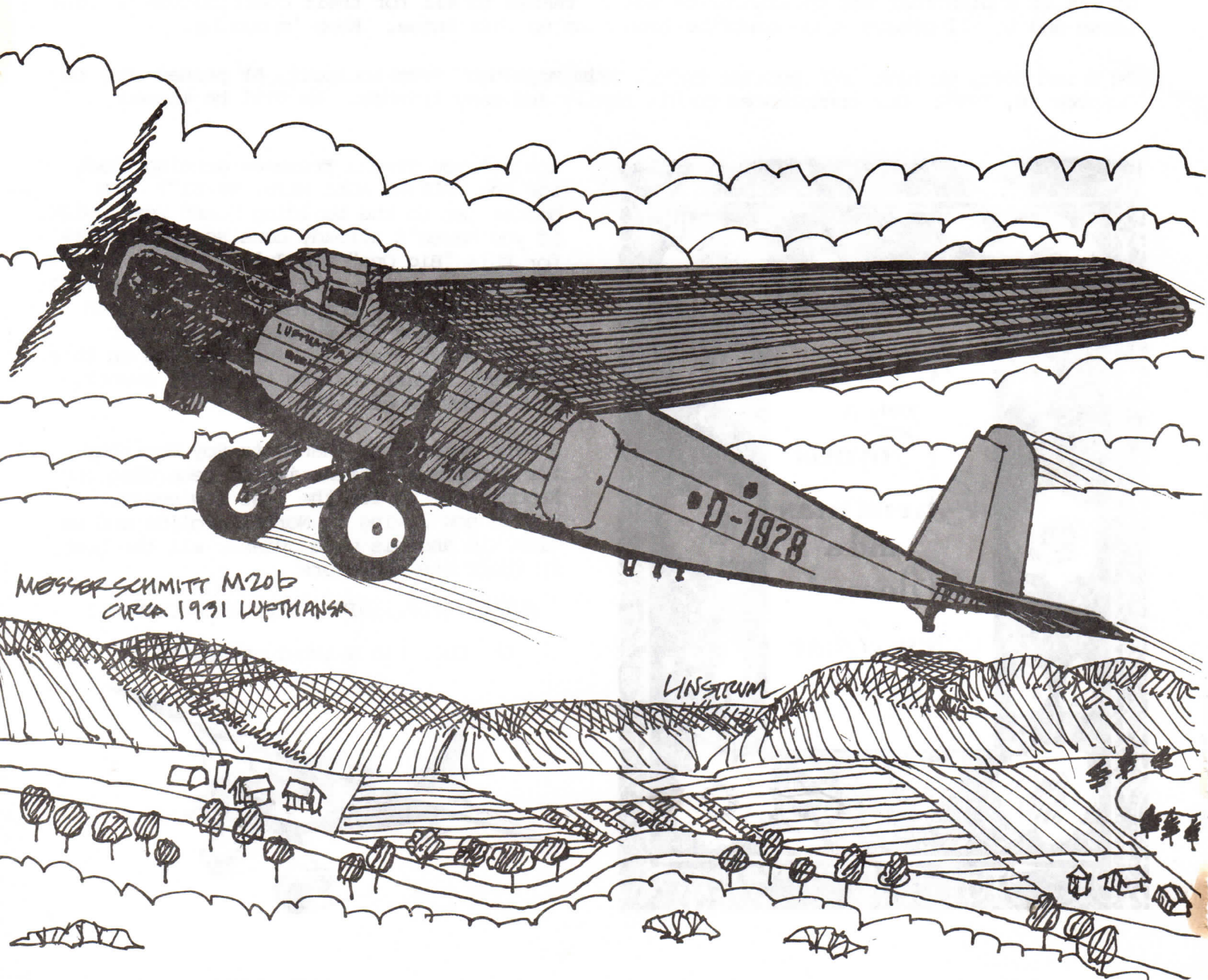


FLYING ACES

ISSUE #178-104 Nov./Dec. 1997

Club News



2.



Our cover, as you probably recognize, was done by Dave Linstrum. This one is of the Messerschmitt M20b shown in the livery of the 1931 Lufthansa. We wish Dave a very speedy recovery after undergoing successful by-pass surgery. Get back on the flightline soon, Dave!

This issue's plans were sent to us from Mark Fineman (Soijka), Florent Baecke (Remington-Burnelli RB-1), Doug Wilkey (Dornier "Merkur"), Florent Baecke (DFW T-28 Floh), Al Backstrom (Maubossin Hempitere), and the Seversky BT-8 plan has been lying around in our archives for much too long. Does anyone have any info as to the history of this? Was it a Kit? Or was it a plan that was published? or What? Thanks to all for their contribution to this issue and to all others whose contributions make up this issue. Keep 'em coming.

On a sad note, we have lost another FACer. Jim Moynihan, from Lockport, NY passed away on October 16, 1997. Our condolences to his family and many friends. He will be missed.

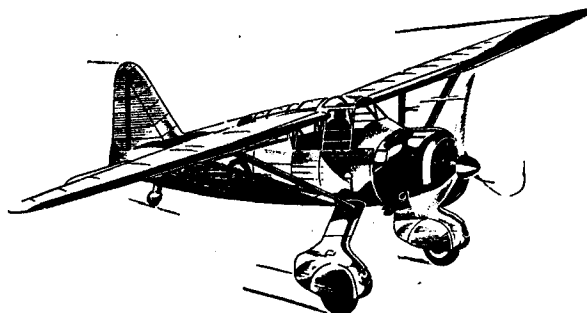


Are all you Tissue Trimmers getting ready for the "FLYING ACES NATS, MK-XI"? You better get to the building board real quick if you haven't already done so. The dates for this "Big One" are July 17-18-19, 1998. The scale judging will be done on July 16th at Peter's Party Complex as we have been doing the last few years. In the next issue we will have all info for you on this contest. There will be the usual events, plus a couple of extras for you.

I want express my thanks to Roy Courtney for doing such a fine job of recording the Kanones for us for the last few years. Roy is now living in North Carolina and we wish him and his wife ,Diane, all the best in their new endeavors.

BUILD...FLY...WIN...EFF--AAA--CEEE!!!!

Lt. Col. Lin Reichel, Cinc-FAC



KEEPER OF THE "KANONES"

Ross Mayo is now in charge of keeping track of the "Kanone" (event) winners. As of this date Ross should be sent all contest results. Send all results to Ross Mayo, 3838 Woodcrest Ct., Erie, Pa. 16506. All results should be on form such as below, or a reasonable facsimile thereof. If you don't fill out such a form, complete, the results will not be accepted. You want to know why we are doing this, right? This method will prevent duplications which have happened in the past. All events must have had at least three contestants who have had at least one official flight. In the case of mass launch events then only the contestant's name and model have to be listed but there must be at least three entries in the event.

Your help in this matter will be greatly appreciated. Let's wish Ross a successful tenure as the "Keeper of the Kanones".

| EVENT _____ | | DATE _____ | | | | | | |
|-------------|-------|------------|-----|-----|---|---|---|--------------|
| CONTESTANT | MODEL | 1ST | 2ND | 3RD | B | S | B | TOTAL POINTS |
| | | F | F | F | O | C | E | |
| | | L | L | L | N | A | S | |
| | | I | I | I | U | L | T | |
| | | G | G | G | S | E | | |
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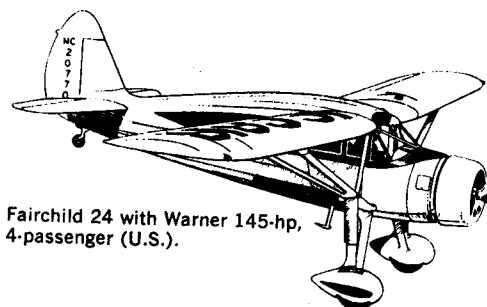
FAIRCHILD 24 RULES:

Models must be built from the guillows kit or plan (readily available). You can use your own wood, but the structure and sizes must be accurate to the plans. The plastic parts may be substituted with wood, any prop can be used, and the motor peg may be relocated. All struts must be in place.

You can create your own color scheme, but all panel lines and registration numbers must be on model.

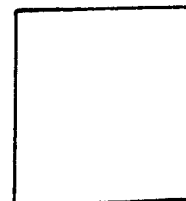
The event is a mass launch, no 15% rule, and dethermalizers are not allowed.

This event will be held at next year's FAC-Nats. It will be sponsored by the Chicago Escadrille, FAC Squadron #9. Should be a fun event. Get started on your's now!



Fairchild 24 with Warner 145-hp, 4-passenger (U.S.).

If the box on the right has the dreaded RED "X" in it, it is time to renew your membership which includes the newsletter. Cost is \$15.00 per year in the United States and Canada. Overseas the cost is \$20.00 per year. Six issues per year published every other month. This is your last issue under your old membership. Please make checks payable to "Flying Aces". Send to FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.

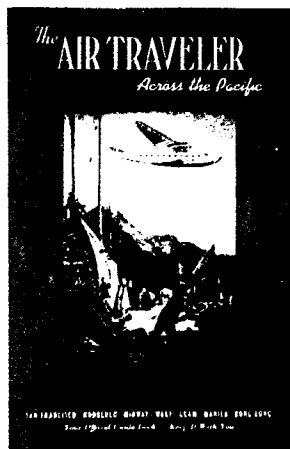


4. Pan Am's Pacific

The Clippers that spanned the world's largest ocean left many lives realigned in their broad wakes.

by Henry Scammell

By almost any measure, the Pacific Ocean was the ultimate aviation conquest. But for Juan Trippe, it was second best. As president of Pan American Airways, Trippe saw the world as a series of landmasses to be connected by Pan Am routes. By the early 1930s the airline had firmly established its Caribbean and Central and South American routes, and Trippe set his sights on transatlantic travel. But his plans were thwarted by the British, who were loath to grant landing rights—and with them, dominance of the Atlantic—to a U.S. carrier—at least until they were ready to compete.



So Trippe turned to the Pacific. In the spring of 1935 Pan Am launched four surveys of a prospective commercial route from San Francisco to Manila in the Philippines via a chain of isolated islands. Laid out by Trippe and Charles Lindbergh, the routes covered Honolulu, then the islands of Midway, Wake, and Guam.

Until these flights the two-square-mile coral atoll called Midway was a cable relay station serviced solely by boat, and the three tiny islands that made up

Wake were inhabited only by birds, hermit crabs, and rats. That would soon change. Shortly before the survey flights Pan Am had dispatched the depot ship *North Haven* with materials and construction crews to create air bases on the islands. Aboard were antenna masts, topsoil, flower and vegetable seeds, five tons of dynamite to create safe harbors by blasting out coral heads, and enough lumber to build villages on Wake and Guam. A later shipment included modern-day amenities for future passengers, including telephones, draperies, Simmons beds, shower heads, playing cards, ashtrays, coat hangers, ice-making machines, aquariums, and lumber for building two hotels. On October 24, 1935, as the sole bidder, Pan Am secured the U.S. transpacific mail contract. The first flight was scheduled to depart Alameda, California, in four weeks.

For Pan Am's Pacific routes, the Glenn L. Martin Company built three M-130 flying boats, at the time the world's largest commercial aircraft. Though they could seat 32 passengers, the fuel load required for the 20-hour flight from California to Hawaii was the more crucial reason for their immense size.

Indeed, on this segment only nine passengers could be accommodated.

The 26-ton Martins would herald a new age of air travel, cutting an 8,200-mile ocean crossing from weeks to days and firmly establishing Pan American as the world's dominant transoceanic airline. The first M-130, delivered to Pan Am two weeks before the mail contract came through, was christened the *China Clipper*.

John Cooke, a 25-year-old radio operator fresh out of the Navy, read about the upcoming *China Clipper* flight in the paper in Astoria, Oregon, and showed it to his wife Isyl. "Why don't I get a job with Pan Am?" he said. "We can go back to Guam."

Cooke loved Guam. The son of a Navy officer, he had spent two years there as a boy, then another two in the service before meeting Isyl. "It's beautiful," he told her. "The whole Pacific is beautiful. The moon jumps out of the ocean as big as a washtub."

"I'll believe it when I see it," she said. Cooke took that as a yes. Three weeks before the inaugural Pacific flight, he started work as a radio operator at Pan Am's Alameda base on San Francisco Bay. On November 22, as part of an audience of 125,000, the Cookes stood on the Alameda pier long enough to see Postmaster General James Farley help stack pouches containing some 110,000 letters and to hear part of Juan Trippe's speech.

Cooke's task that day was to send a "Q" signal to all stations on the route. "QRV?" meant "Are you ready?" and the expected affirmative reply was the same letters without the question mark. A camera crew from Fox Movietone News watched Cooke work the telegraph key. "That was terrific," said a cameraman. "Now we'd like to get a picture of you talking to the airplane."

"I can't do that," Cooke replied. "The only way we communicate with the plane is by telegraph [key]."

"That won't do us any good," said the cameraman. "People won't understand what's happening. Pick up your desk phone and talk to the airplane."

Cooke did as he was told. "Hello, Alameda calling *China Clipper*. Over," he said to the dial tone while the camera rolled.

"Now answer him and say you got his message."

Cooke picked up the receiver again, pretended to listen for a few moments, then said, "*China Clipper*, roger. Alameda over and out."

Outside the office, oblivious to the charade being played out for the camera, Captain Edwin C. Musick taxied from the dock. The *China Clipper* grumbled interminably across the bay and finally lifted off with a flotilla of chase planes in trail. As he approached the Bay Bridge, Musick realized the burdened flying boat didn't have enough altitude to clear the uncompleted span. He lowered the nose and flew under the dangling cables. Mistaking necessity for panache, the loose formation of chase planes followed. Pan American's great Pacific adventure had officially begun.

A couple of weeks later the Cookes went to the movies to see a Laurel and Hardy comedy. The *China Clipper* flight was featured in a newsreel, and the savvy audience roared with laughter when John addressed the Clipper by phone. But the dubbed-in response brought down the house. "Roger, Alameda," said a voice as John held the dead receiver to his ear, "this is *China Clipper* landing in Manila."

Two months after the inaugural flight the Cookes followed the Clipper to Guam, where John became the chief radio oper-

ator for the Pan Am station there. By then the *China Clipper* and *Philippine Clipper* were crossing the Pacific every week.

Ben Blaz was four when the *China Clipper* first came to Guam. His parents took him down to Apra Harbor, where the flying boat was to land. Its arrival is one of Blaz's earliest and most vivid memories.

The largest and most southerly of the Marianas, the island where Blaz was born had virtually belonged to the U.S. Navy ever since Spain ceded it to the United States in 1898. The Navy employed many Guamanians—the natives were called Chamorros—and influenced everything they heard, read, or saw of life beyond their atoll.

Blaz and his parents stood patiently amid the spectators at the harbor, the boy lost in a forest of legs. Finally, a murmur passed through the crowd and Blaz's father reached down to lift him to his shoulders. He was pointing toward the water, and as Blaz squinted he saw a dot above the clouds. "Do you see?" his father asked. "Watch it carefully. Behind that little dot in the sky is the whole world."

Within a year, weekly Clipper flights were carrying passengers as well as mail. "The opening of the Pacific routes affected my future tremendously," Blaz says today. "It opened up avenues of thought and culture that we otherwise would never have known. It made it possible for books to come in, not just what the Navy fed us, and people were able to order things for the first time from catalogs. We saw American movies, and I was able to send away for a cowboy suit just like the one Hopalong Cassidy wore." In 1937 Pan Am extended its airmail flights to Hong Kong, and two years later two 41-ton Boeing B-314 Clippers joined the Martins on the Pacific routes.

Eight years ago Blaz retired as a Marine Corps general, and in 1985 he was elected Guam's congressional representative. The boy by the lagoon had become part of the world behind that dot in the sky.

As the *China Clipper* first approached Manila on November 29, 1935, the waterfront park began to fill with 100,000 spectators. Among them was Dionysis Arches, who managed to work his way through the throng for a clear view of the harbor.

"Until then no one had ever seen an airplane that large or one that really connected us with the outside world," he says. "The *China Clipper* landed and the crowd clapped and cheered, on and on. I saw this was the beginning of a great adventure, and I decided then and there I wanted to be a part of it."

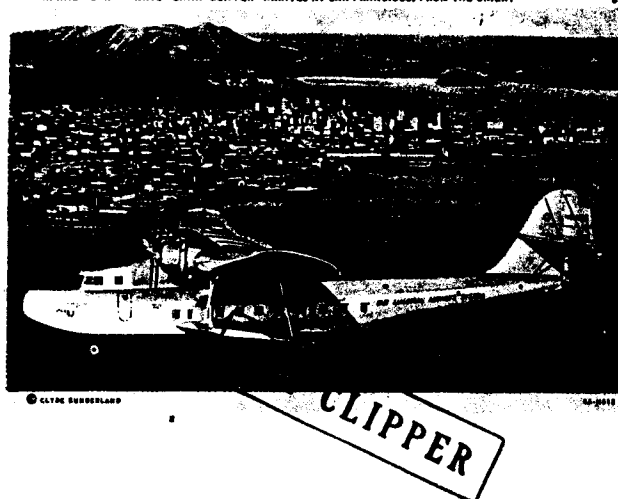
Arches, then 26, had taught primary school for a couple of years and then entered the mechanics' school at the U.S. Naval Station in Cavite on Manila Bay for a four-year program in aircraft, destroyer, and submarine maintenance. In short order he was hired by Pan Am as a seaplane mechanic.

"From the beginning I was proud," he says, "and even now I'm proud. The *China Clipper* changed the way I lived. Pan American gave me dignity in my work. In my society people looked at me as someone to be respected."

Not one to rest on his laurels, Arches took a correspondence course and studied far into the night for the next five years. In 1940, as Pan Am began B-314 passenger service from San Francisco to New Zealand, Arches passed the U.S. aviation mechanics exam. By the time he retired in 1971 he was working on Pan Am's Boeing 747s.

"Pan Am helped me to live better—financially, in my standing in the community, and in my family life," Arches says. "I traveled around the world to training schools in London, New York, San Francisco, and Los Angeles. I was in Manila on the

PAN-AMERICAN AIRWAYS "CHINA CLIPPER" ARRIVES AT SAN FRANCISCO, FROM THE ORIENT



day the *China Clipper* landed because it was a part of God's plan. All my prayers were answered."

In January 1941 Pan American reassigned John Cooke. The Cookes and their two sons became the first family to reside on Wake Island. They arrived by Clipper from Honolulu and Midway. "As we approached, someone pointed out a distant shape in the water," Isyl says, "and I thought they were mistaken. Wake looked like seaweed, a whole raft of kelp floating in the ocean. I said, 'This is an island?' But it turned out to be, and we lived on it."

It was a heady existence for the Cookes. Part of John's job as Wake station manager was running Pan Am's hotel. Ernest Hemingway came to try the deep-sea fishing and stayed a week. Playwright and future diplomat Clare Boothe Luce and her publishing magnate husband Henry dropped in, as did assorted movie stars and a cross-section of the world's diplomatic corps. By then the M-130s and the B-314s were providing biweekly airmail service from San Francisco to Singapore.

Looking back nearly 50 years later, Cooke admits that, despite the glamour, 1941 "probably wasn't the best time" for an American family to be pioneering on Wake. The U.S. military was beefing up its Pacific outposts and war seemed a certainty. That November, despite the Cookes' objections, the Navy moved Isyl and their sons to Oahu's Pearl Harbor just in case Japanese forces made it as far as Wake.

Australia was the next Pan Am target in a route that was growing like Topsy, but the Pacific Division was operating in the red with no financial relief in sight. Having conquered that ocean, Trippe had poured most of Pan Am's cash into the fledgling Atlantic division, which, alone of all the aspirants for the privilege, had started transatlantic service in the summer of 1939. Several months later war engulfed Europe, and the following year tensions began rising between the United States and Japan. Pan Am's material losses in the Pacific were about to surpass the financial.

At 6:30 in the morning on December 8, 1941, the *Philippine Clipper* took off for a routine 10-hour flight from Wake ("Where America's Day Begins") to Guam, 1,500 miles to the west. On Midway it was still December 7.

Winfield Scott Cunningham, a Navy lieutenant and the senior military man on Wake, was confused by a terse message he had just received from Naval Command at Honolulu. He walked down to the pier where John Cooke was watching the *Philippine Clipper* disappear, showed him the message, and

6. asked what he thought of it. As in other potential hot spots around the world, Pan Am employees sometimes had better access to information than the military.

Cooke looked at the paper and read: *Oahu under attack*. "I don't know," he said. He thought for a moment, then had an inspiration. "Don't we have a gunboat named *Oahu*? And isn't it on the Yangtze?"

Cunningham nodded, relieved. "Why didn't I think of that?" he said. It was a good guess—four years earlier Japanese dive bombers had attacked the *Panay*, another U.S. gunboat on China's Yangtze River.

A moment later Cunningham received another message. "It wasn't the gunboat *Oahu*," he shouted at Cooke. "It was the island. Condition One! Call the Clipper back!"

Cooke jumped into the Clipper launch tied to the pier and picked up the radio transceiver microphone. The Clipper was 15 minutes out, approaching the outer limits of the communications radio, and Captain John Hamilton was barely able to understand Cooke. Reluctantly, he turned the airplane back toward Wake to abort the *Philippine Clipper*'s last peacetime flight.

Pan Am meteorologist Walter Nobs was aboard the Clipper when it turned toward Wake. Nobs had watched the *China Clipper* depart Alameda six years earlier—he flew photographers and sightseers around the bay in biplanes back then—but he didn't sign up with Pan Am until 1937.

When the *Philippine Clipper* landed at Wake it was immediately refueled and unloaded with the intention of sending it out to search for the Japanese fleet. Some 200 tires that had been destined for the American Volunteer Group's P-40s in China were burned at dockside to prevent them from falling into Japanese hands, and the 100 mail sacks were turned over to the Marines, who later burned them as well. Then the Clipper was stripped of everything that could be thrown overboard and held at the dock. Nobs went to the hotel where base personnel and some of the Clipper's crew and passengers were having lunch.

Nobs had just sat down at a table near the front door with an Army Air Forces lieutenant when he heard a thud. For an instant he thought it was a construction crew dynamiting nearby, but it was quickly followed by a *thud-thud-thud*. Someone across the room yelled, "Bombs!"

The lieutenant exited so fast the screen door came off its hinges and ended up on the porch with Nobs right behind it. He crawled into a drainpipe that was part of a stack awaiting installation beside the lagoon. Once inside, however, he thought, *If they drop a bomb on this no one will ever find me*, so he crawled to the other end and waited out the first wave of the attack under a bush.

From under the shrub he watched the bombs march up the beach to his hiding place. The other thing he saw was rats. They were everywhere. They came out of the underbrush, the trees, the construction equipment, the ground. "I had rats up my sleeves, up my pants, scurrying across my face, all over me," he says. "None of them bit me. They were as scared as I was. I think they were trying to use me as a cushion for the concussions coming out of the ground."

