

MAX FAX

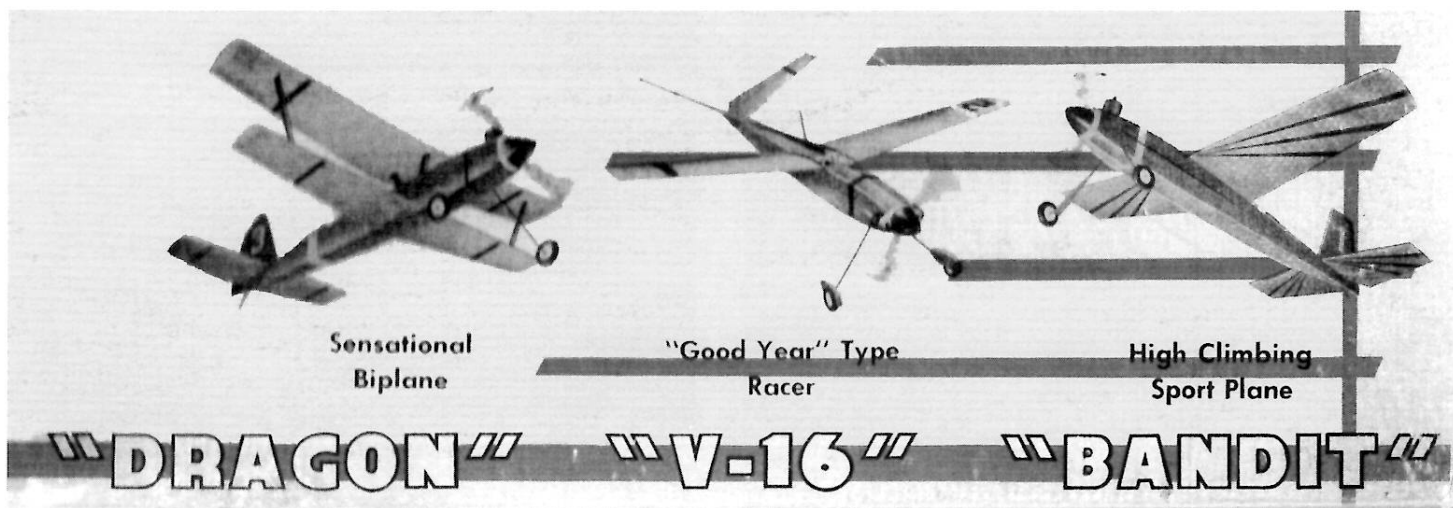


Journal of the D. C. Maxcuters

... home of the dreaded POTOMAC PURSUIT SQUADRON of the Flying Aces

Editor: Stew Meyers

MAY - JUNE 2010



Berkley's TRIPLE THREAT

COMING ATTRACTIONS

Indoor flying at Bauer is over for the season.

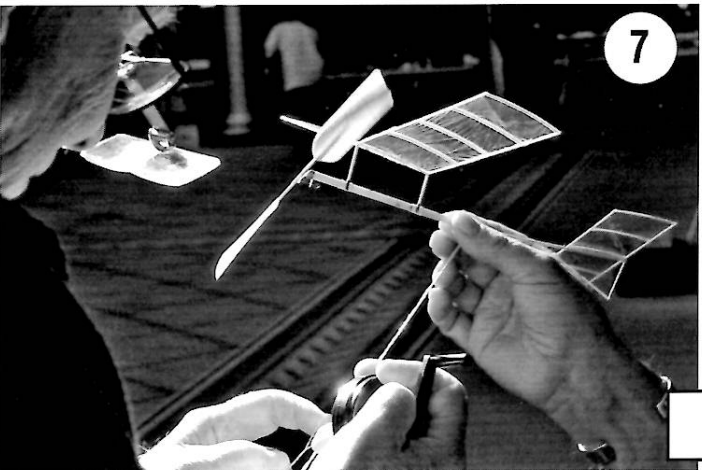
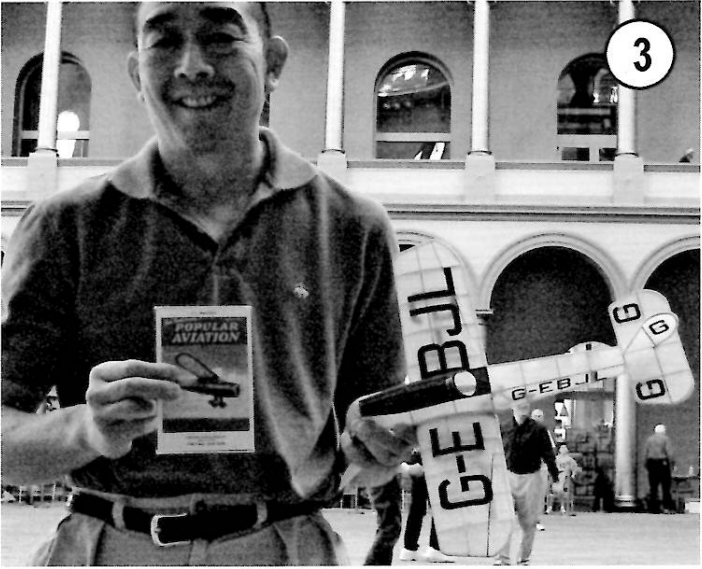
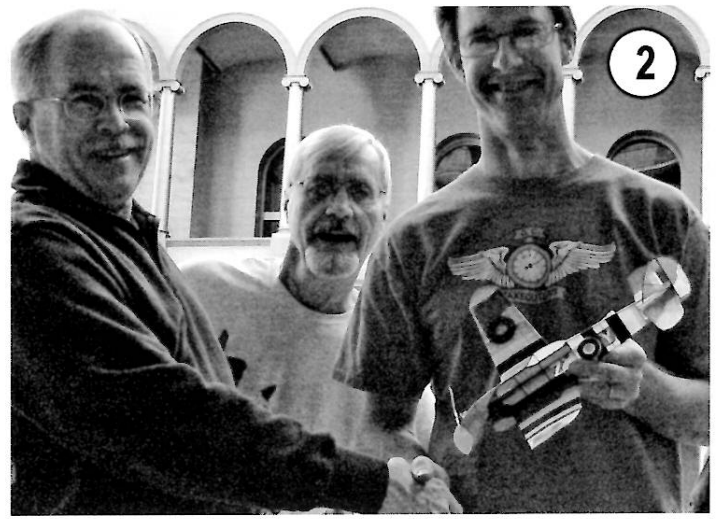
We still gather in the field behind for limited area flying on Thursday evenings at 7:30 pm.

JULY 14,15,16, & 17 2010 TUESDAY THRU FRIDAY
FAC-NATS GENESEO, NY The Big One!

SEPT 9 & 10 2010 THURSDAY AND FRIDAY
FLYING ACES OUTDOOR CHAMPS MUNCIE, IN
CD RALPH KEUNZ 989-506-0273 FRED GREGG 586-834-6919

OCT 9,10,11 2010 SATURDAY, SUNDAY AND MONDAY
GATHERING OF TURKEYS PENSACOLA, FA
CD GEORGE WHITE 850-473-0866

OCT 23 & 24 2010 SATURDAY & SUNDAY
FLYING ACES BARRON FIELD AIR RACES WAWAYANDA, NY
CD TOM HALLMAN 610-395-5656 JOHN HOUCK 610-488-6235



Max-Fax May-June 2010

Berkley's Triple Threat Issue

Stew Meyers Editor



Dave Mitchell

Some time in the 50's or 60's Berkely Models came out with their "Triple Threat" of "Mighty Midget" models. Consisting of a Sensational Biplane, a "Good Year" Type Racer and a High Climbing Sport plane. These were the 14" Dragon, the 13.5" V-16, and the 15" Bandit, respectively. They featured dummy gas motors and were cute it not cutesy.

Change in Club Meeting Location

By now you should be aware that we have lost the use of College Park Airport for our evening meetings. After some thirty years of holding Maxecuter club meetings at the College Park Airport, the gig appears to be up. Budget woes and damage to the airstrip's night lights after the winter's snows have conspired to close the airport to night operations. No night ops, no nighttime club meetings. So until further notice, we will hold our meetings at Riderwood.

Bruce Clark has kindly arranged for us to meet at the Classroom in the Village Square Clubhouse at Riderwood. We now have a confirmed continuing reservation of the Classroom in the Village Square Clubhouse at Riderwood for the first Tuesday of each month, at 8:00 pm. There's no problem with early arrival. We should always have a computer and projection system for our use, as well as internet connectivity.

Where is Riderwood you ask?

If you have internet access go to www.maxecuters.org and click on Club Meetings. If not turn to the next page. While we are on the subject Dave Mitchell and I have revised the Web site. Check it out.

Elsewhere in this issue you will find a write up on the Kudzu affaire, a Solo Aircraft catalog, and results for the March 7th NBM and Kudzu.

May 15th-16th. Day breaks hot and close in Raeford NC, home of the annual Maxecuters/ CAFFA Kudzu spring classic. There is change in the wind; a new field, a new format. Gone is the beloved Goldsboro ROW half-day lake event, victim of Dave and Marie Rees' relocation to Wake Forest. In its place, the brass has decided to spread the contest over two full days, all at the new field that Bill Sheppard has located for us.

About that field: located just 3-1/4 miles west of the old site, the new site comprises two contiguous sod circles spread roughly east-west over gently rolling terrain, plus a patchwork of open fields running northwards from the westernmost sod circle. Dirt roads surround the fields affording excellent access. The best circumstances occur when the winds are out of the east or west, allowing an unobstructed flight path approximately 9/10 mile long by 4/10 mile wide. (This compares VERY favorably with the old site, where the longest possible flightline before trees--approximately 2/3 mile-- was severely complicated, either by having to traverse a major road and a electrified barbed-wire fence, or by having to run through a subdivision.) On days when the winds are from the north or south, the longest flightline is approximately 2/3 mile long. It's a working sod farm; on this weekend, one of the circles had been mostly peeled, revealing a soft, fine, sandy substrate. The other circle was like a golf course. The sand may not be ideal, but it sure beats hard packed soil.

There was much discussion of where to set the flight line. On Saturday, we opted to position ourselves at the far southwestern corner of the area, trusting in the forecast of winds out of the SW. Hah! You know how that goes. No sooner did we plant our stakes than things begin to shift around, but no matter. The Madness was upon us.....Sunday we took the neutral position, mid-field at the join of the two sod circles. This proved a more flexible arrangement for the mild but variable conditions we had on hand.

