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PROMOTION SECTION
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project report

A REVIEW OF THE MARKET FOR

ELECTRIC TYPEWRITERS AND PARTS

prepared for:

Department of Regional
Economic Expansion

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I

INTRODUCTION AND SUMMARY

A. INTRODUCTION

This study examines the potential market for Electric typewriters in Canada.

The objective is to evaluate potential manufacturing opportunities. These can then be evaluated in greater detail by prospective entrepreneurs.

B. SUMMARY

The Canadian production of electric typewriters was $39,700,000 in 1971.

All of the manufacturers, manufacturers' associations, and government authorities contacted expressed doubts as to the feasibility of making complete typewriters in Canada. However, those manufacturers with assembly operations in Canada expressed a willingness to use Canadian-made parts where possible. To explore the typewriter-parts market, a separate study was conducted. This study is included in Appendix A.

IBM is the only true manufacturer in Canada and were responsible for 56% of all the Canadian production. This was composed of $15,900,000 domestic and $6,700,000* export. All assembly is done in Canada and 60% of all parts used are made here.

Smith-Corona Marchant and Olivetti assemble machines in Canada but use, almost exclusively, imported parts. Olympia, now importing whole machines, claim that shortly they will also be assembling here using imported parts.

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* IBM has recently won a sizeable contract to export to the U.S.A. Figures after 1971 should reflect this.

II

CONCLUSIONS

1. The minimum volume for a viable manufacturing and assembly plant is considered to be about $20,000,000 annually. Such a volume will require relatively high exports.

2. The current tariff structure favours the assembly in Canada of imported parts.

3. The parts market should be considered as a separate entity (see Appendix A).

III

COMMODITY

An electric typewriter can weigh as little as 12 pounds (portable) and as much as 75 pounds. Although the basic function of each is the same, there are many options available. Some of the more common are:

- French, German and Spanish accents.
- Variable length character spacing.
- Choices in carriage widths and speed of printing.
- Ancillary hook-ups to character-storing devices that can store entire letters and automatically reproduce them.

It is estimated that over 80% of the dollar volume of typewriters bought in 1972 will be for electrics.

IV

MARKET

A. CANADIAN PRODUCTION

In the last six years Canadian production has more than doubled, reaching $39,700,000 in 1971 (see Appendix B). This production is mainly the assembly of machines rather than the manufacture of parts going into them.

B. IMPORTS

In the last six years imports have more than quadrupled (see Appendix C) reaching $6,500,000 in 1971. The United States, West Germany, and Japan account for 90% of this.

C. EXPORTS

IBM is the only significant exporter. Since 1967 exports have quadrupled, reaching $6,700,000 in 1971. Presently exports go to Japan and the U.S.A. (see Appendix D).

D. TOTAL

The total market in 1971 was $46,200,000 (see Appendix E). This is made up of:

- Domestic production for domestic consumption - $33,000,000.
- Domestic production for export - $6,700,000.
- Imports for domestic consumption - $6,500,000.

E. CONSUMPTION

Total Canadian consumption has increased more than 240% since 1966 (see Appendix E). Total Canadian production is lagging behind slightly (226% increase).

V

CANADIAN PRODUCTION

A. MAJOR PRODUCERS

In 1971 there were only three producers in Canada (see Appendix F) -- IBM with 56.2%; Olivetti with 31.5%; SCM with 12.3%. Olympia of Germany who now import typewriters complete, will shortly begin assembly operations in Canada.

B. TYPE OF PRODUCTION

IBM is the only true manufacturer of electric typewriters in Canada; the remainder assemble imported parts. 60% of all parts in IBM's machines are made in Canada. As all other manufacturers assemble imported parts, approximately 66% of the parts used are imported.

C. CONCLUSIONS

1. The market is very competitive and will not easily support another manufacturer. The lion's share is held by IBM.

2. There is every indication that there is room for a manufacturer of typewriter parts.

VI

COSTS

A. PRODUCTION

Raw materials (i.e. unassembled parts) account for 38% of the production costs. Labour is estimated at 12%. Overhead is responsible for the remaining 50% of the manufacturing cost.

Marketing, storage, transportation and profit are estimated to be another 100%.

Transportation costs are small relative to machine value. For example, to send 500 machines from Toronto to Detroit would cost $225.00 (see Appendix G), or less than 50¢ each.

