The University of Western Ontario



9A84E002

FIRESTONE CANADA INC.

Professor Peter Bell prepared this case solely to provide material for class discussion. The author does not intend to illustrate either effective or ineffective handling of a managerial situation. The author may have disguised certain names and other identifying information to protect confidentiality.

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"Added value for the customer has been an important theme at Firestone Canada for several years now." Bob Peace, manager of advertising and dealer relations at Firestone Canada Inc., was explaining the background to the fall 1983 program *Pay No Dough If It Doesn't Snow.*

Bob continued: "This added value has taken several forms; with purchase of the '721' radial, Firestone provides wheel alignment for the life of the tire, we clean customer white walls during service visits, and our stores provide coffee and comfortable chairs for customer's use while their cars are being serviced. We see *Pay No Dough If It Doesn't Snow* as a further example of added value for our customers — we're saying, 'try our snow or all-season tires, but if it turns out that you didn't need them because there was no snow, then you'll get some, or all, of your money back."

FIRESTONE CANADA INC.

Firestone Canada Inc. is a wholly owned subsidiary of Firestone Tire and Rubber Co. Inc. The principal business focus on Firestone was the development, manufacture, and sale of a broad range of tires to original equipment manufacturers (OEMs) and replacement markets. In 1983, there was considerable pressure to improve tire sales: a combination of a decline in OEM sales, reduced

Page 2 9A84E002

after-market sales due to the longer life of radial tires and a product line rationalization had resulted in a 40 per cent decline in worldwide sales of Firestone tires over the past three years.

For Firestone Canada, sales had declined from \$489.6 million in 1981 to \$468.5 million in 1982, resulting in a decline in net income from \$29.3 million to \$15.0 million. For the parent company, 1981 net income of \$152 million had declined to \$6 million in 1982.

Firestone Canada operated about 100 company-owned stores and some 60 franchised stores in Canada, as well as providing tires to a number of independent dealers.

THE "PAY NO DOUGH IF IT DOESN'T SNOW" PROGRAM

In August 1983, Bob Peace was approached by Firestone's insurance agents with the idea of a refund scheme for snow tires based on the amount of snow. The scheme was generally similar to Toro S'no Risk Program (Exhibit 1), which had run in the U.S. in the fall of 1982 and was expected to be repeated for 1983.

The snow tire market had been declining, particularly in Ontario and the West Coast. This decline coincided with the emergence of the all-season tire and its availability as original equipment on many models of new cars. Bob had been considering a fall promotion for the "721-Metrix" all-season tire with a special promotion price, but the idea of promoting the "Snow Biter" tire with the added value of a no-snow refund caught his attention. While this particular refund concept was innovative, the idea had some resemblance to a Firestone program to promote batteries, run several years earlier ("You Go Or We Pay The Tow").

Bob further developed the refund idea by providing the line "Pay No Dough If It Doesn't Snow" and by creating a refund schedule based on annual snowfall as a percentage of the average annual snowfall for the ten years ending May 31, 1983. This "average" differed from that used in the "Toro S'no Risk" Program, which used the Environment Canada averages for the 30-year period 1951 to 1980. The insurance company took charge of the calculation of this average snowfall for 46 reporting stations and quoted a premium based on the dollar value of tire sales. The program was to run from mid-October to the end of December and would include TV spots starting October 15 in Toronto/Hamilton and November 1 elsewhere, and a promotion kit for the stores ("Your sales will grow with Pay No Dough") that would include the "official" snowfall averages (Exhibit 2) and

Page 3 9A84E002

refund claim certificates (Exhibit 3). The total cost of the program would be about \$500,000.

Firestone's attitude was, "We make tires, insurance companies take risks," and, therefore, if they decided to go ahead with the program, they would accept the insurance proposal and pay a lump-sum premium with an adjustment to be made at the end of the program when tire sales were known. It was anticipated that sales would be in the range of 10,000 to 20,000 tires.

