

# Korean Coins at the United States Mint

by Mark Lovmo



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South Korea's first coins and the Bank of Korea's  
decade-long engagement with the U.S. Mint,  
1956 ~ 1969

**by**  
**Mark Lovmo**

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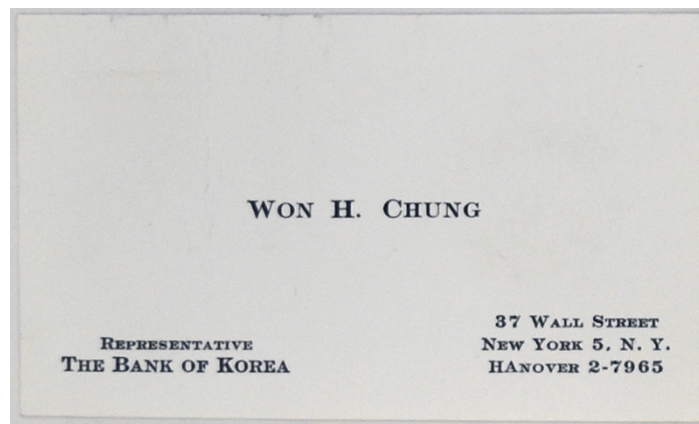
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## DEDICATION

I dedicate this research effort to Won H. Chung, New York Representative for the Bank of Korea (circa 1958~1962). Mr. Chung's hard work was vital to the planning and production of his country's first circulation coins with the United States Mint. As an anonymous and unsung worker bee at the Bank of Korea, his name, until now, had been completely lost to his country's coinage history. No photos of him were available to me. The only remnants are his correspondence in the U.S. Mint's Korea file... and this business card.





# **Korean Coins at the United States Mint**

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## **Introduction**

The recently published book, *South Korean Coins in the Era of Development*, details the growth of the Republic of Korea's coining industry in the decades of the 1960s to the 1980s as it made the rather significant transition from outsourcing the production of Korea's first coins with the United States Philadelphia Mint to itself becoming an annual producer of hundreds of millions of coins.<sup>1</sup> The book's chapter on South Korea's very first coins, minted in Philadelphia from 1959 to 1962, not only provided a unique examination of those coins, but the chapter piqued the interest of those in the numismatic community in Korea by revealing for the first time the actual annual mintage numbers for these coins using U.S. Mint data.

These mintage figures were a revelation that upended some misconceptions in Korea about the Republic of Korea's first coins that entered circulation in 1959 in denominations of 100-Hwan, 50-Hwan and 10-Hwan. This current study will provide an even closer look at the U.S. Mint's work on South Korea's various proposed coining projects and will reveal the convoluted route that was taken to the final form of these proposed projects, both those that were completed and others that were abandoned. Prior to its contract with the U.S. Mint, Korea had last produced and issued coins under its own authority in 1904, after which only Japanese-made coins were issued in Korea until just after the end of the Asia-Pacific War in 1945. By the time they had decided to again introduce coins, the Koreans had not operated a coining plant in over fifty years. In the late 1950s, the Koreans were at zero —and they needed to get back to square one to start making their own coins again. Therefore, U.S. Mint records also indicate a steep learning curve for the Korean currency leadership through its involvement with the U.S. Mint.

This study will explain what motivated the Republic of Korea to initially contact the U.S. Mint, along with the various changes that the Koreans made to their coinage plans over time. Also discussed are the effects that the changes in national leadership and the later currency reform in the early 1960s had on these coinage plans, as well as Korea's contacts with the U.S. Mint later in the 1960s that give us some of the earliest indications of the direction that South Korea was to take with its coins in the following decade.

## **Background**

South Korea's first coins emerged in the last years of the presidential administration of Syngman Rhee (1948-1960). South Korea's currency, the *hwan*, consisted of banknotes in the values of 1,000-Hwan, 500-Hwan, 100-Hwan, and smaller notes of 50-Hwan and 10-Hwan in the late 1950s. The Korean government's decision to introduce coins at this time was guided by a few considerations. The overarching economic rationale was that coins would facilitate the convenience of lower-value transactions, which would further assist much needed growth in the domestic economy during the Rhee government's planned Three-Year Economic Development Plan, for which preparations began in April 1958.<sup>2</sup> In 1959, Bank of Korea Governor Kim Jin-hyeong identified three main motivating factors for issuing coins in South Korea. The first was the potential for coins to reduce

the cost of producing money. The Governor estimated that the costs involved in replacing the existing banknotes during a two-year period was greater than would be the cost to introduce coins. Coins could be expected to last ten years before needing replacement. He also pointed out that coins would help remove what was considered a public health hazard posed by the roughly handled paper banknotes circulating at the time in Korea. His third and final reason was that the issuance of coins would demonstrate the government's confidence in the stability of the currency to the Korean public.<sup>3</sup> Korea's economic planners might have considered this last point as especially important, considering the country had undergone no fewer than three changes of national currency in the previous 15 years. Although Governor Kim did not mention it, another motivation was that the Korean government had also anticipated the popular use of automatic payphones and vending machines, which had become extremely popular in neighboring Japan. Coins would make it possible for South Korea to adopt the use of these machines as well.<sup>4</sup>

However advantageous, the introduction of coins would not have been contemplated if Korea had not been showing signs of economic recovery so soon after the destruction wrought by the Korean War. The recovery in the late 1950s was largely propelled by foreign aid, much of which was provided through the United States government's Foreign Operation Administration (FOA). The FOA—renamed the International Cooperation Administration (ICA) in 1954, which itself was a precursor to USAID—provided up to \$1.3 billion in total to the Republic of Korea, with aid amounts peaking in 1957.<sup>5</sup> Without this foreign aid in its favor, South Korea would have run the risk of a rapid re-devaluation of its currency, as had happened in 1952, which had prompted a currency reform. A repeat of such an event would have considerably debased any low-denomination coins placed into circulation. The Bank of Korea's own literature pinpoints 1958 as the year when conditions within the country were favorable enough for the government to justify the introduction of circulation coins.<sup>6</sup> Although this upturn in the economy would reverse significantly by the early 1960s due to poor government policy, this temporary upward trajectory in Korea's fortunes was thanks to incipient industrial growth that was promoted and sustained by foreign aid.

It would also be foreign aid in the form of an ICA-sponsored trip that allowed the Koreans to make their first contact with the United States Mint in pursuit of re-introducing coins to their country.

### **Korea's Coinage Contract with the U.S. Mint (1958~1962)**

The first known visit of Korean officials to a U.S. Mint facility happened on February 24, 1956, when three Korean nationals—an industrialist, a manager of a Cho Hung Bank branch, and the department head of the Bank of Korea's Research Section—visited the Philadelphia Mint via ICA-sponsorship. Their mission was to understand the minting process and to view the minting operations on the factory floor.<sup>7</sup> Even from this first visit, and as later events will show, it appears the Koreans were not necessarily interested in contracting the U.S. Mint to make their coins. They were more interested in building their own coin mint.

It would be two years later, in February 1958, that the first earnest discussions about a coinage plan for Korea would take place between the Bank of Korea and the U.S. Mint when the New York office of the Bank of Korea dispatched a representative to Philadelphia for another visit. Again,

the details of this visit show that the Koreans' main interest was in building and operating a coining mint.<sup>8</sup>

### **Assistant Director Leland Howard**

Prior to its representative's visit to Philadelphia in 1958, the Bank of Korea requested information on the requirements for building a coin factory from the U.S. Mint in Washington D.C. and had received an extensive reply from the U.S. Mint's long-time Assistant Director, Frank Leland Howard. Signing his name as 'Leland Howard' on official letters, Howard was appointed as Assistant Director of the U.S. Mint twenty years earlier, having previously worked as an economics instructor at the University of Virginia.<sup>9</sup> Upon becoming Assistant Director in 1938, Leland Howard immediately led the adoption of standardized, modern accounting systems across the U.S. Mint Service, to include the three mints, the two bullion repositories and the Washington D.C. Headquarters. Howard also expanded the authority of the position of Assistant Director during his tenure, eventually becoming involved in decision making on nearly every subject at the U.S. Mint under the leadership of Mint Director Nellie Tayloe Ross (1933-1953). Just after the end of World War II, Mr. Howard led an Allied team that evaluated the coins and gold bullion recovered from Nazi hoards, while at the Mint, he took charge of U.S. gold and silver import and export policy in the late 1940s and throughout the 1950s.<sup>10</sup>



*Dr. Frank Leland Howard in 1939, soon after his appointment as Assistant Director of the U.S. Mint.*

Photograph by Harris & Ewing, March 23, 1939. Retrieved from the Library of Congress, <[www.loc.gov/item/2016875308/](http://www.loc.gov/item/2016875308/)>



*Bronze Medal of U.S. Mint Director William Howard Brett. Obverse engraving by Gilroy Roberts and reverse by Engelhardus von Hebel.*

Photos: 1954 William H. Brett Medal, Director of the Mint, F&H 317, United States. The Money Museum Collection, American Numismatic Association.

Korea. Leland Howard left the U.S. Mint after the appointment of Eva Adams as Director in 1961. In fact, the Treasury Department created an "Office of Domestic Gold and Silver Operations" specifically for the exiting Howard. As the Treasury perceived a looming conflict between the two, the creation of this office was an effort to get Howard out of the Mint before Adams could fire him, since Adams intended to steer the U.S. Mint away from formulating government policy on gold and silver, which was Howard's specialty.<sup>11</sup>



*Eva B. Adams, U.S. Mint Director, talks to Assistant Director Dr. Leland Howard.*

Photo: Woman Mint Official discusses inspection of facility in Denver, January 2, 1962, Denver Post.

Written toward the end of his decades-long career at the U.S. Mint, Leland Howard's five-page letter of February 21, 1958 to the Bank of Korea easily stands as a fascinating and worthwhile read

on its own, particularly to those interested in the economics of minting coins and systems of coinage.<sup>12</sup> For this reason, a brief overview of this letter is justified here. Moreover, the advice found in this letter appears to have had a lasting impression on Korean decision-makers as it would prove relevant to South Korea's situation at the time of its writing and well beyond. Therefore, an examination of the assertions in this letter is especially useful to the current thesis (See **Appendix A**).

### **The Howard Letter**

Leland Howard identified for the Koreans what he saw as the four basic problems with mint operations and starting new coinage systems. In his letter to the Bank of Korea, he explains each problem in turn and decorates his statements with examples from the current situation with the coinage of the United States and that of other nations.<sup>13</sup>

As the Koreans had requested from him a list of equipment needed to outfit a coining mint, Howard advised the Koreans that both the metal composition of coins and the volume of their production will determine what equipment is needed. He warned that the choice of coining metal can dramatically change the nature of the capital expenditure for a mint. The processing of metals like nickel and aluminum, which must be rolled hot, requires equipment which is much more expensive and is entirely different than the equipment used for alloys that can be cold rolled. He also advised that only high-volume output can keep coin production economical. Since the Koreans were at such an early stage in the process, they had yet to make firm decisions about the coining metals that they might use, while they were also unsure about their desired annual production volume. Although this fact obviously hindered the nature of the information that he could give, Howard nonetheless provided as an enclosure to his letter a bare-minimum pricelist of equipment that was specifically required to operate a cold rolling coin mint capable of an output of 100,000-coins per day, minus other requirements such as utilities, buildings, etc.

One of Howard's main contentions was that coins should perform the function of a circulating medium and not as a store of wealth, although he noted that the latter is often overemphasized. The job of a coin is to help in the transfer of goods and services, and due to the cost of manufacturing coins, retaining them in circulation should be a primary goal. He makes a memorable statement on the choice between base metal alloys and precious metal alloys for circulating coins. Howard compared coins, which help transfer goods from one place to another, to two kinds of vehicles that can carry vegetables to the market: He states that the best choice of vehicle should be "the cheapest means possible. In the United States, we would use a truck—not a Cadillac."<sup>14</sup> He steers the Koreans toward considering lower value coining alloys so as to not only avoid the higher costs of more expensive metals, but to avoid further incentivizing the populace to later scrap the coins for their metal content when the value of the monetary unit decreases or when the value of the coins' metal content increases, or when both happen at the same time. Howard gives examples of various locations around the world where these concerns exist, in South America, the United States, and Saudi Arabia. He explicitly advised against the adoption of silver coinage for Korea.

The fact that Howard made this point multiple times in different ways in his letter may indicate that he had knowledge that the Bank of Korea might have had a silver alloy under early consideration. One might also detect a bit of irony here, considering that this warning to avoid precious metal alloys was coming from an official of a national mint that itself was churning out tens of millions of silver coins annually. However, Howard's concern for Korea appears to have

been that the value of the Korean currency unit at that time was dangerously low *vis-à-vis* the per-unit metal price of low-denomination Korean coins. South Korea was then one of the poorest countries in the world. Around this time, the Korean monetary unit, the *hwan*, was officially valued in exchange at just above 1 U.S. cent to 1 *hwan*, although the more realistic black-market exchange rate in Korea had it at about 0.00081 cents to 1 *hwan*.<sup>15</sup>

Although his Korean contacts had not yet told him of the denominations under consideration, Howard also believed that if coins of low face values are introduced to Korea, the government there may not see any seigniorage gain and might even have to make the coins at a loss. He asserted that this depended on the metal used, the weight of each coin, and how carefully the margin is maintained between the face value and the metal value in order to discourage the melting of the coins. However, he added that the government might decide that producing more durable, longer-lasting coins is preferable to printing less-durable paper currencies, which are also costly to manufacture. When comparing the production costs of these two forms of money over time, coins may even prove to be the cheaper option.

As for the Koreans' desire to establish a mint in their country, Mr. Howard took a somewhat pessimistic view of the economic soundness of Korea operating its own full-service coining factory. His main concern appeared to be in regard to the likely scale of Korean coining production, which he seemed to assume would be too small since Korea had a smaller and less developed economy compared to most other countries. However, he did not dissuade Korean officials from considering taking on the less expensive stages of manufacturing coins. He suggested that "a large capital expenditure would be eliminated if the coinage process started with the finished blank."<sup>16</sup> He argued that the metal manufacturing stages (melting, rolling, and blanking) might be cost prohibitive for Korea. Just making coin blanks from metal strip incurs significant expenses through the handling of the large amounts of scissel produced (an output of approximately 30% waste), especially if this scrap cannot be recycled locally. He suggested that any future Korean mint could simply import the blanks and strike the coins.<sup>17</sup>

History would prove that South Korean currency planners seemed to have taken heed of Leland Howard's statements in this letter as well as his later communications. The Bank of Korea even implemented many of these suggestions, as can be seen in the eventual decisions made for the production of the three *hwan* coins in Philadelphia. Some of his suggestions also seem to mirror the options that the Koreans would consider when setting up their own coin mint in the 1960s. However, the passing of time would soon negate Mr. Howard's concern that the small scale of Korea's economy would be too small to justify a large enough production volume for a viable coining mint. It would take a few years, but South Korea would press ahead with plans to build a mint; one with an expansive production volume for a rapidly growing economy propelled by export industries that would soon compete with, and outperform, first-world industries.

In the late 1950s, however, the currency leadership in Korea had much to learn about making coins.

### **Getting Started**

The receipt of Leland Howard's letter had evidently given the Bank of Korea headquarters in Seoul a lot to think about. The Korean reply arrived two months later in April 1958 and consisted of a list of requests for the costs and turnaround times to make both blanks and finished coins at

the U.S. Mint, as well as the costs and turnaround times for the importation of mint machinery from the United States.<sup>18</sup> The wide-ranging nature of this request would require the Mint some time to calculate and write up the quotes, while the questions about mint machinery could only be answered by the relevant manufacturers of that equipment. However, their request for quotes on finished coins did reveal that the Bank of Korea had decided upon its proposed coin denominations: 50-Hwan, 10-Hwan, Five-Hwan and One-Hwan.

It was also evident that the Bank of Korea had no real idea where to begin in regard to their proposed coins' specifications regarding weight, diameter, and metal alloys. In the absence of their own coin specifications, the Koreans resorted to drawing up their quote request based on the exact specifications of nine existing coins found in the contemporary coinage systems of Japan, Italy and Cyprus. By requesting a quote based on these nine coins, the Korean leadership appeared to be developing a price comparison between hot-rolled alloys and cold-rolled alloys, since the example coins were composed of either nickel, steel, or aluminum (hot rolled), along with alloys of bronze and brass (cold rolled).

The Bank of Korea's quote request was forwarded to Leland Howard at the Bureau of the Mint in Washington D.C. from the Bank of Korea's New York office at 37 Wall Street and was signed by the Bank of Korea's head representative stationed there. He signed his name in western fashion, with his surname appearing last, as "Won H. Chung"; in Korean, "정원(정?)." For the next three years, Mr. Chung would be the Bank of Korea's man-on-the-scene in the United States, traveling between his office in New York, the Philadelphia Mint, and occasionally to the Office of the U.S. Mint in Washington D.C. during the period of April 1958 to May 1961. It appears that Mr. Chung was almost the only Korean participant in the United States involved in the planning and production of South Korea's first coins. As we will see, the Bank of Korea's headquarters in Seoul would be compelled to relegate a significant amount of authority to him at times when urgent decisions were needed at critical stages in the minting of Korea's coins.

As it would take some time to gather the information on the hot-rolled alloys that the Bank of Korea requested, Leland Howard quickly prepared an alternative cost estimate quote based on completely different coin specifications. He sent this quote to Mr. Chung on May 8, 1958 (**see Fig. 1 and Appendix B**).<sup>19</sup> Mr. Howard explained this alternate quote as his own suggested specifications for Korea's coins and he offered several reasons for his choices. He argued that these specifications had five advantages:

- 1) They would make the coinage plan cheaper for Korea.
- 2) The alloys chosen would help avoid the pitfalls of coins disappearing from circulation (as mentioned in his letter of February 21<sup>st</sup>).
- 3) The alloys would have the added benefit of being cold rolled, allowing the U.S. Mint, or any other mint in the world of Korea's choosing, to produce the metal and blanks for the coins.
- 4) The suggested metals would be less expensive than most of the Japanese, Italian and Cyprus coins listed in the Bank of Korea's quote request, thereby allowing for the possibility of seigniorage gain.
- 5) The suggested specifications included only alloys and not plated metals, which are much more difficult to work.
- 6) The suggested coin diameter sizes would be easier for people to discern between the different denominations.

Fig. 1

### Leland Howard's "Example Coinage Project" for Korea, with Cost Estimate Quotes. Dated May 8, 1958

Conversions: 7,000 grains per pound  
2,000 pounds per short ton

GENERAL DESCRIPTION OF COINS				METALS REQUIRED (in pounds)			COST OF METALS (in 1958 USD)				MANUFACTURING CHARGE	COST OF METALS PLUS MANUFACTURING CHARGE
Denomination	Weight in Grains (tolerance $\pm$ in grains)	Composition	Diameter (mm)	Copper	Zinc	Nickel	Copper	Zinc	Nickel	TOTAL		
50-HWAN	57 (3)	70% Cu., 18% Zn., 12% Ni	22.86	57,000	15,390.00	9,771.43	\$13,680.00	\$1,539.00	\$7,768.29	\$22,987.29	\$18,500.00	\$41,487.29
10-HWAN	38 (2)	95% Cu. and 5% Zn	20.142	51,571.42	2,850.00	—	\$12,377.14	\$285.00	—	\$12,662.14	\$8,500.00	\$21,162.14
FIVE-HWAN	23.5 (2)	95% Cu. and 5% Zn	16.942	31,892.86	1,125.00	—	\$7,654.29	\$176.25	—	\$7,830.54	\$7,800.00	\$15,630.54
ONE-HWAN	15 (2)	95% Cu. and 5% Zn	14.757	20,357.14	21,127.50	—	\$4,885.71	\$112.50	—	\$4,998.21	\$6,600.00	\$11,598.21

Denomination	TOTAL NUMBER OF PIECES OF STRUCK	TOTAL COST IN 1958 USD PER 1,000 PIECES	EXCHANGE RATE VALUE IN 1958 USD PER 1,000 PIECES	SEIGNIORAGE GAIN IN 1958 USD PER 1,000 PIECES	TOTAL WEIGHT OF COINS (in pounds)	NUMBER OF BOXES REQUIRED	TOTAL COST OF BOXES	NUMBER OF PIECES PER BOX	WEIGHT OF BOXES @ 7.25 LBS. PER BOX	WEIGHT OF COINS IN BOXES (in pounds)	TOTAL GROSS WEIGHT IN SHORT TONS
50-HWAN	10,000,000	\$4.15	\$100.00	\$95.85	81,428.57	834	\$1,251.00	12,000	6,046.50	87,475.07	43.74
10-HWAN	10,000,000	\$2.12	\$20.00	\$17.88	54,285.71	500	\$750.00	20,000	3,625.00	57,910.71	28.96
FIVE-HWAN	10,000,000	\$1.56	\$10.00	\$8.44	33,571.43	250	\$375.00	40,000	1,812.50	35,383.93	17.69
ONE-HWAN	10,000,000	\$1.16	\$2.00	\$0.84	21,428.57	200	\$300.00	50,000	1,450.00	22,878.57	11.44

Total Estimated Cost of Project: **\$92,554.18**  
(Minus cost of master dies)

#### MASTER DIE PREPARATION COST QUOTE

Includes cost of sketches, models, galvanos, and reductions

	Cost per Denomination	Total Cost
Different designs on each obverse and reverse, all 4 denominations (recommended by U.S. Mint)	\$946.00	\$3,784.00
Common design on one side, different design on other, all 4 denominations	\$630.00	\$2,520.00
Common design on obverse and reverse, all 4 denominations (not recommended by U.S. Mint)	\$311.50	\$1,246.00

Included in Mr. Howard's letter were four sample upset blanks made according to his recommended specifications. He reassured the Koreans that their original quote request would be honored, but that it would take some time to write up. He also offered to Mr. Chung the Mint's artistic services to create the sketches of the coins for the Bank of Korea's approval. After Korean government approval, he stated that sample lead strikes could be made for the government's review.

On this last point, it would turn out that Mr. Howard might have done a better job to explain to Mr. Chung the required back-and-forth approval procedures between the U.S. Mint and its foreign customers at each step of a foreign coinage project. This would later appear to be a point of misunderstanding for the Koreans. Making lead strikes from dies is meant to give foreign governments a chance to approve the finished dies by providing visual evidence of what coins struck from those dies will look like. It is also a step that comes later in the process of approving the artwork, just before coin production begins on the factory floor.

### **The U.S. Mint's Foreign Coin Production Protocols**

The approval procedures for the production of foreign coins at the U.S. Mint, as they existed at the time in 1958, were as follows:

- Foreign governments wishing to contract the U.S. Mint to produce coins must formally appeal through diplomatic channels directly to the U.S. State Department for approval. For the Koreans in the late 1950s, this step may already have been underway and facilitated via ICA/USAID sponsorship.
- If needing coin designs, the foreign government can request the U.S. Mint to sketch designs based on the government's provided parameters, themes, or images. Payment must be made before artwork can be started. Countries can pay for only the sketches or may pay for any or all of the following steps including engravings, reductions, and the hubbing of master and coining dies. Any final sketches that the U.S. Mint produces must have approval of the foreign government before continuing with the subsequent steps.
- The U.S. Mint will request the approval of the foreign government upon completion of the sculptures and again upon completion of the master dies. It is at this point that the foreign government can review sample lead strikes made from the dies and either approve or request changes to the dies upon this inspection.
- The U.S. Mint can place the foreign coin order on its production schedule (the steps involving melting, rolling, blanking, upsetting, stamping, and packaging the coins) so long as the State Department has agreed to the foreign coinage contract and so long as the work does not interfere with coinage production required for the United States.<sup>20</sup>
- To be placed on the U.S. Mint's production schedule, the foreign government must first pay the Mint for the total cost to manufacture the coinage. This includes actual overhead costs (labor, materials, use of machinery) and any costs incurred in the purchase of the coining metals, plus profit for the Mint.

The required approvals from the foreign government at each crucial step involving the artwork and die production was obviously meant to ensure the foreign government's satisfaction with the resulting coins as well as to help the Mint reduce the amount of wasted time and effort in having to redo work. As the U.S. Mint did not have its own authority to engage in gratuitous coinages for foreign countries, State Department approval became an instrument to ensure that the coinage was appropriately authorized for that country. It also helped to ensure that the payment for the work would be forthcoming.

The required payments prior to the start of work, the receipt of foreign government approval of first the sketches and then the plasters, along with an "official" letter of approval from the State Department were all supposed to precede the creation of sample lead strikes from dies. In the months following May 1958 to the end of the year, Mr. Chung's letters addressed to the U.S. Mint reveal that he and his superiors in Korea were either not fully apprised of the prerequisite steps to the creation of the sample lead strikes, or that they simply wished to circumvent these procedures in light of the Korean government's urgency to issue coins. The Korean government's

desire to get their coins into circulation as soon as possible is quite discernable in these communications from late 1958 and all throughout 1959.

### **Korea's Coinage Project Takes Shape**

While the Bank of Korea took a few months to digest Mr. Howard's suggested specifications, the Bank requested an additional cost estimate quote from the U.S. Mint on August 25, 1958. Their letter revealed that the Korean government was considering an additional 100-Hwan coin denomination of 30% silver composition, including the option for the production of only the finished blanks needed to make such a coin. Department heads at the U.S. Mint quickly considered this new request and weighed the option of making this proposed coin by utilizing either .640 or .720 fine silver Netherlands bars diluted with the proper amount of copper or by recycling some finished silver coins that the Philadelphia Mint had produced for India but for some reason had not delivered to that country. The U.S. Mint's Melting and Refining Division proposed these two options, adding that if the physical properties of the alloy allowed for cold rolling, the utilization of the .300 silver "India-Pakistan coins" to make these proposed Korean 100-Hwan coins would have the added benefit of eliminating the work to salvage and refine the Indian coins for their silver content. In the end, Mint Director William H. Brett vetoed both options, including the recycling of the leftover India-Pakistan coins, although the idea of the Mint producing silver alloy coins for Korea was not entirely ruled out.<sup>21</sup>

By mid-September, five months after the Koreans had requested the information, the U.S. Mint would send to the Bank of Korea its requested cost estimates based on Japanese, Italian and Cyprus coins made from nickel, steel, aluminum, bronze and brass (**see Fig. 2**).<sup>22</sup> As the Koreans also indicated an interest in striking coins in Korea from finished blanks, the Mint included with this cost estimate a list of equipment and contemporary pricing for a mint that could strike 200,000 coins per 8-hour shift. The letter noted that the price for the necessary 6-ton coining presses, five in total, would amount to \$125,000 and that the E.W. Bliss Company in Canton, Ohio was the U.S. Mint's own supplier of these machines.

On September 24<sup>th</sup>, Director Brett provided the Bank of Korea with a cost estimate for the proposed silver 100-Hwan coin, minus the cost of the silver metal, which he told the Koreans they would have to source and supply on their own (**see Fig. 3**).<sup>23</sup> The reason that the U.S. Mint was not willing to supply the silver is not explained. The metal needed to make these 10 million 30% silver coins would amount to 18.12 short tons (16,439 kilograms) of silver. Therefore, the Bank of Korea would end up canceling any consideration of a silver alloy by November 1958 and likely due to the logistics involved in finding an outside supplier of the required silver, not to mention the various costs involved. However, the new 100-Hwan denomination itself would be retained in the coinage plan.<sup>24</sup>

### **The Coin Purchase Plan**

The first definitive indication appearing in U.S. Mint records that the Korean government had decided to import its coinage from the United States appeared in September 1958. Up to this time, the Korean government's communications merely requested information and quotes related to manufacturing either blanks or coins along with the equipment needed to outfit a mint. However, the Korean government's decision to contract the U.S. Mint had likely already been made by at least May or June 1958, while the Korean leadership spent the late summer months contemplating

Fig. 2

**U.S. Mint Cost Estimate Quote for Korean Government**  
**(Korean government chosen specifications based on existing coins from various countries)**  
**Dated September 16, 1958**

Conversions: 7,000 grains per pound

GENERAL DESCRIPTION OF COINS				METALS REQUIRED (in pounds)						COST OF METALS (in 1958 USD)						
Denomination	Weight in Grains (tolerance $\pm$ in grains)	Composition	Diameter (mm)	Copper	Zinc	Tin	Nickel	Aluminum	Steel	Copper @ \$0.2385/lb	Zinc @ \$0.1115/lb	Tin @ \$0.98/lb	Nickel @ \$1.30/lb	Aluminum @ \$0.55/lb	Steel @ \$0.50/lb	TOTAL
50-HWAN	5.50 (3)	Pure Nickel	25	—	—	—	202,090.38	—	—	—	—	—	\$262,717.49	—	—	\$262,717.49
50-HWAN	6.25 (2)	Stainless Steel (18% chrome)	24.8	—	—	—	—	—	229,648.17	—	—	—	—	—	\$114,824.09	\$114,824.09
50-HWAN	5.70 (3)	95.5% Cu., 3% Sn., 1.5% Zn	25.5	120,008.61	1,884.96	3,769.90	—	—	—	28,622.05	\$210.17	\$3,694.50	—	—	—	\$32,526.71
10-HWAN	38 (2)	95.5% Cu., 3% Sn., 1.5% Zn	23.3	90,532.82	1,421.98	2,843.96	—	—	—	\$21,592.08	\$158.55	\$2,787.08	—	—	—	\$24,537.71
10-HWAN	38 (2)	Aluminum	23.9	—	—	—	—	58,789.93	—	—	—	—	—	\$32,334.46	—	\$1,875.00
FIVE-HWAN	23.5 (2)	Aluminum	20.2	—	—	—	—	36,743.70	—	—	—	—	—	\$20,209.04	—	\$20,209.04
FIVE-HWAN	23.5 (2)	95.5% Cu., 3% Sn., 1.5% Zn	20.2	80,005.75	1,256.63	2,513.27	—	—	—	\$19,081.37	\$140.11	\$2,463.00	—	—	—	\$21,684.48
ONE-HWAN	15 (2)	Aluminum	17.2	—	—	—	—	22,964.82	—	—	—	—	—	\$12,630.65	—	\$12,630.65
ONE-HWAN	15 (2)	70% Cu., 30% Zn	15	15,432.35	6,613.87	—	—	—	—	3,680.62	\$737.45	—	—	—	—	\$4,418.07

Denomination	MANUFACTURING CHARGE	NUMBER OF BOXES REQUIRED	TOTAL COST OF BOXES	TOTAL NUMBER OF PIECES STRUCK	TOTAL EST. MANUFACTURING, METAL AND BOX COST
50-HWAN	\$12,500.00	1,250	\$1,875 @ \$1.50/box	10,000,000	\$277,092.49
50-HWAN	\$12,000.00	1,250	\$1,875 @ \$1.50/box	10,000,000	\$128,699.09
50-HWAN	\$26,500.00	1,250	\$1,875 @ \$1.50/box	10,000,000	\$60,901.72
10-HWAN	\$19,500.00	1,250	\$1,875 @ \$1.50/box	10,000,000	\$45,912.71
10-HWAN	\$10,000.00	1,250	\$1,875 @ \$1.50/box	10,000,000	\$44,209.46
FIVE-HWAN	\$8,000.00	834	\$1,251 @ \$1.50/box	10,000,000	\$29,460.04
FIVE-HWAN	\$17,500.00	834	\$1,251 @ \$1.50/box	10,000,000	\$40,435.48
ONE-HWAN	\$7,000.00	500	\$750 @ \$1.50/box	10,000,000	\$20,380.65
ONE-HWAN	\$11,000.00	500	\$750 @ \$1.50/box	10,000,000	\$16,168.07

(Minus cost of master dies)

Fig. 3

**U.S. Mint Cost Estimate Quote for Silver 100-Hwan Coin**  
**Dated September 24, 1958**

GENERAL DESCRIPTION OF COIN				METALS REQUIRED		COST OF METALS (in 1958 USD)		MANUFACTURING CHARGE	TOTAL NUMBER OF PIECES STRUCK	NUMBER OF BOXES REQUIRED	TOTAL COST OF BOXES	COST OF METALS (MINUS COST OF SILVER) PLUS MANUFACTURING CHARGE AND BOXES
Denomination	Weight in Grams	Composition	Diameter (mm)	Silver (in Fine Ounces)	Copper (in pounds)	Silver @ \$0.26875/lb	Copper @ \$0.26875/lb					
100-HWAN	6	30% Silver 70% Copper	24	579,870.80	92,594.14	to be furnished by Korean Government	\$24,884.68	\$29,000.00	10,000,000	1,250	\$1,875.00	\$55,759.68

(Minus cost of master dies)

**Cost Estimate Quote, Blanks Only**

Denomination	TOTAL NUMBER OF PIECES	Proposal No. 1	Proposal No. 2
		Blanks finished to and including selecting. Blanks counted, bagged, boxed.	Blanks finished through blanking only. Packed in barrels. Delivery by weight, not count.
100-HWAN	10,000,000	\$52,759.68*	\$46,884.68*

\* Cost of silver not included

whether to import from the U.S. Mint the blanks to be later struck as coins in Korea or to import the finished coins from the U.S. Mint.

In a letter dated September 25<sup>th</sup>, the Bank of Korea's representative Won H. Chung wrote to Leland Howard to announce that the Korean government had reached "a preliminary decision which is based wholly on your comprehensive letter of May 8, 1958" concerning "the import of manufactured coins."<sup>25</sup> (**See Appendix B**). An enclosure with this letter detailed the Bank of Korea's working plan to import from the U.S. Mint five denominations: 100-Hwan, 50-Hwan, 10-Hwan, Five-Hwan and One-Hwan. It showed that the Koreans had come to a decision on these coins' specifications, including two possible specifications for the 100-Hwan coin: One of 30% silver and the other of "German silver" (70% Cu, 18% Zn, 12% Ni) composition (**see Fig. 4**).<sup>26</sup>

**Fig. 4**

<b>Korean Government's Specifications for Coinage Order with the U.S. Mint Dated September 25, 1958</b>				
<b>Denomination</b>	<b>NUMBER OF PIECES</b>	<b>Weight</b>	<b>Composition</b>	<b>Diameter (mm)</b>
<b>100-HWAN</b>	10,000,000	10 grams	70% Cu., 18% Zn., 12% Ni	26
<b>100-HWAN</b>	10,000,000 (undecided)	6 grams	30% Ag and 70% Cu.	24
<b>50-HWAN</b>	25,000,000	57 grains	70% Cu., 18% Zn., 12% Ni	22.86
<b>10-HWAN</b>	100,000,000	37 grains	95% Cu. and 5% Zn	20.142
<b>FIVE-HWAN</b>	5,000,000	23.5 grains	95% Cu. and 5% Zn	16.942
<b>ONE-HWAN</b>	5,000,000	15 grains	95% Cu. and 5% Zn	14.797

The Bank of Korea noted that their final decision on the metal composition for this coin would be made after receipt of the U.S. Mint's quote for the proposed silver 100-Hwan (which would have to wait, as that quote had only been prepared the day before). Included with the September 25th letter were the first design sketches of the five proposed Korean coins. These initial designs originated from the Korean Mint's design office.

### **The First Designs**

Examples of these first designs for this Korean coining contract were not retained in the U.S. Mint's records at the U.S. National Archives. Keeping these images out of the document archive might have been an attempt to maintain the security of this original artwork. Decades later in 2006, former Korean currency designer Jo Byeongsu included in his ground-breaking book, *Korean Commemorative Coins* (2006), images of three of these coin sketches (the 100-Hwan, 10-Hwan and Five-Hwan) that were most certainly the same ones included in Mr. Chung's letter of September



These four coin designs appeared on page 201 of the book, *Korean Commemorative Coins* (2006), written by former Bank of Korea currency designer Jo Byeongsu. The coin designs are displayed here with obverse and reverse images side-by-side. The denominations are 50-Hwan (upper left), 10-Hwan (upper right), Five-Hwan (lower left) and One-Hwan (lower right). The denominations that these images display are identical to the initial coin denominations that the Bank of Korea first proposed to the U.S. Mint in April 1958. Therefore, these sketches give the impression of an early design consideration; one that was perhaps not shared with the U.S. Mint. This hypothesis is simply based on the style of their design and the absence of a 100-Hwan denomination. Since author Jo Byeongsu did not include any explanatory text with this image in his book, the origin and date of these sketches are left to conjecture. There are two details of interest: The legends in these designs all read “대한민국”(Republic of Korea), and not the legally-required legend, “한국은행”(Bank of Korea), while the One-Hwan design features an image of the Korean hibiscus flower, the mugunghwa (bottom right).

Images found in Jo Byeongsu, *Jo Byeongsu's Story of Money: Korean Commemorative Coins* [우리나라 記念鑄貨 Korean Commemorative Coins : 조병수의 돈 이야기 ]. (Seoul: Ohsung K&C, 2006), 201.

25, 1958 to the U.S. Mint.<sup>27</sup> Interestingly, these first design sketches that the Koreans forwarded to the U.S. Mint were drawn to the actual coin diameter sizes(!) instead of the usual five to eight inch-diameter size drawings that are normally used for transferring designs to engravings. Their small size made the details within these sketches to appear quite small and would later make it difficult for the U.S. Mint engravers to follow the lettering that appeared in them.<sup>28</sup>

An important observation about the Bank of Korea's September 25<sup>th</sup> letter was that it gives clear evidence that the Koreans were open to U.S. Mint input regarding the coins' proposed designs and specifications. As for these proposed designs, Chung wrote to Howard, “[i]f your judgement recommends changing parts of the sketched, Seoul will follow your suggestions to every possible extent.” The Koreans also requested recommendations on the tolerances of the coins' diameter sizes, thicknesses, weights, and compositions. Chung added that the U.S. Mint's suggestions in this regard would “probably serve to make regulations on the new establishment of coins” for Korea.<sup>29</sup> Essentially, the Koreans had decided to invite the



These obverse and reverse sketches of three of the five proposed coin denominations are believed to have first been made public in Jo Byeongsu's 2006 book, *Korean Commemorative Coins*. These images most likely display the artwork and layout scheme that the Bank of Korea had under consideration when it first shared the proposed designs with the U.S. Mint in September 1958. The Korean legends appearing in these designs are rendered in a font the Bank of Korea would refer to as a “running style” of lettering. This lettering would be abandoned in the later reworked designs in favor of a “square” font. The designs that were intended for the One-Hwan and 50-Hwan at this stage of the design phase were probably the Cheomseongdae observatory for the 50-Hwan and the Korean hibiscus flower for the One-Hwan.

Image found in: Jo Byeongsu, *Jo Byeongsu's Story of Money: Korean Commemorative Coins* [우리나라 記念鑄貨 Korean Commemorative Coins : 조병수의 돈 이야기 ]. (Seoul: Ohsung K&C, 2006), 199.

