

NEW All-Metal... UNIT MOUNTS AND UNIT MOUNTING BASES

MET-L-FLEX

"SEA LEVEL PERFORMANCE AT ANY ALTITUDE"

SERIES #7001

#1 AND #2
SIZE CUP TYPE
UNIT MOUNTS

SERIES #7002

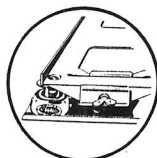
VIBRATION ISOLATION AND SHOCK PROTECTION FOR AIRBORNE EQUIPMENT

Minimum weight — Maximum structural strength — Complies with all applicable Government specifications — High inherent damping provides stability with shock and over-load capacity — Wide environmental tolerance — Optimum performance under all service conditions. #7001 in 5 load ranges ½ to 10 lbs. — #7002 in 5 load ranges 2½ to 40 lbs.



SERIES #878

Two #7001 Unit Mounts assembled on common tie plate with bonding jumper — Simplifies mounting and reduces assembly time — Load ranges from 1 to 20 lbs.



SERIES #892

Complete Mounting Bases are available incorporating #7001 or #7002 Unit Mounts. Write for engineering data.

ROBINSON AVIATION INC.
TETERBORO, NEW JERSEY
Vibration Control Engineers

been applied, presumably the swept-wing version of the CF-100 will be the CF-103. The C-101 was a jet trainer project which was discontinued at an early stage. We do not have any information concerning a single-jet fighter project at Avro Canada.—The Editor.

Reporting Air Shows

Sir:

It has been always a source of wonder to me that Canadian flying publications in general take so little interest in the various air shows which take place in Canada every year. It is so at variance with the policy of British publications such as *Aeroplane*, *Flight* etc., and also many U. S. aviation magazines with regard to their numerous flying displays.

For example one Canadian flying publication this month had an article on the Detroit National Air Races but no mention whatsoever of the National Air Show at Malton. Also it is gratifying to note that Ron Keith of Canadian Aviation was in Britain covering the SBAC show at Farnborough with a view to a special issue devoted to same, but the National Air Show here in Canada rated only a third of a column with nary a picture.

Could this mean that Canadian editorial opinion is that to be newsworthy an event must be non-Canadian? If so, there are 80,000 or more people around southern Ontario who apparently disagree with it.

J. A. D. Gray
28 High St. East
Port Credit, Ont.

Note—We share Mr. Gray's enthusiasm for Canadian air shows, particularly as they have stimulated popular interest in aviation. We submit that it is not fair, however, to compare these local shows, usually featuring well-known lightplanes and familiar military aircraft, with the SBAC Show. The latter presents new types of aircraft and equipment and is calculated to appeal to the aviation industry rather than to the general public. As this publication is edited for the industry rather than for the man-on-the-street, we consider that the local air show comes within the logical scope of the daily newspaper. If and when the Toronto air show develops into a national showcase of aviation with news interest for the nation's air industry, we shall give it full detailed coverage. Perhaps Mr. Gray's criticisms arose from a misunderstanding of our editorial objectives rather than a belief that we are anti-Canadian.—The Editor.

DEVELOP AFTERBURNER FOR ORENDA ENGINE

The Avro Orenda engine is to be fitted with an afterburner to give it extra power. A substantial contract has been placed with the Solar Aircraft Company in California and Iowa to develop the afterburner. Considerable time for development will be required before the afterburner can be put into actual use. Negotiations are under way for additional contracts for testing and research to be carried on by Solar for Avro Canada.

Solar's afterburners, the first in production for U. S. Navy and Air Force planes, are designed to give jet planes an extra burst of speed for brief periods. In addition to providing extra take-off thrust, an afterburner is invaluable for the extra speed necessary in combat.

Afterburners appear in principle to be simple. They seem little more than lengthened tailpipes, equipped with a perforated grid. When maximum power is needed, fuel is squirted into the stream of hot exhaust gas hurtling through the tailpipe. This fuel is ignited and the plane gets added forward thrust.

While the process of afterburning is simple, Solar engineers point out that its development was extremely complicated. One of the toughest problems to be solved was the heat. Temperatures of the tailpipe gases in the afterburner exceed 3,000 deg. F, more than 500 degrees hotter than the melting point of the best alloys.

Therefore Solar engineers were faced with the problem of determining how to use metals without having them actually melt away. This was far more difficult than designing an ordinary jet engine exhaust tailpipe.

Another tough problem that was overcome is the kindling and maintaining of a flame in a gas stream rushing through the afterburner at over 250 mph.

In addition to the new Orenda contract, Solar already is producing afterburners for General Electric, Allison Division of General Motors, and other jet engine manufacturers.

Solar, with plants in San Diego, California and Des Moines, Iowa, is a leading producer of high temperature parts for aircraft turbine and piston engines. The company recently announced the Solaramic Process for coating metals with ceramics, which makes possible the use of less strategic materials in aircraft engines and other military applications.

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