A computer system would be set up to record sales by reporting area so that buyers qualifying for a refund could be readily identified. When the actual snowfall amounts were known, the registration forms for those customers eligible for refunds would be checked by Firestone and then submitted to the insurance company for settlement. Such a system could also provide management with information and reports on regional and national tire sales and refunds.

Bob Peace summed things up. "We know that the odds of a customer getting money back are not great but we *are* giving added value to our customer and we *are* gaining attention and name awareness. We would like some customers to receive refunds but not so many that the insurance company won't do this again. If there are no refunds we won't feel too badly because Firestone has paid to provide added value for our customers.

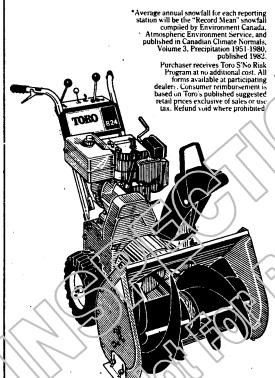
Jim Sardo, president of Firestone Canada had to give final approval to the program. One option that Jim was considering was whether or not to include the all-season "Metrix" tire in the program.

Exhibit 1

TORO S'NO RISK™ PROGRAM

If It Doesn't Snow We'll Return Your Dough.

And you keep the snowthrower!



IF IT SNOWS	YOU KEEP THE TORO
LESS THAN:	AND YOU RECEIVE:
20%	100%
AVERAGE*	REFUND OF
SNOWFALL	SUGGESTED RETAIL PRICE
30% AVERAĜE SNOWFALL	70% REFUND OF SUGGESTED RETAIL PRICE
40% AVERAGE SNOWFALI	50% REFUND OF SUGGESTED RETAIL PRICE
50%	50%
AVERAGE*	REFUND OF
SNOWFALL	SUGGESTED RETAIL PRICE

Buy your Toro snowthrower this year and forget about how much snow we're going to have.

it's S'No Risk with Toro.

If there is a less-than-average* snowfall this season, you could end up with all or part of your money back. And you'll keep the Toro.

If it snows 50% of average* or more, there's no refund but you'll really be glad you bought a Toro.

Here's how it works...

Just buy a new Toro snowthrower before December 25, 1983. Offer applies to models S-140, S-200R, S-200E, S-620E and all two stage units.

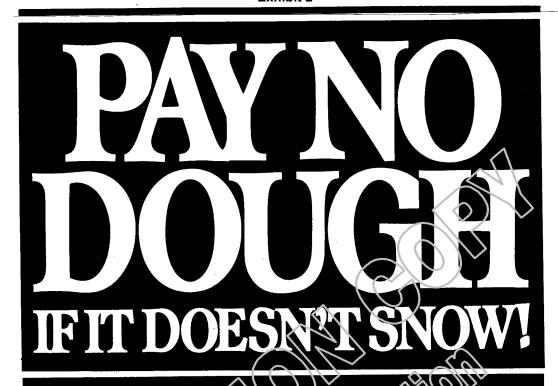
If the snowfall at your designated weather reporting station is less than 20% of average*, you will be refunded 100% of Toro's suggested retail price for the unit. Even if it snows less than 50% of average, you get a 50% refund as above. And you keep the unit!

See your participating Toro Dealer for S'No Risk details.

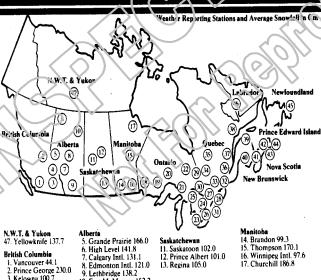


Haven't you done without a Toro long enough?

