The Thermaleer

"If all the year were flying holidays, to sport would be as tedious as work"
Apologies to King Henry IV, W. Shakespeare.

VOTA: Victorian R/C Old Timers Association (SAM 600) Inc.

Photo by Don Howie

Viva Il Presidenti SAM 600

Chris Lawson

shown here with his magnificent
Fox 25 glo-powered, orange with black trim

Foote Racer

flown in Nostalgia at Swan Hill, Easter 1999

SAM 600 Website <http:www.sympac.com.au/jtboundy>
Download this newsletter <http://www.ozonline.com.au/~sam600nl>

Sunday afternoons and Thursdays, Thursday Old Farts Fun Fly (TOFFF's day) there is casual flying at the SWAMPS club on a private property at Lang Lang, (conditions permitting) by courtesy of David Chigwidden. Members are welcome, especially those new to flying are welcomed to the SWAMPS field. Model and pilot training sessions are conducted by Peter Donovan and others. Location and local field rules can be obtained from Fred Chigwidden, you can reach him at 03 5997 5675.

Photo: Trevor Boundy

President's Report

Hi once again,

That time of the year is on us once again, the membership fees are due and to be discussed at the next meeting; also it's AGM time so all positions are to be re-elected, so please let's see some new faces on the Committee. (I would like a rest as President). So let's fill all the positions. To run SAM 600 we need a full Committee, it's not a hard job to do, so get involved. PLEASE.

P.S. No Committee. No SAM 600. Think about it.

Our name change registration to SAM 600 of Australia Inc. (as agreed at the last AGM) is underway. Also a tip for Texaco events. Please paint the tips of your props white - there have been too many lacerated fingers lately. White helps finger & hand damage.

Yours sincerely, Chris Lawson

NEXT MEETING

Meeting #62 the AGM will be held on Thursday, 22th July 1999, 7:30pm sharp at Saturn Hobbies, located at 17 Ardena Court, Bentleigh East (Melway 68 J-12) of East Boundary Road (which is opposite the Moorabbin Memorial Swimming Pool) Saturn Hobbies will be open prior to 7:30pm

Meeting # 63, Thursday 23rd Sept.
Meeting # 64, Thursday 25th Nov.

Postal Competition in Lieu of Bendigo:

Owing to the cancellation of two events that were to be conducted at Bendigo on June 12th and 13th, 1999 a Postal Competition is to be held in the months of July & August. All entries are to be returned to the President by the end of August, 1999 along with a $5.00 entry fee fro each event. All flights are to be conducted to SAM 600 Rules.

Listed below are the events & flight procedures. All events must be signed by both pilot and observer.

Combo Comp: '38 Antique or Nostalgia.
'38 Antique- normal engine run.
Nostalgia- 28 seconds (to obtain 10 minute max).

Name:.....Observer.....Date.....

Model.....Engine.....
Three flights, all to count - Ten (10) minute maxes

1_____2_____3_____Total_____

Fly off as normal Fly Off_____

Duration:
Name:.....Observer.....Date.....

Model.....Engine.....
Three flights, all to count - Ten (10) minute maxes

1_____2_____3_____Total_____

Fly off as per SAM 600 Fly Off_____

SAM 600 Web News: Internet report from Trevor Boundy

1) Over the last 2 months we had 565 visitors to our SAM 600 web page, that's about 9.5 visitors per day.

2) I have taken on the job of keeping the historical records dealing with members status, including financial members and the making of labels for each news letter to reduce the Editor's work load.

3) 600/1788 Rules progress, I have completed a detailed comparison of all the clauses in both sets of rules. Of the 273 clauses approximately 109 are the same. A copy of this document has been sent to 1788 Secretary Brian Payne, now the real work begins. Let's look forward to common rules. JT B

SAM 600 MEMBERSHIP FEES for the year ending July 2000

Fees must be paid at the next (July AGM) meeting to the elected Treasurer / Secretary, or by mail to the elected officer whose name will be published in the newsletter following the AGM. The proposed modest increase in the fee structure will be discussed and voted on at the AGM.

If you are a new member we will need a few details, like mailing address, telephone number and current MAAA membership number for insurance purposes. (Does not apply to overseas applicants). Existing members please update.

Note, SAM 600 can't provide access to MAAA membership / insurance, this will have to be done through a club affiliated with the MAAA.

New fees to be voted on at the AGM, all members should attend

Membership will provide you with six issues of our newsletter, "The THERMALEER", including up to the minute information on what's happening, including contest results.

Note: for newsletters posted to destinations outside Australia a postage levy will be required.

Advertising in "The Thermaleer" should be arranged with the Treasurer / Secretary, the rate is A$36 per year for six issues of the Thermaleer.

Pay at the AGM, or after phoning for the new rates, or you won't receive your copies of "The Thermaleer".

