



**The THUMB PRINT**  
**Thermal Thumbers Of Metro Atlanta**

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## July-August, 2017

### HEADS UP

Welcome to the July-August issue. Yes, it's a little late. Such are the vagaries of life, but it's rather bulky, chockfull of juicy content. Personally, I'm just getting caught up with my life from the Sympo stuff and something called Hurricane Irma, having helped a few relatives evacuate the Savannah area. All is well there, and everyone got lucky with the widespread flooding and other damage. Thankfully, no dire drama ensued.

However, much drama ensued with the bulk of the lest-they-be-sodden evacuees. Their lemming-like devotion to their so-called smart phones and GPS doomed many Floridians and the occasional South Georgian to days of dreadful stop-and-go driving on I-75 northbound. Why more of those fools weren't carrying analog roadmaps giving ample alternatives in FL's and GA's abundance of four and two lane highways is beyond me. Their comfort in remaining immersed in five-hundred miles of parking lot was beyond belief, and their lumpen ineptitude made their way to safety much, much worse. Idiots!

Josh Finn was kind enough to update the Georgia state indoor records, and those are reprinted later in this issue. The large number of national records set at St. Lukes is worth noting, as we say, "where national records go to die." Look for another issue in October, to include Gary Baughman's flyer for November's Turkey Shoot. Without further ado, it's time for me to get out of the way.

### RENEWAL NOTICE

It's not too late for the laggards to enlist into our ranks and enjoy our one-half off membership dues for the rest of the year. The required form follows. So, fill out the form, sign your check on the line that is dotted and mail all and to Karl "Karats" Hube at his stately manor according to the address indicated.

### RENEWAL NOTICE II

It's time I started ragging the membership to further bolster our club's heavy participation in the National Free Flight Society (NFFS). For all those living under rocks, NFFS is the one special interest group that serves as the single voice representing Free Flight interests to the AMA. Given our small numbers relative to the largely AMA-affiliated RC community, and more importantly, to the less affiliated and often misbehaving drone community, this is important work. Also, NFFS members largely lead the way in representing the USA in global FAI matters. So, the next time Free Flight doesn't get a fair shake from the AMA and the beret-wearing FAI, go look in the mirror. If you're not a member, you're not part of the solution. The form follows, and do take pains to investigate the one-half off offer for newbies and recalcitrants. Eyes in you!

### THUMBS ON THE MARCH

Young Hayden Ashworth and his GD Graham Selick made the trip out west to the Rocky Mountain Champs, and they had a good contest. Among other work well done, he set another junior national record in

E-36 and probably got his picture taken a few times. He kept busy and posted 946 seconds in F1C/P, plus winning F1J and 1/2A and Dawn Power with his F1P. It's worth noting that Hayden pushed all weekend and beat several veteran power fliers, including the likes of Bob Hanford, Don DeLoach and Chris Etherington. Well done, young man!

## **YANKING AND BANKING**

Perhaps my final Hi-Start Scale Glider (HSSG) collage follows for your purview and use. (I had to really beat the bushes for the final page's worth!) My own efforts at HSSG got deluged this spring and summer by Sympo commitments and my nasty sinus infection, but will be resurrected this fall along with a number of other projects then left on the vine. Like the previous collage, it collects a number of sure-things, sleepers and bizarre candidates. IMHO, the safest bet is the "UHF-1", and I've a great photo for solid doc in all yellow, carrying the registration number "D-NUDI". (Good grief! Tempt me not, Jezebel!)

The cutie pie award probably goes to the Brant "Scud I". There's no reason it shouldn't fly, in spite of all the lumber hanging out in the breeze, unlike the lovely Slingsby "T.18 Hengist" which is very shapely and quite sleek, aside from the air-cooled Dunlops. The "Lil Dogie" and "1935 Wolf" are a bit distracting, too.

Otherwise, the oddballs reign, and it's hard to spotlight any Belles of the Ball here. Eyeballs are indeed pulled in the direction of either the Spalinger "S-8/S-10" or Lippisch "GB Dive Bomber" but not necessarily for the right reasons. And in terms of the ugliest, there's a generous bounty in the "Yak-14", "Vampyr" and "Rotter-Agotay".

Those looking for a challenge can go with any of the many flying wings presented here and earlier. There're many bonus points therein and aerodynamic challenges galore. Conventional wisdom-wise, the secret to getting them to fly right-side up and in some sort of predictable direction is ample washout at the tips. That and maybe prayer is advised. The Debreyer Ring Wing is in a class by itself—forewarned is forearmed.

Regardless, plenty of documentation for most of the foregoing exists and extravagant color schemes abound. As for me, I hope to finish my Piper "TG-8" soon. FYI, the latest *FAC News* has several photos of HSSG models, so it might be catching on. TTOMA may as well join the fun.

## **BANQUET ANNOUNCEMENT**

Dohrman Crawford secured January 27 from Petite Violettes for the annual banquet. We're happy to return after our first visit last year. All aspects were top notch. Expect the usual flyer with all the details in the December newsletter. In the meantime, set that date aside.

## **MODEL/EVENT OF THE YEAR**

Buried in the fine print of the last issue's business meeting minutes is the announcement of 2018's Model/Event of the Year. It's No-Cal Scale, and we'll be flying it indoors and outdoors under FAC rules. It's a good choice for a number of reasons. First, a number of us already have models in use, and second, they're easy to built and fly. Plans abound from number of sources, and a few, simple rules apply in their execution. Namely, lightness counts for a lot, particularly in the indoor realm. Outdoors, you need a little mass for strength, of course, so I wouldn't be surprised if some members go with separate indoor and outdoor models. Also, the wingspan is limited to 16-inch wingspan, so the lower aspect ratios are favored for obvious reasons. Long noses help, as does enough fuselage length for a good motor run. You'll want to read the FAC rules in terms of scale points, so no "ghost ships". Enough said, start building!

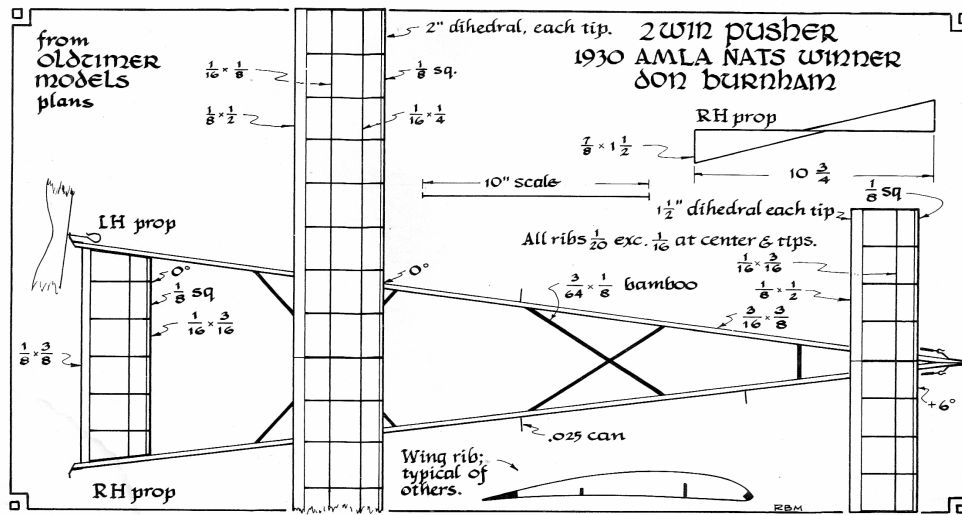
## **OOPSIE!**

Josh Finn brought forth the inconvenient truth that the *Air Trails* "Trainer" in the last issue has, in fact, a wingspan of 29.75 inches, not the 24.75 erroneously indicated. I can blame the low-res scan of the *Model Builder* plan, but this datum on the original *Air Trails* plan is bold and plain. It appears my reverence for *Model Builder* led this pilgrim astray. Had my OCD been in full effect, I would've checked the original

source, inexcusably within arms reach—my bad. Ergo, the “Trainer” isn’t eligible for FAC’s 2 Bit Plus 1 category, but should be useful in FAC’s Old Time Rubber Fuselage, as well as SAM’s Commercial Rubber. It remains a cutie, nonetheless, and better looking than the vaunted “FA Moth”.

