THE HANGAR PILOT

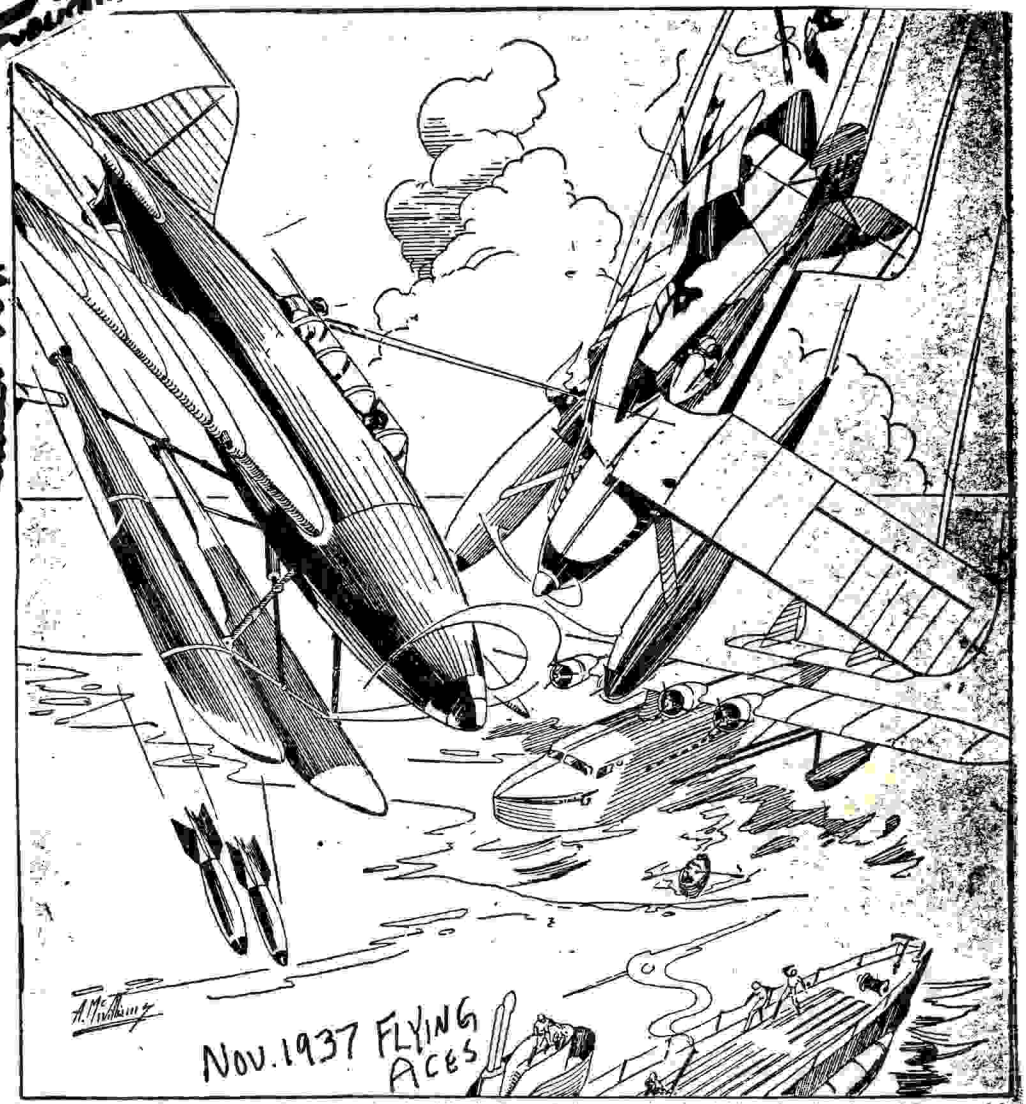
MYSTERIOUS

14TH YEAR OF PUBLICATION

MIAMI INDOOR AIRCRAFT MODEL ASSN.

ISSUE 107
FEB 1986 AMA CLUB 986

INDOOR ISN'T FOR EVERYONE



Barney poured a double stream of lead into the Arado's vitals—and that was the death blow, for she plunged downward in a tight spiral, her right wing crumpled. It was at this instant that Keen pulled his bomb toggles.

NEXT TWO EVENTS

1. FUN FLY

MIAMI DADE SOUTH COLLEGE
9 TO 5

SUNDAY FEB. 9TH

2. FEB 22 + 23 TWO DAY MEET —

SEE PAGE 13

" LIKE A LETTER FROM MOM" - JIM WHELAN

(1)

THE HANGAR PILOT



The Hangar Pilot is published 8 (or 9) times a season for a bunch of middle aged guys who refuse to grow up (Or give up). MIAMA (Miami Indoor Aircraft Model Assoc.) AMA Club 986 is the only active all indoor free flight club in AMA. OUR MOTTOS: "It must be fun." and "Indoor isn't for everyone". For a paltry $10.00 a season you will receive all copies, and be a member of MIAMA.

We solicit your contributions since we are always running out of material. Send letters, plans, 3-views, articles, gripes, and money to: Dr. John Martin Pres. Editor. 2180 Tigertail Ave. Miami, Fla. 33133 USA Phone: 305-858-0363. We want to hear from YOU. Send Material !!!!!

HOMESTEAD AIR BASE FLY IN:

This entire business turned out pretty well. The Homestead Recreation Club sponsored our clubs fly in, and we put on a demonstration of indoor models that was attended by about 80 people, most of whom were kids. You could tell they were interested because they hung around asking questions after the meet. We handed out many Hangar Pilots, and answered a lot of questions. It was sort of a regular fly in but much more intense from 1 to 2. We want to thank MIKE ARAK, ED SHAW, MILLARD WELLS, TOM COONEY, CARL HEDLEY FOR coming out with a bunch of ships to keep the air full of planes. Special thanks to FRANK KIESER for demonstrating his biplane canard ornithopter to the delight of the kids. Also it was great to see old time MIAMA members Kevin Smith and CHARLES SLATER out modeling and flying again after an abscence of about ten years. They are specializing in peanut and AMA scale helicopters- a very difficult subject. So far they manage a very realistic and scale-like flight of about 25 seconds R.O.G. They had about 5 copters and Doc had one so we had a mass launch helicopter event!

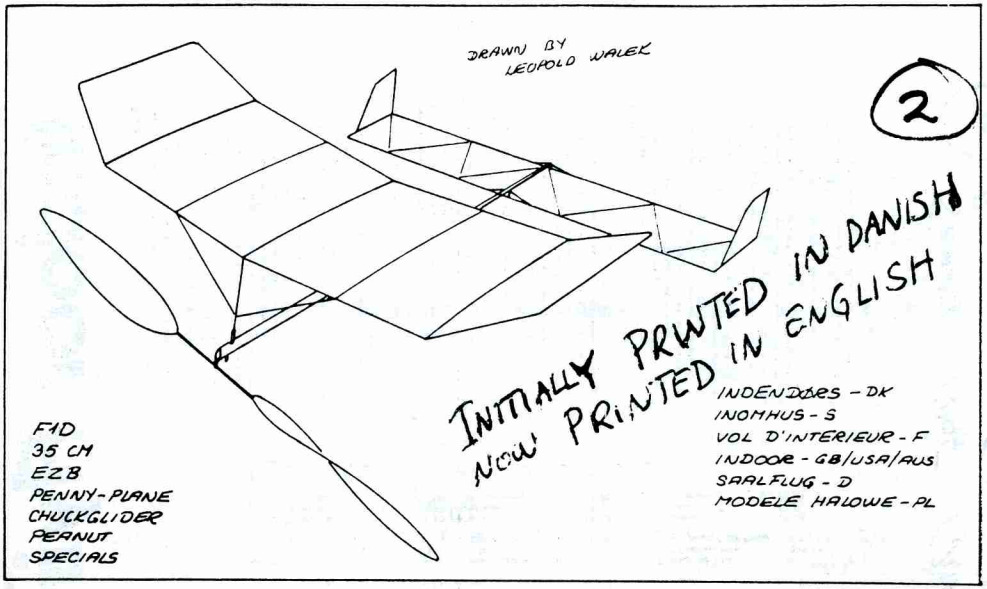
The site is not quite as good as Miami Dade South College, but perhaps we can fly in another location there. At any rate this kind of P.R. and exposure can only do our club good, so thanks, all.



