

HI-LOW LANDINGS The Newsletter of the Navy Carrier Society

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NCS POSTAL CARRIER CONTEST

5 September through 4 October 2020

The NCS Postal Carrier Contest starts today!

I've received a lot of enthusiastic comments about the Postal Carrier Contest, and it appears there will be good participation. I've seen the contest promoted in the "Sky Writings" of the FM Skylarks (Fargo ND). They are planning to participate, as are the Cholla Choppers (Tucson AZ) and the Rocky Mountain AeroModelers (Denver CO). The Buzzin' Buzzards (Dayton OH) are already planning a sanctioned contest during the dates of the Postal, but Bob Heywood indicated they expected to mark out a practice deck at their flying field for Postal activity leading up to the contest the first weekend in October.

If your club is planning to participate, let me know.

Clarification

The intent of the Postal is to encourage as much Carrier flying as possible, using the published rules for each event. The exceptions that I listed in the last H-L-L (number of arresting lines required and allowing multiple contestants to use the same model) should encourage participation and make it easier to fly without hauling a full carrier deck to the flying field. Burt Brokaw questioned how many flights would be allowed for each contestant. What we intended was that each day would be treated separately. Each day would have up to three attempts for two official flights, but a contestant could fly on multiple days to hope for better weather, to fly repaired models on later days if one is damaged on one day, or just to work for a better score through practice.

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2020 Southwest Regionals (Tucson AZ)

reported by Burt Brokaw

The Southwest Regional contest was held here in Tucson on January 25/26. We had six fliers with nine event entries. There were 15 flights with 14 of them being official flights which

generated a score. Nine of the flights were complete with landing on the deck. One new AMA record was set by Pete Mazur in AMA Electric Profile.

AMA Profile, Class I, and Class II combined with percent of record scoring.

First place: Dick Perry, Profile, 302.5, 72.5% (with a model borrowed from Burt)
Second Place: Lou Wolgast, Profile, 257.2, 61.7%
Attempt: Dick Perry, Class I, no score

Nostalgia Profile, Class I, and Class II combined with percent of record scoring (from previous year top twenty).

First Place: Burt Brokaw, Profile, 446.3, 81.5%
Second Place: Mike Hatfield, Profile, 386.6, 70.6%
No entries in Class I or Class II

.15, Skyray, Sportsman Profile combined with percent of record scoring (from previous year top twenty)

First Place: Lou Wolgast, .15, 200.1, 72.1%
Second Place: Jim Hoffman, .15, 194.8, 70.2%
Third Place: Mike Hatfield, Sportsman Profile, 154.1, 61.8%



Lou Wolgast's Profile Carrier entry

Electric events were flown for Top Twenty and AMA Record purposes only. Pete Mazur's score of 366.0 in AMA Electric Profile bumped the record up a little more.

Mike Hatfield flew this Boeing F4B4 in Profile



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PROFILE HELLCAT



Tony Livaudais, VP of the Rocky Mountain AeroModelers, sent me this photo of his F6F Hellcat. His description follows:

The Hellcat was designed by Andy Housden and published in *AeroModeler*. Andy lives in England and is the Secretary of SAM35 (Society of Antique Modelers). I got acquainted with Mike May from the club, and he suggested and furnished the plan from Andy. It flies very well and was originally powered by my FP40 which got a little tired. I acquired the Magnum XL36 that is currently mounted on the model from Jack Buschman who retired from our club.

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NOSALGIA CARRIER RULES

Dick Perry

The Nosalgia Navy Carrier events have been around for a long time now with few changes. Most of the rules reference the current AMA rules for pull test, lines, engines, flight procedures, etc. The differences between the AMA events and the Nostalgie classes are primarily fixed leadouts and scoring based on the old Navy Carrier rules in the Nostalgie events. There are bonus points for models and engines that were used when Carrier was flown prior to the change to the current scoring in 1976.

Many Carrier modelers are now using radio for controlling throttle and any other functions except for elevator control. Most find it easier than dealing with a three-line control system. With fewer modelers possessing the skill set and experience for three-line control systems, and particularly with newer modelers trying Carrier with radio throttle, I thought it might be an appropriate time to bring the Nostalgie Carrier rules in line with that aspect of the current rules on control systems.

