

Annual Report

of the Director of the Mint



AMERICAN EAGLE
GOLD & SILVER BULLION COINS



Fiscal Year 1987
Department of the Treasury

Annual Report

**of the Director
of the Mint**

Fiscal Year Ended September 30, 1987

**Donna Pope
Director of the Mint**

**DEPARTMENT OF THE TREASURY
UNITED STATES MINT**

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MINT OPERATIONS, FISCAL YEAR 1987

MINT OPERATIONS

Introduction

The United States Mint was established by an Act of Congress on April 2, 1792, and became an operating bureau of the Department of the Treasury in 1873, pursuant to the Coinage Act of 1873.

Designated functions of the U.S. Mint are:

- Manufacture of all U.S. coins at Mint facilities.
- Distribution of the coins to and between the Federal Reserve banks and branches, which in turn allocate them to commercial banks.
- Physical custody of Treasury gold and silver assets.
- Handling of various deposit transactions including inter-Mint transfers of bullion.
- Movement, storage, and release of precious metals from custody for such purposes as are authorized.

Functions routinely performed by the Mint on a reimbursable basis include the following:

- Manufacture and sale of gold and silver bullion coins, both proof and uncirculated.
- Manufacture and sale of annual proof coin sets and uncirculated coin sets.
- Manufacture and sale of commemorative coins as authorized by Congress.
- Manufacture and sale of national and other medals.
- Manufacture of medals for other Federal agencies when requested and as schedules permit.

Additional functions performed to serve the public include:

- Maintenance of museum at Old Mint in San Francisco
- Operation of public sales areas and tours at the Denver and Philadelphia Mints.
- Public sales and presentation of exhibits at coin shows and conventions.

Headquarters—Washington, D.C.

- Policy formulation
- Program management
- Administrative guidance
- Research and development
- Marketing operations
- ADP operations
- Customer services
- Order processing

Philadelphia Mint

- Performs all engraving for U.S. coins/medals
- Manufactures all coinage/medal dies
- Manufactures coins of all denominations for general circulation
- Manufactures miniature and multi-strike medals
- Manufactures, packages, and ships regular uncirculated coin sets
- Manufactured and packaged U.S. Liberty and Constitution uncirculated one dollar coins
- Manufactures and packages half-ounce proof gold bullion coins
- Processes mutilated coins

Facilities and Functions of the United States Mint, FY87

Denver Mint

- Manufactures coins of all denominations for general circulation
- Manufactures miniature medals
- Stores gold and silver bullion
- Manufactured and packaged regular uncirculated coin sets
- Manufactured and packaged U.S. Liberty uncirculated half-dollar coins

West Point Bullion Depository

- Manufactures and packages all uncirculated gold bullion coins and proof one-ounce bullion coins
- Stores gold and silver bullion
- Manufactured and packaged proof and uncirculated U.S. Liberty and Constitution five-dollar gold coins

San Francisco Assay Office

- Manufactures and packages regular proof coin sets
- Maintains Mint Museum
- Manufactured and packaged U.S. Liberty and Constitution proof one dollar and U.S. Liberty proof half dollar
- Manufactures and packages uncirculated and proof silver bullion coins

Fort Knox Bullion Depository

- Stores gold bullion

FISCAL YEAR 1987 ACCOMPLISHMENTS

The following section is a brief summary of the Mint's most significant accomplishments in FY87, details of which are included in subsequent sections.

Management

- The Mint managed its operations in such a way that over \$4.522 million of the FY87 appropriated funding of \$42.930 million was returned unspent to the General Fund. This marked the sixth consecutive year in which the Mint returned a significant part of its appropriated funding to the General Fund.

- Mint operations contributed \$876.072 million to the General Fund, including \$458.071 million in seigniorage and \$318.121 million in profit from reimbursable operations. The reimbursable profit was in addition to the \$17.316 million in surcharges earned for the Statue of Liberty—Ellis Island Foundation through the sale of U.S. Liberty commemorative coins in FY87 and \$29.068 million in surcharges from the Bicentennial of the United States Constitution Commemorative Coin Program which were deposited to the General Fund of the Treasury for reducing the national debt.

