A D D E N D A NO. 1

TO COPPER TARIFF BROCHURE

March, 1958

Map showing submarine sinkings in World War II

Discussion of Foreign Currency Devaluation

Estimated Employment, weekly hours etc.

Continuation of U.S.B. M. Monthly Mineral Market Reports Aug. to Dec. 1957

Summary of Refined Copper Statistics, with Release.

Imports of Copper into U.S. 1956 - 1957

Countries in which Copper Imports originated.

Exports of Copper from U.S. 1956 - 1957

Copper Deliveries to G.S. A. during 1957

Chilean Protest to Proposed Tariff

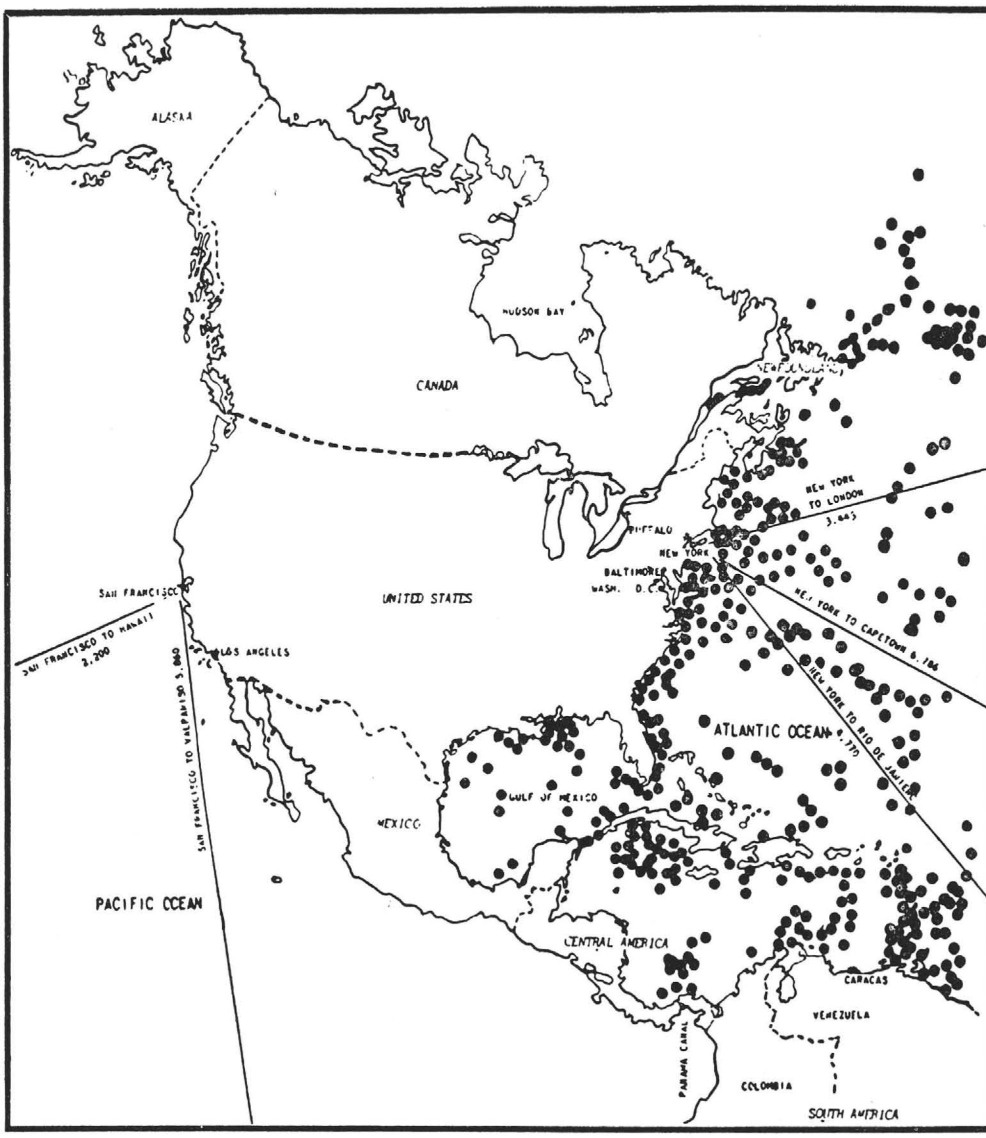
Answer to Chilean Protest

Copy of Proposed Copper Tariff Bill

List of Sponsors of Copper Tariff Bill

Continuation of Wall Street Journal Reports Oct. 1957 to March 1958

Arizona Department of Mineral Resources March, 1958



This potent exhibit shows why metal and mineral development within the United States should be pushed to the utmost in the interest of national defense and security. The above map pinpoints the location of 425 ships which were sunk by submarine or other enemy action along the Atlantic seaboard during a six-month period in 1942. These ships were bearing minerals, metals and other raw materials from foreign countries. The total ship tonnage lost during World War II was 6,764,000 tons, of which 3,609,000 dead weight tons went down in 1942. The growing dependency on foreign production is a definite and unnecessary hazard.

DEVALUED FOREIGN CURRENCIES USED AS TRADE WEAPON

TO UNDERSELL COPPER PRODUCED IN UNITED STATES

In addition to lower labor costs and much higher grade of ore, it has been pointed out that foreign mines have been favored with better currency exchange. Just how this advantage of better currency exchange is gained by foreign copper producers is explained in the following discussion.

In the first place, when a country devalues its currency, it is for the purpose of cutting down on its imports and increasing its exports. Its citizens are discouraged from purchasing another country's goods because they have to pay out more pesos or francs or pounds (or whatever their unit of value is) to pay for the goods received from another country which has not devalued its currency. On the other hand, there is a rush to sell its goods to such a country because they receive in payment a unit of value that enables them to purchase more domestic labor and supplies than they had been able to do before devaluation. Their cost of production is the same (in pesos or pounds) both before and after devaluation.

For example, suppose a country devalues its currency from 7½ pesos to the dollar to 15 pesos; a fifty percent devaluation. Domestic cost of producing goods would remain the same, in pesos, both before and after devaluation. Suppose they ship their goods to a dollar country. Then they would receive a dollar's worth of pesos - fifteen; where they had formerly received 7½. They have made a profit of 7½ pesos, or fifty cents, by the exchange. On the other hand, if they purchase a dollar's worth of goods from the dollar country, they would have to pay fifteen pesos for it where it had formerly cost only 7½ pesos. They have incurred a loss of 7½ pesos in their own money.

On September 19, 1949, England officially declared that the pound would henceforth be worth $2.80 in U. S. dollars, instead of $4.03. Instantly many other countries devalued their currencies. This was especially true of nations comprising the British Commonwealth, such as Australia, Rhodesia and Union of So. Africa, which devalued the same amount, namely 30.5%. Like a chain reaction, devaluation then spread to other countries, such as Belgian Congo, Chile, Mexico and Peru. The reason these other countries immediately took action was because they did not wish to be flooded by British merchandise to the detriment of their own domestic economies.

Foreign copper producers in many cases were greatly benefited by devaluation, because their metal could be produced with little or no increase in the cost of production, and could be sold in the United States at prices which provided a handsome return.

The following table, compiled from data of the International Monetary Fund, local banks and The Wall Street Journal, shows the extent of the devaluations in the more important countries which have exported copper to the United States:

FOREIGN EXCHANGE IN DOLLARS

	Jan. 1, 1949	Dec. 30, 1957	% Devalued
Australia (Pound)	$ 3.22	$ 2.24	30.4
Belgian Congo (Franc)	.0228	.020	12.3
Canada (Free Dollar)	.925	1.01 5/8	8.1 (Increase)
Mexico (Peso)	.1456	.0802	44.9
Peru (Sol)	.0675	.0528	21.8
Rhodesia & U.of So.Africa (Pound)	4.03	2.80	30.5
Quantitative Average *			15.33

* In 1956	Imported into United States	
	Tons	Percent
Australia	18,457	6.26
Belgian Congo	12,763	4.33
Canada	119,605	40.59
Mexico	52,389	17.78
Peru	42,839	14.54
Rhodesia & U.of So.Africa	48,618	16.50
	294,671	100.00

Note: Chile, with its 235,527 tons of copper, exported to the U. S. in 1956, is not included in this table, as its devaluation from $.0329 to $.0015 in its value of the peso, or 96.6% devaluation, and 2,841.2% increase in purchasing power of the U.S. dollar in terms of the new devalued peso, puts it so far out of line with the other countries, that the terrific inflation which has taken place there makes it of no value for comparative purposes. Unquestionably the copper producer in Chile did not get the benefit of such enormous purchasing power of the U. S. dollar in terms of the 0.15 cent peso.