Feedback from active Nostalgie Carrier modelers had a majority favoring the change, a few ambivalent, and a small number opposed. The ayes have it. The revised rules follow.

NOSTALGIA CL NAVY CARRIER

(1 September 2020)

1. **Philosophy:** The Nostalgia Navy Carrier event offers Carrier flyers an opportunity for additional Navy Carrier competition in a relaxed and enjoyable atmosphere. It recreates an earlier period of Navy Carrier flying which predated the prop-hanging slow flight which characterizes today's competition. As the years separate us more and more from the models, engines, and flying styles that formed the beginnings of the modern event, Nostalgia Navy Carrier will help to keep alive the memory of those earlier years. Because the models are simpler than those used in modern competition, Nostalgia Navy Carrier may introduce new flyers to Navy Carrier competition.

2. **Applicability:** The CL Navy Carrier rules as published in the 1974-1975 *AMA Official Model Aircraft Regulations* shall govern this event except as modified below.

3. **Model Requirements:** Model design is unrestricted except as specified below and in the *AMA Official Model Aircraft Regulations*. To encourage models which accurately reproduce actual nostalgia era Navy Carrier models, bonus points are awarded.
 - 3.1. **Engine Specifications:** Engine and fuel system specifications shall be as listed in the current *AMA Official Model Aircraft Regulations* for each event.
 - 3.2. **Moveable Leadouts:** Vertical or horizontal position of the leadouts relative to the model may not change in flight.
 - 3.3. **Control Requirements:** Control system description, line length and size, and pull test requirements will be as specified in the current *AMA Official Model Aircraft Regulations*.

4. **Builder of the Model:** The builder of the model rule does not apply to Nostalgia Navy Carrier.

5. **Historic Model Bonus:** A bonus of 100 points will be awarded for models which were designed, published, or kitted prior to January 1, 1978. The Contest Director may require proof of eligibility, which shall be the responsibility of the contestant. Proof may consist of dated, published plans; construction article, photograph or advertisement from dated magazines; dated photographs, and/or letter of confirmation of the date of design. Plans of un-kitted, un-published designs must be made available to NCS membership. To qualify for this bonus, models must comply with the following requirements:
 - 5.1. **Modifications:** No modifications to the original design are permitted, except as listed below. Any modifications other than those listed in section 5.2 which, in the opinion of the event director, significantly change the appearance or performance of the model as it was originally designed, shall not be permitted. This prohibition includes, but is not limited to, changes in airfoil, changes in dimensions, and use of moveable control surfaces not included on the original design.

(CONTINUED ON NEXT PAGE)

NOSTALGIA CL NAVY CARRIER

(CONTINUED)

5.2. Allowable Modifications:

5.2.1. Landing gear may be changed in length or material, but must exit the model at the original position. A tail wheel may be substituted for a skid and vice versa. Wheels may be of any diameter.

5.2.2. Leadout position may be changed from that shown on the plan. Ground-adjustable leadouts are permitted.

5.2.3. Control travel, control mechanism location, and control mechanism may be changed.

5.2.4. Tip weight may be changed or may be adjustable.

5.2.5. Tailhook and its location may be changed.

5.2.6. Structural changes to strengthen the aircraft are permitted.

5.2.7. Building and finishing material substitutions are permitted.

5.2.8. Location of access hatches may be changed.

5.2.9. Engine mountings may be changed, and engines of different displacement may be used.

6. **Non-schnuerle Engine Bonus:** Non-schnuerle engines will receive a bonus of 20 points.

7. **Carrier Deck:** A carrier deck corresponding to current AMA regulations will be used.

8. **Records:** Records will not be established for Nostalgia Navy Carrier.

9. **Combination of Classes:** Class I and Class II may be combined for Nostalgia Navy Carrier. If classes are combined, Class I models will receive a five percent bonus on total score (multiply Class I total score by 1.05). Profile Class will not be combined with Class I and Class II in Nostalgia Navy Carrier.

ACADEMY OF MODEL AERONAUTICS
 OFFICIAL MODEL AIRCRAFT REGULATIONS
 1974-1975

28. CL NAVY CARRIER

1. **Applicability.** All pertinent AMA regulations (see sections titled Sanctioned Competition, Records, Selection of National Champions, and General) and the General Control Line Rules shall be applicable, except as specified below.

