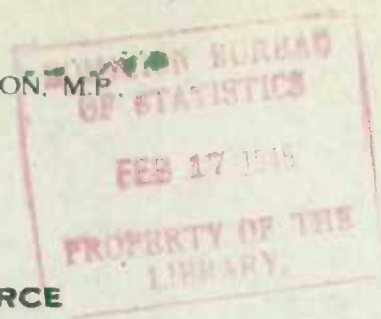


51-202

Historical File Copy

C-3

Published by Authority of the Hon. James A. MacKINNON, M.P.  
Minister of Trade and Commerce



**CANADA**  
**DEPARTMENT OF TRADE AND COMMERCE**  
**DOMINION BUREAU OF STATISTICS**  
**PUBLIC UTILITIES BRANCH**

---

**CIVIL AVIATION**  
**IN**  
**CANADA**  
**1943**

---



OTTAWA  
1945

Price 10 cents

Published by authority of the Privy Council  
by order of the Minister of the Interior

CANADA

DEPARTMENT OF TRADE AND COMMERCE

DOMINION BUREAU OF STATISTICS

PUBLIC UTILITIES BRANCH

CIVIL AVIATION

IN

CANADA

1943



STATISTICS  
CANADA

Published by Authority of the Hon. James A. MACKINNON, M.P.,  
Minister of Trade and Commerce.

---

**DOMINION BUREAU OF STATISTICS**  
**TRANSPORTATION AND PUBLIC UTILITIES BRANCH**  
**OTTAWA**

---

Dominion Statistician, S. A. CUDMORE, M.A. (Oxon.), F.S.S., F.R.S.C.  
Chief, Transportation and Public Utilities Branch, C.S. Wrong, B.Sc.

---

CIVIL AVIATION IN CANADA

1943

The statistics in this report are collected from the operators of aircraft with commercial operators' licenses with the exception of data on licenses and accidents which are supplied by the Civil Aviation Division of the Department of Transport. That division has jurisdiction over the licensing of all airports, aircraft pilots and engineers and, consequently, the licensed aircraft and pilots also include private aircraft and pilots.

The commercial companies are divided into two classes, those engaged principally in international flying between Canada and the United States and those engaged exclusively, or almost exclusively, in flying between Canadian stations. The Canadian operators are divided between licensed and non licensed. The former are licensed by the Transport Board to operate between stated points and have more or less exclusive rights over the routes covered by their respective licenses. These carriers are now (1944) under the jurisdiction of the Air Transport Board. The annual reports contain some small revision in the data reported monthly by these operators.

Light aeroplane clubs have ceased flying during the war and no data for 1941 and subsequent years have been included in these reports. This report includes no statistics for schools and sightseeing operations, this class of flying having also ceased.

The Trans-Canada Air Lines flying between urban centers from the Atlantic to the Pacific are performing a service that existed in only a small way before 1939 and the major part of the increase in passenger traffic is due to its operation.



Operators in the northern districts of Canada are engaged mainly in serving mines, trappers, prospectors, etc., the mines supplying the greater part of their traffic. Their aircraft are equipped with floats in the summer and skis in the winter and lakes serve as landing surfaces. Consequently there are periods each spring and fall when ice conditions make operation impossible. All flying under these conditions is daylight flying. These aircraft have carried all kinds of freight, including shipments of gold, horses and cattle, canoes, mining machinery, bundles of furs, dynamite, etc. They furnish the most economical transportation service to many northern mines and it is this traffic which accounts for the heavy freight traffic by air as compared with freight carried by aircraft in other countries.

Time and miles for "International" operators are only over Canadian territory. The time must necessarily be estimated but any error should be small. These companies report the gasoline and oil purchased in Canada which, with that used by the Canadian operators is the total consumption by civil aircraft except private and Dominion Government aircraft. Also it does not include gasoline and oil consumed by military aircraft. Excess baggage is included with freight. International mail includes both incoming and outgoing mail. Also passengers carried by international operators include passengers in both directions, and for companies flying between United States points they include through passengers on board while flying over Canadian territory.

The international and unlicensed carriers had no accidents during the year. Licensed carriers reported 2 passengers killed and 3 injured in flying accidents and 3 crew killed and none injured, or a total of 5 persons killed and 3 injured compared with 13 killed and 4 injured in 1942 in transportation accidents. A Provincial Government aircraft suffered an accident in which the pilot was injured and three occupants were killed, and in a training flight accident of a licensed carrier a student was injured. These accidents are not included in the above comparisons. The 1942 data were revised; an aircraft crashed on December 20, 1942 and was not found until August 1943, in which a crew of 3 and 10 passengers were killed. These were not included in the 1942 report.

