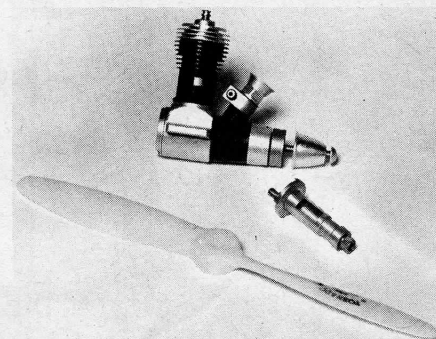


Dale Kirn's

"TORQUETTE"

1/2A PROTO

The Torquette's success is due to the left-hand crankshaft & reverse-pitch prop. (Tornado 6/4 pusher prop.) Both items at well-stocked shops.



◆ Recent AMA rule changes now permit Junior flyers to enter the 1/2 A Proto Speed event with a profile airplane. Also, the rules were amended to include biplanes. "Torquette" incorporates both these rule changes into one plane, along with a couple of other very interesting and practical innovations.

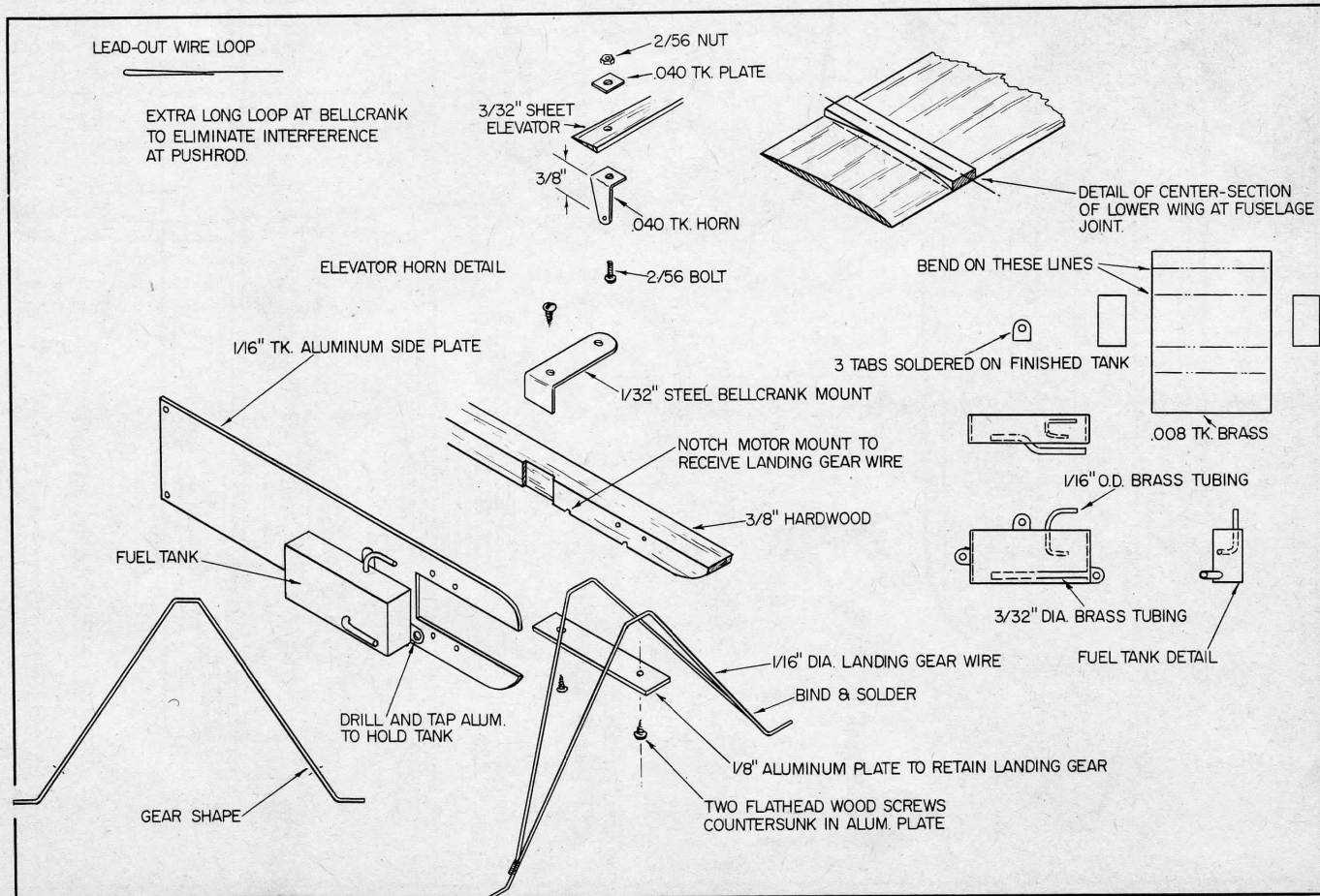
To counteract the torque problems, encountered with conventional counter-