Based upon the proportion of copper exported by the above six countries to the United States in 1956, the average percent devaluation amounted to 15.33%. That is, each dollar received by these countries was equivalent to $1.181 in purchasing power on the average, based on the new currency value. In other words, the average devaluation of 15.33% resulted in an increase of 18.1% in purchasing power for the dollar.

Taking the average devaluation of 15.33% for each of the above six countries, the shipment of a pound of copper to the United States, when the domestic price of copper is 30 cents, would result in that average country being able to purchase 35.4 cents' worth of labor and supplies on the basis of that country's new currency value. Assuming such country's cost of production would be the same, both before and after devaluation, the profit from selling copper in the United States would be 5.4 cents per pound. With a 4-cent tariff, the profit would still be about 0.7 cts. per pound.

Taking each country individually the profit per pound of copper would be according to the following table:

	% Devalued	Purchasing Power of 30 cents U. S.	Profit Per Lb.Copper Due to Devaluation	Purchasing Power of 30¢ U.S. With 4¢ Tariff	Profit Per Lb.Copper Due to Devaluation
Australia	30.4	$ .432	$ .132	$ .374	$ .074
Belgian Congo	12.3	.342	.042	.296	.004(loss)
Canada	8.1 Inc.	.270	.03(loss)	.234	.066(loss)
Mexico	44.9	.544	.244	.472	.172
Peru	21.8	.383	.083	.332	.032
Rhodesia & U.of So.Africa	30.5	.432	.132	.374	.074

It may be argued that while foreign currency was devalued 15.33% in 1949, the American dollar has lost 16.67% of its purchasing power during the subsequent 8 years. (Consumer Price Index in 1949 being 100; and in 1957 it reached 120). In other words, a 30 cent quotation for copper in 1957 would really be equivalent to 25 cents in 1949 dollars. The foreigner's profit of 18.1% by devaluation would still be 4.5 cents (18.1% of 25.0 cents), or more than enough to pay a 4-cent tariff on copper. He would still be in competition with U. S. copper producers, with his cheap labor and high-grade ore. The two countries which have suffered because of devaluation by other countries are the United States and Canada, and the latter has had the advantage of copper being a by-product with relatively low cost of production.

Foreign countries which have profited handsomely by devaluation, because of large exports of copper to the United States are Australia, Chile, Mexico, Peru, Rhodesia and Union of So. Africa.

All of this brings to mind the question of reciprocal trade with foreign countries. If the proponents of reciprocal trade could come up with a formula for balancing currency exchange between all countries, there would be little call for a tariff on imports and exports.

It may be worthy of note that, recently, foreign copper prices have been roughly four cents per pound under U. S. copper quotations. With their average increase of 18.1% in purchasing power in their own country, foreign producers are well able to offer their copper at $4\frac{1}{2}$ cents under U. S. quotations (18.1% of 25 cents).

Arizona Department of Mineral Resources January, 1958

APPENDIX

January, 1958

CURRENCY DEVALUATIONS IN CERTAIN COUNTRIES

(Source: Data of the International Monetary Fund)

AUSTRALIA - The initial par value of the Australian pound was $3.22, as established on November 17, 1947. On September 18, 1949, the par value was changed to $2.24 which happens to be the rate in effect today.

BOLIVIA - The initial par value of the boliviano, established on December 18, 1946 was 2.38¢ per boliviano. The par value was changed by decree on April 8, 1950 to 1.66667¢. On May 14, 1953, it was again changed to 0.526316¢ per boliviano. The free market rate today is 0.013¢.

CHILE - The initial par value of the Chilean peso, established on December 18, 1946 was 3.22581¢ per peso. On October 2, 1953, the par value was changed to 0.909091¢ per peso. The Chile peso in today's free market is .145¢ per peso.

MEXICO - The initial par value of the Mexican peso, established on December 18, 1946 at 20.5973¢ per peso. On June 17, 1949, the par value was changed to 11.5607¢ per peso. On April 19, 1954, it was again changed to 8.00000¢ per peso. Mexico today is 8.02¢ per peso.

PERU - On December 18, 1946, the par value was 15.28¢ per sol. Peru now has a free market and a new par value has not been established. The latest quotation is 5.28¢ which measures the extent of the devaluation.

UNION OF SO. AFRICA - On December 18, 1946, the initial par value of the South African pound was $4.03. On September 18, 1949, it was reduced to $2.80. It is $2.81½ currently.

BELGIAN CONGO - The Belgian Congo franc was established on December 18, 1946, at 2.28¢ per franc. On September 22, 1949, it was changed to 2.00¢ per franc.

January 10, 1958

ESTIMATED EMPLOYMENT, WEEKLY HOURS, HOURLY & WEEKLY EARNINGS IN ARIZONA COPPER MINING, BY YEARS FROM 1951 TO 1956 INCL., AND BY MONTHS IN 1957

Source: Arizona Employment Security Commission

These estimates are based upon a sample of full and part-time production and related employees whose payroll and hours are reported for the pay period nearest the 15th of each month.

COPPER MINING

	Employment	Weekly Hours 1/	Hourly Earnings 2/	Base Hourly Rate	Weekly Earnings
1951, April	10,400	47.2	$ 1.71	1.589	$ 80.71
1952	10,700	47.1	1.92	1.785	90.43
1953	11,400	46.7	2.05	1.896	95.73
1954	11,600	45.3	2.13	2.012	96.49
1955	11,700	47.0	2.23	2.075	104.81
1956	13,200	47.0	2.38	2.215	111.86
1957, Jan.	13,700	45.2	2.43		109.84
Feb.	13,800	46.1	2.42	1st	111.56
Mch.	13,900	45.5	2.44	6-Mos.	111.02
Apr.	14,000	45.8	2.41	Avg.	110.38
May	14,100	45.3	2.41	2.290	109.17
June	14,200	44.5	2.44		108.58
July	14,100	43.0	2.43		104.49
Aug.	14,200	42.2	2.43	2nd	102.55
Sept.	14,000	42.8	2.42	6-Mos.	103.58
Oct.	13,900	41.8	2.43	Avg.	101.57
Nov.	13,900	40.5	2.42	2.364	98.01
Dec.	13,900	42.2	2.40		101.28
1957 Avg.	14,000 3/	43.74	2.42	2.324	106.00

1/ Actual hours worked.

2/ Includes overtime earnings.

3/ Increase due to: San Manuel and Pima reaching economical capacity production, Inspiration's new concentrator, and Duval's new development.

Arizona Department of Mineral Resources — January, 1958

The strike at Northern Rhodesian mines which began July 20 was ended July 30.

AUGUST 1957

Domestic mine production of recoverable copper in August rose 3 percent over July to 87,600 tons, according to the Bureau of Mines, United States Department of the Interior. Of the chief copper-producing States, Arizona, Montana, Nevada, and Michigan registered gains in production, while Utah's output dropped 17 percent, and that in New Mexico was virtually unchanged.

Smelter production of copper from domestic and foreign materials rose 8 percent in August, whereas refinery output from similar sources was unchanged from that in July. Production of refined copper from scrap by the refineries increased 4 percent.