Results: Cohuna Annual Fly Days, Sat May 1 & Sun May 2, 1999

Name	Model	Motor	Score	Place
Half A				
Kevin Fryer	Professor	Cox 049 2s	1181	1
Barry Barton	Anderson P	Cox 049 2s	1128	2
Chris Lawson	RC 1	Cox 049 2s	1089	3
Max Heap	Truman??	Cox 049 2s	940	4
Danny Missen	Anderson	Cox 049 2s	594	5
Steve Cullock	Power Hse	Cox 049 2s	511	6
Fred Chigwidden	Anderson	Cox 049 2s	37	7
Texaco				
Peter White	Flamingo	OS 60 4s	4206	1
Fred Chigwidden	Record B	OS 60 4s	3448	2
Greg Jenkinson	Power Hse	Saito 65 4s	3209	3
Kevin Fryer	Cumulus	Irvine 40d	2358	4
Robin Yates	Cloud Kg	OS 40 4s	2322	5
Robert Taylor	CloudKg	OS 61 4s	2270	6
John Jakab	Record B	OS 60 4s	2248	7
Max Heap	Power Hse	OS 52 4s	2235	8
Danny Missen	Bomber 85%	OS 40 4s	2197	9
Paul Beretta	Cloud king	OS 40 4s	2055	10
Barry Barton	Record B	OS 40 2s	1800	11
Chris Lawson	RC 1	OS 60 4s	1727	12
Lyle Baker	Cloud King	OS 40 4s	1622	13
Trevor Tailor	Miss America	Saito 65 4s	665	14
'38 Antique				
Peter White	Cloud Cruiser	OK S 60sp	1800	1
Chris Lawson	Power House	O&R 60sp	1474	2
Kevin Fryer	Red Zephyr	Cyc 60sp	1274	3
Duration				
Fred Chigwidden	Playboy	Saito 65 4s	2239	1
Peter White	Playboy	McC 60 2s	2207	2
Kevin Fryer	Cumulus	OS 46 2s	1658	3
Brendan Taylor	Playboy	Saito 56 4s	1567	4
Chris Lawson	New Ruler	Web 60 4s	1506	5
Greg Jenkinson	Buzzard B	OS 52 4s	1148	6
Robin Yates	Cloud King	OS 40 4s	990	7
Max Heap	Power Hse	OS 52 4s	787	8

CohunaReport from Barry Barton

Day 1: Half "A"

A small, but select, group of aspirants lined up for this; one of the most challenging of all O/T events. Peter White of Swan Hill (not S.A) abstained and contented himself by offering his vast glider-flying-thermal-hunting skills to whoever would listen. The super-keen Snake Valley contingent failed to make the fly-off but threaten greater competitiveness next season. Kevin Fryer (Professor), Chris Lawson (RC1) and Barry Barton (Anderson Pylon) fought out -the fly off with Kevin using recent high-tech reading on lift and thermals to advantage, a nearby crop of maize lifting the damaged and repaired Purple 'Prof' to a winning position. Local Half A hotshot, Jock Mac: did not compete -he went to a wedding!

Mark Collins - all concentration as he competes, note keen Observer. Photo: John Spring, State Comps, Feb 1999

Texaco

With the terrain warming up, clear skies and wind light to nonexistent, the major event got under way with a great line-up of big ones hunting for a perfect score in maxes. huge localised steady lift were there to be found and this time Peter White (of Swan Hill) put his experience to work.

A small drama surrounded a Red Record Breaker and it's pilot which the locals quickly overcame. Light entertainment was put on by Kevin Fryer's Irvine diesel-powered model which lost most of it's pulling power eventually circling at constant low height popping out smoke rings at regular intervals, the motor sounded very sick. Surprise of the event was the performance of Snake Valley's (ex Cohunan) Greg

Jenkinson, whose large pink Powerhouse put up flights good enough to put him in the fly off against Fred Chigwiddin; making his return to competitive flying and the eventual winner Peter White.

Day 2: Duration

Local flyers spent Saturday night engine-swapping to make their Texaco-type models up for this event, however it was once again the out-of-towner who took home the hardware. Fred Chigwiddin was heard suggesting to Pete White that he let Fred take the honours, an offer pay to take Fred seriously the Two Man Fly-off Fred's that was rejected outright, it doesn't but when the White McCoy went off-song in trusty Saito gave enough height to just ease out the Swan Hill Playboy into 2nd.

'38 Antique

With only three entries it seems this event is for the few willing to wrestle with spark ignition, it will be interesting to see how Nostalgia stacks up numerically in the future. The Bromby-Built-Cloud-Cruiser -a National Winner in this class, cruised away to yet another win helped by tuning and advise by no less an Old Timer than Brian Healy. Kevin Fryer's Super Cyc: powered Red Zephyr brought up the rear with Chris Lawson sandwiched in second.

A great weekends sport, superb weather and, most importantly, good fun !

A NICE GUY: Norm Rosenstock

A few weeks ago Merv Buckmaster wrote to me about the impending visit of Norm Rosenstock (and his charming wife Bella) from the USA. Merv, Norm and Bella were to be in Canberra on the evening of 26 and all day 27 April. After that time the party was going South to stay with Merv and his family before going home to Florida via Melbourne.

Upon receiving the notification I checked my schedule - the calendar in the kitchen- and found that I was 'a required attendee' at my wife's school related function. I declined Merv's invitation as I had higher authority involved - the Bishop was to attend also.