2. **Carrier Deck.** A carrier deck or suitable area shall be provided for this event. It shall be 44' long by 8' wide, and the deck center line shall be curved to the perimeter of a 60' radius arc, the center of which shall be plainly marked, preferably by an unanchored 18" square block of 1/4" wood or 1/4" plate steel painted white. A sloped protective ramp 4 ft. long extending from the ground up to and flush with the edge of the deck shall be provided at the stern of the carrier deck. The edge of the deck shall be adequately marked, and any landing touching any part of the ramp shall be considered a crash. The arresting area of the deck shall be 20' long, and have arresting cables with a minimum dia. of 1/8" (.125"), and a maximum dia. of 1/4" (.250"), with a minimum breaking strength of 200 lbs., suspended from 1/4" (.250") to 1/2" (.500") above the deck, spaced two feet apart. Sand bags weighing approximately 5 lbs. each shall be attached to each end of the 18" long arresting cables. Screw eyes or other suitable guides, shall be used on the outer edges of the deck to hold up the cable and also allow the cable to move through when an arrested landing is being made. The free roll area shall be 24' long and smooth enough to make a free rolling takeoff. If carrier is laid out on the ground, crepe paper streamers shall be stretched across two feet in front of the bow and one foot in back of the stern of the carrier, approximately 1/2' from the ground. Touching either streamer in taking off or landing will be considered a crash.

3. **Aircraft Requirements.** Model must have a fixed or retractable landing gear. If a retractable gear is used, it must be lowered for landing. Profile Carrier models shall have a fixed landing gear consisting of at least a two-wheel main gear with at least four inches separating the wheels. Model must be equipped with an arresting hook which when extended may not be longer than one-third the length of the fuselage. Model wingspan shall be 44" maximum. The model shall be rigged for counter-clockwise flight. Models (entries) shall be placed and compete in three groups as follows:

- 3.1. **Class I**—Models having an engine displacement up to and including .4009 cu. in. Class I models may not be entered in Class II competition.
- 3.2. **Class II**—Models having an engine displacement of .4010 cu. in. to maximum of .6500 cu. in. Class II will also include jet-type as outlined in the CL Jet Speed section. Jet models shall be entered in Class II only.
- 3.3. **Profile Class**—All planes shall be of the profile fuselage

type. Maximum engine size: .3600 cu. in. displacement, plain sleeve bearing only. Engine must not be cowled in. No pressure fuel systems allowed, and the engine must be unmodified and a front intake type equipped with at least a production RC-type intake throttle. Minimum wing area shall be 300 sq. ins. It is encouraged that the plane outlines follow some type of Navy aircraft, and the paint scheme (color) must be of some traditional Navy type with Navy markings. There will be no bonus points awarded in this class.

3.3.1. In the Profile Carrier class the terms "engine must be unmodified" and "production RC-type intake throttle" mean: the plain bearing engine will be acceptable only if it and its single barrel intake throttle are unmodified factory produced units with unmodified venturi throat area and they are advertised and sold as a complete factory assembled ready-to-run combination. Use of any homemade or custom produced throttle, dual carb set-ups, or combinations of engines and throttles except as defined above, are unacceptable. The intake throttle may be coupled to a corresponding factory installed exhaust throttle if the engine is sold with one, but this may be removed if desired. Responsibility for verifying that the engine and throttle are unmodified and conform to the above description rests with the contestant.

3.4. In the case of multi-engine models, the sum of the displacement (engines) will govern the class into which they are placed. Engines used must be of the reciprocating internal combustion or jet type. Neither rocket power nor auxiliary takeoff booster devices are permitted in any case.

