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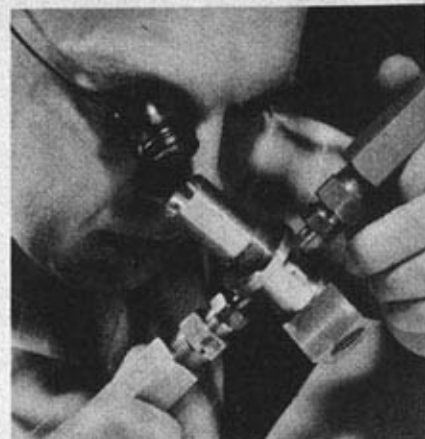
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ROCKET TRAILS by G. Harry Stine

Amateur vs. Model Rocketry

I feel that a comment is in order about the article entitled "We Lead the Russians in M.R." by Harry Stine. I am surprised that you printed this obviously contrived story, simply on the grounds that it consumed a half of a page, saying one thing—"We have better model rocket engines than do our Russian counterparts." This whole piece of nonsense could have been condensed into one or two paragraphs.

But in fact, since I have no reason to doubt Mr. Stine's statement, I felt that his real error lay in his assumption that it is better to use a manufactured product, rather than one fabricated by the individual. This is rather an anti-thesis to the merit of modeling-itself, a hobby devoted to the craft and inventiveness of the individual! Too, he states that USSR model rocket societies are subsidized by the state. Didn't it occur to the Old Rocketeer that the state would also subsidize the young rocketeers with manufactured engines if it would serve to improve them (especially if they are the future scientists of Russia)? In a sense, the writer justifies the dependence of the model-rocketeer (American) on the manufactured item, blessing it as a product

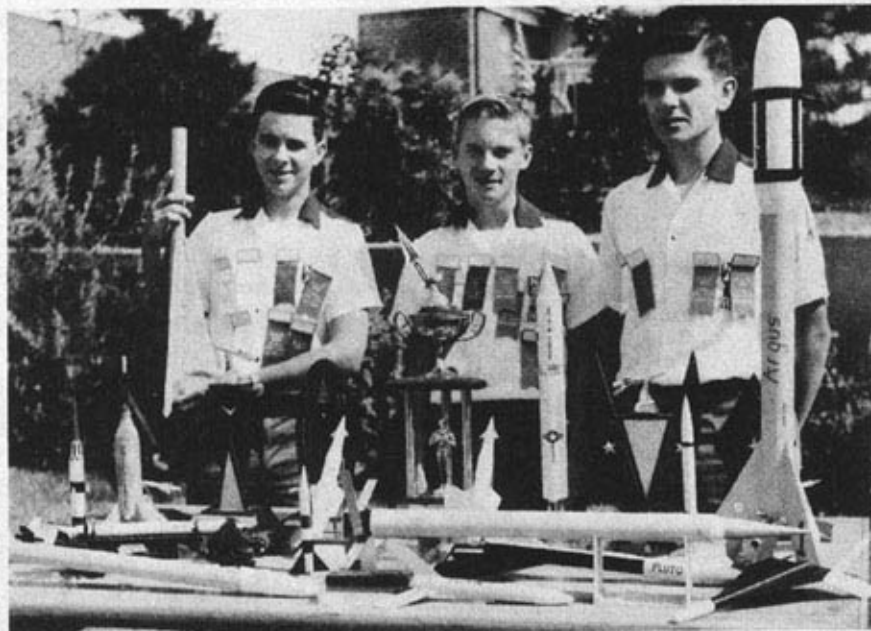


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of the American free-enterprise system. Were the huge rocket boosters that the author spoke of a product of a free-enterprise system?

Finally, the theory that the Americans will win the "model space-race," due to the Russian youth maiming themselves, is a bit maudlin. Incidentally, this is the first time I've heard of the "model space-race."—SP4 Don McIntire, HHD, 88th Engr Bn, APO 259, New York, N.Y.

REPLY TO MCINTIRE: All present forms of modeling—aeronautics, rail-roading, motoring, boating, and rocketry—simply could not exist if modelers did not depend upon manufactured products. In any form of modeling, there are certain parts that are extremely difficult and/or even dangerous to make yourself. Ever try to make Code 70 HO rail?
(Continued on page 78)



NARAM-4 winners from East Coast and their "birds" which brought home trophies from Colorado Springs (from lt.): Gordon Mandell, Paul Hans, Don Scott, all 15, all from Port Washington, N. Y. Camera-toting "Argus" on right.

