

DECEMBER 1993 £1.70

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## RADIO CONTROL MODELS & ELECTRONICS

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### HANNO FLIES BACK!

Prettner wins  
World Champs for 7th time



### AEROLYMPICS 3

TOP PILOTS  
AND THEIR MODELS  
— FULL TECH  
TABLES INSIDE



**A7 CORSAIR II** CONSTRUCT  
OUR 34" SPORT  
SCALE JET FOR .25 MOTORS



► F3A Team Manager, Ray Brotherston, kept a watchful eye on the performances of the GB Aerobatic team. Standing next to Ray is Richard Hirst, with Ken Binks and Jon Tappin in front. Ken reached the flyoffs, coming 18th overall.



# Aerolympics 3



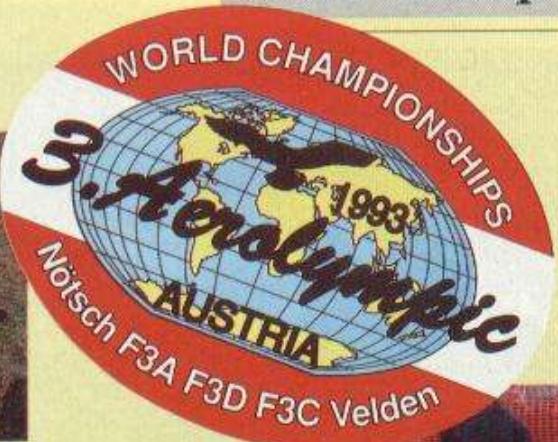
► ▲ Wolfgang Matt watches the action on F3A flightline number 2. Wolfgang flew his jazzzy Rubin design into 3rd place.  
► Tony Frackowiak of the USA follows another competitor on the sticks before flying his Typhoon. Finished 9th.



**M**id September saw a record number of entrants gather together in the Austrian province of Carinthia to compete for the World Championship titles in F3A Aerobatics, F3D Pylon Racing and F3C Helicopters. Hosted by the Austrian Aero-Club, these events were combined under the impressive title of 'Aerolympics 3', this being the third such gathering of the World's top

model pilots. A total of 38 different nations were represented, including teams from several of the ex Soviet bloc countries.

On the spot reports of the action from each discipline will follow in future issues. But this month, we concentrate on presenting many of the leading pilots and their aircraft, together with comprehensive 'Tech Tables' on their models and radio equipment...

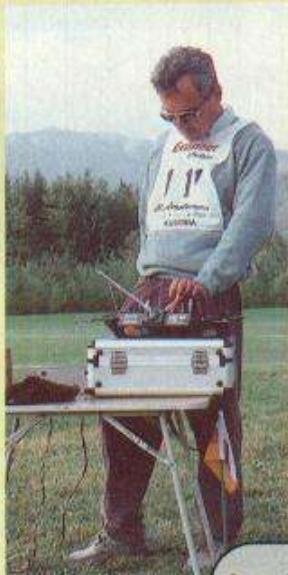


▲ World Champion for the seventh time, Hanno Prettner proved that two strokes are still competitive. Uses an OS 'Hanno Special' in his Mystic 60.

## Organisers

The 1993 Aerolympics were organised under the auspices of the Austrian Aero Club, on behalf of the FAI, by specialist members of the Carinthian Model Aeronautical Association. Such a mammoth task is not easily undertaken, but the Austrian modellers did extremely well, all the more impressive when you consider that they total only around 6,000 in number.

Competitions were run under the 1989 FAI Sporting Code, including rule changes approved up until April 1993. The official languages were German and English, with the latter used for interpreting rules and settling disputes. RCM&E would like to thank the organisers and contestants for their help in covering this event. ■



FAI TEAM RESULTS		
RANK	NATION	TEAM MANAGER NAME
1	Japan	Hoka
2	USA	Stollman
3	Canada	Marsden Ch.
4	Liechtenstein	Beck
5	Austria	Zimmerhofer
6	Germany	Uhlig J.
7	China	Liu W.
8	France	Lafitte
9	United Kingdom	Brotherston
10	Australia	Towne
11	Austria	Somenzini E.
12	Switzerland	Grawendler
13	Belgium	DeWinter J.
14	Italy	Cutti
15	Sweden	Sundstrom L.
16	South Africa	Pretorius
17	Norway	Abrahamsen
18	Korea	Vong
19	Finland	Valles V.
20	Netherlands	van Loon
21	Czech Republic	Voll P.
22	Denmark	Schmidbauer
23	Thailand	Tschirnig B.
24	Ireland	Constant
25	Spain	Bombard
26	Russia	Ivanov
27	Singapore	Mak
28	Taiwan	Li
29	England	Malo
30	Luxembourg	Richartz
31	Brazil	Romano V.
32	New Zealand	Craighead N.
33	Chile	Graham
34	Ukraine	Masarov



## Local hero

All the way through the F3A preliminary rounds, four stroke models looked to be the only ones with a fighting chance of securing the World title, YS 120 engines dominating the event. Rare indeed was the sight of a top competitor flying a two stroke model, the most notable of these being Hanno Prettner, who was keeping faith with the Hanno Special developed for him by O.S.

Despite great respect for the flying abilities of the local hero, talk on the flightline seemed mixed on whether his flying style could sway the judges, who were now becoming more and more accustomed to the closer, more compact schedules of the four stroke fliers. Hanno's use of large, smooth manoeuvres, combined with superb use of the throttle throughout its full range

to maintain constant speed, was a delight to watch, every flight being studied in almost complete silence by the large crowd of appreciative spectators. But was he still good enough to win?

Hanno kept everyone guessing right up until the final rounds, keeping the pressure on the defending Champion, Chip Hyde, until the end of the preliminaries, but unable to topple the American, who led the way into the flyoffs with his OS 120 powered Dr Jekyll design. Wolfgang Mutt, another previous Champion of the World, was also showing good form, flying into the finals in second place, with Prettner third.

However, the best was still to come, with Hanno reserving his best performance for the flyoffs, winning both final rounds to take the World Championship crown for the seventh time. ■

▲ As usual, the Japanese fielded some superbly constructed models. Hajime Hatta's aircraft was particularly well finished.

◀ Top Americans in F3A and F3D. Chip Hyde just missed the world title, coming second in Aerobatics.

Richard Verano did slightly better over in Pylon, becoming the World Champion for 1993.

◀ Quique Somenzini of Argentina waits anxiously for his flight, as rain sweeps up the valley. Placed fourth with his YS 120 AC powered Desafio design.



FAI FINAL RESULTS				
RANK	SURNAME	CHRISTIAN NAME	NATION	TOTAL
1	Prettner	Hanno	Austria	2000.0
2	Hyde	Chip	USA	1911.6
3	Mutt	Wolfgang	Liechtenstein	1908.1
4	Somenzini	Quique	Argentina	1901.2
5	Hatta	Hajime	Japan	1901.2
6	Nanuse	Gichi	Japan	1894.8
7	von Lintow	Dominik	USA	1894.5
8	Atiles	Anthony	Japan	1894.0
9	Falkowski	Ivan	USA	1880.0
10	Kristensen	Olli	Canada	1859.5
11	Cunningham	Roland	USA	1857.3
12	Mutt	Peter	Liechtenstein	1852.5
13	Erlang	Peter	Germany	1850.2
14	Fritzsch	David M.	USA	1828.4
15	Pavaud-Leroux	Christophe	France	1823.4
16	Marsden	Gregory	Canada	1821.2
17	Weissel	Peter	Germany	1820.4
18	Birks	Ken	United Kingdom	1820.0
19	Fan	Min	China	1787.0



◀ ▲ World Champ, Richard Verano, takes time out from preparing his Stiletto racer to talk to RCM&E.

▲ First WC outing for Ivan Cappuyn's (left) O/D Tsunami. Distinctive aircraft is Nelson powered.



◀ ▲ Stiletto by Chujo of Japan had several novel features, including in-flight adjustable pipe length and mixture controls.

▲ Paul Bardoe and Barrie Lever of GB wait to be ferried out to the pylon course. Paul suffered from an 'over enthusiastic' flagman - more later in our full pylon report.

◀ ▲ Manfred Pick of Germany displays his all composite Dago Red. Has a Kevlar fuz, balsa/glass wings with carbon spar and a secret airfoil designed by Martin Heppeler.