clockwise 1/2 A Proto Speed flying, we have utilized a "left hand" propeller and one of the left hand crankshafts available for the Cox Tee Dee .049. The part number for this crankshaft is 1705-L and it sells for the same price as the regular crankshaft.

To check this torque principle, the two line control line system was used and no weight added to the outboard wing tip. Risky? Well, flying this

model proved our point and exceeded our hopes. The model leaped into the air on taut lines and demonstrated better than expected speed for a proto biplane.

Five flyers from the Orange County "Thunderbugs" (Santa Ana, California) flew this startling little "biplane" and placed their stamp of approval in it. Ten year old Jimmy Hodgerson flew it for the first time on 42 foot



PLY OR BASS LEADOUT GUIDE ON STRUT BRACE

C.G.

3/8" SQ. MOUNTS

1/8" BALSA

ALUM. PLATE

3/32" SHEET

3/32" SH.

COX TEE DEE .049 WITH
LEFT HAND CRANKSHAFT

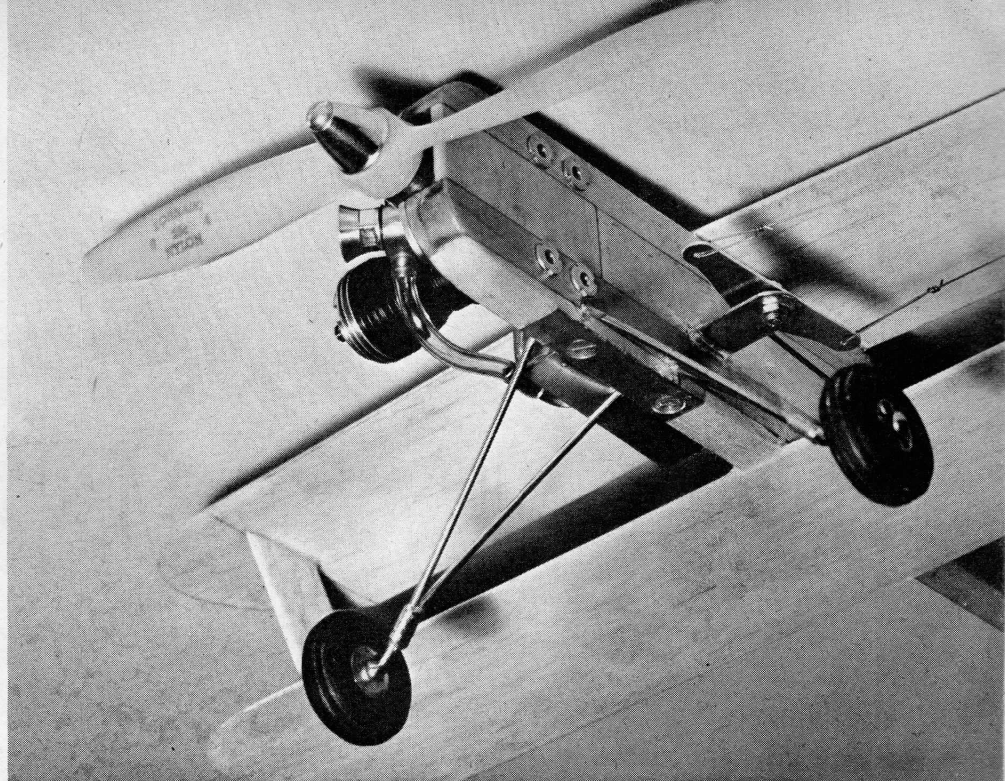
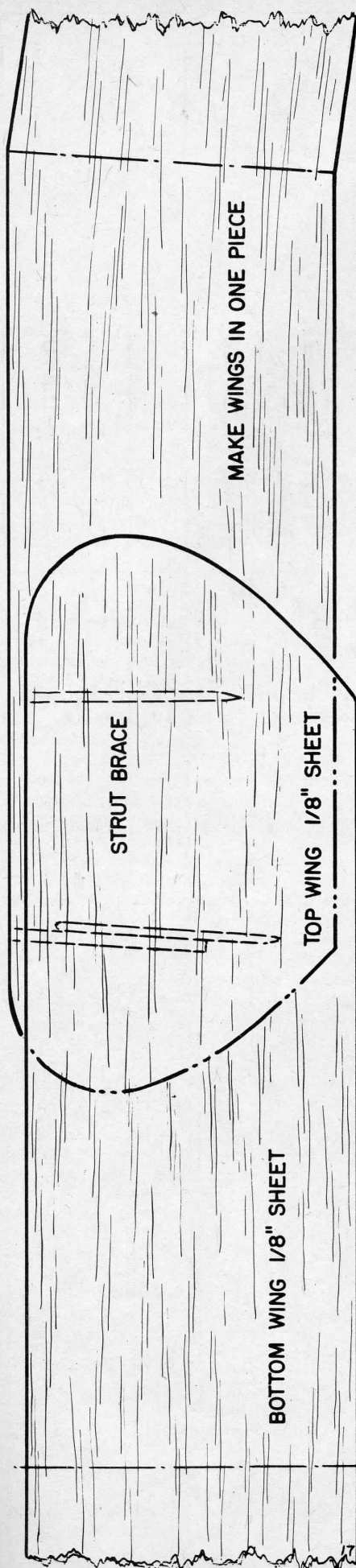
8 C.C. TANK

