



# FLYOFF

Round **42** Winter 2001

The **Skyscrapers**, whenever we get around to it, newsletter.

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## What's Up? XLII

Since the last issue of Flyoff the club has finished another season of competition. The turnout for the monthly contests was quite good. It seems that the majority of the local flyers prefers to fly on Barron Field. For next year the Skyscrapers will be building more bridges over the canals. Including a few substantially bigger bridges over the larger canals. This should make chasing easier and hopefully provide a more direct route to your model. The Skyscrapers will need volunteers to help construct these bridges next Spring, before the new contest season. The idea to build more bridges was proposed at the club's last meeting at Bob Langelius' home November 9<sup>th</sup>, his report follows.

## November Meeting

The November Skyscrapers meeting was brought to order approx. 8:15 PM Fri. 11/9. Items discussed and general assumptions are as follows: (A)-- New Nostalgia events (Rubber) are basically two; Wakefields of the period and Non-Wakefields of the period! No rubber weight limitations--they are new NFFS events and I expect the rules will be published by them generally. The general consensus is they will be included in Skyscraper meets (monthly and otherwise) next year.

(B)--We discussed the Clubs' involvement in a project for the Wright Bros. Centennial--Vic Gagliano is checking with the Brooklyn Museum to determine if they are having a project we might be able to assist on. I'm hoping to get some publicity for the club this way!

(C)--Next years CDs --Some relief for Dave Acton and the Barron/Ellis consortium. They know who they are! and David has volunteered to put on a quick refresher for those of us who are a little "Rusty", or unfamiliar w/contents of the "Contest Box".

(D)--Next years contest schedule will basically consist of combined AMA and FAI with the possible exception of the Fall meet where many of the FAI folks are on the west coast. the hope is to move the

Oct. meet up so the chance of better weather is more likely—more later!!

(E)--I'm working on a up-to-date mailing list w/latest member information.

(F)--We have inventoried our present stock of "Skyscraper" shirts, hats, etc. and will order more to accommodate likely requests.

(G)--Sid Kriven spoke about the current status of the "Galeville" saga to comments of better understanding, etc.

## More Email

I received the following email from Joseph Schatz, if you know Joseph and want to get in touch with him he can be reached at [josephschatz@aol.com](mailto:josephschatz@aol.com).

Just saw your home page and was delighted. I was a Skyscraper junior member in 1937 and flew in many contests with my Brown Junior model C and D. I used comet kits and worked with Sal Taibi and John Powers . We flew in Creedmore Long Island and Jamaica Bay . We met in the Powers basement near the trolley terminal at Flatbush Avenue. I forget the address but I biked there from Crown Heights going south on Utica Avenue.

We built a club RC model at that time. Tony of Mercury models was my supplier also Heathkit or Heath was a supplier we used. I lost one of my best models when it caught a thermal and flew away! I still have a brown engine mounted in a U line that I flew after the War. I used some of my modeling skills in the design of missiles in 1951 and incorporated the Austin timer in the Terrier missile.

I'm 78 now my model U line hangs in my living room .So you see we have an x member living in Brooklyn!

You're always a member. If you've never seen the Skyscraper's website and you have Internet access go to: <http://www.homegrowntv.com/skyspr.html>

## Lou Garami



Louis at the Nationals with one of his all-balsa-fuselage gas models. The sheet wood is bent to shape by the simple trick of drying it on one side.

### MODEL CAREER MEN LOUIS GARAMI BUILT HIS FIRST MODEL WELL OVER THIRTY YEARS AGO IN BUDAPEST.

When in 1908 Louis Garami flew his first model airplane in Budapest, Hungary, his school chums thought him crazy. In those days even the real planes rarely flew. In Budapest you could always go out to the airport where fragile wood-and-linen flying machines skipped around, cutting grass.

It was on one of these airport pilgrimages that Louis was bitten with the proverbial model bug. Actually, though, it was Big Brother Joe who was the model builder and who dragged Louis along to see the airplanes. Joe built just one model. When it didn't fly, he gave up. "His career was finished," says Louis, "so I took over." And for thirty-three years Louis has been grinding them out.

