

# GENERAL ELECTRIC

CORPORATE ACCOUNTING OPERATIONS

SCHENECTADY, N. Y.



SUBJECT

8\*235-5668

COPIES: JF Flowers

CM Heiden

RE Pfenning

PLANT APPROPRIATION REVIEW  
APPROPRIATION REQUEST NO. 87-251

August 21, 1969

Mr. H. D. White  
Manager-Financial Analysis  
New Businesses Development Operations  
SCHENECTADY

Dear Mr. White:

As requested, I attended a meeting in Schenectady, New York on August 20, 1969, to review details of the proposal to lease space and purchase equipment for the production of an electric battery-powered garden tractor. Funds requested total \$525 000 of which \$312 000 is plant investment and \$213 000 is rental and related expense. With previously approved funds of \$247 000, total project costs are estimated at \$772 000. Approval by the Chairman of the Board is required for this request.

The New Businesses Development Operations has studied the electric vehicle market for the past several years, and has built and successfully demonstrated battery-operated vehicles including an automobile, an all-terrain sports vehicle, and a number of garden tractors. In December, 1968, approval was obtained to establish an operation within New Businesses Development Operations to engineer, manufacture, and test market an electric battery-powered garden tractor. Leased space was acquired at a favorable annual rate (\$.98 per square foot) in Corporation Park, Scotia, New York, with production scheduled to begin in November, 1969. The strategy to develop this business is (1) initial entry and product refinement during 1970; (2) evaluation phase, with minimum investment, during 1970 and 1971; and (3) rapid scaleup of manufacturing in 1971 if a favorable evaluation is obtained.

A ten to twelve "horsepower" model will be introduced initially with other sized models added later. The tractor runs on battery for two to three hours, then requires approximately a six hour recharge. Although the average owner would have a small sized lot (one-quarter to two acres), the limited running time between charges will probably be a customer purchase consideration which could have an adverse effect on sales. Prices will be competitive with comparable models of gasoline tractors, and General Electric share of the electric garden tractor market will be substantial until the expected entry of established gasoline tractor manufacturers during 1971. The component's forecasted market share declines from 100 per cent in 1970 to 20 per cent in 1974, although this latter figure appears low considering General Electric's introduction and continued improvement of the product. Distribution will be through outdoor power equipment dealers in the East, which will cover 80 - 85 per cent of the expected market. A recent survey of these dealers disclosed a favorable acceptance of this innovation.

August 21, 1969

The Company should realize the following benefits from this business opportunity:

1. Establishment of a profitable department sized business (forecasted 1974 sales of \$32.0 million and net income of \$3.9 million) which can be used as a base for further expansion into other electric home care and recreational products.
2. Development of a new dealer structure.
3. An expected increase in the market for General Electric motor, control and charger components as a result of new entries into the electric tractor field, as well as a possible benefit to Company suppliers of electric utilities.

The chances of accomplishing the established objectives of this project appear good. By excluding early investment in manufacturing facilities, risk has been minimized. Accordingly, I endorse this project for Corporate Finance, and recommend that it be approved.

J. F. Flowers, Manager-Business Analysis and Cost Accounting Consulting, Accounting, also represented Corporate Finance at this meeting to review financial data and offer consultation.

Very truly yours,

*W D Hibbert*

W. D. HIBBERT  
SPECIALIST-APPROPRIATIONS ANALYSIS

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## PLANT APPROPRIATION REQUEST

No. 87-251

1. Corporate Research & Development Division New Businesses Development Operation Department Schenectady, New York Location Advanced Products Operation Product Line	APPROVAL REQUIRED To be approved by Chairman of the Board After review with
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## 2. SUMMARY DESCRIPTION OF PROPOSED PROJECT

Lease of space and purchase of equipment for Engineering, Manufacturing, and Test  
Marketing of an electric battery-powered garden tractor, during the period 1969-1971.  
Category

## 3. AMOUNT OF APPROPRIATION (\$000)

	This request	Previously approved	Future requests	Total project
Investment (Exhibit A)	\$312	\$ 70	-	\$382
Expense Lease Commit. (ex.B)	3	82	-	85
Other Expense (Ex. C)	210	95	-	305
Total	\$525	\$247		\$772
Starting costs (as a memo.) (Exhibit D)	3 year plan			844
Amounts included in latest budget for total project—Investment	\$400 000		Expense	Not Segregated

4. Estimated additional annual statement net income to department (Year 1972)	\$895,000
Estimated annual gain (loss) in statement net income of other GE components	355 000
Total	\$1 250 000

Computed on annual volume of 13 000 tractors  
(units or dollars) which will be attained in 1972 (year).  
(or earlier)  
Utilization anticipated in that year 80 hours per week.