On the afternoon of the 26 April I was informed that my presence was not now compulsory and was free to do what I liked. I rang Merv at home to get the itinerary details and Joan advised that the party was booked into a Hotel just minutes from my work. We spent a short time that day and dinner the next night where I met Norm and Bella Rosenstock.

Who the hell is Norm Rosenstock? This was the quandary I was in. The name was vaguely familiar yet no details would come to mind. He certainly wasn't one of the well known eagle's who attended the 1997 Gathering of Eagles nor the year later The Pioneers but was also an honoured and invited person to both events. Who was he and what has he done?

Whilst enjoying Norm and Bella's company Norm presented me with an autographed copy of his book "Tales of an Ancient Modeller". It is only after reading the book that many of Norm's exploits were remembered. For example if you think of any of the old time modellers who came from the New York area of the USA between 1935 and 1985 then many were his friends. Some notables are: Joe Raspante, Mike Granieri, Carl Goldberg, Sal Taibi, Bob Aberle, Leon Shulman, John Worth, Bill Winter, Pinky Fructman, Howard Mc Entee, Joe Beshar and of late since he has moved to Florida, Dave Platt (recognise these names and recall what they are known for or did?)

Some of Norm's more famous exploits are:

• first hand held radio transmitter that he designed and built in 1951

• first to use a whip Tx antenna

• nearly had an FAI endurance record in 1961 using a Frog 150 diesel and a 10x6 prop (Maynard Hill wrested the record from the British? a short time later, this achievement was reported in many of the US publications at the time)

• was a diesel engine tester on the Mite and Drone diesels. He hand started each Mite sold and fitted the piston and set the head shims in Drones before sale. Both these diesels were of the fixed head (ie no variable compression) variety. He also used the Drone in many of his r/c models. He thinks he might have more than a few hours experience on diesel model engine use!

• was a Skyscraper and LIDS Club member

• has flown in innumerable contests including the late forties NY Mirror Meets (the 1950 meet had more than 1200 contestants where you had to line up for hours to just to register) that were bigger than the AMA Nats

• has published articles and plans in Flying Models (Electron with an Amco 3.5 for power) and Model Aviation (the AMA magazine) as well as guest spots as columnist in Big Birds; and

• his card states he is an AMA historian. His personal knowledge and vast modelling experience certainly proves it.

I believe Norm's real claim to fame is that he is like many of us a trier and a flyer - a complete modeller and an all round nice guy. Bella is also a sweetie.

Allan Laycock, 6 May 1999

Options Without Advice.

(The continuing observations and adventures of Rex Patkin.)

The instructions to assemble this ARF trainer described how the builder may set up the undercarriage as a tricycle or tail dragger. On the fuselage were the holes to attach the undercarriage as a tail dragger and the support for the front wheel, if the tricycle system was adopted. Now as a novice to this hobby or sport, I searched the instructions for some information to assist me in making some rational choice as to which form of undercarriage I should adopt. Alas, no advice at all. This seemed strange. If there are options, then especially for beginners, there should be some advice as to the selection of one of the options.

So it was natural for me to ask my god father which form of undercarriage I should adopt. You may ask who is my god father. Well he is the club member who is helping me learn to build and fly the radio controlled planes.

How he became my god father is a rather long story. The club did not assign him to me. He was an old friend of mine. Actually a special friend, a very special friend. You see he invited me to a party. Now this was a special party, not for my god father, but for me. Because at that party I meet my wife.

Now you may not be interested in that saga. However you may be interested in what my god father had to say about which form of undercarriage I should adopt. His answer was a surprise, especially as he is the champ. He said he could not advise me, he could not answer the question. Now this was a shock for me because he was not only my champ but he was the champ in the club. Surely champs should know everything. Yet he was saying to me he could not answer this question. I thought what sort of god father have I landed. I started to realise that my god father was not the fountain of all knowledge. Of course in one sense this made me feel better. Like when he had trouble with his motor. That made me feel he was human, and more like me. Now he conceded to me that he could not answer, what seemed to me, was a simple question. The gap between the champ and me may not be as large as I originally thought. So why should I react humbly to him when he admonishes me. Whenever I refer to "petrol" running the motor, he looks at me, with some kind of sarcastic embarrassment, and retorts; " its called fuel. "

Maybe when other club members hear me refer to petrol they may blame my god father for not guiding me in the right direction. Maybe he's concerned about his reputation. I suppose any champ is entitled to that human frailty.

Well, what did I do about my problem? At the flying field I raised the question with club members. Yes I am now a club member. One member confidently told me to adopt the tail dragger system. He said he's seen beginners lose control in steering the plane with tricycle undercarriages, especially while landing. He's seen the plane coming towards the pits out of control. Now this alarmed me. My god father stood by; silently. I was waiting for his comment upon the matter. After all there must be some aerodynamic considerations and he knows his aerodynamics. No, there was absolute silence. He did not even give me any assurance not to worry. In the back of my mind I thought, I was now insured. But what if my plane careered into one of my godfather's aircraft. I pictured it. My propeller eating up one of his beautiful planes. I can assure you they are beautifully built. Just what you would expect from the club champion. I wondered how he would react. One thought was that he had so many planes it may not affect him at all. I knew his wife would probably be pleased. One less plane to clutter the house. They are everywhere. They even monopolise the lounge room. So I thought it was to be a tail dragger system.

