President: Mike Basta
913-492-4830
Vice President: Jeff Renz
913-341-2781
Treasurer: Jack Vetter
913-296-5224
Dues: $20
Secretary: Dana Field
913-400-2132
Newsletter Editor:
Dana Field
Website Editor: Jeff Nisley

AMA Charter # 2357
SAM Chapter #14
FAC Squadron 43

Heart of America Free Flight Association

9135 Hall Dr.
Lenexa, KS 66219

website: ***FLYHAFFA.com***

DISPATCH

August 2017

Schedule of Flying
Events and Meetings

Date	Day	Location	Time	Notes
OUTDOOR EVENTS				
August 8	Tue	Olathe Flying Field	~6:30	**HAFFA Outdoor Flying Champs**
August 22	Tue	Olathe Flying Field	~6:30	**HAFFA Outdoor Flying Champs**
September 2, 3, &4	Sat. – Mon.	Denver, CO	All 3 days	**MMM Rocky Mountain Champs**
September 12	Tue	Olathe Flying Field	~6:30	**Final Night – HAFFA Outdoor Champs**
Sept. 30 & Oct. 1	Sat & Sun	Marion, IL	All both days	**HAFFA Annual Outdoor Contest**
INDOOR EVENTS				
July 18	Tue	Southridge Presbyterian	7:00	**Club Meeting**
August 15	Tue	Southridge Presbyterian	7:00	**Club Meeting**
September19	Tue	Southridge Presbyterian	7:00	**Club Meeting**

HAFFA Indoor Flying Site Locations:

Ozanam Gymnasium
421 E. 137th St.
Kansas City, MO

Osawatomie City Auditorium
425 Main St.
Osawatomie, KS

HAFFA Club Meetings:
Southridge Presbyterian Church
5015 Buena Vista St.
Roeland Park, KS 66205

Osawatomie reserves the right to cancel if they get a paying customer

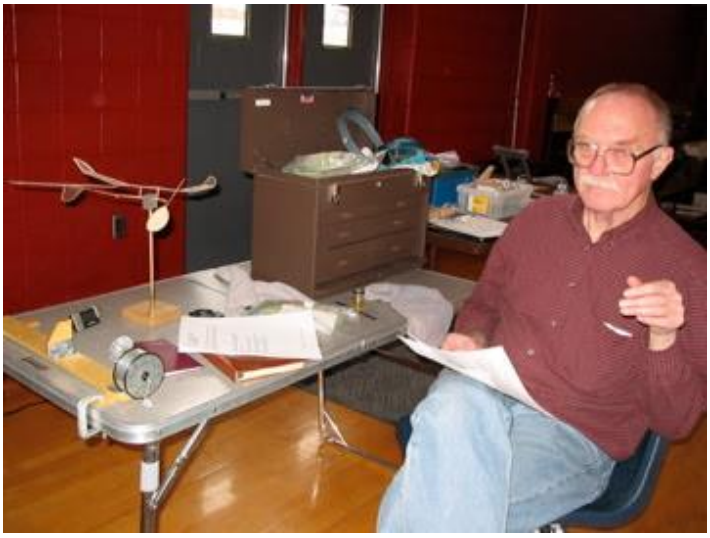
For Outdoor flying information contact Mike Basta (913-492-4830)
For Indoor flying information contact Jeff Renz (913-484-0377)

This is a reminder that our indoor flying fee is $10/person

As many of you, but maybe not all, know, we lost long time member and avid free flighter, Tem Johnson the end of June. Following are a few pictures of him, as well as the obit copy from the newspaper. I have it on good authority that his Bronco will be a one design event in next year's HAFFA outdoor championship, and his indoor limited CLG design is not too shabby either. I timed 5 flights in a row of 33 – 36 sec in the Bible College gym in 2012! Plans for his outdoor HLG "Bronco" are at the end of this newsletter, along with pages on setup and adjustments. He was meticulous in his prep!



Maybe the last photo of Tem, taken by Jeff Renz 12/27/2016. Tem is holding a Bronco, one of his winning designs.