Exhibit 2



WEATHERREP



British Columbia

- 1. Vancouver 44.1 2. Prince George 230.0 3. Kelowna 100.7 4. Revelstoke 442.8

10. Fort McMurray 152.2

Saskatchewan

11. Saskatoon 102.0 12. Prince Albert 101.0 13. Regina 105.0

Mantoba 14. Brandon 99.3 15. Thompson 170.1 16. Winnipeg Intl. 97.6 17. Churchill 186.8

The map of Canada in this folder indicates the various yeather reporting stations that will apply to your purchase of Firestone Snow Biter or 721 All Season Steel-Belted Radials. Also detailed in centimetres is the average radials. Also each station. Look for the weather reporting station nearest to where you purchased your Firestone tires and record the appropriate data on the special Firestone Pay No Dough refund certificate. Send your completed refund certificate directly to Firestone Canada Inc. for processing. Your Firestone Store manager or participating dealer will be happy to assist you in completing this

Ontario

Ontario
18. Kenora 136.0
19. Thunder Bay 210.1
20. Armstrong 218.0
21. Sault Ste. Marie 286.5
22. Kapuskasing 329.0
23. Windsor 133.9
24. Goderich 261.8
25. Wiarton 416.7
26. London 203.3
27. Essa (Barrie) 232.5
28. Toronto Intl. 130.9
29. North Bay 252.4
30. Muskoka 317.5
31. St. Catharines 128.2
32. Kingston 186.7

32. Kingston 186.7 33. Ottawa Intl. 207.4

Quebec
34. Val D'or 284.5
35. Chibougamau 336.1
36. Montreal Dorval Intl. 196.6
37. Quebec Intl. 306.2
38. Sept Isles 406.6
39. Gaspé 384.9

New Brunswick 40. Moncton 338.4 41. Chatham 314.2

P.E.I. ·42. Charlottetown 307.7

Nova Scotia Newfoundland
43. Halifax 217.3 45. St. John's 330.9
44. Sydney 283.0 46. Goose A 491.7

Exhibit 2 (continued)

We all know it's going to snow—but what we don't know is how much. Isn't it nice to know that Firestone takes the guesswork out of buying snow tires in our unpredictable Canadian winter?

Buy Firestone Snow Biter Radials or 721 All Season Steel-Belted Radials between October 17 and December 31, 1983. And we'll refund all or part of your money if the snowfall is below average* between June 1, 1983 and May 31, 1984. If we do get ice and snow, Firestone tires give you the traction you need for most driving conditions.

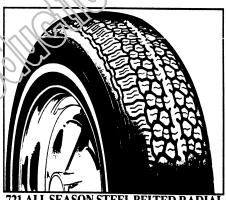
For information on how you pay no dough if it doesn't snow. refer to this handy chart.

*Snowfall statistics and definitions will be those of Environment Canada. As trage enough snowfall will be as supplied by Environment Canada for the 10-year period ending May 31, 1983. Determination of full or partial reimbursement will be based upon the snowfall statistics of a pre-determined weather reporting station. The reporting station applicable to your Firestone tre parchase is shown on the map of Canada in this brochure.

If It Snows Less Than	You Keep the Tires and You Receive:
20% average snowfall	100% refund of your pyrichase pyricu
30% average snewfall	75% refund of your purchase price
average snowfall	refund of your purchase price



SNOW BITER RADIAL



721 ALL SEASON STEEL-BELTED RADIAL



Exhibit 3



SNOW BITER RADIAL AND 721 METRIX RADIAL

PAY NO DOUGH

IF IT DOESN'T SNOW REFUND CERTIFICATE

OCT. 17, 1983 to DEC. 31, 1983

REFUND CLAIM

63741

Buy Firestone Snow Biter Radials or 721 Metrix All Season Steel Belted Radials between Oct. 17 and Dec. 31, 1983. And we'll refund all or part of your money if the snowfall is below average between June 1, 1983 and May 31, 1984.