Today Louis Garami is noted for his varied small gas-model designs. His yen for simple fittings and fixtures has earned him the reputation of "Gadgeteer." Louis has a trick for everything, as the analytical builder will discover on looking over any Garami design--the Strato-Streak, for instance.

Garami specialized in custom-built models, perhaps half a dozen gas jobs a year. There was the time he and Henry Struck banded together for a mass-production blitz of all-balsa fuselage models. These were sold to Macy's in New York City and other department stores. Finally the boys became so adept that Struck alone manufactured seventy-five fuselages in one day. But when Ideal brought out their molded fuselage construction, the jig was up for Struck and Garami.

Louis has made over a thousand models not counting commercial production. Old-timers will bend your ear at the drop of a hat about their early endeavors with kite sticks, glue, paper napkins, shellac and sliced old inner tubes for motive power. Garami really can crow. Long before most of us were even born, he was nailing and gluing fuselage side frames together on the family window sill in Budapest. His props were made out of T-square heads (he doesn't say where he got them from) The models were copies of Bleriot's and other dashing "flying machines" of the era. And they all flew.

We should thank Big Brother Joe for having Louis with us today. Prior to the last war, Joe came to America and soon had a flourishing radio repair business. In 1923 Louis decided to join Joe in this country had probably heard of our gigantic thermals and worked for him about eight years. But once a model builder, always a model builder; Louis was up to his old tricks by 1931. "I had to start all over again," he claims. Actually, he had at least twenty years' head start.

What Louis thinks about contests would fill a book. Winning contests is ninety percent luck, according to him. (No one but a contest winner would seriously disagree.) Some contests are just about as square as a wrestling match, in his opinion. He points out that a couple of high pressure henchmen who know the tricks can talk a watery eyed timer into seeing an out of-sight flight for gosh knows how many more minutes.

The classic example in Garami's book is the time a scaled-up Strato-Streak made high time for the day but was nosed out by an enterprising gent who entered two models, theoretically for two people, but flew both himself. He was able to glean three flights out of the total six to win out by a minute. What the officials were doing in the meanwhile, Louis doesn't know. By the time the protest was aired, the said villain had gone home with the bacon. So Louis flies for the fun of it. Two ounces of dope for a prize isn't sufficient inducement for losing a model. Louis says he loses 'em anyway. (Turn to page 57)

Between nine and five on any weekday you can find Louis at Polk's Modelcraft Hobbies in New York City, where he does everything from designing kits to overhauling old engines. Louis likes it. It's a job in his own line, model building. What hobbyist would not like to be paid for making models? On the side, Garami boosts his income by selling construction features and model designs to the magazines.

You've seen many of them in Air Trails. On Sundays he can't stay away from the contests. Fortunately, Mrs. Garami is a loyal contest follower.

Louis dumfounded the Nationals one year in Detroit. Detroit was in the throes of a heat spell, the second hottest city in the nation during the contest week. Out from New York in an air-conditioned train came Garami. After one hour on the field he disappeared, and by the time the boys checked up he was back on the train bound for New York. That was the time he made his famous remark that tickled Nationals followers: "This isn't a model contest, it's a contest of physical endurance." Maybe that's why they say the only place Louis likes hot air is near the clouds.

Stolen from Dave Dodge's website. Who stole it from a December 1941 Air Trails.

### **What's the frequency Kenneth?**

The following was sent in by Ron Felix.

Thanks for your interest in my tracking antenna and for asking me to provide something for Fly-Off. For your info, my antenna is based upon a design by Joe Leggio, an amateur radio enthusiast - WB2HOL. In addition, I scaled a similar design to match my Walston frequencies and then optimized it for our purposes. The specific design, scaling and optimizing was done via a CAD program for Yagi antennas, which was written by Paul McMahon, another amateur radio enthusiast - VK3DIP.