Tem at Osawatomie, a regular fixture there – Renz photo



Tem at the Bible College. He could put up flight after flight of mid thirties in both CLG and HLG under that ceiling – Renz photo

Temujin Elliott (Tem) Johnson, 82, of Fairway, Kansas passed away on June 22, 2017. Tem was born February 27, 1935 in Brooklyn, New York, the son of Leslie R. and Mary Elliott Johnson.

Tem was a 1952 graduate of Ramsey High School, Ramsey, New Jersey and went on to Purdue University majoring in mechanical engineering. Tem 's career included managing the Spotlight Model Railroad Hobby Shop in Kansas City and he retired as a service technician for Moore Business Forms. He was a veteran of the US Army Reserves.

An avid reader and history buff, Tem had a lifelong passion for model railroads and model airplanes. He enjoyed meetings and weekly meals with fellow hobbyists and was a frequent participant and trophy winner in local and national model airplane flying contests. Tem had an encyclopedic knowledge of model airplanes and lectured to groups on many flying and design topics. Many of his designs and aerodynamic related technical articles were published in technical journals and newsletters. Locally for many years he was an active member of the Topeka Model Aircraft Club and The Heart of America Free Flight Model Airplane Club.

Tem is survived by his brother Dr. Eric R. Johnson (Becky) of Lake Quivira, KS; nephew Matthew Johnson (Deva) of Leawood, KS; nieces Dr. Meghan Lindgren (Ron) of Fairfax, VA and Katherine Marx (Ed) of Lake Quivira, KS.



Tem, with another longtime member, Ralph Preston. Ralph is holding his gull wing whatever. Renz photo

HAFFA 2016 Outdoor Club Contest Results/Standings

After Jeff Renz and Mike Basta missed flying in May, and came storming back in June, the July flying in July produced more tightening up in the standings. The June leader, Charlie Taylor, faltered a bit, only getting 9 points, while Mike Basta cornered 11. The biggest point gatherer was Jack Vetter, who captured 17 points. The standings still have Charlie in the lead, with Jack right behind (1 point!), and Mike closing in. The gap from 1st to third is a not insurmountable 6 points, with August and September flying remaining. Also, Scott Baird is back from Atlanta, has rejoined HAFFA, and has shown he is serious about becoming a serious contender. Maybe he is too late for this year, but look out in 2018! Jeff Renz slipped, with only 10 points garnered (Jeff, did you forget to fly your ½ Gollywock, or is it broken?) Jeff Nisley and myself are bringing up the rear. In Jeff's case, he has only been modeling and flying for about a year, and he is only flying a couple of events so far. In my case, maybe I need to retire and get really serious about modeling.

Thermic - Best Time	May	June	July	August	September	Month Pts.
Dana Field	4	-----	21			7
Charlie Taylor	13	11	10			2
Jeff Renz	-----	15	20			6
Jack Vetter	-----	5	15			4
Scott Baird	-----	4	17			5
Mike Basta	-----	15	11			3
Jeff Nisley	-----	-----	4			1

CLG – Best Time	May	June	July	August	September	Month Pts.
Dana Field	28	-----	24			4
Jack Vetter	10	20	27			6
Charlie Taylor	12	24	9			1
Mike Basta	-----	27	24			4
Scott Baird	-----	21	29			7
Jeff Renz	-----	15	20			3
Jeff Nisley	-----	-----	17			2

Jet CLG – BT	May	June	July	August	September	Month Pts.
Charlie Taylor	11	13 +5	10 +5			4
Jack Vetter	12	14 +5	11 +5			5
Jeff Nisley	2	10 +5	11 +5			5
Mike Basta	-----	9 +5	7 +5			2
Jeff Renz	-----	15 +2	10 +0			1
Scott Baird	-----	13 +0	12 +2			3

½ Gollywock - BT	May	June	July	August	September	Month Pts.
Charlie Taylor	14	49	51			2
Jack Vetter	8	2	32			1
Mike Basta	-----	39	57			3
Jeff Nisley	-----	18	-----			-----