Then another club member joined the conversation. Once informed of the question he said the tricycle system was the best. He rattled off a number of reasons. He said the tricycle system was better for beginners. The plane was already in the flying mode, he said something about not having to wait for the tail to lift off the ground. I did not follow all the dialogue that followed. I looked to the member who originally advised me to adopt the tail dragger system. He said he was still learning and the advice to adopt a tricycle system was given by an expert and he agreed with that advice. Now this admission shocked me. Why did he not inform me that he was a beginner when he gave me the advice to adopt the tail dragger system. He gave no indication to me that he was not experienced. I then wondered about my god father. How experienced was he? No, I had no worry about him. First of all he was the

champ, not only as far as his wife was concerned, but the club recognised him as the champ.
Then I wondered maybe it was merely the editor of the newsletter who described him as the champ? They were close friends. I wondered what would be the reply if I asked fellow club members if they thought he was the champ! Surely a champ should know the answer to a basic option for the undercarriage for a learner's plane. Then I thought one could approach this matter from a different position. Yes, I now felt some confidence in the champ in that at least he admitted to me that he did not know the answer to everything. I wonder if that hurt his ego. After all he is the champ. Or he was the champ, for in a later contest I have to say that he only won one event.

After leaving the air field I called to see the owner of the shop where I had purchased the trainer. He said tail dragger. He gave me some reasons. Then I called to see Tony at his shop. He said tricycle. Now I told Tony the complete story. He laughed.

"Yes", he said, "you will often get conflicting opinions on all manner of topics."

I said to him may be I need more than one god father. Imagine if my god father heard me make that comment. So I assembled the trainer and adopted the tail dragger form of undercarriage. Why you may ask?

It seemed to me there were a number of considerations.

First of all when taking off. I was concerned about the tricycle system; the propeller seems so close to the ground. Then the landing strips at airfields have holes, bumps and all manner of small obstacles. Apologies to those who prepare the strip. The tail dragger system seems to create a number of impressions. The propeller is further from the ground and the plane is less likely to flip over as it runs along a rough take off strip.

Then landing. If the plane comes in with its nose towards the ground that propeller will hit or the nose wheel will bite into the ground and flip the plane over. The tail dragger system is designed to have that tail settling early in the landing procedure, "flaring out" they call it. Then finally I liked the appearance of the tail dragger.

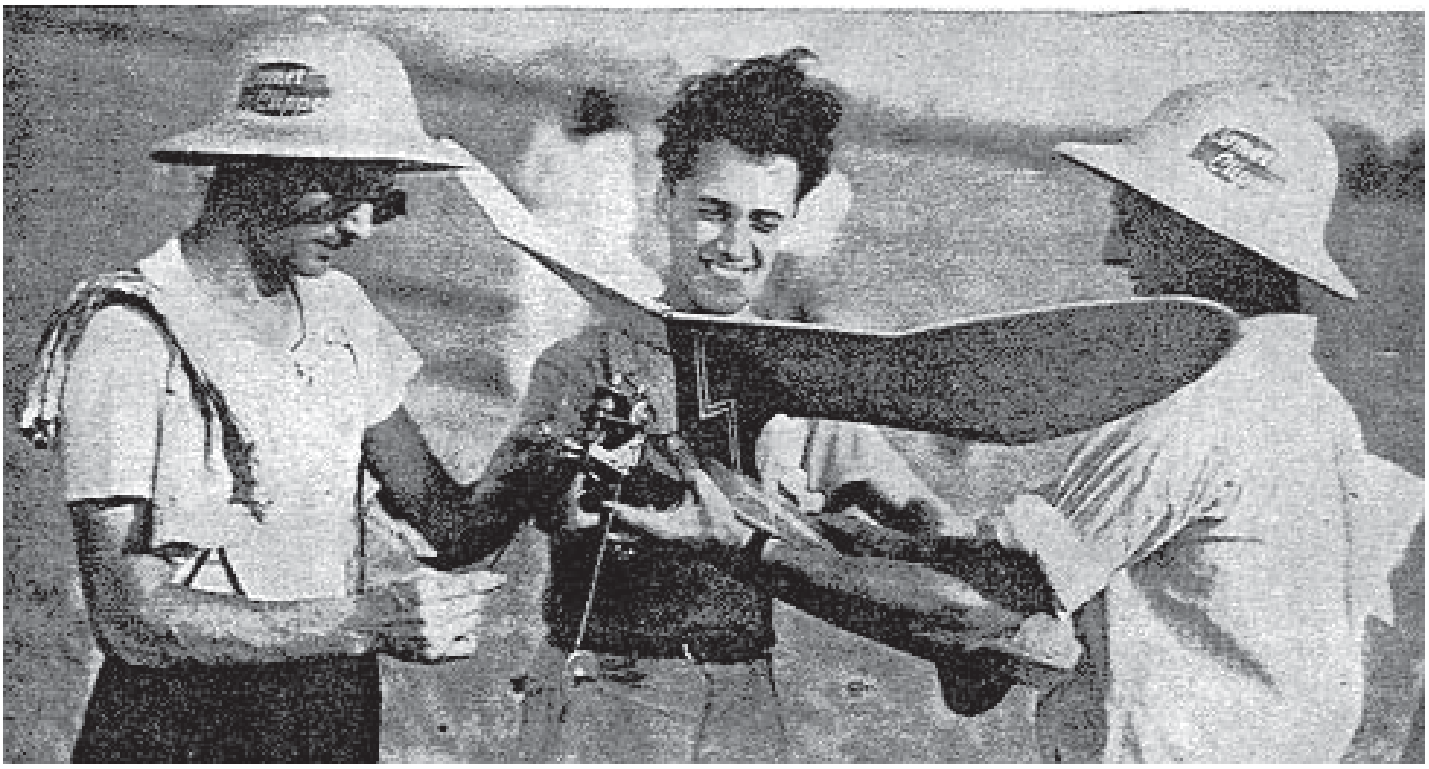
I have now had some further experience and thought about the matter. One day I will inform you of the considerations to be borne in mind when choosing between the tail dragger and tricycle form of undercarriage. Obviously, there will be aerodynamic principles involved. One day I will alter the undercarriage to the tricycle system. That will test the theories about the matter. In the meantime, it would be interesting to ascertain if any information is given in plans or assembly instructions, where the form of undercarriage is an option, as to which option the builder should select. That an option is given in a training aircraft without some advice is rather alarming.

