

Prosecutions
Instead of
Springfield

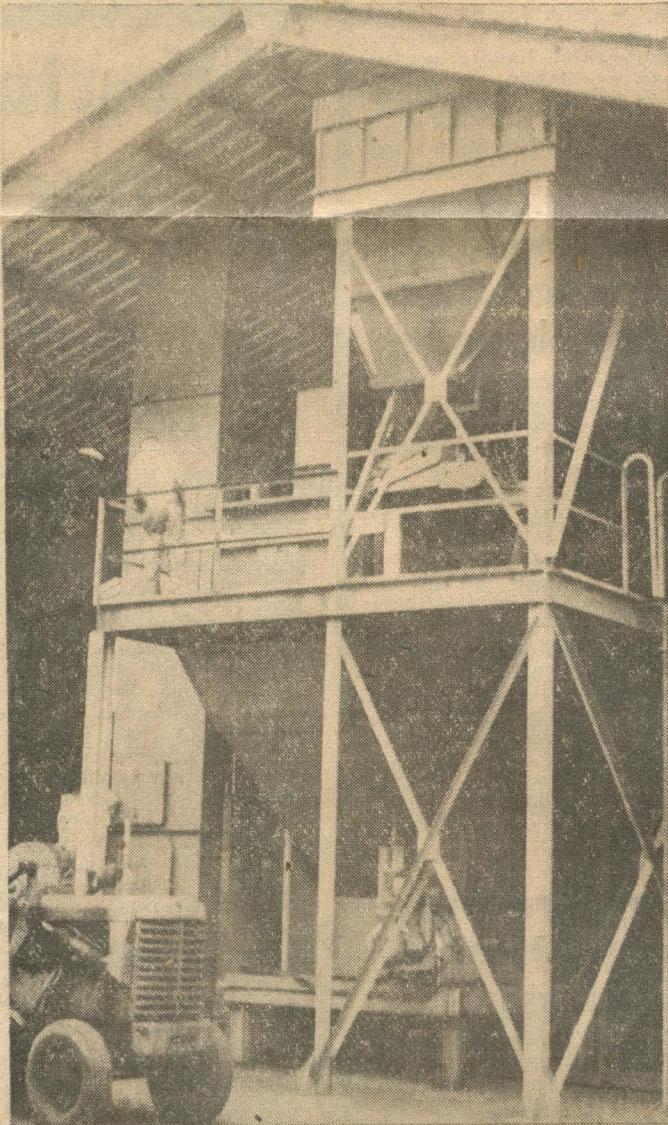
The Springfield

Fifty-Sixth Year—No. 70

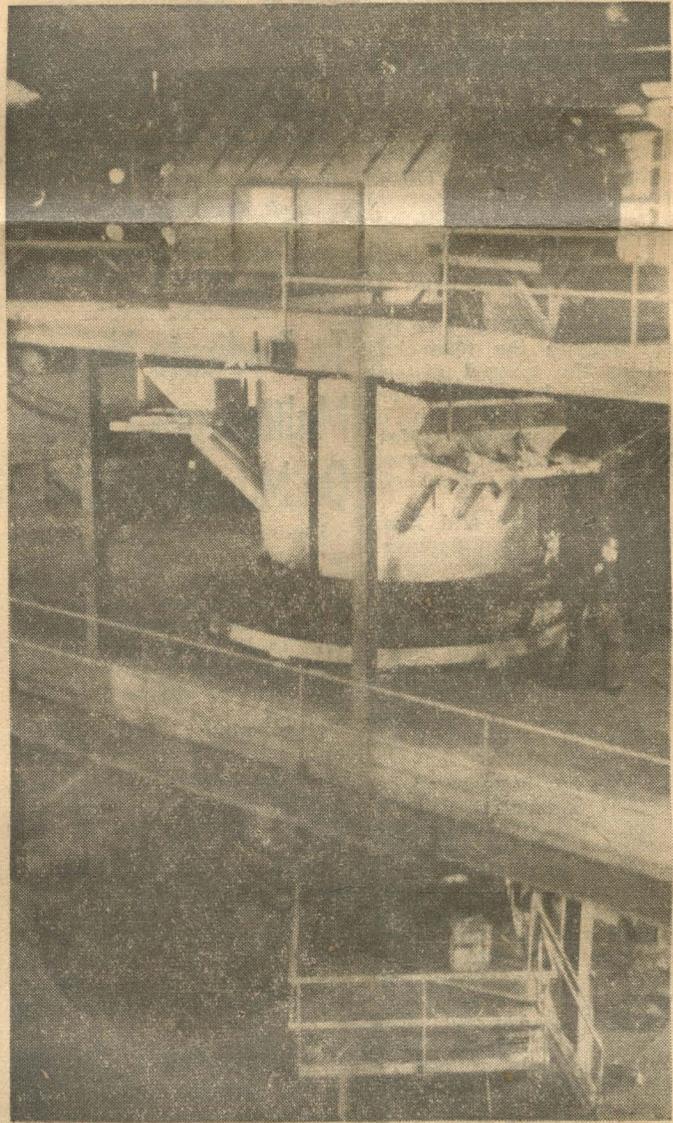
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Springfield, Oregon, Thursday,

