

3,000 FEET UP, WATCHES DIVE-BOMBING CONTEST MARVELS AT ACCURACY

"Now I Can Picture Devastation Wrought on Ruhr"—Class-
room-Taught Fliers Show How They Learn to
Hit a Dime—Kingston Competition

ALL MANNER OF ANGLES TO BOMBING
BUT EVEN STUDENTS ARE GOOD AT IT

By ROSS HARKNESS

Kingston, July 8—Now I can picture the devastation wrought on Nazi trains and troop columns and radio locator stations, by lashing Hurribombers and Mosquitoes.

Yesterday I had an eagle's-eye view from 3,000 feet up of a dive-bombing competition between the 12 crack student bombers from the four single-engine service flying training schools in No. 1 training command.

And remembering that these contestants were still but students who had not yet received their wings, and were using only 11½-pound bombs, it wasn't hard to imagine the devastation seasoned pilots with 500-pounders must be spreading.

Most amazing of all was the fact the grand champion, Dick Roach, of Toronto, had dropped only 36 practice bombs in his life before winning individual honors, and that not one of the three contestants from Camp Borden had ever dive-bombed until the day before the contest, and then for only two hours, but they won the team championship.

Roach and two men from the Camp Borden team, B. M. Smith, of Schomberg, and M. Tuchak, of Winnipeg, were the only ones to score bulls'-eyes. J. B. Lindsay, of Montreal, was third member of the Camp Borden team.

The accuracy of these student pilots is an example of the almost miraculous results being achieved by "synthetic" training, much of which is still on the secret list.

Learn in Classrooms

In classrooms they had potted at working models and moving pictures of enemy targets with electric-eye camera guns until accuracy was second nature. Through the glass of the sights, as their aircraft screamed in its dive, the target looked exactly as if seen through the instruments in their classrooms. Instinctively they reacted as they had been taught.

"Back in the early days of the war pilots learned to bomb and shoot by practice alone," explained Squadron Leader H. E. Boulter, in charge of all "armor training" in No. 1 T.C. "The men who fought in the air over Dunkirk and in the Battle of Britain were never

taught how to aim because nobody knew how to teach them.

"But gradually the pilots themselves, such men as Beurling, analyzed how they aimed, and worked out the principles."

At first the pilot had to work out a complicated mathematical formula based on the speed of his plane, the speed of the target, the direction of movement of the plane and target, distance apart and a number of other factors.

"Now all that complicated head work is eliminated," Boulter explained. "Using models and pictures he sights through an actual sight. He is taught that when he sees a model in a certain position in his sight, he must aim in a certain way."

Not Simple As It Seems

Even aiming a dive-bomber is not the simple thing it seems, for while the bomber hurtles straight on the target at an angle of 45 degrees or more, once the bombs leave the plane they cease to continue on a straight course. Gravity pulls them in an arc, which tends to make them fall short.

So, just before releasing his bomb, the pilot must jerk up the nose of his plane a little. If he jerks it up too much he will overshoot the target.

We tailed Roach on four of his sweeps, and it was a pretty sight. He would sweep in on the target at 2,000 feet altitude, then shove the nose down and go screaming straight for the target in a 45 degree angle. Nine hundred feet above the float he released his bombs and was out of the dive by 500 feet above the target.

"Mighty fine bombing," admired my pilot, an R.A.F. instructor from the Fleet Air Army school. "If those had been 100-pound bombs they would have wrecked the target. A 500-pound bomb striking as close to a train or building would certainly have smashed it."

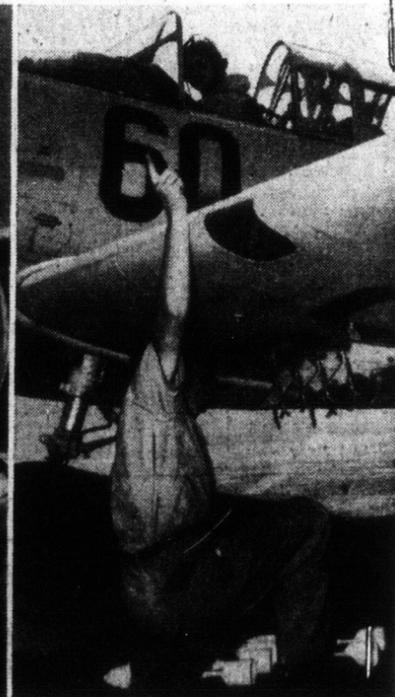
Roach was one of an all-Toronto team representing Aylmer S.F.T.S. His team-mates were K. D. Taylor and Joseph Caulder, both of Toronto. Dunnville was represented by C. A. Dyer, Toronto; G. J. Helmer, Ottawa, and H. L. Becker, Kitchener. The Fleet Air Fliers, representing the Kingston school, were H. D. Tanner, F. Lawley and J. F. Hollingworth.



TOP SCORER of student bombers in dive-bombing test was Leading Aircraftman Dick Roach, Toronto.



TEAM CHAMPIONS, Camp Borden's representation is shown with Group Captain C. Carling-Kelly, holding the trophy. They are W. Brittain, J. B. Lindsay, B. M. Smith, M. Tuchak.



THIS STUDENT is ready to go as soon as the bombs are loaded into the racks. They used 11½-pound bombs.