1949 ESTIMATED CROP ACREAGES

27,500,000 ACRES IN WHEAT: The area seeded to wheat in Canada this year is estimated at 27,500,000 acres, an increase of 14 per cent over the estimated total of 24,100,000 acres sown last year, according to figures released by the Bureau of Statistics. Area under oats is slightly higher. The overall barley acreage is reduced seven per cent, while that of rye showed a sharp decline of 44 per cent.

Oat acreage is estimated at 11,300,000 compared with 11,200,000 in 1948, increased seeding being shown in all provinces but Saskatchewan, Alberta and Prince Edward Island. The barley acreage is down to 6,000,000 from 6,500,000, increases from Manitoba eastward being more than counterbalanced by declines in the other provinces. Rye acreage at 1,200,000 is off sharply from last year's record figure of 2,100,000, while flax seedings dropped 83 per cent from 1,967,000 acres to 335,000. The potato acreage is down two per cent to 499,000.

Wheat acreage in the Prairie Provinces in 1949 is estimated at 26,500,000 compared with 23,000,000 in 1948. Oat acreage this year at 7,300,000 acres is three per cent below that of a year ago, while barley acreage is down eight per cent to 5,600,000 acres. Flax seedings dropped sharply from last year's acreage of 1,900,000 to 300,000 for the current season, while rye acreage at 1,100,000 is just over half of last year's figure of nearly 2,000,000. Summerfallow acreage in 1949 at 21,000,000 is up 1,000,000.

PRELIMINARY ESTIMATES OF CROP AND SUMMERFALLOW ACREAGES

	1948 Area Acres	Per Cent of 1948	1949 Area Acres
Fall Wheat	858,500	93	798,000
Spring Wheat	23,247,400	115	26,731,100
All Wheat	24,105,900	114	27,529,100
Oats	11,200,500	101	11,327,900
Barley	6,495,300	93	6,049,300
Fall Rye	1,605,900	54	866,700
Spring Rye	497,200	62	308,000
All Rye	2,103,100	56	1,174,700
Peas, Dry	82,200	90	74,100
Beans, Dry	92,400	96	88,800
Buckwheat	186,300	92	171,500
Mixed Grains	1,541,500	110	1,689,200
Flaxseed	1,966,500	17	334,800
Shelled Corn	252,300	105	265,000
Potatoes	508,200	98	499,300
Field Roots	109,800	100	110,100
Hay and Clover	9,748,000	99	9,624,200
Alfalfa	1,317,300	113	1,486,600
Fodder Corn	538,800	99	536,100
Sugar Beets	60,000	142	85,250
Summerfallow	19,991,000	105	20,958,000

ICAO APPOINTMENT: The appointment of Mr. Roland Gilbert as Chief of the Administrative Bureau of the International Civil Aviation Organization was announced on July 22 by Dr. Albert Roper, Secretary General. Mr. Gilbert is at present an Assistant Secretary in the Ministry of Civil Aviation of the United Kingdom. He will take up his new duties on August 1.

Mr. Gilbert has had a long career in the service of the United Kingdom Government in the fields of finance and general administration. During the war he was Deputy Director of Supply in the Ministry of Home Security and since January, 1948, as Assistant Secretary and Head of Finance Air Services in the Ministry of Civil Aviation, he has been responsible for financial policy relating to the purchase, sale and leasing of aircraft and the provision of overseas facilities such as aerodromes and meteorological services.

DIRECTOR OF STANDARDS: Appointment of Roderick W. MacLean as Director of Standards was announced on July 20 by the Minister of Trade and Commerce, Mr. Howe.

(C.W.B. July 29, 1949)

THREE ANTI-SUB VESSELS: Contracts for the construction of the first three anti-submarine escort vessels for the Royal Canadian Navy have been awarded to Halifax Shipyards Limited, Halifax; Canadian Vickers Limited, Montreal, and Burrard Drydock Company, Limited, North Vancouver, B.C., it was announced on July 24 by the Minister of National Defence, Mr. Claxton.

While final details of the contracts have not yet been negotiated it is expected the vessels will cost approximately $8,000,000 each, the announcement stated.

Commencement of a naval anti-submarine escort ship-building program was first announced by Mr. Claxton in June of this year. At that time he stated every effort would be made to advance the work without delay and that it was hoped keels for the first three vessels would be laid down by the end of the year or early in 1950.

MAJOR WAR VESSELS

The new anti-submarine escort ships will be classed as major war vessels, and as such are the first to be designed completely in Canada. Their primary purpose will be the detection and destruction of modern fast submarines. They will be the first to be built anywhere to meet the new requirements.

In function they replace the frigates and corvettes of the Second World War. Like the latter vessels, their design has been worked out so that in the event of an emergency it may be possible to produce them rapidly and in quantity.

There the comparison ends. In speed, manoeuvrability, weapons and habitability the new ships of the R.C.N. will fulfill all the requirements of their class for modern sea warfare.

The escort vessels will have steel hulls and aluminum will be used to a certain extent in superstructures and bridges. Steam turbines driving twin screws will provide a speed considerably in excess of that of the frigate.

Accommodation will be provided for a ship's company of more than 250. The crew's sleeping accommodation will be fitted with bunks to an improved pattern and will be separate from the dining spaces, which will be arranged so that either the cafeteria self-service system or modifications of it can be employed. Provision will be made for air conditioning in certain living spaces and principal operating positions. Living accommodation will be insulated so as to ensure comfortable temperatures in all weather conditions.

Every effort will be made to avoid difficulties of production. Specifications will be simplified and standardized wherever possible to meet the requirements of North American industrial practice.

In weapons and equipment generally, careful study has been given to both Royal Navy and U.S. Navy practice and the best features of both have been selected. The net result, in the opinion of R.C.N. authorities, will be an anit-submarine vessel second to none.

HEAT-RESISTANT MATERIALS: Present-day tendencies towards the use of higher operating temperatures as in jet-propelled aircraft, and in many metallurgical processes, mean that design engineers are being faced with the problem of producing better heat-resistant materials. In the operation of jet engines, for example, temperatures are of the order of 1350°F. Higher temperatures would enable better efficiencies to be attained but materials of construction are the limiting factor.

To keep abreast of the problems in this field the National Research Council has an Associate Committee on High Temperature Metals. Members of this Committee represent research interests in the universities, the Ontario Research Foundation, and the industries concerned in this subject. The Committee meets at intervals to review research programs and to make arrangements for further studies. Work is proceeding at the University of Toronto, and in the federal Department of Mines and Resources as well as in the Ontario Research Foundation laboratories and in certain industrial plants.

CORROSION LABORATORY

Chemists in the corrosion laboratory of the National Research Council's Division of Chemistry are contributing to general knowledge of this subject by carrying on a special investigation. For some time they have been engaged on a study of the scaling of heat-resistant alloys. Their work has been directed towards finding out why some types of oxide scale, formed on alloys at high temperatures, act better than others as a protective coating for the underlying metal.

It has been found that the scale formed on alloys at high temperatures exhibits different degrees of protection at different times as the heating continues. An odd feature is that the alloys now being tested show intermediate periods of rapid oxidation, after which the scale becomes protective again.

It is hoped that a study of these data and examination of the scales will provide an adequate explanation of the reason for these variations in behaviour. The results of the investigation may have an important bearing on the selection of heat-resistant alloys for various industrial uses, the National Research Council has announced.