

Cloudbuster membership and subscription to the newsletter is \$16.00 per year (\$6.00 membership without subscription). All memberships expire on Dec. 31. Subscription membership includes all Newsletter issues for the year.

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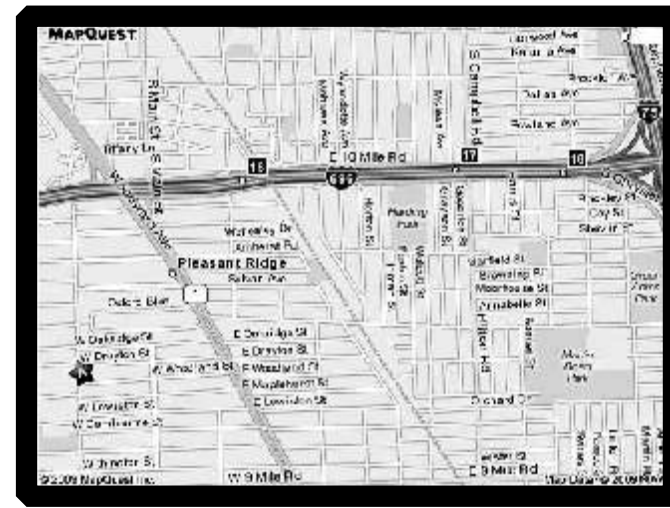
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Cloudbustermac.tripod.com

Cloudbusters Model Airplane Club
976 Pearson St
Ferndale MI 48220



The Cloudbusters meet at 8pm. on the third Tuesday of the month at
Drayton Ave. Presbyterian Church
2441 Pinecrest Avenue
Ferndale, MI 48220 The meeting room is #309
No meetings in June, July, or August.

Be sure to visit our web page to get the winter 2014 handout. If you do not have access to the web or a printer, contact a member who does and get your copies for handout today.

Cloudbusters NEWSLETTER

Cloudbusters Model Airplane Club of Michigan, Inc.

Our 76th Year

Mar-April 2015

Presidents Notes

IMPORTANT – IMPORTANT – IMPORTANT !

Somehow the draft for the Indoor Fling flier got into the Jan/Feb Newsletter. Those dates are not correct. The correct date is Sat, May 16. Mike

Ramblings from the editor:

Mike's article above was really long wasn't it. Yes, there was a major error and we all missed it, but I am the editor, so sorry. See the proper date this issue. Any complaints, next issue will be written by the complainer.

I promised you more Jet Cats, here is another one. The F-14 Tomcat, however, again you are on your own with the instructions. I can not read them. Who will be the first to build it with wings that fold to delta for takeoff then, unfold for glide? Also we have been trying to include more peanuts at the events, The PEANUT PIPER PA-28-180 By Tony Ross looks to me to be a really nice subject. I have included a small 3-view and a little documentation, but a quick search of the internet will reveal tons of color schemes. If you need more or do not have the internet, contact me and I will supply you with some. I have some with lots of color, and some with very little color, depending on what you would like.

Mike's article did include the Broome Park Schedule for this summer. Please mark your calendars, not only with the Broome park schedule, but also for the correct date of the Spring Fling. We will soon be publishing the entry form for the,

2015 Flying Aces Club Outdoor Championships

A.M.A. Flying Site - Muncie Indiana
Sept 17 & 18 8:30 AM to 4:30 PM



For tips this issue, I searched back to the old smallflyingarts web page. It is now defunct. However, like everything that was on the internet, it is still there, you just have to look a little harder for it, Roman, from Switzerland use to publish a lot of neat stuff to smallflyingarts. Included please find a thread that he posted back in 2011 about laminating props. It sure looks easier than carving one. Remember, the lighter the prop, the lest torque effect you have on the plane. If you doubt me, just picture a 10 pound prop on an 8 gram airplane. The plane will spin, while the prop stays still. I know, simple, but that is the way I see things.

If you have an idea, joke, plan, technique, suggestion, that you would like included here, send it to me. I may be able to get it in.

See you at the field!
Chris
Editor
merlin236@comcast.net 810-348-8675

Broome Park 2015 Schedule and Information

This information covers the events and procedures that will be flown at Stanley Broome Park during the summer of 2015. All dates will start official flying at 9:30AM and will run through 4:00 PM.

IMPORTANT - The designated CD should be at the field or flying site a minimum of 30 minutes prior to the start of scheduled flying. Failure to arrive in the starting time frame gives the designate alternate the right to choose the set up location. CD has the right to change start and end time to compensate for the weather. All official FAC events will be flown to the current FAC 2014/2015 Rule Book. Regarding Pinkham Field Stick, Pinkham Field Rules are published on the Cloudbuster Web Page. Note that all FAC Event #'s following Event #3 have changed. Please refer to the new FAC Rulebook on the FAC web site. All FAC rule book changes n the FAC web site are in red text for your quick referral.

Dates and CD's

Sun	Apr 12	Winn Moore	winn_moore@yahoo.com
Sat	May 23	Mike Welshans	mbwelshans@aol.com
Sun	Jun 7	George Bredehoft	volare61@gmail.com
Sun	Jul 5	Club Picnic and Contest – Chris Boehm	merlin236@comcast.net & Mike Welshans
			mbwelshans@aol.com
			A pre registration for this event, because of the free food and refreshments will be required to make sure we do not run out of food.
Sun	Aug 2	Winn Moore	winn_moore@yahoo.com
Sun	Sept 20	George Bredehoft	volare61@gmail.com
Sun	Oct 4	Mike Welshans	mbwelshans@aol.com
Sun	Oct 18	Winn Moore	winn_moore@yahoo.com
Sun	Nov 1	George Bredehoft	volare61@gmail.com