- The accelerated deposits of coin sales through the use of lockbox depositories by the Mint resulted in an estimated \$913,000 in actual interest savings to the Department of Treasury.

Domestic Production

- The Mint produced and distributed approximately 12.65 billion coins.

Marketing/Numismatic Programs

- The United States Mint commenced the sale of American Eagle Gold Bullion Coins on October 20, 1986. The sale of American Eagle Silver Bullion Coins began on November 24, 1986. Initial inventories of the coins were sold out immediately due to the phenomenal demand. So successful was the launch of the American Eagle Bullion Coins that *Fortune Magazine* presented the American Eagle Gold Bullion Coins as one of the "Top Products of the Year" in 1986. In addition, proof versions of the one ounce Gold and Silver American Eagles were offered for sale to the public in FY87 by direct mail order purchase from the Mint.

- In commemoration of the Bicentennial of the United States Constitution, the Mint was authorized to issue up to 1 million gold five dollar coins and 10 million silver one dollar coins. The designs for the coins were selected through a limited competition. The U.S. Constitution Coins were

first offered for sale to the public in July, 1987, and sales continued through FY87. As of September 30, 1987, 2.5 million coins were sold generating surcharges of \$39.7 million and revenues of \$201 million.

- The U.S. Liberty Commemorative Coin Program concluded on December 31, 1986. A total of 15.5 million coins were sold from the start of sales in FY86 through its conclusion, with total surcharges of more than \$83 million forwarded to the Statue of Liberty—Ellis Island Foundation.

Denver Mint Expansion/Improvement Program

- The conceptual designs for the automated materials handling system at the Denver Mint were completed in FY87. The final design will be completed in FY88 with installation to begin in FY89.

- The Denver Mint expansion will provide increased production capacity and greatly improve the operating efficiency of the facility.

Technological Innovations

- The Mint has completed testing and installation of an automated die blank manufacturing process utilizing computerized numerical control equipment. The new equipment and process is expected to increase the Mint's die manufacturing capability by 35%, to approximately 135,000 die blanks, while reducing associated manufacturing labor costs.

- The Mint awarded a contract during 1987 to replace the current manual die blank polishing process with an automated one. This will result in increased capacity at a lower manufacturing cost.

- In FY87, the Mint was able to confirm that automated coin stacking was feasible. The contractor hired by the Mint to develop and test the system successfully demonstrated that a robot could effectively place filled coin bags on shipping pallets. Future plans include performing additional experimentation to complete automation of this one work cell.

COINAGE ACTIVITIES

DOMESTIC COINAGE

Production in FY87 totalled 12.65 billion coins. This is the second consecutive year in which production was held at the 12.6 billion coin level in order to reduce coin inventories.

Demand for one cent coins reversed a four year downward trend with an increase of 9.3% over FY86. Demand for nickels and dimes climbed 15.1% and 16.6%, respectively.

The coin demand forecasting model based on the Data Resources Inc. formulation closely tracked demand for the second successive year with a deviation of less than 1% from actual.

With production of 12.65 billion coins and a demand of approximately 15.0, inventories were reduced by 2.3 billion coins. The Mint met its objective of maintaining coin inventories at levels which were consistent with efficient operations and would ensure adequate supplies of coins for the Nation's commerce.

The Mint and the Federal Reserve's Cash Services Subcommittee introduced an effective discipline to motivate banks to observe pallet return guidelines. The new directive requires banks to purchase those pallets which have not been returned to the Mint within 60 days. This action has helped ensure that pallets dedicated to the shipping of coins are used exclusively for that purpose.

Coinage Strip and Blanks Utilized in FY87:

1-cent blanks	51,683,000 lbs.
5-cent strip	10,876,000 lbs.
10-cent strip	8,871,000 lbs.
25-cent strip	22,592,000 lbs.
50-cent strip	<u>—0—</u> lbs.
	94,022,000 lbs.