### TREASURE TROVE

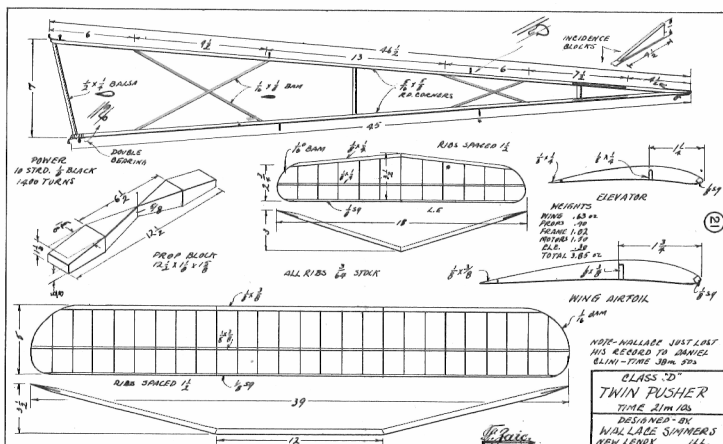
This issue’s first acolyte wasn’t found in any obscure model airplane magazine of yesteryear; rather, it showed up at the flying field last month. Dohrman Crawford brought the late Sandy Downs’s “Burnham Twin Pusher” and decided to fly it once just for the sheer fun of it. Well, over seven minutes later it disappeared across the Mighty Hooch and beyond the far treeline. (Fret not, Sandy would’ve been pleased.) Enthused by the spectacle, he avowed to build another one. Sensing an insufficient ardor in his commitment, your editor offered to carve the two props to ease the old veteran’s way. We shall see . . . . .



Bob's got a lot to say about twin-pushers this month. If you've never seen one before, here's what a contest-winner looked like.

The late George Perryman and I had many discussions about the twin pusher models over the years, and he often held forth about this or that. He advocated the “Simmers Twin Pusher”, as in Wally Simmers of Gollywock, Midwest and K&S fame, and he built and flew several. The plan of same follows for your purview, pilfered with love from the 1935-36 *Zaic Year Book*. I can testify as to its capabilities. Note how the prop offsets allow for narrower boom separation—pretty cool.

The accompanying photo is probably from a mid-1990s Muncie SAM Champs: George sniffs for air, while I leash the beast. He probably won.



## KEEPING SCORE

The club's high point tally follows. The numbers tell the same story as in the last issue. Thumbs flying both indoors and outdoors clog the upper reaches. Fanatics of either the indoor or outdoor stripe can go far, but diversity can pay benefits. (Please note the minor errors in the last newsletter weren't cleared up in the totals before. I erased Karl's correcting message by mistake, and these small errors will be corrected in the next issue. Thanks for your patience.)

Dohrman Crawford	42	Lee Russell	12
Karl Hube	41	David Barfield	12
Hope Finn	40	Jimmy Jordan	11
Josh Finn	38	Savannah Canady	9
Gary Morton	23	David Mills	7
Richard Schneider	22	Joe Ryan	5
Frank Perkins	18	Jim Altenbern	5
Bill Gowen	16	Matt Canady	4
Nick Ray	15	Gary Baughman	2
Jim Conery	13	Hayden Ashworth	1
Dan Crews	12		

## NEXT ISSUE

Look for another issue soon, maybe in mid-October. We'll carry Gary Baughman's annual Thanksgiving Turkey Shoot flyer and an announcement of the Walston yard sale. Look for contest reports on everything in the interim, plus any news of note coming across the transom.

As always, I beseech the multitudes to forward anything fit-to-print in the way of articles, plans, photos, rants and raves. Don't make me work too hard! Ciao, y'all!

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## TTOMA MEMBERSHIP FORM

Name \_\_\_\_\_ AMA # \_\_\_\_\_

Address \_\_\_\_\_

State and Zip Code \_\_\_\_\_ other Family Members and AMA # \_\_\_\_\_

Telephone \_\_\_\_\_ E-Mail \_\_\_\_\_

**\$10.00/yr. adults, plus \$1.00/yr. for all juniors and for additional family members in same household. Send check, payable to TTOMA, to Karl "Karats" Hube/104 Smith Forest Lane/ Alpharetta, GA 30004/770-886-0104. Membership only good until 12/31/2017.**

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## August Indoor Contest Report

Six members showed up for the August contest, plus a couple spectators. Unfortunately, 30 minutes after the contest was supposed to begin, the air conditioning came on and nearly wrecked my brand new FIR. After we had packed up expecting the day to be a bust, Nick Ray tracked down a building staff member who was able to shut off the AC, and it stayed off the rest of the day. Hallelujah!

Yours truly promptly pulled out my brand new 42-inch Unlimited and began putting up test flights culminating in a satisfying 33:44 which never even reached the ceiling because of a slack bracing wire. Can't wait to see what it does next time! Richard made several nice flights with his Farman "Stratoplane". This is going to be the model to beat in Dime Scale! Lee Russell was testing out a beautiful new F1M that shows tremendous potential. His 6:52 flight was with a fixed pitch prop and a significant amount of back-off turns. He'll be doing 10 minutes plus very soon with his new VP prop! Hope did a great deal of flying in a very short time including several nice flights with her new Ministick. This is her first Ministick ever; I sure wish my first one flew that well! One final note: Dan Crews managed his first 2-plus minute flight with a Phantom Flash in Cat I. It takes a good airplane and a talented flier to achieve this level of performance so quickly in one's modeling career.

See y'all next month. If you like FAC flying, this is the place to get Kanones. And you can get lots of great trimming advice, and the weather is sure better! Josh Finn, junior CD, reporting.

Hand Launched Stick

Josh Finn 33:44

F1M

Lee Russell 6:52

Ministick

Hope Finn 5:14

Lee Russell 1:32

A-6

Hope Finn 4:52

F1R

Nick Ray 25:16+26:35\* = 51:51

Josh Finn 3:00+22:18 = 25:18

Phantom Flash

Hope Finn 23+147+122 = 392

Dan Crews 108+126+34 = 268

Josh Finn 55 = 55

No Cal Scale

Richard Schneider Boeing XP-9 243

Embryo

Hope Finn 150+124+105 = 379

Josh Finn 33+154 = 187

Dan Crews 55 = 55

Dime Scale

Richard Schneider Farman F-1000 134

## August Outdoor Contest Report

Blue Ridge Special

Karl Hube 338

Dohrman Crawford 292

Jim Altenbern 196

Peanut Scale

Dohrman Crawford BD-4 162

David Mills Lacey M-10 45

P-30

Frank Perkins E-Pirate 360

Jim Altenbern Square Eagle 321

Lee Russell Kiwi 30 82

F1G

Karl Hube Sun Spider 183

Dime Scale

Dohrman Crawford BAT Monoplane 242

Gary Morton Chambermaid 191

David Mills Cessna Airmaster 87

Catapult Glider

Jim Altenbern Cata-piglet 212

Frank Perkins Sidewinder 140

SCat Jet

David Barfield P-59 33

## September Indoor Contest Report

The turnout at St. Lukes was a little slim, but the flying in the Great Hall wasn't. There was something in the air churning away at all times. Also, we had a 4-lb balsa giveaway that had the indoorists a little giddy. Hopefully, we'll see some air put under those lovely planks soon. The highlight for me was watching Josh Finn's 350ish-inch Unlimited beast lumbering aloft. He says there's 40 minutes in it, and I don't doubt it. Also, Josh blasted Nick Ray's recent FIR national record and has the new record pending. Well done, Josh. We missed Bill Gowen, but he had a fall recently and isn't ambulatory quite yet. Lee Russell learned a lot about tailboom structural integrity.

