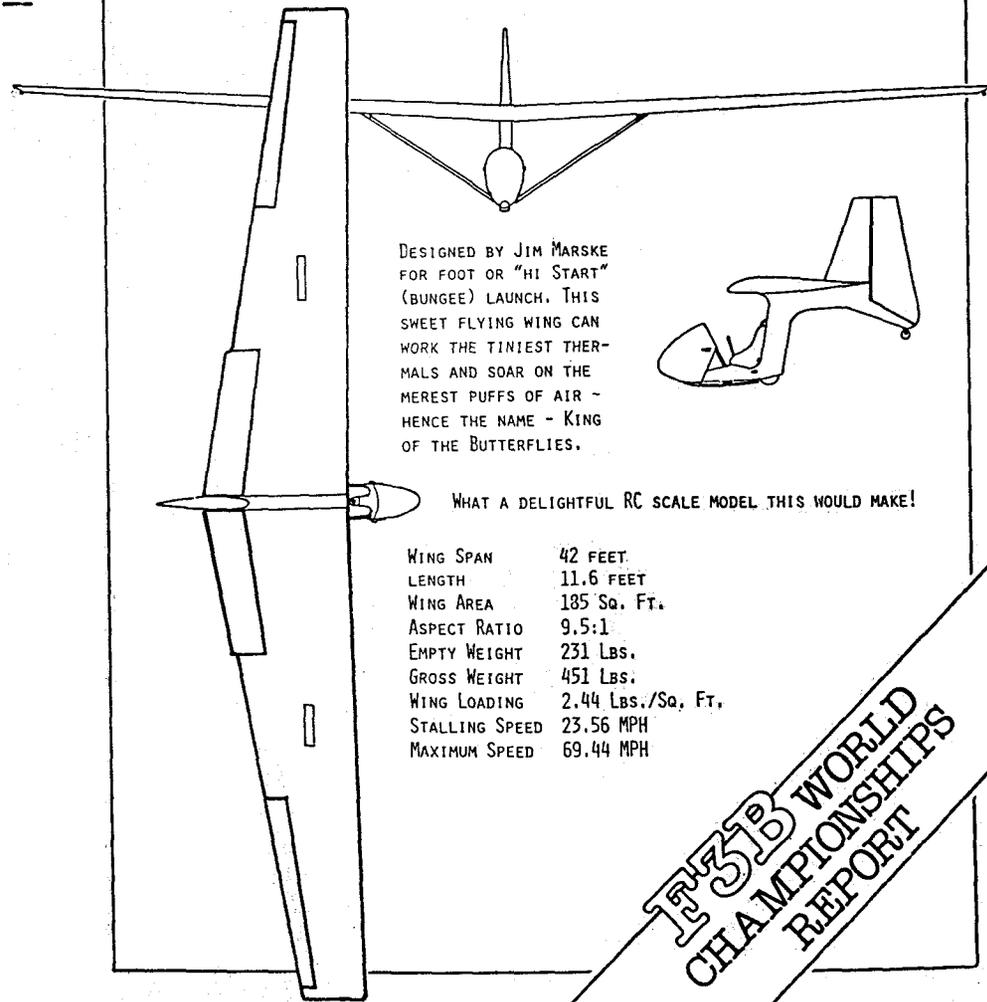




Vol. 2 No. 7

JULY 1985

### MONARCH "C"



DESIGNED BY JIM MARSKO FOR FOOT OR "HI START" (BUNGEE) LAUNCH. THIS SWEET FLYING WING CAN WORK THE TINIEST THERMALS AND SOAR ON THE MEREST PUFFS OF AIR - HENCE THE NAME - KING OF THE BUTTERFLIES.

WHAT A DELIGHTFUL RC SCALE MODEL THIS WOULD MAKE!

|                |                   |
|----------------|-------------------|
| WING SPAN      | 42 FEET           |
| LENGTH         | 11.6 FEET         |
| WING AREA      | 185 Sq. Ft.       |
| ASPECT RATIO   | 9.5:1             |
| EMPTY WEIGHT   | 231 LBS.          |
| GROSS WEIGHT   | 451 LBS.          |
| WING LOADING   | 2.44 LBS./SQ. FT. |
| STALLING SPEED | 23.56 MPH         |
| MAXIMUM SPEED  | 69.44 MPH         |

**1985 WORLD CHAMPIONSHIPS REPORT**

You are invited to join the  
**National Soaring Society**

- OFFICIAL SOARING "SPECIAL INTEREST GROUP"
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- NSS CONTRIBUTES SUBSTANTIAL AMOUNTS TO EACH FFB SOARING TEAM
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- NSS OFFICERS ARE FROM ALL 11 DISTRICTS



For Information Contact  
JOHN R. VOGEL  
904 ORCHARD PARK DR.  
GIBSONIA, PA 15044

### SAILPLANES of the WORLD

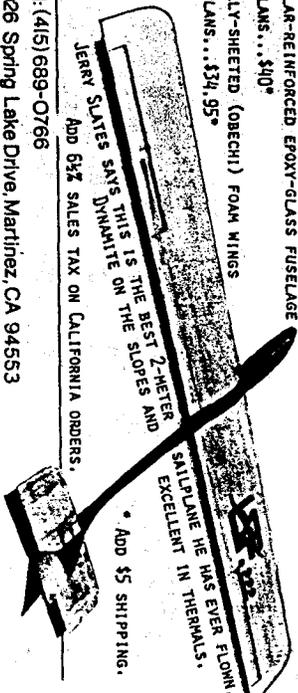
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FULLY-SHEETED (OBECHI) FOAM WINGS  
W/PLANS...\$34.95\*



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SAILPLANE HE HAS EVER FLOWN.  
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Jim Start

"...THERE'S NO USE IN CRYING OVER SPILLED MILK,"...OR SO THE SAYING GOES, SO DON'T EXPECT ANY TEARS FROM ME. HOWEVER, I WOULD LIKE TO TALK A LITTLE BIT ABOUT SOME RECENT EXPERIENCES, AND PUT THINGS IN PERSPECTIVE FOR YOU. THIS YEAR, FOR THE FIRST TIME IN SEVERAL YEARS, PEGGY AND I DECIDED TO TAKE A VACATION; A REAL 'HONEST-TO-GOODNESS' HOLIDAY, WITH TWO WEEKS OFF...NOT THE USUAL DAY HERE AND DAY THERE VARIETY THAT WE'D HAD FOR MANY YEARS. SO, WE DECIDED TO GO TO ENGLAND TO VISIT FRIENDS, DO SOME RC SOARING (HOPEFULLY) AND RELAX. WE GOT TICKETS ON SABENA, THE BELGIAN AIRLINE, WHICH WAS OFFERING A SPECIAL INAUGURAL RATE TO CELEBRATE THEIR NEW SERVICE FROM BOSTON TO BRUSSELS. THERE WAS, FOR US, A SMALL 15-DAY 'WINDOW' DURING WHICH TIME WE HAD TO FLY OR LOSE THE RATE...SO WE PLANNED TO DEPART BOSTON'S LOGAN AIRPORT ON FRIDAY, MAY 10TH...ARRIVING IN BRUSSELS ON SATURDAY THE 11TH. A QUICK FLIGHT FROM BRUSSELS TO LONDON'S GATWICK, VIA BRITISH CALEDONIAN AIRLINES... THERE TO BE MET BY OUR FRIENDS ERIC AND MARGARET MARSDEN. AND SO IT HAPPENED. ON THE WAY TO THE MARSDENS' HOME, THEIR CAR WAS SMASHED INTO BY THIEVES, AND THE LADIES' HANDBAGS STOLEN. THIS MEANT PASSPORTS, CHECK BOOK, CREDIT CARDS, AIRLINES TICKETS, GLASSES, KEYS, PERSONAL EFFECTS, AND ALL THE REST. THE MIDHURST POLICE WERE VERY KIND AND HELPFUL, AND HAVE EVEN MANAGED TO RECOVER SOME OF THE STOLEN PROPERTY AS OF THIS WRITING...BUT NOTHING OF VALUE. IT APPEARS THAT THIS KIND OF THING HAPPENS FREQUENTLY, EVEN IN THE COUNTRY, NOW. SEVERAL TRIPS TO LONDON BY RAIL GRADUALLY SORTED THINGS OUT. NEW PASSPORTS AT THE AMERICAN EMBASSY; NEW TRAVELLERS' CHECKS FROM AMEX (KARL MALDEN IS ABSOLUTELY RIGHT), AND NEW TICKETS FROM SABENA - WHO WERE MOST HELPFUL AND UNDERSTANDING. GRADUALLY, WE RECOVERED - HAVING PUT A STOP TO THE CREDIT CARDS AND CHECKING ACCOUNT, AND GETTING BACK ON OUR FEET. THEN, THE SECOND 'BOMB' HIT US: MY 88-YEAR-OLD MOTHER WHO LIVES ALONE IN NEW YORK STATE FELL AND BROKE HER HIP, WAS PLACED IN HOSPITAL, AND SUFFERED A CARDIAC ARREST...THIS ON THE DAY WE LANDED! TO FINISH THE 'BAD' PART OF THE STORY, UPON ARRIVING BACK HOME IN BOSTON, OUR OWN CAR BROKE DOWN, HAD TO BE TOWED IN FRIDAY AFTERNOON MEMORIAL DAY WEEKEND TRAFFIC IN BOSTON...FIVE MILES TO THE NEAREST FORD DEALERSHIP...WHERE IT SAT FOR TWO WEEKS AWAITING REPAIR. DURING THIS TIME, WE WERE FORCED TO RENT A CAR. WELL, THAT PART IS ALL OVER NOW (I HOPE) AND I CAN THINK ABOUT SOME OF THE GREAT TIMES WE HAD WITH FRIENDS WHILE IN ENGLAND. ERIC MARSDEN AND I TALKED MODELLING ALL THE TIME, AND WE DID A BIT OF SIGHTSEEING, TOO. VISITED THE TANGMERE MUSEUM LOCATED AT THE OLD WWII BATTLE OF BRITAIN FIGHTER STATION, WHERE ERIC IS A VOLUNTEER, AND GENERALLY TOURED AROUND AIRFIELDS AND OTHER POINTS OF INTEREST. THEN WE MET PETER GILL-PURDON, G3NRO, MY 'HAM' FRIEND FROM HULL, AND WE SPENT SOME DELIGHTFUL DAYS WITH PETER AND HIS WIFE EMMA, AND THEIR FAMILY IN YORKSHIRE, SEEING SOME CENTURIES-OLD HISTORICAL SITES. THEN, ON TO VISIT TONY BECKETT IN SEATON, NEAR LEICESTER, WHERE WE FLEW SOME OF HIS SAILPLANES FROM BURROUGH HILL, AN IRON-AGE HILL FORT. ALTOGETHER, THE TRIP WAS MEMORABLE. THE FRIENDSHIP WAS WARM; THE WEATHER WAS TYPICAL ENGLAND: MISTY, RAINY, SUNNY, CLOUDY, AND ALL ELSE MIXED TOGETHER; AND THE 'ADVENTURE' COULD HAVE BEEN AVOID-ED. ON BALANCE, IT WAS FUN AND WORTHWHILE...BUT I WONDER IF I'LL BE RECOVERED ENOUGH TO FLY IN THE NATS THIS MONTH, AS PLANNED?

