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SAM Chapter #71

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HEART OF AMERICA FREE FLIGHT ASSOCIATION

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LENEXA, KS 66219

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DISPATCH — DECEMBER 2011

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Schedule of Flying Events

Date	Day	Location	Time	Notes
Jan. 8*	Sun.	Osawatomie	9AM - 4PM	
Jan. 15*	Sun.	Ozanam	8:30AM - 12:00	
Feb. 5*	Sun.	Osawatomie	9AM - 4PM	
Feb. 19*	Sun.	Ozanam	8:30AM - 12:00	
Mar. 4*	Sun.	Osawatomie	9AM - 4PM	
Mar. 18*	Sun.	Ozanam	8:30AM - 12:00	
April 7*	**Sat.**	**Osawatomie**	**9AM - 4PM**	**HAFFA Annual Indoor Contest**
April 15*	Sun.	Ozanam	8:30AM - 12:00	
May 20*	Sun.	Ozanam	8:30AM - 12:00	
May 23 -27	Wed.-Sun.	Johnson City, TN		United States Indoor Championships
TBA		Moscow, ID		Kibbie Dome
TBA		Muncie, Indiana		Outdoor Free Flight Nationals

***** indicates official HAFFA event/activity

HAFFA Indoor Site Locations:

Ozanam Gymnasium	Kansas City College & Bible School	Osawatomie City Auditorium
421 E. 137th St.	7401 Metcalf	425 Main St.
Kansas City, MO	Overland Park, KS	Osawatomie, KS

For Outdoor flying information contact Mike Basta (913-492-4830)
For Indoor flying information contact Emil Schutzel (913-341-7788)

1. Osawatomie reserves the right to cancel our reservation if they get a paying customer. HAFFA has paid their fee for the April 7th Annual Indoor Contest, so it is confirmed.

INDOOR FLYING SITE FEE UPDATE:

Beginning in November our indoor flying fee will be $10/person. This modest increase is the first in a long time & is necessitated by increases in our cost to obtain these flying sites combined with a decrease in the number of members participating in them. The cost of the HAFFA Annual Indoor Contest is yet to be determined.

HAFFA Indoor Championship Points Standings

Name	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	**Total**
Emil Schutzel	5	3	2	0	0	0	0	**10**
Gary Hodson	3	5	4	0	0	0	0	**12**
Tem Johnson	2	4	3	0	0	0	0	**9**
Jeff Renz	4	0	0	0	0	0	0	**4**
Mike Schmidt	0	2	0	0	0	0	0	**2**
Jack Vetter	1	1	1	0	0	0	0	**3**

Note: Notify Gary Hodson of any scoring discrepancies

HAFFA minutes from November 15, 2011 meeting by Jeff Renz

This meeting was held Nov. 15th (Tues.) 2011 at the Corinth Branch of the Johnson County Library

Emil S, Mike B., Lynn C., Abe G, Jack V, Mike Schmidt, and Jeff Renz attending

The meeting which started at 7 pm was held in two parts. The first part was an A6 prop building demonstration conducted by Emil S.

We had Emil give the demo first. The 45 minute demo included a basic piece by piece discussion of what it takes to get the prop down to the .19 gram weight and still have a prop that can provide competitive performance when attached to the A6 Airframe. (Details of wood selection and construction alignment techniques were presented). Mike Schmidt video taped the presentation.

There was a Q & A session for 15 minutes related to presentation.

Emil had a commitment and had to leave the meeting.

We began the meeting "formal HAFFA buisness"
This meeting was very brief due to the time constraint with the Library.

The previous "meeting minutes" were read and discussed.

The outdoor "Marion" contest was discussed.
It was agreed the contest date would become a permanent date for the first week of October every year

The previous "meeting minutes" were "voted / accepted / approved"

Old business

The Olathe school district "school model airplane" club concept was discussed. Mike Schmidt sent additonal communications to the school staff.

(Science Olympiad) was discussed. Jeff Renz to send list of NW area teachers to Mike B. involved.
This year no airplanes are flown in Sci Oly events. Only rubber powered helicopters in the Senior Division.

