Official Program Book Aerolympics II



Organized and run by the Academy of Model Aeronautics

Cyclone II from Kalt Helicopters

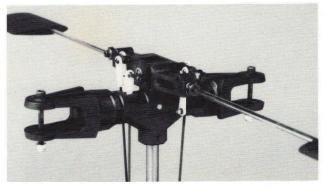






HELICOPTER KITS

The new Cyclone II is available pre-assembled with a Webra .50 size engine or in kit form, both come equipped with the high performance, single axle K-5 rotorhead.



Cyclone II by Kalt

The new Cyclone II is equipped with a newly designed rotor head, the K-5, a high performance single axle head that mixes solid hovering characteristics with outstanding aerobatic capability.

New K-5 Rotorhead

The K-5 is made of light weight, fiber filled plastic. It has a one piece blade axle featuring an all ball bearing flybar assembly and mixing levers, thrust bearings on blade grips and a new stainless steel flybar.

Standard Features

Kalt noticed that many owners of the Cyclone were switching the smooth tail rotor drive belt to an aftermarket tooth belt, and adding the optional autorotation clutch. Both of these items are now standard on the Cyclone II. The Cyclone II has a new, streamlined body that not only catches the eye, but gives the machine a sleek, aerodynamic profile. It comes equipped with a bell hiller mixer, a rear mounted gyro compartment, pre-balanced and finished main and tail rotor blades, no wooden parts to paint, and the kit is complete except for the radio, gyro and engine.

Ready to Fly

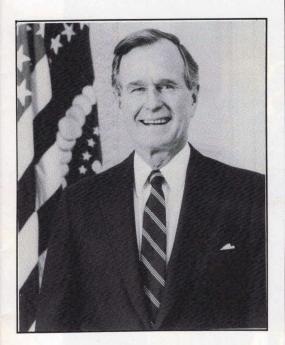
The pre-assembled Cyclone II comes equipped with a Webra .50 size engine. It is packaged ready for radio installation (not included) making it flight ready in approximately 2 to 3 hours. The Cyclone II can also be upgraded to .60 size by adding a .60 size engine mount.

#K81002500 #K82002500 Cyclone II Kit Cyclone II RTF

Available at your local hobby dealer.

Distributed by Hobby Dynamics Distributors • P.O. Box 3726 • Champaign, IL • 61826-3726 • 1-800-458-0241

PRESIDENT'S LETTER



THE WHITE HOUSE WASHINGTON

June 12, 1989

I am pleased to send greetings to all those gathered from around the world to take part in the 1989 Aerolymics hosted by the Academy of Model Aeronautics in Chesapeake, Virginia.

Building model aircraft is a fascinating activity and flying them is a challenging sport. As a former pilot, I know firsthand the unique demands and rewards of guiding a sleek craft through the sky. The lure of the open air is boundless, spanning nations and uniting people of diverse backgrounds in the joy of flying.

My congratulations to everyone participating in this World Radio Control Competition. I am sure the demonstration of your modeling and flying skills will be a thrill to all who attend.

With best wishes for a great event,

ay Bush

FÉDÉRATION AÉRONAUTIQUE INTERNATIONALE F. A. I.

10/12 rue du Capitaine Menard 75015 PARIS FRANCE

Greetings to all participants in the 1989 World Championships for Radio Controlled Aerobatic, Pylon Racing, and Helicopter aeromodels. This event, organized by the Academy of Model Aeronautics, a division of the National Aeronautic Association, is a major sporting aviation event on the FAI calendar of competiton, bringing together the world's best model fliers, assistants, and officials.

This is truly an international affair, with many nations represented from both hemispheres of the world. Approximately thirty flags are involved, with about four hundred individuals registered, making this one of the largest FAI sanctioned events to be held.

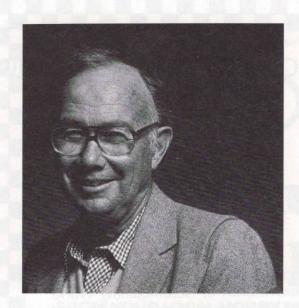
As is typical of FAI events, the spirit of brotherhood and sportsmanship predominates and is symbolized by the FAI flag which embraces all member countries. Meanwhile, individual national flags indicate the branches of the FAI family of nations which are participating in this event.

Thus, while we are all proud of our individual identities, it is more important that we are joining together and sharing the good will and fellowship that our different backgrounds bring to add flavor to our common interest.

On behalf of all FAI members, I wish everyone good weather and good luck!

Best wishes,

Clifton F. von Kann President



It is my great pleasure to welcome modelers from around the world to this unusual aeromodeling event. Not often do we bring several categories of modeling together into one great world championship. We, the AMA, are very happy to be your host and we sincerely hope that your stay in the USA will be a very pleasant one.

As a long-time competitor myself I have great empathy for those of you who are competing in these events.

I know that your preparation has been long and hard, and I know of your aspiration to be the final victor, but whether you win or lose, you will all be winners for having been here since you are the best in the world.

Please take time from your busy schedule to get to know the AMA people. You will find us ready and willing to assist in any way we can to make your stay enjoyable.

Good flying and good competition to all of you.

Sincerely,

Don Lowe President, AMA



ACADEMY OF MODEL AERONAUTICS

1810 Samuel Morse Drive Reston, Virginia 22090 703-435-0750 FAX (703) 435-0798

Welcome to AerOlympics II! For those who don't know what that title refers to, this is to explain that AerOlympics refers to a combination of Aeromodeling World Championships held at the same time and place under the rules and regulations of the Federation Aeronautique Internationale, world governing body for sport aviation activities.

The first AerOlympics was held in the U.S.A. at Lakehurst Naval Air Station in 1974. The World Championships at that event were for Indoor, Control Line, and Radio Control Scale model aircraft.

At AerOlympics II the world championships are for Radio Control Aerobatics, Helicopters, and Pylon Racing. In 1991 the same combination of world championships are scheduled to be held in Italy, so that wil probably be the scene of AerOlympics III.

At FAI World Championships events teams of three persons are invited from countries all over the world. They compete for Individual as well as Team honors. Also participating, independently, are the Individual World Champions from the previous year's FAI events.

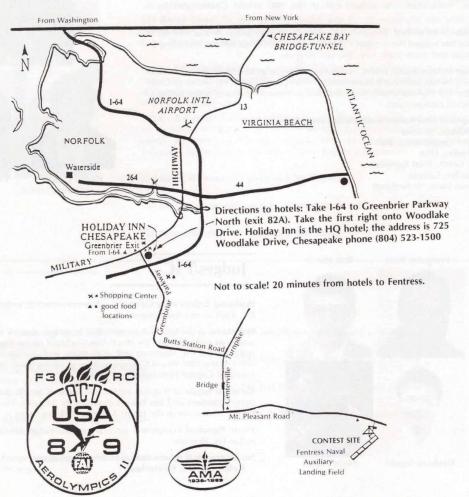
In many ways the organization of aeromodeling world championships are similar to that of the Olympics sports competition. Thus the AerOlympics title is appropriate. No matter what we call this program, however, it is a gathering of the world's best aeromodelers for the categories of competition scheduled. To all of them and to all others who participate--as supporters, spectators, officials, or reporters--this is to wish everyone a happy and memorable experience.