National Metallurgical Corp. Turns on New Furnace Marking End Of Half-Million Dollar Expansion and Construction Project Here



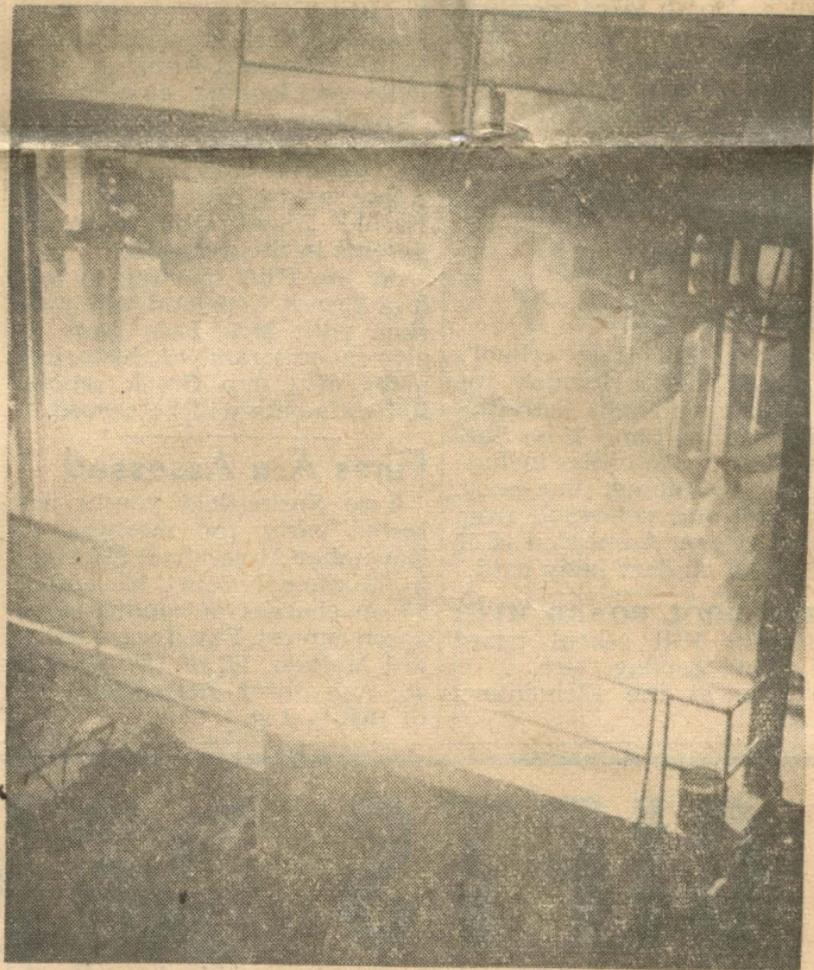
New charge mixing plant.



