THE AIRBORNE SERVICES

AM Campbell New CAS

Air Marshal Hugh L. Campbell, since 1955 Chief of Staff (Operations) at Supreme Headquarters, Allied Powers Europe, officially took over the post of Chief of the Air Staff September 1, replacing Air Marshal C. R. Slemon who is now Deputy Commander-in Chief of the new Canada-United States Air Defence Command (ADCANUS).

A/M Campbell joined the RCAF in 1931. Shortly after the outbreak of war in 1939, he was appointed Director of Training Plans at AFHQ, in which capacity he assumed heavy responsibilities for the eventual success of the BCATP. In 1942 he was posted to RCAF Overseas headquarters in England for a tour of duty as Director of Air Staff. This position involved him in the RCAF's operational activities throughout North Africa, India, Sicily, Egypt, Malta, Italy and the U.K.

He returned to Canada in early 1944 and was appointed Assistant Chief of the Air Staff. He relinquished this position in April, 1945, on being named as Air Member for Personnel. Later he became Air Officer Commanding, North West (now Tactical) Air Command with headquarters at Edmonton. In October, 1949, he was

appointed Chairman, Canadian Joint Staff, Washington, D.C. In this capacity he participated in the original work of the military committees of NATO.

In December, 1952, A/M Campbell became AOC of the RCAF's Air Division in Europe. He held this position during the time the Air Division was being built up to full strength. In August, 1955, he was named Deputy Chief of Staff (Operations) at SHAPE.

Belgians Fly CF-100's

Ten members of the Royal Belgian Air Force are being given conversion training on the CF-100 in Canada. The group of Belgian flyers, five pilots and five observers, are training at the RCAF's All-Weather OTU at Cold Lake, Alberta. The training is scheduled to finish in early November, and the Belgian crews will return to their own country to form the nucleus of a training unit there. They will be instructing Belgian aircrew destined for CF-100 service.

The ten Belgian aircrew members receiving the Cold Lake training are experienced all-weather crews, all of whom have been flying Gloster Meteors. They represent the first group of foreign aircrew ever to receive CF-100

training

• Aircraft technicians of the Belgian Air Force began training last month on the CF-100, at the RCAF's No. 3 Fighter Wing, at Zweibrucken, Germany. On completion of their training, part of the course will be selected to form a Belgian field technical training unit similar to the one at Zweibrucken. The remaining students will form a nucleus of squadron technicians for the CF-100's as they come into squadron service.

Under the direction of Warrant Officer D. J. Mollis, the six week course requires the students to receive contact training by working on the CF-100's along with RCAF technicians. as well as normal classroom instruction. The CF-100's allocated to Belgium through Mutual Air are expected to start arriving in Belgium late this year.

RCN Safety Award

Ten thousand flying hours without a single accident has brought the coveted Safe Flying Award to the RCN's Utility Squadron VU-33, stationed at Patricia Bay, B.C.

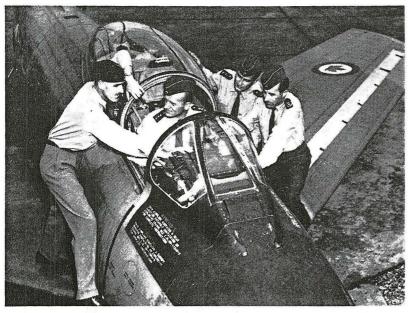
In competition with 14 other active force squadrons within the Navy, the Patricia Bay unit was recently presented the award by Commodore (S) Charles J. Dillon, Supply Officer-in-Chief, Naval Headquarters, Ottawa. The Safe Flying Award trophy is awarded annually by the Supply Branch of the Navy to the air squadron with the lowest accident rate in the RCN.

RCAF Firebees in '58

The Ryan Firebee, a high-speed, high-altitude pilotless jet target aircraft which simulates attacking jet fighters and bombers, will come into service with the RCAF next year. Thirty of these jet drones are now on order from the U.S. Navy with delivery to the RCAF scheduled to commence in January, 1958.

Built by the Ryan Aeronautical Company under sponsorship of the U.S. military forces, the Firebee will not replace targets now in use by the RCAF, but will serve as a realistic target for testing and evaluating present and future weapons systems. Employing a radar reflective device, the Firebee simulates a high-speed enemy bomber at high altitudes when viewed on a radar tracking screen.