When the attack ended and the Japanese aircraft disappeared to the south, Nobs stood up and shook himself to get rid of the rodents. Everything seemed okay. It wasn't until he got back to the airplane that he discovered two bloody holes in his shirt and a long shallow furrow across his back; a half-inch lower and the bullets would have hit his spine.

The *Philippine Clipper* had some damage as well, but it too had survived. None of the 23 bullet holes was below the waterline, and none had cut a control cable. Some 30 Pan Am

employees clambered aboard, and when Cooke counted heads he found he was missing only Waldo Raugust.

Waldo Raugust heard about construction work in the Pacific in 1940 from a girlfriend who worked for Pan American in San Francisco. At the time he was working on a project in Oakland, so he passed the lead on to a roommate, who was soon off to the Pacific to help build a base on Canton Island for the San Francisco-New Zealand flights. A year later a job on Midway was snapped up by another roommate. When a third job in maintenance on Wake came along Raugust's remaining roommate was about to get married, so at age 23 Raugust took the job himself.

One of the roommates who had preceded him to the Pacific was on the *Philippine Clipper* with the other Pan Am employees, waiting for Raugust to turn up after the attack. Cooke wanted to go search for him, but Clipper captain John Hamilton told him to wait with the others and keep the group together. Hamilton took the only available vehicle—a garbage truck—and sped over to the base hospital. He apparently missed Raugust by minutes.



"After the bombing stopped I saw that a number of the Guamanian boys were wounded," Raugust recalls. "I put them on a flatbed and drove them over to the hospital. The doctor there said there weren't enough beds, so next I drove down to the warehouse and brought back six cots. After the wounded workers were put to bed I went back to the base and picked up the three that had been killed outright. At the hospital we put them in rubber bags, tagged them, and put them in the reefer [refrigerator] room. Somewhere along the way I remember looking across to the lagoon and seeing the Clipper taking off." Raugust, along with military personnel and other civilian contractors, was stranded on Wake. Two weeks later Japanese troops declared them prisoners of war. Raugust was imprisoned for nearly four years in China and on the Japanese island of Honshu.

Looking back, Raugust has had no second thoughts. "I've never regretted it, not then and not now," he says. "I did a job that needed to be done." In fact, Raugust says the events that day conferred on him a singular honor. "Of all the millions of people in the world, I like to remind myself that I'm the only one of my kind, the only one of Pan Am's stateside employees to be left on Wake Island."

Raugust came home, worked for Pan Am until 1976, when he had a heart attack; he retired officially five years later.

Forty-eight hours after fleeing Wake Island and 24 hours after being reunited with his family, John Cooke stood with Hamilton in Admiral Husband Edward Kimmel's office on the top floor of the Navy Building at Pearl Harbor, reporting on the attack and the escape of the bullet-riddled *Philippine Clipper* via Midway, also in flames, to Oahu. When they finished their story, Kimmel, commander of the U.S. Pacific fleet, looked thoughtfully at Cooke, as though searching his memory. "Cooke . . . Cooke—as I recall, when we wanted your family

off Wake a few weeks ago you put up a terrific fuss."

Cooke grinned sheepishly. "Yes sir, I guess I did."

"What do you think of the idea now?"

"A very, very good idea, sir."

But Kimmel wasn't willing to leave it at that. He fixed both men with a fierce stare. "That's the trouble with you civilians," he said. "You ought to know that we Navy people have far better information than you do, and that we know exactly what we're doing."

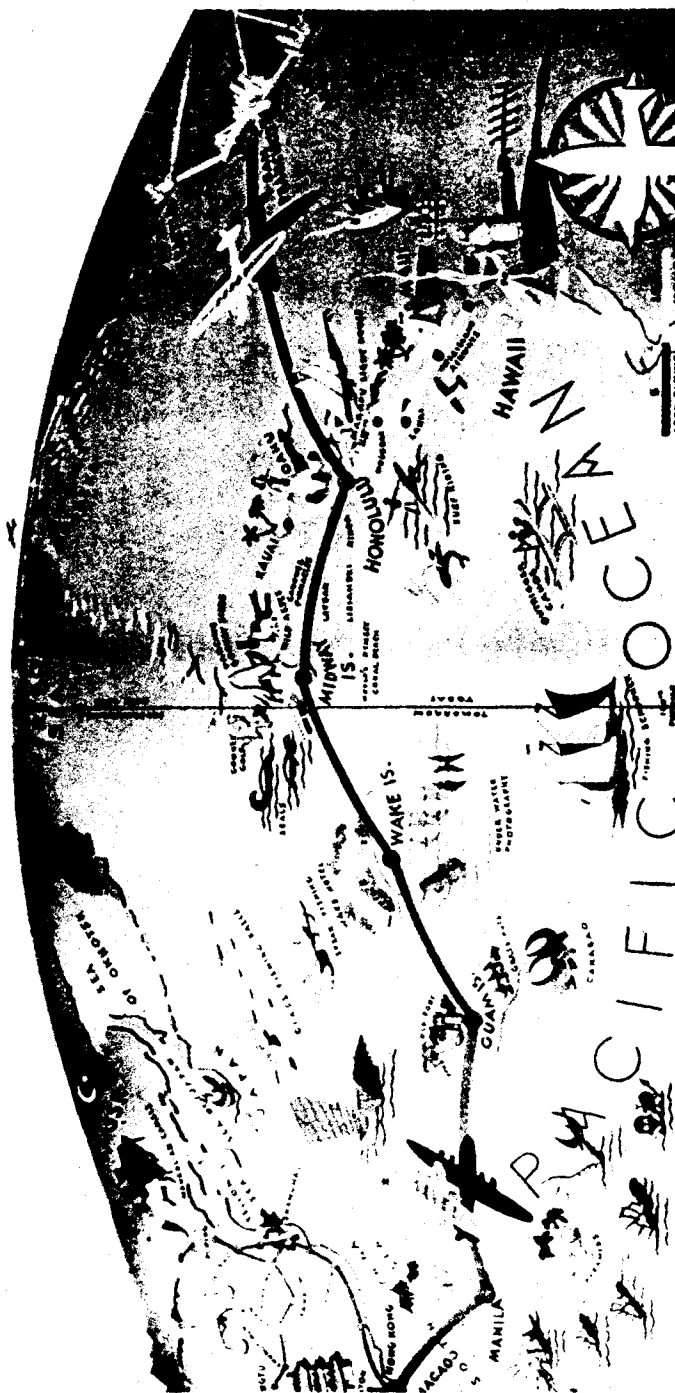
Cooke's grin faded. As a civilian, he was in the Navy Building as a courtesy—but at that moment he and Hamilton knew more than Kimmel or anyone else in the Navy about events in a part of the world that was Kimmel's responsibility to protect. Pointedly, he turned from the admiral's gaze and looked out at the devastation in Pearl Harbor. Eighteen ships of the Pacific fleet had been sunk or put out of action, nearly 250 aircraft had been destroyed or damaged, and in the capsized *Arizona* alone over 1,100 sailors, unwarned and unprepared, lay entombed. Honolulu hospitals were overflowing with the burned and wounded. Below the admiral's window the wreckage still floated out with the tide and the fires still burned. Cooke turned back to Kimmel and met his glare without a word.

Later that day Cooke heard from his father, an officer under Kimmel's command. "You never should have done that," his father said. "The admiral didn't like it." But it didn't matter; a week later Kimmel was relieved of his command.

By war's end all three Martins had crashed, sunk, or disappeared at sea, and the larger Boeings were plying the Atlantic routes. In 1946 all the flying boats were replaced with faster and more cost-effective landplanes like the Douglas DC-4 and the Lockheed Constellation. Pan Am got bigger, but increased size and international competition forced it to operate more like a business and less like a goodwill ambassador and unofficial branch of the government.

In November 1985 Pan American organized a 50th anniversary recreation of the *China Clipper's* first flight, this time in a Boeing 747. Among the guests aboard the *China Clipper II* were 100 Pacific pioneers, including John and Isyl Cooke, Waldo Raugust, Ben Blaz, Dionysis Arches, and Walter Nobs. But the festivities were bittersweet, for just months before, faced with a desperate need for capital, Pan Am had announced that it would sell all its Pacific routes to United Airlines. For those who had been part of the Pacific adventure, it was inevitable. The party had ended long ago. ➔

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PHOTO PAGE

Left column; Mr. & Mrs. Gordon Hastings with Gordon's Pilatus Porter. Photo by Fred Wunsche.

Don DeCook's Lemberger, went O.O.S. at Muncie. Photo by Chris Starleaf.

Tim Lavender's model building class. Great bunch of kids and going to a great bunch of modelers. Photo by Tim.

Right column; Fine flying Rearwin Speedster (aren't they all?) by Pete Azure. Photo by Fred Wunsche.

Fokker E.IV by Radek Gregovsky from the Czech Republic. Plans available from Radek, see his ad in this issue.

S.O.S S.O.S. S.O.S.

Don Hewston, 16 East Glennis Dr., Greensburg, Pa. 15601 is looking for a kit of the Korda Jr. as kitted by LSM Aviation. A copy of the plan and printwood would also be OK.

* * Thermals and Stability * * Mumbo Jumbo # 82 from the pen of the Glue Guru

Salutations, disciples! Today we shall contemplate the ways of thermals and the effect of model stability upon the altitude gained when riding a thermal.

Thermals come in different forms ranging from a horizontal drifter to a vertical boomer. The drifter serves as a mild, helpful extender of glides. Worth a few seconds and posing no problem, it exists mostly early in the morning as a residue from the prior day's heat. Even 5 feet of altitude is enough to permit entrance; once on board we are granted a superb glide, having little to do with grim aerodynamic reality.

The vertical boomer is very different. For one thing, the entrance height is usually at least 25 feet and sometimes 50. It is possible to fly at a contest site harboring a boomer right over the field, and yet only a few will catch a ride. The reason is plain: few scale models are capable of climbing 50 feet. If you wish to get on board, climb is the first requirement.

When engaged, the model will nod several times and then settle down to fly its own circular path within the rising current. Values of upwards velocity between 3 ft/sec (frequent) and 10 ft/sec (rare) result in an elevator-like climb. Because there is no way of coordinating the model turning radius with the diameter of the thermal, the usual result is breakout after a limited altitude gain, of say 50 feet. Unlike entering a thermal, departure has its problems. Surrounding the rising air is a powerful downdraft, necessary to return cooling air to lower levels. Without the downdraft, a vacuum would result near the ground, making breathing a bit difficult. In short, the downdraft is a good thing.

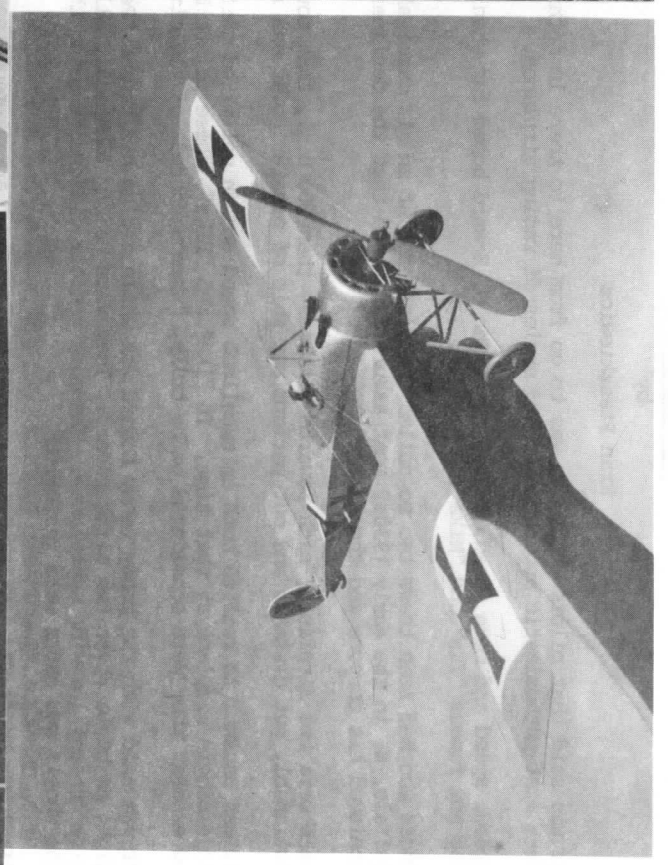
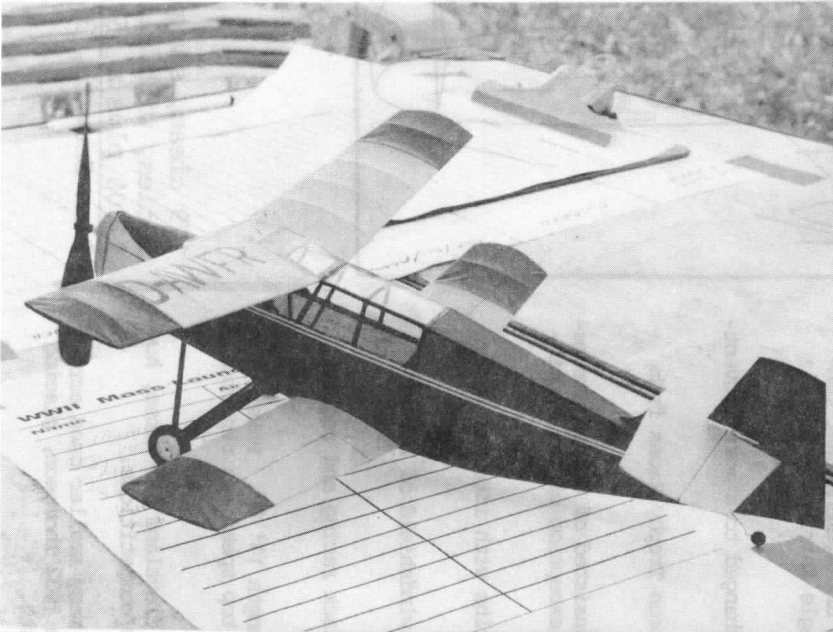
The catch is that the downdraft magnitude is huge. The model reacts by falling off a cliff. Unlike the quick nod seen upon entering the thermal, lower down, the usual exit at altitude is a violent disturbance superimposed upon a dive. Assuming that our model is stable in a fore and aft sense, it will recover before it hits the ground. However much of the altitude gain is lost. It is even possible to catch a fat thermal and end up with a total duration no greater than dead air time.

What can be done? It helps to increase the fore and aft stability; especially the dynamic damping of disturbances. How? Assuming that the wing can't be moved, the only thing that works is to move the CG towards the front, ie add weight to the nose.

This is a painful step indeed, for every added gram cuts into dead air altitude, and without sufficient dead air altitude, the model will never reach the thermal. We are between grim alternatives here and much judgement is necessary - every model case is different.

The other useful approach is to keep the model within the thermal by tightening up the climbing turn to its limit. Usually a good deal of right thrust, plus additional rubber, to make up for lost thrust, will yield an extremely tight right turn under power, opening up in glide. Catches here are: (1) the resulting dog-chasing-its-tail trajectory is unrealistic (2) the model's spiral stability may be inadequate to the task (3) the tighter the turn, the greater the chance of missing the thermal entirely. There is something to be said for a meandering flight path as a thermal detector.

As a practical matter, both stability and circling possibilities can be pushed simultaneously. Many models can absorb a bit more weight up front and still achieve a good height. If yours is reluctant, even with more rubber, try cutting the prop pitch. Should tight right circling prove unacceptable to your model, check for a leftwards warp.



by

Fran Ptaszekiewicz

It was said that pilots whose aim was to go from here to there in nothing flat, were most enthusiastic about the Howard series of racing airplanes.

Speed, speed and more speed, that is what Ben O. Howard hoped for when building the now famous "Ike" and "Mike".

Those who had seen these two so-called "baby racers" at an air carnival held in Buffalo, NY in the early 1930s, most assuredly agreed that the designer had achieved his purpose and then some.

Here were two airplanes, each powered with less than 200 h.p., that could unquestionably out distance and out perform any ship of greater power and repute.

It was unusual to realize both an excellent speed and an unlimited performance in a single airplane at that time. In "Ike" and "Mike", these points both seemed excess, they were considered to be truly, "thoroughbreds of the air".

It was said with the money Benny Howard won while racing his famous "Pete" design, he built these two slick racers. They were nearly identical, all white, wire braced, low-wing monoplanes. The only visible difference being the way the wheels and pants were installed.

"Ike" was originally equipped with a novel tandem wheel arrangement that consisted of two small wheels which were covered by a single fairing or pant in the 1932 version.

By 1935 this landing gear and wheel arrangement were changed to a more conventional single wheel-pant layout.

When built in 1932, both ships placed in various Thompson Trophy Races from 1932 thru 1935.

Construction of the fuselage, tail and landing gear consisted of welded chromolybdenum tubing, which was fabric covered, with the exception of the aluminum engine cowl.

The wing was constructed of spruce spars and plywood ribs with internal wire bracing and was fabric covered.

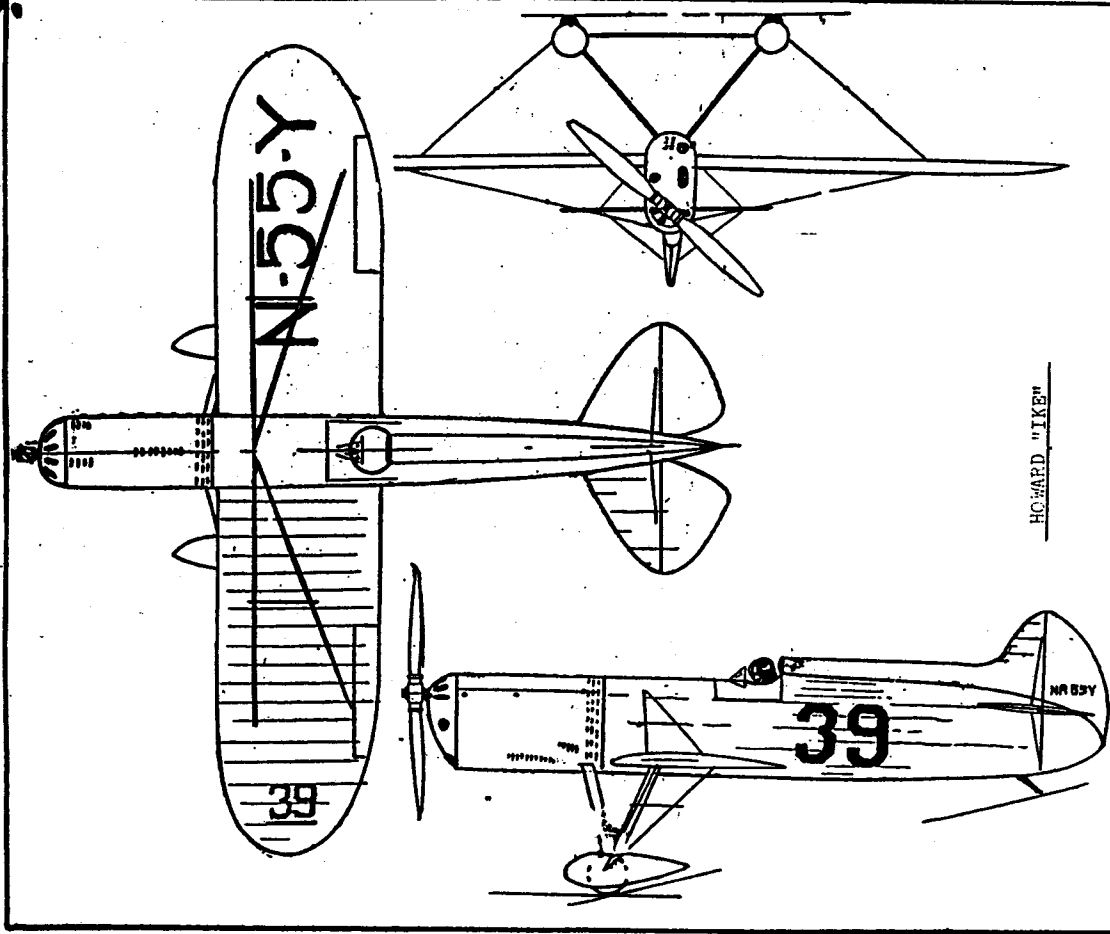
Of interest was the fact that holes were added in the windshield of both aircraft to improve cockpit ventilation.

Both aircraft were painted a gleaming white and had black racing and registration numbers.

Dimensions of both airplanes were; wingspan 20' 1"; length 17' 0". Power plant was a Menasco C-6-5 Buccaneer 6 cylinder engine. The top speed was reported to have approximately 207 m.p.h..

The airplanes were both repainted yellow for the 1939 Cleveland Air Races, however for some unknown reason did not fly in any of the competitions.

In all, "Ike" participated in 3 major air races, plus many smaller ones across the country. Among the larger races entered were; the 1932 Thompson, placing 7th, 1934 Thompson, placing 4th, 1934 Greve, placing 4th.



YESTERYEAR PLAN SERVICE

List #9

179 clean, sharp legible plans from new master transparencies, with all rib and former patterns. You MUST send \$1.00 plus a 55¢ S.A.S.E. for your copy to; Yesteryear Plan Service, 3517 Kristie Dr., Erie, Pa. 16506

Airmail Pals

Dear Lin,

I was surprised to see the color schemes given for Lindbergh's Sirius in 9-10/97 FAC News article, "The Golden Age" by Fran Ptaszkiewicz. As per your editorial comment, I had never previously seen reference to a color scheme other than black fuselage and orange wings and tail for Lindbergh's Lockheed.

As displayed in the National Air and Space Museum, the plane does indeed have a black fuselage (with gold stripe) and orange wings and tail. I have a number of color photos taken of it during my last visit to the Museum.

The earliest color references I could find for Lindbergh's Lockheed all went back to his plane in its original configuration of two open cockpits, before the long canopy was installed over them. These sources also show the colors as being black fuselage with gold pin stripe and orange wings and tail: Model Airplane News, 4/30, page 21; Popular Aviation, 10/30, page 60; and the Cleveland Model and Supply Company's 1930 three-view drawing number SE-10.

The MAN article makes a particular point of the colors, stating that "The colors designated in this article are exactly as those used on Colonel Lindbergh's plane, which combination was selected by himself."

The PA reference refines the color description giving the shade of orange as a "red-orange" (as against a yellow-orange shade). This agrees with the plane's colors at the NASM.