## 5. NUMBER OF EMPLOYEES (12/31/70)

Location	Before	After	Schenectady
Manufacturing			73
All others			53
Totals			126

6. Date of initial expenditure for project January 1969  
Date of project completion This phase - December 1971

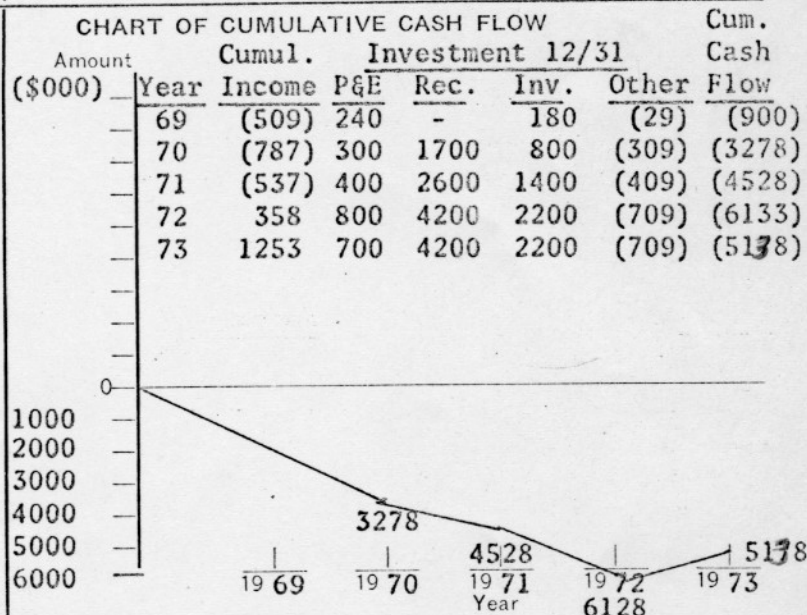
7. STATUS OF PLANNING 90 % complete.  
Remarks (if any):

## 8. CASH FLOW RESULTING FROM PROJECT

Year	Cash flow	Cumulative cash flow
19 69	\$ (900)	\$ (900)
19 70	(2378)	(3278)
19 71	(1250)	(4528)
19 72	(1605)	(6133)
19 73	995	(5138)
Total	(5138)	

Estimated cash generation in 19 73	
Additional statement net income	895
Additional depreciation expense	100
Other changes in statement investment	995
Total cash generated (used)	

## CHART OF CUMULATIVE CASH FLOW



## 9. PERFORMANCE ON CLOSED APPROPRIATIONS

Approved Actual V%

All appropriations—past 24 months  
Total expenditures  
Resultant increased annual statement net income  
Board level appropriations—past 60 months  
Total expenditures  
Resultant increased annual statement income