FLYING OR FIDDLING?

Some people actually like to fiddle with their transmitter, receiver, or servos. Keeps them out of the air. Saves airplanes. (Sometimes the fiddling is all wrong and it wrecks airplanes . . .)

Other people like to fly. Like to take the plane out of the car, start the engine and fly. They do their fiddling with things like Immelmans and Chandelles. These are the kind of people who like Quadruplex. Reliable. (And the smoothest Immelmans and Chandelles you ever saw!)

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Rockets

(Continued from page 64)

An .040 engine or its fuel? A boat prop and shaft? A rubber tire? Or—in this particular case—a model rocket engine?

Sure, somebody had to make the first ones, and some hobbyists are still "scratch builders." But there are very few who have the skill, knowledge, money, and equipment. If modelers did not need manufactured products, the hobby industry would be back where it was 100 years ago: non-existent!

Certainly, a hobby must be devoted to craftsmanship and inventiveness! This is what separates a hobby model from a toy.

In the case of non-professional rocketry, before the introduction of the recoverable model powered by a manufactured rocket engine, there were probably about 1,000 non-professional rocketeers in America. Now that we have "commercial" products there are at least 50,000 rocketeers using them. The number of serious, successful amateur rocketeers who still do it the hard way under conditions of high hazard has not appreciably changed.

Second point: When the Russians do catch on about our manufactured rocket engines, look out! They will tool up from American samples just as they have done with many other items. They will continue to subsidize and support their young rocketeers. We will continue to conduct our hobby of model rocketry on a free enterprise, citizen-supported basis, which is the way we want it; the only government support that American model rocketeers want is in the form of permissive laws. Unless American legislators recognize the value and worth of model rocketry—and model aviation, too—we are likely to be stopped cold by state governments that will adopt regulations to quite rightly keep Junior from blowing up the town. Unfortunately, these same laws could hobble the model rocketry hobby.

The point about large rocket boosters and the free enterprise system doesn't apply in this discussion. Big rocket boosters in both nations are paid for by the governments involved. In Russia, the government owns the industries producing them. In America, the big rocket booster companies would not exist without government funds. Same game, but the rules differ. The Russians have big booster rockets now because they built them to heave the huge warheads of 10 years ago; in America, we waited until the bang-boxes got smaller.

We point out that American modelers with manufactured rocket engines are 100% likely to remain in one piece. If the U.S.A. fans had to make their engines like their Russian counterparts, they would be exposed to hazards of handling explosives that Mr. McIntire, as a military engineer, should understand all too well.

If I erred in assuming that a manufactured model rocket engine is better than one fabricated by the individual, it is because I know of too many who have erred in assuming just the opposite. They include a science teacher, three rocket engineers, a businessman, and an unfortunately large number of young folks whose mutual error proved to be a fatal one. And I did not make any assumption . . . I have the grisly facts for anyone who cares to see them.

Via Dick Schwarzchild. Young man walked into Dick's hobby store and asked, "Do you carry Oxydol for plastic model missiles?" Did he mean "oxidizer?" Was he left high and dry on the bleach? Was he simply soaping up a sticky launch rail? Or (NASA take note) perhaps a bright, shining new propellant formula?

Instant Rocketeer Bryant Thompson, USAF, is now a Captain, giving us now the perfect right to call him "Captain Red of the Space Patrol"—at least on the range, Ours.

Hans-Scott Camera Rocket. They took NARAM-4 junior R&D award with it and flew it at USAF Academy with camera running. Got film back the other day, screened it, and got dizzy. In beautiful Hansco-Color, you can see the bird lift off and surge skyward, showing NARAM-4 launch area, parking lot, mountains. Parachute comes out and starts to lower nose cone with camera inside; picture flips upside down! Camera grinds away until chute gently lands the nose cone, whereupon picture turns on its side.

This film should be part of elimination tests for aspiring astronauts . . . if you can sit through it without getting space-sick, you're in. Model, called "Argus," also flew at NARAM-4 with fresh hen's egg, returning same in perfect condition.

Egging 'Em On. Steve Moro of White Plains, N. Y. became the second chickenaut by flying and recovering an egg last September. He used two paper cups for nose, taped together and filled with water and plastic foam. Silk hankie for parachute on nose cone only. Model consisted of cardboard tube from roll of aluminum foil, balsa fins, three Type B.8-4 engines clustered in tail. Important thing to remember here is to block off spaces between engines so that all of ejection charge gas is used to dislodge the heavy nose cone. Otherwise, it escapes rearward between gaps in engines, and you have a scrambled egg . . . and that's no yoke. Bird flew off 3-foot rod in perfect flight.