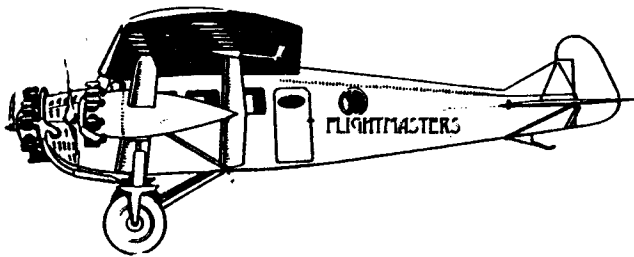
As regards the lettering, the name "TINGMISSARTOQ" on the fuselage is white and the "NR-211" registration on the wing and tail is black, as is the Lockheed logo on the fin. At the Museum, the floats and struts are aluminum. As a landplane, the 1930 references say the landing gear struts and wheel pants were black, with gold striping on the wheel pants.

Sincerely yours,

Jim Alaback

S.O.S.--S.O.S.--S.O.S.

Wanted; 3-views and color scheme for the Lemberger LD-20. Barrie Taylor, 2 Thackeray Ave., Winnipeg, Manitoba Canada R3K0M1



S.O.S.--S.O.S.

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II Model of a model (Of any fuselage outdoor free flight gas or rubber)
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SEND RESULTS TO MIAMI, 2180 Tigertail Ave, Miami, FL 33133

Dick Mallow, 2403 New Albany Rd., Cinnaminson, N.J. 08077 is looking for info and scale data for the Dornier DO-335. Can you help?

Wanted; 3-views of Bjorn Andreason MFI-17. Joe Valenta, 3748 W. Butler, Phoenix, Az. 85051.

Wanted: Kits or plans and printwood for the Scientific 1/4 A C/L Douglas SBD Dauntless; Comet Struct-O-Speed Ercoupe; MODELHOB Dewoitine D.520; Crescent Model Co. plans such as the Curtiss-Wright Jr.; Ripin M.A.Co. Curtiss F9C-2, and other plans and printwood of their kits; Selley plans and p/w including their Curtiss Falcon; Battaglia plans and p/w including their Dewoitine D.500; other scale kits by Cleveland, Berkeley, Miniature, Consolidated, Burkard, old Sterling C-Series, and other discontinued balsa kits. Have many kits for sale or trade. Send SASE for list or my list for yours. Thanks. Lou Buffardi, 400 Windward Passage, Slidell, LA. 70458, 1-504-649-6502.



LAIRD STORY

by Ray Payne

Al Whiteside thought that he had bought the "Super Solution" that had been flown by Doolittle in 1931 & 1932. The "Super Solution" registration number was NR-12048. Doolittle was disappointed in the "Super Solution" performance in the 1931 Thompson, so he redesigned it in early '32 and had it rebuilt with retractable landing gear, a much fatter fuselage, and a large raised cockpit enclosure that gave him some forward vision. The '32 rebuild was not a success as he experienced trouble with the landing gear not locking in the down position and had to do a belly landing that damaged the lower wing and bottom of the fuselage. Also, the redesign set up a severe buffeting problem in the stabilizer at landing speed. The improvements did not produce the expected 300 mph, so Doolittle and Shell Oil decided to scrap the "Super Solution". It was crated in large wooden crates, the fuselage and tail in one, the wings in another and it never flew again after 1932. The fuselage crate is now in the Smithsonian's rebuild facility. The "Super Solution" wings were purchased by Joe Mackey and installed on the "Solution" in the mid 1930's, so the airplane that Al Whiteside owned was a hybrid composed of the Laird "Solution" fuselage, tail and landing gear and the "Super Solution" wings.

Bennie Walker purchased the ship November 8, 1952. He lived in Greensboro, North Carolina. He sold it to Grover T. Parks of Climax, North Carolina on July 1, 1960. "I do not believe that the "Solution" was still flying in 1952 or 1960. The Connecticut Aeronautical Historical Association bought the ship for the New England Air Museum in 1962.

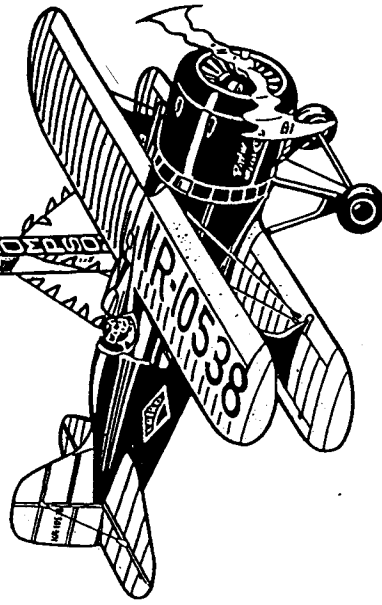
Bob Hirsch has given his permission for us to reprint his 3-views of the Laird aircraft in the newsletter.

Bob Hirsch is a retired aeronautical engineer from Douglas Aircraft and a retired Air Force Colonel. He has done 3-view drawings for most of the major aircraft magazines for some 35 years. He is used as a consultant by aircraft museums, as he is considered to be an expert in the details of 1930's aircraft. He is one of the charter members of the National Historic Aircraft Association and served as secretary. He is a charter member of the Society of Air Race Historians and is an active participant in their Air Racing Symposium at Cleveland, Ohio every year.

to be continued in the next issue.....

THIRD ANNUAL FAC WINTER OUTDOOR CHAMPS----PALM BAY, FLA.---Dec. 28-29-30, 1997. Embryo, No-Cal, FAC O.T. Gas Replica, O.T. Rubber, Greve/Thompson Races, Peanut, Jumbo, Golden Age Scale, O.T. Stick, WW-I, FAC Scale, FAC Power Scale, FAC Dime Scale, WW-II, Giant Scale. The races and WW-II will employ the 15% rubber rule. For more info contact; Steve Bacom, 836 Banbury Dr., Port Orange, Fla. 32119. 904-788-7309

THE FLYING CLUB



Geneseo, NY 1997

AVAILABLE NOW!

This year's T-Shirt and plan from the Geneseo contest. The T-Shirt is as pictured above. The Laird Solution done in black and gold with the FAC logo in red. Pres Bruning did the art work for us. This shirt has to be one of our best! It comes in sizes small, medium, X-large, XX-large and XXX-large. Price for the shirt is \$12.50 postpaid.

The plan this year is of the same aircraft and was drawn by Tom Nallen, Sr., another great plan by Tom! Price for the plan is \$4.00 postpaid. Be the first Kid on your block to get these plans and T-Shirts.

Send your orders to FAC-GHQ, 3301 Cindy Lane, Erie, Pa. 16506.

DREAMS

*Some fellows are out to make money in shoals
And some to win races and some to shoot goals,
But I sit in my study and breathlessly read
Of McCudden and Mannock and their deathless breed.*

*Of Boelcke and Bishop, Richthofen and Ball,
Yes, by name and by fame I'm acquainted with all;
And sometimes the study fades out from sight
And high over Flanders I'm swooping to fight.*

*I've raked a tall Fokker from cockpit to rudder
And drawing away I've bagged yet another.
Then a noise from the engine says something is wrong,
And I'm crashed from the clouds, by the old dinner gong!*

J.N.H. Brennan

VIDEOS

Escort: The P-51 Mustang
Personal interviews with Mustang pilots and rare combat footage make this video a must-have for anyone interested in WW II aircraft.

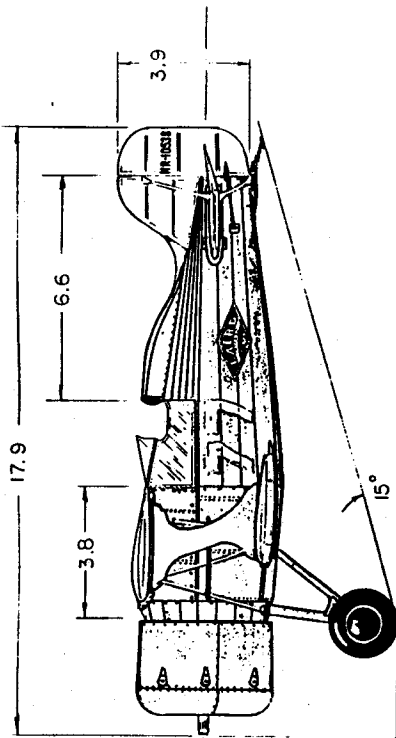
Building & Flying Rubber Power
Now in editing. Will be ready by November 1, 1997.

1997 U.S. Indoor Championships
If you love rubber power, you will want this video in your library. Features flying scenes of Ron Ganser's beautiful 1911 Cessna, plus the surprise of the year, 13 year old Michelle Boyd and her winning Aristocrat.

FAC NATS 1992
It's back on a limited basis and just as interesting as ever.

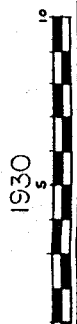
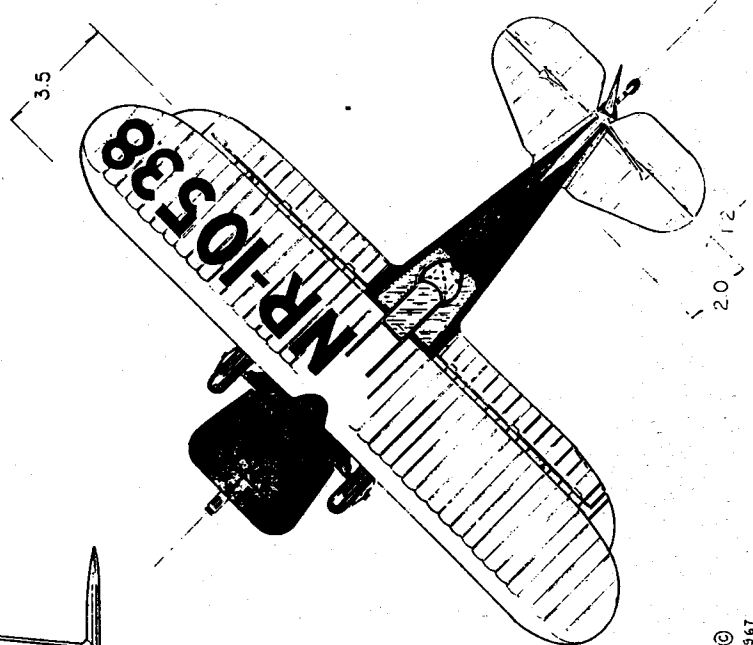
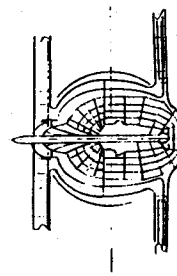
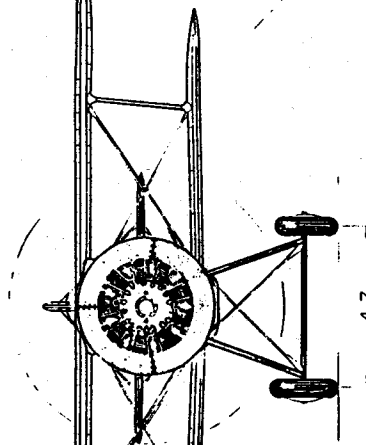
All videos are VHS and \$19.95 plus \$3.00 S&H. Check or M.O.

Harding Aero Productions
4782 Unity Line Rd.
New Waterford, OH 44445



Laird "Solution" as it appeared in 1930 when flown by Speed Holman it won the first Thompson Trophy. Was powered by 470hp P & W "Wasp Jr." engine one of first out of the factory. Had gold wings & tail, black fuselage, landing gear and wing struts.

Restored by New England Air Museum where it is now on display.



LAIRD
LC DW 30C
"SOLUTION"

© 1967
RS. HIRSCH

No one knows exactly where it originated. We call it Murphy's Law of Perversity and it reads as follows:

*Nothing is as easy as it looks.
Everything takes longer than you expect.
If there is a possibility of several things going wrong, the one that goes wrong first will be the one that will do the most damage.
Left to themselves, all things go from bad to worse.
If you work on a thing long enough to improve it, it will break.
If you think everything will be OK, you have surely overlooked something.
Mother Nature always sides with the hidden flaw.*

AIRDEVIL MODEL CO.

Planbook

SIX FLYERS AND ONE SOLID
IN THE 10¢ STYLE OF OLD.
\$10.00 P.P. TO DAVE STOTT,
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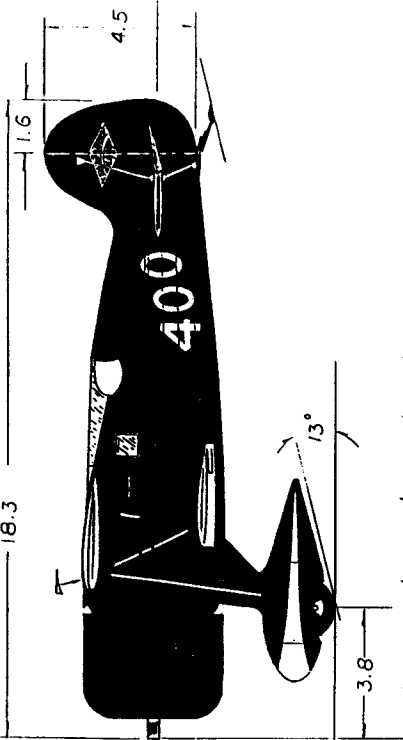
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BOB ISAACKS - President
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Katy, Texas 77449

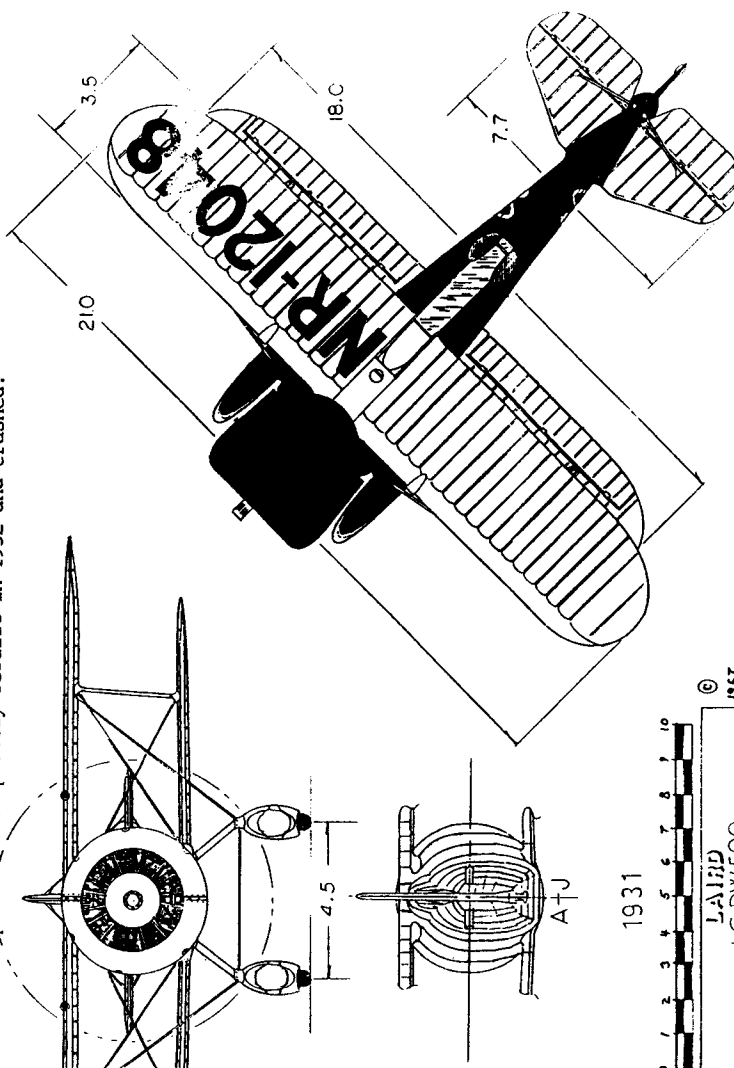
713-855-6853



DIA. 8.3
FOR DIRECT DRIVE
9.0
GEARED ENG.

Laird "Super Solution" as it looked in 1931 when it won the Bendix Trophy with Jimmy Doolittle at the controls. He led the Thomson Trophy race in this plane the first 3 laps, but had to drop out shortly after it burned a piston in the 4th lap. Power was from a Pratt & Whitney "Wasp Jr." of 525 horsepower. Fuselage, rudder and landing gear were all green. The wings, stabilizer and the scallop on the wheel pants were all yellow.

This plane was completely rebuilt in 1932 and crashed.



1931



LAIRD
LC DW 500
SUPER SOLUTION
© 1937
AS HIRSH

BILL KIMMEL FLIES AGAIN!

Bill Kimmel, a member of the Mid-South Squadron, recently celebrated his 73rd birthday by taking the controls in a Naval Aircraft Factory N3N3 biplane, the type in which he learned to fly in December 1941...55 years ago! He was pleased to find that he could still make coordinated turns, keeping the ball in the center. It was the first time that Bill had flown a plane since 1945.

Bill was a Navy flier during WWII. He trained in the N3N3 (similar to a Stearman) at Lambert Field in St. Louis. From there he graduated to the Vultee SNV and later the North American SNJ, both at Pensacola. During the war, Bill flew the Vought OS2U observation plane on sub patrol duty off the Atlantic Coast. With two depth charges, the Vought cruised at 70 knots.

The N3N3 that Bill flew is owned by Lee Kluger in Atlanta. It is based at Cobb County Airport (McCollom Field). You can fly with Mr. Kluger for \$200 an hour. Phone 770-364-3746 or 770-928-6600 (home).

Bill is not one to let George Bush upstage him. For his next birthday, he is going to jump from 14,000 feet without a parachute. Don't miss it.

FLYING ACES VIDEOS 15.

1995 FAC Nationals at Geneseo, NY

2 hours of free flight competition, static display, and interviews, plus narration, background music and sound effects.

\$29.00

Also Available:

1994 FAC Nats remastered with narration, music, and sound effects.

1 hour 50 minutes

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1993 Non Nats, 2 hours including some warbird action and 1993 FAC Outdoor Champs at Muncie, IN

\$22.00

Order any two videos and take \$5.00 off, all three for \$67.00

Send your check payable to:

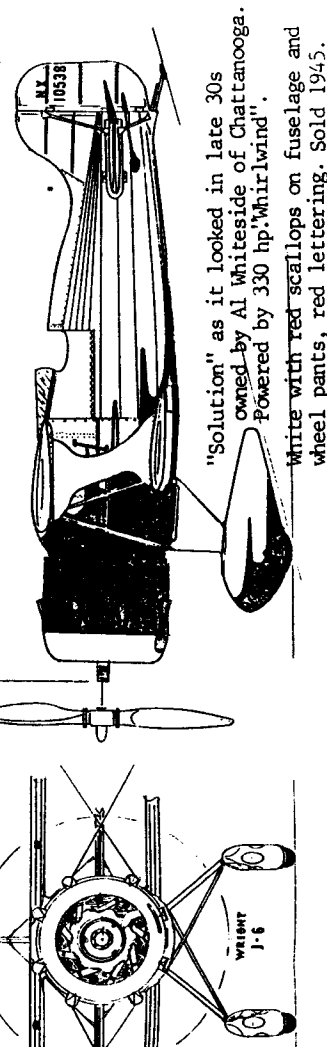
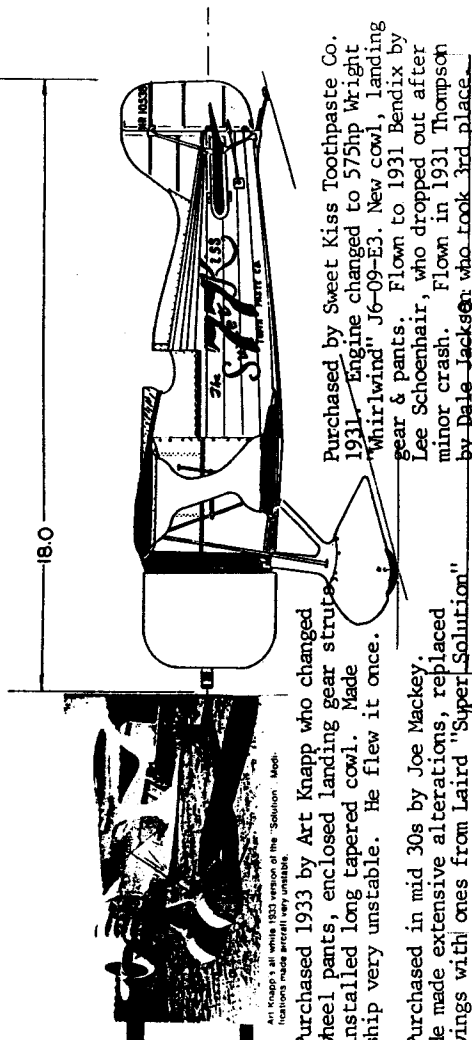
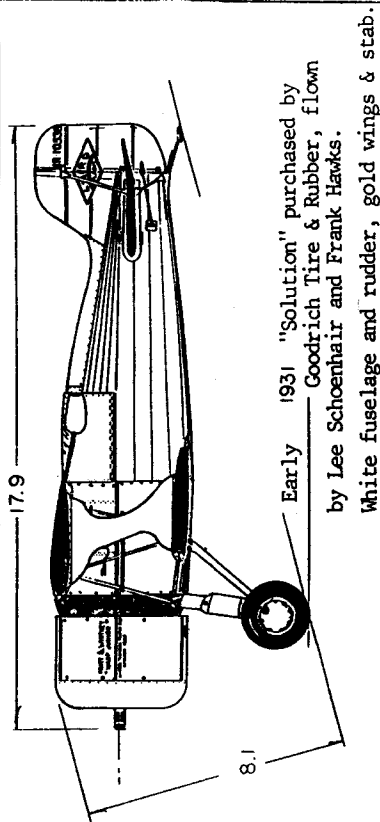
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All prices include postage and handling
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ALTERATIONS MADE TO 1930 LAIRD LC-DW 300



1921 +

1 2 3 4 5 6 7 8 9 10

© 1971 R.S. HIRSCH
LAIRD LC-DW MODS.
300

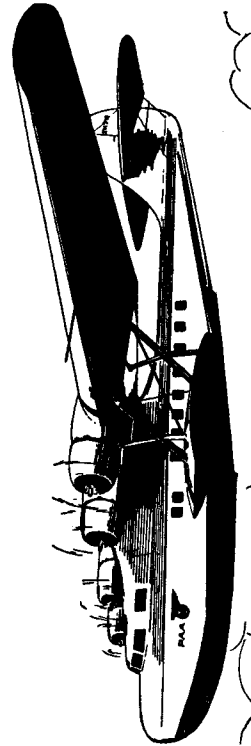
Air Mail

Dear Lin,

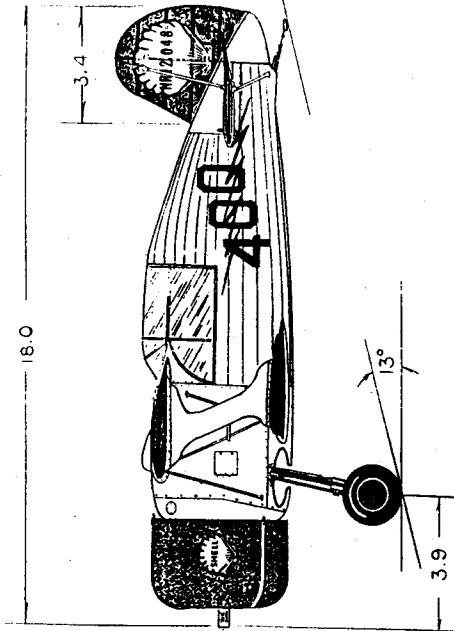
Enjoyed the "Laird Story" article - and just by coincidence several business trips have taken me to New Haven, Connecticut - via Hartford Airport. On each occasion I made it a point to visit the New England Air Museum - which is a very fine museum, and I can comment that the restored Laird "Solution" looks absolutely super - as well as the GeeBee R-1 replica that is sitting beside it. An Earl Ortman racer in fine shape is also on display. Another aircraft which really is a "grabber" is the newly restored Sikorsky S-39. It is simply gorgeous! It looks like it just shipped from the factory in a shammy bag. Many, many other great aircraft on display as well.

