

CONTROL LINE COMPETITION NEWSLETTER

RACING - SPEED - COMBAT - STUNT - CARRIER

FEBRUARY 2020



Extreme heat, high winds, and raging fires put an end to the CLAMF Aerosports four day contest in Albury after the first day. There were some Speed flights and Classic B Team Race was completed. Trent and Mark McDermott were third (3:03 heat and DNF in the final at 70 laps), Rick Justic and Paul Stein were second (3:01.81 heat and 6:36.49 final) and the team of Murray Wilson and Mark Ellins took the top spot (2:59.77 heat and 5:58.56 in the final). All the teams used OS 25FX engines.



The SH-32 (shown) is a possible candidate for Speed Limit Combat. The SH-15 has been approved for use in Sport Goodyear. Be aware that there is also a SH-16 being sold through Mike Goes Flying. More details in this newsletter.

Northwest Regionals in Roseburg, Oregon. Second only to the USA Nationals in size. There's a flyer in this issue with more information including discount early entry and a special room rate at the Hampton Inn.

CONTEST CALENDAR MMXX

February 22	<u>Saturday</u> Racing practice at Sepulveda Basin
March 10-14	Vintage Stunt Championships XXXII Tucson, Arizona
March 20-22	Tucson F2d Top Gun and Outlaw 15 Fast Combat
April 4-5	Bill Nusz Speed and Herb Stockton Racing Memorial See flyer
April 4-5	Gold Country Combat Duel 1/2A, 80mph, and 15 Fast See flyer
April 24-26	Dallas Spring Warmup Speed, Racing, and Air-To-Air Combat
May 16-17	Detroit, Michigan Combat, Carrier, and Racing
May 21-24	Karlskoga World Cup Speed, Stunt, and Combat See flyer
May 22-24	Northwest C/L Regionals AAA Roseburg, Oregon See Flyer
June 13-14	Kansas City F2d KCRC Field
July 4-5	Barcelona 2020 F2d World Cup See flyer
July 7-15	The First West Wyalong National Championships Australia
July 11-19	AMA Nationals Muncie, Indiana
August 7-9	Bladder Grabber XLIII Big Block Combat Snohomish, Washington
August 7-16	World Cup & World Championship Wloclawek, Poland
September 3-6	Italy & Great Britain World Cups See flyer
September 5-6	James Mears Memorial Combat Bash Air-To-Air and Nostalgia Combat
September 12-13	Michigan State Championships Combat, Carrier, and Racing
September 24-27	Canada and USA F2A World Cup events St. Louis, Missouri

Before you set out on a cross-country trek, check with the CD or ED to confirm contest dates.

Link to Flying Lines website: www.flyinglines.org

HOBBY SUPPLIERS



Vintage Performance Model Airplanes: Quality kits produced by Stan Fronabarger. Precision laser cut, rave reviews, look at the MACA Facebook page. Stan's website: www.vintageperformancemodelairplanes.com

CFC Graphics: Graphics for your Air-To-Air Combat model, Racer, etc.
<http://www.cfcgraphics.com>

Partner Productions: Current & Vintage Speed Plane plans. Box 205 Maple Ridge, BC V2X – 7G1 Canada 604-612-4060 cpartner@telus.net Chris Sackett

Eichenberger Products: Carbon Fibre and Composite Epoxy/Glass props for Speed and Racing. Carbon tops for 21-40's and more. Steve Eichenberger 480-730-0016
seichenberger@cox.net

Old Magazine Plans On CD: e-mail Tom Wilk at: tawilk636@live.com

If he doesn't have it, you probably don't need it.

Eliminator Props: <http://eliminatorprops.com/store/>

BMJR Models: Freeflight, R/C, Control Line and Accessories. www.bmjrmmodels.com



Mike's Racing Products: See June 2012 S.C.A.R. Newsletter

http://controlline.org.uk/phpBB2/files/mikenorthlist_209_423.pdf



OPS Engines America: Bill Hughes williamhughes4@att.net

Engines/Parts Prices start at around \$150.

Core House: <http://home.earthlink.net/~philcartier/webcat/catalog.html>

Kits, cores, SLC covering material

Marc Warwashana: Don's wheels, fastfills, etc. whellieman@gmail.com

Pat King's website: www.pdkllc.com Mockingbird Slow Rat and more.

Brodak Manufacturing: <http://www.brodak.com>

Douglas Mayer Model Airplane Plans: Multiple Goodyear plans, Turbo Mouse I, Alley Rat II Quickie Rat. All plans **FREE** as a PDF, \$15.00 for hard copies.

Douglas Mayer Douglasmayer58@gmail.com 310-463-0525

Adriano Molteni: Ultra high quality flying lines, Nelson style plug, F2d models, props and mounts. adrieanto@gmail.com

The Craftsman: Stunt and Racing Engine Tuning (OS, S.T., Fox, K&B, Cox) Custom Kit Building - Ready to cover. Contact: **Jed Kusik** jedeeflyer@aol.com

Doctor Diesel (Eric Clutton) P.A.W. Diesels: www.cafes.net/doctordiesel
doctordiesel@cafes.net

Engine Gaskets: ICBIMproducts.com Laser cut gaskets for current and Vintage engines.

Larry Berman – Owner lounlou@aol.com

Sportsman Goodyear: Parts and accessories including venturis and needle valve assemblies for the Magnum/ASP 15, landing gear, and fuel tanks. billbisch@hotmail.com

ZZ Props: Full line of quality Glass & Carbon Fiber props for Control Line Speed & Racing. Contact Mike Hazel at: 503-859-2905 Day Phone or 503-871-1057 24 Hour Phone
zzclspeed@aol.com



MBS Model Supply

P.O. Box 240 Auburn, KS 66402-0282 <http://mbsmodelsupply.com/>

Phone: After 5:00p.m. Central time or weekends only (785) 256-2583 Cell: (785) 221-7042

The ASP 15 with proper venturi is now available from MBS Model Supply for \$80.00.

TCA Racing Accessories <http://www.tca-srl.it/Home/SITO/index.html> High tech Italian glowplugs, click on the Blue Line (Nelson and GloBee styles).

E-mail for info: Antonio.Giandrini@gmail.com or Adriento@gmail.com

Robin's View Productions: Foam wings, cores and Lost-Foam building fixtures for built-up wings. Nifty electric motor mount called the Hardnose Mount also available. PDF building manuals available for free! Just e-mail your request to Bob Hunt. robinhunt@rcn.com

Walt Ghio: Nelson plugs, fuel tubing, bladder material. f1bwalt@comcast.net

Lee Machine Shop: Syringes, venturi selection for many engines, prop bushings, motor mount drill guides, etc. <http://www.leemachineshop.com/> sales@LeeMachineShop.com

827 SE 43rd Street Topeka, Kansas 66609 785-266-7714

Planet Hobby: NovaRossi aircraft engines are the world's standard for power, performance, and reliability. Phone: 901-755-1536 Web address: www.PlanetHobby.com

Fuel Shutoffs: Dale Long: DirtyDshutoffs@dslextreme.com Guaranteed to work! USA only.