New Business

Indoor Flying at the Desoto Kansas Facility was discussed the dates 11/19/2011 and 12/17, 1/7/2012 and 1/21/2012. the idea is that a local indoor RC model flying group flys at this location and is flying on these dates. The discussion was to fly at the same time when the RC club was attending to generate some "cross interest". Mike B. was to investigate further and asked who would attend with him on the 11/19 date. All members in attendance had time conflicts for that date.

Additional discussion brought up by Jeff Renz and Jack V. concerning the flying at Osawatomie Kansas. Concerns about the limited recent attendance of indoor flyers at that location was discussed.
It was agreed Emil S. could be contacted to discuss the issue. (this was the last formal topic of discussion.....Emil had left the meeting prior to this discussion....He can fill us in on the topic at the next meeting).

Motion to adjourn the meeting was seconded. Meeting adjourned.

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Free Flight News

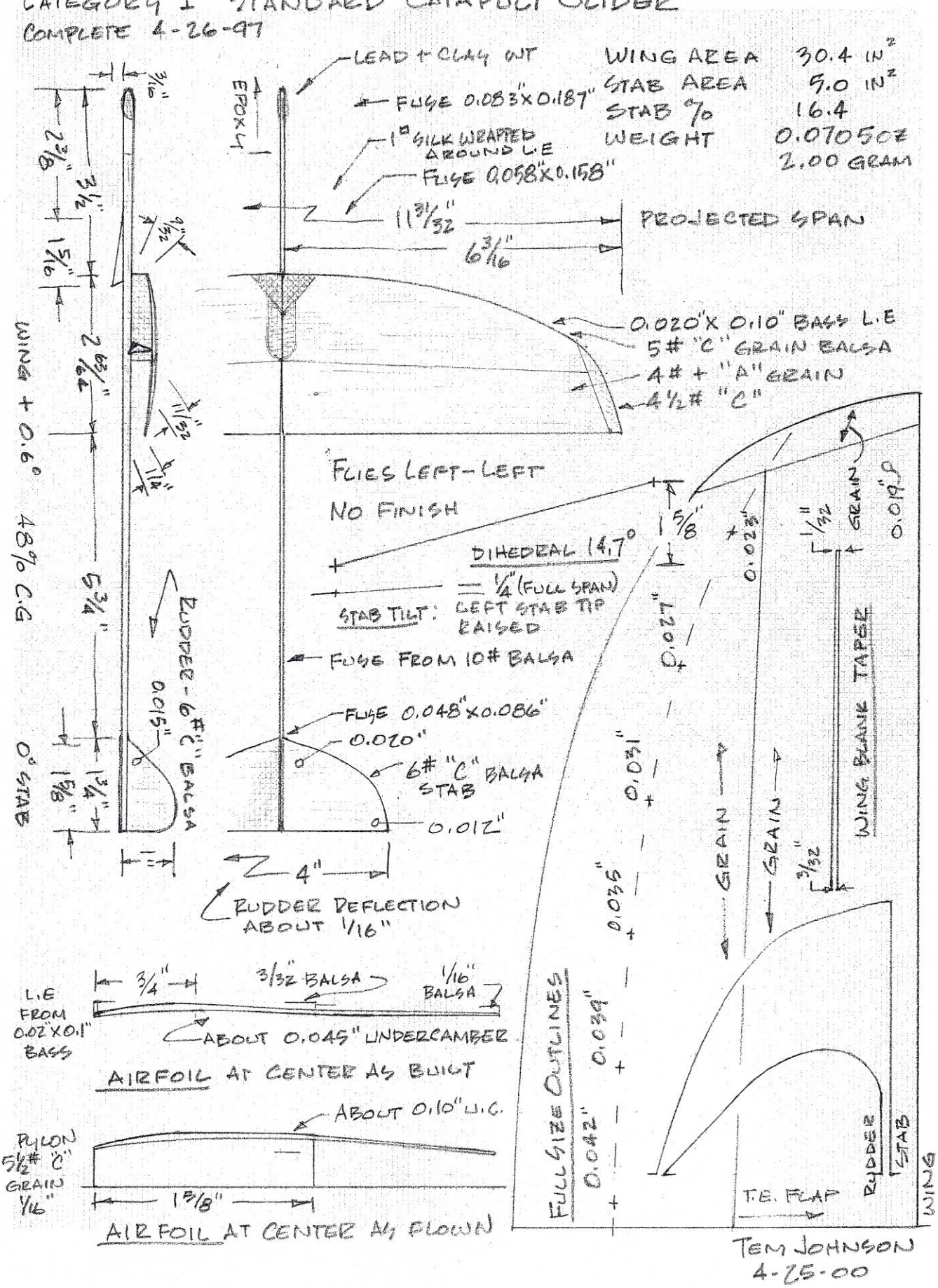
no news is good news

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Tech Tips

Tem Johnson's Indoor Cat. 1 Catapult Glider