Die Manufacturing. During FY87, 98,272 coinage dies were manufactured; a 4.8% increase over FY86:

	<i>FY87</i>	<i>FY86</i>
Circulation Dies	46,511	41,742
Proof Dies	27,809	19,890
Foreign Dies	—	—
U.S. Constitution Dies	6,082	—
U.S. Liberty Dies	4,981	31,594
Bullion Coin Dies	<u>12,889</u>	<u>547</u>
Total Dies	98,272	93,773

Coinage Costs Per \$1,000 Face Value:

<i>Denomination</i>	<i>Total Cost</i>		<i>% Change in Total Cost</i>
	<i>FY87</i>	<i>FY86</i>	
1-cent	\$630	\$659	- 4.4%
5-cent	382	448	- 14.7%
10-cent	116	128	- 9.4%
25-cent	102	110	- 7.3%
50-cent	111	115	- 3.6%

Foreign Coinage

During FY87, the Mint produced no foreign coins. While the Mint is able to manufacture coins for foreign governments on a reimbursable basis upon request, the Mint has not actively sought foreign business in the last few years.

PLANS/IMPROVEMENTS

Denver Mint Expansion. The conceptual designs for the automated materials handling system at the Denver Mint were completed in FY87. The final designs will be completed in FY88 with installation to begin in FY89. The expanded Denver Mint will have increased production capacity, as well as greater efficiency.

SPECIAL COINS AND MEDALS**Special Coin Programs**

American Eagle Gold and Silver Bullion Coin Program. Congressionally authorized by Public Law 99-185, the Gold Bullion Coin Act, and Public Law 99-61, the Liberty Coin Act, the United States Mint launched the American Eagle Gold and Silver Bullion Coin Program in the fall of 1986. Four denominations of the gold coins and one denomination of the silver coins are authorized for bullion production and sale:

Gold:

\$ 50—1 ounce
 \$ 25—1/2 ounce
 \$ 10—1/4 ounce
 \$ 5—1/10 ounce

Silver:

\$ 1—1 ounce

Secretary of the Treasury James A. Baker III kicked off production of the uncirculated American Eagle bullion coins at two first strike ceremonies. Production of the American Eagle Gold Bullion Coins began September 8, 1986 following a first strike ceremony held at West Point, New York. The American Eagle Silver Bullion Coins were first struck during a ceremony held at the San Francisco Assay Office on October 29, 1986.

The Mint commenced sales of American Eagle Gold and Silver Bullion Coins on October 20, 1986, and November 24, 1986, respectively. Initial demand for the gold bullion coins was so strong that the Mint's entire inventory of 845,000 coins was depleted within the first two days of sales. An allocation system for the equitable distribution of sales among the Mint's authorized purchasers was immediately implemented. An allocation system for the sale of the American Eagle Silver Bullion Coins was instituted from the commencement of silver coin sales due to the incredible demand for the new U.S. bullion coins.

The U.S. Mint entered the bullion coin market utilizing the already well-established distribution network used by other successful foreign mints. For the sale of the new bullion coins the U.S. Mint initially approved a total of 25 authorized purchasers for the gold bullion coins and 28 authorized purchasers for the silver bullion coins. Each authorized purchaser met strict qualifying criteria in order to guarantee a buy-back market for the coins during both stable and unstable economic periods. By the end of 1987, 3 additional gold purchasers and 6 additional silver purchasers had been approved by the Mint for a total of 28 authorized purchasers for the gold bullion coins and 34 authorized purchasers for the silver bullion coins. These distributors market the American Eagles in over 20 countries. Markets represented by the authorized purchasers include the United States, Canada, England, Switzerland, Luxembourg, Japan, Hong Kong, and Germany. Through this distribution system, the coins are widely available throughout world markets.

Initial projections for the first year of sales for the American Eagle Bullion Coins were 2.2 million ounces of gold bullion coins and 4 million ounces of silver bullion coins. By March 30, 1987, sales of American Eagle Gold and Silver Uncirculated Bullion Coins had surpassed all projections. Final sales figures for FY87 totaled 2,659,250 ounces of gold bullion coins and 11,806,000 ounces of silver bullion coins.

Gross receipts for the year totaled more than \$1.1 billion in the sales of American Eagle Gold Bullion Coins and over \$85.7 million in the sales of American Eagle Silver Bullion Coins.