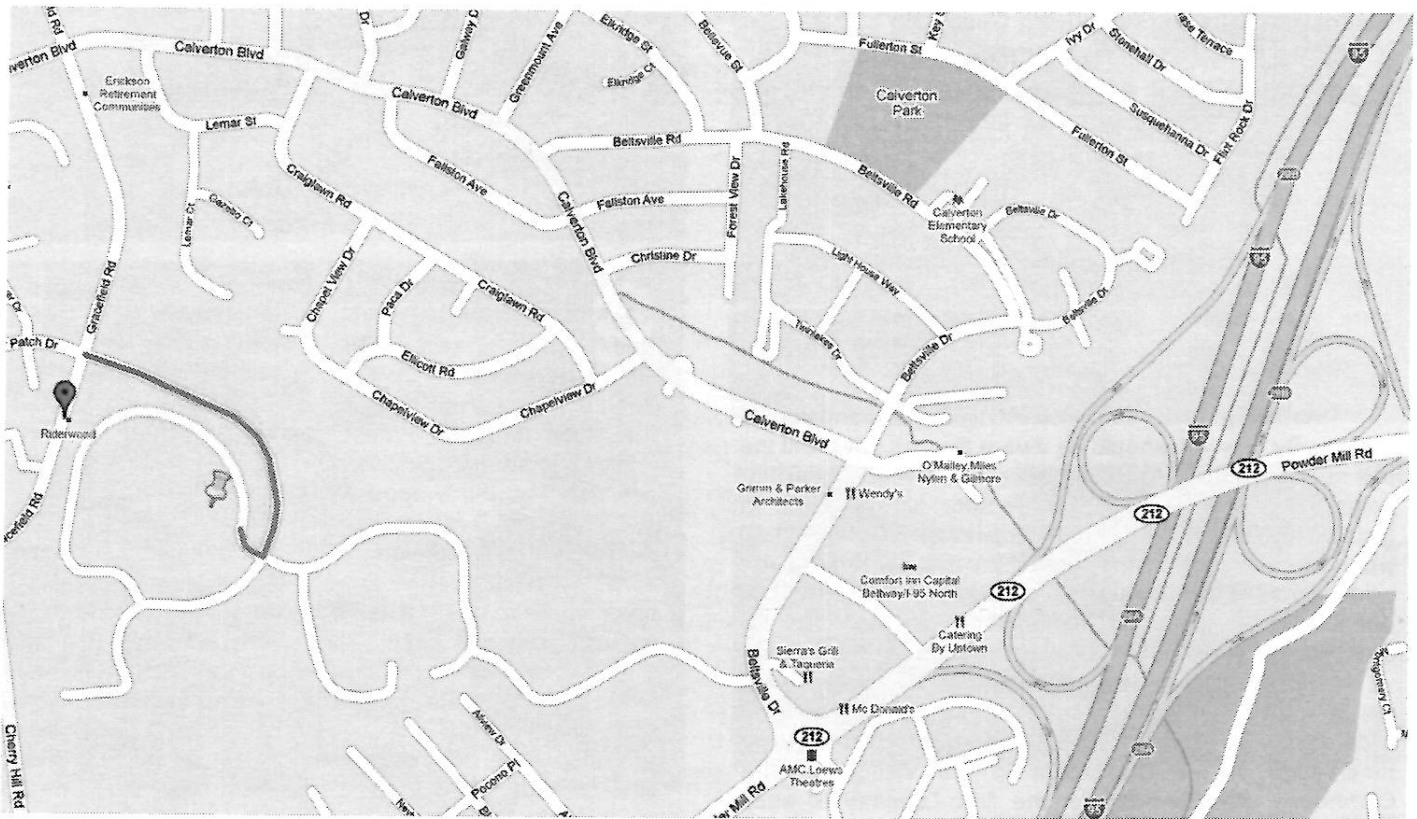
The light contest load spread over two days made for a pleasant, leisurely pace. Saturday's WWI mass-launch didn't get called until 11:30, so as to make time for Dave and Marie to make their way in from Wake Forest. So much for the Dawn Patrol! They were traveling with Frank Rowsome, and it was a great thing to see them out at the field. Attendance was down a bit compared to years past--17 flyers were registered--- but we are betting that the attractiveness of the new site and the two-day event format will draw more flyers next year. Much thanks to Dan Driscoll and John Diebolt for running the meet; Stefan Prosky and Glen Simpers for judging the FAC/Peanut Scale entries; and of course Bill Sheppard for securing the new field.

Page 2 Photo Captions

Photos from Pete Carpenter and Tom Schmitt at the NBM on March 7.

1. Doug Griggs, Stew Meyers and Dan Driscoll assisting the youngsters building Delta Darts.
2. Dan congratulating Dave Mitchell for his WWII NoCal win; Ray Rakow heckling.
3. Who else but Steve Fugikawa can win Dime Scale event; here with Brownie?
4. Our Pres. Stefan Prosky with his 'Carte Postale'..
5. Two 'Pipers' with their builders, Wally Farrell and Dave Mitchell.
6. We say auf Wiedersehen to Ondrej (Andy) Mitas leaving for the Netherlands.
7. Serious competitor (Jim Coffin) winding his 'A-6' for another flight.

Rider wood-- how to get there



From I-95 South or North:

- Take Exit 29B to Rt. 212 West (Powder Mill Road).
- ** Stay in the right lane and turn right at the first light onto Beltsville Drive.
- Turn left at the second light onto Calverton Boulevard.
- Go through the Calverton housing development and turn left onto Gracefield Road.

From BW Parkway South or North:

- Take Rt. 212 (Powder Mill Road) west.
- Cross Rt. 1, cross I-95, follow directions from ** above.

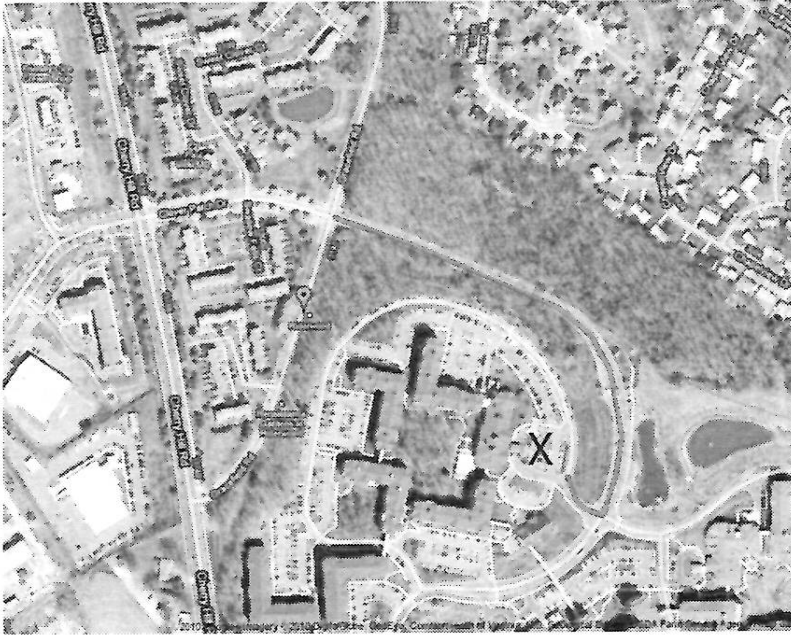
From Rt. 29 South or North, or Randolph Road:

- Take Cherry Hill Road (AKA East Randolph Road) east to Calverton Boulevard and turn left.
- Turn right onto Gracefield Road.

To Enter Riderwood:

- On Gracefield Road, go to the 4-way STOP sign and turn left into the main entrance of Riderwood Village.
- Stop at the guard house and tell the guard you are coming to the Maxcutters Club Meeting at the **VILLAGE SQUARE** (the building is on the hill to your right)
- Take the first right turn after you pass through the gate.
- Park in Visitor Parking if you can, or anywhere else that does not have a green and white reserved sign on the curb.
- Come in the main lobby entrance and sign in at the desk. Ask the desk clerk for directions to the Classroom upstairs.

On the map above the "Tack" marks the spot. GPS will only get you to the Google mark.



Here is a close up satellite view of the end game. **X** marks the spot at 3110 Gracefield Road. Again since inside Riderwood you really aren't on Gracefield any more, the Google mark is off.

Resident reference:
BRUCE CLARK
 3148 Gracefield Road, Apt CL-220
 Silver Spring, Maryland 20904
 301 - 572-6027

(But don't confuse the guard by mentioning Bruce unless asked.)
 The phone number for Village Square is 301-572-8399 X2066.

Jack Fike, who started Scale Flight Models to produce dimers and later sold it to Penn Valley Hobbies, has now started SOLO MODEL AIRCRAFT. He currently is producing the Old Dog Series shown below. You can reach him at (812) -339-8274 or at the address below. (He doesn't have a computer.) SOLO MODEL AIRCRAFT 1219 S. WASHINGTON ST. BLOOMINGTON, IN 47401 Yes, #3 the Megow SE-5, is the one we had in the July-August 2009 MaxFax!

SOLO MODEL AIRCRAFT'S OLD DOG SERIES		W/S	\$
1.	Megow- Waco Cabin Biplane	12" 1934	17.00
2.	Megow- Fleet Trainer Bi	12" 1936	17.00
3.	Megow- SE-5 Bi	12" 1933	17.00
4.	Megow- Boeing P-12E	12" 1934	17.00
5.	Megow- Sopwith Camel	12" 1934	17.00
6.	Megow- Taylor "Cub" E-2	15" 1934	25.00
7.	Megow- Nieuport 17C-1	18" 1938	25.00
8.	Megow- Bellanca "Skyrocket"	18" 1933	25.00
9.	Megow- Vultee V-1A	12" 1934	17.00
10.	A.M.C. Curtiss "Falcon"	16" 1936	18.00
11.	Comet Wiley Post Model-A	18" 1938	25.00
12.	Comet Phantom Flash R.Q.G.	16" 1934	15.00
13.	Comet "Firefly" R.O.G.	24" 1942	25.00
14.	Peerless Junior Endurance	18" 1935	25.00
15.	Peerless "Clipper"	16" 1934	18.00
16.	Lud Kading "Baby Biwinger"	13" 1948	35.00
17.	BURD Fokker D-7	16" 1935	17.00
18.	Ace Whitman "Swallow" Endurance	28" 1938	30.00
19.	Peerless Nieuport 17	12" 1937	17.00
20.	ST. LOUIS Model Co. Waco "C" Biplane	16" 1936	20.00
21.	STURDI BUILT Curtiss "Robin"	36" 1938	39.00
22.	Scientific French MUREAUX C-1	20" 1934	25.00
23.	Guillow "HORNET"	24" 1939	25.00
24.	TESTORS "BABY ZEPHER"	18" 1951	40.00
25.	Cleveland "Flemish Defiance" Stick	32" 1940	30.00
26.	Cleveland "Norseman" Cabin	32" 1940	30.00
27.	Cleveland "Austrian Chivalry" Glider	36" 1940	30.00

National Building Museum – March 7, 2010

We had 19 registered flyers for freeflight, and an undetermined number for RC.