### Flying sites

The Aerolympics were hosted at two different flying sites, both grass, with Aerobatics and Pylon Racing being contested at the full size airfield at Nötsch in the picturesque Gailtal valley, and helicopters being flown off a farmer's field at the village of St. Egyden, near the fashionable lakeside resort of Velden.

Facilities at Nötsch were well organised, but the grass runways raised a few eyebrows and must have caused a few concerns over the reliability of retracting undercarriages, particularly for the aerobatic models. A range of scree covered mountains provided a spectacular backdrop to the flying action, but did not seem to cause the pilots any problems, speaking volumes for their ability to concentrate on their models regardless of such imposing, but beautiful distractions. A collection of fir trees on the far side of the runway could not have helped either, creating an artificial horizon over which the aerobatic contestants had to fly, but yet again the flying discipline at this level overcame this potentially off putting local feature. Some pilots did, however, come close to skimming the tree tops, with dramatically low baselines, most notably Chip Hyde, the defending F3A World Champion, who is a master of the art of relatively close in and tight aerobatic schedules. Pilots over at the pylon course were similarly dismissive of the surrounding trees and mountains. Indeed British team member, Barrie Lever, was all for them, favouring the dark background against which to follow these astonishingly fast aeroplanes.

A major drawback of this site was the limited parking facilities, which allowed just a single row of cars along

the length of the runway, with access via a one way dirt track. Pilots turning up for their slots were often faced with nowhere permanent to park near the flightlines, resulting in most having to unload their models just before their flights, and packing the whole lot away again almost immediately afterwards.

Compared to the Helicopter site, however, the airfield at Nötsch was luxurious. Even worse parking problems confronted the heli pilots, who were only allowed to bring their vehicles up the single track approach road just before their flights. All other access was by foot, with permanent parking provided at a nearby hotel. Although a healthy walk never did anyone any harm, the opportunity to view a wide range of models was sorely missed and the chances for broad discussions of techniques and ideas between the pilots must have been diminished as a result. A lack of models on the ground also severely reduces spectator appeal.

Facilities at the site were very basic, the basis of which was really just a farmers field, from which a crop had been harvested before the event, although a small grass square had been prepared for the actual models to fly from. A long length of carpet connected the 'ready' and 'start' boxes to the flying area, providing a relatively smooth path for the flyers to hover/walk along at the start of each flight. The judges were stationed on an area of wooden staging, as an insurance against any inclement weather. Luckily it remained dry throughout the event. Had it been the other way around, the whole site would have quickly become a mudbath. Austrians must have good faith in their weather! ●



F3D RESULT

PLACE	NAME	NATION	POINTS
1	Verano Richard	N.	778.7
2	Phelan Ranjit	VH	902.1
3	Shadel Dave	N.	817.7
4	Pies Michael	D.	824.5
5	Stukerjahrin Bruno	D.	845.3
6	Hartel Milos	CZ	854.2
7	Cappuyn Ivan	OO	870.4
8	de Chassot Bruce	VH	887.1
9	Casert Victor	MB	897.1
10	Lentz Wim	OO	901.0
14	Bardoe Paul	GB	931.2
27	Raci Antal	GB	1047.7
36	Beard Paul	GB	1329.0



▲ Top Brit, Colin Bliss, reached the F3C flyoffs, coming 10th overall.

▲ View of helicopter flying site, showing carpeted starting area, hover lane and flying area.

► Curtis

Youngblood (USA) pulled out all the stops with his 'cuddle box' style JR Tx to win the F3C World Championship. Flew an X-Cell 60 with NHP blades.

### Weather watch

Pre-event publicity forecasted good flying weather for the Aerolympics, and generally this proved to be accurate. Conditions were very overcast for the first three days, but the clouds broke for the second half of the week, given some very pleasant, warm, sunny weather, particularly in the afternoons. Early morning fog and gloomy conditions did, however, hamper some rounds of the pylon and helicopter events, but both finished as planned.

Thankfully, the Aerolympics were unscathed by wind and rain, keeping calm and dry right up until the Saturday, when overnight rain looked to provide interesting conditions for the F3A Aerobic flyoffs. However, true to form, the sun broke through during the morning for a dry, bright finish to the main competition events. ■

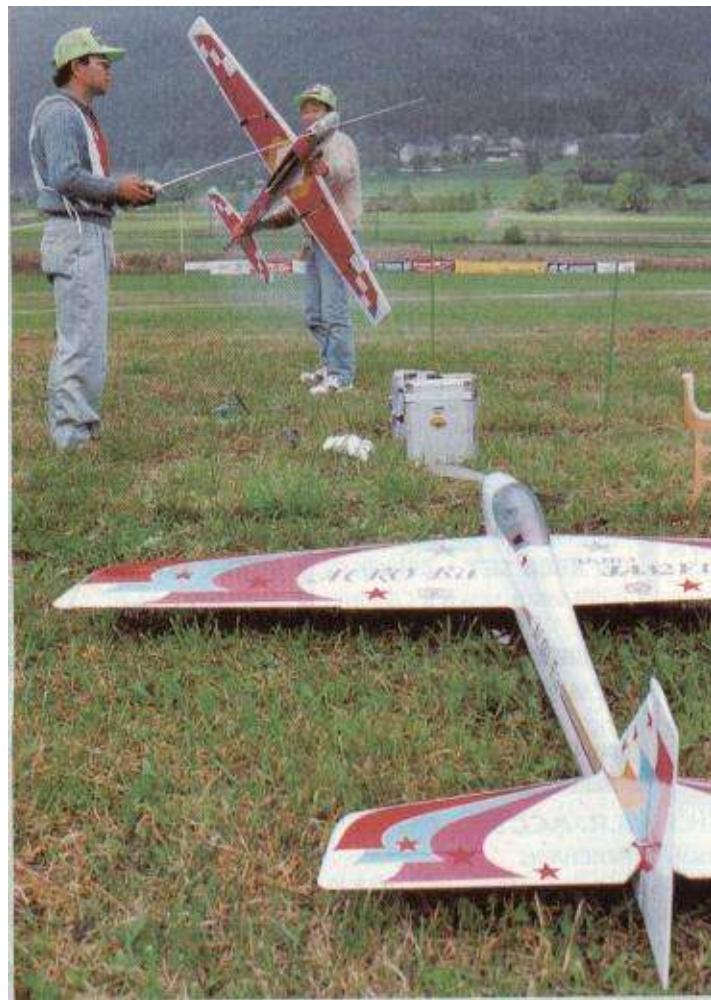


FINAL RESULTS – F3C.

PLACE	NAME	NAT	TOTAL AFTER RD 3	FINAL RESULT
1.	Youngblood Curtis	N	2000.00	2988.88
2.	Semasi Kazuyosi	JA	1958.23	2959.23
3.	Dobashi Yukinori	JA	1886.71	2649.91
4.	Giraber Daniel	HB	1910.93	2846.30
5.	Suwabe Seiji	JA	1887.72	2832.78
6.	Mann Wayne	N	1846.88	2791.08
7.	Gasser Heinz	HB	1787.22	2703.32
8.	Ishikawa Shizuo	JA	1756.76	2668.31
9.	Roesener Joerg	D	1750.26	2627.81
10.	Bliss Colin	GB	1723.42	2618.51