Comprehensive marketing plans have been developed to support the sale of the American Eagle Bullion Coins in both the domestic and international markets. A major component of the plans is print advertising. The Mint selected Grey Advertising of New York to implement the introductory phase of print advertising announcing the availability of American Eagle Coins in the world marketplace. Advertisements for the American Eagle Coins first appeared domestically in November 1986. However, due to the strong demand for the coins domestically, worldwide advertising was delayed a few months until sufficient coin inventories were available to meet the market demand. The introductory phase of advertising ran from January through June 1987. An expansion phase advertising campaign was launched in June 1987 with advertisement appearing in national newspapers and magazines as well as in 12 of the top metro market newspapers. Internationally, advertisements ran in newspapers throughout Germany, Japan, Hong Kong, Belgium, Holland, Switzerland and Luxembourg. The advertisement campaign was scheduled to continue into the new FY88.

The United States Mint has also created and produced point-of-sale materials to support the new American Eagle Bullion Coins. Point-of-sale kits consist of several elements including posters, brochures, stuffers, advertisement slicks, logo and line art, window decals and counter cards. Point-of-sale materials have been produced in six languages: English, French, Dutch, German, Japanese and Mandarin Chinese. These materials are provided without charge to retailers and authorized purchasers to enhance the sales of American Eagle Bullion Coins.

Proof versions of the one ounce Gold and Silver American Eagle Coins were offered for sale to the public in FY87 by direct mail order from the U.S. Mint. Unlike the uncirculated investment coins, the proof bullion coins carry the Mint mark of the producing facility ("W" designating the West Point Bullion Depository for the gold bullion coins and "S" denoting the San Francisco Assay Office for the silver bullion coins.) The ordering period commenced November 1, 1986, and ended December 1, 1986. During the direct mail ordering period customers purchased 446,290 gold proof one ounce coins and 1,446,778 silver proof one ounce coins.

Bicentennial of the United States Constitution Commemorative Coin Program. Public Law 99-582, signed by President Reagan on October 29, 1986, authorized the Mint to issue no more than 1 million gold five dollar coins and 10 million silver one dollar coins to commemorate the 200th anniversary of the United States Constitution. The allowable minting period extends through June 30, 1988.

The gold five dollar coin composition of 90% gold and 10% alloy contains 0.24 fine troy ounces of gold. The silver one dollar coin composition of 90% silver and 10% copper contains 0.77 fine troy ounces of silver. Both legal tender coins are dated 1987.

The gold coin was designed by sculptor Marcel Jovine of New Jersey. The obverse of the coin displays a linear, highly stylized flying eagle with a quill pen in his talons. The reverse depicts the Constitutional slogan "We the People". Patricia Lewis Verani, an artist from New Hampshire, created the designs for the silver coin. The obverse displays a quill pen laid across a sheaf of parchments and reads "We the People". The reverse depicts a cross-section of Americans from past and present in a dramatic parade through history.

The designs, selected by Secretary of the Treasury James A. Baker III, were the result of a limited competition among 11 artists from the private sector who were invited to participate by the Treasury. The Mint's staff of sculptor-engravers were also invited to submit designs.

On July 1, 1987, in Philadelphia, Secretary Baker struck the first Constitution silver dollar. Via an electronic hook-up to West Point, the Secretary also struck the first Constitution gold five dollar coin. These ceremonies marked the start of the July 4th national celebration in honor of the Bicentennial of the American Constitution.

The authorizing legislation required that the Constitution Coin Program be self-supporting at no net cost to the United States Government. In addition, a surcharge of \$35 for the gold coin and \$7 for the silver coin was applied to the price of each coin. The surcharges were deposited to the General Fund of the Treasury for reducing the national debt.

The Mint offered the five dollar gold coin and one dollar silver coin in both proof and uncirculated condition. The San Francisco Assay Office manufactured the proof silver dollars and the Philadelphia Mint the silver uncirculated dollars. The five dollar gold coins in both proof and uncirculated condition were manufactured at the West Point Bullion Depository. The coins were offered individually and in sets. In addition, the one dollar silver coin was also offered in a specially packaged Prestige Set that included the five regular 1987-dated proof coins.