One other Laird story you might enjoy. A number of years ago, Matty Laird was found to be living out his years in a condo in Boca Raton. The Florida antique aircraft group associated with the EAA found out about it and started inviting Matty and his wife, Elsie, to their fly-ins and social functions which ultimately led to the construction of the replica SUPER SOLUTION that is on display in the EAA Museum in Oshkosh. There was a great deal of "politics and poker" involved in that project but it was 90% built by the Florida group. Elsie Laird, a delightful person, said that Matty was beginning to vegetate in retirement but becoming involved with the antique airplane group and the "Super Solution" project made him perk up and "bloom like a flower again". He became a familiar figure at many group functions. At one social function, they had a small birthday party for Matty and I ended up sitting beside him. I wanted to talk to him but had a hard time trying to think of something "worthy" to say. Finally I asked him what he thought of Jimmy Doolittle as a pilot. I'll never forget his answer - "Pretty good for a military pilot".

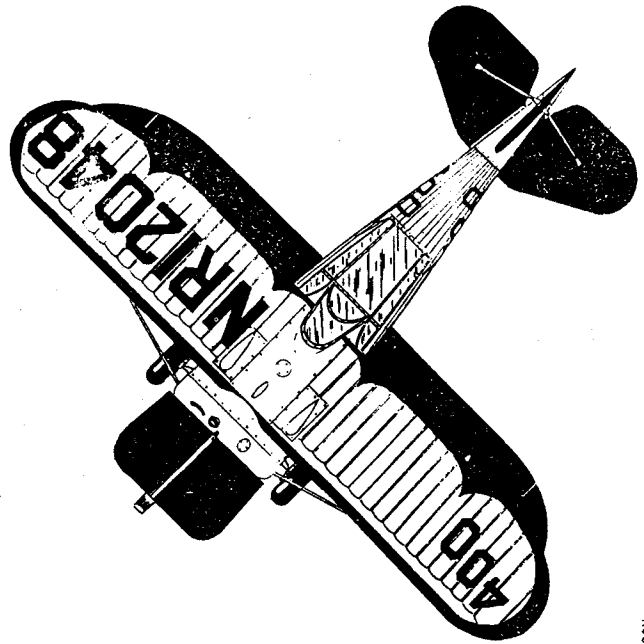
Best regards,
Fred A. Kohnlosy



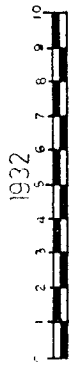
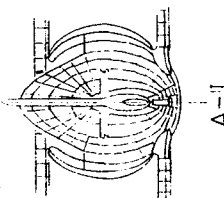
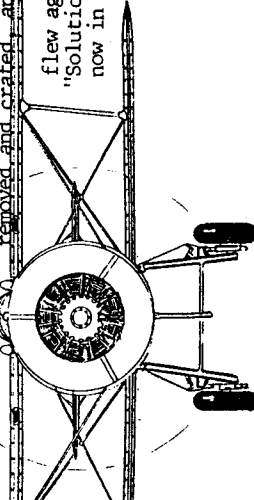
The Martin Clipper No. 7. (By Richard Anderson)



1932-Rebuild of the Laird "Super Solution" flown by Jimmy Doolittle, who had to crash land it when the retractable landing gear stuck in the "up" position. It could not produce the expected speed, so the wings were removed and crated, and the usage and tail in a separate crate in late 1932 and it never flew again. The wings were put on the Laird "Solution" in the mid 30s. The fuselage is now in the Smithsonian rebuild facility still in the large wood crate.



Drawing No. 5



LAIRD
LC DW 500
DOOLITTLE'S SHELL

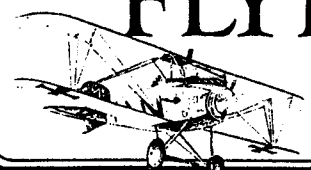
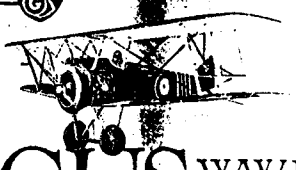
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1967
R. S. HIRSCH

PLANS OF RUBBER MODELS POWER AND CO₂ MOTORS POWER

No.1¹⁹⁹⁷

R. Gregovsky

FLYING CIRCUS W.W.I

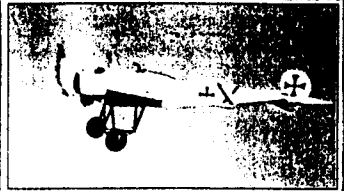

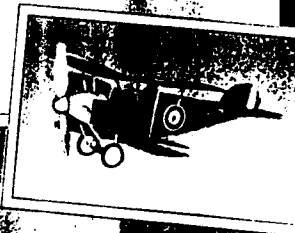
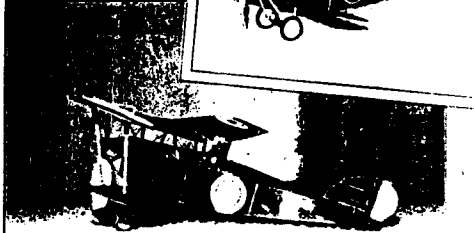



PLANS OF MODELS

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DETAILS, PROFILES

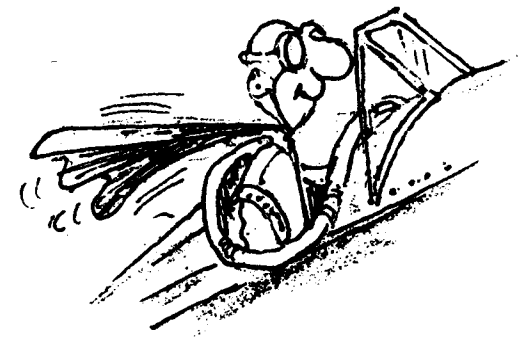





The ad on the left is for the latest item to come from our friend in the Czech Republic, Radek Gregovsky.

This, hopefully will be the first of many of these booklets. You just have to get one of these if you are into World War One types. This edition contains plans, three views, color schemes and photos of the Fokker E.IV and the Grain Kitten. Both are drawn in 1/20 scale and should make for a couple of good flying models.

The price is only \$9.00 postpaid. You can't go wrong on this one!

Somehow the ad for Radek's plans in the last issue was missing the address. To order those plans and the booklet described here send your order to; Radek Gregovsky, Svermova 1371, 266 01, Beroun-2 Czech Republic.



FAC Postal Contests

Here are the final times turned in for the 1997 Postal Contest.

GOLDEN AGE CIVIL

| Pilot | Plane | Times |
|------------------|--------------------|-----------|
| Dave Livesay | Zlin 12 | 38-65-76 |
| Rich Miller | Cessna 34 | 38-70-64 |
| Dave Niedzielski | Rearwin | 59-57 |
| Steve Griebeling | Vega | 73-46 |
| Lin Reichel | Monocoupe | 30-28-31 |
| Gordon Roberts | Stinson 105 | 37-83-120 |
| Bill Harding | Baby Ace | 81 |
| Mark Fineman | Monocoupe | 120-55-57 |
| Walt Farrell | Super Ace | 49-69-82 |
| Bruce Foster | Gadfly | 120-38 |
| Stu Weckerly | Stout 2AT | 120 |
| Tom Hallman | NB-3 | 34-38-52 |
| Chuck Schobloher | Cessna C-37 | 36-50-25 |
| Jack Moses | Dornier Mekur | 26-36-20 |
| Pete Azure | Ong Continental | 43-50 |
| Frank Hirleman | Keene Ace | 43-55-67 |
| Gene Smith | Curtiss Robin | 47-42-62 |
| Jim Kutkuhn | Ryan ST | 34-48-50 |
| Larry Kruse | Messerschmitt m-17 | 87 |
| Steve McKeown | Piper J-3 | 35-36-42 |
| Walt Forbach | Puss Moth | 51 |
| Don Brimmer | Stout AT2 | 39-40-52 |
| Barrie Taylor | Waco SRE | 53-57-67 |

MODERN CIVIL

| Pilot | Plane | Times |
|------------------|----------------|-------------|
| Dave Livesay | Zlin 372 | 79 |
| Ken McConnell | Bede BD-4 | 34 |
| Frank Hirleman | Aeronca Champ | 30-39 |
| Stu Weckerly | Found | 120-111-106 |
| Don Brimmer | Aeronca Champ | 46-36-69 |
| Walt Farrell | Zlin Agro | 32-47-52 |
| Steve McKeown | Jodel Bebe | 35-37-44 |
| Larry Kruse | Found | 120 |
| Jim Kutkuhn | Piper Vagabond | 32-34-80 |
| Gene Smith | Piper Colt | 43-48-52 |
| Chuck McAnis | Cougar | 55-45-41 |
| Bill Stoutenburg | Piper Clipper | 41-38-49 |

The magic numbers were 63 seconds in the Golden Age Civil contest and the number for the Modern Civil event was 46. This means that Gene Smith with a score of 62 was the winner in Golden Age and Don Brimmer won the Modern Civil with the target time right on the nose, 46 sec. Kanones and plan prizes will be sent to Gene and Don.

FAC Postal Contests

As you read this Skysters, this year's postal contest is underway. Once again we will have four wings (events). They are, Indoor Peanut, Outdoor Peanut, Indoor No-Cal and Outdoor No-Cal. To enter all you need do is fly your models and send the times in to GHQ, along with the date of your flight, the name of your model and the wing you flew it in. The contest will end on April 30, 1998. Entries postmarked after May 1, 1998 will not be accepted. Contest times also count. Send the times to; Flying Aces, GHQ, 3301 Cindy Lane, Erie, Pa. 16506.

PHOTO PAGE

Top photo; Great flying Tri-Islander by Pete Mathis. Powered by three electrics. Flown at Muncie. Photo by Chris Starleaf.

Left column; John Blair's models around his Christmas Tree. Hope that tree is outdoors! Photo by John.

T-28 FLOH by Glenn Bearry. This one is a Jumbo! What a monster that must be. Peanut plan in this issue. Photoby Glenn.

Right column; Joe Joseph, editor of the Windy Sock newsletter and a couple of his models. Photo by Frank Hirlman.

Fairchild PT-19 by George Lewis. A real nice flyer. Photo by george.

FOR SALE; Super Strip precision rubber stripper, Precision Balsa Stripper, Beam Scale for weighing indoor models, Winding Stoooge and "Side Winder" rubber motor winder. All new in the box, never been used. Price is negotiable. Nick Sher, 815 Beech Rd., Langhorne, Pa. 19053. (215) 757-0578.

THE INTERNET - What It Means to Free-Flight Modeling

by Joe G. Joseph

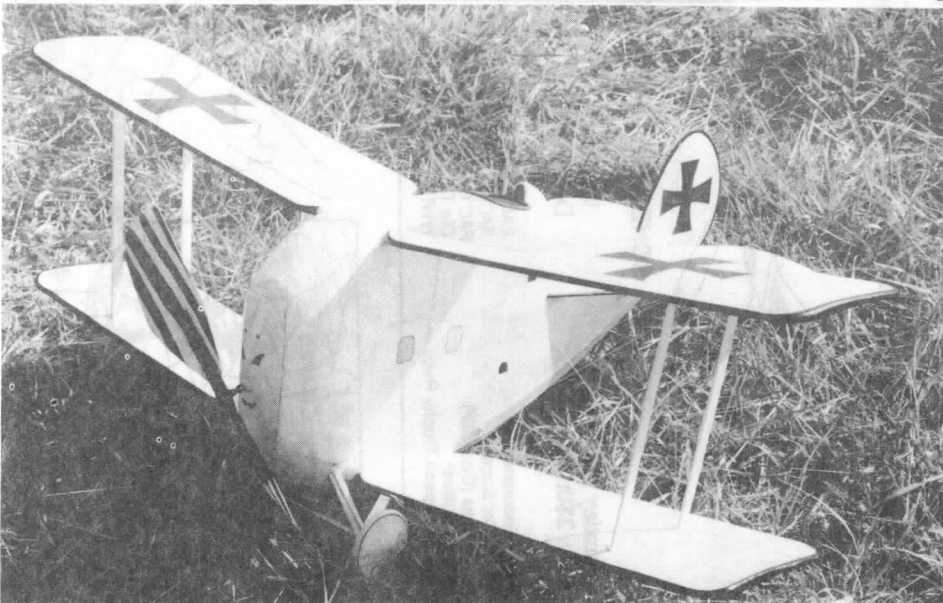
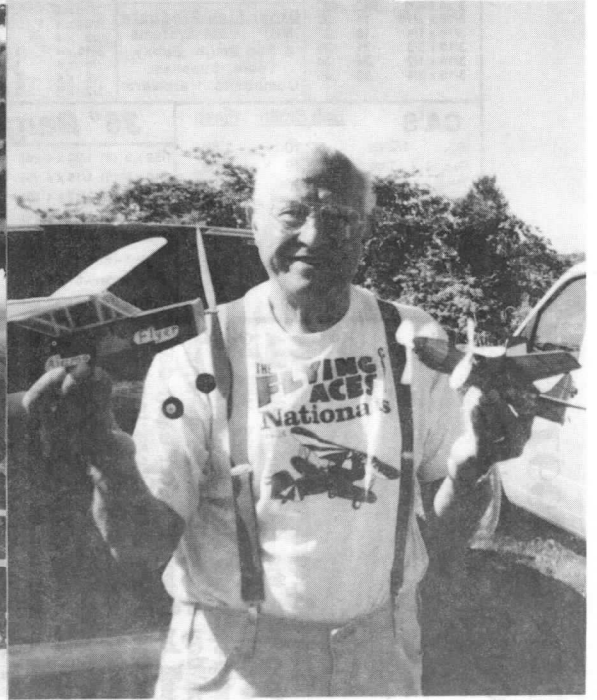
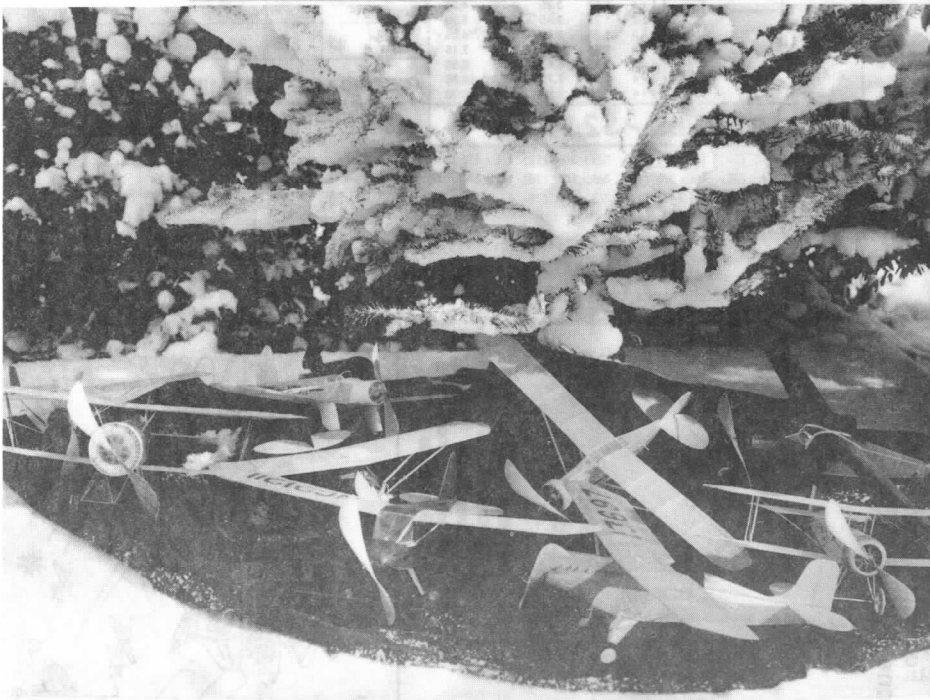
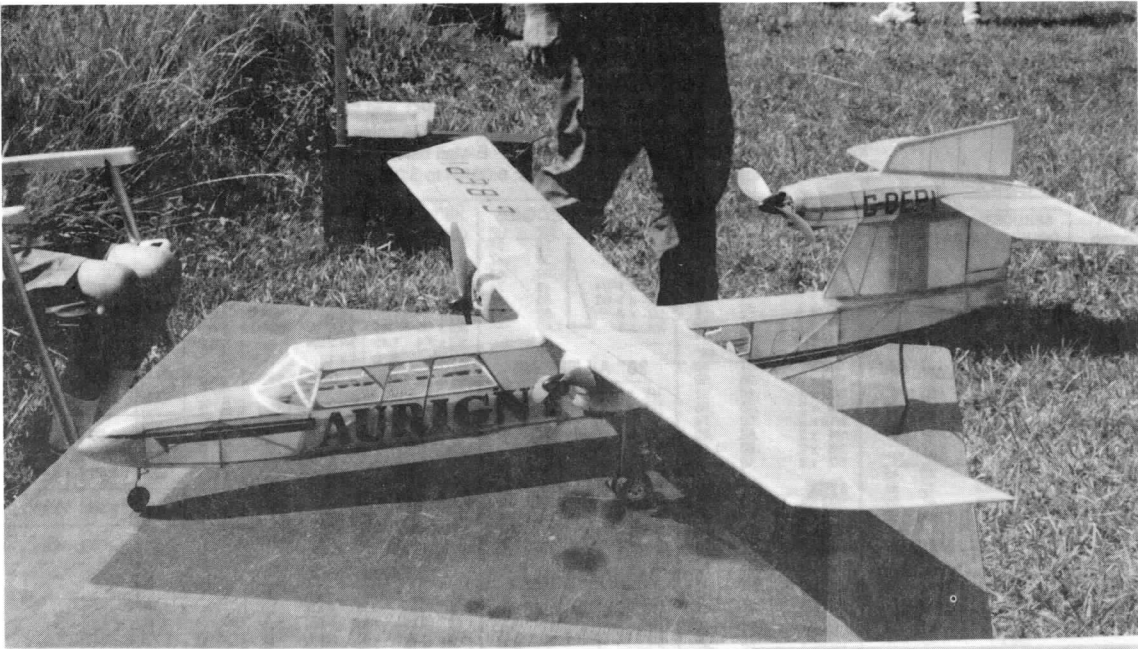
Many modelers envision the computer as a monster that will swallow us all if given the chance, leaving no time for modeling. And this can be true - if you allow it! But for our brand of modeling, the computer and its Internet can be a life saver.

Much is made of the lack of free flight coverage in model publications these days during hangar flying sessions. Indeed, radio control as a sport seems to be attracting many more followers than model building as a craft and art. Taking a current example, *Model Aviation* in its November 1997 issue gave about 43 pages to radio control articles and only about nine pages to free flight. Looking at it another way, 25% of MA's total space is devoted to radio control, while only 5.5% is given to free flight (43% was devoted to advertising). *Flying Models* presents a better picture. Its December 1997 issue gives about 34 pages (39%) to RC and 11 Pages (13%) to free flight (32% goes to advertising). We squawk about this lopsided treatment of our sector of the hobby, but if democratic principles are valid, free-flighters are already over-represented! Looking around us, a reasonable estimate would be that only about ten per cent of modelers are free-flighters. The magazines surveyed above are now providing 20% and 33%, respectively, of their model coverage to free flight. So we really don't have much to squawk about, folks. As long as the majority rules and money talks, let's face it, this is the way things will always be, unless statistics change. But what to do about it?

I think that the Internet promises to be at least a partial answer, if we will become active in it. And you don't have to become a computer nerd overnight in order to participate in it. For the immediate need, you only have to learn to send e-mail and find web sites of interest, no big deal for folks who have learned to squeeze OOS flights out of all varieties of scale models! Despite all the ballyhoo, one can easily survive without much of the computer software gimmickry being promoted. As interest and competence develop, some neat modeling tricks do become possible, though. If enough of us "get on-line," eventually a "cyber magazine" can emerge that will concentrate on modeling *a la* Flying Aces. The extremely low cost of publication and distribution will enable our cottage industries to advertise at very low rates, and who knows? it may become possible to pay folks for submitting articles and plans for publication. In addition, e-mail will enable modelers to communicate quickly and easily about the many daily problems that arise in building, trimming and flying our little jewels. And most important, newcomers will receive the advice and encouragement they need so badly in order to persevere, and they will be able to get it on an individual, personal basis.

Things you might do now, short of running out and buying a computer:

- (1.) Strike up a "relationship" (wotta word!) with someone who is already "computer literate" and try to get him/her interested in helping you. Scan through the many web sites already on the Internet and ask for copies of interesting material. Remember, however, that black and white copies cost about a nickel apiece, and color costs much more. Be sure to compensate in one way or another.
- (2.) If you belong to a club or squadron, check the membership for computer nerdship. An active modeler who knows computers is indeed a gift from the Almighty. (For example, Windy Sock's George Bredehoft, our Internet editor). If you find such an angel, ask him to be your squadron's "Internet Liaison Officer." Ask him to print copies of interesting stuff to present at meetings, but don't expect enough copies for everyone. Computer printers are not very efficient copiers. Again, don't expect him to do it free.
- (3.) Take a look at Windy Sock at <http://www.battlecreek.net/volare/alamo> You will see the full newsletter IN COLOR! That's right, all those magnificent modelers and their flying machines in living color! FREE! Also, our Internet guru, George Bredehoft has retained some of his favorite articles from past issues of WS. The electronic counter, when it's working, is registering over 500 visits per month, but we need to make it 1,000 before we can expect advertisers to help us out.
- (4.) Let me know what you think, either by snail mail at 8311 Babe Ruth, San Antonio, TX 78240, or by e-mail at alamoes@connecti.com Phone: 210/681-2817

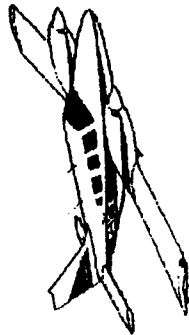


KING ORANGE INTERNATIONAL 1997/FAC

3rd Annual WINTER OUTDOOR CHAMPIONSHIPS

PALM BAY, FLORIDA
DEC 28th, 29th, 30th, 1997

Once again the Mosquito Squadron, commanded by Steve Bacom, will sponsor the 3rd annual FAC Winter Championships in conjunction with the 44th annual FMA King Orange Internationals. There will be 15 FAC events in which prizes will be awarded through third place. A separate FAC high point trophy will also be awarded in the FAC events. Flying will be from 7AM to 5PM each day except Dec. 30 in which flying will be from 7AM to 3PM. Mass launch events will be flown at noon each day. Scale model judging and display will be conducted at the Palm Bay Days Inn on Sunday the 28th beginning at 8PM. You are urged to present your scale models at that time as judging time will be limited during flying time at the field so that squadron personnel will be free to run the meet. The most current FAC rules will apply. You must show proof of scale in order to garner the necessary 45 points for the mass launch events. You can not enter Dime Scale models in the Golden Age event. Mass launch models will be required to use the 15% rubber rule. For information contact Steve Bacom at 836 Banbury Dr., Port Orange, FL 32119, phone (904) 788-7309.