During 1943 these carriers photographed vertically 5,507 square miles and obliquely 12,406 square miles and also sketched from aircraft 6,293 square miles of territory. The Provincial Government of Ontario and Manitoba report locating 93 forest fires by aircraft.

The number of revenue passengers transported, exclusive of 19,381 carried between foreign points, increased from 198,205 in 1942 to 282,886, or by 45 per cent, and revenue passenger miles flown increased by 43 per cent, but the aircraft miles flown in revenue transportation service increased by only 14 per cent, and the aircraft hours flown by 9.6 per cent. These statistics indicate that the larger and faster aircraft were performing a greater part of the service than in 1942. This was also a factor in the increase in horse power hours flown, which increased by 30 per cent, and in the increase in the consumption of gasoline from 4,853,555 to 6,064,455 gallons, or by 30 per cent.

Employees of Canadian licensed carriers increased from 2,292 in 1942 to 3,383 and their wages were increased from \$4,308,848 to \$6,307,659 or by 46 per cent.

On December 31 there were 214 commercial aircraft licensed, which included private aircraft and aircraft belonging to the Dominion Government and aircraft belonging to the carriers included in this report.

The number of licensed airports with landing surfaces of land only was decreased by 2 and airports with water only and with land and water remained unchanged, reducing the total from 177 to 175 airports.



TABLE 1

## STATISTICAL SUMMARY OF CIVIL AVIATION IN CANADA, 1943

	1943	1942	1941	1940	1939	1938
<u>Aircraft Miles flown</u> - Revenue .....	14,584,115	12,781,867	11,810,668	10,341,329		
Non-revenue .....	709,434	547,276	697,722	671,258		
Total .....	15,293,549	13,329,143	12,508,390	11,012,587	10,969,271	12,294,088
<u>Passengers carried</u> - Revenue .....	282,886	198,205	181,219	135,779	133,776	104,117
Between foreign stations .....	19,381	17,497	11,792	1,840		
Company Employees .....	9,011	8,961	(	(	(	(
Other Non-revenue .....	3,364	4,384	( 15,048	( 11,406	( 27,727	( 35,689
Total .....	314,642	229,047	208,059	149,025	161,503	139,806
<u>Passenger Miles</u> - Revenue .....	100,530,892	70,554,377	53,891,516	38,438,439	21,840,484	10,913,409
Company Employees .....	1,992,061	1,601,277	(	(	(	(
Other Non-revenue .....	867,511	1,050,947	(2,832,198	(2,727,363	(4,267,266	(3,973,309
Total .....	103,390,464	73,206,601	56,723,714	41,165,802	26,107,750	14,886,718
<u>Freight carried</u> - Revenue .....	(lbs.) 11,546,777	11,055,142	14,719,700	12,978,836		
Between foreign stations ..	" 791,498	352,859	106,550	11,715		
Non-revenue .....	" 1,515,288	1,243,938	1,733,361	1,446,020		
Total .....	(lbs.) 13,853,563	12,651,939	16,559,611	14,436,571	21,253,364	21,704,587
<u>Freight Ton Miles</u> - Revenue .....	1,500,179	1,125,912	956,482	784,922		
Non-revenue .....	218,141	148,038	169,055	161,273		
Total .....	1,718,320	1,273,950	1,125,537	946,195	1,037,562	1,038,738
<u>Mail carried</u> .....	(lbs.) 7,586,809	5,470,209	3,411,971	2,710,995	1,900,347	1,771,155
Ton Miles .....	2,103,867	1,484,314	894,578	610,053	433,349	281,667
<u>Hours flown by Aircraft</u> - Transportation Revenue ...	101,169	92,314	88,536	80,796		
" Non-revenue .....	6,438	5,227	7,049	6,871		
Forestry Patrol .....	4,352	4,595	6,835	13,461		
Fishery .....	115	120	147	169		
Photography Survey .....	628	559	508	765		
Instruction .....	3,192	13,890	27,927	47,954		
Exhibition - Miscellaneous .....	768	1,371	1,821	1,812		
Total .....	116,662	117,876	132,823	151,828	145,638	133,168
Hours flown by Crew .....	257,815	235,573	241,154	226,534		
" " " Passengers .....	562,337	480,534	379,777	300,904		
Horse Power Hours flown by Aircraft (000) .....	165,487	127,246	113,797	105,451		
Gasoline consumption .....	(Gallons)(3) 5,661,301	4,653,555	4,389,648	3,959,798	3,148,258	2,002,255
Lubricating oil consumption .....	" (3) 117,050	104,441	104,758	92,719	66,902	50,515
<u>Flying Accidents</u> .....		(2)				
Passengers Killed .....	2	12	14	9	8	7
" Injured .....	3	6	10	6	6	8
Crew Killed .....	3	8	8	4	6	10
" Injured .....	1	4	7	5	5	5
Other Persons Killed .....	3	-	-	-	-	-
" Injured .....	-	-	-	-	-	-
Total Killed .....	8	20	24	13	14	17
Injured .....	4	10	15	9	9	13

(2) Revised.

