



# The AMA History Project Presents: Biography of EMIL CALUORY

Born June 1929

Started modeling in 5<sup>th</sup> grade (c. 1938)



---

Written by EC (05/2006), edited and formatted by JS (02/2009), reformatted by JS (10/2011)

---

*The following autobiographical recollections were submitted to the AMA History Project (at the time called the AMA History Program) by Emil in 2006.*

---

## **Model Airplanes Have Been My Whole Life**

Model airplanes have been my whole life, especially when I discovered how prohibitively expensive full scale aviation would be from a paper route. Therefore, model airplanes became my happy substitute.

In my youth, I made models of different types: Free Flight Contest Gases, medium to small A and B Classes, Ohlsson & Rice .19s and .23s, and stick-and-tissue rubber-powered Scales. I also built Peanut and Walnut Scale types and some Pistachios, too, in the late 1930s and early 1940s.

I credit my model airplane exposure with my entering the Air Force, and progressing from factory floor to engineering office with little or no schooling. In the late 1950s, I conducted model-building classes in the San Diego Air Museum (the one that burned down) with about fifteen to twenty-five kids every Saturday and Sunday. I also continued classes at Vandenberg, Santa Maria, California when work transferred.

Mostly modeling was given up after marrying and having a family, but not before I influenced my wife to complete three projects of stick-and-tissue rubber-powered Free Flight.

While working in Toronto, I again reinstated my hobby of model classes with my best success ever. I was even offered a lifetime job opportunity at the recreational complex on the waterfront. However, fortunately or unfortunately, I was offered the job in Montreal.

Overall, I have exposed over 2000 kids to some kind of modeling, mostly airplanes, and the last 760 benefitted from my creating a progression of projects to better initiate technique gradually.

I have maintained a personal model collection (substitute model shop?) of hundreds of models, both built and in kit form, hundreds of models and full size airplane plans, and hundreds of model and full size aircraft magazines. My lawyer had to auction it all off to the tune of \$16,000 as a result of my being stranded in California at the time the recession hit. I estimate that at California prices it could have been \$25,000 to \$50,000, as most of it was antique or otherwise rare.

I once opened my own mini hobby shop at Vandenberg, Culver City, California and was involved with other hobby shop enterprises, especially in Toronto. I had always secretly harbored a fantasy wish to have my own hobby shop and live in the back.

Another brainstorm was to equip my Volkswagen bus/van to explore from town to town, to attempt drumming up interest in elementary model airplane building.

### **The Start of Modeling**

A model airplane hobby shop was a couple doors down from my dad's barbershop, where Al Capone used to come when he was on the lam from Chicago.

My first close up of seventh and eighth graders' model airplane activity was from a glance into the below-level band room. I only saw the horizontal building boards with pins sticking up, looking more like a girl's fabric hobby than model airplanes, as there were none finished at that time. I was run off, as an intruder, before being able to get a closer look. They closed the door to more securely assure safety, as this was a blackboard jungle type of school. You can't blame them. At the next opportunity, I was able to see some small framework, but still not able to discern what was actually going on in that room before I was again run off. This time the security was upped and paper was pasted over the only clean window pane. I arrived at this school around the fifth grade.

Eventually, I crossed paths with some local modelers, but was never quite taken seriously. So, I had to figure out how to navigate about a model airplane kit and was quite sold.

“How do you know how much to wind it?”

“Wind it until it breaks and back off ten turns.”?!?!

In their group, I was definitely an outsider who was to be taken with a grain (not a box?) of salt.

After surviving a period of time and touch of some skills (techniques), I was at a local hobby shop at the center of town, right where everybody congregates to catch a bus. There was some chatter about getting somebody to sit in the storefront window and make models as an added inducement to promote business. There was some squabbling about rate of pay. Not wanting to go over 25 cents an hour really turned off the group that I was acquainted with. So after the dust settled and the peer-group types had dissipated, I approached the management (father and son) about giving it a shot. Even though I was under qualified from the superior peer group modelers, on a trial basis, it was somewhere around 15 to 20 cents an hour and the models would belong to management. I think the first two to three projects were stick-and-tissue models.