Sincerely,

John Worth Executive Director Academy of Model Aeronautics

1989 AEROLYMPICS II RADIO CONTROL WORLD CHAMPIONSHIPS

	August 26 Saturday	August 27 Sunday	August 28 Monday	August 29 Tuesday	August 30 Wednesday	August 31 Thursday	September 1 Friday	September 2 Saturday	September 3 Sunday	September of Monday
8 am				A Company						
0900							_			DEPART
1000	Arrival,	F3D PRACTICE	F3D PRACTICE	F3D 4 Rounds	F3D 4 Rounds	F3D 4 Rounds	F3D 4 Rounds			
1100		0	and PROCESSING					F3C FINALS		
Voon	Registration,	Opening Ceremonies						FINALS		
1300	,							AWARDS	F3A FINALS	
1400	Processing,	F3A and F3C	F3A and F3C	F3A and F3C	F3A and F3C	F3A and F3C	F3A and F3C	F3D FINALS	Round 2	
1500		PRACTICE	Round 1	Round 2	Round 3	Round 4	Round		55	
1 pm	Practice	and PROCESSING					Adjustments	AWARDS		
1700				1						
1800								F3A FINALS	AWARDS	
							11/2/11/11	Round 1		
1900	J. 1138									
3 pm										
2100	Welcome Party	Team Manager Meeting	Team Manager Meeting	Team Manager Meeting	Team Manager Meeting	Team Manager Meeting	Team Manager Meeting	BANQUET		
10 pm										



Jury Members

Ron Chidgey of the USA will serve as a jury member. Ron is Chairman of the FAI F3A Subcommittee, and has extensive experience in international competition.

Christopher Greenwood of Australia will serve as a jury member. A retired engineer, he serves as Association Secretary of the Model Aeronautic Association of Australia and Australian delegate to the FAI aeromodeling committee.





Ron Chidgey

C. Greenwood



Francis De Proft



Tony Aarts

Francis De Proft of Belgium will serve as a jury member. A professional helicopter pilot, he serves as Chairman of the FAI F3C Helicopter Committee.

Tony Aarts of the Netherlands will serve as a jury member. An aeronautical engineer with Fokker, he has been a modeler for 54 years. He serves as Technical Secretary for the FAI aeromodeling committee. Mr. Aarts has been a judge or jury member at 14 international competitions.

Bob Brown of the USA will serve as a jury member. Mr. Brown is an American delegate to the FAI. He currently serves as District 3 Vice President of the AMA.

Judges/F3A

Michele Ardonceau of France will serve as an F3A judge. A modeler for 10 years, she has worked as an international judge for all that time.

Kazuo Ochiai of Japan will serve as an F3A judge. He works as Chief Instructor (Aerodynamics) for Japan Air Lines, and also serves as Director of the Japan Aeronautic Association. He judged F3A at the 1987 World Championships in

Dave Hulme of Knutsford, England, will serve as an F3A judge. A modeler for 48 years, Dave has judged most major F3A competitions in Great Britain, including national events and team trials, over the last 10 years.

Tom Prosser of New South Wales, Australia, will serve as an F3A judge. A modeler for 38 years, he has been Australian national champion 6 times. He serves as Chairman of the FAI F3A subcommittee, and has competed in many other forms of model aircraft competition.

No biographical information available at presstime: Harry Nilsson, Sweden Francesco Cappabianca, Italy James Parker, USA Werner Groth, West Germany Karl Mueller, Canada H. Th. van Loon, Netherlands



Kazuo Ochiai



Tom Prosser

Wolfgang Roth



Bob Harris





Kiyokazu Sugaki



Pierre Pignot

Judges/F3C

Wolfgang Roth of West Germany will serve as an F3C judge. A modeler for 35 years, Mr. Roth works for a major bank.

Bob Harris of the USA will serve as an F3C judge. A modeler for 40 years, Mr. Harris works as a glassblower for the NASA Goddard Space Flight Center. He was Head Judge of the F3C nationals and team trials, and managed the American team that went to the 1987 World Championships in Switzerland. He is also president of the National Capitol Helicopter Association.

Kiyokazu Sugaki of Nagoya, Japan, will serve as an F3C judge. He works as a company president and has been a modeler for 14 years. He has the position of Helicopter Instructor in the Japan Aeronautic Association.

Pierre Pignot of France will serve as an F3C judge. He has been an international judge for 10 years.

No biographical information available at presstime: Rudolf Hadorn, Switzerland

F3A Radio Control Aerobatics Contestants

Defending Champion

101 Hanno Prettner is Defending World Champion. He has been F3A World Champion five times, won the Tournament of Champions 8 times, and been Austrian Champion 14 times. Self-employed as an electrical en-gineer, he will be flying a plane of his own design that is being produced as a kit by EZ Model Company.

Austria



140 Wolfgang Schlager is Team Manager. He works as an official for the Department of Defense.



142 Heinz Kronlachner, 31, has been a model flier for 15 years. He placed tenth at the World Championships in 1987, and seventh at the European Championships in 1988. He works as a control engineer for Voest-Alpine, Linz.



143 Hermann Kowarz, 38, has been a model flier for 24 years. He has placed highly in Austrian events in 1982, 1984 and 1987, and placed eighteenth in the World Championships in 1981. He works as Sales Manager for Tip Top Stahlgruber.

Australia

- 130 Brian Williamson is Team Manager. Mr. Williamson has studied the judging of F3A events and written papers on the subject. He works as a music teacher
- 131 Peter Goldsmith, 26, was National Champion in F3A in 1988, A modeler for 12 years, he works as company director of Kennedy Goldsmith Graphics.
- 132 Edward Edwards, 36, has been a model flier for 15 years and owns a hobby store. He was Australian Champion in F3A in 1987 and 1988 and has placed highly in the US Nationals and Asian Pacific Championships. He is developing a series of four-bladed propellers.
- 133 Chris White, 26, has been a model flier for 16 years. He placed in the top 10 in the US Nationals in 1987, and competed in the World Championships in that year.

