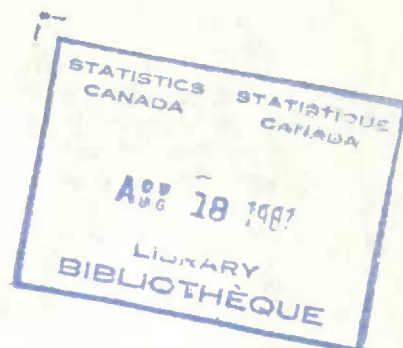


CATALOGUE No.

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ANNUAL

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THE AIRCRAFT AND PARTS INDUSTRY 1957



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NOTICE

The annual reports prepared by the Industry and Merchandising Division of the Bureau of Statistics are divided into 3 volumes, as follows: **Volume I** — 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 are:

- 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

1957

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 and in the servicing and overhaul of aircraft. It does not, however, include overhaul and servicing depots which were operated as integrated parts of regular airlines.

Production from this industry, amounted to \$424,442,713 in 1957. Workers employed by the 70 plants in this group numbered 41,616 and \$179,699,179 were paid in salaries and wages. The amount paid for materials for use in manufacturing was \$148,546,515 and the amount paid for fuel and electricity was \$4,831,700.

In the 3 assembly plants, which constitute the core of the industry, there were 23,247 workers in 1957 and production, including an output value of \$129,257,269 for complete aircraft, was valued at \$239,128,305.

Note: Prior to 1957 this industry included only the plants which were principally engaged in assembling aircraft or in making aircraft parts but included any servicing or overhauling of aircraft done by these plants as a minor part of their operations. In 1957, due to a change in statistical concept, this industry was expanded to include the plants which were primarily engaged in the servicing and overhaul of aircraft. It does not include overhaul and servicing depots maintained by the major airlines and operated by them as a part of their transportation system. The value of production contributed by the addition of these overhaul and repair plants amounted to approximately \$27 million in 1957.

TABLE 1. Principal Statistics of the Aircraft and Parts Industry, Significant Years 1929-1957 and by Provinces, 1956 and 1957

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
	number				dollars		
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
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	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	3,052	10,427,789	238,744	4,177,535	12,548,375	16,964,654
Manitoba	1						
Alberta	1						
Canada	52	35,563	146,428,014	4,084,546	138,155,854	212,269,685	354,510,085
1957 ¹							
Quebec	23	15,816	68,112,308	1,512,336	55,738,069	104,422,789	161,673,194
Ontario	34	21,275	95,178,728	2,966,431	84,901,966	144,601,327	232,469,724
Nova Scotia	2	2,726	9,456,513	241,125	5,924,718	13,451,803	19,617,646
Manitoba	2						
Alberta	5	1,574	6,065,865	65,146	1,533,040	7,532,229	9,130,415
British Columbia	4	225	885,765	46,662	448,722	1,056,350	1,551,734
Canada	70	41,616	179,699,179	4,831,700	148,546,515	271,064,498	424,442,713

¹ See footnote to Text.

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, 1956 and 1957

	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
	number		dollars				
1956							
Assembly plants	4 ¹	21,426	87,940,379	1,640,799	73,554,865	132,490,046	207,685,710
Parts plants only	48	14,137	58,487,635	2,443,747	64,600,939	79,779,639	146,824,375
Total	52	35,563	146,428,014	4,084,546	138,155,854	212,269,685	354,510,085
1957							
Assembly plants	3 ¹	23,247	103,784,780	1,891,476	71,242,583	165,994,246	239,128,305
Parts plants only ²	67	18,369	75,914,399	2,940,224	77,303,932	105,070,252	185,314,408
Total	70	41,616	179,699,179	4,831,700	148,546,515	271,064,498	424,442,713

¹ In addition, one plant, classified as a parts plant, assembled aircraft as a minor part of its operations.

² Includes plants engaged in servicing and overhaul in 1957. See footnote to text.

TABLE 3. Inventories,¹ 1957

	Raw materials and supplies	Goods in process ²	Finished goods of own manufacture	Total
	dollars			
Opening:				
Quebec	3,013,286	4,299,734	1,570,913	8,883,933
Ontario	28,035,642	3,712,777	1,241,158	32,989,577
Alberta	848,229	33,248	—	881,477
British Columbia	224,654	23,036	—	247,690
Other provinces	1,057,712	1,018,434	—	2,076,146
Canada	33,179,523	9,087,229	2,812,071	45,078,823
Closing:				
Quebec	11,368,232	15,330,993	3,363,382	30,062,607
Ontario	23,592,997	8,856,929	2,611,827	35,061,753
Alberta	925,073	77,857	—	1,002,930
British Columbia	198,996	69,413	—	268,409
Other provinces	1,199,329	1,124,142	—	2,323,471
Canada	37,284,627	25,459,334	5,975,209	68,719,170

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 1957 does not necessarily agree with the closing inventory for 1956, because of the addition of new plants, the transfer of plants to other industries and plants going out of business, etc.