B. TARIFFS

The import tariff on electric typewriters is 20% on invoiced value.

The tariff on incoming typewriter parts is 7.5%.

There are no export duties to the U.S.A. or the U.K. To Europe, the export duties are about 6.5%.

VII

LOCATION

A. SITE SELECTION

Presently all manufacturers are located in Toronto.

Locating in this area has the following advantages:

- The majority of Canadian consumption occurs within 350 miles.
- Close to the U.S.A. for export.
- A supply of skilled (female) labour for intricate assembly work.
- A supply of good machine shops, foundries, and other facilities needed to make high tolerance metal, plastic, and rubber parts.

B. TRANSPORTATION

This is not of prime consideration as it is relatively inexpensive (see Appendix G).

C. REGIONAL POSSIBILITIES

The best regions to set up a manufacturing facility are those which are highly industrialized and possess a good supply of skilled labour for assembly operations.

VIII

STRENGTHS AND CONSTRAINTS

A. STRENGTHS

1. Tariffs are a source of competitive advantage. There are no export tariffs to the U.S.A. or the U.K. Export to Europe would mean paying small duties (about 6.5%).

   Duty on imported typewriters is 20%.

2. Manufacturers assembling typewriters in Canada have expressed a desire to "buy Canadian". This is discussed more fully in Appendix A which deals with parts manufacture.

B. CONSTRAINTS

1. Competition with Multi-National Corporations

   These companies produce parts for many markets, the Canadian being only one. They can therefore, rationalize the manufacture of components, making it difficult for a Canadian manufacturer to compete.

2. Marketing

   By virtue of their sales volume, the multi-national corporation has a competitive advantage.

3. Market Size

   The Canadian market itself is too small to support another manufacturer. A recent study by the Department of Supply and Services concludes that "The total Canadian market (Recognizing the diversity of model requirements), can support only one single manufacturer." It would be necessary to develop a good export market.

There are presently at least ten companies selling electric typewriters in Canada. According to the head of Canadian Business Equipment Manufacturers' Association (CBEMA), "The Canadian electric typewriter market is 'cut-throat'." He does not see any potential for complete typewriter manufacture in Canada without a sizeable export market. This would mean setting up a large international marketing force.

4. <u>Tariffs</u>

Although there is a 20% import duty on electric typewriters, a foreign manufacturer can avoid 63% of this by importing the parts and assembling them here. There is only a 7.5%* tariff on typewriter parts. 66% of all parts that go into Canadian-made typewriters are, in fact, imported. A change in the structure might stimulate more domestic parts production.

5. <u>Technology Changes</u>

There is a trend toward more sophisticated word processing equipment (e.g. the IBM MT/ST). Some peope foresee electronic hook-ups to remote character-storage locations where the letter could be edited in tape form and the final draft typed by the machine itself.

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* In some cases that fall under the "Machinery Tariff Plan", parts may be brought in duty free.

Appendix A

PARTS FOR ELECTRIC TYPEWRITERS

I

INTRODUCTION AND SUMMARY

A. INTRODUCTION

This study examines the potential of the electric typewriter-parts* market in Canada. It is a supplement to the main study which deals with the manufacture of complete typewriters.

B. SUMMARY

Only 34% of the parts used in Canadian-made typewriters are manufactured in Canada.

There is presently a potential parts market of approximately $6,600,000.

Assemblers of typewriters have expressed an interest to "buy Canadian".

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* "Parts" here means parts, attachments and accessories.

II

CONCLUSIONS

1. The manufacture of complete typewriters in Canada is not a very attractive proposition.

2. Imports of manufactured parts have been declining since 1966, indicating that production within Canada is feasible.

III

COMMODITY

Typewriter parts range from simple plastic moulded parts to high tolerance metal ones. They are all relatively small and must be produced to fairly high tolerance limits. Some electric typewriters have as many as 5,000 separate components.

IV

MARKET

A. CANADIAN PRODUCTION

Canadian production of parts in 1971 was approximately $5,000,000. These were used in IBM's Selectric I and Selectric II*.

B. IMPORTS

Since 1966 imports have remained relatively constant in terms of absolute dollars (see Appendix H). One can therefore, assume that actual imports have decreased. This is accounted for by IBM's increasing share of the market. 88% of all imports come from the U.S.A.

