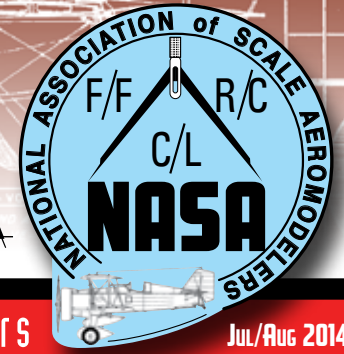


REPLICA



Newsletter of the National Association of Scale Aeromodelers

Jul/Aug 2014

EDITOR'S NOTES

First off, let me apologize for this edition of the Replica being a bit late to your inboxes and mailboxes. I could make excuses, but the simple truth is with all the scale contests and Oshkosh, it's taken a bit longer to gather all the pieces to complete the Replica.

That being said, I've got quite a bit of information to pass along. Let's start with something that's taken up a lot of my free time, the NASA Scale Classic.

It's happening! As you read this, we have 167 pilots who have earned their invitation by placing in the top 25% of their judged class, or they have competed in an NSC Open event in either R/C Fun Scale or C/L 1/2a Scale. This is an outstanding number of pilots and we still have more contests in August and September. To see the complete list, visit the NSC page on the NASA website - <http://www.nasascale.org/calendar/nsc-pilots.htm>

How do you earn your invite? It's just this simple.

- **Go out and compete in a NASA Open Event.** For a complete list of events, see the event calendar listing in this Replica, or visit the NASA website.
- **Place in the top 25% in your class.** If you don't place in the top 25%, compete in another NASA Open event.
- **In R/C, if you fly fun-scale, you're already invited!** Pre-register today at <http://www.nasascale.org/forms/nsc-reg.htm>
- **In C/L, if you fly 1/2a scale, you're already invited!** Pre-register today at <http://www.nasascale.org/forms/nsc-reg.htm>

Not only will we be competing for top placements in all classes, but we will also be competing for a wide range of prizes and merchandise. See that long list of company logos to the right? I've put out the word about the NSC and the industry has shown their overwhelming support! We have been lucky enough to receive a wide range of merchandise - from simple building materials and gift certificates, all the way to a complete radio system!

Oh, and one more thing. Don't forget about our unofficial themed event - this year we're honoring the memory of the start of World War 1, with our WW1 events - Everyone can enter with a properly themed model. Pre-register today at <http://www.nasascale.org/forms/nsc-reg>.



htm. Our good friend, and past NASA President, Stan Alexander is putting together this special, fun event. The first place winner will receive a special award - a bottle of French Champagne, with the Blue Max around it with a red, white and blue ribbon. And there will be 2nd and 3rd place awards as well. So be sure to bring any type of WW1 era aircraft you have to see what Stan has up his sleeve.

This leads me to a perfect segue to my next subject. See this framed Balsa USA Sopwith Pup?



What so special about it you might ask. Well, nothing, other than it's what I'm building to compete in the WW1 NSC event, but it also one of the many builder projects we have on the NASA Flickr site.

Share your current project with the rest of NASA. Gather your photos and a couple notes on the model - then send them to me - mark@airbornemedia.com and I'll get those posted in their own set.

To see all of NASA's photo collection, including pictures from last week's Hoosier Scale Classic, please the links below.

- Coverage of the Brodak Scale C/L Event - [click here](#).
- Coverage of the AMA Scale Nationals - [click here](#).
- Coverage of the Hoosier Scale Classic - [click here](#).
- Mark Lanterman's Sopwith 1/6th scale Sopwith Pup - [click here](#).
- Individual NASA photo sets - [click here](#).