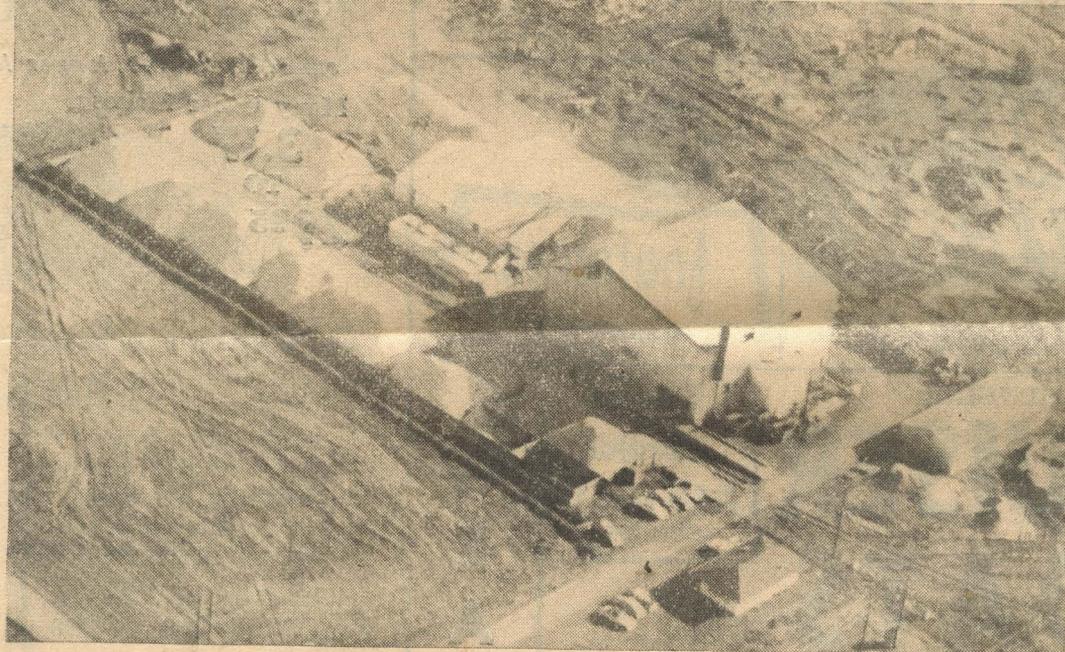
New furnace, three stories high.



Turning on the electricity.



Old furnace glows like this.



Aerial view shows newly-enlarged National Metallurgical co. plant. At upper right is new machine shop. Moving to the left, one sees the old building, which now houses two

large furnaces. Adjoining to the left is a new mixing and storage building. Piles of quartz, raw material for silicon production, may be seen.

This week marked the climax of more than a year of actual construction and more than two years of planning for a half million dollar enlargement of the National Metallurgical company's Springfield silicon plant.

A large new 3,000-KW furnace was turned on Tuesday and today is still being heated up preparatory to receiving its first "charge" of a mixture of quartz, coke and hog fuel from which comes silicon. The 24-inch-thick refractories around the furnace must be brought slowly to the sizzling temperature required for the process, hence the slow heating period. Vinton Platte, vice-president and manager of the company, estimated it would require 1,000 kilowatt hours of elec-

tricity to get the furnace hot enough to charge. It was expected the first charge would go into the furnace late today.

The improvements will more than double the output of silicon, Platte said.

The original furnace is 2,700-KW capacity with a 3,000-KWA transformer. The new 3,000-KW furnace has a 4,000-KWA transformer. The new furnace has Whiting hydroarc regulator, one of two furnaces in the United States using such a system (the other is in a General Electric plant at Schenectady, N.Y.), regulated by current take-off from bus bars. The new mixer system was designed by Alvin Nelson, secretary-treasurer and assistant manager. Each ingredient is

weighed, mixed and conveyed to storage, ready for the furnace crews.

The silicon will go, as does the present output, to National Metallurgical's three parent companies a Long Beach, Calif., Cleveland, Ohio, and Chicago, Ill.

Twelve people have been added to the permanent payroll.

In the accompanying pictures, the new furnace is shown at top right, nearly reaching from foundation to ceiling of a building 40 feet high. At top left is the mixer plant, 29 feet high. Platte turned on the first electricity, with Nelson watching. The glow of the old furnace, to be duplicated by the new one when it is charged and producing silicon, is blinding.