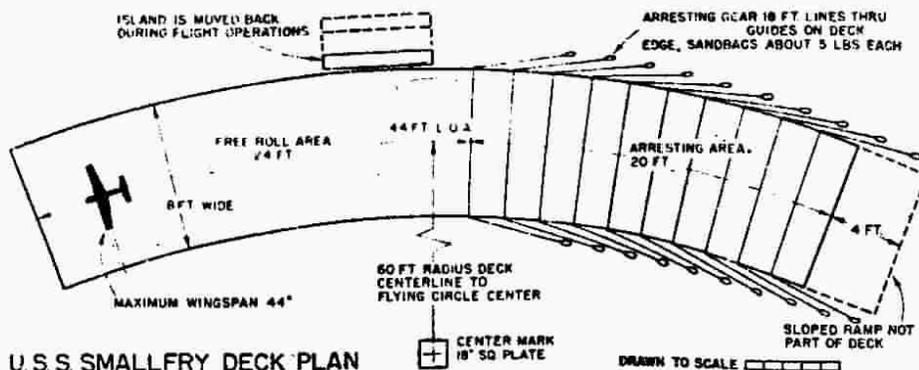
4. Control Line Requirements.

4.1. Line specifications and pull test as per chart. Three control lines are required for the Profile Class.

4.2. All control lines bearing any part of the model's pull in flight must meet the minimum diameter requirements as specified in this section. Auxiliary lines which do not bear any part of the model's pull in flight (i.e., not connected to the bellcrank) and are used solely to actuate components such as landing gear, flaps, etc., may be of any diameter. A load bearing line is one that is tight when plucked during the pull test. If all lines used do not meet this test, then the line diameter required for the number of lines that do bear the load shall be used.

5. Official Flight.

Contestants who do not have their model on the deck within two minutes after being called to fly will have their flight cancelled, and will be charged with an attempt. Three minutes will be allowed to get a model airborne from the time the contestant signals he is ready, or begins to start the engine. Any endeavor to make a take-off is an attempt. Three attempts will be allowed for two official flights. A flight is considered official when the contestant signals for a timed low speed run. In the case of multi-engine models, an extra two minutes starting time will be allowed for each additional engine.



U.S.S. SMALLFRY DECK PLAN

CL NAVY CARRIER 1974-1975 (continued)

6. Flight Requirements.

6.1. General. All ground area shall be termed water. During an official flight if any part of the model comes in contact with the water, the model will be considered to have crashed, and the flight will end. During official timed runs the model may not lose its forward counterclockwise motion or deviate radically from the flight characteristics of its prototype. The model must not exceed an altitude of 20' for more than 1/2 lap during a timed run. No whipping will be allowed. The elevation control line(s) shall emerge from the model within the fore-aft range covered by the wing root chord, and all other lines shall emerge with or between the elevation control line(s). It is permissible to change the position of the movable portion of the rudder during flight. If in the opinion of the judges there is a violation of the above rules, the flight shall be cancelled and the contestant charged with an attempt.

6.2. High Speed Flight. The first seven laps after take-off constitute the high speed phase of the event. Timing will start the instant the model is released for take-off, and shall end when the model completes its seventh lap over the stern of the carrier. The flyer shall not shorten the flight radius of the model during high speed flight by walking a circle larger than three feet in diameter.

6.3. Low Speed Flight. When the contestant has decelerated the speed of his model to his satisfaction, he will signal the judges to start timing his low speed run by using a prearranged signal that is acceptable to the judges. The model will then be timed for seven laps, using the stern of the carrier flight deck as the starting point.

The start of the low speed run must be signaled for within three minutes of the completion of the high speed run. Time for the seven laps shall be used to calculate the average speed. Plane must maintain a forward counterclockwise direction relative to the ground throughout the low speed run as any deviation will be scored as an attempt. The flyer shall not lengthen the flight radius of the model during low speed flight by walking a circle larger than three feet in diameter.

Models powered by two or more engines must keep all engines running through low-speed phase of flight to garner full points for speed differential. One engine running of two or more will score only half of differential.

6.4. Arrested Landing. All landings on the carrier deck shall be made at low speed only. The landing must be completed within eight minutes of take-off. After lining up with the deck upon completion of the low speed run, the pilot shall signal the judges that he is ready to land. After the signal, each lap shall decrease the landing score by 5 points.

6.4.1. The signal of the pilot's intent to land shall be given as the model crosses the deck beginning his lap prior to landing. If other than a hand signal is used, the pilot shall describe his signal to the official immediately prior to each of his flights (i.e., before he starts his engine).