Brian Williamson

Peter Goldsmith

Edward Edwards

Chris White









Belgium

- 150 Fortune Nenin is Team Manager. He works as a sound engineer for Caterpillar, and serves as Chairman of the FAI Noise Committee. He has managed several Belgian teams in Control Line Team Racing as well as F3A.
- 151 Alexander Degotte, 28, has been Belgian champion five times. He has competed in three World Championships. A modeler for 15 years, he works as a hair-
- 152 Jean-Pierre Zardini, 34, owns a model store. He has flown in three World Championships, and was vice-champion three times in the Belgian Nationals.
- 153 Jozef Lenaerts, 27, has placed highly in the Belgian Championships for the last three years. He flew in the World Championships in 1985 and 1987, and the European Championships in 1984, 1986 and 1988. A model flier for 17 years, he works as a finishing operator for Avery Specialty Tape Division.

Fortune Nenin

Alexander Degotte Jean-Pierre Zardini









Brazil

- 170 Vicente de Paula Romano Filho is Team Manager.
- 171 Plinio Augusto Romano no biographical information at presstime.
- 172 Mario Massahiro Watanabe no biographical information at presstime.
- 173 Marcus Angelo Malloy Resende no biographical information at presstime.

Canada

190 Larry Barrett is Team Manager.

191 Dave Patrick, 35, is Senior VP of Carl Goldberg Models and has designed many of their most popular kits. Dave has been modeling for 15 years, and has been Canadian National Champion twice. He flew as an Alternate in the 1988 Tournament of Champions and placed first in the 1988 Tangerine Internationals.



192 Colin Campbell, 29, has been a modeler for 15 years. He has been Eastern Canadian Champion three times and Canadian national runner-up twice. He works as an electrician for Can-Mec Mechanical Ltd.



193 Ivan Kristensen of Guelph, Ontario has been modeling for 26 years. This is his 10th world championships as a member of the Canadian team. He has twice placed 4th. Ivan has also been Canadian National Champion 7 times and US National Champion 3 times. He is self-employed as a property manager and corporate pilot.



Denmark

261 Erik Toft, 45, has been a model flier for 27 years. He has been Danish National Champion in F3A five times.



Chile

200 Eduardo Calderon is Team Manager.

201 Mario Rodriguez, 34, has been a model flier for 10 years. He has been Chilean national F3A Champion since 1980, and has been national F3B (Soaring) Champion since 1979. He works as a hardware sales manager.



202 Adolfo Konig, 46, has been a model flier for eight years. He was National Vice Champion in F3A in 1987 and 1988.



France

310 Guy Brouquieres is Team Manager. A modeler for 30 years, he has been on world championships teams twice. He works as a dentist.



311 Christian Bossard works as a technician for the French Electric Company.



No biographical information 312 Mr. Malfait 313 Yon Le Gouefflec

F. R. Germany

290 Franz Gerstl is Team Manager. A modeler for 46 years, he has placed highly in many regional championships. A retired engineer, he has managed the German team for several years.



291 Bertram Lossen, 27, has been National Champion five times. He was European Champion in 1986, and has placed fourth or above in the last four World Championships. He is a student of chemical engineering.



292 Tobias Schulz, 28, has been a model flier for 20 years. He was on European Championship teams in 1986 and 1988, and the World Championship team in 1987.



293 Peter Wessels, 29, has been a model flier for 15 years He was German Vice Champion in 1987 and 1988. He has been on European Championship teams twice and World Championship teams once.



Greece

No biographical information available at presstime:

331 Konstantinos Papaspizou 332 Antonis Azanoutis

Finland

300 Erkki Haapanen is Team Manager. He works as Technical Director for Advanced Composites. A modeler for 30 years, he is a qualified international F3A judge.

301 Esa Eirola, 35, has been Finnish F3A champion four times. A modeler for 17 years, he works as Sales Manager for STW Security.

302 Ari Syrja, 26, placed fourth in the 1988 Finnish championships. A modeler for 17 years, he works as a designer for Sunds Defibrator.

303 Tero Vallas, 25, has been a model flier for 17 years. He has been Finnish champion four times. He works as a project engineer for Valmet Aviation Industries.

Erkki Haapanen



Esa Eirola



Tero Vallas



Guatemala

341 Julio Quevedo Sr., 53, was national radio control champion in 1980 and 1987. He pioneered radio control in his country, making the first flights in 1957. A medical doctor, he also teaches electronics.

342 Hector Tschen, 33, has been National Champion four times. He has also won six national Soaring championships. A modeler for 25 years, he works in the household products industry.

343 Julio Quevedo, Jr., 21, has been National Aerobatic Champion in 1986 and 1988. He flew in the World Championships in 1985 and 1987. He has flown aerobatics since age 14, and is studying food engineering.

Julio Quevedo Sr.



Hector Tschen



Julio Quevedo, Jr.

Japan

470 Kentaro lioka is Team Manager. He is Director of the Japan Model Aeronautic Association. A modeler for 50 years, Mr. lioka has been Manager of the F3A team for seven years.

471 Giichi Naruke, 39, has been a model flier for 25 years. He placed fourth in the World Championships in 1985 and fifth in 1987. He works as Service Manager for Futaba Co.

472 Hajime Hatta, 32, was National Champion in 1987 and placed second in 1988. He placed fourth in the 1987 World Championships. Mr. Hatta works as a car mechanic for Hatta Motors.

473 Yoichro Akiba, 32, has been a model flier for 22 years. He works as a Service Manager for Futaba Co. He placed sixth in the 1983 World Championships.

Kentaro lioka



Giichi Naruke



Hajime Hatta



Yoichro Akiba

Ireland

410 Finbar Constant is Team Manager. A modeler for 20 years, he has been Irish F3A Team Manager since 1983. He serves as Chairman of the Model Aeronautics Council of Ireland.

411 Noel Barrett manages a wholesale car and model business. He has been Irish F3A champion four times and on the Irish team for the last six years. He also regularly appears in the Cork Opera House

412 Liam Broderick, 36, serves as Treasurer of the Model Aeronautics Council of Ireland. A modeler for 16 years, he works as an electrical instrument supervisor.

413 Ray Keane, 42, works as a consultant engineer. A past Irish F3A Champion, he has been on the Irish team since 1983.

Italy

430 Renato Curti is Team Manager. A modeler for 30 years, he works as an insurance broker. An active competitor, he serves on the Aeromodeling Sport Commission responsible for F3A organization in Italy.

431 Mauro Di Biaggio, 22, has been Italian F3A Champion three times and been on the Italian World Championships team three times. Employed as a boat mechanic, he has been a model flier for 15 years.

432 Pietro Favilla, 31, has been a model flier for eight years. He has been on the World Championships team twice, and placed third in the 1988 Italian F3A Championships.

433 Massimo Giglioli, 28, has been a member of the Italian F3A team twice. he placed second in the Italian F3A Championships in 1988. He has been a modeler for 15 years.

Mexico

510 Alfonso Sanchez is Team Manager. He is vice president of the Monterrey Aero Club, and owns his own metal can manufacturing business.

