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THE AIRCRAFT AND PARTS INDUSTRY 1956

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Metal and Chemical Products Section

NOTICE

The annual reports prepared by the Industry and Merchandising Division of the Bureau of Statistics are divided into 3 volumes, as follows: Volume 1 - The Primary Industries, including mining, forestry and fisheries; Volume II - Manufacturing; Volume III - Merchandising and Services. The volumes are made up of parts, and the parts in turn are subdivided according to the industries or provinces which they comprise.

Volume II consists of the following parts, the first two of which deal with manufacturing as a whole and the balance with the major manufacturing groups.

I - General Review of the Manufacturing Industries, \$1.50

II - The Manufacturing Industries of Canada, (7 sections, as follows:)

Section A. Summary for Canada, 25¢

Section B. Atlantic Provinces, 50¢

Section C. Quebec, 25¢

Section D. Ontario, 25¢

Section E. Prairie Provinces, 40¢

Section F. British Columbia, 25¢

Section G. The Manufacturing Industries of Canada,

Regional Distribution, 75¢

III - Foods and Beverages

IV - Tobacco and Tobacco Products

V - Rubber Products

VI - Leather Products

VII - Textile Mills

VIII - Knitting Mills

IX - Clothing

X - Wood and Paper Products

XI - Printing Trades

XII - Iron and Steel Products

XIII - Transportation Equipment

XIV - Non-ferrous Metal Products

XV - Electrical Apparatus and Supplies

XVI - Non-metallic Mineral Products

XVII - Products of Petroleum and Coal

XVIII - Chemicals and Allied Products

XIX - Miscellaneous Manufactures

The present report belongs in Part XIII, Transportation Equipment. It is punched to permit of filing in a ring binder along with others of the group. The reports in this group

A - General Review, 25¢

B - The Aircraft and Parts Industry, 25¢

C - The Bicycle Manufacturing Industry, 25¢

D - The Boat Building Industry, 25¢

E - The Motor Vehicles Industry, 25¢

F - The Motor Vehicle Parts Industry, 25¢

G - The Railway Rolling Stock Industry, 25¢

H - The Shipbuilding Industry, 25¢

I - The Miscellaneous Transportation Equipment Industry, 25¢

THE AIRCRAFT AND PARTS INDUSTRY 1956

The Aircraft and Parts Industry, as reviewed in this report, is made up of the primary assembly plants and also the establishments which were occupied solely or chiefly in making aircraft parts.

by the 52 plants in this group numbered 35,563 and

\$146,428,014 were paid in salaries and wages. The

to

Production from this industry in 1956 amounted \$354,510,085, a slight increase over the \$354,314,837 reported in 1955. Workers employed

amount paid for materials for use in manufacturing was \$138,155,854 and the amount paid for fuel and electricity was \$4,084,546.

In the 4 assembly plants which constitute the core of the industry, there were 21,426 workers in 1956 and production, including an output value of \$94,625,746 for complete aircraft, was valued at \$207,685,710.

TABLE 1. Principal Statistics of the Aircraft and Parts Industry, Significant Years 1929-1956 and by Provinces, 1955 and 1956