Standings	May Points	June Points	July Points	August Points	September Points	Total Points	Current Standings
Dana Field	4	-----	11			15	6
Charlie Taylor	8	16	9			33	1
Jack Vetter	5	11	16			32	2
Jeff Nisley	1	3	8			12	7
Mike Basta	-----	15	12			27	3
Jeff Renz	-----	9	10			19	5
Scott Baird	-----	6	15			21	4

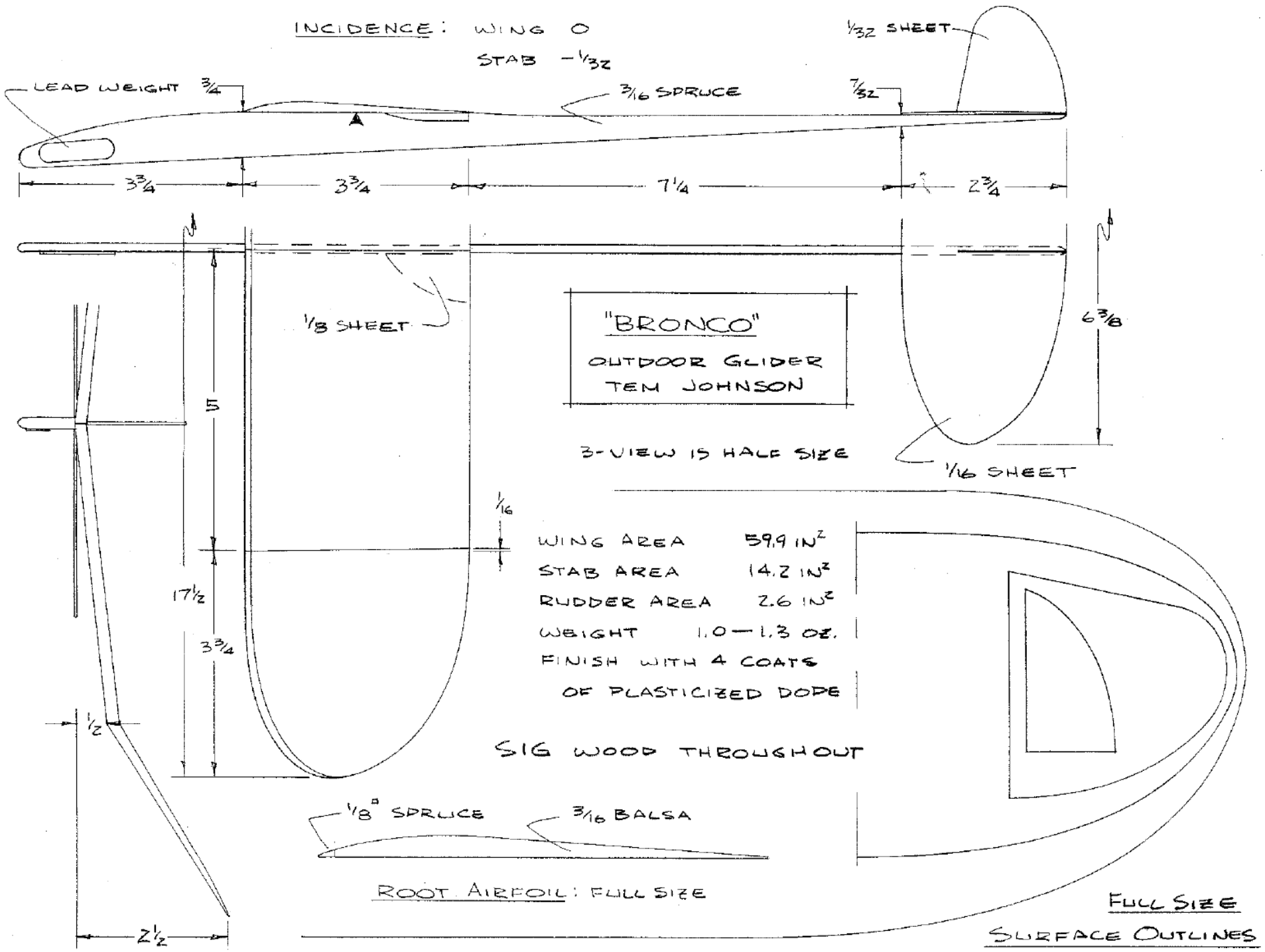




July flying session – Jeff Nisley with his "Super Sabre" – now that is a paint job! – D. Field photo



