

## RCAF FLYING TIME

Training .....	70,699	hours
Transportation .....	34,496	"
Photographic .....	5,205	"
Testing .....	4,976	"
Ferrying .....	3,080	"
Test and development .....	1,935	"
Other flying .....	8,044	"
<b>TOTAL .....</b>	<b>128,435</b>	<b>hours</b>

## RCAF AIR TRANSPORT OPERATIONS

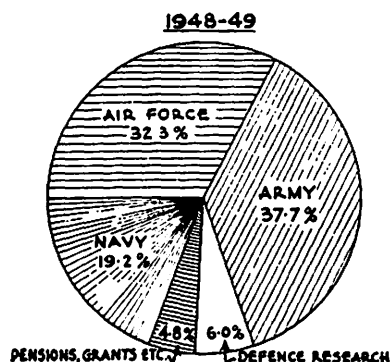
	<b>1948-49</b>
Air miles .....	2,246,416
Number of passengers .....	33,552
Passenger miles .....	29,281,541
Cargo weight (lbs.) .....	5,665,350
Ton miles .....	2,295,930
Mail weight (lbs.) .....	224,722
Mail ton miles .....	95,592

### EXTRACTS FROM ...

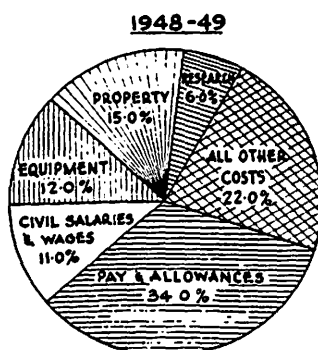
### The 1949 Report on the Department of

# National Defence

## Distribution of the Defence Dollar BY SERVICES



## BY REQUIREMENTS



The annual report of the Department of National Defence, covering the fiscal year 1948-49 (ending March 31) was tabled in the House of Commons on October 19 by Defence Minister Brooke Claxton. *Aircraft and Airport* has taken certain material from the report which the editors think will be of interest to aviation people in Canada. The number of the paragraph from which each extract has been taken, is also given.

12. The Air Force, in addition to its training program, in which the first postwar wings parades were held, flew almost two and a quarter million miles in transport operations, and broke previous records in air photography by covering close to a million square miles in surveys. Over a hundred rescue missions were flown, involving 2,600 flying hours. The modernization of equipment was pursued with the acquisition of over 70 new Vampire planes and a number of aircraft of other types.

20. In the RCAF (Auxiliary) University Flights there were 344 students divided among seven universities, and

under the University Air Training Plan 366 students were given summer employment in various branches of the organization.

37. The Canadian Joint Air Training Centre at Rivers, Manitoba, is a tri-service training station. Its functions are to provide training in matters relating to the joint employment of air and ground forces, to evolve Army-Air doctrines, to conduct service trials, and to make recommendations for the improvement of techniques and equipment; but the training of soldiers in air-transported and parachute operations has been the major object. In addition, the centre at Rivers is concerned with the training of the RCN Carrier Air Group in ground attack techniques, instruction of Army light aircraft pilots and glider pilots, training of RCAF personnel in the tactics and techniques of airborne operations, and the training of all three services in photographic interpretation.

38. In August of 1948, 18 Carrier Air Group of the RCN moved by air from Dartmouth, N.S., to the Canadian Joint Training Centre at Rivers. The RCAF provided excellent co-

operation, transporting by air not only all the personnel of this Naval group who did not fly in their own planes, but also flew out stores totalling 60,000 pounds. With an Army air-carrying team supervising the loading, this was a good working example of tri-service cooperation.

39. . . . Of primary importance was the conversion of one infantry battalion into a parachute-air transported battalion.

### Operations

42. (With reference to the B.C. floods during May and June of 1948) . . . The Air Force flew 900 sorties to carry over two million sandbags, fifty-five tons of freight (from water pumps to blood plasma) and several hundred soldiers. . . . 100 aircrew were on continuous duty in addition to 450 other personnel engaged in emergency activity.

44. The RCAF is coordinating authority for search and rescue operations and maintains for this purpose an organization which has been approved by IACO. Search and Rescue coordination centres are located at Halifax, Trenton, Winnipeg, Edmonton, and Vancouver, each of which has available Dakota, Norseman, Canso, and helicopter aircraft especially equipped for search and rescue work over land or water. Also available for this work are high speed rescue launches of the two marine squadrons stationed at Dartmouth and Patricia Bay. One hundred and sixteen missions were undertaken during the year, of which forty-two were searches for missing aircraft, thirty-five for missing vessels, twenty eight for the evacuation of sick or injured persons and eleven for the provision of medical assistance. Almost 2,600 hours were flown on these missions among the most noteworthy of which was "Operation Attache", a thirteen day search for USN aircraft lost in September on a flight from Churchill to The Pas. The five occupants of the plane were successfully located and rescued.

