THE AIRBORNE SERVICES

Control Stiffness

Due to reported instances of control stiffness under certain conditions of flight, Canada's CF-100 all-weather interceptors were last month in limited service for almost three weeks. Said a prepared RCAF statement.

"Recent flying operations of the CF-100 have provided evidence of control stiffness under certain conditions. Both the RCAF and Avro Aircraft Ltd. are taking immediate action to investigate and rectify as necessary. In the meantime, in the interests of safety, training flights in these aircraft have been reduced to the absolute minimum. However, essential air defense operations will not be affected."

It was later reported that the stiffness was caused by a small bushing in the tail surface control systems. These were binding under certain conditions. The trouble has since been rectified by replacing the bushings.

Homing Torpedo

The RCN and the RCAF this year will obtain a new air-to-water homing torpedo to meet the Russian submarine threat. The new torpedo will be capable of being dropped from an aircraft and homing on a submarine which may be on or below the sur-

face. The torpedo, in fact, is a guided missile.

The subject was brought up in a House of Commons report by Defence Minister Ralph Campney. In discussing policy the report said: "Soviet concentration on the build-up of a large submarine fleet and the prospect of long-range submarines with a capability of launching atomic missiles from several hundred miles off shore, has given an increased significance to the anti-submarine role of the maritime forces of NATO countries as a further essential element of the war deterrent."

The report then lists some of the steps taken to counteract this menace:

- A four-year program to modernize radar equipment in major RCN ships is nearing completion, but research must be continued in this field.
- Production will be started in the near future in Canada of the new air-to-water homing torpedo.
- The RCAF's new maritime patrol aircraft, the Argus, will begin flying on operations this fiscal year.
- The new aircraft carrier, the Bonaventure, will soon join the Atlantic fleet in Halifax.
- Deliveries of the Tracker, the navy's new anti-submarine aircraft, began in the latter part of 1956.



HELICOPTER PLATFORM: The RCN's HMCS Buckingham nests a Sikorsky on her newly constructed helicopter platform during trials being carried out to test the feasability of operating helicopters from escort vessels. _The Navy reports that no final assessment has been made as yet, but trials so far have been promising and further experimentation and evaluation of the scheme is planned.

Geodetic Survey

A nine-year aerial survey operation aimed at outlining Canada's whole geographical skeleton has moved into its final phase over the country's northernmost extremities. About 300 members of the RCAF's 408 Photographic Squadron, along with 11 specialists from the Mines Department's Geodetic Survey of Canada, moved north in April. Their first task was to set up shop at isolated points across the Arctic islands' to Canada's northernmost limits, starting roughly at the 75th parallel.

Using Shoran equipment they will establish permanent marker points and measure the distance between them by a ground-air operation. Once established, the marker points will become accurately located pegs from which to orient future maps of the country's immense northern areas and by which present maps can be corrected. Last year's operation for example, resulted in the Prince of Wales Island, which includes the magnetic North Pole, being moved three miles south on maps made from aerial photographs.

Meteors Retire

An era in fighter aircraft development has ended with the retirement of the Gloster Meteor 8. The last of the Meteor day fighter squadrons in the RAF Fighter Command has now been re-equipped with swept-wing Hawker Hunters. The Mark 8 was the final day interceptor version of the famous Meteor.

The various marks of Meteor jet fighters have been in service with regular RAF home defence squadrons since June, 1944. At one time all the regular day fighter and many auxiliary squadrons of Fighter Command were equipped with Meteor 8's, and up to the end of 1956 aircraft of this particular mark had totalled 722,828 flying hours.

As well as being the first jet fighter in the RAF, the Meteor was also the only Allied jet to operate in World War II. No. 616 Squadron's first task in 1944 was to help combat the V-1 flying bombs. Operating from Manston, Kent, the Meteors acquitted themselves well in this role. In February, 1945, they moved to the Continent, but at this stage of the war

there was little enemy air activity and the jets found no opportunity for air combat.