Not Applicable

10. BUSINESS HISTORY AND FORECAST OF Electric Garden Tractor PRODUCT LINE

Year	Sales			Statement Net income (after taxes)		% return on average statement investment	Contributed value	Residual income	
	Amount	% of market	Served industry	Amount	% to sales			Amount	% to contributed value
a. Last five years									
19									
19									
19									
19									
19									
b. Forecast with proposed project: (Forecast assumes no limitation on facilities or equipment)									
Current year estimated (\$000)									
19 69	-	-		(509)	-	-		(514)	
Next five years									
19 70	4350	1%	100%	(278)	(6.3)%	(19%)	\$2000	(\$353)	(18%)
19 71	8650	2%	90%	250	2.9	8%	4325	85	2%
19 72	14350	3%	33%	895	6.2	17%	7000	630	9%
19 73	22450	4%	21%	1995	8.9	25%	11225	1595	14%
19 74	32500	6%	20%	3825	11.8	35%	16250	3285	20%
Tenth succeeding year									
19									
c. Forecast increment resulting from project (Assumes Maximum Capacity of 13000 tractors per year)									
Current year estimated (\$000)									
19 69	-	-	-	(509)	-	-	-	(514)	-
Next five years									
19 70	4350	1%	100%	(278)	(6.3)%	19%	2000	(\$353)	(18%)
19 71	8650	2%	90%	250	2.9	8%	4325	85	2%
19 72	14350	3%	33%	895	6.2	17%	7000	630	9%
19 73	14350	3%	13%	895	6.2	17%	7000	630	9%
19 74	14350	2%	8%	895	6.2	17%	7000	630	9%
Tenth succeeding year									
19									

Federal income tax rate used for forecasts 52.8%

11. DETAILS OF AVERAGE INVESTMENT

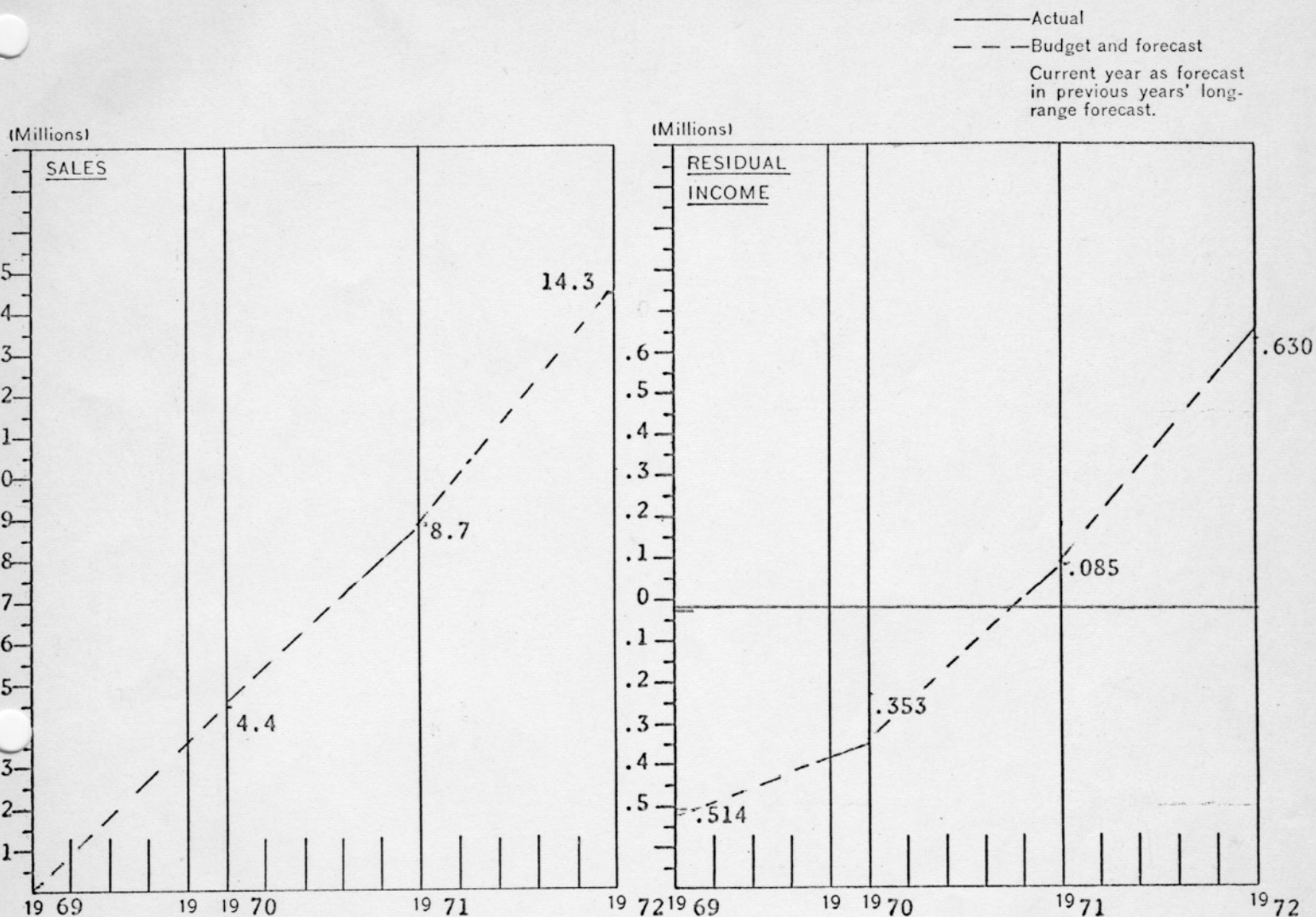
	Last two years actual		19 69 estimated	Next two years including proposed project	
	19	19		19 70	19 71
Plant			\$ 60	\$300	\$400
Receivables			-	900	2200
Inventories			40	500	1100
All others			-	(200)	(400)
			\$100	\$1500	\$3300

