OBSERVATIONS PERTINENT TO ARIZONA AND UNITED STATES COPPER MINING AS OF DECEMBER 31, 1968

ARIZONA DEPARTMENT OF MINERAL RESOURCES

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1. Computed loss of copper production due to the strike.

The nation-wide copper strikes started in mid-July, 1967, and lasted for 8½ months to the end of March, 1968. As estimated by Douglas H. Soutar, Vice President, Industrial Relations and Personnel, American Smelting and Refining Company, (Mining Magazine, September, 1968), the loss in copper production amounted to approximately 850,000 tons of copper. This Department estimates that Arizona's portion of this lost production amounted to 412,017 tons, computed as follows:

Loss 1967

Average monthly production for three months prior to strike	66,843 tons per month	
Calculated normal production, July - December, 6 months	401,058 tons	
Reported production, Bureau of Mines	109,228 tons	
Computed Arizona loss, July -December, 1967		291,830 tons

Loss 1968

Estimated Arizona Installed Capacity	815,300 tons	
Assuming normal production @ 93% of capacity	758,229	
Bureau of Mines production Jan. - Sept.	437,042	
Estimated Oct. - Dec. production	201,000	
Estimated 1968 production	638,042	
1968 Computed Arizona loss due to strike		120,187
Computed Arizona copper loss due to strike		412,017 tons

Based on Mr. Soutar's strike-loss estimate, Arizona stood 41.1 percent of the total United States copper loss. This is occasioned by the fact that five of the larger Arizona mines and a number of the smaller mines were not shut down during the period of the strike.

By-product losses amounted to approximately 4,000,000 ounces of silver, 72,000 ounces of gold, and 2,800,000 pounds of molybdenum.

2. Comparison of Arizona Copper Production and United States Copper Production, 1968 vs. 1967.

	ARIZONA 1968	ARIZONA 1967	UNITED STATES 1968	UNITED STATES 1967
January	13,934	63,927	22,946	122,498
February	14,228	60,165	27,961	117,887
March	26,994	(a) 67,891	41,012	(a) 132,977
April	64,617	67,118	121,334	131,996
May	64,908	67,871	125,470	130,444
June	64,055	65,541	123,933	121,911
July	61,520	31,392	122,357	66,536
	(b) 3,912		(b) 9,870	
August	66,698	15,787	127,945	33,001
September	(p) 64,000	15,850	(p) 122,721	24,893
October	(e) 67,000	15,309	(e) 125,000	23,675
November	(e) 67,000	15,499	(e) 125,000	24,323
December	(e) 67,000	15,391	(e) 125,000	23,923
TOTAL	638,042	501,741	1,200,809	954,064
ARIZONA % of U. S.	53.1%	52.6%		

(a) Record high.
(b) Credit adjustment to conform to Bureau of Mines Totals.
(p) Bureau of Mines "preliminary".
(e) Estimated.

3. Copper Imports.

Beginning with the Third Quarter of 1966, in order to accumulate the greatest possible inventories as a precaution against shortages to be caused by the impending copper strikes that were most probably to be called for July, 1967, fabricators began buying abroad and importing all the copper it was possible for them to get. Fortunately, a decided fall-off in business in the United Kingdom and on the Continent, coupled with the fact that the Soviet Union's sizeable increase in production changed them from an importer to an exporter of copper to Western European countries, made it possible for the United Kingdom and countries of Western Europe to either divert directly to the United States large tonnages of refined copper from Africa, South America and Canada that would otherwise have gone to Europe - or to reship to the United States tonnages they had received from those three continents. As there must be a lapse of time between the purchase of copper in Europe and the arrival of the copper in the United States the fabricating plants continued receiving copper from abroad until May, 1968 in excess of the amount normally required to supply the mills' excess requirements over the quantity of copper supplied from domestic production.

In normal times, important quantities of unrefined copper are imported into the United States under bond, for processing at United States smelters and refineries. Most of this bonded copper is reexported after refining. But, through the strike period in 1967 and 1968 most of it remained in the United States as it was not needed abroad; and it wasn't until May 1968 that important tonnages began to be reexported.