There were eight entrants in the new “Parlor Fly” event, and this will become a permanent event. A young lady, Lydia Schlitzkus, was second, and we hope to see more of her.

A hot Henry Guth was Grand Champ, finally edging out Steve Fujikawa.

14g. Bostonian ML (9 entrants)		
1	John Appling	Pacific Ace
2	Henry Guth	?
3	Steve Fujikawa	T-Party

P-Nut Scale ML (11 entrants)		
1	Henry Guth	Lacey
2	Steve Fujikawa	Lacey
3	Stew Meyers	Camel

Phantom Flash ML (8 entrants)		
1	Henry Guth	-
2	Mike Escalante	-
3	Dave Mitchell	-

WW II No-Cal ML (10 entrants)		
1	Dave Mitchell	Typhoon
2	Steve Fujikawa	P-39
3	John Appling	FW-190D

Dime Scale ML (7 entrants)		
1	Steve Fujikawa	Brownie
2	Henry Guth	Farman
3	Stefan Prosky	Farman Postal

Helicopter ML (4 entrants)		
1	Dan Driscoll	Seasprite
2	Ross Summers	Unicopter
3	Mike Escalante	Brantley B-2

Pennyplane (2 entrants)		
1	Paul Spreiregen	3:57
2	Henry Guth	3:48
3		

Ready-to-Fly (5 entrants)		
1	Wally Farrell	3:07
2	Eric Schlitzkus	3:00
3	Sharon Appling	2:55

A-6 (4 entrants)		
1	Henry Guth	4:35
2	Andy Mitas	4:25
3	Walt Farrell	4:01

FAC No-Cal Profile Scale (3 entrants)		
1	Dave Mitchell	Typhoon
2	Wally Farrell	P-39
3	Wally Farrell	Macchi

Parlor Fly (8 entrants)		
1	Stew Meyers	-
2	Lydia Schlitzkus	-
3	Eric Schlitzkus	-

Grand Champ: Henry Guth

Kudzu Contest Results – May 15-16, 2010

We had 17 registered flyers for our first two day Kudzu contest. The new field was considerably larger than our old field, and the weather was acceptable.

The 15% motor rule was used for WWII and Racers.

Mass Launch Events:

WWI Biplanes (7 entrants)

- | | |
|------------------|----------|
| 1. Walt Farrell | Walfisch |
| 2. Brad Glass | D-VII |
| 3. Frank Rowsome | D-VII |

Navy Scale (7 entrants)

- | | |
|------------------|-----------|
| 1. Josh Finn | PC-7 |
| 2. Walt Farrell | Skyraider |
| 3. Claude Powell | Skyraider |

Modern Civil (8 entrants)

- | | |
|-----------------|---------------|
| 1. Walt Farrell | Citabria |
| 2. John Houck | Citabria |
| 3. Ollie Benton | Piper Clipper |

WWII (7 entrants)

- | | |
|------------------|------------|
| 1. Walt Farrell | King Cobra |
| 2. Dave Rees | Fulmar |
| 3. Dave Mitchell | Avenger |

Combined Racers (6 entrants)

- | | |
|------------------|--------------|
| 1. Dave Mitchell | Bonzo |
| 2. Ollie Benton | Chambermaid |
| 3. Walt Farrell | Mr. Smoothie |

Golden Age Civil (10 entrants)

- | | |
|------------------|------------|
| 1. Mark Houck | Lincoln AP |
| 2. Claude Powell | Howard DGA |
| 3. Dave Mitchell | Orion |

Grand Champion
Walt Farrell

Timed/Judged Events

Dime Scale (8 entrants)

- | | |
|-----------------|--------------|
| 1. Walt Farrell | Staggerwing |
| 2. Don Reed | Fairchild 24 |
| 3. Gary Morton | PT-19 |

Embryo (6 entrants)

- | | |
|-----------------|----------------|
| 1. Walt Collins | Bean Box |
| 2. Mark Houck | Prairie Bird M |
| 3. Gary Morton | Prairie Bird |

FAC Jet Catapult (11 entrants)

- | | |
|-----------------|-----------|
| 1. John Diebolt | Arado 234 |
| 2. Walt Farrell | Canberra |
| 3. Glen Simpers | Banshee |

Low Wing Military Trainer (3 entrants)

- | | |
|------------------|--------------|
| 1. Walt Farrell | Magister |
| 2. Claude Powell | Samolot UT-2 |
| 3. John Houck | CW22 |

No-Cal Scale (9 entrants)

- | | |
|------------------|---------|
| 1. John Houck | Meteor |
| 2. Dave Mitchell | Typhoon |
| 3. Walt Farrell | Maule |

2 Bit+1 OT Rubber (3 entrants)

- | | |
|------------------|-------------------|
| 1. Claude Powell | Bantam |
| 2. Dan Driscoll | EB Jr. Commercial |
| 3. Mark Houck | Skokie |

FAC/P-nut Scale Combined (9 entrants)

- | | |
|------------------|--------------|
| 1. Walt Farrell | Vultee V-11 |
| 2. Dave Mitchell | P-80 |
| 3. Josh Finn | Spruce Goose |

A Dime Scale Clarification

I'm afraid I need to say something more about **Dime Scale**. My comments about Rich Weber's neat Neo Dimer Staggerwing in the last issue lead some individuals to say he was trying to bend the rules. He was so offended by this that he abandoned several new dimers he was working on.

Boy that sure wasn't my intention! I was just trying to point out the problems with the current FAC rules. For what was supposed to be a simple concept, Dime Scale has gotten very complicated. The original idea was to have an event to fly the simple "scale" kits that were flown in the thirties and sold for a dime. Jack Fike started re-kitting some of these under the Scale Flight Co. Label. Some of the original designs were well, pretty awful. People started tweaking these. Jack redid the Megow Spad to be a bit more scale, but the plans he put out don't indicate this. There have been a whole series of "Miller's Moderately Modified Miniature Megow Models" that make them a bit

more scale. Are these "original" dimers? Well- no, but they are often treated as if they were.

Years ago, the FAC wrote some dime scale rules which prohibited keel-former construction, although some actual models that sold for a dime featured this. While the FAC was at it, laminated outlines and other modern practices were proscribed. Some structural improvements were allowed however. Then it was noticed some models won more than others and bonus points were added to increase diversity of the models. Finally wing spans were limited to 16 inches despite the fact that quite a few dimers were larger. Again these larger models tended to have a lighter wing loading and some flew better than the smaller ones.

The concept of a simple scale like model that is recognizable as representation of the prototype is appealing. This is the so called "Spirit of dime scale". Dave Stott manages to channel it very well when he designs a new dimer. So does Rich Weber.

The kicker comes in rule G: *Subjects must NOT have been already kitted by those long ago companies such as Comet, Peerless, Megow, etc.*

Rich did not find the existing dimer designs before he did his Pseudo Dimer. An honest mistake. Some builders however, liking the design, tried saying it was a different mark in order to enter it in contests. Rich did not do this. Please contact Rich and persuade him to publish his new dimers!

I have reread the Pseudo Dimer rules and now see aircraft manufactured prior to 1950 are eligible subjects.

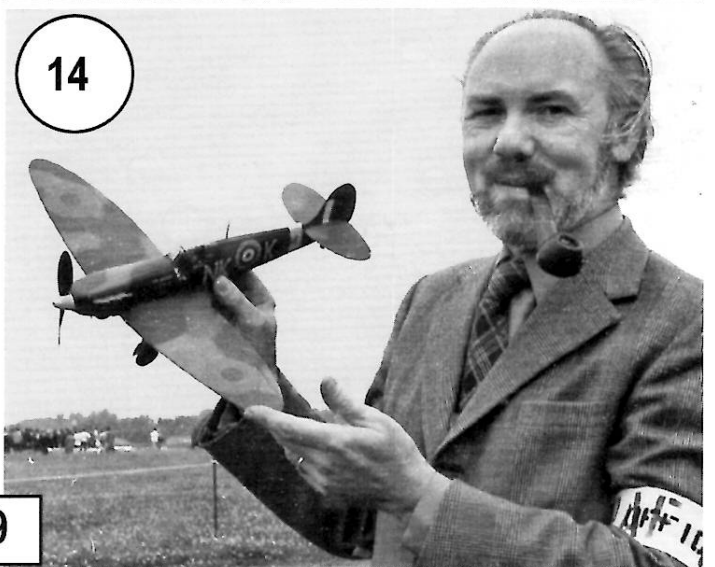
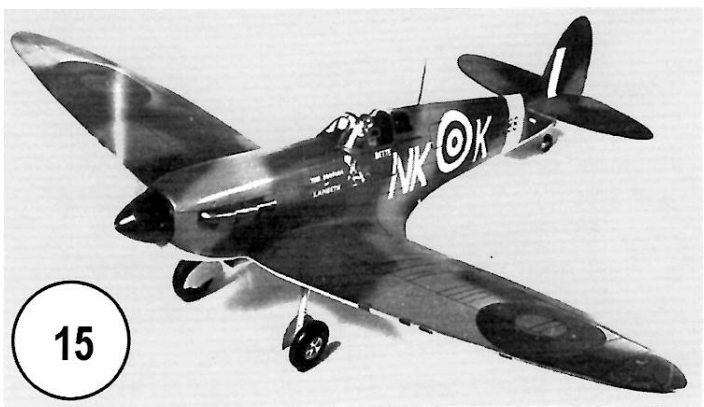
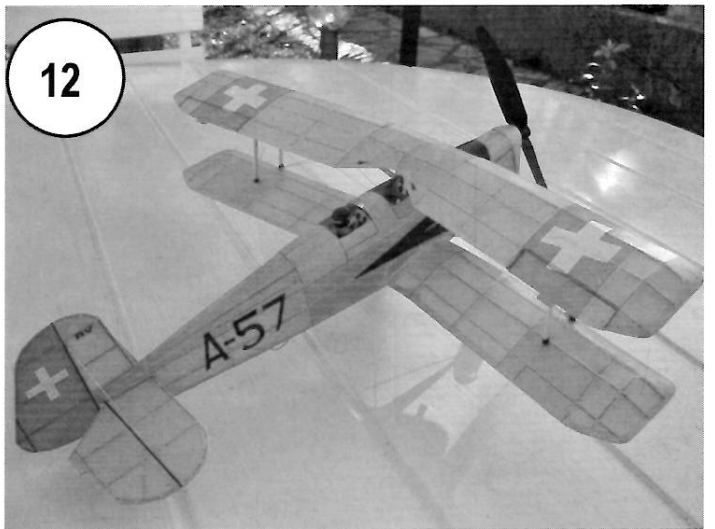
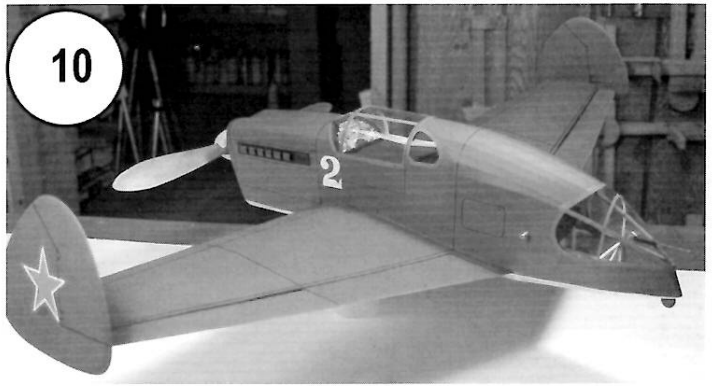
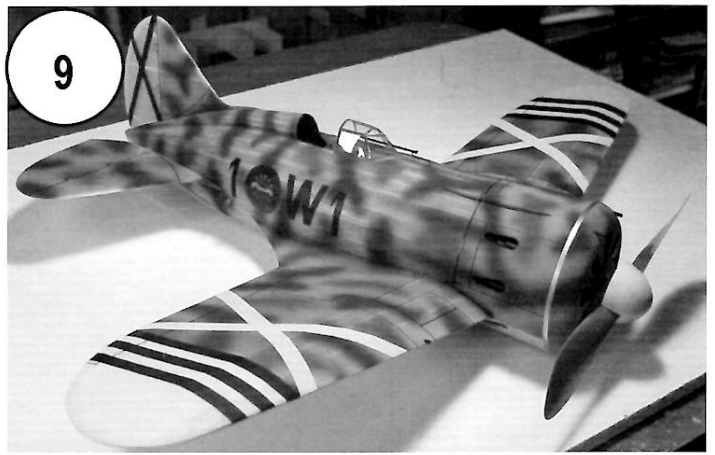
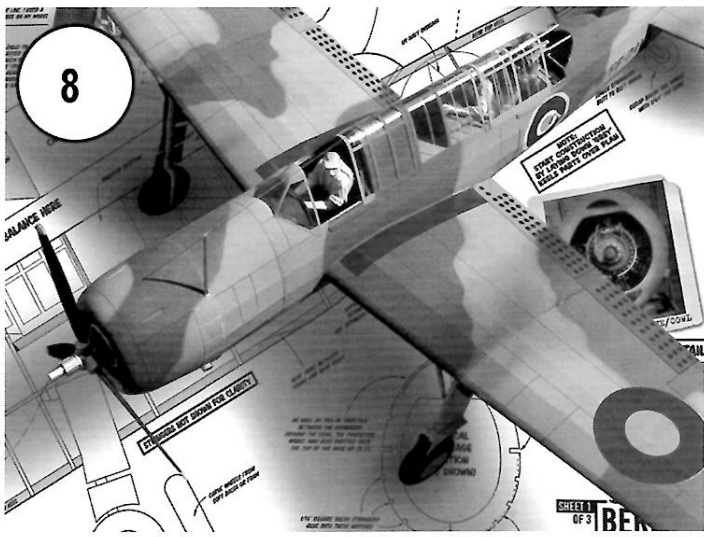
Photos Page 19