Banshees Go Inland

Two RCN jet fighter squadrons from HMCS Shearwater, the naval air station at Dartmouth, N.S. will carry out training in Army ground support this spring at the Canadian Joint Air Training Centre, Rivers, Manitoba The squadrons are VF-870 and VF-871, both of which have been equipped with all-weather Banshee jet fighters. VF-870 is scheduled to be embarked in HMCS Bonaventure later this year, following the new carrier's arrival in Canada from the United Kingdom.

A total of 22 pilots and 120 ground personnel will be involved in the training at Rivers. Eleven pilots and 60 ground personnel of VF-870 squadron will undergo the training from the latter part of April to the latter part of May, while a similar number of pilots and ground crew of 871 squadron will train at Rivers from the end of May to the beginning of July.

An RCAF airlift will carry the spare pilots and ground personnel from Shearwater to Rivers and return. At Rivers, all personnel will take indoctrination courses to refresh their knowledge of the Army support role and the jets will be used to carry out armament firing in the ground support training.

Nimble Bat III

No. 440 all-weather Fighter Squadron, the RCAF's third CF-100 squadron to leave Canada for NATO duty with the Air Division in Europe, was scheduled to make its overseas move this month. Based at RCAF Station Bagotville, north of Quebec City, the squadron will fly its jet interceptors across the Atlantic in Operation Nimble Bat III. The squadron is replacing No. 413 Fighter squadron, presently flying Sabre day-fighters, at No. 3 Fighter Wing, Zweibrucken, Germany.

Nimble Bat III will follow the same route as preceding CF-100 squadrons to Europe. Taking off from Goose Bay, Labrador, the big all-weather fighters will make a single refuelling stop at Keflavik, Iceland. During their trans-Atlantic flight, the operation will be conducted under the authority of



CF-100'S AT DUTCH FLY-PAST: This unusual photo of RCAF jet aircraft in use in No. 1 Air Division was taken by a Dutch camera-and-flying addict during a fly-past at the Royal Dutch Air Force base at Soesterberg, Holland. It is believed to be the first such photo taken of the newly arrived CF-100's in Europe.

Air Transport Command. Nimble Bat operations are usually accompanied by an advisory pilot of ATC's Overseas Ferry Unit which has been jet-ferrying the North Atlantic Route since 1953 with Sabres.

On Nimble Bat III, half of 440 squadron's groundcrew will accompany the unit overseas. They will precede the jet passage by North Star transport and await the arrival of the jets with the other half of the groundcrew, which will be drawn from Air Division personnel. Later this year, the fourth and final CF-100 squadron will follow on Nimble Bat IV. This last squadron will be located at No. 4 Fighter Wing, Baden-Soellingen, Germany.

Staff College to UK

A group of 35 students and members of the directing staff of the National Defence College at Kingston, left Ottawa March 30 for a 53-day tour of the United Kingdom and Western Europe. The group will spend 15 days touring the U.K. and the remaining period visiting Norway, Sweden, Denmark, Western Germany, Yugoslavia, Italy, France and Luxembourg. They will return to Ottawa on May 25.

The purpose of the tour is to give the students a balance in the academic knowledge gained during the course by an on-the-spot examination of the political, economic and strategic importance of the areas to be visited. The tour will provide an opportunity to hear lecturers who are not available in Canada and who are recognized authorities in their own particular field. The party includes senior officers from the three services and officials from government departments attending the 1957 course at the college.

SARAH in Service

Sarah, the pocket-sized homing beacon for lost airmen, is now carried on all RCAF airplanes and some 200 commercial aircraft. So far however, the major airlines have no plans for its installation. DoT officials are said to be drafting a regulation which will make the device mandatory for all northern flights and recommended for passenger aircraft in inhabited areas.

