SYCOPHANTIC

THE HANGAR PILOT

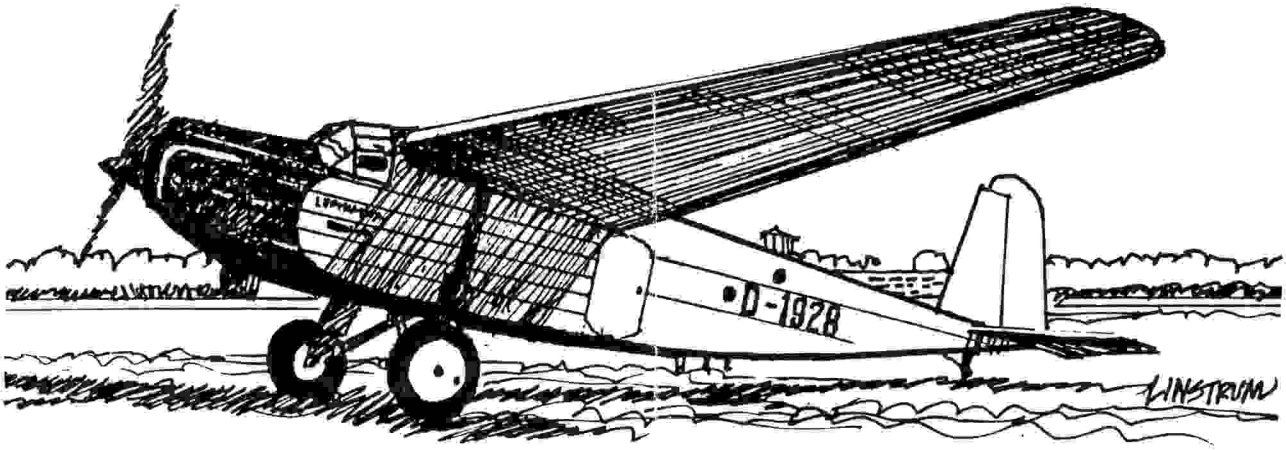
22ND YEAR OF PUBLICATION
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OMNIBUS

MIAMI INDOOR AIRCRAFT MODEL ASSOCIATION
MIAMA

ISSUE 154

- RESULTS - STATE MEET 4
- GOLDWING PISTACHIO by VTO
- MIKE ARAK REMEMBERS THE NARTS
- MARK ALLISON ON GEARED MOTORS

FEB. 1993



MESSERSCHMITT M.20b LUFTHANSA

NEXT EVENT - UNITED TILE WAREHOUSE NW 87 AVE + 13TH ST
NO-CAL, DIME SCALE, ETC. FEB 27

NEXT CONTEST - MACDILL AFB. MIAMA MEET 5
MARCH 20, 21 MASS LAUNCH - MODERN AGE



"LIKE A LETTER FROM HOME" - Whelan

THE HANGER PILOT

The Hanger Pilot, edited by John Martin Jr., who is solely responsible for its content, is published 8 or 9 times a season for bunch of middle aged guys who refuse to grow up. MIAMA (Miami Indoor Aircraft Model Association) - AMA club 986. One of two active all indoor free flight clubs in AMA. For a mere $12.50 you will receive all of the published issues that year. We encourage reader contributions because, frankly, we need the material. Letters, plans, 3-views, complaints, gripes and compliments to: Dr.John Martin Jr., President / Editor, 2180 Tigertail Ave., Miami, FL 33133 USA. phone: 305-858-6363.

THE GREAT COAST GUARD MEET #4

Sound a blast on the post horn. On your mounts,pilots,the chase is on. The game is afoot. Ninteen eager hangar pilots took to the sky at the Coast Guard hangar and staged an aerial circus of competition, enthusiasm, and fun.. Yes I said 19, and that's a lot of indoor flyers for a class A local meet. Lots of MIAMA annual points were earned, a State record in Mini-Stick was set by Wayne Trivin, and a new AMA National Record was set in Cat. II by Ron Ganser of Pittsburgh, with his autogiro. His eight minute flight broke the old Cat. II record by two minutes. Congratulations, Ron! He also flew a tiny ornithopter with a twin canard design reminiscent of our late Frank Keiser. It was sent here from California by Warren Williams and flew like a bird. Itsreally fun when there are 5 or 6 or more contestants in every event and they are all tough to beat. Thats what I call a FUN FLY.

Amazing history note: Rick Choate was out with his Peck Lacey M-10 (That got him a second in mass launch), and a Zero fighter. It has been over twenty years since Rick flew in his last MIAMA meet! Welcome back, Rick!

A contest is a miniature slice of life with joy and disappointment, and frustration from minute to minute. If you enter several events you work steadily all the timeand the time goes by rapidly. Boom,your best contest motor blows up, rats, your best flight of the day hangs up,crunch, you wreck your plane ballooning it off the girders, and finally, whee, your best time results after you hit the roof five times without a hang up.

The back cover has an up to date calendar of events with plenty going on. Locally we are happy to announce that MIAMI DADE NORTH College has agreed to let us use their gym for local meets. We still have three state remaining this season, so finish up your latest mount and C'mon out.

Merry Xmas

MIAMA MEET #4 US COAST GUARD STATION FEB 13,14 '93 CD'S DICK OBARSKI DOC MARTIN (2)

PEANUT SCALE EVENT:

		STATIC SCORE	TWO BEST FLIGHTS		TOTAL
1.Wayne Trivin	14-Bis	111	1:07	1:16	182.5
2.Doc Martin	Astra Kapferer	97.2	1:09	1:01.5	162.4
3.Sidney Gilbert	Lacey M-10	80.6	1:20.9	1:18.8	160.0
4.Millard Wells	Curtiss P-40	93	48.1	59	146.5
5.Walt Everson	Found	77.6	1:00	58	137.1
6.Bill Criss	Fike	68	59.7	1:01	128.3
7.Jake Larson	SOC-3 Seaplane	77.2	28.2	25.1	103.8
8.Bill Stoutenburg	Cougar	68	28.8	27.7	96.1
9.Walt Schlesinger	Cougar	69.8	18		78.8

FAC Scale

1. George Nunez	Grumman Avenger	65	73.1(1:23.7)		136.8
2.Doc Martin	Waco Hydro	77	51.0		128
3.Millard Wells	Fokker D-7	74	42.0		116
4.Jake Larson	N3n-1 Seaplane	74	28.5		102.5
5.Walt Schlesinger	DH Leopard Moth	50	44.0		94

EASY B

1.Dick Obarski	11:38
2.John Barker	11:12
3.Wayne Trivin	10:44
4.George Leffler	7:10
5.Rich MacEntee	5:10.2

NO-CAL SCALE

1.Dick Obarski Lacey	3:13
2.Tom McCoy Cougar	2:46
3.Doc Martin Dayton Wright	2:43
4.Wayne Trivin Farman	2:39
5.Dave Linstrum Sukhoi	1:36
6.Walt Everson Boeing 727	56.0
8.Bill Stoutenburg	29.6
7.Walt Schlesinger	35.0

BOSTONIAN

	Charisma	2 Best Flights	
1.Wayne Trivin Colors II	1.12	2:49	2:56
2.Ron Ganser Merganser	1.14	2:15	2:37
3.Dick Obarski Gen Dick	2:18	2:18	(1.10)
4.John Barker Scimitar II	1.12	2:15	1:57
5.Sidney Gilbert 7-Up	1.10	1:37.4	1:40.3
6.George Nunez 1-AB	1.15	1:15	1:19.2
7.Walt Schlesinger Boston Basic	1.12	41	48