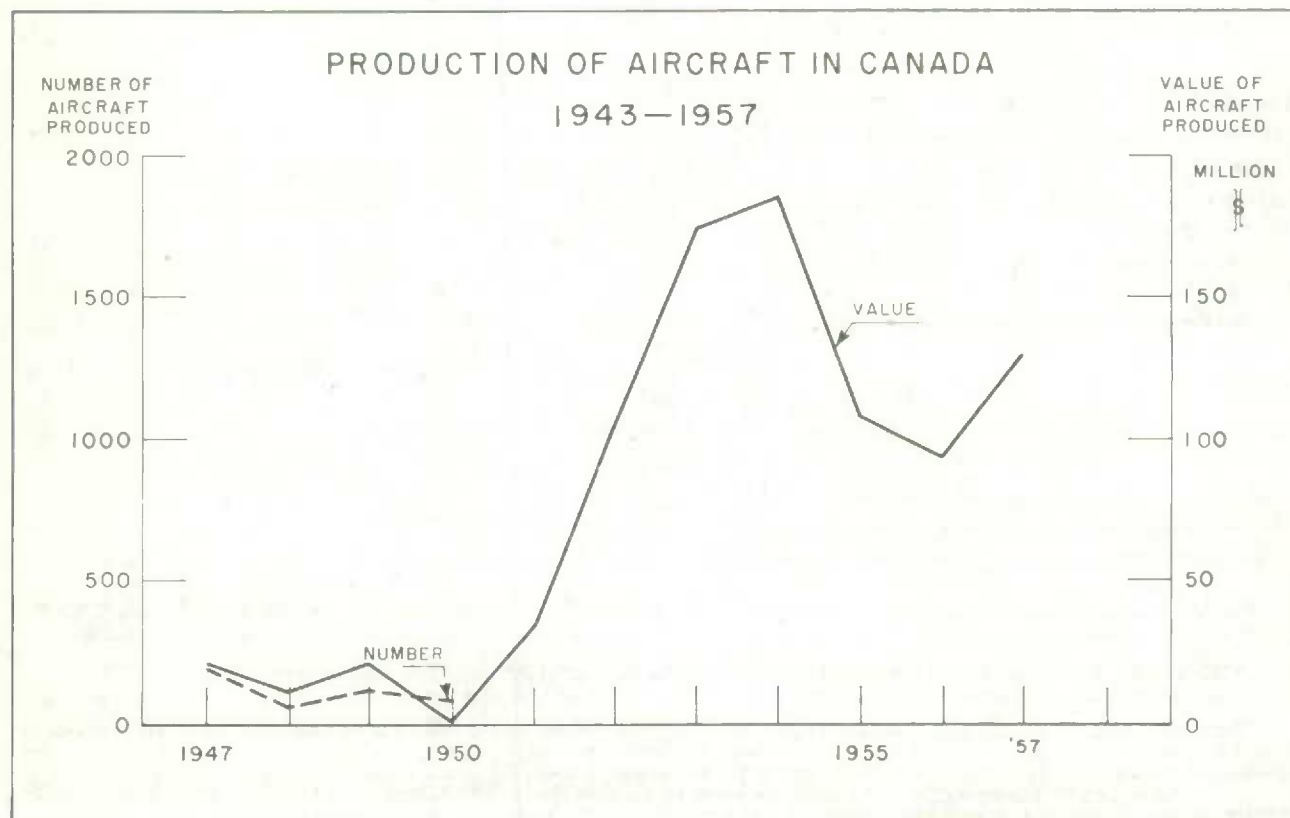
TABLE 4. Products Made in the Aircraft and Parts Industry, 1956 and 1957

Product	1956		1957	
	Quantity	Selling value at works	Quantity	Selling value at works
	No.	\$	No.	\$
Total aircraft completed in year ²	¹	94,625,746	¹	129,257,269
Aircraft and engines being built, but not completed at year-end (value of work done) ³	—	54,905,130	—	69,548,094
Repairs to aircraft (value of work done)	—	43,831,399	—	82,862,441
Aircraft parts manufactured	—	85,526,471	—	74,537,371
All other products manufactured, including engines and value of work done on developing aircraft and engines	—	123,547,127	—	123,526,732
Total of above items	—	402,435,873	—	479,731,907
Less value of work done in previous year on aircraft completed in current year	—	47,925,788	—	55,289,194
Total value of production	—	354,510,085	—	424,442,713

¹ Not available for publication.² Does not include value of equipment and parts supplied as free issue by the government.³ Figures are lower than actual as they represent only unbilled portion of work done.