SCHEDULE OF EVENTS

Sunday
Dec. 28th

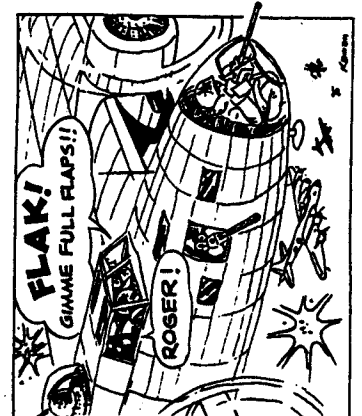
Embryo Endurance
FAC No-Cal Scale
FAC OT Gas (ElegCO)
Old Time Rubber
Grevel-Thompson Trophy Race

Monday
Dec. 29th

FAC Peanut Scale
FAC Jumbo Scale
FAC Golden Age
Old Time Slick
WWI Mass Launch

Tuesday
Dec. 30th

FAC Rubber Scale
FAC Power Scale
FAC Dime Scale
WWII Mass Launch
FAC Giant Scale



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4/97

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| 1/16 x 1/16 | .10 | — |
| 1/16 x 3/32 | .10 | — |
| 1/16 x 1/8 | .10 | .14 |
| 1/16 x 3/16 | .11 | .15 |
| 1/16 x 1/4 | .12 | .15 |
| 1/16 x 3/8 | .13 | .18 |
| 1/16 x 1/2 | .17 | .21 |
| 1/16 x 3/4 | .22 | .29 |
| 3/32 INCH | 3/8" | 48" |
| 3/32 x 3/32 | .11 | .12 |
| 3/32 x 1/8 | .12 | .14 |
| 3/32 x 3/16 | .13 | .16 |
| 3/32 x 1/4 | .14 | .18 |
| 3/32 x 3/8 | .15 | .19 |
| 3/32 x 1/2 | .19 | .24 |
| 3/32 x 3/4 | .26 | .32 |
| 1/8 INCH | 3/8" | 48" |
| 1/8 x 1/8 | .11 | .13 |
| 1/8 x 3/16 | .13 | .16 |
| 1/8 x 1/4 | .14 | .17 |
| 1/8 x 3/8 | .15 | .23 |
| 1/8 x 1/2 | .21 | .27 |
| 1/8 x 3/4 | .28 | .36 |
| 3/16 INCH | 3/8" | 48" |
| 3/16 x 3/16 | .14 | .23 |
| 3/16 x 1/4 | .18 | .27 |
| 3/16 x 3/8 | .21 | .29 |
| 3/16 x 1/2 | .24 | .36 |
| 3/16 x 3/4 | .30 | .45 |

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|-------------|------|------|
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| 1/4 x 3/8 | .27 | .33 |
| 1/4 x 1/2 | .29 | .41 |
| 1/4 x 5/8 | .37 | .50 |
| 1/4 x 3/4 | .42 | .58 |
| 5/16 INCH | 3/8" | 48" |
| 5/16 x 5/16 | .27 | .35 |
| 5/16 x 3/8 | .31 | .39 |
| 5/16 x 1/2 | .38 | .48 |
| 5/16 x 3/4 | .46 | .62 |
| 3/8 INCH | 3/8" | 48" |
| 3/8 x 3/8 | .36 | .45 |
| 3/8 x 1/2 | .40 | .57 |
| 3/8 x 5/8 | .47 | .59 |
| 3/8 x 3/4 | .53 | .68 |
| 1/2 INCH | 3/8" | 48" |
| 1/2 x 1/2 | .49 | .64 |
| 1/2 x 5/8 | .57 | .76 |
| 1/2 x 3/4 | .60 | .82 |
| 5/8 INCH | 3/8" | 48" |
| 5/8 x 5/8 | .60 | .86 |
| 5/8 x 1 | .93 | 1.14 |

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BALSA SHEETS

| 1 INCH | 3/8" | 48" |
|----------|------|------|
| 1/16 x 1 | .29 | .45 |
| 3/32 x 1 | .31 | .42 |
| 1/8 x 1 | .35 | .46 |
| 3/16 x 1 | .38 | .59 |
| 1/4 x 1 | .52 | .78 |
| 3/8 x 1 | .67 | .88 |
| 1/2 x 1 | .76 | 1.04 |
| 2 INCH | 3/8" | 48" |
| 1/32 x 2 | .37 | .50 |
| 1/16 x 2 | .38 | .50 |
| 3/32 x 2 | .46 | .61 |
| 1/8 x 2 | .49 | .65 |
| 3/16 x 2 | .60 | .74 |
| 1/4 x 2 | .68 | .90 |
| 3/8 x 2 | .86 | 1.19 |
| 1/2 x 2 | 1.10 | 1.43 |
| 3 INCH | 3/8" | 48" |
| 1/32 x 3 | .43 | .60 |
| 1/16 x 3 | .44 | .60 |
| 3/32 x 3 | .52 | .67 |
| 1/8 x 3 | .63 | .84 |
| 3/16 x 3 | .76 | 1.03 |
| 1/4 x 3 | .94 | 1.30 |
| 5/16 x 3 | 1.09 | 1.52 |
| 3/8 x 3 | 1.15 | 1.70 |
| 1/2 x 3 | 1.50 | 2.05 |
| 4 INCH | 3/8" | 48" |
| 1/32 x 4 | .66 | .92 |
| 1/16 x 4 | .68 | .92 |
| 3/32 x 4 | .82 | 1.14 |
| 1/8 x 4 | .93 | 1.34 |
| 3/16 x 4 | 1.09 | 1.56 |
| 1/4 x 4 | 1.52 | 1.79 |
| 3/8 x 4 | 2.10 | 2.85 |
| 1/2 x 4 | 2.85 | 3.36 |

TRAILING EDGES

| 1/8 x 1/2 | 3/8" | 48" |
|--------------|------|-----|
| 3/16 x 3/4 | .35 | .47 |
| 1/4 x 1 | .39 | .64 |
| 5/16 x 1-1/4 | .48 | .71 |
| 3/8 x 1-1/2 | .56 | .85 |
| 1/2 x 2 | .90 | — |
| 3/4 x 3 | 1.00 | — |

36" AILERONS

| 1/4 x 1 | 3/8" | 48" |
|--------------|------|------|
| 1/4 x 1-1/4 | .57 | .85 |
| 1/4 x 1-1/2 | .74 | .80 |
| 1/4 x 2 | .80 | .74 |
| 5/16 x 1-1/4 | .74 | .74 |
| 5/16 x 1-1/2 | .75 | .75 |
| 3/8 x 1-1/2 | .83 | .83 |
| 3/8 x 2 | .95 | .95 |
| 3/8 x 2-1/2 | 1.08 | .95 |
| 1/2 x 1-1/2 | .95 | .95 |
| 1/2 x 2 | 1.08 | 1.08 |

36" TRIANGLES

| 1/4 x 1/4 | 3/8" | 48" |
|-----------|------|-----|
| 3/8 x 3/8 | .33 | .33 |
| 1/2 x 1/2 | .40 | .40 |
| 3/4 x 3/4 | .54 | .54 |
| 1 x 1 | .68 | .68 |

36" DOWELS

| 1/8 | 3/8" | 48" |
|------|------|-----|
| 3/16 | .17 | .37 |
| 1/4 | .20 | .54 |

36" LEADING EDGES

| Conventional | Symmetrical |
|--------------|-------------|
| 1/4 x 3/8 | .50 |
| 3/8 x 1/2 | .85 |
| 1/2 x 3/4 | 1.45 |
| 3/4 x 1 | 1.70 |
| 1 x 1 | 1.85 |

WIDE BALSA SHEETS

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|------|------|------|------|
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| 3/32 | 1.80 | 2.47 | 2.25 |
| 1/8 | 2.79 | 2.79 | 2.50 |
| 3/16 | 2.06 | 3.14 | 2.85 |
| 1/4 | 2.35 | 3.80 | 3.25 |
| 3/8 | 3.00 | 4.77 | 4.20 |
| 1/2 | 5.10 | 5.95 | 7.15 |

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| 1 x 3 | 0.80 | 1.65 | 1.90 | 2.15 |
| 1 x 4 | 1.20 | 2.35 | 2.85 | 3.25 |
| 1 x 5 | 1.57 | 3.25 | 3.75 | 4.25 |
| 2 x 2 | 1.75 | 2.45 | 2.92 | 3.30 |
| 2 x 3 | 1.80 | 3.50 | 4.23 | 4.85 |
| 2 x 4 | 2.85 | 4.60 | 5.30 | 7.15 |
| 3 x 3 | 3.30 | 5.55 | 7.50 | 8.85 |
| 3 x 4 | 4.80 | 7.70 | 9.20 | 12.35 |
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| White 4 x 24 x 48 | 12.75 | EPP 2 x 36 x 48 | 30.00" |
| Blue 2 x 12 x 24 | 3.85 | EPP 2 x 24 x 36 | 15.50" |

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HOW WE GOT A KID'S FLYING CLUB STARTED

Like many of you I have been one of those lonely fliers stuck in a part of the country where not a whole lot of rubber twisting goes on. If you love airplanes, that makes you a little different, but if you are into rubber-powered free flight you are almost weird. The fear of hearing "boys with their toys" keeps a lot of prospective fliers out of the hobby. I had tried unsuccessfully for more than ten years to get any friend to join me in this hobby of ours. I even gave models away to try to get something going. But I had to go it alone.

Then one day I thought about taking a few kids with me to a contest and let them fly some of my old stuff and help me in the contest. This was a great day. We had more fun than is legally allowed. That fall, 1995, I got the kids to meet with me at the church building on Thursday nights from 5:00 to 8:00. (I should mention that I am a minister and thus had access to our facilities, but you shouldn't have any problem finding a place to meet, i.e., rescue squads, schools, clubs, churches, airport hangars, garages, etc.) I started out with about five kids, all boys. We built Delta Darts and flew them all to destruction. This caused others who heard about us to join, and by Christmas we had ten meeting every week. The next thing we built was the Pussy Cat. What a great plane! It flies well inside and is really easy to build. Then we built the old Ross Flyer (indoor type) with no wheels. To simplify the front end I had them help me build cottage cheese carton propellers on plastic Q-Tips. The kids went nuts when they started getting two-minute flights in our auditorium. Time for a contest!

I used a local gym for our first contest, and all the parents were invited. I suspended a hula-hoop from the rafter with a dollar taped to it and told them that the first five kids with planes to fly through were going to be awarded a dollar. This kept everyone cheering as we flew endurance, precision time, and mass launch. Parents even got excited and helped. With ribbons to give away and demonstration flights of all kinds, we were on our way to having a great club. Hey no more lonely me! I had model builders all around me ready to fly at a moment's notice.

Our next step was to build Perry Birds with no wheels and fly them indoors. They were an excellent choice. By now I got a sponsor to buy us all custom T-shirts for the Flying Aces of

Smyrna, Tn. The kids wore them to school with pride. In contacting the Atlanta indoor club, I found an open invitation for us to come to their annual contest. We took everything that we had and flew when the heavies flew. Let me tell you, the men were really good to us and seemed to enjoy having us. They encouraged the kids (by now we had two girls in the club). We came back and all of us built profile P-38s. Six of the kids wanted to go to Gennissen for the big contest. We went and were treated very well by many of our fellow fliers.

When September 1996 rolled around, I had two helpers join the club: the mother of two of our fliers, Lisa Spradling (an excellent builder), and a father, Wayne Anderson, who also builds superbly. We now had twenty kids working every Thursday night. We built twenty tow-line gliders. This was a mistake since it took some kids more than four months to complete a plane. We did not have time for a contest, and the kids really wanted to fly. By February 1997 we finally finished the gliders and decided that we would plan on going to the Johnson City Nationals. I called Abram VanDover to see if it could be worked out for us to come. This kind and generous man paved the way for us and encouraged us to make the effort. I had a video of the contest, and after showing it to the kids, I told them that if they would get serious and build three planes by the end of May they could go. Well, eleven of them made a tremendous effort. We now had kids building P-nuts (six), profiles, endurance models and one girl, Michelle Boyd who insisted she could build a coconut Aristocrat. The closer we got to the contest time, the more excited the kids got. I even spent several Saturday mornings helping some of them complete their projects.

By the time the contest came, our sponsor bought us new T-shirts with a racing plane on the front; this really made the kids proud. With everything packed in boxes off we went to Johnson City. At first we were somewhat apprehensive. You didn't know us, and we didn't know you. It took a little getting used to, but we finally learned to walk slowly. Then the flying started. What great fun! Many of the men came over and helped some of our kids get their planes flying. We had some low-wing P-nuts that seemed impossible, but these men got them to fly for 40 seconds. I want to thank everyone who gave of his time. Every one of the kids got a lot of attention and learned a lot, first hand, about how to get a model trimmed.

Did Michelle (13 years old) get her coconut finished? Yes! And believe, me she

constructed it all herself, and covered it herself. She even cut out the lettering and made the dummy engine cylinders out of corks with thread. I made her propeller, turned her wheels, and helped her air brush it. What a thrill it was when we found out that she had placed second in the scale judging. Every official flight she made was a thrill of a life-time for me since she kept edging up in her score. One flight went for 2:47. As fliers around the field realized what she had built and how she was doing they would stop to watch her time and applaud at the end of each flight. Could she win? Win she did, and first place at that, in coconut and third in Golden Age. This has just about sent our club into orbit. They all want to build coconuts too. To top off the contest, one very generous man bought each of our kids a good flying kit. We also ran a contest among our kids and had someone very official pass out the ribbons. What a great group of fliers you indoor people are. As the saying goes, "We will be back."

If you are wanting to start a club of kids, let me tell you you can do it. I have more kids wanting in our club than we can handle. It truly is a good thing since it teaches them to use their hands, visualize a blue print, excel in an area they know little about, and take pride in their work. It also is an interesting hobby. You have to believe in the benefits or you will never get started.

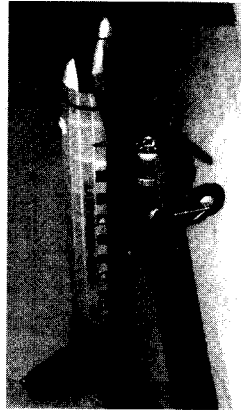
Take a kid or two (with their parents if need be) to a contest (put a display at the library or fly for the local school to find interested kids). Give them something to fly. Start off with a small group and teach them to build. Hold a contest. Give away ribbons. Get some T-shirts. Hang planes from the ceiling. Find someone to help you. Be prepared to spend one night a week helping them build. Challenge them and be proud of every effort they make.

Once you get something started, build on to it. Challenge the kids to compete with each other and to invite their friends. Take them to flying events (teach them to practice etiquette and manners). Have a camp-out where you fly until dark. Have fun! Be patient, and kind. Be excited, whoop it up when someone puts in a great flight. Involve the parents. Get the kids' pictures with their models in the local paper. You can do it. Not only will you help keep this great hobby alive, but you will also help kids have confidence that they can do the difficult. Don't be a selfish flier who does his own thing all alone somewhere; it may not amount to much. With our club I have enjoyed the hobby a lot more. We hope to compete in penny-plane, P-nut, coconut, and mini stick next year at the

nationals. Come with your group of kids, and lets get things to really kicking. I promise I will personally cheer for you. If I can help you in any way, let me know: Tim Lavender, 1-615-459-4799. Our motto on the back of our shirts next year will be, "Fly, But Walk Slowly, Very Slowly."

Tim Lavender

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| 1/16 x 2 | 38 | 50 | 1/16 x 1/8 | 10 | | (20) 3/32 x 3 | 9.70 | | 1/8 x 12 | 3.95 5.50 | 5/8 x 3/4 | 85 | | 1/4 x 1-1/4 | 65 | 90 |
| 3/32 x 2 | 46 | 61 | 1/16 x 1/4 | 12 | | (15) 1/8 x 3 | 8.75 | | 1/4 x 12 | 4.95 9.50 | 3/4 x 3/4 | 92 | | 1/4 x 1-1/2 | 74 | 105 |
| 1/8 x 2 | 49 | 65 | 1/16 x 3/8 | 13 | | (15) 3/16 x 3 | 10.50 | | LITE PLY | 12" 24" 48" | SPRUCE/ BASS36"48" 60" | | | 1/4 x 2 | 80 | 115 |
| 3/16 x 2 | 60 | 74 | 1/16 x 1/2 | 17 | | (10) 1/4 x 3 | 8.75 | | 1/8 x 6 | 1.00 1.25 2.35 | 1/16 x 1/4 | 24 | 30 | 5/16 x 1-1/4 | 74 | 105 |
| 1/4 x 2 | 68 | 90 | 3/32 SQ | 11 | | (10) 3/8 x 3 | 10.50 | | 1/8 x 12 | 1.25 2.35 4.50 | 3/32 x 1/4 | 25 | 39 | 5/16 x 1-1/2 | 75 | 106 |
| 3/8 x 2 | 86 | 119 | 3/32 x 1/4 | 14 | | (5) 1/2 x 3 | 6.95 | | 1/4 x 6 | 1.25 1.75 3.40 | 1/8 SQ | 21 | 29 | 5/16 x 2 | 86 | 120 |
| 1/2 x 2 | 110 | 143 | 3/32 x 3/8 | 15 | | (20) 1/16 x 4 | 12.35 | | 1/4 x 12 | 1.75 3.45 6.50 | 1/8 x 1/4 | 28 | 36 | 3/8 x 1-1/4 | 80 | 115 |
| 1/32 x 3 | 36 | 43 | 3/32 x 1/2 | 19 | | (10) 1/16 x 4 | | 900 | 3 PLY BIRCH 12" 24" 48" | | 1/8 x 3/8 | 35 | 46 | 3/8 x 1-1/2 | 83 | 116 |
| 1/20 x 3 | 36 | 43 | 1/8 SQ | 11 | | (15) 3/32 x 4 | 11.50 | | 1/64 x 6 | 1.40 2.75 4.95 | 1/8 x 1/2 | 41 | 55 | 3/8 x 2 | 95 | 135 |
| 1/16 x 3 | 36 | 44 | 1/8 x 3/16 | 13 | | (10) 3/32 x 4 | 10.75 | | 1/64 x 12 | 2.79 5.10 9.50 | 1/8 x 3/4 | 47 | 63 | 1/2 x 1-1/2 | 95 | 140 |
| 3/32 x 3 | 43 | 52 | 1/8 x 1/4 | 14 | 21 | (10) 1/8 x 4 | 8.75 | | 1/32 x 6 | .95 1.80 3.25 | 3/16 SQ | 28 | 38 | 1/2 x 2 | 106 | 150 |
| 1/8 x 3 | 52 | 63 | 1/8 x 3/8 | 15 | 23 | (5) 1/8 x 4 | 6.25 | | 1/32 x 12 | 1.80 3.35 6.35 | 3/16 x 3/8 | 40 | 53 | 1/4 x 2 | 75 | |
| 3/16 x 3 | 62 | 76 | 1/8 x 1/2 | 21 | 27 | (10) 3/16 x 4 | 10.00 | | 1/16 x 6 | .95 1.80 3.25 | 3/16 x 1/2 | 48 | 64 | 1/4 x 3 | 109 | |
| 1/4 x 3 | 78 | 94 | 1/8 x 3/4 | 28 | 36 | (5) 3/16 x 4 | 7.35 | | 1/16 x 12 | 1.80 3.35 6.25 | 3/16 x 3/4 | 64 | 88 | 3/8 x 2 | 90 | |
| 5/16 x 3 | 109 | 152 | 1/8 x 1 | 35 | 45 | (10) 1/4 x 4 | 14.00 | | 1/8 x 6 | .95 1.80 3.35 | 1/4 SQ | 54 | 57 | 3/8 x 3 | 131 | |
| 3/8 x 3 | 105 | 115 | 3/16 SQ | 14 | 23 | (5) 1/4 x 4 | 8.35 | | 1/8 x 12 | 1.80 3.35 6.50 | 1/4 x 3/8 | 53 | 69 | 1/2 x 3 | 154 | |
| 1/2 x 3 | 135 | 150 | 3/16 x 1/4 | 18 | 27 | (5) 1/2 x 4 | 9.50 | | 4 PLY BIRCH 12" 24" 48" | | 1/4 x 1/2 | 61 | 81 | 100 | | |
| 3/4 x 3 | 225 | 310 | 3/16 x 3/8 | 21 | 29 | (5) 3/4 x 4 | 13.00 | | 3/16 x 6 | 1.09 2.15 3.45 | 1/4 x 3/4 | 83 | 110 | 100 | | |
| 1/20 x 4 | 56 | 66 | 3/16 x 1/2 | 24 | 36 | | | | 3/16 x 12 | 2.15 3.45 6.85 | 3/8 SQ | 74 | 85 | 100 | | |
| 1/12 x 4 | 56 | 66 | 3/16 x 3/4 | 30 | 45 | | | | 5 PLY BIRCH 12" 24" 48" | | 3/8 x 1/2 | 65 | 91 | 154 | | |
| 1/16 x 4 | 56 | 68 | 3/16 x 1 | 38 | 59 | | | | 3/32 x 6 | 1.35 2.60 4.90 | 1/2 SQ | 85 | 105 | 180 | | |
| 3/32 x 4 | 66 | 82 | 1/4 SQ | 22 | 30 | | | | 3/32 x 12 | 2.60 5.00 8.95 | 1/2 x | | | | | |

Cont. 48 State Handling Charge - \$6.50 We pay UPS. Add \$5.50 for COD \$6.00 extra for PP, APO, FPO. We accept Visa, MC, Discover, personal checks, or COD 6 3/4 % tax in Texas US currency only. Min wood order \$15.00