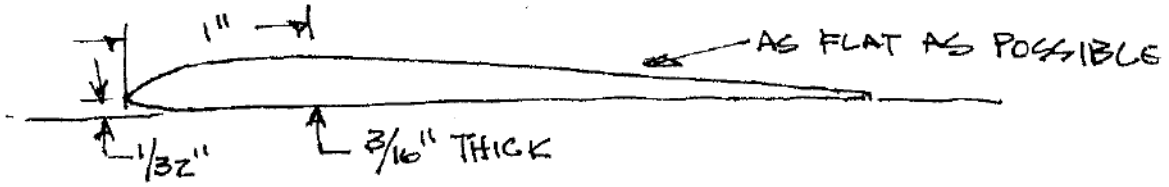
Charlie Taylor with his ½ Gollywock – climbs like DeLoach P-30! – D. Field photo


INCIDENCE: WING 0
STAB −1/32
1/32 SHEET
LEAD WEIGHT
3/4
3/16 SPRUCE
7/32
3 3/4
3 3/4
7 1/4
2 3/4
1/8 SHEET
"BRONCO"
OUTDOOR GLIDER
TEM JOHNSON
3-VIEW IS HALF SIZE
6 3/8
1/16 SHEET
5
1/16
17 1/2
3 3/4
WING AREA 59.9 IN²
STAB AREA 14.2 IN²
RUDDER AREA 2.6 IN²
WEIGHT 1.0—1.3 OZ.
FINISH WITH 4 COATS
OF PLASTICIZED DOPE
SIG WOOD THROUGHOUT
1/2
1/8" SPRUCE
3/16 BALSA
ROOT AIRFOIL: FULL SIZE
2 1/2
FULL SIZE
SURFACE OUTLINES

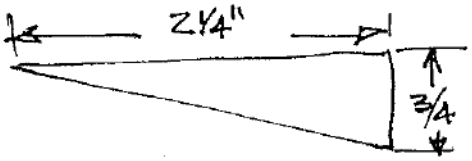
BRONCO UPDATES

WHEN YOU BUILD IT I'D MAKE THE FOLLOWING CHANGES:

1. USE 1/32" UPSWEEP ON L.E. OF AIRFOIL



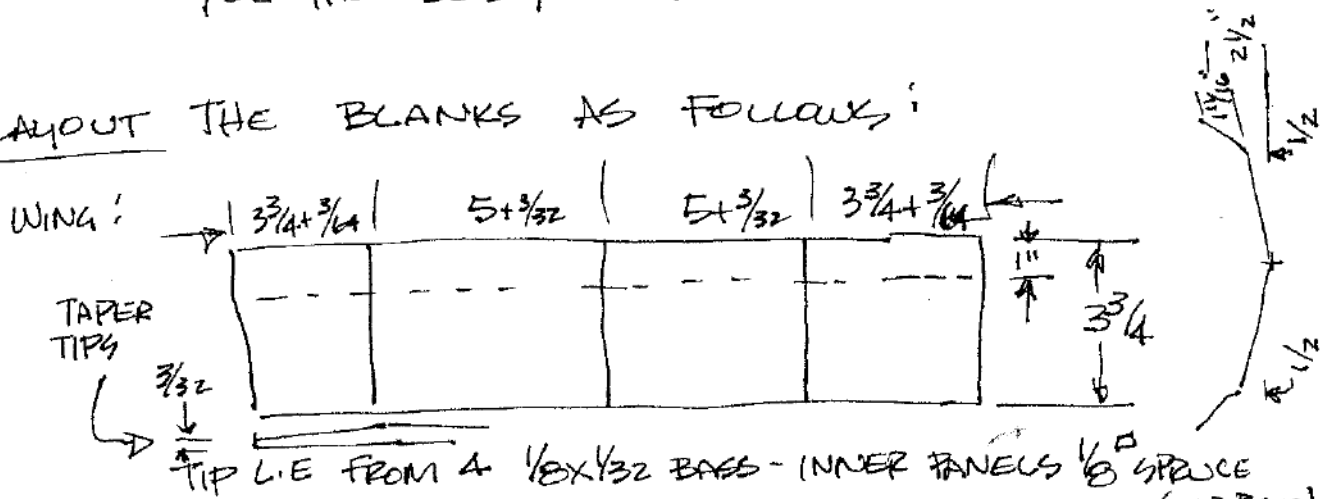
2. USE A 1/8" X 3/4" X 2 1/4" TAB

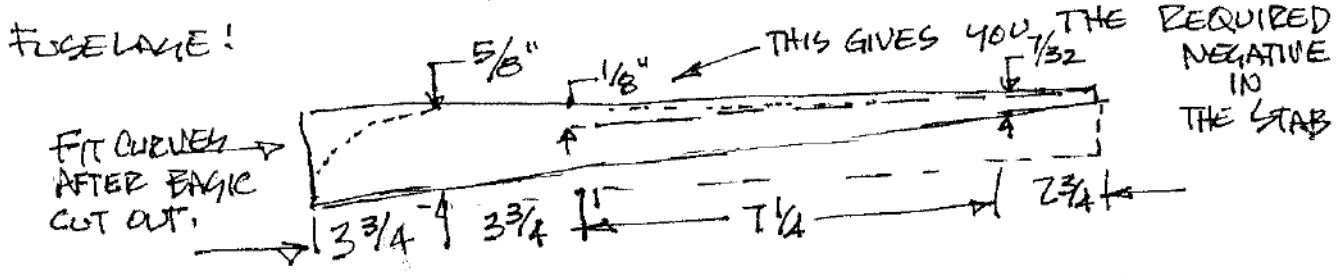


3 POSSIBLY A LITTLE MORE SKEW FOR WASHOUT — 3/32" INSTEAD OF 1/16"

4. YOU'LL NEED TO USE 3/4 X 3/16 X 24" SPRUCE FOR THE BODY. SK NO LONGER HAS THE 1" WIDE

LAYOUT THE BLANKS AS FOLLOWS:



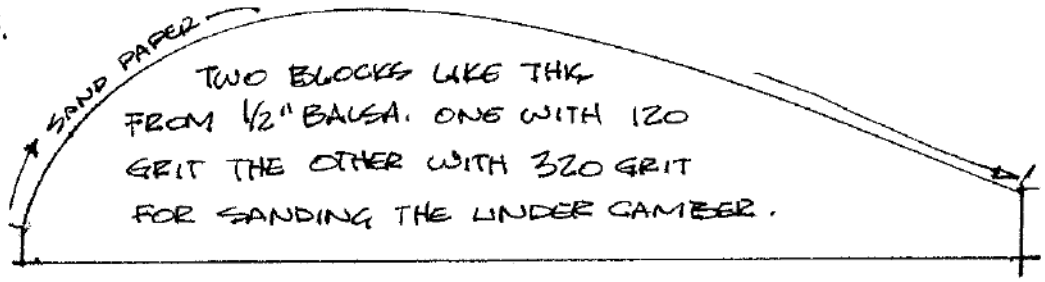


TEM JOHNSON 1995

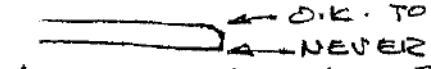
CONSTRUCTION & FLYING SUGGESTIONS

TEM JOHNSON 2005

TOOLS

1. A FLAT, SMOOTH, HARD SURFACE TO WORK ON. I USE A 12"X24" PIECE OF GLASS.
2. SANDING BLOCKS FROM PINE - 1½" X ½" X 5" WITH SAND PAPER GLUED ON THE WIDE SURFACES. USE GRITS 100, 120, 220, & 320
3. 