C. EXPORTS

Exports of typewriter parts have increased 900% since 1966, reaching $1,607,000 in 1971 (see Appendix I).

D. TOTAL

The total market for parts is approximately $15,000,000**. Some parts, however, due to very high tooling and set-up costs, are impractical to make for Canadian production only. The achieveable market is estimated to be $11,600,000.

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* 60% of the parts in IBM typewriters are Canadian made.

** This does not include manual typewriter parts. The market for these is estimated to be $3,000,000 but is quickly decreasing.

E. CONSUMPTION GROWTH

Typewriter parts consumption is directly related to typewriter sales. Parts make up 38% of a typewriter's factory value.

Total consumption has increased 240% since 1966 reaching almost $17,000,000 in 1971.

V

CANADIAN PRODUCTION

A. MAJOR PRODUCERS

IBM is the major producer of typewriter parts in Canada.

B. TYPES OF PRODUCTION

The types of production are as follows:

- castings
- moulded plastic parts
- moulded rubber parts
- minor assemblies
- machining of parts

C. CONCLUSIONS

1. The total achievable market is $11, 600, 000.
2. Only $5, 000, 000 has been captured by Canadian manufacturers.
3. Only IBM uses Canadian parts in a significant volume.
4. The remaining $6, 600, 000 offers some potential to Canadian manufacturers.
5. The following parts seem most attrative:

- motors
- ribbons
- plattens
- covers
- plastic keys
- key tops

VI

COSTS

A. PRODUCTION

An estimate of manufacturing costs is as follows:

	Simple Parts	More Complex Parts
Raw materials	40%	30%
Labour	15%	25%
Overhead	10%	10%
Transportation, distribution and profit	35%	35%
	100%	100%

B. TARIFFS

There is a 7.5% import tariff on parts coming into Canada. There are no export tariffs on parts going to the U.S.A. or the U.K. In Europe there is generally a 6.5% import tariff.

VII

LOCATION

A. SITE SELECTION

This type of operation should be located fairly near Toronto*. This will facilitate a necessary technical liaison between supplier and assembler. Also, replacement parts for unexpected breakdowns in the field can be easily supplied.

B. TRANSPORTATION

As the parts are relatively small, transportation is not a key factor in the total cost.

C. REGIONAL POSSIBILITIES

All the assembly plants are in Toronto. Unless sufficient incentive were given to locate elsewhere, Toronto would be the natural choice for any new facility.

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* All assembly plants are located in Toronto.

VIII

STRENGTHS AND CONSTRAINTS

A. STRENGTHS

1. Tariffs

Tariffs are a source of competitive advantage. There are no export tariffs to the U. S. A. or the U. K. Tariffs are about 6. 5% to European countries.

There is a 7. 5% import duty on all foreign typewriter parts.

2. The Market

There is a $6, 600, 000 market in Canada and all assembly plants have expressed a desire to "buy Canadian".

3. Capital Investment

The manufacture of many of these parts requires a relatively small capital investment.

B. CONSTRAINTS

1. Competition With Multi-National Corporations

These companies rationalize their parts manufacture, often supplying their total world requirements from one source. They, therefore, benefit from economies of scale.

2. Establishing a Close Technical Liaison

All electric typewriters have, basically, the same functioning parts. However, the exact specifications vary from company to company.

3. <u>High Set-up Costs on Some Parts</u>

Certain parts (e.g. the swivelling and rotating head in the IBM Selectric I and Selectric II) will require sizeable capital investment to start production.

Appendix B*

CANADIAN PRODUCTION OF ELECTRIC TYPEWRITERS**
($ 000,000)

Year	Number	$
1957	12,257	5.1
1966	46,886	17.6
1967	56,143	21.0
1968	72,099	22.5
1969	85,909	28.3
1970***	130,060	36.9
1971	140,202	39.7

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* From "1972-1973 Market and Media Report" - MacLean Hunter.