TABLE 5. Production of Aircraft in Canada, 1948-1957

Year	Number	Selling value at works	Year	Number	Selling value at works
		\$			\$
1948	665	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
1952	¹	104,188,368	1957	¹	129,257,269

¹ Not available for publication.

**TABLE 6. Principal Statistics of the Aircraft and Parts Industry, Classified
According to Type of Ownership, 1956 and 1957**

Type	Estab- lish- ments	Em- ployees	Salaries and wages	Cost at plant of materials used	Gross selling value of products
	number		dollars		
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
1957					
Individual ownership	3	43	166,434	109,544	446,808
Incorporated companies	67	41,573	179,532,745	148,436,971	423,995,905
Total	70	41,616	179,699,179	148,546,515	424,442,713

**TABLE 7. Principal Statistics of the Aircraft and Parts Industry in Canada,
Grouped According to Selling Value of Products, 1956 and 1957**

Establishments having a production of	Estab- lish- ments	Em- ployees	Salaries and wages	Cost at plant of materials used	Gross selling value of products
	number		dollars		
1956					
Under \$10,000	1	153	504,796	139,715	839,539
\$25,000 to \$49,999	1				
\$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	10	541	2,124,668	1,523,927	4,505,212
\$500,000 to \$999,999	2				
\$1,000,000 to \$4,999,999	10	3,915	14,582,847	8,363,439	27,101,506
\$5,000,000 and over	9	30,783	128,540,525	127,822,692	320,757,002
Total	52	35,563	146,428,014	138,155,854	354,510,085
1957					
Under \$10,000	1	19	64,327	17,481	89,660
\$25,000 to \$49,999	2				
\$50,000 to \$99,999	7	69	246,488	106,041	484,896
\$100,000 to \$199,999	12	231	912,689	395,510	1,644,391
\$200,000 to \$499,999	17	663	2,688,181	1,565,533	4,987,635
\$500,000 to \$999,999	6	507	2,173,107	1,365,213	4,087,680
\$1,000,000 to \$4,999,999	14	5,009	19,528,271	13,580,485	38,877,491
\$5,000,000 and over	11	35,118	154,086,116	131,516,252	374,270,960
Total	70	41,616	179,699,179	148,546,515	424,442,713

TABLE 8. Employees and their Earnings in the Aircraft and Parts Industry, 1953-1957

Year	Number of employees					Earnings		
	Supervisory and office		Production and related workers		Total employees	Supervisory and office	Production and related workers	Total earnings
	Male	Female	Male	Female				
						dollars		
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
1957	11, 580	3, 376	25, 926	734	41, 616	74, 218, 216	105, 480, 963	179, 699, 179

TABLE 9. Production Workers, by Months, 1956 and 1957

Month	1956			1957		
	Male	Female	Total	Male	Female	Total
	number					
January.....	22,206	561	22,767	25,100	681	25,781
February.....	22,236	566	22,802	25,361	684	26,045
March.....	22,433	578	23,011	25,907	721	26,628
April.....	22,137	569	22,706	25,535	736	26,271
May.....	21,949	578	22,527	26,059	755	26,814
June.....	21,880	588	22,468	26,464	743	27,207
July.....	20,642	539	21,181	26,152	748	26,900
August.....	21,029	542	21,571	26,320	763	27,083
September.....	21,467	552	22,019	26,368	762	27,130
October.....	22,112	551	22,663	26,453	727	27,180
November.....	22,410	562	22,972	26,055	751	26,806
December.....	22,551	573	23,124	25,373	731	26,104
Average.....	21,920	567	22,487	25,926	734	26,660

TABLE 10. Capital and Repair Expenditures in the Aircraft and Parts Industry, 1953-1957

Year	Capital expenditures		Sub-total	Repair and maintenance expenditures		Sub-total	Total capital and repair expenditures
	Construction	Machinery and equipment		Construction	Machinery and equipment		
	thousands of dollars						
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	3, 421	7, 952	11, 373	1, 272	2, 997	4, 269	15, 642
1957 ¹	3, 429	12, 097	15, 526	1, 517	2, 534	4, 051	19, 577

¹ Preliminary.