Enya U.S. Engines+Parts: Complete Enya parts inventory. We specialize in C/L parts. Call or e-mail for your needs. Shipping worldwide. [Http://stores.ebay.com/thecontrol-linestore](http://stores.ebay.com/thecontrol-linestore)

Bob Brooks 954-234-0863 shtterman@aol.com

Microfasteners: Hobby enthusiasts of all types trust MicroFasteners for all of their hardware needs. www.microfasteners.com info@microfasteners.com 1-800-892-6917
610-438-6177 Kathy Bechtel – Owner

Streamer Shuttle: <http://streamershuttle.blogspot.com>



Eugene Toy & Hobby: Control Line supplies, UPS daily
www.eugenetoyandhobby.com
(541) 344-2117

TYMME: Custom-made venturis and mufflers Scott Riese (503) 246-4631
Riese5080@comcast.com



Ritch's Brew: www.ritchsbrew.com (713) 661-5458
0% FAI fuel to 65% nitro fuel for Pylon Racing
Type of oil and percentage listed for every application.
Bulk purchase is possible, call Randy Ritch at the above number.

Membership For Everyone



National Control Line Racing Association: <http://www.nclra.org/>

Membership is now FREE! Go to the NCLRA website and click on the **Join or Renew** tab. Members, as well as Non-members, can view all the electronic newsletters from October 2002 through the most recent (January 2019 as of this posting). A paper copy of the newsletter will incur a \$10.00 fee. NCLRA President Bill Bischoff has added NCLRA to the Vendor's Corner on Stunt Hangar, here's the link: <http://stunthanger.com/smf/nclra/>



Navy Carrier Society: <http://www.navycarriersociety.org/joinNCS.aspx>

Printed newsletter is \$10.00. Electronic membership might still be free for 2020.



North American Speed Society: <http://clspeed.com/membership>

<https://www.facebook.com/groups/107346039286541/about/> Membership is \$35 for USA and Canadian residents, and \$45 international. A special membership with a digital only newsletter is available for only \$20.00. PayPal OK



Combat Flyers Association Vintage and F2d Combat in the UK.
<http://combatflyers.co.uk>

Contact: Admin@combatflyers.co.uk

The latest three issues of their newsletter can be found on
Flying Lines: <http://www.flyinglines.org/competition.newsletter.html>



MACA Miniature Aircraft Combat Association: MACA doesn't have a newsletter anymore but you can get current contest results, new products, and comments from members on their Facebook page: <https://www.facebook.com/groups/107346039286541/>



Academy of Model Aeronautics

<http://www.modelaircraft.org/> If your permanent residence is outside the USA and you want to compete in AMA sanctioned contest be sure to check out Affiliate Membership.



PAMPA Precision Aerobatics Model Pilots Association
<http://www.pampacl.org/> Digital Membership \$40.00



Adrian Duncan's website: There's no membership fee but you'll feel like a real *insider* after looking at this site for a couple days. Basically, it's the history of model aviation in one spot. <http://adriansmodelaeroengines.com>



Glen Dye suggested using 3M 2214 High Temperature epoxy if you're blowing the seal on your glowplugs. To prepare the plugs you should clean them in a sonic cleaner then use mild heat to thoroughly dry them. Put in a stand made of thin metal (aluminum, brass, or steel). Apply epoxy with a fine tip applicator. Put in a preheated oven at 200-225F for an hour. Let cool and then lube threads and store for use, protecting threaded end and element. Be sure to store remaining epoxy in the freezer since it's premixed and will soon be too thick to use. Shelf life in the freezer should be 6-12 months. Your Editor found the 3M epoxy on eBay for around \$70.00 which would coat a thousand plugs. Some of the prices on eBay were really laughable, how about \$799.00 for the same quantity? Glen says the fix worked for tuned-pipe engines running 70% nitro.



Goodwinds: Source for carbon and fiberglass tubes. Used on their own or simply slipped over the existing pushrod, they'll not only make control more accurate but prevent the pushrod from whipping into a U-shape should you *ever* crash. Measurement is in metric or SAE, be sure to accurately measure the OD of your pushrod so the ID of the tube is big enough to slide over it. My pushrods were 3mm, so I bought the tube with 3.07mm ID but all my pushrods are from the last century! Larger sizes would be suitable for tail booms or the cross brace through the center block on foam models. <https://goodwinds.com/carbon-fiberglass/carbon/pultruded-tubes.html>

Parra T4 Tiger Special



Alberto Parra is offering a limited number of Parra T4 Tiger engines for 220€ with shipping included. Normal price for the engine is 270€ plus shipping. The 168g engine can easily pull a 8x6 prop in Vintage Combat events or even a 10x6 in stunt. All the details for this engine and many others can be found at: <http://control-line.eu/engines.html>
Alberto's e-mail is: albparra2@gmail.com

2020 WHITTIER NARROWS CONTEST SCHEDULE

+34.042737 -118.070392 South Elmonte, California

April 4-5 2020

Bill Nusz Speed and Herb Stockton Racing Memorial

All Speed events including Electric, 301-310, 334, 335 + all NW & NASS Speed classes. Racing events: Mouse I, S.C.A.R. Goodyear, NCLRA Clown, Super Slow Rat/Fox Race, and NCLRA Quickie Rat. Racing Sunday only.

CD & Speed ED: Joe Brownlee h.714-895-1857 c. 714-393-1940

April 25-26

Bob Palmer Stunt Knights of the Round Circle

September 12-13

Wayne Trivin Memorial Speed and Racing

Same events as the April contest, Racing Sunday only.

CD & Speed ED: Joe Brownlee h.714-895-1857 c. 714-393-1940

October 24-25

Virgil Wilbur Memorial Speed, Combat, and Racing

Racing (Sunday only) and Speed same events as April contest. 80Mph Combat (double elimination) and HP 1/2A Combat on Saturday. F2d Fast Combat (double elimination) and F2d for cuts (single elimination) on Sunday.

CD & Speed ED: Howard Doering h.714-638-4937 c.714-394-5304

Combat ED: Don Jensen flyjensen56@verizon.net c.909-576-3430

December 5-6

Toys For Tots Speed, Combat, and Racing

All Speed classes including Electric, 301-310, 334, 335 + all NW & NASS Speed classes. Torquette Speed and Hollow Log Speed Racing Sunday only, classes Include: Mouse I, S.C.A.R. Goodyear, NCLRA Clown, Super Slow Rat/Fox Race, NCLRA Quickie Rat, and Musciano Log Racing.

Entry fee: One new unwrapped toy with \$10-\$20 approximate value.