NASA OFFICERS

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MIKE BARBEE

3903 Whispering Creek Lane
Delaware, Ohio 43015
740-362-5504
mabarbee@aol.com

VICE PRESIDENT

DALE ARVIN

3428 Charlestown Pike
Jeffersonville, IN 47130
812-284-0162
darwin8094@aol.com

SECRETARY/TREASURER

TINA PATTON

572 Cedar Pointe Drive
Somerset KY 42501
217-377-7115
tpatton60@sbcglobal.net

REPLICA EDITOR/ NASA WEBMASTER

MARK LANTERMAN
7414 Burton Drive
Liberty Township, Ohio 45044
513-755-7494
mark@airbornemedia.com



PRESIDENT'S NOTES

Who would have known that my start of building and flying radio controlled airplanes 30 plus years ago would lead to a performance at Oshkosh. Well it did and last week at the big airplane show, I had the best time of my life. There were five pilots selected by Matt Chapman to give the EAA members and their guests a look at what R/C flying is all about. The pilots were Frank Noll, Will Berninger, Paul Le Tourneau, Brian O'Meara and myself. We did two shows, one Wednesday and one Friday. Just being on the same stage with the Thunderbirds was nerve shattering. Everything went very well and the comments from the crowd were all good. Therefore, for the first time ever at Air Venture, R/C planes were allowed to participate in the air show.

The whole experience of Oshkosh is unique. All the workers, air show pilots mechanics, and up until this year, the air traffic controllers are all volunteers. No one is paid to put on the largest air adventure of the year. Where have we missed the boat? I can remember in 1979 at my first NATS volunteering to run scores for Pattern. I can remember 82, 83, and 84, judging and volunteering. I also remember judging the U.S. Team selection in Pattern and acting as a volunteer. What has happened? This year at our Scale NATS the judging cost to NASA was over \$3000.00. I guess we just do not have volunteers anymore. It is getting harder to fund the NATS scale events. We try with the big raffle but this year all we realized in profit was spent. I think I have an answer, contestant judging. Alternatively, maybe just raise the dues even at \$100.00 each, but even that would not support the judging costs. I do believe contestant judging is on the horizon. That combined with some volunteer judges and helpers might bring us back to the old days of doing it out of respect for the pilots, organization and the love of scale modeling.

My Scale event is August 16-17, The 2nd annual Columbus Scale Classic. You are invited out to compete with contestant judges and volunteers. Oh, by the way – a great pilot and worker party will be Saturday evening at The Monster Hangar. Hope to see you there.

We also have the NASA Scale Classic on October 3, 4, 5. Our editor, Mark Lanterman has done a fantastic job organizing the event and getting the invitations mailed to all pilots who have qualified. We all hope to see you there.

Thank you all for your continued support of scale modeling.

MIKE BARBEE
mabarbee@aol.com



TREASURER'S NOTES

I am thrilled to say that NASA has grown from 99 members last year, to 139 members this year! That is 40% over last year! We'd like to welcome and thank our 40 new members, and thank our returning members for making 2014 a successful and fun year for NASA.

I would love to see NASA continue to grow, and the best way that we can accomplish this is by word of mouth! Please tell your fellow modelers about NASA, and if they haven't already, ask them to check out our website and see what they've been missing out on!

TINA PATTON
tpatton60@sbcglobal.net



CAN YOU IDENTIFY THIS PILOT?

Well, many of you might have guessed that this well detailed pilot bust is none other than Gerry Yarrish - Model Airplane News editor and one of our new Replica contributors.

Gerry has been kind enough to grant us access to some of his vast collection of how-tos. This particular how-to is all about Adding Scale Details to a Pilot Figure.

When we build large scale models, the small details really make the subject come to life. This is especially true with scale pilot figures and busts. For his recent 33% scale Fokker Triplane project, he needed a properly dressed aviator to fill out the cockpit. For complete details on how he accomplished this, [click here to visit see this online how-to](#).