** Canadian Production for export is included.

*** From 1970 on "portable" electrics have been included.

Appendix C *

IMPORTS OF ELECTRIC TYPEWRITERS
($000)

		1966	1967	1968	1969	1970	1971
United Kingdom	#	524	986	82	1,105	1,507	1,113
	$	85	152	24	307	300	292
West Germany	#	1,576	2,229	3,690	6,438	9,540	12,968
	$	348	496	834	1,409	2,038	2,999
Italy	#	-	-	-	197	744	784
	$	-	-	-	70	178	283
Sweden	#	1,137	423	388	406	429	1,620
	$	218	88	79	78	90	365
Switzerland	#	566	113	214	774	526	227
	$	133	24	51	122	92	46
United States	#	4,520	7,170	5,717	3,428	17,119	18,219
	$	801	1,500	1,332	783	2,318	2,070
Japan	#	-	330	340	548	5,600	10,296
	$	-	28	26	43	363	424
Others	#	28	2	-	7	84	209
	$	1	1	-	1	9	23
Total	#	8,351	11,253	10,431	12,903	35,549	45,436
	$	1,586	2,289	2,346	2,814	5,389	6,503

* Taken from "1972-1973 Market and Media Report" - MacLean Hunter.

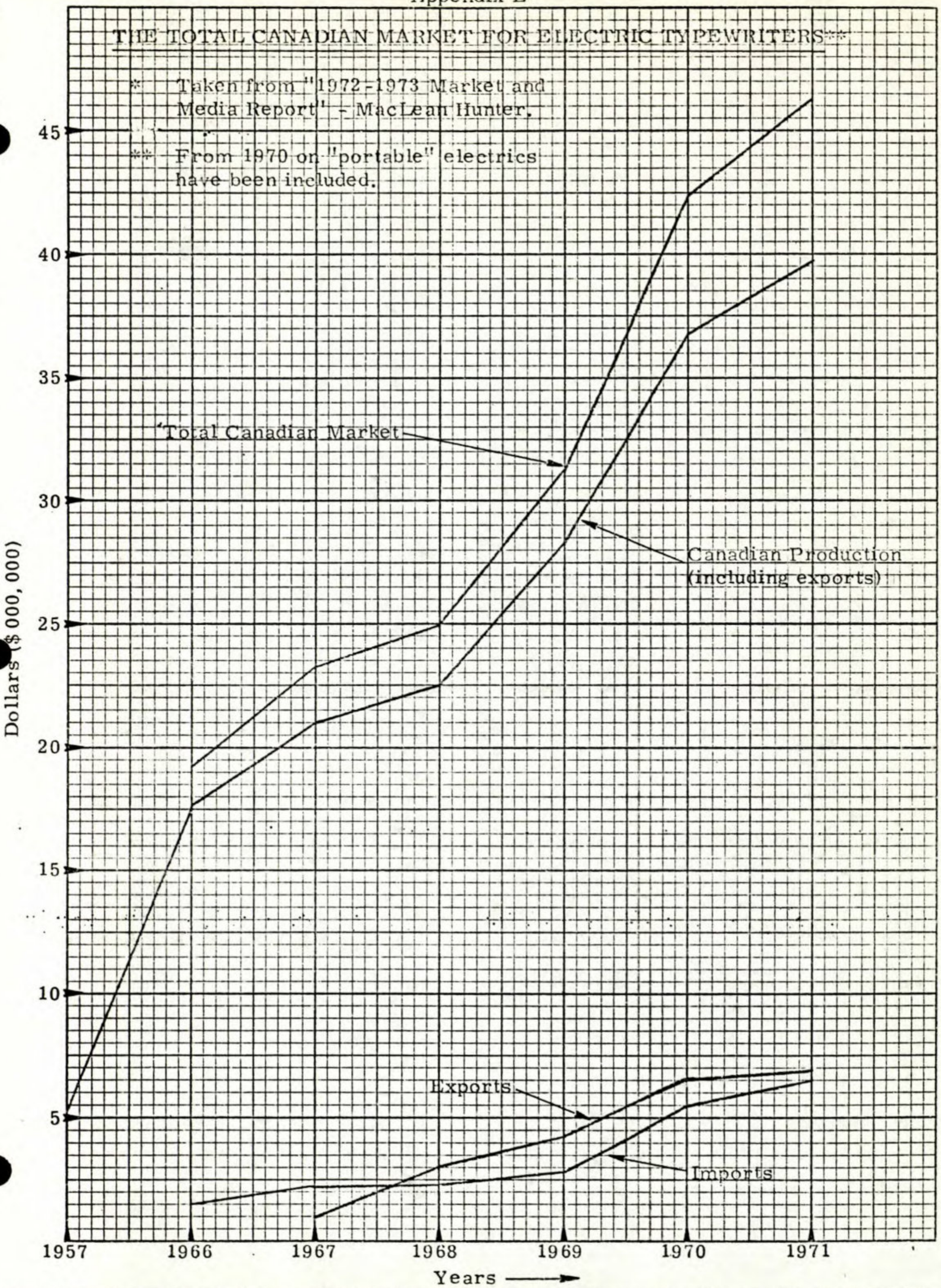
Appendix D*

EXPORTS OF ELECTRIC TYPEWRITERS
($ 000)

Year	Number	$
1966	-	-
1967	7,801	984
1968	26,058	2,982
1969	32,147	4,194
1970	42,419	6,578
1971	32,187	6,696

* From "1972-1973 Market and Media Report" - MacLean Hunter.

Appendix E*


THE TOTAL CANADIAN MARKET FOR ELECTRIC TYPEWRITERS**
* Taken from "1972-1973 Market and Media Report" - MacLean Hunter.
** From 1970 on "portable" electrics have been included.
Total Canadian Market
Canadian Production (including exports)
Exports
Imports
Dollars ($ 000, 000)
45
40
35
30
25
20
15
10
5
1957
1966
1967
1968
1969
1970
1971
Years

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Appendix F

CANADIAN PRODUCTION - 1971
(exports and domestic production)

Company	% Market Share	$ ('000,000)	Portion Imported Machines	Portion Imported Parts	Export
IBM (Canada), Toronto	56.2	22.3	-	40%	Yes $6.7 *