A Change of Pace from the NBM -- model photos from our readers.

8. Richard Crossley latest and excellent plan for a Brewster SB2A-4 Buccaneer (Bermuda) plan is available at www.atomicworkshop.co.uk
9. One of Chris Starleaf's winter projects a Polikarpov I-16, 28 inch span, 61gms..
10. Another from Chris, a Moskalev Sigma SAM-7, 30 ins span, 73gms..
11. Tom Hallman's latest, a DVII from the ol' 20" Scientific version that GAR kits.
12. From France, Roger Alme's electric Stampe Peanut
- 13.. Allan Schanzle's latest 'diorama' with a 12 inch Megow Curtiss Helldiver'
- 14.. Bill Hannan sent this photo of the late Doug Mchard and his Spitfire in response to the article on trimming by Doug in the last MAXFAX.
15. And here is a closeup of the 'Spit'; This model was featured in the book "Flying Scale Models of WWII".
16. Lindsey Smith sent this photo of his latest build a Taupin and also sent photos of Doug in response to the article

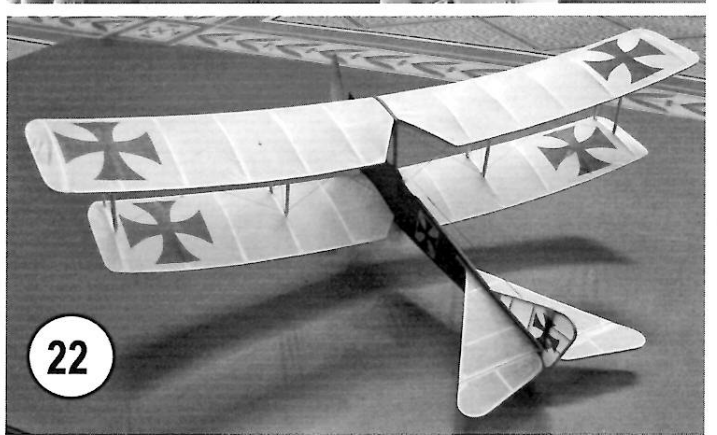
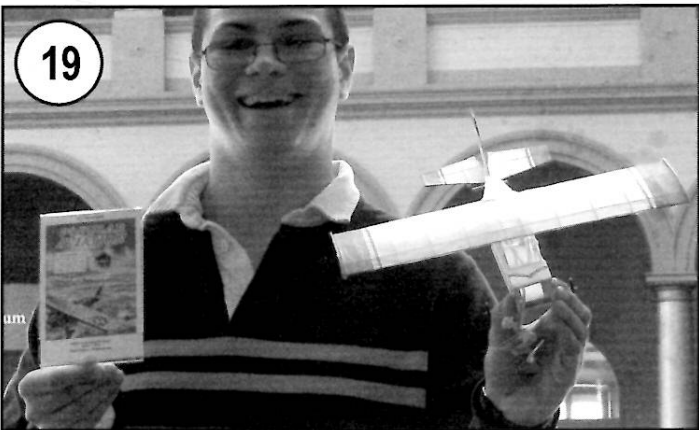
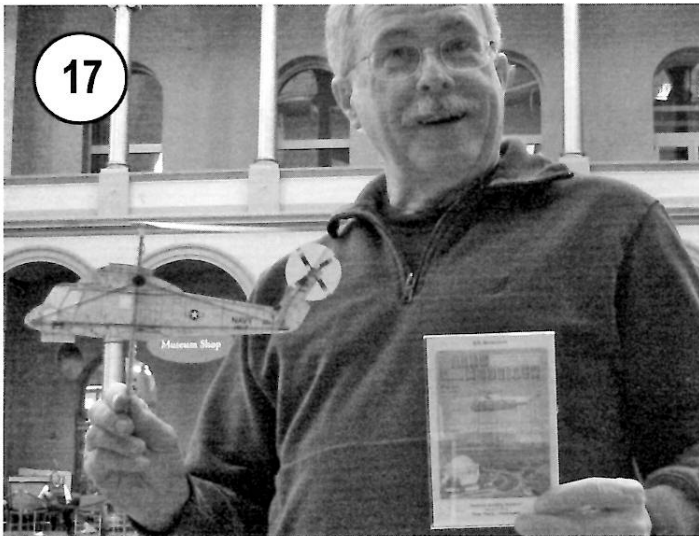
Page 20 Back to NBM photos.

17. Dan Driscoll, once again the winner of the Helicopter event.
18. And John Appling with his trophy and winning Bostonian; (trophies were crafted by our CD, Dan).
19. Peanut Winner and Grand Champion Winner, Henry Guth and his Lacey.
20. John Worth and his R/C model of his old Freeflight Model of many years ago. John is the executive-editor of RC Micro World. Go to 'www.cloud9rc.com' to learn more about the publication; a must read for small indoor R/C fans.
21. Stew Meyers assisting a young lady with flying her Delta Dart. Stew will also be assisting John Worth in producing future editions of RC Micro World.
22. Stew brought along his lightweight Electric R/C Albatross to fly at NBM.



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MaxFax May-June 2010



CLUB OFFICERS -President: Stefan Prosky 414 11th Street SE., Washington, DC 20003
 Secretary: David Mitchell 230 Walnut St. NW., Washington, DC 20012
 Treasurer: Stew Meyers, 8304 Whitman Dr., Bethesda, MD 20817 ---- Note change - Stew has replaced Norm!
 Editor: Stew Meyers, 8304 Whitman Dr., Bethesda, MD 20817

MEETINGS - The D.C. MAXECUTERS hold meetings at 8:00 pm on the first Tuesday of every month at the College Park Airport, the oldest continuously operating airport in the world.

MEMBERSHIP - Dues for membership in the D.C. MAXECUTERS are \$20 per year for residents of the USA, Canada, and Mexico, and \$25 for all other countries.

Your mailing label indicates the year and month of the last issue of your current membership. A red "X" in the box below is a reminder that your dues are due. Send a check, payable to the "D.C. MAXECUTERS", to the treasurer, Stew Meyers.

PUBLISHING DATES - Six issues of MaxFax are sent each year as close to the nominal dates as possible, but since this is a volunteer publication nothing is guaranteed except that six issues will be sent to all members.

CONTACTS - Material for the newsletter and membership questions should be addressed

to Stew Meyers phone 301-365-1749. Email gets immediate attention. stew.meyers@VERIZON.net

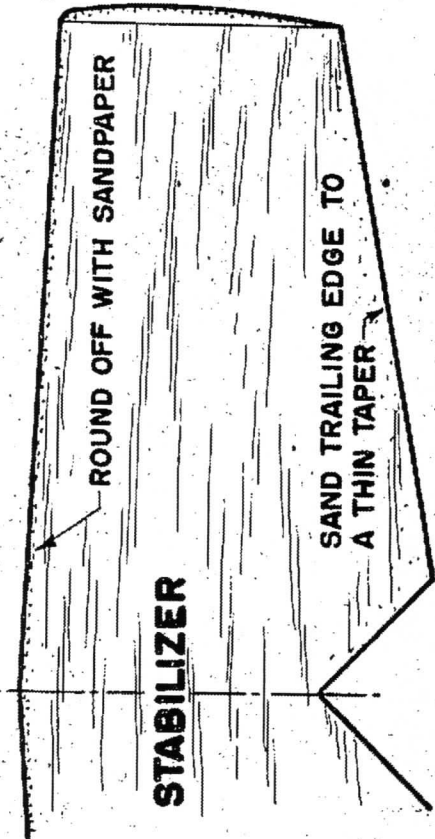
Maxecuter web site: <http://www.dcmmaxecuter.org>

Your DUES are due

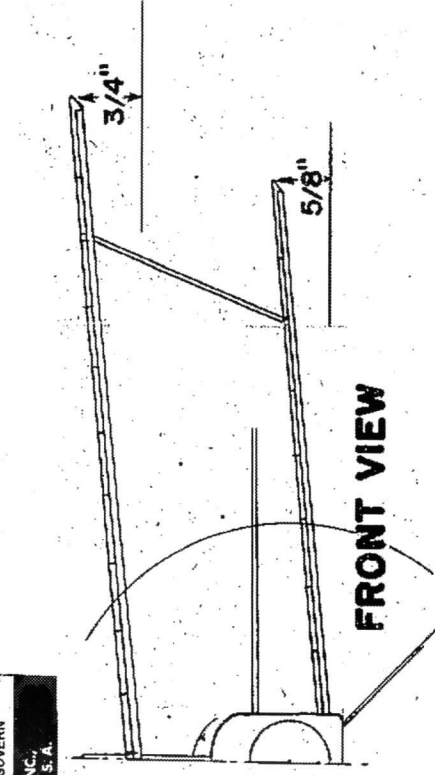


WINGSPAN - 14"
 ALTITUDE 150 FT.
 POWER - 2 TO 4
 STRANDS OF
 1/8" RUBBER

THE "DRAGON"
 KIT ENGINEERED BY BILL EFFINGER
 DESIGNED & DRAWN BY DON MCGOVERN
BERKELEY MODELS INC.
 WEST HEMPSTEAD, NEW YORK, U.S.A.