Year and province	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity at plant	Cost of materials at plant	Value added by manufacture	Gross selling value of products
	No.	No.	\$	\$	\$	\$	\$
1929	4	217	401, 666	7, 303	727, 832	305, 710	1, 040, 845
1933	5	147	169, 053	7, 934	97, 677	239, 606	345, 217
1937	8	606	691, 934	23, 762	879, 654	827, 308	1, 730, 724
1939	13	3, 596	4, 651, 615	100, 668	1, 428, 168	11, 109, 634	12, 638, 470
1944	45	79, 572	161, 055, 010	2, 593, 792	137, 734, 065	286, 653, 701	426, 981, 558
1946	16	11, 405	24, 459, 085	787, 180	6, 708, 468	28, 715, 258	36, 210, 906
1949	14	10,725	27, 443, 498	1, 070, 016	24, 315, 084	35, 713, 975	61, 099, 075
1952	38	33, 356	108, 667, 004	2,024,357	115, 286, 096	127, 296, 867	244, 607, 320
1953	43	38, 048	142, 375, 699	2, 438, 890	135, 756, 989	260, 548, 393	398, 744, 272
1954	47	35, 095	135, 863, 490	2, 735, 388	158, 893, 485	181, 381, 957	343, 010, 830
1955							
Quebec	24	11,066	43, 555, 248	1, 027, 754	35, 977, 014	71, 442, 013	108, 446, 781
Ontario	23	19,036	77, 331, 466	3, 446, 003	100, 513, 012	125, 984, 113	229, 943, 128
Nova Scotia	2	}					
Manitoba	1						
Alberta	1	2, 934	8, 382, 295	209, 805	4, 341, 138	11, 373, 985	15, 924, 928
British Columbia	1	J					
Canada	52	33,036	130, 269, 009	4, 683, 562	140, 831, 164	208, 800, 111	354, 314, 837
1956							
Quebec	24	12, 643	52, 036, 156	1, 255, 075	43, 213, 506	86, 936, 528	131, 405, 109
Ontario	24	19, 868	83, 964, 069	2, 590, 727	90, 764, 813	112, 784, 782	206, 140, 322
Nova Scotia	2)					
Manitoba	1	3, 052	10, 427, 789	238, 744	4, 177, 535	12, 548, 375	16, 964, 654
Alberta	1						
Canada	52	35, 563	146, 428, 014	4, 084, 546	138, 155, 854	212, 269, 685	354, 510, 085

Note. Profits or losses cannot be calculated from above figures as data are not available for general expense items, such as interest, rent, depreciation, taxes, insurance, advertising, etc.

TABLE 2. Principal Statistics, by Subdivisions of Industry, 1955 and 1956

_	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity at plant	Cost of materials at plant	Value added by manufacture	Gross selling value of products
1955	No.	No.	\$	\$	\$	\$	\$
Assembly plants	4 ¹ 48	19,343 13,693	76,838,078 53,430,931	1,629,645 3,053,917	74, 570, 496 66, 260, 668	135,143,801 73,656,310	210,781,931 143,532,906
Total	52	33, 036	130, 269, 009	4, 683, 562	140, 831, 164	208, 800, 111	354, 314, 837
1956							
Assembly plants Parts plants only	4 ¹ 48	21, 426 14, 137	87, 940, 379 58, 487, 635	1,640,799 2,443,747	73, 554, 865 64, 600, 989	132, 490, 046 79, 779, 639	207, 685, 710 146, 824, 375
Total	52	35, 563	146, 428, 014	4, 084, 546	138, 155, 854	212, 269, 685	354, 510, 085

1. In addition, two plants, classified as parts plants, assembled aircraft as a minor part of their operations.

TABLE 3. Inventories 1, 1956

-	Raw materials and supplies	Goods in process ²	Finished goods of own manufacture	Total
	\$	\$	\$	\$
Opening: Quebec Ontario Other provinces	3,559,620 29,703,505 1,789,038	4,748,706 3,324,022 1,644,914	496, 834 1,745, 404 88,120	8, 805, 160 34, 772, 931 3, 522, 072
Canada	35, 052, 163	9, 717, 642	2, 330, 358	47, 100, 163
Closing: Quebec Ontario Other provinces	4, 654, 292 26, 945, 726 1, 825, 108 33, 425, 126	5, 071, 096 3, 218, 182 1, 048, 331 9, 337, 609	1, 874, 360 1, 241, 158 - 3, 115, 518	11, 599, 748 31, 405, 066 2, 873, 439 45, 878, 253

1. Book value of all manufacturing inventories owned and held at plant and plant warehouses.

2. Adjusted to allow for progress payments.

Note: Beginning with 1954, information on the value of year-end inventory holdings at plant and plant warehouses is being collected as part of the annual Census of Industry. These data were formerly collected by a separate survey. The summarized results for the Aircraft and Parts Industry for the year under review are shown in the above table.