Consumption of refined copper increased 41 percent mainly as a result of resumption of full work schedules following annual vacations in July. Stocks of refined copper decreased 6 percent in August but inventories of blister and materials in process of refining rose 5 percent.

On August 6 and August 8 primary producers reduced the price of electrolytic copper 3/4 cent per pound to 28.5 cents per pound, delivered. Custom smelters' price was lowered on August 21, to 27.75 cents, delivered, and again the following day to 27.25 cents, and on August 28 to 27 cents.

Effective August 12, the Rhodesian Selection Trust group price was cut to 26.25 cents per pound. Prices on the London Metal Exchange declined throughout the month and on August 27 dropped to the equivalent of 25.19 cents per pound.

SEPTEMBER 1957

September production of recoverable copper at domestic mines declined 2 percent from that of August to 85,000 tons, according to the Bureau of Mines, United States Department of the Interior. All but two of the copper-producing States showed decreases ranging from 2 to 25 percent. Generally, the reductions in output were due to the shorter work period, however, the largest percentage loss was registered by Michigan where a strike at the White Pine mine began on September 23. Utah mine production rose 11 percent lessening the overall decline.

Smelter and refinery production from domestic and foreign primary materials decreased 7 percent and 9 percent to 92,000 tons and 100,000 tons, respectively. Refined copper recovered from secondary materials amounted to 16,000 tons, 12 percent below August.

Consumption of refined copper was down 6 percent from the previous month. Stocks of refined copper fell 18 percent while inventories of blister, including materials in process of refining, rose approximately 6 percent.

Frequent price changes during September characterized both domestic and foreign markets. Early in the month the principal domestic producers reduced the delivered price 1.5 cents to 27 cents per pound. At the same time custom smelters lowered their price 0.5 cent to 26.5 cents and on September 9 dropped the quotation to 25 cents. Increased sales at the end of the second week prompted two 0.5 cent custom smelter increases on September 12 and 13 to 26 cents per pound and this price held throughout the month. Price changes quoted by the Rhodesian Selection Trust group were similar to those of the United States custom smelters and the London Metal Exchange quotations fluctuated considerably during the month.

September 12, Calumet & Hecla, Inc., Michigan, announced a 10-percent cutback in production, and on September 17, Phelps Dodge Corp. announced a 5-percent reduction in output at certain properties in Arizona.

OCTOBER 1957

Mine production of recoverable copper in the United States in October rose 3 percent over September, but was 1 percent less on a daily average basis, according to the Bureau of Mines, United States Department of the Interior. Smelter and refinery output of refined copper from domestic and foreign materials rose 10 and 15 percent, respectively, and production from scrap by primary and secondary plants increased 24 percent. Consumption of refined copper rose 16 percent in October. Except for January, consumption was at the highest rate of the year and approximated the average for all of 1956.

Although mine output was higher in October than in September, operating rates varied considerably in the principal producing States. There were increases of 16, 11, and 5 percent, respectively, in Utah, Montana and Arizona contrasted with decreases of 38 and 36 percent, respectively, in Michigan and New Mexico. Michigan's low production was due to a strike at the White Pine property which began on September 23 and ended October 28. The decrease in New Mexico resulted from a two-week shutdown for repairs at the Chino Mines Division of Kennecott Copper Corp.

The Rhodesian Selection Trust Group announced that effective October 7 it would price copper on the London Metal Exchange price basis. The RST had established its fixed-price basis on May 9, 1955, and the changeover to the LME basis ended the dual pricing for Rhodesian copper that began more than 2 years ago. The price quoted by primary producers for electrolytic copper, delivered in the United States remained unchanged at 27 cents per pound; on October 15 custom smelters reduced their price ½ cent to 25.5 cents, delivered. On the London Metal Exchange prices for copper fluctuated widely. Early in the month copper was quoted at 23.625 cents per pound; the price dropped sharply on October 11 to 22.94 cents; it dropped again on October 22 to 22.5 cents, and on October 26 the price was at a new low - 22.4 cents. The price advanced late in the month and was equivalent to 23.5 cents per pound.

The strike at Gaspe Copper Mines, Ltd., Quebec Province, Canada, in effect for seven months, was ended early in October.

NOVEMBER 1957

Mine production of copper in the United States rose 4 percent in November on a daily average basis, but the total tonnage produced was virtually unchanged from October, according to the Bureau of Mines, United States Department of the Interior. Increased output in Michigan and New Mexico offset decreases in the other principal copper-producing States.

Smelter production from domestic and foreign materials decreased 6 percent in November, whereas refinery output from similar sources rose 11 percent. Refined copper production from secondary materials at primary and secondary plants dropped 4 percent.

Consumption of refined copper in November was 107,500 tons compared with 126,100 tons in October, and, except for July was at the lowest level of the year. Consumption for January-November 1957 was 11 percent less than the corresponding period of 1956.

Stocks of refined copper at primary refineries rose 4,100 tons, whereas inventories of blister and materials in process of refining dropped 13,000 tons.

The price for electrolytic copper quoted by primary producers continued at 27 cents per pound, delivered. The custom-smelter price was raised to 26 cents per pound on November 6; it was lowered to 25.5 cents on November 13 and to 25 cents on November 21.

DECEMBER 1957

Production of recoverable copper in the United States was 3 percent less in December on a daily average basis but the total tonnage produced was virtually unchanged from November, according to the Bureau of Mines, United States Department of the Interior. Small increases in Arizona, New Mexico, and Utah offset decreases in Michigan and Nevada, and output in Montana was unchanged.

Smelter and refinery production from domestic materials rose 2 and 10 percent, respectively, whereas output from foreign sources decreased 4 and 9 percent, respectively. Refined copper produced at primary and secondary plants from secondary materials fell 13 percent.

Consumption of refined copper dropped to 101,000 tons in December, 6 percent below November.

Producers' stocks of refined copper on December 31 were 21 percent more than those on November 30, but stocks of blister and unrefined materials were 4 percent less.

The price of refined copper quoted by primary producers remained at 27 cents per pound delivered in December. On December 16 the custom smelter price was advanced from 25 cents to 25.5 cents per pound. London Metal Exchange quotations dropped to 21.94 cents per pound on December 11; this was the lowest price since June 5, 1950 when the Government-controlled price was 21.25 cts. The LME price rose slightly about mid-December and ended the year at 22.5 cents.

On December 16 Kennecott Copper Corp. announced a cutback of approximately 12 percent in production at mines in Utah, New Mexico and Nevada. The lower production would be accomplished by a reduction from 7 to 6 days in the work week and would go into effect shortly after the beginning of 1958. Operations at the Ray mine in Arizona have been on a 6-day-a-week basis since Spring 1957. On December 17 Cerro de Pasco stated that a reduction of about 11 percent would be made in production at its properties in Peru.

REPORTED BY WALL STREET JOURNAL Sept.3 to Oct. 15, 1957

Sept. 3 - Phelps Dodge cuts price to 27 cents.

Sept. 4 - Anaconda and Kennecott quickly follow suit.
Belgian Congo cuts its price to 25.45 cents.
London copper price drops to 24 5/8 cents.

Sept. 5 - L.M.E. copper price drops to 24 1/4 cents; to 23.93 cts. Sept.8; to 22 3/4 cts. Sept. 9.

Sept. 9 - Rhodesian Selection Trust offers copper for 23 3/4 cents.

Sept. 11 - Phelps Dodge changes operations to 11 days in 14. Previous cutbacks in copper production were made in November, 1956, and March 1957. The combined effect of the three cutbacks amounts to a total reduction of approximately 15 percent. The current rate is now figured at 19,000 tons per month. Custom Smelters are offering copper for 25 cents - 25½ cents. Belgian Congo offers copper for 24.50 cents.

Sept. 12 - Calumet & Hecla is shutting down four low-grade mines and concentrating operations in seven high-grade deposits. Operations are being cut back 10% of its operations and some 500 workers are laid off indefinitely.
The Chilean Government announced the closing of some copper mines because of the sharp decline in world copper prices.