Rex Patkin

This is Don Cameron, former Presidenti, captured on film by Don Howie at the Swan Hill contest, Easter 1999.
Don's beautiful red, yellow and white Super Quaker with tissue and iron-on covering is powered by an ASP12 glow engine.

Another member with a Zapata moustache. All Presidenti and former Presinedti must have one.

THE 1939 GAS MODEL



1939 rules are evolving a new kind of gas model. Goldberg's successful Zipper with its extraordinary high center of lateral area refutes a popular existing theory by its proven spiral stability and brilliant contest record. (This article written in 1939 by Carl Goldberg).

WHEN the thirty-second motor run rule was adopted early in 1938, the doom of large gas models for competitive work was sounded. Before long-, experts began to agree with the prediction made in an article by the author in 1937 that a limited motor run would lead to small high-powered ships with unusual rate of climb. In January, 1938 the Gas Model Aeronauts of Chicago scheduled a contest for models with wingspan not to exceed 4 1/2 feet, with thirty-second run. The writer was challenged to power such a model with the 1/3 horsepower Forster motor, on the theory that so much torque could not be controlled on such a short span The ship was built and won the contest. In Flight, torque wasn't noticeable, the ship handling itself smoothly.

At the same meet, a noted Midwestern model builder flew two 4 1/2 foot ships powered with Browns. This design, was a good -looking representative of conventional ideas in gas models. The thrust line was high, the center of lateral area "properly" located and the wing had a normal dihedral angle of 1" or 1 1/4" per foot span.

Under low power, the models acted nicely, climbing well. But every time the motor was opened up, all control seemed to be lost and a crash ensued. Because of the extreme ruggedness of the construction it was possible to make several dozen attempts before the models became too badly damaged for further repair at the field. The slightest adjustment caused large variation in flight. It was evident that the reserve stability was zero.

At this time the writer began work on a new design which had been under consideration for some six months incorporating all the lessons in stability design learned from many years of flying indoor models. To draw tip the ship and help design the structure, I sought the aid of Alvin Anderson, winner of the 1937 Berryloid finish contest. His broader experience with outdoor models was of considerable help, and later reflected in the ruggedness of the ship.

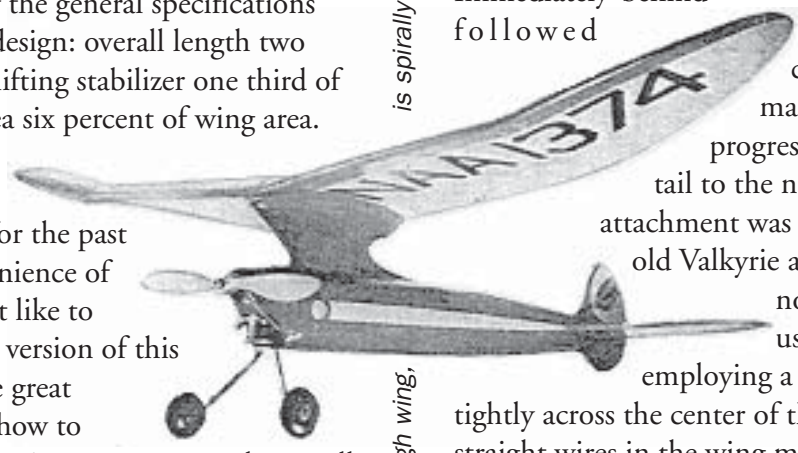
The basic thought behind the design was simply this How low a horsepower loading can you get and still keep close to the wing-loading rule. For example, if your ship weighs three pounds and has a 1/5

horsepower engine, the horsepower loading is three divided by 1/5 which equals fifteen pounds per horsepower. The lower the number of pounds per horsepower, the greater is the possible .performance

By cutting the battery down to the minimum of one ounce - using two pen light cells which would last a dozen flights or more - and building a small ship, it looked as though it would be practical to get the flying weight down to 1 3/4 pounds. Using the 1/4 horsepower Dennymite Airstream, this meant a horsepower loading of 1 3/4 / 1/4, or seven pounds per horsepower. Since the thrust of the Denny is over three pounds, it was obvious that such a ship could very easily climb straight up, even if released for flight in a vertical position.