JOIN TO SIDE VIEW

3/8" BALSA FUSELAGE

.045 PUSHROD

STEEL BELLCRANK MOUNT



Close-up illustrates how gear is secured to the body by aluminum plate, flathead wood screws. 3-48 blind mounting nuts secure engine bolts.

"TORQUETTE"

... continued ...

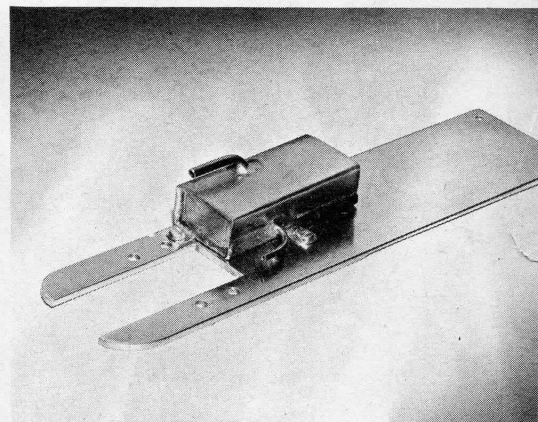
lines in a 10 mph wind with no trouble at all. He was enthusiastic about the flight and surprised at the speed of this little proto biplane. His Dad commented that this plane tugged on the lines the entire flight. Something that he was not accustomed to with $\frac{1}{2}$ A flying.

Granted, "Torquette" is not as fast as a conventional fully cowled $\frac{1}{2}$ A proto, but remember this is a profile biplane!! With a nylon 6-4 Tornado pusher prop cut down to a $5\frac{1}{4}$ inch diameter (leave the tips square) the proto speed was 69 mph. Top speed was 73 mph. Thimble Drome Racing fuel was used in all the test flights and it was apparent that the engine could stand a little more nitro. Undoubtedly with a higher pitch prop and a hotter fuel, speeds from 70-75 mph (proto time) could be expected. How about some of you speed men carving a pusher prop—say about a 5-5 for your Junior flyer Should make a noticeable speed difference.

Most interesting flight was with the new Cox Muffler assembly, used in conjunction with their new 7904 cylinder. The top speed was only down $3\frac{1}{2}$ mph ($65\frac{1}{2}$ mph) with the muffler spring in the fully closed position. With this muffled engine you can fly almost anywhere without having to worry about being chased out. Cox has a .049 Muffler Conversion Kit which includes the muffler assembly, new style cylinder and a high compression head. (Part #495.)