DIME SCALE

1.George Nunez Comet Consolidated BT-7	187.0
2.Doc Martin Megow Puss Moth	182.2
3.Millard Wells Dallaire Sopwith Camel	144.5
" " " Comet Curtiss Falcon	143
4.Dave Linstrum Megow Puss Moth	119.3
5.Dick Obarski Comet DH Tiger Moth	104

EMBRYO ENDURANCE

1.Dave Linstrum X-Y Chromosome	371
2.Terry Patterson Long One	370
3.Wayne Trivin Yellow Bird	345
4.Sidney Gilbert Hornet	279
5.Walt Schlesinger 12½¢	111
6.Bill Criss Grapefruit	87

COCONUT SCALE

1.Doc Martin Junkers Stratoplane	1:21.5
2.Dave Linstrum Martin MO-1	1:17.3
3.Millard Wells Ford 2-AT	1:03.8

Everson & MacEntee entered but did not fly

MINI STICK

1.Wayne Trivin	6:51 NEW RECORD
2.John Barker	6:23
3.Ron Gander	5:51
4.Dick Obarski	5:36
5.Rich MacEntee	5:14

PISTACHIO SCALE

1.Dave Linstrum	Dornier Komet	1:09.6
2.Millard Wells	Wee Bee	1:07
3.Doc Martin	Messerschmitt M20-b	59.7
4.Sidney Gilbert	Lacey M-10	35.4

PENNY PLANE

1.Wayne Trivin	7:59
2.Ron Ganser	7:32
3.John Barker	6:40
4.George Leffler	5:41
5.Rich MacEntee	5:19

EXPERT PENNY

1.WaltEverson 5:33

AUTOGIRO

1. RON GANSER 8:38 NEW AMA NATIONAL RECORD

MASS LAUNCH EVENTS: Flying Aces WWII EVENT:

1.Geo Nunez Avenger
2.Millard Wells Buffalo *
Four more entered

COCONUT EVENT:

1.Dave Linstrum TIE
1.Doc Martin
3.Millard Wells
4.Walt Schlesinger
5.Walt Everson

PEANUT EEVENT:

1.Sidney Gilbert
2.Rick Choate
3.Bill Criss
4.Dave Linstrum
5.Doc Martin
6.Jake Larson, Rich MacEntee, Walt Schlesinger, Walt Everson, Bill Stoutenburg

*BOTH HAD MOTOR TROUBLE WINDING FOR FINAL.

③ MIAMA MEET 2 REVISITED THE LOST RESULTS

the rediscovered 'mystery' results of miama meet two, held on Nov.7 & 8 1992 at MacDill AFB. CD Rich MacEntee. This means that the 1992/93 MIAMA season will have 7 State Meets, of which we will count your best 5 performances.

Peanut scale:

	Model,	Static Score	two best flights		total
1.Sidney Gilbert	Lacey M-10	82	1:15.9	1:22	160.9
2.Millard Wells	Huntington H-12	72.6	1:12	1:13	145.6
X. " " "	Curtiss P-40	93	52.9	55.0	146.4
3.Bill Criss	Pilatus Porter	77	46	47	123.5
4.Walt Schlesinger	Cougar	80	14.5	17.5	96.0

FAC SCALE:

1.Millard Wells	Waco SRE	69	1:06.2	(63.1)	132.1
X. " " "	Fokker D VII	74	44.5		118.5
2. Walter Schlesinger	Leopard Moth	54	50.4		104.4

MASS LAUNCH
COCONUT
1. MILLARD WELLS
2. DAVE LINSTRUM
3. WALT SCHLESINGER

DIME SCALE: Total of best 3 flights of unlimited flying.

1.Millard Wells	Comet Curtiss Falcon		165.5
X. " " "	Megow Douglas Observ.		150.6
2.VTO Linstrum	Peerless Rearwin Speed.		115
3.Dick Obarski	Comet C-1 Pursuit		64
4.Walt Schlesinger	Comet Fokker D VII		17

NO- CAL SCALE:

1.Wayne Trivin	Farman	3:35
2.Dick Obarski	Lacey	3:12.5
3.Dave Linstrum	Sukhoi	2:03
4.Sid Gilbert	Cassutt	1:37.5
5.Walt Schlesinger	SAI	34.6
6.Bill Stoutenburg	Avenger	32.4

COCONUT SCALE:

1. Millard Wells	Ford 2-AT	:55
2.Dave Linstrum		:42.5
3.Walt Schlesinger	Leopard Moth	11.0

PISTACHIO EVENT:

1.Millard Wells	Curtiss Jenny	40.2
2.Dave Linstrum	Dorn. Komet	1:14.2

Model of a Model:

1. Dave Linstrum	Pacific Ace	1:07.1

BOSTONIAN:

			Charisma
1.Wayne Trivin	3:02	3:27	1.12
2.Dick Obarski	2:41	2:34	1.10
3.John Barker	2:01	2:34	1.12
4.Sid Gilbert	1:33.6	1:16	1.10
5.Walt Schlesinger	30	31	1.10

MASS LAUNCH

PEANUT 1. MILLARD WELLS
2. WALT SCHLESINGER
3. BILL STOUTENBURG
4. SIDNEY GILBERT
5. WALT EVERSON

EMBRYO ENDURANCE:

1.Wayne Trivin	9	2:08	2:20	1:20
2.Sid Gilbert	9	1:53	1:16	
3.Walt Schlesinger	9	37.5	37.4	41.3
4.Bill Criss	9	54	57	

MINI-STICK

1.Wayne Trivin	7:28
2.John Barker	6:39
3.Dick Obarski	6:31
4.Walt Everson	4:50
5.Millard Wells	3:23

EASY B:

L.Dick Obarski	15:01
2.John Barker	12:59
3.Wayne Trivin	10:30
4.Millard Wells	6:36

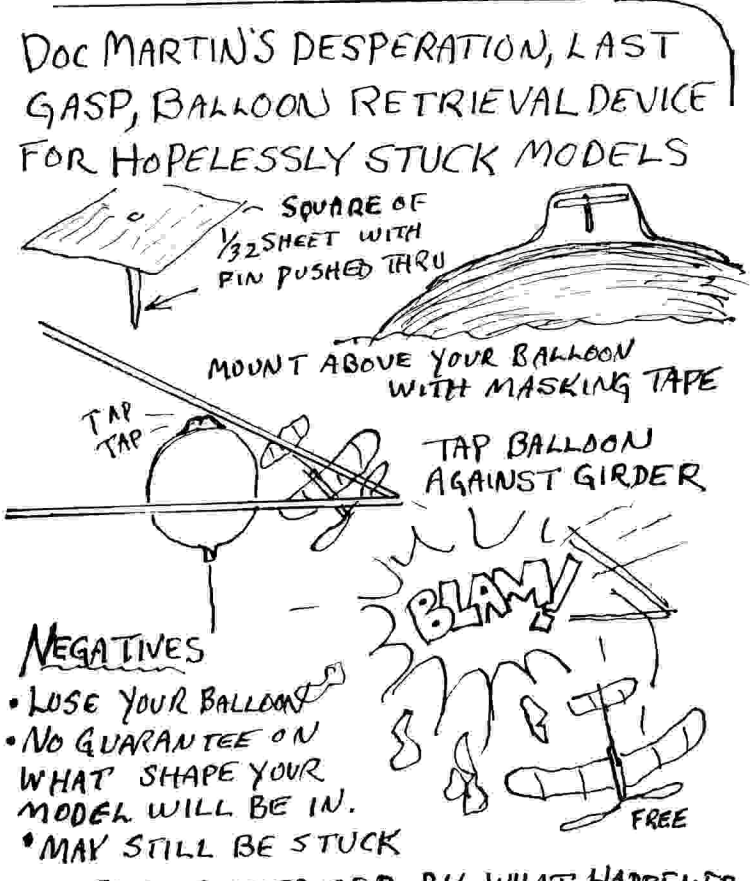
PENNY PLANE:

1.Wayne Trivin	8:57
2.Dick Obarski	8:42
3.John Barker	8:19
4.Walt Everson	7:32
5.6:52 Millard Wells	

BALLOONING - A DISTURBING TREND

Pilots, in a rare editorial ol' Doc has a word for some ballooning tactics that are just beginning in our club in the hope that the practise will cease before it becomes a habit. It is the use of the balloon to control altitude instead of steer away from trouble. You simply over wind your model, and hold it back when it gets near the ceiling. This is illegal, and will no longer be ignored if observed. 'Nuff Sed.

INDOOR YARNS is lifted from Larry Kruse's F/F SPORT column in FLYING MODELS. The hard core indoor modeler does not look to Larry for a lot of indoor stuff so this will probably be news to most of you.



Indoor yarns

Spinning off of the indoor theme introduced earlier, it's probably safe to say that anyone who's flown in an indoor site has had the misfortune of getting a model hung up on an obstruction. If lights don't reach out and get your plane, a rafter will, or a hanging speaker, or an air vent duct, or a wire, or a conduit, or *ad infinitum*. Retrieval is ordinarily via a line and helium balloon attempting to bump the model off the obstruction. Modeling friend, Ben Strauss, has elevated retrieval to new heights, however, by using yarn instead of string as the connecting link to the balloon.

Here's the way Ben rigs his retrieval system. He begins with two balloons instead of one, and connects the two balloons to each other with about ten feet of stranded yarn. He now ties the retrieval line to the center of the yarn and lets the balloons float up. The yarn forms a very fuzzy V-shaped retrieval unit, becoming quite narrow at the apex of the yarn/retrieval line connection. The V-shape is a useful tool for getting in under wings, props, stabs and fuselages to lift them up and away from the obstruction. Ben has become very adept at using the fuzzy texture of the yarn to snag an airplane and gently nudge it or even *pull* it out away from wherever it's hung up.

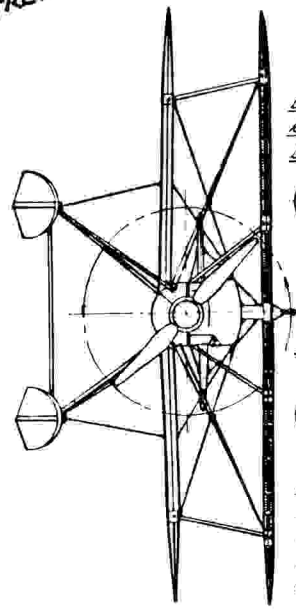
I was fortunate not too long ago to have Ben as a fellow contestant at a local meet. I had managed to get the prop of my EZB wedged between a piece of conduit running along the bottom of a rafter and the rafter itself and there it hung, slowly twisting around as the motor ran down. After some ineffectual bumping on my part using the usual balloon on a line, I retired to the sidelines, having accepted the eventual destruction of my plane in the retrieval process.

At that point, Ben rigged up his yarn unit and gave it a try. Using a gentle sawing and tugging motion by way of the yarn fibers, it was not too long before he had literally *pulled* the prop blade out of its snare and set the plane free—totally undamaged. It was a remarkable demonstration of technique and patience. Thanks, Ben, for both.

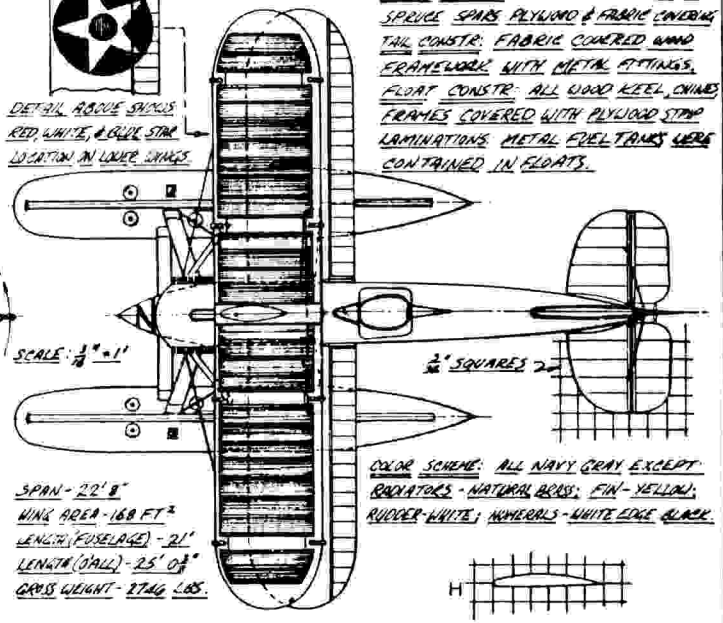
(5)

NO STRUTS ON UPPER WING.

SUBMITTED BY FRED KOMLOSY



DETAIL ABOVE SHOWS RED, WHITE, & BLUE STAR LOCATION IN LOWER WINGS.



SCALE: 1/8" = 1'

2" SQUARES

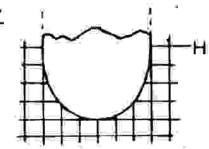
FUSELAGE CONSTR: ALUMINUM COWL, PLYWOOD SHELL OVER WOOD FRAME
WING CONSTR: WOODEN RIBS ON 2 SPRUCE SPARS PLYWOOD & FABRIC COVERING
TAIL CONSTR: FABRIC COVERED WOOD FRAMEWORK WITH METAL FITTINGS.
FLOAT CONSTR: ALL WOOD KEEL, CHINES FRAMES COVERED WITH PLYWOOD STRIP LAMINATIONS. METAL FUEL TANKS WERE CONTAINED IN FLOATS.

COLOR SCHEME: ALL NAVY GRAY EXCEPT: RADIATORS - NATURAL BRASS; FIN - YELLOW; RUDDER - WHITE; NUMERALS - WHITE EDGE BLACK.

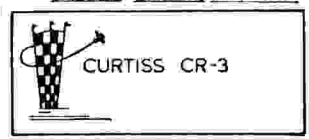
SPAN - 22' 8"
WING AREA - 168 FT²
LENGTH (FUSELAGE) - 21'
LENGTH (O'ALL) - 25' 0⅜"
GROSS WEIGHT - 2746 LBS.