12. PRINCIPAL COMPETITORS

Name of competitor	Year	Garden Tractor Sales	Rank or % of market
International Harvester		50,000	1
John Deere		45,000	2
Sears Roebuck		40,000	3
Simplicity		25,000	4



### 13. CHART OF SALES AND RESIDUAL INCOME



#### 14. CRITERIA REQUIREMENTS

☐ QUALIFYING☐ NON-QUALIFYING

- a. Are the Department's annual budget and long-range forecast supported by substantial written plans?.....

### Profitability standards

Percent net income to sales..... Not %

Investment turnover.....times

Investment turnover.....	Applicable	%
Percent residual income to contributed value.....		

- b. Incremental residual income/(loss) over life of project.....

- c. Residual income for preceding twelve months—budget.....

—actual.....

Ratio of actual to budget ..... %

- d Total NBDO-Profit & Loss-Components (\$000)

Last Yr. 1968

Without Project

Residual income—budget.....	(512)
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—forecast.....

—current estimate.....(431).....

Ratio of estimate to budget or forecast.....84%.....

Current year—19		Next Year—19	
With project	Without project	With project	Without project
(864)	(350)	XXX	XXX
XXX	XXX		
(849)	(335)		
98 %	96 %	%	%

# 15. PERIOD OF EXPENDITURE

Month and year	Total	Investment	Expense	Quarter and year	Total	Investment	Expense
2nd Qtr. 1969	13	11	2	1st Qtr. 1971	8	-	8
3rd Qtr.	364	189	175	2nd Qtr.	59	16	43
4th Qtr.	51	36	15	3rd Qtr.	8	-	8
Sub Total	428	236	192	4th Qtr.	7	-	7
1st Qtr. 1970	28	16	12	Sub Total	82	16	66
2nd Qtr.	110	57	53	1972 Total	13	-	13
3rd Qtr.	34	21	13	Total	708	347	361
4th Qtr.	13	1	12	Contingencies	64	35	29
Sub Total	185	95	90	Grand total	772	382	390

# 16. DETAILS OF INCREMENTAL STATEMENT NET INCOME IN 1972

Incremental income from sales is caused by changes in:

Selling prices.....	\$	14 350	
Sales volume (increment with project).....			
Product mix.....			
Cost—base volume.....	\$	12 450	-a)
—incremental volume.....			

Incremental—Income from sales.....	1 900
—Federal income taxes.....	1 005
—Statement net income.....	\$ 895

1a- Details of (increases) decreases in cost with project:

	Total	Increment
Direct material.....	\$ 7 000	\$ 7 000
Direct labor (including benefits).....	450	450
Indirect labor (including benefits).....		
Maintenance.....		
Transportation.....	1 800	1 800
Spoilage, rework, shrinkage.....		
Depreciation.....		
Engineering costs.....	600	600
Administrative, Employee Relations, Finance and Marketing costs.....	2 600	2 600
	\$ 12 450	\$ 12 450

Sales volume with project, \$14 350 without project, -

# 17. ACCOUNTING DISTRIBUTION OF PROPOSAL

Cataloged plant and equipment:

Land and grading or improvements to land.....	\$
Buildings (.....sq. ft.).....	
Machinery and equipment.....	234
Other.....	69

Uncataloged plant and equipment:

Building services.....	
Foundations and installation.....	
Office furniture.....	9
Miscellaneous equipment.....	
Other.....	
Leasehold costs.....	70
Expenses:	Sub Total
Patterns and tooling.....	382
Rearrangement.....	210
Rent (total for period of lease).....	12
Transfer of personnel.....	73
Other.....	\$ 95

Total gross expenditure.....	\$ 772
Amount included for contingencies.....	64

# 18. FACILITY TO BE REPLACED

Description:

None

First cost.....	
Year purchased.....	
Gross book value.....	
Salvage value.....	

Proposed disposition:



19. PROJECT DESCRIPTION, REASONS FOR EXPENDITURES AND RESULTS TO BE ACCOMPLISHED.

The New Businesses Development Operations has studied the electric vehicle market for several years, and has built and successfully demonstrated battery-operated vehicles including an automobile, an all-terrain sports vehicle, and a number of garden tractors.

Approval was given by Mr. Parker in December 1968 to establish an NBDO profit and loss operation to engineer, manufacture, and test market an electric battery-powered garden tractor for a three-year period subject to reviews at periodic check points.

A preliminary appropriation covering leased space and leasehold costs was approved in March 1969 by Dr. Bueche. This current appropriation includes the costs of the leased facilities previously approved, plus the equipment required to produce up to 13,000 tractors on a two shift operation.

A forecast prepared in late 1968 indicated that this product would reach a \$25,000,000 sales level by 1974, and would return a substantial profit.

Recent forecasts indicate probable sales level of \$32,500,000 and returning a net profit of \$3,825,000.

20. Estimates and data prepared by.....

Appropriation recommended by.....

Appropriation endorsed and supporting data certified by.....

Appropriation endorsed or approved by.....

James T. Lawrence  
Advanced Products Operation  
Manager—Employee and Plant Community Relations

RM Fisher  
Manager—Engineering

Petry K. H. Kausano  
Manager—Manufacturing

Ernest L. Re  
Manager—Marketing Development

RM Heider 8/17/69  
Department General Manager Date

Division General Manager Date

Group Executive Date

President or Chairman of the Board Date

H. White 7/13/69  
Manager—Financial Analysis

## PLANT APPROPRIATION # 87-251

## ELECTRIC GARDEN TRACTOR FACILITIES

EXHIBIT A - EQUIPMENT

	<u>Total</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>
<u>Manufacturing</u>				
Elec. Assy. Area	28	18	-	10
Press Area	80	38	42	-
Machine Area	27	21	-	6
Final Assy.	17	11	6	-
Ship - Rec. + Renewal	3	3	-	-
Parts				
Quality Control	8	7	1	-
Lift Trucks	29	29	-	-
All Other	20	20	-	-
Sub Total	<u>212</u>	<u>147</u>	<u>49</u>	<u>16</u>
Contingencies	<u>22</u>	<u>15</u>	<u>5</u>	<u>2</u>
Total	<u>234</u>	<u>162</u>	<u>54</u>	<u>18</u>
<u>Other Equipment</u>				
Automobiles (6)	18	18	-	-
Trailers (6)	4	2	2	-
Trucks (1)	3	3	-	-
Office Equip.	16	10	6	-
Lab. Equip.	<u>30</u>	<u>12</u>	<u>18</u>	<u>-</u>
Sub Total	<u>71</u>	<u>45</u>	<u>26</u>	<u>-</u>
Contingencies	<u>7</u>	<u>4</u>	<u>3</u>	<u>-</u>
Total	<u>78</u>	<u>49</u>	<u>29</u>	<u>-</u>
<u>Leasehold Costs</u>				
Partitions	10	10	-	-
Air Conditioning & Addl. Heating	14	14	-	-
Lighting & Wiring	11	11	-	-
Ceilings	3	3	-	-
Flooring Tile	6	6	-	-
Lunch Room	5	-	5	-
Rest Rooms	<u>15</u>	<u>-</u>	<u>15</u>	<u>-</u>
Sub Total	<u>64</u>	<u>44</u>	<u>20</u>	<u>-</u>
Contingencies	<u>6</u>	<u>4</u>	<u>2</u>	<u>-</u>
Total	<u>70</u>	<u>48</u>	<u>22</u>	<u>-</u>
Exhibit Totals	<u>382</u>	<u>259</u>	<u>105</u>	<u>18</u>