The opening inventory for 1956 does not necessarily agree with the closing inventory for 1955, because of the addition of new plants, the transfer of plants to other industries and plants going out of business, etc.

TABLE 4. Products Made in the Aircraft and Parts Industry, 1955 and 1956

		1955		1956
Product	Quantity	Selling value at works	Quantity	Selling value at works
	Number	\$	Number	\$
Total aircraft completed in year ² Aircraft being built, but not completed at year-end (value of work	1	108, 408, 292	1	94, 625, 746
	-	46,074,243	_	54, 905, 130
done) ³	-	40,894,582	_	43, 831, 399
Aircraft parts manufactured		73,007,531	-	85, 526, 471
work done on developing aircraft and engines	_	121,870,965	_	123, 547, 127
Total of above items	_	390, 255, 613	_	402, 435, 873
Less value of work done in previous year on aircraft completed in				
current year		35, 940, 776	_	47,925,788
Total value of production	_	354, 314, 837	-	354, 510, 085

Not available for publication.
 Does not include value of equipment and parts supplied as free issue by the government.

3. (a) Figures are lower than actual as they represent only unbilled portion of work done.

(b) The total shown for 1956 included as well the value of work done on engines.

TABLE 5. Production of Aircraft in Canada, 1947-1956

Year	Number	Selling value at works	Year	Number	Selling value at works
		\$			\$
1947	199	20, 305, 382	1952	1	104, 188, 368
1948	65	11,816,393	1953	1	174,847,321
1949	117	22,931,615	1954	1	186,934,184
1950	85	2,666,348	1955	1	108,408,292
1951	1	34,701,964	1956	1	94,625,746

1. Not available for publication.

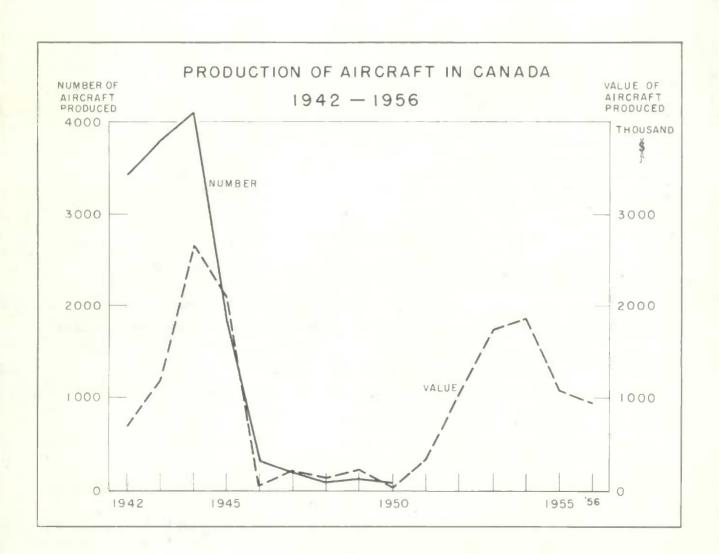


TABLE 6. Principal Statistics of the Aircraft and Parts Industry, Classified According to Type of Ownership, 1955 and 1956

Туре	Estab- lish- ments	Em- ployees	Salaries and wages	Cost at plant of materials used	Gross selling value of products
	No.	No.	\$	\$	\$
1955					
Individual ownership	3	1	455 404	15 051	200 100
Partnerships	1	} 43	177, 104	45,654	309, 168
Incorporated companies	48	32,993	130,091,905	140,785,510	354,005,669
Total	52	33,036	130, 269, 009	140, 831, 164	354, 314, 837
1956					
Individual ownership	3	23	89,930	32,727	213,922
Incorporated companies	49	35,540	146,338,084	138, 123, 127	354, 296, 163
Total	52	35,563	146, 428, 014	138, 155, 854	354,510,085

TABLE 7. Principal Statistics of the Aircraft and Parts Industry in Canada, Grouped According to Selling Value of Products, 1955 and 1956