Oregonian Dec 22, 1959

Springfield Plant Sold

Apex Smelting Co., which operates National Metallurgical Corp. of Springfield, Ore., has been purchased by Aluminium Ltd., big Canadian aluminum producer, according to a joint announcement made in New York by Nathanael V. Davis, president of Aluminium Ltd., and William A. Singer, chairman of the board of Apex.

The Associated Press said that the purchase was made for approximately 340,000 shares of Aluminium stock. The stock was quoted Monday at 35 on the New York Stock Exchange which would make the purchase price in the neighborhood of 11.9 million dollars.

Stock Sharing Set

The transfer, the news service said, contemplates distribution of 1.6 shares of Aluminium for each share of Apex.

Aluminium Ltd. has headquarters in Montreal and is known as builder of the famed Kitimat project in British Columbia. It is one of the major suppliers of primary aluminum ingot to American fabricating companies.

Apex, a producer of aluminum foundry alloys has plants in Chicago, Cleveland and Los Angeles. The National Metallurgical plant at Springfield is a producer of silicon.

NATIONAL METALLURGICAL CORPORATION

P. O. BOX 656

CHICAGO OFFICE
2537 W. TAYLOR ST., ZONE 12

SPRINGFIELD, OREGON

PLANT LOCATION
SPRINGFIELD, OREGON
PHONE RI 6-3233

◆◆◆◆◆ NEW YORK OFFICE ◆◆◆◆◆
◆◆◆◆◆ 120 BROADWAY, ZONE 13 ◆◆◆◆◆

<u>PLANT</u>	--	NATIONAL METALLURGICAL CORPORATION
<u>LOCATION</u>	--	Springfield, Oregon
<u>PERSONNEL</u>	--	Approx. 30 employees
<u>PRODUCT</u>	--	Silicon (98.8%+)
<u>PROCESS</u>	--	Electro-thermal reduction of quartz.
<u>USES</u>	--	a) Making aluminum die cast alloys b) De-oxidizer in steel c) Transistors (after ultra-purification) d) Waxes, oils, resins, silicones

NEXT JULY

NEW FURNACE (1) EXISTING

How Big? 4000 KVA 40 TON
16' DIAM. WHITING
SILICON COAL
FURNACE

COST? \$500,000

STATIONARY
HEAVY

NO OF MEN 15 MORE

NEW POWER

Run 1000S FROM RENO - SINCA

SM AREA CORE

WOOD CHIPS

EXTRACTION

CONTRACT

FIRM DANIEL FABRI SPECIFIC

McKENNAN Co.

JUNE 17, 1960. AIME

NATIONAL METALLURGICAL COMPANY, Springfield, Oregon

Subsidiary of Apex Smelting and Refining, Aluminum Alloy melters.

Open top electric furnace is ~~xxxxxxx~~ charged as follows:

1. Crystal Peak quartz, shipped in from Northern California, near Reno, 500 pounds. 99.6% SiO₂. So pure that it often contains large quartz crystals. -8850
2. Wood chips 850 pounds.
3. Petroleum coke, 150 pounds.

~~The furnace revolves slowly around the carbons to prevent cratering~~
The furnace revolves slowly around the carbons to prevent cratering.

About 13,500 tons of quartz is kept on hand at the present. Impurities in the quartz include, .05 Alumina, .12 iron, Ca oxide trace, Mg oxide trace, Mn .05 Max.

One of the two furnaces is down now so the staff is reduced from 34 to 21 employees. The second furnace should be overhauled and back in operation late in the summer.

The final product, SILICON is ⁸95.5% pure. Most of the impurities come from the wood ash from the chips.

A new conveyor belt system and mixing plant has just been installed and should improve mixing and speed up operations.

Product has been sold entirely to APEX SMELTING, but now about half is being peddled on the open market. ?Tons per month ???

tcn

SiO₂ 60

Labor 34 x 20	=	680	DAY
2800 kw @ .44	=	240	"

Si = 28 = 47%

Si 98% = \$380 STW

250 r/10 Si ?