Since last October, the RCAF has had search airplanes at each main rescue station equipped with the Sarah receiver. By June all the Air Force's 35 search airplanes will carry the finder unit.

Chief short-coming of Sarah is that it requires a survivor to set it off. It can be operated by a child, but in a crash where there are no survivors it would not be effective unless the crew had started its signal before the impact and it came through intact. Several agencies, including its Canadian producer, Canadian Aviation Electronics Ltd., are working to perfect a fully automatic device which would be

blown clear in a crash and start signalling without human help.

CF-100 Units Postponed

Formation of three additional CF-100 squadrons to augment the nine units which presently constitute the regular Canadian air defence force, has evidently been postponed indefinitely.

The plan to form the three extra all-weather squadrons was made public last year, simultaneous to the announcement of the cutting and reorganization of the auxiliary force. At that time, it was assumed that the then planned reduction in the NATO air training establishment which Canada has maintained for the past several years as part of her Mutual Aid Contribution, would release sufficient manpower to make possible the manning of three new fighter squadrons without raising the RCAF's overall manpower establishment.

However, the sale of Sabres to Ger-

many by Canadair was made contingent on Canada providing training for sufficient German pilots to man the fighters. This meant that it became impossible to cut down the training organization for at least another 18 months, and the manpower to staff the new squadrons is therefore not available.

While there has been no official statement as to the Government's plans with regard to these three squadrons, there is some significance in the fact that no mention was made of them by Minister of National Defence Ralph Campney in his "Report on National Defence" tabled recently in Commons.

Queen's Commendation

A Queen's Commendation for Brave Conduct has been granted Flight Sergeant Walter Hetman, CD, for his part in a rescue operation near Haney, B.C. in November 1955. A motorboat crewman of RCAF Station Vancouver, F/S Hetman was called upon Novem-

ber 3, 1955, to assist in the evacuation of eight civilians marooned on a pile of bush and rubbish formed in the flooded Alouette River in British Columbia's Fraser Valley.

Ripley Accident

It has not been possible to pinpoint any cause for the crash March 1 of the RCAF B-25 Mitchell in which Air Vice Marshal R. C. Ripley was killed, Minister of National Defence Ralph Campney told Commons April 9. The crash occurred while the aircraft was making an approach to Ottawa's Uplands Airport, at the completion of a flight from Churchill, Man., via North Bay.

According to Mr. Campney, the aircraft crashed about 9.06 p.m. within a few minutes of the last radio contact with Uplands, "at which time there was no reason to believe that the pilot was experiencing any difficulty.

"Although the investigation has been very thorough, the lack of survivors and the complete disintegration of the aircraft have made it difficult, indeed practically impossible, to determine the actual cause of the crash."

Postings & Careers

Air Commodore Clarence A. Cook, OBE, has been promoted to the rank of Air Vice Marshal and appointed Air Officer Commanding, Air Materiel Command.

A/V/M Cook, formerly chief logistics officer at AMC headquarters, Rockcliffe, Ont., has been acting AOC of the Command since the death of Air Vice Marshal Robert C. Ripley.

Born in Saskatoon, A/V/M Cook attended public and high school there and was graduated from the University of Saskatchewan in 1933 with a degree in civil engineering. In November of 1939 he was commissioned as an aeronautical engineering officer in the RCAF, with the rank of flying officer. By 1944 he had risen to the rank of group captain, as senior engineering officer for No. 4 Training Command.

In 1948 and 1949 he attended advanced technical courses in the United States, and in 1949 he joined Air Materiel Command headquarters as senior planning co-ordination staff officer. He was later appointed chief staff officer, and then chief logistics officer, being promoted to air commodore rank in 1952.



STARFIGHTER THREE-VIEW: Below is the first official three-view drawing to be released of Lockheed's F-104A Starfighter (above). _Dotted line areas indicate provision for installation of supplementary fuel tanks or external armament devices. Now in quantity production, Starfighters will enter service in near future.