Establishments having a production of	Estab- lish- ments	Em- ployees	Salaries and wages	Cost at plant of materials used	Gross selling value of products
1955	No.	No.	\$	\$	\$
Under \$10,000\$25,000 to \$49,999	2	} 38	127,589	21,633	153, 581
\$50,000 to \$99,999	8	90	332,462	93, 459	574,426
\$100,000 to \$199,999	10	234	788, 415	411,410	1,473,872
\$200,000 to \$499,999 \$500,000 to \$999,999	8	} 401	1,515,018	1,133,294	3,077,488
\$1,000,000 to \$4,999,999	10	3,531	12, 463, 696	6,086,875	22,578,094
5,000,000 and over	10	28,742	115,041,829	133, 084, 493	326,457,376
Total	52	33,036	130, 269, 009	140, 831, 164	354, 314, 837
1956					
\$10,000 to \$24,999	1				
\$25,000 to \$49,999	1	153	504,796	139,715	839,539
\$50,000 to \$99,999	10	}			
\$100,000 to \$199,999	9	171	675, 178	306,081	1,306,826
\$200,000 to \$499,999 \$500,000 to \$999,999	10	} 541	2,124,668	1,523,927	4,505,213
\$1,000,000 to \$4,999,999	10	3,915	14,582,847	8.363.439	27, 101, 506
55, 000,000 and over	9	30,783	128, 540, 525	127,822,692	320,757,00
Total	52	35,563	146, 428, 014	138, 155, 854	354, 510, 083

TABLE 8. Employees and Their Earnings in the Aircraft and Parts Industry, 1952-1956

		Numb	per of emp	ployees		Earnings				
Year		Supervisory Production and office related v			Total employees	Supervisory and office	Production and related	Total		
	Male	Female	Male	Female	emproyees	and office workers		earnings		
						\$	\$	\$		
1952	7,302	2, 428	22, 559	1,067	33, 356	34, 533, 237	74, 133, 767	108, 667, 004		
1953	8, 136	2,813	26,380	719	38, 048	45, 574, 126	96, 801, 573	142, 375, 699		
1954	8,080	2, 696	23, 560	759	35,095	46,068,342	89, 795, 148	135, 863, 490		
1955	9,092	2,622	20,746	576	33, 036	52, 198, 947	78, 070, 062	130, 269, 009		
1956	10, 159	2, 917	21, 920	567	35, 563	60, 860, 882	85, 567, 132	146, 428, 014		

TABLE 9. Production Workers, by Months, 1955 and 1956

3645		1955			1956	
Month	Male	Female	Total	Male	Female	Total
			Numl	per		
January	21,577	646	22, 223	22, 206	561	22,767
February	21,726	633	22, 359	22, 236	566	22,802
March	21,556	607	22, 163	22, 433	578	23,011
April	21, 494	605	22, 099	22, 137	569	22,706
May	21, 100	591	21,691	21, 949	578	22, 527
June	20, 912	594	21,506	21,880	588	22,468
July	18, 594	532	19,126	20,642	539	21, 181
August	19,081	525	19,606	21,029	542	21,571
September	19,484	516	20,000	21, 467	552	22,019
October	19,995	522	20,517	22, 112	551	22,663
November	21, 345	568	21,913	22, 410	562	22,972
December	22, 101	574	22,675	22,551	573	23,124
Average	20,746	576	21,322	21, 920	567	22,487

TABLE 10. Capital and Repair Expenditures in the Aircraft and Parts Industry, 1952-1956

Year	Capital ex	penditures	1	Repair and maintenance expenditures			Total capital
	Construction	Machinery and equipment	Sub-total	Construction	Machinery and equipment	Sub-total	and repair expenditures
		\$'000					
1952	6, 319	2,059	8, 378	1, 326	1,729	3,055	11,433
1953	8, 272	3, 496	11,768	901	3, 851	4,752	16,520
1954	4,017	4, 354	8, 371	1,212	2,986	4, 198	12, 569
1955	3, 413	7, 165	10, 578	1,557	2,439	3, 996	14,574
1956 ¹	3, 026	6,880	9,906	1, 185	2,113	3, 298	13, 204

^{1.} Preliminary.