HAPPY SOARING, Jim JIM

A NOVEL WING FINISHING SYSTEM.....WAYNE CUSTER\*

MANY OF US ARE USING FOAM-CORE WINGS THESE DAYS, AND WOULD LIKE TO OBTAIN A GLASS-SMOOTH, HARD AND IMPERVIOUS FINISH ON THESE CORES. THE SYSTEM I USE WORKS VERY WELL, AND HAS THE ADVANTAGE OF BEING EASY, SIMPLE, AND INEXPENSIVE. BESIDES THAT, IT WORKS EVERY TIME! HERE'S WHAT I DO:

OBTAIN THE FOLLOWING MATERIALS:

1. ENOUGH .6 OZ. OR .75 OZ./SQ. YD. FIBERGLASS CLOTH;
2. K & B EPOXY OF DESIRED FINISH COLOR;
3. A CHIPBOARD WORKSURFACE (1/2" x 24" x 60");
4. A PIECES OF FORMICA OF THE SAME SIZE AS CHIPBOARD ABOVE;
5. CARNAUBA WAX; 6. HOBBY POXY FORMULA 2.

DO THE FOLLOWING STEPS WITH MATERIALS YOU OBTAINED:

1. CEMENT THE FORMICA TO THE CHIPBOARD, USING A GOOD CONTACT CEMENT
2. WAX THE FORMICA SURFACE WITH TWO COATS OF CARNAUBA - BUFF TO POLISH
3. SPRAY THE WAXED FORMICA WITH THE DESIRED EPOXY COLOR COAT, USING K & B
4. ALLOW THE SPRAYED COAT TO CURE/DRY
5. APPLY HOBBY POXY FORMULA 2 TO THE AREA ALREADY COVERED, AND ALLOW TO DRY UNTIL 'TACKY'...THEN LAY THE CLOTH (WHICH YOU HAVE ALREADY CUT OUT TO THE WING SHAPE, ALLOWING SEVERAL INCHES OVERLAP, ON TO THE SURFACE AND USE EPOXY BRUSH TO WET IT OUT WITH MORE HOBBY POXY FORMULA 2. USING OLD PLAYING CARD, SQUEEGEE EXCESS RESIN AND REMOVE.
6. WHEN CURED, 'PEEL' THE EPOXY-FIBERGLASS 'SKIN' FROM THE FORMICA SURFACE. THE COLOR COMES WITH IT.
7. CEMENT THE SHEET OF FIBERGLASS TO THE WING, USING THE FOAM BEDS AND EPOXY OR TRANSFER TAPE (WHICHEVER YOU PREFER).

\* SUPERWINGS, 422 WENTWORTH AVENUE, BATTLE CREEK, MI 49015

EDITOR'S COMMENT:

WAYNE CUSTER HAS BECOME THE NEW OWNER OF SUPERWINGS, FORMERLY OWNED BY THE LATE HY JOHNSON IN CALIFORNIA. IF YOU NEED FOAM CORES, FUSELAGES, CANOPIES, ACCESSORIES OF ALL KINDS, AND A NEW HIGH-START RUBBER THAT IS THE BEST I HAVE EVER SEEN, WRITE OR CALL WAYNE. HIS TELEPHONE NUMBER IS: (616) 965-5293. TELL HIM RCSD RECOMMENDED HIM.

\*\*\*\*\*

WING TIPS AND SOURCES

FIBERGLASS CLOTH - .6 oz. & .75 oz. - FROM FIBER-GLAST, 1944 NEVA DRIVE, DAYTON, OH 45414. TELEPHONE: (513) 274-1159. REPORTED TO BE VERY NICE FOLKS TO DEAL WITH. ASK FOR FREE CATALOG & MENTION RCSD.

NEW IMPORT/EXPORT WHOLESALE HOBBY BUSINESS - DALE WILLOUGHBY, FORMER OWNER OF SCALE MODEL RESEARCH - USA, HAS MOVED TO GUAM TO 'RETIRE.' DALE JUST CAN'T KEEP HIS HANDS OUT OF SAILPLANES, SO HE HAS BEEN BUILDING DEMONSTRATOR MODELS FOR HIS BUSINESS: A WIK ASTIR CS-77 IN 1/4 SCALE, A MULTIPLEX ASW-22, AND A MINI BIRD OF TIME DALE HAS FOUND A GOOD SLOPE SITE NEAR NIMITZ HILL ABOUT MID-ISLAND, WITH GOOD LANDING GROUND IN SAW GRASS. WRITE HIM AT P.O. Box 23305, MPO (GMF), GUAM, GU 96921-3305.

FIELD NOTES - ANTARES.....JEFF FERRIS\*

"DEAR JIM - I THINK YOUR NEWSLETTER IS GREAT! YOU ASKED FOR SOME ARTICLES FROM YOUR READERS, SO HERE'S A QUICK ONE THAT MAY HELP.

"I'VE SEEN AT LEAST 6 NEW ANTARES AT OUR FLYING FIELD, INCLUDING MY OWN. CONSIDERING THAT WE HAVE LESS THAN 20 ACTIVE LOCALS FOR FLYERS, THAT MAKES IT VERY POPULAR, RIGHT? WRONG! ALL HAVE SOME COMPLAINTS, AND SINCE I WAS MORE OR LESS THE LAST TO BUILD ONE, I GOT THE 'BUGS' OUT EARLY.

" ONE MAJOR COMPLAINT: FUSELAGE IS TOO NARROW. I ADDED STRIPS OD 3/8" X 1/8" SPRUCE BETWEEN THE SIDES AND THE FORMERS...WHICH GAVE ME 1/4" MORE WIDTH AND EXTRA STRENGTH.

SECOND COMPLAINT WAS THE FRAGILENESS OF THE FUSELAGE IN FRONT OF THE TAIL SECTION...I SAW ONE BREAK CLEAN IN HALF ON A SOFT LANDING. WELL, TRY SOME OF DAN PARSONS' .6-OZ. FIBERGLASS CLOTH ON THE INSIDE OF THE FUSELAGE BEFORE CLOSING UP WITH THE BOTTOM SHEETING. SOME CARBON FIBER FROM THE PLY DOUBLER BACK TO THE TAIL HELPS, TOO. GLASS OVER IT, SOAK UP AS MUCH EXCESS EPOXY AS POSSIBLE (TO HELP CUT DOWN WEIGHT) AND CLOSE UP THE FUSELAGE PER INSTRUCTIONS. THE GLASS 'C' CHANNEL FORMED INSIDE IS VERY STRONG...AND BEING CAREFUL WITH THE GLASS & EPOXY WILL STILL NOT ADD TOO MUCH WEIGHT.

"THANKS FOR LETTING ME PUT IN MY 2¢ WORTH. AGAIN, YOU HAVE A GREAT THING HERE, SO KEEP IT UP!"

\* 6812 South Congress #206, Austin, TX 78745

\*\*\*

EDITOR'S COMMENT:

JEFF'S COMMENTS IN NO WAY DETRACT FROM WHAT IS A FINE, COMPETITIVE SAILPLANE. FIELD EXPERIENCE IS ALWAYS HELPFUL WHEN GIVEN IN A CONSTRUCTIVE MANNER, AND WE THINK THAT THIS KIND OF REPORT IS EXACTLY WHAT OUR READERS NEED AND WANT. THE TOPFLITE ANTARES IS ONE OF THE BEST SAILPLANE BUYS AROUND, AND WELL WORTH YOUR MONEY IF YOU ARE A CONTESTER OR JUST A FUN FLIER. LOOK AT YOUR FAVORITE DEALERS FOR ONE.

