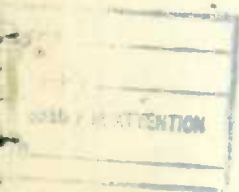


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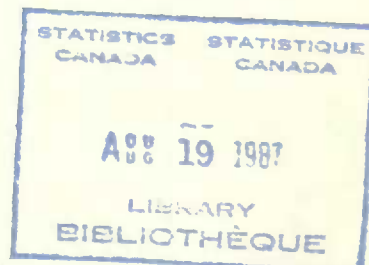
**CANADA**  
**DEPARTMENT OF TRADE AND COMMERCE**  
**DOMINION BUREAU OF STATISTICS**  
**TRANSPORTATION & PUBLIC UTILITIES BRANCH**

**CIVIL AVIATION**

**IN**

**CANADA**

**1944**



**OTTAWA**  
**1945**

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OTTAWA

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Dominion Statistician, HERBERT MARSHALL, B.A., F.S.S.

Chief, Transportation and Public Utilities Branch, G.S. Wrong, B.Sc.

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CIVIL AVIATION IN CANADA

20-1500

1944

The statistics in this report are collected from the operators of aircraft with commercial operators' licences with the exception of data on licences 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 licences. The annual reports contain some small revision in the data reported monthly by these operators. All carriers are now under the jurisdiction of the Air Transport Board, and starting July 1, 1945, were required to keep records and accounts in accordance with the Board's regulations.

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, coupled with construction of air bases in the north country during the war years, 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.

International carriers had no accidents in Canada during the year and unlicensed carriers also had no accidents involving personal injuries. Canadian licensed carriers had 3 accidents in which 2 of the crew were killed, 1 of the crew was injured and 5 passengers were injured, but no passengers were killed. There were also 3 persons injured in non flight accidents. These compare with 8 persons killed and 4 injured in flight accidents in 1943 and 20 killed and 10 injured in 1942. These flight accidents do not include private flying nor military flying accidents.

The number of revenue passengers carried continued to increase, advancing to 371,397 in 1944 as compared with 282,886 in 1943 and 198,205 in 1942. This was an increase of 31 per cent over

1943, but passenger miles flown increased by only 10.5 per cent.

Freight carried showed a decrease in pounds and in ton miles and mail ton miles declined by 1.5 per cent.

Revenues of Canadian air carriers increased to \$17,119,291 from \$16,386,989 in 1943. Operating expenses increased to \$17,847,346 from \$16,652,940 increasing the net operating revenue debit from \$265,951 to \$728,055, and increasing the debit balance to Profit and Loss account from \$377,835 to \$1,042,046.

The number of employees of Canadian carriers, including crews of provincial aircraft, increased from 3,494 to 4,201, and the salaries and wages increased from \$6,551,171 to \$8,353,928. These are exclusive of 131 employees and \$253,116, wages of Canadian domiciled employees of United States carriers flying international routes into Canada for 1944. This was an increase in the number of employees of 20.2 per cent and in pay roll of 27.5 per cent. Each class of employees under which the data are reported, shows a greater increase in wages than in number, indicating a general increase in average wages. General officers increased from an average of approximately \$6,300 to \$6,500 and pilots increased from an average of \$4,564 to \$4,846, the increase in the average for all employees being 6 per cent.

The Civil Aviation Branch of the Department of Transport reports that on December 31 there was a total of 136 airports in Canada as compared with 175 in 1943.