Events – Flown on All Dates

- Event # 1 FAC Peanut Scale
- Event # 2 FAC Scale
- Event # 12 Golden Age Biplane
- Event # 13 Golden Age Monoplane
- Event # 32 FAC Dime Scale
- Event # 33 FAC No Cal Scale
- Event # 34 FAC Phantom Flash - Must ROG - Best 3 of 6
- Event # 35 FAC Embryo – Must ROG
- Event # 36 FAC Jet Catapult
- Event # 41/42 Combined Greve/ Thompson Race (* and ** Apply)
- Event # 43 Goodyear/ Formula Race (* and ** Apply)
- Event # 44 WW-I Combat (* and ** Apply)
- Event # 45 WW-II Combat (* and ** Apply)
- Event # 53 ½ Size Wakefield - Must ROG (*** Applies)
- Event # X Pinkham Field Stick (**** and ***** apply)
- * All Mass Launch Events Minimum 2 Rounds per FAC Rule Book
- ** Must Comply to FAC Pilots Pre Launch Check List
- *** ½ Wake, because of field size and due to high performance flight characteristics, will be flown with a 60 second max. If multiple contestants have 3 maxes we will have a fly off with 15 second increases in max time (75 seconds, 90 seconds etc until a winner is declared or someone gives up or loses a model.
- **** Regarding Pinkham Field Stick Models 1st Place Only is Awarded. 2nd or 3rd place do no apply to Top Gun Trophy.
- ***** Pinkham Field Rules are available on Cloudbuster Web Page. Must present plan with model

GRUMMAN F-14 'TOMCAT'

[PLANEADOR]

Este planeador lanzado a mano ó catapultado con una goma nos fue acercado por el Sr. Guillermo Viguerie de la localidad de Quilmes, viejo lector nuestro y aficionado al aeromodelismo, aparte de ser dibujante de historietas serias en temas de guerra y anecdóticas para el exterior. El mismo lo diseñó y contruyó asegurándonos que vuele muy bien, así que allá va...

El "TOMCAT" hizo su aparición en 1970, es un birreactor en flecha con ángulo variable y participó en combates del conflicto con el Sudeste Asiático y últimamente en la guerra del Golfo. Muchos los recor-