At the time, the wing loading rule was ten ounces per square foot. For 1 3/4 pounds or twenty-eight ounces total weight this meant an allowable maximum of 2.8 square foot wing area. To be on the safe side in avoiding differences in weighing scales at contests, I used a little less area, about 2.7 square feet so that a twenty-eight ounce ship would be one ounce over the minimum. For strength, an aspect ratio of six was decided upon. This worked out at around four foot span. Other parts of the general specifications followed usual rules for design: overall length two thirds of the wing span; lifting stabilizer one third of the wing area; rudder area six percent of wing area. The wing section was of the bird type used by discriminating builders for the past ten years. (For the convenience of more builders who might like to use it, several sizes of my version of this section are shown). The great question, of course, was how to handle the tremendous engine torque on such a small span, and how to have sufficient reserve stability so that small adjustments would not affect the flight to a great extent. This was solved by simply raising the wing about six inches above the center of the fuselage, and using a fair amount of polyhedral. This may be in defiance of certain therories regarding careful location of the center of lateral area, but every ship built to this design has been found to handle engine torque quite easily, and to be capable of proper adjustment. This will be shown later.

1939 rules are evolving a new kind of gas model.



The Zipper, stable because of its high wing, is spirally stable because of its HIGH center of lateral area.

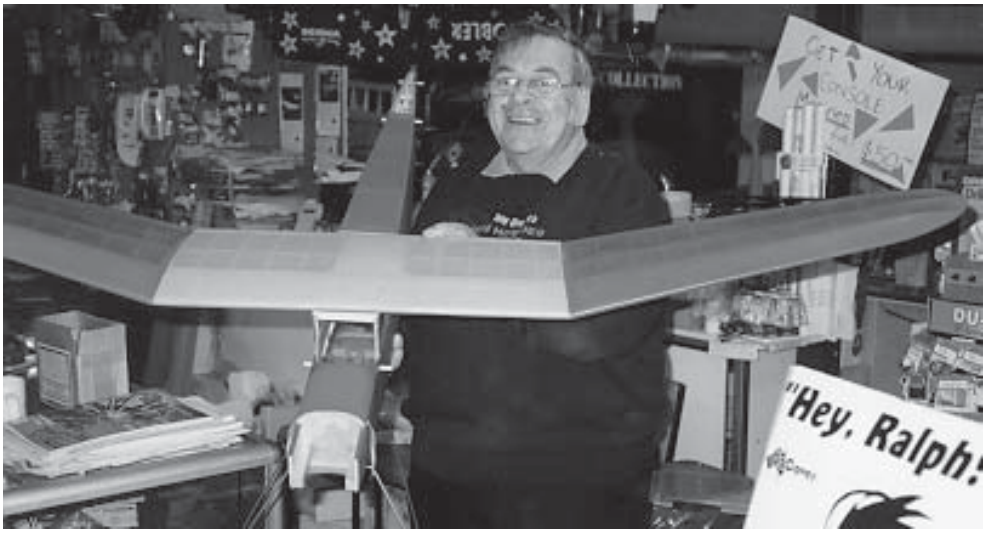
Goldberg's successful Zipper with its extraordinary high center of lateral area refutes a popular existing theory by its proven spiral stability and brilliant contest record.

There wasn't any question about the need for quick accessibility of the ignition parts - many contests are won and lost on the ability to find and repair a broken wire, or replace batteries in a hurry. So of course the ship was equipped with an instantly removable firewall to which was attached a simple battery rack carrying everything but the automatic timer. For low drag and light weight, the single strut landing gear with balsa wheels was employed. Mounting the landing gear on the firewall saved having to increase the strength and weight of some portion of the fuselage to take landing shocks.

The fuselage structure was designed according to a principle fairly well known but not often used. In a crash the stress grows greater and greater toward the nose because of the cumulative weight of the tail and each portion of the fuselage all pushing toward the point of contact with the ground. Therefore the portion on which the firewall rested was made of a plywood ring to bind the balsa firmly together. Immediately behind was heavy sheet balsa, followed with medium balsa, et cetera. The idea was to make the fuselage progressively stronger from the tail to the nose. Lastly, the wing attachment was the same as used on my old Valkyrie and Clipper, and which now is coming into wider use. This is the method employing a rubber band stretched tightly across the center of the wing, and attached to straight wires in the wing mount. The most important advantage is the wing detaches from the fuselage on any hard impact by pushing the rubber band off one of the wires, which saves both wing and fuselage from a great deal of damage. The tail was attached in this way also, and for the same reason, as well as another.

To avoid damage to this unit, it has to be able to slide off forward, because landing on rough ground occasionally causes a "cartwheel" onto the tail, smashing it if it is very firmly fixed.