Apparently, the quality of workmanship was sufficient that management now wanted a U-Control *P-47 Thunderbolt* by Berkley Models. This was way out of my league, what with all the bell cranks, flipper surface hinges, push-rod lead-out alignments, and lead-out wires for the controls, not to mention all the planking of the fuselage. I had come a long ways from the beginning when I shook so bad I couldn't control cutting accurately (on the mark) and pinning was almost impossible. What the unappreciative management did with the early projects I don't remember. And even worse, I don't recall the reaction/response of the superior peer groups' opinion. But what I do remember the most was when management would test fly my handiwork, right there in the hobby shop confines, and bringing back the limping, sagging bag of tissue and bones for me to fix/repair. It was in conjunction with the new projects, like I was two people but with one pay. The camel straw came when they threw/tossed the not quite finished three- to four-foot *P-47 Thunderbolt* U-Control across the shop and brought back the heap/mess for me to repair. (Humpty Dumpty my foot!!!) That's when I just walked off the job (take-it-and-shove-it).

Doing the modeling in the show window was a very revealing shock exposure/experience. People standing outside the window, waiting for a bus, for the first time having a distraction, to help keep them occupied during the otherwise uneventful agony... it sure forced me out of my shell, like a monkey from the wild into captive exploitation.

There was a man who was probably one of my dad's barbershop customers that took pity on me because of my dad's treatment during my times in the barbershop. I remember customers trying to slip me a nickel and before I could make it out the door, my dad would commandeer the nickel because the customers knew I would try to buy a nickel model airplane kit at the model shop. I remember he would try to make me learn how to shine shoes from the shoeshine boy, in a sense that's taking away from the guy who at time would also be my babysitter on occasions.

One of these customers was a kind of tall man named Agnew. He had inherited the Agnew Coal Company from his father. He went the furthest of all the customers. He somehow got enough money to me to be able to make him a model airplane. This was great until I had to give up the model to him at his company office, right next door to the post office. This was actually one hell of an arrangement. Until after a number of models were coughed up for cash to purchase a next one, he suddenly exploded and said, "What the hell am I supposed to do with all these models? I don't know where to put them all!!!" Needless to say, that was the end of that. For me it was the greatest thing since sliced bread. It sort of helped me to further come out of my cocoon until his shock treatment, which almost took it all back.

Hi Flyer was some of my early pathetic attempts at kit models. There was something else? They were so out of fidelity with real airplanes and/or appealing models that I never knew the difference. In my isolation, I was more concerned about the economics of allied purchases, such as glue, dope, brushes, pins (that wouldn't "dent" my finger), razor blades (single and double edged), and building boards when they got bigger than 10-12 inches.

My really first successful flyer was the *Pacific Ace* (I think it was by Modelcraft,) about 20" wingspan. (Although it looked pleasing for a cabin model, it just wasn't after any real airplane.)

My first successful biplane was the Megow 10-cent *Fleet* biplane. This was the first time I really got caught up in scale-like detail, by trying to duplicate the scale number of wing ribs. I was so excited about how bold I was to be doing such a thing that I just made them all full-size ribs (not knowing about false ribbing in those days.) I gave up on trying to figure out the five cylinders. There was a neat front view, 1/2-scale (what's that?), and gave it a pathetic try, but each one was turning out a different size and shape. I think I still have difficulty deciding how to go about it universally, standard, consistently, even with the Williams Brothers plastic started at 3/8-inches-to-the-foot scale.

The Grumman *F4F Wildcat* 25-cent model by Comet Speed-O-Matic was my successful modeler military scale model. It was a great flyer in tall grass. The weak imitation for Grumman landing gear never stayed on for more than one landing and/or take-off, but hand-launch was beautiful.

The Comet 25-cent Speed-O-Matic type construction Taylorcraft was so beautiful to build and fly realistically that I used it as a post-graduate scale model for kids that completed my non-scale beginner course and still wanted to continue to another level. I went through about 25 or 30 out of the total 2000 kids I taught in my travels.

I was hitting my stride when I made the Megow 25-cent Corben *Super Ace*. It had yellow tissue with black trim. I planked the nose back to the cockpit with 1/32" sheet. It flew well enough, even took off.

There was a large, for me at the time, Waco cabin with tiny lower wings. Very fragile construction for its size. All 1/16" for an advertisable big wingspan. I just couldn't get the thing to fly, couldn't afford enough rubber power for it anyway. So I tried tying a string from the back of my bike to the nose block. It waivered/rocked from side to side like a crazy kite. I'd go on anyway. The landing gear sheared off first, then the lower wings until I was finally just dragging the nose block along the ragged asphalt, reshaping it. The kit was an early Guillow's, about 25 to 50 cents. The neighborhood kids used to delight in watching the pieces being distributed/scattered all down the street.