PLANT APPROPRIATION # 87-251

ELECTRIC GARDEN TRACTOR FACILITIES

EXHIBIT B - LEASE COMMITMENT (\$)

	<u>Total</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>
Office Space - 2000 sq. ft. @ \$1.15+ eff. 7/16/69	\$ 6 900	\$ 1 100	\$ 2 300	\$ 2 300	\$ 1 200
Factory Space - 27000 sq. ft. @ 60¢ ft. eff. 7/16/69	48 600	7 425	16 200	16 200	8 775
- 13000sq. ft. @ 60¢ ft. eff. 7/1/70	15 600	-	3 900	7 800	3 900
Sub Total	71 100	8 525	22 400	26 300	13 875
Contingency - Incr. in taxes, Insurance, etc.	1 500	-	-	900	600
Total Rental Cost	72 600	8 525	22 400	27 200	14 475
Related Relocation Expenses	12 000	12 000	-	-	-
Total	<u>\$ 84 600</u>	<u>\$20 525</u>	<u>\$22 400</u>	<u>\$27 200</u>	<u>\$14 475</u>

7/23/69

PLANT APPROPRIATION #87-251

ELECTRIC GARDEN TRACTOR FACILITIES

EXHIBIT C - OTHER EXPENSES (\$000)

	<u>Total</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>
Reinstallation of Equip.	\$50	\$32	\$18	-
Patterns & Special Tooling	191	124	27	\$40
Office Equip. under \$200	25	8	17	-
Lab. Equip. under \$200	8	4	4	-
RECO Services	2	2	-	-
Other	<u>2</u>	<u>1</u>	<u>1</u>	<u>-</u>
Sub Total	\$278	\$171	\$67	\$40
Contingencies	<u>27</u>	<u>16</u>	<u>7</u>	<u>4</u>
Total	<u>\$305</u>	<u>\$187</u>	<u>\$74</u>	<u>\$44</u>

PLANT APPROPRIATION # 87-251

ELECTRIC GARDEN TRACTOR FACILITIES

EXHIBIT D - STARTING COSTS

Starting Costs are defined as those expenses incurred in advance of the start of regular production such as, but not limited to, product engineering on the new line, planning of manufacturing facilities, rearrangement of facilities, patterns and special tooling, and relocation of plant facilities.

Production of tractors is scheduled to begin at the end of 1969. Under this assumption, starting costs for the project total \$844,000, as detailed below:

Total 1969 Expenses (\$000)		\$ 1078
Less Expenses included in other Categories:		
Leasehold Costs Amortization		
(Incl. in Exhibit A)	7	
Rental & Related Expenses		
(Incl. in Exhibit B)	20	
Other Expenses (Included in Exhibit C):		
Reinstallation of Equip.	35	
Patterns & Special Tooling	136	
Office and Lab Equip.	13	
RECO Services	2	
Other	<u>1</u>	
Total		<u>234</u>
Net Starting Costs 1969		<u>\$ 844</u>