As a point of introduction, I built this antenna primarily because of my initial interest in lightening up my equipment, as well as looking for something that could be easily transported in a more compact package. Also, the use of metal tape measure elements seems very practical for our purposes. The beauty of these elements is that not only are they light, but they can bend easily and then pop right back straight out. This is a definite benefit when you are going through corn or thick brush! Other items that make up this antenna include ½ inch PVC pipe, matching crosses and tees, and a 5- ft. length of coaxial cable from Radio Shack. Lastly, some hardware bits are needed, which include a half dozen sheet metal screws and a couple of crimp type electrical connectors. In summary, it is easily made, light, serviceable, and everything is available at your local Home Depot and Radio Shack for well under \$15.00! Rather than repeat what others have said, or re-publish other people's drawings, I suggest that

you follow my footsteps, and go on the Internet to get the necessary background and details.

To get started, choose "Goggle", and type into Search: antenna, Leggio, foxhunt. Once you are there, I suggest that you do the following: (I have supplied the links. Ed)

First click on RDF via the link below, and print it out. This you can read, and it will give you an overview of "foxhunting", and this sport's relationship to finding models via trackers.

<http://members.aol.com/fdecker/rdf.htm>

Second, click on Equipment Ideas for Radio Orienting via the link below, and print this out. This will give you some idea of what I made, along with some hints for construction and packing.

<http://members.aol.com/homingin/equipment.html>

Third, go back to RDF, then find and click on Links. Click on WB2HOL, and then click on Radio Direction Finding Projects. Select and click on the 3-element RDF optimized beam antenna.

[http://home.att.net/~jleggio/projects/rdf/tape\\_bm.htm](http://home.att.net/~jleggio/projects/rdf/tape_bm.htm)

This gives all of the details of approximately what I made and then optimized. Also check out the following:

<http://www.frontiernet.net/~elisa96/w2ki/flexbeam.html>

To develop an antenna for our use and for Walston frequencies, I followed Joe Leggio's path to Paul McMahon's Yagi CAD program. This I downloaded and installed on my old DOS based laptop computer. Here I went thru the necessary gyrations to come up with the design details. Specifically, I chose Paul McMahon's broad band antenna design, then scaled it for the Walston frequencies.

During this process, I optimized it, choosing the best element size, maximizing the front to back ratio, minimizing side lobes, improving gain, and very importantly, getting the design impedance to a value of approximately 50 ohms. This is necessary to get the best efficiency with the RG-58 coaxial cable used for connecting it to Walston's receiver.

Now for the details of the Walston optimized design: (Use Joe Leggio's drawing, and change the dimensions to the following for the 220 MHz range):

Reflector length = 27.638 inches (702 mm)

Driven Element Length = 23.189 inches (589 mm), which you cut exactly in half - so you have two lengths of 11.594 inches (295 mm).

Director Length = 22.953 inches (583 mm).

Distance from the centerlines of the driven element and the reflector = 5.433 inches (138 mm).

Distance from the centerlines of the driven element and the director = 8.897 inches (198 mm).

In cutting and building the antenna, you should have good results if you keep everything accurate to within 1/16 inch, which is approximately 1.5 mm. In choosing the materials, you should be advised that a 1-inch wide tape is best from a performance standpoint. Paul McMahon's CAD program is detailed enough to show not only the difference between round and rectangular elements, but also the effects of variations on their size as well! By using 1-inch elements, you will get the best impedance match, combined with the best front to back ratio. So, if you want the performance, buy a 1-inch tape.

I do not have a standing wave meter, nor did I want to run around and try to find a well-equipped Ham radio enthusiast, and then go through the exercise of tuning the assembled antenna. What I did do though, was to use a Walston transmitter in conjunction with the Walston receiver. With the antenna connected, and by observing the LED readout, I simply adjusted the spacing to get the strongest signal as seen on the LED display. Coincidentally, I found this dimension to be 1 inch, with no noticeable loss of sensitivity with a +/- 3/16-inch variation. Initially I used hose clamps to mount the elements during this adjustment period, but afterwards, I used stainless steel sheet metal screws to mount all of the elements permanently. When it came to the inductance matching (the hairpin inductor), I found that no matter how long or short a hairpin I tried, nothing improved on no inductor at all! Well all of this may not be super scientific, but the antenna works.