CD & Speed ED: Howard Doering h.714-638-4937 c.714-394-5304

Combat ED: Don Jensen flyjensen56@verizon.net c.909-576-3430

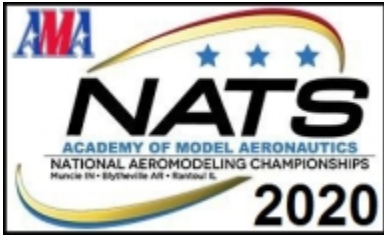


UK Vintage Combat Calendar 2020

admin@combatflyers.co.uk

- Sat/Sun 14th/15th March - Buckminster (F2D/F2E/Vintage)
- Sat/Sun 25th/26th April - Buckminster (F2D/F2E/Vintage)
- Sunday 10th May - Old Warden (Vintage)
- Fri/Sat/Sun 29th/30th/31st May - Buckminster F2D Training with Audrius Rastenis
- Sat/Sun 30th/31st May - Buckminster (F2D/F2E/Vintage)
- 14th June - Bristol Gala (Vintage)
- Fri/Sat/Sun 19th/20th/21st June - Weston Park (Demo/Show)
- Sunday 26th July - Old Warden (Jack Marsh Oliver)
- Sat/Sun 8th/9th August - Buckminster (F2D/F2E/Vintage)
- 29th/30th/31st August - BMFA Nationals Barkston Heath (TBC) (All Classes)
- Sat/Sun 12th/13th September - Buckminster (F2D/F2E/Vintage)
- Sunday 20th September - Old Warden (John Oliver Trophy)
- Sat/Sun 10th/11th Oct - Buckminster (F2D/F2E/Vintage)
- Sat/Sun 24th/25th Oct - Buckminster - Combat Reserve Date

Notes :- All dates are provisional. Saturdays at Buckminster are practise and competitions days for F2D & F2E. There should also be the opportunity for vintage practise as well. There will be a charge of £8 per flyer (unless you are a season ticket holder, then no charge) for the day, payable to the BMFA. Fees for CFA competitions remain at £15, this will include the £8 to go to the BMFA at Buckminster competitions.



July 11-12 Full F2d Combat (Open Entry)
 July 13 F2d Fast Combat
 July 14 Slow Combat
 July 15 1/2A Combat
 July 16 36 Fast Combat

According to a post by Nats Combat Manager Dave Edwards, the \$50.00 entry fee will be waved for first time Nationals entrants.



Friday July 17 Scale processing and static judging
 Saturday July 18 Flying and banquet
 Sunday July 19 Flying and awards



Brenda Schuette is the USA F2 Team Manager for the World Championship in Poland this summer. Her e-mail address is: blschuette@cox.net
 The official team site is on Facebook, look for **2020 USA F2 Team** You will have to sign on to Facebook in order to visit the site. Be prepared for a deluge of "friending requests" in your e-mail. If you decide to go along as a supporter be sure to take along a smart phone, tablet, or whatever device you have that connects to the

internet. Without electronic access you'll be hard pressed to find printed information. Here's the link to Facebook: https://www.facebook.com/groups/1049170482132344/hc_location=group



Andy Mears will be running Outlaw 15 Fast Combat on Friday March 20 in Tucson. Normally, legal F2d engines are required but ANY 15 is legal for this event and mufflers are not required either. There is no restriction as to fuel used. K&B Speed Fuel, Fox Blast, or your favorite mixture of 80% nitro, 20% propylene oxide, a dash of oil and a handful of mothballs. Matches are four minutes flown on normal F2d length lines. Cuts are 60 points and a kill wins the match. Fly-away shutoffs are mandatory. Pilot starts his engine or doesn't enter the circle until someone else starts the engine and the glow clip is off. Yippee!

The **2020 New Zealand Nationals**. Freeflight and Radio results can be found at this website: https://modelflyingnz.org/Admin/Event_Results_Detail.php

FAI F2B Aerobatics

Kim Webby	2225.8
Kevin Barnes	2172.0
Owen Rogers	1990.8
Daniel Munro	1983.3
Glen Lewis	1739.5
Roscoe Smith	1430.8
Gerald Wimmer	921.8

Sportsman Aerobatics

Roscoe Smith	712.0
Phil Eldridge	709.0
Tawhai Webby	580.5 Junior
Otto Wimmer	317.0 Junior
Max Wimmer	18.0 Junior

Classic Aerobatics

Kevin Barnes	685.5
Adrian Hamilton	673.0
Keith Renacle	669.0
Kim Webby	648.5
Daniel Munro	644.0
Roscoe Smith	599.5
Gerald Wimmer	541.0
Tawhai Webby	438.0 Junior
Owen Rogers	58.0

Slow Combat

James Palmer	5 Wins
Graeme Christie	4 Wins
Jon Spain	3 Wins
Kevin Barnes	2 Wins
Doug Palmer	2 Wins
Otto Wimmer	1 Win Junior
Robert Wallace	1 Win
Martin Szeto	0 Wins
Adrian Hamilton	0 Wins
Daniel Munro	0 Wins

FAI F2D Combat

Doug Palmer
James Palmer
Jon Spain
Bryce Gibson
Robert Wallace

Classic A Team Race

Brendan Robinson	10:27.77
Don Robinson	11:07.35
Graeme Christie	11:08.16
Brian Howser	5:24.46
Steve Hanson	86 laps

Classic B Team Race

Brian Howser	4:49.62
Andrew Robinson	54 laps

FAI F2C Team Race

Graeme Christie	3:23.4
Brendan Robinson	3:36.13
Andrew Robinson	3:38.47

Slow Goodyear

Robert Wallace	8:25.92
Dave Ackery	8:29.27
Andrew Robinson	8:34.69
Andrew Hanson	4:15.85

Steve Hanson	4:17.94
Martin Szeto	4:59.66
Brian Howser	37 laps

Fast Goodyear

Martin Szeto	12:38.32
Brian Howser	14:42.52
Steve Hanson	0
Andrew Hanson	7:00.32
Robert Wallace	88 laps

Class B Team Race

Steve Hanson	11:47.26
Andrew Hanson	169 laps
Don Robinson	89 laps

F2F/Classic FAI

Andrew Robinson	9:03.38
Steve Hanson	181 laps
Andrew Hanson	0 laps

Percentage Speed

Andrew Robinson	100.3%
Carl Lickfold	97.05%
Brendan Robinson	86.14%
Don Robinson	68.34%
Adrian Hamilton	67.66%



“Ted, I don't know quite how to tell you this. I know how much you love to read Motor Dude's comments on the forums, but.....he's not a real person. A group of modelers invented him and take turns making comments on all the forums. That's why some comments are arrogant while others make sense. Motor Dude is so smart he doesn't remember what he knows and why contest management just mail him the first place trophy. He claims he's that good.”



We thought we knew Motor Dude, although nobody has actually seen him. Banish that vision from your mind. Could one of these pictures could be the real Motor Dude?



August, 1987

Just Google Duke Fox and you'll find more Duke's Mixture which appeared in various model airplane magazines. -Ed

You can drive your car anywhere in our country and fill up your gas tank with any brand fuel, and reasonably expect it to perform about the same as any other brand.

This is because gasoline refining companies have voluntarily established standards on viscosity, flash point, octane, etc., so that just about any automobile produced will run okay on various manufacturers' fuel.

