "Eee, they're fast aren't they", close by. Another couple on the course. The sprint and shepherd routine again. A car boot sale on the racecourse somewhere today, I learn. Three models later it happens again. Now I wish I had a radio with me. I'd been offered one but hadn't considered it necessary. Not long after that, a model on the course, I become aware of a very large, beautiful red setter towering in front of me looking quizzical, as the model completes its final turn for that set. My eyes back on the model, there's no response to my call to the invisible owner, then Rover wanders slowly off into the course, "Here boy, don't go on the course, there's a good dog...", not Yorkshire enough for canine comprehension because it ignores me completely.

As the sun rises in the cloudless sky, it starts to reflect off the sighting wires, badly enough for the outer wire to become much less distinct against the rich, mid-blue backdrop for a while. Getting the alignment right is harder during this time. I'll bring a Magic Marker pen next time, matt black for the outer wire the cure. I don't know what to do about the insects though, the same team back to line-dancing all over my glasses again.

A model on course half way towards Base A suddenly explodes and screeches to a virtual

halt before the bits scatter onto the field. Then I see the half-winged second model go in. A model on the duration task has come into the course area, a midair the result

Remo's model's heading back to Base A on a 4<sup>th</sup> leg when, "KARUMPH!". The model pitches up, slows, performs a loop and goes in vertically attempting the 2<sup>nd</sup>. It's a good few minutes before two team mates get to the model, one bending over it when there's another loud bang, the helper staggering backwards holding an ear. Luckily Barry Flude, the genial event safety man, has just popped out to tell me there's just the re-flights to go, so radios that 1<sup>st</sup> Aid help may be required. It isn't as it turns out, the noise being loud enough to be excruciatingly painful close in. Remo's suffered another pack failure, in flight this time.

The 5<sup>th</sup> round of the 2004 F5B World Championship finishes, reflights and all. It's over. Already? I sit there for a few moments, grinning for no reason, a last look at the course. My first electric World Champs experience. My first Base B experience. Priceless. And not one bodged WC buzz. Until today...

*...The model's final set is a carbon copy of the last one. The model completes the 2<sup>nd</sup>/3<sup>rd</sup> leg turn at Base A and, wish answered, heads straight towards my position again. Still not certain of what I'll do differently, whatever it is won't be the same as before. I relax, thumb off the buzzer. This time my vision switches from model to sighting wires earlier, focus locks, wires perfectly aligned. Wait. A moment later a whistling blur, a curving vertical streak from top to bottom in my monocular view. With remarkable precision flying the blur is a metre inside the wire again. The thumb doesn't flicker. A grin as the model, very low, fast, and a little down the course already, executes a speed-killingly flat 180 degree turn and cruises slowly back past the wire, cap in hand, to claim the leg. That was better.*

Fluent Curse helping to get the folding chair into its impossibly small bag, a sense of disappointment too. It's over so quickly, eight days a confusingly long time ago yet yesterday.

Uncertain of what I've learned. Almost nothing about the models, motors, controllers, radio equipment, servos, props and batteries used. Nothing about the set-ups used to transform cruise missiles into Gentle Ladies. Nothing about Base A, a more demanding task. But I have learned what F5B is about. It's a start.

At the Control Tent, champagne is poured for the small, hard-working cricket team, Steve on the bottles. Boyish grins, a handshake with Dick Whitehead, glasses raised, Base men at the end. Handshakes all round. I don't get the chance to kiss Sabine. Sorry, ADS. The champagne runs out much sooner than champagne should. I drift away to thank the girls in the marquee, who may have more champers...

Ray Pike introduces me to Rudi Freudenthaler (Ray and his team mates buy a

lot of their equipment from Rudi. Unlike a lot of suppliers, Ray tells me Rudi normally delivers as soon as an order is placed and paid for. Ray's told me that on placing his order for his two Surprise XI+'s, motors, controllers, etc, the order arrived in Oz in four days). I tell Rudi it's nice to meet the man whose pension fund I've contributed to over the years, my collection of RFM bits growing yearly.