Sept. 16 - Custom smelters raise prices to 26 cents.
London prices have rebounded from a low of 22 3/4 cents to 25 cents; but closed last week at 24.50 cents.
American mine cutbacks or closings have totaled around 8,000 tons a month. They include 3,000 tons by Anaconda, 833 tons by Miami; 550 tons by Inspiration; 300 tons by Howe Sound, and 160 tons by Calumet & Hecla.
Rhodesian mines have cut output by about 1,700 tons a month.
Chilean mines have cut output by about 2,900 tons a month.
Canada mines have cut output by about 1,000 tons a month.
Total foreign cutbacks have amounted to about 6,000 tons a month.
Kennecott announced shut-downs of its Utah mine for 8 days to install equipment; its Chino mine for 12 days for repairs; and its Ray mine for 14 days for repairs to its power plant. These shut-downs would amount to about 7,500 tons loss in production.

Sept. 23 - The White Pine mine in Michigan was closed down on account of a strike.

Sept. 30 - The E. & M.J. average price for domestic copper for September was 26.435 cts. as compared with export price of 23.926 cts.

SUMMARY OF REFINED COPPER STATISTICS REPORTED BY MEMBERS OF THE COPPER INSTITUTE

BY MONTHS AND SIX-MONTH PERIODS

	IN U.S.A.			OUTSIDE U.S.A.		
	Refined Production	Deliveries to Fabricators	Refined Stocks at End of Period	Refined Production	Deliveries to Fabricators	Refined Stocks at End of Period
Second six months, 1955	696,693	709,148	61,554	654,828	645,755	159,777
Average per month	116,116	118,191		109,138	107,626	
First six months, 1956	821,106	826,626	60,671	696,683	650,692	205,550
Average per month	136,851	137,771		116,114	108,473	
Second six months, 1956	759,181	639,273	120,645	710,090	716,287	233,775
Average per month	126,530	106,546		118,348	119,381	
January, 1957	139,150	119,925	118,564	117,579	143,089	226,408
February	134,291	101,565	136,502	108,661	113,231	233,626
March	143,961	113,571	140,191	120,688	149,700	229,065
April	144,013	116,816	139,842	108,844	136,579	223,621
May	151,785	121,101	155,365	124,278	136,043	221,396
June	134,640	102,479	165,549	117,531	118,059	234,745
TOTALS	847,840	675,457		697,581	796,701	
Average per Month	141,307	112,576		116,263	132,783	
July, 1957	127,805	85,129	191,515	111,951	119,231	238,908
August	128,480	107,622	192,931	103,189	123,778	231,681
September	117,821	103,718	176,813	110,659	122,113	242,116
October	129,832	114,032	166,976	137,106	132,046	261,056
November	129,051	107,542	161,552	130,001	147,591	265,249
December	136,135	84,446	181,024	128,137	133,901	277,316
TOTALS	769,124	602,489		721,043	778,660	
Average per Month	128,187	100,415		120,174	129,777	
January, 1958	136,748	109,707	176,287	125,105	150,171	272,613
February						
March						
April						
May						
June						
TOTALS						
Average per Month						

SUMMARY OF REFINED COPPER STATISTICS - Continued

COMBINED TOTALS IN U.S.A. AND OUTSIDE U.S.A.

	Refined Production	Deliveries to Fabricators	Refined Stocks at End of Period
Second six months, 1955	1,351,521	1,354,903	221,331
Average per month	225,254	225,817	
First six months, 1956	1,517,789	1,477,318	266,221
Average per month	252,965	246,220	
Second six months, 1956	1,469,271	1,355,560	354,420
Average per month	244,878	225,927	
January, 1957	256,729	263,014	344,972
February	242,952	214,796	370,128
March	264,649	263,271	369,256
April	252,857	253,395	363,463
May	276,063	257,144	376,761
June	252,171	220,538	400,294
First six Months, 1957	1,545,421	1,472,158	
Average per Month	257,570	245,360	
July, 1957	239,756	204,360	430,423
August	231,669	231,400	424,612
September	228,480	225,831	418,929
October	266,938	246,078	428,032
November	259,052	255,133	426,801
December	264,272	218,347	458,340
Second six Months, 1957	1,490,167	1,381,149	
Average per Month	248,361	230,192	
January, 1958	261,853	259,878	448,900
February			
March			
April			
May			
June			
First six Months, 1958			
Average per Month			

During the above six-month periods, the producers' price for copper in the United States varied as follows:

Second Half of 1955 - 36 cents low to 43 cents high.
First Half of 1956 - 43 cents low to 46 cents high.
Second Half of 1956 - 43 cents high to 36 cents low.
First Half of 1957 - 36 cents high to $29\frac{1}{4}$ cents low.
Second Half of 1957 - $29\frac{1}{4}$ cents high to 27 cents low.
January, 1958 - 27 cents high to 25 cents low.

FOR RELEASE UPON RECEIPT: February 20, 1958

A study of refined copper statistics, reported by the members of the Copper Institute, reveals that curtailment in U. S. mine production has not had the effect expected from it. It has failed to stimulate consumer buying interest in the U. S. A. During the first six months of 1957, U. S. refined production had reached a maximum of 151,785 tons in the month of May, while deliveries to fabricators reached 121,101 tons. Outside the U. S. A., refined production for the same month of May had reached 124,278 tons while deliveries to fabricators reached 136,043 tons. The increase in production in the U. S. during the first six months of 1957 was accounted for by new copper properties like San Manuel and Pima attaining their normal capacity production as originally planned. However, U. S. refined production during the last half of 1957 was lower than the first half's production by 78,716 tons, while the deliveries to fabricators decreased during the same periods by 72,968 tons. On the other hand, outside the U. S. A., production increased by 23,462 tons and deliveries decreased only 18,041 tons.

Outside the U. S. A., 1957 deliveries increased over 1956 from 1,366,979 tons to 1,575,361 tons. This rapid growth of copper deliveries outside the United States emphasizes the importance of keeping our domestic mines in sound condition. World population growth together with increasing industrialization will result in greater need of raw materials, and the United States, which has been consuming about one-half of the world's output of copper, will find its domestic mines increasingly important to the domestic economy. It is well to recall that in 1951, when the United States was bearing the brunt of the Korean War, yet, with no submarine increase, we failed to receive an adequate supply of copper from abroad. The experience proved that an active, going, domestic mining industry is our only assurance of defense in time of war.

It is believed that cutbacks recently made by Phelps Dodge Corp., in Arizona, Kennecott Copper Corp. at three of its U. S. mines, and Union Miniere du Haut Katanga, in the Belgian Congo, are steps in the right direction to bring output in line with demand. It takes, however, 90 days before cutbacks at the mines will be reflected in lower refined production.

The study shows no reason as yet to expect any improvement in the copper price or market situation.

From -

Arizona Department of Mineral Resources February 20, 1958

IMPORTS OF COPPER INTO THE UNITED STATES
1956 AND 1957

Compiled by the American Bureau of Metal Statistics; In tons of 2,000 pounds

	1956	1957
Ore, matte and regulus (copper content)............	122,174 tons	124,776 tons
From		
Canada	24,730	29,533
Mexico	10,946	7,146
Cuba	15,394	16,849
Bolivia	4,500	4,463
Chile	18,711	17,368
Peru	12,546	12,918
Cyprus	6,945	8,937
Philippines	10,911	13,065
Union of South Africa	15,237	13,081
Australia	1,528	997
Other countries	2,254	1,416
Blister copper (copper content)	276,085 tons	301,180 tons
From		
Canada	1,038	.....
Mexico	37,411	37,574
Chile	175,889	208,461
Peru	14,294	14,486
Belgian Congo	4,345	.....
Rhodesia & Nyasaland	13,452	16,728
Union of South Africa	6,054	5,742
Turkey	5,586	3,495
Australia	16,931	14,078
Other countries	2,123	616
Refined cathodes & shapes	191,745 tons	161,907 tons
From		
Canada	93,525	87,080
Mexico	4,033	2,924
Chile	41,915	10,190
Peru	16,001	14,224
Germany (West)	2,738	2,545
Norway	5,969	.....
United Kingdom	3,348	2,413
Belgian Congo	8,419	10,221
Rhodesia & Nyasaland	13,866	28,054
Other countries	1,931	4,256
TOTAL IMPORTS (Crude and Refined)	590,004 tons	587,863 tons