TABLE 11. Imports of Aircraft and Complete Parts Thereof, Not Including Engines, 1956 and 1957

Item	1956		1957	
	Number	Value	Number	Value
		\$		\$
Aircraft not over 1,500 lb. wt.:				
From United States	263	971,068	297	1,315,806
From other countries	5	7,690	1	3,309
Aircraft 1,501 to 3,000 lb. wt.:				
From United States	129	1,438,125	140	1,642,763
From other countries	1	750	3	27,557
Aircraft 3,001 to 7,500 lb. wt.:				
From United Kingdom	—	—	5	308,111
From United States	31	2,196,392	35	1,199,873
From other countries	—	—	—	—
Aircraft over 7,500 lb. wt.:				
From United Kingdom	4	2,965,967	12	9,059,483
From United States	64	11,113,256	31	4,722,564
From other countries	2	186,250	1	53,333
Total aircraft	499	18,879,498	525	18,332,799
Aircraft parts	—	72,424,420	—	75,357,730

TABLE 12. Imports of Aircraft Engines and Complete Parts, 1956 and 1957

Item	1956		1957	
	Number	Value	Number	Value
		\$		\$
Engines, aircraft, up to 200 h.p.:				
From United States	313	381,716	351	325,778
From other countries	9	9,272	—	—
Engines, aircraft, 201 to 500 h.p.:				
From United Kingdom	11	51,049	6	33,394
From United States	207	618,683	242	687,066
From other countries	—	—	1	2,688
Engines, aircraft, 501 to 1,000 h.p.:				
From United Kingdom	1	6,089	4	5,314
From United States	66	481,228	75	334,467
Engines, aircraft, over 1,000 h.p.:				
From United Kingdom	51	1,026,513	71	2,114,694
From United States	461	10,167,341	338	9,165,662
From other countries	5	52,542	2	45,397
Total aircraft engines	1,124	12,794,433	1,090	12,714,460
Parts of aircraft engines	—	20,128,952	—	22,593,850

TABLE 13. Exports¹ and Re-exports of Aircraft and Parts, 1956 and 1957

	1956	1957	—	1956	1957
Exports²			Re-exports³		
Aircraft No.	281	211	Aircraft No.	34	21
Aircraft \$	26,837,104	24,285,504	Aircraft \$	2,157,902	477,272
Aircraft parts \$	22,707,703	15,624,710	Aircraft parts \$	3,419,288	3,833,951
Total exports \$	49,544,807	39,910,214	Total re-exports \$	5,577,190	4,311,223

¹ 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.

² Made in Canada.

³ Foreign-made goods re-exported.

TABLE 14. Fuel and Electricity Used in the Aircraft and Parts Industry, 1956 and 1957

Kind		1956		1957	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Bituminous coal—Canadian ton		7,645	85,679	9,696	115,784
Imported "		18,114	183,412	16,604	185,054
Anthracite coal "		—	—	39	736
Lignite coal "		—	—	195	1,528
Gasoline (including gasoline used in cars and trucks).... Imp. gal.		639,171	209,562	996,000	342,022
Kerosene "		2,998	768	2,150	634
Fuel oil "		8,734,964	859,199	10,072,113	1,163,388
Gas—Liquefied petroleum gases "		142,341	37,397	91,399	23,586
Other manufactured M cu. ft.		5,437	9,937	4,975	5,268
Natural "		94,607	47,550	117,953	54,659
Other fuel ¹ —		—	1,294,502	—	1,406,814
Electricity used kwh.		130,950,742	1,356,540	148,059,371	1,532,227
Total..... —		—	4,084,546	—	4,831,700

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

Directory of Firms in the Aircraft and Parts Industry, 1957

Name of firm	Location of plant
Nova Scotia:	
Enamel & Heating Products Ltd.	Amherst
Falrey Aviation Co. of Canada Ltd.	Eastern Passage
Quebec:	
Aircraft Industries of Canada Ltd.	St. Johns
Aircraft Overhaul & Repairs Ltd.	Lac. A. La Tortue.
Aircraft Welding & Sheet Metals Co. Ltd.	7980-18th Ave., Ville St. Michel
Bristol Aero Engines Limited	10210 Pie IX Blvd., Montreal North 12
Canadian Pratt & Whitney Aircraft Co. Ltd.	P.O. Box 10, Longueuil
Canadair Limited*	Laurentian Blvd., St-Laurent