We had some RC guys drop by for a visit, and they had a good time. Between Josh and them, their conversations have all of us fully up-to-date as to the *crème* of the nation's best handguns. Apparently, the modern variants of the legendary Browning 1911 still rule the roost, with a nod or two to the latest from the good people at Georgia's own Glock.

### F1R

Josh Finn 28:04\*  
Nick Ray 24:28

### Phantom Flash

Hope Finn 7:44 (three)  
Josh Finn 1:42

### Embryo

Hope Finn 7:17 (three)

### Helicopter

Josh Finn 8:06 (single)

### Unlimited

Josh Finn 21:15, 33:40

### Ministick

Josh Finn 7:43  
Nick Ray 7:25  
Hope Finn 5:04

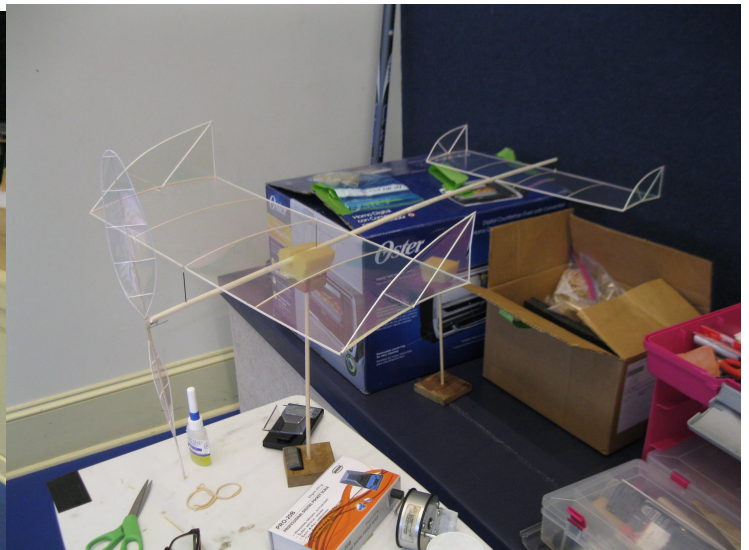
### F1M

Lee Russell 1:37, 3:36

### Hangar Rat

Dohrman Crawford 7:29 (three)  
Hope Finn 3:59 (two)

\*national record pending



## August Outdoor Contest Report

### Blue Ridge Special

Karl Hube 338  
Dohrman Crawford 292  
Jim Altenbern 196

### P-30

Frank Perkins E-Pirate 360  
Jim Altenbern Square Eagle 321  
Lee Russell Kiwi 30 82

### Peanut Scale

Dohrman Crawford BD-4 162  
David Mills Lacey M-10 45

### FIG

Karl Hube Sun Spider 183

### Dime Scale

Dohrman Crawford BAT Monoplane 242  
Gary Morton Chambermaid 191  
David Mills Cessna Airmaster 87

### Catapult Glider

Jim Altenbern Cata-piglet 212  
Frank Perkins Sidewinder 140

### SCat Jet

David Barfield P-59 33

## 2017 TTOMA Outdoor Flying Schedule

North Georgia Turf Farm/Whitesburg, Georgia  
Flying is scheduled from 9:00 am to 4:00 pm

Date	Contest	Contest Director
October 29, 2017	Last Fling Until Spring Specials: Jimmy Allen Scale and Embryo	David Barfield
November 5, 2017	Gary Baughman	Turkey Shoot

**Note:** The term “**Specials**” shown under each contest name is a new feature for 2017. The Specials are highlighted events with a prize for the winner. If two or more flyers score official flights, the winner will receive a return of the entrance fee. A flyer can win only one Special refund for the day. As always, any other event can be flown for fun or to score points for the big collection of club awards available at year’s end.

## 2017 TTOMA Indoor Flying Schedule

St Luke’s Presbyterian Church-Grand Hall/ Dunwoody, Georgia  
Flying is scheduled from 9:00 am to 5:00 pm

Date	Contest	Contest Director
October 7, 2017	Monthly Contest	Bill Gowen
November 18, 2017	Monthly Contest	Nick Ray
December 16, 2017	Monthly Contest	Joshua Finn
January 20, 2018	Monthly Contest	Bill Gowen