\*\*\*\*\*

MORE HL NEWS.....George C. AVENT

"DEAR JIM: JUST A COUPLE OF LINES TO COMPLIMENT YOU ON THE DIGEST. IT'S GREAT! OF COURSE, I COULD CRY A BIT, AND WISH FOR MORE PAGES, MORE PICTURES, AND ALL THE OTHER GOOD STUFF...BUT I'M SURE THAT'S COMING AS SOON AS PRACTICAL.

"GLAD TO SEE YOU HAVE CAUGHT THE HL FEVER...AIN'T IT FUN??? I HAVE A 53" ORIGINAL THAT I HAVE FLOWN FOR OVER TWO YEARS. NOT IDEAL PERHAPS, BUT FAIRLY GOOD. THICK WING SECTION, WITH A LOT OF PHILLIPS ENTRY (ERIC MARSDEN'S 'ZIP' STYLE AIRFOIL) ALMOST IMPOSSIBLE TO STALL WITH A FAIRLY LONG NOSE-MOMENT (NO BALLAST WITH 100 MA BATTERY), BUILT-UP FIN AND STABILIZER, ETC. FOR AN ALL-UP WEIGHT OF UNDER 10 OUNCES... UNTIL I DECIDED TO GLASS THE FUSELAGE AND PAINT IT...NOW, IT'S 11 1/4 OZ. READY TO FLY. STILL FLIES WELL, BUT NOT QUITE AS SLOWLY AS BEFORE. HAS A NUMBER OF GOOD THERMAL FLIGHTS, MOST WITHOUT STOPWATCH, BUT IT DOESN'T TAKE LONG TO GET TOO FAR AWAY SO THAT CONTROL IS DIFFICULT FOR MY TIRED OLD EYES.

CONTINUED,

GEORGE AVENT ON HL

"JOHN LUPPERGER'S COMMENTS ARE GOOD. 1/64" PLY ON THE INSIDE OF THE FUSELAGE SIDES ADDS MUCH STRENGTH WITHOUT A LOT OF WEIGHT. TAIL SURFACES SHOULD BE OUTLINED IN 1/8" X 3/16" FAIRLY HARD Balsa, WITH A 1/16" X 1/8" DIAGONAL BRACING. EVEN SUPER MONOKOTE WILL NOT CAUSE WARPING PROBLEMS IF DESIGN IS PROPER...LOOKS NICER THAT WAY, TOO, THAN THE SHEET SURFACES. WILL TRY EITHER SOLARTEX OR MICA FILM ON MY NEXT HL WING.

"NOTHROP'S LAUNCHING TECHNIQUE IS HELPFUL, BUT I GET BEST RESULTS TRIMMING IN A WIDE LEFT CIRCLE, THROW ABOUT 30 - 40 DEGREES UPWARD, WITH WING BANKED RIGHT (ALMOST VERTICAL) BUT STILL HAVE TO HOLD A LITTLE FORWARD STICK WITH MY LEFT HAND.

"PICTURES & ARTICLE ON GERRY KNIGHT'S K-18 QUITE INTERESTING. I WOULD LOVE TO MODEL MY ASK-13 WHEN I HAVE SOME OF THE OTHER PROJECTS OUT OF THE WAY, SUCH AS: RECOVERING THE '13, COMPLETING A FISHER FP-101 ULTRALIGHT, FINISHING MY PARAGON, ICARUS, ELECTRIC-POWERED SCALE RF-3, FINISH LEVELLING AND GRASSING THE 10 ACRES IN FRONT OF THE HOUSE, SO I CAN FLY IN & OUT WITH THE ULTRALIGHT, ETC., ETC."

"CHECK ENCLOSED FOR RENEWAL! THANKS AND GOOD THERMALS! GEORGE"

\*\*\*

COMMENT:

GEORGE, YOU'RE A BUSY GUY, WHAT WITH ALL OF THOSE PROJECTS. LOOKS TO ME AS IF YOU'VE GONE INTO AVIATION WHOLE HOG, AND THAT IS FABULOUS. MANY OF US WOULD LIKE TO HAVE OUR OWN FRONT (OR BACK) YARD AIRPORTS. WHEN YOU GET A CHANCE, SEND IN SOME PIX AND PLANS FOR THE HAND-LAUNCH DESIGN. OUR READERS WOULD LIKE TO HAVE A PEEK AT IT, AND SO WOULD I. MEANWHILE, HAVE FUN WITH YOUR 'TOYS'. THAT ASK-13 SOUNDS GOOD TO ME. EVER SINCE I SAW ONE, I THOUGHT IT WOULD BE FUN TO FLY...ESPECIALLY WITH A PASSENGER, WHICH IS THE MOST FUN KIND OF FLYING FOR ME. JIM.

MORE SOURCES:

I JUST RECEIVED A BROCHURE FROM AMS IMPORT/EXPORT AT 1110 SOUTH WELLS AVENUE, RENO, NEVADA 89502; TELEPHONE: (702) 786-7733. IN THE SAILPLANE FIELD, BAUER MODELLE IS FEATURED WITH THE VARIANT KRANICH 13-FOOTER, TWIN TAIL BOOM, POWER ASSISTED SAILPLANE; THE VARIANT RECORD 300A AND 400A CONVENTIONAL SAILPLANES WITH 14-FOOT AND 10-FOOT SPANS; THE VARIANT 290 DASH; THE DIAMANT II SCALE MACHINE; A PILATUS B-4 SCALE MACHINE; AN FS-25 15-FOOTER ARF SCALE DESIGN. IN ADDITION, AMS CARRIES A 3-METER AERO CHAMP SAILPLANE, PLUS A COUPLE OF DALOTELS FOR POWER, A SUPER FLI, A COUPLE OF SCALE POWER SHIPS, AND A COUPLE OF DUCTED FAN ASSEMBLIES. READERS, IT LOOKS AS IF THERE ARE SOME INTERESTING MACHINES HERE, AND A FEW THAT I HAVEN'T SEEN BEFORE ON THIS SIDE OF THE ATLANTIC. WHY NOT GIVE THESE FOLKS A BUZZ AND LET ME KNOW HOW YOU LIKE THEM. I'LL PUT YOUR COMMENTS IN A FUTURE ISSUE.

OH YES, PRICES RANGE FROM \$89 FOR THE DIAMANT II UP TO \$293.15 FOR THE YAK 55 AEROBATIC SCALE MODEL OF THE RUSSIAN TEAM SHIP.

"How to IRON ON MONOKOTE HINGES".....RAY DeNOBLE

THIS NEAT SUGGESTION COMES FROM THE GREATER DETROIT SOARING AND HIKING SOCIETY'S JUNE 1985 NEWSLETTER. GAPLESS HINGES WITH VERY LITTLE DRAG AND VERY LITTLE RESISTANCE TO MOVEMENT ARE MUCH IN DEMAND FOR GLIDER GUIDERS. SURPRISINGLY, MONOKOTE SEEMS TO HAVE ALMOST INFINITE RESISTANCE TO FAILURE IN THE BENDING MODE, SO HINGES MADE FROM THIS MATERIAL ARE SECURE, STRONG, NEAT, AND GOOD LOOKING. THANKS TO RAY AND THE GDSHS CREW.

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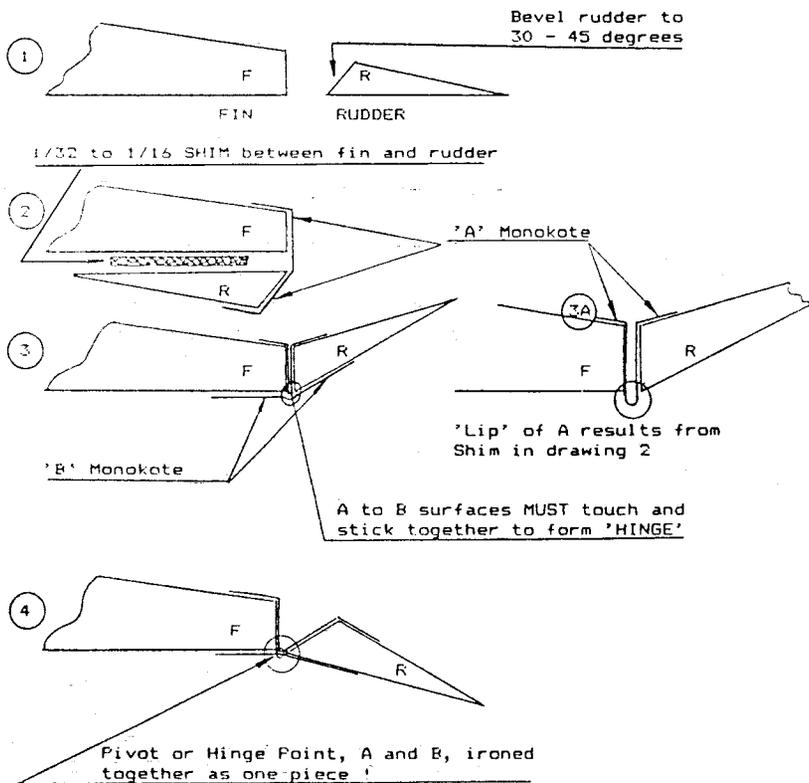