I bump into Ulf outside the marquee later, ask him how things have gone from his perspective, a feeling I know what the response will be. Ulf is critical of the way some things have gone, been organised, the small amount of flying carried out. F5B was scheduled for 7 rounds, pylon for 16. What's been achieved is 5 and 9 rounds respectively, the operational team working like an ethnic minority in a woodpile to achieve this. The weather didn't



*Man and machine in perfect harmony. The 2004 F5B World Champion, Wolf Fickenscher, with the very effective Racketworm. Not quite the fastest climbing model at the Champs maybe, but with the off-course and on-course flying performed as one smooth, flowing manoeuvre allied to very precise, aggressive course flying, it proved a tough act to match, let alone beat.*

*With German team mates Guntmar Rueb and Heinz Kugler finishing 2<sup>nd</sup> and 11<sup>th</sup> respectively, Germany also won the team prize. An outstanding performance from an outstanding team.*

*I hadn't heard of this model before the Champs, so was a mite surprised at coincidence when discussing the event later with Guy Taylor of Soarhigh Models, Guy telling me that he has a set of moulds for the model! Quite a few sold at the Champs as well, Terry Stuckey departing with a car full of them on Sunday morning.*

help, but neither did the F5B and F5D courses sharing the same spot on the field, severely compromising both events. I'd been told earlier in the week that there weren't the resources to do it differently. Nick Neve picks up on the conversation, joins in, supporting the way things have gone. Ulf moves to Defcon 2. Sabine joins the meeting, supports Nick's approach. Defcon 3. There's actually no conflict of opinion. Nick and Sabine take a positive approach to what's been achieved. Ulf was talking to me about what could have been achieved. Both are right. I agree with Nick and Sabine. I learn from Ulf. I'd have liked to see a lot more flying too.

The F5B and F5D score sheets finally see the light of day. The German pylon teams fill all three rostrum places (with two teams), in F5B the top two. Wow. Then double Wow. Before today's round of F5B I'd heard hopeful mutterings that Wolf, the 2004 F5B World Champion after four rounds by Friday with a perfect 4000 points, might risk all today trying for a new record in legs on the course. Wolf's flight brings a more deliciously subtle conclusion to affairs. He wins this round too, giving him a *discard* score of a 1000 points. A Champion's ending, one Mr Schumacher would approve of. Wolf's been collecting pilot's signatures on one of his models. I'm very flattered when he insists I add mine.



Jan Bassett

*The moment Remo's pack cells, scattered around the model now, start to explode again. This happened some time after the model had gone in.*



Jan Bassett

*Remo, 4<sup>th</sup> place finisher and prover of the Big Bang theory, says farewell to an old friend.*



Jan Bassett

*Team Canada. Sole F5B pilot Jean-Claude Terrettz, with F5B TM Kevin Cooper carrying J-C's model and F5D TM Delbert Godon listening to the helpful after-flight advice, "Let's try the Fox and Roman again."*



Jan Bassett

*Top level F5B competition demands Really Serious intensely focussed concentration, monumental dedication and gritty determination to succeed.*

*Team Sweden pilots Bengt Johansson (6) and Thomas Karlsson show just how serious this business is.*



Bruce/Elaine Flockhart

Team Switzerland. Markus Möckli, 3<sup>rd</sup> place finisher, charging packs in stereo. 24 cells in a pack, Markus using the latest GP2200 NiMH cells. More grunt than 18xGP3300's. History soon, the rules changing from 2005 to 16 cells of max. subC size.



Jan Bassett

Markus returns from his final flight of the Champs.



Jan Bassett

Team USA. David Pitcairn (8), Jeff Keesaman (23) and helper Bruce Flockhart return from a final flight.



Jan Bassett

What do F5B pilots do to relax? Markus flying a monster size electric helicopter. Beautiful machine (haven't a clue what it is - details, Markus?) is whisper quiet, ultra stable and has a really majestic flight performance.



John Barnes

The Sopranos pay a visit to the Champs.

Terry 'You looking at me' Stuckey about to corner the market in Racketworms before discovering he should have brought a bigger vehicle or left Pauline at home.