FEB 22 & 23

FLY MEET 5 IN THE COAST GUARD HANGAR

SEE PAGE 13



INDOOR NEWS 3/85

Dear friend.

This issue is the 6th I have produced over the past two years. It has been lots of fun and a very interesting business to make it. Intended as it was in the beginning as a help to my indoor friends in Denmark, it now covers most of the indoor activities in Europe and to some extend in USA and Australia. The support from my readers has been very intensive and comprehensive, and I sincerely hope that this will continue in the third year of "INDOOR NEWS" - (has anyone a better name for it??)

The subscription rates cover the printing - on a copy-machine -, paper, envelopes and postage. By now the newsletter can carry itself economically and the salary for me is the HONOUR. No one who has made contributions, has been paid. Some free issues has been sent to other newsletters/magazines on an exchange basis, and some others has been sent to "names" in order to make them contribute or subscribe. Otherwise free issues have not been the order of the day.

In the past issues you have seen some advertising from different firms or persons selling/offering vital items for our very special sport. I have given them free space and will continue to do so, and everyone is wellcome to ask for ad. space - free! I think it is very important to know where to get the vital things.

When you make contributions you must know that these will help promoting our beautiful sport, every hint and tip will be useful somewhere no matter how "basic" you might consider it! It IS difficult to start building F 1 D microfilmmodels though some of the "experts" might have forgotten their problems!

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Jørgen Korsgaard
Ahornweg 5
D-2397 Ellund-Handewitt
W. Germany

Phone 04608-6899

3 issues annually, will appear around March, July and November.

Scandinavia	Dkr. 45,-
Europe	Dkr. 50,-
Overseas,air	Dkr. 60,-

ABOVE & NEXT PAGE IS A NEW INDOOR NEWSLETTER FOR THE SERIOUS INDOOR BUILDER. SUBSCRIBE WITH KORSGAARD!

North of England

Low-Ceiling Indoor Flying

Rules

Easy B - rubber powered duration models

1) Current model specification i.e. Rule 3.22.2 in the SMAE Rulebook
   a) Wing maximum projected span 18" max chord 3"
   monoplane only
   b) Tail area 30 sq ins maximum. Wing and tail to have straight line outlines
   c) Prop max diameter 14". No variable pitch or flaring mechanisms. span to be at 50% ± 10% all the way along the blades. Solid wood construction only
   d) Motor stick and rail boom to be solid construction only
   e) Minimum weight without rubber 1.2g
   f) Wood bracing may be used
   g) Any covering material allowed
2) EITHER. Any rubber weight. Flights must have a 7 minute maximum
   OR. Rubber may weight 0.6 g
   Ballast in the form of a spacer between rubber and rear hook 0.6 g minimum
   No max mum flight time
3) Total of best 2 from 6 flights

Indoor Hand Launched Glider

1) Wing span 13" max. wing area 15 sq ins max
   Overall length 13" max
   Tail span 6" max
   All up weight 3 g minimum

Peanut Duration

1) a) Rubber powered monoplanes only
   b) Wing span 13" max propeller. Wing chord 2½ max
   c) Tail span 7" max. Tail area 14 sq. ins. max
   d) Overall length, including propeller 17" max
   e) Propeller 6" diameter max
   f) Cross section of fuselage 2 sq. ins. minimum
   g) A frame weight (without rubber) 4 g minimum
   h) Fixed, wheel undercarriage required. Flights must ring
2) Total of best 2 from 6 flights

Scale

1) a) Rubber power only
   b) No limitations on size or weight
2) Scoring will be on a points basis as follows.
   Static realism as decided by judges and using any documentation provided by the entrant. 1st place 1 point 2nd place 2 points etc.
   Flight (duration being a trial of the best two flights one of which must be a ring) 1st place 1 point 2nd place 2 points etc.
   The total of a model's points will determine the results.
3) In the case of a tied places in any section, points will be averaged i.e. a two way tie for 1st place will be considered as a sharing of 1st and 2nd place and the models awarded 1½ points each.
4) Ties in overall scores will be decided by the highest ring duration flight.
5) Scale models that win a contest during the 1984-85 winter will not be allowed to enter the new winter

NORTH OF ENGLAND LOW-CEILING INDOOR FLYING WINTER 1984-85

13 JAN 1985

60.7	D. Morley	57.2	B. Hunt
58.3	R. Green	56.5	W. Murray
56.8	G. Dimitt	55.5	D. Morley

10 FEB 1985

57.2	B. Hunt	57.5	
56.5	W. Murray	56.1	
55.5	D. Morley	54.8	
6.37	J. O Donnell	6.06	
6.31	B. Hunt	5.36	
5.51	W. Murray	5.27	
6-48	R. Boor PS1	7	D. Horsefield B. Scout
9-25	J. O Donnell Fae	8-13	J. O Donnell Fae
9-25	B. Horsefield Fae	9-29	M. Colling Eberel
15.53	B. Hunt	16.18	
14.57	D. Morley	16.17	
14.00	J. O Donnell	14.20	

3 MARCH 1985

57.5	B. Hunt	52.	
56.1	R. Boor	51.8	
54.8	W. Murray	50.8	
6.06	J. O Donnell	6.16	
5.36	B. Hunt	5.57	
5.27	H. Tubbs	4.25	
7	R. Boor He 113	6	
8-13	J. O Donnell Fae	9-15	
8-48	D. Horsewell Paper Plane	9-5	
16.18	D. Dorel	14.59	
16.17	H. Tubbs	14.05	
14.20	J. O Donnell	13.34	

THANKS TO "AEROMODELLER" FOR THE PRINTING.

MORE VERY PRECIOUS "MANNY'S WRINKLES"

INDOOR

by Manny Radoff

INDOOR RIBS - A DISCUSSION OF TYPES

There are two types of ribs used in the making of an indoor endurance model: regular ribs and compression ribs. Compression ribs are usually put at the places where the wire bracing joins the wing spars. Regular ribs are used everywhere else.

Most indoor modelers cut the ribs from "c" grain balsa. I wonder why? I cut my ribs as deep as possible so they will better retain the shape I give them. So why not use "A" grain wood where the "C" grain will be on the vertical and give the rib resistance to bending forces? I get resistance to lateral forces on the ribs by wetting them so the microfilm sticks to the ribs and keeps them from bending. Another advantage of sticking the film to the ribs is that it prevents the microfilm from rubbing. This rubbing can wear holes on a very long car trip and was particularly bad in the old piston-engine airplanes when models were carried on them cross-country or overseas.

There are two types of compression ribs that I see on models. They are the built up, Fig. 1, and the deep one piece, Fig. 2. The built-up ribs have been used for as long as I can remember. I have seen one or two, and even three upright pieces used. Their number should depend on the thickness and quality of wood.

The solid, one piece style (Fig. II) can also vary. The deep part can be at the high part of the camber or the middle of the rib. To make them I use a rib cutting template for the underside, which is of a lower camber and I position it to give me the depth and configuration that looks good. I first learned of this style after the 1970 W/C at the Saltmine, in Slanic, Romania, where Jim Richmond used it. I like it because it saves time.

For many years now, two of my indoor modeling friends and I, have not used compression ribs at any wire bracing points on the spars except at the dihedral break of our flat center section wings. We did make one concession and that was to put a piece of bracing wire across the wing at the wing posts.



FIG. 1

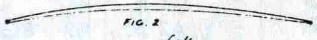
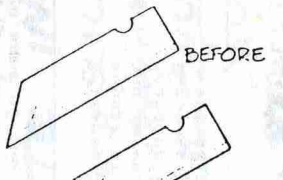


FIG. 2

RAZOR BLADE HINT
by Emanuel Radoff

During a mouth stuffing and elbow bending session after a day of indoor flying at Lakehurst, Ray Harlan told me of a little trick to keep the razor blade point from following the grain of the cutting board. He grinds off the tip of the razor blade with a handstone, at the correct angle to permit the new tip to be flush with the base. The resultant flat tip rides on the surface of the base instead of digging into it and thereby following the grain.