IF IT SNOWS LESS THAN		YOU KEEP THE TIRES AND YOU RECEIVE:		
20%	of average snowfall*	100% refund of your purchase p		
30%	of average snowfall*	75%	refund of your purchase price	
40%	of average snowfall*	50%	refund of your purchase price	

"Snowfall statistics and definitions will be those of Environment Canada. Average annual snowfall will be as supplied by Environment Canada. Average annual snowfall will be as supplied by Environment Canada for the 10 year period ending May 31. 1983 Determination of full or partial reimbursement will be based upon the snowfall statistics of a pre-determined wealther reporting station. The reporting station applicable to your Firestone purchase and the terms of reimbursement are displayed all your Firestone Store or participating dealer across Canada.

Official Reporting Station	
rieporting ciation	

Average snowfall for Reporting Station

City	Town

ficates must be submitted to: Firestone Canada Inc., "Pay No Dough" Refund, 1579 Burlington
St. E., P.O. Box 400, Hamilton, Ont. LBN 3J1. Purchases of tires to be made during period
Oct. 17, 1983 - Dec. 31, 1983 to be eligible for refund. Envelopes to be postnerked no later
than Jan. 16, 1984. Offer good only in Canada at company-owned and uperated Firestone Stores
and participating dealers. Refunds to be mailed automatically to customers who qualify by
approx. June 30, as soon as snowfall figures are available from Firefronment Canada.

VALID ONLY WHEN SUBMITTED WITH ORIGINAL TIRE PURCHASE INVOICE. All refund certi-

CHECK TYPE OF TIRE PUF		
SNOW RITER RADIAL	721 METRIX	

STORE	DEALE	R REC	ORD S	ERIA L	NOWBE	HALL—R	CLOW

1st TIRE					
2nd TIRE		\sim			
3rd TIRE					
4th TIRE					

TIRE SIZE P-	11		

Automobile Make	License No.
	A ()
Model	

Cristoniei Name		<i>{}</i> }	<u> </u>	
Stree:		37. U	A	ot.
31100.	777	770		

City	Province	Postal Code
U.,		
Customer Phone No		

STORE/DEALER CEPTIFICATION

I certify that each and every condition sloove specified for this consumer refund has been riet, including purchase and delivery to the consumer of Snow Biter Radials or 721 Metrix All Season Steel Beltou Radials, within the prescribed offer

Store/Dealer Sig	anature .
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NOTE: It is very important that all information requested above is supplied incorrectly submitted certificates will be returned

d	_ `	N 7	h.
7	ate	20	Purchase

Store/Dealur	N	me	١
Oldi Ci Delli Ci		1100	

Store	Dealer	Street_
Cifta	O	

Date of Purchase

>	Province	 Postal Code	;

0 3/2		
Customal Signature,		
In roice #	Total Amount	

Value of purchase eligible for refund includes price of tires listed above, including all taxes, but excluding any other related services performed, e.g. wheel balancing, alignment and valves.

CUSTOMER — IMPORTANT — KEEP THIS STUB AS A RECORD OF YOUR REFUND

Snowall statistics and definitions will be as supplied by The uroning statistics and a similar principle of the first principl purchase and the terms or reimbursement are displayed at your Firestone Store or participating dealer across Canada.

CLAIM Nº 63741

Official Reporting Station		Average snowfall for Reporting Station	Date of Purchase .	
	-			
O: . T	***			—

City, Town

RECORD SERIAL NUMBER VN

1st TIRE				
2nd TIRE				
3rd TIRE				
4th TIRE				

Offer limited to minimum retail purchase of two (2) tires, maximum retail purchase of four (4) tires per vehicle.