U.S. Mint to help with both the designs of South Korea's future coins and with the calibration of their specifications.

Another detail of interest in this correspondence was yet another appeal from Bank of Korea headquarters that sample lead strikes be made as soon as possible from the coin design sketches. Mr. Chung wrote, "our Seoul office wishes lead strikes...if the making can be done without entering the process of regular preparation for the master dies and without charge," however "if [the] processes for full scale models, galvanos, and others are necessary, please let us have the details so that we may get the approval of Seoul."<sup>30</sup> This request makes it appear that the Korean side was quite anxious to obtain samples of the proposed coins. This was likely driven by pressure from higher-level Korean government officials who might have demanded evidence of exactly what it was that they could expect from this coining contract in order to accelerate approval on their end.

Although this September 25<sup>th</sup> letter shows that the Koreans probably understood that the U.S. Mint was not likely to subvert its own foreign-coin approval procedures (which involved key intermediate steps prior to producing sample strikes), Bank of Korea officials appear to have hoped that an exception to the rules could be made in their case. As we will see however, the U.S. Mint would fail to immediately address this Korean request for sample strikes after it was forwarded to the staff at Philadelphia. Instead, the team at the Philadelphia Mint would busy themselves with adjusting the coin specifications and drawing up the quotes. However, by failing to clarify the U.S. Mint's procedures with Mr. Chung at this point, Leland Howard would later encounter some embarrassment when he realized that the request had gotten lost in the shuffle.

### **The U.S. Mint's First Suggested Changes**

With permission to make changes to the proposed coins' specifications, the U.S. Mint made slight adjustments to the Korean coinage order. Two immediate changes were slight upward adjustments to the diameter of the One-Hwan coin and to the weight of the 10-Hwan coin.<sup>31</sup> The Coining Division at the Philadelphia Mint then produced four bronze coin blank samples for review, three of which were sized to the proposed specifications for the One-Hwan, Five-Hwan and 10-Hwan. Since they believed that a reduction to the diameter of the 10-Hwan coin would be advantageous, the Mint created a fourth blank at a diameter size of .750 inch (19 mm) for the 10-Hwan coin. The Coining Division made this suggestion since the result would be a slightly thicker blank that would result in a better strike compared to the one resulting from the original 20.1mm diameter (or .787 inch) specification. This 19mm diameter size would also make it easier to punch the blanks using the U.S. Mint's existing standard One-Cent blanking die sets and carbide collars. They reasoned that this reduced size "together with the prospect of longer die life and consequent higher production, would lower...costs considerably" and would bring the actual costs more in line with their cost estimates, which the Mint leadership had requested the Coining Division to keep "very low for this job."<sup>32</sup> The Philadelphia Mint team also suggested that the 100-Hwan be reduced in weight from 10 grams to 6.61 grams since a 26mm coin at this lower weight would not only present "a more favorable appearance as a coin but will require less metal to manufacture." Nonetheless, they produced both 10-gram and 6.61-gram sample blanks, which Director Brett sent to the Bank of Korea for review on October 13<sup>th</sup>.<sup>33</sup>

Once the above adjustments to the coin specifications were completed by the end of October 1958, the Mint drew up a cost estimate quote for the entire coinage project for Korea, including an informal estimated quotation for the shipping costs. Notably, the U.S. Mint's adjustments to the coin specifications were written into the quote without prior written consent from the Korean side since the Bank of Korea had apparently granted the U.S. Mint that authority, as evidenced in their letter of September 25<sup>th</sup>. The Director of the U.S. Mint, William H. Brett, sent this quote to the Bank of Korea's representative in New York, Mr. Chung, on October 31<sup>st</sup>. (See Fig. 5).<sup>34</sup>

**Fig. 5**

<b>U.S. Mint Cost Estimate Quotes for the Korean Government's Proposed Coinage Project</b> <b>Dated October 31, 1958 and supplemented, November 26, 1958</b>													
GENERAL DESCRIPTION OF COINS						METALS REQUIRED (in pounds)				COST OF METALS (in 1958 USD)			
Quote Date	Denomination	NUMBER OF PIECES	Weight	Composition	Diameter (mm)	Copper	Zinc	Nickel	Stainless Steel	Copper @ \$0.29/lb	Zinc @ \$0.12/lb	Nickel @ \$0.77/lb	Stainless Steel @ \$0.50/lb
11/26/58	100-HWAN	10,000,000	93 grains	Stainless Steel	26	—	—	—	221,428.57	—	—	—	\$110,714.29
	100-HWAN	10,000,000	102 grains	95% Cu. and 5% Zn	26	138,428.71	7,285.71	—	—	\$40,144.29	\$874.29	—	—
10/31/58	100-HWAN	10,000,000	6.61 grams	70% Cu., 18% Zn., 12% Ni	26	102,000.00	26,228.57	17,485.71	—	\$29,580.00	\$3,016.29	\$13,464.00	—
	50-HWAN	25,000,000	57 grains	70% Cu., 18% Zn., 12% Ni	22.86	142,500	36,642.86	24,428.57	—	\$41,325.00	\$4,213.93	\$18,810.00	—
	10-HWAN	100,000,000	38 grains	95% Cu. and 5% Zn	19.1	515,714.28	27,142.86	—	—	\$149,557.14	\$3,121.43	—	—
	FIVE-HWAN	5,000,000	23.5 grains	95% Cu. and 5% Zn	16.942	15,946.42	839.29	—	—	\$4,624.46	\$96.52	—	—
	ONE-HWAN	5,000,000	15 grains	95% Cu. and 5% Zn	14.757	10,178.58	535.71	—	—	\$2,951.79	\$61.61	—	—

Quote Date	Denomination	MANUFACTURING CHARGE	MASTER DIE PREPARATION COSTS	NUMBER OF BOXES REQUIRED	TOTAL COST OF BOXES	TOTAL COST
11/26/58	100-HWAN	\$18,000.00	\$1,606.00	1,667	\$2,500.50	\$132,820.79
	100-HWAN	\$28,000.00	\$1,606.00	1,667	\$2,500.50	\$73,125.08
10/31/58	100-HWAN	\$34,000.00	\$1,606.00	1,667	\$2,500.50	\$84,166.79
	50-HWAN	\$46,250.00	\$1,406.00	2,084	\$3,126.00	\$115,130.93
	10-HWAN	\$85,000.00	\$1,206.00	5,000	\$7,500.00	\$246,384.57
	FIVE-HWAN	\$5,250.00	\$1,406.00	167	\$250.50	\$11,627.48
	ONE-HWAN	\$4,250.00	\$756.00	100	\$150.00	\$8,169.40

TRANSPORTATION COSTS	
(from Philadelphia Mint to port of Incheon)	
Drayage from Mint to pier at \$0.20 per 100 lbs. (Armed guard: \$30/day, if needed)	\$2,000.00
Unloading at pier at \$0.115 per 100 lbs.	\$1,161.50
Insurance Coverage from Philadelphia Mint to dock at Incheon, Korea	\$655.50
War risk, if needed	\$163.00
Ocean freight, approx. 505 short tons at \$77.00 per short ton	\$38,885.00
TOTAL ESTIMATED TRANSPORTATION	\$42,885.00

Total Estimated Cost of Project:

**\$ 514,133.17 (for order of five denominations, with Stainless Steel 100-Hwan)**

**\$ 454,437.46 (for order of five denominations, with 95% Cu., 5% Zn. 100-Hwan)**

**\$ 465,479.17 (for order of five denominations, with 70% Cu., 18% Zn., 12% Ni. 100-Hwan)**

Director Brett informed Mr. Chung that the U.S. Mint would gladly purchase the required metal for this coin plan and bill the Korean government at the prevailing market price for the metal when the order is made firm. He also reiterated the need for Korea to request approval from the U.S. State Department and for the Korean government to accept the estimated costs before work could begin; thereafter the coin order would take approximately five months to complete.<sup>35</sup>

After receiving the quote, Chung quickly informed Howard that the Bank of Korea had decided to drop consideration of the silver composition 100-Hwan coin and was instead interested having

**Fig. 6**

<b>U.S. Mint Cost Estimate Quotes for Korea's <i>hwan</i> Coinage Dated December 11, 1958</b>										
GENERAL DESCRIPTION OF COINS					METALS REQUIRED (in pounds)			COST OF METALS (in 1958 USD)		
Denomination	NUMBER OF PIECES	Weight in Grains (tolerance ±)	Composition	Diameter (mm)	Copper	Zinc	Nickel	Copper @ \$0.29/lb	Zinc @ \$0.1275/lb	Nickel @ \$0.7950/lb
<b>100-HWAN</b>	10,000,000	104 (4)	75% Cu., 25% Ni	26	111,428.57	—	37,142.85	\$32,314.29	—	\$29,528.57
<b>50-HWAN</b>	25,000,000	57 (3)	70% Cu., 18% Zn., 12% Ni	22.86	142,500	36,642.86	24,428.57	\$41,325.00	\$4,325.00	\$24,428.57
<b>10-HWAN</b>	100,000,000	38 (2)	95% Cu. and 5% Zn	19.1	515,714.28	27,142.86	—	\$149,557.14	\$3,460.71	—
<b>FIVE-HWAN</b>	5,000,000	23.5 (2)	95% Cu. and 5% Zn	16.942	15,946.42	839.29	—	\$4,624.46	\$107.01	—
<b>ONE-HWAN</b>	5,000,000	15 (2)	95% Cu. and 5% Zn	14.757	10,178.58	535.71	—	\$2,951.79	\$68.30	—

Denomination	MANUFACTURING CHARGE	MASTER DIE PREPARATION COSTS	NUMBER OF BOXES REQUIRED	TOTAL COST OF BOXES	TOTAL COST
<b>100-HWAN</b>	\$28,000.00	\$1,606.00	1,667	\$2,500.50	\$93,949.36
<b>50-HWAN</b>	\$46,250.00	\$1,406.00	2,084	\$3,126.00	\$116,199.67
<b>10-HWAN</b>	\$85,000.00	(no charge)	5,000	\$7,500.00	\$245,517.85
<b>FIVE-HWAN</b>	\$5,250.00	\$1,406.00	167	\$250.50	\$11,637.97
<b>ONE-HWAN</b>	\$4,250.00	\$756.00	100	\$150.00	\$8,176.09

Total Estimated Cost of Project: **\$ 518,365.94**

it struck as either a stainless steel, pure nickel, or copper-based coin.<sup>36</sup> At the end of the month on November 26<sup>th</sup>, Mint Director Brett was able to provide Mr. Chung with two out of these three additional requested quotes for the 100-Hwan. The quotations gave pricing for a 95% copper alloy coin and a stainless-steel alloy coin (14~18% chromium, .12% carbon, and the rest iron); both coins at 26mm in diameter but with differing weights (See 11/26/58 quote in **Fig. 5**).<sup>37</sup>

The metal composition eventually chosen for the 100-Hwan originated in a telephone conversation two days later on November 28<sup>th</sup> in which Howard and Chung discussed the possibility of striking the 100-Hwan in cupronickel (75% copper, 25% nickel). Howard described the alloy as “the same as our five cent coin” and he soon had a 26mm, 104.05-grain cupronickel sample blank ready for review by December 10<sup>th</sup>.<sup>38</sup> The next day, the U.S. Mint updated the quote to include the cost of a cupronickel alloy 100-Hwan for the Bank of Korea’s consideration (**See Fig. 6**).<sup>39</sup>

Around this same time, in November 1958, the first public announcements appeared in the main daily newspapers in Seoul about the Korean government’s decision to introduce coins into the economy for the first time since the liberation from Japan in 1945. The *Kyonghyang Shinmun* reported that the Bank of Korea had requested approval from South Korea’s Ministry of Finance to introduce coins in denominations of 100-Hwan, 50-Hwan, 10-Hwan, Five-Hwan, and One-Hwan. The article asserted that coins would have an advantage over the frail banknotes circulating in the same denominations by providing a special kind of “tangible sensation,” giving the Korean public

the sense that “the monetary system will stand properly.” However, the article also noted that “[a]s the issuance ultimately requires the approval of high-ranking officials, the Bank of Korea cannot guarantee that [the coins] will be issued as initially intended.”<sup>40</sup>

This would prove to be a prescient observation.

### **South Korea's First Master Coin Hubs**

It was in the midst of these adjustments to the initial coin specifications that Leland Howard placed an urgent work order with the Philadelphia Mint on November 26, 1958 on behalf of the Korean government. The order was for the immediate creation of dies for South Korea's proposed 10-Hwan coin and for the purpose of creating sample strikes.

The U.S. Mint now reckoned with its failure to manage its Korean clients' expectations.

It all began in a telephone conversation that same day between Mr. Chung and Leland Howard. Mr. Chung wanted to know when he could expect an answer to one of his inquiries in his September 25<sup>th</sup> letter about when the Bank of Korea would receive sample lead strikes of Korea's proposed coinage. After waiting two months, the Koreans had not received a reply to this specific request. It turns out that Howard was not the one who had dropped the ball on this issue. Back in September, Howard had sent the Bank of Korea's letter, including the request for sample strikes, to Mint Director Brett. Brett then forwarded the letter to the Superintendent of the Philadelphia Mint Rae V. Biester for processing, specifically remarking that Philadelphia should “...note the comments in connection with the lead strikes...”<sup>41</sup> As they likely focused more on the letter's more significant announcement that the Korean government had made the decision to hire them to make Korea's coins, the Philadelphia team had probably forgotten to address it.



*These are the very first South Korean coin hubs (right), created for the 10-Hwan denomination (Version 1) in the first weeks of December 1958. These hubs were never used for coinage but rather to make sample lead strikes at the request of the Bank of Korea. The Philadelphia Mint's hasty manufacture of these hubs using low-resolution sketches resulted in several errors that the Bank of Korea requested be changed. Gilroy Roberts created new plasters (Version 2) based on the suggested changes to these hubs by early February 1959. However, work on this “ear of rice” coin design progressed no further. The arabesque scrolls on either side of the 4292 (1959) date are the only artistic features from this first version of the 10-Hwan that were retained on the final design for the 10-Hwan. The Chinese characters in blue ink next to the hubs in the photo are, from top to bottom, 裏 (reverse) and 表 (obverse).*

Image (left) found in Jo Byeongsu, *Jo Byeongsu's Story of Money: Korean Commemorative Coins* [우리나라 記念鑄貨 Korean Commemorative Coins : 조병수의 돈 이야기] (Seoul: Ohsung K&C, 2006), 199. Photo (right) found in an attachment to letter dated January 16, 1959 to Assistant Director the Mint, Leland Howard from Won H. Chung, Representative Bank of Korea. NARA-CP, RG104, Entry 328-F, box 10, Korea-Establishment of new coinage system and coinage.

Mr. Howard formally responded to Chung in writing on December 2<sup>nd</sup> in an effort to atone for the oversight. He belatedly explained that “we do not, as a general operating policy, produce dies and issue sample strikes, without charge, before our estimate of cost has been accepted by the Government involved.” Nonetheless, Howard and other officials at Mint headquarters authorized,

without charge to the Korean government, the manufacture of the hubs for the 10-Hwan coin only. In explaining this decision to Mr. Chung, Howard noted that it was made “because of the undue delay occasioned your government,” but did not elaborate any further; he simply promised to make hubs for this coin and to send sample strikes within two weeks.<sup>42</sup> The Mint’s unilateral and seemingly arbitrary decision to order the hubs for this one particular denomination out of the five was actually based on a rather practical consideration.

In consultation with Assistant Superintendent of the Philadelphia Mint Paul S. Heckman on November 26th, Howard agreed that “the design for the 10 Hwan was the sharper of the bunch” —an allusion to the small, unclear coin designs that the Bank of Korea had shared with them. Although Mint records do not explicitly state that the Koreans were impatiently awaiting sample strikes, what the record does reveal makes their impatience apparent enough. Howard told Heckman to make the hubs for the 10-Hwan “as quickly as possible and charge the cost to experimental.”<sup>43</sup> The New York branch of the Bank of Korea soon received the lead sample strikes, which they promptly airmailed to their Seoul Headquarters on December 15, 1958.<sup>44</sup>

In an effort to finally clear up the Bank of Korea’s misunderstanding of the minting process, the U.S. Mint invited Mr. Chung to revisit Philadelphia the following month on January 15, 1959 to speak with Superintendent Biester and take a tour of the Mint. During this visit, Chung was turned over to Chief Engraver Gilroy Roberts for a detailed explanation of coin die manufacturing, beginning with the designs. In her meeting with Mr. Chung, Rae Biester became aware that the Korean government was now quite anxious to have Philadelphia improve the designs for Korea’s coinage, with specific concerns about the 10-Hwan hubs. After their review of the sample 10-Hwan strikes, the Seoul Headquarters noted that the hubs required “some changes from the design appearing on the lead strikes...”<sup>45</sup> Chung brought with him the Bank of Korea’s requested modifications to the 10-Hwan hubs, which he turned over to Roberts. Although no images of them are available, Chung would later detail the Bank of Korea’s desired adjustments to the initial pair of 10-Hwan dies as follows:

- 1) A change from the “running style” of Korean lettering to a “square style.”
- 2) A revision to the appearance of the written denomination “십 환” (Ten Hwan) on the obverse.
- 3) A correction to the appearance of the denomination numeral, which the Koreans had expected the U.S. Mint’s artists to correct on their own.
- 4) A revision to the appearance of the “ear of rice” on the obverse; the Koreans considered the U.S. Mint’s rendering of this main device as “different from the actual object.” In other words, Bank of Korea officials did not think it looked like an ear of rice.
- 5) All Korean letters were “to be corrected.”<sup>46</sup>



10-Hwan “Ear of Rice” (Version 2)

*This image is a mock-up based on its written description and not the actual design. Gilroy Roberts sculpted revised plasters using design elements and lettering that were probably similar to the those shown here. Evidence suggests that this version progressed no further than plaster casts.*

The Bank of Korea's apparent dissatisfaction with a few of these items was clearly the result of the poor quality of the images that the Koreans themselves had given the U.S. Mint, in addition to the haste involved in making the dies. Chung would admit that two of the revisions (the appearance of the lettering and written denomination) were made simply because the Bank of Korea had changed its preferences after viewing the lead strikes.<sup>47</sup> The Bank of Korea's reaction to the 10-Hwan lead strikes also highlights exactly why, under normal circumstances, the U.S. Mint followed procedural standards that involved prior permissions and approvals at each step of the production of foreign coins.

It was also during his visit to Philadelphia that Chung found out that the Mint's artists had not yet drawn their own sketches of any of the Korean coin designs. It appears that he and his bosses in Korea had expected that the Mint would proceed with the drafting of sketches that could then be transferred onto plasters. Both Roberts and Heckman told Chung that it was probably not possible for the Philadelphia team to proceed with sketches without the proper approvals.<sup>48</sup> At this point, the only artwork that the Mint had created for Korea were the initial 10-Hwan plasters that were quickly created to cut the first dies for this denomination (Version 1).



*The Philadelphia Mint building as it would have looked during the late 1950s and early 1960s at its location at 16<sup>th</sup> and Spring Garden Streets.*

Black and white photograph of entrance elevation of the Third Philadelphia Mint, U.S. Department of the Treasury, [home.treasury.gov/about/history/curator/us-mint-buildings/philadelphia-mint](https://home.treasury.gov/about/history/curator/us-mint-buildings/philadelphia-mint)

The following day, Chung forwarded to Leland Howard both a written description and images of the desired changes to the 10-Hwan. Mr. Chung urged Howard to allow the artists at the Mint to “go ahead with the preparatory designs and sketches” as it would be “greatly helpful in saving time.”<sup>49</sup> Howard replied to Chung the following week, stating that Gilroy Roberts would rework the 10-Hwan without charge to the Korean government. Roberts soon finished the reworked 10-Hwan plasters (Version 2), which were then airmailed to Seoul for review on February 11<sup>th</sup>.<sup>50</sup> Howard also confirmed Roberts' and Heckman's opinions that for the other four designs, procedures would need to be followed. Specifically, the Korean government would be required to pay before the U.S. Mint began work on the sketches or sculptures for the remaining denominations. He also explained at length the need for the Bank of Korea to send larger, 5 to 8-inch diameter sketches of the remaining coin designs so as to eliminate the chance of making errors in the imagery and lettering when sculpturing the models, as had happened with the first 10-Hwan dies. Since the Koreans indicated a desire to approve the plasters from photographs, Howard assured Chung that photos would be forthcoming after the Mint had first received “larger designs and a firm order to sculpture them.”<sup>51</sup>

This entire episode involving South Korea's first hastily produced master dies apparently clarified the U.S. Mint's requirements and procedures for the Koreans, especially for Mr. Chung. As the Bank of Korea's sole representative on the scene, Chung was practically the only Korean to interface with the Americans and was likely the one who had to translate and communicate all that he had learned to his leadership back in Korea. Although the Korean side would later continue to urge the U.S. Mint to expedite and even abbreviate its procedures, now that Mr. Chung was better informed of how the work should proceed, the first deliveries of their new coins could have easily taken place a few months later. Instead, the Korean coinage project would stagnate for months at this very early stage of development.

### **A Complete Change to the Coin Designs**

By February 1959, South Korea's coinage plan consisted of five proposed denominations along with their preliminary composition, size, and weight specifications, as well as designs. Yet, the only existing finished obverse and reverse designs and plasters were for a single denomination, the revised Version 2, "ear of rice" design for the 10-Hwan. Even though the Bank of Korea had "expressed full satisfaction with the plaster model" after reviewing the Version 2 plasters in mid-March, the Korean government had not yet given its final approval for this artwork.<sup>52</sup> At this point, not only was approval pending for this finished artwork for the 10-Hwan, but the U.S. Mint was also awaiting the larger, more precise sketches of the remaining denominations to arrive from Korea, in addition to payment prior to beginning the engraving work on these designs. In contrast to their previous urgency to get coin production started, the leadership in Korea would put their coinage project on hold for three months between February and May of 1959. After only the first month of this delay, an internal Mint memorandum suggested possible changes to the U.S. Mint's foreign coinage policies.

Concerns about rising overhead costs at the Philadelphia Mint due to the installation and breakdown periods of new melting and rolling equipment in early 1959 called into question the lack of expiry dates on the cost estimates quoted to foreign governments. With no firm orders from the Koreans, it was feared that an extended delay between the date of the last cost estimate prepared on December 11, 1958 and the actual production of the Korean coins might force the Mint to either absorb the increased overhead costs or to charge the Korean government for them. Therefore, the memo suggested that the Mint might find it "desirable, when submitting an estimate to a foreign government, to set a time limit during which the quoted prices will apply, and reserve the right to review the estimates and revise the prices, if necessary, if a greater time has elapsed since the estimate was given."<sup>53</sup>

Then, in mid-May, there was news from Korea. Soon, decisions that had been made in Korea during the interim were shared with the U.S. Mint in quick succession over the following two-week period spanning late May to early June 1959. The plan to import coins from the U.S. Mint had passed the first of two authorizations required for the introduction of new coins and currency in South Korea. According to the country's central banking laws, new coins and banknotes needed first government approval, then final approval from the highest-level organization within the Bank of Korea that formulates monetary policy, the Monetary Policy Board.<sup>54</sup> On May 14, 1959, South Korean President Syngman Rhee had given the coinage plan his approval which, in those years, was tantamount to "government approval." However, on the following day, the Korean Ministry of Finance's instructions to the Bank of Korea revealed that the Korean government had, so far, decided to issue only the 50-Hwan and 10-Hwan coins.<sup>55</sup>

On May 18<sup>th</sup>, Chung informed Howard that the Bank of Korea would order mintages of 25 million pieces for the 50-Hwan and 100 million pieces for the 10-Hwan. The news also included the Korean government's rather hopeful plan to issue the coins on their nation's Liberation Day holiday of August 15<sup>th</sup>.<sup>56</sup> A few days later, an "enlarged design of [the] 50 Hwan" was also on its way to Philadelphia from Seoul. The Korean leadership gave instructions to South Korea's ambassador and Washington D.C. resident, Dr. Yang You-chan, to transact the formal request with the U.S. State Department.<sup>57</sup> On May 21<sup>st</sup>, the Monetary Policy Board in Korea passed the second, and final, approval for the introduction of the 50-Hwan and 10-Hwan coins.<sup>58</sup>

Within days after these announcements out of Korea, Mr. Chung met with Leland Howard and Mint Director William Brett. What they discussed at this meeting promised to accelerate the Korean coinage project after months of delay. The men agreed to tentatively place the Korean coining order on the Philadelphia Mint's schedule to first break down the coining metal and then start striking the coins on or around July 10, 1959. They assumed that the production of the coins would take about three months to complete; with the proviso that "all the preparatory arrangements can be made and no unforeseen obstacles appear."<sup>59</sup>

Just a few days after this meeting, a rather significant "unforeseen obstacle" appeared.

It would turn out that the Korean government had not yet finished deliberating on the final number of coins, nor their designs. On May 26<sup>th</sup>, Chung telephoned Howard to tell him that, in addition to 10-Hwan and 50-Hwan coins, the Bank of Korea was now interested in "50 million pieces of 100 Hwan coins" to be struck in cupronickel—and that there would be "possible changes in designs of all three denominations."<sup>60</sup> By this time, the Philadelphia Mint was already scheduled to begin the rolling and blanking of the 10-Hwan as soon as the bronze metal needed for Lincoln Cents had been broken down within a few days, while Gilroy Roberts had been "authorized to proceed with the necessary working dies," to be completed within two weeks.<sup>61</sup> The announcement that there would be a complete change to the designs knocked the entire Korean coinage order off the Philadelphia Mint's work schedule. Upon hearing the news, Director Brett ordered the Philadelphia Mint to immediately suspend work on the 10-Hwan (on May 26<sup>th</sup>) and to instead make "as many U.S. one cent coins as possible" and other foreign bronze coins, telling Superintendent Biester to "produce Venezuelan and Philippine coins now on order as soon as possible."<sup>62</sup>

Leland Howard broke the bad news to Mr. Chung in a letter two days later on May 28<sup>th</sup>, explaining that Philadelphia had actually started to roll the ingots for the 10-Hwan the day before. Howard's letter to Chung also indicates that the Mint would have worked with the latest plaster to create the dies (the "ear of rice" Version 2) and that the first sample coins would have been struck beginning July 6<sup>th</sup>, however, U.S. coins would now replace the 10-Hwan on the schedule.<sup>63</sup>

This development threatened to be a major setback for Korean currency planners, given their urgency to issue coinage. As for the Korean government's wish to issue the first batch of coins as soon as the August 15, 1959 Liberation Day holiday in Korea, the design changes would obliterate any hope of that happening. Even if the 10-Hwan had stayed on schedule with its first samples ready by early July 1959, the U.S. Mint's forecasted schedule at this time would not have allowed for sufficient quantities of these coins to be ready for issue by August 15<sup>th</sup>. Just prior to the removal of the 10-Hwan from the schedule, Acting Superintendent Paul Heckman told Director Brett that he planned to have enough 10-Hwan blanks available "to start on sixteen presses when we get under way during the first week of Fiscal Year 1960 [i.e. October 1, 1959]."<sup>64</sup> If the Koreans had ever gotten wind of this information at this time, one can imagine that an exclamation mark would have been the response back in Seoul. Despite the removal of their coinage from the schedule, the Koreans would have much less cause for concern since the Philadelphia Mint would nonetheless proceed expeditiously with the order in the coming months.

## New Designs Arrive

The designs that eventually appeared on South Korea's *hwan* coinage passed resolution during the 15<sup>th</sup> Monetary Policy Board meeting of June 4, 1959 —the week after the Philadelphia Mint had halted work on the Korean coinage order in late May. These new designs were approved that day in two Policy Board resolutions. One resolution approved the design of the 100-Hwan coin and the other resolution allowed changes to the designs for the 50-Hwan and 10-Hwan coins, which the Policy Board had previously authorized on May 21<sup>st</sup> under different designs.<sup>65</sup> South Korea's currency planners had clearly made late changes to these coin designs just prior to this final approval on June 4<sup>th</sup>.

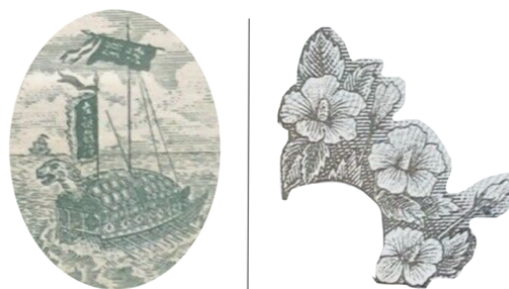
**Fig. 7**

### Korean Government's Final Specifications for Coinage Order with the U.S. Mint Dated June 11, 1959

Denomination	NUMBER OF PIECES	Weight in Grains (tolerance $\pm$ )	Composition	Diameter (mm)	Thickness in inches* (tolerance $\pm 0.003$ inches)	Design Obverse	Reverse
<b>100-HWAN</b>	50,000,000	104 (4)	75% Cu., 25% Ni	26	.070	Portrait of President Rhee	Phoenix
<b>50-HWAN</b>	25,000,000	57 (3)	70% Cu., 18% Zn., 12% Ni	22.86	.054	Tortoise Armored Ship	Grass
<b>10-HWAN</b>	100,000,000	38 (2)	95% Cu., 5% Zn	19.1	.049	Rose of Sharon	Grass

\*The Thicknesses of the coins were reported on October 12, 1959. These were ascertained only after first coins were struck.

From his office in New York, Mr. Chung wrote to Leland Howard on June 2<sup>nd</sup> to apologize on behalf of the Bank of Korea for the sudden change to the already-approved 10-Hwan coin design and assured that the new designs for all three coins would arrive from Korea within days. He also included a copy of Ambassador Yang's May 26<sup>th</sup> letter to the State Department requesting permission for the U.S. Mint to produce South Korea's 50-Hwan and 10-Hwan coins.<sup>66</sup> Within days, Mr. Chung traveled to Philadelphia to meet again with Leland Howard and William Brett and to deliver the new designs, which he personally handed over to Gilroy Roberts in the Engraving Division. These materials included six "enlarged designs" for the obverses and reverses of the three coins, one cross section photo of the 100-Hwan and cross section images of each coin face (seven cross section images in total), along with a photograph of President Syngman Rhee. The Korean government's preferred obverse designs for the coins now consisted of a left-facing bust of President Syngman Rhee for the 100-Hwan, an image of the 16th-century Joseon Royal Navy *Geobukseon*



The images of the Geobukseon, or "turtle boat", (left) and the Korean hibiscus flower (right) had appeared on South Korean banknotes in the 1950s, as shown here.

South Korea's currency planners evidently made late changes to the main devices that were to appear on the 50-Hwan and 10-Hwan coins in favor of these two images that had precedent in Korean currency design.

Banknote detail photos by Mark Lovmo.

warship (turtle ship) for the 50-Hwan, and an image of the unofficial national flower, the *mugunghwa* (Korean hibiscus) for the 10-Hwan (**See Figs. 7 and 8**).<sup>67</sup>

### **Origins of the Final Designs**

As can be seen in the final specifications (**Fig. 7**), the Korean government decided to only issue the three higher-value denominations of the originally proposed five. The decision to remove the Five-Hwan and One-Hwan from consideration was likely due to the insignificant value that the coins represented, if not the influence of Leland Howard's earlier warnings about seigniorage loss and the maintenance of the proper margins between the face value and the metal value of coins placed into circulation. As for the designs, it appears that after the Korean planners had dropped the Five-Hwan and One-Hwan, they shifted the images that were to appear on these two coin denominations over to the 50-Hwan and 10-Hwan coins. One source (Yi Bumho, 2002) suggests that other changes were made as well. However, the accessible document and image records are incomplete and do not currently allow for certainty on this matter (**See Fig. 8**).

Both U.S. Mint records and imagery available from Korean sources confirm that the main device image initially considered for the 10-Hwan coin was an “ear of rice.” While images of rice had not appeared on earlier South Korean money, a similar image of a bending ear of rice had appeared on the Japanese Five-Yen coin since 1949. Although the evidence available to the current research does not reveal the exact design that South Korea's Monetary Policy Board first approved for the 10-Hwan coin on May 21, 1959, it was almost certainly the same “ear of rice” image accompanied by legends rendered in “block lettering” that Gilroy Roberts had re-created in February that year (the ear of rice design, Version 2).



*The preliminary (top) and final (bottom) main obverse designs for the 50-Hwan coin (left) and 10-Hwan coin (right). According to the very limited available sources of information, the two designs shown at top of this diagram were most likely the ones that the Korean government's Monetary Policy Board approved on May 21, 1959. The images at the bottom of this diagram were the replacement designs that the Policy Board approved for these two coins on June 4, 1959.*

**Upper Left:** The 7th Century Silla Dynasty Cheomseongdae (첨성대) observatory with the seven stars of the Big Dipper in the background. Meaning “star-gazing platform,” Cheomseongdae is the oldest surviving astronomical observatory in Asia. **Upper Right:** An ear of rice. Although rice is a staple food crop of Korea, images of rice did not appear on previously issued South Korean currency. **Lower Left:** The Geobukseon (거북선) or “turtle ship” was a Joseon Dynasty (1392-1897) warship made famous by Admiral Yi Sun-shin in his numerous victories against Japanese naval forces during the Imjin War of 1592-1597. **Lower Right:** The Korean variety of the hibiscus syriacus, also known as the Rose of Sharon, or mugunghwa (무궁화). The South Korean government adopted the flower as the central design element of the National Emblem of the Republic of Korea in 1963.

Images (upper left, upper right, and lower right) found in Jo Byeongsu, *Jo Byeongsu's Story of Money: Korean Commemorative Coins* [우리나라 記念鑄貨 Korean Commemorative Coins : 조병수의 돈 이야기]. (Seoul: Ohsung K&C, 2006), 199, 200, 201. Image (lower left) photo by Mark Lovmo.

The best guess is that the final design chosen on June 4, 1959 for the 10-Hwan, the Korean hibiscus flower (the *mugunghwa*), originated from the one that was probably first considered for the One-Hwan denomination (see page 16). Indeed, the idea that the planners had swapped the two designs

Fig. 8

## The Evolution of Korean Coin Design 1958 ~ 1962

Date	100-Hwan	50-Hwan	10-Hwan	Five-Hwan	One-Hwan
September 1958	Korean President Syngman Rhee Artwork by Korean Mint sketches only 	Unknown ( <i>Cheomseongdae</i> Observatory?) * Artwork by Korean Mint sketches only (no image available) 	Ear of Rice, Version 1 Artwork by Korean Mint 	<i>Geobukseon</i> (Turtle Ship) Artwork by Korean Mint sketches only 	Unknown (probably <i>mugunghwa</i> ) Artwork by Korean Mint sketches only (no image available) 
December 1958			Ear of Rice, Version 1 Artwork: Re-drawn, engraved and hubs made at Philadelphia, Gilroy Roberts These hubs produced sample lead strikes only 	No further development	No further development
February 1959			Ear of Rice, Version 2 Artwork: Philadelphia, Gilroy Roberts sketches and plasters only 		
May 21, 1959	Monetary Policy Board approves 50-Hwan and 10-Hwan coins	Unconfirmed ( <i>Cheomseongdae</i> Observatory?) * Artwork by Korean Mint sketches only (no image available) Yi (2002) claims that these designs had no English lettering Jo (2006) claims that the main design was the <i>Cheomseongdae</i> 	Unconfirmed (Ear of Rice, Version 2?) Artwork by Korean Mint sketches only (no image available) Yi (2002) claims that these designs had no English lettering Jo (2006) claims that the main design was an ear of rice 		
June 4, 1959	Monetary Policy Board approves 100-Hwan coin and revised designs for 50-Hwan and 10-Hwan Inclusion of "REPUBLIC OF KOREA" Artwork by Korean Mint 	Artwork by Korean Mint, Kang Bak (?) <i>Geobukseon</i> (Turtle Ship) 	Artwork by Korean Mint, Kang Bak (?) <i>Mugunghwa</i> (Hibiscus - Rose of Sharon) 		
June to October 1959	Drawings and plasters: June to September 1959 First coins struck: Late August to mid-October 1959 Artwork: Re-drawn, engraved and dies made in Philadelphia, Engelhardus von Hebel Struck as coins and issued in Korea 	Artwork: Re-drawn, engraved and dies made in Philadelphia, Gilroy Roberts Struck as coins and issued in Korea 	Artwork: Re-drawn, engraved and dies made in Philadelphia, Gilroy Roberts Struck as coins and issued in Korea 		
April 1962	<i>Cheomseongdae</i> Observatory * Artwork by Korean Mint sketches only 				
Late 1962	10-WON, Based on <i>Cheomseongdae</i> 100-Hwan Design Hypothetical design based on internal communications and previous design scheme (no images available) 	FIVE-WON, Based on 50-Hwan Design Design shown here is speculative based on internal communications and previous design scheme Artwork by Korean Mint, sketches only (no images available) 	ONE-WON, Based on 10-Hwan Design One-Won reverse image found in Jo (2006). Obverse image is speculative; no obverse image available Artwork by Korean Mint, sketches only 		

\* Jo Byeongsu (2006, p. 200) claimed that the original design for the 50-Hwan coin was the same *Cheomseongdae* Observatory that was later reconsidered as a replacement image on the 100-Hwan after President Rhee's ouster.

is also supported by former currency designer Jo Byeongsu, who wrote in his book *Korean Commemorative Coins* (2006) that the Korean hibiscus flower had indeed replaced the ear of rice design.<sup>68</sup> Unlike the ear of rice design, the hibiscus flower was one of a handful of previous design themes that had appeared on South Korean banknotes prior to the introduction of coins in 1959.

The original design that the Policy Board had approved for the 50-Hwan on May 21<sup>st</sup> is also somewhat open to question. There is no reference to this original design in any of the correspondence found in the U.S. Mint's file on the Korean coinage project. However, Jo Byeongsu wrote that the *Geobukseon* (turtle ship) replaced an image of the 7th Century Silla Dynasty *Cheomseongdae* observatory. Mr. Jo even included an image of this design in his book, although it was an image of a later reconsideration of the *Cheomseongdae* design for the 100-Hwan in 1962, after President Syngman Rhee's removal from office. Jo explains that these seemingly last-minute changes in design for the 50-Hwan and 10-Hwan coins had stemmed from the planners' belief that the turtle ship and hibiscus flower images would be more popular with the Korean citizenry.<sup>69</sup>

Another clue about the designs that were first approved on May 21, 1959 for the 50-Hwan and 10-Hwan coins comes from an online article published by the Bank of Korea. In 2002, Yi Bumho, a researcher at the Bank of Korea, looked through the Monetary Policy Board's May 21, 1959 decision to approve the 50-Hwan and 10-Hwan coins. He found that the Board's minutes reveal that the approved coin designs had featured only Korean *hangeul* lettering in the coins' legends. This is noteworthy, as all three *hwan* coins were later minted with the English legend, "REPUBLIC OF KOREA," the official English name of South Korea, on their reverses. Mr. Yi asserts that the Policy Board's notes from that day also reveal "evidence of seeking advice from the United States Mint regarding the design of coins."<sup>70</sup>

Yi claims that the designs for the 100-Hwan, 50-Hwan and 10-Hwan that were approved in the later June 4<sup>th</sup> Policy Board resolution included the addition of the English lettering, "REPUBLIC OF KOREA." Yi hypothesizes that this inscription "was introduced to the coins in consultation with the U.S. Mint." Mr. Yi further explains that since the United States mints its coinage with the name of the country in the legends, advisors at the Philadelphia Mint had probably suggested that the Koreans do the same for their coins.<sup>71</sup> While his guess about the origins of the English inscription is plausible, U.S. Mint documents concerning the Korean coinage project do not reveal any evidence about the content of the legends that were to be included on the coins.