Directory of Firms in the Aircraft and Parts Industry, 1957 - Concluded

Name of firm	Location of plant
Quebec - Concluded:	
Curtiss-Reid Manufacturing Co. Ltd.	2200 Laurentian, St-Laurent
Dorval Metalcraft Co.	Montreal Airport., Montreal
Ferndale Industries Reg'd.	1540 Henri Bourassa, Montreal
Godfrey Engineering Co. Ltd.	480 Metropolitan Blvd., Lachine
Gorman Welding Engineering Ltd.	4289 Majeau, Montreal
Heroux Machine Parts Limited	340 Thurber, Longueuil
Jarry Hydraulics	4384 St. Denis, Montreal
Kurt-Mutual Industries Ltd.	476 St. Edouard St., Granby
Lasalle Engineering Ltd.	1225 Conway St., Montreal 22
Noorduyn Norseman Aircraft Ltd.	P.O. Box 5, St. Laurent
Patenaude Engineering	10830 Lajeunesse, Montreal
R.C. Machine Shop	242 St. Jean St., Longueuil
Rolls-Royce of Canada Ltd.	Cote de Liesse Rd., Montreal
Service Tool & Die Ltd.	2130 Bleury, Montreal
Sprague Engineering Ltd.	642 De Courcelle Montreal
Utility Aircraft & Metal Products Ltd.	539 Cowie St., Granby
Westhill Industries Ltd.	4821-6th Ave., Montreal
Ontario:	
Aeroquip (Canada) Ltd.	287 Bridgeland, Toronto
Aircraft Appliances & Equipment Ltd.	585 Dixon Rd., Weston
Aro Equipment of Canada Ltd.	Kipling Ave., Toronto
Avro Aircraft Limited*	Malton
Campbellford Precision Products Ltd.	Cobourg
Canadian Car Co. Ltd.*	Montreal St., Fort William
Davair Components Ltd.	537 Keele, Toronto
De Havilland Aircraft of Canada, Limited*	Sheppard Ave., Downsview
Dowty Equipment of Canada, Limited	Ajax
E.G.M. Machine Products Ltd.	123 McCormick., Toronto
Elliot, W.R. Limited.	134 Sydney St. S., Kitchener
Field, Aviation Co. Ltd.	Oshawa
Fleet Manufacturing Ltd.	Gilmore Rd., Fort Erie
Garratt Aircraft Ltd.	Hangar No. 2, Malton
Garrett Mfg. Corp. Of Canada Ltd.	Racine Rd. Rexdale
Genaire Limited.	St. Catharines
Keicher Engineering Ltd.	1680 King St. E., Kitchener
L.C.S. Metals Corp. Ltd.	147 Mary St., Brantford
Leavens Bros. Ltd.	3220 Dufferin, Toronto
Leggart Aircraft Ltd.	Gormley
Martin Baker Aircraft Co. Ltd.	Collingwood
Modern Aircraft Products Ltd.	Main St. E., Kingsville
Murray, F.T., Machine Co. Ltd.	58 Rosemont Ave., Weston
Orenda Engines Ltd.	Malton
Orillia Equipment Co. Ltd.	Orillia
Parmatic Engineering Ltd.	Owen Sound
Renfrew Aircraft & Engineering Co. Ltd.	Renfrew
Rotaire Limited	St. Catharines
Sanderson Aircraft Limited	Malton
Thompson, H.I., Co. of Canada, Ltd.	60 Johnston St., Guelph
Thompson Products Limited.	St. Catharines
Tube Benders & Fabricators Ltd.	Streetsville
Vertol Aircraft Co. (Canada) Ltd.	Arnprior
York Gears Limited	825 Caledonia Rd., Toronto
Manitoba:	
Bristol Aircraft (Western) Ltd.	Berry St., St. James
Standard Aero Engine Ltd.	Stevenson Airport, Winnipeg
Alberta:	
Canadian Pacific Air Lines (Repairs) Ltd.	Curry Airport, Calgary
Field Aviation Co. Ltd.	Municipal Airport, Calgary
Northwest Industries Ltd.	Municipal Airport, Edmonton
Pacific Western Air Lines Ltd.	Municipal Airport, Edmonton
Western Propeller Co. Ltd.	Municipal Airport, Edmonton
British Columbia:	
Aviation Electric Pacific Ltd.	Vancouver Airport, Richmond
Bristol Aero Engines (Western) Ltd.	Vancouver Airport, Richmond
Fairey Aviation Co. of Canada Ltd., The	Sidney
Husky Aircraft Ltd.	202-2256 W. 12th Ave., Vancouver

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*.

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