### Recruiting

48. RCAF recruiting stations, which had previously in most cases been located on Air Force stations, began during the year to be moved into major cities chosen across the Dominion on a population-density basis.

After careful study the educational qualifications for both aircrew and groundcrew have been lowered, junior, matriculation instead of senior now being the requisite for aircrew.

49. Total intake . . . for the Air Force (was) 709 officers and 2,909 airmen.

181. Two Carrier Air Groups have been maintained by the RCN and have been embarked alternately in the one carrier. The Carrier Air Group when not afloat is based at Dartmouth Naval Air Station, which was taken over during the year from the RCAF. Early in the year a Naval Air Stores Depot was established at Dartmouth. In May, 1948, the RCN established . . . a School of Naval Aircraft Maintenance to provide instruction to air mechanics and ordnance and electrical personnel.

182. The two Carrier Air Groups of the RCN, the 18th and 19th, are divided into two squadrons each. The 18th Carrier Air Group is composed of 825 and 826 Squadrons, each equipped with 10 Fireflies, which are anti-submarine aircraft. The 19th Carrier Air Group is composed of 803 and 883 Squadrons, each equipped with 8 Sea Furies.

205. HMCS Magnificent, a light fleet carrier, was obtained on loan from the RN to replace HMCS Warrior, and was commissioned on April 7, 1948.

### Meteorology

206. HMCS St. Stephen, formerly a frigate, but now converted for weather reporting, shared operating duties with the USCG at the weather station between Labrador and Greenland, in accordance with the ICAO agreement. During the year she completed six patrols on this station.

358. At the end of the fiscal year the strength of the regular component of the RCAF was 2,701 officers and 11,851 airmen and of the auxiliary, 429 officers and 998 airmen. The reserve, a pool of partially trained personnel, is now in course of organization. On March 31, 1949, there were 46,423 officers and airmen enrolled in the six classes of the reserve.

385. The Flying Training School at Centralia graduated 84 pilots, including two RCN, and had 118 pupils end of the year. The planned intake of trainees was increased from 20 to 36, including three RCN, every eight

weeks. The wings parade held at this school on June 21, 1948, marked the graduation of the first of the new pilots, 14 in number, trained since the termination of the war.

386. The Instrument Flying School, also at Centralia, graduated 91 RCAF and 3 RCN pupils. Planned intake per course is 20 trainees.

### Training

387. The Central Flying School at Trenton gave training to 198 pupils. Two RCN officers were graduated as Link Trainer Instructors. Three basic flying instructor courses were conducted with 44 graduates, and 66 former instructors were recategorized as flying instructors after refresher training. Thirty-nine pilots were converted to Vampire aircraft. Twenty-nine Flight Cadets of the University Air Training Plan, of whom 24 qualified for continued training, received the first year course of ab initio flying instruction, and 18 completed the second year.

388. The Flying Boat Conversion School at Sea Island graduated 18 pilots. It is intended to operate this school only during the period September to April, with an intake of eight pupils every ten weeks.

389. The Air Navigation School at Summerside conducted a Staff Navigation Instructors Course, which was completed by 16 RCAF navigation officers and one RCN observer, and a Staff Pilot-Navigation Instructors Course, which was completed by five pilots with eight more in training at the close of the year. A Specialist Navigation Course began on October 22, attended by eight RCAF and one USAF officer . . . Basic navigation courses at this school commenced on March 28, 1949; intakes of 18 pupils every eight weeks are planned.

### Electronics

391. The Radar and Communication School at Clinton continued radio officer training with courses of 15 students every eight weeks. The standard of air training phases of these courses was considerably improved by the receipt in October of the first Dakota radio trainer. By the end of the year, four of these "flying classrooms" had been delivered.

392. The first postwar wings parade was held at this school on May 6, 1948, when 13 officer graduates received the

new double-wing badges for radio officers and radio navigators.

393. The Air Armament School at Trenton graduated 63 pilots and 58 radio officers, and also gave familiarization bombing and gunnery flights to all technical courses.