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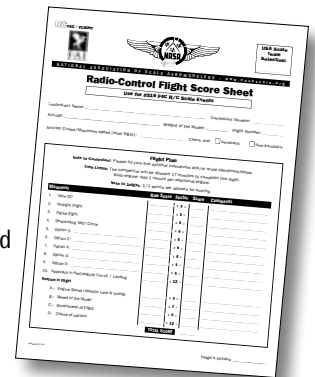
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WWW.NASASCALE.ORG

NASA NEWS AND INFORMATION ON THE INTERNET

If you have internet access, you owe it to yourself to visit NASA's web site - www.nasascale.org. The NASA site was designed from the start to be the only place you need to go to find out everything that's happening in the world of scale aeromodelling - whether it's here on the National front, or on the International front - the domain of the FAI.



COMPETITION DOCS/FORMS

This is one of the more exciting features of the web-site. We have all the competition forms and documents for scale competition online in pdf form. Not only are the documents up-to-date, but we now have two versions of each.

One is the regular pdf that we invite contest directors to download and printout for use in their contests.

The second (and more exciting) version of the form is the "intelligent" form. Using this version and an up-to-date version of Adobe's Acrobat Reader, you can fill out all your information using your computer, then pre-print copies to take to your next scale event: information about yourself, your plane and your maneuvers/options. All AMA rule book maneuvers/options (as spelled out in the current AMA rule book) can be selected from pull-down menus; right on the .pdf. Imagine not having to spend time at your next contest filling out forms!

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AMA Sanction
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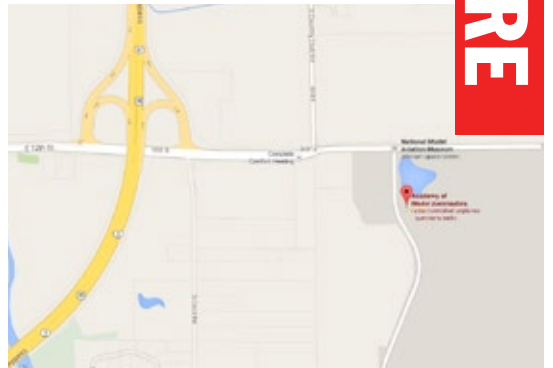
**October
3-5, 2014**

WHEN

AMA Site

**5161 E. Memorial Dr.
Muncie, Indiana 47302**

WHERE



WHAT

What is the NASA Scale Classic?

- A competition for Control-line and Radio-Control.
- AMA/NASA Rules.
- Entry fee is \$20 for NASA members, \$40 for non NASA members (with an instant NASA membership).
- Awards will be given for 1st, 2nd, 3rd, NASA Flight Achievement, and Pilot's Choice.

CONTROL-LINE EVENTS

EARNED INVITATION ONLY:

- #509 Sport
- #521 Profile
- #526 Fun

OPEN ENTRY TO EVERYONE:

- 1/2a Scale
(a non-official AMA event)

RADIO-CONTROL EVENTS

EARNED INVITATION ONLY:

- #511 Sportsman
- #512 Expert
- #522 Team
- #515 Designer

OPEN ENTRY TO EVERYONE:

- #520 Fun Scale Open
- #520N Fun Scale Novice

HOW

How do you earn an invitation?

- Compete in a supporting NASA Open contest and place in the top 25%.
- Invitations will also be earned by winning the NASA Flight Achievement award and/or the High Total Flight Score in any supporting NASA Open contest.
- But what if you didn't earn an invitation? Come and compete in 1/2a Scale (control-line) or Fun-Scale (radio-control) events as they are open to everyone.

**For complete up-to-date
information, including a
complete list of NASA
Open events, visit the
NASA website**

www.nasascale.org

2014 CL SCALE NATIONALS

The annual trek to Muncie, Indiana this year for the Nats broke new records in the number of CL scale entries. While the weather was not good, most everyone had a good time and were able to get one round of flying in for all of the events. Some folks had some technical problems and were not able to get a flight in, and because we did not fly any more rounds those pilots only ended up with their static score. The events flown in CL include 1/2a, Fun, Sport, Profile, Team and F4B. Team scale only had one entry which was down from last year but all other events saw an increase in entries.