INFO & HELP
806-745-6394

ORDERS ONLY
1-800-687-5555

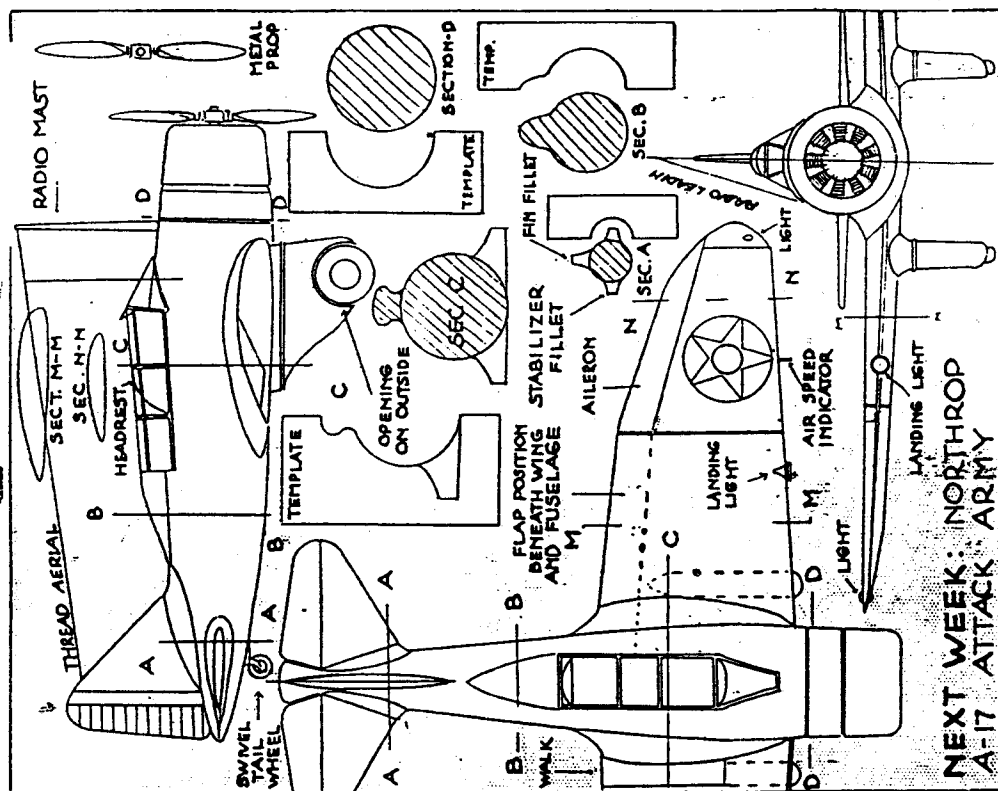
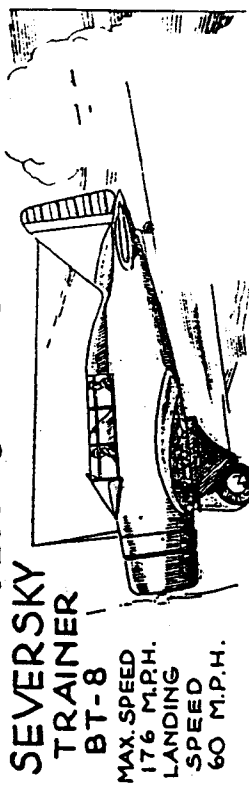
24 HR FAX
806-745-6483

SEND MAIL ORDERS TO: LONE STAR MODELS
Rt. 9, Box 437, Lubbock, TX 79423

FLYING CLUB

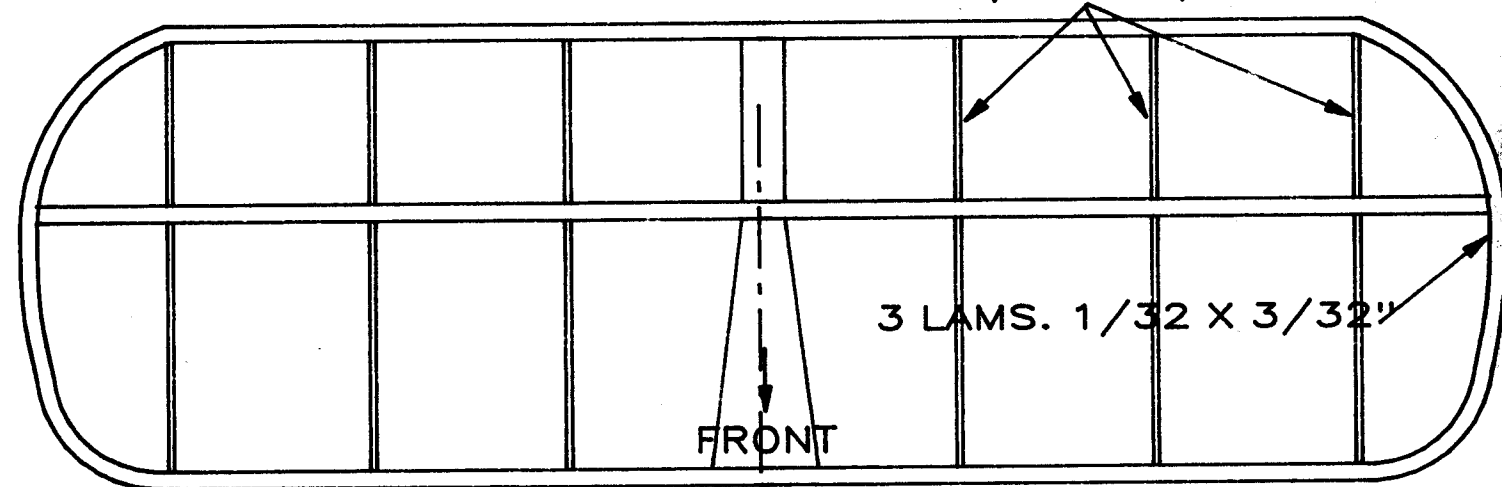
SEVERSKY TRAINER

MAX. SPEED
176 M.P.H.
LANDING
SPEED
60 M.P.H.



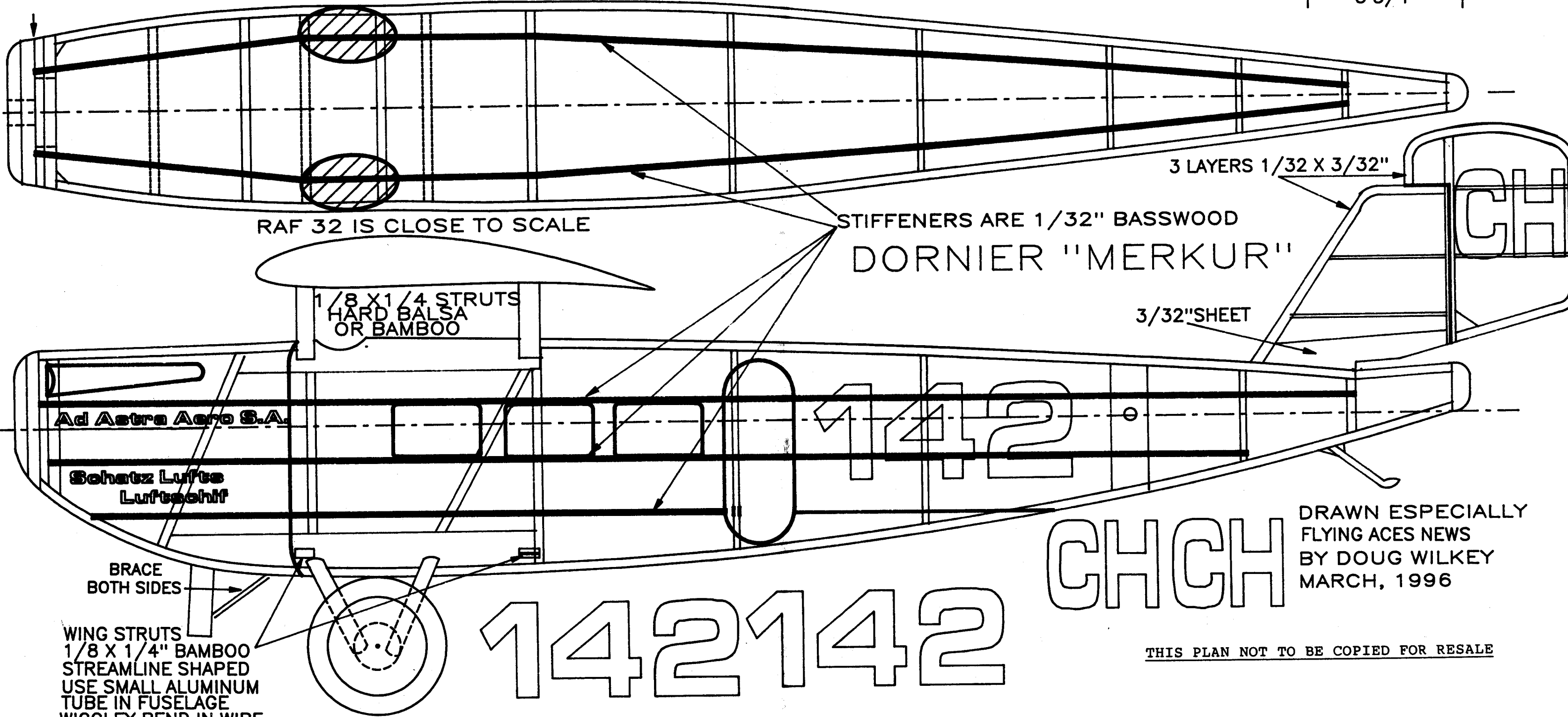
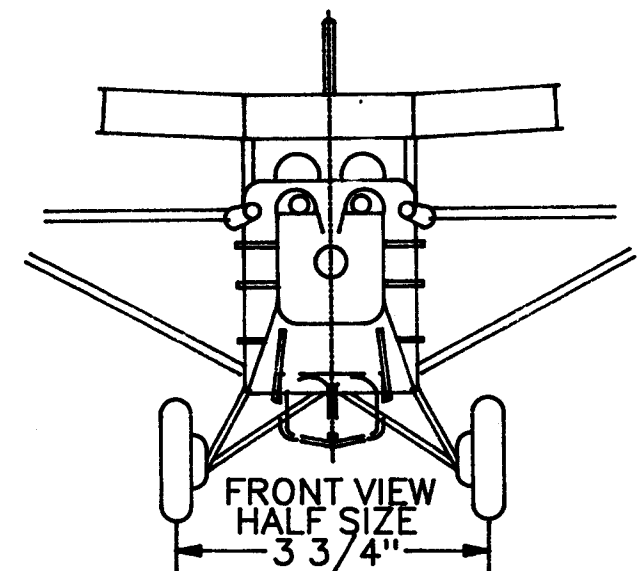
**NEXT WEEK: "NORTHROP
A-17 ATTACK" ARMY**

1/32 X 3/32"



NOSE BLOCK SEPERATION

USE ABOUT 3 DEGREES RIGHT
ABOUT 4 OR 5 DEGREES DOWN
USE 9" PECK PROP OR CARVE
3 LOOPS OF 1/8" RUBBER
COLOR SCHEME
SWISS--AIRCRAFT IS GREY
WING MARKINGS--WHITE REGISTRATION
RED BACKGROUND. RUDDER, NOSE, AND
FUSELAGE CORNERS, AND STIFFENERS
ARE RED. WING STRUTS AND LANDING GEAR
ARE BLACK.
GERMAN--AIRCRAFT IS GREY, ALL TRIM
IS BLACK
NOSE LETTERING ON BOTH IS WHITE.



RAF 32 IS CLOSE TO SCALE

STIFFENERS ARE 1/32" BASSWOOD
DORNIER "MERKUR"

1/8 X 1/4 STRUTS
HARD Balsa
OR BAMBOO

3/32" SHEET

Ad Astra Aero S.A.

Schutz Luft
Luftschiff

BRACE
BOTH SIDES

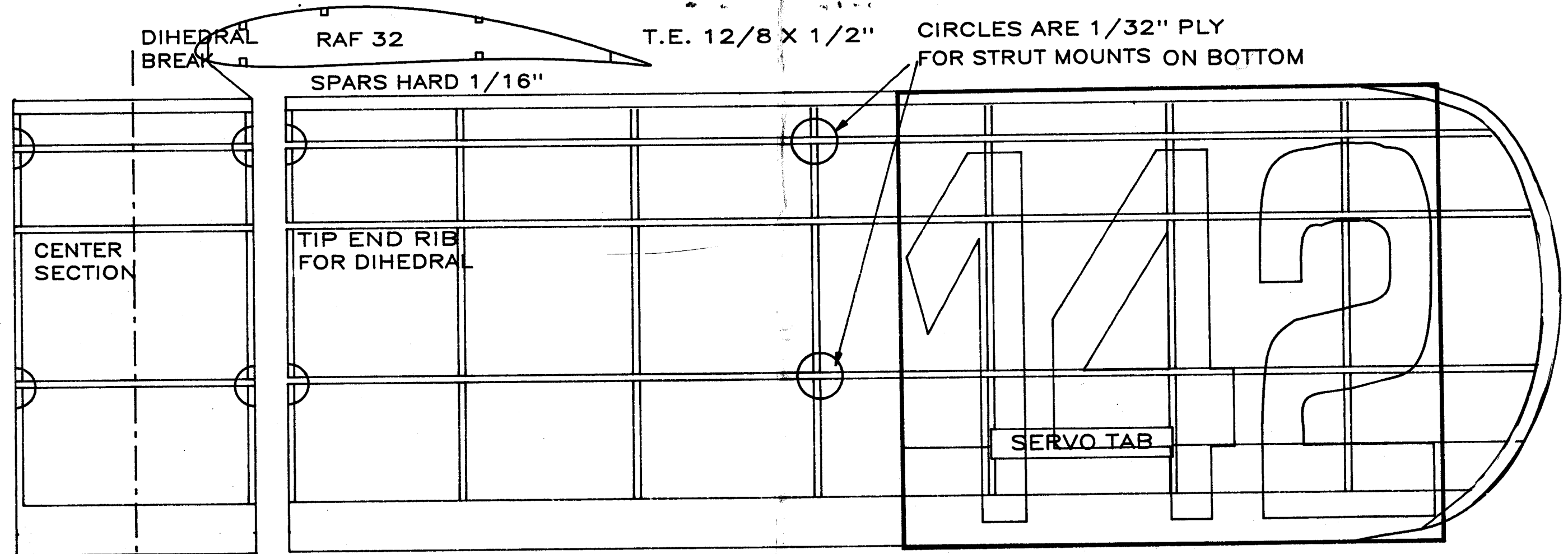
WING STRUTS
1/8 X 1/4" BAMBOO
STREAMLINE SHAPED
USE SMALL ALUMINUM
TUBE IN FUSELAGE
WIGGLEY BEND IN WIRE

142142

CHCH

DRAWN ESPECIALLY
FLYING ACES NEWS
BY DOUG WILKEY
MARCH, 1996

THIS PLAN NOT TO BE COPIED FOR RESALE



USE 1/32" PLY DIHEDRAL BRACES

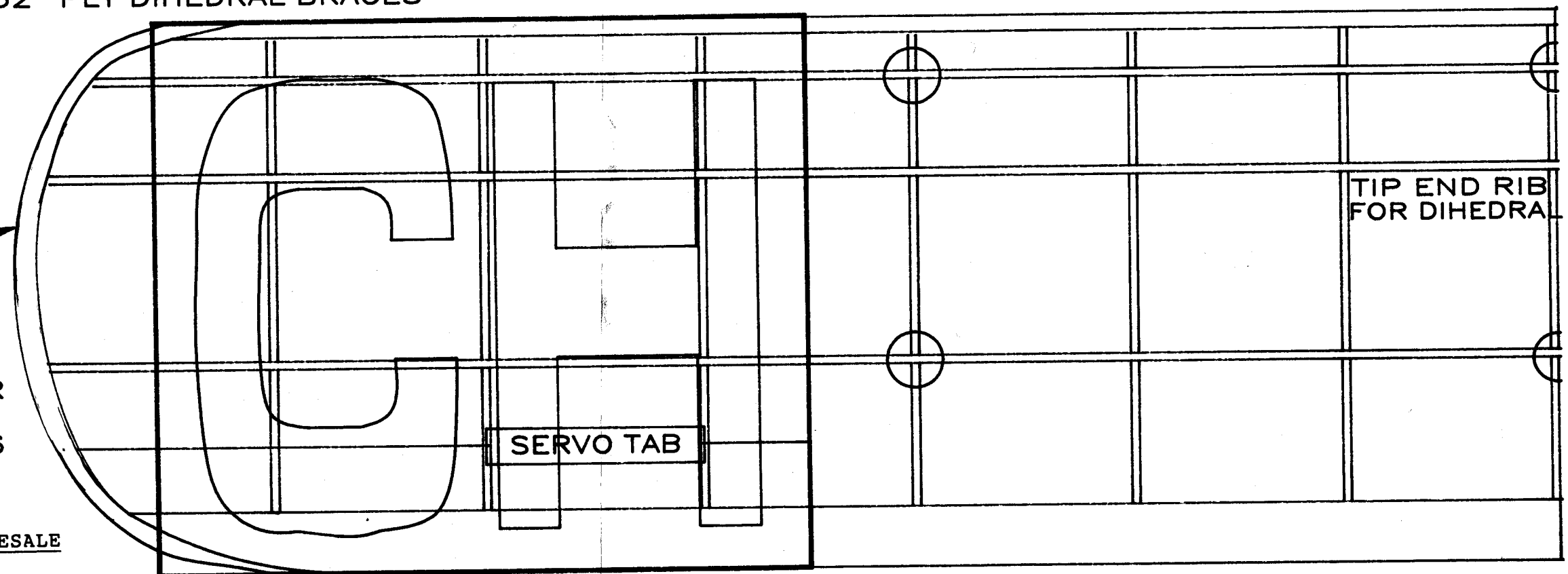
3 LAMS 1/8 1/32"

DORNIER "MERKUR"

DRAWN ESPECIALLY FOR

FLYING ACES NEWS

DOUG WILKEY MARCH 96

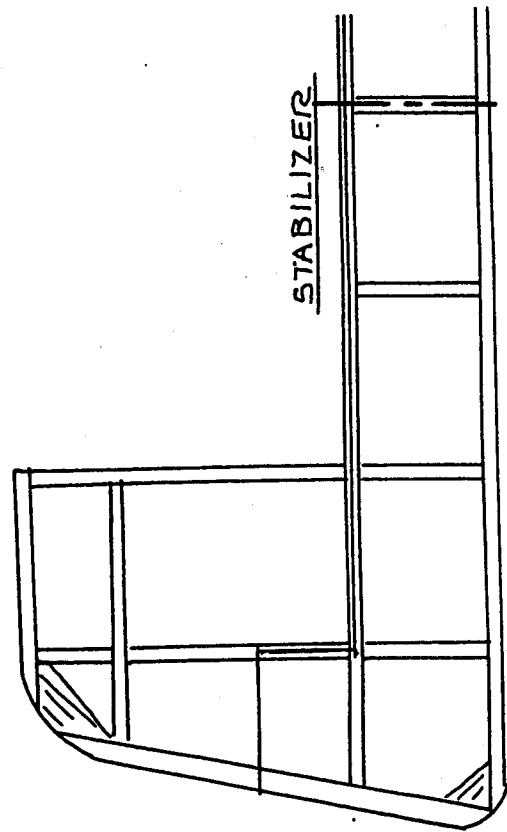


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TAB IS 1 3/4 X 3/8".