TECH TABLE 2 – F3D

Nation	Name	Aircraft	Designer	Radio	Engine	Propeller	Stock Mode	Fuselage	Wings	Wingspan	Tail	Retract	Weight
Australia	Pashan Ranjit Murphy Barry De Chazal Bruno	Mustang P51 Mustang Riviera	Pashan Murphy De Chazal	JR Multiplex 3030 Futaba	Rosai Rosai Rossi 05	Supercool Supercool 7.5x2.5 Carbon	1 1 1	Fibre Fibre Fibre/Glass	Composite Foam/Carbon/Balsa Moulded Glass	1500mm 1407mm 1450mm	Balsa Balsa Fibreglass	Nil No No	2208g 2205g 2200g
Austria	Watzschek Erwin	Mustang Sillito	Gary Novak	Webra	Nelson	Own Design		Epoxy		1330mm			
Belgium	Claeysen Paul Vervaeke Peter Lentges Wim	Tsurumi Tsurumi Belg. Team Belg. Team	Claeysen Tsurumi Belg. Team Belg. Team	Graupner Futaba 1024 Graupner	Nelson Nelson Nelson	Cappuccino own made APC-Carbon	2 2 2	Composite Composite Composite	Plywood Foam/Plywood Plywood	1200mm 1350mm 1350mm	Foam/Plywood Foam/Plywood Plywood	Robert Robert Robert	2300g 2300g 2300g
Canada	Smith Edward Hendley John McIntosh Andrew	GR 7 Mustang Grove GR 7	G. Hover Grove	Futaba Futaba	Nelson Nelson Nelson	ED Smith Carbon Carbon	2 2 2	Fibre Glass Glass Fibre Glass	Balsa/Foam Balsa/Foam Balsa/Foam	1525mm 1364mm 1511mm	Balsa/Foam Balsa/Foam Balsa	No No No	2300g 2300g 2300g
Czech Rep.	Masina Milos Vajan Zdenek Hovorka Frantisek	MIC 9.J Mustang Mac R.J. Mustang	vojan Hovorka	JR JR Apex JR Apex	MWVS MWVS MWVS	Oneway Hovorka Hovorka	2 2 1	Glass Glass Glass	Foam/Balsa/GFK Foam/Black/GFK Foam/Balsa/GFK	1350mm 1300mm 1370mm	Foam/Balsa/GFK Foam/Balsa/GFK Foam/Balsa/GFK	No No No	2200g 2250g 2250g
Germany	Lindemann Thon Pohl Manfred Stuckenberg Bruno	P51 Dago Red P51 Dago Red P51 Dago Red	Team Dago-Red Team Dago-Red Team Dago-Red	Simprop Futaba Simprop	J.R. J.R. J.R.	S.S. S.S. S.S.	2 1 1	Aramid Aramid Aramid	Composite Composite Composite	1446mm 1446mm 1446mm	Composite Composite Composite	Yes Yes No	2200g 2260g 2210g
Great Britain	Barlow Paul Board Paul Roez Arne	Mustang Stiltito Mustang	Archie P. Board/K. Moore A. Roez	Futaba 1024 Futaba Futaba	OPS OPS OPS	BLMT Carbon/Epoxy Carbon Fibre/Epoxy	1	Fibre Glass Fibre Glass	Foam clothed Framed Glass Framed Glass	1280mm 1200mm 1260mm	Foam clothed Balsa Balsa	No No No	2250g 2205g 2205g
Italy	Giammatte Giorgio Razi Renzo Muceddu Paolo	Folkerts 4 Folkerts Folkerts GFA	Cassat Cassat Cassat	Futaba Futaba FF2 Futaba	OPS OPS 40 Futaba	Own design Own design Own design	1 1 2	FG-Epoxy FG-Epoxy Epoxy FG	Ply-Sty Epoxy Ply-Sty Epoxy Ply-Sty Epoxy	1320mm 1360mm 1360mm	Composite Composite Composite	No No No	2220g 2240g 2200g
Japan	Sato Yogenji Sueda Kyosuke Chiba Nobuyuki	Saitama Sillito Sillito Mustang	Saito Bob Huber Ishii-Nakamura	JR PCM 105 JR JR PCM 105	OS 40 PS OS 40 PS Nelson	Supercool Carbon Own design	1	Glass Glass Carbon	Foam Balsa Carbon	1400mm 1300mm 1680mm	Balsa Balsa Balsa	Supra Yes OK	2220g 2300g 2200g
Netherlands	v.d. Bosch Robert Mettemeyer Bert	Tsurumi Chamber music	v.d. Bosch M. Wombacher	Graupner X34J Simprop SAM	Mettemeyer Mettemeyer pylon	Mettemeyer Mettemeyer	2 2	Glass/Carbon Glass	Foam/Plywood Foil/Plywood	1400mm 1380mm	Foam/Plywood Balsa	No No	2300g 2300g
Russia	Orlov Smolentsev Gorushenko	Mustang Mustang Mustang	Doroshchenko-Oliver Smolentsev Doroshchenko-Oliver	MC 16 MC 16 MC 16	Mir 6.9 Mir 6.9 Mir 6.5	Carbon Carbon Carbon	2 2 2	Glass Plastic Glass	Plastic Plastic Plastic	1380mm 1380mm 1380mm	Balsa Balsa Balsa	No No No	2300g 2200g 2300g
Sweden	Sjöström Hans-Olov Carlsson Larsson Ingvar	Lite-Tech Hinkel 100 Mustang	Göran Göran Metra	Futaba Futaba Futaba	Rossi Rossi Rossi	Own design Own design B.R.	2 2 2	Fibre Fibre Fibre Glass	Cellplast Cellplast Cellplast	1350mm 1350mm 1350mm	Foam/Balsa Foam/Balsa Foam/Balsa	No No No	2350g 2300g 2400g
Switzerland	Cesari Victor Folkerts SK 2/4 Folkerts SK 3/4	V. Cesari V. Cesari	Graupner JR Futaba	JR Nelson	2U Reewill Nelson	Own Design V. Cesari	2 2	Fibre Epoxy	Foam plywood Plywood	1440mm/1360mm 1340mm	Foam plywood Foam Plywood	No No	2200g 2240g
South Africa	Dores John Alberts Pierre Tolmer Chris	Stiles Stiles Stiles	John Dorre Chris Tolmer Chris Tolmer	Futaba Futaba Futaba	Nelson/Nelson Nelson Nelson	Tolly Tolly Tolly	1 2 2	GPR Glass/Glass Epoxy Glass	Booth covered Foam Foam Balsa Glass Foam Balsa Glass	1360mm 1450mm 1480mm	Balsa/GFK Balsa/GFK Balsa/GFK	No No No	2300g 2300g 2300g
Ukraine	Gorban Igor	Mustang	Gorban	Attack 4	MDC 5.6, W 40, M 40	Carbon		Plastic	Plastic	1230mm		No	2300g
USA	Shadel Dave Vernon Richard Beale Henry Jett Dab	Stiles Stiles Stiles Kankiner	Hover Hover Hover Jerry Small	Futaba Futaba Futaba Sainwa/Atronics	Nelson Carbon Carbon Jeff 6.5	1 2 2 2	Fibre Glass Fibre Glass Fibre Glass Glass	Fibre Glass Composite Carbon/Glass	1350mm 1450mm 1310mm Glass/Balsa/Balsa	Composite Composite Composite Composite	No No No No	2200g 2200g 2200g 2200g	



## VM I F3A Nøtsch Østerrike 18. - 25. September 1993

Tekst : May Elin Ringvold  
 Bilder : Ringvold, Fremming

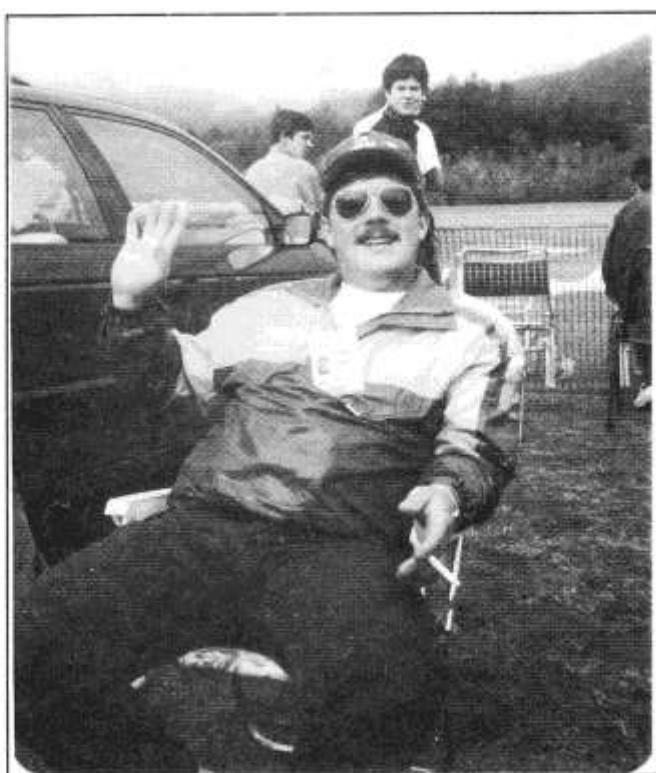
Landslagdeltagerne i år ble 1. Kjell Tore Pettersen Fredrikstad NAK, 2. Ola Fremming Baronen NAK og 3. Jens Petter Ringvold Baronen NAK. Øyvind Moe var så heldig å bli ansatt som lagleder. May Elin Ringvold ville også være med, og ble dermed supporter og "hushjelp". Det var denne gjengen som en "gråkald" tirsdag formiddag (14 sept.) satte kursen mot Østerrike i Ringvolds gule "brødbil". Vi dro med Kronprins Harald (Oslo-Kiel), og var fremme i Kiel onsdag formiddag. Båtturen gikk greit, uten store bølger og urolige mager. De andre reisende var for det meste tyske pensjonister, så det ble ikke noe hæla i taket om kvelden. Men vi fortære mye god mat, og enda mere god drikke. Kjell Tore og Øyvind spilte Black Jack, hvor Kjell Tore ble "rik", mens Øyvind ble heller fattig. Turen frem til vi var i Østerrike gikk passelig fort unna, bortsett fra 4 timers køkjøring nord for Hamburg. Snakk om fri fart på autobanen. Torsdag kveld (16.sept) var vi fremme ved hotell Residenz Warmbad. Her hadde vi bestilt et 5 mannsrom. Rommet var koselig og passe stort, og i første etasje var det svømmebasseng og badstue som vi brukte flittig. Det tok oss ikke lang tid å finne et sted hvor man kunne få fylt opp magen med litt for. I nærheten av hotellet var det et lite koselig vertshus, med masse god mat og drikke. Innhaveren av dette stedet var en "merkelig skrue" som underholdt gjestene med sang (forferdelig stemme) jodling og spill på forskjellige instrumenter. Dette stedet benyttet vi flere ganger, bortsett fra de kveldene vi var så trette at vi heller bestilte pizza på rommet. Dagene før den offisielle åpningen ble brukt til å observere selve flyarenaen,