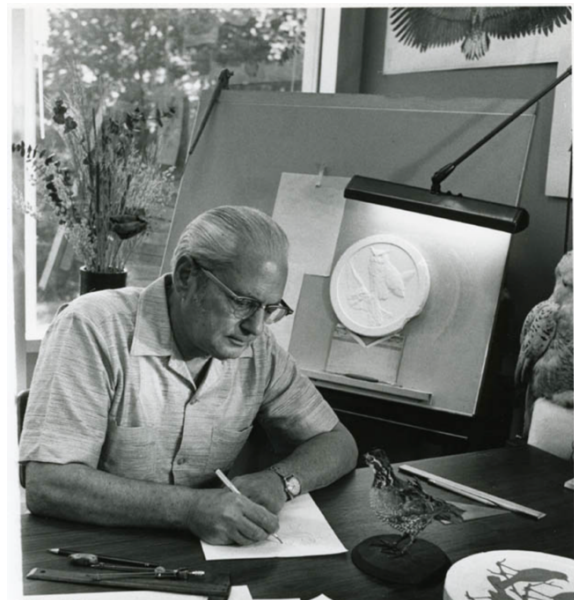
The Korean government approved these images, legends, and design layout for South Korea's first coins on June 4, 1959.

Images: Excerpts from "Bank of Korea Issue Notice [한국은행 공고]," *Dong-A Ilbo*, 19 Oct. 1959 and 29 Oct. 1959.

A left-facing bust image of President Syngman Rhee appeared on the obverse sketch for the 100-Hwan coin that the U.S. Mint first received in September 1958. This profile of Rhee was adopted for the design of the 100-Hwan coin on June 4, 1959. This would not be the first time that his face showed up on South Korea's money —out of the twenty-one Bank of Korea notes that circulated during Rhee's time as president, nine of them featured his face. Further evidence of the Rhee administration's influence on South Korea's first coins also appears in the form of their years of issue, which can be seen in both the design sketches and on the actual coins as issued. The coins from the first year of issue have the Korean Era calendar date, 4292, which corresponds to the Gregorian calendar date, 1959. South Korean banknotes from the Rhee era also display Korean Era dates. This calendar system was enforced in South Korea from the beginning of Rhee's presidency in 1948 until 1961, just after his removal from office. Known as the *Dangun givon* (檀君紀元 / 단군기원), this calendar counted Gregorian calendar years from "Year One" of the foundation of the legendary Korean kingdom of Gojoseon in 2333 BC. As the last of them were struck in 1962, these three coins were the last South Korean money minted with years of issue that were displayed exclusively as Korean Era dates.<sup>72</sup>

### **Work Resumes on the Coinage Project**

With the coins' designs and specifications finalized, South Korea's coinage order with the U.S. Mint would continue apace in the summer of 1959. However, returning the Korean order to the Philadelphia Mint's production schedule for rolling and striking the new Korean coins would have to wait. In early June 1959, two other foreign orders and United States coins took the place of the Korean 10-Hwan coin's start date of July 6th. Now that the Korean government had finalized its chosen images, legends, and layout for all three coins, Philadelphia Mint Superintendent Rae Biester asked Gilroy Roberts' Engraving Division to start work on the art for the Korean coinage, beginning with the designs and going no further than the plaster casts.<sup>73</sup> Roberts' team was soon finished with its renderings of the coin drawings by June 24<sup>th</sup>. Mr. Chung spent most of that day in Philadelphia to review these sketches with Roberts.<sup>74</sup>



*Gilroy Roberts at his studio after his 1964 retirement from the U.S. Mint.*

Photo: Gilroy Roberts – Autographed inscribed photograph HFSID 181818. Inscribed photo, showing him at work in his studio. B/w photograph inscribed and signed: "To Eddie and Betty Sousa/Gilroy Roberts." www.historyforsale.com/gilroy-roberts-autographed-inscribed-photograph/dc181818

Getting the plasters finished was imperative to getting the Korean coinage back on the schedule at this point since Robert's team now no longer possessed engravings that had Korean government approval. The entire process would have to start from the beginning: The Korean government would need to first approve the plasters, while the U.S. State Department also needed to provide the U.S. Mint with approval to manufacture the Korean government's requested coin denominations and number of pieces to be made. State Department approval was quickly received on June 24 for the 50-Hwan and 10-Hwan coins.<sup>75</sup> Another requirement prior to striking foreign coins was that the Mint should first bill the foreign government and receive payment. It was possible for foreign governments to first pay for the production of the dies separate from the costs

of the metals and manufacturing (melting, rolling, and striking).<sup>76</sup> The Korean government would follow this procedure by making a separate payment for the engraving charges on July 29<sup>th</sup> for the 50-Hwan and 100-Hwan —the 10-Hwan engravings were still free of charge.<sup>77</sup>

Although the Korean side was quite anxious to get back on the schedule, Mint Director William Brett wanted to make sure that the Bank of Korea understood that it would take “several weeks” for the process to result in approved sample strikes from finished dies. Brett informed Mr. Chung in late June that it would only be after the Korean government had reviewed and approved the sample strikes that the Mint would be “in a much better position to work out a production schedule.” He also informed Chung that the striking operations for the three denominations would likely not take place on the schedule at the same time since the Mint wanted to “avoid producing two coins of a similar size and alloy at the same time,” for example, the Korean 10-Hwan and the U.S. Lincoln Cent coins.<sup>78</sup> This news did not bode well for the Korean leadership’s hopes of issuing the coins in Korea by late summer.

Director Brett also attempted to disabuse the Korean leadership of the idea that it was possible to receive any of their coins in time to be issued on the Korean Liberation Day holiday of August 15<sup>th</sup>.<sup>79</sup> Although Brett asked Rae Biester on June 25<sup>th</sup> to attempt to make 100,000 pieces of each denomination to be ready to be flown to Korea by August 10<sup>th</sup> (as the Koreans had requested), he would end up informing Mr. Chung just five days later that the time needed to approve the models and to press the working dies would make meeting this deadline impossible.<sup>80</sup> This news evidently did not filter back to Korea, where Seoul newspapers would nonetheless report in late July that “a portion of the total number of coins” would be available by August 15<sup>th</sup>.<sup>81</sup>

Now that the coinage project was advancing to production, the U.S. Mint provided the Bank of Korea with a final update on the cost estimate totals based on the latest proposed mintages and metal prices but was careful to reassert that “the actual cost will be based on market prices prevailing at the time the order is made firm” (**See Fig. 9**).<sup>82</sup>

**Fig. 9**

<b>Revised Total Cost Estimate for Korean Coinage Dated 4292</b> <b>(Prices in June 1959 USD)</b> <b>Estimate Date: June 22, 1959</b>						
	<b>Number of Coins</b>	<b>Manufacturing Cost</b>	<b>Metal Cost</b>	<b>Cost of Boxes</b>	<b>Cost of Dies</b>	<b>Total</b>
<b>10-Hwan</b>	100,000,000	\$85,000	\$165,571.41	\$ 7,500.00	0	\$ 258,071.43
<b>50-Hwan</b>	25,000,000	\$46,250	\$68,533.14	\$ 3,126.00	\$ 1,406.00	\$ 119,304.14
<b>100-Hwan</b>	50,000,000	\$140,000	\$323,142.85	\$ 12,502.50	\$ 1,606.00	\$ 477,251.35
<b>Totals</b>		\$271,250	\$557,236.42	\$ 23,128.50	\$ 3,012.00	\$ 854,626.92

### **An Emphasis on Foreign Coinage Orders**

With the impending production of South Korea’s coins at the Philadelphia Mint, its leadership was concerned about an already heavy workload that included production for Costa Rica, the Philippines, and Venezuela; not to mention United States coins, including proof coins. Coinage orders for Liberia and the Dominican Republic were also pending.<sup>83</sup> As he was concerned about

“the availability of sufficient personnel to meet the schedule,” the Acting Superintendent at Philadelphia, Paul Heckman, wrote to Director Brett to ask “whether production of foreign coins should take precedence” when staffing becomes short. Heckman suggested that “it may be necessary, at times, to lean, heavily, on the employees that should normally be assigned to the production of Proof Coins.”<sup>84</sup> The Director responded by emphasizing the importance “to complete foreign coins on schedule.”<sup>85</sup> Considering the amount of time that these orders would consume, he informed the Philadelphia Mint that “[i]f all orders materialize, requiring production during fiscal year 1960, it appears that it will be necessary to confine your production chiefly to foreign coins, with a corresponding reduction in the previously planned production of domestic coins.”<sup>86</sup>

It appears here that the U.S. Mint leadership was under considerable pressure to complete work on its foreign orders. The above statements also seem to indicate that Mint Director Brett was applying a somewhat loose interpretation of the rule that foreign coinage orders were to “not interfere with regular minting operations” required for United States coins.<sup>87</sup> This would turn out to be good news for the Koreans, as this emphasis on completing foreign coinage orders was likely the reason that South Korea would be able to issue at least some of its first coins before the end of 1959. Although the coins would not be ready for the August Liberation Day holiday in Korea, Brett informed Mr. Chung on June 30<sup>th</sup> that it was possible for the Korean government to receive “a portion of each denomination in time to reach Korea by November,” with the balance to be completed after the New Year.<sup>88</sup>

### **Final Adjustments Prior to Production**

Philadelphia Mint engravers Gilroy Roberts and Engelhardus von Hebel finished the plaster casts for all three of South Korea’s coins by July 20<sup>th</sup>. With the exception of a needed retouch to one side of the 100-Hwan coin, Mr. Chung approved of the artwork, giving his consent that day “to go ahead with the further steps up to making the dies.”<sup>89</sup> Prior to completing these plasters, the Mint had requested clarification from the Bank of Korea concerning two details on the main device of the 50-Hwan coin. The engraving team wanted to know if the flag on the Turtle Ship was fluttering in the correct direction. The design shows the flag to be fluttering toward the bow of the ship. Robert’s team also wanted to clarify what the “crescent drawn at the front” of the ship represented. The Koreans informed the Mint artists that the representation of the flag was correct since the image on the coin was meant to show that “the ship is heading forward in the direction of the tortoise head but with a strong wind from the rear,” while the crescent shape is the ship’s anchor.<sup>90</sup>



*The 50-Hwan coin’s main device is an image of the Geobukseon (Turtle Ship), a Joseon Royal Navy warship operating at various times between the 16<sup>th</sup> and 19<sup>th</sup> centuries in Korea.*

*Visible here on this detail of the coin are the ship’s anchor and its fluttering flag. After U.S. Mint artists wondered if the flag was fluttering in the correct direction, the Bank of Korea explained that the image was meant to show a ship moving forward with the wind blowing from the ship’s stern, adding that “This may be the way of attacking of the ship [sic]...”*

Coin detail photo by Mark Lovmo.

In June and July 1959, the Bank of Korea clarified their preferences regarding other important details about the appearance of the coins as well. The Korean leadership chose to strike all three

denominations in coin turn (i.e., the orientation of the design and legends appearing on the reverse deviate 180 degrees from the design and legends appearing on the obverse), much like U.S. circulating coins.<sup>91</sup> Due to the fact that it was now apparent that the majority of the Korean coins would be produced after New Year 1960, Director Brett also asked whether those coins struck in calendar year 1959 should bear the Korean Era date of “4292” while the remaining coins should bear the following year’s date (“4293”) or possibly a different date.<sup>92</sup> The Bank of Korea decided on a single date for this coinage order, declaring that “all coins are to bear 4292 regardless of date of issue.”<sup>93</sup>

As their coinage project advanced in late July 1959, the Korean side was preoccupied with two issues. The first was their urgency to expedite the order for the 100-Hwan coin. In late July, only two of the coins, the 50-Hwan and the 10-Hwan, were slated to enter the Philadelphia Mint’s production schedule. This was due to the fact that State Department approval had not yet arrived for the 100-Hwan coin. In fact, the Korean government would not request this approval for the 100-Hwan until August 4<sup>th</sup>.<sup>94</sup> Nonetheless, the Bank of Korea urged Director Brett in late July to “give the instruction” to the Philadelphia Mint to produce the 100-Hwan “even before you receive the diplomatic letter.”<sup>95</sup> Brett would not disappoint. Before the month was out, he asked Superintendent Biester to bill the Korean government for the manufacture of the 50-Hwan (25 million pieces) and 10-Hwan (100 million pieces) and to set up a schedule for these coins. He also asked Biester to “include in your schedule the one hundred (100) Hwan denomination” even in the absence of State Department approval. Brett asked her to simply bill the Koreans after the State Department approval arrived.<sup>96</sup> After some discussion among its officials concerning the Korean government’s hurry to issue this coin, the State Department finally gave its approval for the 100-Hwan on August 10<sup>th</sup>.<sup>97</sup>

Transporting the coins from Philadelphia to Korea was the Bank of Korea’s other concern at this time. The Koreans requested, on more than one occasion, that the U.S. Mint provide them with pricing for ocean transportation and insurance.<sup>98</sup> The Mint responded on July 31<sup>st</sup>, telling Mr. Chung that they would assist in obtaining information on transportation only after the coins’ “production schedules and delivery dates have been established.”<sup>99</sup> Later, Mr. Chung would inform Director Brett that his bosses were “very anxious to receive these coins as soon as possible even to the point of shipping them by air-cargo.”<sup>100</sup> Only by late July did the Korean leadership finally accept the fact that none of the coins were going arrive in Korea by August 15<sup>th</sup>, as they had earlier told reporters in Seoul. Apparently to compensate for missing the promised date of issue, if not to ensure that coins marked “4292” (1959) would be issued before the end of 1959, the Bank of Korea altered its issuance plan by trying to get at least some of the coins to Korea as fast as possible. The coins now had no set date of issue. The issue date would instead depend on when the coins arrived in Korea.

By early August, all the required steps had been met to place the 50-Hwan and 10-Hwan coins on the Philadelphia Mint’s schedule. Superintendent Biester therefore sent the bill for the total price of the overhead costs, the cost of the metals at current market rates, and the cost of the shipping boxes to Mr. Chung on August 6<sup>th</sup>. The total amount, minus the previously billed engraving charges, came to \$364,412.55 (**See Fig. 10**).<sup>101</sup> A week later, Director Brett asked Rae Biester to order the required metals and to set a schedule to manufacture the 100-Hwan as well.<sup>102</sup> Soon, the master hubs for the 10-Hwan coin were completed by the time Mr. Chung arrived to inspect

Fig. 10

**U.S. Mint Bill for 4292 (1959) 50-Hwan and 10-Hwan Coins  
Coins Struck in 1959 and 1960**

**Invoice Date: August 6, 1959**

METALS REQUIRED (in pounds)					COST OF METALS, BOTH COINS (in 1959 USD)												
Denomination	NUMBER OF PIECES	Copper	Zinc	Nickel	Copper (both coins) @ \$0.2975/lb	Zinc (both coins) @ \$0.1225/lb	Nickel @ \$0.77385/lb	NUMBER OF BOXES REQUIRED	TOTAL COST OF BOXES	TOTAL COST OF MANUFACTURING	COST PER 1,000 PIECES	TOTAL GROSS WEIGHT OF ORDER IN SHORT TONS	INVOICE AMOUNT				
50-HWAN	25,000,000	142,500	36,642.86	24,428.57	\$195,818.75	\$7,813.75	\$18,904.05	2,084	\$3,126.00	\$46,250.00	\$1.85	329	\$364,412.55				
10-HWAN	100,000,000	515,714.28	27,142.86	—				5,000	\$7,500.00	\$85,000.00	\$0.85						
ENGRAVING CHARGES											10-HWAN			(no charge)			
(billed on June 23, 1959)											50-HWAN			\$1,406.00			

them on August 11<sup>th</sup>. This time, Mr. Chung was accompanied by another colleague from the Bank of Korea, a “Mr. Li.” Chung gave his verbal approval of these hubs that day, even though the Bank of Korea headquarters back in Seoul had yet to examine the sample strikes —an indication of the authority that his bosses back in Korea had given him. The Mint team told Chung that the actual manufacture of the 10-Hwan would begin within the week.<sup>103</sup> He wrote to Brett the next day to indicate his satisfaction with the work on the 10-Hwan, asking the Director to “produce the coin based upon the hubs at the speediest way possible so that partial shipment of the coin, together with the others, can be made in early October.” Chung noted that, during his visit, the engravers were in the process of creating the hubs for the two other coins as well. He again requested sample strikes for all three coins so he could forward them to the Seoul headquarters *posthaste*.<sup>104</sup>

Mr. Chung again visited the Philadelphia Mint on August 18<sup>th</sup> to inspect the completed 100-Hwan and the 50-Hwan hubs, which he verbally approved. He requested the Mint to begin manufacturing the coins from them. Chung reiterated the Bank of Korea’s desire for sample lead strikes of all three coins but added an additional request for sample blanks; two sets for each denomination.<sup>105</sup> By August 27<sup>th</sup>, the U.S. Mint had prepared the bill for the manufacture of the 100-Hwan coin, and related that production for this coin would soon be underway (**See Fig. 11**).<sup>106</sup> Mr. Chung also responded to one last suggestion that the U.S. Mint had proposed to the Bank of Korea back in June. Director Brett had mentioned that a considerable savings of \$75,000

Fig. 11

<b>U.S. Mint Bill for 100-Hwan Coins Coins Struck in 1959 and 1960 Invoice Date: August 26, 1959</b>										
Denomination	NUMBER OF PIECES	METALS REQUIRED (in pounds)		COST OF METALS (in 1959 USD)		NUMBER OF BOXES REQUIRED	TOTAL COST OF BOXES	TOTAL COST OF MANUFACTURING	COIN COST PER 1,000 PIECES	INVOICE AMOUNT
		Copper	Nickel	Copper @ \$0.3273/lb	Nickel @ \$0.7734/lb					
100-HWAN	50,000,000	557,143	185,714.28	\$182,352.86	\$143,631.42	8,334	\$12,501.00	\$140,000.00	\$2.80	\$478,485.28
ENGRAVING CHARGES (billed on June 23, 1959)									\$1,606.00	

could be had by striking the 100-Hwan coin on the same “German Silver” coining metal as the 50-Hwan coin (70% copper, 18% zinc, 12% nickel).<sup>107</sup> The Bank of Korea declined this suggested alloy for the 100-Hwan, opting instead for the originally planned 75% copper, 25% nickel alloy.<sup>108</sup>

### **Problems During Production**

From late August to mid-September 1959, the Philadelphia Mint had been churning out South Korea’s 10-Hwan coins, accumulating at least 200,000 pieces by September 23<sup>rd</sup>.<sup>109</sup> On this date, the Bank of Korea (via Mr. Chung’s authority) gave its approval of the sample strikes of the 50-Hwan coin, allowing the Mint to place that coin on the schedule as well.<sup>110</sup> With operations finally accelerating now in late September, the Koreans were hopeful to have 120,000 to 200,000 pieces of each denomination ready for air shipment to Seoul by early October.<sup>111</sup> For the upcoming 50-Hwan coin, the Mint estimated that by breaking down around 8 ingots of “German Silver” material weighing a total of 1,628 pounds, there would be enough coining metal to produce the 120,000 pieces that the Bank of Korea requested for this coin. As for the 100-Hwan, once the Bank of Korea approved samples from the finished hubs, it too would be placed on the schedule and would require around 14 ingots of cupronickel metal weighing 2,971 pounds in total to result in the requested 120,000 pieces.<sup>112</sup> The Philadelphia team was confident that these first quantities of Korean coins could be fit into the Mint’s already busy operations and that the only impact on domestic coin production would be “the use of one coin press for approximately two days.”<sup>113</sup> It appeared that the first coins were going to be ready for their flight to Korea within a fortnight.

The Mint soon hit a snag.

After they had finished pressing the hubs for the 100-Hwan sometime on or before September 23<sup>rd</sup>, the Mint struck sample coins for review. Director Brett described the samples struck from this tool steel as “not satisfactory to officials of the Philadelphia Mint” and stated that the 100-Hwan hubs required revision to “produce a coin of better quality.”<sup>114</sup> In a letter to Mr. Chung, Brett explained that it would take two weeks to create the new hubs, to be completed on October 12<sup>th</sup>. He invited Chung to be present in Philadelphia on that day to approve the first 100-Hwan sample strikes on-site, as this would help to “expedite completion of the required quantity” of 120,000 of these coins within a week’s time.<sup>115</sup>

As the Mint worked on new hubs for the 100-Hwan and continued to churn out 50-Hwan and 10-Hwan coins in late September, the Bank of Korea requested that quantities of all three coins be available for air transport by October 9<sup>th</sup>.<sup>116</sup> Although the problem with the 100-Hwan hubs appeared to exclude that coin from making the October 9<sup>th</sup> deadline, the Mint was on track to manufacture 500,000 total 10-Hwan coins and 120,000 total 50-Hwan coins by that date.<sup>117</sup>

Then another problem arose.



*South Korean coin hubs and dies, 10-Hwan (top) and 100-Hwan (bottom), produced at the Philadelphia Mint.*

Photo: Pak Han-gwang, et. al. *원시화폐* - Money Exhibition (Issue Department, Bank of Korea, 1970) 49.

On September 28<sup>th</sup>, the staff at the Philadelphia Mint discovered that the 500,000 10-Hwan coins that had been struck in the previous weeks were tarnished. They attempted to reclean the coins, but “it was the opinion of Philadelphia officials that the coins were not suitable for delivery.” A Mint official brought 203 of the tarnished 10-Hwan coins to Director Brett’s office in Washington D.C. for examination.<sup>118</sup> A look at these coins made it clear that unless the Mint team put in an extra effort to address this problem, the promised number of coins would not be ready for their Korean clients’ October 9<sup>th</sup> flight to Seoul.

Brett made a quick executive decision: He authorized Superintendent Biester to remelt the tarnished coins, utilize the remaining three days that week (September 30<sup>th</sup> to October 2<sup>nd</sup>) to produce a new batch of 500,000 blanks for the 10-Hwan, then have her team work that Sunday, October 4<sup>th</sup> to strike 500,000 pieces for the 10-Hwan along with the 120,000 pieces for the 50-Hwan. Brett instructed that special precautions would need to be taken to keep the blanks separated from the various coining operations going on at the time, especially since United States coins of almost the same diameter size and composition as these South Korean coins were also under production.<sup>119</sup>



*This 1959 Quarter Dollar struck on a 50-Hwan planchet is an interesting remnant from the United States Mint’s production of South Korea’s first coins. This error coin highlights the difficulty the U.S. Mint faced in trying to completely separate blanks of similar sizes and metal compositions from its domestic and its various foreign coining operations.*

Photos: David Lawrence Rare Coins, [www.davidlawrence.com](http://www.davidlawrence.com)

As this took place, the Mint’s engraving room and die shop had made strides in creating new 100-Hwan hubs. The hubs were finished almost a week earlier than predicted. Mr. Chung approved the new hubs from sample strikes on October 6<sup>th</sup>.<sup>120</sup> The Mint quickly placed the 100-Hwan on the production schedule to begin manufacture the following week (October 12<sup>th</sup> to October 16<sup>th</sup>).<sup>121</sup>

### **South Korea Issues its First Coins**

Korean National Airlines (KNA) cancelled its scheduled flight to pick up the first batch of 50-Hwan and 10-Hwan coins, which the Mint had bagged, boxed and readied for delivery on October 9<sup>th</sup>. Therefore, the Bank of Korea would reschedule alternative transportation for the coins the



*The very first South Korean coins to arrive in Korea consisted of 10 boxes (120,000 pieces total) of 50-Hwan coins, shown at far left, and 25 boxes (500,000 pieces total) of 10-Hwan coins. The shipment weighed 4,041 pounds and arrived in Korea by air on October 14, 1959.*

*Each full shipping box weighed 107 pounds for the 50-Hwan and 118 pounds for the 10-Hwan. The boxes each held two canvas duck coin bags commonly used by the United States Mints and Treasury Department. The bags displayed stenciled labels identifying the number of pieces, denomination, country, and date on the coins. The 50-Hwan coin bags contained 6,000 coins each. Each 10-Hwan coin bag (a mock-up of which is shown here) contained 10,000 coins.*

*The shipping boxes shown here (far left) are those for the 50-Hwan. The stenciled label on the side of these boxes reads:*

**50 HWAN  
12,000 PCS.  
GR. WT. 108 LBS.**

Photo (detail) far left: Chairman Park Chung-hee inspects the Bank of Korea. OPEN Gonggongnuri Free use of public productions permitted, [www.chistory.go.kr/view/photo?mediaid=11&mediatd=1289](http://www.chistory.go.kr/view/photo?mediaid=11&mediatd=1289).

Image (immediate left): mock-up image by Mark Lovmo.



Photos by Mark Lovmo

following week.<sup>122</sup> Just before the 50-Hwan and 10-Hwan coins left for Korea, Director Brett reassured Mr. Chung that 120,000 pieces of 100-Hwan coins would be finished that week and therefore there should be no concern that these coins would need to bear the date “4293” (1960) since the first of them would definitely arrive in Korea before the New Year.<sup>123</sup> The Bank of Korea had been concerned that the delays and the heavy schedule would push the issue of the 100-Hwan beyond the last day of 1959, necessitating a change to the date appearing on that coin.<sup>124</sup>



*The Korean government resorted to flying the first groups of coins to Korea due to their urgency to issue coins into circulation before the end of 1959. The coins were probably transported to Korea aboard an aircraft such as this half-cargo, half-passenger configured Northwest Orient Airlines DC-7, which was used as the Tokyo-Seoul connection at the time.*

Photo: Mel Lawrence, [www.airliners.net/photo/Northwest-Orient-Airlines/Douglas-DC-7C-F-Seven-Seas/126285](http://www.airliners.net/photo/Northwest-Orient-Airlines/Douglas-DC-7C-F-Seven-Seas/126285).



*Stills from newsreel footage of the arrival of the first 50-Hwan and 10-Hwan coins in Korea on October 20, 1959.*

Photos: *Dahan News* No. 237 – *Newly Introduced Coins*, KTV 국민방송 Korea TV National Broadcasting, [www.youtube.com/watch?v=sxqkRGxj9XoA](http://www.youtube.com/watch?v=sxqkRGxj9XoA)

The first 50-Hwan and 10-Hwan coins arrived in Seoul by air on October 14<sup>th</sup>.<sup>125</sup> The details surrounding this first shipment of coins is not clear but as the KNA flight had been cancelled, it is likely that the Bank of Korea resorted to having the boxes loaded aboard U.S. airline cargo aircraft that took them to Kimpo airport in Korea. Tuesday, October 20, 1959 was the official issue date. The Bank of Korea released the new 50-Hwan and 10-Hwan coins to the public from its main branch in Seoul and at its branch locations in other cities in Korea that day and on the following day, October 21<sup>st</sup>.<sup>126</sup>

That same day, Mr. Chung wrote to Director Brett to share a cable from the Bank of Korea reporting that a “huge crowd” had come to make exchanges for the new coins on the first public day of issue. They thanked the United States Mint for its efforts to make the coin release a success and added an additional thanks “in advance for your further effort for the smooth supply of coins...”<sup>127</sup>

The U.S. Mint would indeed be making ‘further efforts’ for the Korean coinage, as the urgency to get the first coins struck and shipped to Korea would almost immediately be replaced by the Bank of Korea’s pressing need to receive many more of them.

Four days later, the first 120,000 pieces of 100-Hwan coins arrived by air on October 24<sup>th</sup> and the Bank of Korea issued them a week later on October 30<sup>th</sup>.<sup>128</sup>

### **The Public Reaction to the First Coins**

The former head of historical research at the Seoul daily, *Chosun Ilbo*, described the popularity of the country's first circulating coins upon their release as

*"...beyond imagination. Even though their face value was insignificant, they were treated as special commemorative coins. Much of their popularity was due to the curiosity of elementary and middle school students about the shiny 'metal money.' Adults may have used coins during the Japanese colonial period, but for children, there was nothing more fascinating than this. As so many students flocked to the Bank of Korea asking to make exchanges for coins, not only were security guards mobilized and armed with truncheons to keep order, but also traffic police."*<sup>129</sup>

As a consequence of this enthusiasm, almost the entire amount of the first group of 620,000 coins were drained from the banks on the first day of issue.<sup>130</sup> The release of new coins was not a surprise to the Korean public as Korean media reports had been heightening anticipation of the impending issue since the year before. Therefore, it was expected that curious citizens would be motivated to get their hands on this new and relatively novel form of Korean money. As for the government, officials would boast that the coin issuance was evidence of the stability of the country's currency value. Some merchants considered the possibility of installing vending machines in public areas.<sup>131</sup> South Korea's Postal Ministry soon detailed its plan to install coin-operated payphones in the country for the first time since the Japanese occupation.<sup>132</sup> The *Dong-A Ilbo* reported that the average citizens were simply "delighted to be able to handle money that feels like money for the first time in a long time."<sup>133</sup>



*On the first day of issue for the 50-Hwan and 10-Hwan coins young students flooded the teller windows at banks in order to obtain the first coins to be used in Korea in 15 years.*

Photo: Kim Myung-hwan, "Kim Myung-hwan's time travel [82] The first coin exploded in popularity among students... For both Christmas gifts and New Year's money, coins are ranked '0'," Chosun Ilbo, 9 August 2017, [www.chosun.com/site/data/html\\_dir/2017/08/08/2017080803193.html](http://www.chosun.com/site/data/html_dir/2017/08/08/2017080803193.html). Accessed 23 June 2024.

### **"Money that Does Not Circulate"**

Back in the United States, Bank of Korea representatives worked with the U.S. Mint to determine ocean freight transportation rates in preparation for shipments that could accommodate the much larger quantities of coins that were expected to be delivered in the coming months.<sup>134</sup> However, the average time for ocean transport from Philadelphia to the port of Incheon was around 45 days. In November 1959, such a delay would be a problem for the Bank of Korea, which was under considerable government pressure to immediately issue more coins. Mr. Chung wrote of "the anxiety of our head office to receive additional coins" and explained that rapid shipments of coins "could save our bank from a pressure of the public in Korea for a continued supply of coins."<sup>135</sup> The Bank of Korea's concerns over the dearth of coins at this time was summarized in a telegram from the U.S. Embassy in Seoul:

*“[The] First shipment... [of] hwan coins to value 23 million hwan received in [the] ROK by air in October rapidly disappeared from circulation probably mainly due to their premium value as souvenirs after many years [of] absence of coins from Korea. BOK also fears some possibility [of people] hoarding [the next group of coins to be released, which] may similarly disappear from circulation in short time... Because [the] first issuance [of] coins [was] accompanied by some publicity fanfare[, the] BOK [is] concerned over [the] possible psychological impact on Korean people who may be puzzled over their inability [to] see coins in steady circulation and may to some extent have their faith in [the] hwan currency undermined.”<sup>136</sup>*

Although its staff agreed that first batch of coins were indeed not circulating in the economy, the Embassy did not share the Bank of Korea’s alarm over the “hoarding angle” in regard to any future releases of coins. The Embassy was of the opinion that the “obvious method [to] drive them out of hiding as souvenirs is [the] early injection [of] large quantities [of] coins.” The Seoul Embassy would therefore echo the Korean government’s plea for a quick resupply of more coins and requested that “Treasury assist by speeding up production and delivery.”<sup>137</sup>

Many disappointed Koreans who encountered nary a coin in the weeks after their issue were hearing rumors of people willing to pay 150 hwan for a single 100-Hwan coin. The scarcity of coins at this time inspired a snarky editorial to ask, “Who is responsible for making ‘money’ that does not circulate?”<sup>138</sup> Another Seoul newspaper article derided the lack of coins as the “new riddle created in 1959,” posing the question, “What have you heard about but not seen?” The correct answer: “A newly issued Korean coin.”<sup>139</sup> Besides their insufficient numbers, an earlier rumor had it that the coins’ release was a precursor to yet another currency reform in the country. This was one rumor that Bank of Korea officials made a point of vociferously denying.<sup>140</sup> Perhaps elevating the sense of confusion over the coins was the fact that the public was told that the government had purchased from the U.S. Mint coins amounting to 7.2 billion hwan (175 million coins) but the actual number of coins issued in October 1959 was reportedly kept a secret until late December under the strict orders of the Bank of Korea’s superiors in the Ministry of Finance.<sup>141</sup>



*The Seoul daily, Dong-A Ilbo, poked fun at the scarcity of the government’s new coins in late 1959 with this panel cartoon depicting people queuing up to view single 10-Hwan, 50-Hwan and 100-Hwan coins displayed in jewel cases on tall pedestals with a sign above them that reads, “Coin Exhibition Hall.”*

From: “Discontinuous Line of 1959 (11) Coin Issuance [1959 年(년)의 不連続線(불연속선) (11) 通貨發行(주화발행)],” *Dong-A Ilbo*, 29 Dec. 1959.

### **Establishing the Final Delivery and Production Schedules**

In early November, the Bank of Korea came up with solutions to expedite deliveries of the coins to Korea. They suggested to the Americans that they could “compensate the Mint for overtime service if necessary, to produce the coins as well as further production.” The Korean side wanted the next batch of coins to constitute twice the quantity of each denomination that had been shipped

in October, with KNA ferrying the coins to Korea in two flights. They also gave the U.S. Mint an extra incentive: Mr. Chung informed Director Brett of the news that “another coinage order to your Mint next year... is under planning by our head office...” The Bank of Korea’s only wish was a rather sanguine one: They hoped that “the present order will be possibly finished within this year.”<sup>142</sup> It was perhaps an unrealistic expectation to think that it was possible that Philadelphia could melt, roll, blank, strike, bag, and box 174 million pieces of South Korea’s three different coins alongside other foreign and domestic coining commitments in the remaining six weeks of the year. Nonetheless, the Bank of Korea was fortunate that the Philadelphia Mint would begin conversion from domestic to completely foreign coin production toward the end of November 1959.<sup>143</sup>

The date of this change-over to foreign coin production depended on a coin inventory that took place on November 13<sup>th</sup>. The result of that inventory allowed for the change-over to take place on November 23<sup>rd</sup>, a week earlier than predicted.<sup>144</sup> Philadelphia soon had a schedule for South Korea’s second batch of coins for transport to Seoul via air freight. The 10-Hwan coins started production again on December 7<sup>th</sup>. This time, the Mint struck one million of these coins in three days, with delivery made on December 11<sup>th</sup>. The requested 240,000 pieces each of the 100-Hwan and 50-Hwan coins were completed and delivered on December 18<sup>th</sup>. These two deliveries were flown to Korea on separate KNA flights.<sup>145</sup>

For future deliveries, the Bank of Korea decided on a policy of utilizing ocean freight shipments to move larger quantities of coins at the end of each month, beginning with the month of December 1959.<sup>146</sup> Director Brett told Mr. Chung on December 15<sup>th</sup> that the Mint would have around 20 million pieces of the 10-Hwan denomination finished by the end of the month for this first bulk surface shipment.<sup>147</sup> When delivered on December 31<sup>st</sup>, the shipment would actually amount to 25 million 10-Hwan coins placed into 1,244 boxes.<sup>148</sup> More importantly, Brett laid out for Mr. Chung the production schedule for the remaining coins, to include the sequential order in which the Mint would finish each denomination in the coming months:

**10-Hwan** — Coinage would resume January 18, 1960 and entire quantity completed at the end of March 1960.

**100-Hwan** — Coinage would also start on January 18<sup>th</sup> alongside the 10-Hwan and would continue until a total of 25 million pieces have been produced in late March.

**50-Hwan** — Coinage will begin as soon as the 100-Hwan is finished. A total of 25 million pieces will be struck with completion sometime in April.

**100-Hwan** — The remaining 25 million pieces of the 100-Hwan will start as soon as the 50-Hwan is completed. Coinage should be completed before the end of June.

Brett explained the sequence as necessary so as to not have coins of similar metal appearances being produced at the same time, i.e. the 100-Hwan and 50-Hwan. He also warned that these schedules “may be delayed slightly due to other commitments.”<sup>149</sup>

This projected schedule (if not the statement about the possibility of ‘slight delays due to other commitments’) was apparently unacceptable to the Bank of Korea, for they appealed directly to

the U.S. Embassy in Korea on December 11<sup>th</sup>. The Koreans asked the American diplomats to get the U.S. government to speed up the U.S. Mint's production and delivery of their coins. Ambassador Walter McConaughy appealed on behalf of South Korea, writing to the State and Treasury Departments to inform them that the Korean government had requested that the remaining portion of the coinage order, amounting to 7.181 billion *hwan* worth of coins, be completed by the end of February 1960 instead of the end of June 1960, as scheduled. South Korea's Finance Minister even requested the Embassy to help them utilize the U.S. Defense Department's Military Sea Transportation Service (MSTS), which serviced U.S. military bases in Korea, to ship the coins. The Minister claimed that these vessels could make the journey in only 20 to 23 days versus the 45 days for commercial shipping.<sup>150</sup>

Despite this effort, the Korean appeal fell flat. The U.S. Mint's schedule would not change.

The Philadelphia Mint further refined its schedule in mid-January 1960, detailing more precise completion dates, number of pieces to be made per day, and the number coining presses needed:

**10-Hwan** — To start on January 20<sup>th</sup> on 20 coining presses; strike 2,300,000 pieces per day. Approximately 68,000,000 pieces remaining. Completion date: March 2<sup>nd</sup> (estimated).

**100-Hwan** — To start on January 18<sup>th</sup> on seven presses; strike 700,000 pieces per day. Complete half of order (25 million pieces). Completion date: March 10<sup>th</sup>.

**50-Hwan** — To start on March 11<sup>th</sup> on 12 presses; strike 1,200,000 pieces per day. Complete 25 million pieces. Completion date: April 8<sup>th</sup>.