(To be continued in the next issue...)



Tony Cincotta showing off his fantastic traditional red and yellow Red Zephyr.
The finish is fabulous, a matt tissue covering in the traditional manner. But wait, when you poke the covering it's stronger than anything on the market. What's the secret ? Well, Tony has just invented another great application for his famous OzCover. Tissue over OzCover, applied with Cabots water based clear .

Results - Bendigo Old Timer Fly In - Saturday June 12, 1999

event	name	model	motor	seconds	chan	rank
Half A	Graeme Sinclair	Dallaire	Cox 049 2s	1617	625	1
Half A	Norm Campbell	Anderson Pylon	Cox 049 2s	1502	641	2
Half A	Mark Collins	Bomber	Cox 049 2s	1468	620	3
Half A	Chris Lawson	RC 1	Cox 049 2s	1463	24	4
Half A	Ray Woodhouse	Dallaire 54"	Cox 049 2s	1395	629	5
Half A	Ken Lawson	PB 2	Cox 049 2s	1331	36	6
Half A	Fred Stebbings	Fox 107%	Cox 049 2s	1304	36	7
Half A	Kevin Fryer	Professor	Cox 049 2s	1265	631	8
Half A	Don Cameron	Request	Cox 049 2s	1244	34	9
Half A	Trevor Boundy	Albatross	Cox 049 2s	1237	28	10
Half A	Peter Bennett	Anderson Pylon	Cox 049 2s	1162	643	11
Half A	Danny Missen	Anderson Pylon	Cox 049 2s	1052	12	12
Half A	Barry Barton	Anderson Pylon	Cox 049 2s	1008	16	13
Half A	Stevan Gullock	Powerhouse	Cox 049 2s	687	28	14
Half A	Fred Chigwidden	Anderson Pylon	Cox 049 2s	0	629	15
Texaco	Graeme Sinclair	MG 2	Irvine 40 diesel	3756	645	1
Texaco	Mark Collins	Bomber	OS 60 4s	3670	14	2
Texaco	Ray Woodhouse	Cumulus	OS 60 4s	3544	601	3
Texaco	Trevor Boundy	Bomber	OS 60 4s	3537	653	4
Texaco	Peter Bennett	Bomber	OS 60 4s	3504	605	5
Texaco	Fred Chigwidden	Record Breaker	Enya 60 4s	3342	629	6
Texaco	Kevin Fryer	Cumulus	Irvine 40 diesel	3337	631	7
Texaco	Danny Missen	Bomber	Enya 53 4s	3247	635	8
Texaco	Barry Barton	Record Breaker	OS 40 4s	3200	16	9
Texaco	Don Cameron	Bomber	OS 60 4s	3143	32	10
Texaco	Norm Campbell	Bomber	OS 60 4s	3140	641	11
Texaco	Chris Lawson	Dallaire	OS 60 4s	2886	28	12
Texaco	Ken Lawson	Dallaire 75%	Enya 46 4s	1061	28	

Amco's and Hyphens - by Don Howie

As a boy I flew a control line model powered with the long shaft AMCO 3.5. This was a Vernon "Sea Fury: that featured flaps and was a nice looking semi scale model. It featured a plug-in u/c that dropped off when the model left the ground. The AMCO 3.5 was fairly easy starting; it was a light, compact engine for its size. Ted Martin, who designed the engine, migrated to the USA in the fifties and I read his engine articles in the magazines in the USA.

I had expected the CS AMCO 3.5 would run well, but this was not the case. In South Australia we have very cold winters, like Victoria. It was found impossible to start the AMCO 3.5 during the winter time. It should be remembered that Rudolph Diesel needed glow plugs to start his engine when cold. The Queensland flyers do not suffer the cold weather of the Southern States and the diesels are more suitable for year round flying.

Next item is the dihedral on the Hyphen. About 5 Hyphens were built during 1993 in South Australia. Leo O'Reilly provided the plans and we had plenty of information as Mal Sharpe and Dean McDonald still had original models from about 1950. Brian Horrocks in our club had drawn the plans for the original magazine article. I think it was a case of you used what you thought was about right, as no dihedral braces or dihedral angles were shown on the plan.

The four inches on each panel was considered excessive and my model has three inches dihedral on each panel, that gives a total of nine inches total dihedral each side.

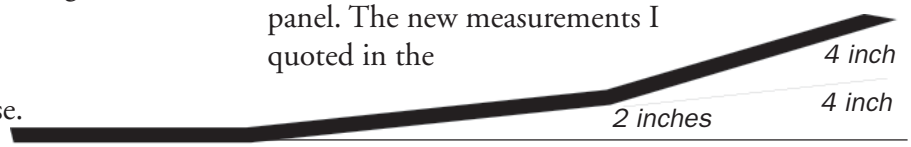
I would suggest you use 2 inches on the first panel and 4 inches on the outer panel; this will give a total of 8 inches each side, as stated in the original article. This would be less than used on some original F/F models, but is perfect for the radio assist versions and with 4 inches on each panel it does not look right and does not fly well under power (it wallows).