I made a Hawker *Hurricane*, probably a 25-cent-size Comet kit that utilized flat sides (square box) with small bits of formers to help round out the fuselage contours. Tissue cover was purple and white, probably all I had at the time.

I also made a Blackburn *Skua* because the cockpit canopy was mostly flat with no compound curves. Probably another 25-cent Comet kit. I figured the turned-up wing tips would/could substitute for dihedral.

I was thrilled with the Megow 10-cent primary glider because its flight path just fit in the backyard from the back porch. It didn't give me any problems with rubber band breakage and/or power torque flight trim and was always ready to fly when somebody was walking by!

I even made the Grumman *F3F* biplane, a Megow 10-cent model, and tried to fly it once. When it wiped out, all the landing gear and skewered the wings around, I just put it back together and hung it up because I had put my mother's name on it.

I made two or three Cleveland *Condor* 6-foot gliders, but they were so flimsy it had to be no wind, provided I got it through/past the inner and outer doors without crunching it. It was all 1/16" stick and sheet.

## **Remembering, Part 1**

I remember hanging/mounting models around the living room wall, just under the ceiling. They were 1/72-scale plastic airplanes, the same size as those used during the Second World War to help pilots identify all the different types, friend and enemy.

It seemed about the time that all four faces of the room were full; we were probably going to move again. It got to be like a superstition.

## **Remembering, Part 2**

I remember the first time I christened an engineering office with model airplane flight. I remember coming back to California from the Electric Boat Company in Connecticut, returning to San Diego Convair on the *DC10*. With the family in San Francisco, it was rather a dry

existence in a motel room after work. So I took to starting a model airplane of the *Fleet* biplane by Megow, about an 11-inch wingspan.

I still had the plans from the original kit as precious cargo equal to my toiletries. This was fortunate for me now that I was cut off. So, proceeding to begin a kind of construction by coming in early before starting work at lunchtime and lingering when possibly after overtime, I never got halfway through and at no time did I ever seriously consider flying it in the office, were it ever to be finished anyway. This was in the mid- to late-1960s.

My folks were such squabblers and wranglers that the only peaceful concentration on model airplane building was the office. It didn't help that I was living out of a cold attic, mode over livable.

## **A List of Delayed Projects**

### Grumman F4F Wildcat

A Comet 25-cent Speed-O-Matic, I am awaiting the right shade of light gray to finish the fuselage. The fuselage and tail are over 15 years old. I have been taking it everywhere with my moves, hoping against hope to figure out a clever way to fold the wings (on a rubber band model!?!)

### Taylor Cub

It is a contemporary 25-cent size kit by Comet after the Germans bought Comet and produced a rejuvenating kit line, but unfortunately, Comet has vanished anyway. I am awaiting a clever configuration for exposed cylinder engine: 4-cylindar Flat or a 3-cylander Ansani.

### Curtiss P-40 Tigershark

A Comet 25-cent Speed-O-Matic, I discovered why my three models, when I was a kid, flew so badly. The wing position has negative incidence. Now that I've finished all the structure, I have to decide where to make corrections. Raise the front of the wing and leave a gap between the lower belly or lower the trailing edge and have a ridiculous distorted shape in the wing file. The best and cleanest way would be to redo the side profile and modify the bulkhead/former shapes to suit. (Yeah, like I wanna work!)

### Fleet Trainer

An open cockpit biplane forms a 10-cent Megow kit. The fuselage needs top combing and I need to finish all the extra ribs in the wings.

### Cessna C-34/C-37

A Comet 5-cent model. I only have it half-way done.

### Fokker DR-1

A Megow 10-cent kit. I did a rib for every scallop, very fragile, probably will never cover it. I made two or three of them when I was a kid. It always fell off on one wing and smashed all up.

### Fiesler F-156 Storch

It has the fuselage and tail structure finished except the cabin formers to the wing are not firm. The wings with tripled ribs are in the process of being joined with/by the bird cage cabin roof structure. Not everything gets to have to improvise. It is tedious with the shakes. I don't know

what to do about cabin framing, bits and pieces or the all-clear plastic provided by the kit. (What!?! – Do it right!?!) The Storch has stalled because of the “advanced” clear plastic cabin pieces. I’m afraid of not fitting the four pieces together. Besides, there doesn’t seem to be sufficient incidence in the original model. I left the cabin formers floating, just in case, so I may lightly attach the front windshield and just cover the wing and tail surfaces until I am sure of flight trim positions. The covering is awaiting final 10 percent structure flying so I can take pictures before covering. (For lack of a nail, a show was lost. For lack of a shoe, a horse was lost, etc.)

