

## 49.—Statistical Summary of Civil Aviation in Canada, 1927-32.

Item.	1927.	1928.	1929.	1930.	1931.	1932.
<b>General Analysis.</b>	No.	No.	No.	No.	No.	No.
Firms manufacturing aircraft.....	2	4	6	7	7	7
Firms chiefly operating aircraft.....	20	53	81	100	100	73
Firms using aircraft as auxiliary service..	1	1	4	4	4	4
Aircraft flights made.....	16,748	75,285	144,143	156,174	144,080	102,219
Aircraft hours flown.....	12,070	43,071	79,786	92,998	73,645	56,170
Approximate aeroplane mileage.....	209,583	1,557,617	4,083,321	5,222,685	5,280,958	2,786,609
Approximate float seaplane mileage.....	247,238	797,998	1,768,758	2,024,219	1,553,721	1,508,157
Approximate boat seaplane mileage.....	372,189	352,029	426,064	285,828	180,620	198,792
Approximate amphibian mileage.....	—	20,341	5,956	13,938	30,950	80,573
Total aircraft mileage.....	829,010	2,728,414	6,284,079	7,547,420	7,046,276	4,569,131
Average flight duration (minutes).....	43	32	33	36	30	33
Pilots carried.....	16,748	75,285	144,143	156,574	144,080	102,219
Passengers and crew carried.....	18,932	74,669	134,751	124,875	100,128	76,800
Total personnel carried.....	35,680	149,954	268,894	281,449	244,208	179,019
Pilots carried one mile (pilot-miles).....	829,010	2,728,414	6,284,079	7,547,420	7,046,276	4,569,131
Passengers and crew carried 1 mile (passenger-miles).....	1,424,031	2,883,782	6,114,997	5,408,676	4,073,552	2,869,799
Total personnel carried 1 mile (personnel-miles).....	2,253,041	5,612,196	12,399,076	12,956,096	11,119,828	7,438,930
Total freight or express carried (lb.).....	1,098,346	2,404,682	3,993,908	1,759,250	2,372,467	3,129,974
Total mail carried (lb.).....	14,684	316,681	430,636	474,199	470,461	413,687
<b>Licensed Civil Air Harbours.</b>						
Total air harbours (all types).....	36	44	77	77	78	83
<b>Licensed Civil Aircraft.<sup>1</sup></b>						
Aeroplanes (single-engined).....	30	124	281	316	286	259
Aeroplanes (triple-engined).....	—	3	2	2	1	1
Float seaplanes (single-engined).....	16	160	119	183	180	152
Boat seaplanes (single-engined).....	21	33	37	21	23	26
Amphibians (single-engined).....	—	4	6	5	5	7
Total aircraft (all types).....	67	264	445	527	495	445
<b>Licensed Civil Air Personnel.</b>						
Pilots only (flying machines).....	43	258	349	408	653	775
Pilot-Air Engineers.....	29	70	96	131	134	133
Air Engineers only (flying machines).....	74	130	212	241	236	208
Total licensed personnel.....	148	458	657	780	894	993
Unlicensed air mechanics employed.....	59	8	150	164	131	52

<sup>1</sup>These figures show duplication, since in several instances the aircraft are used both as landplanes and seaplanes.

PART VIII.—CANALS.<sup>1</sup>

Before the period of extensive railway construction which commenced for Canada in the 1850's, the water routes, more especially the St. Lawrence, the Great Lakes and the Ottawa, were the chief avenues of transportation. These routes were interrupted at certain points, necessitating portages, and to eliminate the toil of unloading, transporting and reloading at the portages the canals of Canada were constructed.

The earliest mention of canals in Canada is in connection with the Lachine canal, begun by early French settlers in 1700, but only after the conquest of Canada by the British were improvements of the main water routes made, and in the early part of the 19th century increased internal and foreign trade and the introduction of steam navigation resulted in more attention being given to this work. Although the canals were constructed primarily for military purposes they soon became essential to the commercial life of the country.

<sup>1</sup>Revised by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This Branch publishes an annual report on "Canal Statistics".