## Georgia State Indoor Records

Last Updated 8/31/2017

	Event	Ceiling Category	Record Type	Endurance	Date	Name	Location	National Record?
FAI Events	F1D (1.2 g)	Cat I	Single Flight	28:18	5/10/2014	Ray, Nick	St. Luke's	yes
		Cat II	Single Flight	15:10	4/14/2007	Ray, Nick	North Cobb	-
	F1D (1.4 g)	Cat I	Single Flight	22:50	8/15/2015	Lee, Kang	St. Luke's	yes
		Cat II	Single Flight	-	-	-	-	-
	F1L	Cat I	Single Flight	14:20	8/16/2014	Finn, Joshua	St. Luke's	-
		Cat II	Single Flight	13:04	1/20/2007	Gowen, Bill	North Cobb	-
	F1M	Cat I	Single Flight	16:31	11/21/2015	Gowen, Bill	St. Luke's	yes
		Cat II	Single Flight	10:07	4/16/2005	Gowen, Bill	-	-
F1R/35CM	Cat I	Single Flight	26:35	8/19/2017	Ray, Nick	St. Luke's	yes	
	Cat II	Single Flight	-	-	-	-	-	
AMA Events	EZB	Cat I	Single Flight	21:04	12/8/2012	Lee, Yuan Kang	St. Luke's	-
		Cat II	Single Flight	12:35	5/17/2003	Gowen, Bill	-	-
	ROG Cabin	Cat I	Single Flight	8:00	6/18/2016	Finn, Joshua	St. Luke's	-
		Cat II	Single Flight	-	-	-	-	-
	Intermediate Stick	Cat I	Single Flight	26:35	8/19/2017	Ray, Nick	St. Luke's	-
		Cat II	Single Flight	10:56	10/21/2000	Barker, John	-	-
	HLS	Cat I	Single Flight	33:44	8/19/2017	Finn, Joshua	St. Luke's	-
		Cat II	Single Flight	15:10	4/14/2007	Ray, Nick	North Cobb	-
	A-6	Cat I	Single Flight	7:53	6/15/2013	Gowen, Bill	St. Luke's	yes
		Cat II	Single Flight	5:07	3/18/2000	Lavender, Tim	-	-
	AROG	Cat I	Single Flight	11:43	9/19/2015	Finn, Joshua	St. Luke's	-
		Cat II	Single Flight	-	-	-	-	-
	LPP	Cat I	Single Flight	10:25	4/21/2012	Gowen, Bill	St. Luke's	-
		Cat II	Single Flight	10:27	3/22/1987	Klemetsen, Howard	-	-
	OPP	Cat I	Single Flight	12:17	9/10/2005	Gowen, Bill	Chamblee	-
		Cat II	Single Flight	11:08	4/16/2005	Gowen, Bill	North Cobb	-
	Ministick	Cat I	Single Flight	10:01	10/10/2015	Ray, Nick	St. Luke's	-
		Cat II	Single Flight	6:52	5/19/2001	Downs, Sandy	-	-
Manhattan Cabin	Cat I	Single Flight	-	-	-	-	-	
	Cat II	Single Flight	-	-	-	-	-	
AMA Events	Autogyro	Cat I	Single Flight	12:44	6/18/2016	Finn, Joshua	St. Luke's	-
		Cat II	Single Flight	-	-	-	-	-
	Helicopter	Cat I	Single Flight	8:20	6/18/2016	Finn, Joshua	St. Luke's	-
		Cat II	Single Flight	1:46	10/30/1999	Perryman, George	-	-
	Ornithopter	Cat I	Single Flight	2:13	?	Singer, Len	-	-
		Cat II	Single Flight	2:34	4/22/2002	Goins, Chris	-	-
	Std CLG	Cat I	Best 2 of 9	1:35.9	1/11/2013	Gowen, Bill	St. Luke's	yes
		Cat II	Best 2 of 9	1:33.7	3/4/2006	Gowen, Bill	North Cobb	-
	Ulld CLG	Cat I	Best 2 of 9	1:35.9	1/11/2013	Gowen, Bill	St. Luke's	yes
		Cat II	Best 2 of 9	1:24.5	3/17/2007	Gowen, Bill	North Cobb	-
HLG	Cat I	Best 2 of 9	1:20.4	11/19/2005	Gowen, Bill	Chamblee	-	
	Cat II	Best 2 of 9	1:20.1	3/4/2006	Gowen, Bill	North Cobb	-	
Bostonian	Cat I	Best 2 of 6	4:39	4/24/1999	Lavender, Tim	-	-	
	Cat II	Best 2 of 6	5:35	10/21/2000	Barker, John	-	-	
FAC Events	10 g FAC Embryo	Cat I	Total of 3	6:02	3/13/2004	Dixon, Brook	Chamblee	-
		Cat II	Total of 3	5:42	4/22/2000	Barker, John	North Cobb	-
	FAC Embryo	Cat I	Total of 3	8:15	2/25/2016	Finn, Joshua	St. Luke's	-
		Cat II	Total of 3	-	-	-	-	0
	FAC Nocal	Cat I	Total of 3	8:07	2/21/1998	Perryman, George	-	-
		Cat II	Total of 3	8:44	4/14/2001	Perryman, George	-	-
	FAC Dimescale	Cat I	Total of 3	3:57	2/1/1997	Barker, John	-	-
		Cat II	Total of 3	3:04	9/22/2001	Barker, John	-	-
	FAC Phantom Flash	Cat I	Total of 3	8:29	9/13/2016	Finn, Hope	St. Luke's	-
		Cat II	Total of 3	-	-	-	-	-
SAM Phantom Flash	Cat I	Single Flight	4:25	4/5/1997	Perryman, George	-	-	
	Cat II	Single Flight	3:05	4/22/1989	Perryman, George	-	-	
Hangar Rat	Cat I	Best 2 of 6	6:03	9/26/2009	Finn, Joshua	Ward Rec.	-	
	Cat II	Best 2 of 6	7:51	5/18/2002	Perryman, George	-	-	



Misc. Events	Chattahoochee Challenge	Cat I	Single Flight	3:19	12/11/1999	Perryman, George	-	-
		Cat II	Single Flight	5:44	10/30/1999	Perryman, George	-	-
	Butterfly	Cat I	Single Flight	1:54	12/7/2002	Perryman, George	-	-
		Cat II	Single Flight	2:13	4/22/2000	Brock, Wayne	-	-
	P-24	Cat I	Single Flight	-	-	-	-	-
		Cat II	Single Flight	2:00	9/1/2000	Bakay, Carl	-	-
	TSA	Cat I	Single Flight	2:00	3/13/2004	Ray, Nick	Chamblee	-
		Cat II	Single Flight	-	-	-	-	-
	Science Olympiad 8	Cat I	Single Flight	4:00	4/25/2003	Goins, Chris	-	-
	g ROG	Cat II	Single Flight	4:39	4/5/2003	Goins, Chris	-	-
	Science Olympiad 8	Cat I	Single Flight	4:30	11/22/2003	Goins, Chris	-	-
	g 2004 "C" Division	Cat II	Single Flight	-	-	-	-	-
	Science Olympiad 8	Cat I	Single Flight	4:42	10/25/2003	Goins, Chris	-	-
	g 2004 "C" Division w/ribbon drop	Cat II	Single Flight	4:59	3/27/2004	Goins, Chris	-	-

### IMPORTANT RENEWAL INFORMATION

To continue receiving NFFS *Digest* without interruption, your dues should reach the NFFS Membership Office at least two (2) months before your current expiration date. For example, if your *Digest* mailing label says your month of expiration is August, NFFS should receive your payment by June. Do not wait for a reminder from NFFS. You will be late and miss an issue.

### NFFS MEMBERSHIP & RENEWAL APPLICATION

Mail to: NFFS Membership Office  
P.O. Box 74  
Grosse Ile, MI 48138 USA

Make checks payable  
in U.S. dollars to:  
National Free Flight Society

Dues include a mandatory \$0.50 per year for NFFS membership.

U.S. memberships (Age 19 & over)  2 years \$58.00 (\$18.00 Youth)  
 1 year \$30.00 (\$10.00 Youth)

Youth: Age 18 & under as of July 1 of the current year

Check here if you desire *Digest* delivery via email. This saves valuable funds on printing/ mailing, and you get your *Digest* about 3 weeks sooner. As a bonus, the electronic version contains exclusive content in each issue.

All Non-US Residents  2 years \$58.00  
 1 year \$30.00

NOTE: Current international members will continue to receive printed *Digest* until membership runs out. Effective with May/June 2012 issues, all new/renewal international memberships will receive *Digest* electronically.

Life Membership U.S. Residents  \$500.00  
Non-U.S. Residents  \$550.00

First-Time or Lapsed (more than 1 year) Domestic Members  
 2 Years for \$29  2 Years Youth for \$9  International \$37.50  
Offer expires very soon...take advantage before it's gone.

### ★ NFFS Foundation Donation ★

Silver \$75  Gold \$125  Platinum \$250 or more \$ \_\_\_\_\_

To help reduce expenses maintaining NFFS records,  
PLEASE renew for at least two years. Thank you!

Check appropriate boxes below:

New Member  Renewal  Address Change  Donation

Amount: \$ \_\_\_\_\_ Current expiration date: Mo.-Yr. \_\_\_\_\_

PLEASE PRINT VERY CLEARLY

Date of Birth		
M	D	Y
/	/	

Name: \_\_\_\_\_

Address: \_\_\_\_\_ AMA#: \_\_\_\_\_

City, State: \_\_\_\_\_ Zip: \_\_\_\_\_

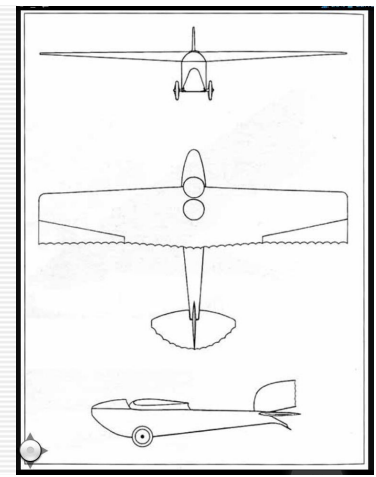
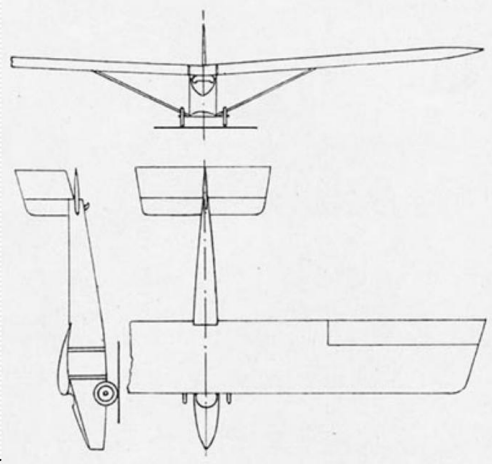
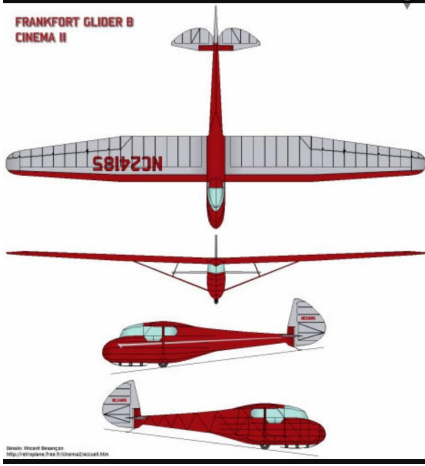
Telephone: \_\_\_\_\_

Email Address: \_\_\_\_\_

Send all renewals, address changes, applications, and membership questions to the Membership Office, email: <martinr362@aol.com>

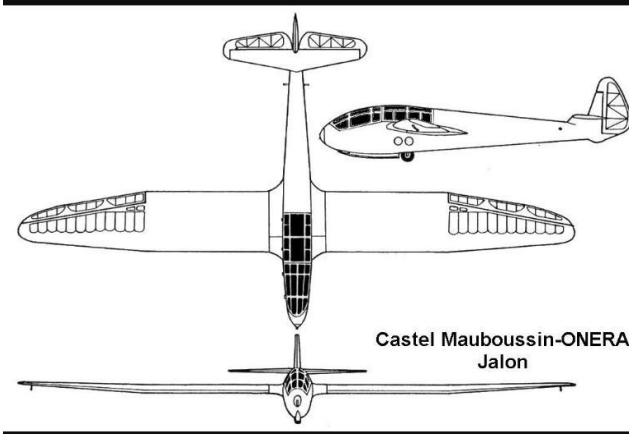
Please go to [www.freeflight.org](http://www.freeflight.org) for credit card renewals.  

# HI-START SCALE GLIDER 3-V PREVIEW II

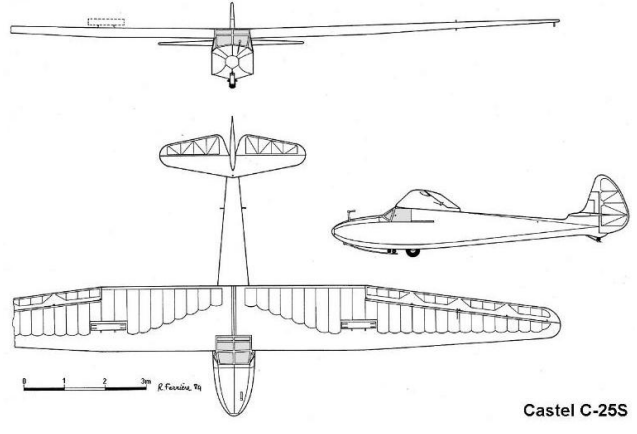


Abrial-Peyret A-2 Vautour

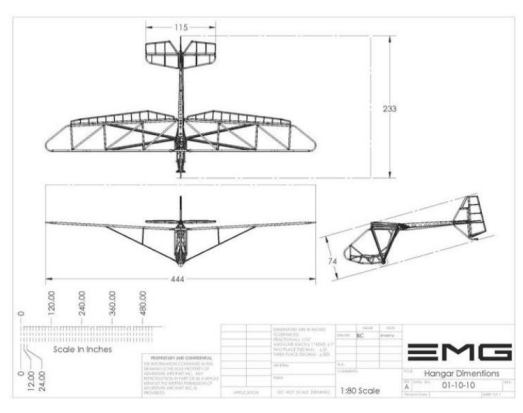
Poncelet Vivette



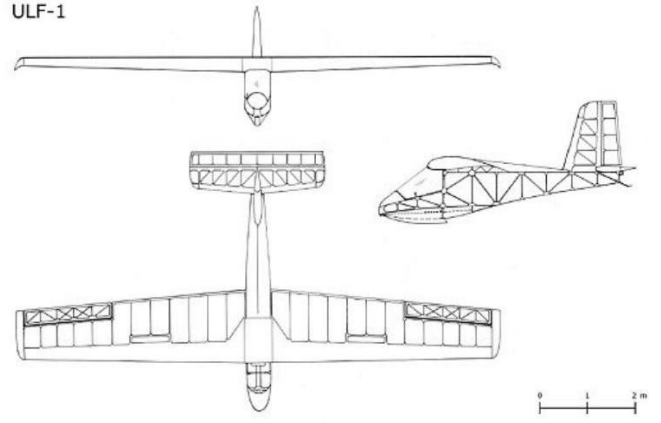
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Jalon