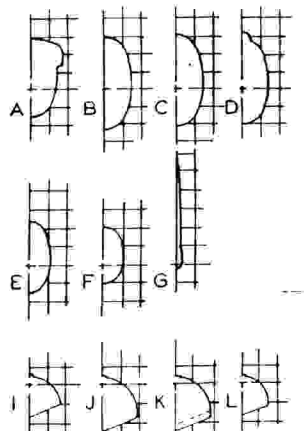
TYPICAL SECTION CURTISS RACING AIRFOIL

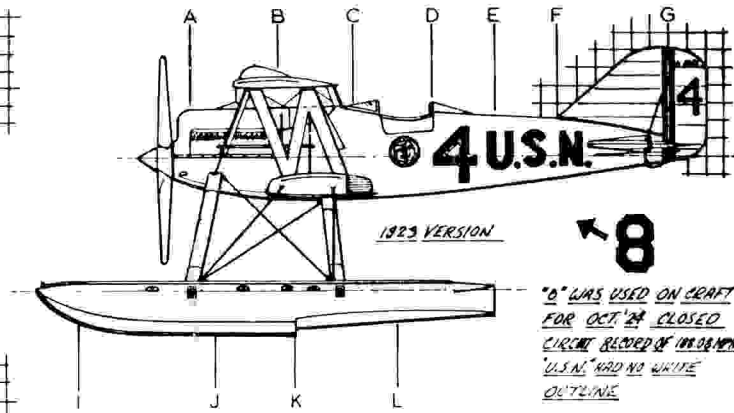
POWERPLANT: CURTISS D-12 12 CYLINDER "VEE" BLOCK ENGINE DELIVERING 465 HORSEPOWER
PROPELLER: CURTISS-REED ALL METAL FIXED PITCH
NOTE DUE TO INCREASED H.P. OF CURTISS D-12 ENGINE ADDITIONAL WING RADIATORS WERE ADDED TO WING TIPS OUTSIDE OF 'N' STRUTS OVER & ABOVE THOSE ON CR-2.



ABOVE VIEW DEFINES UPPER & LOWER WING TIPS.







1923 VERSION

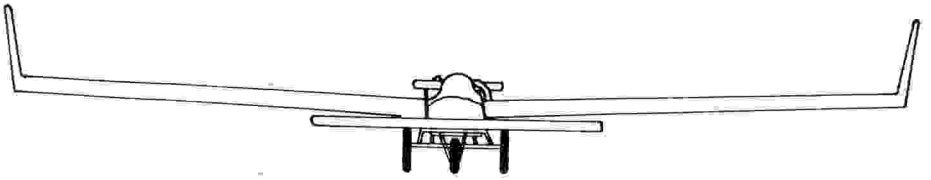
8

"8" WAS USED ON CRAFT FOR OCT. '23 CLOSED CIRCUIT RECORD OF 108.08 MPH. 'U.S.N.' HAD NO WHITE OUTLINE

ABOVE PLANE WAS CR-1 IN '921, MODIFIED TO CR-2 IN 1922, AND STILL FURTHER MODIFIED WITH FLOATS IN 1923 "SEEN (L) LT. DAVID RITTENHOUSE A-6081 WON 1923 SCHNEIDER TROPHY AT COWES, U.K. AT 177.38 MPH. TOP SPEED - 192 MPH

FROM: "THE AIR RACER" BY CHARLES R. MENDENHALL. A REALLY GREAT BOOK WITH DRAWINGS OF JUST ABOUT EVERY RACE PLANE FROM 1909 THROUGH 1975 - ABOUT 194 AIRCRAFT. BOOK DON'T HAVE ANY ENGINEERING, JUST HISTORY & PHOTOS.

SEAL OR EMBLEM BENEATH COCKPIT IS THAT OF THE U.S. NAVAL BUREAU OF AERONAUTICS.



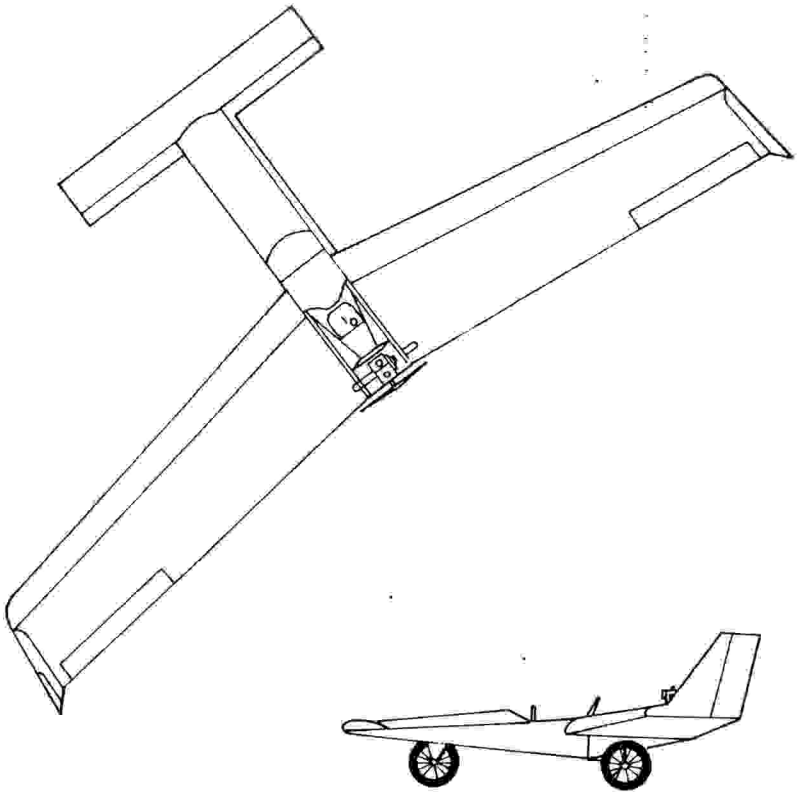


Fig 3-35 Three view drawing of the Goldwing

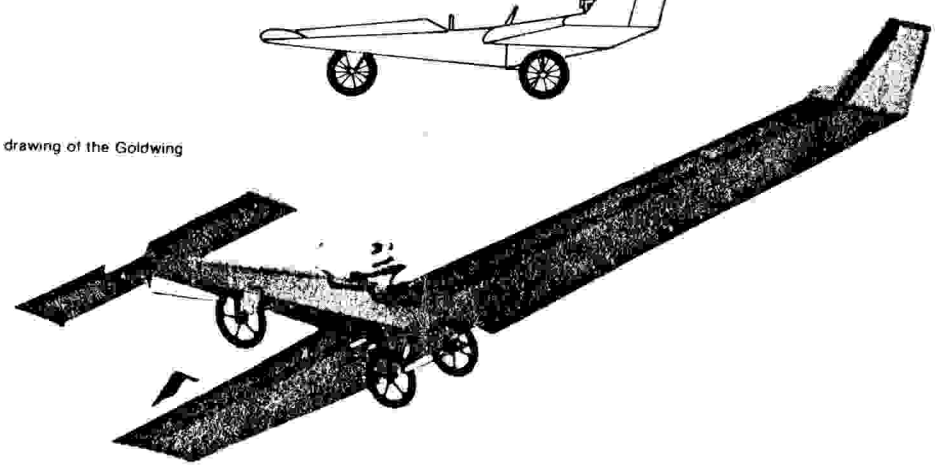
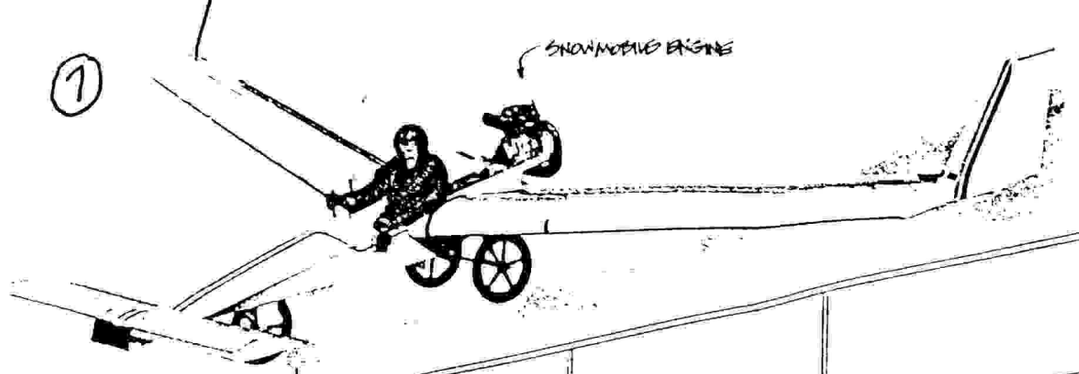