Unfortunately, this is not true in the model airplane business. Commercial model fuels are sold with a variety of types and quantities of oils, and some measure nitro by weight, some by volume, and some don't seem to measure it at all. The reluctance of a fuel blender to put his ingredients on the can makes me a bit suspicious that he is trying to hide something - or, perhaps, the absence of something. I would like to see each blender fuel to voluntarily print on his container just what the ingredients are in his fuel so the modeler know what he is getting. Also, I would like to see the quantities of each ingredient listed by volume.

All model plane fuel uses commercial methanol as its base. It is commonly known as wood alcohol because it was first produced from wood chips. Now, most of it is produced from natural gas, I am told. In any event, methanol, when bought in tank car quantities, is quite reasonable in cost. It is not the alcohol that runs up the cost of model airplane fuel, it is what you put in it and put it in. While alcohol costs less than \$1.00 a gallon, a good oil costs \$6.00 to \$8.00 a gallon, and nitromethane costs \$30.00 to \$35.00 a gallon when purchased in quantities. Under the pressure of competitive pricing, any fuel blender is constantly tempted to use less and less of the high priced ingredients and more and more of the low priced ingredients.

Now, about the ingredients themselves. Methanol is a single chemical, and not a mixture, as gasoline is. The manufacturing plants deliver it 99.9% pure, or better.

About the only thing that can happen to the methanol is if it is sloppily handled, it can be contaminated with water. It only takes a few drops of water in a gallon of fuel to produce noticeable flameout tendencies. Likewise, nitromethane is a nearly pure product, and is sold in one grade only. You should note that nitro content by weight will be in the order of 2/3 the quantity as when nitro content is measured by volume. A modern R.C. motor of a 40 size class requires about 22% oil to be well lubricated and to have a good, long life. Larger motors need less oil, percentage wise, than small ones. The reason being that as the size of the motor increases, the displacement goes up as the cube, while the area to be lubricated goes up as the square. Thus, a motor with a 1 1/2" bore would be as well lubricated on a 10% oil mix as one with a 3/4" bore would be with a 20% oil mix. Unfortunately, some manufacturers have been delivering fuel with as little as 12% and 13% oil, and recommending it for 40 size motors. The result of extended use of such a fuel is as you would expect, an abnormal rate of wear in the motor, and on rare occasions, a catastrophic failure.

Over the years a great many different oils have been used in the search for something that works better and costs less than castor oil. The most usual of these are the glycol type synthetic lubricants. The glycols have good lubrication qualities, but they have one major shortcoming, and that is that they vaporize at somewhere around 500° F to 550° F. Lawn mowers, outboard motors, and the like are never run hard enough so that this is of any significance.

But a model airplane motor that is run hard could have a piston and wrist pin temperature in a 700° F range, and because if this, the motor using pure poly-α-olefin lubricant is almost certain to have catastrophic ring, wrist pin, and upper rod failure. Castor oil is the only oil I know of that will continue to function at 800° F. Synthetic oils of the phosphate ester type also have this shortcoming.

Other oils that have been used are soybean oil, fish oil, and modified mineral oils, such as turbine oil. I am sure that there are dozens of other oils that different fuel blenders have tried, and some are using. I would like to point out that lubrication is not the only requirement of the oil. The rusting of the steel parts, such as crankshafts and bearings, is also a consideration. Motors that were run 30 and 40 years ago on a straight castor oil, alcohol, nitromethane mix show little rust. Some motors that have come back for repair have the bearings rusted until they are ruined. I have to believe that this was caused by some sort of a breakdown in some of the synthetic oils or additives used.

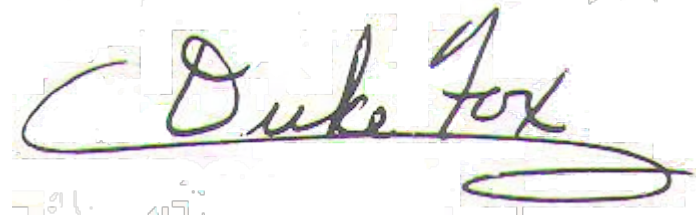
Over the years there have been a lot of different additives used in model airplane fuels. Propylene oxide mixes well in fuel, and it only takes 2% or 3% propylene oxide to very materially improve the idling characteristics of a motor. However, the government has determined that propylene oxide is a carcinogen (cancer causing agent).

Any blender who now uses propylene oxide is laying himself open to all sorts of lawsuits. Nitroethane is a sister chemical to nitromethane, and while it is not as effective a power additive as nitromethane is, it is very oily, and a very excellent solvent. Nitroethane is a very useful fuel ingredient for motors with an aluminum piston, because it keeps the inside of the motor nice and clean, as well as providing additional lubrication. A motor with an iron piston should not use a fuel containing nitroethane or synthetic oils because they tend to wash away the glaze castor oil puts on these surfaces, giving their long wearing characteristics.

In summary, what I am saying is that I would like to see all the fuel manufacturers list the nitro content by volume, give the oil amount and type in percentages by volume, and identify any other additives used. Smaller motors need larger percentages of oil than large ones.

Good, middle of the road figures would be 22% for 40 size and under, 18% for 60 size, and less for larger motors. In order to understand the importance of a good oil in model airplane fuel, I would like to report a conversation I had with a research engineer with one of the large oil companies. He said that an automobile engine that would normally run 100,000 miles on conventional gasoline would do well to run 2,000 or 3,000 miles on pure methanol because methanol had no lubrication value whatever. The challenge in exploring alcohol based fuels for automobiles was to bring up the lubrication value of the alcohol to match gasoline, and it appeared that this could not be done economically. The oil in your fuel is probably the most important factor in how long your model motor serves you.

Happy Flying,

A handwritten signature in blue ink that reads "Duke Fox". The signature is written in a cursive style with a long, sweeping underline that extends to the right and loops back under the name.

When trolling around the Internet you'll come across some fabulous sites. When looking for information on Duke Fox, your Editor came upon this site created by Ronald A. Chernich. The link is: <http://modelengineneeds.org/index.html> Even though Mr. Chernich says the site is Copyrighted © I don't think it has been updated for a few years. I'll try to find an e-mail address so I can ask permission to use his data without being sued. The site is a little "British" with emphasis on the engines of the past. The Duke's Fuel link took me directly to one of his "in-formercials" that ran in a number of aeromodeling magazines (Model Airplane News, in this case).