But you should have seen the mad chase to recover it! Twenty-five people running all-out across a field after a tiny parachute! Tension and apprehension were high as Steve ripped off the Scotch tape holding nose cone together. Egg emerged whole, and mighty cheer went up. Remind me to get a trophy for Steve—a live hen.

Mail Bag. Bin getting lots of letters. I can't answer all personally, and I can't use all of 'em in this column, but I read every word you write. (I do like the ones who report they like the column. Keep writing; flattery should get you everything.)

Leonard Daniel, NAR#2755 of San Diego, calls to my attention that the drawing of the Russian model rocket published here in July 1962, seems to be a dead-ringer for a picture of an early Russki research rocket built by Tikhonravov. Leonard seems to think the Russian rocketeers have a great lack of imagination. I might point out that some American modrocs still look like the V-2 or Aerobee; the gang finds it difficult to use rounded fins and nose cones, because the result doesn't look like a rocket oughta look!

Many letters have been asking a wide
American Modeler — January/February 1963



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range of questions about a 1-2-oz. radio transmitter for model rockets that was written up in one of the electronics magazines several months ago. Gentlemen, if you can't dig the circuit diagram or don't savvy where to get the parts, you don't know enough to attempt building.

I hope to write up the details of a more advanced transmitter in these pages. Remember that you've gotta have more than the transmitter. Also required are an antenna on the model, a ground antenna, a ground receiver, and some sort of recording device. Don't start a radio rocket project unless you can get your hot little hands on 100 clams or so for equipment—or unless you've got friends in an electronics lab somewhere.

I still get letters from the "ram-it-yourself" amateur fuel makers. These I read, while suppressing a shudder and put in the file; if they persist in living dangerously, I don't wish to be involved at all with their untimely demise.

Letters and photos from Bill Loeffler indicates he and colleagues are flying in a cemetery. "I don't worry," he sez. "It wouldn't bother me to have some kid flying rockets over my resting place if positions were reversed."

Ted Ellis, NAR #2407, wants to know what "fin chord" is. Model airplane builders could tell him. It is the fin dimension parallel to the long axis of the model, or parallel to the body tube of a modroc. "Root chord" is the dimension next to the body, while "tip chord" is the dimension at the tip (natch). If the fin is tapered, they aren't the same (again natch). Average chord is root chord plus tip chord divided by two.

Terry Schmidt NAR #1442 sends the following definitions for you to ponder:
Fins: What should be worn to make you swim faster.

Countdown: the way people count who are too stupid to count up.

Stine: a big glass of beer (thanks!).
Nose cone: if this is on the bottom of the rocket, it is a sign that you are trying to fire it upside-down.

Tracker: good if eaten with soup.
Parachute: what to cuss at if the payload breaks.

CP: initials of Calvin Pepperjingle who made the sad mistake of holding his model when it took off. Last seen trying to hitch a ride with Wally Shirra.

Record Attempts. Irv Wait reports that he set the altitude record for a static test. Seems he had neglected to lag down the stand. When the thrust hit it, it kind of rolled over and over. Sez that the recording drum kept going; I would hate to try to decipher that data!

I claim the absolute altitude record for static testing. Happened one day a few months ago when I was running a large engine on a recording-type stand in nozzle-up position. It blew through forward and sent the casing arcing up into the blue while all eyes followed it. Casing landed okay and the nozzle was in place, but it would probably be disqualified because it wasn't in condition to fly again and there was no recovery system deployment.

Talkies, Yet. NAR now has a wonderful 15-minute sound film in 16mm color that tells the story of model rocketry. It had its world premiere at the US Air Force Academy during NARAM-4. Features the Old Rocketeer and a cast of thousands. NAR sez film is available on free loan if requested by a responsible adult. Movie has scenes from all four national meets and Cape Canaveral.



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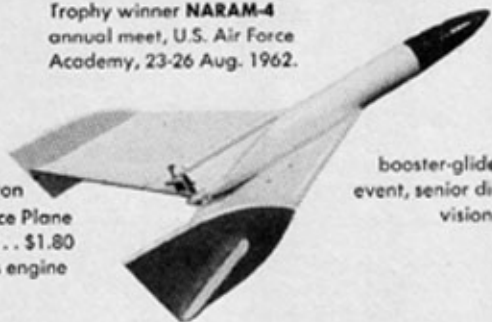
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