Ray developed the idea for the cutter on his micrometer measuring type balsa stripper he sells along with an indoor scale and pigtail double thrust bearings. Ray can be contacted at 15 Happy Hollow Road, Wayland, Mass. 01778.



(3) SAMPLE PAGE FROM "INDOOR NEWS" - A REPRINT OF SOME RADOFF HINTS & SOME UK RULES. THIS TYPE OF EFFORT DESERVES OUR SUPPORT - THANKS JØRGEN!

JAN 86

(4)

A new look at an old design

FROM SOUTHEAST AVIATION NEWS

By LIAM MAGUIRE

"Build a better mousetrap and the world will beat a path to your door." For eighty years the aviation and aerospace industries have been hot beds of ingenuity and inventiveness. New engineering concepts, new designs, new materials, new engines with fuels continue to be introduced. Today a visit to any major aviation convention or a browse through an aviation magazine brings back memories of the pioneer days. The ultralights are direct descendents of the Wright brother's ingenuity. Sleek experimentals and business jets have adopted the canard configuration. Engineers and economists are investigating the cost benefits of Zeppelins. Space shuttle rocketships have sprouted wings and glide to Earth. Propellers are once more looking like "air screws" that push rather than pull. The shapes of aviation technology continuously are changing, but the laws or physics are immutable.

For many venerable aviators, the present "inventions" seem more like examples of *deja vu*. They have seen it all before. Today's aerospace engineers are going back to basics in an attempt to solve the problems of high fuel costs, sky-rocketing manufacturers product liability and the need to demonstrate safer flying aircraft and a better chance of survival for the ticket-buying public.

Chalmers H. Goodlin, chairman of the Burnelli Company, has devoted his life to aviation advancement and air safety. As a test pilot in W.W.II, he flew many of the new fighters including the Bell X1 — the first aircraft designed to penetrate the sound barrier. He is familiar with parasitic drag and the thrust required to overcome it. In 1949, when he first met Vincent Burnelli, he already possessed considerable practical and theoretical aviation expertise. His company is dedicated to the development of the design, not to rewriting or preserving the history. However, it is an interesting history.

Vincent Burnelli was a Texan scientist and aeronautical engineer who was probably the first to recognize that the physical conflict between parasitic drag, thurst and lift could be alleviated in part if the fuselage of an aircraft looked less like a cigar and more like an airfoil — an aerodynamic wedge. By changing the shape to produce a "lifting body," the aircraft flies faster, lands slower and, for a given power, can carry more payload and provide more cubic capacity. It is also much safer.

The Burnelli Wing, as it is known, is not just a theoretical concept. It has been flying since 1920 when the first RB-1 biplane transport took off from Amityville, Long Island. This was followed by the RB-2 which demonstrated its load carrying capacity by transporting two automobiles on an aerial sales tour. It subsequently flew for eight years as a commercial cargo carrier.

In 1928, with a new banker/partner, Burnelli developed the CB-16, a high-wing, twin-engine monoplane with a cabin 18 ft. long and over 11 ft. wide, luxuriously appointed to accommodate 20 passengers in fully-reclining swivel chairs. It had all the luxuries of the present day executive aircraft. The twin engines were embodied in the wide-lifting body fuselage, providing a modified form of centerline thrust and were accessible for repairs during flight.

Burnelli next built his GX-3 which combined his lifting fuselage principle with the variable-camber wing. It was entered in the 1929 Guggenheim Safe Aircraft Competition. The aircraft had a maximum speed of 135 m.p.h. and landed at 30 m.p.h.

Burnelli went on to design and build several transport aircraft of which perhaps the most famous was the UB-4. An all metal aircraft with retractable undercarriage that lifted into the wide fuselage. The strong engine supporting structure acted as cushion protection for the pilots and passengers in the event of a crash. Unfortunately, the life of the prototype terminated in a spectacular crash in 1935, but the structural integrity of the boxed body protected the crew, with the forward engines and "detachable" wings absorbing the shock.

The outstanding performance and flight characteristics of the UB-14 were becoming recognized in the late 1930s. In 1938 a British company began manufacturing them under license and one was selected to attempt a nonstop flight around the world. The flight was cancelled by the war. A modified UB-14, known as the Cunliffe-Owen OA-1, was built in Britain and served during the war as General de Gaulle's personal aircaft in Africa. The UB-14B went into service with TACA flying from Miami to Honduras as a freight carrier.

Burnellis' lifting fuselage was incorporated into bomber configurations and into large troop gliders. In 1941, the Canadian Car and Foundry Corporation (now Canadair) was licensed to build the Burnelli CBY-3 Loadmaster. This incorporated many of the features of the UB-14, but was built for bush and jungle operations, carrying 22 passengers and providing over 1,000 cubic feet of cargo space. The demonstration model was acquired by Airlift, Inc. of Miami and also spent time in Venezuela operated by Rutas Aereas Nacionales. Eventually it returned to the U.S. where the engines were replaced with Wright R-2600s and was selected for a polar basin expedition. It is now preserved at the Connecticut Aeronautical Historical Association Museum, the sole surviving Burnelli aircraft and memorial to over 60 years of aeronautical design.

Why did the proven Burnelli design not meet with the same support as the present conventional aircraft? Simply put — politics. Buoyed by the enthusiasm of General "Hap" Arnold of the U.S. Air Force, Burnelli entered a competition to build a prototype fighter-bomber. His design won in every category and cost 75 percent less to build than the average cost estimate of his rivals. He was called to the White House to personally witness the signing of the directive by President Roosevelt. During casual conversation, FDR learned that Burnelli's financial backer was Arthur Pew, Jr., a noted Republican booster during the 1940 presidential election. Reportedly, FDR flew into a rage, flung his pen across the room and dismissed Burnelli and his associates. Instead of granting the contract, a certain Air Force classified evaluation report was written to bury the Burnelli designs. The report concluded with these words: *"The committee recommends that the Air Corps inform the Central Aircraft Corporation and V.J. Burnelli, Inc., and any other concern which may later possibly become interested in the Burnelli 'lifting fuselage,' that the design is of no interest to the Air Corps and that for this reason no further correspondence, consultations or reviewing of the data embodying this design will ever again be considered by the Air Corps or the Material Division."* This document was signed by Bennet Myers, who was later jailed for other aircraft procurement crimes. Burnelli's designs were deprived of the public exposure and the military testing which conventional aircraft received both during and after the war.

In a recent exclusive interview by *SEAN* with Chalmers Goodlin, he stated that the advantages of the Burnelli lifting fuselage design are still applicable today. He quoted Professor E.J. Cantilli, an internationally recognized expert on air safety, who stated as

(5)

recently as 1983 that "the use of Burnelli aircraft would reduce air crash fatalities by 85 percent." Goodlin produced article after article, letter after letter, confirming that the Burnelli shape provides a much lower drag coefficient, a higher lift coefficient, good flight characteristics enabling slower landings, a safer and stronger fuselage isolated from the fuel tanks in the wings. Since the wings do not carry the engines or the landing gears, they are less vulnerable in a crash situation.

Burnelli aircraft are also easier and less expensive to build and do not require sophisticated runways required by the conventional modern jet with high impact characteristics caused by high landing speeds and the fewest possible wheels. The Burnelli aircraft is ideal for both military and Third World use.