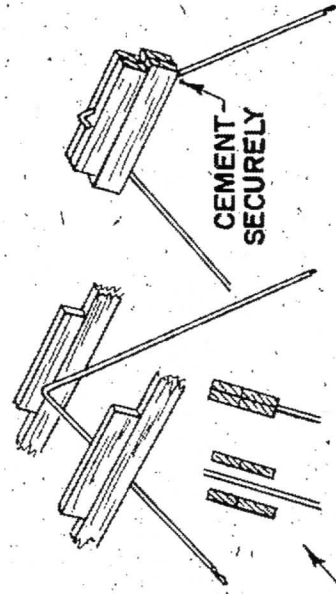


DO NOT RUIN THE APPEARANCE OF YOUR MODEL WITH A RECTANGULAR TRAILING EDGE. TAPER AS SHOWN.

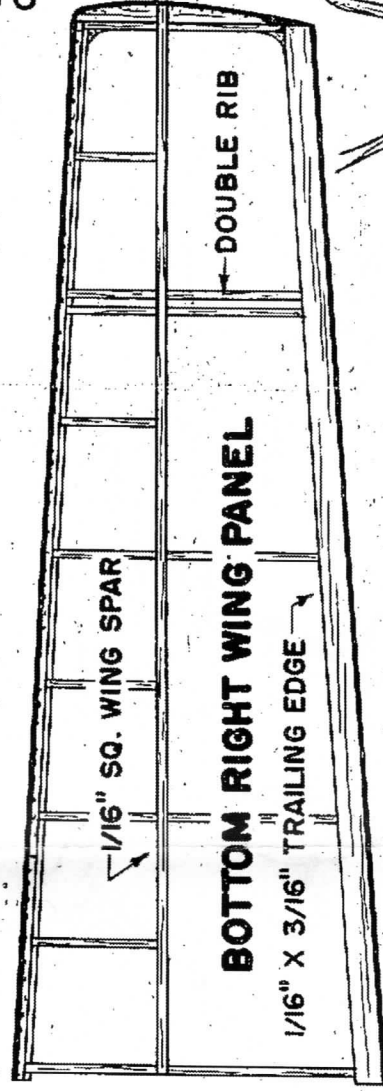
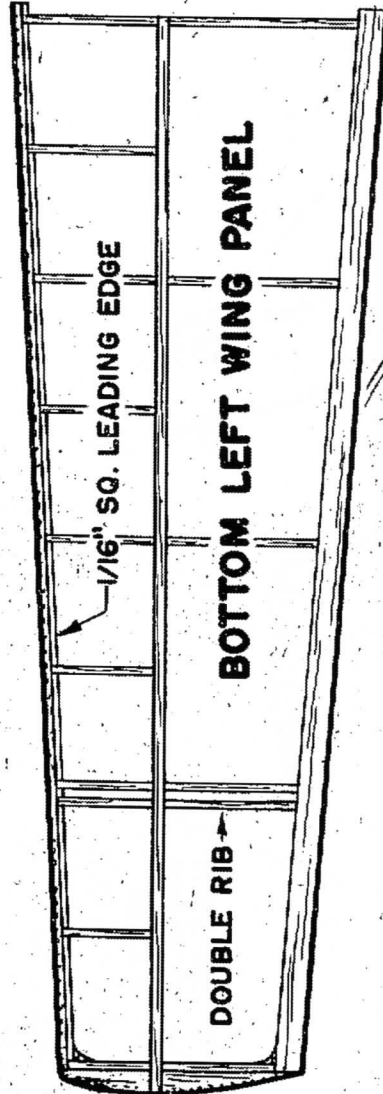
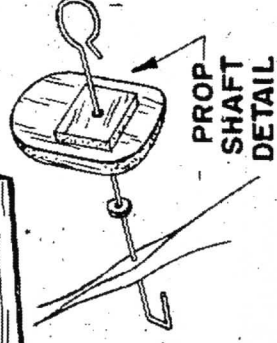


GEAR DETAIL

SANDWICH GEAR BETWEEN TWO LAYERS OF CROSS-PIECES AS SHOWN, AND THEN CEMENT INTO FUSELAGE SLOT.



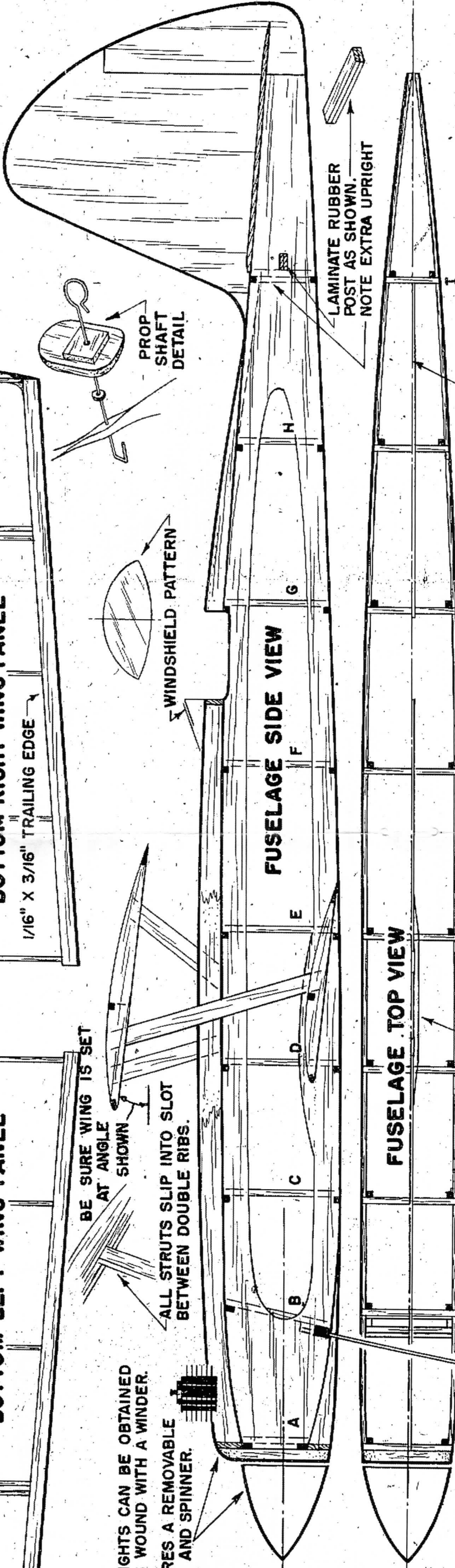
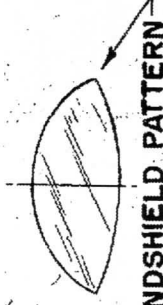
USE ONE LARGE LOOP OF RUBBER WITH A SINGLE KNOT TO FORM A 4 STRAND MOTOR.



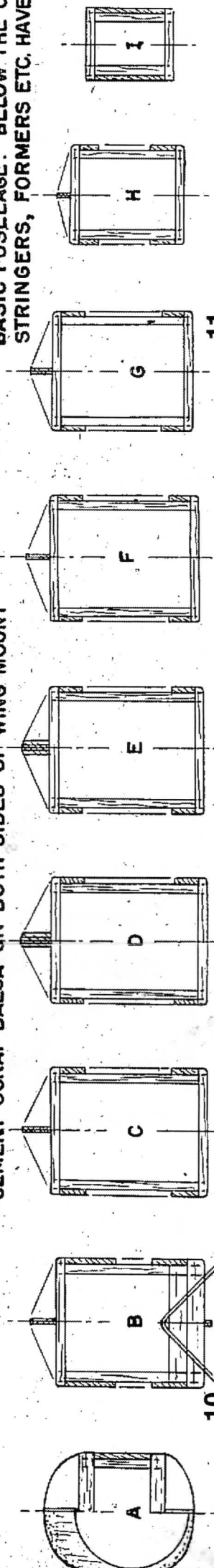
BE SURE WING IS SET AT ANGLE AS SHOWN

ALL STRUTS SLIP INTO SLOT BETWEEN DOUBLE RIBS.

LONGER FLIGHTS CAN BE OBTAINED IF MODEL IS WOUND WITH A WINDER. THIS REQUIRES A REMOVABLE NOSEBLOCK AND SPINNER.



NOTE: ABOVE CENTERLINE, TOP VIEW SHOWS BASIC FUSELAGE. BELOW THE CENTERLINE, STRINGERS, FORMERS ETC. HAVE BEEN ADDED.