IRON-ON 'MONOKOTE' HINGES

Ray DeNoble

Top View - FIN / RUDDER

End View - WING / AILERON / FLAP



LSF LEVEL V MEMBERSHIP ROLL

|                       |      |                |
|-----------------------|------|----------------|
| 1. JOHN BAXTER        | 024  | JULY 3, 1975   |
| 2. STEVE WORK         | 571  | DEC. 15, 1975  |
| 3. FRED WEAVER        | 283  | SEPT. 17, 1976 |
| 4. NEIL NOLTE         | 586  | MAY 30, 1977   |
| 5. MARVIN QUALLS      | 1639 | FEB. 19, 1978  |
| 6. JOHN NEWMAN        | 1632 | AUG. 17, 1978  |
| 7. DON HARRIS         | 810  | AUG. 27, 1978  |
| 8. CHRIS ADAMS        | 348  | OCT. 15, 1978  |
| 9. TOM CHRISTIAN      | 074  | JUNE 24, 1979  |
| 10. DWIGHT HOLLEY     | 2259 | JULY 8, 1979   |
| 11. HOWARD SEARS      | 294  | JULY 12, 1979  |
| 12. KEN BATES         | 604  | AUG. 26, 1979  |
| 13. PAUL WEDEKING     | 2540 | NOV. 4, 1979   |
| 14. CRAIG FOXGORD     | 882  | JAN. 27, 1980  |
| 15. PAT FLINN         | 2160 | AUG. 8, 1980   |
| 16. JACK HINER        | 383  | OCT. 12, 1980  |
| 17. KEITH KINDRICK    | 1693 | MAY 17, 1981   |
| 18. GERALD ZEIGENFUSE | 944  | JUNE 13, 1981  |
| 19. DON CLARK         | 082  | JUNE 28, 1981  |
| 20. DON GOUGHNOUR     | 595  | JUNE 28, 1981  |
| 21. JIM PORTER        | 194  | JULY 12, 1981  |
| 22. DON PATWRSON      | 1365 | AUG. 23, 1981  |
| 23. WILLIAM MELESKE   | 1227 | MARCH 4, 1982  |
| 24. OTTO HEITHECKER   | 170  | JULY 4, 1982   |
| 25. JAMES BOHMER      | 1460 | AUG. 8, 1982   |
| 26. WARREN PLOHR      | 334  | AUG. 8, 1982   |
| 27. ROBERT STEELE     | 800  | AUG. 15, 1982  |
| 28. WALT GOOD         | 063  | MAR. 22, 1983  |
| 29. MIKE REAGAN       | 173  | JULY 3, 1983   |
| 30. BOB ROBINSON      | 002  | AUG. 14, 1983  |
| 31. JOHN HUMPHREYS    | 3064 | SEPT. 3, 1983  |
| 32. LARRY JOLLY       | 3579 | NOV. 16, 1983  |
| 33. STANLEY WATSON    | 2542 | FEB. 19, 1984  |
| 34. BOB CHAMPINE      | 3128 | MAY 15, 1984   |
| 35. CHUCK BEEMAN      | 293  | JUNE 10, 1984  |
| 36. JOHN HOOVER       | 592  | JULY 8, 1984   |
| 37. MIKE KOZUMPLIK    | 2497 | JULY 22, 1984  |
| 38. CAL POSTHUMA      | 2997 | AUG. 11, 1984  |
| 39. TIM McDOW         | 2764 | SEPT. 22, 1984 |

THERE ARE, NO DOUBT, SOME OTHERS WHO HAVE BEEN GRANTED THE LEVEL V DURING LATE 1984 AND IN 1985. WE DO NOT HAVE THE UP-TO-DATE LIST. FOR ADDITIONAL INFORMATION, WRITE TO LSF, P.O. Box 647, MUNDELEIN, ILLINOIS 60060. ASK FOR THEIR ASPIRANTS PACKAGE.

A recent question from one of our 'Tech Sessions' about Monokote hinges and how-to-install them, requires a few drawings. (One picture is worth a thousand words).

GOOD FRIEND AND FREQUENT CONTRIBUTOR, KALE HARDEN, JUST RETURNED FROM AUSTRALIA AND THE F3B WORLD CHAMPIONSHIP SOARING CONTEST. THIS IS HIS STORY DONE ESPECIALLY FOR RCSD. (YOU MAY REMEMBER THAT KALE IS ALSO A KEY FIGURE IN THE INTERNATIONAL POSTAL SOARING CONTEST SERIES WHICH IS NOW UP TO EIGHT PARTICIPATING INTERNATIONAL SOARING CLUBS).

WAIKERIE, SOUTH AUSTRALIA 1985

"PEOPLE WHO KNOW, RATE THE WORLD CHAMPIONSHIPS HELD IN 1983 IN YORK, ENGLAND AS THE ALL-TIME TOPS IN TOURNAMENTS OF THIS TYPE. FACILITIES, ORGANIZATION, AND COMPETITION WERE ALL TOP DRAWER. WE NOW HAVE A CLOSE SECOND. THE WORLD SOARING CHAMPIONSHIPS (F3B) HELD IN WAIKERIE, AUSTRALIA IN APRIL OF THIS YEAR RATE RIGHT UP THERE WITH THE BEST. UNDER THE GUIDING HAND OF RICHARD TAPP, THE MULTITUDE OF AUSSIE WORKERS PRODUCED ANOTHER CLASSIC. EVERY EVENTUALITY HAD BEEN THOUGHT ABOUT, PLANNED FOR, AND THE WHOLE AFFAIR RAN LIKE CLOCKWORK...ALL BUT THE WEATHER, THAT IS...AND IT REFUSED TO COOPERATE UNTIL THE FINAL DAY OF COMPETITION! ON THAT DAY, WITH PERFECT WEATHER, THE REIGNING WORLD CHAMPION RALF DECKER, SHOWED THE REST OF THE MODELLING WORLD WHY HE IS STILL WORLD CHAMPION. HAVING TRAILED DAVE WORRALL OF ENGLAND ALL WEEK, HE FLEW A 19-SECOND SPEED RUN TO SNATCH THE CHAMPIONSHIP FROM DAVE BY A MERE 33.4 POINTS OUT OF 17,000! THEN IT WAS DAVE'S TURN; HE NEEDED A 21-SECOND RUN TO BE THE NEW CHAMPION, BUT THE BEST HE COULD DO WAS 22 SECONDS. THE TREMENDOUS EXCITEMENT THAT RAN THROUGH THE CROWD AS THIS TRANSPIRED HAD TO BE WITNESSED. IT WAS AWESOME.

"THE CONTEST WAS SCHEDULED TO LAST SIX DAYS, WITH ADDITIONAL DAYS FOR PRACTICE AND PROCESSING. PLANES WERE PROCESSED WITHOUT INCIDENT ON SATURDAY, AND A FEW UNOFFICIAL PRACTICE FLIGHTS WERE MADE. THE WEATHER WAS FINE WITH TEMPERATURES IN THE 100-DEGREE RANGE. LATE IN THE AFTERNOON, THUNDERSTORMS DEVELOPED AND A FRONT MOVED THROUGH. ON SUNDAY, THE SCHEDULED PRACTICE DAY, THE FRONT CONTINUED TO MOVE THROUGH; TEMPERATURES DROPPED AND THE WIND CAME UP, BLOWING 25 - 30 KNOTS. TWO PRACTICE FLIGHTS WERE ATTEMPTED, BUT THE CONDITIONS WERE SO MISERABLE THAT THESE BECAME HAZARDOUS AND ALL FURTHER FLYING WAS CANCELLED. THE FOLLOWING FIVE DAYS OF THE CONTEST WERE PLAGUED BY HIGH WINDS AND COOL TEMPERATURES WITH A SCATTERING OF SHOWERS. THE LOSS OF THE PRACTICE DAY HAD SOME EFFECT ON THE FINAL OUTCOME OF THE CONTEST AS WILL BE DESCRIBED LATER. THE FINAL DAY OF THE CONTEST WAS PERFECT FOR SAILPLANES, TEMPERATURE IN THE 70-DEGREE RANGE, AND A SLIGHT BREEZE BLOWING. IN SPITE OF THE MARGINAL WEATHER, FOUR EVENTS WERE FLOWN EACH DAY EXCEPT THE LAST WHEN ONLY DISTANCE AND SPEED WERE FLOWN. ONLY ONE ROUND OF SPEED HAD TO BE POSTPONED UNTIL THE FOLLOWING DAY BECAUSE OF POOR WEATHER. ALL OTHER EVENTS WERE FLOWN AS SCHEDULED. SEVEN ROUNDS WERE FLOWN IN ALL, WITH THE POOREST BEING DISCARDED. THE CONTESTANTS RESPONDED BEAUTIFULLY TO THE POOR WEATHER, AND FLYING THROUGHOUT THE CONTEST WAS OF THE HIGHEST CALIBER.