The importance of the import-export situation with respect to fabricators' stocks is demonstrated by the following statistics:

		New Unrefined Imports					
		Unrefined Imports	Reexports	Net Unrefined Imports	Refined Imports	Total Imports Available to U.S. Consumption	Exports Ores & Concentrates (a)
1st Qtr. 1966		82,762	76,790	5,972	34,421	40,393	1,625
2nd Qtr.		86,885	79,576	7,309	30,258	37,567	251
3rd Qtr.	Anticipating strike	115,842	77,748	38,094	26,304	64,398	33
4th Qtr.	Anticipating strike	106,366	38,957	67,409	70,117	137,526	141
1st Qtr. 1967	Anticipating strike	86,062	56,585	29,477	53,646	83,123	16
2nd Qtr.	Anticipating strike	94,439	66,187	28,252	62,917	91,169	490
3rd Qtr.	strike	70,531	27,502	43,029	62,969	105,998	22,247
4th Qtr.	strike	51,317	9,080	42,237	150,814	193,051	36,940
1st Qtr. 1968	strike	41,661	5,750	35,911	226,836	262,747	41,647
2nd Qtr.		84,091	55,600	28,491	131,217	159,708	30,002
3rd Qtr.		91,354	102,972	(b)(11,618)	22,013	10,395	1,290

(a) Permitted by the Government to assist non-struck mines to dispose of their production.

(b) Excess of refined exports over unrefined imports.

4. Copper Inventories

At the Copper Forum held in New York on December 11, 1968 it appeared to be the consensus of the fabricators that the stocks at their plants were ample, but there was a general complaint that they were unable to get all of the copper they wanted at the United States producers' price, and had to pay higher dealer and foreign prices for the balance. With respect to Fabricators Stocks, the reported September 30, 1968 inventory of 504,486 tons was considerably in excess of the 460,848 tons carried at the end of June, 1966 when the build-up started in anticipation of the strike, but was less than the 540,711 tons in inventory at the end of September 1967, after 2½ months of strike. However, it must not be overlooked that the inventory on June 30, 1967, the last inventory before the strike started, was 641,083 tons, the highest on record.

Facing the Arizona and other producers is the question of adequacy or superabundance of inventory in the future. It appears to be the consensus that at least for the near future the mills will continue to absorb not only the copper offered them by the domestic producers but also normal amounts of foreign copper. Since 1940, the United States has each year consumed more copper than it has produced - and in recent years has been an importer on balance of about 20,000 tons per month.

5. Future Copper Production

Much more copper will be required after 1975 than presently contemplated production capacities provide for. However additional capacities presently being developed, according to the consensus of producers, fabricators, and research associations, augur for surplus productions between 1970 and 1972 if all of such planned additional capacities are brought in as scheduled and if increases in consumption do not exceed the quantities presently projected. This surplus in the early '70's may present a problem because times have changed with regard to production in four major foreign export countries which produce 41% of the Free World's copper. Sales of copper abroad by these four countries are a major source of funds for their government expenses and national developments. Chile, Zambia, the Congo and Peru have organized the Intergovernmental Council of Copper Exporting Countries with headquarters in Paris. The needs of these countries may cause them to continue to exert pressures upon the mining companies in their countries to increase production. Therefore, in a period of low demand, these countries with their low wage labor and mines with higher grade ore would be under pressure to sell at depressed prices and increase output. The result would be very tough competition for the American market.

Arizona is the major copper producing state in the United States and has important additional capacities scheduled to come into production in 1969 and 1970. She therefore faces possible set-back from such competition, with curtailment of operations at some copper mines and the shutting down of marginal mines.

6. Import Restrictions and International Commodity Agreements

The American Mining Congress at its World Mining Symposium Session at Las Vegas on October 8, 1968 adopted the following resolutions:

> "Import Restrictions: - The American economy must have a ready and ample supply of raw materials. In our markets there is room, and need, for imports of minerals and metals of many kinds. But it is vital for the United States to continue to generate a substantial portion of its requirements from the secure base of the domestic mining and mineral processing industry.
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> "At times certain domestic metals or minerals face such competitive pressure from foreign materials that selective duties or other import restrictions are required to assure the maintenance of an economically sound domestic industry. Such restrictions should be enacted on a standby basis where recurrent need for them has become apparent. They should include, where necessary, flexible import quotas, responsive to domestic market conditions.
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> "Import protection accorded to any metal or mineral can be effective only if equivalent compensatory customs treatment is established and maintained on fabricated and manufactured articles containing such metal or mineral."
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> "Import Commodity Agreements: - We oppose intergovernmental control of production or marketing of metals and minerals as being contrary to the best interests of the American economy and of the mining industry. We recommend therefore, that our government use its influence to resist attempts at such intergovernmental control, and that it firmly maintain a policy of not becoming a party to such agreements.
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> "In those cases where our government decides it should be represented on international committees or study groups considering production and consumption of metals and minerals, we urge that these principles be of paramount consideration and that effective use be made of representatives of the industries concerned."