CL scale requires throttle control in all of the events except 1/2a scale where your goal is to get all of the engines started and see how stable your flight can be. Fun scale allows pilots to assemble an ARF since it does not have builder of the model rule. All of the events except fun scale have builder of the model rule. This year was also a qualifier for the NASA Scale Classic so pilots had two goals, win the Nats and earn an invitation to the NASA Scale Classic.

1/2A SCALE

This event was started in 1976 in California and one of the models that flew at that first event was flown at the 2014 CL scale Nats by Ron Duly. 1/2a Scale is where you build a single or multi-engine model with an .061 glow engine or smaller and throttles are not allowed in this event (electric power is not allowed). Your goal is to get the motors started and put in 10 level laps and then land. Sounds easy but if you have ever flown one of these small models with engines that don't always want to start you have a challenge on your hands. Static is still very important, in fact the rules are set up such that static scores plays a bigger role than the flight score. At the Brodak fly-in this year the top three winners had the exact same flight score and static determined who won 1st, 2nd and 3rd place.

Ron Duly brought out his He-111Z glider tug that he flew in 1976. This model has no less than FIVE engines, the German's joined two He-111's together to make a glider tug for WW-II. It took some work but Ron was able to get all 5 engines to start and put in a great flight with the model on Sunday morning. The wind was very strong and gusty that morning. So asking the 1/2a scale pilots to fly the 1/2a scale models in those conditions tested the piloting abilities of everyone.

Richard Schneider took off with his AT-6 Sunday morning and was barely able to keep the model airborne despite the crazy weather and landed safely. Richard did fly very well to keep the small model under control. Bob Whitney flew his Pond racer with a pair of .061 engines like it was on rails despite the wind. Bob took 1st place at the Brodak Fly-in with the same model and captured 1st place at the 2014 Nats.

Bill Avera got top Static in 1/2a scale with 70.5 points. 1/2a scale also gives bonus points for multi-engine models, the top 5 entries were all multi-engine models. Frank Beatty, Richard Schneider, Bob Whittney, Allen Goff and Ron Duly all had static scores between 67.5 and 69.5 which meant the flying score was very important. Ron Duly took 2nd place, Bill Avera took 3rd place, Chris Brownhill was in 4th place and Frank Beatty in 5th place.

PROFILE SCALE

Profile scale had 9 entries with 5 of the models scoring 90 or better with static scores. Fred Cronenwett returned with his electric powered B-29 with some upgrades including panel lines, some new details and improved the clear coat. After all of the flights were in, the static scores revealed a tie for top static between Harry Crespo and Fred Cronenwett. The tie was broken by comparing the individual judges score, and ultimately the top static went to Fred Cronenwett with the B-29.

Bill Avera had a best flight score that meant that Bill got 1st place with his B-25 with 182.75 points. Fred Cronenwett came in 2nd place with 182.0 points with Harry Crespo in 3rd place at 180.75 points. Just like last year the difference between 1st and 2nd place was a fraction of a point.

SPORT SCALE

The Sport Scale category brought out a lot of the detailed models which was reflected in the Static scores. With 9 open entries and 1 senior entry the flight score became even more important with 7 planes between 94 and 98 static points. Jim Fruit beat out Dave Platt to win the top static award with his Rearwin Speedster with a static score of 98.0 points.

Three of the pilots with high static scores above 94 points had technical difficulties and were unable to get a flight in. If we had been able to fly another round they could have possibly flown but the weather did not allow that to happen. John Brodak returned with his Shoestring racing model and captured 1st place with a flight score of 90.25 points. Because of the number of entries, the awards covered up to 4th place. Ed Mason took 2nd place, Jim Fruit took 3rd place and Frank Beatty took 4th place.