Fra venstre : Jens P. Ringvold, May E. Ringvold og Øyvind Moe, før avgang fra Oslo

trene, se på flystilen til de andre gutta, handle i nærmeste by ved navn Velden, besøke arenaen til helikoptergutta, og for å se på pylon. For de som ikke vet det var dette også et VM for F3D og F3C. Pylonflyvning en var virkelig "hårete" å se på. Her lå hastigheten på ca. 300 km/t, og det brakte noe infernalsk.

Lørdag kveld(18.sept) var det offisiell åpning. Her gikk alle nasjoner fra F3A, F3C og F3D sammen i tog

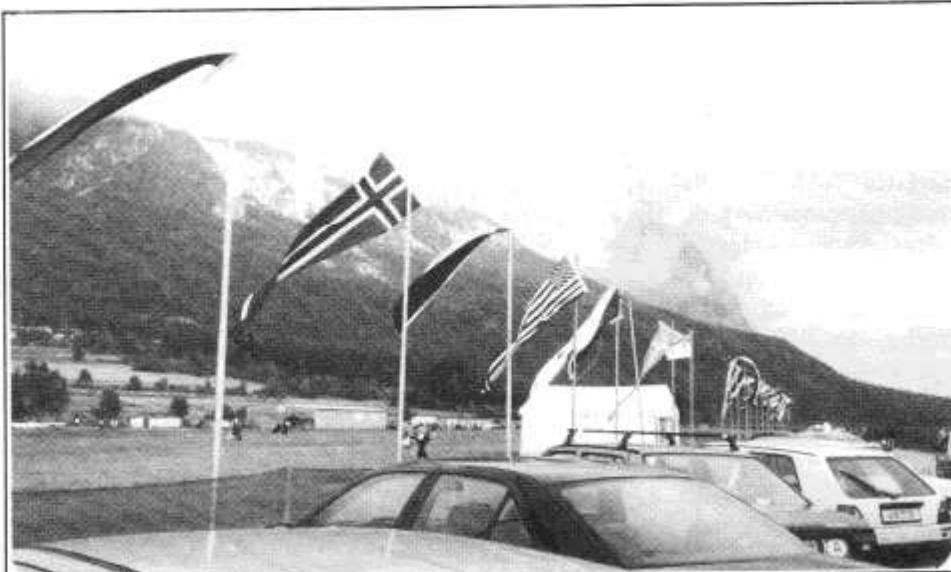


Laglederen i velkent positur

gjennom Veldens gater. Vi fikk servert hornmusikk og det ble holdt taler.

Videre fikk vi en båttur rundt Lake Wörthersee, med gratis middag og drikke, avsluttet med et fantastisk fyrverkeri. Her var det ikke spart på pengene. Tirsdag(21.sept) var første konkurransedag. Det ble flyyet en omgang for hver dag, fram til og med fredag. Lørdag flygde de 19 beste finale. Gjennom alle konkurransedagene måtte vi stå opp kl.7.00 om morgenens, da vi hadde 2,5 mils kjøretur til flyplassen i Nötsch im Gailtal. Alle radioer måtte være levert arrangørene mellom kl.9.00 og 9.30. Det var tilsammen 95 deltagere i F3A, fordelt på 36 nasjoner. Selv flyarenaen var delt opp i 2 flyfelt (arena A+B), hvorav deltagerne ble delt opp i to grupper. Her byttet man flyfelt annen hver dag. Så var konkurransen i gang. Jeg kunne merke visse nervøse tendenser blant det norske landslag, spesielt før hver deltager skulle fly. Det var Jens Petter som først skulle i "ilden", senere var det Ola sin tur, og på slutten av dagen flygde Kjell Tore. Jeg synes alle 3 flygde brukbart, kanskje ikke det beste de kan prestere, men absolutt bra. Jeg tror det er lett å bli litt misfornøyd, når man før se så mange andre som flyr bedre, og mye bedre enn en selv. Jeg vil bare få nevne at på trening før konkurransen, fikk vi se hvordan forrige VM mester Chip Hyde flygde. Dette var en flystil veldig forskjellig fra den stilens som blir brukt i Norge. Han flygde meget lavt og nærmest ikke altfor store manøvrer og meget presist. Vi tenkte, hvis det er slik man må fly for å hevde seg, er det norske landslaget "langt ut på viddene". Det var da godt å se under selve konkurransen at andre som nok ville bli blant de beste, f.eks. W.Matt, hadde en helt annen flystil (mer lik vår egen stil). Været var nydelig disse dagene frem til lørdag (25 sept). Enkelte av dagene ble det

noe forsiktig start p.g.a tåke om morgenens, men når solen først kom "fløt" fint, selv med så mange deltagere. Det var satt opp et stort telt



*Det Norske flagget vaier som vanlig friskt i den lete vinden*



*Vi venter spent på ds siste resultatene fra dagens flyvning.*

Fv : Ø. Moe, K.T. Pettersen, M.E. Ringvold & J.P. Ringvold

frem, ble det godt og varmt. Resten av konkurransen gikk greit for de norske gutta. Alle 3 slapp unna motortrøbbel og andre problemer. Det som mangler er presisjon og jevnhet. De hjelper ikke å få til en knalltur i en omgang, man må få til dette i alle omgangene. Men nå vet de hva de må trenne på. Selv arrangementet synes jeg var meget godt lagt opp. Konkurransen

på stedet hvor man kunne meske seg med alt fra smørbrød, til full middag. Her fikk man brus, og sterke saker hvis man ønsket det. Det var satt opp diverse salgsboder med suvenirer. Det var i det hele tatt ikke vanskelig å få brukt penger her for billig var det ikke. Det eneste som var dumt, var at publikum fikk parkere på samme sted som deltagerne, slik at det til tider var

vanskelig å få parkert. Lørdagen var det som sagt finale. Været var fra morgen av overskyet, men et stykke utover dagen kom et forrykende regnvær. Finalen ble allikevel gjennomført, og det gikk heldigvis bra uten uhell. Om kvelden var det banket. Med så mange deltagere fra alle klasser (det har aldri hvert så mange deltagere i et VM tidligere), ble banketten holdt i det store teltet jeg nevnte tidligere. Med det regnsværet som var både før og under banketten, ble hele området forvandlet til et gjørnehull. Inni teltet var det satt opp langbord. Her ble holdt taler, og det var premieutdeling til de beste i hver klasse. Det ble serveret tre retters middag, hvor man måtte stå i lang kø for å få hovedretten. Etterhvert som kvelden skred frem, ble fuktigheten i teltet temmelig høy, slik at det begynte å dryppa vann fra taket. Så det sier seg selv at banketten ikke ble så vellykket som resten av arrangementet. Det var en sølete og trett gjeng som tilbake på hotellelet stupte på hode i seng. Neste dag skulle vi vende nesa hjemover igjen, og måtte stå opp tidlig, for vi hadde som mål å rekke Kielfergen som skulle gå fra Kiel kl.16.30 mandag. Dette klarte vi med god margin, slik at vi fikk oss en bytur i Kiel før avreise. Båtturen gikk greit uten store bølger, og det var fem fornøyde personer som entret kjære Norge tirsdags formiddag (28.sept) fulle av inntrykk, og forhåpentligvis full av inspirasjon til å gjøre det enda bedre neste sesong. Jeg vil avslutte dette tilbakeblikk med å si "jeg gleder meg til neste år folkens, da skal jeg dømme dere sønder og sammen, ha,ha,ha." Vi sees.