TABLE 1  
STATISTICAL SUMMARY OF CIVIL AVIATION IN CANADA, 1944

	1944	1943	1942	1941	1940	1939
Aircraft Miles flown - Revenue .....	15,568,569	14,584,115	12,781,867	11,810,688	10,341,329	
Non revenue .....	620,803	709,434	547,276	697,722	671,258	
Total .....	16,189,362	15,293,549	13,329,143	12,508,390	11,012,587	10,969,271
Passengers carried - Revenue .....	371,397	282,886	198,205	181,219	135,779	133,776
Between foreign stations .....	20,846	19,381	17,497	11,792	1,840	(
Company Employees .....	6,740	9,011	8,961	(	(	(
Other non revenue .....	2,955	3,364	4,384	15,048	11,406	27,727
Total .....	403,938	314,542	229,047	208,059	149,025	161,503
Passenger miles - Revenue .....	111,127,010	100,530,892	70,554,377	53,891,516	38,438,439	21,840,483
Company Employees .....	2,215,907	1,992,061	1,601,277	(	(	(
Other non revenue .....	543,412	867,511	1,050,947	(2,832,198	(2,727,563	(4,267,266
Total .....	113,886,329	103,390,464	73,206,601	56,723,714	41,165,802	26,107,750
Freight carried - Revenue .....	10,522,932	11,546,777	11,055,142	14,719,700	12,978,836	
Between foreign stations .....	659,970	791,498	352,859	106,550	11,715	
Non revenue .....	1,247,743	1,515,288	1,243,938	1,733,361	1,446,020	
Total .....	12,430,645	13,853,563	12,651,939	16,559,611	14,436,571	21,253,364
Freight Ton Miles - Revenue .....	1,406,679	1,500,179	1,125,912	956,482	784,922	
Non revenue .....	261,507	218,141	148,038	169,055	161,273	
Total .....	1,668,186	1,718,320	1,273,950	1,125,537	946,195	1,037,562
Mail carried .....	7,296,265	7,586,809	5,470,209	3,411,971	2,710,995	1,900,347
Ton Miles .....	2,072,129	2,103,667	1,484,314	894,578	610,053	433,349
Hours flown by Aircraft - Transportation Revenue .....	105,815	101,169	92,314	88,536	80,796	
Non revenue .....	5,308	6,438	5,227	7,049	6,871	
Forestry Patrol .....	5,351	4,352	4,595	6,835	13,461	
Fishery .....	146	115	120	147	169	
Photography Survey .....	668	628	559	508	765	
Instruction .....	4,231	3,192	13,690	27,927	47,954	
Exhibition - Miscellaneous .....	843	768	1,371	1,821	1,812	
Total .....	122,422	116,662	117,876	132,823	151,828	145,638
Hours flown by Crew .....	279,943	257,815	235,573	241,154	226,534	
" " Passengers .....	712,373	562,337	480,534	379,777	300,904	
Horse Power Hours flown by Aircraft (000) .....	183,556	165,487	127,246	113,797	105,451	
Gasoline consumption .....	6,169,355	5,661,301	4,653,555	4,389,648	3,959,798	3,148,238
Lubricating oil consumption .....	100,240	117,050	104,441	104,758	92,719	66,902
Flying Accidents						
Passengers Killed .....	-	2	12	14	9	8
" " Injured .....	5	3	6	10	6	6
Crew Killed .....	2	3	8	10	4	6
" " Injured .....	1	1	4	5	5	3
Other Persons Killed .....	-	3	-	-	-	-
" " Injured .....	-	-	-	-	-	-
Total Killed .....	2	8	20	24	13	14
" " Injured .....	6	4	10	15	9	9