F4B SCALE

With the new rules coming thru the proposal cycle, F4B will be replaced with authentic scale at the 2015 Nationals if they approved by AMA. Authentic scale was written similar to F4B so this will be the event that allows the judges to get up close to the model and also judge the cockpit details. The documentation for F4B and for Authentic scale requires more attention to detail, color, markings and surface detail so if you are building a model for this event make sure you read the proposed rules and get your documentation is ready.

Dave Platt brought out his OV-1 Mohawk that was electric powered to earn top Static and 1st place in F4B this year. Dave had retracts on the model but did not use them during the contest. The cowls on the OV-1 are long and skinny which meant that he could easily hide the electric motors. Ed Mason flew a 77" span B-17 built from the Royal kit to earn 2nd place. Charlie Bauer earned the 3rd place award.

FUN SCALE

This event allows pilots to bring ARFs and other models since there is no builder of the model rule in this category. With 6 open entries and 1 junior entry this category was popular. You can only earn 10 static points in Fun Scale so the flight points determine who wins in this event.

Ed Mason flew his .15 powered DC-6 to a 1st place finish (94 points) with a good lead over 2nd and 3rd place. Bill Avera edged past Chris Brownhill with a better flight score to earn 2nd place with 84.63 points. Chris came in with 84.0 points.

TEAM SCALE AND OTHER STUFF

We only had one entry in Team Scale with Ed Mason and Bill Avera earning 1st place in this event. Last year we had two entries in this event.

One of the items worth mentioning is the variety of airplanes and control systems that were at the nationals this year. CL scale pilots tend to be very traditional but we had every type of throttle control system flying this year. This included 3-line, Bill Young handle, 2.4 Ghz transmitter on the hip, 2.4 Ghz RC car system built into a custom handle and single channel electronic controls.

The models included four models with 4 engines, multiple twins, military and civilian models. We have a wide variety of motors and engines to pick from for our models including glow, electric and four strokes. Allen Goff flew his new Cessna 182 with a four stroke engine in F4B, while Dave Platt

...continued on page 6

...continued from page 5

flew the OV-1 with electric power. Electric power was used in at least 5 of the models.

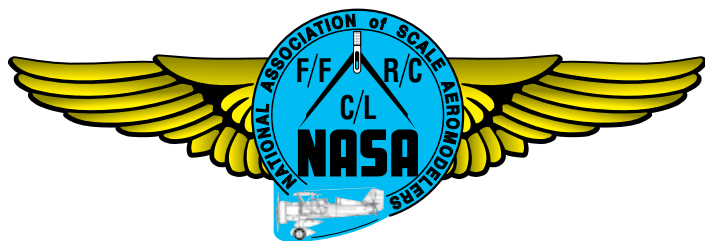
Ed Mason from Florida brought three models with 4 engines. The B-17 built from the Royal kit was flown in F4B, his smaller .15 powered DC-6 from the Dare Kit was flown in Fun scale and his larger .25 powered DC-6 with the same paint job as the smaller version was flown in Sport Scale. Ed makes it look easy in starting and tuning a 4 engine model with glow engines.

Retracts continue to be challenge for CL scale pilots. Burt Brokaw had trouble with his retracts on his P-51 in fun scale and Dave Platt did not retract the gear on the OV-1 Mohawk even though he had retracts installed. Flaps were used on Fred Cronenwett's RV-4. Flaps are easy to set up with 2.4 Ghz or electronic controls using a servo.

The new rules (if approved) for 2015 will give lower scores in some events if the gear is not retracted if the full size had retracts. This is especially true in Authentic scale where if the full size had retracts then the model is expected to have retracts. If you don't retract the gear then you will see a lower flight score. Also complexity is also part of Authentic scale, this means complexity of the aircraft and the paint job will be evaluated, this is worth 10 points.

Time to get building for next year!

FRED CRONENWETT
clscale@rocketmail.com



I'm just back from this year's Scale World Championships. It was a great contest and congratulations to this year's winner in F4C, Marc Levy flying his own design Fouga Magister CM 170. His final score was 5488.50.