How does it compare to the Walston non-folding unit? It is just as sharp at determining the precise

direction of the signal. Going off bearing, the antenna responds very similarly in the rate of drop off versus deviation angle, as compared to the Walston antenna. When you return to the correct bearing however, this antenna gives a very sharp audible chirp, which also includes additional audio harmonics (a complex chirp)! This definitely confirms a precise direction, and it is something that my Walston antenna does not do. When testing it pointed 180 degrees away, it rejects the signals as well as the Walston antenna. (This is what is referred as the front to back ratio). Finally, the forward sensitivity is equal to the Walston (I get the same LED reading with this antenna as I do with my Walston antenna), but only provided that you keep your hand well away from the elements. This suggested the need for a handle, which is something that is not part of Joe Leggio's design, but something that I incorporated later. In summary, using only crude tuning, I think you can equal the Walston antenna, but probably not surpass it. Was it worth it? Yes, as it is much lighter, you can take it through woods or corn with abandon, and it is easier to pack (fold the elements through the crosses and tee). Last but not least, a hearty thanks to Joe Leggio and Paul McMahon, who put their knowledge and creative ideas out onto the Internet for us to use.

## Cloud Tramps



**Marty Maloy, Pete Money & Bob Langelius with their Cloud Tramps**

On August 12<sup>th</sup>, 2001 at 1200 hours EST Cloud Tramps from all over the world took flight. It was the second Annual world wide Cloud Tramp postal contest.

At Barron Field in Wawayanda, NY Bob Langelius, Pete Money and Marty Maloy put in their flights to join the mass launch of hundreds, (thousands?) of other CT fliers all over the world. A full size plan of this Charles Hampton Grant design is included in this issue. Build one for next year. We could use more than three contestants.





**Pete Money puts up a flight.**

In 2000 only Pete Money put up an official flight., and he did that between flashes of lightening and claps of thunder and torrential showers. But at the appointed hour it stopped raining long enough for Pete to put up his flight.

In 2001 the weather was more cooperative and the three intrepid flyers put in their flight at high noon. The Mass Launch is not really a contest, just a bunch of guys throwing their models into the air at the same time worldwide to commemorate Charlie Grant's contributions to model aviation. That being said, there is always an element of competition to see who is last one down! In the case in point Bob Langelius was last down, Pete Money was second, and Marty Maloy was a pretty distant third.

### **CARGO LIFTER INDOOR INTERNATIONAL**

Submitted to Flyoff by Bob Hatschek. Excerpts stolen from an article in Free Flight News, Dec, 2001 by Bob Bailey and Laurie Barr.

This meeting on October 13th and 14th was ably organized on behalf of the Deutscher Aero Club by Gerhard Wobbeking in spite of health problems. It was the third event to take place in the superb and enormous Cargolifter hangar, which is situated at Brand, an ex Soviet airfield about 30 km south of Berlin.

The hangar, with its semicircular cross section and hemispherical ends, each with 6 doors is bigger than it actually looks. The hangar skinning consists of two layers of a special plastic material between which is ducted moist air to keep the hangar cool in summer and warm enough in winter to prevent build up of snow on the outside, which might otherwise put too much weight on the structure. Throughout the meeting, the weather improved from a dank and drizzly Thursday to warm and sunny (about 20°C) on Saturday and Sunday. The second day was better, and best of all, was when they switched the lights on in the evening! It is not known what the temperature

might have been at the roof, but judging from the models' behavior, it could not have varied that much.

The available ceiling height is 107m [351 feet], more than twice the height of Cardington and well in excess of that for any other building available to indoor fliers. By comparison, Slanic [Romanian salt mine] has about 64m [210 feet] ceiling height. In order to make best use of the height, plenty of power on stiff and well controlled models was required. This hangar is so big that nobody hit the roof, or hung sideways either! The only reason you would need balloons, was to catch a badly adjusted model, or to avoid a mid air collision.