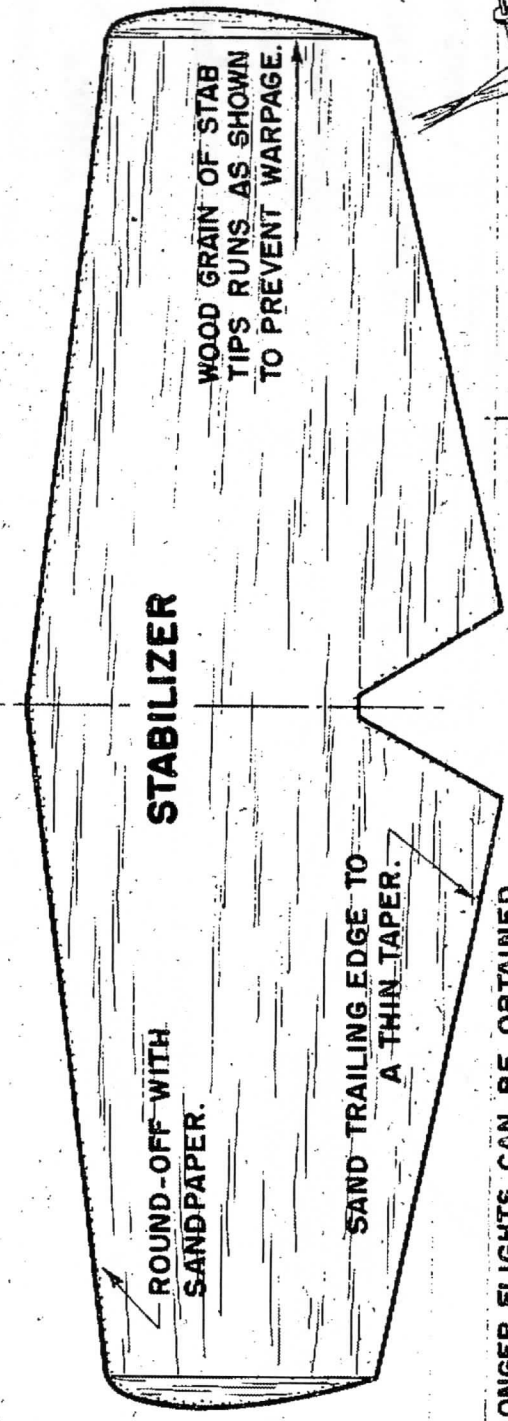


A DROP OF CEMENT WILL HOLD WHEEL ON AXLE.

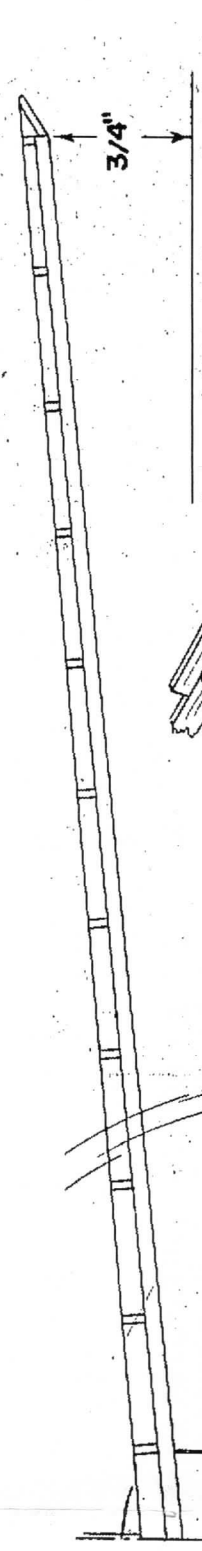
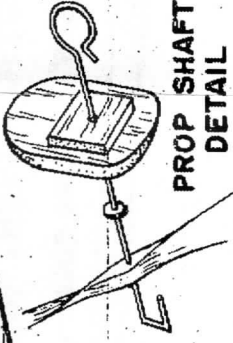
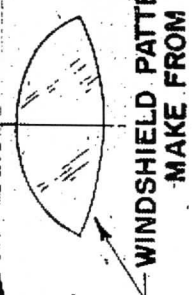
CROSS-SECTIONS

THE "BANDIT"
 KIT ENGINEERED BY: BILL EFFINGER
 DESIGNED & DRAWN BY: DON M^cGOVERN
BERKELEY MODELS INC.,
 WEST HEMPSTEAD, NEW YORK, U.S.A.

WINGSPAN - 15"
 ALTITUDE - 150 FT.
 POWER - 2 TO 4
 STRANDS 1/8"
 RUBBER



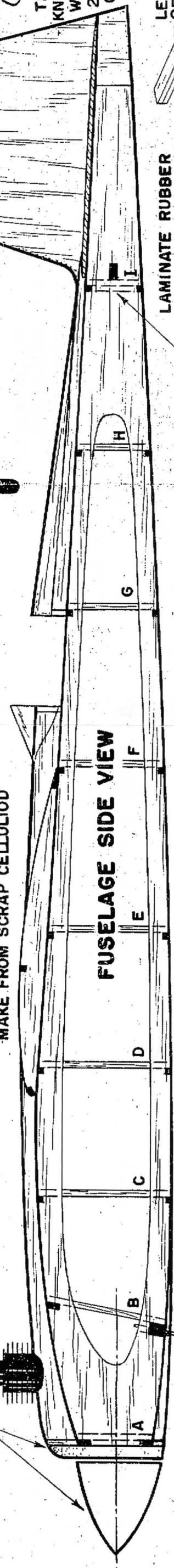
LONGER FLIGHTS CAN BE OBTAINED IF MODEL IS WOUND WITH A WINDER. THIS REQUIRES A REMOVABLE NOSEBLOCK AND SPINNER.



GEAR DETAIL
 THE GEAR IS SANDWICHED BETWEEN TWO LAYERS OF CROSS-PIECES AS SHOWN, THEN CEMENTED INTO FUSELAGE SLOT.

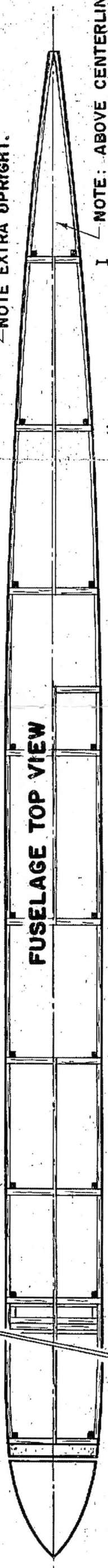
USE AMPLE CEMENT AROUND ENTIRE LANDING GEAR INSTALLATION.

TIE ONLY ONE KNOT IN RUBBER WHETHER FOR 2 STRANDS OR FOR 4.

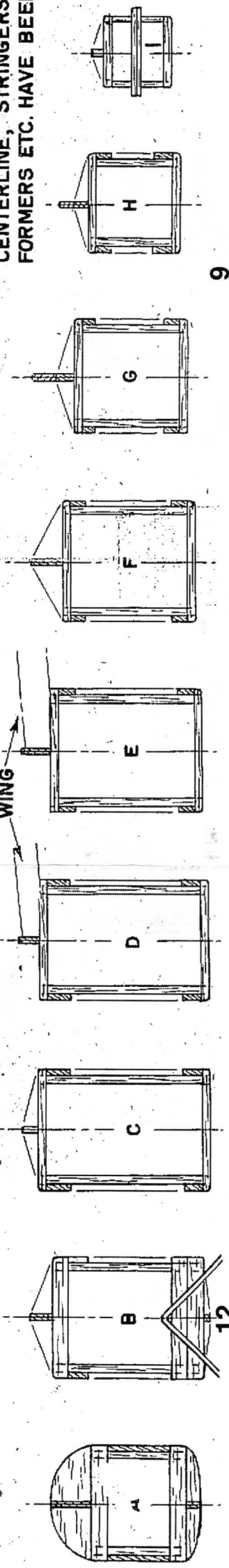


LAMINATE RUBBER POST AS SHOWN. NOTE EXTRA UPRIGHT.

LEAVE BOTTOM OF FUSELAGE UNCOVERED BETWEEN SEC H & I, FOR RUBBER.



NOTE: ABOVE CENTERLINE, TOP VIEW SHOWS BASIC FUSELAGE BELOW THE CENTERLINE, STRINGERS, COCKPIT FORMERS ETC. HAVE BEEN ADDED.

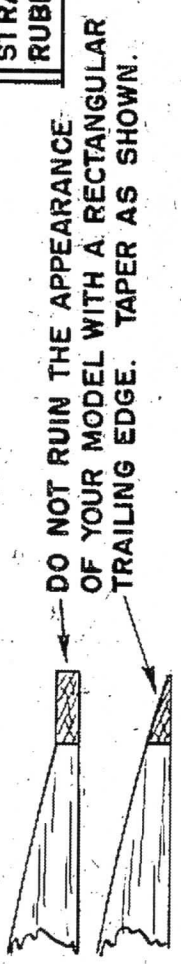


A DROP OF CEMENT WILL HOLD WHEEL ON AXLE.

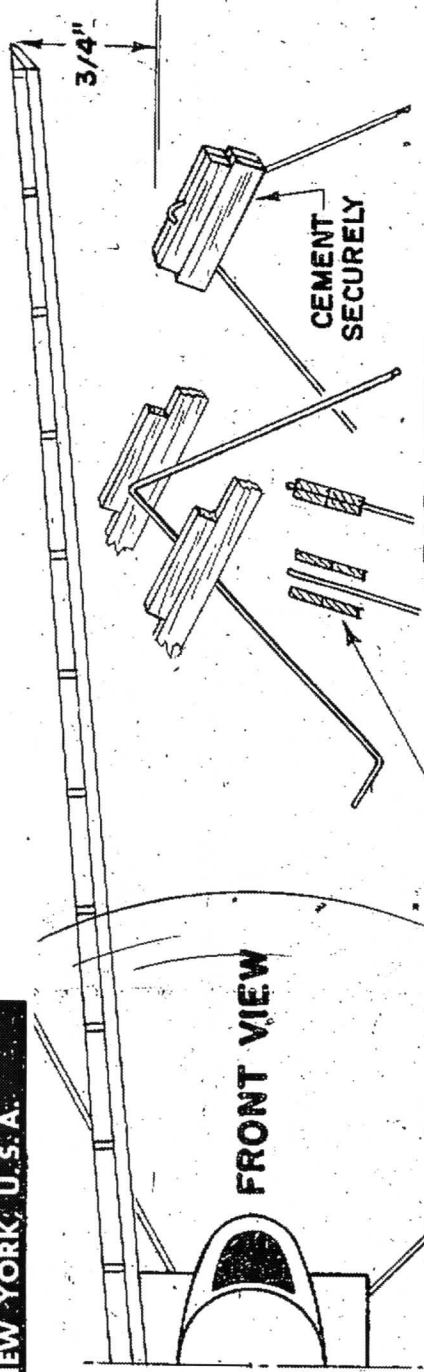
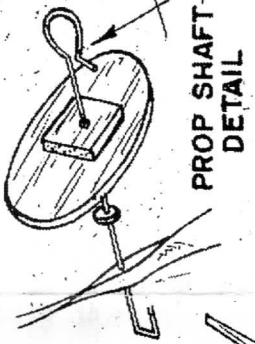
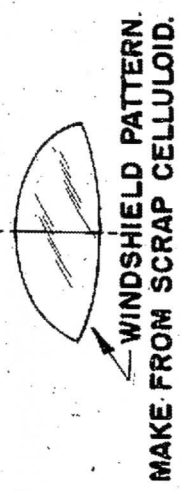
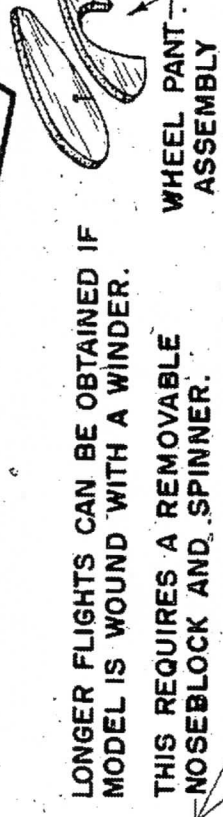
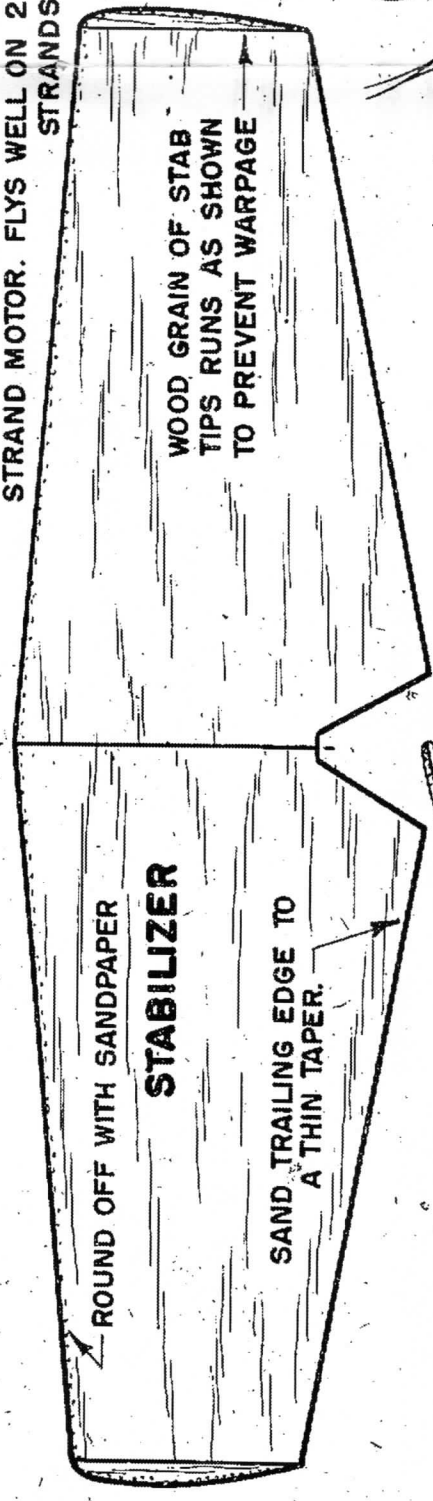
CROSS-SECTIONS