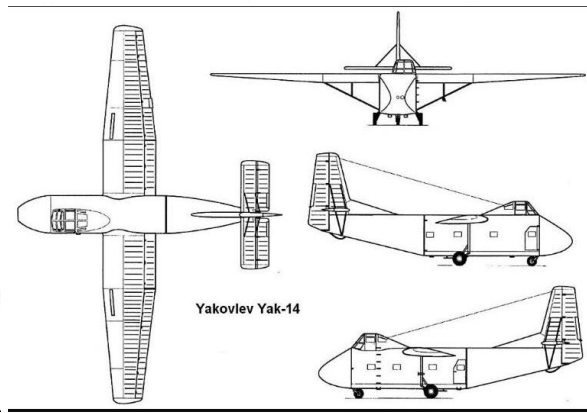
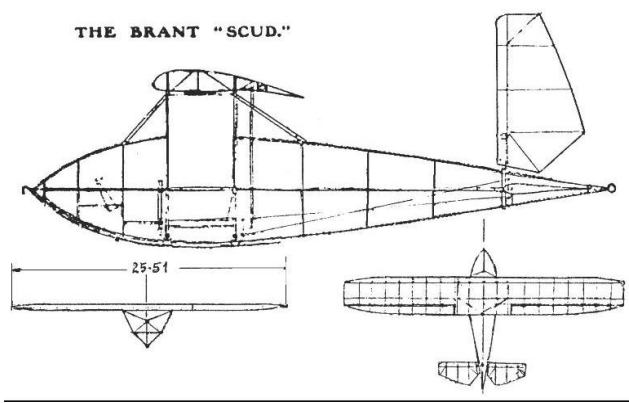
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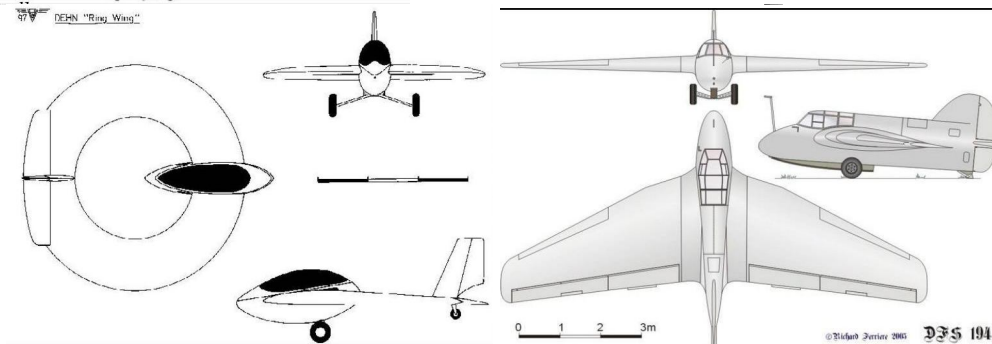
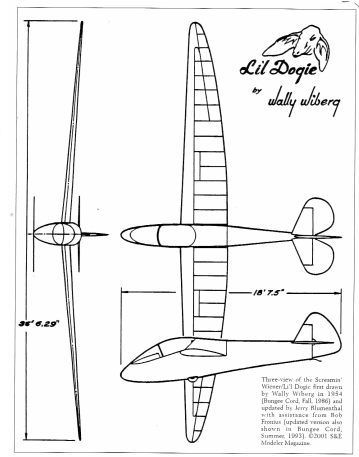
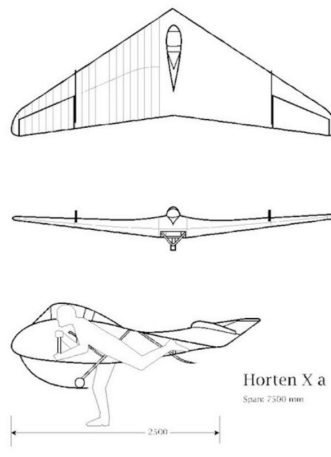
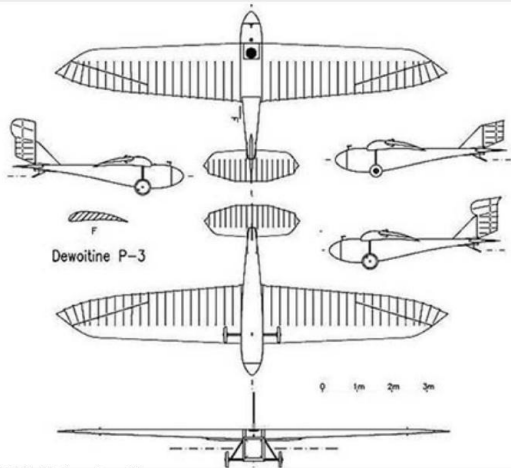
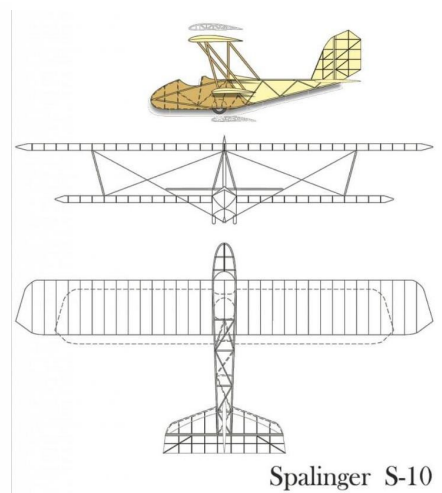
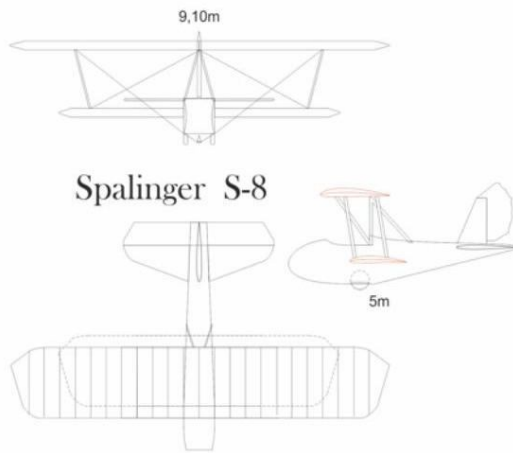
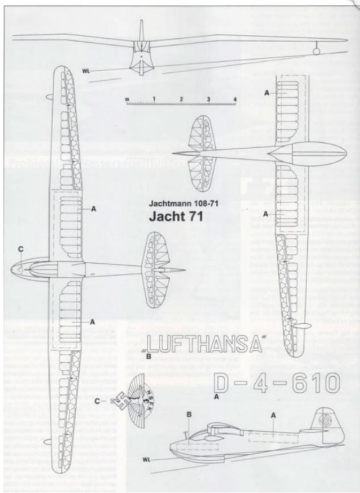
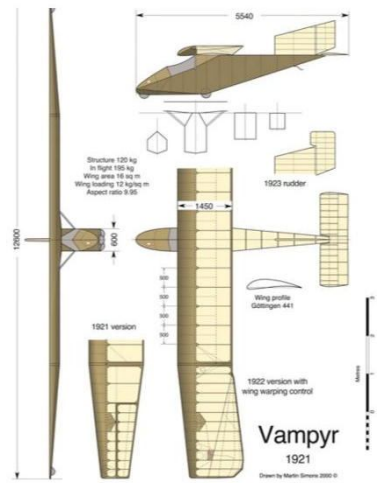
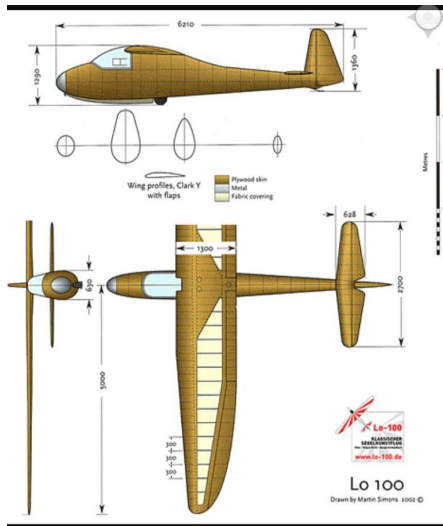
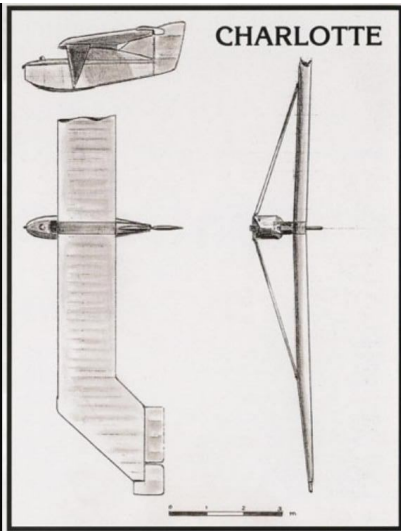
ULF-1