Duke Fox ran into some very dark days toward the end of his life. Some of us could never come to grips with his personal problems. Ignoring all that, I'm sure we'd all look back at the positive moments when we had dinner with Duke during the AMA Nationals. A number of

AMA combat pilots made their living as very proficient machinists. There were so many questions by them about why he used a certain alloy, bearing, or improper heat treatment. He'd quite candidly state that he used a certain alloy because he had equipment that could machine it. He'd use up some odd size bearings because he had a thousand of them, even though replacements were impossible to find. Why did he sell the pre-MK3 with a crank that he knew was heat treated improperly? Most of the engines sold would never be run (they're on eBay right now). Some engine specialists would fix the problem on their own (Brasher-McFadden crank for the MK3). The small number of engines that were actually run, and most likely blew the crank out of the case on the test stand, would be replaced under warranty. Consumer Reports would have given him a pretty poor rating for quality. -Ed



Here's a little bit bigger picture of the SH-32 on the cover. Toss the muffler and carb and it might be a Speed Limit Combat engine. They also make a SH-15 which is legal for Sport Goodyear. There is a report on the engine in the latest NCLRA Torque Roll. Same mounting pattern as the ASP/Magnum, carb drops in and the

backplate is inter-changeable so you're not out of luck if you have a backplate mounted shutoff. Weight is within a gram or two and performance nearly identical. So far nobody has actually tried the SH-32 but since they're available from Mike Goes Flying for \$89.99 it shouldn't be long before we see them on the field. www.mikegoesflying.com Oddly enough there is a SH-16 offered by Mike with a liner that has a thinner wall, so it could drop into the SH15 case. The SH,-15 uses a head button and gigantic head clamp rather than the simple head on the ASP/Magnum. Bill Bischoff is offering a replacement plan where you send him \$10 and your oversize head clamp and he sends back a machined clamp that's lighter and more cosmetically appealing. Here's Bill's e-mail address: billbisch@hotmail.com

Another oddity on the MGF website is a 40 size engine that runs on 91 octane gasoline. They say it runs just like a glow engine that uses an alcohol based fuel. You'd need to have a tank and fuel line that would be compatible with gasoline. It's hard to hurt yourself with our glow fuels but gasoline might be another story. Fuel would be cheap though.

Cheaters Cookbook: The last installment found a pacifier hidden in a metal tank, de-stroked HP 40 using a *short rod*, Fox 40 piston/liner in the 36 case, and the use of high nitro fuel in events using a standard low nitro mix. This month we heard about some Quickie 500 flyers who modified their **stock engines** with high compression heads. If the surface of the head was machined to provide more compression you'd notice that the space between the outer part of the head was closer to the top of the case. That surface was cleverly machined too, so it wasn't obvious that the head was modified.

You might be the victim of someone else's zeal to win by any means. Another person found that his 40 had a 45 crank in it. He found it odd that the head had to be shimmed way up. He finally tore the engine down and found the crank marked as a 45.

The original Formula Unlimited event required a two ounce tank. One entrant was very fast and seemed to have no problem getting the necessary laps. He left the model at a friend's place and he decided to check the tank. Of course it was way oversized, so the friend re-soldered the overflow vent so the most fuel the tank could hold was exactly two ounces. At the next contest the plane owner was dumbfounded about the loss of laps. A variation of this scheme was a person with a B-Team Race type model. The overflow line, which wasn't sealed after filling the tank, went into a cavity in the body. The fuel was drawn back into the tank giving a few extra laps.

Airline Dirty Tricks: There have been a few classics over the years. One of the most expensive was in 1988 when flying on Aeroflot to the World Championship in Kiev. Despite an agreement between AMA's travel agent and the airline they reneged on the arrangement. The airline charged around \$2900 extra to take all the model boxes from New York to Moscow and then tried to extort another \$2900 on the flight to Kiev.

In 2012 many flyers ran into the same sort of situation in Sofia, Bulgaria when checking in for their return flight home. It might not have been the airline's policy but counter staff were able to levy some hefty charges to take the model boxes. A couple people paid almost as much in excess baggage charges as the models would be worth.

In 1994 we were abandoned at the Shanghai airport by our Chinese minder. The counter staff insisted on lots of money for the model boxes. We decided that we weren't paying and went and sat down. It took until a couple minutes before the flight departed that someone in authority agreed to take the boxes. We actually carried some of the boxes down on the tarmac where they were loaded in the hold. It was a mad dash to the boarding area, we passed some fantastic duty free shops on the way. No time to stop and buy anything, they lost out on some good sales.

Weasel Columnist: In the early 70's I published the SCCA Newsletter. This was the Southern California Controline Association and not the car racing group. Dirt Bike Magazine had just

published an article on all the synthetic oils available for two stroke off road bikes. We decided to do our own test and spent many weekends at El Cajon Model Airport with my K&B 40S Rat and Rossi Goodyear evaluating all the oils. The results were duly printed in the SCCA Newsletter. A couple months later a friend pointed out my article in a well known Radio Control Modeler magazine. The columnist claimed it as his own but there was to be sweet revenge. Besides the performance figures we also mentioned whether the oil contained a dye that would stain your model. The base oils, which mainly came from Union Carbide and Dow, had a dye in them so a leak could easily be seen when used in some sort of hydraulic application. All the fuel mixtures we used were kept in metal containers and not exposed to light. Our favorite oil, which I remember as NPG, didn't leave a stain on the models but after exposure to light in our fuel bottles, sitting on the field for an hour or two, hello stain! The stain wasn't nearly as bad as that caused by Steen C or Ucon 650 but it would sure muck up a nice paint job on a R/C model. I chuckle just thinking about the *treatment* this columnist would get from his outraged R/C buddies.



- Classic A, own design, ETA 15 Mk2, complete with lines. \$325 *NZ\$ is about 64 cents -Ed*
- Classic B, ETA 29-6C still to be run in, complete with lines \$325
- Classic FAI team racer, Nelson side exhaust, AAC, legal filler/shutoff, complete with lines, test flown. \$460
- Slow Goodyear, Mr. D, Mk 3 Rossi, ABC, Alan Barnes Diesel head, complete with lines \$295
- Fast Goodyear Mr. D, needs motor and lines. \$250
- Half A team racer, flying wing, Boys carbon fuselage, Mk 2 Olly Cub, rebored, new bearings, test flown, lines. \$350
- Class 3 Speed model, upright motor, brand new 1971 Super Tigre 29, ABC, front induction, motor not test run and model not test flown. No lines or dolly. \$350
- F2C team racer, no motor but otherwise ready to go. \$120
- Brian Howser brianhelenhowser180@gmail.com New Zealand

Vintage Stunt Championships XXXII

March 10-14, 2020

Flying Site: Christopher Columbus Park, 4800 North Silverbell Rd, Tucson, AZ 85745
Pilots meeting: Daily at 7:30 AM. Official flights start no later than 8:00AM.
Hotel: Holiday Inn Express, 565 West Grant Rd, Tucson, Az. 85745 Phone: 520-624-3200 (code: VSC)

Classic & Super 70's Appearance Judging - Wed. (Mar 11) starting promptly at 4:00PM at the flying site.

Ringmaster S-1 Ringmaster required, no BOM, flown on grass. You may enter OTS, IGN OTS, and Ringmaster OTS if you wish.

Exhibition Event – We invite you to fly or exhibit something COOL, interesting or representative of any early era of control line. Exhibition to be held on Wed Mar 11. No pre-entry or fee required. Just show up with a current AMA license and show us something cool.