BUILDING THE WING

1. LAY UP THE BALSA PIECES WITH THINNED TITEBOND II (YOU COULD USE DUCO OR SIMILAR WELL PLASTICIZED) I LIKE TO HAVE THE BLANK 1/16" → 3/32" OVER WIDE & ¼" → 3/8" OVER LENGTH.
2. CUT THE LEADING EDGE TO PLANFORM SHAPE & GLUE ON THE BALSA WOOD LEADING EDGE STRIP, AGAIN USING TITEBOND II.
3. SAND THE BOTTOM SMOOTH
4. TAPER THE TOP SURFACE.
5. MARK THE TOP SURFACE WITH DOTS AT EACH OF THE THICKNESS GAUGING POINTS ALONG THE HIGH POINT USING A FINE POINT ROLLERBALL PEN.
6. SHAPE THE TRAILING EDGE. CHECK THE THICKNESS FREQUENTLY USING A DIAL CALIPER. IT'S TOUGH TO GET BOTH WINGS THE SAME SO LET ANY EXCESS THICKNESS, 0.001" → 0.002", BE ON THE INNER (LEFT) WING
7. SHAPE THE LEADING EDGE. CHECK THE THICKNESS.
8. SAND IN THE UNDERCAMBER. AGAIN, CHECK THE THICKNESS.
9. TRIM THE TRAILING EDGE SO THAT THE WING CHORD IS JUST UNDER THE MAXIMUM 3" ALLOWED, IT'S O.K. TO BREAK THE TOP CORNER BUT NEVER THE BOTTOM CORNER 

10. CUT WING PANELS TO LENGTH & BEVEL FOR DIHEDRAL. TRY ASSEMBLY (NO GLUE) TO MAKE SURE SPAN DOES NOT EXCEED 12"
11. GLUE DIHEDRAL JOINT USING ELMER'S WHITE GLUE, PUT GLUE SKIN 3/16" → ¼" EITHER SIDE OF JOINT. ADD THE 1" SQUARE SIDE REINFORCEMENTS WITH THINNED & PLASTICIZED DUCO.
12. MAKE SURE THE WING TRAILING EDGES DON'T INTERFERE WITH EACH OTHER WHEN FLEXED. ADD THE PYLON.