Last month we featured Tem Johnson's outdoor glider. This month we feature plans, specifications & building for Tem's indoor Category 1Catapult glider. You can find them somewhere in this newsletter.

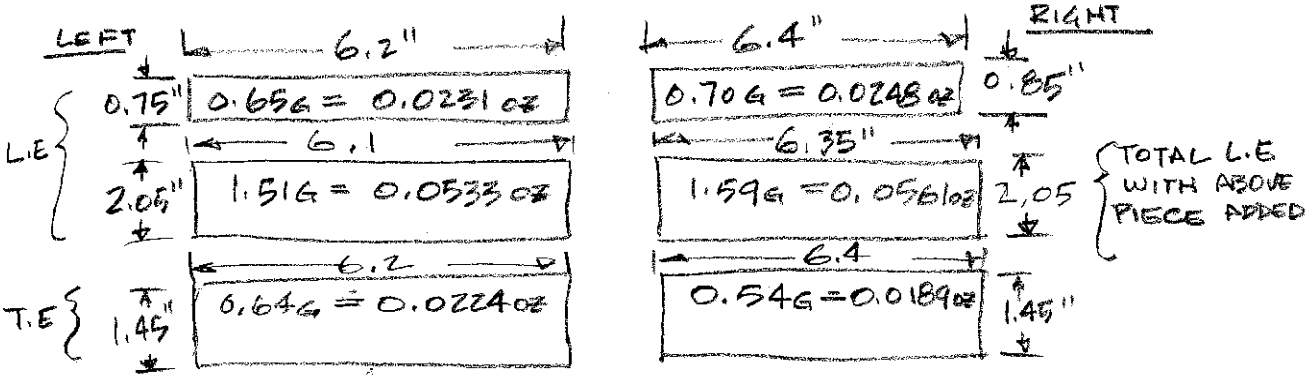

CATEGORY I STANDARD CATAPULT GLIDER
COMPLETE 4-26-97
LEAD + CLAY WT
FUSE 0.083"X0.187"
EPOXY
1" SILK WRAPPED AROUND L.E
FUSE 0.058"X0.158"
WING AREA 30.4 IN²
STAB AREA 9.0 IN²
STAB % 16.4
WEIGHT 0.07050Z
2.00 GRAM
11 3/32"
PROJECTED SPAN
6 3/16"
0.020"X 0.10" BASS L.E
5# "C" GRAIN BALSA
4# + "A" GRAIN
4 1/2# "C"
FLIES LEFT-LEFT
NO FINISH
DIHEDRAL 14.7°
= 1/4" (FULL SPAN)
STAB TILT: LEFT STAB TIP RAISED
FUSE FROM 10# BALSA
FUSE 0.048"X0.086"
0.020"
6# "C" BALSA STAB
0.012"
RUDDER - 6# "C" BALSA
0.015"
WING + 0.6° 48% C.G
0° STAB
4"
RUDDER DEFLECTION ABOUT 1/16"
3/16"
2 1/2"
3 1/8"
2 63/64"
5 3/4"
1 5/16"
1 1/8"
1 3/4"
9/32"
11/32"
1/2"
5/8"
0.023"
0.027"
0.031"
0.035"
0.039"
GRAIN
1/32"
WING BLANK TAPER
L.E FROM 0.02"X0.1" BASS
3/4"
3/32" BALSA
1/16" BALSA
ABOUT 0.045" UNDERCAMBER
AIRFOIL AT CENTER AS BUILT
ABOUT 0.10" U.C.
PYLON 5 1/2# "C" GRAIN 1/16"
1 5/8"
AIRFOIL AT CENTER AS FLOWN
FULL SIZE OUTLINES
0.042"
0.039"
T.E. FLAP
RUDDER
STAB
WING
TEM JOHNSON
4-25-00