2nd was Andreas Luthi from Switzerland flying is Bucker Jungmeister, with a final score of. 5418.75.

3rd was David Law from Australia flying a 1/3rd scale Pitts Special S2A with a score of 5387.25.



Fair Skies & Tail Winds,
STAN ALEXANDER
onawing4602@att.net



SCALE EVENT CALENDAR

Click on any event name for more information.
NASA Scale Open events are noted in blue boxes.

KNIGHT'S JOUST

August 9-10, 2014 - Southern California

WENATCHEE SCALE RALLY AND NW SCALE CHAMPIONSHIPS

August 15-17, 2014 -Wenatchee, WA

FCM AT AMA

August 23-24, 2014 - Muncie, IN

WEST OHIO C/L STUNT AND SCALE CONTEST

August 9-10, 2014 - Dayton, Ohio

COLUMBUS SCALE CLASSIC

August 16-17, 2014 -Westerville, OH

BROKEN ARROW

September 20-21, 2014 - Valley Park, MO

HOOSIER DAWN PATROL

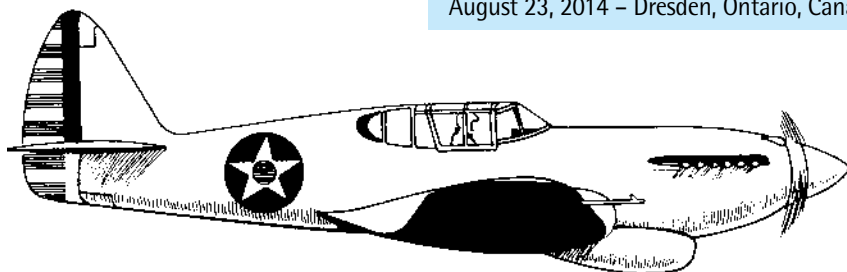
August 15-17, 2014 -Muncie, IN

SOUTHERN ONTARIO CONTROL LINE CHAMPIONSHIPS

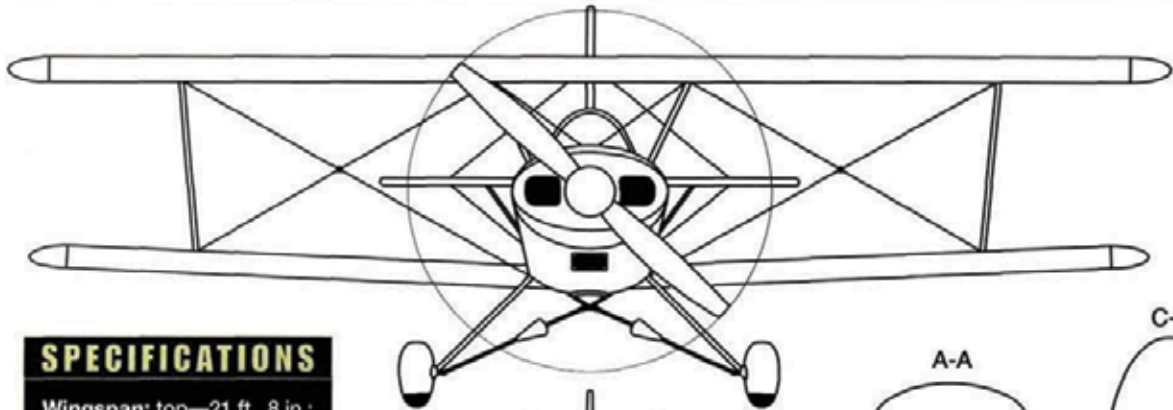
August 23, 2014 - Dresden, Ontario, Canada

NASA SCALE CLASSIC

October 3-5 - Muncie, IN



ACRO-SPORT-II 3-VIEW



SPECIFICATIONS

Wingspan: top—21 ft., 8 in.;
bottom—20 ft., 9 in.