511 Secundino Vazquez, 41, has been a model flier for 10 years. He owns his own business, a manufacturer of heaters and kitchens. He has competed in two world championships (Holland and France) and the US Nationals.

512 Jose Barrios, a student, has been a model flier for 10 years. He competed in the last World Championships in France.

513 Mario Quintanilla, 40, works as an engineer for Caterpillar. He has competed in two World Championships and the US Nationals in 1988.

South Korea

460 Hyun Jin Choi is Team Manager. Mr. Choi is President of Say-In Iternational Co., and has been a model flier for 12 years. He has placed highly in the Air Force Chief of Staff's Cup competition in 1988.

461 Sung Nam Kim, 31, has been a model flier for 10 years. He placed first in three major Korean model meets in 1989. He works as Manager of the Commercial Ad. Department of Jin Ro Co. Ltd.

462 In Hwang Kim, 29, works as a model airplane designer for the Aurora Model Co. He placed third in the 1989 Korean National Championships.

463 Soon Young Cho, 32, has flown models for 10 years. He is President of Cho's Model Co. He placed Second in the Korea RC Club Cup in 1988, and Second in the 1989 National Championship.

Hyun Jin Choi Sung Nam Kim In Hwang Kim Soon Young Cho

The Netherlands

540 Kees Houbolt is Team Manager. A modeler for 25 yars, he works as a surveyor for the Office of Land Registry. He is also secretary of the Radio Vliegclub Brabant.

541 Jan Van Beek, 44, has been Dutch national champion three times. Employed as a shopkeeper, he has been a model flier for 24 years.

542 Dennis Van Der Tooren, 24, was Dutch F3A Champion in 1988. He works as a salesman of model supplies.

543 Jan Van Vliet, 52, as flown model airplanes for 25 years. He has been Dutch National Champion 18 times and competed in 13 World Championships. He is the Netherlands representative to the FAI for model aeronautics.



D. Van Der Tooren

Liechtenstein

490 Peter Kunkel is Team Manager. He flew for Liechtenstein in 1985 and 1987 in the World Championships. A modeler for 15 years, he serves on the Managing Board of the Liechtenstein Aero Club.

491 Wolfgang Matt, 41, has been World Champion twice, vicechampion four times, and European Champion three times. he has won over 200 F3A competitions. A Personnel manager for the National Bank of Liechtenstein, he also serves on the FAI F3A Subcommittee.

492 Roland Matt, 19, has been a model flier for 7 years. He has won several regional F3A competitions, and is currently National Champion in F3B (Soaring). He works as a bank clerk for the Private Trust Bank in Vaduz.

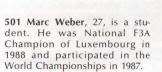






Luxembourg

500 Alain Marchioni is Team Manager. A modeler for 20 years, he works as a Sales Engineer for the Philips Corporation









New Zealand

550 Noeline Craighead is Team Manager. She placed first in the 1987 New Zealand Nationals in Novice Aerobatics and has numerous other placings in international and national competition. She is reputed to be New Zealand's only lady RC pilot.

551 Ross Craighead, 37, has been a model flier for 18 years. He works as Retail Manager for Modelair Ltd. He has placed first in the New Zealand Nationals for five years, and represented New Zealand in the Trans-Tasman Challenge and Asian Pa-

552 Keith Jennings, 30, has been a model flier for eight years. A printer by trade, he has placed third in the New Zealand Nationals 1987-88 and second in the 1988 Kraft Masters International.

553 Paul Stairmand has been a model flier for six years. He has placed first in the New Zealand Nationals and Kraft Masters Internationals. He works as Managing Director of New Lynn Upholsterers Ltd.



Ross Craighead, Noeline Craighead, Paul Stairmand, Keith Jennings

South Africa

640 Bob Skinner is Team Manager.

641 Greg Casson, 24, works as manager of a hobby shop. He has been national aerobatic champion for 5 consecutive years and has also placed highly in pylon racing events.

642 Graeme Cox, 23, has been a modeler for 15 years. He works as Manager of Coxcraft Company. He has been national novice Champion, Vice-Champion, Regional Champion and Pylon Racing Champion in national contests.

643 Dean Grobbelaar, 22, is a student at Johannesburg Technical College. He was Aerobatic Vice-Champion this year. His airplane is a kit version of the plane that won the 1987 World Championships, the Supra-Fly.







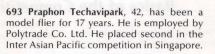


Thailand

690 Bunchoed Tubihong is Team Manager. A modeler for 15 years, he is employed as a doctor for the Thailand Royal Air Force.

691 Prathug Vongprasert, 36, has been a model flier for 12 years. He competed in the World Championships in 1985 and 1987, and in regional Asian events in 1985-1988. He is also a volunteer amateur radio operator.

692 Chaiphat Tubihong, 17, has been a model flier for 9 years. He placed fourth in the Asian Pacfic Regional RC Competition in 1986, and received a special award from the Thai government in the same year.









Spain

No biographical information available at presstime:

650 Jesus Bas Diez

651 Jose Bas Duque

652 Cristobal Rombaut Cauterman

653 Mariano Vivas Gallego

Sweden

No biographical information available at presstime:

670 Lars-Olf Sundstrom

671 Anders Johansson

672 Robert Sundstrom 673 Ingmar Svensson

United Kingdom

720 Dave Smith is Team Manager. He has managed the last six UK teams. His teams placed third in the last two European championships. Dave has flown models for Steven Spielberg's film 'Empire of the Sun' and others.

721 Ken Binks, 41, has been a model flier for 34 years. He has been British national champion 7 times and competed in all the World Championships since 1979. He serves as Chairman of the Great Britain RC Aerobatic Association.

722 Terry Westrop, 37, is self-employed as a professional model builder. He was British Champion in 1986 and 1987. He will be flying a model of his own design called Loaded Dice; plans for the plane were published in RC Modeler Magazine in February 1988.

723 Andrew Nicholls, 27, works as a biologist for Beecham Pharmaceuticals. In only three years of active competition he has been Welsh Open Champion and placed highly in many European competitions. He will be flying a plane of his own design.









Switzerland

680 Werner Burger is Team Manager. An airline captain, he has been a modeler for 30 years. He serves on several FAI committees.

681 Emil Giezendanner, 48, was Swiss Champion in 1985 and 1988. He is Vice President of the Model Flight Commission of the Swiss National Aeroclub.

682 This Bosshard, 27, has placed highly in many national and European competitions. A modeler for 14 years, he works as an airline pilot for Swissair.

683 Hugo Peyer, 35, has been Swiss champion several times. He works as a mechanic for Cinerent Film Equipment Service in Zurich.







U.S.A.

740 John Britt is Team Manager. A modeler for 21 years, he works as an engineer for Allied Signal Aerospace. He participated in the last seven US team selection contests, and serves on the Team Selection Committee. He has participated in the Tournament of Champions, placing seventh in 1988.