**100-Hwan** — To resume on May 4<sup>th</sup> on 12 presses; strike 1,200,000 pieces per day. Complete the remaining 25 million pieces. Completion date: June 3<sup>rd</sup> (estimated).<sup>151</sup>

When informing the Bank of Korea of this information, the Mint added an extra week's time to each completion date for the mintage runs shown above for the 100-Hwan and 50-Hwan. In the case of the 10-Hwan, an extra 16 days was added.<sup>152</sup> On January 22<sup>nd</sup>, the Bank of Korea's designated transportation company picked up from the Philadelphia Mint the second month-end delivery of coins for ocean transportation, consisting of another 25 million 10-Hwan coins.<sup>153</sup> By mid-February, the first of these large bulk shipments had finally reached Korea, where the government reportedly channeled these 10-Hwan coins to rural areas of the country to replace banknotes of equivalent denomination.<sup>154</sup> The total number of coins delivered by February 12, 1960 was, 100-Hwan: 7,860,000 pieces; 50-Hwan: 360,000 pieces; and 10-Hwan: 78,260,000 pieces.<sup>155</sup>

When the first large ocean shipments of coins arrived in Korea, the Korean government's urgency for the speedy delivery of ever more numbers of coins appeared to have finally eased. In fact, when following up on the Seoul Embassy's December 11<sup>th</sup> letter on behalf of the Korean government, the State Department claimed that, by mid-February 1960, the "[s]hipments are being made on schedule and apparently to the satisfaction of the Korean Embassy and of the Bank of Korea's New York representative." State also believed that using the ships of the MSTS would therefore not be necessary, and in any case, they doubted that MSTS ships would have made the journey

from the docks at Philadelphia to the port of Incheon in shorter time than the commercial vessels that the Korean government had hired.<sup>156</sup>

### **The Completion of the First Korean Coinage Order**

The U.S. Mint completed South Korea's coinage in the order and on the dates that had been shared with the Bank of Korea. The last 10-Hwan coins were finished first on March 18, 1960. The 50-Hwan coins were finished by April 15<sup>th</sup>.<sup>157</sup> The last 25 million pieces of 100-Hwan coins were started around May 9<sup>th</sup> and were finished by the promised date of June 10<sup>th</sup>. The Mint estimated that they would need approximately 20 days to finish the remaining number of 100-Hwan coins and would have to produce around 110 cupronickel ingots per day to have enough coining metal to strike these 25 million coins. The Mint worked to meet the target end date for the 100-Hwan by shifting some of its work on U.S. coinage to the weekends. Acting Superintendent Paul S. Heckman proposed overtime pay for employees to work on Saturdays and Sundays to operate the two blank annealing furnaces that were suited to handle the U.S. Five-Cent blanks; otherwise, there would not have been enough time and capacity to anneal both the Five-Cent and the 100-Hwan blanks during the work week. As proposed earlier, Heckman also shifted workers normally assigned to proof coin operations over to activities that would help meet "commitments on regular and foreign coins."<sup>158</sup>

On August 17, 1960, Mr. Chung wrote to Director Brett to inform him that the Bank of Korea had received the last shipments of South Korea's first coinage order and that its entire quantity of coins had been successfully transported to Korea.<sup>159</sup> The quantities involved with this first Korean order, consisting of the coins dated 4292 (1959), are shown below. (**See Fig. 12**).<sup>160</sup>

**Fig. 12**

<b>U.S. Mint Output for Korean Coinage Dated 4292 (1959)</b>						
<b>(Prices in 1959 USD)</b>						
<b>Information for use in connection to transporting coins</b>						
	<b>Number of Coins</b>	<b>Coins per Box</b>	<b>Weight per Box in pounds*</b>	<b>Number of Boxes</b>	<b>Total Weight in pounds</b>	<b>Cubic Feet</b>
<b>10-Hwan</b>	100,000,000	20,000	118	4,975	587,050	3,300
<b>50-Hwan</b>	25,000,000	12,000	107	2,074	221,918	1,400
<b>100-Hwan</b>	50,000,000	6,000	99	8,334	825,066	5,500
<b>Totals:</b>				<b>15,383</b>	<b>1,634,034</b>	<b>10,200</b>
					<b>short tons: 817</b>	
Replacement Value: Approximately \$855,000						
Monetary Value: 7.25 billion <i>hwan</i>						

\*Metal strapping bands on boxes added an extra pound per box, hence the reason each 50-Hwan box (for example) had a stenciled label that listed its gross weight as "108 LBS."

Months after the last coins were shipped, the U.S. Mint's cost accountant prepared a document comparing the Mint Bureau's estimated costs to the actual costs for this first Korean coinage order. The manufacturing costs listed in this document included all the charges for melting, rolling, blanking, annealing and cleaning, upsetting, striking, selecting, counting, dies and collars, coin bags and tools, and even administrative and security costs. The document also lists costs for separate billings, which are the costs of the metals, boxes, engravings, galvanos, hubs, and master dies.

The cost estimates for the separate billings for each denomination were comparable to the actual costs, with the exception of overruns listed for the actual costs involving the artwork and masters for the 100-Hwan and 50-Hwan.

The actual manufacturing costs for each denomination were below the estimated costs in the following amounts:

**100-Hwan** — \$6,455.97 below estimate. A variation of 4.6 %

**50-Hwan** — \$5,299.56 below estimate. A variation of 11.5 %

**10-Hwan** — \$3,043.81 below estimate. A variation of 3.6 % <sup>161</sup>

### **Korea's Coin Conundrum in mid-1960**

A problem that governments can encounter when coins are a component of the system of money is their low circulation rate in the economy. For South Korea, this very situation became apparent even before the last of the 4292-dated *hwan* coins arrived in the country. This stood in contrast to the initial massive popular reaction to the coins in October 1959. The Seoul daily newspaper, *Dong-A Ilbo*, reported in mid-August 1960 on the total numbers of coins in circulation versus the numbers of coins imported (or soon to arrive) from the United States by the end of July 1960:

**100-Hwan** — 3,720,000 coins in circulation. 50,000,000 pieces imported.

**50-Hwan** — 3,140,000 coins in circulation. 25,000,000 pieces imported.

**10-Hwan** — 58,700,000 coins in circulation. 100,000,000 pieces imported.

The article states that the amount of the coins, valued in *hwan*, in circulation at the end of July 1960 was 1.07 billion out of the total 7.25 billion worth of coins purchased and imported. This meant that only around 15% of the total mintage of the coins dated 4292 were in circulation. The reason given for the coins' low circulation rate was "because they are too heavy and inconvenient to use compared to their value."<sup>162</sup> The lack of coin circulation in the Korean economy at this time was likely due to two other factors as well. One may have been that the coins still faced competition in usage with banknotes of equivalent denominations (100-Hwan, 50-Hwan and 10-Hwan); banknotes which were still in circulation and would remain legal tender until 1962. Another reason was the fact that Korea had yet to fully develop "coin intensive" service providers, such as mass transit, tolls, automatic payphones and vending machines. When common in an economy, these industries accumulate large volumes of coins from their customers and serve as a pathway through which the majority of coins return to the central bank.<sup>163</sup> It would take a few more years, but Korea's new coinage would eventually come into more common usage and result in a higher percentage of coins in circulation.<sup>164</sup>

### **Korea's Second Coinage Order with the U.S Mint — Coins dated 4294 (1961)**

The first indication in the U.S. Mint's Korea file that the Korean government was interested in ordering additional coins beyond the initial 175 million coins ordered in the summer of 1959 appeared in a letter written by Bank of Korea Representative Won H. Chung just as the Philadelphia Mint was gearing up to deliver the first of Korea's large surface shipments of coins. Writing to Director William Brett on November 10, 1959, Mr. Chung stated that "another coinage

order... is under planning by our head office” and that the reason behind the order was “to meet future demand of our coins” in Korea.<sup>165</sup>

The Bank of Korea placed this second order with the U.S Mint months later, on March 29, 1960. Mr. Chung wrote to Director Brett that the order would be for the manufacture of 50 million pieces of the 100-Hwan denomination and 100-million pieces of the 10-Hwan. He added, “It is expected that the designs and alloys will remain the same. The only contemplated change will be in the dates on the coins.”<sup>166</sup>

The Philadelphia Mint completed an estimate on April 20<sup>th</sup> and Assistant Director Leland Howard shared a summary of the cost estimate with Mr. Chung on May 3<sup>rd</sup> (**See Fig. 13**).<sup>167</sup> As the

**Fig. 13**

U.S. Mint Cost Estimate Quotes for Korean Government (Revised on March 13, 1961: Reduced Mintage) Date of Estimate: April 20, 1960															
Denomination	NUMBER OF PIECES	Weight in Grains (tolerance ±)	Composition	Diameter (mm)	METALS REQUIRED FOR BOTH COINS (in pounds)			COST OF METALS FOR BOTH COINS (in 1960 USD)			NUMBER OF BOXES REQUIRED	TOTAL COST OF BOXES	TOTAL COST OF MANUFACTURING	DATE CHANGE ON COINS	INVOICE AMOUNT
					Copper (both denominations)	Nickel	Zinc	Copper @ \$0.33/lb (both denominations)	Nickel @ \$0.78/lb	Zinc @ \$0.13/lb					
100-HWAN	50,000,000	104 (4)	75% Cu., 25% Ni	26	1,072,857.14	185,714.28	-	\$354,042.85	\$144,857.14	-	13,334	\$20,001.00	\$145,000.00	\$170.00	\$762,769.56
10-HWAN	100,000,000	38 (2)	95% Cu. and 5% Zn	19.1		-	27,142.86	-	\$3,528.57	\$95,000.00		\$170.00			

existing coin designs for the 100-Hwan and 10-Hwan would be used for this new order, the only charge for die work would be for the change of date. Howard reminded Chung that State Department approval would again be necessary, as well as Korean government approval of the Mint’s estimated costs before this second order could be placed on Philadelphia’s schedule. Metals prices were also subject to change. Howard also warned that due to the heavy demand for U.S. coinage, “it is very doubtful if any work can be started on your coinage order before January or February of 1961.”<sup>168</sup>

The Bank of Korea evidently accepted the news of this seven-month delay to their second order and without responding with desperate calls to advance its start date or with pleas for the U.S. Mint to sidestep its protocols, as was witnessed with the first order. Perhaps the Korean leadership understood that the U.S. Mint was not likely to change its schedule this time, or maybe the public pressure in Korea for more coins had abated.

However, something else may have been afoot.

### **President Syngman Rhee’s Ouster**

It was almost as soon as the *hwan*-denominated coins began wider circulation in South Korea that the country entered a period of considerable political upheaval. Five months after the introduction of South Korea’s first coins, a popular uprising removed President Syngman Rhee from office in April 1960, right after the



*Korean citizens destroy a statue of President Rhee during the April 1960 uprising.*

Photo: “Statue of Syngman Rhee destroyed during the April 19 National Uprising,” *Kookmin News*, [www.kookminnews.com/1814](http://www.kookminnews.com/1814).

Korean government placed its 2<sup>nd</sup> order with the U.S. Mint. The uprising resulted in the short-lived “Second Republic” government of Prime Minister Chang Myon and President Yun Boseon. The Philadelphia Mint-made *hwan* coins remained in circulation throughout this government’s two-year duration, even though the 100-Hwan coin displayed the image of the roundly disliked former president.<sup>169</sup>

After Rhee fled to Hawaii, the new Korean government announced that it would heed popular appeals to replace the country’s coins and currency that displayed the image of President Rhee.<sup>170</sup> The Bank of Korea evidently shared such plans with the press well before informing the U.S. Mint. The Mint discovered the plans later in the summer when they were alerted to an article in the July 14, 1960 issue of the *Journal of Commerce* that reported that South Korea would soon replace some of its banknotes that feature Syngman Rhee with new notes. The article also stated that the Bank of Korea “requested the United States Federal Mint, which mints South Korean coins, to change to a new design rather than continue with coins which carry Rhee’s portrait.”<sup>171</sup> No record of such a request from the Bank of Korea exists in the U.S. Mint’s file on Korea from either 1960 or 1961.

With the high likelihood of an impending change to the design of the 100-Hwan under consideration, the Bank of Korea had likely welcomed the seven-month delay to the coinage order as it would provide the Korean government with time to either decide on a new design or to cancel the 100-Hwan entirely from the order before the coinage could begin. Over three months after they had provided the Bank of Korea with its first estimate, the Mint received a change to the Korean coinage order. Mr. Chung wrote to Director Brett to inform him that the order would now consist of 50 million 100-Hwan coins, 20 million 50-Hwan coins, and 50 million 10-Hwan coins. A possible change to the design of the 100-Hwan was not mentioned.<sup>172</sup>

However, the Koreans were not finished with their revisions to the order.

It would take until late January 1961 that Mr. Chung would next call Leland Howard to inform him that the Korean government had been considering, and would soon approve, the new coinage order. The Bank of Korea would now order 50 million pieces of 50-Hwan coins and 100 million pieces of 10-Hwan coins. Chung also stated that he had reminded the Seoul office to make the formal request for this new coinage through the U.S. State Department.<sup>173</sup> The Philadelphia Mint produced quotes for these numbers of coins, but on February 14<sup>th</sup>, the Bank of Korea amended the 50-Hwan coin’s mintage downward from 50 million to 20 million.<sup>174</sup> Philadelphia then drew up another quote based on this new information, finishing it on February 24<sup>th</sup>.<sup>175</sup> Leland Howard shared the new quote with the Bank of Korea on March 13<sup>th</sup>; however he did not mention a possible start date (**See Fig. 14**). Howard only stated rather vaguely that “we shall plan to produce

**Fig. 14**

U.S. Mint Cost Estimate Quotes for Korean Government (Revised)												
Invoice Date: March 13, 1961												
Denomination	NUMBER OF PIECES	METALS REQUIRED (in pounds)			COST OF METALS, BOTH COINS (in 1961 USD)			NUMBER OF BOXES REQUIRED	TOTAL COST OF BOXES	TOTAL COST OF MANUFACTURING	COST PER 1,000 PIECES	INVOICE AMOUNT
		Copper (both denoms.)	Zinc (both denoms.)	Nickel	Copper @ \$0.29/lb	Zinc @ \$0.145/lb	Nickel @ \$0.7752/lb					
50-HWAN	20,000,000	629,714	56,457.15	19,542.86	\$182,617.14	\$8,186.29	\$15,149.63	6,667	\$10,667.20	\$41,000.00	\$2.05	\$357,960.26
10-HWAN	100,000,000			—								

the coins when our facilities are available for that purpose.”<sup>176</sup>

It would turn out that the removal of the 100-Hwan from this coinage order would only delay a planned change to a new design for this denomination.

### **Partitioning the Second Coinage Order**

After receipt of the U.S. Mint’s cost estimate quote, the Bank of Korea clarified for the Mint that “[t]he same master dies which are in your possession will be used for the production, except the change of date on both denominations from the present 4292 to 4294.” Meanwhile, on March 28<sup>th</sup>, the Korean Embassy in Washington D.C. sent the formal request for this second order to the State Department.<sup>177</sup> State Department approval was granted a week later on April 6, 1961.<sup>178</sup>

While the Korean side was taking the steps required to finally get on the Philadelphia Mint’s schedule after a year’s delay, the U.S. Mint was finding it difficult to make space any time even in 1961 for this second Korean coinage order. Officials at the Mint Headquarters in Washington D.C. mulled over the idea that the Mint “may have to make a token quantity for Korea” instead of producing the entire quantity of coins that year.<sup>179</sup> Soon the Mint Bureau’s Assistant Chief Accountant Ben C. Hollyfield was dispatched to “discuss at Phila[delphia] the possibility of making some of these during June 61.”<sup>180</sup>



*The 50-Hwan and 10-Hwan coins produced for Korea’s second coinage order all bear the date, 4294 (1961). Only the 10-Hwan was actually produced during calendar year 1961, while the remaining quantity of 10-Hwan coins and the entire quantity of the 50-Hwan coins for this order were manufactured in 1962.*

Photo detail: Courtesy of Professional Coin Grading Service (PCGS.com)

On April 28<sup>th</sup>, Leland Howard informed Mr. Chung that the Mint would be able to produce only 25 million pieces of the 10-Hwan denomination beginning the first week in June, with completion of this portion of the order to happen in early July. The Mint would bill the Koreans separately for this group of 25 million 10-Hwan coins. Howard explained that due to “extremely heavy demand for United States coins at the present time” that kept the mints at both Philadelphia and Denver on very heavy overtime schedules, the Mint would have to postpone the Korean order for at least “several months.”<sup>181</sup>

Interestingly, there is evidence that Howard’s written description of the U.S. Mint’s situation here may have been crafted for the benefit of Mr. Chung. A handwritten note, likely from Howard’s April 28<sup>th</sup> telephone conversation with Chung, reveals a reminder to “[i]nclude explanation why we can’t make more! ... For Chung’s benefit to help him explain to his home office why they can’t have the entire order now.”<sup>182</sup> It appears that pressure from the Bank of Korea Headquarters had not entirely let up on Mr. Chung after the first order had arrived in Korea. However, the news that the Bank of Korea could expect only one quarter of the 10-Hwan mintage in the remaining seven months of 1961 was indeed significant, especially considering that the U. S. Mint had already postponed this coinage order since the year before, starting in April 1960. And as the start date for the remaining 75 million 10-Hwan and 20 million 50-Hwan coins was left to an indefinite date sometime in 1962, it all just may have been too much for Mr. Chung’s bosses back in Korea. Although it is not certain from the available records, the U.S. Mint’s inability to accommodate

Korea's entire second order in 1961 may have caused Mr. Chung to be replaced as the Bank of Korea's Representative working with the U.S. Mint.

The Philadelphia Mint soon sent the Bank of Korea the bill for this first portion of Korea's second coinage order on May 5, 1961 (**See Fig. 15**).<sup>183</sup>

**Fig. 15**

U.S. Mint Bill for 25 million 10-Hwan Coins (4294)										
Coins Struck in 1961										
Invoice Date: May 5, 1961										
METALS REQUIRED (in pounds)				COST OF METALS (in 1961 USD)						
Denomination	NUMBER OF PIECES	Copper	Zinc	Copper @ \$0.30/lb	Zinc @ \$0.145/lb	NUMBER OF BOXES REQUIRED	TOTAL COST OF BOXES	TOTAL COST OF MANUFACTURING	COIN COST PER 1,000 PIECES	INVOICE AMOUNT
10-HWAN	25,000,000	128,929	6,785.72	\$38,678.57	\$983.93	1,250	\$2,000.00	\$25,000.00	\$1.00	\$66,832.50

As with April 1960, this month of May 1961 would also bring momentous political change back in Korea. This change would also affect the Bank of Korea's future interactions with the U.S. Mint.

### **The Military Coup d'état of May 16, 1961**

In the pre-dawn hours of May 16, 1961, around 3,600 South Korean soldiers crossed the bridges of the Han River into central Seoul on a mission to capture the centers of political power, which they did with relative ease.

Thus began 32 years of the Korean military's domination of the politics of South Korea.

In the span of a day, the 'democratic experiment' of the country's Second Republic government rapidly disintegrated with no protection from the nation's military, and thanks to the worsening overall economic situation in the country, with no love lost from the Korean civilian population. During their tenure, Prime Minister Chang Myon and President Yun Boseon were simply not able to garner support from the public, nor even control their own political party. Unemployment rose to 26%, and rice prices rose 60% during the regime's last four months in power. The government was forced to devalue the Korean *hwan*. The *hwan* to U.S. dollar exchange rate rose to 1,300—1. The culmination of political, economic, and social instabilities dovetailed to the effect that it can be said that the Second Republic died the death of a thousand blows. Had they been listening, the Chang government might have paid better attention to the rumblings in the ranks of the officers of the Korean Army, to the ones who were to deliver the final blow.



*Images of the May 16, 1961 South Korean military coup.*

*Photo (top): "M4A3E8 Sherman tank at Namdaemun, Seoul during the 5.16 military coup," BEMIL Photo Gallery, bemil.chosun.com/nbed/tbs/view.html?b\_s\_id=10044&num=204235&pn=1&compn=2*

*Photo (bottom): "Army Chief of Staff Jang Do-young (left) and 2nd Army Deputy Commander Park Chung-hee standing in front of the main gate of Seoul City Hall after the success of the May 16 coup." Daily Chosun, monthly.chosun.com/client/news/view.asp?ctcd=&nNewsNum=201603100038*

The leaders of the military junta explained to the Korean citizenry that they had lost faith with the government of Chang Myon, and now wished to give direction to a nation they felt had gone dangerously astray. The rebels fashioned themselves as Young Turks, insisting (and continuing to insist for the next two decades) that the Korean media refer to their actions that day as the “May 16 Military Revolution.”

It did not take long for a Major-General Park Chunghee to consolidate his own position at the top soon after the coup. On July 3, 1961, Park was named Chairman of the Junta, now calling itself the Supreme Council for National Reconstruction. Unable to rely on an acceptable political pedigree, Park and his junta instead took full advantage of the popular consensus for total reform in the country. The junta slowly began to build legitimacy with an achievement and growth-oriented leadership with military-style discipline and efficiency and with an intense devotion to economic progress via “Guided Capitalism.” The junta planned a series of ‘reform projects’ to support the high investment levels needed for their ambitious economic development policies under their upcoming Five Year Economic Development Plan (FYP) for 1962 to 1966.

To gain economic independence from the country’s rather significant foreign aid dependency, the government’s FYP carried with it a formula to raise immediate economic capacity based on Korea’s own domestic capital by imposing ‘administrative controls’ on certain ‘target mechanisms’ needed for a planned economy. Korean business and finance were the targets. The junta nationalized the country’s five major independent banks almost immediately after the coup, along with instituting a “stock market maintenance plan” the following January. Another one of the key agents for accommodating the FYP was the central bank. The junta would completely amend the Bank of Korea Act in 1962, paving the way for the staffing of its decision-making body, the Monetary Policy Board, with junta appointees. Park Chunghee placed his finance minister in the role of chairperson, with veto right over the Board’s decisions on monetary policy. The new law restricted the Bank from *formulating* monetary, credit, and foreign exchange policy to simply *implementing* monetary and credit policies. Essentially, the Bank of Korea’s new role was the rubber-stamping of government policies (particularly regarding loans) to facilitate an economic jump-start, and not to let conservative ideas such as ‘price stability’ get in the way.

Park’s junta government would also develop a policy of making investments in the South Korean Mint to standardize the system of currency in anticipation of economic growth, and later, for the country to gain independence in banknote and coin manufacturing. Before this got underway, however, the junta would concoct a scheme to jump-start the economy in June 1962 by creating ‘economic capacity’ out of thin air.<sup>184</sup> This scheme would affect South Korea’s monetary structure, including its new U.S.-made circulating coins.

Before this took place however, the new Korean government would follow through on the importation of the remaining coinage ordered by the previous government.

### **Completion of the Second Coinage Order**

Won H. Chung, the Bank of Korea’s representative who toiled for three years on South Korea’s coinage project in the United States almost through to completion, was relieved of his duties sometime in the days before the May 16, 1961 military coup took place in Korea. In a letter dated May 16<sup>th</sup>, Chung’s replacement, a man with a name even more cryptically rendered in English as “C.Y. Kim,” wrote to Leland Howard for the first time to exchange pleasantries after having been

introduced in Washington D.C. a few days before.<sup>185</sup> Mr. Kim soon forwarded the Korean government's payment for the 25 million 10-Hwan coins to the Philadelphia Mint on May 29<sup>th</sup>.<sup>186</sup>

This group of 10-Hwan coins began production on July 5<sup>th</sup> and delivery was scheduled for July 26<sup>th</sup>.<sup>187</sup> The actual manufacturing cost for this portion of the coinage order was over \$2,036.22 above the estimated cost of \$25,000. Additionally, the reduction in mintage due to the U.S. Mint's need to partition the 10-Hwan coinage order, which lowered production from 100 million coins down to 25 million coins, resulted in scores of leftover dies. The Engraver at the Philadelphia Mint still had 58 dies for the 10-Hwan he never delivered to the Coiner, while the Coiner himself still possessed 41 dies.<sup>188</sup>

It would take until late October 1961 for the Mint to finally be able to predict a start date some two or three months distant for the production of the remaining portion of South Korea's 50-Hwan and 10-Hwan coins.<sup>189</sup> However, the Bank of Korea's patience appeared to wear thin; perhaps justifiably so at this point. C.Y. Kim was soon replaced with another Representative for the Bank of Korea who also went by another abbreviated name: "H.M. Lee." This new Representative called the Mint on November 13<sup>th</sup> to ask that production for the remaining Korean coins be started sooner. The Philadelphia Mint had already been requested to get bids for the necessary metals for the coinage, but the Chief Coiner, Sydney Engel, believed that it would "be impossible —or at least impractical— to start stamping before Jan[uary 1962]." <sup>190</sup> If the Mint team could not exactly schedule the coins at this time, they at least attended to the preparatory work by sending the Korean government the bill for the remaining coins. (**See Fig. 16**).<sup>191</sup> The date that was to appear

Fig. 16

U.S. Mint Bill for 20 million 50-Hwan Coins and 75 million 10-Hwan Coins (4294)												
Coins Struck in 1962												
Invoice Date: November 29, 1961												
Denomination	NUMBER OF PIECES	METALS REQUIRED (in pounds)			COST OF METALS, BOTH DENOMS. (in 1961 USD)			NUMBER OF BOXES REQUIRED	TOTAL COST OF BOXES	TOTAL COST OF MANUFACTURING	COIN COST PER 1,000 PIECES	INVOICE AMOUNT
		Copper	Zinc	Nickel	Copper @ \$0.3112/lb	Zinc @ \$0.1238/lb	Nickel @ \$0.84378					
50-HWAN	20,000,000	114,000	29,314.29	19,542.86			\$16,489.87	1,667		\$41,000.00	\$2.05	
10-HWAN	75,000,000	386,785.71	20,357.14	—	\$155,844.51	\$6,149.32		3,750	\$8,667.20	\$75,000.00	\$1.00	\$303,320.90

on these coins also needed to be confirmed. This coinage was first to take place in 1961 (Korean Era date: 4294) then delayed into 1962 (Korean Era date: 4295), therefore the Mint needed to know which date should be used for these last coins. The Bank of Korea chose to remain with the date 4294 (1961), even though the coins would be struck in 1962.<sup>192</sup>

Keeping the date as "4294" would make possible the use of the leftover 10-Hwan dies from the production that took place in July. Around this time, the new Mint Director, Eva Adams, also met with the Bank of Korea's new Representative, H.M. Lee, at her office in Washington D.C. to discuss this last group of coins for Korea. After this meeting, Mr. Lee wrote to Adams that "the demand for coins in our country grows continuously" and that "expediting the production of the coins will be greatly appreciated."<sup>193</sup>

The new Philadelphia Mint Superintendent, Michael H. Sura, who replaced Rae V. Biester in this position on December 1, 1961, received the Bank of Korea's full payment for the remaining

coinage on December 18<sup>th</sup>.<sup>194</sup> The last shipment of South Korea's U.S. Mint-manufactured *hwan* coinage was scheduled to be delivered on February 26, 1962. The shipment consisted of 75 million pieces of the 10-Hwan denomination and 20 million pieces of the 50-Hwan denomination, for a total of 311.25 short tons of coins.<sup>195</sup> Evidently, this last delivery of coins was either delayed a few days or needed to be transported in more than one shipment. H.M. Lee informed Director Adams that the Bank of Korea had “just completed the shipping arrangement for the last shipment of coins...” by March 1<sup>st</sup>. Therefore, these last coins had probably arrived in Korea by mid-to late April 1962.

The actual manufacturing costs for the 20 million 50-Hwan coins and 75 million 10-Hwan coins were below the estimated costs in the following amounts:

**50-Hwan** — \$335.25 below estimate. A variation of only 0.8 %

**10-Hwan** — \$5,253.82 below estimate. A variation of 7.0 %<sup>196</sup>

These were to be the very last foreign-made South Korean business strikes. However, the Bank of Korea was planning to revive the 100-Hwan denomination with the help of the United States Mint.



*Although no images of the proposed redesigned 100-Hwan were retained in the U.S. Mint's files on Korea's coinage, this obverse and reverse design was included in a book written in 2006 by a former Bank of Korea currency designer and later executive, Jo Byeongsu. Mr. Jo claimed that this is the design that the Bank of Korea intended to use to replace the image of the left-facing bust of President Syngman Rhee. The main device is the historical structure known as the Cheomseongdae (첨성대) observatory from Korea's 7th Century Silla Dynasty. The seven stars of the Big Dipper appear in the background. Not only was Rhee's image replaced but also the presidential peacocks that appeared on the reverse of the previous design. One will also notice that the designers utilized the 10-Hwan's arabesque scrolls on the reverse. The design here displays the date, 4294 (1961), therefore this drawing may have been prepared that year, or in the previous year, in preparation for the start of its production in 1961, although it was postponed until planning resumed in April 1962. The Korean Mint's design team had probably drawn these sketches. This new 100-Hwan never got any further than the design stage.*

Images found in Jo Byeongsu, *Jo Byeongsu's Story of Money: Korean Commemorative Coins* [우리나라 記念鑄貨 Korean Commemorative Coins : 조병수의 돈 이야기]. (Seoul: Ohsung K&C, 2006), 200.

### **The Proposed 100-Hwan: Cheomseongdae Design**

The first indication in U.S. Mint records that the Korean government was contemplating a new design for the 100-Hwan denomination appeared in a letter written seven months after Korean President Syngman Rhee was removed from office. As the Bank of Korea awaited its second coinage order of 4294-dated coins to start production in Philadelphia, Representative Won H. Chung sent a work request on January 27, 1961 to Mint Director William Brett for three sample coin blanks. The Bank of Korea wanted the three sample blanks composed of an alloy of 75%

copper and 25% nickel and with a diameter size of 25 millimeters but each with differing weights: 70 grains, 75 grains and 77 grains. Mr. Chung stated that these samples were “to be used for changing design and size of our 100 Hwan coin.”<sup>197</sup>

The Philadelphia Mint soon got to work to create these blanks. Although he was unsure of the exact purpose the samples were to serve, Mint Bureau Technical Assistant Philip B. Neisser instructed Paul S. Heckman at the Philadelphia Mint to cut three blanks and upset them to 25 millimeters and “make each sample ‘on the nose’ as to weight...by means of filing [the] blanks.”<sup>198</sup> Once completed, the three blanks were delivered in-person to Mr. Chung sometime soon after February 23, 1961.<sup>199</sup> Earlier in Korea, the Bank of Korea had worked on the administrative end to obtain official approval from the Finance Ministry of Prime Minister Chang Myon’s government to remove Rhee’s portrait from all future banknotes and coins and to eventually withdraw such pieces currently circulating. This included the introduction of a new 100-Hwan design to replace the then current coins featuring Rhee’s image. However, the Ministry shelved the redesign of the 100-Hwan coin due to budget constraints by March 1961.<sup>200</sup>

Over a year would pass before the Bank of Korea took further action.

On April 11, 1962, with the Korean state now under the military regime, the Seoul press reported that the Bank of Korea was back on track to replace all 50 million of the 100-Hwan coins.<sup>201</sup> Two days later, H.M. Lee wrote to Director Adams to inform her that his Headquarters was planning to place an order with the U.S. Mint for a new 100-Hwan coin of an entirely new design. Lee asked if the Mint could prepare “three sets of lead strikes in size of 25MM in diameter, obverse and reverse, of die reductions prepared from the attached design.”<sup>202</sup> Mr. Lee also shared the specifications of the three sample blanks weighing 70 grains, 75 grains and 77 grains that were made the year before. He asked Adams, “which one of the three do you think will be the best in its quality and production as a coin?” Lee wanted to know if was possible “to prepare the master dies from the attached design prior to the formal order” to manufacture the coins. Lee also asked for the price of preparing the master dies and the lead strikes. He informed Adams that the Korean government was interested in ordering 50 million pieces; the same number of 100-Hwan coins that the Mint had produced with President Rhee’s image during the first coinage order.<sup>203</sup> The Philadelphia Mint quickly prepared cost estimates for the Bank of Korea’s proposed 100-Hwan on April 27, 1962 (**See Fig. 17**).<sup>204</sup>

Fig. 17

U.S. Mint Cost Estimate Quotes for Redesigned 100-Hwan Coin														
Earliest Year of Production: 1962 (Cheomseongdae Obverse — Cancelled)														
Date of Estimate: May 8, 1962														
GENERAL DESCRIPTION OF COINS					METALS REQUIRED (in pounds)		COST OF METALS (in 1962 USD)				Die Costs - Models, galvanos, hub reduction and lead strikes			
Denomination	NUMBER OF PIECES	Weight in Grains	Composition	Diameter (mm)	Copper	Nickel	Copper @ \$0.31/lb	Nickel @ \$0.8457/lb	NUMBER OF BOXES REQUIRED	TOTAL COST OF BOXES	TOTAL COST OF MANUFACTURING	MANUFACTURING COST PER 1,000 PIECES		INVOICE AMOUNT
100-HWAN (NEW DESIGN)	50,000,000	70	75% Cu., 25% Ni	25	375,000.00	125,000.00	\$116,250.00	\$105,712.50	6,250	\$10,000.00	\$114,000.00	\$1.60	\$1,716.00	\$347,678.50
	"	75	"	"	401785.71	133,928.57	\$124,553.57	\$113,263.39	6,250	\$10,000.00	\$116,500.00	\$2.33	\$1,716.00	\$366,032.96
	"	77	"	"	412,500.00	\$137,500.00	\$127,875.00	\$116,283.75	6,250	\$10,000.00	\$117,500.00	\$2.35	\$1,716.00	\$373,374.75

Director Adams forwarded a summary of this estimate to the Bank of Korea on May 8<sup>th</sup>. In her summary, Adams informed Mr. Lee that the Mint recommended the weight of 77 grains for this coin, while the thickness could only be determined after assessing the variations of pattern, relief,

along with the effects of upsetting on the pieces. In other words, the coin's thickness would have to be determined after sample coins were struck. In contrast to the delays given to the Korean government during the last coinage order, this time the Mint would be able to prepare the dies in around 25 working days, with approximately 50 working days to manufacture the coins after Korean government approved the sample strikes. Adams also dismissed any idea that the master dies could be made 'prior to the formalities,' as Mr. Lee had asked. A formal Korean government request to the U.S. State Department would still be needed.<sup>205</sup>

Work on this new design would advance no further. In two short months, South Korea's military government would enact its plan to fire up the Korean economy; a plan which would completely obviate the 100-Hwan redesign effort.

The end of the *hwan* currency had arrived.

### **The June 1962 Currency Reform**

Just over a year after the May 16, 1961 military coup d'état ended the Second Republic government in South Korea, the country's coinage would be radically affected by the military junta's currency reform, known as the "Emergency Currency Measure" of June 9, 1962. The currency reform was one of a series of reform projects that the junta enacted to support the high investment levels needed for their ambitious economic development policies under South Korea's first Five Year Plan (FYP). The new currency reform law immediately cancelled the nation's currency, the *hwan*, and proclaimed that "from June 10, 1962, the currency units are to be called *won*" and that all current South Korean money would be converted into the new *won* at a rate of 10 *hwan* to 1 *won*. The enforcement of this new law on June 10th also included the immediate invalidation of all currency in denominations above 50-Hwan. This meant that all the 50-Hwan and 10-Hwan coins imported into the country from the United States would temporarily remain in circulation but were now revalued to "Five-Won" and "One-Won" respectively. Also, citizens were merely allowed to *deposit* currencies and coins in denominations above 50-Hwan into bank accounts at the 10 to 1 conversion rate no later than June 17th, after which the money would be worthless.<sup>206</sup> Therefore, the Korean government declared the 100-Hwan coin demonetized on June 10, 1962 and began pulling it completely from circulation.<sup>207</sup> The approximately 37 million Philadelphia-made 100-Hwan coins then circulating in the economy would disappear as banks were under orders to sequester these coins instead of returning them back to circulation.<sup>208</sup>



The Seoul daily, the Kyonghyang Shinmun, announced the currency reform on the morning of June 10, 1962: "Currency Reform- 10 hwan becomes 1 won." Its front page shows military police guarding the entrance to the Bank of Korea building.

Image: "Currency Reform, 10-Hwan becomes One-Won [貨幣改革(화폐개혁) 10 圓(원)을 1 圓으로]," *Kyeonghyang Shinmun*, 10 June 1962.

The sudden announcement of the currency reform at the rather inopportune hour of 10 p.m. on Saturday, June 9<sup>th</sup> caused frantic scenes in the streets that night and the following day, as it was clear that many did not understand the rules of the reform. Taxi drivers started to refuse to take the ‘old’ currency denominated in *hwan*, making it increasingly more difficult for late-evening commuters to get home before the nationwide midnight curfew. Housewives rushed to the local rice sellers with skirts full of cash in an attempt to purchase as much as they could before inflation hit. The following day, shoppers were greeted with three-fold price increases at stores. While calm was eventually achieved, large crowds queued in front of banks for days, just to ensure that they could make the deadline for deposits and to secure some of the new currency.<sup>209</sup>

At its core, the currency reform was a plan to recall all the nation’s cash, particularly those ‘copious funds’ that Korean citizens had surreptitiously squirreled away, and to utilize portions of this money immediately to fund national economic development. The junta evidently considered this a preferred alternative to traditional bank loans, as the complicated lending procedures involving securities were not to their liking. The reform plan was concocted in 1961 and 1962 in an airtight bubble of five people, including the Governor of the Bank of Korea.<sup>210</sup> Therefore, the need to maintain secrecy may be the reason why the second coinage order with the U.S. Mint (coins dated 4294) along with the plan to replace the existing 100-Hwan coins with coins bearing the *Cheomseongdae* design were not suspended.