...CONTINUED

"A ROUND-BY-ROUND DESCRIPTION OF THE CONTEST WOULD BE BORING, SO I SHALL RECOUNT ONLY SOME OF THE SIGNIFICANT HAPPENINGS. MIKE O'REILLY OF THE AUSTRALIAN TEAM LED THE COMPETITION AT THE CLOSE OF THE FIRST DAY'S ACTION. RALF DECKER CROSSED THE RESTRAINING LINE ON HIS SPEED RUN AND RETURNED A ZERO SCORE. HAD THE CONTEST LASTED ONLY FIVE ROUNDS, THERE WOULD HAVE BEEN A DIFFERENT WINNER, AS THIS LAPSE CAUSED HIM TO SCORE ONLY 1991 POINTS FOR THE ROUND. ONLY WHEN MORE THAN FIVE ROUNDS ARE FLOWN DO THE RULES PERMIT DISCARDING ONE ROUND, AND WITHOUT DISCARDING THIS ROUND DECKER WOULD NOT HAVE WON.

"THROUGHOUT THE FIRST ROUND MOST TEAMS WERE TROUBLED BY THEIR TURNAROUNDS PULLING OUT OF THE GROUND. STEVE NEU OF THE U.S. TEAM WAS ONE OF THE CONTESTANTS BOTHERED BY THIS PROBLEM. IT SEEMS THAT THE AREA WHERE THE TURNAROUNDS WERE STAKED CONSISTS OF ABOUT FOUR INCHES OF SOFT TOPSOIL BELOW WHICH THERE IS SANDSTONE! TEAMS WITH SMALL STAKES AND LIGHT HAMMERS WERE MOST AFFECTED AS THEY COULD NOT DRIVE THE PEGS INTO THE STONE. AS THE WEEK PROGRESSED, LARGER STAKES AND LARGER HAMMERS APPEARED, AND THAT SOLVED THE PROBLEM. HAD THE PRACTICE DAY NOT BEEN BLOWN OUT, MOST TEAMS WOULD HAVE SORTED OUT THIS PROBLEM BEFORE THE CONTEST BEGAN.

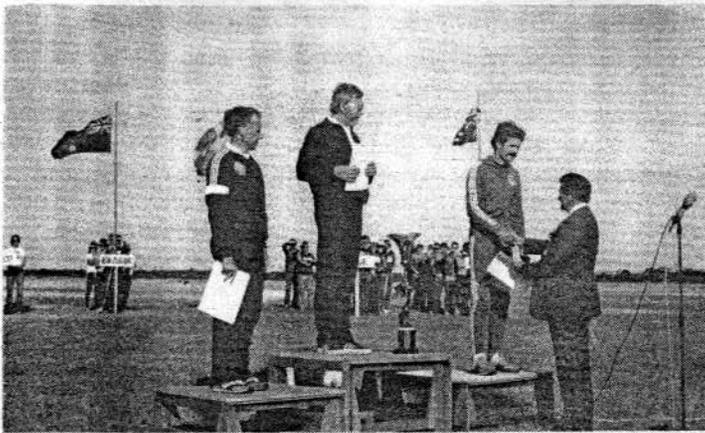
"DAVE WORRALL LED THE COMPETITION AFTER DAYS 2, 3, 4, AND 5. HE WAS ONE OF THE MOST CONSISTENT FLIERS AT THE CONTEST, AND IT WAS ONLY DECKER'S TREMENDOUS SPEED FLIGHT UNDER PRESSURE THAT KEPT DAVE FROM BECOMING THE NEW WORLD CHAMPION. OF COURSE DECKER PROVED THAT HE IS THE CHAMPION BY RESPONDING WHEN THE CHIPS WERE DOWN.

"GREAT BRITAIN WON THE TEAM CHAMPIONSHIP, BUT IT WAS NOT EASY. THEY WERE UNDER PRESSURE ALL WEEK FROM THE GERMAN AND AUSTRIAN TEAMS. IT APPEARS THAT PARITY HAS ARRIVED IN INTERNATIONAL F3B COMPETITION, AS MOST COMPETITORS HAD SAILPLANES CAPABLE OF WINNING THE EVENT. LAUNCHING HAS EVENED OUT ALSO, WITH MEMBERS OF THE BETTER TEAMS ACHIEVING APPROXIMATELY THE SAME HEIGHTS. USE OF THE 'WEAK LINK' AS IN THIS CONTEST MAY HAVE HELPED ACCOMPLISH THE UNIFORMITY OF LAUNCHING, ALTHOUGH VERY FEW WEAK LINKS WERE BROKEN; MOST OF THE LINE BREAKS WERE CAUSED BY NICKS IN THE MONOFILAMENT LINES USED BY THE COMPETITORS.

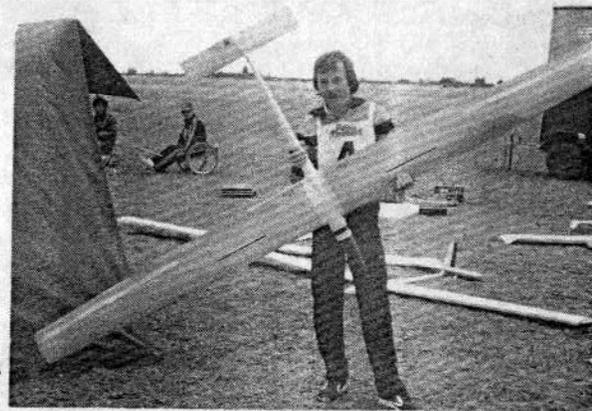
"THERE WERE TWO LAUNCHING TECHNIQUES WORTHY OF NOTE. THE FIRST WOULD HAVE TO BE THE CHINESE METHOD...THEY USED A SIMPLE PULLEY HAND TOW. THEIR LAUNCH HEIGHT WAS VERY GOOD, ALTHOUGH PERHAPS JUST A BIT LESS THAN THAT PRODUCED BY THE BEST OF THE POWERFUL ELECTRIC WINCHES. ALSO OF NOTE IS THE FACT THAT ALL OF THE CHINESE TEAM MEMBERS FLEW THE SECOND LAP OF THEIR SPEED RUNS INVERTED! THE SECOND NOTEWORTHY LAUNCHING METHOD WAS THAT USED BY THE BRITISH TEAM. THEY HAD A CONSTANT-TENSION PULLEY ARRANGEMENT ON THEIR WINCH, AND THEIR TURNAROUND WAS ABOUT ONE METER OFF THE GROUND. THEIR LAUNCHES WERE ABOUT AS HIGH AS ANY OF THOSE AT THE CONTEST...AN ESTIMATED 250 METERS WAS HEARD, AND IS PROBABLY NOT TOO FAR OFF THE MARK.

"ONLY ONE POLYHEDRAL AIRPLANE WAS FLOWN AT THE CONTEST, ALL OTHERS BEING OF THE STRAIGHT DIHEDRAL TYPE WITHAILERONS. THERE WERE FEW, IF ANY WOODEN FUSELAGES, ALL BEING OF FIBERGLASS CONSTRUCTION. MOST USED SOME REINFORCEMENT WITH MORE EXOTIC MATERIALS LIKE CARBON, KEVLAR, AND BORON FIBERS. THERE WERE MANY ONE-PIECE CAST WINGS, BUT MOST WERE OF THE BUILT-UP VARIETY. NO RELEASABLE TOW HOOKS WERE SEEN, AND MOST TEAMS

...CONTINUED



Winners left to right  
Worrall, 2nd  
Decker, 1st  
Wasner, 3rd



Bird of Australia  
with Marjoli.

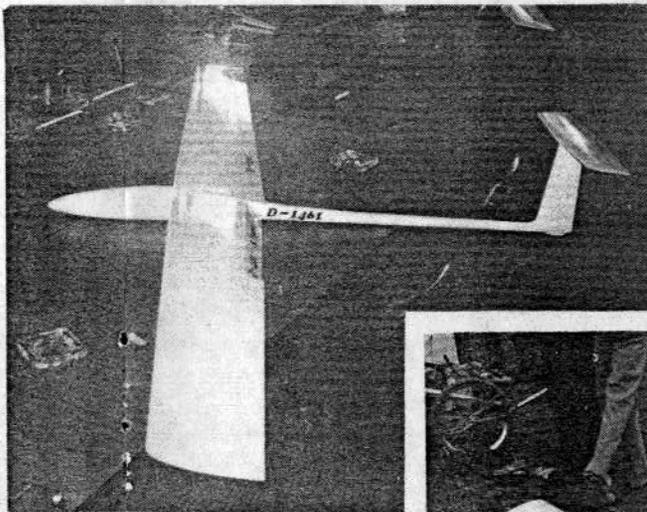
Mike O'Reilly of Australia with  
Europa. Led competition first day.

# F3B WORLD CHAMPIONSHIPS

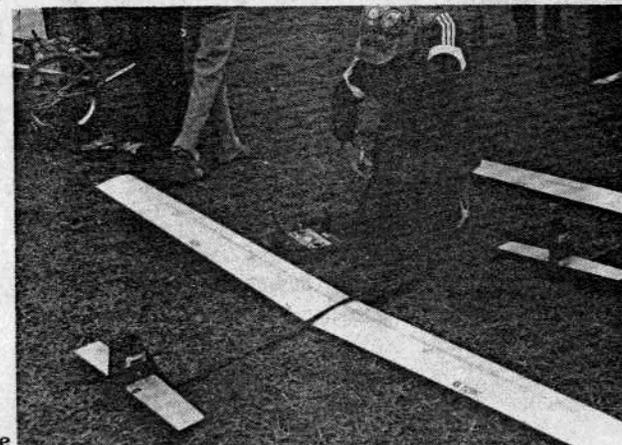
PHOTOS BY KALE HARDEN



Wasner of Austria.  
3rd place



1st place. Ralph  
Decker's plane.