7/23/69



# OUTDOOR POWER EQUIPMENT OPERATION

## IMPUTED INTEREST COSTS AND ADDED COMPANY PROFITS

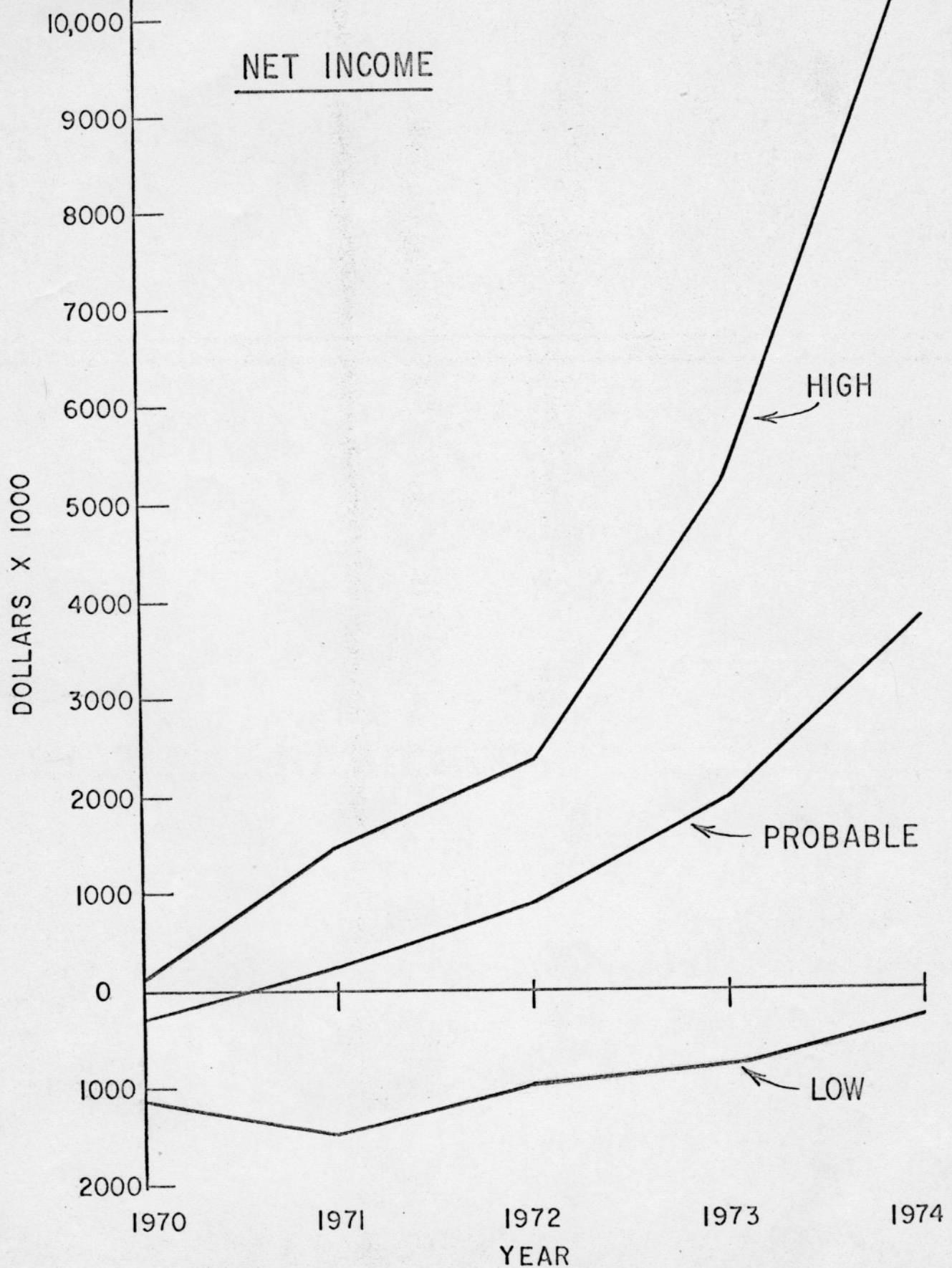
<u>PROBABLE FORECAST*</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>
Imputed Interest Cost	<u>47</u>	<u>88</u>	<u>121</u>	<u>145</u>	<u>147</u>
After Tax					
Co. Component Net Profits (Mainly Components & Materials Group)					
GE Mkt.	65	180	350	650	875
50% Ext. Mkt.	-	55	120	325	712
Total	65	235	470	975	1587

\*Garden tractors and accessories only

Memo: Added tractor and accessory sales in the 1/10 high estimate would add 78%, 86%, 91%, and 56% to the company component net profits.

Additional profit of approximately the same magnitude would be expected from the added new product sales.

# OUTDOOR POWER EQUIPMENT OPERATION



# OUTDOOR POWER EQUIPMENT OPERATION