On the Saturday morning the air was turbulent at lower levels (up to 60' or more) with considerable drift, which was not encouraging as we had been told that at an earlier meeting, these conditions had prevailed throughout the day. I suspect that this was the March meeting at which the outside temperature was close to 0°C with about 18°C inside. However as the day progressed, the conditions calmed and improved, being generally good from 3pm onwards. Trying to trim an F1D earlier on was difficult to say the least. Despite the reasonable air temperature, the air did not seem to be as buoyant as I for one might have expected in that despite lots of height being obtained, the times were lower than expected. Until later in the afternoon, 31 min for F1D was difficult to achieve. The contest format was 3 flights for each event on each day (until 8pm on Sat and 5pm on Sun), the best 2 from the 6 being taken for the contest placing. As a bonus, sport flying was allowed until 8pm on Sun for those who didn't have to dash home. For us Brits, this was too good an opportunity to miss!

F1D was the most well supported event with many models in the air most of the time. The 41 entries who flew came from 10 countries, but, not surprisingly, there were no transatlantic competitors. There is a huge upsurge of interest in F1D to the new rules, because they are easier to build, but not necessarily to trim, and also with the advent of the superb new Y2K2 film which is as light as thick microfilm, but vastly superior in strength. The models can be flown safely in many more sites than the old rules models. Damage to the models is usually much less extensive than with old rules F1D. A considerable variety of designs was in evidence with unbraced models in the majority. Dieter Siebenmann from Switzerland was flying a model with a steeply angled tailboom, lots of wing incidence and a prop with outrigger sparless blades built using carbon fiber. Peter Kuttler's model has an elliptical profile wing, rear fin and a prop with highly swept tips resembling CAM electric

model props. The tips of the prop are highly washed out. Peter caused a sensation by recording a big increase in flight time - 35:32! This I believe is the longest new rules FID flight recorded to date and put him in the lead. He did not record any flights on the 2nd day and was narrowly beaten into 1st place by Lutz Schramm who improved with every flight, to win by a mere 5 sec. On this showing, the Germans can expect to be strong contenders for next year's World Championships in Slanic, particularly as they hope to run 4 meetings in the Cargolifter next year. We'll be there for some at least!

Most FID fliers were using fixed pitch props and many models climbed to 80 meters [262 feet] or more; this is well in excess of that available in Slanic. Such heights are considerably more than anticipated before this year. Generally, it seemed that to do the time, one needs the altitude, as is the case in Slanic, where there is little temperature increase with height. If, as in Cardington, it is significantly hotter at altitude, the air is more buoyant and helps in extending the climb and cruise phases of flight. The extra height of the highest climbs gives a longer let down. You have to fly the model flat out, and this means a less "draggy" trim, and also flying with almost no back off from full turns, using every last bit of power the model will stand. It is very difficult to see EZBs and 35cms at high altitude against the buff colored background; the dodge here is to change the viewing point to see the models against the dark gray background of the doors where they are much easier to see. This problem exists at Slanic but no change of viewing position alleviates the problem there!

We all found that it was not possible to fly in 4 events, which many of us entered, particularly on the

first visit to such a unique site. It is an absolute 'must' for any indoor duration flier and provides a challenge which I think can only be matched by Slanic in terms of the high power requirement. Nothing gung ho about this site (wind up and hope for the best); whether it is possible for any of the current classes of models to reach the top, remains to be seen but some of the FID's got pretty close. In the informal session after the contest had finished John Tipper, Derek Richards and Laurie Barr took the chance to fly old rules FIDs but some problems meant that times were not as good as hoped (50 min target, best achieved 39.54 by Derek). These models should be able to reach the top with something like a Slanic set up. Bob Bailey had to try for more with the 35cm which with a slightly lighter motor and more turns climbed very high and dead stuck with the motor hanging from the rear hook (as did John Tipper's FID in Slanic 1998). A new, possibly a record time of 36.23 was set. A different ending to an excellent meeting in a fabulous site (given reasonable weather outside) which I hope was enjoyed by all. Here's to next year! Gerhard hopes to have about four events next year, with the German Championships held in June or September, when the weather will be warmer, and better!