After the Pan Am Boeing 727 crash in New Orleans, the International Harry Schultz Letter of August 1982 stated: *"The experts are blaming 'windshear' again, when the cause is the defective conventional jet; small wings mean high wing loading which equals excessive takeoff speeds and extra power required. Any airflow interference over small wings can cause a stall, a crash. Passengers sit atop fuel tanks. The Burnelli plane means low wing loading, low takeoff speeds, better controllability — even in a stall. Greater wing surface minimizes windshear and ice effects. The passengers are surrounded by 60 percent of the structure and do not sit on the fuel tanks. We've positive proof on film of a Burnelli UB-14 flying into the ground vertically; a wing came off, an engine tore loose, but the seats held fast, the fuselage remained intact, no fire; and the crew stepped out unscathed. This took place in 1935."*

The aviation industry is aware of the advantages of the Burnelli design. Recently Boeing did comparison between the Boeing 767 and the Boeing 754, a Burnelli-type design. Boeing figures demonstrate that the Burnelli-type B-754 provides more than double the payload and cubic volume over the B-767 with similar engines (Figure 1), yet the conventional B-767 is in production and the B-754 is relegated to the files reserved for the dashed hopes of dreamers. Perhaps the Roosevelt curse on Burnelli brilliance lingers on. If so, now is the time to forget the personality conflicts and the conventional "wisdom" of the past and to concentrate on designing a mousetrap which will allow more of the travelling public — us, mice — survive should the inevitable accident occur.

FIGURE 1

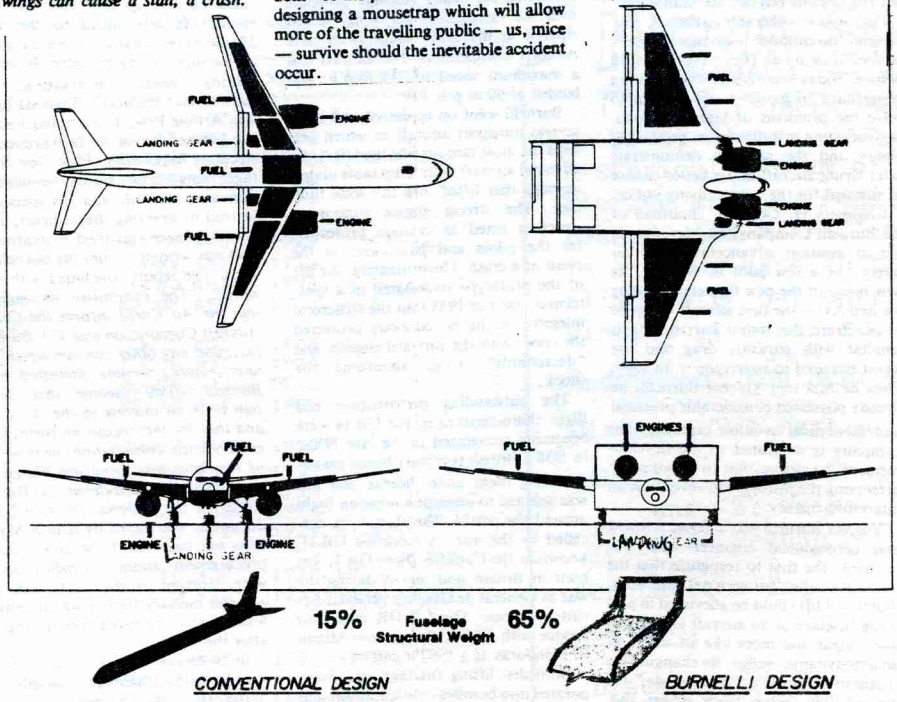
MODEL	BOEING 754	BOEING 767
O. Empty Wt.	lbs. 159,600	179,580
Max. Payload	lbs. 160,600	72,770
Max. Zero Fuel Wt.	lbs. 320,200	253,000
Max. Fuel	lbs. 143,375	112,725
Max.T/O Gr. Wt.	lbs. 363,900	335,000
Mach Speed	0.74	0.80
8'x8' Container Lanes	3	0

Note: The Boeing 754 Burnelli-type aircraft was designed for freight carriage and could hold three lanes of standard 8'x8' containers with a net containerized density of 7 lbs. per cubic foot.

This would permit integration into existing road/sea containerized freight systems without the need for repacking or load breaking. This would make air freight even more attractive to manufacturers and shippers.

Editor's note: At press time, Chalmers Goodlin was in Washington beginning a series of discussions on the feasibility of the Burnelli concepts in modern aircraft.

Note: *Southeast Aviation News* would be pleased to publish additional articles on aircraft design and on new aviation technology if written for the general reader. Those who would like to discuss in greater detail the merits of the Burnelli design should contact Mr. Chalmers Goodlin, The Burnelli Company, Inc., 7372 N.W. 12 Street, Miami, FL 33126. Telephone (305) 592-3270, Telex 519496.



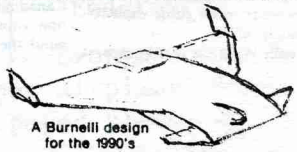
15% Fuselage Structural Weight 65%

CONVENTIONAL DESIGN

BURNELLI DESIGN

"Aviation is still in its infancy; give it a chance to grow up and they will see that I am right. The lifting fuselage is the first new configuration since streamlining was first introduced, and my plane carries more, carries it faster and safer."

—V. J. Burnelli — 1950

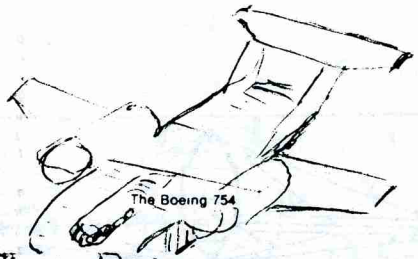


A Burnelli design for the 1990's

"The Use of Burnelli airliners would reduce air crash fatalities by 85%"

1983 — PROF. E. J. CANTILLI, New York Polytechnic

FORGET REAR SEAT MANIA — All Burnelli seats are safe, as they are protected by the bulk of the airplane structure and isolated from the fuel tanks. The Burnelli design eliminates the common place conventional hazard of attaching engines and landing gear to the fuel tank supporting structure and does not store fuel underneath the passengers in the fuselage. Take-off and landing speeds are substantially reduced while providing more payload usable volume and floor area for a given horsepower at no sacrifice in cruising speed. Sitting low to the ground, Burnelli airplanes do not require the complex and costly evacuation chutes or hi-lift loading and maintenance equipment. Last but not least, the overall simplicity of the Burnelli design, with its shorter load paths and lack of complex curvatures, means lower construction and maintenance costs.



THE BURNELLI COMPANY

7372 N.W. 12th Street, Miami, FL 33126
Tel.: (305) 592-3270 • Telex: 519496

6

THE CAUDRON QUESTION

W.C. HANNAN, GRAPHICS
P.O. BOX A
ESCONDIDO, CA 92025 USA

by Bill Hannan

Jan. 15 '86

Hi Doc,

Enjoyed every word and line of issue 106!