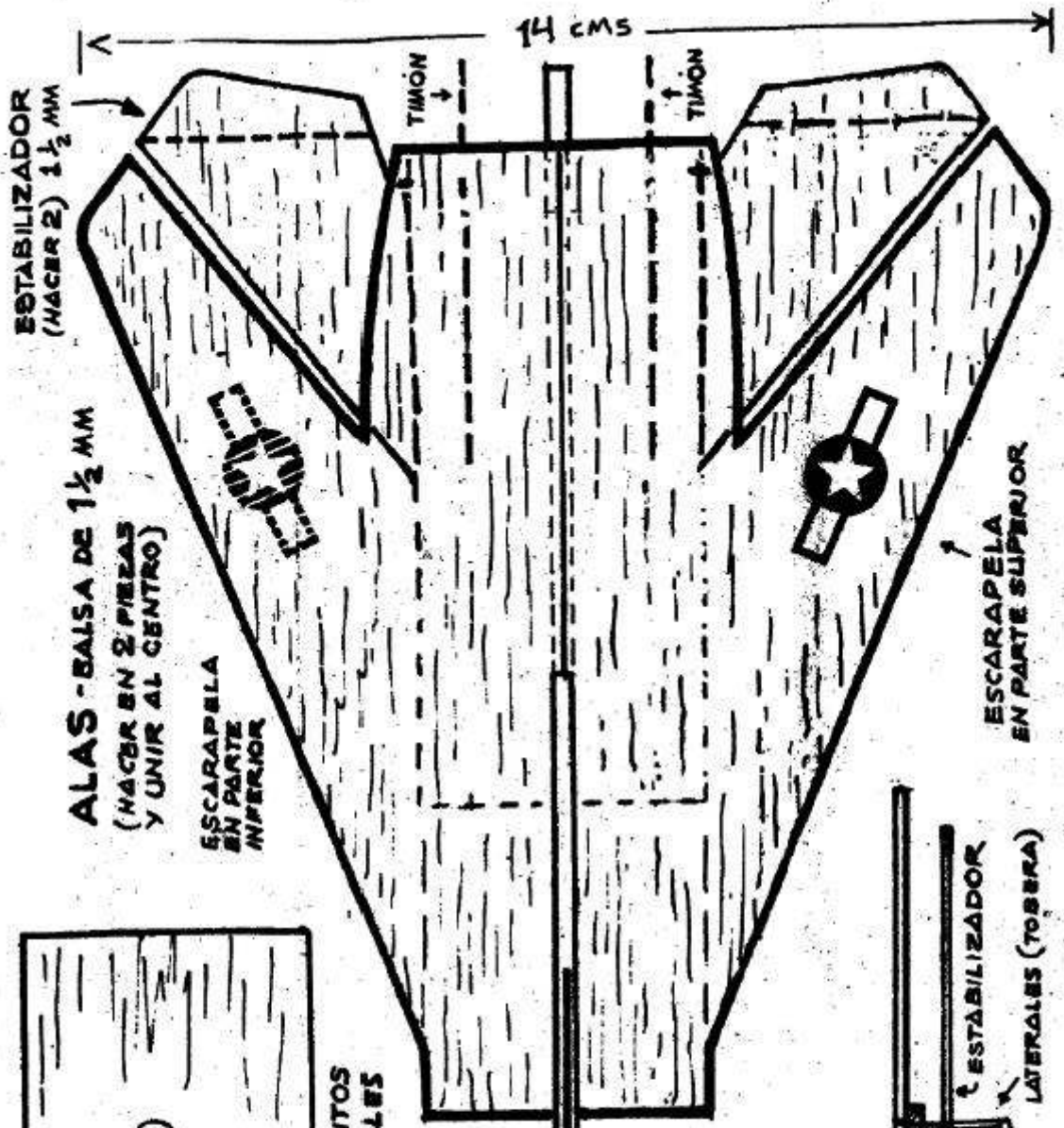
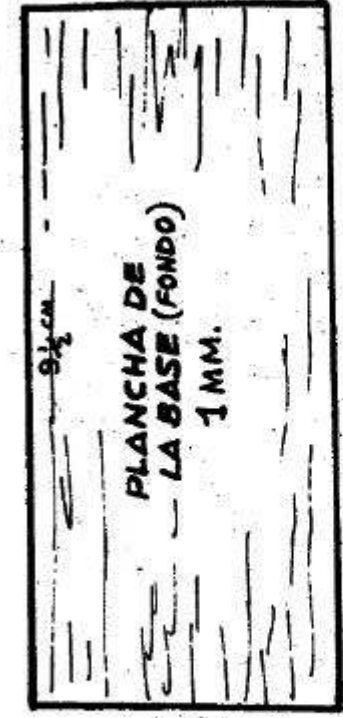
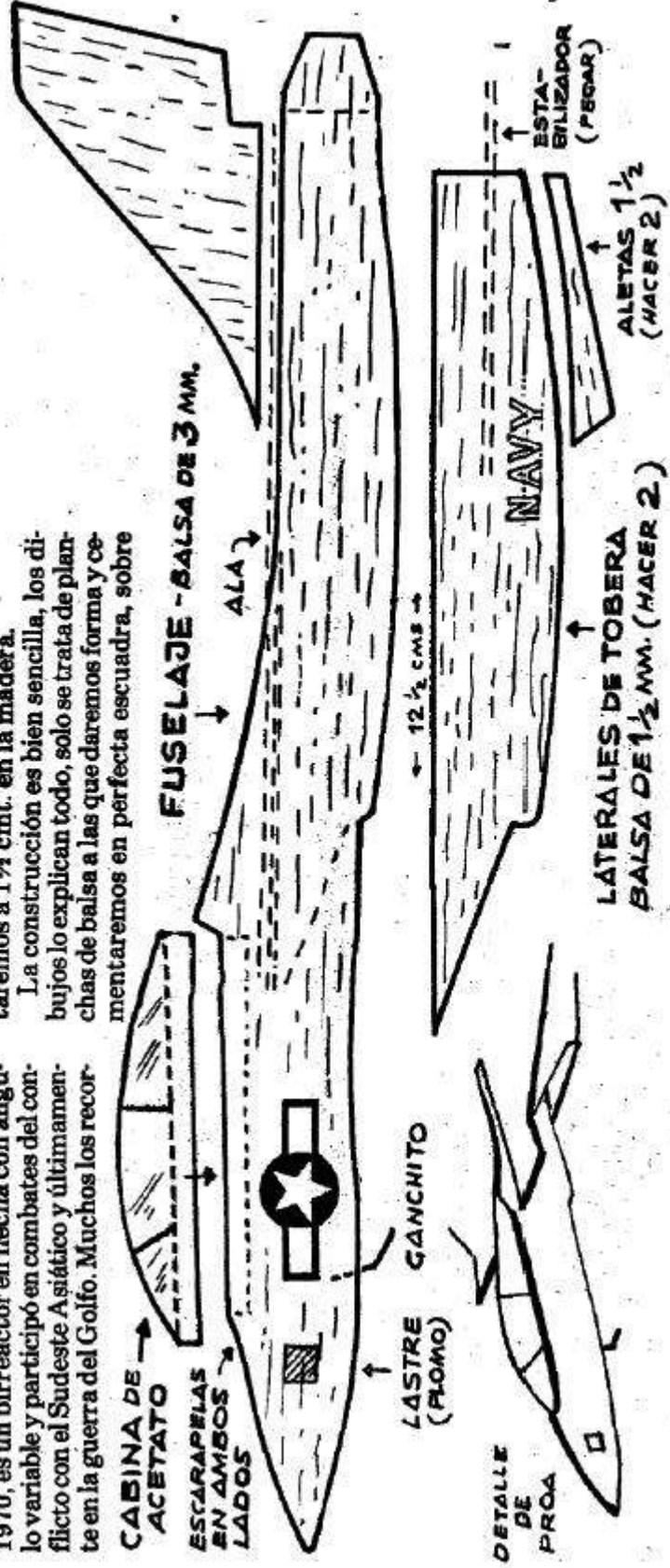
darán también como el protagonista de la película "TOP-GUN".

El modelo está publicado para ampliarlo tomando como base 14 cm. de envergadura y 22 cm. de largo del fuselaje. Puede ampliarse con el sistema de cuadrículado o por fotocopiado. También puede hacerse un poco más grande que las medidas dadas, ampliándolo media vez, es decir, que cada centímetro de la reproducción lo trasportaremos a 1 1/2 cm. en la madera.