Customer Enquiries - Please call Firestone Canada Inc., Consumer Affairs Departmen Telephone 416-545-4711, Ext. 356/421 or 409.

nvoice #	 Total Amount	
ivoice #	 lotal Amount	

Page 8 9A84E002

Exhibit 4

TORONTO AIRPORT SNOWFALL (cms.) (Environment Canada Data)

Year

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	TOTAL
1940	29.7	38.9	35.1	10.4	0.0	0.0	0.0	0.0	0.0	T	42.2	11.9	168.2
1940	41.7	27.4	26.2	10.4 T	0.0	0.0	0.0	0.0	0.0	Ť	42.2 T	16.0	111.3
1941	11.9	33.5	14.2	14.0	0.0	0.0	0.0	0.0	0.0	, T	14.5	37.1	125.2
1942	68.3	20.3	23.9	20.3	0.0	0.0	0.0	0.0	0.0	0.0	4.1	2.8	139.7
1944	6.6	49.5	30.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0	10.7	92.5	206.3
1945	45.7	30.2	3.3	10.9	0.0 T	0.0 T	0.0	0.0	0.0	U.U	12.7	18.5	121.3
1946	56.6	54.6	1.5	3.3	0.0	0.0	0.0	0.0	0.0	0.0	13.0	24.1	153.1
1947	59.9	25.1	36.6	12.7	0.5	0.0	0.0	0.0	0.0	0.0	13.0	34.5	182.3
1948	37.1	48.5	16.3	0.3	T	0.0	0.0	0.0	0.0) <u>T</u>) T	42.2	144.4
1949	21.8	30.5	32.5	1.3	0.0	0.0	0.0	0.0	0.0	(†(22.6	10.9	119.6
1950	41.7	70.9	29.7	1.8	0.0	0.0	0.0	0.0	0.0	0.0	57.2	3.6	204.9
1951	28.7	20.8	23.9	T	0.0	0.0	0.0	0.0	0.0	0.0	34.0	71.1	178.5
1952	45.5	19.1	7.9	0.3	T	0.0	0.0	0.0	0.0	2.3	T	9.1	84.2
1953	16.0	19.1	0.3	T	0.0	0.0	0.0	0.0	0.0	0.0	16.8	14.5	66.7
1954	37.1	36.8	30.5	Т	Т	0.0	0.0	0.0	0.0	0.0	2.8	24.1	131.3
1955	31.2	35.8	32.0	Т	0.0	0.0	0.0	0.0	0.0	तं€	6.1	44.7	149.8
1956	36.3	30.0	44.5	12.2	Т	0.0	0.0	0.0	T_	0.0	7.6	22.1	152.7
1957	42.2	31.0	11.9	17.8	0.0	0.0	0.0	0.0	0.0	((()	0.5	11.9	115.3
1958	32.8	19.6	10.2	4.6	T	0.0	0.0	0.0	0.0	0.0	28.2	25.4	120.8