Fig 3-34 The Goldwing can be purchased either as an amateur-built ARV, or a factory-built ultralight The UL version meets the US ultralight specifications, while the amateur-built version is heavier and faster

(7)



NTS

SCALE IN INCHES

PISTACHIO

"GOLDWING" (8)

ULTRALITE A/C CANARD

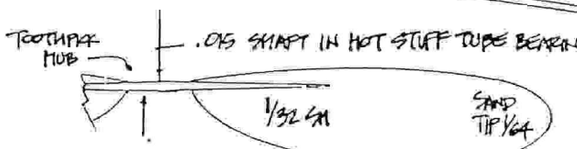
PISTACHIO SCALE BY VTO 6" OAL MIAMA RULE
BASED ON A PEANUT SCALE © DAVE ARGYSTEIN
TO 9" OAL MIAMA RULE

COLORS FOR THIS A/C ONLY:

WHITE OVERALL
ORANGE + BLACK PINSTRIPES AS SHOWN ON WING, TIPLETS + BODY
LEADING STRIPE O.J.
STRIPE ON BODY IS ALONG C/L THEN BENDS TO SIDES
STAB HAS PERIMETER STRIPE ON ALL EDGES
WHEEL TIRES + SPOKES BLACK
ENGINE SILVER WITH BLACK HOSES
GREY AIRCLEANER

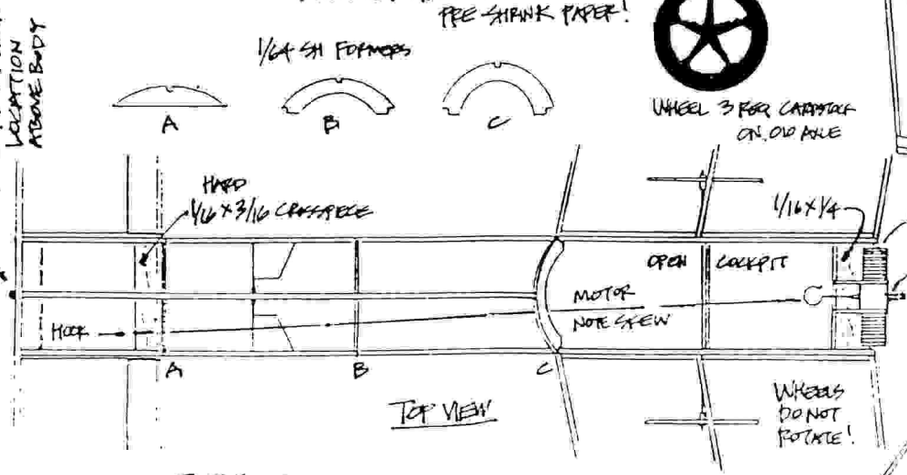
COVER MODEL WITH ULTRAFINE WHITE JAP TISSUE OR CONDENSER PAPER WITH MIST SPRAY OF WHITE LACQUER PRE-SHRINK PAPER!

COVER TOP ONLY OF WING + STAB
ENTIRE BODY EXCEPT OPEN COCKPIT + MOTOR ACCESS

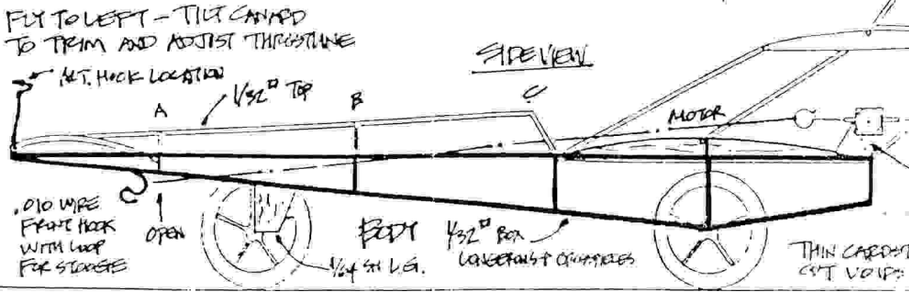


BE SURE TO MAKE A PUSHER PROP BLADE ⊥ OPPOSITE NORMAL

WET FORM BLADES @ 15° ON 2" D VITAMIN BOTTLE



SEE FOTO FOR SNOWMOBILE ENGINE — THE PROTOTYPE HAD OPPOSED TWIN



RIB + WING TEMPLATES 1/32 PLY

Pistachio
MIAMA RULE
6" OAL, 12 3/4 SPAN

(9)

MIKE ARAK REMBERS WEST BADEN

A Magical Mystery Tour

Let's see.... my oldest daughter, Heather was about six years old at the time, so about fifteen years ago, 1977 maybe, my wife Karen, Heather, and our youngest, Susan, set out for a place that was becoming a legend to indoor modelers around the world. It was called "West Baden", named for the town in Indiana where it was located, just down the road from the thriving metropolis of French Lick.

Our modeling group, led by (and still is) "Doc" Martin, had been attending the yearly flying meets there for a few years and urged us to attend. Over the years, West Baden became the Mecca for modelers such as us. As I look back now, I should have realized, when simply traveling from Miami to there became an adventure in itself, that this was a special place.

West Baden was a hotel built in the early part of this century because of the mineral springs there, to which many people attributed healing powers. The structure and layout of the building was the attraction to modelers, however. Our rubber band powered, gossamer-light aircraft are built only to fly indoors. Wind , even the slightest of breezes, would destroy them. Of necessity, they are adjusted to fly in circles. Well, this hotel was built with a central atrium (remember, this was the 1920's) of 200 feet in diameter and about 115 feet high, with no obstructions. My first view of this wonder was an occurrence that I will never forget.

We flew from Miami to L, Kentucky, the closest airport to our destination. It was early evening; we rented a car, and with very little in the way of directions, set out. The terrain became mostly hills, which in the twilight, were lovely. We enjoyed the countryside views: farmland, quaint towns, America in all its glory. As darkness fell, the hills took on an erie effect to us flatlander Miamians. The headlights alternated from trying to illuminate a black bottomless pit to trying to light up the sky. Cresting some hills in the blackness, we went weightless. I learned to slow down accordingly, to keep the kids from freaking out. We all became concearned, and of course our imaginations began to take control. Were we even going in the right direction? Civilization was short bursts of the smallest towns or villages we had ever seen. Directional signs were non-existant.