(1) 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 .....	-	1,006,418	14,355,415	320,802	15,568,559
Non revenue " .....	-	5,508	463,293	154,112	620,803
Total .....	-	1,009,924	14,798,708	474,714	16,189,362
<u>Passengers carried</u> - Revenue .....	-	101,579	279,281	5,371	371,397
Received from Canadian Carriers (2) .....	-	32,525	4,598	-	-
Between foreign stations .....	-	20,846	-	-	20,846
Company Employees .....	-	2,139	5,311	1,386	8,740
Other non revenue .....	-	457	1,127	1,399	2,955
Total ..... (2)	-	157,546	290,317	8,156	403,938
<u>Passenger Miles</u> - Revenue .....	-	11,142,101	100,630,251	247,303	111,127,010
Company Employees .....	-	178,547	1,922,172	118,551	2,215,907
Other non revenue .....	-	34,715	412,027	97,213	543,412
Total .....	-	11,355,363	102,964,450	463,067	113,886,329
<u>Freight carried (lbs.)</u> - Revenue .....	-	601,861	9,293,859	662,752	10,522,932
Received from Canadian Carriers (2) .....	-	240,207	56,742	-	-
Between foreign stations .....	-	659,970	-	-	659,970
Non revenue .....	-	120,190	830,556	306,255	1,247,743
Total ..... (2)	-	1,622,228	10,183,157	969,007	12,430,645
<u>Freight Ton Miles</u> - Revenue .....	-	82,749	1,303,200	24,365	1,406,679
Non revenue .....	-	8,580	244,028	8,977	261,507
Total .....	-	91,329	1,547,228	33,342	1,668,186
<u>Mail carried (lbs.)</u> .....	-	1,934,923	5,682,943	30,487	7,296,265
<u>Mail Ton Miles</u> .....	-	78,946	1,996,852	279	2,072,129
<u>Hours flown by Aircraft</u> - Transportation Revenue .....	-	6,332	96,256	3,747	105,815
" Non revenue .....	-	28	3,755	1,526	5,308
Forestry Patrol .....	5,197	-	-	154	5,351
Fishery " .....	103	-	-	43	146
Photography - Survey .....	-	-	413	255	668
Instruction .....	1	4	4,287	-	4,291
Exhibition - Miscellaneous .....	92	108	685	-	843
Total .....	5,393	6,472	105,396	5,725	122,422
<u>Hours flown by Crew</u> .....	6,172	19,841	249,894	5,725	279,943
" " " Passengers .....	-	71,938	640,587	5,112	712,373
Horse Power Hours flown (1000) .....	1,949	12,543	168,597	1,654	183,556
Gasoline consumption (Gallons) .....	105,050	(3) 768,221	5,963,459	100,846	6,651,414
Lubricating oil consumption (Gallons) .....	2,464	(3) 4,604	95,084	2,692	101,040
<u>Cost of Property</u> - Aircraft .....			\$ 5,596,969	\$ 311,851	\$ 5,908,820
Aircraft engines .....			2,611,714	21,796	2,633,510
Buildings and Improvements .....			2,014,523	87,547	2,102,070
Miscellaneous .....			2,402,715	71,649	2,474,364
Total .....			12,625,921	492,843	13,118,764

(1) Statistics of International routes of Trans-Canada Air Lines are included in columns B &amp; 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 .....	\$ 7,770,007	\$ 52,643	\$ 7,822,650
Excess Baggage .....	51,196	4,291	55,487
Mail .....	5,075,741	5,210	5,080,951
Freight .....	1,545,038	26,743	1,571,781
Other Air Services .....	153,230	75,687	228,917
Total .....	14,595,212	162,554	14,757,766
<u>Incidental</u> - Repairs and Services .....	1,408,405	231,416	1,639,821
Fuel and Oil Sales .....	153,809	12,779	146,588
Rents .....	250,948	-	250,948
Miscellaneous .....	322,170	1,998	324,168
Total .....	2,115,332	246,193	2,361,525
Grand Total .....	16,710,544	408,747	17,119,291

TABLE 4.