With most of the nation’s currency recalled and withdrawals from accounts frozen, the government issued another decree on Saturday, June 16<sup>th</sup>, ordering that all accounts held either by individuals or corporations be bifurcated: Each account was to be converted into a restricted account, and an unrestricted account. Calculations based on a prescribed rate diverted a percentage of an account-holder’s money, if above a set limit, into the restricted account. This restricted account was converted into shares issued by the government-owned Industrial Development Corporation. This was to be the key funding source for the junta’s FYP.<sup>211</sup>

Although the government allowed for the continued circulation of the 10-Hwan and 50-Hwan coins, now converted to One-Won and Five-Won, these two coins would only temporarily remain as legal tender for another 30 days, until July 11, 1962.<sup>212</sup> Afterwards, the country was to rely entirely on the newly imported *won* banknotes. After July 11<sup>th</sup> however, citizens found out that the military junta’s new British-made Five-Won and One-Won banknotes —the notes meant to replace all the 50-Hwan and 10-Hwan coins— were hard to come by. Questions were also raised



*The chairman of the military junta, General Park Chunghee, inspects boxes of 50-Hwan coins on a visit to the Bank of Korea in Seoul on January 5, 1962. The official on the right (wearing glasses) is the junta-appointed governor of the Bank of Korea, Yu Chang-soon. The two men were among a small, secretive group that planned the government’s June 1962 currency reform. These U.S. Mint-manufactured 50-Hwan coins were to play an important role in the currency reform by tiding over the country’s need for small-denomination currency until a sufficient amount of British-made won banknotes from De La Rue could fill the void after the currency conversion. It turned out that the huge demand for small-denomination currency at this time was much larger than the quantity of the newly imported won banknotes could satisfy, necessitating the continued circulation of the 50-Hwan and 10-Hwan coins (revalued as Five-Won and One-Won) long past their planned removal date.*

Photo: “Chairman Park Chung-hee inspects the Bank of Korea.” OPEN Gonggongnuri Free use of public productions permitted, [www.chistory.go.kr/view/photo?mediasrcgbn=BK&mediagbn=&mediaid=111&mediadd=1289](http://www.chistory.go.kr/view/photo?mediasrcgbn=BK&mediagbn=&mediaid=111&mediadd=1289).

about the waste involved in abolishing coins that had only been in circulation for 34 months, as well as questions about how people were supposed to use the new coin-operated payphones without access to 50-Hwan coins.<sup>213</sup> Without a re-release of at least some of the locally available small-denomination *hwan* currency, it seemed that the Bank of Korea would be forced to import even more British-made banknotes, raising the costs of an already badly bungled currency reform.<sup>214</sup>

The public may have been concerned about the military government's use of surprise martial decrees to appropriate citizens' legitimate earnings, but the response over time was muted, as very few people found that their bank accounts would be skimmed by the government under the rules of the currency reform. The reason for this, as the junta quickly found out, was that few Koreans, either rich or poor, held much money in the *hwan* currency at all: It was discovered that 90.5% of all account holders had total balances of no more than a million *hwan* (\$770.00 in 1962 USD). Among the rich, there were only seven cases of individuals found to have 100 million *hwan* (\$77,000 USD) or higher, with the highest amount just below 1.2 billion *hwan* (\$923,000 USD). Consequently, only a small minority of bank accounts held balances in amounts high enough to qualify for siphoning-off by the government, and woefully insufficient funds were converted into government shares.<sup>215</sup> Besides, any Koreans who *did* hold significant cash reserves in 1962 probably held them in the form of United States dollars.

The currency reform turned out to be a huge flop.

The combination of a U.S. threat to reduce aid (since the currency reform was also a surprise to the Americans) and the currency reform's failure to produce results forced the junta to alter the reform. They converted two-thirds of the 'restricted accounts' into time deposits of less than one year, while turning the rest into unrestricted accounts. The junta's passage of this legislation on July 13, 1962 made the basic reform measures meaningless, essentially cancelling the currency reform. Concretely, it had failed: Lasting only five weeks, the currency reform accomplished little more than the reduction of South Korea's basic monetary unit by one-tenth and its resulting name change, from the *hwan* to the *won*.<sup>216</sup>

### **The End of the *hwan* Coins**

The cancellation of the currency reform plan did not immediately bring the U.S.-made *hwan* coins back into circulation from their complete recall. What did bring them back was the exigent lack of smaller denomination currency in the monetary system. Unless the Korean government wanted to put up the expense of ordering more banknotes from De La Rue, they needed an alternative plan. One alternative the Korean government explored was to order additional coinage denominated in the new *won* currency from the U.S. Mint.<sup>217</sup> As this would take months to discuss and plan with the Americans, the junta government needed to take more immediate action to address the shortage of small denomination money in Korea. Therefore, the junta was forced to reverse the coin withdrawal by bringing the 10-Hwan and 50-Hwan coins back into use again as revalued *won* denominations, as well as printing quantities of new, domestically made banknotes. The junta allowed the return of the coins on August 28, 1962, by passing Law Number 1132, the "Temporary Measures Law on the Circulation of Coins."<sup>218</sup> Although the Philadelphia-made 50-Hwan (Five-Won) and 10-Hwan (One-Won) coins were back in circulation in Korea after a 48-day absence, the coins were still only considered to be a stopgap until coins struck in the new *won* could replace them.

The Temporary Measures Law on the Circulation of Coins was not as ‘temporary’ as planned, however, since the 50-Hwan and 10-Hwan coins remained in circulation as revalued *won* coins for the next thirteen years, after which the Bank of Korea demonetized both coins for the last time. The Bank of Korea first stopped the issue of the 50-Hwan coin (Five-Won) on February 3, 1967, along with the 10-Hwan (One-Won) the following year, on April 16, 1968.<sup>219</sup> These two coins were no longer legal tender in South Korea after the central bank formally demonetized them on March 22, 1975.<sup>220</sup>

What made the eventual removal of these last Philadelphia-made *hwan* coins possible was the Korean government’s move to restart the country’s domestic coining industry in the mid-1960s.

### **South Korea’s *hwan* Coins -An Addendum**

Below are additional and notable facts concerning the production and circulation of the *hwan* coins.

#### **Engelhardus von Hebel, Engraver at the United States Mint**

At the four o'clock position on the 100-Hwan coin's obverse are the initials, EvH. Other than these odd letters, no other coin ever minted for circulation in South Korea has *any* such lettering as a mint mark or designer or engraver initials. The initials are those of the U.S. Mint engraver, Engelhardus von Hebel (b. 1892), a staff engraver working at the U.S. Mint in Philadelphia from 1949 to 1961.<sup>221</sup> Von Hebel was an immigrant to the United States from the city of Groningen in The Netherlands. He worked on several medals and foreign coins at the Mint, having collaborated with Chief Engraver Gilroy Roberts on several projects, such as the one for South Korea’s coinage in 1959. His initials appear on the 100-Hwan coin, denoting von Hebel as the artist behind the image of President Syngman Rhee on this coin. Former Korean Mint currency artists Jo Byeongsu and Oh Soonhwan have praised this work. Mr. Oh once stated in a 2019 interview that the bust of President Rhee on the 100-Hwan was “a complete piece of art,” one that “exudes the essence of a human being that you can smell.” He also noted that the face of the 100-Hwan coin exhibits the highest relief of any of the Republic of Korea’s 18 different circulating coins issued over the years.<sup>222</sup> Engelhardus von Hebel retired from the U.S. Mint in 1961 and eventually moved to California, where he passed away, probably sometime in the 1980s.<sup>223</sup>



*President Syngman Rhee and wife, Francesca (upper left). This pencil drawing of Rhee (upper right) is likely the work of Engelhardus von Hebel. Von Hebel's initials appear on South Korea's 100-Hwan coin (middle) and on a Philippine One-Peso commemorative coin honoring the Filipino patriot, Jose Rizal (bottom).*

Photos:  
Upper left: "Syngman Rhee and Francesca interviewed by LIFE Magazine," [Wikipedia, ko.m.wikipedia.org/wiki/%ED%8C%8C%EC%9D%BC:Syngman\\_Rhee\\_and\\_Francesca\\_interviewed\\_by\\_LIFE\\_Magazine.png](https://www.wikipedia.org/wiki/%ED%8C%8C%EC%9D%BC:Syngman_Rhee_and_Francesca_interviewed_by_LIFE_Magazine.png).  
Upper right: Jo Byeongsu, *Korean Commemorative Coins*, 200.  
Other photos by Mark Lovmo.

### **Problems Encountered When Manufacturing Korea’s Coins**

The production of Korea’s coinage did not come off without its share of problems. These problems were only occasionally mentioned in the correspondence between the key individuals involved in this coinage project; for example, when the first 10-Hwan coins turned out to be discolored or when the Mint needed to remake the hubs for the 100-Hwan coin. More often, the particular difficulties encountered in manufacturing the coins were noted in the documents recording the

actual coinage charges that were incurred. These forms were written months after production had come to an end. The notable problems are described below.

During the manufacture of both Korean coinage orders, (first order: 4292 coins and second order: 4294 coins), the Philadelphia Mint experienced staffing shortages, especially at the reviewing and selecting tables for blanks and coins. The comments sections of documents for both orders have remarks noting that the cost estimate was predicated on using two people per table, however, only one person per table was available. Because of this, when the 50-Hwan blanks went to the coining presses during the second coinage order, “blanks that should have been condemned” went to the presses anyway. Of course, the staffing shortages also caused variations from the estimates regarding the overhead rate for the affected steps of the manufacturing process.<sup>224</sup>

The manufacture of the ternary-alloy 50-Hwan coin saw particular trouble in the steps of annealing and stamping. During the first Korean coinage order, the facilities for annealing the coining metal evidently gave the staff trouble since they noted that “no annealing equipment for slabs and/or coils was available” when the 50-Hwan was produced.<sup>225</sup> When upsetting the 50-Hwan blanks for the second coinage order, the Mint noted simply: “Material was poor. Difficult to work with.”<sup>226</sup> Workers also explained that the 50-Hwan dies had worn out faster than expected during striking. The life of these dies was so short that the Mint noted “a 74% reduction was experienced in the number of pieces per pair of dies,” therefore “more dies were used than estimated.” This increased the amount of time the workers spent setting the dies in the presses, placing the machines “in a non-productive stage more often than had been anticipated.”<sup>227</sup> When the Koreans considered using the 50-Hwan’s same “German silver” alloy for a later coinage project, Philadelphia Mint Superintendent Michael Sura dissuaded the Korean planners from the idea, explaining that the alloy was “not too desirable because of the high zinc content.”<sup>228</sup>

#### Melting and Recycling the 100-Hwan and 50-Hwan coins

The Korean government would later make use of the large numbers of 100-Hwan and 50-Hwan coins pulled from circulation in the 1960s. In the case of the 100-Hwan coins, these pieces set the Korean government back \$479,000 (in 1959 USD), yet the coins had only circulated in relatively small numbers for a short year and-a-half. Therefore, the Korean government very much wanted to recycle them and had contemplated several plans for reusing this coining metal in the early 1960s. The government eventually settled on one plan. Reserved for storage and melted down, the 100-Hwan coins’ copper-nickel material was later refabricated into coin blanks for the 100-Won coins that the Bank of Korea first issued in 1970.<sup>229</sup> The recycled metal from these 100-Hwan coins comprised 315 metric tons out of a total of 337 metric tons of coins that the Philadelphia Mint had produced in 1959 and 1960.<sup>230</sup> These figures suggest that just over three million of the 100-Hwan’s total 50 million pieces were not recycled in this fashion. The South Korean Mint’s official history states that the recalled 50-Hwan coins were also later melted for use as the coining metal that made the first 50-Won coins in 1972. The 50-Won is composed of the same ternary “German silver” alloy as the Philadelphia-made 50-Hwan.<sup>231</sup>

#### Coin Usage in Payphones

The concerns noted in mid-1960 that the Korean government’s new coins were not circulating in the country’s economy began to lessen a year and-a-half later. At the end of 1960, the value of the coins in circulation were still only a small fraction of South Korea’s currency, amounting to almost 1.7 billion *hwan*. By the end of 1961, the value of coins in circulation had risen to 5.7 billion *hwan*

of South Korea's estimated M1 money supply of 90 billion *hwan*.<sup>232</sup> The slow increase in “coin intensive” industries in Korea would help this trend accelerate in the coming years, as would actions taken by the Bank of Korea to suspend the issue of paper currencies in the same denominations as the new coins. These factors would lend to more coins being used by Korean consumers in their small-value transactions. Among these coins' uses in small transactions in the early 1960s was the 50-Hwan coin's use in the nation's new public payphones. Shops across Seoul



*The adoption of coinage in the Republic of Korea promised to be especially helpful to Korean consumers when making payments at (left to right) store and street market vendors, for bus fares, or for making calls from automatic payphones. It would take until the late 1970s for coins to be useful in vending machines in South Korea (far right), almost three years after the last hwan coins were demonetized.*

Images: Stills from Daechan News (KTV 국민방송) Korea TV National Broadcasting.

began hosting the first coin-operated payphones of the “tabletop” variety, starting on June 1, 1960.<sup>233</sup> Although there were some significant reliability problems with these very first payphones, the machines were popular.<sup>234</sup> From September 1962, the Postal Ministry began widespread installation of wall-mounted and booth-type payphones that were placed independently of shop locations in areas of Seoul. The coin-accepting devices in all these payphones only took 50-Hwan coins, and these remained the only coins that would operate payphones in South Korea until the gradual phasing out of this payment method after the introduction of the *won* coins in 1966.<sup>235</sup> These first Korean payphones were developed in partnership with Japanese producers of such devices, with parts imported from Japan and assembly and re-tuning of the coin accepting devices accomplished in Korea for local installation.<sup>236</sup>

### Custody of Korea's Master Hubs and Dies

Governments consider the original artwork (designs, plasters, or molds) along with the original plates or tool steel that go into creating legal tender to be security-sensitive items. It is not surprising, therefore, that copies of the original designs for Korea's coinage were not retained in the U.S. Mint's document record. During the production of Korea's first coinage order in October 1959, the Bank of Korea raised the issue of the security of Korea's original coin hubs and dies. According to Bank of Korea Representative Won H. Chung, Korean domestic regulations mandated that “the Bank of Korea must have [a] formal contract with the U.S. Treasury Department with respect to the master dies and hubs for its production, use and safekeeping” at the U.S. Mint. The Koreans requested from the Mint advice on procedures or a sample contract for this purpose.<sup>237</sup>

Mint Director William Brett responded by stating that “[i]t is not our policy to enter into formal contracts covering the custody and safekeeping of master dies and hubs for foreign coinage.” Brett instead offered that the sensitive pieces could be “shipped to the authorized agent of the Government of Korea, if so desired.”<sup>238</sup> As for the safekeeping of foreign coin hubs and dies at the Philadelphia Mint, existing security procedures involved keeping the pieces in drawers within a vault under the custody of the Chief Engraver.<sup>239</sup> The Bank of Korea evidently did not want to

remove and take custody of the pieces at this time and probably for the simple fact that they were best kept secure at the Philadelphia Mint, where they might be used again soon. Korea's hubs and dies would remain as they were in Philadelphia for the time being.

Over a year after the Bank of Korea brought up this issue, they came up with a compromise solution; one that they would use a decade later in Europe. The Koreans arranged with Philadelphia to have two Bank of Korea employees visit the engraving room and seal the container in which the hubs and dies were kept within the Engraver's vault. The sealing of this container first took place during the work week of December 12, 1960.<sup>240</sup> It can be assumed that this same routine took place during Korea's second coinage order to both unseal and re-seal the container, since the hubs would have been used to create new coining dies for the 4294-dated coins.

During the production of South Korea's very first commemorative coins in the early 1970s at various locations in Europe, the Bank of Korea attempted to follow this same procedure. The Korean government contracted the German State Mints to produce the hubs and dies for these commemorative coins. Korean authorities tasked a West German-based Bank of Korea employee to conduct quality and quantity inspections of the coins and was also given the job of breaking the security seals on the dies before their use. Although this arrangement worked initially, the sporadic nature of the later production runs made it prohibitive for the worker to travel to the various minting locations since the mints only struck the coins as often as necessary to fulfill orders over the period of four years that these coins were produced. In this case, the Koreans were forced to abandon this level of security out of practicality.<sup>241</sup>

As for the fate of the Philadelphia-made hubs and dies, the Bank of Korea requested that the U.S. Mint ship them to the Note Issue Department of the Bank of Korea in Seoul.<sup>242</sup> The request came over two years after the pieces were last used in early 1962. The U.S. Mint sent the Korean hubs and dies to the Seoul office on July 21, 1964 via a TWA/Northwest Orient Airlines flight under a U.S. government bill of lading.<sup>243</sup> An inventory of these pieces is below and images of four of them appear on page 34.

100-Hwan	Obverse	Hub	C	1313
	Obverse	Die	B	1312
	Reverse	Hub	A	1310
	Reverse	Die	B	1311
50-Hwan	Obverse	Hub	A	1304
	Obverse	Die	B	1305
	Reverse	Hub	A	1306
	Reverse	Die	B	1307
10-Hwan	Obverse	Hub	A	1300
	Obverse	Die	B	1301
	Reverse	Hub	A	1302
	Reverse	Die	B	1303

### Korea's Proposed Proof Coin Sets

The Bank of Korea, through its Representative, Won H. Chung, inquired about the possibility of ordering proof coins from the U.S. Mint in February 1960 after some of the first large bulk shipments of 4292-dated coins had arrived in Korea. The Bank of Korea's head office showed interest in producing the three *hwan* coins in proof finish "in the same manner as United States coins." Instead of importing these coins into Korea for local sale, the Bank of Korea intended that "[t]hese proof coins would be sold mainly in the United States." Mr. Chung requested a cost estimate for this work, although he did not mention the number of coins or coin sets that the Seoul office had under consideration.<sup>244</sup>

Leland Howard responded to the Bank of Korea inquiry on February 23, 1960. Mr. Howard wrote that if the Korean government wanted to proceed with a proof coin order, approval from the U.S. State Department would be needed since a proof coin order was tantamount to an entirely new coinage order from Korea. As the Koreans did not define a desired number of coins or coin sets, Howard told them that he would request a cost estimate from the Philadelphia Mint based on 1,000 three-coin proof sets. He added that scheduling this work would be difficult due to the heavy orders for United States proof coins that had already filled Philadelphia's schedule "through the end of this calendar year."<sup>245</sup>

By March 29, 1960, the cost estimate for Korea's proof coinage was completed and Leland Howard shared it with Mr. Chung. Howard told Chung that the total, including a change to the date appearing on the coins, would be \$1,661.11 (**see Fig. 18**).<sup>246</sup> The Korean government took no further action on this proof coin order.

**Fig. 18**

U.S. Mint Cost Estimate Quote for 1,000 Proof Coin Sets for Government of Korea (No Follow Through by Korean Government — Cancelled) Date of Estimate: March 28, 1960								
METALS REQUIRED (in pounds)						COST OF METALS, BOTH COINS (in 1960 USD)		
Denomination	NUMBER OF PIECES	Composition	Copper	Zinc	Nickel	Copper @ \$0.33/lb	Zinc @ \$0.14/lb	Nickel @ \$0.77/lb
100-Hwan	1,000	75% Cu, 25% Ni	22.00	1.74	4.69	\$7.26	\$0.24	\$3.61
50-Hwan	1,000	70% Cu., 18%Zn., 12% Ni						
10-Hwan	1,000	95% Cu., 5% Zn.						
MANUFACTURING CHARGES								
LABOR					OVERHEAD			
MELTING (CASTING)	ROLLING & BLANKING	ANNEALING &BURNISHING	STRIKING	REVIEWING & PACKING	MELTING @ 300%	ROLLING @ 250%	MEDALS @ 80%	REVIEWING & PACKING @ 50%
\$75.76	\$18.41	\$10.08	\$60.48	\$33.28	\$227.28	\$46.03	\$56.46	\$16.64
DIES - 9 PAIR (3 PAIR EACH DENOMINATION)			SUPPLIES		ADMINISTRATIVE OVERHEAD @APPROX. 30%			
\$456.00			POLYETHYLENE BAGS (3,000 PCS)	CARDBOARD BOXES (1,000 PCS)	TISSUE & GUMMED PAPER	\$57.89		
			\$11.70	\$50.00	\$20.00			
TOTAL COST:			\$1,140.00					
COST PER SET:			\$1.14					
IF CHANGE OF DATE ON COINS IS NECESSARY, COST IS:								
\$170 PER DENOM. TOTAL: \$510								

**Fig. 19**

**The Republic of Korea's *hwan* -Denominated Coins: Data**

Specifications	100-Hwan	50-Hwan	10-Hwan
<b>Composition</b> <sup>1</sup>	Cu 75%, Ni 25%	Cu 70%, Zn 18%, Ni 12% (German Silver)	Cu 95%, Zn 5%
<b>Diameter / Thickness (mm)</b> <sup>1</sup> * [Thickness from U.S. Mint]	26.0 / 1.70 [0.70 inch]*	22.86 / 1.27 [0.54 inch]*	19.1 / 1.17 [0.49 inch]*
<b>Weight in grams</b> <sup>2</sup>	6.73 (±.26)	3.69 (±.194)	2.46 (±.130)
<b>Rim</b>	Raised. Reverse: Dotted circle of 98 dots	Raised. Reverse: Dotted circle of 95 dots	Raised. Not decorated on either side.
<b>Crenellations (reeded/milled edge)</b> <sup>1</sup>	125	None: Smooth	None: Smooth
<b>Alignment</b>	Coin alignment	Coin alignment	Coin alignment
<b>Main Design Features</b>	<b>Obverse:</b> Left-facing bust of South Korea's first president, Syngman Rhee (이승만), <i>hangul</i> denomination 백한 ("Hundred Hwan"), and issuing bank, 한국은행 ("Bank of Korea"), and engraver's initials "EvH." <b>Reverse:</b> Denomination numeral "100," double peacocks (공작새), REPUBLIC OF KOREA, and Korean Era date, "4292."	<b>Obverse:</b> 16th Ce. Joseon Royal Navy <i>geobukseon</i> [거북선] warship, <i>hangul</i> denomination 오십환 ("Fifty Hwan"), arabesques, and issuing bank, 한국은행 ("Bank of Korea"). <b>Reverse:</b> Denomination numeral "50," REPUBLIC OF KOREA, arabesque scrolls, and Korean Era date.	<b>Obverse:</b> Korean Hibiscus Flower, <i>hangul</i> denomination 십환 ("Ten Hwan"), and central bank 한국은행 ("Bank of Korea") <b>Reverse:</b> Denomination numeral "10," Korean Era date, "REPUBLIC OF KOREA," and arabesque scrolls.
<b>Artist(s)</b>	Design layout: Unknown (Korean Mint) Artist: Engelhardus von Hebel (U.S. Mint)	Design layout: Kang Bak(?) (Korean Mint) Artist: Gilroy Roberts (U.S. Mint)	Design layout: Kang Bak(?) (Korean Mint) Artist: Gilroy Roberts (U.S. Mint)
<b>Legal Approval Process</b>	Government Approval/Monetary Policy Board Resolution: June 4, 1959	Government Approval/Monetary Policy Board Resolution: May 21, 1959 [Revised June 4, 1959]	Government Approval/ Monetary Policy Board Resolution: May 21, 1959 [Revised June 4, 1959]
<b>Issue Date</b>	10/30/1959	10/20/1959	10/20/1959
<b>Current Status</b>	No longer legal tender. <b>Former Status:</b> Circulated at 100-Hwan (10/59 to 6/62). Government demonetization: 6/10/1962.	No longer legal tender. <b>Former Status:</b> Circulated as 50-Hwan (10/59 to 6/62). Redenominated as "Five-Won" on 6/10/62 and removed from circulation on 7/11/62; Re-entered circulation as "Five-Won" on 8/28/62 until Bank of Korea suspended issue on 2/3/67. Monetary Policy Board Demonetization: 3/22/1975.	No longer legal tender. <b>Former Status:</b> Circulated as 10-Hwan (10/59 to 6/62). Redenominated as "One-Won" on 6/10/62 and removed from circulation on 7/11/62; Re-entered circulation as "One-Won" on 8/28/62 until Bank of Korea suspended issue on 4/16/68. Monetary Policy Board Demonetization: 3/22/1975.
<b>Date(s) on Coin</b>	Korean Era: 4292 (1959)	Korean Era: 4292, 4294 (1959, 1961)	Korean Era: 4292, 4294 (1959, 1961)
<b>Actual Years Minted</b>	1959, 1960	1959, 1960, 1962	1959, 1960, 1961, 1962
<b>Location of Master Die Manufacture</b>	United States Mint, Philadelphia	United States Mint, Philadelphia	United States Mint, Philadelphia
<b>Location of Working Die Manufacture</b>	United States Mint, Philadelphia	United States Mint, Philadelphia	United States Mint, Philadelphia
<b>Location of Striking Operations</b>	United States Mint, Philadelphia	United States Mint, Philadelphia	United States Mint, Philadelphia

<sup>1</sup> *Korean Currency* [韓國의貨幣], (Seoul: Bank of Korea, 1982) p. 349.

<sup>2</sup> "Bank of Korea Issue Notice [한국은행 공고]," *Dong-A Ilbo*, 19 October 1959 and 29 October 1959.

\* National Archives College Park, Records of the U.S. Mint, Record Group 104, Entry 328-F, Case Files on Foreign Coins, Korea-Establishment of new coinage system and coinage.

**Fig. 20**

**The Republic of Korea's *hwan* -Denominated Coins: Mintages**

Denomination	Year Produced at US Mint, Philadelphia <sup>2</sup>	Date on Coin <sup>2</sup>	Pieces Minted <sup>2</sup>	Composition	Diameter	Weight in grams per coin <sup>2</sup>	Mintage in Troy ounces <sup>2</sup>
100 Hwan	1959	4292 Korean Calendar (1959 Gregorian Calendar)	360,000	Cu 75%, Ni 25%	26.0mm	6.73	78,000.03
50 Hwan	1959	4292 Korean Calendar (1959 Gregorian Calendar)	360,000	Cu 70%, Zn 18%, Ni 12% (German Silver)	22.860mm	3.69	42,750.02
10 Hwan	1959	4292 Korean Calendar (1959 Gregorian Calendar)	22,980,000	Cu 95%, Zn 5%	19.10mm	2.46	1,819,250.80
	<b>1959 Total Coins</b>		<b>23,700,000</b>				1,940,000.85
100 Hwan	1960	4292 Korean Calendar (1959 Gregorian Calendar)	49,640,000	(Same as above)	(Same as above)	(Same as above)	10,755,337.33
50 Hwan	1960	4292 Korean Calendar (1959 Gregorian Calendar)	24,640,000	"	"	"	2,926,001.30
10 Hwan	1960	4292 Korean Calendar (1959 Gregorian Calendar)	77,020,000	"	"	"	6,097,419.40
	<b>1960 Total Coins</b>		<b>151,300,000</b>				19,778,758.03
10 Hwan	1961	4294 Korean Calendar (1961 Gregorian Calendar)	25,000,000	"	"	"	1,979,167.60
	<b>1961 Total Coins</b>		<b>25,000,000</b>				1,979,167.60
50 Hwan	1962	4294 Korean Calendar (1961 Gregorian Calendar)	20,000,000	"	"	"	2,375,001.60
10 Hwan	1962	4294 Korean Calendar (1961 Gregorian Calendar)	75,000,000	"	"	"	5,937,502.70
	<b>1962 Total Coins</b>		<b>95,000,000</b>				8,312,504.30
Total 100 Hwan			<b>50,000,000</b>				10,833,337.36 or Approx. 337 Metric tons *
Total 50 Hwan			<b>45,000,000</b>				5,343,752.92 or Approx. 166 Metric tons
Total 10 Hwan			<b>200,000,000</b>				67,291,672.9 or Approx. 2,094 Metric tons
<b>Total</b>			<b>295,000,000</b>				83,468,763.18 or Approx. 2,596 Metric tons

<sup>2</sup> *Domestic and Foreign Coins Manufactured by Mints of the United States, 1793-1980.* Washington: U.S. G.P.O., 1960, 1961, 1962, 1963.

\*The Korean government utilized around 315 metric tons of this metal to produce the blanks used for the first 100-Won coins in 1970.

## Korea's Proposed Coinage Projects and Inquiries with the U.S. Mint (1962~1969)

South Korea's economic planning under its three separate governments of the late 1950s and early 1960s emphasized growth, to varying degrees. With support, and some pressure from the United States, these governments formulated different plans to work towards economic self-sufficiency and away from foreign aid dependency. Toward this end, the late Rhee administration reformed the country's currency structure with the introduction of coins in an effort to promote the domestic economy, if only marginally. Both the follow-on Second Republic and junta governments continued this policy and supported the importation of coinage from the United States as well as maintaining coins in the money supply. The potential economic advantages of coins was exemplified in other countries where there existed 'coin intensive industries' involving payphones, vending and mass transit. The economic activity promoted by coin usage in nearby Japan was likely the most compelling for the Koreans. Payphones had become common in Japan, while vending machines became incredibly popular in the late 1950s, with the total number of these machines in Japan reaching 240,000 by 1964.<sup>247</sup>

While the various Korean governments' economic plans had either faltered or never got off the ground due to the changeover to successive governments, the junta government eventually overcame its faulty reform projects. It would be this government that would prioritize an export led industrialization policy; the first time in history for a developing country. As for the domestic side of the economy, this military government also needed to attend to the nation's money supply.



*Automatic payphones and vending machines had been in common usage in Japan since the 1950s.*

Photos: "Phone Poles For Tokyo Districts," *Pictorial Parade*, 1955. (left), Irvine, Dean. "This small Japanese town is a vintage vending machine paradise," CNN Travel, 8 Aug. 2022. [www.cnn.com/travel/article/sagamihara-japan-retro-vending-machines-intl-hnk/index.html](https://www.cnn.com/travel/article/sagamihara-japan-retro-vending-machines-intl-hnk/index.html). Accessed 21 Jul 2024. (right).

One of the junta's faulty policies, the currency reform of June 1962, presented the Korean government with the challenge of needing to eventually replace all the country's M1 money with new currency and coins. The wake of the currency reform left South Korea with a confusing combination of revalued *hwan* coins and a mix of smaller-denomination banknotes of different designs. This would be sufficient for a few years, although it soon became apparent that the amount of *won* banknotes and old *hwan* coins in circulation would not be enough to meet currency demands.<sup>248</sup> As the currency reform ended, and as the last of the Philadelphia-made *hwan* coins arrived in Korea, new plans for a future coinage project to introduce coins in the *won* denomination had already come under consideration by late July 1962.

### **The Currency Reform Coinage Order with the United States Mint**

As the junta government wished to move quickly to introduce large numbers of coins that displayed denominations in the country's new standard currency unit, the Bank of Korea requested a cost estimate for new coinage from the U.S. Mint on July 31, 1962 —three weeks after the government (temporarily) removed the 50-Hwan and 10-Hwan coins from circulation under Article 26 of the currency reform law. The Bank of Korea explained to Mint Director Eva Adams that "Seoul is planning to place [an] order for manufacture" of new *won*-denominated coins with the U.S. Mint.

The denominations and mintages of the new reform coinage were to be 10-Won, 40 million pieces; Five-Won, 10 million pieces; and One-Won, 50 million pieces. The specifications for these coins were to be exactly the same as the previous *hwan* coinage (the One-Won to be the same as the 10-Hwan and the Five-Won to be the same as the 50-Hwan), except for the 10-Won, the specifications of which were to be the same as the revised 100-Hwan (*Cheomseongdae* design) that the Bank of Korea had discussed with the U.S. Mint earlier in April and May of that year. The Koreans wanted to know the completion date of such an order in case they placed their order at the end of September. The recycling of the *hwan* coins was also brought up. The Bank of Korea wrote, “[w]ould it be possible...to ship the old coins to your Mint...and use them for manufacture of the new coins?”<sup>249</sup>

As the Philadelphia Mint worked up the cost estimate quote for this proposed coinage, the Koreans’ request to ship the “old *hwan* coins” to Philadelphia to be melted and reused as coining metal for the new *won* coins caused some concern for Superintendent Michael Sura. In a letter to Director Adams on August 24, 1962, Sura described the Korean inquiry about recycling the coins as both “not germane to our functions” and “not explicit enough to be answerable.” Beyond these points, Sura’s saw three problems with this idea. First, he did not know the means by which the shipments of the “old *hwan* coins” would arrive at Philadelphia. Second, Sura was worried about the extent to which these “old” coins could be used to make the new coins, since it was “impossible to determine the alloy, quantity, or the condition” of the coins that were to be recycled. This second point led to his third point, that due to the unknown nature of the “old” coins, it was “impossible to give an estimated cost...” and that any possible savings garnered by using the “old” coins “would be due to the extent to which metal contained in [the] old coins would reduce virgin metal requirements.” He contended that these savings would be “offset somewhat” by the cost of having to ship the “old” coins from Korea to Philadelphia.<sup>250</sup>

The Mint finished the cost estimate for Korea’s new *won* coins on August 28, 1962 and Director Adams shared a summary of this estimate with H.M. Lee of the Bank of Korea on September 7<sup>th</sup> (see Fig. 21).<sup>251</sup>

Fig. 21

U.S. Mint Cost Estimate Quote for Korea's Reform Coinage ( <i>won</i> denomination)										
Earliest Year of Production: 1963 (Cancelled)										
Dated September 7, 1962										
					METALS REQUIRED (in pounds)			COST OF METALS (in 1962 USD)		
		Weight in Grains		Diameter	Copper (all 3 denoms.)	Zinc (both Five- Won and One-Won)	Nickel (both 10- Won and Five-Won)	Copper @ \$0.31/lb	Zinc @ \$0.1238/lb	Nickel @ \$0.8457/lb
Denomination	NUMBER OF PIECES	(tolerance ±)	Composition	(mm)						
10-WON	40,000,000	77 (4)	75% Cu., 25% Ni	25	644,857.14	—	119,771.00	\$199,905.71	—	\$3,494.68
FIVE-WON	10,000,000	57 (3)	70% Cu., 18% Zn., 12% Ni	22.86		28,228.43			\$101,290.33	
ONE-WON	50,000,000	38 (2)	95% Cu., 5% Zn	19.1		—			—	

					Die Costs - Models, galvanos, hub reduction and lead strikes*	INVOICE AMOUNT FOR ALL 3 COINS in 1962 USD
Denomination	NUMBER OF BOXES REQUIRED (all 3 denoms.)	TOTAL COST OF BOXES (all 3 denoms.)	TOTAL COST OF MANUFACTURING	MANUFACTURING COST PER 1,000 COINS		
10-WON			\$94,000.00	\$2.35	\$1,790.00	Different Design (obv./rev.)= 486,883.12
FIVE-WON	7,389	\$11,822.40	\$21,000.00	\$2.10	\$1,790.00	Common Design on One Side= 485,638.12
ONE-WON			\$50,000.00	\$1.00	\$1,790.00	

\*For totally re-designed obverses and reverses, all three coins.  
For coins with common obverses, cost was quoted at \$1,375 USD each.

Director Adams informed Mr. Lee that the Mint's quote for this new coinage included pricing for coins with different designs on each face and pricing for coins with a common obverse design and a different design showing the denomination markings on the reverse. She offered the Mint's artistic services to create the designs from themes of the Korean government's choosing if the Bank of Korea chose not to provide its own drawings. The time to produce the coins would require approximately 110 working days to complete after the Mint received both a firm order and State Department approval. Adams also noted that recycling the "old" coins was possible, but she repeated Superintendent Sura's pessimistic view by citing the difficulties involved.<sup>252</sup> As for packaging for delivery, the same method would be used to ready the coins for shipment to Korea as in the previous coinage orders: Two duck canvas bags of coins per wooden box. This time, the number of coins per bag would include 5,000 pieces per bag for the 10-Won, 6,000 pieces per bag for the Five-Won, and 10,000 pieces per bag for the One-Won.<sup>253</sup>



*The Bank of Korea did not attach images to its July 31<sup>st</sup> request to the U.S. Mint for a cost estimate quote for the manufacture of three denominations of Korea's new currency reform coinage. Therefore, the designs shown here are only speculative and based largely on a notation in this letter that stated that each coin was to be the same as the "old" coin. In the case of the 10-Won, the Bank of Korea made reference to its May 8<sup>th</sup> letter to the U.S. Mint that included the updated Cheomseongdae design for the 100-Hwan. The One-Won reverse design shown here (red arrow) is from former Bank of Korea currency designer Jo Byeongsu's 2006 book. Therefore, this particular image almost certainly originated from Korean archives. The other images shown here are mock ups based on the same pattern as this One-Won reverse design in combination with the notes included in the Bank of Korea's July 31<sup>st</sup> letter. After its currency reform, the Korean government was indeed interested in issuing new coins that displayed denomination numerals and lettering in the new currency unit (won). In its later revision to this coinage order, the Bank of Korea would ask the U.S. Mint to utilize the dies that produced the 50-Hwan and 10-Hwan coins to make the new Five-Won and One-Won. These dies were still in the possession of the Philadelphia Mint. Korean planners asked that Philadelphia simply modify both the date and the inscriptions for the denominations on the coins. What you see here are very likely close approximations of the designs the Korean planners had in mind if they had chosen different designs for each side of the coins.*

Image (far right, red arrow) from: Jo Byeongsu, *Jo Byeongsu's Story of Money: Korean Commemorative Coins* [우리나라記念貨幣 Korean Commemorative Coins : 조병수의 돈 이야기]. (Seoul: Ohsung K&C, 2006), 201. Other images are mock up images by Mark Lovmo based on the Bank of Korea's letter dated July 31, 1962, H.M. Lee to Eva Adams.

The Bank of Korea contemplated the U.S. Mint's cost estimate for a month and-a-half before responding. On October 22, 1962, H.M. Lee forwarded to Director Adams an amended proposed coinage plan from the Bank of Korea. Mr. Lee wrote that his Head Office was "planning to place [an] order in the near future" for the manufacture of 40 million pieces of a Five-Won denomination and 100 million pieces of a One-Won denomination. The specifications were to be the same as the 50-Hwan and 10-Hwan coins. The new plan essentially dropped the 10-Won from the previous quote request and increased the mintages for the remaining Five-Won and One-Won. This time, the Bank of Korea included designs for the two coins and asked for the U.S. Mint's "early comments on the technical possibility of manufacturing coins from the enclosed designs." The coin designs were not retained in the U.S. Mint's Korea file, but notations in this letter state that the coins were to be the "[s]ame as the old" coins. Lee also laid to rest the idea of recycling the "old" *hwan* coins, telling Adams that the Korean government would instead purchase the metals in the United States.<sup>254</sup>

The U.S. Mint was able to easily accommodate this change to the Korean government's reform coinage plan. The Philadelphia Mint's Superintendent, Michael Sura, wrote that "[t]he change

of the inscription and date in accordance with the submitted designs... presents no problem,” and that this change could easily be made since the “[m]aster dies and hubs for the old ten (10) and fifty (50) Hwan coins are in our custody.” He listed the price for the change of date and inscription at \$310.00 in total.<sup>255</sup> With the change in mintages, the Mint also created an update to the cost estimate, although when completed, it revealed no change to the unit price (manufacturing price per 1,000 coins). The estimate retained the options for the Korean government to receive coins with a common obverse or reverse, or different obverses and reverses (**see Fig. 22**).<sup>256</sup>

**Fig. 22**

U.S. Mint Cost Estimate Quote for Korea’s Reform Coinage (*won* denomination); Revised Earliest Year of Production: 1963 (Cancelled)  
Dated November 19, 1962 (updated December 26, 1962)

Denomination	NUMBER OF PIECES	Weight in Grains (tolerance in grains)	Composition	Diameter (mm)	METALS REQUIRED (in pounds)			COST OF METALS, BOTH COINS (in 1962 USD)		
					Copper	Zinc	Nickel	Copper @ \$0.31/lb	Zinc @ \$0.1238/lb	Nickel @ \$0.8187/lb
FIVE-WON	40,000,000	57 (3)	70% Cu., 18%Zn., 12% Ni	22.86	228,000.00	58,628.57	39,085.71	\$70,680.00	\$7,258.22	\$31,999.47
ONE-WON	100,000,000	38 (2)	95% Cu., 5% Zn.	19.1	515,714.28	27,142.86	—	\$159,871.43	\$3,360.29	—

Denomination	NUMBER OF BOXES REQUIRED	TOTAL COST OF BOXES	TOTAL COST OF MANUFACTURING	Die Costs - Models, galvanos, hub reduction and lead strikes*	COST PER 1,000 PIECES	INVOICE AMOUNT in 1962 USD
FIVE-WON	3,556	\$5,689.60	\$84,000.00	\$1,790.00	\$2.10	FIVE-WON: <b>\$201,417.29</b> (different obv./rev. design) <b>\$201,002.29</b> (common design on one side)
ONE-WON	5,000	\$8,000.00	\$100,000.00	\$1,790.00	\$1.00	ONE-WON: <b>\$273,021.72</b> (different obv./rev. design) <b>\$272,606.72</b> (common design on one side)

\*For totally re-designed obverses and reverses, both coins.