The Mint marketed U.S. Constitution Coins through direct mail, bulk distribution, consignment, telemarketing, direct response publications, international marketing and over-the-counter sales. These commemorative coins were first offered for sale at a pre-issue direct mail discount during the month of July 1987. More than 2.2 million coins were sold during the one month period of pre-issue discount sales.

After the pre-issue period, the Mint conducted special campaigns to support the sale of coins through a consignment program. Major retailers such as K-Mart, Sears, Montgomery Ward and Service Merchandise, as well as over 4,200 financial institutions, sold U.S. Constitution Coins on consignment. This program made U.S. Constitution Coins available to the American public in all fifty states at more than 15,000 selling locations.

Additional marketing efforts included a program to sell large quantities of coins to precious metals and coin dealers. A strong public relations program was also conducted to ensure substantial press coverage.

More than 2.5 million U.S. Constitution Coins were sold as of September 30, 1987. This generated over \$201 million in net revenue with more than \$39.7 million in surcharges for deposit to the General Fund of the Treasury, including over \$2.7 million in surcharges from sales overseas.

Following is a breakdown of total U.S. Constitution Coins sold during FY87:

U.S. Constitution Coin Sales—FY87

<i>Coins</i>	<i>Proof</i>	<i>Uncirculated</i>	<i>TOTAL</i>
Silver Dollar	1,428,517	309,057	1,737,574
Gold Five Dollar	<u>576,421</u>	<u>211,687</u>	<u>788,108</u>
Total Coins Sold	2,004,938	520,744	2,525,682

U.S. Liberty Coin Program. Public Law 99-61, signed by President Reagan on July 9, 1985, authorized the Mint to strike up to 500,000 gold five dollar coins, 10 million silver one dollar coins, and 25 million cupronickel clad half dollar coins to commemorate the Statue of Liberty's 1986 centennial.

The gold five dollar coin composition of 90% gold and 10% alloy contained 0.24 fine troy ounces of gold. The silver one dollar coin composition of 90% silver and 10% copper contained 0.77 fine troy ounces of silver. The cupronickel clad half dollar with two outer layers of 75% copper and 25% nickel was bonded to a core of pure copper.

Coins were sold through direct mail, bulk distribution, consignment, telemarketing, international marketing and over-the-counter sales. The Mint offered all three U.S. Liberty coin denominations in both proof and uncirculated condition. The San Francisco Assay Office manufactured the proof silver dollars and clad half dollars. The uncirculated silver dollars were manufactured at the Philadelphia Mint and the uncirculated clad half dollars were manufactured at the Denver Mint. The five dollar gold

coins in both proof and uncirculated condition were manufactured at the West Point Bullion Depository. Sales began on November 1, 1985, and ended on December 31, 1986. A breakdown of total sales for the program is reflected below:

<i>Coins</i>	<i>Proof</i>	<i>Uncirculated</i>	<i>TOTAL</i>
Clad Half Dollar	6,925,627	928,008	7,853,635
Silver Dollar	6,414,638	723,635	7,138,273
Gold Five Dollar	<u>404,013</u>	<u>95,248</u>	<u>499,261</u>
Total Coins Sold	13,744,278	1,746,891	15,491,169

The Mint raised approximately \$83.1 million in surcharges. Total contributions to the general fund were \$63.5 million.

Proof Coin Set Program. The production of proof coins is a unique operation. Both the dies and blanks require special handling to obtain the frosted relief against the polished background. Striking each coin twice brings out every detail of the design.

The 1987 proof sets contained one each of all denominations struck for regular circulation—the cent through half dollar—each with the San Francisco “S” mint mark. The sets, sealed in a protective case, were offered for sale at \$11 per set. The ordering period for the 1987 program opened June 1987 and continued throughout FY87. The ordering period for the 1986 proof sets commenced in March 1986 and continued until June 1987 when the 1987 dated proof sets were offered. Over-the-counter sales of 1986 dated proof sets also continued in the Mint sales areas until the 1987-dated proof sets were available.