136 CATEGORY I CATAPULT GLIDER - STANDARD CLASS

BUILT TO FLY IN CATEGORY I (26' 3" OR LESS) SITES. FLYING #131 SUGGESTED PLANFORM & NEED TO REDUCE WING LOADING TO GET A LOWER SINK RATE. COMPLETE 4-26-97

WEIGHTS:

WING: LE FROM 3/32 X 3 X 48 5# "C" GRAIN (18.2G = 0.642 oz)
TE FROM 1/16 X 3 X 36 4#+ "A" GRAIN (6.2G = 0.219 oz)
TIPS FROM SCRAP 4 1/2# "C" GRAIN



BLANK WITH L.E - OVERSIZE	3.40G - 0.1198 oz
✓ BOTTOM SANDED SMOOTH - APPROX CHORD	2.84G - 0.1003 oz
✓ TAPERED	2.40G - 0.0846 oz
✓ T.E SHAPED	1.98G - 0.0698 oz
✓ L.E SHAPED - TOP FINISHED	1.53G - 0.0550 oz
✓ L/C SANDED	1.19G - 0.0418 oz
WING CUT TO SIZE - DIHEDRAL GLUED	1.16G - 0.0410 oz
✓ SILK REINFORCEMENT ADDED	1.19G - 0.0420 oz
PYLON FROM 1/16 5 1/2# "C" GRAIN - FINISHED	0.04G - 0.0015 oz
WING/PYLON ASSEMBLY	1.28G - 0.0451 oz

STAB & RUDDER: FROM 0.057" 6# "C" GRAIN

STAB BLANK	0.32G - 0.0114 oz
✓ SHAPED	0.10G - 0.0034 oz
RUDDER BLANK	0.11G - 0.0040 oz
✓ SHAPED	0.04G - 0.0013 oz
✓ TRIMMED	0.02G - 0.0006 oz

FUSELAGE: FROM 3/32 X 1/4 X 36 = 2.15G 10#- (CHAMPION)

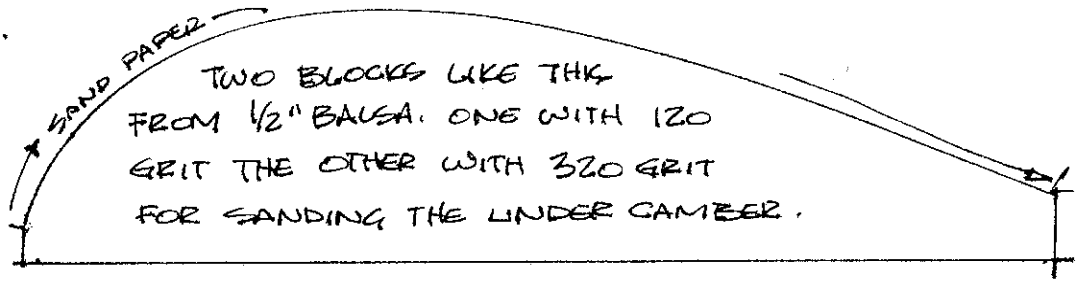
SIDE PROFILED	0.48G - 0.0168 oz
THICKNESS TAPERED	0.29G - 0.0101 oz
TRIMMED TO SIZE	0.28G - 0.0099 oz

ASSEMBLIES

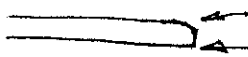
WING/PYLON	1.28G - 0.0451 oz
STAB/RUDDER/FUSELAGE	
COMPLETE AS FLOWN 4-27-97	1.98G 0.0697 oz
(C.G AT 47% ANGULAR DIFFERENCE 1.2°)	

CONSTRUCTION & FLYING SUGGESTIONS

TOOLS

1. A FLAT, SMOOTH, HARD SURFACE TO WORK ON. I USE A 12"×24" PIECE OF GLASS.
2. SANDING BLOCKS FROM PINE-1½" × ½" × 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 BASS 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 ROLLER BALL 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 SILK REINFORCEMENT 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.