OPERATING EXPENSES

<u>Aircraft Operation &amp; Maintenance</u> - Flying Personnel .....	1,317,981	18,609	1,336,590
Aircraft Engine Fuel .....	2,178,386	21,105	2,199,491
" " Oil .....	81,676	146	81,822
" Repairs .....	1,182,350	4,490	1,186,840
" Engine Repairs .....	1,021,661	21,491	1,043,152
Misc. Flying Equipment Repairs .....	105,567	5,606	111,173
Flying Equipment Insurance ..	486,759	6,776	493,535
Liability & Compensation " ..	154,267	4,435	158,702
Other Flying Expenses .....	1,806,635	5,790	1,812,425
Aircraft Depreciation .....	898,617	2,107	900,724
Aircraft Engine " .....	426,661	2,068	428,729
Misc. Flying Equipment Depreciation ..	25,749	503	26,252
Total .....	9,686,309	(1) 108,267	(1) 9,794,576
<u>Ground Operation &amp; Maintenance</u> - Superintendence .....	436,816	-	436,816
Airport and Hangar Employees .....	980,099	10,341	990,440
Communication Operators .....	419,582	-	419,582
Travelling and Office Expenses .....	567,344	-	567,344
Light, Heat, Power and Water .....	136,002	160	136,162
Rent of Equipment .....	364,891	1,340	366,231
Miscellaneous Ground Equipment Repairs .....	296,427	-	296,427
Buildings and other Improvement Repairs .....	130,511	-	130,511
Shop Expenses .....	468,474	2,319	470,793
Stores " .....	230,210	-	238,210
Ground Liability & Compensation Insurance ..	70,690	98	70,788
Other Ground Expenses .....	314,293	1,388	315,681
Depreciation of Ground Facilities .....	266,162	763	266,925
Total .....	4,689,501	(2) 22,020	(2) 4,711,521
<u>Incidental Services</u> - Repair and Service Sales .....	1,030,172	-	1,030,172
Other Incidental Services .....	254,877	239,850	494,727
Total .....	1,285,049	239,850	1,524,899
<u>Traffic Expenses</u> - Salaries and Wages .....	411,743	-	411,743
Travelling and Office Expenses .....	122,241	8,241	130,482
Advertising .....	161,919	873	162,792
Traffic Charges from other Companies .....	37	-	37
Other Traffic Expenses .....	121,244	1,653	122,897
Total .....	817,184	10,767	827,951
<u>General Administration</u> - Salaries and Wages .....	472,513	7,073	479,586
Travelling and Office Expenses .....	126,607	2,093	128,700
Office Rentals .....	29,650	-	29,650
Administration chgs. from other Companies ..	65,556	-	65,556
Uncollectible Operating Revenues .....	1,136	2,256	3,392
Other General & Administration Expenses ..	198,145	10,933	209,078
Total .....	893,607	(3) 25,308	(3) 918,915
<u>General Taxes</u> .....	69,484	-	69,484
Total Operating Expenses .....	17,441,134	406,212	17,847,346

(1) Includes \$15,141 not distributed.

(2) Includes \$5,611 not distributed.

(3) Includes \$2,953 not distributed.



TABLE 5.

INCOME ACCOUNT

	Canadian Carriers		
	Licensed	Unlicensed	Total
	\$	\$	\$
Operating Revenues .....	16,710,544	408,747	17,119,291
Operating Expenses .....	17,441,134	406,212	17,847,346
Net Operating Revenue .....	Dr. 730,590	2,535	Dr. 728,055
Interest and Dividend Income .....	19,294	-	19,294
Miscellaneous Income .....	206,590	3,076	209,666
Gross Income .....	Dr. 504,706	5,611	Dr. 499,095
Deductions -			
Miscellaneous Income Charges .....	365,932	-	365,932
Interest on Long Term Debt .....	230,000	-	230,000
Miscellaneous Interest Charges .....	Cr. 66,908	315	Cr. 66,593
Total Deductions .....	529,024	315	529,339
Net Income before Income Taxes .....	Dr. 1,033,750	5,296	Dr. 1,028,434
Income Taxes .....	13,612	-	13,612
Balance to Profit and Loss .....	Dr. 1,047,342	5,296	Dr. 1,042,046

TABLE 6.