(3) For Canadian Carriers only.

TABLE 2

## AIRCRAFT MILES, PASSENGERS, FREIGHT AND MAIL

	Provincial Governments	International Carriers (1)	Canadian Carriers		Total (1)
			Licensed (1)	Unlicensed	
	A	B	C	D	E
<u>Aircraft Miles flown</u> - Revenue Transportation .....		762,579	13,736,180	160,877	14,584,115
Non-revenue " .....		1,910	511,361	196,269	709,434
Total .....		764,489	14,247,541	357,146	15,293,549
<u>Passengers carried</u> - Revenue .....		64,096	227,194	2,611	282,886
Received from Canadian Carriers (2) .....		31,537	1,586	-	-
Between foreign stations .....		19,381	-	-	19,381
Company Employees .....		2,677	3,963	2,443	9,011
Other Non-revenue .....		482	1,705	1,210	3,364
Total .....	(2)	118,173	232,862	6,264	314,642
<u>Passenger Miles</u> - Revenue .....		8,586,746	92,490,832	136,270	100,530,892
Company Employees .....		273,581	1,535,271	185,596	1,992,061
Other Non-revenue .....		46,832	731,825	89,710	867,511
Total .....		8,907,159	94,757,928	411,576	103,390,464
<u>Freight carried (lbs.)</u> - Revenue .....		523,937	10,760,530	302,485	11,546,777
Rec'd from Canadian Carriers (2) .....		239,078	36,698	-	-
Between foreign stations .....		791,498	-	-	791,498
Non-revenue .....		106,896	914,998	501,043	1,515,288
Total .....	(2)	1,661,409	11,675,528	803,528	13,853,565
<u>Freight Ton Miles</u> - Revenue .....		95,144	1,399,403	8,794	1,500,179
Non-revenue .....		9,377	193,256	15,591	218,141
Total .....		104,521	1,592,659	24,385	1,718,320
<u>Mail carried (lbs.)</u> .....		1,613,399	6,295,933	26,045	7,586,809
<u>Mail Ton Miles</u> .....		78,804	2,028,632	130	2,103,867
<u>Hours flown by Aircraft</u> - Transportation Revenue .....	-	5,055	94,723	1,810	101,169
" " Non-revenue ...	-	11	4,395	2,033	6,438
Forestry Patrol .....	4,311	-	35	6	4,352
Fishery Patrol .....	82	-	-	33	115
Photography - Survey .....	-	-	268	360	628
Instruction .....	13	9	3,174	-	3,192
Exhibition - Miscellaneous ...	167	47	569	8	768
Total .....	4,573	5,122	103,164	4,250	116,662
<u>Hours flown by Crew</u> .....	5,440	15,245	234,060	4,399	257,815
" " " Passengers .....	-	59,087	503,089	4,179	562,337
Horse Power Hours flown (1000) .....	1,762	9,392	154,160	1,100	165,487
Gasoline consumption (Gallons) .....	86,440	(3) 620,864	5,507,057	67,804	6,064,455
Lubricating oil consumption (Gallons) .....	1,838	6,218	113,339	1,873	117,876
<u>Cost of Property</u> - Aircraft .....			\$ 5,433,575	\$ 257,232	\$ 5,690,807
Aircraft engines .....			2,549,417	24,614	2,574,031
Buildings and Improvements .....			1,696,433	87,570	1,784,003
Miscellaneous .....			2,076,746	51,974	2,128,720
Total .....			11,756,171	421,390	12,177,561

(1) Statistics of International routes of Trans-Canada Air Lines are included in both columns B and C. Duplications are eliminated in Column E.

(2) Duplications are eliminated in totals.

(3) Purchased in Canada only.



TABLE 3.