Olivetti, Toronto	31.5	12.5	-	100%	No
Olympia, Toronto	-	**	100%	-	No
Remington, Toronto	-	N.A.	100%	-	No
Smith-Corona Marchant, Toronto	12.3	4.9 ***	-	100%	No
Others, Toronto	-	-	100%	-	No
Total	100.0	39.7			

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* In 1972 this figure is expected to rise to $20 million.

** Hope to start an assembly line in the near future.

*** Includes portable electric sales of $1.8 million.

Appendix G

TRANSPORTATION COSTS OF ELECTRIC TYPEWRITERS
Less than truck load -- common carrier

Quantity	70 miles	250 miles
1	$ 4.95	$ 5.25
	(4.95)*	(5.25)
2	5.80	6.50
	(2.80)	(3.25)
3	6.45	7.65
	(2.15)	(2.55)
4	6.70	8.20
	(1.68)	(2.05)
5	8.82	10.22
	(1.76)	(2.05)
6	10.58	12.26
	(1.76)	(2.05)
7	12.35	14.31
	(1.76)	(2.05)
8	11.59	13.83
	(1.45)	(1.73)
9	13.04	15.56
	(1.45)	(1.73)
10	14.49	17.29
	(1.45)	(1.73)

Weight: 7 pounds -- Cube: 6 cu. ft.

Truck Load Quantity

	103.00	225.00
	(.21)	(.45)

Truck load: 500 pieces Total weight: 35,000 lbs.

400	.26	.56
300	.34	.75
200	.53	1.13
100	1.03	LTL
50	LTL	LTL

* Note: Figures in parentheses represent unit costs.

Appendix H

IMPORTS OF TYPEWRITER PARTS, ATTACHMENTS AND ACCESSORIES
($ 000)

	1966	1967	1968	1969	1970	1971
United Kingdom	642	209	184	183	232	458
West Germany	280	442	653	268	69	52
East Germany	-	-	-	-	1	-
Italy	558	548	548	455	1,047	517
Netherlands	30	13	134	183	97	45
Sweden	6	6	5	11	17	2
Switzerland	214	62	10	-	1	2
Japan	5	4	1	4	6	3
United States	7,559	8,437	10,325	8,322	9,607	8,035
France	1	-	-	-	2	10
Spain	25	192	135	423	335	100
Peru	-	-	-	-	-	1
	9,321	9,912	11,994	9,849	11,413	9,225

Appendix I

EXPORTS OF TYPEWRITER PARTS, ATTACHMENTS AND ACCESSORIES
($ 000)

Year	Amount
1966	174
1967	154
1968	97
1969	157
1970	1,993
1971	1,607