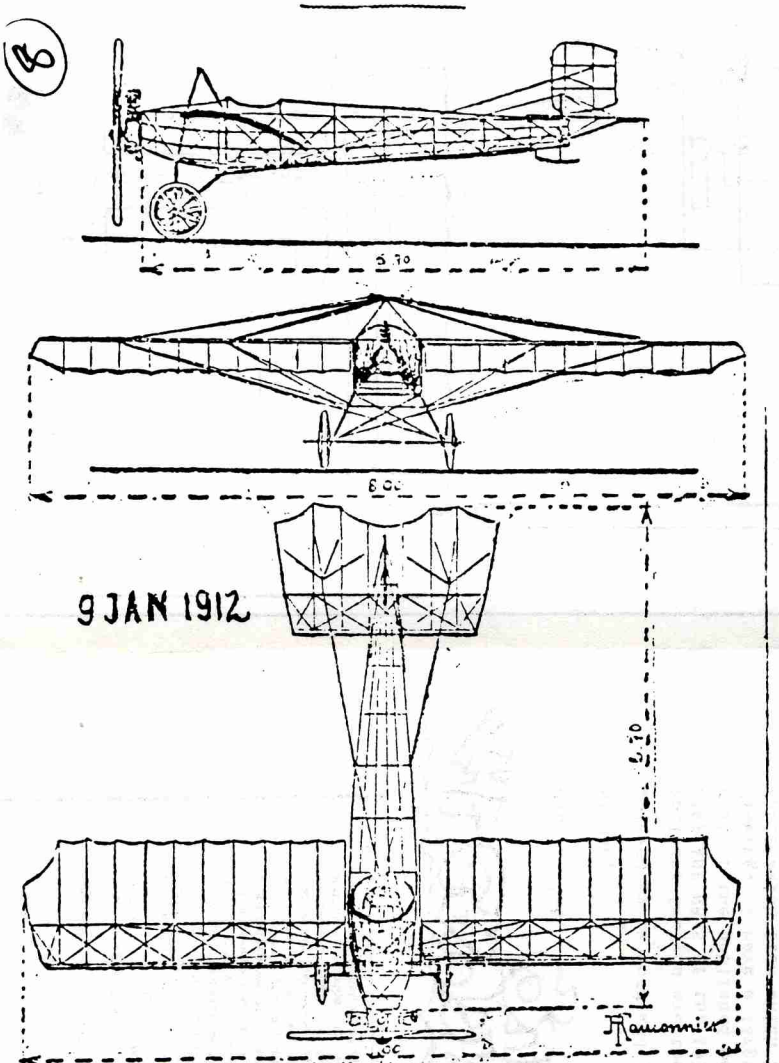
Enclosed for you are two Caudron 3-views. The large page is from a MODEL AIRPLANE NEWS of the 1930s or so (have lost the date), and I suspect most of the published models of the Caudron have been based upon this drawing. I have a larger more detailed drawing from a much earlier publication from which I think this drawing was derived. However, Harry Robinson, of England, and I are of the opinion the drawing is suspect, since we have never seen photographic proof of such a configuration, in spite of years of searching. The sequence of events seems to go something like this: Before WW 1, an American firm , Sloan, imported some aircraft including a French Caudron or two, and employed them in their school. This is well-documented in adverts, etc. We think the 3-view and article about the Caudron was directly connected with the Sloan enterprise... The only photos we have seen of the machine(s) taken in the U.S. have been fragmentary...none showing the complete aircraft. One theory has it that a modified copy may have been made in the U.S., or possibly an original Caudron modified. However, a long search of English and French publications of the pre-WW-1 era failed to turn up any Caudron with the deep-bellied configuration shown in the early U.S. publication, (and evidently copied for the MAN article).

The other 3-view I'm sending is from a French pre-WW 1 publication, and is one of several basically similar Caudrons we have found which ARE SUBSTANTIATED BY PHOTOGRAPHIC EVIDENCE. Note that we are not being closed-minded on this issue, and we stand willing to accept photographic evidence that there was a deep-bellied Caudron monoplane. Certainly there were deep-bellied Hanriots, Ponniers and Nieuports.

Sidelight: Quite a number of models have been published over the years evidently based upon the MAN 3-view. Humorously, one of them featured a ring-cowling, evidently the result of misinterpretation of the dotted lines employed instead of detail for the Anzani engine. There is also confusion in regards to the number of cylinders of the Anzani. Here again, documentation exists, if one cares to do a bit of detective work! Where else can one find entertainment like this?!

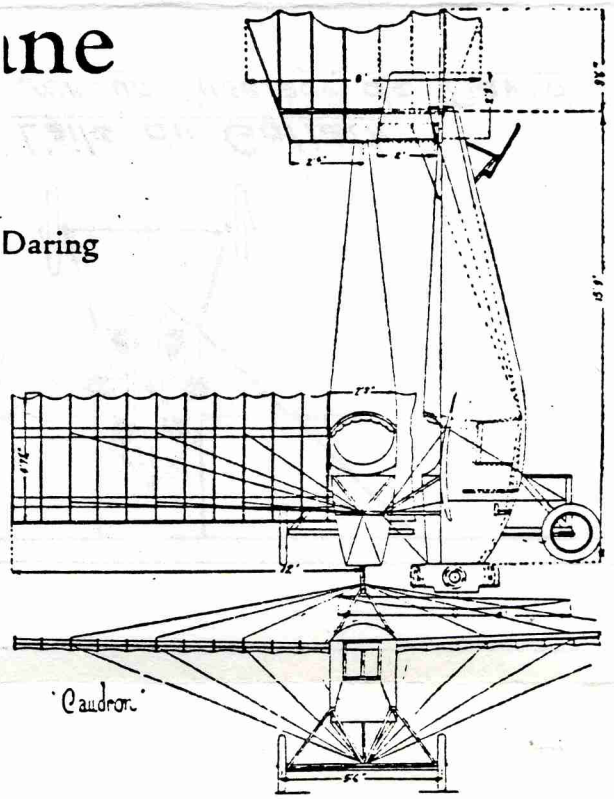
Bill

Le Monoplan Caudron



ine

Daring



Le bon Caudron

Le Caudron Soupgonneux ! (MAN)

ever been at-

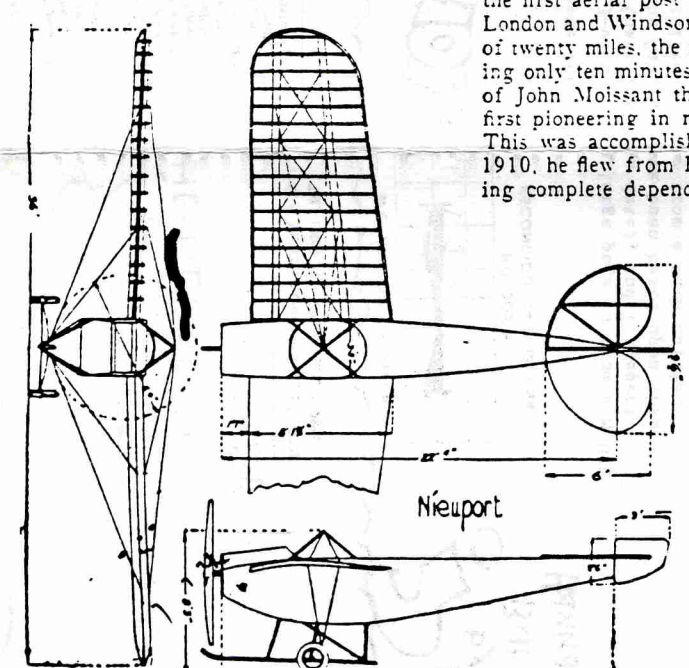
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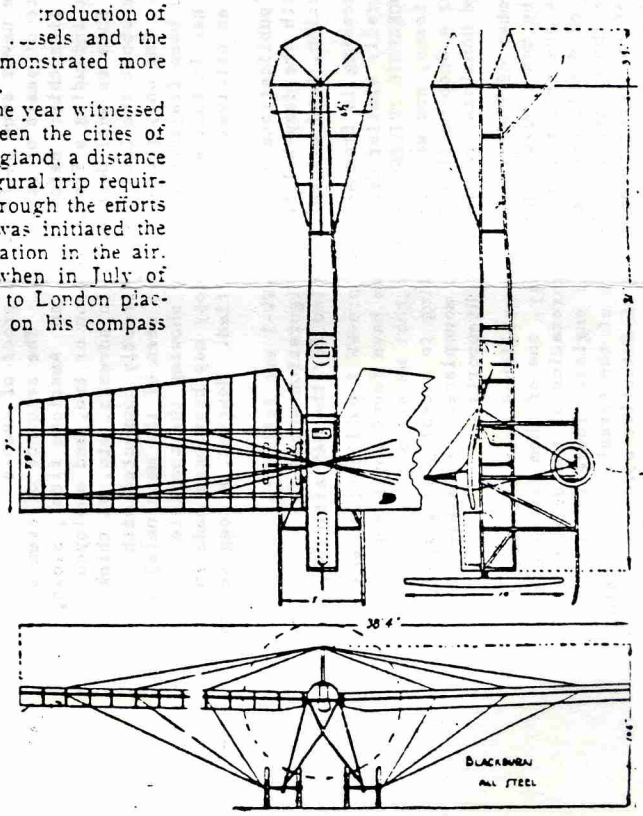
prize of ten thousand pounds for the completion of the first flight from London to Manchester, England, with a limit of only one stop to refuel. After many unsuccess-

wireless to ocean going vessels and the proof of this has been demonstrated more than once rather recently.