WINGSPAN - 13.5"
 ALTITUDE - 135 FT.
 POWER - 2 TO 4
 STRANDS 1/8"
 RUBBER.

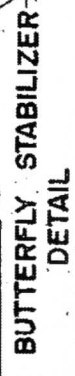
THE "V-16"
 DESIGNED & DRAWN BY DON MFGOVERN
 KIT ENGINEERED BY: BILL EFFINGER
BERKELEY MODELS INC.,
 WEST HEMPSTEAD, NEW YORK, U.S.A.



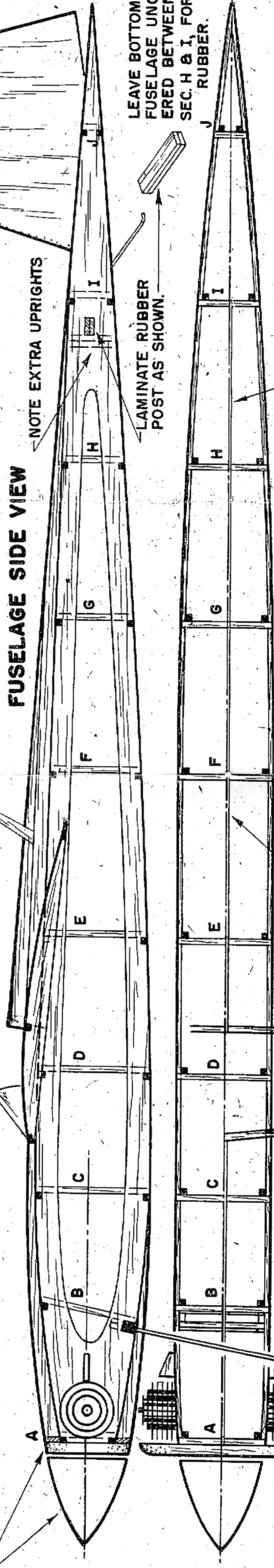
USE ONE LARGE LOOP OF RUBBER, WITH SINGLE KNOT TO FORM A 4 STRAND MOTOR. FLYS WELL ON 2 STRANDS.



GEAR DETAIL
 THE GEAR IS SANDWICHED BETWEEN TWO LAYERS OF CROSS-PIECES AS SHOWN, THEN CEMENTED INTO FUSELAGE SLOT.

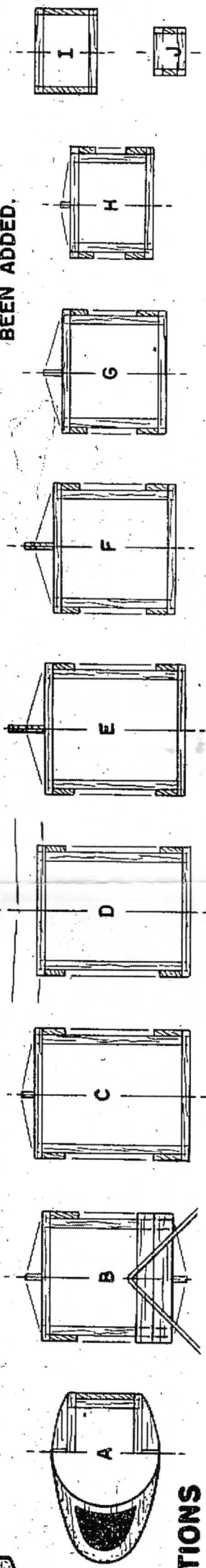


FUSELAGE SIDE VIEW

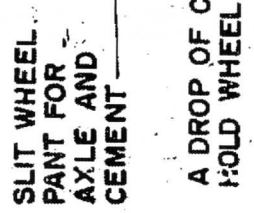


FUSELAGE TOP VIEW

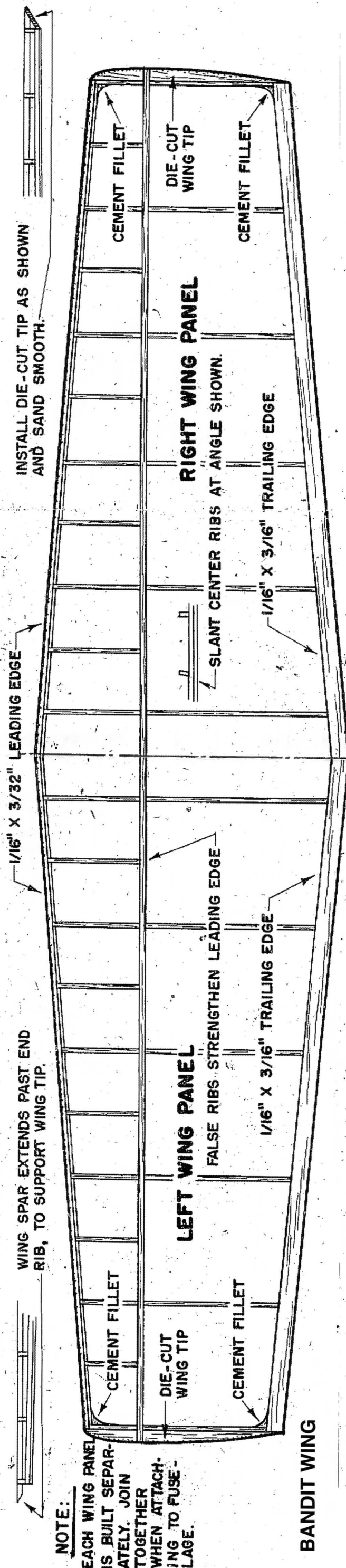
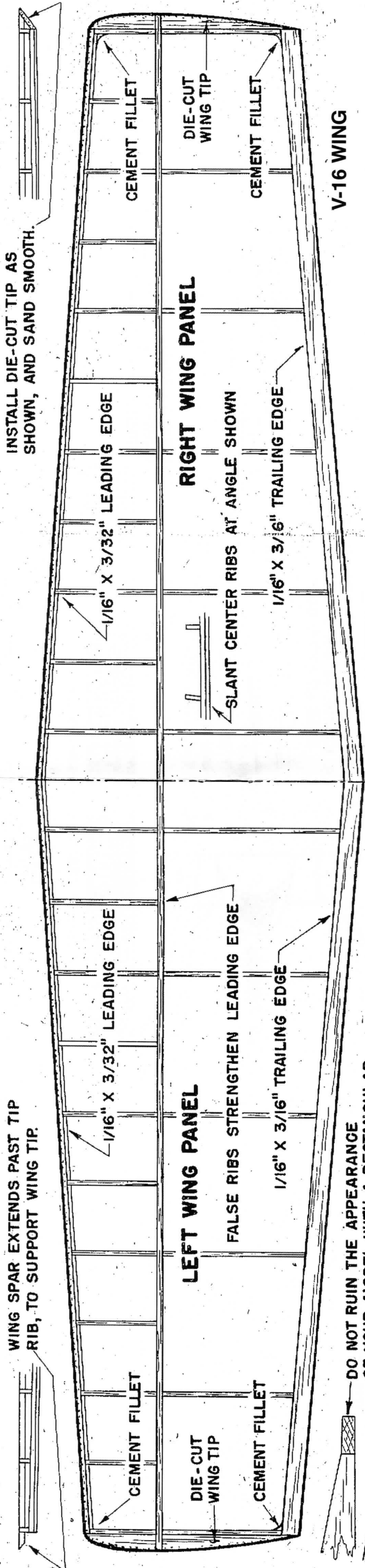
-DIE-CUT STRINGERS, HEADREST ETC.



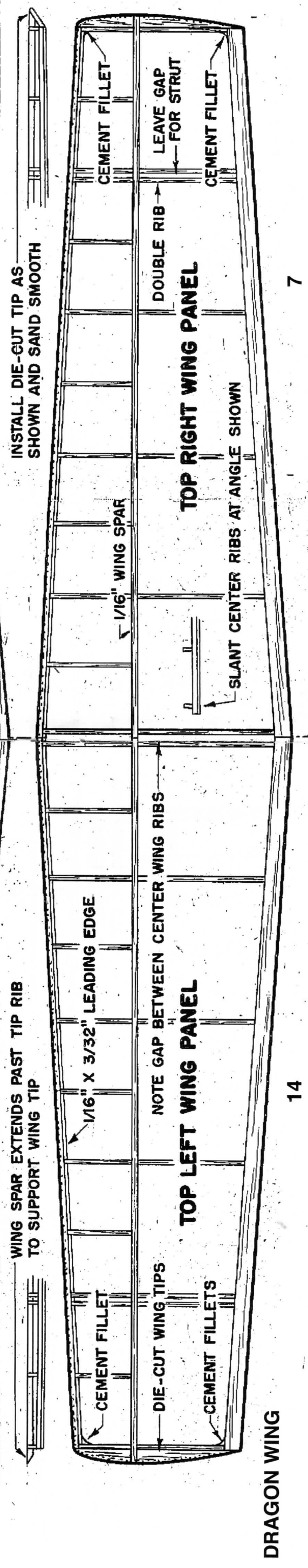
CROSS-SECTIONS



NOTE: ABOVE CENTERLINE, TOP VIEW SHOWS BASIC FUSELAGE. BELOW THE CENTERLINE, STRINGERS, COCKPIT FORMERS ETC. HAVE BEEN ADDED.



