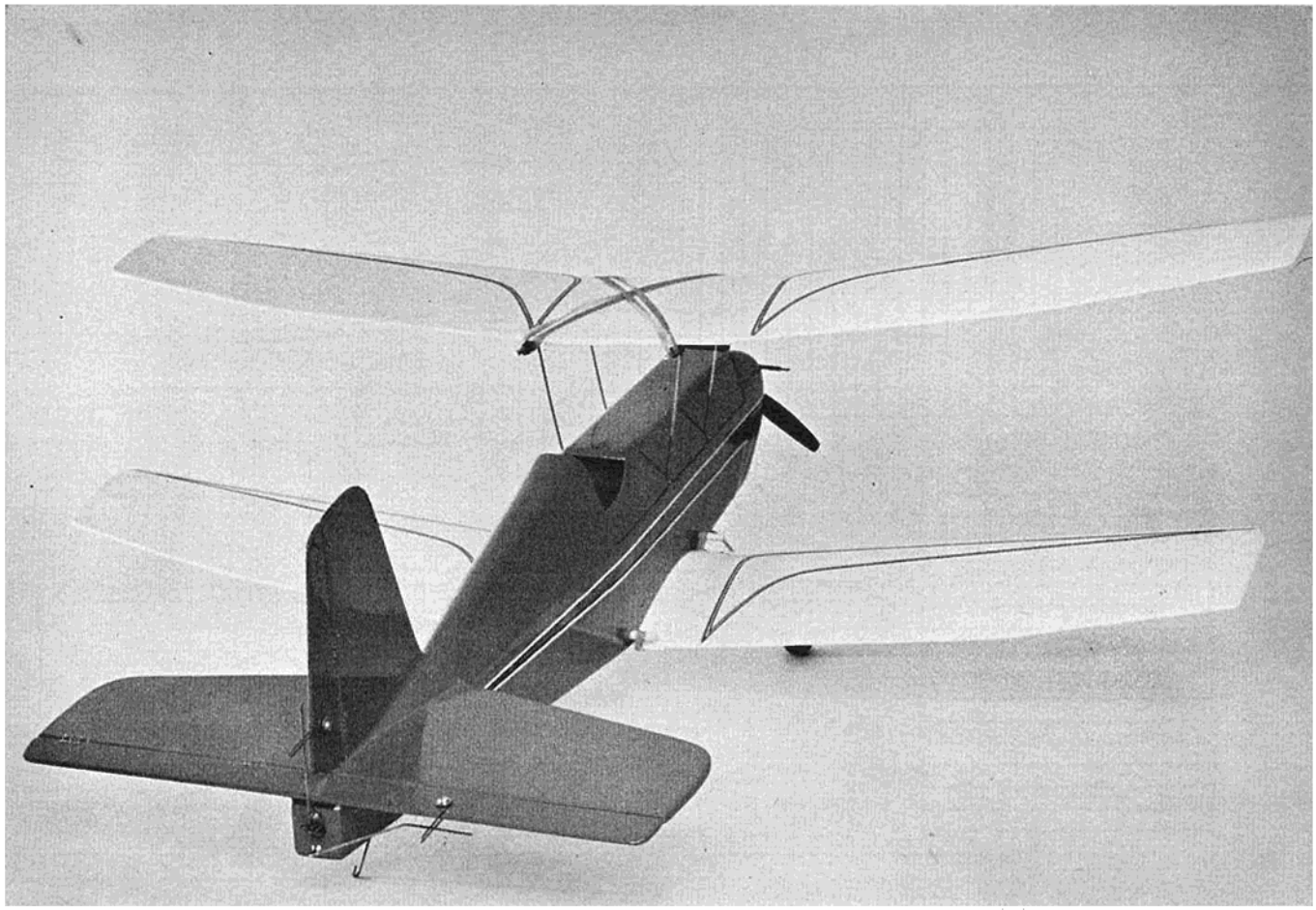

RCM's version of the Wild Child with single channel equipment, later switched to six channels using the Convertible Superhet and Bellamatic servos with RCM amplifiers. Hobbypoxy red and white with black trim.