2800 kw x 24 x .4 =

6-30-60

NAT. METALLURGICAL

6,750 TONS QZ/YR = 3100 TONS SILICON

3100 x 90% = 2800 x \$380/TON = \$1,060,000 YR

EST. COSTS

MANAGEMENT			
LABOR	34 MEN x \$20/DAY x 250 DAYS	=	\$170,000 ✓
POWER	5800 KW @ .009 x 24 x 350 DAYS	=	194,000
QUARTZ	6,750 TONS x \$8.50/TON	=	57,375
WOOD CHIPS	11,500 TONS x \$10.00/TON	=	115,000
PET COKE	2,000 TONS x \$20.00 EST	=	40,000
INTEREST & AMORTIZATION (15 YRS)		=	86,600 ✓
TAXES - INSURANCE ETC		=	
COUNTY TAXES	\$10,000		
STATE CORP TAX	5,000		
FED INCOME TAX	157,500	=	157,500
INSURANCE - SIAC-FICA	10,000	=	25,000 ✓
REPAIRS & MISC (ESTIMATED)		=	20,000 ✓
DEPRECIATION (10 YRS)		=	100,000 ✓

406,375

TOTAL COSTS 980,475

TOTAL INCOME \$1,060,000 LESS \$980,475 = 79,500 = 7.5% PROFIT

* HOLLAND FUEL QUOTED (6-30-60) TARR-FREE CHIPS \$12.00/TON
 BE-S 177C (MR HOLLAND) REGULAR FIR CHIPS 9.00/TON
 HOG FUEL 1.50/TON

0000000000

6-30-60

Internal Revenue Service BE-4 8211 Ex 435 MR. (KWIESTAD)
QUBSTAD

1. What taxes do corporations pay?
2. What is the tax rate.
3. Is there a sliding scale based on amount of profit or is the tax tied to a profit-investment ratio?
4. Is it possible to get federal taxes collected from Oregon mining and metallurgical firms by categories?

Corporations pay federal income tax on their profits. The tax rate is based on the amount of profit. There is a sliding scale of rates based on the amount of profit. The tax is tied to a profit-investment ratio.

It is possible to get federal taxes collected from Oregon mining and metallurgical firms by categories. The tax is based on the amount of profit. The tax is tied to a profit-investment ratio.

The tax is based on the amount of profit. The tax is tied to a profit-investment ratio.

Very truly yours,

no-ak-10-1111
no-ak-10-1111

1-1-61

GOVERNING BOARD
MASON L. BINGHAM, CHAIRMAN, PORTLAND
LES R. CHILD, GRANTS PASS
NADIE STRAYER, BAKER



FIELD OFFICES:
2033 FIRST STREET
BAKER
239 SOUTHEAST "H" STREET
GRANTS PASS

STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
1069 STATE OFFICE BUILDING
PORTLAND 1

January 5, 1959

The annual round-up of information on Oregon's mineral and metallurgical industry will appear in the January issue of The Ore.-Bin. A complimentary copy will be mailed to you immediately it is printed.

Before we go to press, however, we need some first-hand information on your activities in 1958. News about improvements in your operation, changes in ownership, new markets or products is particularly welcome. If you wish you can write the information on the bottom of this sheet.

A stamped self-addressed envelope is enclosed. Since we go to press about January 15 we would appreciate hearing from you promptly.

Sincerely yours,

A handwritten signature in cursive script that reads "Ralph S. Mason".

Ralph S. Mason
Mining Engineer

RSM:lk
Encl.