Entry Deadline: Saturday Feb. 29, 2020. By this date and time we need to have received your entry. John Callentine's mailing address is on the registration form. Registration form is also available for download at www.cmaonline.org or www.azucontrol.org/ Our policy is to return your entry fees if you have registered and cannot attend for any reason

Awards Banquet: sign-up is held open until after the start of VSC. If you wish to attend the banquet and have not signed-up, Sign up with John Callentine at the flying site by **8 AM, Wed March 11.** Refunds for the banquet **cannot be made after 8 AM, Wed. March 11**

Raffle: Drawing at Appearance judging on Wed – donations welcome and appreciated – Contact Jim Hoffman

REGISTRATION FORM: VSC-XXXII (32) March 10-14, 2020

NAME: _____ **AMA #** _____
STREET: _____ **CITY:** _____ **STATE:** _____ **Zip** _____
EMAIL ADDRESS: _____ **License Plate # and State:** _____
Needed if you would like entry confirmation (Only if staying at flying site overnight)

FOR ANY AND ALL EVENTS: I hereby certify that I have read all information accompanying the entry form, and that the model(s) entered by me will be built by me (if required) and flown in compliance with the current Competition Regulations (both AMA and PAMPA), and will previously have been successfully flight tested and proved to be airworthy in accordance with the Official AMA Safety Code.

BOM rule, as it applies to VSC is posted on websites listed at bottom of page

Signature: _____

EVENTS ENTERED:

OTS @ \$20.00 _____ (Tues. 10th – Wed. 11th)
Classic @ \$20.00 _____ (Thu. 12th – Fri. 13th)
OTS Ringmaster @ \$20.00 _____ (Fri. 13th – Sat. 14th)
IGN OTS @ \$20.00 _____ (Sat. 14th)
Super 70s @ \$20.00 _____ (Sat. 14th)

- OTS/OTS IGN-current PAMPA rules, BOM not req'd
- Ringmaster - no BOM rule. No bonus for self-built models
- Classic & S/70 – no BOM. Zero (0) for appearance if you are not the BOM.
- OTS/Classic - Two rounds each day using 2 asphalt circles. Highest score from each circle will be added together for the final score & placing.
- S70 – flown on asphalt circles. Will try for as many rounds as possible in a single day.
- Ringmaster – Two rounds, one each of two days, best single flight

ARF's, ARC's, purchased or borrowed models are allowed in all events, but, models entered in Classic or Super 70s receive a zero (0) for appearance points. No more than two contestants can fly the same plane in the same event. Example: Contestant 'X' and contestant 'Y' can fly the same plane in Classic but no one else. This goes for OTS, OTS Ign, S70 and Ringmaster as well. For more details refer to the web sites below

Awards Banquet Meal Selections (Hotel Tucson City Center, Sat. Night March 14, 2020)

Beef Top Sirloin _____ @ \$40.00, Names: _____
Chicken Marsala _____ @ \$40.00, Names: _____
Salmon _____ @ \$40.00, Names: _____

Entry must be received no later than Saturday Feb. 29, 2020.

Make Checks Payable to John Callentine (Email Johncallentine@gmail.com)

Mail to: John Callentine, 5625 W. Owl Ridge Rd., Tucson, AZ 85745

*PayPal also accepted.
Send to John Callentine as
a friend, not a business*

CD: Jim Hoffman:
2658 W. Montgomery Drive
Chandler, Az. 85224
Home 480-897-0630
Cell: 480-329-3316
Email: windswept4@cox.net

Assistant CD: Leroy Black
25526 W. Rio Vista Lane
Buckeye, AZ 85326
Cell: 623-328-4110
Email: Lindyle1@yahoo.com

John Callentine
5625 W. Owl Ridge Rd
Tucson, Az. 85745
Home: 520-743-7835
Cell: 520-631-5420
Email: Johncallentine@Gmail.com

CHOLLA CHOPPERS WEB SITE: www.cmaonline.org

CENTRAL AZ CONTROL LINE CLUB WEB SITE: www.azucontrol.org/

GOLD COUNTRY COMBAT DUEL

N 38° 23.993 W 121° 00.868

Located at Spiva Feild, 5 miles north of
Ione Ca. On Ione Road/Michigan Bar Road.



Saturday: 04/04/2020
330 High Performance 1/2 A Combat and
329 80 MPH Combat, both Double Elimination.

Sunday: 04/05/2020
328 .15 FAST Combat, Triple Elimination.

Pilots meeting 9:00 am.
Lunch Provided both days.

AMA. Sanction # 8446



goldcountryflyers.com
leenkimberly@yahoo.com

2020 FAI F2 „WARSAW WORLD CUP” FOR CONTROL LINE MODEL AIRCRAFT

for Seniors and Juniors

August 07 – August 08, 2020 Wloclawek POLAND

WORLD CUP SCHEDULE

07-08-2020	Friday	2020 FAI F2 WARSAW World Cup Arrival of Participants, FAI Jury & Judges – Registration F2A, F2B, F2C and F2D Rounds
08-08-2020	Saturday	F2A, F2B, F2C and F2D Rounds
09-08-2020	Sunday	Reserve Day

IMPORTANT NOTES:

1. Entries are limited
2. Registration rule - first come first served.
3. Number of competitors for F2A: maximum 30.
4. Number of competitors for F2B: maximum 30.
5. Number of teams for F2C: maximum 28.
6. Number of competitors for F2D: maximum 34.
7. One competitor can start only in one class.
8. Entry Fee : 40 Euro
9. Registration will be available ON-LINE ONLY using the official Organizer's of World Championships website : <http://cl-f2abcd-wchs2020.pl/>
10. Start of registration: 2020-01-02 18:00 CEST

Contest Director.: TBA

2020 FAI F2 WORLD CHAMPIONSHIPS FOR CONTROL LINE MODEL AIRCRAFT

for Seniors and Juniors

August 10 – August 15, 2020 Wloclawek POLAND

WORLD CHAMPIONSHIPS SCHEDULE

09-08-2020	Sunday	2020 FAI F2 World Championships Arrival of Participants, FAI Jury & Judges – Registration of Teams			
10-08-2020	Monday	Processing - Official Practice - Team Managers' Meeting OPENING CEREMONY AT AIRFIELD			
11-08-2020	Tuesday	F2A Flight 1	F2B Flights 1 & 2	F2C Round 1	F2D Rounds
12-08-2020	Wednesday	F2A Flight 2	F2B Flights 1 & 2	F2C Round 2	F2D Rounds
13-08-2020	Thursday	F2A Flight 3	F2B Flights 3 & 4	F2C Round 3	F2D Rounds
14-08-2020	Friday	Reserve day	F2B Flights 3 & 4 F2B Fly-off 1	F2C Semi-final 1	F2D Rounds
15-08-2020	Saturday	F2A Flight 4	F2B Fly-off 2 & 3	F2C Semi-final 2 F2C Final	F2D Semi-finals F2D Final
		CLOSING CEREMONY AT AIRFIELD Banquet			
16-08-2020	Sunday	Departure of participants			

IMPORTANT NOTES:

1. Organisers reserves the right to change this schedule if necessary
2. Lunch time from 12:00 to 14:00

Contest Director.: Marek DOMINIAK POL

DMAA Spring Warm-up
Gene Hempel Memorial
April 24th, 25th & 26th 2020
Control Line Racing, Speed & Air to Air Combat
Site: Samuell Garland Park

Northwest Highway & Garland Rd. Dallas, Texas
11500 McCree Rd. Dallas TX. 75238
GPS 32.866867, -96.671400
Class AA AMA Sanction # _____

Pilots Meeting at 9:30 AM Saturday & Sunday 12:00 noon on Friday

Friday 04-24

Record Ratio Speed
NASS Sport Jet
NASS Perky Speed

Saturday 04-25

Texas Quickie Rat
Super Slow Rat
Sport Goodyear

Sunday 04-26

F2CN
Clown
Mouse 1
Goldberg
Air to Air Combat 75mph

Speed events all three days. All events are (JSO). Helmets required for racing pit crews.