*Quique Somenzini's Desafio S, hvis trykken er snill mot bildet, kan eksosåpningen i vingetippen synes. Motor : YS 120 AC*



*Novaene til Colin Campbell fra Canada.*



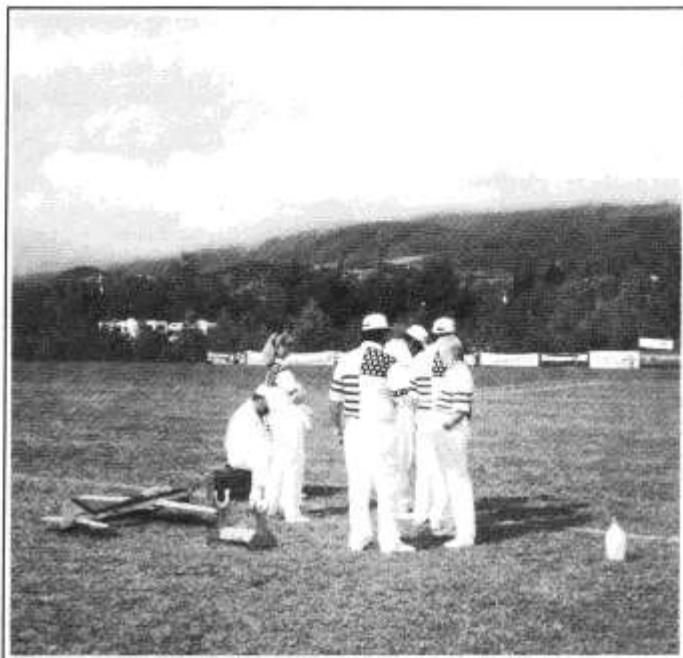
*Giichi Naruke fra Japan stilte med denne strøkne modellen.*

## Resultater

1 : Hanno Prettner	AUT	2970 / 2000
2 : Chip Hyde	USA	2992 / 1972
3 : Wolfgang Matt	LIE	2973 / 1968
4 : Quique Somenzini	ARG	2886 / 1920
5 : Hajime Hatta	JAP	2904 / 1901
6 : Giichi Naruke	JAP	2882 / 1900
7 : David von Linsowe	USA	2858 / 1899
8 : Yoichiro Akiba	JAP	2880 / 1894
9 : Tony Frackowiak	USA	2860 / 1888
10 : Ivan Kristensen	CAN	2769 / 1860
11 : Bill Cunningham	USA	2758 / 1857
12 : Roland Matt	LIE	2777 / 1853
13 : Peter Erang	GER	2766 / 1850
14 : Colin M. Campbell	CAN	2791 / 1849
15 : C. Paysant-Leroux	FRA	2725 / 1829
16 : Gregory Marsden	CAN	2768 / 1821
17 : Peter Wessels	GER	2714 / 1804
18 : Ken Binks	GBR	2699 / 1803
19 : Min Fan	CHI	2752 / 1787
32 : Robert Sundström	SWE	2537
40 : Anders Johansson	SWE	2494
41 : Kjell T. Pettersen	NOR	2491
46 : Ola Fremming	NOR	2461
48 : Tero Vallas	FIN	2439
51 : Allan Sörensen	DEN	2406
53 : Bernt Olsson	SWE	2402
60 : Jens P. Ringvold	NOR	2330
65 : Janne Nyssönen	FIN	2299
66 : Esa Eirola	FIN	2297
68 : Finn Lerager	DEN	2293
83 : Erik Toft	DEN	1997

Antall totalt : 95

Antall i finale : 19



Det patriotiske USA laget er samlet for å piffe opp Bill Cunningham før en av hans finaleomganger



Kjell Tore diskuterer strategi med laglederen (??)

## Lagrekkefølge

1 : Japan	8667
2 : USA	8476
3 : Canada	8327
4 : Liechtenstein	8307
5 : Østerrike	8120
6 : Tyskland	8085
7 : Kina	8043
8 : Frankrike	7917
9 : Storbritannia	7731
10 : Australia	7635
15 : Sverige	7434
17 : Norge	7282
19 : Finland	7035
22 : Danmark	6695

Antall lag : 35



Peter Wessels fra Tyskland stilte med to slike fullstendig glassfiberstøpte modeller.

**3. Aerolympics**  
**Worldchampionships F3A 1993**

Nötsch - Carinthia - Austria

1993-09-25

**F3A TEAM RESULTS**

Rank	Reg.-Nr.	Nation	Teammanager Name	1st Pilot	Points 1st Pilot	2nd Pilot	Points 2nd Pilot	3rd Pilot	Points 3rd Pilot	Total Team
1	180	Japan	Iioka	Naruke	2881,6	Hatta	2904,6	Akiba	2880,4	8666,5
2	265	USA	Stilliman	von Linsowe	2858,1	Cunningham	2757,9	Frackowiak	2859,9	8475,9
3	125	Canada	Marsden Ch.	Marsden G.	2767,6	Campbell	2790,8	Kristensen	2768,9	8327,3
4	190	Liechtenstein	Beck	Matt N.	2557,8	Matt W.	2972,6	Matt R.	2777,0	8307,4
5	110	Austria	Zehethofer	Prettner	2970,3	Kronlachner	2629,8	Dworak	2520,0	8120,1
6	160	Germany	Uhlig J.	Erang	2766,3	Wessels	2713,7	Uhlig P.	2605,4	8085,3
7	130	China	Liu W.	Fan	2752,0	Liu A.	2651,0	Ma	2639,6	8042,7
8	155	France	Laffite	Paysant-Leroux	2724,8	Lombard	2640,7	Bossard	2551,9	7917,4
9	165	United Kingdom	Brotherston	Binks	2698,9	Hirst	2546,0	Tappin	2486,0	7730,9
10	105	Australia	Payne	Goldsmith	2572,8	McFarlane	2530,4	Coram	2532,1	7635,2
11	100	Argentina	Somenzini E.	Somenzini Q.	2886,1	Colombo	2583,3	Morales	2150,0	7599,4
12	240	Switzerland	Giezendanner	Giezendanner	2290,6	Emmenegger	2607,3	Schaden	2668,1	7566,0
13	115	Belgium	DeWinter J.	Rombauts	2473,4	DeWinter T.	2500,9	Zardini	2489,5	7463,9
14	175	Italy	Curti	Benincasa	2515,9	Giglioli	2459,6	Silvestri	2483,2	7458,7
15	235	Sweden	Sundström L.	Sundström R.	2537,4	Johansson	2494,1	Olsson	2402,3	7433,8
16	245	South Africa	Pretorius	Stockwell	2423,1	Marais	2413,4	Casson	2504,7	7341,2
17	210	Norway	Moe	Ringvold	2330,1	Pettersen	2490,6	Fremming	2461,3	7282,0
18	185	Korea	Yong	Sung Nam	2532,6	Soon Young	2368,6	Seon Sang	2331,7	7232,8
19	150	Finland	Vallas V.	Vallas T.	2438,8	Nyysänen	2298,7	Eirola	2297,0	7034,5
20	200	Netherlands	van Loon	Volkers	2328,8	van Vliet	2398,3	v.d.Toorren	2092,6	6819,6
21	140	Czech Republik	Volf V.	Volf V. jun.	2346,1	Chvatal	2299,9	Volejnik	2161,4	6807,3
22	145	Denmark	Kristensen	Sørensen	2405,9	Lerager	2292,5	Toft	1996,5	6694,9
23	255	Thailand	Tubthong B.	Tubthong C.	2352,2	Techavipark	1954,3	Vongprasert	2307,3	6613,8
24	170	Ireland	Constant	Barrett	2232,5	Carolan	1888,5	Keane	2347,1	6468,0
25	230	Spain	Rombaut	Bru	2041,1	Anguera	2113,9	Rombaut	2228,6	6383,6
26	220	Russia	Ivanov	Mandrika	2113,7	Nefedov	1917,1	Kozlovski	1752,1	5782,9
27	225	Singapore	Mok	Yong	1840,7	Chan	2233,2	Mok	1479,7	5553,6
28	250	Taiwan	Lai	Wang	1490,7	Chen	1616,9	Lin	2258,0	5365,6
29	215	Portugal	Melo	Machado	1470,3	Ferreira	1549,8	Seabra	1889,8	4909,9
30	195	Luxembourg	Richartz	Richartz	2121,4	Weber	2322,7			4444,1
31	120	Brazil	Romano V.	Romano P.	1014,7	Hueb	2084,9			3099,6
32	205	New Zealand	Craighead N.	Craighead C.	2404,5					2404,5
33	270	Chile	Graham	Rodriguez	2295,6					2295,6
34	260	Ukraine	Makarov	Makarov	2131,9					2131,9