#### Hawker Hurricane

It has a 16.5-inch wingspan, from a Guillow’s kit. I made all the formers, ribs, trailing edge, and tail outlines from 1/32 sheet. It needs landing gear plus is awaiting the nerve/decision for two-tone camouflage butt joint tissue pattern.

#### SE5A

A larger Guillow’s, it has the 1/32 ribs, formers and tail outlines. Olive drab or chocolate brown tissue is needed.

#### Grumman F6F Hellcat

A 16.5-inch wingspan Guillow’s kit, the 1/32 formers, ribs and trailing edge are done, it has tail outlines and is finished enough to fly. It wobbles from side to side; have been told it needs a larger rudder.

#### Cessna 150

I acquired a completed Cessna 150 from the local Farmer’s/Flea Market. It was seven dollars. He did a better completion/decorating job than I would have. But he’s obviously not a tried and true scale flying modeler. The kit was the Guillow’s series with the Piper *Cub* and Aeronca (Airknocker) *Champion*, with about a 30-inch wingspan. I think it was put together like a plastic model kit. Then after doing such a nice job of scale affect/appearance, he put more than enough dihedral for flight and glued the propeller? The trailing edge of the wing is as blunt as the leading edge a la Guillow’s. I myself prefer the thinner trailing edge, a la 1/32” sheet, at twice the width. Even though it’s more prone to warping at the trailing edge, it looks more professional!?!

#### Midwest Flyboy

This was finished and successfully flown.

#### Tern-Aero Gone Goose

I finished this and successfully flew a copy/replica of the one flown in the engineering office in the 1970s.

#### Piper Cub J-3

Of course there’s the clipped wing Piper *Cub J-3* by Peck-Poly already put together that I bought at a declining/going out of business sale for \$15 about seven years ago. Even at the time, the original yellow tissue was so old and aged that just staring at it would buckle it. A better job that I would/could have done, especially making the engine detail at so small a scale, like the shaping the exhaust from reed (?) I don’t have the nerve to try and recover it for fear of doing an inferior job over his superior work. That’s why I bought another kit to see how close I could come. I figured out how many ribs to the full Piper *Cub* wingspan, but was disappointed how little help the plans were.

Who's procrastinating? Not me certainly!!!

---

*The following was submitted to the AMA History Project (at the time called the AMA History Program) by Emil in 2006, originally published in the Silent Electric Flyers of San Diego's newsletter, Peak Charge.*

---

## **My First Close Encounter with a Model Airplane**

Sometime around 10-11 years old, I ran across/into another kid just hanging around. We were total strangers, never having met before. He turned out to be the typical "looking-for-any-port-in-a-storm" relationship predator. It had to be in the summer time, 1938 or 1939, between school terms.

It turns out he was just drifting, but more intensely than I, in search of something and/or someone "to do." After our initial encounter, I tried to break off a number of times, but he could cleverly/desperately beg on. Finally, to rid of him once and for all, I put my foot down and stated that I was only interested in model airplanes, but that I never had the money. Model airplanes were the furthest from his mind/repertoire, but in desperation of the moment he would agree to the compromise demand.

He needed to know how much (money) and how long (time) this model airplane activity took. Now the shoe was on the other foot. I not only hadn't escaped, but was hooked. This might be the golden opportunity of a lifetime since I'd never seen the inside of a kit's contents, much less the progression of a model "in-building."

The lowest bidding came down to a five-cent kit range. But the luxury item was the Comet Models *Cessna C-37* (high wing cabin with no wing struts, stationary landing gear [wheels], and a round engine.) The assurance being that five cents would cover all (how was I to know?) sealed the deal.

The kit was the most beautiful thing that I had ever seen in my entire life!! I even mustered enough nerve to be allowed to touch/handle it before the actual purchase.

Upon discussion with the proprietor of the hobby shop, it came out that the kit by itself would indeed not complete a model. If he had been mafia and grown up, I'd have been dead. Now I was all for cancelling out on the whole enterprise, once and for all, because I had faked/lied/winged it/whatever about my credentials in the expertise of modeling, not giving any thought to being found out in the go-for-broke excitement of actually getting privy exposure (before my time) to model airplanes.

Now it was his turn, in repayment he wasn't going to escape/release me without maximum penalty of the total reprisal torment. (A pound of flesh?) So, with me mentally shackled, he was going to squeeze it for all it was worth.