7. Bonus Points. A scale model of a carrier aircraft of any nation, provided it displays the national markings of the using nation, will receive 100 bonus points. To qualify for bonus points the prototype aircraft must have been used for operations from aircraft carriers. Experimental aircraft which did not reach operational status are acceptable if the prototype was intended for carrier operation or if the prototype made actual carrier-type takeoff and arrested landing on an actual or simulated carrier deck. Proof of operational status, intended use or carrier takeoff/landing tests is the responsibility of the contestant. Scale 3-view drawings of the full-scale aircraft must be submitted to be eligible for bonus points. (See Proof of Scale Regulations in the Scale section of the rule book for types of plans acceptable.)

7.1. No points will be given if the linear dimensions of the major components of the model are not to the same scale, within a plus or minus 5% tolerance. Models which appear to comply with this tolerance upon rudimentary inspection need not be further checked except in case of dispute. "Major components" are considered to be the fuselage (excluding surface markings) and air brakes; the top view profile of the wing, horizontal stabilizer, elevator, and flaps (ailerons shall not be used as flaps); and the side view profile

of the vertical stabilizer and rudder. Although landing gear needs not to be scale, it must emerge from the model in the same location as the prototype.

7.2. If the engine or accessories protrude from the scale contours of the model, there may be openings in the skin sufficient to accommodate the protruding part with 1/4" maximum clearance at all points around the protruding part. Five points shall be awarded for each engine above one used to power the model, providing such engines contribute to the performance of the model from take-off through at least the high-speed phase of the flight (at completion of high-speed timing, count number of engines running, subtract one, and multiply times 5).

7.3. To be considered scale:

7.3.1. The model dihedral as viewed from the front must be similar (within 2 or 3 degrees by official's visual judgment) to the actual airplane as shown in the three-view drawing. Namely, it must have some positive or negative angle, as shown on the 3-view drawing.

7.3.2. If a clear canopy is not used the cockpit or canopy area must be defined with a contrasting color or color outline denoting the scale area.

7.3.3. The color of the model should be similar to any traditional Navy type aircraft paint scheme.

8. Takeoff. Model must successfully take off from free roll portion of the deck, point of model release to be no more than 42" from the last arresting line.

9. High Speed Points: All high speeds will be calculated to the nearest 1/100 mph. High speed points shall be scored the same as speed in mph, and to the nearest 1/100.

10. Low Speed Points: Low speed will be calculated to the nearest 1/100 mph. Low speed points shall be scored as three (3) times the difference between the high speed and low speed in mph.

11. Landing Points. Landing (dead stick included) shall be scored as follows:

11.1. Normal 3-point arrested landing, 100 points.

11.2. Arrested landing with plane in other than 3-point attitude, 50 points. Mono-wheel models (unless the contestant can offer documentation that he is representing a particular full-scale plane) should receive a maximum of 50 landing points for "other than 3-point attitude".

11.3. Arrested landing with plane coming to rest on its back or with one wheel off the dock, 25 points.

11.4. From the above score, 5 points will be deducted for each unsuccessful landing approach made after signaling; however, landing score in no instance will be less than zero. No points will be allowed for other landings.

12. Flying for Record. A score shall be accepted for record purposes provided:

a. A full-sized carrier deck as specified in the "Carrier Deck" paragraph has been used, and

b. All other requirements of Control Line Carrier have been met, and

c. At least two timers, equipped with stopwatches having 1/10th second or finer gradations, have timed flights in unison from the same judge's position. Records shall be recognized where no more than 0.2 second variation on the high speed on 0.4 second variation on the low speed timing exist between the watches used. The average of the two watches shall be used to calculate speed, and

d. Only those flights made outdoors shall be recognized for record purposes.

e. Records shall not be kept for Profile Class.

f. Navy Carrier records may be set only during the course of normal competition flying at an AA, AAA, or AAAA contest.