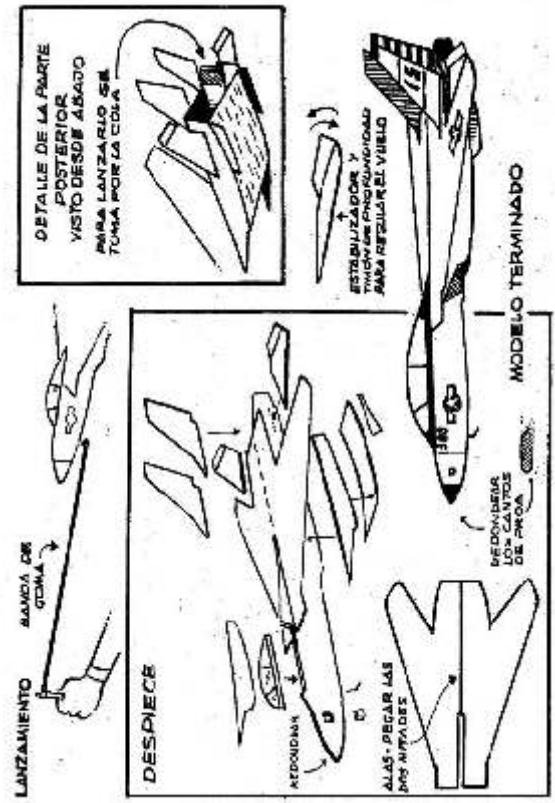
La construcción es bien sencilla, los dibujos lo explican todo, solo se trata de planchas de balsa a las que daremos forma y cementaremos en perfecta escuadra, sobre

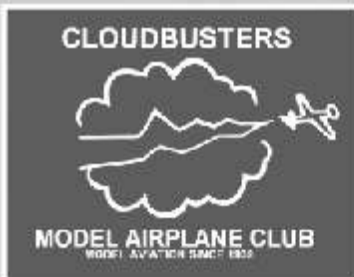
todo el cajón que forman las turbinas en la parte inferior del ala. Luego podemos pintarlo y decorarlo con escarpelas, matriculadas, etc.

Con un palito de madera dura y una banda de goma haremos la honda que lo catapultará al espacio, tomándolo del gancho, sosteniéndolo con la otra mano de la parte trasera saliente del fuselaje y... ¡a volar!...



en la
spín-
fricu-
aban-
cate-
mchi-
de la
y... ¡a





The Clodbusters & The Balsa-Bugs

In conjunction with
The Michigan Indoor Aircraft Association

Present
The 2015



Indoor Fling

MIAA
Michigan Indoor Aircraft Association
A. M. A. Charter Club 5064

An AMA Sanctioned Class AAA Contest
AMA Category III Ceiling

Saturday, May 16, 2015 Ultimate Soccer Arena

867 South Blvd E, Pontiac MI
2 miles south of the Silverdome

Flying

9:00AM- 5:00PM*

Flying Floor split in half.

South End for FAC - North End for AMA*

Entry Fees:
\$30. post marked by April 25
\$35. at door

Special Entry Fee { Junior Entrants
Science Olympiad
\$1.00 Junior Phantom Flash

Spectators - FREE!

Send Check or Money order to
Mike Welshans
Clodbuster's MAC
976 Pearson,
Ferndale, MI 48220

Contest Director
Mike Welshans 248-545-7601
Mbwelshans@aol.com
Event Managers
FAC- Winn Moore 248-830-6294
winn_moore@yahoo.com
AMA - Paul Crowley 586-294-1236
usa2298@comcast.net

AMA EVENTS

Standard Cat Glider	218
Unlimited Cat Glider	219
Hand Launched Glider	212
Manhattan Cabin	205
Limited Penny Plane	208
Penny Plane	207
Bostonian	215
F1L Easy B	217
Mini Stick + MS ML	220
Inter Stick	202
F1D (no rounds)	203

Phantom Flash for Juniors Separate Awards

Phantom Flash kits Available at
Prop Shop Hobbies, Inc. - "Your Complete Model Shop"
23326 Van Dyke Ave. Warren, MI 48089
586-757-7160 propshophobbies.com
Carlton Hobbies - "We make hobbies affordable."
8194 Croxy Lake Road
White Lake, MI 48386
248-360-4910 carltonhobbies.com
Flight Line Hobbies
1192 S Tappan Rd, Lake Orion, MI 48360
248-814-8359 www.flightlinehobbyus.com
Retro RC - Vintage & Retro Model Aeroplane Kits
PO Box 193 Keego Harbor, MI 48320
248-212-9666 - retro.rc.com
Volare Products - Shorty's Basement
269-339-9795 volareproducts.com

FAC EVENTS

- FAC Peanut Scale
 - FAC Scale
 - FAC Dime Scale
 - FAC No Cal
 - FAC Phantom Flash
 - FAC Embryo
 - Jet Catapult
 - FAC Goodyear Racers
 - FAC WW-I ML
 - FAC WW-II ML
 - Pinkham Field Stick**
Junior Phantom Flash
- All FAC Events flown to 2014/2015 FAC Rules
** No Kenoses for this unofficial event

See Registration Form for map to site and details of events.



A wonderful site with a 72' center ceiling and 40' at the walls.
The Arena is on South Blvd. E. (20 Mile Rd.) just west of Opdyke Rd. on the northwest corner.
Food Services on Site.
Floor area is equal to a full size soccer field plus!
Eight AMA CATEGORY III Records Were Set Here in 2012!

2015 INDOOR FLING

An AMA Sanctioned Class AAA Contest
Sanction Number 14-xxx

Presented By: Clodbusters Model Airplane Club of Michigan & The Detroit Balsa-Bugs
In conjunction with: The Michigan Indoor Aircraft Association

Official Registration Form

Name _____ AMA # _____
Address _____
City _____ State _____ Zip _____

____ Yes, I would like to be on the Clodbuster Official Email List _____
Email Address Here Please Print Legibly.

Entry Fees:
\$30- post marked by April 25
\$35- at door
Special Entry Fee! { Junior Entrants
Science Olympiad
\$1.00 Junior Phantom Flash
Contest Director
Mike Welshans 248-545-7601
Event Managers
AMA-Paul Crowley 586-294-1236
FAC-Winn Moore 248-830-6294