The 1987 proof sets were available over-the-counter at Mint sales areas, at various conventions attended by Mint representatives, by mail order, and through financial institutions and sales merchandise outlets.

During FY87, customers purchased 480,015 proof sets dated 1986 and 2,948,664 sets dated 1987. In addition, customers purchased 94,613 proof prestige sets dated 1986 and 333,776 proof prestige sets dated 1987.

Uncirculated Coin Set Program. The 1986 and 1987 uncirculated coin sets contained one each of all denominations—cent through half dollar—struck at the Denver and Philadelphia Mints. The 1987 Kennedy half dollar uncirculated coin was produced only for inclusion in the 1987 uncirculated sets, no half dollars were produced for general circulation.

The Mint packaged the uncirculated coins, along with a mint mark piece, into Mylar plastic film packages. The uncirculated sets were comprised of packages from the Denver and Philadelphia Mints, along with a descriptive folder and a detailed specification card, and were offered for sale at \$7.00. The ordering period for the 1987 program opened April 1987 and continued throughout FY87. The ordering period for the 1986 uncirculated sets commenced in June 1986 and continued until the 1987 sets were offered. Over the counter sales of 1986 uncirculated sets also continued in the Mint sales areas until the 1987 dated sets were available.

During FY87, customers purchased 203,578 uncirculated sets dated 1986 and 2,589,915 uncirculated sets dated 1987.

Bicentennial Coin Set Program. During the past several years the Mint has offered 40% silver clad Bicentennial proof and uncirculated coin sets produced prior to December 31, 1976. Each set contained an Eisenhower dollar, Kennedy half dollar, and Washington quarter dollar. All coins depicted the double dates "1776-1976" with reverse designs symbolic of the Bicentennial of American Independence. The proof sets sold for \$12 and the uncirculated sets for \$9.

In March 1985 the Bicentennial proof sets sold out with a fiscal year total of 20,621 and an overall program total of 3,998,621. Sales of the Bicentennial uncirculated sets ended December 31, 1986. Customers purchased a total of 4,908,319 Bicentennial uncirculated coin sets during the program.

Souvenir Sets. Two types of souvenir sets were available at Mint sales areas in Denver and Philadelphia during FY87. One set contained the five coin denominations (cent through the half dollar) produced at the Philadelphia Mint, plus a Philadelphia Mint miniature medal. The other set had the same five denominations struck at the Denver Mint, plus a Denver Mint medal. Each set was priced at \$4. During FY87, customers purchased 3,450 1986 and 40,516 1987 Philadelphia sets and 3,315 1986 and 58,355 1987 Denver sets.

Susan B. Anthony Dollar Souvenir Sets. Sold at all Mint sales areas and by mail order in FY87, the dollar souvenir sets contain three Susan B. Anthony dollars—one from each of the producing facilities—the Denver Mint, the Philadelphia Mint, and the San Francisco Assay Office. These sets, dated 1979 or 1980, were priced at \$4. Customers purchased 23,123 souvenir sets during FY87. In addition, the Mint offered \$100 and \$2,000 bags of SBA dollars and a six-piece coin set containing an SBA dollar struck at each Mint facility for both production years. These three pur-

chase options sold for \$110, \$2,050, and \$10 respectively, including shipping and handling. During FY87, customers purchased 13,899 \$100 bags, 226 \$2,000 bags, and 102,207 six-piece coin sets.

Medals

National Medals. National medals produced by the U.S. Mint, generally in gold, are selective awards authorized by Acts of Congress in commemoration of noteworthy segments of American history or for outstanding personal services to America. The first such medal was awarded to General George Washington by resolution of the Continental Congress on March 25, 1776, for his "siege and acquisition of Boston". Since that time there have been 116 legislative actions awarding 317 gold medals. There were no gold medals presented in FY87. However, the following National Medal Programs continued through FY87:

- **Americans Missing or Otherwise Unaccounted for in Southeast Asia ("MIA Medal")**—Public Law 98-94, approved September 24, 1983, provided for 2,494 three-inch bronze presentation medals to be presented to the next of kin of Americans missing or unaccounted for in Southeast Asia. The legislation also provided for miniature bronze replicas (1-5/16" in diameter) to be produced and sold by the Mint. After symbolic presentation ceremonies in July 1984, presentations by state delegations commenced and are expected to continue for an indefinite period of time as next of kin are identified and located.