THE WILD CHILD . . . PLUS SIX

By BILL NORTHROP

Do you know why writers get gray? I'll tell you why writers get gray. Suppos'n you sit down and design a nice little Half-A biplane, you fly it over a period of about three to four years, and it proves to be a durable, stable lively little plane. It's simple to build, will handle single channel with escapement or pulse, and most of all, for the hobbyist deeply involved in multi, it provides a needed change of pace from the 70 m.p.h., 8-pound Fort Knoxes he's usually pushing around.

So what happens? Well, this writer who is about to get gray, scribbles out a story on this little biplane, which one of his friends has dubbed the 'Wild Child.' He tells all about the change of pace bit and how relaxing it is to fly single channel once in a while. He explains how, with the kick-up elevator properly applied, it is possible to make three-point landings (no, not wing tip, rudder tip, and stab tip — just two wheels and a skid!) He tells how, with deft applications of right rudder pulses on a Babcock Compound it is possible to fly around in mad cicles about five feet off the deck and send everybody running for their cars. He goes on to explain how this maneuver prevented a flyaway one day when he used a plug-in antenna connection for ease of transferring the receiver from one plane to another. On this occasion, he luckily realized after the first couple of commands that he had forgotten to make the connection and W.C. was up there with about five inches of antenna. The last key had put the plane in a turn. Fortunately, Wild Child was never in a sweat to get out of a turn, once put in it, so this soon-to-be-gray writer ran after the plane, got within range, and proceeded to fly it in 20 ft. circles, ukie fashion, until the fuel gave out. Needless to say, the antenna has been one-piece since then!

I remember another time when this — oh, I fogot — I was going to explain why writers get gray. Well, this writer fella was sittin' around the house doin' nuttin', as usual, when the phone rings and some nut claiming he's editor of an R/C magazine says he'll make the Wild Child go down in history if the writer will send him the whole business so it can be published. The writer said "fine," and then had a heart attack. (To all you fellas who may be talking to an editor in the near future, don't worry, this wasn't the cause of it.)

To make a long story short (It's too late now, Willie. — Ed.), this writer-type guy put the job off for about three or four months and then finally got on the stick to finish it up and send it to the editor. Just as he was going to mail the article about

Want a rest from that 70 m.p.h. multi?
Try this change-of-pace biplane for single channel.
And if you stretch the bulkheads just slightly . . .

the change-of-pace biplane for single channel, the greying writer gets a phone call. You guessed it! That nutty editor again. Y'know what he's going to do? He's going to create a sensation by putting six-channel in the 'Wild Child' and come up with one of the smallest Half-A multi's to date!

This guy's mad! But, y'know, it sounds intriguing as the devil! The 'Wild Child' isn't exactly a subminiature cuty-pie. With a 28" span and about 250 sq. in. of usable wing area, it has hauled a 22½ volt Kraft single, 3 pencells, a 22½ volt hearing aid battery, and a Babcock compound on rudder and kick-up elevator for most of its useful life. Just to prove that wing loading is unimportant, at 23 ounces all up, the wing loading is only 13 oz./sq. ft., but the plane feels like a brick compared to the modern-day so-called vest-pocket sized backyard R/C flitabouts. I'll take the 'Wild Child's' ruggedness and penetration qualities any day in preference to the superlights. I must concede that with careful attention to weight factors, a Wild Child can be loaded with special multi equipment and still come out at 23 to 24 ounces. Whether you fly it on single, six, or pulse, you'll like the 'Child.'

Construction

Construction is quite simple. The stabilizer, elevator, fin, and rudder are best made from "C" grain balsa. Sig still takes the extra trouble to make this warp-fighting wood available. The stiffeners at the tips of the stab prevent splitting during tail first landing (no comment!).

Bulkhead A on the prototype was perpendicular to the centerline of the fuselage and tapered hardwood blocks were used to obtain the thrust offset. Once the offset was determined, it was incorporated in the drawings. Any minor adjustments can be made with washers.

Make up the sides including the vertical grained doublers. Before assembling the sides with the bulkheads, determine whether or not you intend to use Annco or Bellamatic type multi servos for four or six-channel use. If you do, it will be necessary to plan your battery, receiver, servo installation carefully, increasing the width of the bulkheads as necessary to fit your installation. It is possible to install this lightweight multi equipment without altering the plans, although it makes quite a tight compartment in which to work! After the body is assembled using bulkheads A and C, along with the cabane struts, the horizontal grained triplers can be installed.