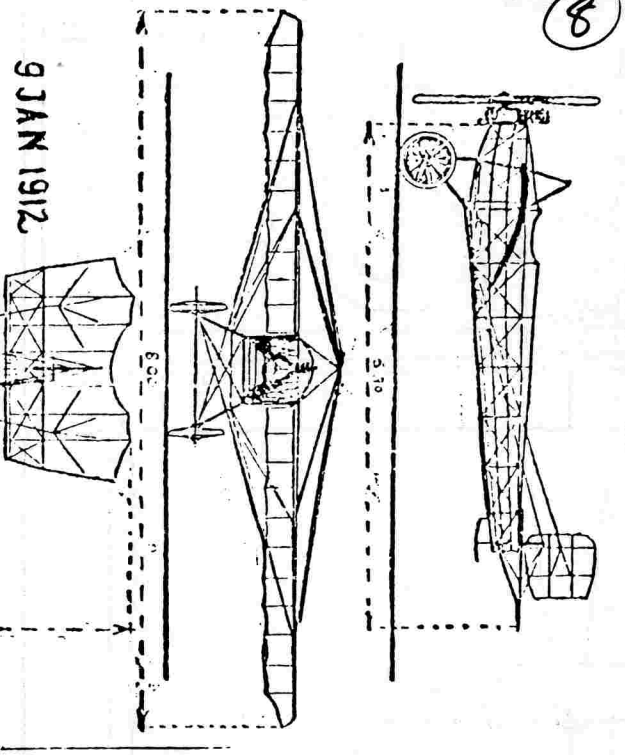
The summer of the same year witnessed the first aerial post between the cities of London and Windsor, England, a distance of twenty miles, the inaugural trip requiring only ten minutes. Through the efforts of John Moissant there was initiated the first pioneering in navigation in the air. This was accomplished when in July of 1910, he flew from Paris to London placing complete dependence on his compass for guidance, from start to finish. This, in conjunction with the use of wireless, showed that there were many pioneers who were looking ahead far into the future, to the day when the aeroplane should be considered as a really safe means of transportation.

On Sept. 23rd, Georges Chevez succeeded in crossing the Alps mountains at Simplon Pass, but unfortunately he

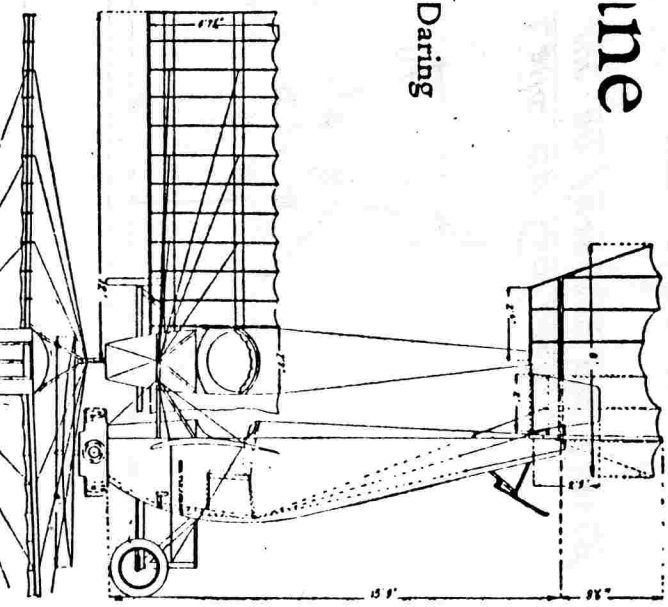




Le Monoplan Caudron



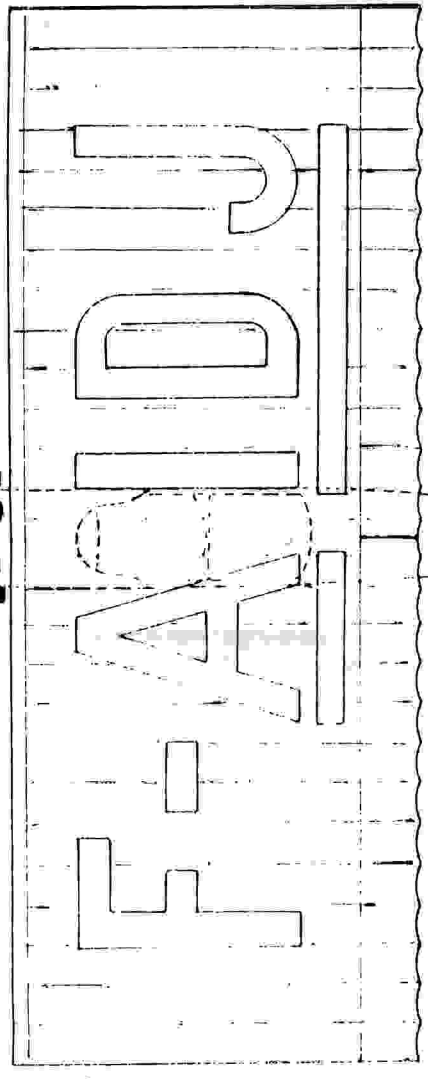
n Caudron

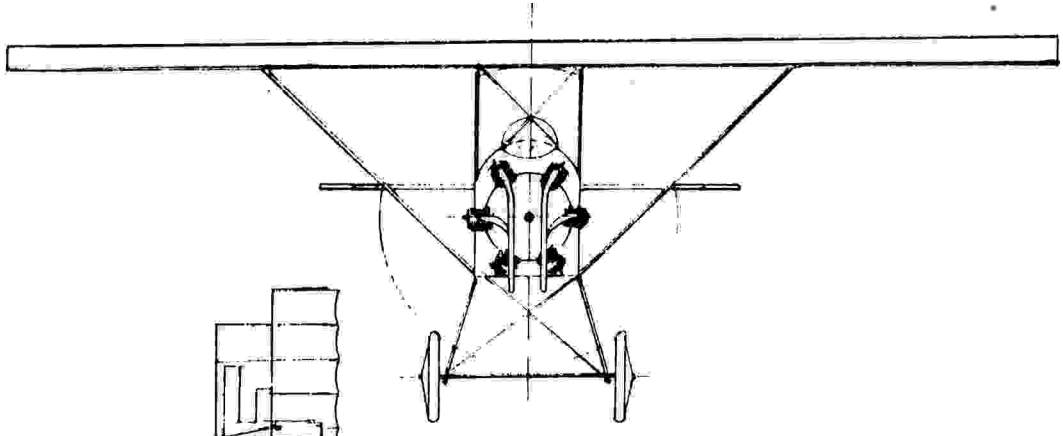


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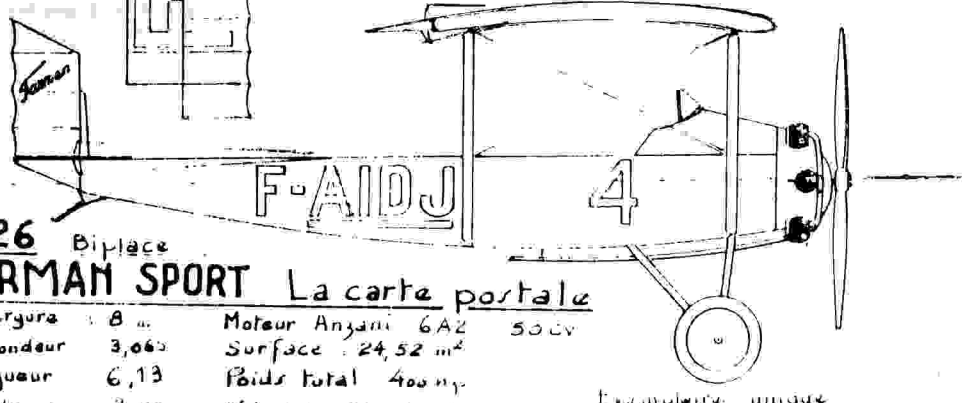
Caudron soupçonneux ! (MAN)

THANKS TO CONTRIBUTORS. BOTH ED SEAY Sm AND BILL HANNAN SENT IN CAUDRON 3-VIEWS. ED SENT PLANS FOR MODELS OF IT AND THE BLACKBURN HERE. HE WILL SOON HAVE A LIST OF ULTRALIGHT 3-VIEWS.