Paoli, close to our destination, thankfully appeared. There is a crossroads at Paoli, and of course, no sign to direct you to West Baden. I took my best intuitive guess, and motored on hopefully. It was getting late, and we were all tired and not sure where we were. When we reached the point in time that we should have arrived at West Baden, I had to decide wether or not to turn back to Paoli and try the other fork in the road. But what if our destination is just over the next hill? We turn back. Paoli, find an open gas station, and ask. We did take the wrong turn, but are now on the final approach to West Baden.

It's now almost midnight, and we are tired mentally and physically, when the stone gates to the brick road that lead to the hotel appear. After all this, I am wondering if I should have stayed home. As we find our way to the hotel, however, a strange excitement begins. Seeing the structure for the first time is awesome in the true sense of the word. Immense, and with the dome on top lighted from inside, the building seems to have a life of its own. I know without going in that this is the best indoor model flying site in the country. The license tags on the cars and trailers indicate that more than half of the states, as well as Canada, are represented.

Keep in mind that it is after midnight, a time when most people are asleep. But not here. We enter, and immediately find Doc, and other Miami friends, practicing with their models, fighting off sleep to extend their precious days at West Baden. I knew then what it will be like to arrive in Heaven.

Michael Arak

MICHAEL ARAK

MIAMA'S MARK ALLISON - THE KING OF THE INTER-GNATS, HAS HAD A LOT OF SUCCESS WITH GEARED RUBBER DRIVE - HERE'S HIS REPORT:

Advantages of Gears for Peanuts, Pistachios, Bostonians and light Fan Jets.

- More duration! This is really the bottom line. Gears allow use of more rubber weight and that means more "gas in your tank" and more prop revs. A typical 2:1 gearbox can almost double your duration over direct drive. A 12:6 gearbox was used on my 2.9 gram pistachio Falcon XP which can fly 80 seconds under a 27 ft. arched gym ceiling (and took 1st in its category at the MIAMA Intergnats 1990). The best time on a direct drive profile version of the Falcon which weighs 1.4 grams was 45 seconds, outdoors, and probably thermal assisted. So if you consider the doubled weight, the duration was really more than "almost" doubled. Unfortunately my Falcon flew O.O.S. at 15 minutes on April 9, 1991.

  My 3:1 geared Quail peanut (Mooney plan) took 1st at the May 1991 USFF Champs, flying 85 seconds for most flights, 14:39 in a thermal. The Quail has short fuse., short nose, and narrow chord – a very unlikely duration subject (and a decidely poor choice for an indoor peanut). Using 1/3 its airframe weight in rubber (2 gm., 1/8"x12" loop, tan FAI), its prop run averaged 1:15 with 650 to 700 turns (1950 to 2100 prop revs). Dr. Tomas Hultgren won the 1992 Swedish Championships with a 3:1 (Allison-geared) museum-quality Sopwith Triplane (8gm., 56 sec. flights).
- With gears, smaller props can be used to R.O.G. with only slight duration penalty, making trimming easier and adding a ten second bonus to your flight score. Your choice. Also, scale length landing gear adds scale points and saves weight.
- Since duration is longer, power curve is flatter (longer cruise portion), an important consideration indoors when trying to avoid ceiling hits.
- Makes multi-engined peanuts & pistachios a practical reality. Makes short-nosed, small chord planes, (and the Gee Bees!) competitive with other ungeared models. (Royall Moore flew a geared, 24" span Gee Bee R-1 for 44 seconds in 1978.)
- Because of greater duration capablility you can wind more conservatively, and enjoy long flights without the risk of trashing your pride and joy. Less sweat, more smiles.
- Power of rubber increases a bit faster than the increase in strip thickness. That means you'll double your prop revs before you double your rubber weight. You can use a motor for your 2:1 gear ratio that is 2x as thick as your direct drive motor, but add about 10% to the length.
- Ideally, but not practically, you'd want to use 2x your airframe weight in rubber. For a scale model, you'll do extremely well if you can get .5x your airframe weight in rubber. On most planes there just isn't room. The long raceplanes of the 1930's (Folkerts SK-3, Chambermaid, Hosler Fury, etc.) have room for more rubber than most other types.
- Rear peg location can be closer to the same distance back, as the prop is forward, of the C.G. Makes for better trimming, especially in glide. Motor changes (to heavier or lighter) won't move your C.G. as much, if at all. The gearbox also replaces useless nose weight.

(10)

Hope for MacDill still alive

By RICHARD DANIELSON
Times Staff Writer

TAMPA — A federal panel that will play a key role in the future of MacDill Air Force Base has been appointed, clearing the way for Tampa Bay leaders to plan for another round of base closure hearings.

Earlier this month, former President Bush appointed eight members to the Defense Base Closure and Realignment Commission, which will consider recommendations from Pentagon planners and issue its own report on ways to cut the defense budget.

Getting a new panel named was an important step for MacDill supporters. If the commission had not been named by Monday, there would not have been more base closure hearings until 1995.

The hearings may begin in April.

The boosters' goals are to prevent the Joint Communications Support Element from moving to South Carolina and to keep MacDill's runway under military control even after the F-16s of the 56th Fighter Wing are transferred to Arizona in 1994.

The MacDill Response Team, a group of business and government leaders, hopes to meet with new Secretary of Defense Les Aspin about the base's future.

Response team members have kept in regular contact with Washington officials.

"We have strong indications that they support all the efforts we're making," response team chairman Al Austin said Friday.

MacDill supporters say the base's runway should stay open for the two unified commands at the base: Central Command, which oversees military operations in the Middle East and the Horn of Africa, and Special Operations Command, which coordinates U.S. commandos worldwide.

CONT. ON BACK PAGE

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(11)

MAIL CHECKS TO: MARK ALLISON P.O.B.622 CORVALLIS, OR 97339

CAST EPOXY GEARS for Pistachios, Light & Multi-engine Peanuts.
Illustrations shown are actual size.



12:6 gears: for pistachios, small peanuts, multi-engined peanuts. Gearbox can be built to .4" height x .375" width x .25" thick. Use .020" music wire shafts (.015" for a pusher prop installation).



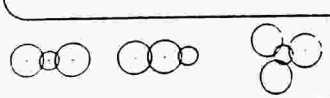
9:6 gears: for small pistachios where 12:6 doesn't fit. Gives 1.5:1 ratio. Gearbox can be built to .35"ht. x.33" w. x .25" thick. Use .020" music wire shafts.



18:9 gears: for larger peanuts, small scale rubber, Bostonian. It's a more durable choice at a small weight and size penalty. Gearbox can be built to .6" ht. x.52" w. x .25" thick. Use .025" music wire shafts.



18:6 gears: for short multi nacelles, short nosed or short fuse. peanuts. Box can be built to .54" ht. x.54" w. x .25" thick. Use .025" music wire for the 18 tooth gear, and .020" for the 6 tooth gear.



Compound gear setups allow use of same additional rubber weight without use of single, thick motor, so fuse can be built lightly. Each gear/shaft joint bears less stress. Downside: more complex, more motors, wider fuse & cowl needed.

Dear Modeler,

Thanks for your inquiry. Yes! I'm selling cast epoxy gears (not gearboxes) for pistachios, lightweight and multi-engined peanuts. These gears are *undrilled*. You can choose your own size gear shaft and drill the holes accordingly. The holes are drilled by hand 1/2 way thru each side.