For coins with common obverses, cost quoted at \$1,375 USD each.

Evidence suggests that the U.S. Mint was proceeding with the necessary steps to advance the Korean government’s new coinage project. This work likely included the engraving work to change the date and inscription, finding time in the busy Philadelphia schedule, and perhaps even the pressing of new matrices and other dies. Around this same time, Director Eva Adams referred to this coinage order in a letter, writing that the “technical staff” of the U.S. Mint were “committed to a major project” for the government of Korea.<sup>257</sup>

The Korean government itself was hastening to start production for these coins. On December 12, 1962, the Korean government sent the necessary request for the services of the United States Mint to the State Department for these Five-Won and One-Won coins.<sup>258</sup> The State Department gave its consent on December 26<sup>th</sup>.<sup>259</sup>

However, it was all for naught.

The next week, H.M. Lee from the Bank of Korea wrote to Director Adams to inform her that the “Monetary Board of the Bank of Korea had postponed indefinitely the production of new coins.”<sup>260</sup>

Acting Director of the Mint, Frederick W. Tate, wrote to Superintendent Michael Sura to inform him of the Korean decision to cancel the coinage project. He added simply, “We regret the action taken by that Government.”<sup>261</sup>

### **South Korea’s Inquiries into Establishing a Domestic Coinage Mint**

As the Republic of Korea government maintained a relationship with the United States Mint in the late 1950s and early 1960s, the Koreans repeatedly broached the topic of establishing a domestic Korean coining factory. Their very first communications with the U.S. Mint in 1956 inquired about this possibility. Further interactions with the Mint, especially those involving visits to the large and heavy equipment-crammed Philadelphia Mint facility, should have convinced the Koreans at this early stage to postpone the idea. Constructing a coin mint just a few years after the end of the Korean War would have to wait until the proper groundwork could be laid for the construction of a factory of such a scale in Korea.<sup>262</sup> Korean officials made inquiries, nonetheless.

Leland Howard first provided the Bank of Korea with a bare list of equipment to outfit a cold rolling coin mint capable of an output of 100,000-coins per day in February 1958. However, he informed the Koreans that the equipment needed would be dependent on the metals used in making their coins as well as the expected annual production output.<sup>263</sup> The Bank of Korea’s Director of the Note Issue Department, Choo Bo-rin, later traveled to the United States in January 1959 to meet with the Mint Bureau’s Technical Assistant Phillip B. Neisser. Mr. Neisser “spent several hours discussing and explaining the coin manufacturing process” with Director Choo. While the Koreans were determined to grow their economy while concurrently further developing their monetary system and currency industry, they evidently had no idea what the scale of their future coin production would be. Mr. Neisser simply could not provide Mr. Choo with a definitive equipment list or price list to outfit a Korean coining factory without first knowing the basics of Korea’s capacities and needs. In the absence of “detailed information concerning available utilities, total [number] of [pieces] required, alloys, etc.,” the Americans simply improvised and provided the Koreans with a “list for a small mint, 10” mills, based on past estimates boosted to cover increased costs.”<sup>264</sup>

As the U.S. Mint worked on South Korea’s soon-to-be-abandoned reform coinage project in late 1962, the Director of the South Korean Mint (back then using the English title, “Government Printing Agency, Republic of Korea”) wrote to U.S. Mint Director Eva Adams requesting “the cost of suitable coin making equipment” for the Korean Mint. Korean Mint Director, Major General Soung Kyu Park (박승규), explained to Adams, “[a]s you perhaps know, we are in the process of expanding our organization, and we hope to be able to produce our own coins in the near future.” Echoing the options that Leland Howard had outlined for the Koreans four years earlier, General Park related that the Korean government was “studying the comparative costs and advantages involved in minting our coins in Korea with the complete necessary installations, in contrast with buying blanks from the U.S. Mint for use in our striking presses.”<sup>265</sup>

In other words, the Korean government was considering the rather impressive leap to investment in a full-service coin mint that could melt, roll and anneal metal, finish blanks, strike coins, and maintain an engraving department and die shop. Since the Koreans were also comparing costs of this plan versus simply importing blanks and striking them on presses in Korea, General Park also requested a cost quote for “blanks in the same sizes and quality that you have been supplying to the Republic of Korea.”<sup>266</sup> He listed three blank specifications that matched the specifications and

mintages that Korean planners had chosen for the proposed reform coinage (**see specifications in Fig. 21**).

The U.S. Mint responded to these requests on November 28<sup>th</sup>. The Mint provided a current cost per-1,000 pieces comparison between blank and coin manufacturing at the U.S. Mint according to the Koreans' desired specifications and number of pieces (**See Fig. 23**).<sup>267</sup> This cost estimate did not include charges involving boxes, shipping or metals.

**Fig. 23**

<b>U.S. Mint Cost Estimate Quote for Manufacturing 3 Types of Blanks and Coins for Korea</b>						
<b>Dated November 28, 1962</b>						
Denomination	NUMBER OF PIECES	Weight in Grains	Composition	Diameter (mm)	Cost per 1,000 Blanks *	Cost per 1,000 Coins *
<b>A</b>	50,000,000	38	95% Cu., 5% Zn	—	\$0.80	\$1.00
<b>B</b>	10,000,000	57	70% Cu., 18% Zn., 12% Ni	—	\$1.60	\$2.10
<b>C</b>	40,000,000	77	75% Cu., 25% Ni	—	\$1.90	\$2.35
* Does not include cost of metals						

As for the Korean request for information on coin-making equipment, Director Eva Adams informed General Park that the information would not be forthcoming for at least “several months” due to the Mint’s simultaneous work on Korea’s reform coinage; a job that she characterized as “a major project.”<sup>268</sup> Instead, Adams presented to the Korean Mint Director some of the U.S. Mint’s own rather pointed questions for the Koreans in regard to their ability to establish a coining mint. In order to provide a sound response to the question of the equipment needs for a coining factory, Adams asked whether the proper utilities existed in Korea:

*“is electric power available, or would it be necessary for you to install fuel-operated power generating equipment? If the latter, do you have access to natural or manufactured gas for use in melting or heat treating operations? We suggest you consult the local municipal authorities responsible for such engineering information.”*<sup>269</sup>

This question about sufficient power generation in Korea was an important one. In 1962, it had only been seven years since South Korea was able to reach self-sufficiency in regard to fully supplying the country’s rather low electrical power usage without international help for the first time since the end of the Korean War. Earlier in the 1950s, the country had relied on electrical power derived from, among other sources, electrical generators placed on barges floating on the Han River near Seoul and operated by the U.S. Army.<sup>270</sup> Director Adams’ question here simply echoed earlier American responses. She asked about whether the coin and blank specifications that the Koreans cited would actually represent South Korea’s “average annual requirement” for the number of blanks and/or coins, if not also representing the cold-rolled metals that the Koreans intended to use. Adams also asked if the Korean government intended to develop an “Engraving

Division staffed with Sculptors capable of producing...designs and models,” along with the ability to fabricate masters and working dies.<sup>271</sup>

In response to the U.S. Mint’s questions, H.M. Lee wrote to Adams that although the Bank of Korea would provide detailed answers to the above questions, the answers “will unlikely be received...by around the end of January in 1963.”<sup>272</sup>

The Americans would never receive a reply to their questions after January 1963. Instead, the U.S. Mint received a notification that the Korean government had cancelled all consideration of producing new coins.<sup>273</sup> After these communications in late 1962, the Koreans would not engage the United States Mint again for another three years.

### **South Korea’s Dongnae Coin Mint and its First Korean-made Coins**

Although discussions about Korea’s future coin mint came to an end between the U.S. Mint and the Korean planners, the Koreans would now encounter and have to overcome, or work around, many of the issues that the Americans had raised.

Soon after its discussions with the U.S. Mint, the Bank of Korea began researching different approaches to funding and producing new *won*-denominated coins in 1963. Korean planners considered the options of either importing hundreds of millions of additional foreign-printed banknotes or securing the coining machinery necessary for the Korean Mint to locally manufacture coins that could replace both the old *hwan* coins and three of the banknotes that were then in circulation; the One-Won, Five-Won and 10-Won. The lower-value One-Won denomination was especially in demand at the time. Author and former currency designer Jo Byeongsu (2006) wrote that the Bank of Korea compiled its research findings in a 1964 monograph titled, *A Study on the Issuance of Coins* (주화발행에 대한 검토). This study noted that if the currency system relied solely on the revalued 10-Hwan (One-Won) coin and the British-made One-Won banknotes, and possibly having to reorder more notes from Britain in the near future, the Bank would simply not have enough of the One-Won denomination to meet the growing demand for this denomination.<sup>274</sup>

One of the plans that *A Study on the Issuance of Coins* had proposed was the hiring of an overseas mint to manufacture a total of 340 million finished coins, consisting of 200 million One-Won coins, 40 million Five-Won coins, and 100 million 10-Won coins—a plan similar to the Korean government’s coinage contracts with the U.S. Mint in 1959-1962. Another plan envisioned the domestic production of the necessary minting equipment as well as the coin blanks and the finished coins. A third proposal considered scrapping and selling the former 100-Hwan cupro-nickel coins; approximately 315 metric tons of the original amount of 50 million pieces produced. It was thought that this reclaimed metal might be sold to Japan and the proceeds from this sale could be used to import 40 million brass coin blanks to manufacture new One-Won coins and another 10 million brass coin blanks for new Five-Won coins. The Bank of Korea’s study included a fourth option of scrapping and selling all the approximately 290 million remaining former *hwan* coins. In this scheme, the proceeds from the sale of the 100-Hwan coins would be used to import the One-Won and Five-Won coin blanks from overseas, as described above, while the sale of the reclaimed metal from the 50-Hwan and 10-Hwan coins would fund the purchase and import the minting equipment needed to begin the domestic production of coins at a new coin mint.<sup>275</sup>

News reports indicate that the Korean government had initially decided to go with the third proposal. In May 1965, the Korean press reported that South Korea's Ministry of Finance had plans to sell the 315 metric tons of demonetized 100-Hwan coins and use the proceeds to import the coin blanks which would then be used to locally produce an initial batch of new One-Won (40 million pieces) and Five-Won coins (10 million pieces). This was to be the first stage of a total production of 340 million coins (amounting to 1.4 billion *won*), which would begin to be issued on August 1, 1965.<sup>276</sup> The government publicly announced this plan even though the Korean Mint had yet to install a single coining press or train any of its employees in the operation of such machines or in any of the other related processes. Nevertheless, on June 24, 1965, the Monetary Policy Board decided to approve new One-Won and Five-Won coins.<sup>277</sup> Soon after, in late July 1965, the Bank of Korea finally revealed to the Korean media that the plan to issue the new coins within the year would be “put on hold” due to “a lack of budgetary measures.”<sup>278</sup> Evidently, a realistic assessment of the required preparations for building a coin mint had finally intervened, and this rather hopeful intention of issuing domestically struck circulating coins in 1965 was abandoned.

South Korea's currency planners had to go back to the drawing board.

Within months, authorities settled on a new, modified coin plan. It involved the importation of the coining machinery necessary to equip a new coin mint that would strike the new *won* coins in the form of 10-Won, Five-Won, and One-Won coins from locally produced coin blanks. The Korean government decided to acquire the coin blanks from local manufacturers since imports would “require enormous foreign currency as well as [incur] many problems in terms of supply chain and security.”<sup>279</sup> In the end, it appears that none of the former *hwan* coins, two of which were still circulating as revalued *won* coins, were to be scrapped and sold to fund the production of the new coins.

By September 29, 1965, the Ministry of Finance had approved the Korean Mint's request to begin construction of South Korea's very first coin minting facility.<sup>280</sup> After the Korean National Assembly had signed off on the plan on November 19th, the government established a temporary committee to oversee the construction of a new coin mint on December 1, 1965. By January 1966, “emergency repair work” was carried out on buildings remaining on the site of a recently closed banknote printing facility in Dongnae County, near the southeastern port city of Busan.<sup>281</sup>

Although the press ran articles since early 1965 that told of the impending production, issue, and then delayed issue of new coins in 1965, the first real news about the coins that would eventually be issued was revealed to the public in early March 1966. The *Chosun Ilbo* reported that, after the appropriate equipment installations and upgrades to the



South Korea's Dongnae Mint (Busan Mint) was a refurbished banknote-printing facility which completed conversion to a coining factory in 1965-66. This mint produced the country's first reform coinage, the 10-Won, Five-Won and One-Won, in 1966. The Dongnae Mint would continue to produce South Korea's coins until 1975, when operations transferred to a new facility located in Gyeongsan.

Photo: Yun Yeongdae, et al. *돈 만드는 사람들 60 년사: 한국 조폐 공사 창립 60 주년 1951-2011 = 60 Year History of KOMSCO: KOMSCO 60th Anniversary*. Korean Minting and Security Printing Corporation, 2011.

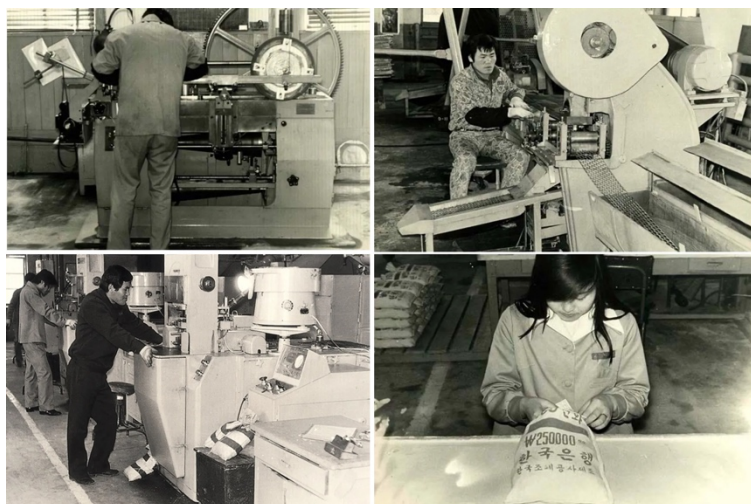
Korean Mint's facilities (power generation most certainly being one of them), the government had decided to issue new 10-Won, Five-Won and One-Won coins on August 15, 1966. These new coins would be used alongside the already-circulating 10-Hwan (circulating as One-Won) and 50-Hwan (circulating as Five-Won) and would eventually replace them.<sup>282</sup> Budgetary measures were also in place to further pay for these plans after the Korean government revised its Mint Act (조폐공사법) to increase the Korean Mint's funding capital from 500 million *won* to 2 billion *won* in April 1966.<sup>283</sup>

To equip its new Dongnae coin mint, the government purchased at auction two British-made Taylor & Challen coining presses, two Hordern Mason & Edwards (HME) coining presses, and related coining equipment at a cost of \$230,000 in March that year. As the Korean Mint did not yet employ trained relief engraving artists and die-making technicians nor possess the equipment necessary to manufacture the master dies and coining dies, the Korean government contracted with the British private mint, John Pinches, to produce the dies and collars to strike the new One-Won, Five-Won, and 10-Won coins.<sup>284</sup>

By mid-1966, the Korean Mint staff faced a looming deadline to set up a functioning coining facility. According to the Korean Mint's official history, the Dongnae Mint workers had to "learn the operation of the [minting] machinery from the machine installers who decided to visit Korea."<sup>285</sup> Among these foreign technicians helping to install and operate the new equipment were the employees of Cincinnati Milling Machine, the parent company of the coining press manufacturer, HME.<sup>286</sup> These efforts began in earnest after July 2, 1966, when many of these machines and the foreign technicians arrived at the Dongnae Mint. The Korean

employees took a crash course in learning their trade on the job as they helped the technicians install the presses during the day, while they also "organized groups of four to five people to study all night" the operating manuals and equipment.<sup>287</sup>

The Korean Mint's official history points out that one of the largest barriers that the Korean Mint faced at this time was in securing quality coin blanks. The official history explains that Korea's non-ferrous metal producers in 1966 were only small companies that operated outdated facilities with almost no technical experience in precision metallurgy. The Korean Mint's metal suppliers underwent "many trials and difficulties in developing coin blanks" that could meet the appropriate standards for the required coining metal.<sup>288</sup> Despite the difficulties encountered, the Dongnae



(From top left, clockwise): Korean Mint Technician in the die shop operating the Mint's pantograph, a Janvier Reducing Lathe, first acquired in July 1974; (top right) Mint worker operating a blanking press; (bottom right) Mint worker securing a "large" 100-Won coin bag for shipment to financial institutions around the country for distribution into the currency system; (bottom left) Mint workers operating HME "Coinmaster 2" coining presses.

Photo: Yun Yeongdae, et al. 돈 만드는 사람들 60 년사: 한국 조폐 공사 창립 60 주년 1951-2011 = 60 Year History of KOMSCO: KOMSCO 60th Anniversary. Korean Minting and Security Printing Corporation, 2011.

Mint was “in normal operation” by July 25th, after the metal suppliers delivered the first coin blanks.<sup>289</sup> Months before the official opening of the Dongnae coin mint on December 30, 1966, the Korean government announced on August 15th that the issue of the new coins was underway.<sup>290</sup> On that same day, August 15, 1966, the Korean Mint delivered to the Bank of Korea the first batches of the new coins in the amounts of 1 million One-Won coins, 600,000 Five-Won coins, and 400,000 10-Won coins.<sup>291</sup> At the time of the issue of these first South Korean *won* coins, only two Taylor & Challen presses had been installed. Producing these first coins was accomplished with these machines, each turning out finished coins at a leisurely 180 strikes per-minute.<sup>292</sup>

A description of South Korea’s first domestically produced coins is below (see Fig. 24).<sup>293</sup>

**Fig. 24**

<b>South Korea's First Circulation Coins Issued in the <i>won</i> Denomination Issued August 16, 1966</b>					
Denomination	Mintages for coins dated 1966	Weight in Grams	Composition	Diameter (mm)	Obverse Design
<b>10-Won</b>	10,600,000	4.22	88% Cu, 12% Zn	22.86	<i>Dabo Pagoda</i>
<b>Five-Won</b>	4,500,000	3.09	88% Cu, 12% Zn	20.40	<i>Geobukseon (Turtle Ship)</i>
<b>One-Won</b>	7,000,000	1.70	60% Cu, 40% Zn	17.20	<i>mugunghwa</i> (Korean hibiscus flower)



Photos by Mark Lovmo

The Koreans had partially achieved their goal of domestic coin production in 1966. The Korean Mint would continue to make incremental strides towards completely independent coin manufacturing during the next dozen years. By the late 1970s, South Korea would be able to produce its own coins, including commemoratives, with full control over the coin-making process to include the manufacture of coining metal, in-house design and engraving, along with the production of master and coining dies.

### **The Korean Mint’s Quote Request of September 1966**

Only one month after the Dongnae Mint had delivered the first of its locally made coins to the Bank of Korea, the Director of the Korean Mint reached out to the U.S. Mint for quotes on the

prices of both blanks and finished coins for three different alloys. Korean Mint Director Chi Young Lee (이치영) wanted to know the U.S. Mint's pricing for three pieces he described as alloys of copper and zinc (88% copper, 12% zinc), nickel, and silver. However, the information Director Lee provided was clearly not sufficient for the U.S. Mint to provide a price quotation. Missing were the exact compositions of the "nickel" and "silver" alloys, their weight per-piece, as well as the numbers of pieces of blanks and coins under consideration for each alloy (**see Fig. 25**).<sup>294</sup>

**Fig. 25**

<b>Korean Government Quote Request to U.S. Mint for Manufacturing Coin Blanks and Finished Coins Dated September 17, 1966</b>			
Alloy	Weight in Grams	Composition	Diameter (mm)
Copper & Zinc	3.09	88% cu, 12% Zn	20.17
Nickel			20.60
Silver			22.60

On September 26<sup>th</sup>, Mint Director Adams replied that the U.S. Mint would first need the quantity, composition, and weight of all three of the pieces requested, as well as whether designs would be needed if ordering coins.<sup>295</sup> Technical Assistant Phillip B. Neisser wanted to know if the Koreans would need the U.S. Mint to make the masters for these coins. He also pointed out that the Mint was "not in a position to execute" any potential order deriving from this Korean inquiry in the remaining months of 1966.<sup>296</sup> The correspondence on this topic between the Korean Mint and the U.S. Mint ends here.

Although the lack of follow-up by the Korean Mint leaves the reasoning behind Director Lee's quote request to appear rather opaque, its details might be clues about the plans the Korean government had under consideration for South Korea's coinage so soon after the release of its first *won* coins. The copper-zinc alloy piece in Director Lee's request had the same weight and metal composition as the country's Five-Won coin, albeit with a slightly smaller diameter. Were the nickel and silver pieces considerations of larger denomination coins? Korean planners might have wanted to consider larger denominations at this time. It is known that soon after the 10-Won, Five-Won and One-Won coins were issued, price inflation in Korea had already made these coins seem somewhat debased compared to money of the same values from just a few years before. Reflecting on the noticeably rising consumer prices, a November 1966 *Dong-A Ilbo* article noted that the cost of a haircut rose to 180 *won*, and a half kilogram of pork was at 160 *won*; both up from the price of 110 *won* the year before. The writer of the article quipped, "One doesn't have to go through the Bank of Korea's arcane currency analysis to measure the usefulness of the Five-Won or 10-Won coin in one's pocket..."<sup>297</sup> In addition to inflationary pressures, the shrinking seigniorage of the coins was also a factor. The per-unit manufacturing cost for the copper-based One-Won coin exceeded its face value upon issue, while a Bank of Korea analysis predicted that the total per-unit cost of the Five-Won would also soon surpass its face value.<sup>298</sup>

Perhaps the Korean government was actually considering an order with the U.S. Mint and had preliminary plans to issue higher denominations, hence the choice of nickel and silver coining metal. Perhaps the Koreans were attempting to obtain some market research on the prices of such imported pieces and then compare them to the costs of domestic production. In the absence of open and accessible Korean archives, one can only speculate about the real purpose behind this quote request.

### **The Korean Mint's Quote Request of July 1967**

The next communication the Korean Mint sent to the U.S. Mint was in the form of a brief telegram on July 14, 1967. The telegram informed the U.S. Mint that the Korean Mint was “planning to produce two new kinds of coins” in diameters of 24 millimeters and 21 millimeters. The designs were to include a portrait and a building on their obverses with lettering on the reverses. The Koreans intended to send the designs to the U.S. Mint in September. They requested only the “estimated delivery time for 2 master dies...and 50 pairs [of] working dies” for each proposed coin.<sup>299</sup> Director Eva Adams replied on July 26<sup>th</sup>. She informed the Korean Mint that it would take 70 days after the Korean government approved the artwork and that advance payment and State Department approval would be required. (see Fig. 26).<sup>300</sup>

**Fig. 26**

<b>Korean Government Delivery Time Request for Producing Master and Coining Dies for 2 New Korean Coins Dated July 14, 1967</b>				
Coin	Diameter (mm)	Obverse Design	Number of Requested Working Dies	U.S. Mint's Estimated Delivery time for 2 Masters and 50 Working Dies
A	24	Portrait	50 pairs	70 work days after approval of design sketches. U.S. State Department approval required
B	21	Building	50 pairs	

The correspondence between the two mints about this die manufacturing work went no further.

This inquiry from the Korean Mint appears to very much foreshadow the next two circulating coins that the Bank of Korea would issue. The combination of a 24 millimeter-diameter coin with a portrait as its obverse design is strikingly similar to South Korea's 24-millimeter 100-Won coin, issued in November 1970. This would be the first coin introduced into the country's system of money since the appearance of the 10-Won, Five-Won and One-Won coins in 1966. The 100-Won features an obverse image of Joseon Admiral Yi Sun-sin, victor of numerous naval battles against the invading forces of Japan's Hideyoshi Toyotomi during the Imjin War of 1592-1597. As for the proposed 21 millimeter coin, it is also similar to the 21.60 millimeter-diameter 50-Won coin that would be first issued at the end of 1972. However, the 50-Won coin would not display a building but instead a stylized image of the “ear of rice” design that was first considered for the 10-



These Seoul landmarks have appeared as imagery on Korean money since 1945.

Left: Palgakjeong Pavilion in Tapgol (Pagoda) Park is the birthplace of the March First Independence Movement in Korea when young students and patriotic citizens gathered here on March 1, 1919, shouted "Long live the Republic of Korea" and held a demonstration following a student reading aloud the declaration of independence of Korea from Japan.

Center: The Independence Gate (Dongnimmun) is a fifteen-meter high stone structure as it stands in the Seodaemun district of Seoul. In November 1897, the Dongnimmun stone-block arch was erected at the site and was modeled after the Arc de Triomphe in Paris. Korean independence activist, Seo Jae-pil (a.k.a. Philip Jaisohn, the very first Korean to become a naturalized citizen of the United States), designed this structure and supported its construction with help from other Korean nationalists. Dongnimmun was meant to symbolize Korea's emancipation from Chinese suzerainty in 1895.

Right: The 14<sup>th</sup> Century Seungnyemun ("Gate of Exalted Ceremony"), also known as Namdaemun (or "Great South Gate") is one of the most recognized symbols of South Korea and its capital city, Seoul. It was the southern gate of the old walled city of Seoul and was first built in 1396.

Images (left and center) by Mark Lovmo; (right) by Iwy (Wikimedia Commons) commons.wikimedia.org/wiki/File:Korea-Seoul-Namdaemun-Seungnyemun-12.jpg Inset images from Korean banknotes by Mark Lovmo.

Hwan coin in 1958. The "building" that is cited as the obverse design for this proposed 21-millimeter coin may have been a carryover design from earlier design considerations. It may specifically have been the *Cheomseongdae* observatory design that was initially planned to be used for the 50-Hwan coin and later used on a series of unissued pattern coins dated 1965. Other "buildings" that have appeared on Korean banknotes include historic Seoul landmarks such as the *Seungnyemun* (*Namdaemun*) Gate, the Independence Gate (*Dongnimmun*), and the *Palgakjeong* Pavilion. Since South Korean currency and coin design appears to favor imagery that has precedent, this "building" may have been one of these images. Again, unless the Bank of Korea lifts its current embargo on access to its archives, there can only be speculation as to the exact designs that the Korean Mint might have forwarded to the U.S. Mint in September 1967.

This telegram from the Korean Mint might constitute evidence that Korean authorities had been planning for 100-Won and 50-Won denominations as early as 1967. Prior to the discovery of this telegram in the U.S. Mint's Korea file, the earliest date cited in the existing literature for either of these coins was April 3, 1970; the



These Korean Mint coin design thumbnail sketches fit the loose description of the obverse designs found in the July 1967 telegram to the U.S. Mint.

Top: Admiral Yi Sun-sin on the 100-Won coin.  
Bottom left: the Cheomseongdae observatory.  
Bottom right: the Palgakjeong Pavilion.

Images: (top) from Jo Byeongsu, *Jo Byeongsu's Story of Money: Korean Commemorative Coins* [우리나라 記念貨幣 Korean Commemorative Coins: 조병수의 돈 이야기]. (Seoul: Ohsung K&C, 2006), 208.  
(bottom) from Jo (2006), page 199.



50-Won. Issued December 1, 1972.

*Photos courtesy of Professional Coin Grading Service (PCGS.com)*



100-Won. Issued November 30, 1970.

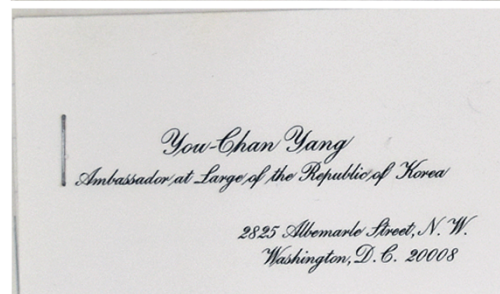
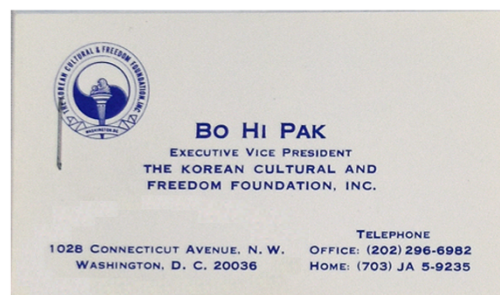
*Photos by Mark Lovmo*

government approval date for the 100-Won coin.<sup>301</sup> Although they did not follow through with contracting the U.S. Mint to produce the master and coining dies for these two proposed coins, the Korean government would later approach the Osaka Mint to do this work. Prior to 1975, the Korean Mint had relied on foreign-made master dies. The Korean Mint first imported dies from Britain in 1966 and then masters from the Osaka Mint in Japan for both the 100-Won in 1970 and the 50-Won in 1972. This telegram might be evidence that the Koreans had first contemplated the importation of the masters for these two coins from the United States Mint years before approaching the Osaka Mint.

### **South Korea's Gold and Silver Commemorative Coin Project**

The very last time that the South Korean government appealed to the U.S. Mint about a proposed coinage project took place in 1969. Pak Bo-hi, the leader of the Korean Cultural & Freedom Foundation (KCFF), a Korean government-linked Washington D.C. non-profit, visited the U.S. Mint headquarters to meet with Director Eva Adams in April 1969. Mr. Pak was instead received by Deputy Director Frederick W. Tate since Adams was not available. Mr. Pak had visited to inquire about a “proposed venture into proof coins” for the Republic of Korea.<sup>302</sup>

Although Mr. Tate did not tell Pak that the Mint could not assist the Korean government in producing proof coins, Tate did explain that all U.S. Mint facilities were at that time “operating at capacity in production of proof coins” for the United States. In response to Mr. Pak’s visit, Director Adams later wrote to Ambassador Yang You-chan to explain that the Mint might be able to assist the Korean government with a proof coin project after the start of the Mint’s Fiscal Year (July 1, 1969), if the Mint’s current “personnel restrictions” had eased.<sup>303</sup> Therefore, the U.S. Mint placed the Koreans on hold until after the start of July that year. However, it would not be until October 1969 that Korean representatives would re-engage the Mint about this proof coin project. As for Pak Bo-hi and Ambassador Yang, they would move on and work with minting authorities in Europe in the coming months.



*Pak Bo-hi (top) and Ambassador Yang You-chan (bottom). Mr. Pak presented these two business cards to U.S. Mint Deputy Director Frederick W. Tate at their meeting in April 1969.*

Images: (top) *Namu Wiki*, [namu.wiki/w/박보희](https://namu.wiki/w/박보희) and (bottom) *Wikimedia Commons*, [commons.wikimedia.org/wiki/File:Yoo-Chan\\_Yang.jpg](https://commons.wikimedia.org/wiki/File:Yoo-Chan_Yang.jpg)  
Business card images: NARA-CP, RG104, Entry 328-F, box 10, Korea - Establishment of New Coinage System and Coinage, Attachment to Letter dated April 18, 1969 from Eva Adams, Director of the Mint to You-Chan Yang, Ambassador at Large of the Republic of Korea

The idea for this South Korean proof coin project began when Ambassador Yang traveled to Europe in the Spring of 1969. There, he was tipped off to a rumor that the North Koreans were making plans to introduce a set of gold and silver commemorative coins onto the world numismatic market. Yang dutifully notified the government in Seoul, which at the highest levels quickly set in

motion the actions that would allow South Korea to get a set of their own coins onto the market first.<sup>304</sup>

Ambassador Yang You-chan was not only South Korea's "Ambassador at Large," he was a figurehead member of Pak Bo-hi's KCFF in Washington D.C. The leader of the Unification Church, Sun Myung Moon, established the KCFF in Washington D.C. in 1965, however, the organization was the brainchild of his right-hand man and former Korean Army Lieutenant Colonel and Korean intelligence agent, Pak Bo-hi. Pak hit upon the idea of raising money for the Unification Church (tax-free) by creating a foundation in Washington that would appeal to conservative American sensibilities, all the while hiding its connection to the church from donors and even the American notables who were to grace the KCFF's letterhead with their famous names. To appear as a worthy cause to American donors, the KCFF fronted as a foundation that promoted Korea-U.S. relations and anti-communism. One of the notables that Pak involved in his Foundation was Ambassador Yang. To access Yang's gravitas as a respected Korean War-era diplomat as well as his connections as an ambassador, Pak gave him the title of Executive Vice-President of the KCFF.<sup>305</sup>

By sounding the alarm about the impending issue of the "North Korean commemorative coins" (the veracity of which is highly questionable), the Korean government rewarded Ambassador Yang and Pak Bo-hi a percentage of the profits from the sale of South Korea's proof coins.<sup>306</sup> In reality, the Korean government sponsored the obscure, anti-communist religious sect, the Unification Church and its organization the KCFF, with the view that utilizing loyal Korean citizens to front some of the operations of the Korea intelligence services in foreign countries was potentially useful. Interestingly, the KCFF's profits from the sales of these proof coins would actually emerge as one of the planned funding sources for the Unification Church and its efforts in the influence-peddling scandal on behalf of the Korean government that erupted in Washington D.C. in the mid-1970s. The scandal is commonly referred to as "Koreagate."<sup>307</sup>

The U.S Mint would next hear from two Bank of Korea representatives, Chong Jik Ahn (New York Representative) and Jai Woong Lee (Washington D.C. Representative) when they presented a list of questions for the Mint regarding this commemorative proof coin project on October 23, 1969. The Bank of Korea representatives included with their inquiry a list of proposed gold and

**Fig. 27**

<b>Korean Government Request for Cost Estimate Quote for Gold and Silver Commemorative Coin Project Dated October 23, 1969</b>					
	Denomination	Weight in Grams	Composition	Diameter (mm)	Number of Pieces
GOLD COINS	5,000-WON	18.01	Au 900/ Cu 1000	32	30,000
	2,500-WON	9.00	Au 900/ Cu 1000	26	40,000
	1,000-WON	3.60	Au 900/ Cu 1000	18	80,000
SILVER COINS	1,000-WON	52.12	Ag 1000/1000	55	25,000
	500-WON	26.06	Ag 1000/1000	40	25,000
	250-WON	13.03	Ag 1000/1000	30	100,000

silver alloy coins, complete with denominations, diameter sizes, weights and a preliminary number of pieces for each coin. At this planning stage, the project consisted of three gold and three silver alloy coins (**See Fig. 27**).<sup>308</sup>

The Bank of Korea wished to know whether the U.S. Mint was able to accept a commemorative coin order and how long the manufacturing process would take. The Koreans also wanted to know if they needed to purchase the metals from the Mint or from “local markets.” It was also clear that the Bank of Korea was interested in the artistic services that the Mint could provide to “draw and manufacture working dies...”<sup>309</sup> It is not known if the U.S. Mint replied since no further correspondence on the subject of South Korea’s gold and silver commemorative coin project is found in U.S. Mint archives.

It appears that the Koreans not only inquired about pricing and turnaround times from the U.S. Mint for the manufacture of these coins but also traveled to Europe to get bids from both De La Rue in Britain and Italcambio from its office in Italy. The Koreans had prior experience in dealing with De La Rue when that company printed an entire series of banknotes for the Bank of Korea after their government’s currency reform in 1962. However, De La Rue was not specialized in minting gold and silver proofs in quantity, nor were they associated with a sales network. Italcambio, on the other hand, had a record of performance as a contract mint for over forty different countries’ commemorative proof sets, and equally important, they possessed an extensive sales network. The Korean government would choose Italcambio to produce the Republic of Korea’s first commemorative coins in both gold and silver. These coins would be manufactured at various locations in Europe (the German State Mints, the Gori & Zucchi jewelry factory in Italy, and at the Paris Mint) between 1970 and 1974 with Italcambio handling marketing and distribution in North America and Europe. The final composition of this proof commemorative coin series consisted of six gold and six silver coins shown below.<sup>310</sup>



Photo Courtesy of Heritage Auction (ha.com)

Final Specifications				
Final Designs (April 20, 1970) <sup>1</sup>	Composition <sup>2</sup>	Diameter <sup>2</sup>	Final Adjusted Weight in grams <sup>2</sup>	Denomination
King Sejong the Great	Au 90%, Cu 10%	60 mm	96.80	25,000-Won
Silla Dynasty Gold Crown	"	55 mm	77.44	20,000-Won
President Park Chung-hee	"	40 mm	38.72	10,000-Won
Joseon Royal Navy "Turtle Ship"	"	32 mm	19.36	5,000-Won
Queen Seondeok of the Silla Dynasty	"	26 mm	9.68	2,500-Won
Sungnyemun (Great South Gate)	"	18 mm	3.87	1,000-Won
U.N. Forces in the Korean War	100% Silver	55 mm	56.02	1,000-Won
Seokguram Grotto Bodhisatva	"	40 mm	28.01	500-Won
President Park Chung-hee	"	30 mm	14.00	250-Won
Goryeo Dynasty Celadon Vase	"	28 mm	11.20	200-Won
Admiral Yi Sun-sin, English lettering	"	21 mm	5.60	100-Won
Independence Martyr, Yu Gwan-sun	"	16 mm	2.80	50-Won

Sources:  
<sup>1</sup> Jo Byeongsu. *Jo Byeongsu's Story of Money: Korean Commemorative Coins* [우리나라 記念鑄貨 Korean Commemorative Coins: 조병수의 돈 이야기 조병수 지음], (Seoul: Ohsung K&C), 2006, 78-80.  
<sup>2</sup> "Bank of Korea Issue Notice [한국은행 공고]," *Chosun Ilbo*, 25 Feb. 1971.