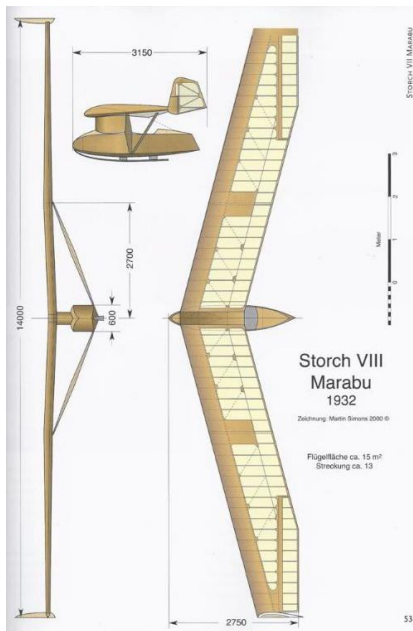
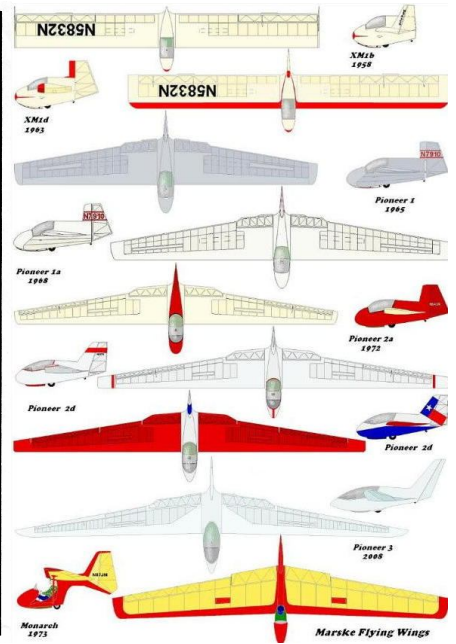
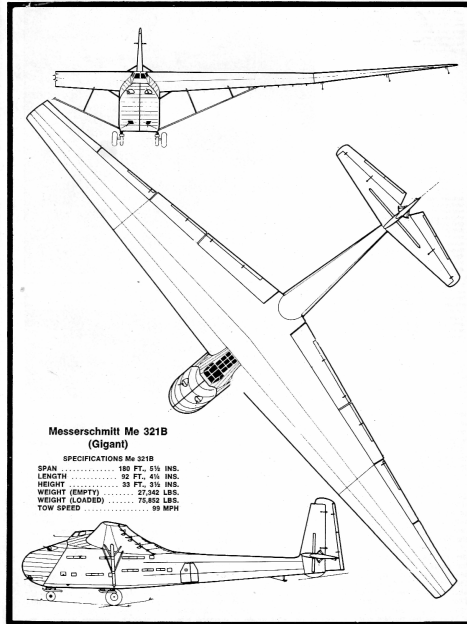
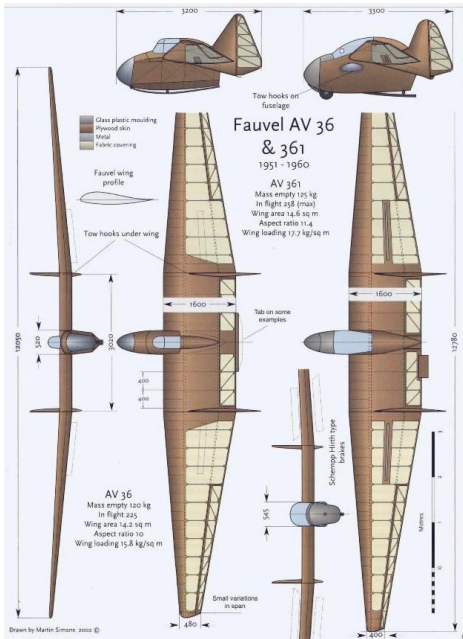


THE BRANT "SCUD."

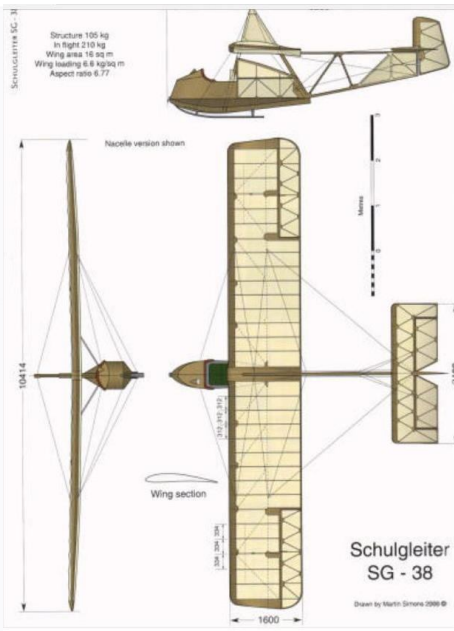


Yakovlev Yak-14

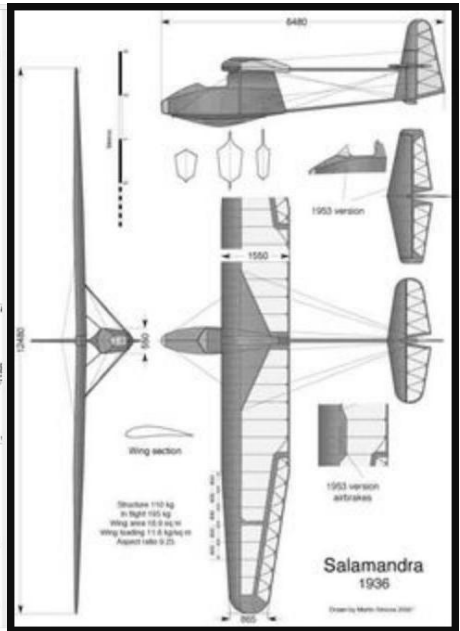




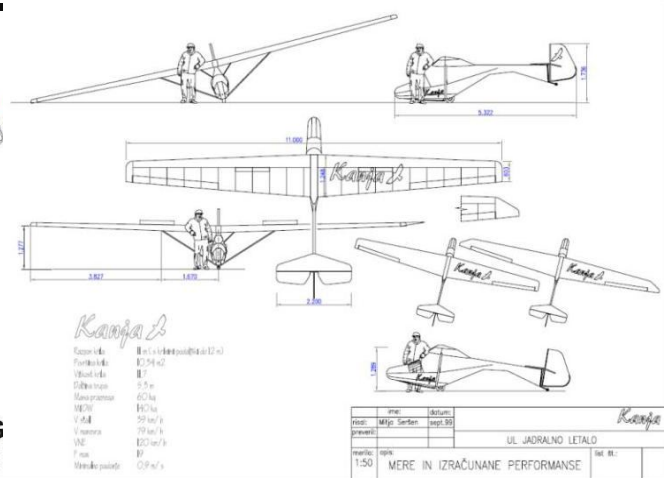
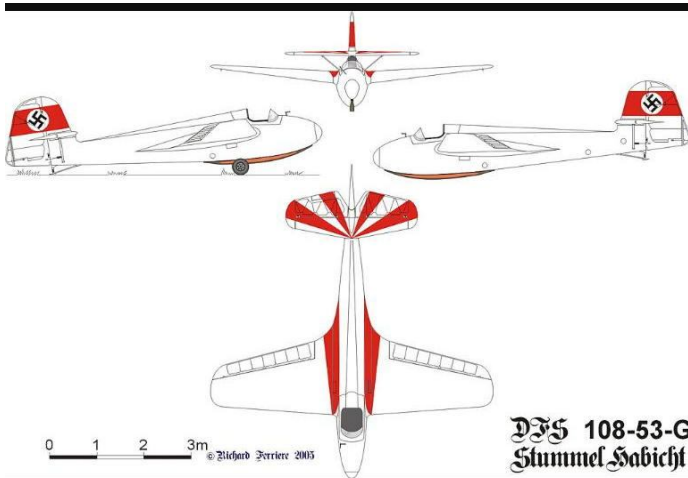
Lippisch Storch VIII Marabu