Above is the drawing that appeared in Flying Models, Mar. 1991, showing the smallest possible gearbox sizes of some of the different gear combinations and their recommended uses. The illustrations above are shown actual size to help you in selecting the appropriate gears for your project. You can retrofit existing models with gears for a surprising jump in duration! Gears make multi-engined peanut projects practical and turn mild-mannered peanuts and pistachios into "killer duration models!" Gearboxes can be built in the .3 gm. to .5 gm. range. Ply boxes are slightly heavier. Gearboxes using these epoxy gears weigh 1/3 the weight of those built using nylon & brass gears. The epoxy gears are very strong. The teeth will not strip even in crashes. Note well: in all gearboxes, the critical factor is the *gear-to-shaft joint*. A well built 18:9 gearbox can handle up to a 3/16" rubber loop. The others, up to 1/8". For planes requiring wider rubber motors, use nylon & brass spur gears from Stock Drive Products. Send for free Master Catalog #757: Stock Drive Products 2101 Jericho Turnpike, New Hyde Park, New York 11040. Phone: (516) 328-3300. They're not a model supply company so they can't answer questions (and they don't know me). They don't print a price list but will send you a quote on your specific needs. Page 6 & 24 have the gears you should use (48 pitch, 14.5° pressure angle). Use brass for the pinion (smaller) gear. 24 tooth nylon and 12 tooth brass are a good choice. I've used two 24 tooth nylon and a 12 tooth brass, compound gear setup to avoid using a single monster rubber loop on my Ryan STM (30" span, uses two 6-strand 1/8" motors: like two P-30 motors).

GEARS (undrilled)
6 tooth = $3
12 tooth = $5
9 tooth = $4
18 tooth = $7

I no longer offer the drilling & mounting service for any price (I need time to do some modeling myself.) Gears are cast in molds, cut and sanded by hand to approximately 3/32" in thickness.

GEARBOX MATERIALS KIT:
- one: 1" x 1/8" piece of .003" carbon fiber sheet
- one: 1" x 1/8" piece of .007" carbon fiber sheet
- one: 1" square of .5 oz. fiberglass cloth
- four: teflon washers
- two: music wire shafts 3" long (.020" or your choice of .015" or .025". Note: .020" is the largest shaft that can be used on the 6 tooth gear!) NOT included: gears, micro drill bits, balsa, or glue.

PRICE: ONE KIT = $5, DOUBLE KIT = $8 (yes, it seems costly for what is included, but you don't spend $45+ for a lifetime supply)

PROFUSELY ILLUSTRATED "HOW TO MAKE A GEARBOX" SHEET (a "must have") = price: $1.00

Materials kits and "How to" sheet prices are postpaid. For gear orders, please add $1 postage & handling.

Cash, checks & money orders only, no credit cards. For modelers outside the U.S.: add $1 per gear or kit order, and use International Money Orders for U.S. dollars only. Orders will be sent by U.S. mail. Please allow 6 weeks for delivery. I'll do my best to get them out sooner. People have asked how much it costs to make their own gears. Several hundred dollars for materials, over 100 hours of sweat and tears ("trial-by-error"). Even now, the gears average 1/2 hour each to manufacture, hence the slightly "pricey" cost. But these are the lightest gears available anywhere (that I know of). Due to contact dermatitis and eye problems from the epoxy fumes and dust I may have to discontinue this business altogether. Meanwhile, I'd like to see your successes (photos) and hear about your wins. I'm hoping these gears will advance the state-of-the-art and maybe help somebody's peanut or pistachio scale model break 3 or 4 minutes indoors! Who's it gonna be?

Allison Gears can double your flight times. SASE for prices. "How to make gearbox:" $1. P.O. Box 622, Corvallis, OR 97339

Catalog worth having if you don't already: Small Parts, Inc., P.O. Box 4650, Miami, Lakes, FL 33014-9727 (305) 558-1255 or (800) 423-9009 - FAX
- VARIOUS GEARS LISTED -

(12)

SWAMP SQUADRON, FAC
1503 Clairdale Lane
Lakeland, FL 33801

REALLY WEIRD PEANUT SCALE PLANS

Designed by the Late Donald E. Brown. All prices postpaid.

P-1 MAKHONINE 123 Polymorphic Aircraft built in Germany and flown in 1946. Pleasing to look at with long fuselage and very clean lines. $1.50 PP

P-2 DORNIER DO-335 Fast long range German fighter with prop at both ends. $1.50 PP

P-3 LANIER PARAPLANE COMMUTER With a design history dating back to 1907 this STOL (fully controlled flight at 19 mph!) has all the attributes of a good rubber model. Published in Model Builder in Feb 1976. $1.50 PP

P-4 NORTH AMERICAN/ROCKWELL OV-10 BRONCO Twin-engined recon ship with fair wing area, and trike gear for good ROG. $1.50 PP

P-5 BREDA-PENSUTI Aerial motorcycle circa 1917. Simply constructed triplane with 114 sq. in. wing area. $1.50 PP

P-6 CIERVA C6A AUTOGYRO Peanut autogyro. Stick model with Hungerford wheels. Used a fuselage from an Avro 504. $1.50 PP

P-7 BEDE BD-5 & BD-5J Peanut size composite plan for both rubber and Jet-X 50. $1.50 PP

P-8 DORNIER DO-212 Pusher prop WW-II German amphibian with very large lifting stab. Lots of room for rubber. $1.50 PP

P-9 GRUMMAN AO-1 MOHAWK Twin-engined triple-tailed recon ship flown in Vietmam. $1.50 PP

P-10 HEGY CHUPAROSA Nifty red homebuilt biplane. $1.50 PP

P-11 STITS SKY BABY Homebuilt bipe, "worlds' smallest Airplane" when built in 1952. Would be a really red-hot .020 RC! There's room for a radio! 2 sheets $2.50 PP

P-12 F-82G TWIN MUSTANG Versatile night fighter, escort fighter, and record setter. Flown in Korean war. $1.50 PP

P-13 PAULHAN-TATIN "AEROTORPILE" Pusher prop. Over 90 mph in 1911! $1.50 PP

P-14 MILLER JM-2 "TEXAS GEM" Colorful Formula 1 racer with red or gold paint job. This is the early version. $1.50 PP

Note: Prices are good in the USA and Canada. Please add 25% for other countries. Plans will be sent airmail.

(13)

Iraqi tries to surrender to model plane

Associated Press

Among the tens of thousands of Iraqi surrenders during the allied ground offensive, some stood out.

"They were surrendering in droves, almost too fast for us to keep up with," said Marine Col. Steve Wagner.

"The guys here like to tell about one of them who gave up to an RPV (remotely piloted vehicle). Here's this guy with his hands up, turning in a circle to give himself up to a model airplane with a camera in it."

One group of about two dozen emerged from a roadside bunker and surrendered to a high level convoy carrying the top commander of the U.S. Marine contingent, Lt. Gen. Walter Boomer.

Members of the Tiger Brigade, a U.S. Army tank unit, singled out a surrender by several hundred Iraqis who marched toward the Americans behind one man holding up a white sheet with a crude U.S. flag drawn on it.

The Tiger commander, Col. John Sylvester, accepted the surrender of two Iraqi majors, both brigade commanders, who gave up with their entire units.

"One of the surrendering Iraqi majors said, 'It's not our cause we only want peace.' And I told him I only wanted peace too and accepted his surrender," said Sylvester, 45, of Brownsville, Texas.