741 Tony Frackowiak, 33, has been a model flier for 24 years. he works as an RPV Instructor for AAI Corporation. He was National Champion in 1987, and has been a US team member four times. He placed in the 1982 and 1988 Tournament of Champions. Tony will fly a biplane design called the Fyg-Leaf.

742 Chip Hyde. 17, started flying radio control when he was four years old. He has been US National Champion three times, in 1982, 1984 and 1988. His first World Championships was in 1987; he placed sixth.

743 Dean Koger, 45, has flown models for 23 years. He has participated in the Tournament of Champions seven times, finishing fourth twice. He flew in the World Championships in 1979 and managed the US team in 1981. An electrical engineer by trade, he is flying a model with a special belt-driven power system.









John Britt Chip Hyde

Tony Frackowiak Dean Koger

Basics of the Competition Events

F3A Aerobatics

The object of this event is to test a pilot's skill in flying his model through a prescribed series of 23 maneuvers. The maneuvers must be executed during an uninterrupted flight in the order in which they are listed. Much as in the manner of figure skating, the maneuvers are judged for accuracy of presentation in accordance with precise descriptions regarding direction, altitude, symmetry, timing and other details.

The competitor may make only one attempt at each maneuver during the flight. Up to three minutes are allowed for engine starting, within a total time of ten minutes to start and complete a flight.

Each competitor is entitled to four flights, with the best three counting to determine the team placings. The top 20/but no more than 20 competitors will then have three additional flights to determine the individual winner. The average of the best three preliminary flights will count as one score along with the three finals flight scores to provide four scores, the best three to count for final placing.

Five judges are used for scoring each of the four preliminary flights per competitor. For the flyoff flights, ten judges are used per flight.

All scores for each round including the finals rounds will be normalized as follows: When all competitors have flown in front of a particular group of judges once (i.e. once a round) the highest score shall be awarded 1000 points. The remaining scores for that group of judges are then normalized to a percentage of the 1000 points in the ratio of actual score over winner's score.

F3C Helicopters

In this event, the object is similar to that of F3A Aerobatic flying; with nine maneuvers to be flown on each of four flights, with ten minutes total time allowed per flight.

The final classification will be determined by the sum of all flight scores, except the lowest one which is cancelled. In case of a tie for the first three places, the final placing is determined by the scores obtained in a fly-off. Five judges are used to score each flight. The final score for each flight is obtained after discarding the highest and lowest scores among the five judges for each maneuver.

As with Aerobatics, each maneuver is awarded points between 0 and 10 by each judge. The maneuvers must be performed in airspace which will allow them to be clearly seen by the judges, within imaginary 'boxes' which limit the maneuvering area.

F3D Pylon Racing

In this event up to four pilots fly their models simultaneously in a race over a four kilometer course, consisting of ten laps (cycles) around three pylons (course markers). Each individual flight is timed to determine the fastest flights of each race. Each pilot is assisted by a 'caller' who informs the pilot when to turn around the pylons, to minimize the flight path and distance over the course. Due to the speed of the models, the pilot must concentrate on flying as low, accurately and safely as possible.

A maximum of one minute is allowed for starting and adjusting engines. All laps are flown counter-clockwise (turns to the left).

Points shall be awarded after each race as follows: The contestant's score is his corrected time in seconds to the first decimal place. No points will be awarded if a model fails to complete the 10 laps or if the flight is cancelled.

The winner of the event is the contestant who has accumulated the lowest score after the conclusion of all heats. If nine or more rounds are flown, each competitor's two worst scores shall be discarded.

The number of flights per pilot is determined by the time available over the course of the contest, with scores from all flights counting, except the worst one, toward the individual and team placings. Penalties may be incurred for releasing the model before the drop of the starter's flag, cutting inside of (instead of going around) a pylon, or flying outside the course.

F3C Radio Control Helicopter Contestants

Defending Champion

101 Curtis Youngblood, USA is defending World Champion. He is a 20 year old student from Bryan, Texas. He has been a model flier for eight years.



Australia

130 Max Tandy is Team Manager. A hobby shop proprietor, he has been Australian Helicopter Champion and has won state aerobatic tournaments.

131 Rob Barbuto, 35, has been National Champion in 1989 and 1982 and has placed in all competitions entered since 1980. A modeler for 15 years, he works as a service technician for Gas And Fuel Corporation.

132 John Wessel, 28, is a service technician for Airmaster Australia. He placed first in the 1988 Nationals and 1988 Trans Tasman contest, and serves as Contest Organizer for his club, the Melbourne RC Helicopter Club.

133 Geoff Woodward, 32, has been a model flier for 15 years. He was Australian Helicopter Champion in 1986 and runner-up in 1989.







Austria

140 Manfred Dittmayer is Team Manager. A modeler for 20 years, he serves as a member of the FAI F3C Subcommittee. He works as a technical engineer.

141 Josef Brennsteiner, 42, has been a modeler for 20 years. He has placed highly in several international events, including third in the World Championships in 1987.







142 Harald Bingel, 29, has been a modeler for 15 years. he works as a shop owner.

Canada

190 Rene Dikkes no biographical information available at presstime.

191 Leon Luke no biographical information available at presstime.

F. R. Germany

290 Lars Waegner is Team Manager. A modeler for 35 years, he edits a major model helicopter magazine. He also serves on the FAI F3C Subcommittee.

291 Jochen Gerkens, 28, works as a master joiner for Robbe Modellsport. He was German Vice Champion in 1988.

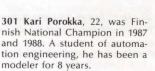
292 Ewald Heim, 43, holds a World's Record for distance and altitude. He was German Champion in 1982 and 1983, European Champion in 1984 and 1986, and World Vice Champion in 1985. He works as a technical engineer.

293 Volker Heine, 32, works as a mechanical fitter for Robbe Modellsport. A modeler for 19 years, he was German National Champion from 1984 to 1988.

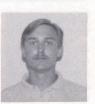
Lars Waegner Jochen Gerkens Ewald Heim Volker Heine

Finland

300 Jyrki Hurnasti is Team Manager. He serves as Chairman of the Finnish RC Heli Team, and works as Technical Manager of Audiocom Hobby World Inc.











France

310 Jean-Claude Lavigne will be Team Manager. He has managed the French F3A teams since 1971 and organized the World Championships in France in 1987.

311 Maurice Depigny, 40, has been a modeler for 8 years. He was French F3C Champion in 1985, 1987 and 1988; he has placed highly in the 1988 European Championships and the 1987 World Championships.

312 Phillippe Rose, 48, has been a modeler for 6 years. An architect, he placed highly at the 1988 European Championships.

313 Gerard Weil, 39, has been a modeler for 25 years. He has placed at the World Championships in 1987 and the European Championships in 1988. He works as an engineer for I.T.T. Electromechanical Components.