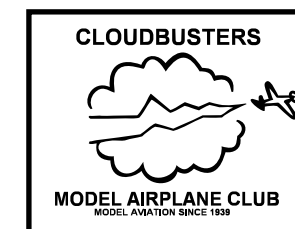
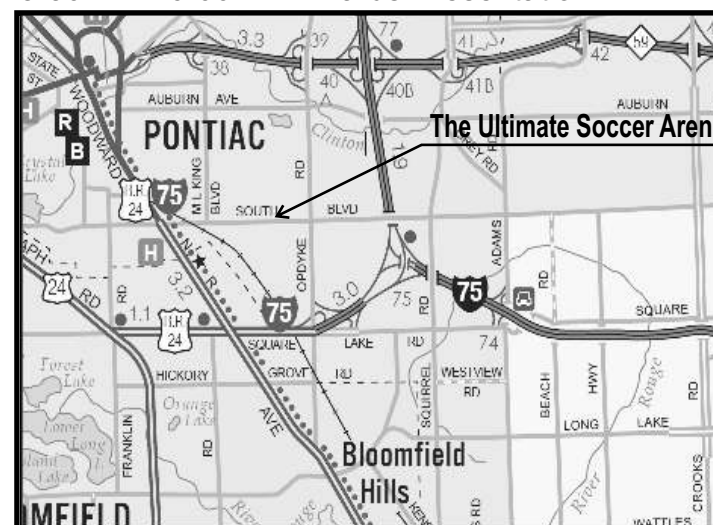
Make checks payable to:
Clodbusters Model Airplane Club
Send by April 25, 2014 to:
Mike Welshans
Clodbuster's MAC
976 Pearson
Ferndale, MI 48220
When: Saturday, May 16 from 9:00 AM to 5:00 PM
Where: Ultimate Soccer Arena
867 South Blvd E,
Pontiac MI
2 miles south of the Silverdome

Event Schedule:

8:00 AM Registration
9:00 AM-10:30 AM FAC Scale Events Judging
9:00 AM-5:00 PM Open flying for all events.

Mass Launches: 12:00 Noon - WW-I,
1:00 PM - WW-II,
2:00 PM - Mini-Stick
3:00 PM - Goodyear Racers

All official flight times must be turned in by 5:00 PM
5:30 PM - 6:00 PM Awards Presentation



Michigan Indoor Aircraft Association
A. M. A. Charter Club 5064



All AMA Events will be flown to current AMA Rules
for Indoor Free Flight.

<http://www.modelaircraft.org/events/compreg.aspx>

All FAC Events will be flown to current FAC Rules.

<http://www.flyingacesclub.com/FACrules3.html>

Email mbwelshans@aol.com for Pinkham Field Rule Book in PDF Format.

Phantom Flash for Beginners flown to current FAC Rules.

All decisions of Event Managers Are Final.
Please make sure your models qualify
to the current rules.

NO ADMISSION FEE!



Sixth Annual Contest and Picnic

DOOR PRIZES!

CLOUDBUSTERS



MODEL AIRPLANE CLUB
MODEL AVIATION SINCE 1939



Contest will be held if the wind is less than 15 MPH and no rain.

JULY 5, 2015

BROOME PARK - FLINT MICHIGAN

CONTEST STARTS AT 9:30 AM
FREE LUNCH AT 12:30

Please Call or Email by Friday, July 3 10:00 AM with your head count so that we know how much food to have available.

For More Information Call or email
Chris Boehm - 810-348-8675
merlin236@comcast.net
OR
Mike Welshans - 248-545-7601
mbwelshans@aol.com



You may enter Broome Park on the southwest corner, from Hammerburg Road, or on the northeast from Tuxedo Avenue. The Cloudbusters will usually be found on contest days on the **UPWIND** side of the park.

All Aviation Enthusiasts
Friends and Relatives
WELCOME!
Control Line
Free Flight
Radio Control
Port-A-Potty
ON SITE!

PEANUT PIPER PA-28-180

By Tony Ross

The Piper PA-28-180 Cherokee is a four place, fixed landing gear landplane, Lycoming O-360-A3A or O-360-A4A engine of 180 hp (134 kW), gross weight 2,400 lb(1,089 kg). First certified on 3 August 1962. It is a all-metal, unpressurized, single-engine, piston-powered airplane with low-mounted wings and tricycle landing gear. It has a single door on the copilot side, entered by stepping on the wing.

Some of my earliest memories are of my dad flying over our house in his Piper Cherokee as I played in the yard. His commute to his job by car was almost an hour and a half. So on the days with decent weather he would fly to work instead. We lived close enough to the municipal airport, and when he flew over we all knew about how long it would be until his arrival. The fly-over was always a low-altitude high banked turn so there would be no mistake that it was him. It was with these fond memories in mind that I set out on this project.

The basic construction of the model is straight forward flat sides of 1/20" balsa strip built over the plan with formers top and bottom. Stringer notches are cut into the formers and the stringers should sit just proud to give a metal-like skin appearance. The formers are cut from the plan. However, the builder may want to leave some wood in the middle and trim out once the stringers are in place. Scalloping formers is common and if done correctly can reward the builder with a much lighter model. A considerable amount of longeron twist from the wing LE forward is required for the final placement of the nose formers so part N1 is best left off the side construction until after the fuselage is nearly complete. The wing is of one-piece-thru design and can be built over the plan using one strip of 1/16"x1/8" for the TE that can be cracked as the wing panels are lifted to achieve the dihedral indicated. The wing tips are 2 pieces of 1/32"x1/16" laminated around a form using a white glue/watermixture or soft balsa block. The wing is covered with tissue and doped prior to assembly to the fuselage. The one-piece wing design will allow the builder to adjust the wing incidence to suit. The wing incidence shown on the plan is 3°.