U.S. Treasury Department Internal Revenue Service

or Other Taxable Year Beginning _____, 1959, Ending _____, 19____ (PLEASE TYPE OR PRINT)

A. Check if taxpayer is a sole proprietorship or partnership electing under section 1361 to be taxed as a corporation.

B. Is this a consolidated return? Yes No (See Instruction I)

C. Are you a personal holding company? Yes No (See Instruction H)

D. Total assets from line 13 Sch. L (See instruction O) \$

E. County in which located

F. Are you a resident foreign corporation? Yes No If "yes," place incorporated

Name WAS. MET

Number and street

City or town, postal zone number, State

GROSS INCOME

1. Gross Receipts	Less: Returns and allowances	1,146,000
2. Less: Cost of goods sold (Schedule A) and/or operations (Attach Schedule)		406,375
3. Gross Profit		739,625
4. Dividends (Schedule C)		
5. Interest on obligations of the United States, etc. issued:		
(a) Prior to 3-1-41—(1) U.S. savings and Treasury bonds owned in excess of the principal amount of \$5,000; and (2) obligations of a U.S. instrumentality	Gross Amount of Interest	Less: Amortizable Bond Premium
(b) On or after 3-1-41, by the U.S. or any agency or any instrumentality thereof		
6. Other interest		
7. (a) Rents	(b) Royalties	
8. Net gains (losses) (from separate Schedule D)		
9. Other income (Attach schedule)		
10. TOTAL income, lines 3 to 9, inclusive		739,625

DEDUCTIONS

11. Compensation of officers (Schedule E)	15,000	
12. Salaries and wages (not deducted elsewhere)	170,000	
13. Repairs (Do not include cost of improvements or capital expenditures)	20,000	
14. (a) Bad debts (Sch. F)	(b) Rents	
15. (a) Taxes (Sch. B) 25,000	(b) Interest 20,000	45,000
16. Contributions or gifts paid (Attach schedule)		
17. Losses by fire, storm, shipwreck, or other casualty, or theft (Attach sch.)		
18. (a) Amortization (Attach sch.) 66,600	(b) Depletion	66,600
19. Depreciation (Schedule G)		100,000
20. Advertising		
21. Amounts contributed under:		
(a) Pension, profit-sharing, stock bonus, annuity plans (Attach sch.)		
(b) Other employee benefit plans (Attach sch.)		
22. Other deductions (Attach schedule)		
23. TOTAL deductions in lines 11 to 22, inclusive		416,600
24. Taxable income before net operating loss deduction and special deductions (line 10 less line 23)		323,025
25. Less: Net operating loss deduction		
26. Taxable income before special deductions		
27. Special deductions (Schedule I)		
28. Line 26 less line 27		323,025

TAX

29. TOTAL income tax (from line 9, Tax Computation Schedule, page 3)	
30. Credits for amounts paid on 1959 income tax:	
(a) Tax paid with application for extension of time in which to file	
(b) Payments and credits on 1959 Declaration of Estimated Tax	
31. If tax (line 29) is larger than payments (line 30), the balance is TAX DUE. Enter balance here →	
32. If payments (line 30) are larger than tax (line 29) Enter the OVERPAYMENT here →	
33. Enter amount of line 32 you want: Credited on 1960 estimated tax _____ Refunded _____	

SIGNATURE AND VERIFICATION (See Instruction E)

I declare under the penalties of perjury that this return (including any accompanying schedules and statements) has been examined by me and to the best of my knowledge and belief is a true, correct, and complete return. If the return is prepared by a person other than the taxpayer, his declaration is based on all the information relating to the matters required to be reported in the return of which he has knowledge.

CORPORATE SEAL

(Date)

(Signature of officer)

(Title)

(Date)

(Individual or firm signature)

(Address)

Schedule H.—SUMMARY OF AMORTIZATION AND DEPRECIATION SCHEDULES

Part A.—DEPRECIATION		Part B.—AMORTIZATION	
1. Straight line method.....		8. Emergency facilities.....	
2. Declining balance method.....		9. Grain storage facilities.....	
3. Sum of the years-digits method.....		10. Research or experimental expenditures.....	
4. Based on units of production.....		11. Exploration and development expenditures.....	
5. Addl. 1st year (Sec. 179).....		12. Organizational expenditures.....	
6. Other methods.....		13. Trademark and trade name expenditures.....	
7. Total depreciation claimed.....		14. Total amortization claimed.....	