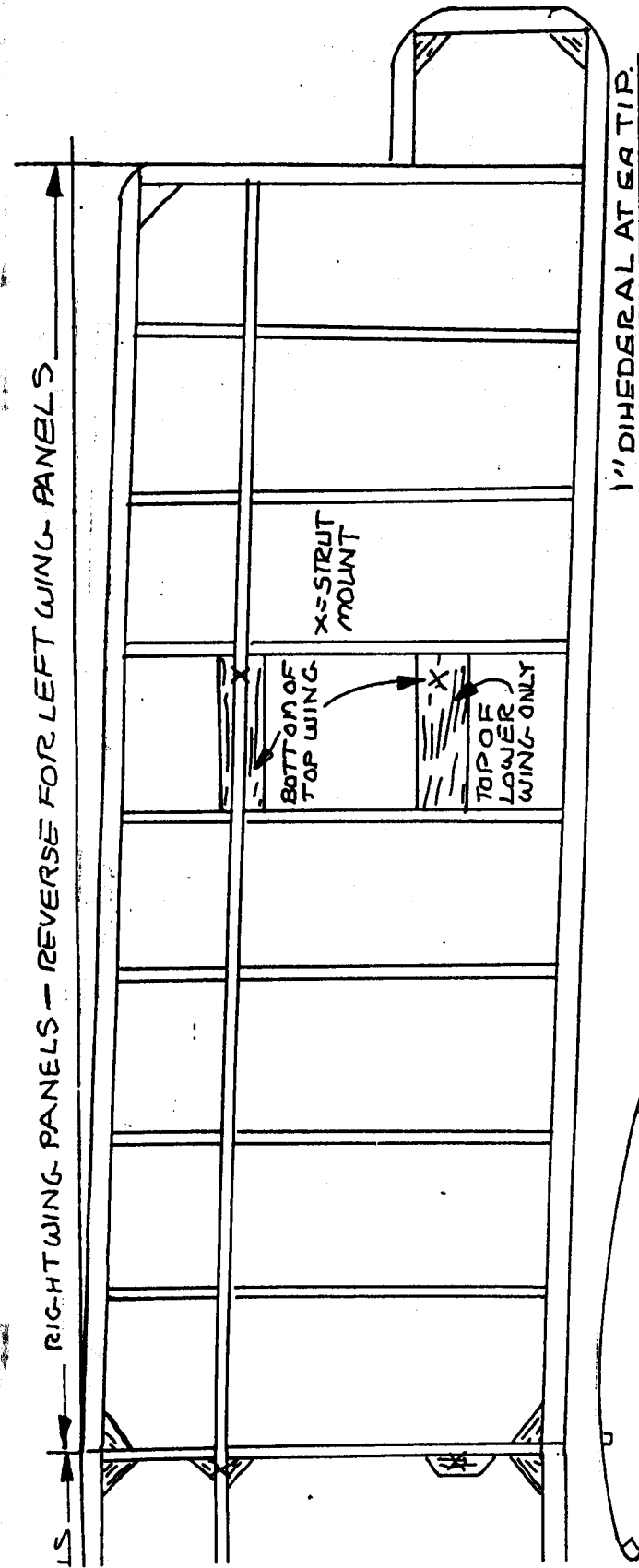
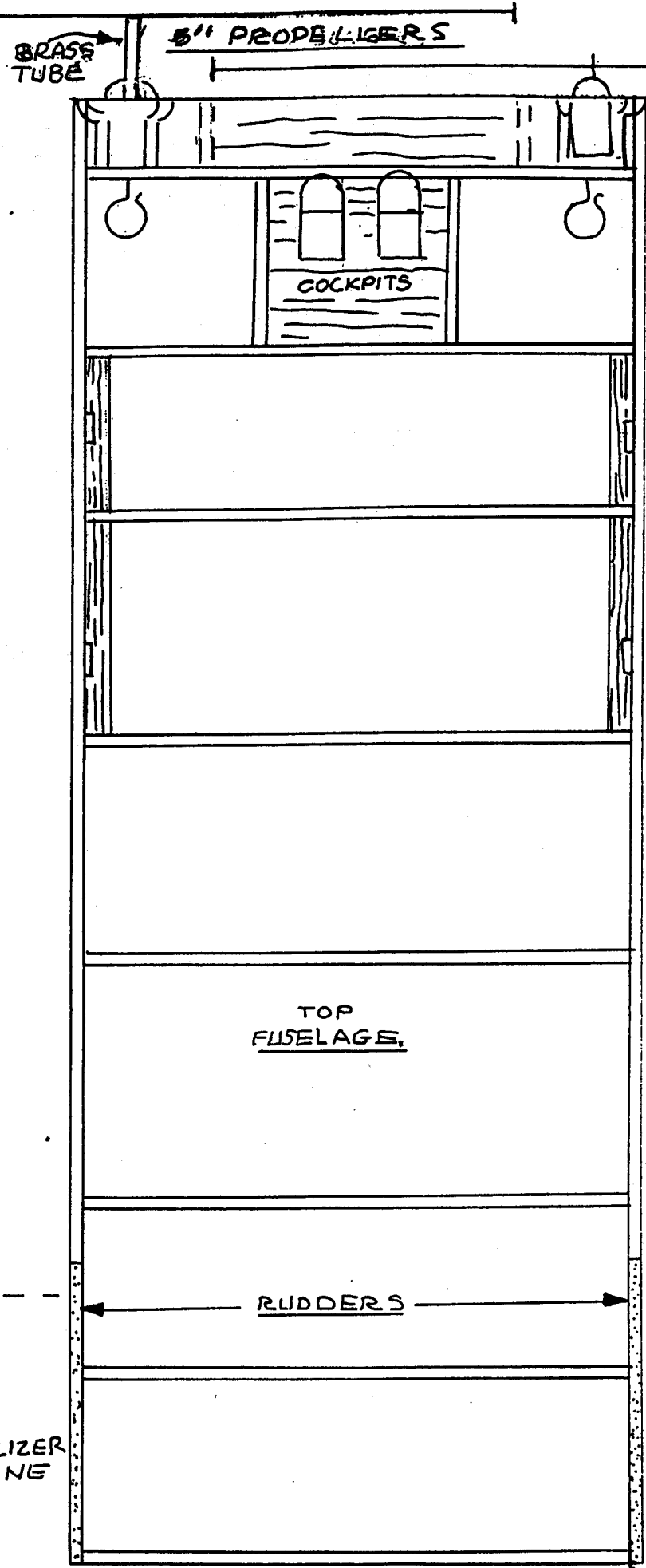
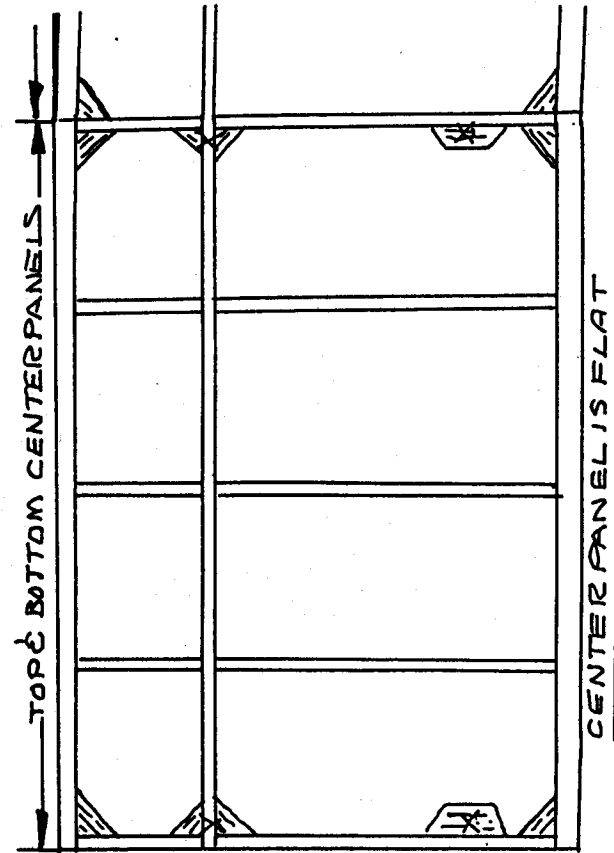
TAB IS 1/2" ABOVE AILERON

SAME SIZE ON ELEVATOR

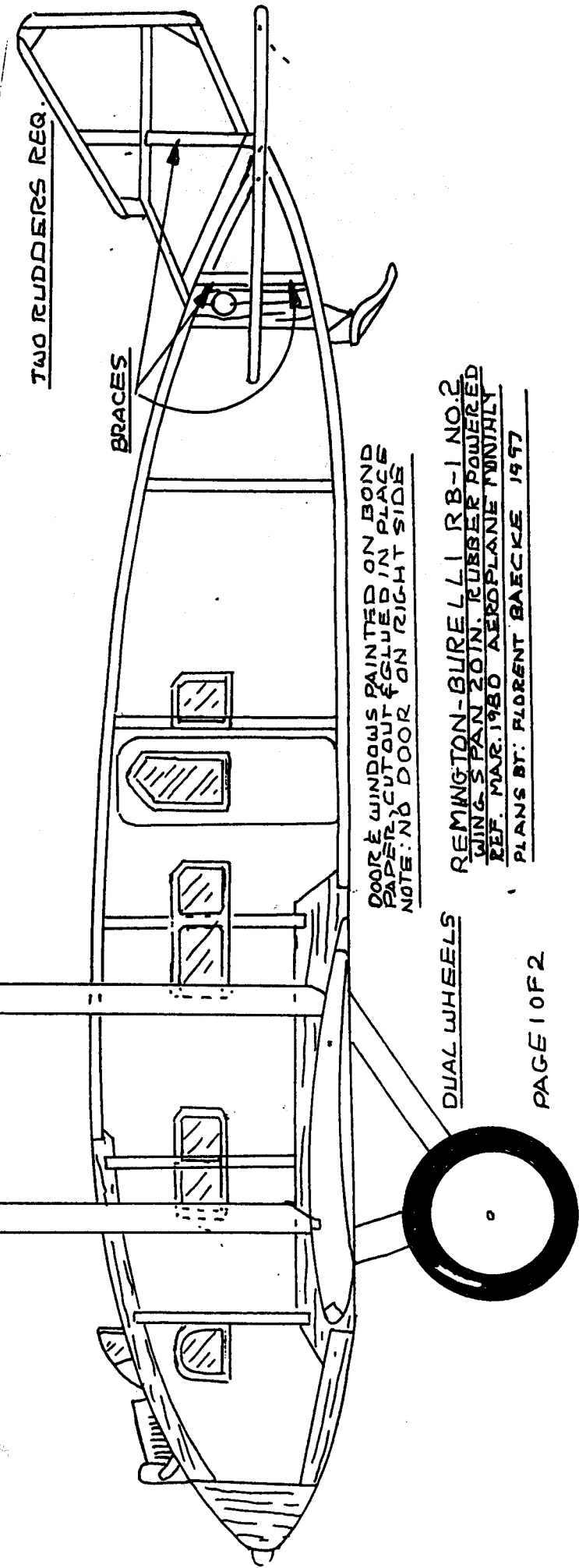


STABILIZER

STABILIZER
OUTLINE



THIS PLAN NOT TO BE COPIED FOR RESALE

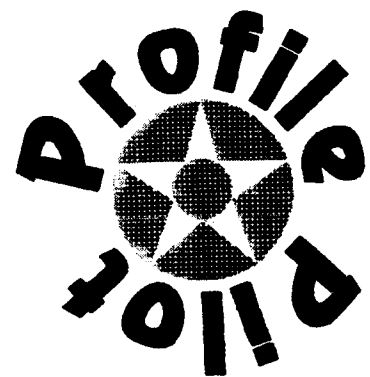


DUAL WHEELS

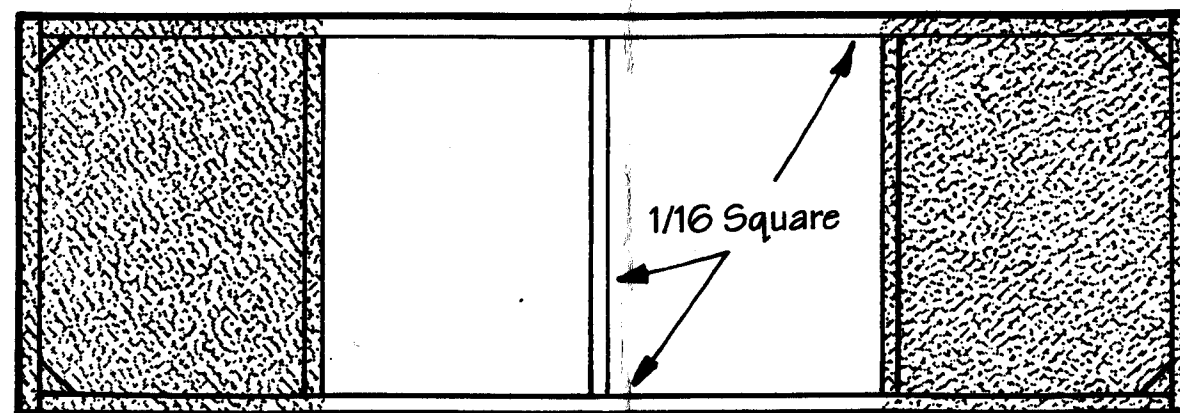
DOOR & WINDOWS PAINTED ON BOND
PAPER, CUT OUT & GLUED IN PLACE
NOTE: NO DOOR ON RIGHT SIDE

REMINGTON-GURELLI RB-1 NO.2
WINGSPAN 20 IN. RUBBER POWERED
REF. MAR. 1980 AEROPLANE MONTHLY
PLANS BY: FLORENT BAECKE 1997

PAGE 1 OF 2



STABILIZER



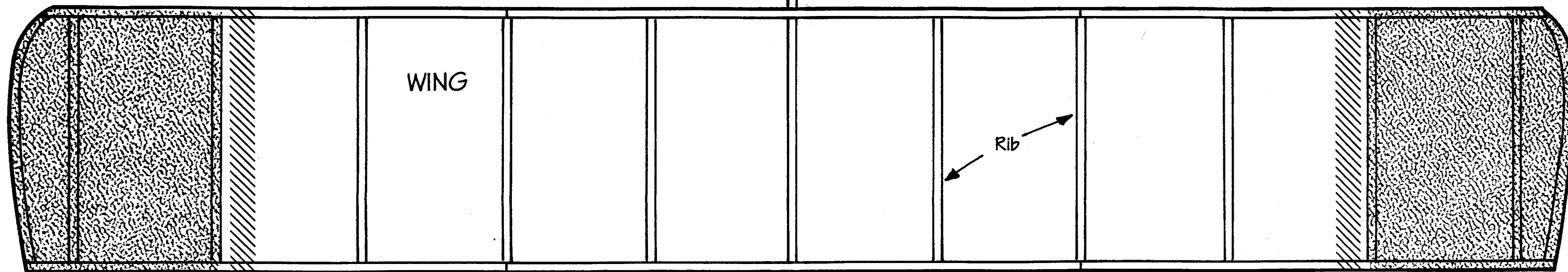
Soijka

Remotely Piloted Vehicle

THIS PLAN NOT TO BE COPIED FOR RESALE

Dihedral:
1-1/8 inches Each Tip

Leading Edge



[Red]

[Blue]

Base Color: White

[POD]

[BOOM]

Stabilizer Location

RUDDER (Make 2)

All Balsa is 1/16 Stock

BOOM (Make 2)

Sliced Rib Template

Motor Stick:
3/32 X 3/16 X 11 inches

[Blue]

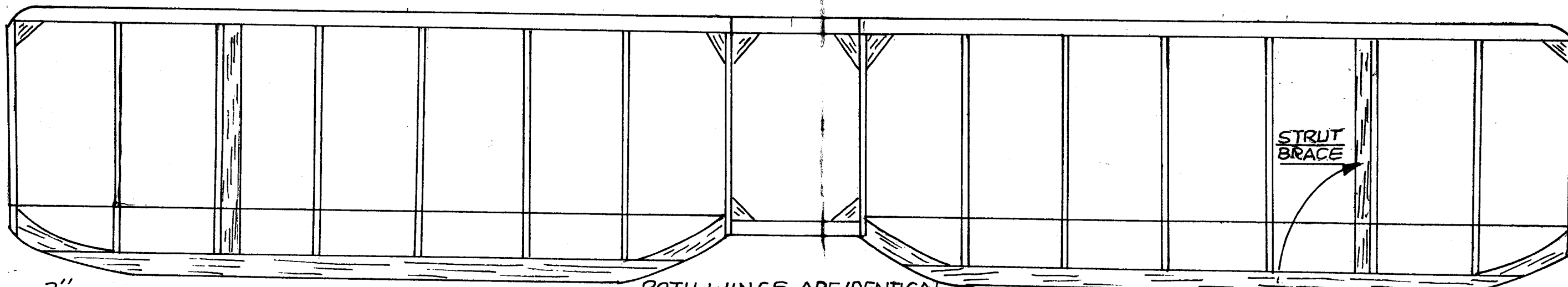
[Red]

WHITE BASE COLOR

POD

SKID: Bent Bamboo

MARK
FINEMAN

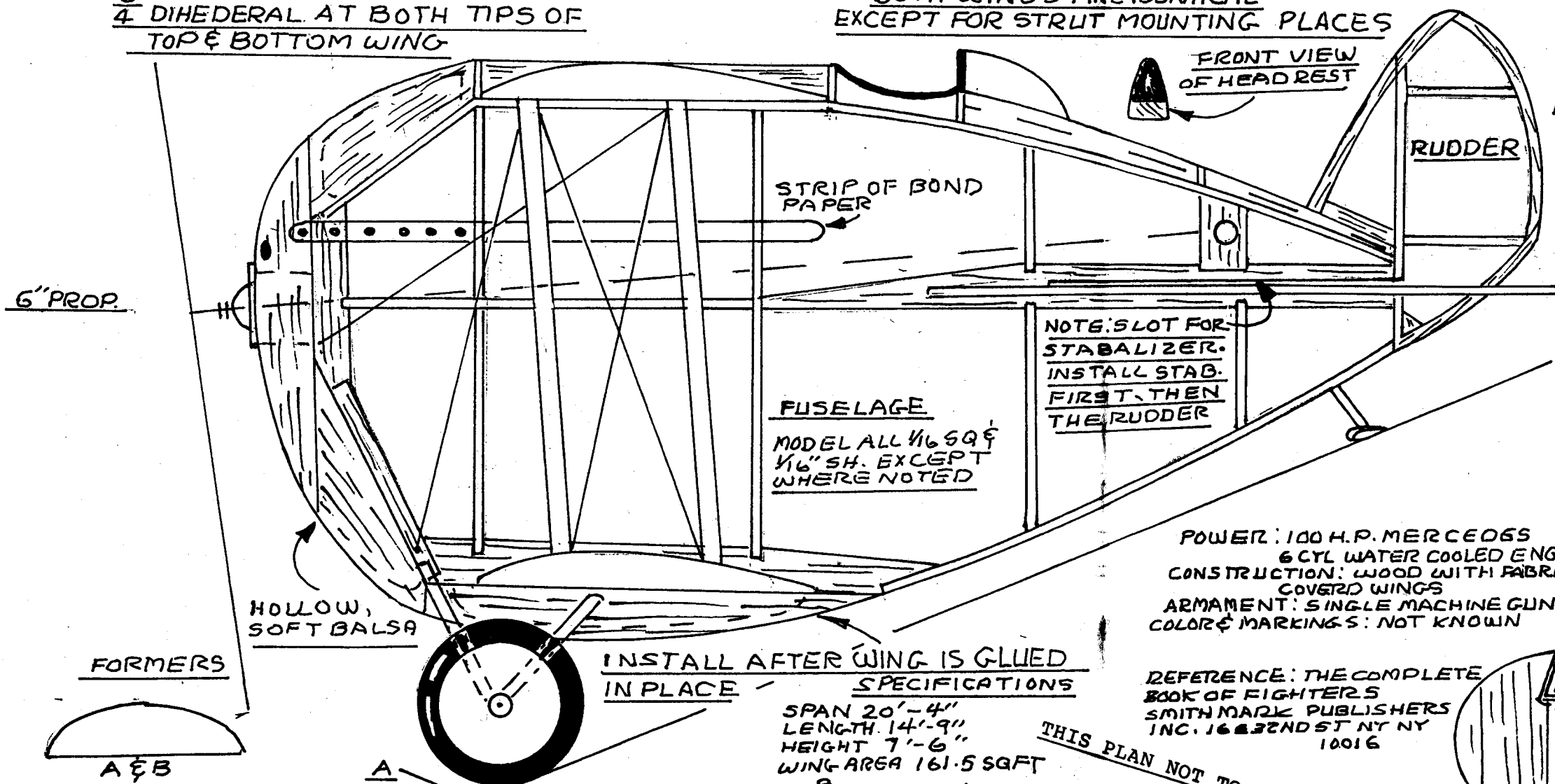


$\frac{3}{4}$ " DIHEDRAL AT BOTH TIPS OF
TOP & BOTTOM WING

BOTH WINGS ARE IDENTICAL
EXCEPT FOR STRUT MOUNTING PLACES

ON BOTTOM OF TOP WING & ON TOP
OF BOTTOM WING

NOTE: FOR 1 IN = 1 FT
SIZE MODEL,
ENLARGE X 1.39



POWER: 100 H.P. MERCEDES
6 CYL WATER COOLED ENG.
CONSTRUCTION: WOOD WITH FABRIC
COVERED WINGS
ARMAMENT: SINGLE MACHINE GUN
COLOR & MARKINGS: NOT KNOWN

REFERENCE: THE COMPLETE
BOOK OF FIGHTERS
SMITH MARK PUBLISHERS
INC. 16 & 32ND ST NY NY
10016

THIS PLAN NOT TO BE COPIED FOR RESALE

SPECIFICATIONS
SPAN 20'-4"
LENGTH 14'-9"
HEIGHT 7'-6"
WING AREA 161.5 SQFT

INSTALL AFTER WING IS GLUED
IN PLACE

FUSELAGE
MODEL ALL $\frac{1}{16}$ SQ &
 $\frac{1}{16}$ " SH. EXCEPT
WHERE NOTED

NOTE: SLOT FOR
STABILIZER.
INSTALL STAB.
FIRST, THEN
THE RUDDER

RUDDER

FRONT VIEW
OF HEAD REST

STRIP OF BOND
PAPER

HOLLOW,
SOFT Balsa

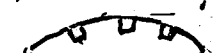
FORMERS



A & B

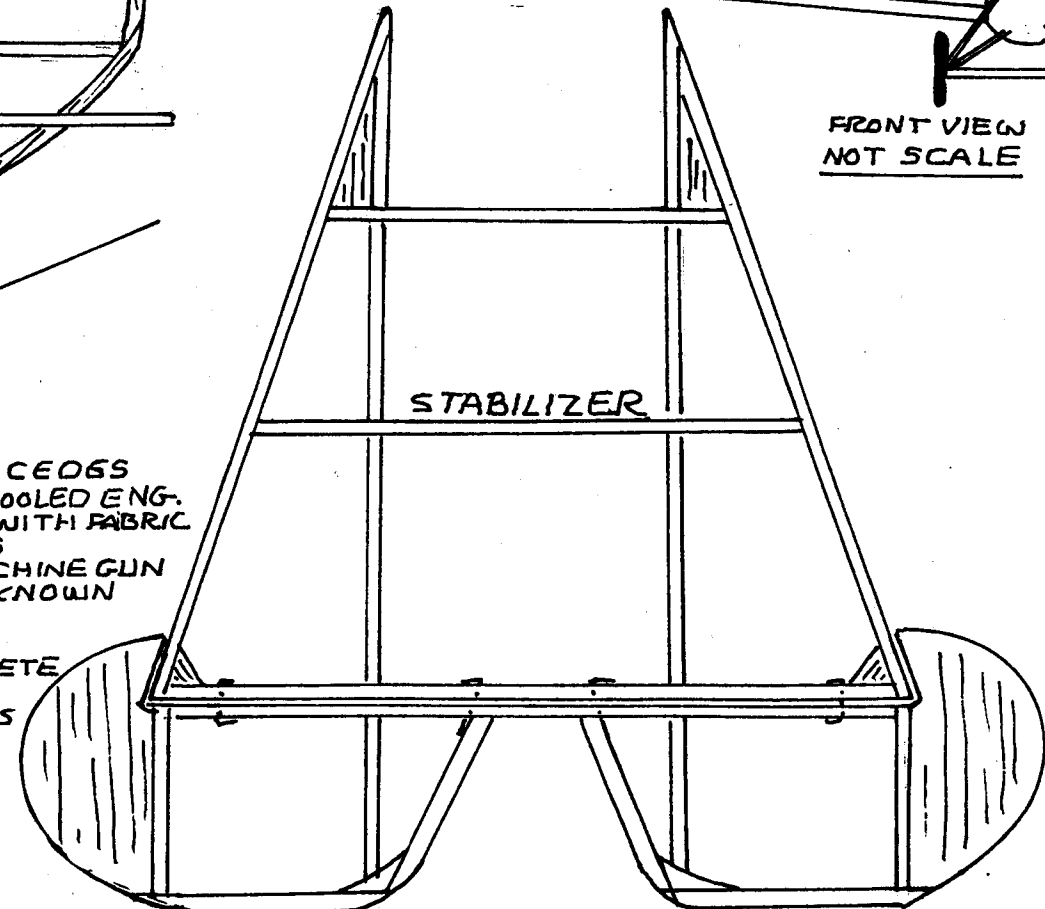
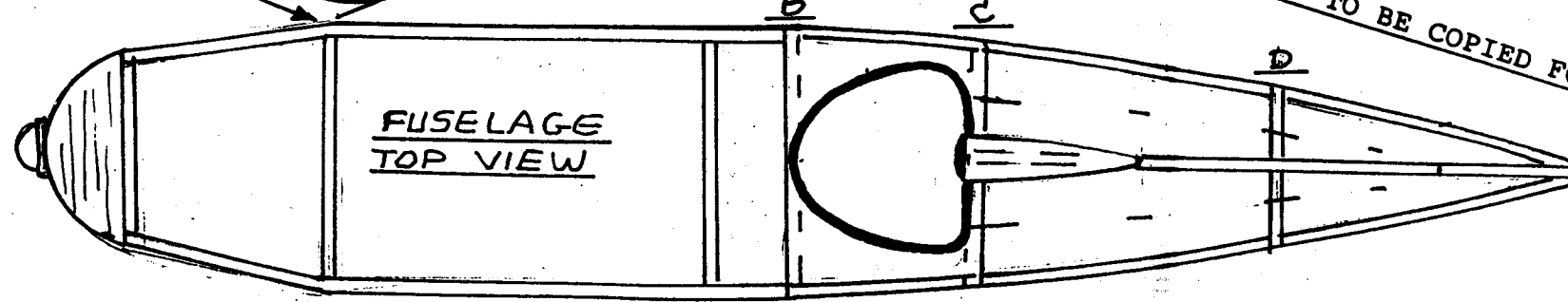