OPERATING REVENUES

	Canadian Carriers		
	Licensed	Unlicensed	Total
<u>Transportation</u> - Passenger .....	\$ 7,549,999	\$ 56,582	\$ 7,586,581
Excess Baggage .....	60,751	-	60,751
Mail .....	4,754,556	3,765	4,758,321
Freight .....	1,857,703	20,979	1,878,682
Other Air Services .....	220,966	52,400	273,366
Total .....	14,443,955	113,678	14,557,631
<u>Incidental</u> - Repairs and Services .....	1,114,294	191,542	1,305,836
Fuel and Oil Sales .....	121,511	2,320	123,831
Rents .....	302,194	-	302,194
Miscellaneous .....	95,377	2,120	97,497
Total .....	1,633,376	195,982	1,829,358
Grand Total .....	16,077,331	309,658	16,386,989

TABLE 4.

OPERATING EXPENSES

<u>Aircraft Operation &amp; Maintenance</u> - Flying Personnel .....	1,182,247	49,107	1,231,354
Aircraft Engine Fuel .....	2,165,013	26,850	2,191,863
" " Oil .....	107,093	429	107,522
" Repairs .....	897,129	19,608	916,737
" Engine Repairs .....	777,802	1,722	779,524
Misc. Flying Equipment Repairs .....	117,644	2,431	120,075
Flying Equipment Insurance .....	568,345	14,161	582,506
Liability & Compensation " ..	212,690	6,490	219,180
Other Flying Expenses .....	1,769,282	11,946	1,781,228
Aircraft Depreciation .....	1,148,759	21,602	1,170,361
Aircraft Engine " .....	524,047	3,779	527,826
Misc. Flying Equipment Depreciation ...	49,938	3,827	53,765
Total .....	9,519,989	(1) 175,091	(1) 9,695,080
<u>Ground Operation and Maintenance</u> - Superintendence .....	330,207	500	330,707
- Airport and Hangar Employees .....	714,762	2,008	716,770
Communication Operators .....	412,126	50	412,176
Travelling and Office Expenses .....	441,768	345	442,111
Light, Heat, Power and Water .....	127,369	1,420	128,789
Rent of Equipment .....	384,026	1,432	385,458
Miscellaneous Ground Equipment Repairs ...	253,144	76	253,220
Buildings and other Improvement Repairs ...	100,933	404	101,337
Shop Expenses .....	388,847	1,871	390,718
Stores " .....	397,062	-	397,062
Ground Liability & Compensation Insurance ..	53,587	288	53,875
Other Ground Expenses .....	273,821	656	274,477
Depreciation of Ground Facilities .....	261,868	2,259	264,127
Total .....	4,139,520	(2) 15,628	(2) 4,155,148
<u>Incidental Services</u> - Repair and Service Sales .....	885,984	-	885,984
Other Incidental Services .....	20,627	268,979	289,606
Total .....	906,611	(3) 268,979	(3) 1,175,590
<u>Traffic Expenses</u> - Salaries and Wages .....	299,189	7,512	306,701
Travelling and Office Expenses .....	120,172	-	120,172
Advertising .....	177,655	894	178,549
Traffic Charges from other Companies .....	3,273	-	3,273
Other Traffic Expenses .....	102,540	881	103,421
Total .....	702,829	9,287	712,116
<u>General Administration</u> - Salaries and Wages .....	450,790	-	450,790
Travelling and Office Expenses .....	75,129	1,270	76,399
Office Rentals .....	24,622	-	24,622
Administration chgs. from other Companies ..	112,749	-	112,749
Uncollectible Operating Revenues .....	5,539	3,456	8,995
Other General & Administration Expenses ..	191,393	8,884	200,277
Total .....	860,222	(4) 15,441	(4) 875,663
<u>General Taxes</u> .....	38,696	16	38,712
Total Operating Expenses .....	16,167,867	485,073	16,652,940

(1) Includes \$13,159 not distributed.

(3) " 631 " "

(2) Includes \$4,521 not distributed.

(4) " 1,851 " "



TABLE 5.

INCOME ACCOUNT

	Canadian Carriers		
	Licensed	Unlicensed	Total
	\$	\$	\$
Operating Revenues .....	16,077,331	309,658	16,386,989
Operating Expenses .....	16,167,867	485,073	16,652,940
Net Operating Revenue .....	Dr. 90,536	Dr. 175,415	Dr. 265,951
Interest and Dividend Income .....	15,545	-	15,545
Miscellaneous Income .....	359,926	1,359	376,830
Gross Income .....	284,935	Dr. 174,056	110,879
Deductions -			
Miscellaneous Income Charges .....	199,826	-	199,826
Interest on Long Term Debt .....	230,000	-	230,000
Miscellaneous Interest Charges .....	39,081	1,987	41,068
Total Deductions .....	468,907	1,987	470,894
Net Income before Income Taxes .....	Dr. 183,972	Dr. 176,043	Dr. 360,015
Income Taxes .....	17,820	-	17,820
Balance to Profit and Loss .....	Dr. 201,792	Dr. 176,043	Dr. 377,835

TABLE 6.