TABLE 11. Imports of Aircraft and Complete Parts Thereof, Not Including Engines, 1955 and 1956

Yéon		1955	1956		
Item	Number	Value	Number	Value	
Air-aft and area of Edd III and a		\$		\$	
Aircraft not over 1,500 lb. wt.: From United States	158 10	435, 461 22, 090	263 5	971,068 7,690	
Aircraft 1,501 to 3,000 lb, wt,: From United States From other countries	136	1,156,620 21,512	129	1, 438, 125 750	
Aircraft 3,001 to 7,500 lb. wt.: From United Kingdom From United States From other countries	2 33 —	88, 562 2, 797, 797	31	2, 196, 392	
Aircraft over 7,500 lb. wt.: From United Kingdom From United States From other countries	25 100 4	8,644,278 38,003,385 246,863	4 64 2	2, 965, 967 11, 113, 256 186, 250	
Total aircraft	470	51, 416, 568	499	18, 879, 498	
Aircraft parts	_	86, 674, 721	_	72, 424, 420	

TABLE 12. Imports of Aircraft Engines and Complete Parts, 1955 and 1956

75.00	1	1955	1956		
Item	Number	Value	Number	Value	
		\$		\$	
Engines, aircraft, up to 200 h.p.: From United States From other countries	222	431, 938 15, 798	313	381, 716 9, 272	
Engines, aircraft, 201 to 500 h.p.: From United Kingdom From United States From other countries	5 219 1	5, 467 755, 087 2, 099	207	51, 049 618, 683	
Engines, aircraft, 501 to 1,000 h.p.: From United Kingdom From United States	4 39	34, 093 410, 872	1 66	6,089 481,228	
Engines, aircraft, over 1,000 h.p.: From United Kingdom From United States From other countries	273 454 8	5,348,149 8,255,665 49,260	51 461 5	1, 026, 513 10, 167, 341 52, 542	
Total aircraft engines	1, 236	15, 308, 428	1, 124	12, 794, 433	
Parts of aircraft engines	_	18, 106, 741	_	20, 128, 952	

TABLE 13. Exports 3 and Re-exports of Aircraft and Parts, 1955 and 1956

-	1955	1956	-	1955	1956
Exports1			Re-Exports ²		
Aircraft No.	200	281 26, 837, 104	Aircraft No.	326, 165	34 2,157,902
Aircraft parts\$			Aircraft parts\$		3,419,288
Total exports \$	19, 905, 785	49, 544, 807	Total re-exports \$	2, 119, 071	5, 577, 190

Made in Canada.
 Foreign-made goods re-exported.
 The above statistics of exports do not include defence equipment or supplies transferred by Canada to North Atlantic Treaty countries under the Defence Appropriation Act.

TABLE 14. Fuel and Electricity Used in the Aircraft and Parts Industry, 1956

Kind	Unit of measure	Quantity	Cost at works
			\$
Bituminous coal — Canadian	tons	7,645	85,679
Imported	tons	18, 114	183,412
Gasoline (including gasoline used in cars and trucks)	imp. gal.	639, 171	209,562
Kerosene	imp. gal.	2,998	768
Fuel oil	imp. gal.	8,734,964	859, 199
Gas - liquefied petroleum gases	imp. gal.	142, 341	37,397
Other manufactured	1,000 cu. ft.	5, 437	9,937
Natural	1,000 cu. ft.	94,607	47,550
Other fuel ¹	_	_	1, 294, 502
Electricity used	k.w.h.	130,950,742	1, 356, 540
Total	_	-	4,084,546

^{1.} Includes fuel for flying and testing aircraft and engines used by reporting companies.