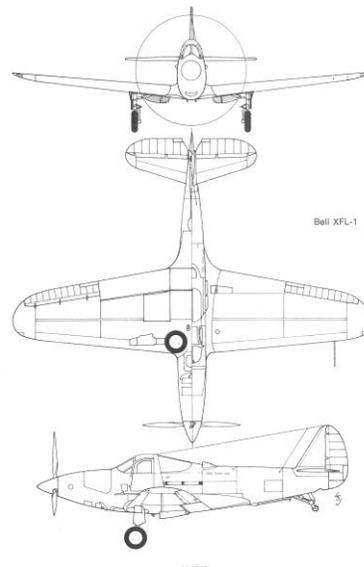
CL NAVY CARRIER								
Class/ Engine Size (cu. in.)	Max. Model Weight	Required Line Length	Required Minimum Diameter of Each Line					Pell Test
			Single Strand			Multi-Strand		
			1 Line	2 Lines	3 Lines	2 Lines	3 Lines	
Class I: .0000—4009	4 lbs.	80'0"-80'8"	.025"	.020"	.015"	.020"	.015"	25G
Class II: .4010—8500	4 lbs.	80'0"-80'8"	.033"	.024"	.018"	.024"	.018"	25G
Profile: .0000—3800	4 lbs.	80'0"-80'8"	—	—	.015"	—	.015"	20G

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Bell XFL-1 Airabonita for Nostalgia Carrier (AMA, too) Dick Perry

A decade or so ago, Ron Duly wrote to discuss the eligibility of the Sterling P-51 kit for Nostalgia Profile Carrier and asking me to comment for the record. Here is an update of my comments at that time.

There is really no question about eligibility for the Historic Model Bonus for any Sterling kits as they were all designed well before the 1 January 1978 cutoff. The earliest record I've seen of the S-2 Mustang kit is in the 1955 catalogue. I've been around long enough, unfortunately, to have been flying well before the cutoff date, and I've actually seen the Sterling P-51 flown in Carrier – both in the 1970s and up to the present time. I believe it was at the Southwest Regionals when a Sterling S-2 P-51 was flown at Buckeye. There isn't a requirement that someone actually flew the model in Carrier before the cutoff, only that the kit existed and could have flown in Carrier under the old rules. The Sterling P-51 is definitely eligible for the Historic Model Bonus.



Ron also believed he had seen a Sterling Yak-9 converted to an Airabonita. It's a great idea, and I've mentioned at least once in my *Model Aviation* column that the Yak-9 would make a very