**AEROLYMPICS 1993****BEWERB F3A**

24.9.1993 21:08

Nation	Teilnehmer	Aircraft	Designer	Radio	Engine	Carburator	Muffler	Propeller	Glow Plug	Fuel	
Argentina	Somenzini Quique Colombo Marcelo Morales Sergio										
Australia	Goldsmith Peter McFarlane David Coram Stephen										
Austria	Pretner Ing. Hanno Kronlachner Heinz Dvorak Ing. Manfred	Mystic 60 Endeavor Terminator	Hanno Pretner Kronlachner Dvorak	Graupner mc 20 Robbe FC 28 Futaba	OS Hanno Special RIN OS Webra Comp. OS Max	OS Webra Dynamix OS Max	Maro 13x12 Selfmade OS	Maro No. 8 Enya 3 OS	Riga Champion 10 % Riga Special Self made		
Belgium	Rombauts Kurt De Winter Tom Zardini Jean-Pierre	Saphir Jester Europa 120	W. Mett Tom de Winter ZN Ling	Graupner MC 20 Graupner MC 20 Futaba 1024 Z	YS-120-AC YS-120-AC YS	YS Hattori	APC 14,5x14 APC 14,5x14,5 APC 14,5x14,5	OS F OS F OS F	20 % Oil 20 % Nitro 20 % Oil 20 % Nitro 20 % Oil 20 % Nitro		
Brazil	Romano Plinio A. Huber Carlos H.	Dosso II Desafio	Somenzini Somenzini	JR Futaba	YS 120 AC YS-120-FS	YS Hattori	Bolly Somenzini Bolly 14,5x14,5	OS-F OS-F	Castor 25 % N 25 % N		
Canada	Marsden Gregory Campbell Colin M. Kristensen Ivan	Legend 5 Nova Summit IV	Greg Marsden Colin Campbell I. Kristensen	Futaba 92 AP Futaba 92AP Futaba 92 AP	YS-120AC YS-120-AC YS-120	YS Hattori	APC 15x12 APC 15x12 C2 Hattori	OS-F Type F APC	Cool Power Morgan Cool Power KB 1L		
Chile	Rodriguez Mario	Typhoon	Ron Chidgey	Futaba 7 UAPS	YS 120 AC	YS	AAP-500	APC 14x14	OS F	Cool Power 25 %	
China	Fan Min Liu Aiqiang Ma Jianling										
Czech Rep.	Volf Vilim jun. Chvatal Vladimir Volejnik Milan	Saphir Rubin Symphony	W. Mett W. Mett Milan Volejnik	Graupner mc 18 Graupner mc 18 Graupner mc 18	MVVS OS 61 RF ABC Hanno OS 61	Webra Dynamix Hattori ROT Hattori	APC (Copy) 12x11 Prol/Prop 12,5x11 APC	OS Nr. 8 MVVS, OS 8 MVVS	10 % Nitro 10 % Nitro Graupner		
Denmark	Sørensen Allan Lerager Finn Toft Erik	Charmer Matador Saphir	D. Altenkirch Peter Erang W. Mett	Futaba FC 28 Robbe CM-Rex Multiplex 3030	OS 61 ABC-P Webra 61 ABCD Webra Comp.	OS Dynamix Webra Dynamix	Hattori Hattori (LS) Hattori 850	APC 12x11 APC 12x10 Dyna Prop 12x10	OS Nr. 8 Rossi 5 Rossi 4	85/15 % - 10 % Nitro Molotov 150K 15%/ 80/15% %	
Finland	Vallas Tero Nyssinen Janne Eiroa Esa	Domino Topaz C Saphir E	T. Vallas Peter Wessels W. Mett Iwan	Futaba FB-9VAP Graupner mc 20 Graupner mc 20	YS-120 120 AC YS-120 AC YS 61 R	YS Hattori	ABC 14x13 HAFU	OS F OS F APC 12,5x11,5	Own mix Own mix OPS 300	Own mix Own mix Klotz 6,5 % Oil, 28 %	
France	Paysant-Leroux C. Lombard Laurent Bossard Christian	Extra Manchot Slide Zephir	Paysant-Leroux Own design Graupner mc 20	Futaba 1024 Z Futaba 1024 YS 120	YS 120 AC YS 120 YS	YS Hattori	APC 14,5x13 APC 14x13,5 APC 14,4 x 13	OS F OS SF OS F	MG Synth Glow 25 % Synth Glo Synthetic		
Germany	Erang Peter Wessels Peter Uhlig Peter	Matador 3 Genesis Ecstasy	Self Self Scheiteler/Uhlig	Futaba FC 28 Graupner MC-20 Graupner/JR MC 20	Webra LS Comp. OS Hanno Webra 61 LS Comp.	Dynamics Hattori	Maro 12,5x10% Maro 12,5x10% Hattori	Enya 3 OS Nr. 8 Ulsamer 12,5x11% Novarossi 5	Synth 10 % Synth-Glow Comp. Synth Glow Comp		
Great Britain	Binks Ken Hirst Richard Tappin Jon	Stylis 4C Silhouette Summit 3 (mod)	Ken Binks I. Maybury/R. Hirst I. Kristensen/J. Tap	Futaba 92AP Futaba PCM 1024 ZA JR PCM 108	YS 120 AC OS Hanno OS Hanno	YS Hattori	14x13 APC 12,5x11 12x12	OS FS Enya No. 4 OS No. 8	20 % Castor 20 % Nitro 10 % Oil, 20 % Nitro Synthetic 20 % Nitro		