Entry Fee: \$15 first event, \$5 each additional event.

Contest Director: Patrick Hempel
For additional info. On event rules.
See Web Site: www.dmaa-1902.org

Sponsored by
Dallas Model Aircraft Association
Fuel and awards provided
By NASS, DMAA & NCLRA
AMA: License & Entry fee required

Racing Event Director: Bill Lee
Combat: Event Director: Lester Haury





Early Announcement



Early Announcement

Karlskoga World Cup 2020

At 21st - 24th of May 2020 Karlskoga and Sweden will have the annual **World Cup** Contest.

C/L Flyers from all around the World are welcome to fight to be a Winner.
Mark this date in your calendar **NOW** and join us in 4 days of joy!! **WELCOME!!!!**

World Cup Classes: F2A – F2B – F2D

Additional Classes: Minispeed, Semispeed, Weatherman Vintage Speed,
Semistunt, F2C Team Racing and Goodyear Racing (F2F).

Preliminary schedule:

Thursday: F2B, Semistunt, Minispeed, Semispeed, Weatherman.
Friday: F2B, Semistunt, F2C, Goodyear Racing (F2F)
Saturday: F2A, F2D
Sunday: F2A, F2D

Judges:

F2A:	Göran Olsson	SWE
F2B:	Roger Ladds	GBR
	Kauko Kainulainen	SWE
	Claus Vinding Christensen	DEN
F2C:	Göran Olsson	SWE
	Ingemar Larsson	SWE
F2D:	Vernon Hunt	GBR
	Ingemar Larsson	SWE
	Niklas Karlsson	SWE

Registration can be done via email to ingemar.larsson.vis@telia.com.
All other info can be found at www.f2d.nu where you also can see registered pilots.

2020

Air to Air

COMBAT

75 mph control line combat series

DMAA Event - Garland Hobby Park

February 23

DMAA Event - Garland Hobby Park

April 26

DMAA Event - Garland Hobby Park

June 13

James Mears Memorial - Lubbock

September 5

DMAA Event - Garland Hobby Park

October 11

****More events to be added**

Rules at:

streamershuttle.blogspot.com

Northwest Fireballs, Western Oregon Control-Line Flyers, Eugene Prop Spinners and
Roseburg area CL fliers present ...

Oregon flying fun!

Four control-line fun-fly events

Everyone invited — No entry fee! 10 a.m.-3 p.m.

If the weather is bad, go to the alternate site listed for "hangar flying" socialization!

Wednesday, Jan. 1 at East Delta Park, Portland

Pot luck lunch, plus coffee and doughnuts

Bad weather meeting site: Elmer's at Delta Park; cell 503-867-2101

Info: Northwest Fireballs, [Richard Entwistle](#), 503-867-2101

Saturday, Feb. 8 at Sunshine Park, Roseburg

Bad weather: Elmer's restaurant at I-5 Exit 125; cell 541-537-0061

Info: [Dave Shrum](#), 541-672-8893

Saturday, March 28 at Bill Riegel Model Airpark, Salem

Bad weather: Flight Deck restaurant, 1 block south of the flying field; cell 503-871-1057

Info: WOLF: [Mike Hazel](#), 503-871-1057

Saturday, May 2 at Can Do Ranch, Junction City

Bad weather: The Kozy restaurant, 1600 Coburg Road, Eugene; cell 541-554-8848

Info: Eugene Prop Spinners, [John Thompson](#), 541-689-5553

- Bring any and all airplanes ... do any kind of flying!
- Every flight is an entry in the "flying raffle."
- Flying raffle prizes will be awarded after a drawing

Come to all four fun-flies and support four great Oregon CL flying groups!

Academy of Model Aeronautics membership required





The 49th
Northwest Control-Line
Regionals

Roseburg, Oregon, May 22-23-24, 2020

Awards offered in 45 events, including ...

- **AEROBATICS** — Precision Aerobatics, Old-Time, Classic, Nostalgia 30 and Profile Stunt!
 - **COMBAT** — 15 Fast, 1/2-A (high-performance), 80-mph and AMA Fast, plus Vintage Combat!
 - **NAVY CARRIER** — Profile, Class I, Class II, .15 and Nostalgia (Profile and Class I-II), Sport 40!
 - **RACING** — Mouse I, NW Sport, NW Super Sport, NW Sportsman Clown, NW Clown!
 - **SCALE** — Authentic Scale, Sport Scale and Profile Scale, Fun Scale, 1/2-A Scale!
 - **SPEED** — 1/2-A, 1/2-A Proto, A, B, D, FAI, Jet, Formula 40, .21 sport, .21 Proto, NW Sport Jet, NASS Sport Jet, F2D Proto, Northwest B Proto and Northwest C Speed!
-

Location: Roseburg Regional Airport

Just off Interstate 5 — take Exit 127

For your convenience: Advance registration!

Sign up early and purchase your T-shirts in advance. Discount for all early entry and T-shirt sales!

Write for entry package: Northwest Regionals, 2456 Quince St., Eugene, OR 97404 or download at flyinglines.org

Regionals host hotel

Get a special room rate of \$116 at the Hampton Inn on Mulholland Drive, near the flying site. To reserve a room at the special rate, go to the Regionals reservation page at bit.ly/2vbQCCL, or call 1-800-HILTONS and mention the Northwest Regionals. Reserve by May 7 to be assured of the special rate.

For information, contact:

Contest director Mike Hazel, P.O. Box 505, Lyons, OR 97358, zzclspeed@aol.com

See flyinglines.org for more information or contest-related updates.

The Northwest Control-Line Regionals

Roseburg Regional Airport, Roseburg Oregon, May 22-23-24, 2020

FRIDAY

Speed (all classes)10:30-6
Vintage Combat display10 a.m.
80mph Combat10:30
Carrier (all classes)Noon-5
Old-Time StuntNoon
Vintage Combat static judging during
80mph lunch break
Vintage Combat flyingafter 80.

SATURDAY

Classic/Nostalgia 30 Stunt
Appearance judging8:30 a.m.
Speed (all classes)9-6
HP 1/2A combat9 a.m.
Classic/N30 flying9 a.m.
Carrier (all classes)9-5
Profile Stuntafter Classic
Scale static judging10 a.m.
Scale FlyingNoon
15 Fast Combat*1 p.m.

* 15 Fast Combat will finish on
Sunday morning if necessary, with
AMA Fast Combat to follow.