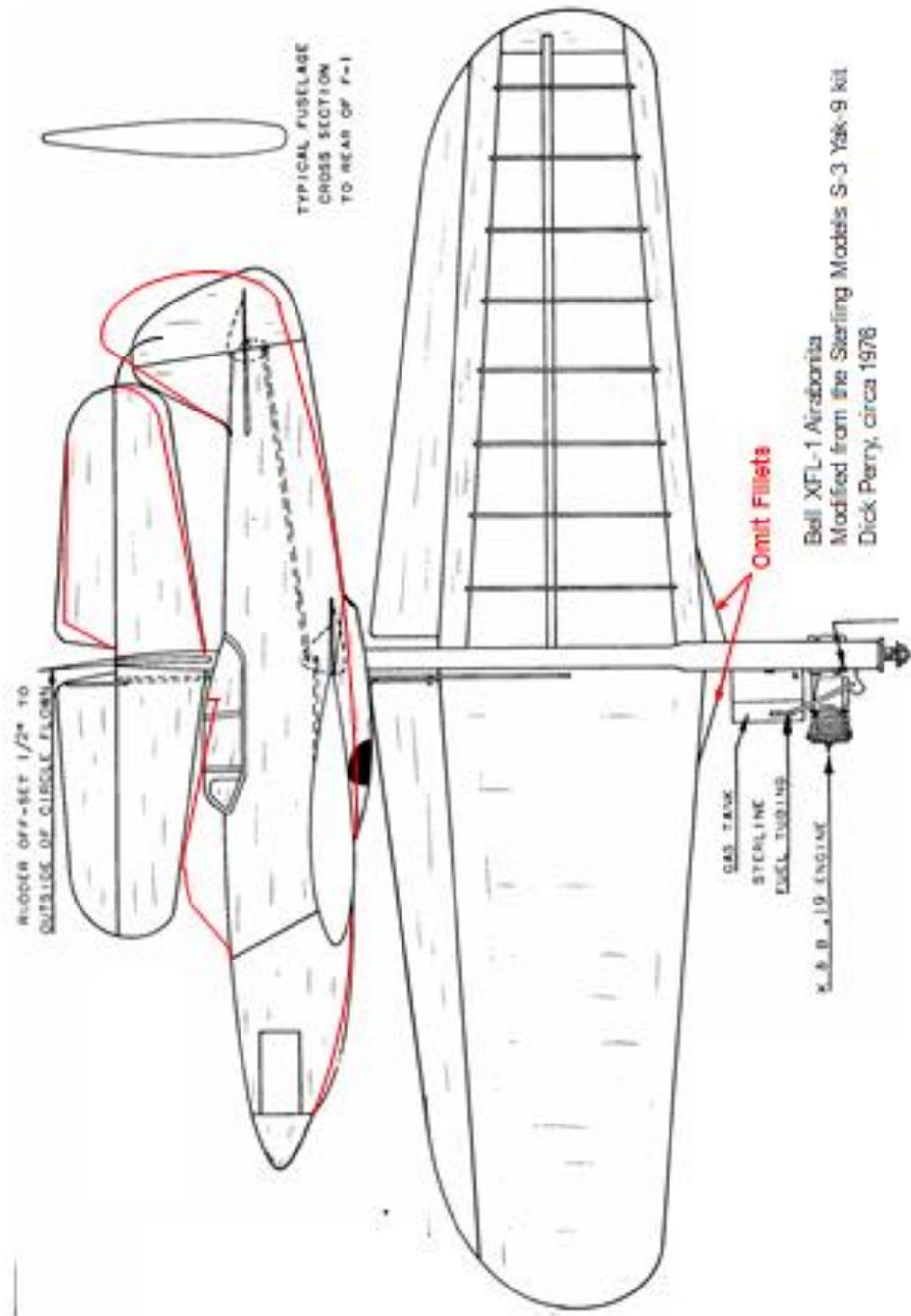
good Bell XFL-1 Airabonita with very few modifications and most of the original parts. Though I personally can't recall ever seeing one modified in that way, the thought had, indeed, occurred to me, and I still have a Yak-9 that I purchased over four decades ago with that intent.

U.S. Naval Fighters; Lloyd S. Jones; 1977; Aero Publishers; Fallbrook CA

I liked the way my Profile Guardian looked compared to the “non-scale” models being flown in the 1970s (including my own “Anymouse” models). I had the XFL-1/Yak-9 design drawn out and ready to build, but with the change in the rules for 1977, my attention was diverted to a couple of G-S Bearcats with internal slider followed by a low aspect ratio non-scale design for internal slider (Anymouse IV). Though it was designed before the cutoff (thus qualifying for the Historic Model Bonus under the Nostalgia rules), I didn't get around to actually building my version of the XFL-1.

For anyone who might be interested in an XFL-1 modification of a Sterling Yak-9 kit, here it is, as designed by me in 1975 or 1976. The changes to the Sterling kit are relatively minor. The fuselage and the horizontal stabilizer and elevator are trimmed down to more Airbonita-like outlines as shown in the accompanying drawing. All the modifications are highlighted in red. The canopy add-on to the fuselage is cut from 1/2” balsa and substituted for the add-on canopy provided in the kit. The vertical stabilizer and rudder are new, and cut from 1/8” hard balsa. The remainder of the model is stock Sterling. The way it was designed, the rudder is fixed, and the flaps are moveable, though fixed flaps would not affect bonus point eligibility.

The S-2 P-51 and S-3 Yak-9 kits are available from Brodak Manufacturing, (<https://www.brodak.com/>). Other Nostalgia-legal kits are also available (Ringmaster, Flight Streak, Flying Clown, etc.). Though there are no longer ARF versions available, one might find some in the secondary market. Older models acquired from friends, or any eligible model with two-line control can now be converted to throttle using radio without having to remove and convert the control system to three lines.



Temporary Editor

For the next couple of months, I'll be producing and distributing the H-L-L newsletter. It will be primarily a means of distributing information about the NCS Postal Carrier Contest, but I'll be including additional items from my archives. If you have an item to share, especially your photos and results for the NCS Postal Carrier Contest, send it to me at tailhooker@comcast.net .



Dick Perry
Temporary Editor