1959	28.2	46.7	36.8	Т	0.5	0.0	0.0	0.0	0.0) T	15.5	21.3	149.0
1960	63.5	63.0	42.4	5.3	0.0	0.0	0.0	0.0	0.0	T	1.8	14.7	190.7
1961	26.4	30.2	42.2	15.0	√ , Ţ \	0.0	0.0	0.0	0.0	T	3.8	15.2	132.8
1962	26.7	62.0	2.5	5.3	0.0	0.0	0.0	0.0	0.0 حر	2.0	1.8	24.4	124.7
1963	19.6	16.3	20.1	13.2	1.8	0.0	0.0	0.0	0.0	0.0	1.3	49.5	121.8
1964	15.7	33.8	32.3	10.2	0.0	0.0	0.0	0.0	0.0	Т	3.3	23.9	119.2
1965	55.4	41.9	47.0	10.4	0.0	0.0	0.0	0.0	0.0	1.3	3.6	15.0	174.6
1966	70.9	13.5	13.5	24.6	1.3	0.0	0.0	0.0	0.0	0.0	9.4	20.3	153.5
1967	49.0	48.3	28.7	16. <u>3</u>	0.5	0.0	0.0	0.0	0.0	0.0	2.3	16.0	161.1
1968	51.1	7.6	39.9	T	0.0	0.0	0.0	0.0	0.0	T	7.6	50.5	156.7
1969	15.0	14.0	9.9	T	0.0	0.0	0.0	0.0	0.0	12.2	3.8	34.3	89.2
1970	29.5	15.5	16.3	2.8	0.0	0.0	0.0	0.0	0.0	T	4.6	67.8	136.5
1971	33.5	42.2 47.5	38.4	1.3	0.0	0.0	0.0	0.0	0.0	0.0	14.7	33.8	163.9 195.0
1972	31.0		40.9	11.9	0.0	0.0	0.0	0.0	0.0	T	14.2	49.5	195.0
1973	10.4 30.5	24.9 25.7	14.2	0.8	0.0	0.0 0.0	0.0	0.0	0.0	0.0 T	3.0 1.5	58.4	102.4
1974	30.5 13.2	29.0	16.5 26.4	24.4	0.0		0.0	0.0 0.0	0.0		0.8	27.4 64.0	157.8
1975 1976	53.1	4.8	37.8	10.2	0.0 T	0.0 0.0	0.0 0.0	0.0	0.0 0.0	0.0 T	3.0	40.9	149.8
1977	70.8	6.2	22.6	1.9	0.0	0.0	0.0	0.0	0.0	0.0	5.8	67.6	174.9
1977	63.4	28.3	11.4	0.8	0.0 T	0.0	0.0	0.0	0.0	0.0 T	13.4	14.2	131.5
1979	55.4	26.2	1.2	37.6	0.0	0.0	0.0	0.0	0.0	+ +	0.8	56.3	177.5
1980	10.8	14.9	38.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	10.9	28.3	103.2
1981	37.1	33.3	23.6	7.4	0.3	0.0	0.0	0.0	0.0	0.5	10.3	28.7	141.1
1982	36.4	28.5	24.7	7. 4 7.6	0.3	0.0	0.0	0.0	0.0	0.6	7.4	33.9	139.2
1983	10.8	9.6	18.6	1.6	0.0		3.3	0.0	2.3	0.3		22.3	