March 13, 1958

COUNTRIES IN WHICH COPPER IMPORTED INTO THE UNITED STATES ORIGINATES

\- - - - - -

Figures include copper content of ore, matte, regulus, blister copper, refined cathodes and shapes --- For 1956 and 1957

From data compiled by American Bureau of Metal Statistics

FROM	1956	1957
Canada	119,293 tons	116,613 tons
Mexico	52,390	47,644
Cuba	15,394	16,849
Bolivia	4,500	4,463
Chile	236,515	236,019
Peru	42,841	41,628
Cyprus	6,945	8,937
Philippines	10,911	13,065
Union of South Africa	21,291	18,823
Australia	18,459	15,075
Belgian Congo	12,764	10,221
Rhodesia	27,318	44,782
Turkey	5,586	3,495
West Germany	2,738	2,545
Norway	5,969	.....
United Kingdom	3,348	2,413
All other countries	6,308	6,388
TOTAL IMPORTS	590,004 tons	587,863 tons

* * * * *

Following is a list of the countries from which the United States imports copper in various forms. They are given in order of quantities and include all countries from which the United States gets over 10,000 tons annually.

1 Chile
2 Canada
3 Mexico
4 Rhodesia
5 Peru
6 Union of South Africa
7 Cuba
8 Australia
9 Phillipines
10 Belgian Congo

Following is a list of the countries to which the United States exports copper. They are given in order of quantities taken and include all countries to which the United States sends over 10,000 tons annually.

1 United Kingdom
2 France
3 Germany
4 Japan
5 Italy
6 Switzerland

Note that there are no countries that are on both the import and export list.

The data on pages 34a, 34b and 35a show clearly that the bulk of the imports of copper sent to the United States for smelting and refining does not go back primarily as exports to the same country.

The excess of crude and refined copper imports into the U. S. over copper exports from the U. S. amounted to an annual average of 381,000 tons over the last seven years (1951-1957).

EXPORTS OF COPPER FROM THE UNITED STATES
1956 AND 1957

Compiled by American Bureau of Metal Statistics — In tons of 2,000 pounds

	1956	1957
Ore, concentrates, matte and other refined (content)	13,717 tons	15,656 tons
Refined ingots, bars, etc.*	222,536	345,834
Canada	2,869	3,547
Argentina	...	9,859
Brazil	8,622	8,776
Uruguay	57	1,551
Austria	295	224
Belgium	55	1,128
Denmark	457	801
France	59,969	54,495
Germany (West)	32,900	50,771
Italy	26,159	33,534
Netherlands	8,367	7,846
Norway	2,472	3,213
Spain	...	2,192
Sweden	1,824	2,520
Switzerland	15,093	14,619
United Kingdom	15,289	89,644
Yugoslavia	220	4,500
Formosa	969	128
India	15,835	7,617
Japan	29,431	46,850
Union of South Africa	475	534
Australia	560	560
Other countries	618	925
TOTAL EXPORTS:		
Crude and refined	236,253 tons	361,490 tons

* Includes exports of refined copper resulting from scrap that was reprocessed on toll for account of the shipper.

	1956	1957
TOTAL IMPORTS INTO THE UNITED STATES	590,004 tons	587,863 tons
TOTAL EXPORTS FROM THE UNITED STATES	236,253	361,490
EXCESS OF IMPORTS OVER EXPORTS	353,651 tons	225,873 tons

COPPER DELIVERIES TO G.S.A. DURING 1957

NAME	QUANTITY (Pounds)	VALUE (Dollars)	AVERAGE PRICE (Cents)
American Metals Ltd.	8,800,507	$ 2,469,401	28.1
Appalachian Sulphides Inc.	2,299,796	708,900	30.8
Banner Mining Co.	3,169,894	933,636	29.5
British Metal Corp. Ltd.	13,652,972	4,174,245	30.6
Calumet and Hecla, Inc.	43,843,582	13,860,070	31.6
Consolidated Coppermines Co.	919,764	292,765	31.8
Consolidated Coppermines Co.	1,200,118	384,038	32.0
Copper Range Co.	1,693,609	531,988	31.4
Granby Consolidated Mining Co.	1,499,108	448,795	29.9
Howe Sound Co.	128,860	41,757	32.4
International Mining and Metals	800,311	238,893	29.9
International Nickel Co.	1,000,018	355,756	35.0
International Nickel Company of Canada	19,612,353	6,229,664	31.8
National Lead Co.	531,094	196,240	36.9
Rhodesia Congo Border Power Corp.	10,867,362	3,315,533	30.5
San Manuel Copper Corp.	25,600,000	6,777,791	26.5
Sherritt Gordon Mines, Ltd.	5,735,630	1,864,352	32.5
TOTAL	141,354,978	$ 42,823,824	

March 13, 1958

STATEMENT FROM THE CHILEAN EMBASSY AND BEING CIRCULATED
AROUND WASHINGTON AND TO MEMBERS OF CONGRESS

- - - -

EMBAJADA DE CHILE
WASHINGTON 6

MEMORANDUM

Repercussions from the establishment of new restrictions on the importation of copper

1.- In view of the occurrences that favor the imposition of restrictions on the importation of copper into the United States, the Government of Chile can only voice its profound anxiety over this threat to her foreign trade.

2.- The grave repercussions that the Chilean economy will suffer from the establishment of a duty on copper will be an addition to the serious problems facing the country at this time as a consequence of the rapid decline over the course of the last months in the price of this metal on the international markets, and the substantial weakening in its demand. Thus, from an average price of approximately US $0.40 per pound of exported copper, received by Chile during 1956, receipts were reduced during 1957 to approximately US $0.27 per pound on the average, and should the present levels of prices on the international markets prevail, this average will be reduced to the low level of US $0.22 per pound for 1958. Besides, as a consequence of this weakening of the world market, the Government of Chile was forced to recommend to the large copper producing companies a reduction of 10% in production with the idea of contributing to a strengthening of the copper market.

3.- The copper industry is basic for the economic stability of Chile.

As a matter of fact, it supplies more than 60% of the foreign currency obtained by the country. The Banco Central of Chile calculates that the income in foreign currencies supplied by the large copper mining enterprises will suffer a diminution in 1958 of approximately 90 million dollars as compared with the year 1956, and 43 million dollars as compared with the year 1957. The gravity of this fact may be appreciated when compared with the figure for total foreign currency income, which is estimated for 1958 at around 270 million dollars, an amount clearly insufficient to attend to our obligations and our most essential import requirements.

Clearly this availability of foreign exchange is a determinant factor of the capacity of the country to import machinery, equipment, raw material, and other elements indispensable to her economic development. More than 50% of Chile's imports during the past few years has come from the United States. The incidence of copper in the receipts of the Government in foreign exchange continues to be very high. It suffices to point out that under present conditions of price and production every cent per pound of copper exported represents, in terms of government income, approximately 5 million dollars, which is almost 10% of the total of the National Budget in foreign exchange for the current year.

The drastic effects of the drop in the price of copper on our economy is shown by the reduction of the Central Bank's gold reserve of 20 million dollars in 1957, which is equivalent to approximately one-third of the total gold and foreign exchange reserve of the Bank.

4.- The adverse situation of the copper market occurs at a very unfortunate moment for Chile, which has been engaged for more than two years in carrying out a great attempt to put a brake on the inflation that has overburdened the country. This attempt is reflected in the following figures: in 1955, the last year of uncontrolled inflation, the cost of living index increased 89%; in 1956, during which the fight against inflation was begun, the increase was 38%; and in 1957 the increase was curbed to only 18%. The wage earners, through cuts in their wages, and the abolition of subsidies, have borne the heaviest burden of the struggle, and this will explain why our general public opinion is so sensitive to any unfavorable action against our international trade.