## Appendix A

(This letter is recreated here due to the poor condition of the original)

Mr. Chan Sup Lee, Asst. Representative Bank of Korea, New York

February 21, 1958

Mr. Leland Howard Asst. Director of the Mint

Coinage Mint for Korea

There are many problems in connection with setting up and operating a mint and the establishment of a new coinage system. These problems can be divided into the following categories:

1. The type of metal to be worked will to a great extent determine the type of equipment to be used.
2. The volume of production will determine the type of equipment needed and the cost per unit of production.
3. The monetary unit of a country will determine to a great extent whether or not the coins are produced at a profit or loss to the government.
4. The monetary unit, the coins produced, and the metals used will to a great extent determine whether or not coins will remain in circulation or will be withdrawn for their intrinsic value. Of course, the price of metals will to a great extent affect the withdrawal.

The type of metal to be worked will to a great extent determine the type of equipment to be used.

In most mints of the world, a metal is chosen that is malleable and workable under conditions of cold rolling. For example, in the United States we are able to manufacture our bronze coins through the entire operation on a cold process with the exception that we do anneal the blanks. I will explain annealing to you- as metal is rolled it work hardens and becomes brittle. The annealing process brings the metal to a desired heat in a furnace which softens it so that work can be continued on the metal. The reason that bronze blanks are annealed in blank form is to make them soft enough to take the impression of the die in the stamping operation. If we did not anneal the blanks, they would be hard and brittle and the metal would not flow properly into the die, the impression would be bad, and the coin could have a bad appearance. Die life would be very limited. On our five-cent coin and all of our silver coins, we do not only anneal the blanks but we also anneal it at least two times during the minting operation. The size of an ingot, particularly thickness, determines the number of times the metal must be annealed in the operation. I think at this stage I should tell you that our one-cent coin is composed of an alloy of 95% copper and 5% tin and zinc. We use very little tin in the alloy -merely a trace. The five-cent coin is composed of an alloy of 75% copper and 25% nickel. All of our silver coins are of an alloy of 900 parts silver and 100 parts copper.

We happen to use these alloys because we adopted them many years ago and because in the United States the use of vending devices with slug rejectors on them are not conducive to change. Most of the slug rejectors in vending devices work on an electrical resistance principle and therefore to substitute another alloy we would have to adopt one that would have the same electrical resistivity. Otherwise, we would upset the many millions of machines that are now in operation. Also, the size and thickness of our coins are important factors in operating our many coin operated devices, and we are more or less tied to the present size.

There are many good alloys other than the ones that we use in the United States that are adaptable to cold rolling. You will recall that you were shown many sample pieces of various alloys. Of course, in starting any coinage system, the cheaper the alloy the better. If the coins are to perform as a circulating medium and not as a store of value; that is, if the coins are to exchange the goods of the country, the cheaper the alloy, the better, as the government makes more profit and the desire to withdraw the coins from circulation because of their metal content is lessened.

Coins performing their function of circulating medium can be compared to the transportation of goods from one place or person to another. For example, if you wanted to transport vegetables from the farm to the market, you would use the cheapest means possible. In the United States we would use a truck - not a Cadillac. Coins, as a medium of exchange, should move goods from one person to another as cheaply as possible, the same as any other service performed in getting goods from one person to another. Because coins are sometimes used as a store of value or a means of deferred payment, sight is lost of its other and main function and that is to facilitate the transfer of goods and services.

There are many metals and alloys that cannot be handled in a cold rolling process. They must be rolled hot and the type of equipment for hot handling is entirely different from that for cold rolling, and as a rule is more expensive. Pure nickel is an example of a metal that must be hot rolled. It is not ductile enough to be rolled cold. Aluminum is another one. Perhaps in determining your alloy you would not want to get equipment to handle the first stages of manufacture. You may desire to purchase blanks and merely stamp them. The purchase of blanks is suggested because if round coins are manufactured, there is approximately 30% waste in the stamping of round blanks from a strip. If the scrap metal could not be used in your country, you would have the expense of not only paying for its shipment to your country but also the expense of shipping scrap metal to a point where it could be used. Costly equipment appears in the early stages of coining, that is, in melting, rolling, and blanking; therefore, a large capital expenditure would be eliminated if the coinage process started with the finished blank.

The volume of production will determine the type of equipment needed and the cost per unit of production.

I have touched on this subject under No. 1, but I want to stress very much the fact that a country should not start a coinage mint unless it has the volume to support it. The overhead in minting, both equipment and labor, is so great that unless you have volume you cannot produce the coins as cheaply as you can buy them in many minutes throughout the world. Attached is a list of the manufacturing charges for several coins that have been produced in the United States mints

during the past several years these costs are in dollars per thousand pieces and do not include metal costs.

If a country with a small volume were given a mint, that is, if they did not have to purchase equipment or build the structure to house it, the cost of production would exceed the purchase of the coins elsewhere. Of course, you do not know the number of coins that your country needs initially or annually thereafter. I venture to say that, based upon the knowledge that I have of your country, it would be very uneconomical for it to establish a mint.

If a mint is to turn out a rather large volume, the amount of equipment and the type of equipment should be different. As was pointed out to you, we closed our coining operations in our San Francisco Mint in 1955 because we did not have enough volume to economically produce coins at that plant. Our production capacity and requirements were in the neighborhood of 175,000,000 pieces annually. We can make coins in our larger mint at Denver, pay the shipping costs to San Francisco, and place them in the San Francisco Mint much cheaper than we can produce them there.

There is attached a list of coining equipment and the estimated cost for a small mint to produce 100,000 coins per day on an eight-hour shift. Of course, we have no details concerning weight, composition, or size, and are assuming that the metal or alloy chosen can be cold rolled. You will note that provision is made for a manufacturing working dies but no outlay is included for the manufacturer of master dies. There is no provision for power plant. We assume that electricity is available for all operations. No provision is made for buildings, storage vaults, security systems, office equipment, and all other items necessary to house and accommodate the operating equipment. The list is brief and only includes principal items of special equipment peculiar to minting - in other words, this is a minimum requirement.

The monetary unit of a country will determine to a great extent whether or not coins are produced at a profit or loss to the government.

The smaller the value of the monetary unit the greater is the difficulty of manufacturing coins at a profit. For example, in the United States the one-cent piece is our smallest coin. We make 145 one cent pieces from one pound of alloy - in other words, the face value of the coins from a pound of alloy is \$1.45. At the present the price of copper, namely 25¢ per pound, and of Zinc at 12¢ per pound, the alloy costs us slightly less than 25¢. The cost of manufacturing 145 one-cent pieces is 12¢. Therefore, we make \$1.08 above the cost of the metal in the manufacture of each pound of one-cent alloy. We make 90 five-cent pieces, our next smallest coin, from a pound of alloy that cost us approximately 39¢, and it cost us 15¢ to manufacture the 90 five-cent pieces. The difference between the face value and the cost of the metal and manufacturing is \$3.96 per pound of cupro-nickel alloy (copper -25¢ per pound, nickel -79¢ per pound).

I do not know what denominations your country desires; neither do I know the size coinage desired or, more important, the weight of each coin and the cost of metal, but with your monetary unit starting with a much smaller value in relation to the dollar, I believe that many of your coins must of necessity be produced at a loss to the government. This may not be too bad if the coins replace paper money which is costly to maintain because it wears out much more quickly. However,

precautions should be taken not produce coins that would be withdrawn from circulation later on because their metallic content exceeds their face value. In other words, a margin must be left to take care of an increase in the price of the metal used. Only two years ago, we were paying 50¢ per pound for copper. If you were to base a coinage system that was on the margin at 25¢ a pound, it would go out of existence when copper reached 50¢ a pound. These are problems that must be well thought out by your government and perhaps, because of the nature of the situation, Korea may even desire to take a calculated risk. By calculated risk, I mean that if these coins stay in circulation for a certain period of time, your government may still make money over the present system of paper money. Without complete details, I am at a loss as to what to advise you in this connection but it is not difficult to arrive at a solution once the facts are well known. Of course, I believe silver coins as a medium of exchange should not be considered. I cannot conceive of the use of silver except in very high denominations and only for a purpose other than a medium of exchange.

The higher denominations of money in the United States, as you know, are in paper, silver dollars being the largest silver coin that is made. Silver in the United States silver dollar has a monetary value of \$1.29 per ounce. In other words, it would not pay to melt a silver dollar for its bullion value unless silver were above \$1.29 per ounce. The monetary value of silver in the United States half-dollar, quarter-dollar, and dime is \$1.38 per fine ounce. In other words, there is proportionately less silver in these coins, and the price of silver would have to go above the price of \$1.38 per ounce in order for it to be profitable to melt these coins for their metal content.

The monetary unit, the coins produced, and the metals used will to a great extent determine whether or not coins will remain in circulation or will be withdrawn for their intrinsic value. Of course, the price of metals will to a great extent affect the withdrawal.

I have touched on this point in great detail above. I again repeat that there is not too much that I can offer in this direction without knowing more of the facts. However, the small unit now of paper money that you mentioned to me will be difficult to keep in circulation if replaced by a coin unless the conditions in Korea are different from any that I can conceive. I know of no place where the populace would not withdraw coins if the metal content was worth more than the monetary value of the coin. Maybe some prohibition could be imposed, or maybe a metal could be chosen that was not workable within the country and its export could be controlled at the borders of the country - that is, the smuggling out of the metal could be controlled, but if such conditions could be controlled in Korea, it would be different from any place that I know of in the world. Many countries on many occasions have lost their coinage through this process. Silver is a prime example, particularly in some of the South American countries. At the present time, difficulty is being encountered keeping the silver riyals in circulation in Saudi Arabia. I know of many countries that have lost coins made of copper and other metals due to a decrease in the value of the monetary unit and/or an increase in the value of the metal.

If, after your visit to the Philadelphia Mint, you have any additional questions that you wish to raise, we shall be glad to help you in any way possible. If you can secure additional information from your country relative to their coinage plans, maybe we can help at that point.

## Appendix B

6. The diameters have been selected May 8, 1958 view of being able to distinguish each coin. Some change could be made in the diameters, if desired. The design on each coin should be different so as to lend further distinction. A different design on each coin is recommended because the bronze coin (10 Swan) could be plated to appear like the 50 Swan coin if both designs are alike.

Mr. Won H. Chung  
Representative  
The Bank of Korea  
37 Wall Street  
New York 5, New York

Dear Mr. Chung:

I have your letter of April 22nd and the enclosure referred to therein. It will take the Mint some time to prepare cost estimates on pure nickel, stainless steel, and aluminum coins, inasmuch as we must buy these metals fabricated from the outside. They are hot rolled and we only do cold rolling in the Mint. Also, it will take us some time to get a cost estimate on the equipment referred to in your letter. You can expect information on this material at a later date.

In view of my conversation with Mr. Lee, and based upon my conception of the problem in your country relative to replacing paper money with coins, I have taken the initiative to suggest a coinage system in place of the coins suggested by your Government. I will get information on the alloys requested by your Government but I submit my suggestion as an alternate mainly because it is cheaper. Also, by being cheaper it eliminates some of the pitfalls that could cause the coinage to disappear from circulation. I enclose four sample coins and a separate detailed cost on each of them.

The following are some comments that are pertinent:

1. These blanks were made hurriedly and in actual production they would appear much smoother. Of course, the striking of a blank takes care of any minor imperfections.
2. The alloys I have selected cannot only be worked in the United States mints but in practically any mint in the world as they are subject to cold rolling. As to shipping costs, I submit the following:
3. I have stayed away from expensive metals, thus giving the Government more seigniorage.
4. Coins are protected as much as possible from being subjected to melting for their metal content.
5. The proposed coins are alloys, not plated metal.

May 8, 1958

6. The diameters have been selected with the view of being able to distinguish each coin. Some change could be made in the diameters, if desired. The design on each coin should be different so as to lend further distinction. A different design on each coin is recommended because the larger bronze coin (10 Hwan) could be plated to appear white like the 50 Hwan coin if both designs are alike.

In the accompanying sheets covering each denomination, I have only included the cost of manufacture and the cost of metals. The cost of metals is important because it determines whether or not the coin might disappear because of its metal content. In preparing the estimate of the cost of metals, current market quotations have been used. If the coins are manufactured by the United States, the Mint could purchase the metal and bill your Government at the then current price. The cost of manufacture is not subject to change unless there is a considerable delay in placing the order.

In addition to the cost given on the attached sheets relative to each coin, there will be a cost for preparing the master dies. If all four denominations have different designs on each obverse and reverse, which we recommend they have, the cost of sketches, models, galvanos, and reductions will be \$946 each denomination, or a total cost of \$3,784. If the same design is used on the obverse and reverse of all four denominations, which we do not recommend, the cost of sketches, models, galvanos, and reductions will be \$311.50 each denomination, or a total for the four denominations of \$1,246. Having a common design on one side of all denominations and a different design on each of the other sides, the cost of sketches, models, galvanos, and reductions will be \$630 each denomination, or a total cost for four denominations of \$2,520. We can make sketches and designs from any idea given us. We will be glad to prepare the sketches from your suggestions and forward them for approval, and then make lead strikes of the coin prior to manufacture and forward them for approval. If more than 10 million pieces of each denomination are ordered, the price will be reduced somewhat due to spreading certain overhead costs, but the reduction will not be appreciable.

On each of the attached sheets, the number of shipping boxes are listed. If different packaging is desired, we can change accordingly. The cost of these boxes is \$1.50 each. As to shipping costs, I submit the following:

We have obtained informal quotations on ocean transportation from one of the shipping companies. The ocean rate from Philadelphia to Inchon would be \$85.00 per 2000 pounds. There would also be wharfage charges and the cost of transportation from the Philadelphia Mint to shipside. The above rates are predicated upon no packages being valued in excess of \$500 per package. If the valuation of each package is over \$500, the quoted rate will be increased by 5½ per cent. This refers to each individual box or package.

Howard:goj

Mr. Won H. Chung

- 3 -

May 8, 1958

The valuation to be placed on the coins should be replacement cost, rather than face value.

We are not experts in shipping and prefer to have you make your own arrangements, as there is a possibility that the rates quoted could be reduced if competitive quotations were obtained.

On the separate sheets, as stated before, we have included the manufacturing costs and the metal costs. For you to obtain the total cost of getting the coins in Korea, you will have to add four things:

- (1) cost of the master dies (sketches, models, galvanos, etc.).
- (2) cost of boxes.
- (3) cost of transportation from the Mint to shipside.
- (4) cost of ocean transportation plus unloading and delivering in Korea.

Also, enclosed is a summary of all the details relative to the coins.

Yours very truly,

Assistant Director of the Mint

Enclosures.

**KOREA  
SUMMARY**

**GENERAL DESCRIPTION**

Denomination	Gross Weight in Grains	Weight per Piece in Grains	Weight tolerance + or - in Grains	Weight of Coins in Grains	Composition	Weight of Boxes in Grains	Diameter Inch	Millimeter
50 Hwan	57	57	3	57,000,000	70% Cu., 18% Zn. and 12% Ni.	57,000,000	.900	22.860
10 Hwan	38	38	2	38,000,000	95% Cu. and 5% Zn.	38,000,000	.793	20.142
5 Hwan	23.5	23.5	2	23,500,000	" " "	23,500,000	.667	16.942
1 Hwan	15	15	2	15,000,000	" " "	15,000,000	.581	14.757
Total	40,000,000			1,335,000,000		1,335,000,000		

**METALS REQUIRED**

	50 Hwan	10 Hwan	5 Hwan	1 Hwan	Total lbs.	Short Tons
Copper	57,000.00	51,571.42	31,892.86	20,357.14	160,821.42	80.41
Zinc	15,390.00	2,850.00	1,762.50	1,125.00	21,127.50	10.56
Nickel	9,771.43	-	-	-	9,771.43	4.89
Total	82,161.43	54,421.42	33,655.36	21,482.14	191,720.35	95.86
Cost of Metals	\$ 13,680.00	\$ 12,377.14	\$ 7,654.29	\$ 4,885.71	\$ 38,597.14	
Cu. (24¢)	1,539.00	285.00	176.25	112.50	2,112.75	
Zn. (10¢)	7,768.29	-	-	-	7,768.29	
Ni. (9¢)	22,987.29	12,662.14	7,830.54	4,998.21	48,478.18	
Mfg. Chgs.	\$ 18,500.00	\$ 8,500.00	\$ 7,800.00	\$ 6,600.00	\$ 41,400.00	
Cost of Metals plus Mfg. Chgs.	\$ 41,487.29	\$ 21,162.14	\$ 15,630.54	\$ 11,598.21	\$ 89,878.18	

**KOREA  
SUMMARY (cont.)**

**VALUE**

	No. of Pieces	Face Value in Hwan	Value in U. S. dollars @ \$.002 per Hwan	Value in Hwan per 1,000 Pieces	Value in U. S. \$ per 1,000 Pieces	Value in U. S. \$ per Piece
50 Hwan	10,000,000	500,000,000	\$ 1,000,000	50,000	\$ 100	\$ .10
10 Hwan	10,000,000	100,000,000	200,000	10,000	20	.02
5 Hwan	10,000,000	50,000,000	100,000	5,000	10	.01
1 Hwan	10,000,000	10,000,000	20,000	1,000	2	.002
Total	40,000,000	660,000,000	\$ 1,320,000	66,000	\$ 132	

**Total Cost Per 1,000 Pieces**

	Mfg. Cost	Cost of Metals	Total
50 Hwan	\$ 1.85	\$ 2.30	\$ 4.15
10 Hwan	.85	1.127	2.12
5 Hwan	.78	.78	1.56
1 Hwan	.66	.50	1.16

**Difference in monetary value from cost of Mfg. and Metals combined**

	Monetary Value	Cost of Mfg. & Metals	Profit
50 Hwan	\$ 100	(-) \$ 4.15	\$ 95.85
10 Hwan	20	(-) 2.12	17.88
5 Hwan	10	(-) 1.56	8.44
1 Hwan	2	(-) 1.16	.84

**Number of Boxes Required**

	Boxes	Pieces per Box	Total Pieces
50 Hwan	834	12,000	10,000,000
10 Hwan	500	20,000	10,000,000
5 Hwan	250	40,000	10,000,000
1 Hwan	200	50,000	10,000,000
Total	1,784		40,000,000

**Cost of Boxes**

50 Hwan	\$ 1,251
10 Hwan	750
5 Hwan	375
1 Hwan	300
Total	\$ 2,676

KOREA  
SUMMARY (cont.)

(3)

Weight of Coins and Coin Boxes \*

Denomi- nation	No. of Pieces	Weight per Piece in Grains	Total Weight of Coins		No. of Boxes	Weight of Boxes @ 7½ lb. per Box	Value in U. S. \$ per Piece
			In Grains	In Pounds			
50 Hwan	10,000,000	57	570,000,000	81,428.57	834	6,046.50	.10
10 Hwan	10,000,000	38	380,000,000	54,285.71	500	3,625.00	.02
5 Hwan	10,000,000	23.5	235,000,000	33,571.43	250	1,812.50	.01
1 Hwan	10,000,000	15	150,000,000	21,428.57	200	1,450.00	.002
Total	40,000,000		1,335,000,000	190,714.28	1,784	12,934.00	

\*Coins are shown at standard weight and weigh less than the metals required, since the  
since requirements are computed at an excess of 5% throughout.

Denomi- nation	Weight of Coins in Pounds	Weight of Boxes in Pounds	Total Gross Weight in Pounds	Total gross Weight in Short Tons	Pieces per Box	Total Pieces
50 Hwan	81,428.57	6,046.50	87,475.07	43.74	12,000	10,000,000
10 Hwan	54,285.71	3,625.00	57,910.71	28.96	20,000	20,000,000
5 Hwan	33,571.43	1,812.50	35,383.93	17.69	40,000	40,000,000
1 Hwan	21,428.57	1,450.00	22,878.57	11.44	50,000	50,000,000
Total	190,714.28	12,934.00	203,648.28	101.83 +		

Conversion Factors:  
7,000 grains per pound  
2,000 pounds per short ton

# 1 HWAN

The proposed alloy of this coin is 95% copper and 5% zinc. While new this coin will have a copper-brass color but after a period of time, particularly in circulation, it will turn a bronze color. This is practically the same alloy used in the United States one-cent piece. The proposed coin will weigh 15 grains and will have a diameter of .581 inch or 14.757 millimeters. There will be approximately 466 coins per pound of weight. The weight tolerance will be plus or minus two grains.

The estimated manufacturing cost on these coins will amount to 66¢ per thousand pieces. We will require 20,357.14 pounds of copper and 1,125 pounds of zinc. At 24¢ a pound for copper and 10¢ a pound for the zinc, the metal cost will be \$4,885.71 and \$112.50, respectively, or a total metal cost of \$4,998.21. The copper required is calculated at standard weight and wastage in the metal is included in the manufacturing charges. The zinc has been calculated on a 5% excess weight to compensate for volatilization.

The cost of metals and charges for manufacturing will amount to \$11,598.21. 1000 pieces of this coin, therefore, will cost \$1.16. On the basis of 500 Hwan to the dollar, this coin has a monetary or face value in United States money of \$.002 (2 mills). 1000 pieces have a value of \$2; therefore, there is a profit to your Government above the manufacturing cost and the metals of \$.84 per 1000 pieces (\$2 minus \$1.16). One pound of this alloy will produce 466 coins having a monetary value of 93¢. The cost of one pound of this alloy is approximately 23¢, thus leaving a wide margin for the increase in the price of metals before it is profitable to melt the coin for its metal content. We propose to put 50,000 pieces of this denomination in a packing box, which would require 200 boxes for 10 million pieces.

5 HWAN

The proposed alloy of this coin is 95% copper and 5% zinc. While new this coin will have a copper-brass color but after a period of time, particularly in circulation, it will turn a bronze color. This is practically the same alloy used in the United States one-cent piece. The proposed coin will weigh 23.5 grains and will have a diameter of .667 inch or 16.942 millimeters. There will be approximately 297 coins per pound of weight. The weight tolerance will be plus or minus two grains.

The estimated manufacturing cost on these coins will amount to 78¢ per thousand pieces. We will require 31,892.86 pounds of copper and 1,762.50 pounds of zinc. At 24¢ a pound for copper and 10¢ a pound for the zinc, the metal cost will be \$7,654.29 and \$176.25, respectively, or a total metal cost of \$7,830.54. The copper required is calculated at standard weight and wastage in the metal is included in the manufacturing charges. The zinc has been calculated on a 5% excess weight to compensate for volatilization.

The cost of metals and charges for manufacturing will amount to \$15,630.54. 1000 pieces of this coin, therefore, will cost \$1.56. On the basis of 500 Hwan to the dollar, this coin has a monetary or face value of 1¢. 1000 pieces have a value of \$10; therefore, there is a profit to your Government above the manufacturing cost and the metals of \$8.44 per 1000 pieces (\$10 minus \$1.56). One pound of this alloy will produce 297 coins having a monetary value of \$2.97. The cost of one pound of this alloy is approximately 23¢, thus leaving a wide margin for the increase in the price of metals before it is profitable to melt the coin for its metal content. We propose to put 40,000 pieces of the 5 Hwan denomination in a packing box, which would require 250 boxes for 10 million pieces.

### 10 HWAN

The proposed alloy of this coin is 95% copper, 5% zinc, and 1% tin. While new this coin will have a copper-brass color but after a period of time, particularly in circulation, it will turn a bronze color. This is practically the same alloy used in the United States one-cent piece. The proposed coin will weigh 38 grains and will have a diameter of .793 inch or 20.142 millimeters. There will be approximately 184 coins per pound of weight. The weight tolerance will be plus or minus two grains.

The estimated manufacturing cost on these coins will amount to 85¢ per thousand pieces. We will require 51,571.42 pounds of copper and 2,850 pounds of zinc. At 24¢ a pound for copper and 10¢ a pound for the zinc, the metal cost will be \$12,377.14 and \$285, respectively, or a total metal cost of \$12,662.14. The copper required is calculated at standard weight and wastage in the metal is included in the manufacturing charges. The zinc has been calculated on a 5% excess weight to compensate for volatilization.

The cost of metals and charges for manufacturing will amount to \$21,162.14. 1000 pieces of this coin, therefore, will cost \$2.12. On the basis of 500 Hwan to the dollar, this coin has a monetary or face value of 2¢. 1000 pieces have a value of \$20; therefore, there is a profit to your Government above the manufacturing cost and the metals of \$17.88 per thousand pieces (\$20 minus \$2.12). One pound of this alloy will produce 184 coins having a monetary value of \$3.68. The cost of one pound of this alloy is approximately 23¢, thus leaving a wide margin for the increase in the price of metals before it is profitable to melt the coin for its metal content. We propose to put 20,000 pieces of the 10 Hwan denomination in a packing box, which would require 500 boxes for 10 million pieces.

## 50 HWAN

The proposed alloy of this coin is 70% copper, 18% zinc, and 12% nickel. This makes a white coin of a durable alloy. It substitutes zinc as a whitening metal in place of nickel, thus making a cheaper alloy as the present price of zinc is 10¢ a pound whereas the present price of nickel is 79½¢ a pound. The proposed coin will weigh 57 grains and will have a diameter of .900 inch or 22.860 millimeters. There will be approximately 122 coins per pound of weight. The weight tolerance will be plus or minus three grains.

The estimated manufacturing cost on these coins will amount to \$1.85 per thousand pieces. We will require 57,000 pounds of copper, 15,390 pounds of zinc, and 9,771.43 pounds of nickel. At 24¢ a pound for copper, 10¢ a pound for the zinc, and 79½¢ a pound for the nickel, the metal cost will be \$13,680, \$1,539, and \$7,768.29, respectively, or a total metal cost of \$22,987.29. The copper and nickel required is calculated at standard weight and wastages in these metals are included in the manufacturing charges. The zinc has been calculated on a 5% excess weight to compensate for volatilization.

The cost of metals and charges for manufacturing will amount to \$41,487.29. 1000 pieces of this coin, therefore, will cost \$4.15. On the basis of 500 Hwan to the dollar, this coin has a monetary or face value of 10¢. 1000 pieces have a value of \$100; therefore, there is a profit to your Government above the manufacturing cost and the metals of \$95.85 per 1000 pieces (\$100 minus \$4.15). One pound of this alloy will produce 122 coins having a monetary value of \$12.20. The cost of one pound of this alloy is approximately 29¢, thus leaving a wide margin for the increase in the price of metals before it is profitable to melt the coin for its metal content. We propose to put 12,000 pieces of the 50 Hwan denomination in a packing box, which would require 834 boxes for 10 million pieces.

<sup>1</sup> Lovmo, Mark. *South Korean Coins in the Era of Development*, iAsure, 2022.

<sup>2</sup> Korea Minting and Security Printing Corporation, *Korea Minting and Security Printing Corporation 40-Year History* [韓國造幣公社四十年史 / 한국조폐공사 40 년사], (Daejeon: KSPMC, 1991) 116; and “Export-led Industrialization of South Korea(50min),” *대한민국역사박물관* (National Museum of Korean Contemporary History), [www.youtube.com/watch?v=ozZIOQ1Qerc&t=314s](http://www.youtube.com/watch?v=ozZIOQ1Qerc&t=314s), Accessed 13 Jun 2024.

<sup>3</sup> NARA-CP, RG104, Entry 328-F, box 10, Korea-Establishment of new coinage system and coinage. Telegram dated June 13, 1959 to Department of State from American Embassy, Seoul.

<sup>4</sup> *Korea Minting and Security Printing Corporation 40-Year History*, 116.

<sup>5</sup> Kim Jun-kyung and Kim K.S. “Impact of foreign aid on Korea’s development,” (Seoul: Korea Development Institute, 2012).

<sup>6</sup> Kim Du-gyeong. *Korean Currency after the Japanese Imperial and Liberation Eras* [日帝時代 및 解放以後 韓國의 貨幣 / 일제시대 및 해방 이후 한국의 화폐], (Seoul: Bank of Korea, 2004) 56.

<sup>7</sup> NARA-CP, RG104, Entry 328-F, box 10, Korea - Establishment of New Coinage System and Coinage. Letter dated July 26, 1956 to William H. Brett, Director of the Mint from Rae V. Biester, Superintendent of the Philadelphia Mint.

The above letter, and all the following U.S. Mint sources for this research, unless otherwise cited, are from box 10 of this source, below:

National Archives College Park, Records of the U.S. Mint, Record Group 104, Entry 328-F, Case Files on Foreign Coins, 1874-1980.

<sup>8</sup> Letter dated February 21, 1958 to Chan-sup Lee, Assistant Representative Bank of Korea New York, from Leland Howard, Assistant Director of the Mint, 5.

<sup>9</sup> “To be named Assistant Director of Mint. Washington, D.C., March 23. Dr. Frank Leland Howard, 31, former economics instructor at the University of Virginia, will be appointed Assistant Director of the U.S. Mint to succeed Miss Mary M. O'Reilly, who retired in October, it has been Learned. Dr. Howard has been serving as Assistant Director since last December 15. 3-23-39.” NARA—Harris & Ewing photograph collection. [Online version, [www.loc.gov/pictures/item/2016875308/](http://www.loc.gov/pictures/item/2016875308/), National Archives and Records Administration, March 3, 2024.]

<sup>10</sup> Roger W. Burdette. “The roles of Mint Director and Assistant Mint Director.” *Collectors Universe*, 23 Nov 2016, [forums.collectors.com/discussion/972272/the-roles-of-mint-director-and-assistant-director](https://forums.collectors.com/discussion/972272/the-roles-of-mint-director-and-assistant-director). Burdette explains in this source that much of this information on Leland Howard comes from Burdette’s own examination of more than a thousand pages of the personal papers of Ednes Wilkins, Mint Director Nellie Tayloe Ross’ private secretary.

<sup>11</sup> Ibid.

<sup>12</sup> Letter dated February 21, 1958 to Chan-sup Lee, Assistant Representative Bank of Korea New York, from Leland Howard, Assistant Director of the Mint.

<sup>13</sup> Ibid.

<sup>14</sup> Ibid 2.

<sup>15</sup> NARA-CP, RG104, Entry 328-F, box 10, Korea-Establishment of new coinage system and coinage. American Embassy Seoul Despatch dated June 9, 1959 from Robert W. Tucker, First Secretary of the Embassy.

<sup>16</sup> Letter dated February 21, 1958 to Howard to Chan-sup Lee 2.

<sup>17</sup> Ibid 2.

<sup>18</sup> Letter dated April 22, 1958 to Leland Howard from Won H. Chung, Representative Bank of Korea.

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- <sup>19</sup> Letter dated May 8, 1958, Howard to Chung.
- <sup>20</sup> 31 U.S. Code § 5111 - Minting and issuing coins, medals, and numismatic items. *Legal Information Institute*, Cornell Law School, [www.law.cornell.edu/uscode/text/31/5111](http://www.law.cornell.edu/uscode/text/31/5111).
- <sup>21</sup> Memorandum dated September 10, 1958 to Paul S. Heckman, Acting Superintendent of the Mint from J.L. Meyer, Assistant Superintendent of the Melting and Refining Division.
- <sup>22</sup> Letter dated September 16, 1958 to Won H. Chung Representative Bank of Korea from William H. Brett, Director of the Mint.
- <sup>23</sup> Letter dated September 24, 1958 Brett to Chung.
- <sup>24</sup> Letter dated November 3, 1958, Chung to Howard.
- <sup>25</sup> Letter dated September 25, 1958, Chung to Howard.
- <sup>26</sup> Ibid.
- <sup>27</sup> Jo Byeongsu, *Jo Byeongsu's Story of Money: Korean Commemorative Coins* [ 우리나라 記念鑄貨 Korean Commemorative Coins : 조병수의 돈 이야기 ]. (Seoul: Ohsung K&C, 2006), 199. Images of the three coin sketches appear on this page, while other sketches from what appears to be earlier or alternate designs for the 50-Hwan, 10-Hwan, Five-Hwan and One-Hwan are on page 201 of this book.
- <sup>28</sup> Letter dated January 22, 1959, Chung to Howard.
- <sup>29</sup> Letter dated September 25, 1958, Chung to Howard.
- <sup>30</sup> Ibid.
- <sup>31</sup> Letter dated September 30, 1958 to Superintendent of the Philadelphia Mint Rae V. Biester from the Director of the Mint, William H. Brett.
- <sup>32</sup> Letter dated October 3, 1958 to Paul S. Heckman, Assistant Superintendent of the Philadelphia Mint from the Superintendent of the Coining Division, Sydney C. Engel.
- <sup>33</sup> Letter dated October 13, 1958 to Won H. Chung, Representative Bank of Korea from Director of the Mint, William H. Brett.
- <sup>34</sup> Letter dated October 31, 1958 to Won H. Chung from Director of the Mint, William H. Brett.
- <sup>35</sup> Ibid.
- <sup>36</sup> Letter dated November 3, 1958 to Assistant Director of the Mint, Leland Howard from Won H. Chung.
- <sup>37</sup> Letter dated November 26, 1958 to Won H. Chung, Representative Bank of Korea from Director the Mint, William H. Brett.
- <sup>38</sup> Letter dated December 2, 1958 to Won H. Chung, Representative Bank of Korea from Acting Director the Mint, Leland Howard.
- <sup>39</sup> Letter dated December 11, 1958 to Won H. Chung, Representative Bank of Korea from Director the Mint, William H. Brett.
- <sup>40</sup> "Economy Rotary [經濟 (경제) 로타리]," *Kyonghyang Shinmun*, 27 November 1958.
- <sup>41</sup> Letter dated September 30, 1958, Brett to Biester.
- <sup>42</sup> Letter dated December 2, 1958, Howard to Chung. See also: Memorandum, "Korean Coinage," dated November 26, 1958 from R.R. Reed.
- <sup>43</sup> This is from Howard's handwritten notation dated "11/26/58" at the end of the last page of the Letter dated September 25, 1958, Chung to Howard.
- <sup>44</sup> Letter dated December 30, 1958, Chung to Howard.
- <sup>45</sup> Letter dated January 16, 1959 to the Director of the Mint, William H. Brett from Superintendent of the Philadelphia Mint Rae V. Biester.
- <sup>46</sup> Letter, with attached page 2, dated January 16, 1959 to Assistant Director the Mint, Leland Howard from Won H. Chung, Representative Bank of Korea.

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- 47 Ibid.
- 48 Ibid.
- 49 Ibid.
- 50 Letter dated February 11, 1959 to Superintendent of the Philadelphia Mint Rae V. Biester from Won H. Chung. The Seoul Headquarters of the Bank of Korea would return these revised (Version 2) 10-Hwan plasters to the U.S. Mint for safekeeping the following Month, in March 1959. See: Letter dated March 18, 1959, Chung to Howard.
- 51 Letter dated January 22, 1959 to Won H. Chung, Representative Bank of Korea from Acting Director the Mint, Leland Howard.
- 52 Letter dated March 18, 1959, Chung to Howard.
- 53 File Memorandum dated March 13, 1959 from Mr. Hollyfield.
- 54 Bank of Korea Law (Law No. 138), May 1950, art. 49 and art. 54, (Republic of Korea). Article 49 reads, “*The Bank of Korea, with the approval of the Government, may issue currencies of any standard and shape, as prescribed by the Monetary Policy Board.*” Article 54 specifically concerned the issue of coins and stated simply, and in part, “*The Bank of Korea may issue coins in the Republic of Korea with the approval of the Government.*”
- 55 “50-Hwan · 10-Hwan Coins Issued from August 15th, Bank of Korea Ordered [8.15 부터 주화발행 50 환 · 10 환권, 한국은행에 지시],” *Dong-A Ilbo*, 16 May 1959.
- 56 Letter dated May 18, 1959 to Assistant Director the Mint, Leland Howard from Won H. Chung, Representative Bank of Korea.
- 57 Telegram dated May 20, 1959, to Bank of Korea Representative, New York from the Bank of Korea, Seoul.
- 58 Yi Nae-hwang. *Republic of Korea Currency Post-1950 Bank of Korea Establishment* [1950 년 한국은행 창립 이후 대한민국 의 화폐]. Bank of Korea, 2010, 44.
- 59 Letter dated May 25, 1959, Chung to Howard.
- 60 Letter dated May 26, 1959, Chung to Howard.
- 61 Letter dated May 26, 1959, to Director of the Mint, William H. Brett from Paul S. Heckman, Acting Superintendent of the Philadelphia Mint.
- 62 Letter dated May 28, 1959, Brett to Biester.
- 63 Letter dated May 28, 1959, Howard to Chung. Howard wrote, “*we understood from your letter dated March 18, 1959 that the plaster models had been approved.*” The approved designs Howard is referring to here is the “ear of rice” design, Version 2.
- 64 Letter dated May 26, 1959, Heckman to Brett.
- 65 Yi 44.
- 66 Letter dated June 2, 1959, Chung to Howard.
- 67 Letter dated June 11, 1959, Chung to Howard.
- 68 Jo 200.
- 69 Ibid.
- 70 Lovmo, 49. See: Yi Bumho, “Obverse ‘Bank of Korea,’ Reverse ‘Republic of Korea’ [앞면은 “한국은행,” 뒷면은 “Republic of Korea”],” Issue Planning Team, Bank of Korea, 2002, [www.bok.or.kr/portal/bbs/P0000547/view.do?nttId=24198&menuNo=200387&pageIndex=5](http://www.bok.or.kr/portal/bbs/P0000547/view.do?nttId=24198&menuNo=200387&pageIndex=5) Accessed 12 May 2024.
- 71 Ibid. Yi (Bank of Korea, 2002) also highlights the fact that it is unusual for the name of the country (Republic of Korea) to be added to coins issued in South Korea. The central bank is South Korea’s legal issuing authority for both banknotes and coins. Therefore, the title “Bank of Korea” appears on all South Korean currency and coins; sometimes in English writing, but always in *hangul*, (as “한국은행”) since this text is legally required. Yi points out that the name of the issuing authority for coins in Korea is not the name of the government, as it is in Japan and the

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United States. Based on these facts, it appears that placing the official name of the country on South Korean coins, even if expressed in non-Korean writing, is unnecessary, if not heterodox.

<sup>72</sup> Lovmo, 46-47.

<sup>73</sup> Letter dated June 17, 1959, Biester to Brett.

<sup>74</sup> Handwritten note from Frederick W. Tate attached to Letter dated June 24, 1959, Biester to Brett.

<sup>75</sup> Letter dated June 24, 1959, to the Secretary of the Treasury from the Secretary of the State Department.

<sup>76</sup> Letter dated June 22, 1959, Brett to Chung.

<sup>77</sup> *Foreign Coinage Order, Country: Korea*, dated July 1, 1959. Although this document is dated July 1, 1959, it appears to be a running document in which additional information concerning dates and dollar amounts for the entire Korean coinage project was added in pencil at later dates once the information became known.