My Hyphen was the first to be flown in competition, it placed second at the Wagga Nats at the end of 1993. It did better at the Ballarat Nats, winning the event, and Hyphens took out the first 5 places. It still seems to perform quite well, I won Nostalgia at the SA State Champs a couple of weeks ago with the same model.

Further notes from Don Howie on the Hyphen.

I must be stupid with regard to the dihedral on the Hyphen. I read Bill Evans article again, about the construction of the Hyphen - AMH March 1950.

He states - "The dihedral on the wing is eight inches on each side. Four inches on the outer panel and four inches beneath the wing tip". The vital words are as underlined and refers to the inner panel. The new measurements I quoted in the previous letter are correct as shown below.



The actual dihedral shown on the framed up drawing of the Hyphen and the picture of Andy Vidale shows much more dihedral on the outer panels. At the time that the article was published, Bill Evans had not built a Hyphen; he gave some rough drawings to Brian Horrocks who drew the plans for the magazine. I saw the early Hyphens fly and Bill's and Mel Sharpes were the traditional Black and Yellow. The Hyphens came up against the models of the late Allan King (Vic), who was Australia's greatest builder and flyer at that time, who won most of the contests.

I expect Trevor Carey came to the same conclusion; Bill quoted from his drawings not from building a model, which would have made it quite obvious. Regards, Don Howie.

Note from The Editor: This will close the Hyphen file and any discussion about its dihedral. It looks as though there can, and will be, different interpretations of what is meant by the construction instructions. From 4 inches plus 4 inches which may or may not be eight inches at the tip to Don's 2 inches plus 4 inches which is 8 inches at the tip and some other variations in between. Take your pick.

Here endeth the discussion. Peter Bennett

President **Chris Lawson** (H) 03 5275 8482
21 Carmarthen Drive CORIO 3214

Vice President & Contest Calendar **Ted Hall** (H) 03 9762 5627 (W) 03 9763 8655
45 Bambury Street BORONIA 3155
email <tedi@corplink.com.au>

Treasurer/Secretary Ian Triffitt (H) 03 9776 7450
11 Catalina Court FRANKSTON 3199
email <strobe182@bigpond.com.au>

Public Officer & WebMaster **Trevor Boundy** (H) 03 5628 7688
45 Fisher Road DROUIN WEST 3818
email <jtboundy@sympac.com.au>

Publisher/Editor **Peter Bennett** (H) 03 9645 7272
3 St Vincent Place ALBERT PARK 3206
email <pcb@ozonline.com.au>

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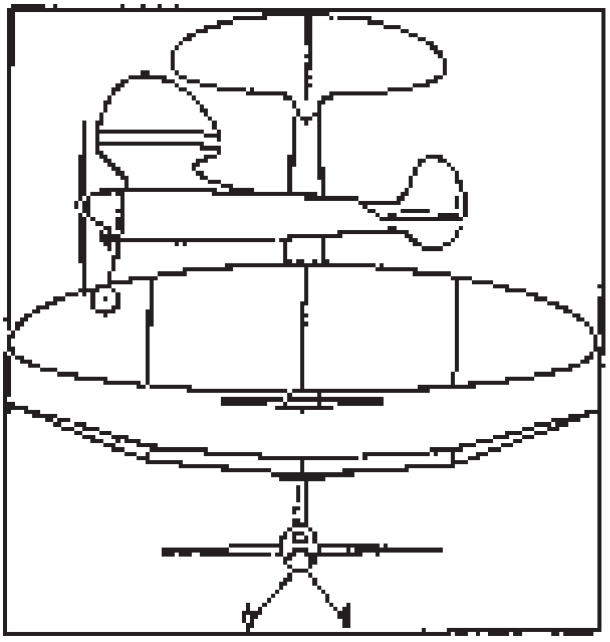

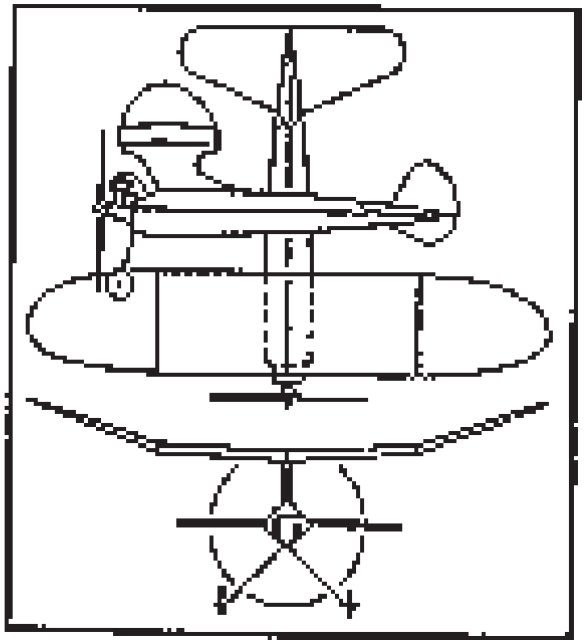

Shown on the right is the original Zipper with a diamond shaped fuselage and parallel wing plan, and on the left the famous contest winning, record breaking Zipper with the now familiar elliptical wing and tailplane.