By directive of April 6, 1984, the Department of Defense appointed the U.S. Air Force Missing Persons and Casualty Matters Staff to identify and locate the next of kin, coordinate ceremonies, authorize shipments of the presentation medals by the Mint to the responsible officials, and administer the entire program.

On October 20, 1984, Public Law 98-599 was enacted, changing the criteria for award of the medal and increasing the number of presentation medals to be awarded, as determined by the Department of Defense. Therefore, the Mint produced another 160 medals in addition to the 2,494 previously produced under Public Law 98-94.

By directive of October 22, 1986, the Department of Defense rescinded their previous appointment and ordered the individual services—Army, Navy, Marine Corps and Air Force—to assume responsibility for their respective program arrangements.

As of September 30, 1987, the Air Force had authorized the Mint to ship 1,870 medals for presentation ceremonies by state delegations or other designated parties.

Other Medals. The Mint has legislative authority to strike national and "other" medals. Under this authority, the Mint has produced medals for U.S. Presidents, Secretaries of the Treasury, Directors of the Mint, and Chief Justices of the Supreme Court. Also, the Mint has issued numerous other medals, such as those depicting historical buildings.

Medals produced for sale to the public are often referred to as "list" medals because they are listed in a sales brochure. Some medals are 3 inches in diameter and require multiple strikes of the medal press to bring up the relief. These medals are hand-finished. Smaller medals, such as the 1-1/2 inch and 1-5/16 inch miniature sizes, generally require one strike of the press.

During FY87, the Mint produced medals in both the multi-strike and single-strike classes, as summarized below:

FY87 Production of Multi-strike/Hand-finished Medals	17,188
FY87 Production of Single-strike Medals	1,011,776
TOTAL	1,028,964

Medals in Process. The following Congressionally authorized medals were in various stages of design, engraving, or manufacturing, or were available for presentation in FY87:

- Lady Bird Johnson—Public Law 98-278, approved on May 8, 1984, provides for a gold medal to be presented to Lady Bird Johnson for her contribution to the beautification and improvement of America.
- George and Ira Gershwin—Public Law 98-86, approved on August 9, 1985, provides for a gold medal to be presented to Frances Gershwin Godowsky, the sister of the late George Gershwin, and to Leonore Gershwin, the widow of Ira Gershwin. The medal honors the Gershwin brothers' outstanding and invaluable contributions to American music, theater and culture.
- Natan (Anatoly) and Avital Sharansky—Public Law 99-298, approved on May 13, 1986, provides for gold medals to be presented to Natan (Anatoly) and Avital Sharansky in recognition of their courage and commitment to the cause of individual human rights and freedom.
- Harry Chapin—Public Law 99-311, approved on May 20, 1986, provides for a gold medal to be presented to the family of Harry Chapin in recognition of the late Mr. Chapin's efforts to address issues of hunger around the world.
- Aaron Copland—Public Law 99-418, approved on September 23, 1986, provides for a gold medal to be presented to Aaron Copland in

recognition of his incomparable contributions to American musical composition.

Conventions and Exhibits

In FY87, the Mint's numismatic marketing staff set up Mint exhibits at approximately 20 major financial and numismatic conventions nationwide to sell and/or promote the U.S. Mint annual coin sets, U.S. Liberty and Bicentennial of the Constitution Commemorative Coins, and the American Eagle Gold and Silver Bullion Coins. For international exhibitions, displays featuring the Mint's current commemorative and bullion coins were also prepared. Numismatic shows were used as an educational forum for the hobby by providing facts and figures on mintages, surcharges and new coin legislation. At shows catering to financial institutions the primary emphasis was on the introduction of the new American Eagle coins into the world bullion coin market. Profits from convention sales were deposited into the General Fund of Treasury.