<sup>78</sup> Ibid.

<sup>79</sup> Ibid. See also: Letter dated June 11, 1959, Chung to Howard.

<sup>80</sup> Letter dated June 25, 1959, Brett to Biester and Letter dated June 30, 1959, Brett to Chung.

<sup>81</sup> “Delay in Coin Issue Should be Brief, Possibly Only Partial [鑄貨發行遲延(주 화발행 지연) 빨라야一部(일부)만可能(가능)],” *Dong-A Ilbo*, 24 July 1959, 2.

<sup>82</sup> Letter dated June 22, 1959, Brett to Chung.

<sup>83</sup> Letter dated July 13, 1959, Brett to Biester.

<sup>84</sup> Letter dated June 23, 1959, Heckman to Brett.

<sup>85</sup> Letter dated June 25, 1959, Brett to Biester.

<sup>86</sup> Letter dated July 13, 1959, Brett to Biester.

<sup>87</sup> 31 U.S. Code § 5111 - Minting and issuing coins, medals, and numismatic items. *Legal Information Institute*, Cornell Law School, [www.law.cornell.edu/uscode/text/31/5111](http://www.law.cornell.edu/uscode/text/31/5111).

<sup>88</sup> Letter dated June 30, 1959, Brett to Chung.

<sup>89</sup> Letter dated July 21, 1959, Chung to Brett. In this letter, Chung refers to two Philadelphia Mint artists: “Mr. Roberts and his associate.” Although he does not name the “associate,” Chung is almost certainly referring to the engraver, Engelhardus von Hebel, whose initials appear on the obverse of the 100-Hwan coin.

<sup>90</sup> Letter dated July 2, 1959, Chung to Heckman.

<sup>91</sup> Ibid.

<sup>92</sup> Letter dated June 30, 1959, Brett to Chung.

<sup>93</sup> Letter dated July 21, 1959, Chung to Brett.

<sup>94</sup> Letter dated August 4, 1959, to the U.S. Secretary of State from Korean Ambassador Yang You-chan.

<sup>95</sup> Letter dated July 21, 1959, Chung to Brett.

<sup>96</sup> Letter dated July 27, 1959, Brett to Biester.

<sup>97</sup> Memorandum, *State approval of Korean coinage*, dated August 10, 1959, from Frederick W. Tate to Files and Letter dated August 10, 1959, to the Secretary of the Treasury from the Secretary of the State Department.

<sup>98</sup> Letter dated July 2, 1959, Chung to Brett and Letter dated July 21, 1959, Chung to Brett.

<sup>99</sup> Letter dated July 31, 1959, Brett to Chung.

<sup>100</sup> Letter dated September 21, 1959, Chung to Brett.

<sup>101</sup> Enclosure: *Bill for Collection*, to the Bank of Korea, New York Office from United States Mint at Philadelphia, attached to Letter dated August 6, 1959, Biester to Chung.

<sup>102</sup> Letter dated August 13, 1959, Brett to Biester.

<sup>103</sup> Memorandum, *Korean Coinage*, dated August 13, 1959, from Ben C. Hollyfield to Files.

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- <sup>104</sup> Letter dated August 12, 1959, Chung to Brett.
- <sup>105</sup> Letter dated August 19, 1959, Chung to Brett.
- <sup>106</sup> Enclosure: *Collection Voucher*, dated August 26, 1959 to the Bank of Korea, New York Office from United States Mint at Philadelphia, attached to Letter dated August 27, 1959, Heckman to Chung.
- <sup>107</sup> Letter dated June 22, 1959, Brett to Chung.
- <sup>108</sup> Letter dated September 8, 1959, Chung to Brett.
- <sup>109</sup> Memorandum, *Korean Coinage*, dated September 23, 1959, from Phillip B. Neisser to Files.
- <sup>110</sup> Letter dated September 23, 1959, Chung to Biester.
- <sup>111</sup> Letter dated September 21, 1959, Chung to Brett.
- <sup>112</sup> Memorandum, *Korean Coinage*, dated September 23, 1959, from Phillip B. Neisser to Files.
- <sup>113</sup> Letter dated September 25, 1959, Brett to Biester.
- <sup>114</sup> Letter dated September 25, 1959, Brett to Chung.
- <sup>115</sup> Ibid.
- <sup>116</sup> Letter dated September 24, 1959, Chung to Brett.
- <sup>117</sup> Letter dated September 25, 1959, Brett to Chung.
- <sup>118</sup> Letter dated September 29, 1959, Brett to Biester.
- <sup>119</sup> Ibid.
- <sup>120</sup> Letter dated October 6, 1959, Chung to Biester.
- <sup>121</sup> Letter dated October 12, 1959, Brett to Chung.
- <sup>122</sup> Letter dated October 6, 1959, Chung to Brett.
- <sup>123</sup> Letter dated October 12, 1959, Brett to Chung.
- <sup>124</sup> Letter dated October 6, 1959, Chung to Brett.
- <sup>125</sup> “From the 20th Coins Appear [20 日(일)부터鑄貨(주화)쓰기로],” *Dong-A Ilbo*, 15 October 1959.
- <sup>126</sup> “『Coins on the Street』 [『거리에나온銅(동전)』],” *Dong-A Ilbo*, 21 Oct. 1959.
- <sup>127</sup> Letter dated October 21, 1959, Chung to Brett.
- <sup>128</sup> *Dong-A Ilbo*, 15 October 1959.
- <sup>129</sup> Kim Myung-hwan, “Kim Myung-hwan's time travel [82] The first coin exploded in popularity among students... For both Christmas gifts and New Year's money, coins are ranked ‘0’,” *Chosun Ilbo*, 9 Aug. 2017, [www.chosun.com/site/data/html\\_dir/2017/08/08/2017080803193.html](http://www.chosun.com/site/data/html_dir/2017/08/08/2017080803193.html), Accessed 22 June 2024.
- <sup>130</sup> “Popular Coins’ Entire Quantity Exchanged on the First Day of Issuance [人氣(인기)있는銅(동전)發行(발행)첫날中(중)으로 在庫量全部交換(재고량전부교 환)],” *Dong-A Ilbo*, 22 Oct. 1959.
- <sup>131</sup> *Dong-A Ilbo*, 21 Oct. 1959.
- <sup>132</sup> “Coin-Operated Public Telephones from November [公衆電話改備(공중전화개비) 鑄貨投入(주화투입)토록 十一月(십일월)부터];” *Dong-A Ilbo*, 11 October 1959.
- <sup>133</sup> *Dong-A Ilbo*, 21 Oct. 1959.
- <sup>134</sup> Details about ocean transport rates are found in several letters. It appears that the Korean government decided to work with ocean transportation services provided by the U.S. General Services Administration (GSA) using ships of the Eastern Freight Conference and was eventually quoted maritime transport rates of \$89 USD per short ton and had figured out methods of drayage to the docks at Philadelphia: Letter dated October 27, 1959, from Chung to Brett; Letter dated December 9, 1959, Chung to Brett; and Letter dated December 23, 1959, Howard to Chung.

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- 135 Letter dated November 10, 1959, Chung to Brett.
- 136 Telegram dated December 11, 1959, to Secretary of State and the Secretary of Treasury from Ambassador Walter Patrick McConaughy, Jr. American Embassy, Seoul.
- 137 Ibid.
- 138 Lovmo, 51. From: "Politics Scoop [政界(정계)스캔]," *Dong-A Ilbo*, 23 Nov. 1959.
- 139 "Discontinuous Line of 1959 (11) Coin Issuance [1959 年(년)의 不連續線(불연속선) (11) 鑄貨發行(주화발행)]," *Dong-A Ilbo*, 29 Dec. 1959.
- 140 "Currency Reform Myth [貨幣改革(화폐개혁)이 浪說(낭설)]," *Dong-A Ilbo*, 4 September 1959.
- 141 *Dong-A Ilbo*, 29 Dec. 1959.
- 142 Letter dated November 10, 1959, Chung to Brett.
- 143 Memorandum, *Financial planning – coinage operations*, dated November 10, 1959, from Ben C. Hollyfield to Files.
- 144 Ibid. See also: Letter dated December 2, 1959, Brett to Chung.
- 145 Letter dated November 20, 1959, Brett to Chung, and Letter dated December 3, 1959, Brett to Chung.
- 146 Letter dated December 9, 1959, Chung to Brett.
- 147 Letter dated November 20, 1959, Brett to Chung.
- 148 Letter dated December 15, 1959, Brett to Chung. If 1,244 boxes each contained 20,000 pieces, this third shipment of 10-Hwan coins actually totaled 24,880,000 pieces, or just under 25 million. The total number of 10-Hwan coins struck in calendar year 1959, according to the total number of coins in the three shipments described in the U.S. Mint's file on South Korea's coinage order, should equal 26,380,000. However, the *Annual Report of the Director of the Mint* reports a total 1959 mintage of 22,980,000 pieces for the 10-Hwan. These discrepancies may be partly explained by the timing of a coin inventory that was used for the *Annual Report*. This is only the author's hypothesis, for he does not have enough information to account for the differences in the totals listed above. See: *Annual Report of the Director of the Mint for Fiscal Year Ended June 30, 1960*. United States Mint, U.S. G.P.O., 1960, 78.
- 149 Letter dated November 20, 1959, Brett to Chung.
- 150 Telegram dated December 11, 1959, Ambassador McConaughy to Secretary of State and the Secretary of Treasury.
- 151 Memorandum dated January 11, 1960, from Treasury Department, Philadelphia, 2.
- 152 Letter dated January 20, 1960, Brett to Chung.
- 153 Letter dated January 21, 1960, Biester to Brett.
- 154 "Ten-Hwan Coin Bulk Shipment [十圓(십환)동전 大量入荷(대량입하)]," *Dong-A Ilbo*, 13 February 1960.
- 155 Telegram dated February 17, 1960, to American Embassy, Seoul from Secretary of State.
- 156 Ibid.
- 157 *Foreign Coinage Order, Country: Korea*, dated July 1, 1959.
- 158 Letter dated April 6, 1960, Heckman to Brett.
- 159 Letter dated August 17, 1960, Chung to Brett.
- 160 Enclosure to letter dated September 25, 1959, Brett to Biester, page 3.
- 161 U.S. Treasury Department, U.S. Mint Service Forms 1080 and 1080-A, *Foreign Coinage Costs - Description of Coinage: Korea* (denominations: 10 Hwan Order No. 79; 50 Hwan Order No. 80; 100 Hwan Order No. 81), dated October 21, 1960.
- 162 "Unused Coins [쓰이지않는 銅錢(동전)]," *Dong-A Ilbo*, 14 August 1960, 3.

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- 163 “U.S. Coin Circulation: The Path Forward,” The Federal Reserve Financial Services, October 2022. [www.frbservices.org/binaries/content/assets/crsocms/financial-services/cash/101322-us-coin-supply-chain-final-report.pdf](http://www.frbservices.org/binaries/content/assets/crsocms/financial-services/cash/101322-us-coin-supply-chain-final-report.pdf). Accessed 16 Jul 2024.
- 164 Kim Du-gyeong, 56. By the end of 1960 the coins in circulation amounted to almost 1.7 billion *hwan*, and at the end of 1961 the amount had risen to 5.7 billion *hwan*.
- 165 Letter dated November 10, 1959, Chung to Brett.
- 166 Letter dated March 29, 1960, Chung to Brett.
- 167 Attachment to Letter dated April 20, 1960, Biester to Brett; and Letter dated May 3, 1960, Howard to Chung.
- 168 Letter dated May 3, 1960, Howard to Chung.
- 169 Lovmo 52. From: Seth, Michael J. *A Concise History of Korea: from the late nineteenth century to the present*, (Lanham : Rowman & Littlefield, 2010) 153.
- 170 “Permission to Issue New Coins, Syngman Rhee’s Portrait is Used for the Time Being [新貨發行許可 (신화발행허가) 李承晩(이승만) 씨肖像(초상)는 貨幣當分間併用(화폐당분 간병용)],” *Dong-A Ilbo*, 19 March 1961, 3.
- 171 “Korea to Issue new Banknotes,” *Journal of Commerce*, 14 July 1960, 11. This article was cut out and a copy placed in the U.S. Mint’s files on Korea soon after the article’s publication.
- 172 Letter dated August 17, 1960, Chung to Brett.
- 173 Letter dated January 26, 1961, Chung to Brett.
- 174 U.S Treasury Department, U.S. Mint Service Forms 1080 and 1080-A, *Foreign Coinage Costs - Description of Coinage: Korea* (denominations: 10 Hwan and 50 Hwan), February 2, 1961, attached to letter dated February 6, 1961, Biester to Howard. The Bank of Korea’s notice of change in mintage from 50 million to 20 million for the 50-Hwan is found in Letter dated February 14, 1961, Chung to Howard.
- 175 U.S Treasury Department, U.S. Mint Service Forms 1080 and 1080-A, *Foreign Coinage Costs - Description of Coinage: Korea* (denominations: 10 Hwan and 50 Hwan), February 24, 1961, attached to letter dated February 24, 1961, Biester to Howard.
- 176 Letter dated March 13, 1961, Howard to Chung.
- 177 Letter dated March 30, 1961, Chung to Howard.
- 178 Letter dated April 6, 1961
- 179 Undated handwritten memo, Ben C. Hollyfield to Mr. Reed; attached to the front of Letter dated March 30, 1961, Chung to Howard.
- 180 Undated handwritten memo, Frederick W. Tate to Mr. Reed; attached to the front of Letter dated March 30, 1961, Chung to Howard.
- 181 Letter dated May 1, 1961, Howard to Chung.
- 182 Undated handwritten note, no author (possibly Leland Howard), attached to Letter dated May 1, 1961, Howard to Chung.
- 183 Bill No. ARP 61-77 (Standard Form No. 1114e) Collection Voucher, dated May 5, 1961, from United States Mint at Philadelphia to The Bank of Korea, New York Office, attached to Letter dated May 9, 1961, Howard to Chung.
- 184 Lovmo 21-24.
- 185 Letter dated May 16, 1961 to Leland Howard, Assitant Director of the Mint from C.Y. Kim, Representative Bank of Korea.
- 186 Letter dated May 29, 1961, C.Y. Kim to Howard.
- 187 The start of coinage for the 25 million 10-Hwan coins is from Letter dated June 20, 1961, Howard to Biester; the delivery date is from Letter dated July 13, 1961, Howard to C.Y. Kim.

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- <sup>188</sup> U.S. Treasury Department, U.S. Mint Service Forms 1080 and 1080-A, *Foreign Coinage Costs - Description of Coinage: Korea* (denomination: 10 Hwan, Order No. 59), October 11, 1961, attached to letter dated October 12, 1961, Biester to Howard, and Letter dated July 13, 1961, Howard to C.Y. Kim. The “Coiner” that is referenced here is Sydney C. Engel, Chief Coiner at the Philadelphia Mint.
- <sup>189</sup> Letter dated October 26, 1961, Howard to C.Y. Kim. This is the very last document signed by Leland Howard in the U.S. Mint’s Korea File. Upon Eva Adams taking the office of Mint Director at exactly this same time, Mr. Howard left the U.S. Mint to work at the Treasury Department’s Office of Domestic Gold and Silver Operations.
- <sup>190</sup> Handwritten note dated November 24, 1961, *Korea Coinage*, no author (possibly Leland Howard), to Files.
- <sup>191</sup> Bill No. ARP 62-32 (Standard Form No. 1114e) Collection Voucher, dated November 29, 1961, from United States Mint at Philadelphia to The Bank of Korea, New York Office, attached to Letter dated November 29, 1961, to H.M. Lee, Representative, Bank of Korea from Superintendent of the Philadelphia Mint, Rae V. Biester. See also: Letter dated January 10, 1962, from to Eva B. Adams, Director of the United States Mint to H.M. Lee, Representative, Bank of Korea.
- <sup>192</sup> Letter dated November 3, 1961, from H.M. Lee, Representative, Bank of Korea to Leland Howard, Assistant Director of the United States Mint.
- <sup>193</sup> Letter dated November 29, 1961, from H.M. Lee, Representative, Bank of Korea to Eva B. Adams, Director of the United States Mint.
- <sup>194</sup> Letter dated December 18, 1961, to Eva B. Adams, Director of the United States Mint from Michael H. Sura, Superintendent of the Philadelphia Mint.
- <sup>195</sup> Letter dated January 10, 1962, Adams to H.M. Lee.
- <sup>196</sup> U.S. Treasury Department, U.S. Mint Service Form 1080, *Foreign Coinage Costs, Revised - Description of Coinage: Korea* (denomination: 10 Hwan, Order No. 69 and 50 Hwan, Order No. 70), May 22, 1962, attached to letter dated May 25, 1962, Sura to Adams.
- <sup>197</sup> Letter dated January 27, 1961, Chung to Brett.
- <sup>198</sup> Memorandum, *Korean Coinage*, dated February 8, 1961, Philip B. Neisser to Files.
- <sup>199</sup> Handwritten notation on Letter dated February 23, 1961, Biester to Howard.
- <sup>200</sup> Lovmo 52, from: “Permission to Issue New Coins, Syngman Rhee’s Portrait is Used for the Time Being [新貨發行許可(新화발행허가) 李承晩(이승만) 씨肖像(초상)는 貨幣當分間併用(화폐당분 간병용)],” *Dong-A Ilbo*, 19 March 1961, 3.
- <sup>201</sup> “Change-Coin Famine [잔돈기근],” *Kyunghyang Shinmun*, 11 April 1962, 2.
- <sup>202</sup> Letter dated April 13, 1962, H.M. Lee to Adams.
- <sup>203</sup> Ibid.
- <sup>204</sup> U.S. Treasury Department, U.S. Mint Service Forms 1080 and 1080-A, *Foreign Coinage Costs - Description of Coinage: Korea* (denomination: 100 Hwan; 70 grains, 75 grains, and 77 grains), April 27, 1962, attached to letter dated May 1, 1962, Sura to Adams.
- <sup>205</sup> Letter dated May 8, 1962, Adams to H.M. Lee.
- <sup>206</sup> Emergency Currency Measure [긴급통화조치법] (Law No. 1088), 10 June 1962, art. 2, (Republic of Korea).
- <sup>207</sup> Lovmo 52-55. From: “From the 1953 Emergency Currency Measure to the 1962 Emergency Currency Measure [1953 년 긴급통화조치부터 1962 년 긴급통화조치 이전까지],” *Bank of Korea*, [www.bok.or.kr/portal/main/contents.do?menuNo=200381](http://www.bok.or.kr/portal/main/contents.do?menuNo=200381). Accessed 13 Nov 2019.
- <sup>208</sup> Lovmo 52-55. From: Kim Du-gyeong. *Korean Currency after the Japanese Imperial and Liberation Eras* [日帝時代 解放以後 韓國의 貨幣 / 일제시대 및 해방 이후 한국의 화폐], (Seoul: Bank of Korea, 2004) 56. Although 50 million was their total mintage, the approximate amount of 37 million pieces was the Bank of Korea’s last calculation of the 100-Hwan coins circulating in the Korean economy at the end of 1961.
- <sup>209</sup> Lovmo, 52-55.

- 210 Ibid.
- 211 Ibid.
- 212 Emergency Currency Measure [긴급통화조치법] (Law No. 1088), 10 June 1962, art. 26, (Republic of Korea).
- 213 “Hey Coins...Goodbye [“銅錢(동전)이여...안녕”],” *Dong-A Ilbo*, 10 July 1962, 3.
- 214 Lovmo, 52-55. See also: *Kyunghyang Shinmun*, 11 April 1962. This *Kyunghyang Shinmun* article states that just before the currency reform, at the end of March 1962, the total amount of money (M1) actually circulating was 177.5 billion *hwan*, of which 93% was composed of the higher-value 1,000-Hwan and 500-Hwan banknotes, while 7% were coins and currency in values of 100-Hwan or less. The article further states that the year before, in January 1961, the currency ratio was 80% for the larger-denomination banknotes, and 20% for the smaller-denomination currency and coins.
- 215 Ibid.
- 216 Ibid.
- 217 The start of this plan to order coins in the new *won*-denomination from the U.S. Mint began at the very end of July 1962, just after the junta government ordered the 50-Hwan and 10-Hwan coins to be pulled out of circulation in Korea. See: Letter dated July 31, 1961, H.M. Lee to Adams.
- 218 Temporary Measures Law on the Circulation of Coins [주화의통용에관한임시조치법] (Law No. 1132), 28 Aug 1962, (Republic of Korea).
- 219 From the 1953 Emergency Currency Measure to the 1962 Emergency Currency Measure [1953 년 긴급통화조치부터 1962 년 긴급통화조치 이전까지],” *Bank of Korea*.
- 220 Abolition of Temporary Measures Law on the Circulation of Coins [주화의통용에관한임시조치법 폐지법률] (Law No. 2689), enacted 21 Dec 1974; enforced 22 March 1975, (Republic of Korea). See also: Korea Minting and Security Printing Corporation, *Korea Minting and Security Printing Corporation 40-Year History* [韓國造幣公社四十年史 / 한국조폐공사 40 년사], (Daejeon: KSPMC, 1991) 228-229.
- 221 The author owes a debt of gratitude to Dick Johnson and Wayne Homren (editor of the E-Sylum) for providing this information. See Johnson’s response to the author’s query at an online forum: “U.S. MINT ENGRAVER ENGELHARDUS VON HEBEL,” The E-Sylum: Volume 17, Number 49, Article 17, [www.coinbooks.org/esylum\\_v17n49a17.html](http://www.coinbooks.org/esylum_v17n49a17.html), 30 Nov. 2014. Accessed 20 December 2014. See also: Pete Smith, *American Numismatic Biographies*, Newman Numismatic Portal, [nnp.wustl.edu/library/book/304](http://nnp.wustl.edu/library/book/304), 2012, 347.
- 222 Oh Soonwhan’s comments from: Oh Soonhwan. Personal Interview. 20 June 2019. In his 2006 book, Jo Byongsu states the following about the design and engraving for the *hwan* coins: “These coins, which were made at the United States Philadelphia Mint with its one hundred years of history, are considered to be the best in terms of design and strike among the coins that the Bank of Korea has issued. [이들 주화는 100 여년이 넘는 역사를 가진 미국의 필라델피아 조폐국에서 만들어져 지금까지 발행된 한국은행 주화 중에서 도안이나 인각 상태 등이 가장 훌륭한 것으로 평가를 받고있다].” Quoted at length from Jo, *Korean Commemorative Coins*, 200.
- 223 Gerard von Hebel. “Coinage of the Republic of Korea.” Received by Mark Lovmo, 20 Apr. 2019.
- 224 U.S Treasury Department, U.S. Mint Service Form 1080-A, *Foreign Coinage Costs - Description of Coinage: Korea* (denominations: 50 Hwan Order No. 80 and 100 Hwan Order No. 81), dated October 21, 1960. Staffing shortages affecting reviewing were also found in the second coinage order: U.S Treasury Department, U.S. Mint Service Form 1080-A, *Foreign Coinage Costs - Description of Coinage: Korea* (denomination: 50 Hwan Order No. 70), dated May 4, 1962.
- 225 Form 1080-A, (denomination: 50 Hwan Order No. 80) dated October 21, 1960.
- 226 Form 1080-A, (denomination: 50 Hwan Order No. 70) dated May 4, 1962.
- 227 Form 1080-A, (denomination: 50 Hwan Order No. 80) dated October 21, 1960.
- 228 Letter dated August 24, 1962, Sura to Adams.
- 229 Lovmo 55. From: Kim Du-gyeong 77.

- <sup>230</sup> Lovmo 55. From: “New One-Won, Five-Won Coins Coming [1 원 5 원짜리 새鑄貨(주화)나온다],” *Dong-A Ilbo*, 4 May 1965, 7. This is where the figure of 315 metric tons of recycled 100-Hwan coins comes from. See it also mentioned in: Jo, *Korean Commemorative Coins*, 204 and 209. The weight of the entire mintage of 100-Hwan coins is found in: *Domestic and Foreign Coins Manufactured by Mints of the United States, 1793-1980* (see Korea listing).
- <sup>231</sup> Lovmo, 55. From: Korea Minting and Security Printing Corporation, *Korea Minting and Security Printing Corporation 50-Year History* [한국조폐공사 50 년사], (Daejeon: KOMSEP, 2001) 131.
- <sup>232</sup> Lovmo 52. From: Kim Du-gyeong 56.
- <sup>233</sup> Lovmo 52. From: “From November Coin Operated Public Phones [공중전화 개비 주화투입토록 십일월부터],” *Dong-A Ilbo*, 11 October 1959, 3.
- <sup>234</sup> Lovmo 52. From: “Coin Operated Telephone Problems [鑄貨投入電話器異狀(주화투입전화기 이상)],” *Kyungyang Shinmun*, 8 June 1960, 3.
- <sup>235</sup> Lovmo 52. From: Lee BongJea. “Wired Communication History: Public Telephone History [유선통신 역사, 공중전화기 역사],” *Small Pond* [자은 연못], m.blog.naver.com/wkdbdls32/60146853432. Accessed 2 March 2020.
- <sup>236</sup> Ibid. The development of payphones in partnership with Japanese companies in Korea in the early 1960s would mirror South Korea’s later adoption of automatic vending machines in the late 1970s. See: “Development of Automatic Vending Machines [自動(자동)판매기 개발],” *Maeil Kyongjae*, 21 Jun 1978, 6.
- <sup>237</sup> Letter dated October 6, 1959, Chung to Brett.
- <sup>238</sup> Letter dated October 12, 1959, Brett to Chung.
- <sup>239</sup> Letter dated October 31, 1960, Brett to Chung.
- <sup>240</sup> Letter dated December 9, 1960, Chung to Brett.
- <sup>241</sup> Jo Byeongsu 86.
- <sup>242</sup> Letter dated July 8, 1964, to Eva Adams, Director of the U.S. Mint, from Kim Sun Chang, Representative, Bank of Korea.
- <sup>243</sup> Letter dated July 22, 1964, Sura to Kim.
- <sup>244</sup> Letter dated February 17, 1960, Chung to Brett.
- <sup>245</sup> Letter dated February 23, 1960, Howard to Chung.
- <sup>246</sup> Letter dated March 29, 1960, Howard to Chung. Cost estimate is based on: Memorandum, *Proof Coins for the Government of Korea*, dated March 17, 1960, from Daniel J. Costanzo, Cost Accountant to Paul S. Heckman, Assistant Superintendent of the Philadelphia Mint, attached to Letter dated March 24, 1960, Biester to Brett.
- <sup>247</sup> “Vending Machines in Japan,” *att.JAPAN*, 02 Jun. 2023, att-japan.net/en/culture/498/. Accessed 21 Jul 2024. This article states that Japan’s vending industry took off in the late 1950s, adding that “*The pioneering vending machine was a “Fountain-style Juice Dispenser,” a box mounted with a juice fountain. This was an unprecedented success thanks to its fountain performance and a reasonable price of just 10 yen per paper cup. Later, as companies engaging in the vending machine business appeared and beer companies also entered the vending machine industry, the number of vending machines rapidly increased from 240,000 in 1964 to 1 million in 1970. In 1973, the number exceeded 2 million and by 1984 it had reached 5 million.*” See also: Lovmo, 146. From: ““The Age of Coins’ is Here [「鑄貨時代(주화시대)」가 온다],” *Kyonghyang Shinmun*, 6 Oct. 1981, 5. This article shows that the number of vending machines in South Korea numbered 8,800 at the end of October 1980 and would almost double to 16,000 machines by the end of September 1981. At this time, the scale of South Korea’s vending industry was dwarfed by that of Japan’s, which in 1979 had around 4.5 million machines making 2.57 trillion *yen* (over \$11 billion in 1979 USD) in sales, while there were over 8 million vending machines in the United States pulling in \$13 billion in 1979 USD.
- <sup>248</sup> Lovmo, 44 and 346.
- <sup>249</sup> Letter dated July 31, 1961, H.M. Lee to Adams.
- <sup>250</sup> Letter dated August 24, 1962, Sura to Adams.

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- 251 U.S Treasury Department, U.S. Mint Service Forms 1080 and 1080-A, *Foreign Coinage Costs - Description of Coinage: Korea* (denominations: 10 Won, 5 Won and 1 Won), August 28, 1962, attached to letter dated August 28, 1962, Sura to Adams. See also Letter dated September 7, 1962, Adams to H.M. Lee.
- 252 Letter dated September 7, 1962, Adams to H.M. Lee.
- 253 U.S Treasury Department, U.S. Mint Service Forms 1080 and 1080-A, *Foreign Coinage Costs - Description of Coinage: Korea* (denominations: 10 Won, 5 Won and 1 Won), August 28, 1962, attached to letter dated August 28, 1962, Sura to Adams.
- 254 Letter dated October 22, 1962, H.M. Lee to Adams.
- 255 Letter dated October 30, 1962, Sura to Adams.
- 256 U.S Treasury Department, U.S. Mint Service Forms 1080 and 1080-A, *Foreign Coinage Costs - Description of Coinage: Korea* (denominations: 5 Won and 1 Won), November 19, 1962, attached to letter dated November 20, 1962, Sura to Adams. See also attachments (updated forms 1080-A) to Letter dated December 26, 1962, Sura to Adams and Letter dated December 28, 1962, Frederick W. Tate, Acting Director of the Mint to H.M. Lee.
- 257 Letter dated November 28, 1962, to Soung Kyu Park, President of the Government Printing Agency Republic of Korea from Eva Adams, Director of the U.S. Mint.
- 258 Letter (No. 62 68-60) dated December 12, 1962, from Republic of Korea Embassy, Washington D.C. to the Secretary of the U.S. Department of State.
- 259 Letter dated December 26, 1962, Secretary of the U.S. State Department to Republic of Korea Embassy, Washington D.C.
- 260 Letter dated January 2, 1963, H.M. Lee to Tate.
- 261 Letter dated January 4, 1963, Tate to Sura.
- 262 Mint Director Brett's September 16, 1958 letter alone might have convinced the Koreans to postpone the construction of a coining factory in Korea in the late 1950s. Brett's stated that "you could reasonably expect to spend in excess of \$100,000 to make alterations to an existing security building, such as a large bank, to accommodate these items of heavy equipment" to outfit a mint. From Letter dated September 16, 1958, Brett to Chung. Information in Brett's letter prepared by Phillip B. Neisser, Technical Assistant to the Director of the Mint. See: Undated Memo (possibly June or July 1958), From Phillip B. Neisser to Mr. Reed.
- 263 Attachment to Letter dated February 21, 1958 to Chan-sup Lee, Assistant Representative Bank of Korea New York, from Leland Howard, Assistant Director of the Mint.
- 264 Memorandum dated January 12, 1959, Phillip B. Neisser to Files.
- 265 Letter dated October 20, 1962, from Soung Kyu Park, President, Government Printing Agency, Republic of Korea to Eva Adams, Director of the U.S. Mint.
- 266 Ibid.
- 267 Letter dated November 28, 1962, Adams to Park.
- 268 Ibid.
- 269 Ibid.
- 270 Hwang In-guk, "Kang Myeong-jang's Power System History ① 1950s [강명장의 전력계통史① 1950년대]," *Jeonggi Shinmun*, 17 Mar 2009, [www.electimes.com/news/articleView.html?idxno=65110](http://www.electimes.com/news/articleView.html?idxno=65110). Accessed 28 Jul 2024.
- 271 Letter dated November 28, 1962, Adams to Park.
- 272 Letter dated December 17, 1962, H.M. Lee to Adams.
- 273 Letter dated January 2, 1963, H.M. Lee to Tate.
- 274 Lovmo 26. From: Jo 203-204.
- 275 Lovmo 26. From: Jo 204.
- 276 Lovmo 26-27. From: "New One-Won, Five-Won Coins Issued in August [1 원·5 원짜리銅錢(동전) 8 月(월) 1 日(일)부터 發行(발행)]," *Chosun Ilbo* 5 May 1965, 4. Later, in June 1965, the news was that the government would

delay the issue of these “new Five-Won and One-Won coins” until the October 9th Hangeul Day holiday or the October 24th United Nations Day holiday. Then the press announced another delay until the November 3rd Students’ Day holiday. See: “One-Won and Five-Won Coin Issues Delayed until November 3rd.

[1 원 5 원鑄貨發行(주화발행) 豫定(예정)늦추어 11 月(월)3 日(일)에],” *Chosun Ilbo*, 24 Jun. 1965, 3.

<sup>277</sup> Lovmo 27. From: *Republic of Korea Currency Timeline* [대한민국 화폐연대표], (Seoul: Bank of Korea, 2001) 21.

<sup>278</sup> Lovmo 27. From: “Five-Won · One-Won Coin August 1st Issue Update [5 원 · 1 원鑄貨發行(주화발행) 8 月(월)1 日豫定保留(일예정보류)],” *Kyonghyang Shinmun*, 29 Jul. 1965, 2.

<sup>279</sup> Lovmo 27. From: Korea Minting and Security Printing Corporation, *Korea Minting and Security Printing Corporation 40-Year History* [韓國造幣公社四十年史 / 한국조폐공사 40 년사], (Daejeon: KSPMC, 1991) 117.

<sup>280</sup> Lovmo 27. From: “Approval for Coin Minting Facility Introduction [鑄貨製造施設(주화제조시설) 導入(도입)계획承認(승인)],” *Kyonghyang Shinmun*, 29 Sep 1965, p. 2.

<sup>281</sup> Lovmo 27. From: *Korea Minting and Security Printing Corporation 50-Year History* 123.

<sup>282</sup> Lovmo 27. From: “Ten-Won Coin Among New Coin Issues [10 원짜리등 새 동전發行(발행)],” *Chosun Ilbo*, 2 Mar. 1966, 3.

<sup>283</sup> Lovmo 27. From: “Amendment of Mint Act with Capital of 2 Billion won [資本(자본)20 億(억)원으로 造幣公社法改定(조폐공사법개정)],” *Dong-A Ilbo*, 15 April 1966, 2.

<sup>284</sup> Lovmo 28. From: *Korea Minting and Security Printing Corporation 50-Year History* 123-124. The Dongnae Mint has also been referred to as the “Pusan Mint” or the “Busan Mint” in other English-language publications.

<sup>285</sup> *Korea Minting and Security Printing Corporation 40-Year History* 117.

<sup>286</sup> Lovmo 28. From: Livshits, Dmitry. “Re: AllExperts Question Receipt. Message to Mark Lovmo, 26 Dec 2012. An inquiry at the now-defunct forum “AllExperts.com” related information that Cincinnati Milling Machine (after 1969 to be known as Cincinnati Milacron) had been involved in helping install the minting machinery at the Dongnae Mint in the 1960s. In its official history, the Korean Mint also refers to the fact that its workers had to learn how to operate their new coining presses from “cold-forging machine [i.e., coining press] assembly technicians.” *Korea Minting and Security Printing Corporation 50-Year History* 123. See also: *Korean Mint 30-Year History* [韓國造幣公社三十年史 / 한국조폐공사 삼십년사], Daejeon Jikhsai : Government Printing and Mint Agency, R.O.K., 1981, 61.

<sup>287</sup> Lovmo 28. From: *Korea Minting and Security Printing Corporation 40-Year History* 117.

<sup>288</sup> Ibid.

<sup>289</sup> Ibid.

<sup>290</sup> Lovmo 28. From: “New Coins to be Issued Tomorrow; One, Five, and 10-Won Coins [새 주화내일발행 1 · 5 · 10 원짜리],” *Kyonghyang Shinmun*, 15 Aug. 1966, 3.

<sup>291</sup> *Korean Mint 30-Year History* [韓國造幣公社三十年史 / 한국조폐공사 삼십년사], Daejeon Jikhsai : Government Printing and Mint Agency, R.O.K., 1981, 201.

<sup>292</sup> Lovmo 28. From: *Korea Minting and Security Printing Corporation 50-Year History* 269. Here, the official history shows that only these two Taylor & Challen (TC) presses had been installed, while it would take until September 7th for the HME presses to be installed.

<sup>293</sup> *Korea Minting and Security Printing Corporation 50-Year History* 131.

<sup>294</sup> Letter dated September 17, 1966, from Chi Young Lee, President of the Government Printing Agency, Republic of Korea to Eva Adams, Director of the U.S. Mint.

<sup>295</sup> Letter dated September 26, 1966, Adams to Chi Young Lee.

<sup>296</sup> Handwritten note dated September 26, 1966, from Phillip B. Neisser, no recipient; attached to Letter dated September 17, 1966, Chi Young Lee to Adams.

<sup>297</sup> “Currency Expansion is Raising Prices [物價(물가) 膨脹(팽창)이 부채질],” *Dong-A Ilbo*, 22 Nov 1966, 6.

- <sup>298</sup> Lovmo 81. From: “Korean Standard-coin Manufacturing Unit Price Variance [우리나라 일반주화의 제조단가 변동],” this internal Bank of Korea data is quoted in Jo, 2006, 221. See also: Kim Du-gyeong 76.
- <sup>299</sup> Telegram received by Treasury Department, July 14, 1967, from the Korean Mint (Jopekongsa) to Director Mint, Washington D.C.
- <sup>300</sup> Telegram sent by Treasury Department, July 26, 1967, from Eva Adams, Director of the U.S. Mint to the Director of the Korean Mint, Seoul, Korea.
- <sup>301</sup> Jo 208.
- <sup>302</sup> Letter dated April 18, 1969 from Eva Adams, Director of the Mint to You-Chan Yang, Ambassador at Large of the Republic of Korea
- <sup>303</sup> Ibid.
- <sup>304</sup> Bank of Korea Incheon Branch Planning Research Team. “The First Commemorative Coins [최초의 기념주화],” *Kiho Ilbo*, 23 Nov. 2006, [www.kihoilbo.co.kr/news/articleView.html?idxno=225762](http://www.kihoilbo.co.kr/news/articleView.html?idxno=225762). Accessed 4 Nov. 2020.
- <sup>305</sup> Boettcher, Robert B., and Gordon L. Freedman. *Gifts of Deceit : Sun Myung Moon, Tongsun Park, and the Korean Scandal*. 1st ed, Holt, Rinehart and Winston, 1980.
- <sup>306</sup> Lovmo 194 from: Jo 76-77.
- <sup>307</sup> Lovmo 199 from: Boettcher, et. al. 44-47 and 313-318. See also: *Investigation of Korean-American Relations: March 15, 16, 21, 22; April 11, 20 and June 20 1978, U.S. House of Representatives*, (Washington, DC: U.S. Govt. Print. Off.), 1978, 489.
- <sup>308</sup> Letter dated October 23, 1969 from Chong Jik Ahn, New York Representative, Bank of Korea (no recipient).
- <sup>309</sup> Ibid.
- <sup>310</sup> Lovmo 192-208.