Terry one of the FAI Jury team members (so I wasn't kidding about the Sopranos!)



Jan Bassett

Rudi Freudenthaler, final flight completed, gets news of the huge thermal which appeared just as he was about to land. That's one thing F5B, F3B and F3J have in common!



*Pilots assembling for the obligatory landscape group snap, which always prints too small in sub-A2 model mags. My apologies to anyone who gets mugged under the staples.*

*Jan Bassett*



*Ulf and George Shering discussing the club scene in the world of electrons inside a competition controller.*

*John Barnes*



*Jan Bassett*

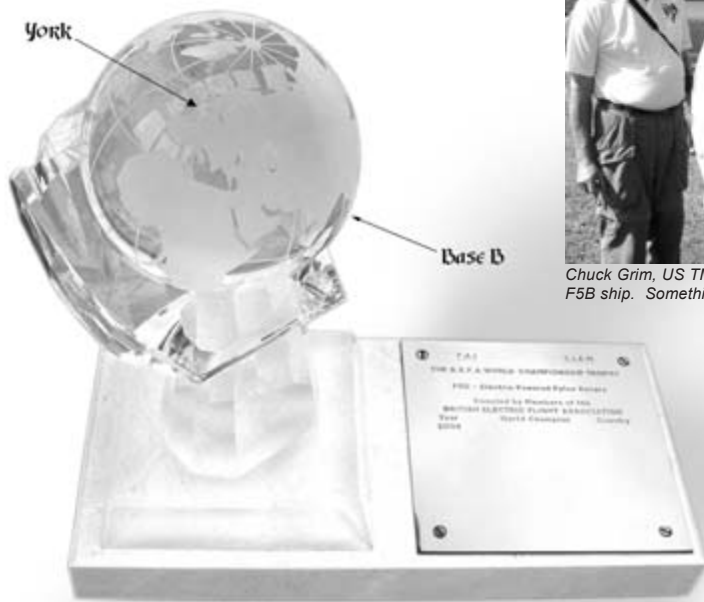
*An F5B model approaching the landing circle. Note the crow braking set-up, flaps down and ailerons up. In this case, partially up and down, full deflection cranking both ailerons up more and dropping the flaps to c. 90°. Aileron-only ships simply reflex the ailerons. Properly trimmed out with elevator compensation, these set-ups give very good glide path control.*

*During the Open event on Sunday, a stiff side wind across the course, I watched one model on landing approach go into full crow as it passed me close by, about 5m up. The model stopped dead, effectively hovering. Head on to its pilot, he didn't realise it had stopped moving forward at first. As it lost height he gave it a full power burst, still with full crow applied. The model went up but didn't go forward much. It never did, finally settling onto the ground well short of the circle in a slow, vertical descent, still pointing faithfully straight at its owner, still with full crow applied. As I say, very good glide path control.*

*Bruce/Elaine Flockhart*



*The Four Amigos. US team mates, L-R, Jeff Keesaman, Elizabeth Pitcairn, Dave Fee and David Pitcairn survive the prize-giving ceremony.*



Chuck Grim, US TM, watches Steve Neu sign Marku Möckli's F5B ship. Something suitably rude I hope, Steve!

Bruce/Elaine Flockhart

Beautiful F5D trophy for the individual winner of the WC pylon racing event, donated to the FAI from the BEFA. The glass globe is separate from the elegant base, so much betting at the banquet about whether the trophy would survive until 2006, let alone make it to the German Team hotel in one piece!

Cinders goes to the ball that night, the closing banquet help at the racecourse. I follow the Plettenberg family into the building, chuckle at tiny Felix in tow, one arm straight out holding a big bag of Lego bricks. Inseparable.