Cargolifter said that they have plans to build an identical hangar in North Carolina, and that they hope to build 40 airships! You lucky guys in the States. You could put Lakehurst and Akron into it, and have room for Cardington as well.

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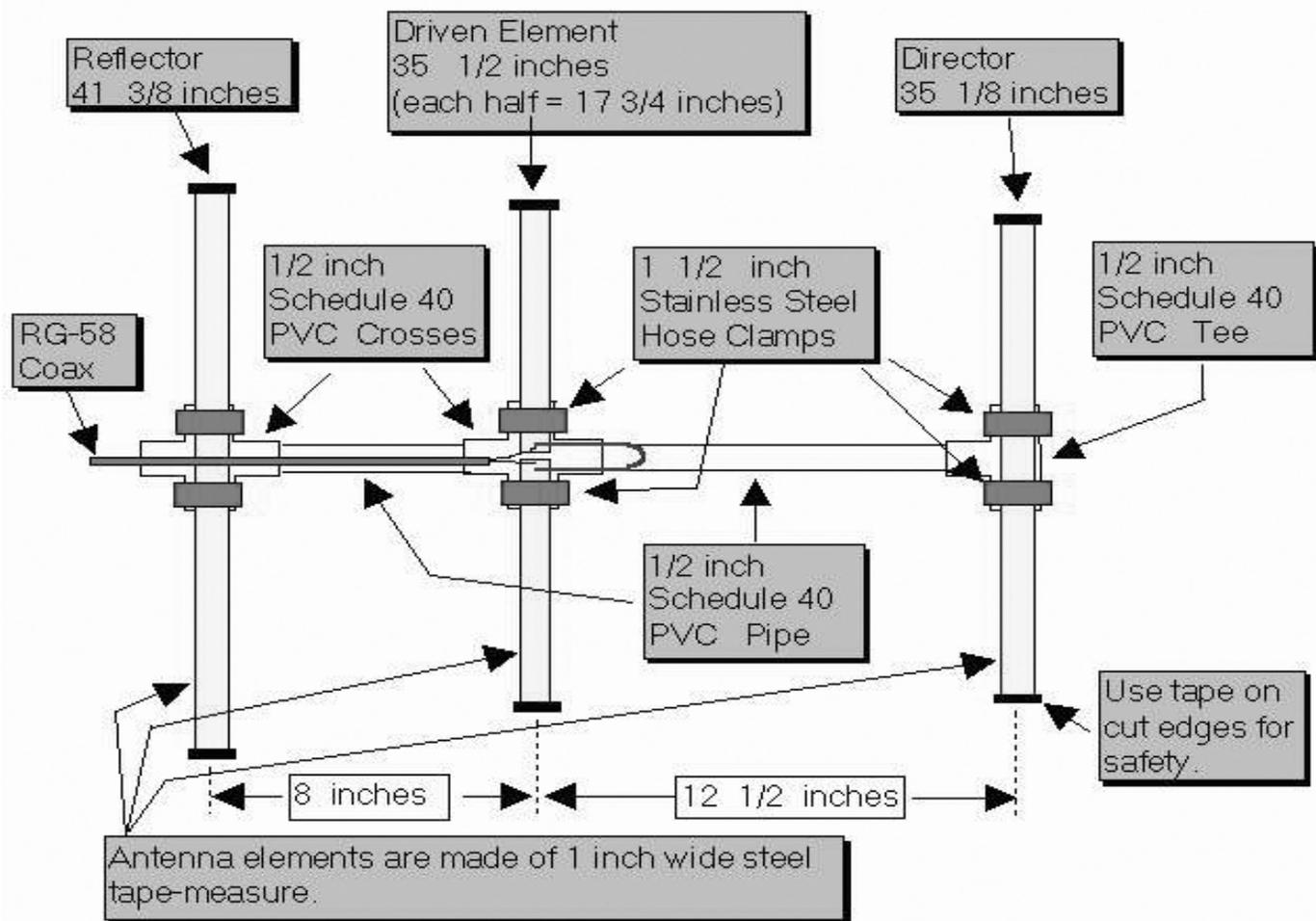
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