cases was due to multiple causes, including such contagious diseases as public-apathy-towards-civil-defence, no-support - from-civil-defence - authorities, and pass-the-buckitis. The latter was caught when the sponsoring groups inadvertently came into contact with municipal, provincial, and federal governments.

New Hangar

A new type low-cost hangar for private and business airplanes is now available in mass-production quantities, according to The Quad Corp., Worcester, Mass.

This unique hangar, designed in the shape of a four-leaf clover, holds four airplanes in four separate stalls, each with its own door opening. The doors form a large part of the exterior wall of the hangar, but due to a patented rotation device and are said to swing open with finger-tip effort.

The "Cloverleaf Quad" hangars, as they are known, are available in two sizes. The standard Quad holds airplanes up to the size of the Piper Apache, and the super Quad permits storage of airplanes up to the Beech 18. Special Quads are available for DC-3, Convair, and similar types of aircraft.

The Canadian distributor is Ben Valerie, 996 East 26th, Vancouver, B.C.

CF-100's in Europe

Three Avro Aircraft CF-100/4's took part in the flying program at the recent Paris Salon at Le Bourget, near Paris, France, marking the first time that these Canadian aircraft have appeared on the continent. Pilots of the three aircraft were Flight Lieutenant Jack Woodman and Squadron Leader Phil Etienne, both of the RCAF, and Wing Commander Ed Crew of the RAF (who was for some time CO of the OTU at North Bay, while on exchange duties with the RCAF).

Solo aerobatics were performed by F/L Woodman and included the only spin to be carried out in the show by an operational fighter (though at least one jet trainer was also spun). The crowd appeared particularly impressed by a long inverted flypast and, on the second day, an extended vertical climb which carried the aircraft almost out of sight. The latter was a particularly strong demonstration of the power at the disposal of the CF-100, since the climb was made from level flight and did not have the impetus of a preliminary dive.

The three machines used were those currently attached to the RAF's Central Fighter Establishment, where they are being evaluated.

VOR PROGRAM

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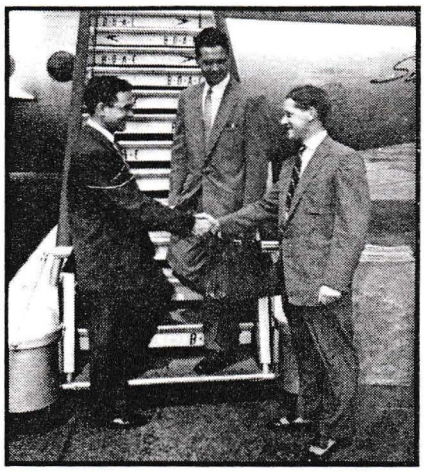
present case has the further difficulty that there has not been agreement between certain of the great powers as to what system of navigation should be adopted. The United States, for example, has adopted VOR and installed a large number of stations.



Headed for U.K. for a two-year course with Bristol are first two participants in "Athlone" scheme, Walter Weir (L) and Bernard Palfreeman (centre), shown being wished goodby by Bristol of Canada Sec. B. A. Chalmers. Bristol of Canada sponsors scheme, designed to build up nucleus in Canada of U.K.-trained engineers.

The original plans called for the closing down of a large number of LF stations as the VOR stations were commissioned. This part of the plan has been greatly modified. An entirely new system of navigation, TACAN, the details of which are still on the secret list, is favored by the military authorities there. The indications are that in the United States it may in part at least, be superimposed on the VOR system which as has been indicated is being superimposed on the LF system. The tumult and the shouting is still audible. In the circumstances the rest of the world may be excused for approaching the whole subject with some caution.

With this background in mind, it can be stated that the Department of Transport has constructed six VOR stations between Montreal and Windsor which will be commissioned early in 1955. The intermediate points are, Ottawa, Stirling, Toronto and London. While there is no airport at Stirling, this facility could provide some navigation assistance to aircraft operating to and from the nearby Trenton Airport. The other ranges on this sector are placed close to the airports concerned.

Sites are now being selected for five stations between Toronto and Winnipeg and one station at Gander. These will be constructed and commissioned in 1956.

Two sites will be selected between Winnipeg and Calgary via Regina, four sites between Gander and Yarmouth and six between Winnipeg and Edmonton in 1957 for completion in 1958.

The last eight stations serving B.C., plus some extras will be selected in 1958 and finished in 1959.

PHILOSOPHY

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ments, Group Captain F. R. West. Says Group Captain West, "Our job is to get the operational philosophies from as many responsible and experienced operational personnel that we can. At the same time, we must feed into our assessment of a future airplane or system, the mathematical analysis from the RCAF's technical side, and that from the Defence Research Board's Operational Research Section assigned to us."

Play it by Ear: He quickly points out, however, that the magnitude of the philosophical task, and the staggering amount of statistical and mathematical data that *could* be computed, to numerically evaluate every possibility, can quickly become unmanageable. "Consequently," he admits, "there is a fine art to blending the product of the electronic computer and the human brain to obtain the final answer."

Even the scientist is recognizing that this numerical baseline is only part of the evaluation. J. W. N. Sullivan in his book *The Limitations of Science*, notes that, "We are no longer taught that the scientific method of