



LEFT: This sketch, claiming to show details of the Avro XC-100 jet fighter, appeared in Aviation Week.

Canadian Jet Fighter Data "Leaks" to U.S. Publication

A STORM of controversy has followed publication in the U.S. magazine, *Aviation Week*, of a sketch and descriptive details concerning the XC-100 twin jet fighter designed and being manufactured at the A. V. Roe Canada plant at Malton.

After publication of the data, the RCAF and the RCMP became interested in tracing the "leak" of secret information although it was indicated that much of the data was in error. Authorship of the article was tossed into the general controversy with the magazine's assistant editor putting the finger on Charles W. Cain, British aviation writer and the latter denying he wrote the story.

Following are the details of the Avro Canada XC-100 as published by the magazine:

"First details reveal that the Avro Canada XC-100 is a tandem-seat, all-weather fighter powered by two 6,500-lb. static thrust Rolls-Royce Avon axial-flow turbojets, capable of a speed of 675 mph. The XC-100 is built to a Royal Canadian Air Force specification.

"**Designer**—Prototype XC-100 now nearing completion at the Malton (Toronto) plant is primarily work of J. C. M. Frost, British designer, who worked with Chief Designer Bishop on the de Havilland D.H.-108 swept-wing craft that broke the sonic barrier.

"If the XC-100 proves the success that Avro Canada expects, it will be offered to both British and American governments.

"**Fuselage**—An all-metal low-wing monoplane of between 23,000-27,000 lb. (according to range), the XC-100 employs a fuselage refrigeration system which keeps skin temperature, at high speeds, to 80 F.

"Nose portion carries American night interceptor radar, four cannon, and a rearward-folding nose wheel leg.

"Crew of two is protected by an optically flat cannon-proof windshield and a one-piece canopy.

"Fuel is carried in tanks situated behind the rear crew member.

"**Wing, Tail**—A high conventional tailplane and straightforward fin and rudder are employed.

"The wing has no dihedral but incorporates the German "droop-snoot" leading-edge flap.

"**Landing Gear** — Dowty liquid-spring units are employed, the main gear using small diameter twin wheels which retract inward and fit snugly into the underside of the fuselage and bulky wing root.

"**Jet Units**—Although the new Avro Canada T.R.5 Orenda axial-flow turbo-jet was first considered, the British Rolls-Royce Avon model will power the prototype, delivering a total of 13,000 lb. static thrust—or an

even higher total if present development continues in England.

"Most novel feature of the XC-100 is the mounting of the jet units above the wing root and close to the fuselage.

"Several German projects of 1944 favored this particular external positioning of the jets. Avro engineers decided on this course because wind tunnel tests in the early stages proved satisfactory.

"The circular intake was decided upon in preference to the narrower oblong and more streamlined entry because of the greater, and more equally distributed air flow.

"**Armament**—Utilizing four 30 mm. cannon the XC-100 will be one of the most powerfully armed jet fighters in existence. The 30 mm. gun was developed from a wartime German design and the XC-100 will be the first airplane to employ this newly developed unit.

"**Application**—The Canadian government has been impressed by the possibilities of the XC-100, which incorporates all the latest ideas culled from winterization and sub-zero experiments carried out by the RCAF in recent years.

"The British have no all-weather fighter and the combination of speed, range, adaptability and firepower may prove an important factor in the ordering of this airplane for mass production."

Pylo Learns Low Flying

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of the wind and the height of the obstruction.

So, Pylo Terror, spread the word. You know how to do a steep turn, you have good eyesight and can see an obstruction ahead of you, you have tried your hand at aerobatics and stall turns, and you are a hotshot at pull-outs. Okay, maybe you're right. But remember, there are a lot of hidden dangers once you fly your aircraft near the ground, dangers you never dreamed of at normal height.

Play safe. Don't be an obstructionist. Don't mess up the landscape by flying around — and into — obstructions on the ground.

Yours for Better Flying
Joe — CFI