SUNDAY

Precision Aerobatics
Appearance Judging8 a.m.
Combat/Racing pilots meet.8 a.m.
AMA Fast Combat8:30 a.m.
Mouse Race I.....8:30 a.m.
Sportsman Clown.....After Mouse
Flying Clown RaceAfter Sptsmn
NW Sport RaceAfter Clown
NW Super Sport RaceAfter NWSR
Carrier (all classes).....9-3
All classes PA flying9 a.m.
Contest ends*4 p.m.
Awards ceremony*4:30 p.m.
* Earlier if events finish early.

SCHEDULE NOTES

- No engine running before 8 a.m. any day. Electric flying OK.
- Schedule may be adjusted due to number of entries, weather conditions, etc.
- Site may be open for limited flying on Thursday, May 21, depending on progress of setup.
- Registration: Friday 10 a.m.-2 p.m., Saturday 8 a.m.-noon, Sunday 8 a.m.-10 a.m.

RULES INFORMATION

- AMA events are per current AMA rules except as noted below. AMA rules can be downloaded at www.modelaircraft.org; Northwest rules can be obtained at flyinglines.org.
- Northwest Rules will be used for these events: NW Sport Race, NW Super Sport Race, Flying Clown Race, Sportsman Clown Race, .15 Carrier, Sport 40 Carrier, 80-mph Combat, 15 Fast Combat, Vintage Combat, Profile Stunt, Northwest Sport Jet Speed, C Speed, F2D Proto Speed and Northwest B Proto Speed.
 - **PRECISION AEROBATICS:** ARF planes allowed, zero appearance points. ARC appearance up to 10 points. Precision Aerobatics Model Pilots Association rules will be used for Old-Time Stunt and Classic Stunt.
 - **COMBAT:** All events except Vintage double-elimination. **LINE-TENSION FLYAWAY SHUTOFFS** required in all events except Vintage: Failure of a shutoff results in disqualification from the event. No electric planes allowed. Shutoffs encouraged in Vintage.
 - **SCALE:** Make sure your airplane has been flight tested and is ready for competition, per AMA rules.
 - Safety thongs required in all events.

OTHER INFORMATION

- AMA or MAAC membership required for all participants. AMA membership available at registration.
- Only participants and officials allowed in flying areas. All others must stay outside roped-off or restricted areas.
- Absolutely no alcoholic beverages on flying field during meet hours.
- Awards — Through third place in each event. Grand championship trophies!
- Product vendors contact contest director for permission and site info.
- **Camping:** Free RV parking (no hookups) available on site; space is limited. No tent camping allowed.
- **Parking:** In airport parking lot and across the street on weekend. **NO PARKING** in real estate office lot.

FOR MORE INFORMATION, CONTACT:

Contest director Mike Hazel, P.O. Box 505, Lyons, OR 97358, zzclspeed@aol.com or see flyinglines.org.

The Northwest Control-Line Regionals are sponsored and produced by the Northwest Regionals Management Association in association with flyinglines.org and Northwest control-line model airplane clubs.

BARCELONA 2020 F2D WORLD CUP

XLIV TROFEU LA MERCÈ - COPA CATALANA 2020

4th/5th JULY 2020



WHERE... AT RACBSA CLUB - Font i Quer sn - 08028 Barcelona - N 41° 21' 52.8294" E 02° 09' 32.6376"

Details and Program

Organizer: Real Aero Club Barcelona Sabadell RACBSA
Chairperson: Manuel Mateo

Date: 4th and 5th of July 2020

Contest place: Font i Quer s/n - Parc Montjuïc: 08038 Barcelona
GPS: N 41° 21' 52.8294" E 02° 09' 32.6376"

Class: F2D (F2D fuel will be available from organizers)

Entry fee: 35 € Seniors
10 € Juniors

Maximum number of competitors: 40

Contest rules: The FAI Sporting code rules will be applied. To compete, all competitors must have their valid FAI License. FAI licenses will be kept at the office till the end of the competition.

Protests: Will be attended prior a payment of 35 €.

GUEST JUDGES: Vernon Hurt / Ingemar Larsson

SCHEDULE

3rd July: free training all day
4th July: 10h00 competition starts
5th July: following heats from 8h30

Pre-inscription: You can pre-sign in by sending an email to manmatoo@gmail.com with the following details: NAME, SURNAME, CAT (Senior/Jun) and COUNTRY. You will be included in the previous list.

Inscriptions: Friday 3rd July from 18h00 to 20h00.
Last inscrip: Saturday 4th July from 8h00 to 8h30

Recommended Hotel

CATALONIA Barcelona Plaza ****
Plaza Espanya, 6-8
08014 Barcelona
110 € double room 1100 € double room individual use (breakfast included)
For booking contact Ms. NEUS ARTIGA (password: RACBSA) at the following mail: plaza.reservas2@catalognahotels.com
www.hotels-catalonia.com



XLIV TROFEU LA MERCÈ F2D

BARCELONA
2020
WORLD
CUP



Barcelona city - Barceloneta beaches

Bladder Grabber XLII

“AMA FAST COMBAT”

August 7, 8, 9, at Harvey Field, Snohomish, Washington

1st Place 1/2A -- \$1,000

1st Place Fast -- \$1,000

Prizes include plaques 1st-3rd plus other cash and merchandize to be determined

Double elimination High Performance 1/2A starts at 11:00 Friday. Pilots meeting at 10:30

Seven Rounds of AMA Fast Combat will be flown Saturday and Sunday, leading to a 4-man semifinals flown single elimination for the championship

Pilots meeting at 9:30, Combat starts at 10:00

\$100 fee buys you entry into the 1/2A competition, the AMA FAST COMBAT, and lunch all three days

Line-tension shutoffs must be used in Fast Combat

For further information, contact Jeffrey Rein

Jeffrey_a_rein@yahoo.com

BRITISH 2 **ITALIAN**
0 0

3rd GBR WORLD CUP 2 **57a Coppa d'Oro**
0 0

3 - 4 September 0 **5 - 6 September**

AEROPORTO F. BARACCA
VILLA SAN MARTINO DI LUGO ROMAGNA
GPS 44'23'58.0"N 11'51'15.7"E

F2

A
B
C
D



Information & Registration : www.aeromodellugo.org

- Aero Club Lugo - Tel. +39 0545 76400 - Fax. +39 0545 76577 - e-mail : info@aeroclublugo.it -
- Lanzoni Luigi - mobile phone +39 368 607198 - e-mail : llanzoni@racine.ra.it -
- Pirazzini Elvis - e-mail : elvispirazzini@libero.it -
- Vernon Hunt - phone +44 07973 817 331 - e-mail : extremechaosltd@hotmail.com

MASA - MONGOLIAN AEROMODELLING SPORT ASSOCIATION
In 2020, four World cups and one Asian-Oceanic championships
in a row from July 12 to 26 will be organized in Mongolia.

WORLD CUP EVENT: CONTROL LINE F2A, F2B, F2D
12-14 JULY, 2020

WORLD CUP EVENT: CONTROL LINE F2A, F2B, F2D
15-17 JULY, 2020



Something for the adventurous. Back to back World Cup events in Mongolia.



The Complaint Desk has closed.

The Editor has left the building.

Don't forget to buy your souvenirs at the concession booth.