Wing area: 152 sq. ft.

Length: 18 ft., 10 1/4 in.

Height: 79 3/4 in.

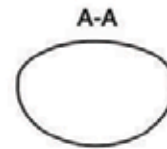
Empty weight: 875 lb.

Gross weight: 1,520 lb.

Cruise speed: 123mph

Stall speed: 53mph

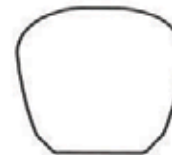
Construction: steel tube
and fabric covering



A-A



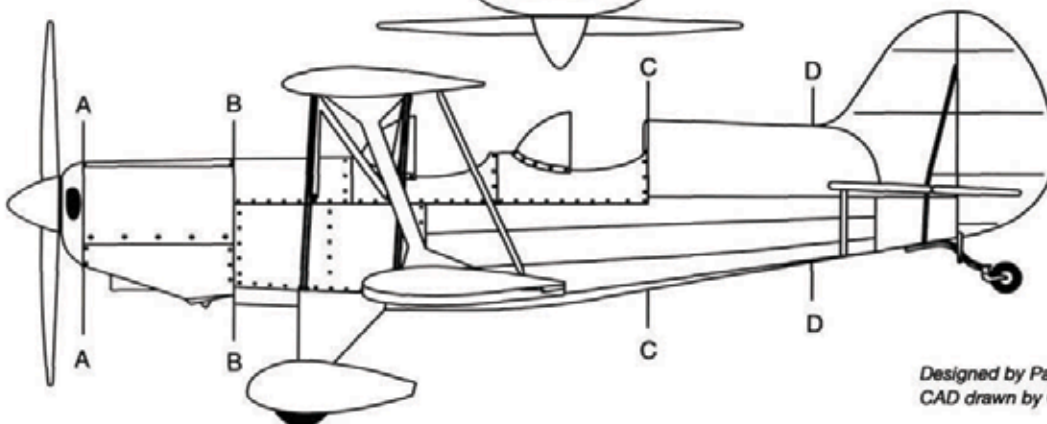
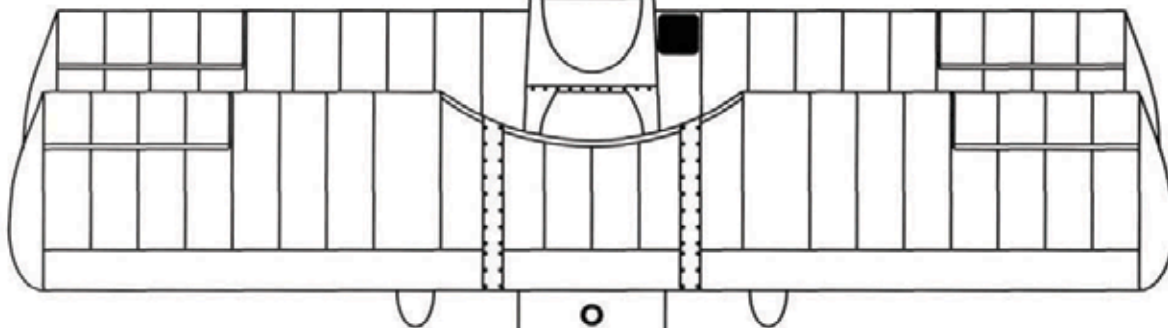
C-C



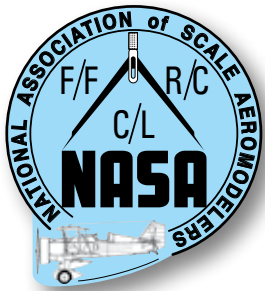
B-B



D-D



Designed by Paul Poberezny
CAD drawn by Gerry Yarrish



IN THIS ISSUE:

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- **THE LATEST IN SCALE NEWS!** • **ACRO-SPORT-II 3-VIEW**

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