Although the plan indicates the 1/20" balsa strip construction, the test planes were built with 1/16" and 1/32". The 1/16" model resulted in a 14.7 gram completed airframe without rubber motor and the 1/32" came in at 10.4 grams. The 1/16" version required more ballast but was easy to fly in most all conditions and trimmed out quickly. This model utilized a single loop of 1/8" tan rubber 14" long with 800 turns and a 4-3/4" plastic propeller. The 1/32" model was only able to fly in calm air but did so with some nice duration-like flights. The final set up for that version was a 4-1/2" balsa propeller with 1.4 P/D and a single loop of 0.09 tan rubber wound to the 80% breakpoint. Even though the scale stabilizer was installed on both test models, the larger stabilizer was later utilized to allow the models to fly well at a lower airspeeds. The final CG position ended up at 0.6 inches back from the LE (27%) and with the thrust settings given on the plan turned in a right hand pattern with no rudder adjustments.

Covering the models with tissue was straight forward with the exception of the top of the fuselage. The rounded area over the cockpit needed two strips of tissue to avoid any wrinkles. White Esaki Japanese tissue was used for both models. A light coating of white lacquer paint was applied on the 1/16" version with water-slide decals printed on a inkjet printer. For the 1/32" version, the pattern provided was printed directly onto the tissue.

The front windshield was cut from the pattern given. It was first masked and painted to simulate the front divider and installed. Then the flat side windows were cut from the plan side view and applied.

I have to agree somewhat with a good friend that there really isn't anything too great about the actual plane. Only that it has been around for over 50 years giving a great number of people the freedom to enjoy the clear blue skies.

P = The problem logged by the pilot.
S = The solution logged by the mechanic.

P: Left inside main tire almost needs replacement.
S: Almost replaced left inside main tire.

P: Test flight OK, except auto-land very rough.
S: Auto-land not installed on this aircraft.

P: No. 2 prop seeping prop fluid.
S: No. 2 prop seepage normal. Nos. 1, 3 & 4 prop lack normal seepage.

P: Something loose in cockpit.
S: Something tightened in cockpit.

P: Dead bugs on windshield.
S: Live bugs on backorder.

P: Autopilot in "alt-hold" mode produces a 200-fpm descent.
S: Cannot reproduce problem on ground.

P: Evidence of leak on right main landing gear.
S: Evidence removed.

P: DME volume unbelievably loud.
S: DME volume set to more believable level.

P: Friction locks cause throttle levers to stick.
S: That's what they're there for!

P: Transponder inoperative.
S: Transponder always inoperative in OFF mode.

P: The T/C ball seemed stuck in the middle during my last turn.
S: Congrats! You've just made your first coordinated turn.

P: Suspected crack in windscreen.
S: Suspect you're right.

P: Number 3 engine missing.
S: Engine found on right wing after brief search.

P: Aircraft handles funny.
S: Aircraft warned to straighten up, fly right, and be serious.

P: Radar hums.
S: Reprogrammed radar with words.

P: Mouse in cockpit.
S: Cat installed.

P: Radio switches stick
S: Peanut butter no longer served to flight crew

P: Screaming sound in cabin at start-up
S: Company accountant deplaned

P: Funny smell in cockpit
S: Pilot told to change cologne

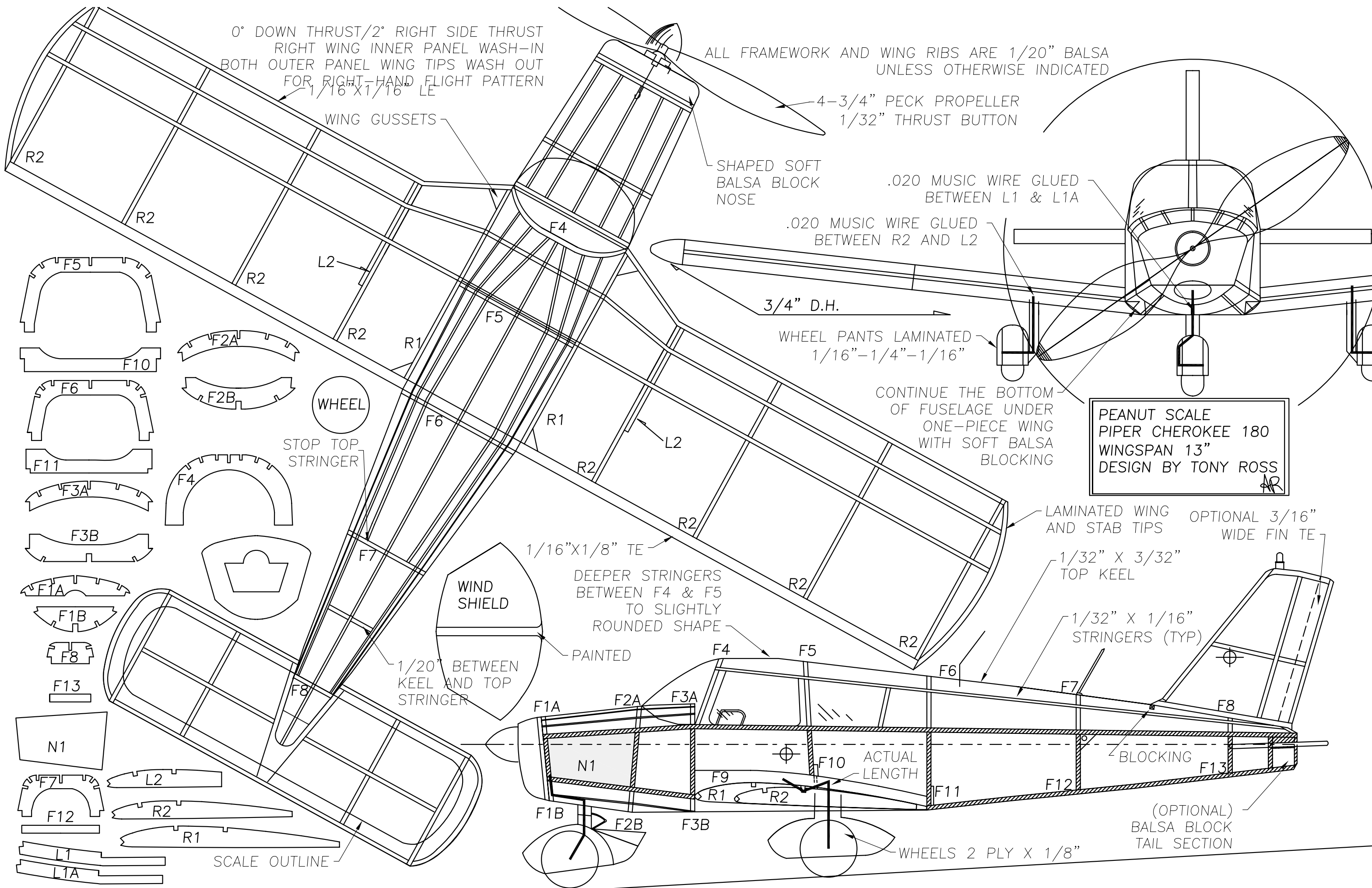
P: Brakes howl on application
S: Don't step on 'em so hard!