FLYING

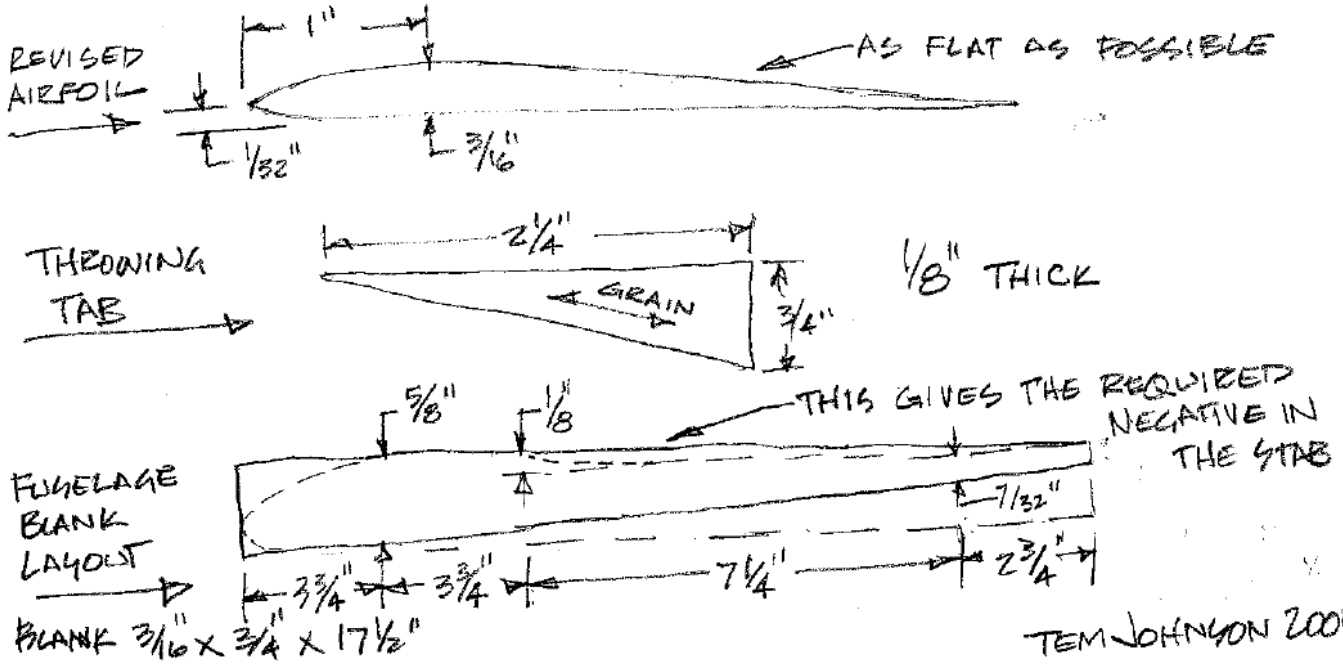
1. TAPE THE WING IN PLACE WITH MASKING TAPE.
2. ADJUST WING INCIDENCE BY SANDING BOTTOM OF THE PYLON.
3. USE A 7" → 8" LOOP OF 0.026" → 0.035" RUBBER FOR CATAPULT.
4. CATAPULT LAUNCH AT A NEAR VERTICAL ANGLE. BUNT CLIMBING PATTERN.

ON A BREEZY DAY A HAND-LAUNCHED GLIDER THAT ROLLS OUT DOWN WIND WILL GO OUT OF SIGHT A LOT FASTER THAN ONE THAT ROLLS OUT INTO THE WIND SO YOU WANT A PLANE THAT ROLLS OUT INTO THE WIND. THE "BRONCO" WAS MY ANSWER TO THAT NEED.

THE FIRST CONTEST FOR THE "BRONCO" WAS THE SOUTHWESTERN CHAMPS AT DALLAS IN SEPTEMBER 1959. THE RESULT WAS 3RD PLACE. IN SIX SUBSEQUENT AMA SANCTIONED CONTESTS THROUGH 1962, IT ACCUMULATED THREE FIRSTS, TWO SECONDS, AND A FOURTH PLACE. AS I REMEMBER ONE OF THOSE FIRSTS WAS AT A TULSA GLUE DOBBERS ANNUAL AND A PLAN WAS LATER IN THEIR NEWSLETTER. SOMETIME EARLY IN 1963 I SENT THE PLAN OFF TO FRANK ZAIC AND IT APPEARED IN HIS "1964-65 MODEL AERONAUTIC YEAR BOOK."

LATER, WHEN JOHN KAUFMANN WROTE "FLYING HAND-LAUNCHED GLIDERS," THE "BRONCO" WAS ONE OF SEVEN RECOMMENDED DESIGNS. NFFS HAS REPRINTED THIS BOOK. IF YOU FLY HAND-LAUNCHED OR CATAPULT GLIDERS AND MISSED THE ORIGINAL EDITION, GET THE REPRINT. YOU SHOULD HAVE A COPY OF THIS BOOK.

I THINK THE DESIGN IS STILL VIABLE AS IT STANDS, BUT IF I WERE BUILDING IT TODAY I'D USE AN AIRFOIL WITH A RAISED ENTRY AS WAS USED ON THE FIRST "BRONCO" RATHER THAN THE FLAT BOTTOM FOIL USED LATER. I'D ALSO CHANGE THE SHAPE OF THE THROWING TAB TO MAKE IT STRONGER. GIVE STRONG CONSIDERATION TO ADDING A DETHERMALIZER. GOOD WOOD IS HARD TO GET.



TEM JOHNSON 2005