Jean-Claude Lavigne Maurice Depigny

Phillippe Rose

Gerard Weil









Italy

430 Paolo Dapporto is Team Manager. He is Editor of the Italian model magazine "Eco Model" and President of the Italian aeromodeling club. He has been a model flier for 36 years.

431 Massimo Aita, 19, has been a model flier for 12 years. He was Italian Sport F3C Champion in 1988.

432 Massimo Rocchi, 35, has placed highly in European championship events and was the Italian Sport F3C Champion in 1987. He has been flying models for 16 years.

433 Paolo Mella, 40, has been a modeler for 16 years. He manages a hobby store. He was Italian F3C Champion in 1988 and competed in the F3C World Championships in Canada.

Paolo Dapporto

Massimo Aita









Massimo Rocchi

Paolo Mella

Hong Kong

791 Michael Lieu, 29, is currently Hong Kong RC Helicopter Champion. He has been Tai-wan National Champion in 1987, 1988 and 1989. He has been a model flier for 16 years.

Israel

420 Moshe Kastiel is Team Manager.

421 Efraim Kastiel, 16, has flown models for two years. He is flying an X-Cell .60 in the

Moshe Kastiel

Efraim Kastiel





South Korea

460 Jun Young Na is Team Manager. He has been a modeler for 10 years. Mr. Na works as President of MANI Engineering Co.

461 Han Jun Park, 28, has flown model airplanes for 6 years. He is President of Jun Products Co.

Jun Young Na

Han Jun Park





Japan

470 Shin Abe is Team Manager. He has managed the Japanese teams to the World Championships in 1985 and 1987, and is Chairman of the F3C Committee of the Japan Model Association. Mr. Abe owns a hobby store.

471 Shizuo Ishikawa, 37, was F3C National Champion in 1985 and placed fifth in the World Championships in 1987. A modeler for 20 years, he works as an engineer for the Futaba Co.

472 Yukihiro Dobashi, 20, placed first in the Japan National Championships in 1988 and second in 1987. He works as an engineer for the Futaba Co.

473 Kazuyuki Sensui, 18, has been a modeler for 9 years. He works for the Izumi Model Co. He was F3C National Champion in 1987 and has won many local com-

Shin Abe

Shizuo Ishikawa

Yukihiro Dobashi

Kazuyuki Sensui









Luxembourg

Kit Flammang

Patrick Prange





501 Kit Flammang, 30, has been a modeler for 14 years and owns his own Graupner model distribution company. He is flying a scale model of the Lockheed 286H, and is serving as Team Manager as well as contes-

502 Patrick Prange, 31, is flying a Lockheed 286 with a handmade fuselage and blades. He placed fourth in the international competition in France in 1988.

The Netherlands

540 Rom Bakker is Team Manager. A modeler for 36 years, he serves as Vice-Chairman of the Royal Netherlands Aeronautical Association. He works as Financial Manager for Noord-Nederland B.A., an exporter of dairy products.

541 Joop van Lent, 44, has been a model flier for 16 years. He has competed in three European championships and two World Championships. He is a member of the FAI subcommittee on RC Helicopters.

542 Jan Verhagen, 40, works as Office Services Manager for Wang Computers. He placed Second in the Dutch Championships, and is Controller of the National Helicopter Association.

543 Kees Verplanke, 38, has been Dutch Champion since 1988. He placed sixth in the 1988 European Championships. A modeler for 11 years, he is employed as a Technical Manager for Piling Equipment.

Rom Bakker



Joop van Lent



Jan Verhagen



Kees Verplanke

Switzerland

Peter Oberli



Peter Daeppen



Rudolf Linder

680 Peter Oberli is Team Manager. A modeler for 40 years, he organized the 1987 F3C World Championships in Bern.

681 Daniele Graber, 39, has been Swiss National Champion five times and was European Champion in 1988. A modeler for 20 years, he works as a civil engineer.

682 Peter Daeppen, 34, has been a model flier for 20 years. A carpenter, he has been Swiss Vice Champion twice and was a member of the winning European Championship team in 1988.

683 Rudolf Linder, 36, has been Swiss National Champion twice. He was a member of the winning European Championship team in 1988. A modeler for 22 years, he works as a mechanical engineer.

New Zealand

551 Alan Robert Campbell, 34, has been a modeler for 14 years. He serves as helicopter Training Instructor for the Wellington Model Airplane Club. He works as a police dog handler for the New Zealand Police Department. He is the first person to represent New Zealand in an F3C World Championships.



South Africa

640 Bob Skinner is Team Manager of all three South African teams. He works as a graphic designed for the J. Walter Thompson Agency. He has been National Chief Aerobatic Judge from 1982 to present, and has been an international Scale and Helicopter judge.

641 Neville Wright, 29, has been South African Helicopter Champion, Vice-Champion and Regional Champion. He works as an accountant for Allforms.



Bob Skinner



Neville Wright

Sweden

670 Bjorn Friberg is Team Manager. A model flier for 12 years, he is Secretary of the Aeroklubben Modell in Gothenburg, Sweden.

671 Christer Palmdahl, 38, has been a modeler for eight years. Employed as a craftsman, he placed fourth in the Swedish Nationals.



Bjorn Friberg



Christer Palmdahl

United Kingdom

720 Leonard Bliss is Team Manager. A model flier for 23 years, he owns a hobby store. He is also chairman of the British RC Helicopter Association and a representative to the FAI. He was British National Helicopter Champion in 1979 and 1980.

721 Leonard Mount has been a model flier for 22 years. Self-employed as a technical consultant, he has been British and Scottish National Champion five times.

722 John Wallington, 34, has been a model flier for 14 years. He works as Technical Manager for J. Perkins Distribution Ltd. He has been British national Helicopter Champion twice.

723 Colin Bliss, 28, was British National Champion 1987-88. He flew an RC helicopter across the English Channel to raise money for charity.



Leonard Bliss



Leonard Mount



John Wallington



Colin Bliss

U.S.A.



Clifford Hiatt



Timothy Schoonard

740 Clifford Hiatt is Team Manager. A modeler for 25 years, he serves as President of the Orlando RC Heli Society. He was National Champion in 1984 and 1988. He works as an engineer for the Westinghouse Electric Corp.

741 Thomas Dooley, 35, has been a modeler for 20 years. He was National Intermediate Champion in 1985 and won the 1989 Team Trials.

742 Timothy Schoonard, 32, has been a model flier for 11 years. He serves on the RC Heli Contest Committee and the F3C Team Selection Committee.

743 Robert Gorham, 29, has been National Champion three times and a member of the US team to both previous World Championships. Selfemployed as a consultant, he serves on the RC Helicopter Contest Board.

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F3D Radio Control Pylon Racing Contestants

Defending Champion

101 David Shadel, USA is defending World Champion. A model flier for 32 years, Dave runs his own hobby busines. He has placed first in over 12 US National competitions.