Directory of Firms in the Aircraft and Parts Industry, 1956

Name of firm	Location of plant
Nova Scotia:	
Enamel & Heating Products Ltd	Amherst Eastern Passage
Quebec:	
Aircraft Welding & Sheet Metals Co. Ltd. Bristol Aero Engines Limited Canadian Pratt & Whitney Aircraft Co. Ltd. Canadair Limited Curtiss-Reid Manufacturing Co. Ltd. Ferndale Industries Reg'd. Godfrey Engineering Co. Ltd. Gorman Welding Engineering Ltd. Heroux Machine Parts Limited Jarry Hydraulics Kurt-Mutual Industries Ltd. Leader Products Co. Ltd. Noorduyn Norseman Aircraft Ltd. Northern Machinery Co. Patenaude Machine Shop Precision Automatic Works Reg'd. R.C. Machine Shop Rolls-Royce of Canada Ltd. Service Tool & Die Ltd. Spraque Engineering Ltd. Utility Aircraft & Metal Products Ltd. Valois & Valois Limitée Westhill Industries Ltd.	7980-18th Ave., Ville St. Michel 10210 Pie IX Blvd., Montreal North 12 P.O. Box 10, Longueuil Montée-St-Laurent, St-Laurent 10500 Montée St-Laurent, Ville St-Laurent 1540 Henri Bourassa, Montreal 480 Metropolitan Blvd., Lachine 4289 Majeau, Montreal 340 Thurber, Longueuil 4384 St. Denis, Montreal 420 St. Edouard St., Granby 1225 Conway St., Montreal 22 95 St. Zotique St. W., Montreal 184 St. Paul St. W., Montreal 184 St. Paul St. W., Montreal 10830 Lajeunesse, Montreal 2245 Beaubien St. E., Montreal 242 St. Jean St., Longueuil Cote de Liesse Rd., Montreal 2130 Bleury, Montreal 2215 Beaconsfield Ave., Montreal 539 Cowie St., Granby 639 Notre Dame St. W., Montreal 34821-6th Ave., Montreal
Ontario:	
Aeroquip (Canada) Ltd. Aro Equipment of Canada Ltd. Avro Aircraft Limited* Campbellford Precision Products Ltd. Canadian Car & Foundry Co. Ltd.* Davair Components Ltd. De Haviland Aircraft of Canada, Limited* Dowty Equipment of Canada, Limited	287 Bridgeland, Toronto Kipling Ave., Toronto Malton Cobourg Montreal St., Fort William 537 Keele, Toronto Sheppard Ave., Downsview Ajax

Directory of Firms in the Aircraft and Parts Industry, 1956

Name of firm	Location of plant	
Ontario — concluded: Elliott, W.R., Limited Fleet Manufacturing Ltd. Garratt Aircraft Ltd. Garrett Mfg. Corp. Of Canada Ltd. Keicher Engineering Ltd. L.C.S. Metals Corp. Ltd. Magor Aviation Limited Modern Aircraft Products Ltd. Murray, F.T., Machine Co. Ltd. Orenda Engines Ltd. Orilia Equipment Co. Ltd. Renfrew Aircraft & Engineering Co. Ltd. Sanderson Aircraft Limited Thompson, H.I., Co. of Canada, Ltd. Tube Benders & Fabricators Ltd. York Gears Limited	134 Sydney St. S., Kitchener Gilmore Rd., Fort Erie Hangar No. 2, Malton Racine Rd. Rexdale 1680 King St. E., Kitchener 147 Mary St., Brantford Argyle Road, Galt Main St. E., Kingsville 58 Rosemount Ave., Weston Malton Orillia Renfrew Malton 60 Johnston St., Guelph Streetsville 825 Caledonia Rd., Toronto	
Manitoba: Bristol Aircraft (Western) Ltd.	Berry St., St. James	
Alberta: Northwest Industries Limited	Municipal Airport, Edmonton	

Note. This is not intended to be a complete directory of firms which make aircraft and parts. It is merely a list of the concerns which have been classified to this industry for statistical purposes. It includes the main assembly plants and also the firms which were occupied solely or chiefly in making aircraft parts. The assembly plants are indicated by an *.