TRAFFIC

Taken on	Passengers	Freight (1)	Mail (2)
Prince Edward Island .....	8,879	6,093	145,365
Nova Scotia .....	13,047	186,055	253,490
New Brunswick .....	20,756	100,612	454,644
Quebec .....	55,008	2,247,021	995,744
Ontario .....	61,101	4,524,213	1,082,941
Manitoba .....	13,744	2,767,946	471,095
Saskatchewan .....	10,369	233,460	171,682
Alberta .....	25,617	932,332	1,460,191
British Columbia .....	27,472	612,795	1,093,688
Yukon .....	8,316	471,635	241,787
Northwest Territories .....	4,340	506,481	166,693
Foreign Countries .....	45,538	447,295	832,040
Total .....	294,187	13,035,938	7,569,360
Between Foreign Countries .....	20,455	863,614	217,449
Total .....	314,642	13,899,552	7,586,809

(1) Includes duplications of 14,035 tons interchanged between carriers.

(2) Includes duplications where mail is carried over more than one route.

TABLE 7.

FLYING ACCIDENTS

	Provincial Government	Inter- national	Canadian Carriers		Total
			Licensed	Unlicensed	
Accidents resulting in Death or Injury....	1	-	4	-	5
" " in Property Damage only ...	-	-	18	-	18
<u>Revenue Transportation -</u>					
Persons Killed - Crew .....	-	-	3	-	3
Passengers .....			2	-	2
Persons Injured - Crew .....			-	-	-
Passengers .....			3	-	3
<u>Forestry Patrol -</u>					
Persons Killed - Crew .....	-	-	-	-	-
Other Persons ..	3	-	-	-	3
Persons Injured - Crew .....	1	-	-	-	1
<u>All Flying -</u> Persons Killed .....	3	-	5	-	8
Persons Injured .....	1		3	-	4
<u>Non-flight Accidents -</u> Persons Killed ....	-	-	-	-	-
Persons Injured ...	4	-	-	-	4

TABLE 8.

EQUIPMENT IN SERVICE AND LICENSED

	Provincial Government	Canadian Carriers		Total	Total Licensed (1)
		Licensed	Unlicensed		
Up to 2,000 lb.....	9	2	5	16	52
2,001 to 4,000 lb. ....	1	15	7	23	48
4,001 to 10,000 " ....	20	57	8	85	73
10,001 to over .....	-	45	-	45	41
<b>Total .....</b>	<b>30</b>	<b>119</b>	<b>20</b>	<b>169</b>	<b>214</b>
Landplanes .....	-	46	5	51	74
Seaplanes .....	26	-	-	26	18
Convertibles .....	3	73	15	91	121
Amphibians .....	1	-	-	1	1
<b>Total .....</b>	<b>30</b>	<b>119</b>	<b>20</b>	<b>169</b>	<b>214</b>

(1) Includes Dominion Government and Private aircraft and Licensed aircraft of International carriers.

TABLE 9

EMPLOYEES

	Provincial Governments		Canadian Carriers				Total	
			Licensed		Unlicensed			
	No. of Employees	Salaries & Wages	No. of Employees	Salaries & Wages	No. of Employees	Salaries & Wages	No. of Employees	Salaries & Wages
General Officers ....	5	17,738	57	250,634	1	3,600	43	271,972
Clerks .....	5	6,435	670	936,463	5	4,904	680	947,802
Pilots .....	22	59,817	268	1,297,632	15	34,679	305	1,392,128
Engineers .....	26	63,574	235	534,963	4	9,124	265	607,661
Mechanics and other								
Aircraft ....	11	22,354	1,359	2,070,880	5	6,499	1,375	2,099,733
Other Employees .....	9	10,466	814	1,217,087	3	4,322	826	1,231,875
Total .....	78	180,384	3,383	6,307,659	33	63,128	1/3,494	1/6,351,171

(1) Exclusive of 26 employees paid \$28,035 - Canadian domiciled employees of International carriers.

Table 10.

Airports in Canada, as at Dec. 31, 1943.

Kind	Landing Surfaces			
	Land Only	Water Only	Land and Water	Total
	No.	No.	No.	No.
Public .....	7	27	1	35
Dominion Government .....	43	-	1	44
Intermediate .....	40	-	-	40
Provincial .....	-	10	-	10
Private .....	4	24	1	29
Municipal Airports .....	11	4	2	17
Total .....	105	65	5	175



1010548931