Austria

141 Ernst Waltschek, 48, has been a modeler for 18 years. He has placed highly this year at racing events in Italy, Germany, and the Soviet Union. He works



David Garner



Ian Haigh

Roger Langham









Bruce de Chastel

Keiran Harvey

F. R. Germany

290 Dr. Werner Brenner is Team Manager. A modeler for 36 years, he works as a pharmaceutical chemist and university teacher.

291 Edmund Graef, 26, was German Champion in 1988. He is a mechanic and engineer.

292 Otto Jakob, 30, has been a model flier for 16 years. He works as an engineer.

293 Hans Sagemuller, 40, has been a model flier for 20 years.

294 Sabine Frick will be a Mechanic.

295 Werner Schafer will be a Mechanic.

Australia

130 David Garner is Team Manager. He serves as Editor for the Victorian Miniature Pylon Racing Association, and placed highly last year in the Australian Quarter Midget Pylon Championships. A finance officer for Avco Financial Services Ltd., he has been a model flier for 17 years.

131 Ian Haigh, 35, has been a model flier for 25 years. He holds national records in Quarter Midget and F3D, and has been an international, national, state and interstate champion. He also competes as a cross country hang glider pilot.

132 Roger Langham, 27, has been a modeler for 20 years. He won the Australian Nationals this year, and set a new Australian record. He works as a radio control systems technician for Kraft Systems Australia, and serves as President of the Geelong Miniature Aircraft Association.

133 Bruce de Chastel competed in the 1987 World Championships on the championship team.

134 Keiran Harvey, 22, has been a model flier for 10 years. He works as an Aircraft Maintenance Enginer for Ansett Airlines. He will work as a Mechanic for Ian Haig.

135 Gary Gau will serve as a Mechanic.











Otto lakob

Hans Sagemuller

Belgium

150 Willy Rose will be Team Manager. An engineer for Agfa-Gevaert, he has been a model flier for 10 years and serves as Secretary of his local model club.

151 Ivan Cappuyns, 26, has been a model flier for 13 years. He has been Belgian Champion eight times and has won the Euro Cup. He also serves on the FAI F3D Committee, and flies full-size gliders.

152 Wim Lentjes, 26, has been a model flier for 13 years. He has placed in the Belgian Nationals since 1986. he works as a electronics enginer for Philips.

153 Edgard Voets, 32, has flown models for 19 years. He has placed highly at the Belgian Nationals for the last two years. An engineering teacher, he is Chairman of his local model club.



Canada

- 190 Edward Smith will be Team Manager.
- 191 Allan Baker no biographical information available at presstime.
- 192 John Davidson no biographical information available at presstime.
- 193 Dave Kelley no biographical information available at presstime.
- 194 Edward Smith no biographical information available at presstime.
- 195 Niel Watson no biographical information available at presstime.
- 196 Rick Paine no biographical information available at presstime.

Japan

- **470 Yoshiro Sato** will be Team Manager. A modeler for 50 years, he serves as President of the Japan Miniature Pylon Racing Association. He has also won several championships in free flight competition. He works as President of Sato Rashi Co.
- **471 Nobuyuki Chujo**, 38, has been a model flier for 25 years. He works as Section Chief of Sales for Heiwa Aluminum Co. He placed fifth in the F3D World Championships in 1987, and was Japan Pylon Grand Prix Champion from 1984 to 1988.
- **472 Yasuo Nomura** no biographical information available at presstime.
- **473 Yoshinori Sato**, 25, placed eighth at the F3D World Championships in 1987. A modeler for 20 years, he has also won awards for RC sailplanes. He works as an engineer for Honda. His plane will use a handmade engine.
- **474 Kunihide Kawaoku** will serve as a Mechanic.
- 475 Masaomi Amano will serve as a Mechanic
- 476 Jinichi Furuzaki will serve as a Mechanic.

Yoshiro Sato



Nobuyuki Chujo



Yasuo Nomura



Yoshinori Sato



Italy

430 Giancarlo Giulianetti is Team Manager. A model builder for 25 years, he serves on the NAI F3D Subcommittee.



- **431 Giorgio Giannasi**, 42, has been a modeler for 17 years. He is current Italian Champion, and has placed highly in national events since 1986.
- **434 Anna Pieroni** will serve as a Mechanic.



433 Paolo Mucedola, 28, has been a model flier for 12 years. He placed sixth in the first F3D World Championships. He owns an optical shop in Milan.



432 Renzo Razzi, 31, owns a model store. He has participated in the first and second F3D World Championships. He has placed first in the Italian championships four times.



435 Fiorello Razzi will serve as a Mechanic. He attended the forst and second World Championships as a mechanic.

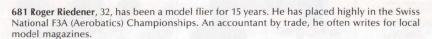


436 Maria Pia Donati will be a Mechanic.



Switzerland

680 Werner Burger is Team Manager.





South Africa

640 Bob Skinner is Team Manager.

641 Theo Marnewick, 32, has been a model flier for 23 years. He has been National and regional Pylon Racing Champion in South Africa, and serves with the national aeroclub. He works as a mechanical designer for E.S.D.

642 Chris Tollner, 35, has flown models for 12 years. He was National Pylon Racing Champion in 1987/88, and has won regional championships. He works as a Technical Training Consultant for Plascon Paints.

643 Peter Sherliker, 42, has been a model flier for 30 years. He was National Pylon Racing Champion in 1984, 1986 and 1987; he presently holds the South African record. He also serves on the FAI F3D Subcommittee.

644 Chris Tollner will also serve as a Mechanic.

645 Theo Marnewick will also serve as a Mechanic.

Bob Skinner

Theo Marnewick





Chris Tollner











Keith Reid

Edwin Woolley

United Kingdom

720 Marcus Griggs is Team Manager. He has been British National F3D Champion twice and placed nationally many times. He has attended most pylon racing events in Britain since 1973, and managed the British team to the World Championships in 1987.

721 Barrie Lever, 26, has been a model flier for 20 years. He has won national events three times, the Euro-Cup in 1987, and the 1989 Match-Aurora championships. He also serves on the FAI F3D subcommittee.

722 Paul Board, 30, has been a model flier for 15 years. He was British Champion 1986-1988, set a record in 1987, and was a member of the British World Championships team in 1987. He works as a director of a car dealership, and enjoys sports and performance cars.

723 Keith Reid, 42, has been a model flier for 30 years. He placed second in the British Nationals in 1988 ad third in 1987. He has also placed highly in F3A (Aerobatics) events. He works as managing director of a contracting company, and serves as Treasurer of the British Miniature Pylon Racing Association.

724 Ralph Worman will serve as a Mechanic.

725 Kevin Morgan will serve as a Mechanic.

726 Edwin Woolley will serve as a Mechanic.

U.S.A.