5.- From the preceding it is easy to deduce the grave consequences for Chile in the fact that ideas favorable to a protectionist policy may prevail. On the other hand, as a consequence of the establishment of the duty, the exports of Chilean copper to the United States will be diverted towards the European market, depressing even more the price prevailing on that market, and with a clear reaction on the American market.

6.- It is a fact that the United States for some years has become purely an importer of copper, an essential raw material for modern industry, and also of high strategic value. The mining production of the United States during the last few years, even with very favorable prices, has been able only to supply around two-thirds of the refined copper needed by American consumers; the balance must and will have to be imported, and Chile has been the principal supplier of the metal, particularly in times of emergency and war.

Although the proposed measures will apparently affect all copper exporting countries, the fact cannot fail to be recognized that since Chile is by far the most important supplier of copper to the United States, these measures take on in some way a discriminatory character against her copper exports.

7.- My Government lent its enthusiastic adherence to the GATT agreement of which the United States forms a part, also, because she saw and continues to see in them a consecration of the policy of free trade favored by both countries, and the best protection against restrictive measures such as those contemplated.

8.- The Chilean Government strongly maintains the view that solidarity between our two countries should be a reality not only when times are prosperous, but more particularly in times of crisis. Such was Chile's attitude when it accepted during World War II a controlled price for copper of about US $0.12 a pound, while the United States Government was subsidizing production of domestic mines at much higher figures.

My Government most earnestly hopes that copper market conditions, which are already very severe, will not be worsened by any deliberate action on the part of a friendly nation.

Washington, D. C., 20 February, 1958.

ANSWER TO THE CHILEAN EMBASSY'S PROTEST AGAINST
A UNITED STATES TARIFF ON COPPER

The first and foremost argument for a tariff on copper is the matter of national security. A submarine menace could conceivably cut off completely the shipment of overseas copper to the United States. It therefore behooves the United States to keep its copper mines in active production all of the time. It simply cannot afford to allow any marginal producers to shut down, for they cannot be expected to resume operation on short notice. It would take many months to get needed copper into manufacturing channels. From all reports the Russian submarine fleet is many times stronger than the German submarines during World War II. It is therefore a matter of necessity for the United States to put its own survival first.

Aside from its troubles from inflation, which, by the way, has been considerably curbed by the Chilean Government during the past two years, Chile's copper industry is in no worse condition than all copper producing countries, including the United States. The law of supply and demand is working the same in Chile as elsewhere. The effect on the economy of the United States is already similar to what Chile says their's would be if the proposal for a higher peril point, and an increased tariff were enacted. Besides an increase in unemployment and the loss of wages due to curtailment, the government of the United States is losing many millions of dollars in income tax revenue, and the copper states are losing millions in sales taxes as well as income taxes; also property taxes are less because of reduced valuation of the mines.

The Copper Institute figures of copper production and consumption indicate a rapid growth of copper consumption outside the United States. World population growth, together with increasing industrialization, has resulted in greater need for raw materials, and Chile should be well able to compete with South Africa and the Belgian Congo in this market.

Regarding currency devaluation, Chile has devalued its currency far more than any foreign country and therefore has an advantage over them all in the matter of foreign exchange.

The International Monetary Fund reports that on December 18, 1946, the initial par value of the Chilean peso was 3.22581¢ per peso. On October 2, 1953, the par value was changed to 0.909091¢ per peso. The Chile peso in to-day's free market is 0.145¢ per peso. This amounts to a 95.5% devaluation, and results in an increase of purchasing power in Chile of over 2200 percent. In other words, each dollar received by Chile is equivalent to $22.00 in purchasing power in Chile.

Taking the year 1956, for example, when Chile sold us 236,515 tons of copper worth 40.434* cts per pound, or a total of $191,264,950, the purchasing power in Chile was 22 times this, or $4,207,828,900. Offsetting this enormous increase in purchasing power, would be the value of Chile's imports from the United States which Chile had to pay in dollars worth 22 times the purchasing power of the peso. The Department of Commerce reports this to be $154,353,000 in 1956, or $3,395,766,000 in Chilean purchasing power. The net gain in purchasing power of the dollars received from its copper sales to the United States and of the dollars

* E. & M. J. quotation for export copper in 1956.

paid to the United States for its imports from the U. S. was $812,062,900, which was equivalent to $1.717 per pound of copper exported to the United States. Chile could therefore well afford to pay the proposed 4 cents tariff (88 cents in purchasing power) because she would be receiving $0.837 per pound ($1.717 - $0.880) in purchasing power of the peso in Chile; all due to Chile's devaluation of the peso.

In 1951, when the United States was bearing the brunt of the Korean War, the Office of Price Stabilization announced that, effective July 25, the ceiling price for copper refined in the United States from imported crude materials, was 27½ cents a pound delivered Connecticut Valley, while the price to domestic consumers was controlled at 24½ cents. So, instead of foreign producers paying an import tax of 2 to 4 cents a pound, they were given a three cent advantage over domestic producers. Yet Chile shipped us less of this badly needed copper in 1951 than they did in 1950. As there was no submarine menace, the experience proved that an active, going domestic mining industry is our only assurance of defense in the time of war.

With the restoration of a balance between supply and demand, there is no reason to believe that Chile will not be able to restore her copper industry to its former healthy condition, and be well able to pay the four-cent tariff on her exports to the United States. Her internal troubles with inflation must be solved by herself alone. Meanwhile, it is up to the United States to give first consideration to her own national economy and security. If, in the relatively small Korean War, with no submarine menace, we could not get the copper we needed from abroad, then in a real war, with a real submarine menace, we could hardly expect to get sufficient copper from abroad. Although our productive capacity has increased, it would still fall short of our domestic requirements in a war-time economy.

As to the charge that a U. S. tariff on copper discriminates against Chile because she is the most important supplier of copper to the United States, it should be borne in mind that Chile's devaluation of her currency was greater in relation to the U. S. dollar, than it was in relation to other foreign currencies.

Arizona Department of Mineral Resources — March 17, 1958

COPY OF PROPOSED COPPER TARIFF BILL
SUBMITTED TO 85TH CONGRESS (2d Session)
BY 14 SENATORS and 17 REPRESENTATIVES
JANUARY 16, 1958

A BILL

To amend the Internal Revenue Code of 1954 relating to the imposition of an import tax on copper.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That subchapter C of chapter 38 of the Internal Revenue Code of 1954 is hereby amended to read as follows:

"SUBCHAPTER C -- COPPER

"SEC. 4541 IMPOSITION OF TAX

"(a) RATES OF TAX. -- In addition to any other tax or duty imposed by law, there is hereby imposed upon the following articles, imported into the United States, a tax at the rates specified, subject to the conditions provided in section 4542 hereof. For the purposes of such tax, the term 'United States' includes Puerto Rico.

"(1) GENERAL -- Copper-bearing ores and concentrates and articles provided for in paragraph 316, 380, 381, 387, 1620, 1634, 1657, 1658, or 1659 of the Tariff Act of 1930 (46 Stat. 613, 626, 627, 674, 675, 676; 19 U. S. C. 1001, 1201), 4 cents per pound on the copper contained therein.

"(2) OTHER ARTICLES WHERE COPPER IS CHIEF COMPONENT. -- All articles dutiable under the Tariff Act of 1930 (46 Stat. 590; 19 U.S.C., ch. 4), not provided for heretofore in this section, in which copper (including copper in alloys) is the component material of chief value, 3 cents per pound.

"(3) OTHER ARTICLES CONTAINING 4 PERCENT OR MORE OF COPPER. -- All articles dutiable under the Tariff Act of 1930, not provided for heretofore in this section, containing 4 percent or more of copper by weight, 3 percent ad valorem or three-fourths of 1 cent per pound, whichever is the lower.