Worrall of U.K. with  
graphite reinforced  
glass wing. 2nd place

WORLD CHAMPS CONTINUED.....

USED MONOFILAMENT LINE ON THEIR WINCHES. AS ONE PARTICIPANT WAS HEARD TO SAY: 'IT'S LIKE A GIANT RUBBER BAND...'. LINE DIAMETER VARIED BETWEEN ONE-HALF AND ONE MILLIMETER (0.020" - 0.040"), AND BREAKING STRENGTH WAS ESTIMATED AT SOMEWHERE AROUND 160 POUNDS.

"ALL OF THE TOP FINISHING MODELS HAD SOME SORT OF EFFECTIVE AIR BRAKING SYSTEM. THESE RANGED FROM OPENING CANOPIES TO SPOILERS TO FLAPS TO REFLEXED AILERONS. THE MOST EFFECTIVE OF THESE SEEMED TO BE THE ARRANGEMENT WHERE THE FLAPS GO DOWN AS THE AILERONS GO UP (A LA THE DODGSON WINDSONG METHOD...JHG). THE NECESSITY FOR SPEED CONTROL IS BROUGHT ON BY THE 'WORKING TIME' RULES OF F3B. IN A SIX-MINUTE DURATION TASK FOR EXAMPLE, THE COMPETITOR GETS 9 MINUTES OF WORKING TIME. HE MAY LAUNCH, SEARCH FOR LIFT, AND - IF HE HAS A POOR LAUNCH, OR FINDS NO LIFT - HE MAY RELAUNCH. HOWEVER, IN ORDER TO GET CREDIT FOR A 6-MINUTE MAX, HE MUST RELAUNCH WITHIN THE FIRST THREE MINUTES. TO RELAUNCH IN THIS NARROW TIME SLOT, HE MUST BE ABLE TO DRIVE BACK TO THE LAUNCH POINT, SLOW THE PLANE FOR LANDING, LAND, AND RELAUNCH...HENCE THE REQUIREMENT FOR AIR BRAKES. A SIMILAR STRATEGY APPLIES TO DISTANCE AND SPEED FLIGHTS, WITH THE COMPETITOR HAVING A LIMITED 'WORKING TIME.'

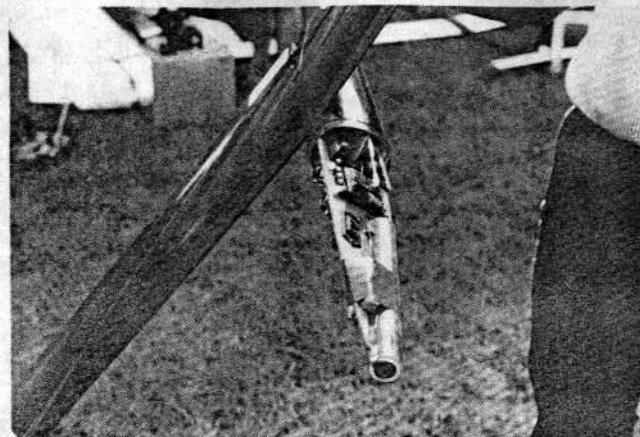
"THE AIRPLANES ARE HEAVY AND STRONG, WITH 18 TO 20-OUNCE PER SQ. FT. WING LOADINGS BEING THE ORDER OF THE DAY. ALTHOUGH THESE WERE THE LOADINGS FOR THE SPEED EVENT, THEY WERE NOT GREATLY REDUCED FOR DURATION AND DISTANCE TASKS. WHEN ASKED ABOUT CHANGES TO HIS PLANE, DECKER SAID HE ONLY MADE THE WING STRONGER. IT WAS CAPABLE OF WITHSTANDING 4 G'S OF STRESS, AND NOW IT CAN TAKE 5 G'S. STEVE NEU OF THE U.S. TEAM USED A 5/8" DIAMETER GRAPHITE ROD AS A WING JOINER, AND MIKE O'REILLY OF THE AUSSIE TEAM USED A HALF-INCH DIAMETER STEEL ROD ONE METER LONG! THE AVERAGE WINGSPAN WAS ABOUT 120 INCHES, AND SAILPLANES OF THIS SIZE APPEARED TO HAVE AN ADVANTAGE OVER THE SMALLER ONES. QUABECK AIRFOILS WERE IN ALMOST UNIVERSAL USE, THE NOTABLE EXCEPTION BEING THE CHINESE WHO USED EPLLER SECTIONS.

"AS PREVIOUSLY MENTIONED, THE CONTEST WAS A CLASSIC, WELL ORGANIZED AND CARRIED OUT TO PERFECTION. BEST OF ALL, THE BEST PILOTS WON. ISN'T THAT WHAT WE ALL HOPE FOR IN A COMPETITION OF THIS SORT?

FINAL RESULTS

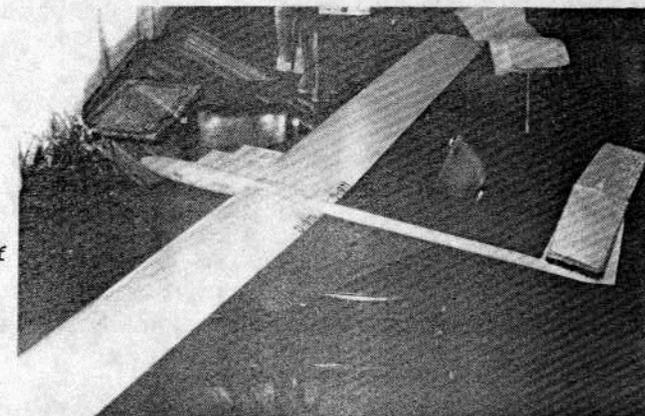
- TEAM:
1. UNITED KINGDOM.....51,376.8 POINTS
  2. F.R. GERMANY.....51,066.0 "
  3. AUSTRIA.....50,613.2 "
  4. AUSTRALIA.....49,870.4 "
  5. U.S.A.....49,115.2 "

- INDIVIDUAL:
1. RALF DECKER (F.R.G.)....17,425.0 POINTS
  2. DAVE WORRALL (U.K.)....17,391.6 "
  3. K. WASNER (AUSTRIA)....17,353.4 "
  4. S. BLANCHARD (U.K.)....17,292.3 "
  5. R. LIESE (F.R.G.) .....17,283.5 "
  11. S. NEU (USA) ..... 16,633.0 "
  13. M. REGAN (USA).....16,538.0 "
  19. M. BAME (USA) .....15,944.2 "

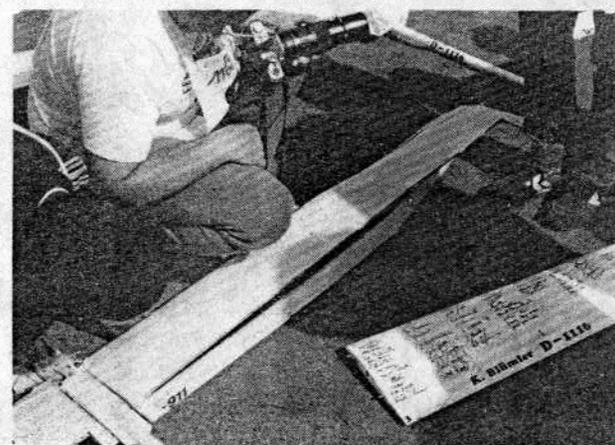


Eicholzer of Austria

WORLD CHAMPS PHOTOS BY KALE HARDEN



Liese (frg) - beautiful - spoilers on bottom of wing - flaperons



Liese of Germany after wing flutter in last speed run.

CHAMPINE ON TURNAROUNDS & WINCHES.....BOB CHAMPINE\*

WHENEVER I GET LOW ON FRESH MATERIAL TO USE, I TURN TO MY STOCK-PILE OF MATERIAL THAT BOB CHAMPINE HAS SENT OVER THE MONTHS AND ALWAYS MANAGE TO BRING OUT SOMETHING NEW AND INTERESTING. THIS MONTH BOB LETS US IN ON SOME INTERESTING THINGS THAT HE HAS DISCOVERED IN RC SOARING, SO LISTEN UP.