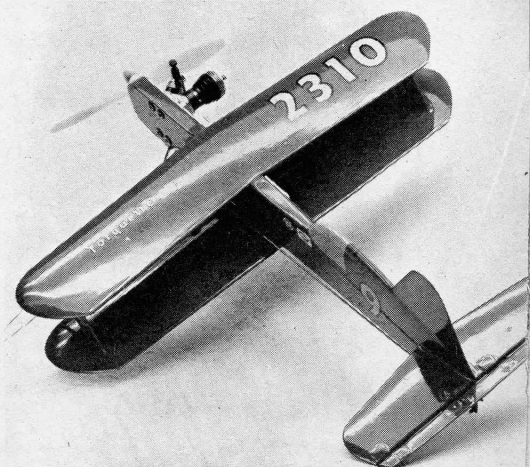
A suction fuel system was used for the sake of simplicity for Junior flyers. The fuel tank has enough capacity for

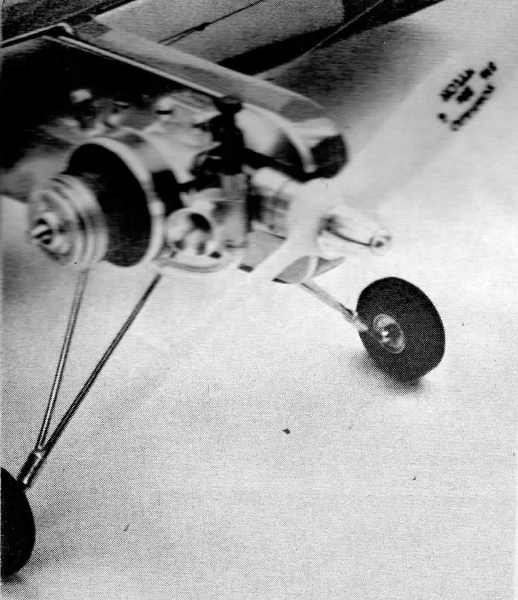
(Continued on Page 28)



Aluminum engine cooling plate and tank set-up. 2-56 machine screws hold tank to plate, rear is fastened to the fuselage with wood screws.

A long tail moment and small elevator make the design an extremely smooth flying $\frac{1}{2}$ A biplane.





"Quiet Speed Concept". Design gives very fine performance with new Cox Muffler assembly. A turn-over of the needle-valve body is necessary to clear the muffler housing, easily switched.

"TORQUETTE"

(Continued from Page 17)

about 20-25 laps. It is fastened to the engine "cooling" plate with three 2-56 machine screws. We have found that this "cooling" plate provides the heat dissipating area needed to reduce glow head burn out when using hot fuels. It also keeps the engine from cutting into the wood engine mount area.

There is nothing very outstanding about the construction of "Torquette," other than the landing gear and bell-crank mount. Total cost (less engine) is less than five dollars.

If you balance the plane where shown on the plans you will have no trouble flying this little rascal. After you have flown the design a few times, try something a little different for a change. Take off with your wrist in the pylon and enjoy the benefit of a reverse pitch propeller. It certainly makes that first lap enjoyable. Clockwise flyers have enjoyed these benefits for many years. Now you counter-clockwise exponents can too.

Even if you don't build "Torquette," it is hoped that you try this torque principle and apply it to your next 1/2 A Proto plane. You will be in for a pleasant surprise if you do. ●

MODEL BUILDERS

(Continued from Page 26)

ment. German has picked a team and the English are trying to organize an entry. Other nations may or may not be represented.

Al Rohrbaugh of Kokomo, flying at Bunker Hill AFB in April, managed better than twelve minutes in Easy-B. The ship was a conventional paper-covered, all-balsa prop job. Can anyone top this?

At Lakehurst, Bob Champine managed 49:23 in FAI for top honors. Other good times were Russ Russo's 25:49 in D Stick and John Triolo's 24:32 in B Stick. Champine also went for 17:50 in C Cabin.

● Speaking of Denver, that city has been proposed as the site of an annual "Old Timer" Nats. Bud McNorgan of the Southern Cal Antique Model Plane Society (SCAMPS) and editor of an OT newsletter suggests that the meet could be held each summer about a week before the Big Nats. His address: 11421 Salinas Drive, Garden Grove, Cal.