It was going to take pins, a razor blade/cutting knife, glue (the miniature tube in the kit probably couldn't glue two fingers together!!), dope/thinner and brushes!!

I think it all came to about a dollar. We went to his family tenement house, two to four stories high, and then I felt really physically as well as mentally entrapped. (I probably half expected to die and/or be killed.)

He was very meticulous in reading the plans (I never did know how to read) and realized just the extent of my deception when right there on the plans, things that I had stated about how a model is made - (all on the fly/winging it because he had demanded specifics and I tried to take advantage of his total ignorance of the existence of the model hobby [science?] figuring he would never know the difference, sounding super knowledgeable, and I would never see him again anyway. This was all before there was anything about actually building a kit, so I was flapping my wings about how great I could fly when in fact I had never been off the ground!!!) - That just wasn't so at all.

Now came the moment of truth. I had lied to my jailor and was about to reap the consequences. To build to the maximum, he was relishing all the payback by forcing the total involvement in this model airplane "thing."

He had "bucks," but typical of the species, was violently cheap. But now this dollar was going to make his whole summer, in terms of entertainment/torment, and I was the sacrificial lamb (beyond his wildest dreams)!!

To give him credit due, he did make the model, despite all my "expertise," that he would periodically shut-up before I could go very far with my "answer" to his question, he knowing - full well by now- that he had me in over my head and was deliciously savoring the payback.

He was really playing with a thousand marlin on a hundred-pound line, and he was good at it, too. But now that we're grownup, had it been on a deserted island, I can assure you that one or both of us would be dead.

Through the agony, I was still delighted in the creativity of it all. I actually got to see, in person, the innards of one of those mysteries of life, the model airplane kit.

What with all the trauma, I'm not quite sure of all the details, but it may have taken a second day to really complete the model. I just can't visualize our/his succeeding in one day, before dark. But I do recall there was some urgency about finishing it before dark so as to be able to find it in the daytime, so it wouldn't get away out of sight in the dark. (Did I lay one on or what?!)

I think I may have tried to cut some of the pieces out from the print wood (*Make yourself useful, reject!!*) until I was splitting the wood so badly (*Never mind, useless, I'll have to do it myself.*) that still didn't mean you're free/off the hook. (*If you want to finally see it fly... I need somebody to badger. You don't think I'm going through all of this at your insistence just to be by myself. You are not getting off scot-free when you got me into this in the first place. That I should die, already!?!*)

Anyway, this "beautiful" model from the "beautiful" kit was finished and ready to fly. All the structure, two body sides and joiner cross braces, wing and tail, even covered except the bottom of the fuselage under the wing and tail. I don't remember what was done about the windshield, but there was landing gear with wheels and nose plug, and wire prop shaft with beads. Of course



the propeller was nothing more than a flat-plate silhouette with an angled line to kink a blade pitch angle along.

A moment of truth. I was so shaken/shocked that this whole thing had actually come about and I had been a part of it that it think if I'd had \$100, I may have given it to him (and this a pre-war prices) [*yeah, Tom, I haven't changed*] just to freeze the moment for me for all time. However, as it turned out, just as he was about to launch it from his second or third story rear balcony, out of nowhere he managed to stick a match to it and set it afire, just as he launched into flight!!!

My **god**, here I had been toying with attempting to talk/buy the model from him and he's destroying it all in a grand finale. It flew beautiful, too by the way, without any experience at rigging/sighting, test gliding or anything.

Somehow I thought, "Well, if you don't want it that bad, I do," and ran down the stairs (more like flew - if I'd missed my step I'm sure I'd have broken something) to the ground to retrieve the model (*stamp out the flames?*) and run like the devil with it. Only I got to the ground and at first saw nothing (*lost out of sight?*), and while staring up noticed two or three falling blurs and slowly drifting/falling ash flakes. I grabbed wildly at two of them that turned out to be a hardwood wheel and the wire prop shaft with beads, maybe with the rubberband still attached or not, I don't remember now, and another blur I missed that turned out to be the other hardwood wheel. I still ran.

In my later experience, I witnessed this phenomenon by other experienced modelers. Very unraveling, to say the least.

---

**This PDF is property of the Academy of Model Aeronautics. Permission must be granted by the AMA History Project for any reprint or duplication for public use.**

**AMA History Project**  
National Model Aviation Museum  
5151 E. Memorial Dr.  
Muncie IN 47302  
(765) 287-1256, ext. 511  
historyproject@modelaircraft.org