Page 9 9A84E002

Exhibit 4 (continued)

VANCOUVER AIRPORT SNOWFALL (cms.) (Environment Canada Data)

Year

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1940	5.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	11.6
1941	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
1942	3.0	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.6	27.6
1943	28.7	12.7	Т	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.4
1944	Т	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\T\	8.9
1945	0.0	0.0	Т	0.3	0.0	0.0	0.0	0.0	0.0	0.0	9.7	0.3	10.3
1946	5.1	16.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.9	6.1	35.9
1947	35.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	38.2
1948	0.0	19.8	Т	Т	0.0	0.0	0.0	0.0	0.0	0.0	0.5	42.2	62.5
1949	9.7	60.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.4	82.8
1950	94.0	3.8	Т	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<i>)</i> 9)1 1	Т	106.9
1951	25.9	11.9	41.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.2	123.1
1952	36.8	2.8	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	41.4
1953	8.6	T	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	8.6
1954	80.8	T	0.5	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	81.3
1955	0.5	19.1	2.8	2.3	0.0	0.0	0.0	0.0	0.0	0.0	15.2	16.0	55.9
1956	8.1	35.8	16.3	0.0	0.0	0.0	0.0	0.0	0.0	T		1.8	62.0
1957	35.6	23.6	3.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	T	62.2
1958	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	32.0	33.5
1959 1960	16.3	1.3	0.5 17.8	0.0 0.0	T/	0.0 0.0	0.0	0.0	0.0	0.0	8.1 T	T T	26.2 38.1
1961	20.3 7.4	0.0 2.5	3.3	0.0 T	0.0	0.0	0.0	0.0	0.0	0.0	T	20.3	33.5
1962	34.3	0.3	52.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	1.3	92.0
1963	10.7	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.5	14.2
1964	13.2	0.0 T	1.5 T.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	89.7	106.7
1965	45.2	1.0	0.8	T	0.0	0.0	0.0	0.0	0.0	0.0	J.5	39.4	86.4
1966	49.3	T.5	14.2	\\ {	0.0	0.0	0.0	0.0	0.0	0.0	Ť	6.4	69.9
1967	9.4	2.5	2.5	0.3	0.0	~ ~	0.0	0.0	0.0	0.0	Ť	18.3	33.0
1968	10.4	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.7	71.9
1969	64.8	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Т	0.0	71.4
1970	15.2	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	⊃ o,b~	Т	0.0	0.0	0.0	0.0	0.0	0.0	9.9	15.2	40.3
1971	121.9	32.3	7.6	Т	0.0	0.0	0.0	0.0	0.0	0.5	0.0	80.3	242.6
1972	35.8	0.8	1.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	Т	16.3	58.7
1973	11.9	T	0.3	一	0.0	0.0	0.0	0.0	0.0	0.0	11.9	5.3	29.4
1974	25.7	/ T	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Т	1.0	40.7
1975	26.7	43.7	7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	22.4	25.7	119.0
1976	3.3	18.5	16.0	∖ ∕₹	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.8
1977	11.5	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	9.9	30.8
1978	22.6	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.8	43.5
1979	6.4	3.7	0.0	0.0	Т	0.0	0.0	0.0	0.0	0.0	Т	Т	10.1
1980	10.9	0.5	Т	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.5	45.9
1981	0.0	4.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	Ţ	14.8	22.6
1982	53.9	6.9	Т	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Т	0.0	60.8
1983	0.0	0.0	0.0	3.8	0.0								