" IN RC SOARING DIGEST, MARCH '84, YOU WROTE ABOUT TURNAROUNDS. THE PROBLEM IS NOT EASILY SOLVED, AND THE BEST IS YET TO BE DESIGNED. IT HAS BEEN MY FEELING THAT A GOOD TURNAROUND SHOULD BE SIMPLE, EASY TO CONSTRUCT, AND FAIRLY CHEAP...ALSO THEY NEED TO BE SERVICED (I.E. GREASED) FROM TIME TO TIME. I HAVE BUILT MANY AND BOUGHT OTHERS, PAYING AS MUCH AS \$45 EACH - AND ALL HAD PROBLEMS OF ONE KIND OR ANOTHER UNTIL I LEARNED. IF IT COULD GO WRONG, I GUESS I'VE HAD IT HAPPEN, AND THAT GOES FOR WINCHES, TOO. I'VE BUILT ABOUT A DOZEN WINCHES FOR MY FRIENDS A' LA THEIR SPECS, AND I'VE HAD A LOT OF EXPERIENCE. THIS TIME, THOUGH, I'D LIKE TO SHARE WITH YOUR READERS A DESCRIPTION OF THE TURNAROUND I'M USING NOW. IT WORKS REAL GOOD, HAS HAD NO PROBLEMS, AND IS FAIRLY EASY TO CONSTRUCT, SERVICE AND CARRY AROUND IN THE TRUNK OF MY CAR. IT IS MADE OF WOOD: 2" X 6" PIECES, AS SHOWN IN DRAWINGS A, B & C. THE PULLEY IS MADE FROM ALUMINUM. MAGNESIUM WOULD BE OKAY, BUT STEEL IS TOO HEAVY. I'VE TRIED 'EM OUT OF NYLON BUT THAT IS TOO SOFT, AND THE TOWLINE CUTS IN A GROOVE. I'VE USED BALL BEARINGS AND ALTHOUGH THEY'VE WORKED FINE FOR AWHILE, THE BEARINGS ARE EXPENSIVE (ABOUT \$5 EACH DOWN HERE). THE DUST, DIRT, AND GRASS GOT TO 'EM, SO I WENT TO PLAIN OILITE BEARINGS LUBRICATED WITH THICK GREASE. WHEN THEY GET DIRTY, THE LAG BOLTS ARE REMOVED AND THE PULLEY COMES OUT FOR A WASH JOB IN VARSOL, AND A RE-GREASING. THE 1/4" DRILL ROD IS WASHED TOO, OF COURSE.

" PLEASE NOTE THAT THERE ARE PLAIN WAHSEERS AT EACH END OF THE PULLEY. THE DEPTH OF THE RECESSED HOLE (APPROX 1/4") IN EACH SIDE PART HAS TO BE ADJUSTED SO THAT THE PULLEY IS FREE. I USE ABOUT 1/16" SIDEWARDS SLOP. THESE WAHSEERS ARE SHOWN ON DRAWINGS B AND C. THE 1/8" DIAMETER (O.D.) ALUMINUM OR COPPER/TUBING IS FREE TO ROTATE ON THE 1/8" DIAMETER MUSIC WIRE. GREASE IS USED INSIDE THE 1/4" DIA. TUBE...ALSO, THERE ARE WAHSEERS AT THE ENDS - SEE DRAWING C. AGAIN, ABOUT 1/16" SLOP OR END PLAY IS NEEDED. THE 'STAKE HOLE' IS LINED WITH A SHORT PIECE OF METAL (ELECTRICAL CONDUIT) TUBING, AND WORKS FINE...SO DOES COPPER TUBING. THE DIAMETER IS A LOOSE FIT ON 1/2" ROD.

"THE 'ANCHOR STAKE' IS A MUST. I'VE SEEN SCREW DRIVERS AND RAIN GUTTER NATLS PULL OUT OF SOFT, WET AND SANDY SOIL...BOY, WHAT A MESS IN FAI-F3B TYPE FLYING! SO THE ANSWER IS TO PURCHASE A 24" LONG STEEL ROD ABOUT 1/2" IN DIAMETER, AND CUT OFF 14" TO USE FOR THE STAKE ITSELF, AND THE REMAINING 10" FOR THE CROSS HANDLE. THE HEAD MUST BE TURNED ON A LATHE, AS MUST THE PULLEY, ALLOWING ABOUT 1 1/2" FOR THE HEAD. AFTER AWHILE IT WILL GET FLATTENED AS SHOWN IN DRAWING D. BY THE WAY, THE STAKE MUST BE POUNDED DOWN ALL THE WAY - BUT LEAV IT A LITTLE LOOSE SO THE TURNAROUND CAN LINE ITSELF UP AS THE TOWING STARTS.

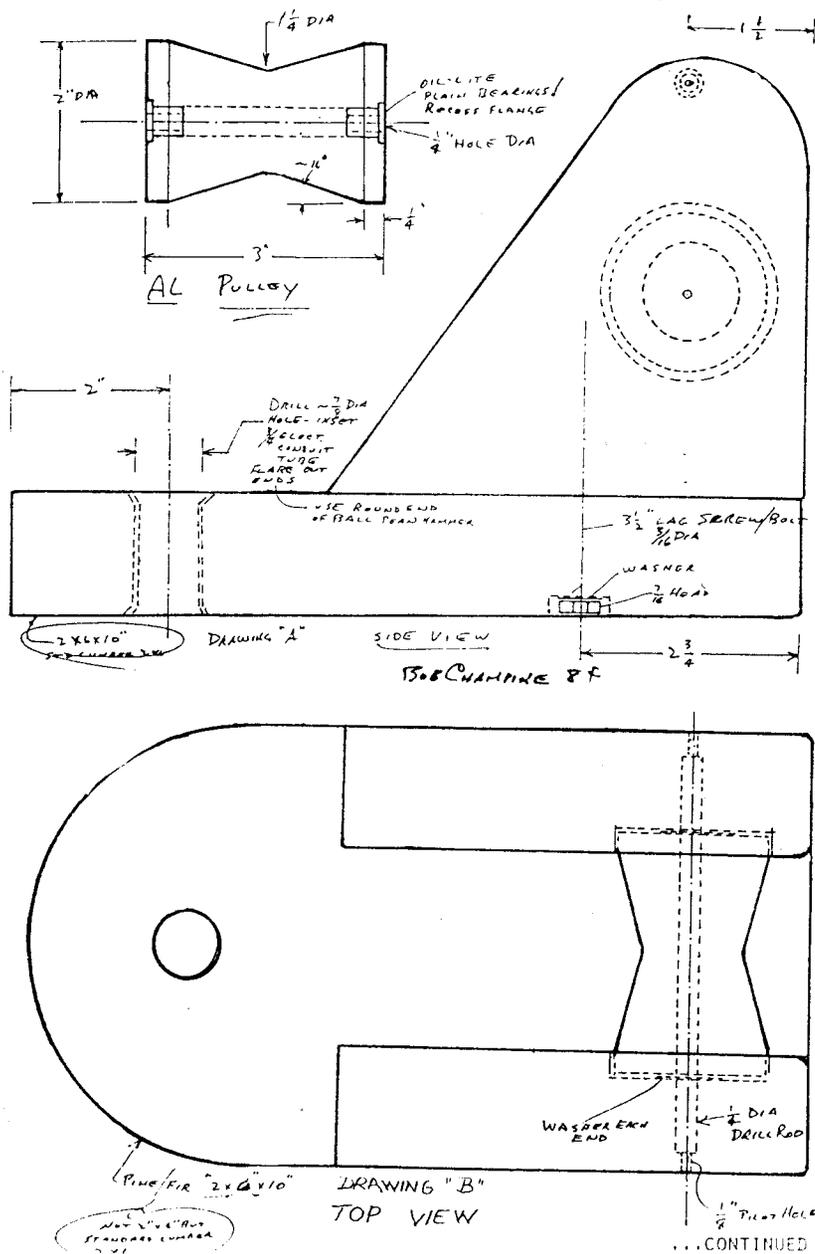
"ANOTHER FEATURE IS THAT THE FLAG OR PARACHUTE CAN BE PULLED THRU THE PULLEY AND TURNAROUND AT THE END OF THE DAY'S FLYING. PAINT THE STAKE AND TURNAROUND WITH WHITE ENAMEL SO THAT IT CAN BE SEEN IN THE TALL GRASS...AND MAY REMIND YOU THAT YOU NEED TO GO PICK IT UP BEFORE YOU LEAVE!

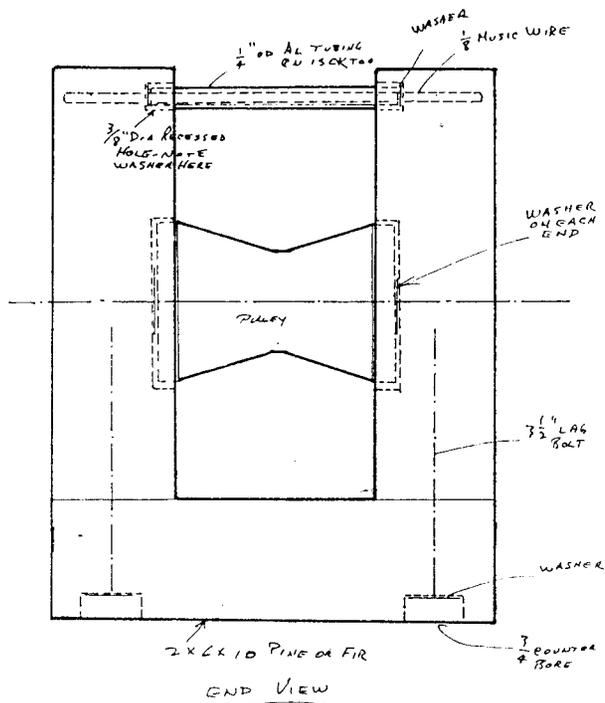
TURNAROUND (CONTINUED)

" ONE PROBLEM THAT I HAVEN'T BEEN ABLE TO SOLVE AS YET IS THE DOWNWIND LAUNCH. SOMETIMES, THE TOWLINE WILL FALL BACK AROUND THE STAKE AND HANG UP. THE BEST PROCEDURE I'VE FOUND SO FAR IS TO RELOCATE THE WINCH (GROAN, PANT, GASP...JHG). THIS SYSTEM WORKS BETTER THAN MOST I HAVE SEEN OR USED BEFORE, AND HAS OPERATED FOR SEVERAL YEARS WITHOUT TROUBLE FOR ME AND MY FRIENDS. I HOPE THAT THIS WILL BE OF INTEREST TO THOSE WHO ARE FRUSTRATED WITH THE TURNAROUNDS THEY ARE NOW USING.