On October 28, 1968, President Johnson signed into law a bill suspending the copper import duty through June 30, 1970 if the domestic producer price stays at 36 cents a pound or over. If the domestic producer quote goes below 36 cents a pound, a U.S. import duty is to be reapplied. If reapplied the 1968 duty would have been 1.8 cents a pound instead of the Kennedy round 1.5 cents which was suspended. In 1969, the applicable duty will be 1.6 cents instead of the suspended Kennedy round 1.3 cents; and, starting January 1, 1970, the applicable duty will be 1.4 cents instead of the Kennedy round 1.1 cents. If the domestic copper price goes below 24 cents a pound, a higher duty of 1.8 cents will be imposed.

The U. S. Tariff Commission has the duty of informing the U. S. Treasury Secretary what the average domestic copper producer price "quote" is for any calendar month in which domestic producer copper quote goes below or back up to 36 cents. The Secretary then has 20 days in which to act on the commission's price report. Generally, it would mean a lag of about a month before there would be any change in the copper import duty after the movements of the domestic producer copper quote.

7. Copper Price

Despite the loss of 850,000 tons of copper due to the strike, there is presently no shortage of copper in the Free World. However, availability of copper is frequently interfered with by circumstances which cause fabricators to increase their copper stocks. The opinion recently expressed by some executives is that the present 42-42¼ cent producers price will remain in effect during the first half of 1969.

Copper is a world commodity and while United States producers attempt to maintain a steady price relation to cost of production, there can be no doubt about the world price situation having a telling influence upon the general market price.

Metals Week, in the November 11, 1968 issue, states: "Every time it appears that copper prices are beginning to soften somewhat, a crisis seems to develop to restore the firm undertone to the market. Last week Kennecott said it is again cutting shipments from its Teniente mine by 20% in November and December as a result of the severe drought in Chile. Kennecott had earlier announced a similar cutback for September and October - a move which added some strength to the market toward the end of the summer."

Other statements since that date are quoted as follows:

"Foreign producers suspended prices on November 20th in the wake of the closure of foreign exchange markets because of unsettled currency conditions in France and England which caused some hedge covering by United Kingdom copper consumers who were unable to price fix on their regular producers contracts because of the temporary suspension of producer prices."

"Increasing reports of some delays in Belgian deliveries and rather less copper coming from Zambia due to transport difficulties resulting from the poor internal transport system in that country."

"Although it is observed that some of the recent buying and borrowing has been to cover sales to China, there seems to be little doubt that consumer interest in the United Kingdom and the continent is being maintained at a steady level. As far as the immediate outlook is concerned it is evident that with solid consumer interest and the maturing of past purchases for Far Eastern delivery next month, cash copper is likely to at least maintain a position near present levels."

"The strength of the market is on account of strong American buying in view of the expected resumption of the U.S. dock strike on December 20 and also due to yet another bout of fears concerning the stability of currencies."

"On the monetary front market interest has been stirred by the strength in the price of open market gold, which in turn has led to the onset of hedge buying of copper."

It is also pointed out that fabricators generally buy heavily at year end because of their LIFO position in connection with their income tax returns.

Thus it is seen that copper's price has been affected more by events occurring with the ability to get copper in the form, at the place, and at the time required rather than whether the copper exists or not.

Mr. John G. Hall, Senior Vice President of the Anaconda Company states that "There is not likely to be any significant change in the U.S. producer price and the world price will probably settle somewhere near that level, over the near term." (Accent supplied.)

George B. Monroe, President of Phelps-Dodge "feels it is impossible to predict when the price may change, or when it does change - whether the move will be up or down." He guessed, however, "that the price would range within 38-46¢."

It is a question of whether the strike postponed the day when an overproduction of copper will be felt. While prices may remain firm in the near term there is the possibility of a later severe price cutting. Unfortunately, price cutting will not sell any more copper -- it will just hurt producers.

8. Government Stockpile

A question in connection with the amount of copper to be produced in the future, is the amount of copper that will be required by the Government for the stockpile and for the war in South Vietnam.

The Government National strategic stockpile of copper, originally established at 1,000,000 tons, was later reduced to 775,000 tons. (Actually the total stockpile contained 1,142,000 tons in 1962). This stockpile has now been reduced to 260,000 tons due to deliveries to the Mint and the sale of 670,000 tons to industry for defense in 1965-66. Copper requirements for the Vietnam struggle have been estimated at from 235,000 to 300,000 tons per year.

In connection with the replacement of the stockpile copper Mr. William A. Meissner, Jr. Director Copper Division, Business and Defense Services Administration of the U. S. Commerce Department, recently pointed out that a special provision of the March 21, 1966 release of 200,000 tons gives the government the option to reacquire the copper from the seven domestic producers who purchased the release at the market price at a rate up to 33-1/3 percent per year over the periods 1969-1970-1971, which option could be extended up to but not beyond 1975. Mr. Meissner said the government has already notified producers that the 1969 purchase option will not be exercised. He further added that a new evaluation of the copper stockpile question has not been completed.