P: Radio sounds like a squealing pig
S: Removed pig from radio. BBQ behind hangar tomorrow

P: First class cabin floor has a squeak
S: Co-pilot told not to play with toddler toys in cabin anymore

P: Electrical governor is broke
S: Paid off governor's debt to Jimmy "The Fish" Galvano

P: A/C motor makes a loud squeal like my mother-in-law.
S: recommend divorce



0° DOWN THRUST/2° RIGHT SIDE THRUST
 RIGHT WING INNER PANEL WASH-IN
 BOTH OUTER PANEL WING TIPS WASH OUT
 FOR RIGHT-HAND FLIGHT PATTERN

ALL FRAMEWORK AND WING RIBS ARE 1/20" Balsa
 UNLESS OTHERWISE INDICATED

4-3/4" PECK PROPELLER
 1/32" THRUST BUTTON

SHAPED SOFT
 Balsa BLOCK
 NOSE

.020 MUSIC WIRE GLUED
 BETWEEN L1 & L1A

.020 MUSIC WIRE GLUED
 BETWEEN R2 AND L2

3/4" D.H.

WHEEL PANTS LAMINATED
 1/16"-1/4"-1/16"

CONTINUE THE BOTTOM OF
 FUSELAGE UNDER
 ONE-PIECE WING
 WITH SOFT Balsa
 BLOCKING

PEANUT SCALE
 PIPER CHEROKEE 180
 WINGSPAN 13"
 DESIGN BY TONY ROSS

LAMINATED WING AND STAB TIPS
 OPTIONAL 3/16" WIDE FIN TE

1/32" x 3/32"
 TOP KEEL

1/32" x 1/16"
 STRINGERS (TYP)

WIND SHIELD
 PAINTED
 1/20" BETWEEN
 KEEL AND TOP
 STRINGER

1/16"x1/8" TE
 DEEPER STRINGERS
 BETWEEN F4 & F5
 TO SLIGHTLY
 ROUNDED SHAPE

ACTUAL
 LENGTH

BLOCKING

(OPTIONAL)
 Balsa BLOCK
 TAIL SECTION

WHEELS 2 PLY x 1/8"

SCALE OUTLINE

Laminating Propeller

Posted on Smallflyingarts.com

Mar 13th, 2011

by Rgroener – Switzerland

I was asked how I am doing my laminated propellers, so I decided to open this thread. I am not very experienced nor is this process the "right" one. It's just the way I do it. So feel free to comment, criticize or add your ideas to it.

First I sanded a balsa block on which I will laminate my blades. This block is covered with clear adhesive tape to avoid that the laminated blades stick to the block.

Then I cut out four pieces of the desired blade shape. Mostly I use 1/32" balsa for it.

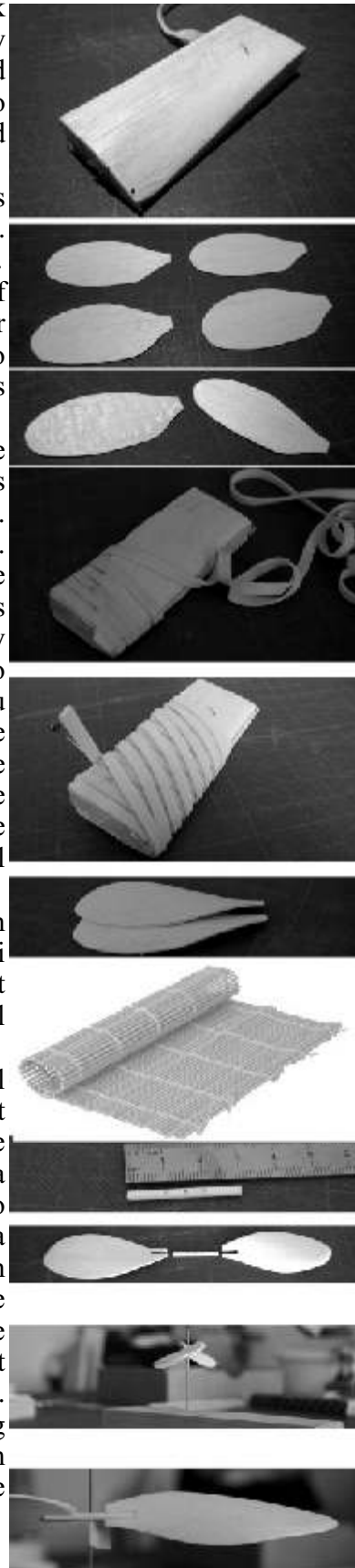
Next step is glueing two of the blades together. Smear the glue with the fingers so that the whole blade area is covered.