"(b) EXEMPTIONS. --

"(1) COPPER LOST IN PROCESSING. -- No tax shall be imposed under this section 4541 on copper which is lost in metallurgical processes.

"(2) COPPER USABLE AS FLUX, ETC. -- Ores or concentrates usable as a flux or sulfur reagent in copper smelting and/or converting and having a copper content of not more than 15 percent, when imported for fluxing purposes, shall be admitted free of the tax imposed by this section 4541 in an aggregate amount of not to exceed in any one year 15,000 tons of copper content.

"SEC. 4542. APPLICABILITY OF TAX

"On and after the first day of the third calendar month following the enactment of this Act, the tax imposed by section 4541 shall be applied successively from time to time under the following specific circumstances and conditions:

"(a) DETERMINATION OF APPLICABILITY. -- As soon as practicable after the "(c) REPEAL OF LAW SUSPENDING IMPORT TAX ON COPPER.-- Public Law 38 of the Eighty-second Congress, first session (65 Stat. 44), as amended to date, concerning the suspension of certain import taxes on copper, shall be repealed effective on the first day of the third calendar month following the enactment of this Act.

"(d) TREATMENT PROVIDED FOR IMPORTS.-- The treatment provided for imports of articles described in this subchapter C of chapter 38 of the Internal Revenue Code of 1954 (as hereby amended) shall, for the purposes of section 350 of the Tariff Act of 1930, as amended, be considered as having been in effect continuously since the original enactment of section 350: Provided, That, for the purposes of including a continuance of the customs treatment provided for in this subchapter C (as hereby amended) in any trade agreement entered into pursuant to section 350 prior to the initial application of that subchapter (as hereby amended) pursuant to section 4542 thereof, the provisions of section 4 of the Trade Agreements Act, as amended (19 U. S. C. 1354), and of section 3 of the Trade Agreements Extension Act of 1951, as amended (19 U. S. C. 1360), shall not apply.

"(e) EFFECTIVE DATE.-- This Act shall enter into force on the day following its enactment."

January 16, 1958

SPONSORS FOR COPPER TARIFF LEGISLATION

SENATE:

ARIZONA - - -	Barry M. Goldwater	(R-Ariz.)	Carl Hayden	(D-Ariz.)
COLORADO - -	Gordon L. Allott	(R-Colo.)		
IDAHO - - -	Frank F. Church	(D-Idaho)		
MICHIGAN - -	Charles E. Potter	(R-Mich.)	Patrick V. McNamara	(D-Mich.)
MONTANA - - -	James E. Murray	(D-Mont.)	Michael J. Mansfield	(D-Mont.)
NEVADA - - -	Alan Bible	(D-Nev.)		
NEW MEXICO - -	Dennis Chavez	(D-N.Mex.)	Clinton P. Anderson	(D-N.M.)
NORTH CAROLINA -	William K. Scott	(D.-N.C.)		
UTAH - - -	Arthur V. Watkins	(R-Utah)	Wallace F. Bennett	(R-Utah)

HOUSE:

ARIZONA - - -	Stewart L. Udall	(D-Ariz.)	John J. Rhodes	(R-Ariz.)
COLORADO - -	Wayne S. Aspinall	(D-Colo.)	Wm. S. Hill	(R-Colo.)
CONNECTICUT -	James T. Patterson	(R-Conn.)		
IDAHO - - -	Gracie B. Pfost	(D-Idaho)	Hamer H. Budge	(R-Idaho)
MICHIGAN - -	John B. Bennett	(R-Mich.)	Victor A. Knox	(R-Mich.)
MONTANA - - -	Lee Metcalf	(D-Mont.)	Leroy H. Anderson	(D-Mont.)
NEVADA - - -	Walter S. Baring	(D-Nev.)		
NEW MEXICO - -	John J. Dempsey	(D-N.M.)	Joseph M. Montoya	(D-N.M.)
PENNSYLVANIA -	Richard M. Simpson	(R-Penna)		
UTAH - - -	Henry A. Dixon	(R-Utah)	William A. Dawson	(R-Utah)

Oct. 7 - Copper's price on the London Metal Exchange is equivalent to 23.81 cents a pound.

Oct. 10 - Belgian Congo reduces its copper price to 24.50 cents. It was the first change since Sept. 16, when it was 24.45 cents.
London's price is 22.93 cents.

Oct. 15 - Custom smelters cut price to 25½ cents, with dealers reported offering copper at 25 cents a pound.
London Metal Exchange drops copper price to 22.68 cents.
Belgian Congo drops its price to 23.6 cents.
White Pine mine still down on account of strike.

CONTINUATION OF WALL STREET JOURNAL REPORTS TO MARCH 19, 1958

Oct. 25 - Belgian Congo reduces copper to 23.15 cents at New York.
London spot copper dropped to 22 3/8 cents - a new post war low.

Nov. 4 - Domestic consumers of copper were large buyers of custom copper at the 25½ cent price.
Five-week strike at White Pine comes to an end, after causing a production loss of about 4,500 tons of copper.
London copper prices gyrates between 23½ and 24 1/8 cents, while Belgian Congo boosts its price to 23.80 cents.

Nov. 7 - Custom smelters raise their copper price to 26 cents, following an up-turn in spot copper at London to 24.43 cents.

Nov. 14 - Custom smelters drop price to 25½ cents, following a dip in London price to 23 3/4 cents.

Nov. 22 - Custom smelters drop price to 25 cents, preceded by Katanga cut to 23.60 cents and London price of 22.90 cents.

Dec. 5 - Reports of possible cut in production in Africa strengthens London price to 23¼ cents.

Dec. 10 - It was indicated in the London conference on possible curtailment, that Chile could continue its full production because its cost reportedly is about 15 cents a pound, compared with a current London Metal Exchange quotation of around 22 3/4 cents, and the 27 cent price of Major U. S. producers.

Dec. 16 - Kennecott Copper Corp., the largest producer of copper, is cutting production at its U. S. mines by 12%, or roughly 3,800 tons a month. Another big world producer, Katanga, is reported to have quietly initiated a 10% cut recently in its output, or around 2,300 tons a month.
The price of copper has plummeted from a nearly 100-year high of 46 cents a pound charged by producers and from a domestic custom smelter high of 55 cents to 55½ cents set early last year to current levels of 27 cents and 25 cents, respectively. In London the quotation has fallen from a mid-March, 1956, record of 54 5/8 cents a pound to a low last week of 21.93 cents a pound. The declines have been accompanied by a sharp falling off in U. S. consumer buying and a lesser drop abroad. This has

occurred while production of copper throughout the world was increasing as new mines came into production, a good part of new output was accomplished under Government aid.

OTHER U. S. CUTBACKS

Kennecott is the last of the big three domestic producers to slice a substantial part of production. Earlier this year Phelps Dodge Corp., the nation's second largest producer, lopped off about 3,500 tons a month from its Arizona mine output. Anaconda Co., the third member, cut production 2,000 tons a month at its underground mines in Butte, Mont., and reduced output by 416 tons a month at its Yerington, Nev., mine.

Other U. S. properties that have announced cuts include: Inspiration Consolidated Copper Co. and Miami Copper Co., in Arizona, and the Chelan mine of Howe Sound Co. in Washington, which has been closed. The Ray Mine of Kennecott, in Arizona, chipped about 500 tons from its output last spring when it went from a seven-day week to six days.

Including the major operation of production just announced by Kennecott, total U. S. mine cutbacks are estimated at close to 11,900 tons.

Increased production from new mines this year, however, has offset a good part of these cutbacks.

But now, the U. S. Government, which helped bring some of these properties into production, is helping to take their output off the market under purchase agreement contracts.

Magma Copper Co.'s new San Manuel Copper Co. subsidiary in Arizona has completed arrangements with the Government stockpile buying agency, the General Services Administration, for the sale of its nearly 6,000 tons monthly production at a price of 27.05 cents a pound, and deliveries are being made under the contract. The White Pine property of Copper Range Co., in Michigan, is conducting negotiations with the G.S.A. under its agreement with the Government for the sale to the stockpile authorities of its roughly 3,500 tons a month output. The negotiations are expected to be completed in a few weeks.