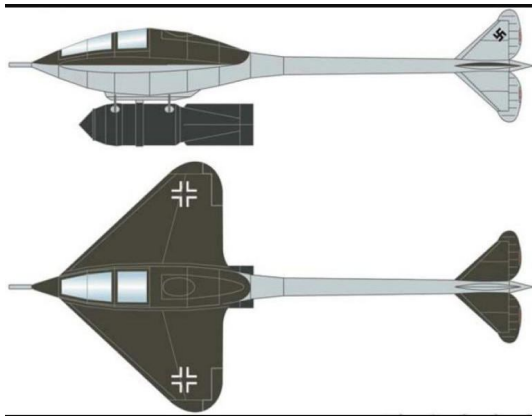


Lippisch SG-38

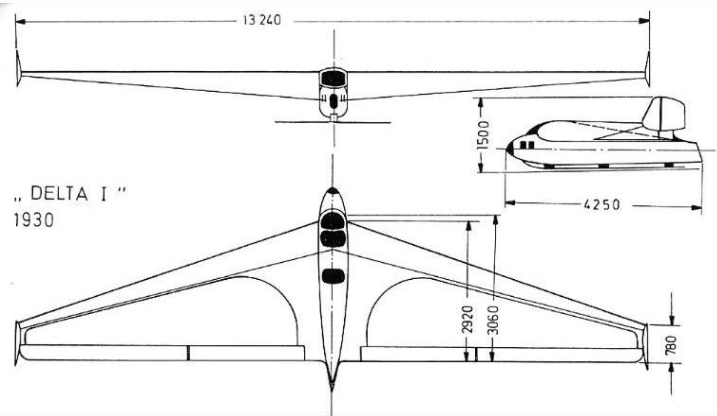


Czerwinski WWS-1 Salamandra

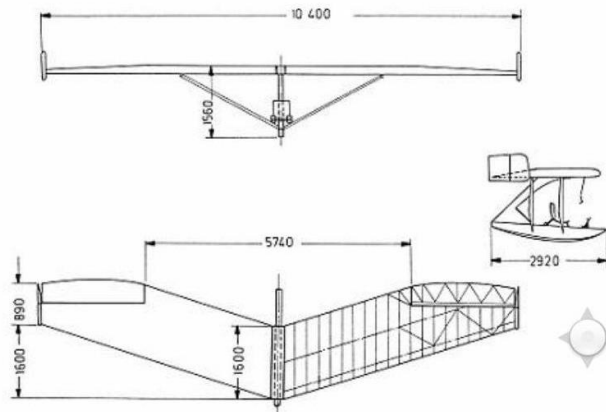




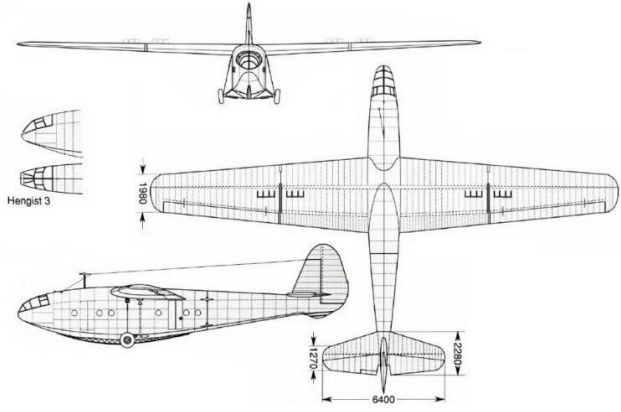
Lippisch GB Dive Bomber



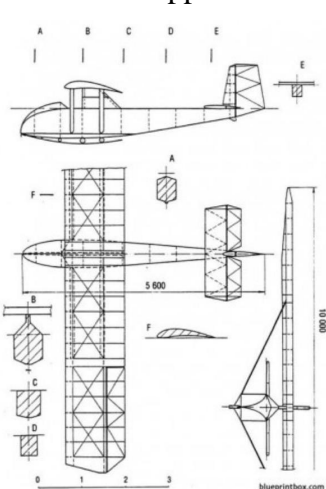
Lippisch Delta I 1930



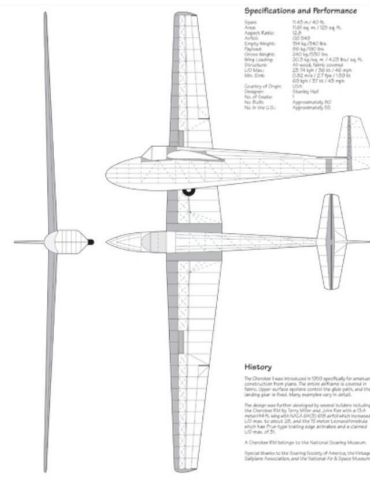
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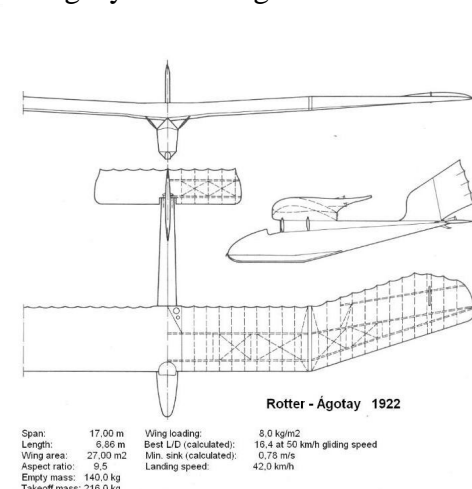
Slingsby T.18 Hengist



Slingsby T.21 Daisy

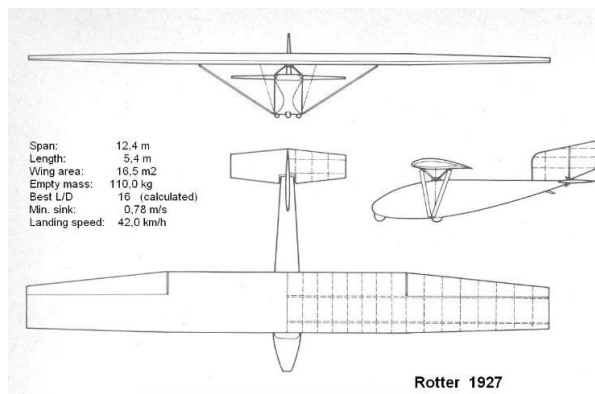


Hall Cherokee II

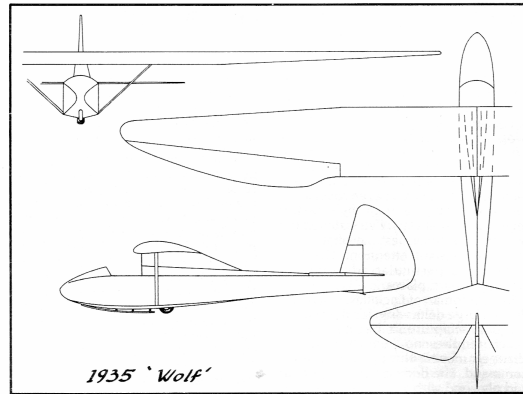


Rotter - Agotay 1922

Span: 17.00 m Wing loading: 8.0 kg/m<sup>2</sup>  
 Length: 6.06 m Best L/D (calculated): 16.4 at 50 km/h gliding speed  
 Wing area: 27.00 m<sup>2</sup> Min. sink (calculated): 0.78 m/s  
 Aspect ratio: 9.5 Landing speed: 42.0 km/h  
 Empty mass: 140.0 kg  
 Takeoff mass: 216.0 kg



Rotter 1927



1935 'Wolf'

Span: 12.4 m  
 Length: 5.4 m  
 Wing area: 16.5 m<sup>2</sup>  
 Empty mass: 110.0 kg  
 Best L/D: 16 (calculated)  
 Min. sink: 0.78 m/s  
 Landing speed: 42.0 km/h

Specifications and Performance

Span: 17.00 m  
 Length: 6.06 m  
 Wing area: 27.00 m<sup>2</sup>  
 Aspect ratio: 9.5  
 Empty mass: 140.0 kg  
 Takeoff mass: 216.0 kg  
 Quantity of Engines: 0  
 Max. Altitude: 10,000 ft  
 Max. Speed: 100 km/h  
 Max. Rate of Climb: 1000 ft/min

History

The aircraft was first flown in 1922 and was one of the first gliders to be used for training. It was designed by the German glider designer, Hans Klinker. The aircraft was used for training until the late 1930s. It was later used for racing and was one of the fastest gliders of its time. The aircraft was built by the Rotter brothers in Germany.