**AEROLYMPICS 1993****BEWERB F3A**

24.9.1993 21:08

Nation	Teilnehmer	Aircraft	Designer	Radio	Engine	Carburator	Muffler	Propeller	Glow Plug	Fuel	
Ireland	Barnett Noel Carolan Brian Keane Ray										
Italy	Benincasa Marco Giglioli Massimo Silvestri Sebastiano										
Japan	Nanke Giichi Hatta Hajime Akiba Yoichiro	Aurum-A Explorer 5 Wild Beast	Nanke Hatta Own design	Futaba 1024 ZA JR PCM 10 S FP 9ZA	YS-F 120 OS FS 120 SP YS 120 AC	YS Hattori	APC 14x14N APC APC 14x14	OS-F OS OS	MG 700 M MG 700		
Korea	Sung Nam Kim Soon Young Cho Seon Sang Yoo										
Liechtenstein	Matt Norbert Matt Wolfgang Matt Roland	Saphir II Rubin Rubin	W. Mett W. Mett W. Mett	Futaba FC28/PCM102 Futaba FC28/PCM102 Futaba FC28/PCM102	YS-120-AC YS-120-AC YS-120-AC	YS Hattori	APC/Fuchs 14x13,5 APC/Fuchs 14x14 APC/Fuchs 14x14	OS-F OS-F OS-F	HOPE/Carbulin HOPE/Carbulin HOPE/Carbulin		
Luxembourg	Richard Luc Weber Marc	Europa	Own design	Graupner mc 20	YS 120 AC	YS Hattori	APC 13,5x14 APC 12x12	Enya 3 Rossi 7	Titan Titan		
Netherlands	Volkers Maarten W. van Vliet Jan v.d. Tooren Dennis	Supra Fly Pacific Bird Now-Wave	H. Pretner Jan van Vliet D. v.d. Tooren	Graupner mc 20 Futaba Futaba	OS 61 RF OS Standard	6-P OS Keller-Pro 736/B	OS/Hattori APC 12x12 Asano 12,5x12,5	Enya 8 Enya 3 15 % Nitro 18 % Oil	Titan S 12 Enya 3 15 % Nitro 18 % Oil		
New Zealand	Craighead Ross										
Norway	Ringvold Jens P. Pettersen Kjell Tore Fremming Ola	Lotus Minus Amethyst Spiga SV	J.-P. Ringvold Pettersen/W. Mett Ola Fremming	Graupner mc 18 Multiplex Graupner mc 20	OS 61 Hanno + AAC YS 120 AC OS 61 Hanno + AAC	OS Hattori	APC 12,5x11 APC 14x13,5 Bolly EQ-60	Rossi R5 OS-F APC 12,5x11,5	Model Technics Sup 60/20/20 Rossi R6		
Portugal	Machado Jorge Ferreira Rui Seabra Carlos										
Russia	Mandrikov Victor Nefedov Vyacheslav Kozlovskiy Vladimir										
Singapore	Yong Teck Sin Chan Tze Law Mok Chok Koon	MK Beetle Summit II Firefly	Ivan Kristensen Ivan Kristensen Mok Chek Koon	Futaba 9ZA Futaba 9 VAP Futaba 9ZA	OS 61 Hanno YS 61 FR Hanno Special	OS 6 P YS OS 6 P	Hattori Pipe Bolly EQ62 Carbon OS Tune Pipe	APC 12,5x11 APC 12x11 APC 12,5x11	OS No. 8 Enya 4 OS No. 8	Cool Power 15 % Byron 15 %/Synth. Cool Power	
Spain	Bru Luis Anguera Jose Romboau Cristobal	Fivol Fivol II Fivol	J. Anguera Jose Anguera J. Anguera	Samwa PCM 7 Graupner mc 20 Graupner mc 18	OS 61 RF Hanno OS 61 Hanno OS 61 RF Hanno	OS OS OS	APC 12x12 APC 12,5x10,5 APC 12x12	OS No. 8 OS 8 OS Nr. 8	ASP 15 % Personel Personel		
Sweden	Sundström Robert Johansson Anders Olsson Bernt	Conquest 120 Nova Primera Saphir II	D. Patrick Johansson/Sares W. Mett	Graupner MC 20 Futaba FC 28 Graupner MC 20	YS 120 AC Webra 61 ABCD Com YS 120 AC	YS Dynamix YS	Hattori 675 Robbe GFK AAP	APC 14x13,5 APC 12,5x11,5 APC 14x13,5	18% Aeriosynth 20 % N Rossi 5 OS F		
										18% Aeriosynth 20 % N Robert S 20 18% Aeriosynth 20 % N	

**AEROLYMPICS 1993**

**BEWERB F3A**

24.9.1993 21:08

Nation	Teilnehmer	Aircraft	Designer	Radio	Engine	Carburator	Muffler	Propeller	Glow Plug	Fuel
Switzerland	Emmenegger Hans	Saphir II	W. Matt	Futaba FC 28	YS 120 AC	YS	Hattori	APC 13,5x14	OS F	Hope Synth
	Schaden Bernhard	Artemis	Schaden	Futaba	Yamada	Yamada	Hattori	14x13	OS F	
	Giezendanner Emil	Cadence	Giezendanner	Futaba 1024 ZA	YS 120 AC	YS	Hattori	APC 13,5x14	OS F	Own
South-Africa	Stockwell André	Eureka II	Marais/Stockwell	Futaba PCM 1024 FFT OS .51 RF ABC Hanno #86			Hanno	APC 12x11	Rossi 6	5 % M 12 % MSSR 15
	Marais Pierre	Eureka II	Pierre Marais	Futaba FFT/PCM 1024 OS .51 RF ABC LS	OS 6P		Hattori	APC 12,5x11	Rossi 6	12 / MSSR, 6 %M, 12
	Casson Greg	Dimension	Grog Casson	Multiplex 3030	OS FS-120-S SP	OS	EX OS	APC 13,5x13,5	OS FS	18 % M 20 % Nitro
Chinese	Wang An Pan	Flash		JR PCM 10 S	Magnum Pro 61	Magnum	Magnum	APC 13x9	Magnum 180	Cool Power
Taipei	Lin Chung Jen	Saphir	Matt	Futaba	YS 120	YS	Hattori	APC 12x11	OS F	Cool Power
	Chen Cheng Feng	Desire		JR PCM 10 S	YS 120	YS		APC 13,5x14	OS 5	Cool Power
Thailand	Tubthong Chalaphat	Jekkle	Chip Hyde	JR 10S	OS 120	OS 120	Hattori	APC	OS	Cool Power
	Techaripark Praphon	Supra Jore	Own design	Futaba	YS 120	YS 120	Hattori	APC	OS	Cool Power
	Vongpraserl Prathug	Silent	Naruka	JR 10S	OS	OS	Hattori	APC	OS	Cool Power
Ukraine	Malakov Volodymyr									
USA	von Linsows David									
	Cunningham Bill									
	Frackowiak Anthony									
	Hyde Chip									

Federation Aeronautique Internationale

Aero Club Austria

**3. Aerolympics  
Worldchampionships F3A 1993**

Nötsch - Carinthia - Austria

1993-09-25

<b>F3A FINAL RESULTS</b>													
Rank	Reg. Nr.	Surname	Givenname	Nation	1st Round	2nd Round	3rd Round	4th Round	Total Round 1 to 4	Qualification Relative	Final 1	Final 2	Total
1	111	Pretner	Hanno	Austria	984,6	985,7	1000,0	979,6	2970,3	992,8	1000,0	1000,0	2000,0
2	269	Hyde	Chip	USA	982,0	1000,0	997,5	994,2	2991,7	1000,0	971,6	969,5	1971,6
3	192	Matt	Wolfgang	Liechtenstein	1000,0	972,6	969,0	1000,0	2972,6	993,6	974,5	972,2	1968,1
4	101	Somenzini	Quique	Argentina	957,7	896,8	973,3	955,0	2886,1	964,7	952,3	955,4	1920,1
5	182	Hotta	Heijime	Japan	999,4	963,0	902,0	942,2	2904,6	970,9	914,8	930,3	1901,2
6	181	Naruka	Giichi	Japan	981,4	893,2	970,2	929,9	2881,6	963,2	912,1	937,2	1900,4
7	266	von Linsows	David	USA	964,1	926,0	965,3	928,8	2858,1	955,4	35,5	943,3	1898,6
8	183	Akiba-	Yoichiro	Japan	994,2	926,5	949,8	936,4	2880,4	962,8	838,6	931,2	1894,0
9	268	Frackowiak	Anthony	USA	980,1	935,6	944,2	914,2	2859,9	955,9	882,1	932,1	1888,0
10	128	Kristiansen	Ivan	Canada	898,3	889,0	936,8	932,9	2768,9	925,5	906,5	934,1	1859,6
11	267	Cunningham	Bill	USA	916,6	921,2	920,0	913,0	2757,9	921,8	919,6	935,4	1857,3
12	193	Matt	Roland	Liechtenstein	919,8	918,9	923,7	933,5	2777,0	928,2	903,4	924,2	1852,5
13	161	Erleng	Peter	Germany	934,6	928,4	903,3	896,7	2766,3	924,7	866,8	925,6	1850,2
14	127	Campbell	Colin M.	Canada	927,5	890,2	928,1	935,2	2790,8	932,9	897,9	916,6	1849,4
15	156	Paysant-Leroux	Christophe	France	913,4	862,2	938,6	872,7	2724,8	910,8	900,3	917,9	1828,7
16	126	Marsden	Gregory	Canada	959,6	883,7	924,4	879,2	2767,6	925,1	896,1	435,2	1821,2
17	162	Wessels	Peter	Germany	880,1	930,8	900,8	882,1	2713,7	907,1	869,7	897,3	1804,4
18	166	Binks	Ken	United Kingdom	874,9	903,3	898,3	897,3	2698,9	902,1	859,5	900,9	1803,0
19	131	Fan	Min	China	921,1	915,9	915,1	872,7	2752,0	919,9	853,5	867,3	1787,2