● Seasonal activity in the Northwest has centered around Seattle and Spokane. Bob Stalick had a good day: first in Cd'H and BC Gas, second in 1/2 A Gas, and third in FAI Power. Don Elliott took first in FAI, second in A Gas, and third in A/2. Bill Vernon dominated the Rubber events, Chuck Stohlmeyer took first in A/1, second in A/2. Bill Vowels and Bill Giffen provided plenty of competition in most events.

Flyoffs occurred in 1/2 A and A. In the former, Dale Gran and his Viking took the first flyoff round as Stalick's "Northwind" hit a downer. Don Elliott and Eric Greenwell worked into a fifth-round settlement when Don goofed. Eric's .051 "square everything" ship went on to rack up 1080.



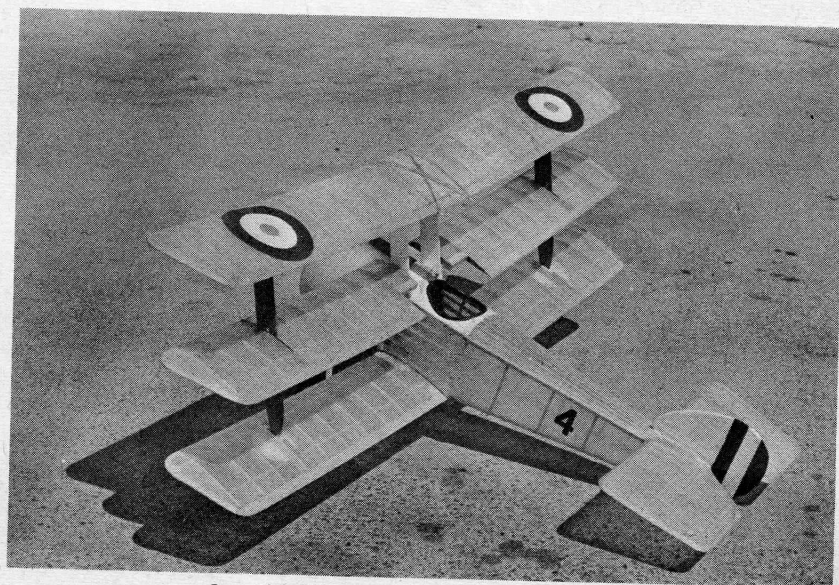
The Junior-only events were taken over by the Grell kids of the Willamette club. Paul took first in 1/2 A, followed by Bruce. Glenn took A/1.

● Seriously, the meet was run at abandoned Gardner Field, 150 miles north of L.A., with miles of open space in all directions. Being largely paved, the field made retrieving by car and cycle entirely feasible. It will be the site of most big meets in the area. The meet drew 127 entries who flew 418 flights. (SHOCmen timed 80% of these.)

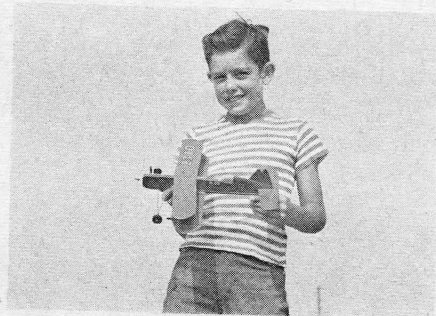
Highest time of the meet was posted in B Gas by Amos Kleinsauer, who went for 48:16 to take the event. Art Marion was second with 36:07, and Vic Cunnygham stayed with it for 23:58 and third. Young Denny Matsuda posted a tremendous 27:45 in C to beat out Jack Thomas and Kleinsauer. Thomas, incidentally, took the night flying with 20:12.

Vic Cunnygham, Jr., took A Gas with a posted 20:26 and Handlaunch with 5:59. Bob DeShield beat out twenty-five other entrants in 1/2 A and threw his chuck glider into third place. A/2 went to Bob Norton, Rubber to Batiuk. George also came third in A/1 behind Russ Backer and Marty Thompson—Backer posted 12:25 to win. Rubber and Towline seemed to be on a par performance-wise, at this meet; Gas times were very high in comparison.

(Continued on Page 30)



Beautiful flying Sopwith "Triplane," Jim Strigle. Near scale speed on Cox .049. Seen at NAA Flightmaster's Semi-Annual Scale bash.



Jimmy Hodgerson, age 10, had no trouble flying the Torquette in the teeth of a ten mph breeze.