Released from a launch aircraft, the



RCAF TRAINS GERMANS: Three WW II Luftwaffe fighter pilots are nearing completion of an eight-week training course on Sabre aircraft at the RCAF's No. 3 Wing, Zweibrucken, Germany. They will form nucleus of German jet instructors. L to R above are: F/O Arnulf Leiter, RCAF instructor, and the German Sabre students, Captain G. Josten, Lieutenant H. U. Flade, and Lt. Colonel H. Wehnelt.

remote controlled Firebee can climb from sea level to 40,000 feet in 10 minutes. It is said to be capable of speeds up to 600 mph at that altitude. Simulating the speed, attack and evasiveness of modern jet fighters and bombers, the swept-wing pilotless target has an endurance of approximately an hour and twenty minutes.

Built into the 17-foot fuselage is a two-stage parachute which opens automatically when the fuel supply has been exhausted. This parachute, with an integral flotation system, assures safe recovery of the target from either land or water. Due to the rugged construction of the Firebee, little or no damage is incurred when it strikes the earth. Powered by a Fairchild J-44 engine, producing 1000 pounds thrust, the Firebee's 1800 pound airframe is easily assembled by means of self-aligning bolts and four-point attachments.

WW-I Pilots Gather

A group of World War I pilots are planning a reunion in Toronto of all former members of the Royal Flying Corps, and Royal Naval Air Service, who saw service in WW-I. Tentative dates set up by the committee are March 31 and April 1, 1958.

The two or three day program is planned to include a reunion cocktail party and dinner, and tours of Toronto's aviation industry, including Avro Aircraft, Orenda Engines, and de Havilland Aircraft. Both de Havilland and Avro have been requested to stage flying exhibitions of their latest aircraft during the conducted tours of their facilities.

The reunion committee is anxious to hear from ex-RFC or RNAS officers anywhere in the world who may be interested in attending the reunion. Particulars may be obtained by contacting A. F. MacDonald, the de Havilland Aircraft of Canada Ltd., Postal Station "L", Toronto, Ont.

Reactivate 424

No. 424 Auxiliary Squadron at Hamilton, Ontario, is to be reactivated as a light transport squadron equipped with twin-engine Beech Expeditors. Flying operations of this unit, which had existed as a fighter squadron equipped with Mustangs and T-33's, ceased last year when a reorganization of the auxiliary squadrons was put into effect. This reorganization resulted in the retirement of some of the squad-



AS THE SEAT FLIES: Above, built for supersonic ejection, the new USAF "B" type seat is seen poised on its test launching platform on top of a supersonic rocket sled at Hurricane Mesa, Utah. Below left: seat is shown being rocketed forward and upward by its own integral rocket propulsion unit. At right, the seat is seen with the two telescoping booms which extend a most five feet out, provide more stability for the seat much as the stick on a sky-rocket.



rons, and a reassignment of others to different roles.

The reactivation follows strong local protests when it was announced that the Hamilton unit was one of those scheduled to be disbanded.

L-19E Deliveries Complete

Delivery of the last Cessna L-19E Bird Dog of a Canadian Army order for nine of the light AOP observation aircraft, is scheduled to take place by the end of September.

The addition of these new-model Bird Dog aircraft brings the Army's total strength of this type to 27. The other 18 Bird Dogs are the L-19A model. The new aircraft will be placed in service with Army AOP units and at the AOP school at Rivers, Manitoba.

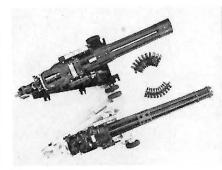
Superficially, the L-19E and the L-19A are identical. However, the gross weight of the E has been increased to 2400 lb., from the A's 2100 lb. Empty weights are, respectively, 1614 lb. and 1513 lb. The extra weight is evidently mainly the result of structural modifications to strengthen the fuselage and wings.

As might be expected, the raising of the gross weight has imposed a slight performance penalty on the E, as compared to the A. Comparative performance figures at identical engine settings are as follows, with those for the A appearing in parantheses: Max speed @ 5,000 ft., 115 mph (116 mph); cruise speed @ 5,000 ft., 86 mph (91.7 mph); landing speed, 53 mph (49 mph); rate of climb @ SL, 1020 fpm (1150 fpm); service ceiling, 18,500 ft. (22,900 ft.); absolute ceiling, 20,500 ft. (22,900 ft.); range with max. fuel, 555 mi. (612 mi.).

Radar Unit Praised

The RCAF's crack radar squadron in Europe has celebrated its second birthday. Working with RCAF Sabres and CF-100 interceptors in "Operation Zulu", NATO's constant patrol along the iron curtain buffer zone, the radar squadron has won high praise from Canadian and other NATO airmen for its efficiency in 24-hours-a-day, seven days-a-week operations.