740 Donald McStay will serve as Team Manager.

741 Dub Jett has been USA National Champion for three years and has competed in Control Line Speed events.

742 Bruce Richmond no biographical information available at presstime.

743 Gary Hover no biographical information available at presstime.

744 John Shannon will work as a Mechanic.

745 Henry Nelson will work as a Mechanic

746 Jim Shinohara will work as a Mechanic.

747 J P. Hanway will work as a Mechanic.

Who Organized the AerOlympics?



Federation Aeronautique Internationale (FAI). The FAI is the worldwide governing body for all sport aviation, including soaring, parachuting, ballooning, racing, aerobatics, and aeromodeling. With headquarters in Paris, the FAI is the official source of documentation for all international competitions; it supervises the organization of World Championships and the establishment of World Records in accordance with FAI regulations. The FAI certified the first landing on the moon, as well as many other historic aviation feats. It has been in existence for over 60 years, and currently includes over 80 countries.



National Aeronautic Association. Each member nation of the FAI has designated a national aero club to administer the international sporting activity within its borders. The NAA was established many years ago to be the official US organization for such purposes. The NAA is a non-government, non-profit organization headquartered in Washington DC, with representatives of all major aeronautic and aerospace groups on its board of directors. Under NAA's jurisdiction many other organizations, known as divisions or affiliates, share responsibility for particular phases of sporting aviation.



Academy of Model Aeronautics. The Academy is a separately-functioning division of the NAA, responsible for governing all aspects of aeromodeling activity. The Academy is housed in its own building, the National Center for Aeromodeling, in Reston, Virginia near Washington, DC. The Academy charters over 2000 local flying clubs nationwide, sanctions over 1800 competitions each year, and provides insurance to each of its members. AMA also publishes a monthly magazine, sponsors a network of Air Show Teams, and assists its clubs in locating and maintaining flying fields.

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What is the Academy of Model Aeronautics?

The Academy of Model Aeronautics operates the National Center for Aeromodeling, located in Reston, Virginia, near Washington, DC. It serves as the National Headquarters for the Academy, as well as being a visitors' center. It also houses the Academy's Aeromodeling Museum.

The Center was built with money donated to the Academy by its members, through a two-year Building Fund program. This fund, designed to cover the basic start-up costs necessary for such a construction project, exceeded its goals. Many members of the Academy are honored in the Center with plaques acknowledging their donations. You may see many different patches and pins worn by AMA members to show their support of the Center.

As the Academy's national headquarters, the Center contains all of the computerized records of AMA's 150,000 members. The Contest Department sanctions over 2000 local, regional and national contests each year. The Special Services Department coordinates the Academy's insurance coverage for each of its members. The Flying Sites Department assists members and clubs in obtaining and maintaining flying fields all over the country. Model Aviation, the monthly magazine sent to AMA members is produced here. AMA Headquarters is a busy place, with a staff of 50 full-time employees.

bers, is produced here. AMA Headquarters is a busy place, with a staff of 50 full-time employees.

The National Center for Aeromodeling is open to the public during normal business hours Monday through Friday, and on Saturday from 10 a.m. to 3 p.m. Everyone is invited to visit. Reston is located about 20 minutes from Washington, five miles from Dulles Airport. Write or call for more information: Academy of Model Aeronautics, 1810 Samuel Morse Drive, Reston, VA 22090 phone (703) 435-0750.

What RC Is All About

Radio Control is one of the most exotic categories of aeromodeling and possibly the most fascinating of any hobby/sport. Radio control (or 'RC' as it is called by those who participate) means just what it says: control by radio. An RC model is controlled from the ground by a miniaturized hand-held transmitter that sends out from one to twelve channels of information. The pilot, on the ground, sends these command signals by manupulating one or more conrol sticks on his transmiter. These signals radiate into the aire and are picked up by his model, which contains a small receiver.

The receiver is capable of receiving the same number of channels as the average TV set, but its reliability must be better than even the best TV set...a lot depends on it! Models can be expensive, and they represent weeks or months of works by their proud owners. Along with the receiver, the model contains special batteries and some miniature control actuators called servos. The servos use signals from the receiver to position the varions flying surfaces. Most RC airplanes have four basic controls: engine throttle, rudder, elevator and ailerons. Other functions can include retractable landing gear, flaps, spoilers steerable nose wheels and wheel brakes

ers, steerable nose wheels, and wheel brakes.

RC models can do everything that a full-size aircraft can do, and then some. They are not limited by the physical endurance of the pilot like larger planes, so can do maneuvers that full-scale polots wouldn't attempt. It is actually more difficult to fly RC model aircraft than it is to fly full-scale aircraft. The RC pilot must respond visually to his plane; he can't feel what the plane is doing because he's not sitting in it. The maneuvers you see at this event may look easy, but that's because these RC pilots are the best in the world; it took them many years to get that good!

The hobby/sport of RC flying has an enormous variety. There are simple, slow-flying planes that anyone can fly and enjoy. Serious enthusiasts can enter local, national and international competitions and take their sport as far as they want. Most American RC fliers, however, fly simply for the love of it; they get their satisfaction from building and flying their creations. Getting started in RC is not difficult or expensive. Most cities have hobby stores where planes, engines and equipment can be bought, and where you can get help putting it all together.

For more information about the sport of RC flying or the address of a model club near you, call or write the Academy of Model Aeronautics, 1810 Samuel Morse Drive, Reston, VA 22090 phone (703) 435-0750.



Best of luck to all the participants, from Airtronics.



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- · Built-in, mutual mixing,

616

- · Servo reversing (9). · Air brake/2 way.
- · Elevator/Flap mixing.
- · Exponential.
- · Supplemental AFR.
- Memory storage.

USER FRIENDLY ERGONOMICS

The heart and soul of the 9VAP is encased in a body that is also second to none. The ergonomically designed transmitter case provides a comfortable grip with more than a handful of customizing features.

Switches and controls are angled for easier use, spring tension and length of the non-slip control sticks are adjustable. Idle up lever and the tachometer sensor are conveniently integrated into the side panel. Dual rates can even be switched on or off automatically at the throttle stick.

With the computer you can even electronically reposition mixing and dual rate control locations.

A TRUE 1991 SYSTEM

The receiver for the 9VAP system is the new R129DP, dual conversion 1991 unit featuring Surface Mount Technology (SMT), ceramic AND crystal filtering, dual AGC circuitry and voltage regulation.

Programmed fail safe settings are received at 60 second intervals in this remarkably compact unit.



S5101 servos are another important new part of the 9VAP package. The new 5101 uses an instrument quality, 5-pole motor and SMT assembly to maximize efficiency and minimize the effect of vibration. A rapid rate input error signal also results in improved centering, and a more powerful neutral.



For World Class helicoptor pilots Futaba has custom designed the 9VHP/PCM



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