REVENUE TRAFFIC

Taken on	Passengers	Freight	Mail
	No.	lbs.	(1) lbs.
Prince Edward Island .....	12,369	3,150	221,269
Nova Scotia .....	22,260	139,828	215,177
New Brunswick .....	16,177	65,435	565,450
Quebec .....	68,312	1,767,620	987,690
Ontario .....	78,580	3,998,561	1,176,328
Manitoba .....	14,909	1,950,824	489,700
Saskatchewan .....	12,030	144,646	206,932
Alberta .....	28,249	705,956	1,091,207
British Columbia .....	46,431	599,943	705,881
Yukon .....	9,617	291,420	213,150
Northwest Territories .....	5,884	451,146	62,383
Flown into Canada .....	56,579	404,403	356,615
Total .....	371,397	10,522,932	6,291,782
Between Foreign Countries .....	20,846	659,970	1,004,483
Total .....	392,243	11,182,902	7,296,265

(1) 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 ....	-	-	3	-	3
" " in Property Damage only	-	-	14	1	15
<u>Revenue Transportation -</u>					
Persons Killed - Crew .....	-	-	2	-	2
Passengers .....	-	-	-	-	-
Persons Injured - Crew .....	-	-	1	-	1
Passengers .....	-	-	5	-	5
<u>Forestry Patrol -</u>					
Persons Killed - Crew .....	-	-	-	-	-
Other Persons ...	-	-	-	-	-
Persons Injured - Crew .....	-	-	-	-	-
<u>All Flying -</u>					
Persons Killed .....	-	-	2	-	2
Persons Injured .....	-	-	6	-	6
<u>Non-flight Accidents -</u>					
Persons Killed .....	-	-	-	-	-
Persons Injured .....	3	-	-	-	3

TABLE 8

EQUIPMENT IN SERVICE AND LICENSED

	Provincial Government	Canadian Carriers		Total	Total Licensed (1)
		Licensed	Unlicensed		
Up to 2,000 lb. ....	6	-	7	13	71
2,001 to 4,000 lb. ....	-	13	5	18	44
4,001 to 10,000 " ....	22	43	10	75	87
10,001 to over .....	-	45	-	45	45
Total .....	28	101	22	151	247
Landplanes .....	-	45	4	49	95
Seaplanes .....	25	-	-	25	18
Convertibles .....	3	56	17	76	133
Amphibians .....	-	-	1	1	1
Total .....	28	101	22	151	247

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

TABLE 9.

EMPLOYEES

	Provincial Governments		Canadian Carriers				Total	
	No. of Employees	Salaries & Wages	Licensed		Unlicensed		No. of Employees	Salaries & Wages
			No. of Employees	Salaries & Wages	No. of Employees	Salaries & Wages		
		\$		\$		\$		\$
General Officers ....	5	17,778	47	322,816	1	3,600	53	344,194
Clerks .....	6	7,249	794	1,179,802	3	4,409	803	1,191,460
Pilots .....	20	57,115	302	1,540,708	15	35,312	337	1,633,135
Engineers .....	28	68,082	289	704,974	5	10,410	322	783,466
Mechanics and other Aircraft Employees..	11	24,828	1,670	2,728,012	5	12,599	1,686	2,765,439
Other Employees .....	5	7,041	993	1,627,008	2	2,185	1,000	1,636,234
Total .....	75	182,093	4,095	8,103,320	31	68,515	(1)4,201	(1)8,353,928

(1) Exclusive of 131 employees paid \$253,116 - Canadian domiciled employees of International carriers.

TABLE 10.

Airports in Canada, as at Dec. 31, 1944.

Kind	Landing Surfaces			
	Land Only	Water Only	Land and Water	Total
	No.	No.	No.	No.
Public .....	9	13	-	22
Dominion Government .....	22	3	-	25
Intermediate .....	49	-	-	49
Provincial .....	-	7	-	7
Private .....	4	16	-	20
Municipal Airports .....	8	3	2	13
Total .....	92	42	2	136



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TABLE 10	
Category	Value
General Office	100
Class	100
Pilot	100
Engineer	100
Mechanics and	100
Aircraft Engineer	100
Other Engineer	100
Total	100

(1) Excluding

TABLE 10

TABLE 10	
Category	Value
Pilot	100
Engineer	100
Mechanics and	100
Aircraft Engineer	100
Other Engineer	100
Total	100