In addition to alerting and guiding fighter planes on to "unknown" aircraft flying in the sensitive regions of the Continent, the RCAF radar squadron has used its very long range and exceptionally accurate equipment to





NEW VERSION OF VULCAN: The new 30 mm version of the Vulcan automatic cannon is shown above left alongside the earlier 20 mm version which is presently installed in the F-104A Starfighter. The new version, designated the T212, uses 50 percent larger shells and has three times the striking power of the 20 mm. Though it has shorter barrels, it weighs about the same.

help Allied pilots in distress. The squadron is credited with saving ten friendly aircraft and aiding 58 others in reaching base safely.

Located "somewhere in Europe", the quadron is equipped with late model radar of British design and manufacture. Although its specific performance data is secret, NATO officials rate the squadron's combination of personnel and equipment as "unsurpassed" in the NATO air arm.

Missile Regiment

Defence Minister George Pearkes has announced that the 1st Light Anti-Aircraft Regiment would be the first unit in the Canadian Army to be equipped with guided missiles. Although the type of missile was not included in the announcement, indications are that it will be the Nike.

The first stage in preparing the unit for guided missile warfare will necessitate the concentration and relocation of personnel now at Esquimalt, B.C., to the regiment at Picton, Ont. At the present time, the regiment is comprised of a headquarters and two batteries at Picton, and a single battery at the west coast base.

CF-100's in Europe

The last of four squadrons of CF-100 twin-jet fighters to join the RCAF's No. 1 Air Division, arrived at the fighter base of Baden-Soelingen last month. This completes the transfer of the all-weather squadrons to Europe, and brings Canada's NATO air commitment to eight squadrons of dayfighters equipped with Sabre 6's, and four squadrons of CF's.

RCN Helicopter Tests

Installation of a helicopter platform on a St. Laurent class destroyer escort will be carried out this month by the RCN as part of a continuing program of experiments to evaluate the feasibility of operating helicopters from escort

First trials were carried out during the autumn of 1956 with the Halifax-based frigate Buckingham and showed considerable promise. Tests included a mid-ocean evaluation under various weather and sea conditions. More extensive trials are to be carried out on the HMCS Ottawa, a unit of the Third Canadian Escort Squadron based at Halifax. The platform will be removed from the Buckingham and its installation in Ottawa be started at once.

Carrier Qualification

Ten RCN pilots of Anti-Submarine Squadron 881 from HMCS Shearwater Air Station, took their carrier qualification landings aboard the U.S. Navy carrier USS Wasp last month. The Canadians are flying Canadian-built, American-designed CS2F-1 Tracker anti-submarine aircraft. They are the first Canadians to qualify on board a U.S. Navy angle-decked carrier using the mirror landing system.

The training on the Wasp was a prelude to landings on the RCN's new angle-decked carrier the HMCS Bonaventure.

Postings & Careers

New appointments for three senior RCAF officers, Group Captains Nelles W. Timmerman, DSO, DFC, CD; Wesley B. Hodgson, DFC, CD; and Michael G. Doyle, CD, were announced recently by AFHQ. G/C Timmerman, chief operations officer at the headquarters of Allied Air Forces, Central Europe, (AAFCE) at Fontainebleau, France, will become commanding officer of RCAF Station Chatham, N.B. His post at AAFCE will be assumed by G/C Hodgson who has been serving as director of air training at AFHQ, while G/C Doyle, now serving as director of vehicle and marine engineering at AFHQ, will become commanding officer of RCAF Station Goose Bay, Labrador.

• Squadron Leader Keith M. Ham has been named officer commanding 115 Communications Flight, Abu Suweir, Egypt. This flight is one of two RCAF formations serving with the United Nations Emergency Force. S/L Ham, who was serving at Air Force Headquarters, took over his new duties this month, replacing S/L Verne A. Rutherford, who has commanded the flight since its formation in January of this year.





EXPERIMENTAL FLYING SUIT: New three-piece suit provides a number of advantages in supersonic era. It is waterproof, has a thermal liner for warmth, a ventilating suit for cooling, and is a partial pressure suit. It floats a pilot face-up, even when unconscious, with full gear and in cold water without undue exposure. It reduces by a third the time it now takes a pilot to don flying equipment, and decreases the bulk of equipment. Suit was designed by the Industry Crew Escapes Systems Committee for the USAF.