Build the hatch right on the body by installing pieces of Saran Wrap at the hatch ends to prevent it from becoming a permanent fixture. (You see, the glue will — oh, never mind!) Pin the hatch bulkheads in place. Pin and glue the ⅛" top sheet in place, having tapered the edges to a proper fit. Then pre-taper the bottom edges of the 1/16" slope sides, notch for the cabane struts (put stiffeners in later) and glue in place. Er, ah, Clyde . . . hey! Don't cover up no pins holding those hatch bulkheads in place or you'll be hung up as bad like you left off the Saran Wrap . . . right, pal?

Sew the 3/32" landing gear to the pre-drilled ⅛" ply floor with uninsulated single strand hook-up wire. (J-bolts stick into radios and poke holes in batteries!) This can be done after the finish is applied, making that particular job easier. A liberal fillet of glue around the whole mess

Run for the cars . . . that nut's at it again!

The author's Wild Child . . . going into its 4th year.

will prevent fuel from sneaking under the landing gear and into the fuselage.

The photographs show the R/C installation in the author's prototype, plus the original single channel escapement set-up in the nutty editor's version. The latter W.C. is the one in which six channel was later installed and flown. For single channel applications, .045 wire will do nice as torque since the distance involved is quite short. Bonding wires eliminate "noise" to touch receivers, particularly in escapements that provide metal to metal contact, such as the Babcock Mk II used in the author's prototype.

The wings are rugged and warp-free, and have survived many cartwheels. (Well, they can't all be three point landings!) Cut out four separate wing panels. After the leading edge is installed, but prior to inserting ribs in place, apply two or three coats of sanding sealer to the underside only. This will put just about the right curve in the surfaces.

To complete a panel, glue in all ribs, pinning through from the **top.** Full size ribs are used at the tip. This is **important** — you trim them off later. Now pin the whole mess down flat on your building board. (When I run out of space, these things usually end up getting pinned to the backside of the cellar door. It's smooth, flat, and unoccupied.) Steps for joining panels are shown on the drawings. A wing has never broken, but if and when one does, I don't think it will be through the center section!

To complete the wings, trim the excess lumber from the tip ribs. If instructions were followed, you now have washed out tips on all four panels, and you can't hardly get them no more.

The prototype was finished with three coats of sanding sealer and two coats of clear dope, all butyrate, no trim. RCM's prototype was red, white, and black, all done in HobbyPoxy. (Old Gluey was trying to make me feel bad — I like to look at grain!). Contrary to the results of most articles on small planes, your finished job will probably come out lighter than the original. Besides... I have a reputation to uphold. (Yeah, Willie ...but we won't say what it is. — Ed.) Mine is now using a relayless C.G. Pioneer receiver. (Now called F&M, I believe this was the first commercial relayless receiver. Came out around 1958 or 1959. Mine is a six meter version dating around 1962). However, the all up weight is about the same as I use four pencells in series-parallel for more reliability through added capacity.

A few words about flying the Wild Child. When you look for a place to grab a-holt of it, you'll realize the highly scientific reason for leaving the bottom surface of the wings uncovered. The perfect grip for hand-launching is by thumb and first two-fingers on the bottom center-section of the bottom wing. It's just about at the C.G.

The best launch for powered flight is a javelin throw straight toward the horizon. When properly trimmed, W.C. will bore on straight and level and will fly right out of sight about six feet off the deck unless you stop it.

The original, with kick-up elevator, will loop from straight flight if it's "on the step." A real "let's-get-out-of-here-that-guy-will-kill-us-all" maneuver begins with a loop at about 25 feet altitude. When W.C. gets on its back, let off the button. The idea now is to play "chicken" with yourself and see how long you can wait before pulling the ship out of what Harold Goldklank calls a "Figure 9." I've pulled out with a foot and a half to spare. Don't try it unless you can hit 3 pulses faster than Matt Dillon can draw on the "meany." (Of course, if you go ape like certain editors I know, and put multi in this thing, forget it — there's too much at stake).

Skoal.