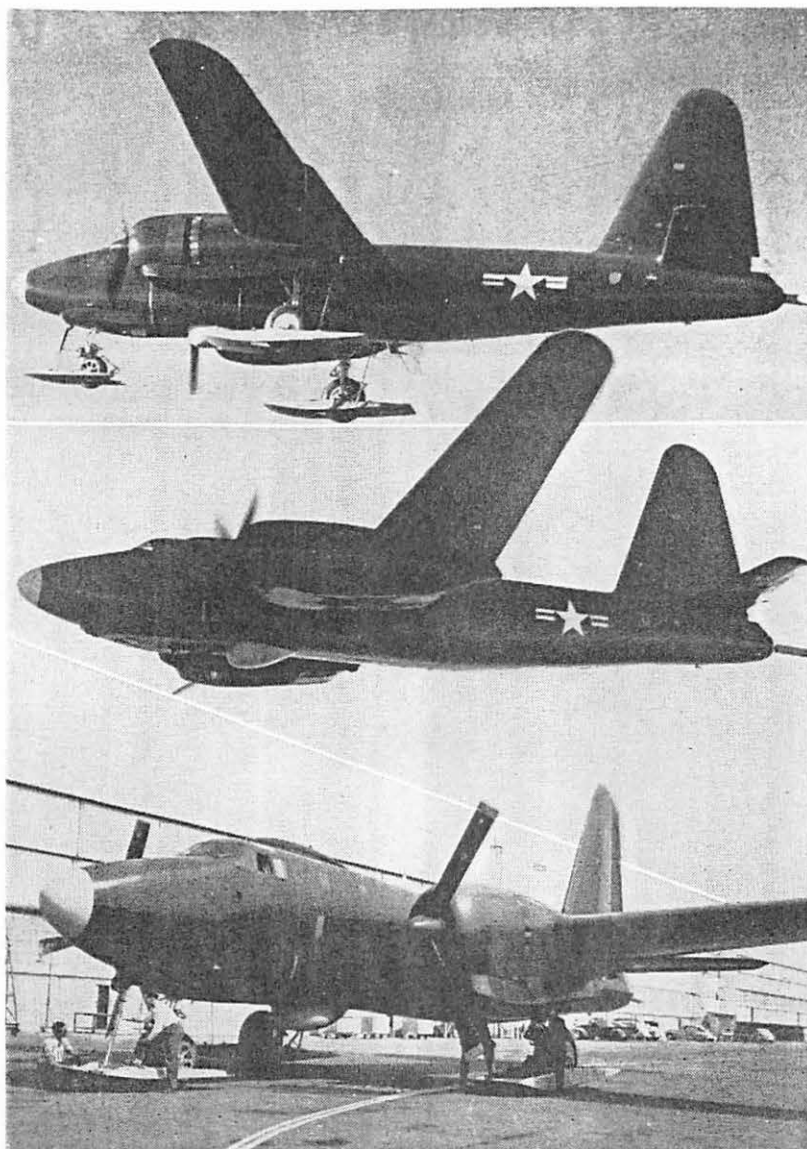
395. Ten of the proposed eleven auxiliary squadrons have now been activated. The eight fighter squadrons carried out flying training and operational exercises, including ground-controlled interception problems with the use of radar. The two tactical bomber squadrons were engaged on flying training and conversion to operational aircraft; one carried out several operational training exercises.

419. One hundred and nine aircraft (73 Vampire and 36 Auster VI) were received from the U.K. and erected. Two hundred and forty-four aircraft (172 Harvar, 37 Dakota, 15 Expeditor, 10 Canso, 6 Mitchell, and 4 Lancaster) were reconditioned and modified or converted for various uses.

428. During the year the Chinook, Canada's first experimental jet propulsion engine, completed 400 hours on test runs which proved the mechanical design of the engine and achieved the planned performance. In February the Orenda, a larger development of the Chinook, made its first run and completed over 100 hours on test by the end of the year. It gives every indication of satisfactory operation.

429. A series of tests at McGill University was sponsored by the RCAF to determine the performance of a Canadian experimental jet engine fuel.

447. It has been decided that the RCAF will use GCA as the standard landing aid rather than the ILS used by commercial air lines in accordance with ICAO. GCA systems were established at St. Hubert and Edmonton and a training school for GCA operators and technicians was set up at Dorval. As highly trained GCA crews graduate from the school, additional installations will be made during 1949 at Greenwood, Mont Joli, Bagotville, and Centralia. Six GCA units are now owned by the RCAF. Procurement action was commenced to obtain additional units of a new design which will, amongst other improvements, be air transportable in North Star aircraft. Installation of an instrument landing system was partially completed at the flying training school at Centralia to provide a training facility for RCAF pilots.



### Neptune on Skis

No chance of the USN's Lockheed P2V Neptunes becoming snow-bound. With 16 foot aluminum skis fitted over the wheels of its regular tricycle landing gear, the Neptune is claimed to be the largest combat aircraft ever equipped for Arctic operations. The aircraft has already been test flown.

Retractable in flight, the skis are tucked inside a fairing underneath the engine nacelles and at the nose of the airplane to reduce in-flight drag. For landings on standard runways, the three wheels protrude through openings in the skis. For snow operation the skis are lowered farther, offering an area of 64 square feet for each of the two main skis and 32 square feet for the nose ski.

The top photograph shows the undercarriage in a down position. The centre shot reveals the neat fairing job which Lockheed has effected when the undercarriage is fully retracted. The bottom picture gives some idea of how the Neptune looks on the ground.

Fully equipped for cold-weather operation, the P2V has been specially fitted with super-sized heaters, a sun-compass, special radio and radar for use near the magnetic poles, and additional fuel tanks for extra-long range operations.

There are also special camera installations, and winter rescue gear is contained in the aircraft's fuselage. The camera's are intended for mapping work.