Schedule I.—SPECIAL DEDUCTIONS

1. Deduction for partially tax-exempt interest (See Instruction 5).....	
2. Dividends-received deductions:	
(a) 85 percent of column 2, Schedule C.....	
(b) 62.115 percent of column 3, Schedule C.....	
(c) 85 percent of dividends received from certain foreign corporations.....	
3. Total dividends-received deductions (sum of lines 2 (a), (b), and (c) but not to exceed 85 percent of the excess of line 24, page 1 over the sum of lines 1 and 5). (See Instructions in case of net operating loss or if the corporation is a small business investment company.).....	
4. Deduction for dividends paid on certain preferred stock of public utilities (See Instructions in case of net operating loss).....	
5. Deduction for Western Hemisphere trade corporations (See Instructions in case of net operating loss).....	
6. Total special deductions (enter here and on line 27, page 1).....	

TAX COMPUTATION FOR CALENDAR YEAR 1959 AND TAXABLE YEARS ENDING ON OR BEFORE JUNE 30, 1960
For other taxable years attach Schedule 1120 FY (See tax computation instructions)

1. (a) Line 28, page 1..... (b) plus line 1, Schedule I..... Enter total here →		323,025
2. If amount of line 1 is:		
(a) Not over \$25,000 —Enter 30 percent of line 1 (32 percent if a consolidated return).....		
(b) Over \$25,000 —		
Enter 52 percent of line 1 (54 percent if a consolidated return).....	162,000	
Subtract \$5,500, and enter difference.....	5,500.00	157,500
3. Adjustment for partially tax-exempt interest. Enter 30 percent of line 1 (b), but not in excess of 30 percent of line 1..		
4. Normal tax and surtax (line 2 less line 3).....		157,500
5. Income tax (line 4, or line 20 of separate Schedule D).....		
6. Credit allowed a domestic corporation for income taxes paid to a foreign country or United States possession (submit Form 1118).....		
7. Balance of income tax (line 5 less line 6).....		
8. Tax under section 541 of the Internal Revenue Code (from Schedule 1120 PH).....		
9. Total income tax (line 7 plus line 8). Enter here and on line 29, page 1.....		

ADDITIONAL INFORMATION REQUIRED

G. Employer Identification No.	
H. Date incorporated	
I. Did the corporation at any time during the taxable year own directly or indirectly 50 percent or more of the voting stock of a domestic corporation?..... <input type="checkbox"/> Yes <input type="checkbox"/> No Did any corporation, individual, partnership, trust, or association at any time during taxable year own directly or indirectly 50 percent or more of the corporation's voting stock? <input type="checkbox"/> Yes <input type="checkbox"/> No If either answer is "Yes," attach separate schedule showing: (1) name and address; (2) percentage of stock owned; (3) date stock was acquired; and (4) the District Director's office in which the income tax return of such corporation, individual, partnership, trust, or association for the last taxable year was filed.	If answer is "Yes," state the approximate aggregate gross dollar amount billed during the taxable year under all such contracts and/or subcontracts. (See Instruction G-(4)).....
J. Did the corporation make a return of information on Forms 1096 and 1099 for the calendar year 1959 in connection with: Taxable dividends..... <input type="checkbox"/> Yes <input type="checkbox"/> No Other payments..... <input type="checkbox"/> Yes <input type="checkbox"/> No (See Instruction G-(1).)	L. Did the corporation at any time during the taxable year own directly or indirectly any stock of a foreign corporation?..... <input type="checkbox"/> Yes <input type="checkbox"/> No If answer is "Yes," attach statement as required by Inst. K.
K. Did the corporation, during the taxable year, have any contracts or subcontracts subject to the Renegotiation Act of 1951..... <input type="checkbox"/> Yes <input type="checkbox"/> No	M. Enter amount of income (or deficit) from: (a) line 32, page 3, Form 1120, 1956.. .. (b) line 32, page 3, Form 1120, 1957.. .. (c) line 32, page 3, Form 1120, 1958.. ..
	N. If corporation is a cooperative association, check whether: (1) <input type="checkbox"/> farmers' marketing or a farmers' purchasing cooperative association, (2) <input type="checkbox"/> consumers' cooperative association, or (3) <input type="checkbox"/> other cooperative association.
	O. Business group code No. and principal business activity (see Page 8, instructions).....