NOTE:
EACH WING PANEL IS BUILT SEPARATELY. JOIN TOGETHER WHEN ATTACHING TO FUSelage.



WINGSPAN - 14"	<h2 style="margin: 0;">THE "DRAGON"</h2> <p style="margin: 0;">KIT ENGINEERED BY BILL EFFINGER DESIGNED & DRAWN BY DON MCGOVERN</p> <h3 style="margin: 0;">BERKELEY MODELS INC.</h3> <p style="margin: 0;">WEST HEMPSTEAD, NEW YORK, U.S.A.</p>
ALTITUDE 150 FT.	
POWER - 2 TO 4	
STRANDS OF 1/8" RUBBER	

BUILDING AND FLYING INSTRUCTIONS

This model is simple in structure and design, and should offer no difficulties in construction, even to the beginner. Before beginning the construction of the airplane, look over the plans and pictures carefully to obtain a general idea of the construction. If any difficulties appear, try to construct the model as far as possible. Most of the construction will become simple as work progresses. In all cases, take your time, making sure that all parts are correctly cut and aligned.

Select a flat board, table top, or workbench for layout work. It is best to have a model knife, pliers, and sandpaper handy.

THE FUSELAGE

Study the step by step Assembly Details for the fuselage. They fully explain the construction method.

TAIL SURFACES

The tail surfaces (Rudder and Stabilizer) are made from flat die cut sheet balsa. Note that small extra pieces are used at the tips with the grain running in the opposite direction. This will prevent the balsa from warping. After cementing the tips to the tail surfaces, sand smooth, rounding the leading edge and tapering the trailing edge.

WING

The wings are built directly on the drawings and the construction is self-explanatory. Cover the plan with wax paper so that the model cement will not stick to the plan. Use pins to hold the wing ribs in place. Cement the trailing edge to the ribs and add the center spar. Add the leading edge last. Insert the short false ribs. Note that pins are not stuck through the wood itself but are used on either side of the parts to hold them in position.

It should be further noted that the left and right panels are made separately. If the panels are to be joined together it is done last, making sure that the proper dihedral is used.

The wing tips are added after the panel is removed from the plans. Be sure to sand a taper on the trailing edge and to round off the leading edge.

PROPELLER

A plastic propeller is included with the kit. The propeller and nose block are made removable from the fuselage to permit the rubber to be stretched while winding. Cement one washer on the nose block, then pierce the nose block with the prop shaft from the front side. Remove the shaft and insert it through the rear of the block. Slip the extra washer over the shaft. Install the prop and bend a "u" in the shaft. Cement the shaft to the prop. Center the spinner over prop and spot glue in place.

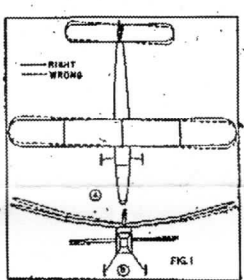
COVERING AND DECORATING

- It is best to follow these hints when covering your model:
- A - Sand the wood smooth before beginning to attach paper.
 - B - Always have the grain of the paper running lengthwise on the model. By holding the paper in front of a light, the grain can be easily detected.
 - C - Apply the tissue to the framework with Clear Dope, a small portion at a time.
 - D - Cut tissue in small strips when covering curved parts of the fuselage, wing tips, etc.
 - E - After the entire ship is assembled, spray or brush lightly with water and allow to dry slowly.

FLYING

CHECKING ALIGNMENT

When viewed from above, the wing and tail should be at right angles to the fuselage (See Fig. 1-A). When viewed from the front (Fig. 1-B) the tail surfaces must also be in proper alignment.



INSTALLING THE RUBBER MOTOR

Power your Mighty Midget for the type performance that you want. A single loop of 1/8" rubber will give long low level cruising flights. A double loop of 1/8" rubber will give high climb-long duration flights. While a single loop of 3/16", or a double loop of 3/32", rubber will give a combination of both.

When using the model without a winder, the rubber length should be about 11". If you intend to stretch out the rubber and wind in slowly for maximum performance, a 13" to 15" length of motor may be used.

To increase the performance of the model, a BERKELEY BALL BEARING WASHER may be used between the nose block and the propeller. This "extra" may be purchased from your local dealer.

For long life the rubber should be lubricated with soft soap or a good commercial rubber lubricant. Friction at the propeller shaft can be reduced by rubbing the shaft and the washers with a soft lead pencil.

BALANCING THE MODEL

Balance may be checked by supporting the model beneath the wing on the finger tips. The model should balance approximately at the main spar.

The model should balance as designed. However, if the model should be badly out of balance, B-B shot may be cemented either at the nose block or the tail to balance.

TEST - GLIDING PROCEDURE

Having checked the alignment and balance, the first step in adjusting is to hand-glide the model. A glide test should be made over grass or some soft surface that minimizes possible damage to the model. Crouch down and, holding the fuselage well back of the wing, "push" but don't throw, the model into the wind (if any) with the nose aimed at a spot on the ground about 30 feet away. (Fig. A).

If the model is in proper trim it will glide straight ahead with the nose slightly down.

Watch for any tendency to dive (Fig. C) or stall (Fig. B). In a stall the nose keeps rising with a resulting loss in flying speed. If the stall is violent, the nose will rise sharply, sometimes resulting in the model "falling off" on one wing tip and going into a spin. A less violent stall is known as a "mush".

It is important to avoid throwing the model so fast that a stall is forced on the model.

To correct for a stall, if the model is already balanced as in earlier instructions, it is necessary to warp the trailing edge of the stabilizer downward. This is done by dampening the surfaces slightly with the breath and bending gently between the fingers. Likewise a dive is corrected by bending in the opposite direction.

Having found a good glide angle, the next step is to adjust the rudder. For best performance the model should turn slightly to the right. Warp the rudder in the same manner as the stabilizer. Be sure not to warp the rudder excessively. If proper turn cannot be obtained with a slight warp, check the wings for warps.

Warps in the wing can be corrected holding over a steaming kettle and softening the covering. The wing must be held in the hand or fastened on the workboard with the desired twist while the covering again pulls taut.

SPECIAL INSTRUCTIONS FOR ADJUSTING THE "V-16"

The "V-16" has a tail known as a "RUDDERVATOR". Each surface acts as both rudder and elevator. Therefore, if for example, the right trailing edge is bent downward it will make the model both dive and turn to the right. For stabilizer action only, be sure to bend both surfaces down equally in the same direction. For rudder action be sure to bend both surfaces equally in opposite directions.

Do not try to adjust for both glide and turn at the same time. Get the glide right first, then adjust for turn.

POWER FLIGHTS

The model is now ready for its first power flight. If the model has been properly glide tested there should be no difficulty flying under power.

As the model has built-in down thrust there should be no tendency to stall under power. If the model should show a tendency to roll in the opposite direction of the propeller rotation, add right thrust by inserting a balsa wedge between the nose block and the fuselage.

Start flying with about 50 turns of rubber, winding the prop by hand. If the first flights are good, increase the number of turns by 25 each time until the maximum is obtained.

For duration, the model should climb and glide to the right under power.

WINDING THE RUBBER

Long flights can be made if the rubber is stretched to three times its natural length and wound in slowly. This will give about four times as many turns as during the previous hand wound tests.

A mechanical winder can be made by using a hook in a hand drill and installing an eye in the prop shaft. In order to do this it will be necessary to remove the spinner.

"MIGHTY-MIDGETS" properly built and flown will turn in consistent performance between 25 and 40 seconds. Good Luck!

STUDY THIS FUSELAGE ASSEMBLY DETAIL TYPICAL OF ALL BERKELEY "MIGHTY-MIDGET" KIT DESIGNS

STEP I CAREFULLY REMOVE FUSELAGE SIDES FROM SHEET AND PLACE OVER PLAN FOR TOP VIEW FOR PROPER WIDTH. (SIDES ARE PARALLEL FROM GEAR TO WING TRAIL EDGE.)

STEP II INSERT CROSS-PIECES STARTING WITH THIS STRAIGHT OR PARALLEL PORTION OF THE FUSELAGE SIDES.

STEP III PULL FUSELAGE SIDES TOGETHER AT REAR, AND AS REQUIRED AT NOSE. ADD REMAINING CROSS-PIECES.

STEP IV ADD UPRIGHTS AS SHOWN, AND TRIM ALL ENDS FLUSH. NOTE DOUBLE UPRIGHT AT THE NOSE. ADD GEAR, STRINGERS, CABIN OR COCKPIT-DETAILS, ETC.

DUMMY ENGINE
 A DUMMY CYLINDER HEAD, SIMULATING A REAL GAS MODEL CAN BE ASSEMBLED BY CUTTING OUT PAPER DISCS BELOW, AND CEMENTING THEM BETWEEN THE SMALLER Balsa DISCS AS SHOWN AT THE LEFT.

A STRAIGHT PIN MAKES AN IDEAL GLOW PLUG.

Ray Rakow picked up his Tripple Threat Berkley Kit No. 23-3 from Capitol Sport and Hobbies for \$1.25. Built with good wood, I'm sure the proto-types flew well. If you want a nostalgic trip back to the 50's, try one. I did not try to scan the ribs, as the edges of the parts were too indistinct. But they are easy to loft up from the profile on the plans. Obviously there is a bit of sheet balsa on the top especially around the nose. This is only hinted at on the plans. You might go with longerons rather than sheet. Or laminate the top and bottom pieces of the side from 1/16th or 1/20th by 1/8 to save some balsa. In this day and age I would move the rubber forward a bay. With FAI super sport rather than T-56 you will easily get the 25-40 second duration promised on the instructions even with all that wood.

Unfortunately the box suffered some smoke damage from his fire of a few years ago. The contents however were as good as new; which is to say not so hot. Berkley was infamous for their "diecrunching" and this kit is exhibit "B". Some of the wood is pithy, some rock hard up to Guillow's standards. The die cut sides were 1/20th and the rest 1/16th. Ray had removed the hard wood wheels and plastic props before it fell into my hands. The landing gear wire was pre-bent. The instructions and assembly details are identical for each of them and are shown on this page.