L'aile du Goliath
sur un fuselage de David



1926 Biplace
FARMAN SPORT La carte postale

Envergure	8 m.	Moteur Anzani 6A2	50 cv
Profondeur	3,065	Surface : 24,52 m²	
Longueur	6,13	Poids total 400 kg	
Hauteur	2,80	Vitesse maxi : 130 km/h	

Exemplaire unique

#4 à la Coupe Zenith 1926 — Vœprès côtes et photos Doceud 21 — Echelle 1/43ème

(b)

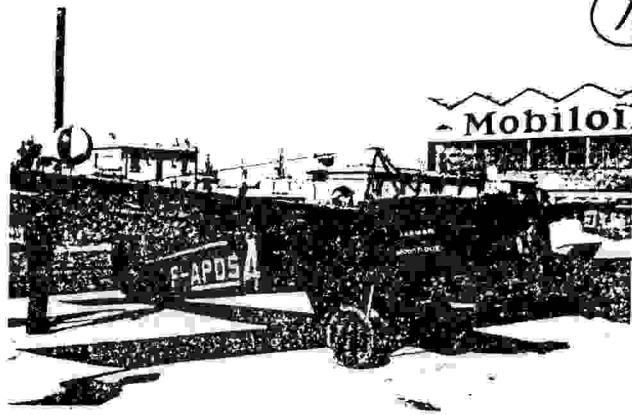
(10)

Merci pour votre Bulletin "The Hangar Pilot" Bonne Année- Amicalement E. Fillon

A.L.D
Thanks from the Gang in USA

MIAMA SALUTES OUR FRENCH PEANUTEERS

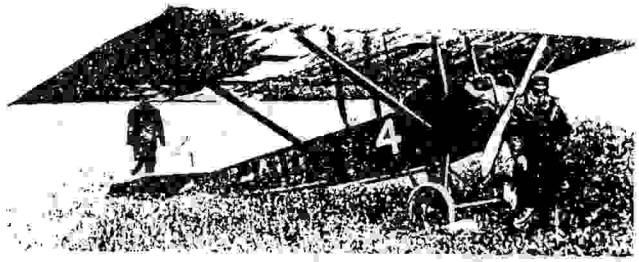
Destiné à l' « Aviation populaire », le F 451 « Moustique » (ici le n° 16) était un monoplace de tourisme issu des avionettes de 1923. Son moteur AVA de 35 ch lui assurait une vitesse de 135 km/h (stand de l'aviation légère au Salon de l'Aéronautique de 1936).



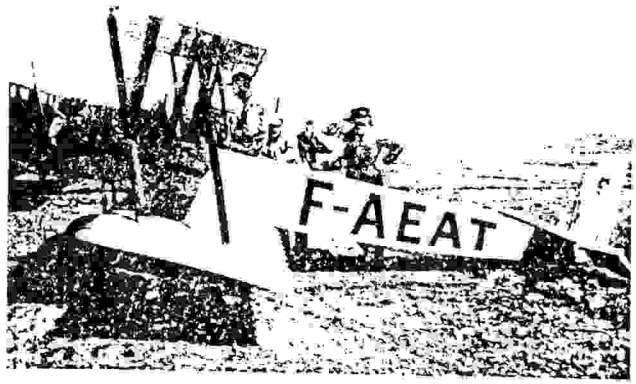
Prenez un fuselage de « David », surmontez-de d'une portion de voiture de « Goliath » et vous obtenez ce parasol type « Sport » qui participa à la coupe Zenith de 1926. Remarquable par ses décollages courts, il resta néanmoins en exemplaire unique

good for Peanut →

E. Fillon



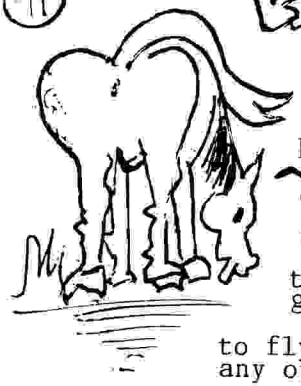
FF 65 « Sport », ce « David » n° 10 participait en 1922 à de nombreux rallyes pilote par



We reproduce the FARMAN's on these pages with many Thanks To E. Fillon of FRANCE who submitted the Material to HANGAR PILOT. Let's see a FARMAN SPORT PARASOL !! AN H.P. EXCLUSIVE!

FROM THE HORSES' MOUTH

AND OTHER ORIFICES



HERE ARE SOME REMINDERS ON THE UPCOMING PROXY MEETS:

Time is growing short for the Proxy Inter-Gnats. Send your Pistachio model here byApril 13. Our Xmas issue #105 has all the details. We remind you that the classes are: I, less than 2 grams, II between 2 & 3 grams, III: over 3 grams. RIDOTTO..smallest scale model to fly at least 30 seconds., and Model of a model..a model of any outdoor, non-stick model.. Send 'em in, gang.

FOR BUTCH HADLAND's PROXY LYMPNE TRIALS CONTEST: Details of this were in our Issue 104, and can still be had here or from Butch. A reminder that these entries are to be either rubber or CO2 power, and to be built to a scale from 1/2 " to 1" to the foot.

AEROPLANE MONTHLY REFERENCES - 3 VIEW

LYMPNE

AIRCRAFT	COPY	YEAR ENTERED
ANEC I	SEP84 #42	1923
ANEC II	JUN85 #51	1924
CLIPPED WING ANEC IA	SEP84 #42	1923,1925
ANEC MISSEL THRUSH	JAN79 #32	1926
AUSTIN WIPPET		
AVRO AVIAN		
AVRO 558	JUL84 #40	1923
AVRO 560	AUG84 #41	1923
AVRO 562 AVIS	AUG85 #53	1924,1925,1926
BEARDMORE WEE-BEE	MAY85 #50	1924,1925
BLACKBURN BLUEBIRD		
BRISTOL BROWNIE	JUL85 #52	1924,1926
CRANWELL CLA2	AUG80 #37	1924
CRANWELL CLA3	AUG80 #37	1925
CRANWELL CLA4	DEC78 #31	1926
DH GENET MOTH		
DH53 HUMMINGBIRD	APR85 #49	1923
ENGLISH ELECTRIC WREN	OCT84 #43	1923
GLOUCESTER GANNET	NOV84 #44	1923
GNOSSPELIUS GULL	MAR79 #33	1923
HAWKER CYGNET	OCT85 #55	1924,1925,1926
FAUDER (HOLLAND)		
PARNELL PIXIE II & IIA	OCT80 #37	1923,1924,1926
PARNELL PIXIE III	OCT80 #37	1923,1924,1926
PERYET (FRANCE)		
POWCELET (BELGIUM)		
R A E HURRICANE	DEC84 #45	1923,1925
SAYERS HANDLEY PAGE	MAR85 #48	
SHORT SATELLITE	NOV85 #56	1924,1926
SUPERMARINE SPARROW	SEP85 #54	1924,1926
VICKERS VIGET	FEB85 #47	1923
VICKERS VAGABOND	DEC85 #57	1924
WESTLAND WIGEON I		
WESTLAND WOODPIGEON		

MIAMA SWEEPS

PAPER AIRPLANE MEET

Some proxy flyers down at the Historical Museum of Southern Florida must be really impressed with MIAMA,'cause there is a glass case in their lobby filled with our paper planes: winners of their recent meet.

Endurance: Ron Sharpton 7.72 Sec.