The one free glass of wine is taken outside on the massive patio area overlooking the racecourse itself, where everyone gathers for a while. In the packed dining hall, Jan Bassett and me join the Belgian Team table. With the meal (not bad) and prize-giving ceremonies completed, we're treated to some impromptu musical sessions, Ray Pike managing a relaxed version of Pete Townsend on guitar before Elizabeth Pitcairn, sister of David Pitcairn, one of the US pilots, generates absolute silence in the hall with a classical piece played on violin, the place erupting with thunderous applause and "Bravo!" when the haunting music fades away on the evening air. Very impressive. (At the 1998 Upton WC F3J banquet, the sole cultural experience of the evening was the air filled with paper napkins folded into imaginative model shapes, calls for stop-watches and more wine!).

Much later, when I've decided that the wine I've sampled won't interfere with navigation back to the hotel, Wolf appears, grinning hugely, a couple of glasses in one hand and an unlabelled bottle of something clear in the other, hands me one of the glasses, fills both so we can toast who can do the biggest grin. My head revolves and my throat loses two layers of skin. I don't know what's in the bottle (Wolf's a chemist...) but it's brilliant stuff. Happy memories, Wolf.



Jan Bassett

*Exquisite classical music from Elizabeth Pitcairn. 'BRAVO!'*



Jan Bassett

*Remo gets a special award to aid his Big Bang research.*



Jan Bassett

*Bob Mahoney hands the F5D BEFA trophy base to the FAI while Bob Smith juggles the globe in the corner.*



Bruce/Elaine Flockhart

*Drinkies on the patio before the meal arrives. Ray Pike, far left, still celebrating his 35 leg flight, while in the centre foreground, Brian Anderson (FVK fame) discusses his latest import ideas with Uwe Plettenberg. "Dead simple, Uwe, you just ship 500 units to Timbuktu via Antarctica, then my Tibetan import company will..."*



Jan Bassett

*Dinner with the hugely charismatic Belgians, ADS reporter slowly sliding down the wall as the wine finishes. And this is well before I bumped into Wolf with his magic bottle of rocket fuel. Mr Protech Ultimate, Luc, 2<sup>nd</sup> to my right.*

On Sunday, another beautiful day with little wind, I pop by the field to watch some of the BEFA fly-in stuff, say my goodbyes to folk. In among the scale, d/f and fun-fly model demos, Steve Neu and Markus Möckli put on a synchronised show with their F5B ships. This brings out the Ooh's and Aah's from the spectators. Full chat at low level they aren't much slower than pylon racers, but it's the breathtaking warp speed vertical climbs, matching vertical dives and free-form high speed aerobatics which really impress. Great show, chaps.

Ulf Herder puts in a flight for me with his Aeronaut d/f Grumman F9F Panther. Ulf tells me that on short grass he simply powers up and takes off very quickly, no bungee assist required. The model's performance on a 14 cell pack of GP2200's c. 70A is blistering, much more thrust than weight making for spectacular vertical climbs. A model which looks very good in the air.

The US tent does a roaring trade in battery packs, bargains galore. I've picked up some GP1100 cells from Steve Neu the day before.

Steve Mettam has mentioned that he's planning to try some of these cells too. Steve M is watching the US sale in full swing when I hand him a small bag of GP1100's, a thank-you for the Base B opportunity. Steve Neu watches this transaction, asks Steve M if he's seeing things. "Let me make sure I've got this right. Your helpers reward **you** for the chance to help out?!" Steve M and I just grin back. That's the way it is here, Steve. He shakes his head in disbelief.

An exciting, entertaining, educational and unforgettable 8 days for me. Just magic.

Thanks, Steve.

**John Barnes**

#### **Conclusions:**

*F5B is a wonderfully technical, dynamic, majestic competitive soaring event. It's truly awesome to watch the top exponents of the art in action close up. I can really appreciate why people travel half way around the world to participate at WC level. It's just spectacularly brilliant.*

*I wasn't involved in the pylon racing—Sabine had all the help she needed—but it is also a very dynamic, exciting, technically challenging event.*

*F5B/F5D events should not share the same plot of land for their courses when held together!*



John Barnes

*Steve Mettam and Ulf Herder at the BEFA fun-fly, two men who made my WC visit such a success. Ulf's Aero-Naut ducted fan Grumman Panther an outstandingly good model. Power up on grass and away she goes!*

### **Movers & Shakers**

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