C



D

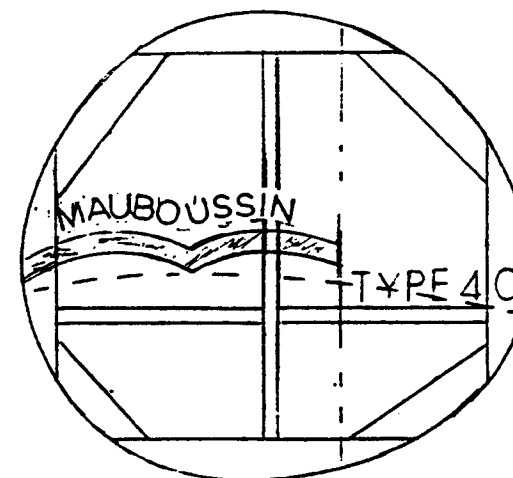
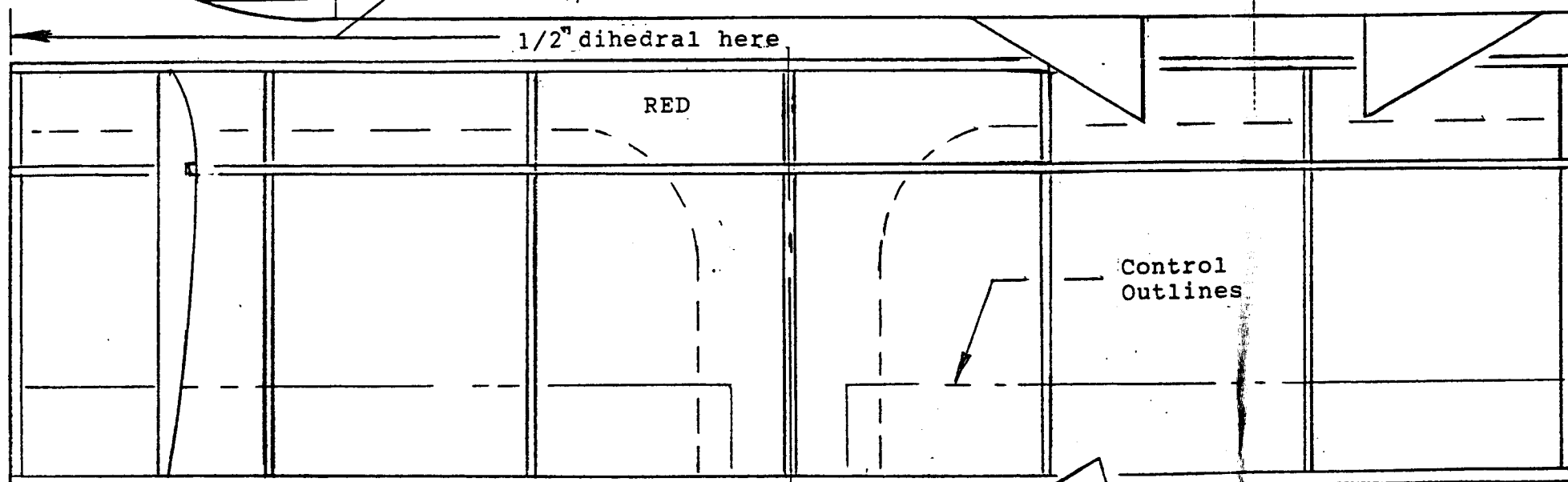
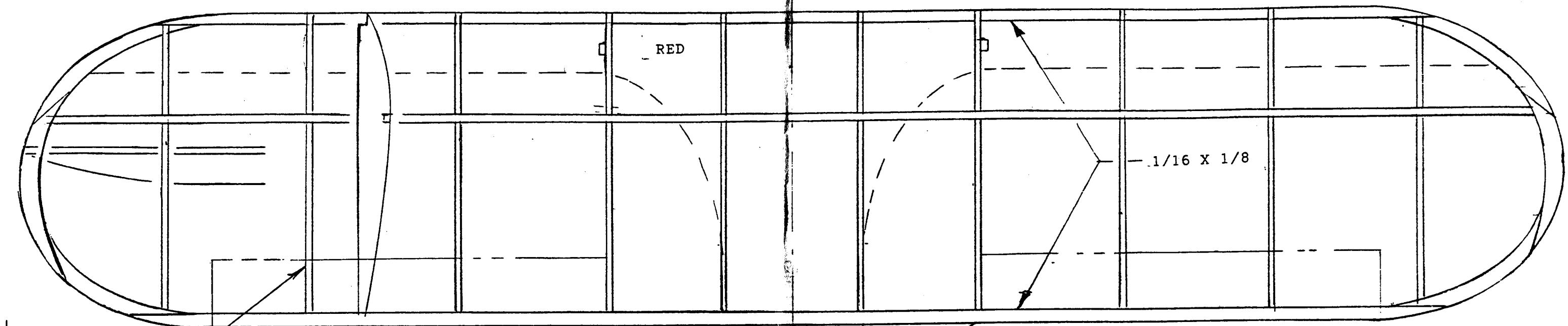
FUSELAGE
TOP VIEW



STABILIZER

FRONT VIEW
NOT SCALE

DFW T 28 FLOH (FLEA)
DESIGN BY: H. DORNER
IN 1915 ATTAINED 112 MPH
MODEL BY: FLORENT BAECKE



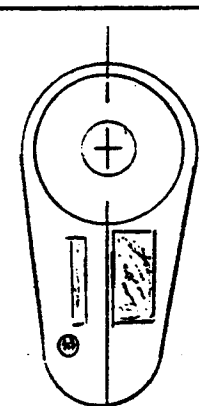
MAUBOUSSIN HEMIPTERE
NEO DIME SCALE

NOTES:

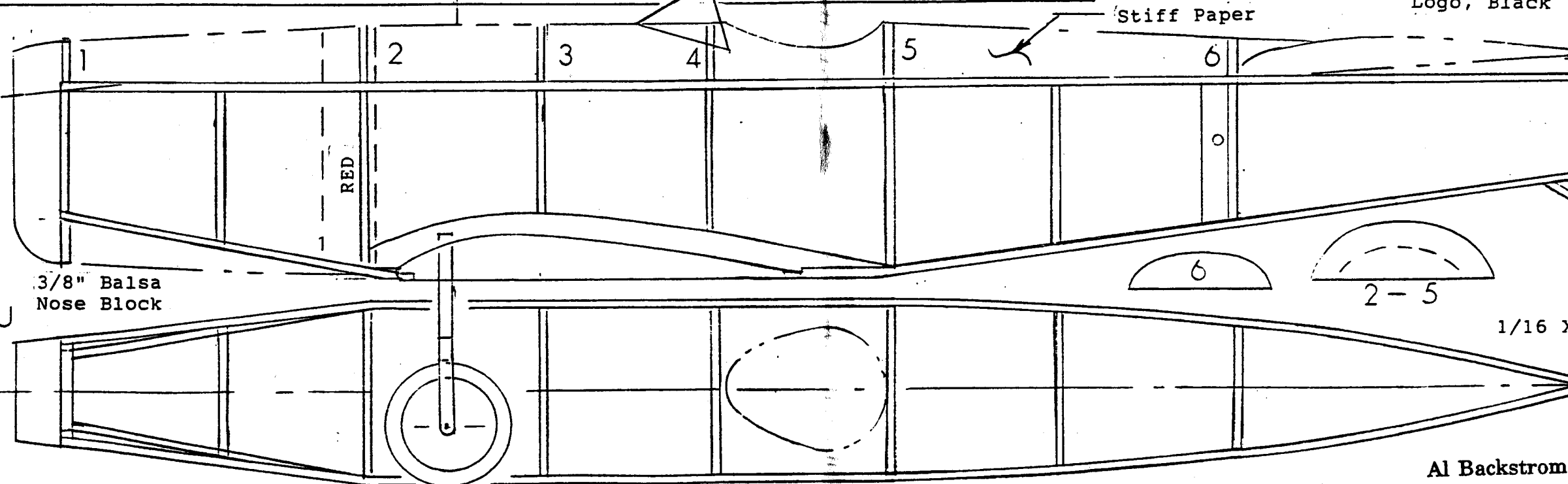
1. All material 1/16 sq. or sht. balsa unless noted
2. Color, white or as shown
3. Wheels X grain

Fins, Make 2
Logo, Black

Cut from sheet & use to align rear wing tip & L.G. ribs to make these vertical



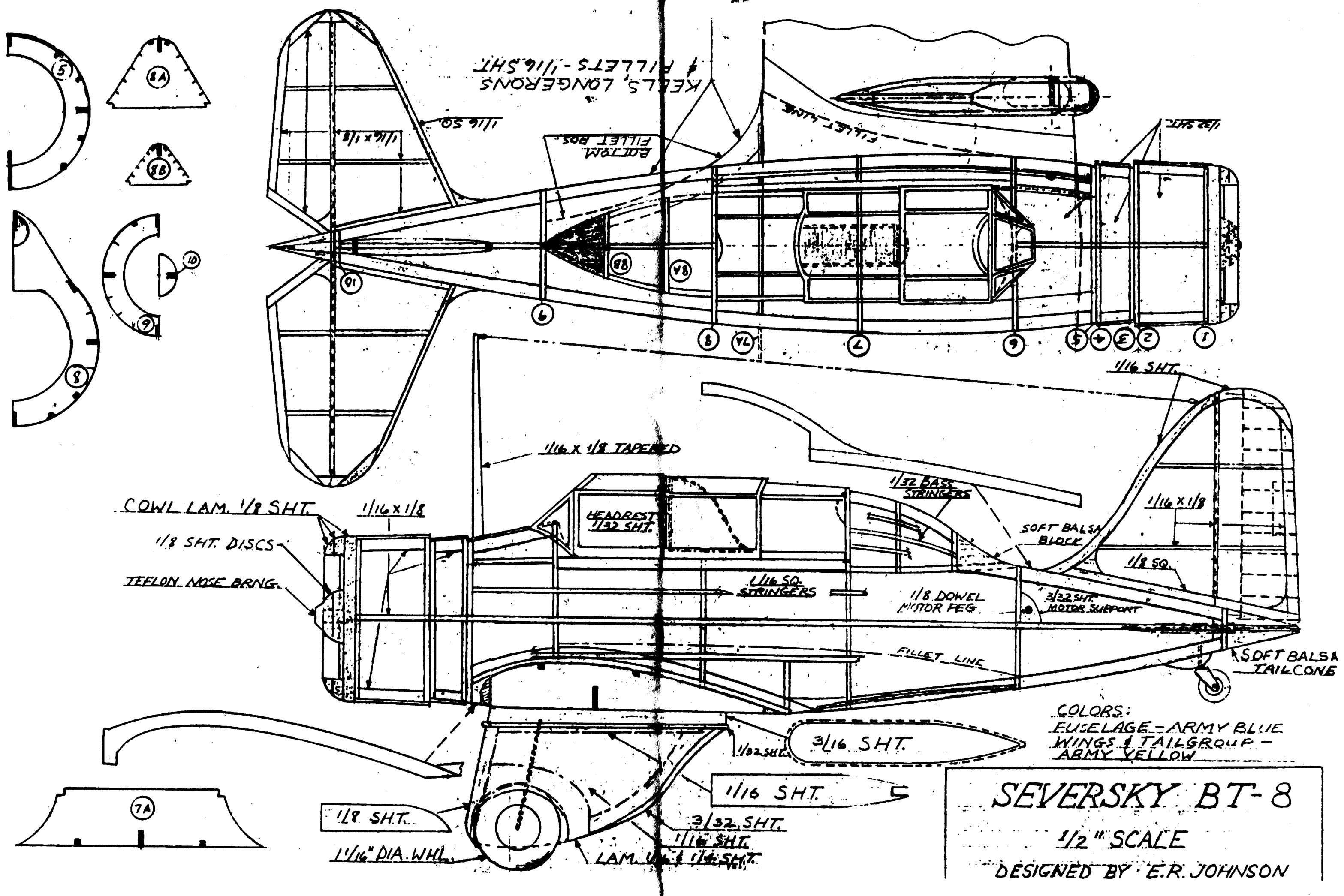
3/8" Balsa
Nose Block



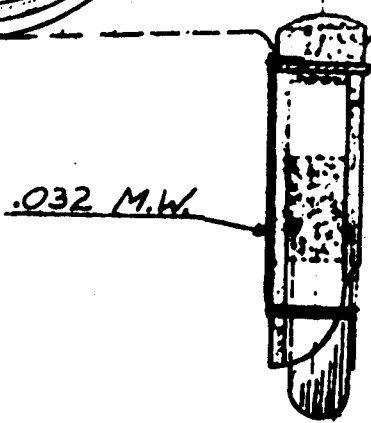
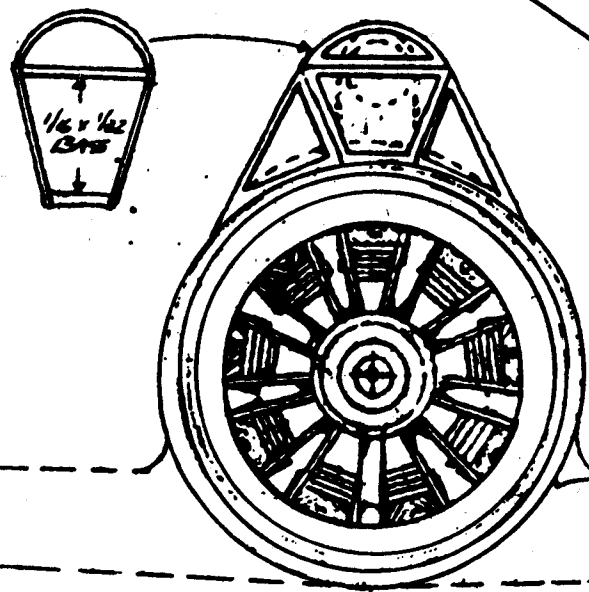
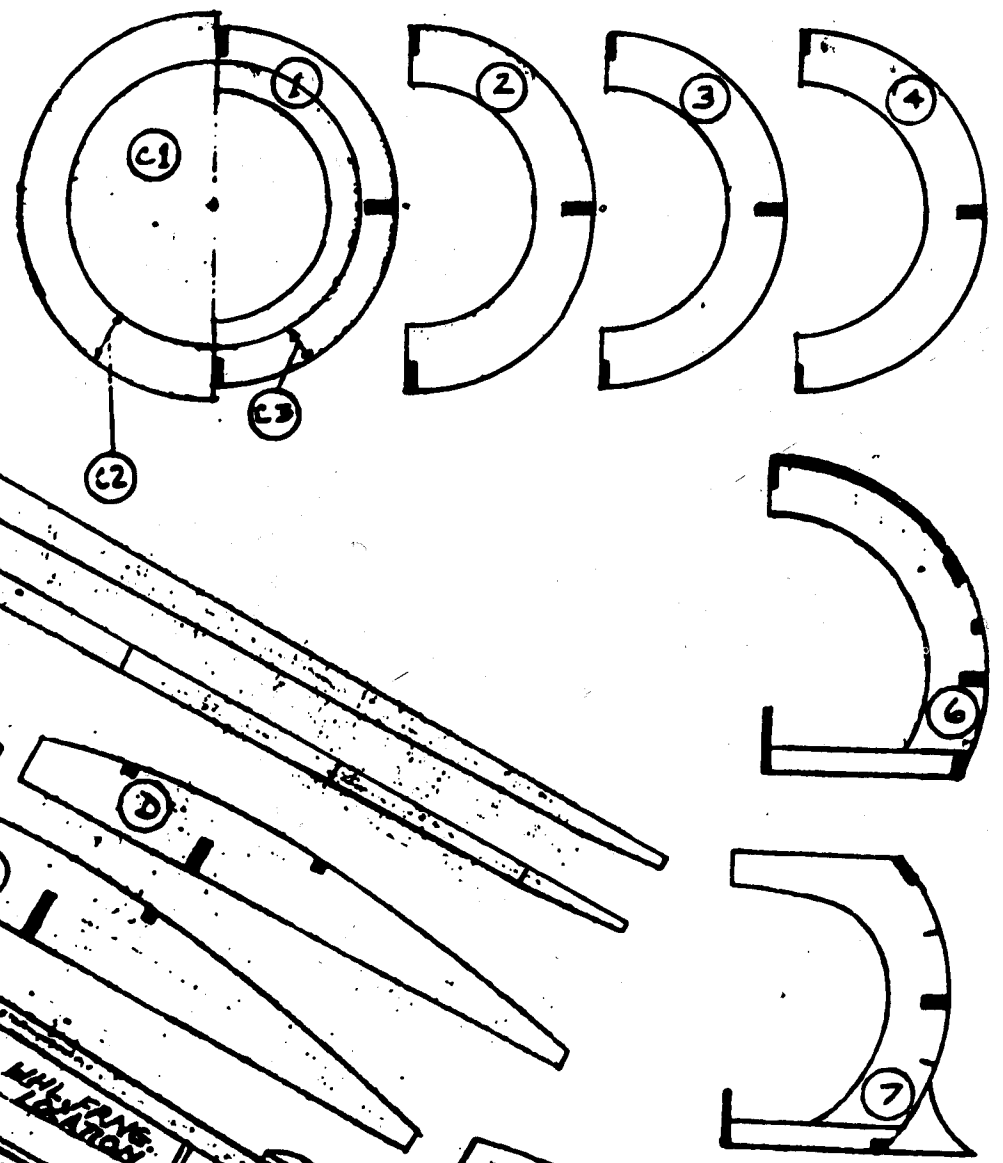
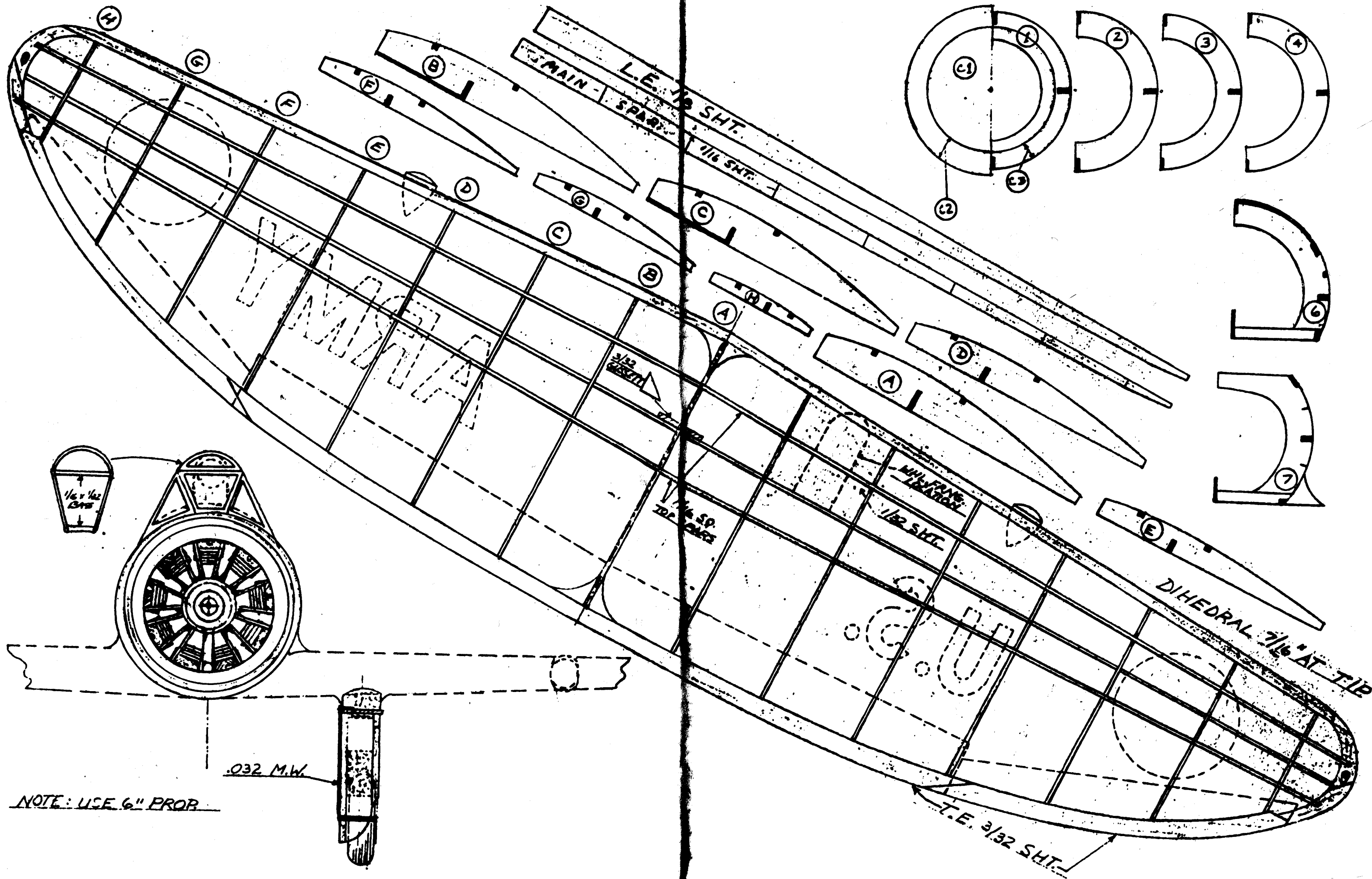
LG front view

Al Backstrom

THIS PLAN NOT TO BE COPIED FOR RESALE



SEVERSKY BT-8
1/2" SCALE
DESIGNED BY E.R. JOHNSON



NOTE: USE 6" PROP.

.032 M.W.