Distance:Doc Martin 67'7"

Esthetics: Frank Fong
2nd S. Weiss
3rd Jeanne McGinley

Aerobatics: Doc Martin

JUNIORS:

Distance: David Bal 67'5"

Endurance: Steven Bal 8.32 Sec

Everyone had such fun at this paper airplane event that we intend to contune to fold and fly paper planes at our future meets. If NOTHING else appeals to you, maybe this event will. MORE.

HORSES ORIFICES (CONT.) Bill Warner reports from Santa Monica that there is a stirring among free flight scalers in the direction of the little pistachio models. "Mooney has a new 8" DH Hornet Moth, Otto Kuhni has a new DH 9A with chem. milled spoke-pattern wheels, and also a Deperdussen and Bristol Prier which belong in museums." Bill made Nick Peppiatt's pistachio Contestar "and got 40 seconds which, for me, ain't bad indoors. My peanut Contestar flew OOS at Taft..one of the problems with outdoors." Bill, and others are planning to enter the Proxy Inter-Gnats and adds:"The Lympne thing looks good too, and we are going to try it at a couple of indoor sessions to see how it works."

Bill spent a lot of time recording a tape for Doc's NFFS Award, full of great sounds of Hell's Angles sound track, and music of the 1920's, all related to old aviation themes. Thank's Bill for Der Fuhrer's Face, Lucky Lindy, Come Josephine, Hop Harrigan, "Wait til you get themup in the air, boys." the Aeroplane glide, and the sad death of Jack Smirtch. Great tape

We recommend to you the COAST GUARD HANGAR at the Clearwater St. Pete airport. I have not been there as yet, but am planning to stay at the Holiday Inn and fly at the hangar. This has been a strange season with new and untried sites, but with a lot of enthusiasm and new members.

"I am seldom capable of sustained rapture; I can thrill to Benny Goodman playing "Stealing Apples" or a seascape by Marsden Hartley, but I may as well confess freely that goatskins and cinnamon leave me cold." S.J. Perelman in Westward, Ha!

"A thing a beauty is a joy for a very short time" Doc

Channel 4 TV News: "A police helicopter crashed in Baltimore today killing the two straight troopers on board."

No more joy of kissing

A West German dentist was ordered Monday to pay $1,500 to a patient who was left without any "joy of kissing" after a tooth was pulled three years ago. Denis Ferrand, who works at the French Embassy in Bonn, said that when he tries to kiss he feels "either nothing or only a burning sensation." Ferrand's lawyer claimed the problem had reduced his client's chances of remarrying.

(13) ANOTHER NEW FLYING SITE:

COAST GUARD HANGAR

CLEARWATER/ ST PETE AIRPORT

"OUTSTANDING" DICK OBARSKI

"I GIVE IT 4 STARS ★★★★" TONY BECKER

"WHERE?" DOC? "I'LL BE THERE!"

ROUTE I-4, TAMPA, BECOMES ROUTE 275
GO WEST ON 275 & AT END OF HOWARD FRANKLYN BRIDGE TURN RIGHT ON ULMERTON RD.
RIGHT ON 686 ROOSEVELT BLVD.
GO PAST CLEARWATER-ST PETE AIRPORT & GO RIGHT AT TRAFFIC LIGHT. IN 400 YARDS GO RIGHT AGAIN TO GUARD HOUSE AND CHECK IN.

60 FT TO CENTER BEAM, 40' AT SIDES + LIGHTS.

SAT + SUN FEB 22 + 23 9 TO 5

FLA STATE INDOOR MEET # 5

P-NUT, KIT PLAN SCALE, EZB, CLASS A ROG, PENNY PLANE HL GLIDER, MANHATTAN/BOSTONIAN - FLYING ACES MASS LAUNCH P-NUT GOLDEN AGE. (WITH L.G.)

STAY AT HOLIDAY INN 3535 ULMERTON RD
1-813-577-9100 CONFIRM MEET FRI NIGHT - CALL 305-858-6363.

FLYING ACES Nats mk V (14)

JULY 19/20 1986 GENESEO, NY

To all Flying Aces;

The Flying Aces Nationals, Mark V is all set for 1986! The dates are July 19 and 20. The site is the Geneseo (say Jen-ess-eeoh) airport, Geneseo, New York, located about 30 miles south of Rochester, N.Y. Meet sponsor is the Western New York Free Flight Society. In addition, GHQ-FAC will hold an indoor contest at the University on Friday night, July 18.

Geneseo airport is an especially appropriate location for FAC Nats Mk. V, as it's the home base of the National Warplane Museum, a 300-member organization devoted to preserving, restoring, exhibiting,and flying World War II aircraft. On hand for the FAC Nats will be a Fairchild PT-19, a Vutee BT-13, an Aeronca "Defender", a Curtiss P-40e, and a B-17 Flying Fortress. Some antique and homebuilt aircraft are expected also.

Housing and meals will be available as an inexpensive package at the State University, located just up the road a mile or so from the field. The school will also be the site of the FAC banquet in the Union building, scheduled for Saturday night. Motels and restaurants are located close by also. Many splendid parks, museums, and other attractions are located within less than an hours drive from Geneseo, so non-competitors will find lots to do also. We should have some more information on these attractions as time goes by.

We've developed the following schedule to give a solid two-day balance of events.

Saturday, July 19; FAC Rubber Scale, FAC Peanut Scale, Embryo End., Greve Trophy Race (1 pm), Thompson Trophy Race (3 pm), and WW I Peanut Combat (9 am) multi-wing aircraft only.

Sunday, July 20; GHQ Peanut Scale, FAC Jumbo Scale, FAC Power Scale, WWI Combat multi-wing aircraft only (9 am), Golden Age Mass Launch (1 pm), WWII Combat (3pm)

Contest times both days will be from 9:00 AM till 5:00 PM.

Times for the indoor meet will be determined later. Events will be FAC Peanut Scale, No-Cal Scale and WWI Peanut Dogfight--multi-wings only.

Awards will be given to at least three places in all events.

Special awards;

Grand Champion....presented by GHQ.
Earl Stahl Trophy...presented by the Detroiten Geschwader.
Achievement Award...presented by the Erie Model Aircraft Assn.

FEE; Contest entry fee, $12.00 advance fee by July 1, 1986. After July 1 it will be $14.00. This does not include the indoor meet.

Housing and meals are available under two plans. First is the package deal, for $90.00 per person you will get your room for three nights, breakfast on Saturday and Sunday mornings, dinner on Friday and Sunday evenings and your ticket to the banquet on Saturday night. The second plan is this, your room in the dormitory will cost $17.00 per person per night and the banquet will be $11.00 per person. Meals are on your own. If you are definately going to attend, please submit your entry as soon as possible, especially for the banquet. Late entries may not be guaranteed a place at the banquet.

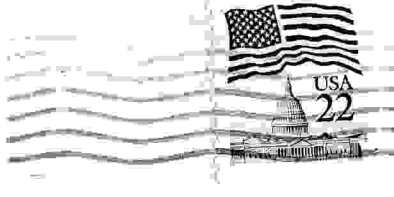
This Nats Mk. V promises to be an excellent competition, as

WHAT'S ON: FEB 9 - MIAMI DADE SOUTH COLLEGE FUN FLY 9 TO 5
FEB 22+23 - FLA STATE INDOOR MEET #5 - See page 13 inside.
MARCH 23 - TO BE ANNOUNCED
APRIL 13 WORLD PISTACHIO INTER-GNATS - M/D SOUTH
MAY 18 - TO BE ANNOUNCED
JUNE 18, 19, 20 NIAGARA FALLS - NFFS U.S. INDOOR CHAMPS
JULY 27, 28, 29 INDOOR AT AMA NATS - LAKE CHARLES LA.
JULY 18, 19, 20 GENESEO, N.Y. 5TH FLYING ACES NATS
CD BOB CLEMENS 1-716-392-3346 JULY 19 IS INDOOR
AUG 22-26 CARDINGTON, ENGLAND. WORLD FID INDOOR CHAMPS

THE HANGAR PILOT

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





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