Normally I dont soak the blades in water. The blades are bound to the carved block. use an old rubber for that. This way, I let it dry some hours. The duration depends on the used glue. With my favorite white glue, I have to wait only 2-3 hours. If you soak the blades, you will have to wait over night. The same process is done with the second blade. So in one afternoon, two identical blades are produced.

Next is the dowel between the blades. I bought a sushi mat which is made of straight baboo sticks. This stock will last for years

With a drill press, I drill the center hole. Its important to get a really snug fit to the prop shaft. Normally I use a scrap piece of a prop shaft to get the right size. Now I cut a slot for this center dowel in the laminated blades. To glue the blades to the dowel, I use two component glue. I adjust the plades normally by eye. Better would be to use a jig you look from the side, both blade tips should have the same pitch.

front view...



If the glue is dry enough, I dope the propeller with sanding sealer and sand the blades smooth. Since the bamboo dowel is thicker than the blades, I sand or cut it down in the blade area.

Next step is covering of the blades. I cover both sides and dope the covered prop two to three times.

If you haven't flattened down the dowel in the blade area, it's harder to avoid any wrinkles in the root area of the prop during the covering process.

If all the blades are covered and doped, its time to drill an additional hole in to the center dowel. This time the hole is not vertical.

I inserted a shaft in this newly drilled hole to show the direction of it.

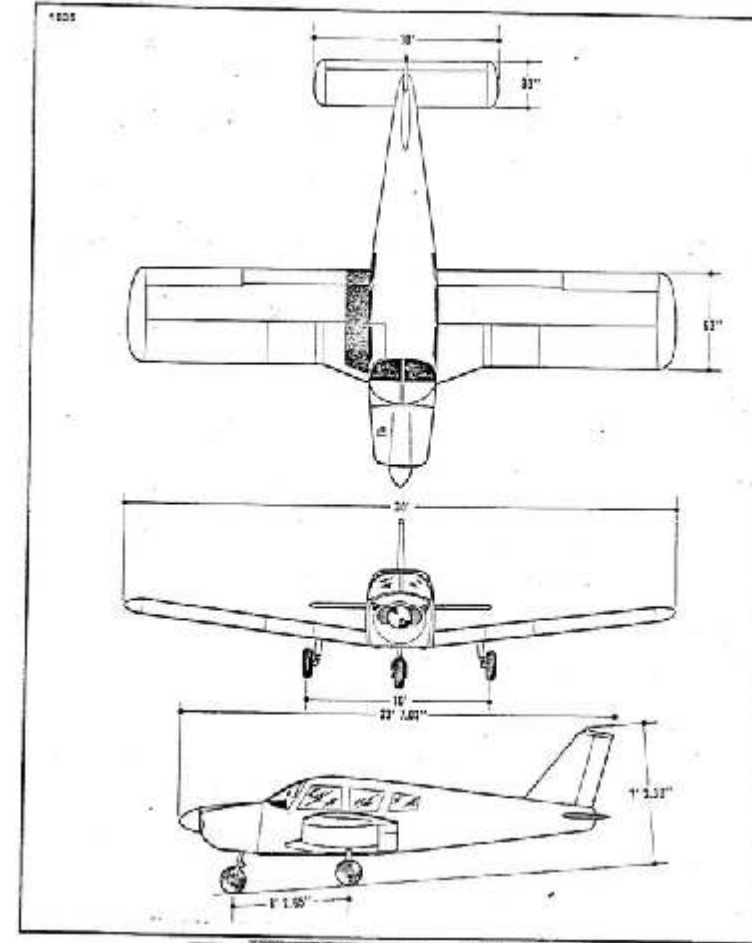
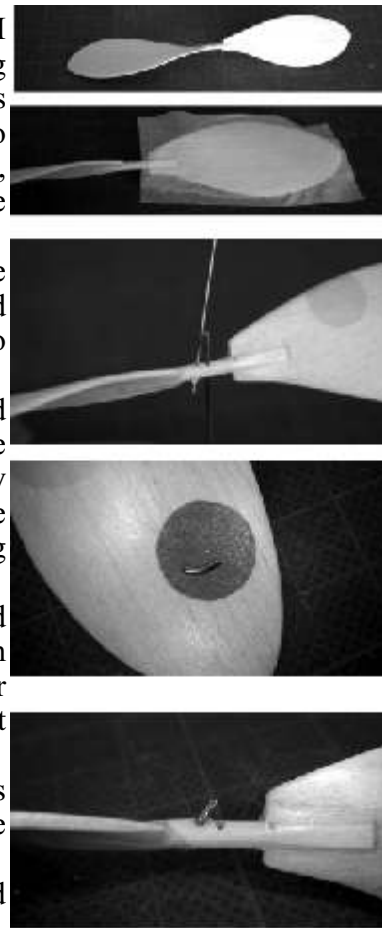
From a scrap shaft I bend and cut a small piece...

This piece is also glued with a two component glue in to the dowel. It will act as a free wheeling ramp.

And that is all. If you need some extra strength, you can cover your blades with a glass mat.

All the props on this last picture are made from the same basic block. Shape and size are variable to your needs.....

Best regards Roman



A Skydiving lesson

During class my first skydiving instructor would always take the time to answer any of our stupid first-timer questions. One guy asked, "If our chute doesn't open, and the reserve doesn't open, how long do we have until we hit the ground?" Our jump master looked at him and in perfect deadpan and answered, "The rest of your life."

The strength of the turbulence is directly proportional to the temperature of your coffee. — Gunter's Second Law of Air Travel

If helicopters are so safe, how come there are no vintage/classic helicopter fly-ins? — Anon