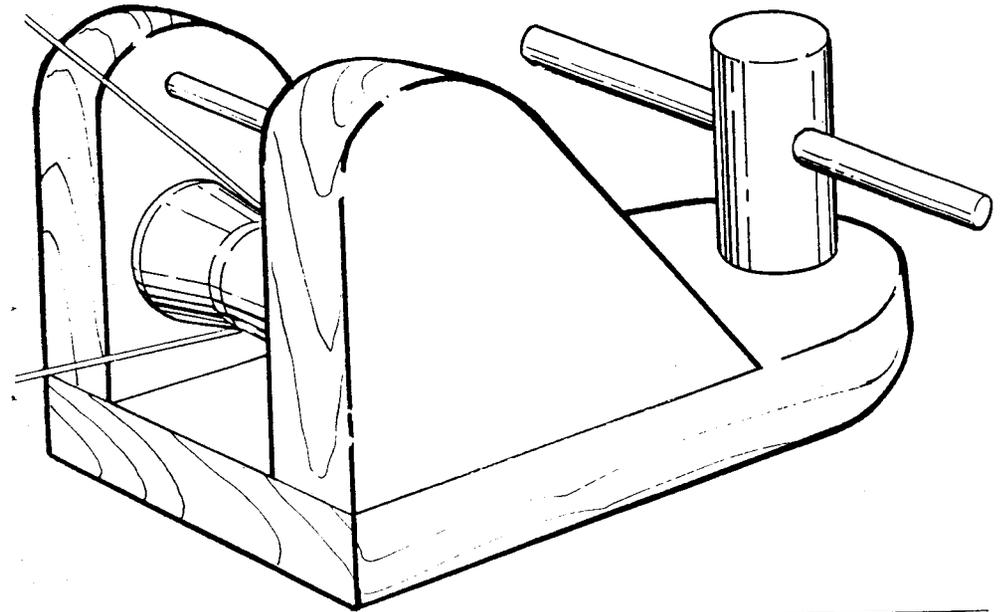
GOOD LIFT, BOB"

\* BOB CHAMPINE, 205 TIPTON ROAD, NEWPORT NEWS, VA 23606



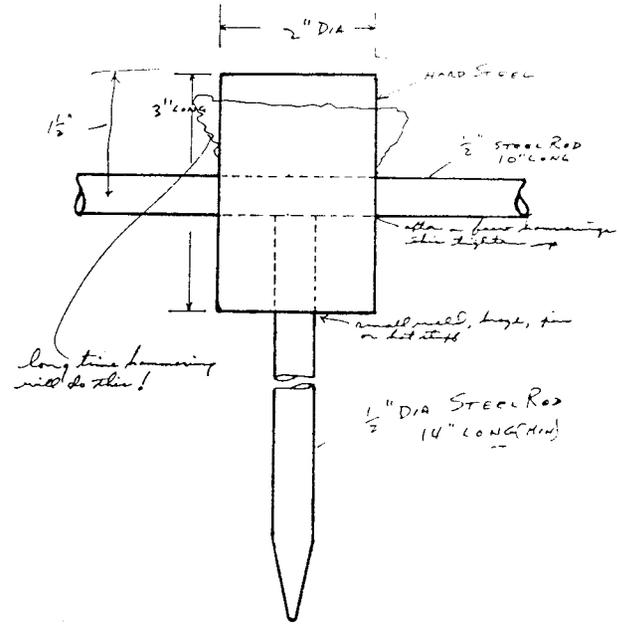


DRAWING "C"



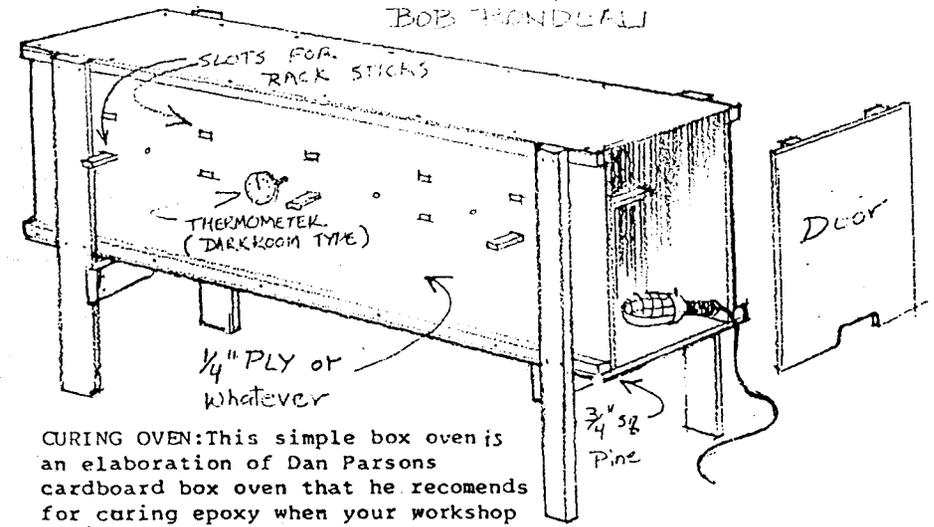
"ANOR" STEAKE  
4 HOLE

DRAWING "D"



BOB CHAMPINE 84

LOW-TEMP OVEN (72° - 120°)  
BOB CHAMPINE



CURING OVEN: This simple box oven is an elaboration of Dan Parsons cardboard box oven that he recommends for curing epoxy when your workshop is too cold or to speed up the cure. At 120-F a 24 hour curing epoxy can cure in as little as 2 hours. I used 1/4" ply and pine scraps to build it in about one evening. A darkroom thermometer with a metal probe is used to monitor the temp through holes along the box. I heat with one or two trouble lights hung CAREFULLY inside the oven. Size can vary according to the size of your planes, mine fits the wings and fuse of a standard class plane with ease at 20"x18"x60". A word of caution, don't leave the oven unattended the first time you test it, and always check for hot spots. A near by smoke alarm is a comfort.

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PRODUCT RELEASE

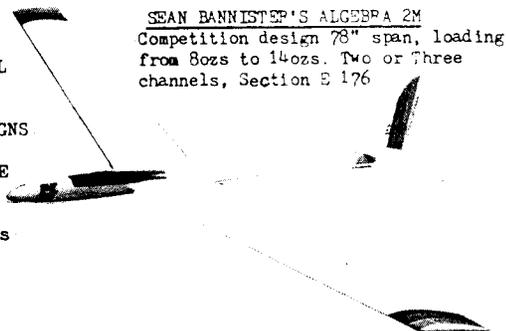
DAVEY SYSTEMS CORP. has released another sailplane kit in the popular PROPHET series, the PROPHET 941. The 941 has a 99 1/2" wingspan, 941 sq. in. wing area and a 41 Oz. flying weight for a 6.0 oz./ sq.ft. wing loading.

The kit has die cut and machined balsa, spruce and plywood, rolled plans, all hardware including flexible steel control rods, adjustable tow hook, hardened steel wing rod and an antenna tube. The 941 can be flown on three or four channels and has a very wide speed range due to the computer optimized modified E-193 airfoil and can easily carry a 15 oz. ballast load. A second plan sheet is included to show optional wing configurations as well as electric equipment installations in a modified fuselage.

from ENGLAND

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|-----------------------------|-------------|
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| ALGEBRA 2M (glassfibre fuz) | £53.00      |
| ALGEBRA 3M (Ply fuz)        | £49.00      |
| ALGEBRA 3M (glassfibre fuz) | £62.00      |



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CORRECTION: IN THE DRAWING OF THE LOW ASPECT RATIO SAILPLANE THAT APPEARED IN THE MAY ISSUE OF RCSD, PAGES 8 AND 9, THE DESIGN WAS WRONGLY ATTRIBUTED TO JACK DECKER. IT SHOULD HAVE BEEN JACK DIETRICH, AND THE SAME IN THE REST OF THE ARTICLE. ARTIST BOB RONDEAU HAS BEEN RELEGATED TO SHAGGING 'CHUTES AS SUITABLE PUNISHMENT. OH YES, IN THE DRAWING OF THE WING CROSS-SECTION, THERE IS AN INCORRECT DIMENSION THAT MAKES THE CHORD LENGTH COME OUT AT 16" INSTEAD OF 14". THE 3/4" X 6" SECTION SHOULD HAVE BEEN 3/4" X 4". MY APOLOGIES, JACK BUT WE STILL HAVEN'T CAUGHT THAT LI'L PRINTER'S DEVIL THAT RAN AWAY WITH THE PROPER NAMES AND NUMBERS. JIM GRAY

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