At one point, according to allied soldiers, an Iraqi tank and an armored personnel carrier came upon a U.S. humvee utility vehicle stuck in the mud. The Iraqis helped free the humvee, then surrendered.

In another instance, four Iraqis approached a U.S. soldier, fell to their knees and kissed his hand.

A group of six Iraqi soldiers also surrendered to a TV news crew, who frisked them and left them by the roadside for later pick up by allied forces.

AMIAMA / NEW SCOOP FEB 1993

POLY-MICRO

THE LIGHTEST, THINNEST FILM AVAILABLE

Polymicro is a new indoor film being offered by Richard Obarski and Wayne Trivin. It is the lightest polyester film manufactured, and the last you'll have to buy. Ideal for beginners in FID, who can't handle microfilm yet, to repairs and even replacement, in some applications, on microfilm models. Check out the specifications below.

SPECIFICATIONS

	Wght. in oz. per 100 sq. in.*	Thickness in inches
Ultra Film (Ray Harlen)	.0045	.00006
Ultimate (Wayne Trivin)	.00366	.000047
POLYMICRO	.00285	.0000353
Microfilm	.0015 Appx.	Varies

*Above weights determined using a Harlen beam scale. Weight for microfilm varies depending on sheet color after pouring.

Prices

Polymicro- 15' for $25.00 freight included

Ultimate, new reduced price- 20' for $16.00 freight included

Send check or money order to; Wayne R. Trivin
7408 W. Hanna Ave.
Tampa, Fl. 33615

NEXT MEET MAC DILL MARCH 20+ 21

FAC MASS LAUNCH: MODERN 9-5

SAT. 5:00

ANY PEANUT MASS LAUNCH - SAT. 2:00

COCONUT MASS LAUNCH - SUN. 3:00

BRING CURRENT AMA CARD

USEFUL TOOLS, RUBBER FF

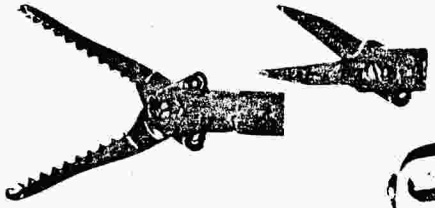
The enclosed pictures are of two surgical long reach instruments. They have been made available to modelers by Kevin Smith and Chuck Slater of The Symbiosis Company. They not only produce these tools but also profess to be the worlds largest employer of indoor modelers.

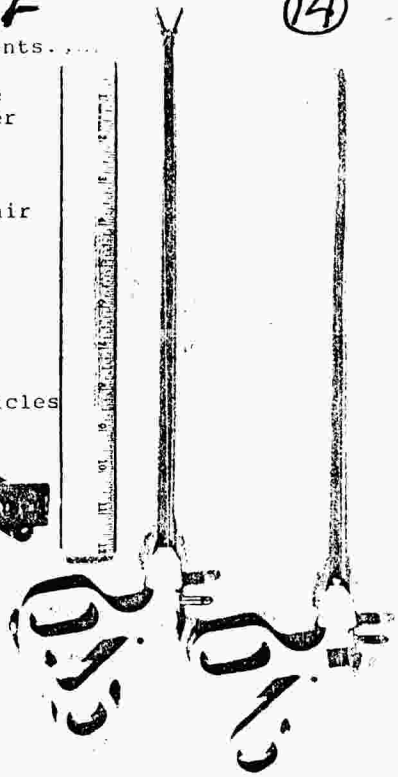
These tools are most useful in retrieving broken rubber from inside fuselages. As you can see there is a grasper and a pair of scissors.

As with the eye scalpel and microcautery program, the monies generated will be given to The AMA Indoor Travel Fund.

I am asking for $20.00 for a pair of these tools.

Please mention the above in your news letter or magazine articles





Vernon D. Hacker, M.D.
25599 Breckenridge Drive
Euclid, Ohio 44117

(216) 486-4990



NFFS Free Flight Video Ready

The National Free Flight Society has produced an excellent, professionally done video titled, "The Joy of Flying Free". (LOTS OF INDOOR!)

Approximately 45 minutes long, it covers both indoor and outdoor free flight. The video is narrated and has appropriate musical background.

It was professionally done by free flighter Bill Harding of Harding Productions. Harding and his crew filmed several free flight events, including the US Outdoor Champs. The still pictures in the video were supplied by Bob Clemens.

If you want to show others the joy and magic of free flight then you must get this video! Clubs need it for mall shows, recruiting new members, and telling the world what free flight is all about. It gives a very good picture of the sport.

To order send $28 to: Tony Italiano, 1655 Revere Drive, Brookfield, Wis., 53005, (414) 782-6256.

CONT. MACDILL

If Tampa Bay officials can't persuade the commission to keep the airstrip under military command, they hope to get the Department of Commerce to take it over.

The new commissioners are:

- New Jersey lawyer James Courter.
- Peter Bowman of Maine, a retired Navy captain.
- Former Maryland Rep. Beverly Byron.
- Continental Airlines vice president for government affairs Rebecca Cox of California.
- Hansford T. Johnson of Texas, a retired Air Force general and former commander of that branch's Air Mobility Command. Johnson now is chief of staff at the USAA.
- Arthur Levitt Jr., chairman of the board of Levitt Media Co. in New York.
- Harry McPherson Jr. of Maryland, a lawyer in Washington, D.C.
- Robert Stuart Jr. of Illinois. Stuart, president of Conway Farms, is the father of James Stuart, executive director of the Florida Aquarium in Tampa.

WHAT'S ON IN FREE FLIGHT? LOTS!

BE SURE TO CALL INDOOR HOT LINE 305-858-6363 the night before miama meets.

FEB 27 MIAMA local meet TILE WAREHOUSE No-Cal, Dime Scale.
MARCH 13,14 Outdoor Free Flight and Flying Aces. SPRING OPENER,Palm Bay 407-724-2144
MARCH 20,21 MIAMA STATE MEET #5 MacDill AFB,Tampa. Mass Launch- MODERN
APRIL 3 MIAMA local fun fly at new site. Miami Dade NORTH gym. NO-Cal, Dime Scale.
APRIL 17,18 MIAMA STATE MEET #6 MacDill AFB FAC Mass Launch- WW I
APRIL 18-24 EAA Sun and FUN Fly In Lakeland
APRIL 24,25 F.A.R.T. VI Dade County Youth Fair. Tentative.
APRIL 24,25 Sam Spring Meet C/D Don Brimmer
MAY 1 Miami Dade North College Gym. Local Meet. Dime Scale, No-Cal.
MAY 22,23. Last MIAMA State Meet of the 1992/1993 season MacDill AFB,Tampa
MAY 30 Last MIAMA local meet TILE WAREHOUSE.
JUNE 3 to 6 THE BIGGIE....JOHNSON CITY AMA INDOOR NATS, AND NFFS US CHAMPS. MIAMA GRAND PRIX
JUNE 19,20 PENSACOLA- Fiesta of Five Flags
JUNE 19, MIKE ARAK's UMPTEENTH ANNUAL MIAMA OUTDOOR MEET & COOK OUT. FIU Campus. LOTS OF FLYING ACES
AUG. 7 ANNUAL MILLARD WELLS GREAT FLORIDA KEYS RISE OFF WATER MEET

THE HANGAR PILOT

EDITOR: DR JOHN MARTIN, JR
2180 TIGERTAIL AVE MIAMI FLA.
33133



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Cincinnati, OH 45240