Page 10 9A84E002

Exhibit 4 (continued)

LONDON AIRPORT SNOWFALL (cms.) (Environment Canada Data)

Year

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1940	M	В	M	M	M	M	M	0.0	0.0	2.3	43.9	26.2	M
1941	27.2	25.7	16.3	0.0	0.0	0.0	0.0	0.0	0.0	T	6.6	21.6	97.4
1942	10.7	55.9	15.5	3.3	0.0	0.0	0.0	0.0	T	Ť	37.1	46.7	169.2
1943	87.4	49.5	16.0	20.3	0.0	0.0	0.0	0.0	0.0	6.9	19.3	24.6	224.0
1944	19.1	58.2	22.4	8.4	0.0	0.0	0.0	0.0	0.0	0.0	37.3	109.0	254.4
1945	45.0	22.1	1.8	Т	0.5	0.0	0.0	0.0	0.0	0.8	8.4	54.4	133.0
1946	41.4	45.7	1.0	T	0.0	0.0	0.0	0.0	0.0	0.0	6.9	27.9	122.9
1947	54.9	53.8	76.7	16.3	2.0	0.0	0.0	0.0	0.0	0.0	27.7	38.1	269.5
1948	53.8	14.2	15.2	1.3	1.3	0.0	0.0	0.0	0.0	16.5	1.0	35.1	138.4
1949	39.9	28.2	34.3	4.1	0.0	0.0	0.0	0.0	0.0	0.0	34.8	26.9	168.2
1950	37.8	58.4	55.9	13.2	0.0	0.0	0.0	0.0	0.0	0.0	88.6	49.8	303.7
1951	57.4	35.6	52.6	10.2	0.0	0.0	0.0	0.0	0.0	0.0	65.0	87.9	308.7
1952	42.4	36.3	16.8	5.1	0.0	0.0	0.0	0.0	0.0	4.3	8.4	30.7	144.0
1953	36.8	30.2	10.4	1.5	0.0	0.0	0.0	0.0	0.0	0.0	20.6	55.4	154.9
1954	44.5	28.7	51.8	1.8	T	0.0	0.0	0.0	0.0	3.3	13.7	25.9	169.7
1955	33.8	53.1	25.1	Т	0.0	0.0	0.0	0.0	0.0	T	17.8	72.1	201.9
1956	33.0	33.3	24.1	10.9	0.3	0.0	0.0	0.0	T	0.0	43.7	38.6	183.9
1957	48.5	30.2	20.1	17.5	0.0	0.0	0.0	0.0	0.0	Ť	33.5	23.6	173.4
1958	50.8	34.0	13.2	4.3	0.0	0.0	0.0	0.0	0.0	0.0	26.9	39.9	169.1
1959	78.0	23.6	32.0	8.0	1.0	0.0	0.0	0.0	0.0	(です	26.7	15.2	177.3
1960	62.7	70.6	64.3	5.3	T	0.0	0.0	0.0	0.0	3.3	25.4	32.5	264.1
1961	34.3	13.5	10.2	25.1	5.8	0.0	0.0	0.0	0.0	0.0	12.7	25.4	127.0
1962	54.1	56.4	5.8	8.4	0.0	0.0	0.0	0.0	0.0	6.9	2.3	72.4	206.3
1963	33.8	35.1	18.0	1.5	\ T	0.0	0.0	0.0	0.0	0.0	9.1	80.8	178.3
1964	30.0	34.0	21.8	5.3	0.0	0.0	0.0	0.0	0.0	1.3	20.1	37.3	149.8
1965	60.7	52.3	42.4	23.4	0.0	0.0	0.0	0.0	0.0	3.8	8.1	14.2	204.9
1966	72.6	25.4	21.3	20.3	T	0.0	0.0	0.0	0.0	T	24.4	66.3	230.3
1967	60.7	73.2	41.4	4.1	8.0	0.0	0.0	0.0	0.0	1.5	28.4	23.1	233.2
1968	66.5	58.9	29.5	3.6	Т	0.0	0.0	0.0	0.0	3.6	37.8	96.0	295.9
1969	85.6	40.9	27.2	0.3	1.0	0.0	0.0	0.0	0.0	15.2	30.7	64.5	265.4
1970	68.6	51.6	26.9	11.4	0.0	0.0	0.0	0.0	0.0	Т	74.2	84.6	317.3
1971	95.5	44.2	37.8	6.9	0.0	0.0	0.0	0.0	0.0	0.0	31.5	30.0	245.9
1972	48.5	72.6	26.2	11.4	0.0	0.0	0.0	0.0	0.0	3.3	30.2	60.5	252.7
1973	17.0	39.1	34.3	6.1	0.3	0.0	0.0	0.0	0.0	1.0	12.2	58.9	168.9
1974	29.5	44.7	20.8	5.1	0.3	0.0	0.0	0.0	Т	0.5	12.4	45.5	158.8
1975	35.1	47.5	32.0	32.3	0.0	0.0	0.0	0.0	0.0	0.0	17.3	77.0	241.2
1976	104.9	22.1	31.0	4.3	8.0	0.0	0.0	0.0	0.0	8.0	34.3	54.6	252.8
1977	48.6	21.3	22.0	6.5	0.0	0.0	0.0	0.0	0.0	Т	35.0	134.1	267.5
1978	130.3	16.5	18.2	3.7	0.0	0.0	0.0	0.0	0.0	Т	13.2	36.7	218.6
1979	57.8	16.4	31.0	29.5	0.0	0.0	0.0	0.0	0.0	5.2	3.8E		162.3
1980	27.0	27.1	29.0	4.9	0.0	0.0	0.0	0.0	0.0	4.4	11.7	36.0	140.1
1981	49.0	40.9	26.9	7.6	0.0	0.0	0.0	0.0	0.0	2.3	26.7	47.2	201.1
1982	55.0	38.9	27.9	9.1	0.3	0.0	0.0	0.0	0.0	1.9	24.4	51.3	208.8
1983	12.9	15.2	35.6	9.0	0.0								

T = Trace E = Estimated M = Missing