**3. Aerolympics**  
**Worldchampionships F3A 1993**

Nötsch - Carinthia - Austria

1993-09-25

<b>F3A SINGLE RESULTS</b>									
Rank	Reg. Nr.	Surname	Givenname	Nation	1st Round	2nd Round	3rd Round	4th Round	Total Round 1 to 4
20	243	Scheden	Bernhard	Switzerland	899,9	855,6	868,4	879,7	2668,1
21	132	Liu	Aiqiang	China	905,1	846,7	888,4	857,6	2651,0
22	157	Lombard	Laurent	France	877,5	842,5	903,9	859,3	2640,7
23	133	Ma	Jianxiong	China	862,1	813,2	879,1	898,4	2639,6
24	112	Kronlachner	Heinz	Austria	910,2	856,2	854,9	863,4	2629,8
25	242	Emmenegger	Hans	Switzerland	877,5	847,3	862,4	867,5	2607,3
26	163	Uhlig	Peter	Germany	887,7	880,1	837,6	829,5	2605,4
27	106	Goldsmith	Peter	Australia	853,1	876,5	843,1	831,9	2572,8
28	102	Colombo	Marcelo	Argentina	874,3	775,7	863,0	826,0	2563,3
29	191	Matt	Norbert	Liechtenstein	814,0	842,5	853,7	861,6	2557,8
30	158	Bossard	Christian	France	862,1	831,1	868,6	781,1	2551,9
31	167	Hirst	Richard	United Kingdom	808,9	847,9	859,3	838,9	2546,0
32	236	Sundström	Robert	Sweden	883,9	824,6	828,9	824,3	2537,4
33	186	Sung Nam	Kim	Korea	850,5	845,5	832,0	836,5	2532,5
34	108	Coram	Stephen	Australia	869,8	824,6	822,1	837,7	2532,1
35	107	McFarlane	David	Australia	861,4	826,4	842,5	817,9	2530,4
36	113	Dworski	Manfred	Austria	829,4	842,5	848,1	827,2	2520,0
37	176	Benincasa	Marco	Italy	839,0	821,6	834,5	842,4	2515,9
38	248	Cesson	Greg	South Africa	848,6	804,3	851,8	792,8	2504,7
39	117	DeWinter	Tom	Belgium	840,9	826,4	820,2	833,8	2500,9
40	237	Johansson	Anders	Sweden	818,5	821,0	812,2	854,6	2494,1
41	212	Petersen	Kjell Tore	Norway	818,5	828,2	828,3	834,2	2490,6
42	118	Zendini	Jean-Pierre	Belgium	895,4	775,7	747,1	818,4	2489,5
43	168	Teppin	Joe	United Kingdom	862,7	788,8	806,6	816,7	2486,0
44	178	Silvestri	Sebastiano	Italy	837,1	797,7	817,7	828,4	2483,2
45	116	Rombauts	Kurt	Belgium	808,9	858,6	806,0	781,1	2473,4
46	213	Fremming	Ole	Norway	806,9	811,5	788,6	843,0	2461,3
47	177	Giglioli	Massimo	Italy	110,3	788,8	841,9	829,0	2459,8
48	151	Väistö	Tero	Finland	812,7	827,0	799,1	793,3	2438,8
49	246	Stockwell	Andre	South Africa	871,1	773,3	690,0	778,8	2423,1
50	247	Menzis	Pierre	South Africa	819,1	784,6	716,7	809,7	2413,4
51	146	Sørensen	Allan	Denmark	806,9	785,2	722,9	813,8	2405,9
52	206	Craighead	Rosa	New Zealand	777,4	788,5	831,4	795,7	2404,5
53	238	Olosson	Bernt	Sweden	764,0	788,8	803,1	804,4	2402,3
54	202	van Vliet	Jan	Netherlands	783,8	797,1	764,4	817,3	2398,3
55	187	Soon Young	Cho	Korea	809,5	781,0	778,1	733,8	2368,6
56	256	Tubthong	Chaiwat	Thailand	765,9	773,9	807,2	771,2	2352,2
57	173	Keane	Ray	Ireland	758,8	812,1	776,2	756,0	2347,1
58	141	Völf	Vilém jun.	Czech Republic	778,7	791,2	776,2	758,3	2346,1
59	188	Seon Sang	Yoo	Korea	771,6	735,7	783,0	777,0	2331,7
60	211	Ringvold	Jens P.	Norway	785,8	760,1	763,8	780,5	2330,1
61	201	Volkers	Maarten W.	Netherlands	775,5	804,3	744,0	749,0	2328,8
62	197	Weber	Marc	Luxembourg	772,9	775,7	678,9	774,1	2322,7
63	258	Vongprasert	Prathug	Thailand	753,0	779,2	765,7	762,4	2307,3
64	142	Chvalat	Vladimir	Czech Republic	762,7	769,7	767,5	754,8	2299,9

**3. Aerolympics**  
**Worldchampionships F3A 1993**

Nötsch - Carinthia - Austria

1993-09-25

		<b>F3A SINGLE RESULTS</b>							
Rank	Reg. Nr.	Surnams	Givenname	Nation	1st Round	2nd Round	3rd Round	4th Round	Total Round 1 to 4
65	152	Nyyssönen	Janne	Finland	773,6	755,4	765,0	760,1	2296,7
66	153	Eirola	Esa	Finland	780,0	746,4	646,0	770,6	2297,0
67	271	Rodriguez	Mario	Chile	0,0	761,3	762,0	782,3	2295,6
68	147	Lerager	Finn	Denmark	737,7	768,5	648,5	786,3	2292,5
69	241	Glezendanner	Emil	Switzerland	752,4	727,9	739,0	798,2	2290,6
70	253	Lin	Johnson	Taiwan	775,5	757,2	725,4	685,3	2258,0
71	227	Chan	Tze Law	Singapore	738,3	612,2	727,8	767,1	2233,2
72	171	Bennet	Noel	Ireland	769,1	738,7	724,7	650,9	2232,5
73	233	Rombout	Cristobel	Spain	755,6	761,3	666,5	711,6	2228,6
74	143	Volejnik	Milan	Czech Republic	604,9	523,9	783,0	773,5	2161,4
75	103	Morales	Sergio	Argentina	676,1	699,3	658,4	774,7	2150,0
76	261	Makarov	Valery	Ukraine	692,1	724,9	714,8	26,3	2131,9
77	196	Püchertz	Luc	Luxembourg	665,8	693,9	713,6	714,0	2121,4
78	232	Anguera	Jose	Spain	715,8	674,2	653,4	723,9	2113,9
79	221	Mendrikus	Victor	Russia	701,7	685,1	685,8	716,9	2113,7
80	203	v.d.Tooren	Dennis	Netherlands	666,5	699,3	706,8	686,5	2092,6
81	122	Hueb	Carlos H.	Brazil	638,9	699,3	675,8	709,9	2084,9
82	231	Bru	Luis	Spain	721,6	654,5	615,0	664,9	2041,1
83	148	Toft	Erik	Denmark	730,0	17,9	616,2	650,3	1996,5
84	257	Techavipark	Praphon	Thailand	736,4	675,4	542,5	527,1	1954,3
85	222	Netedov	Vyacheslav	Russia	633,1	649,8	634,2	0,0	1917,1
86	218	Sesbra	Carlos	Portugal	610,6	634,2	637,9	617,6	1889,8
87	172	Carolan	Brian	Ireland	601,0	631,3	507,7	656,2	1886,5
88	226	Yong	Teck Sin	Singapore	617,7	619,8	504,0	603,0	1840,7
89	223	Kozlowski	Vladimir	Russia	581,1	582,6	549,9	608,3	1752,1
90	252	Chen	Cheng Feng	Taiwan	418,9	36,8	602,6	595,4	1616,9
91	217	Ferreira	Rui	Portugal	510,6	402,1	532,5	506,7	1549,8
92	251	Wang	An Pen	Taiwan	738,9	751,8	0,0	0,0	1490,7
93	136	Mok	Chak Koon	Singapore	269,4	639,0	281,5	559,3	1479,7
94	216	Machado	Carvalho	Portugal	471,5	522,1	476,8	467,0	1470,3
95	121	Romano	Plinio A.	Brazil	300,2	0,0	0,0	714,5	1014,7