PRODUCTION CUTS ABROAD

Outside the U. S. before the reported Katanga cut, only one major copper producing group had cut production - the mining properties in Northern Rhodesia, Africa, controlled by the Rhodesian Selection Trust, Ltd. The Anglo American Corp. group of producers, which accounts for half the Northern Rhodesia production, has made no official announcement on cutbacks. Northern Rhodesia ranks third as a world producer of copper, behind the U. S. and Chile.

In Chile, there were conflicting reports concerning prospects of curtailing copper production there. About a week ago the head of the National Mining Society in Chile a private association of mining men, said Chile planned a 10% cut in annual production. This was followed by a statement from the chief of the Chilean copper department, a non-regulartory body charged with keeping close tabs on the mining industry, that no thought had been given to a cutback. Finally the mining ministry said the problem of curtailing copper output was being studied by the copper department, which would recommend the policy to be followed.

An official of Kennecott, which owns and operates the big Braden Copper property in Chile, emphasized the cut at its U. S. mines was strictly a domestic affair. He had no comment to make as to what would happen in Chile. Advices from Chile indicate the Braden mine has stepped up its monthly production to a rate of around 17,000 tons after several months of considerably less output because of a shortage of water for power during Chile's recent winter months.

The cutback by Kennecott will be accomplished by a reduction in the operating week from seven days to six days, with the properties operating 12 days consecutively and then closing for two days. The properties affected are the company's mines in Utah, New Mexico and Nevada, Kennecott's other U. S. Mine, the Ray division in Arizona, is not affected, since the Ray property has been on a six-day operating schedule since early April this year.

In Salt Lake City, it was announced the curtailment necessitates the furloughing of nearly 900 employes in the three divisions - 525 in Utah, 180 at Nevada and 182 at New Mexico. The company currently employs about 11,000 workers at the four U. S. western mining divisions.

Prices for copper, lead and zinc last week continued to move lower in foreign markets while U. S. quotations held unchanged.

COPPER TOUCHES LOW IN LONDON

Most of the interest centered in the London Metal Exchange copper dealings where the price sank to 21.93 cents a pound, a new low in more than four years, or since free trading was resumed in August, 1953, after a 14-year war-time lapse. The price rallied to close at the equivalent of 22 3/8 cents, or down about a half cent from the close a week ago.

News of the Kennecott curtailment, however, may have a stimulating effect on the volatile London copper dealings today. It was noted that at the 21.93 cent low in London, the spread between the London-New York price gap widened to slightly more than 5 cents a pound below the 27 cents U. S. producer price and to a little more than 3 cents under the domestic custom smelter quotation of 25 cents.

Jan. 13 - Chile government permits a 10% reduction in output, stimated to amount to 2,600 tons monthly, provided other producers besides Kennecott and Anaconda act also.

Dealers are reported to be selling copper to American industry at 24½ cents a pound.

Jan. 14 - Big U. S. mines cut copper price to 25 cents a pound, a 5-year low. London price drops to 21.68 cents, a new low since August, 1953. Dealers quote .24 cents to American industry.

Jan. 20 - It is reported that there may be some delay in Kennecott's reduction of its Chilean output, because most of the 1958 metal has been booked for sale. Anaconda's Chilean production has already been cut back, and it is figured that the called-for reduction by the three mines would average about 4,000 tons a month.

Jan. 21 - Phelps Dodge cuts its Arizona mine production another 9%, or 1,700 tons a month, "because of decreased demand for the metal." The latest cut is being accomplished by reducing the work period to 10 consecutive days out of every 14 days. It was previously 11 out of 14. This is the fourth reduction in copper output, and the cumulative decrease amounts to 22%, or roughly 5,100 tons a month.

Kennecott is currently putting into effect a 12% cut at its U. S. mines equal to about 3,800 tons a month.

Katanga is cutting current output by about 1,800 tons a month.

Production cuts at U. S. copper mines announced so far aggregate almost 14,500 tons. Foreign mine cutbacks, or shutdowns, now amount to roughly 10,300 tons a month, of which 5,800 tons represent current reduction in the Belgian Congo and Chile.

Copper industry sources note that the 1957 cutbacks in output have been offset to a major degree by increased production coming from new mines and expansion programs at old properties. It is added, however, that an estimated 9,000 tons a month is being bought by the Government at above market prices, under purchase agreement contracts.

Jan. 24 - Custom smelters cut copper price to 24 cents, lowest since August 31, 1950.

Jan. 27 - L.M.E. prices slumped to 20.06 cents. The industry figures copper can thus be bought in London and shipped to the U. S. at a price of 22 cents a pound, delivered in the Connecticut Valley. Copper trade sources say that this apread of 3 cents cannot be maintained too long. In the U. S. markets, copper dealers were reported to be offering the metal at 22 3/4 cents delivered to consumer plants in the East.

Katanga cuts its price to 21.55 cents at New York and Antwerp.

Jan. 28 - Spot copper on the L.M.E. closed yesterday at 20.81 cents, on word that Kennecott had agreed with the Chilean government to trim its copper shipments from the U. S. to Europe instead of cutting output in South America.

Jan. 29 - The Anglo American Corp. group of copper mines in Northern Rhodesia announded that its production will be curtailed by 10%, or 27,000 tons a year, beginning in March. Anglo American said it is stopping production at its Bancroft Mine in Rhodesia and confining operations to underground development. This property is a newly developed copper mine, and had been scheduled for a 1958 production of 40,000 tons. The company's other two mines will produce an additional 13,000 tons, thus making a 27,000 ton cutback for the entire group.

Feb. 10 - Copper curtailment announcements have failed to improve the market price. Custom smelters have cut their price to 23½ cents, a new low since 1950. Katanga cut its price to 21.325 cents. L.M.E. prices ended the week at 20.46 cents.
Tsumeb Corp., a S.W.Africa producer, announced a cutback of 20%, or a yearly cut of around 5,600 tons.
Coldstream Copper Mines Ltd., a Canadian producer in Ontario, is starting the shutdown now with completion due by the end of the month. It cited declining copper prices.

Feb. 12 - Katanga cuts copper price to 20 7/8 cents, lowest in many years. L.M.E. new low price is 20.18 cents.

Feb. 26 - Custom smelters make sales of copper at 23 1/8 cents a pound.

Feb. 28 - Katanga cuts its copper price to 20.425 cents.
Dealers report U. S. offerings of copper at 22½ to 22 3/4 cents a pound.

Mar. 6 - Katanga raised its copper price to 20 7/8 cents, N. Y. and Antwerp. This was the first upward change since mid-December. It reflected a firmer market in London where spot copper has edged up to 20.31 cents a pound, from 20 cents at last week's close.
Howe Sound closed its Britannia mine on March 1st, citing depressed prices for copper.
U. S. custom smelters trimmed their price to 23 cents.

Mar. 7 - Cerro de Pasco plans a 7½% cut in production in 1958, amounting to about 1,050 tons a month.

Mar. 10 - Demand for copper at 23 cent custom smelter price picked up quite a bit last week. Katanga raised its price last week to 21.10 cents, and London spot copper got up to 20.81 cents.

Mar. 11 - Kennecott is curtailing copper output at its four U. S. mines in order "to more nearly keep demand and supply in balance". The cutback will reduce output by 12½% from the present rate, or by an estimated 3,500 tons per month. The two cutbacks so far this year total about 7,300 tons a month, or roughly 87,600 tons annually. In the spring of 1957, the company had reduced output at its Arizona mine by about 500 tons a month. The new cutbacks will be accomplished by reducing the work week to five days from six days now.

Mar. 19 - Katanga raises its copper price to 21.55 cents. L.M.E.'s price is 21.09 cents. Custom smelters report an active market at 23-cent price.