Mint Catalogue

In September 1987, the Mint issued its 1987 color catalog entitled "Catalogue of Official Coins and Medals". The catalog listed coins and medals available for sale from the Mint, including the annual proof and uncirculated coin sets, souvenir coin sets, list medals and the Bicentennial of the Constitution Commemorative Coins.

Collector's Album

In FY 87, the Mint offered for the first time, a collector's album for the Miniature Presidential Series Medals and the White House Medal. Included with the collector's album is a volume of "The Presidents of the United States of America", published jointly by the White House Historical Association and the National Geographic Society.

TECHNOLOGY HIGHLIGHTS

Productivity Improvement

Coin Press Feed System. Preproduction units of the coin press feed system were installed for testing in FY87. Testing of the units was inconclusive and deficiencies requiring modifications to the design resulted in plans for continued testing into FY88. Conversion of all existing presses to the new feed system will increase current coin production capability by 20% to 30% at a small fraction of the cost of purchasing new presses to achieve a like increase.

Bag Filling and Stacking. During FY87, experimentation with a robot to stack coin bags continued. The contractor who had begun work in FY86 was able to successfully demonstrate the ability for a robot to accurately place filled coin bags on shipping pallets. Future plans will research means of automatically filling and sewing coin bags to complete automation of this work cell.

High Speed Presses. The Mint accepted delivery of its first two high speed presses, which were installed at the Denver Mint. A third press is scheduled for installation in FY88, and an order has been submitted for an additional seven presses to be delivered in early FY89.

Other Improvements

Noise Reduction. The original program, treatment of coining presses at Philadelphia, was expanded to include the Denver facility and blanking presses. Engineering surveys at both facilities were completed and the enclosure designs were refined. The first coining press enclosure was tested on a press at Philadelphia and required a redesign. The first blanking press enclosure was tested and approved for production at Denver. Treatment of auxiliary equipment such as counters and sizers shall follow the coining and blanking press treatment.

Chemical Analysis Methods. An instrumental method of silver assaying was implemented at the San Francisco Assay Office, resulting in greatly increased output with no increase in staff. The Mint also developed an x-ray instrumental method for silver in gold bullion coin blanks.

Quality Control. During FY87 the Mint obtained proof plastic coin capsule suppliers whose quality levels greatly exceeded all previous contractors, resulting in overall lower costs and improved outgoing coin set quality. This was done by purchasing the capsules based on quality, in addition to price. The Mint has applied the same procurement technique to the purchase of die steel, whose cost is a small part of a coin die, but whose quality is crucial.

Quality control studies aimed at improving specification compliance for circulation coins have identified areas for correction, including the weights of cents and quarters, nickel and quarter thickness, collar dimensions, and wear standards. The quality of purchased cent blanks has improved at no cost through tightened specifications and working with the contractors on improved process control.

Studies showed the major cause of variation in fill of the four coins struck simultaneously in quad presses to be press tooling and maintenance, rather than blank thickness and variations in die length.

Gold and Silver Coin Blanks. Technical parameters, specifications, and coin designs were developed for the American Eagle Bullion Coins and blanks and the Bicentennial of the U.S. Constitution Commemorative Coins and blanks.

Laboratory. A new laboratory was installed at the Judiciary Square Building at Mint Headquarters in Washington, D.C. The laboratory helps to reduce variations among field office laboratories, conducts assays for audits and other special projects.

Metal Flow Study. A contract was awarded to study how to use a computer to model the flow of metal during coining, using the finite element method of estimating metal movement. The contractor has developed an initial equation for overall force and planned test strikes of a symmetric design approximating the half dollar. Dies for this test were fabricated at the Philadelphia Mint.

Die Steels. Alternative alloy tool steels for large numismatic dies were successfully tested. A larger pilot study is planned for FY88.

Proof Die Life. The Mint increased proof die life dramatically at the West Point Bullion Depository by implanting high-energy nitrogen ions into chrome plated die surfaces. At the San Francisco Assay Office investigation showed that the die life could be improved by burnishing the blanks. Large scale test burnishing equipment was ordered and delivered for tests commencing in FY88 to extend this innovation to all denominations. Stripping of chrome plate from worn dies, touchup repolishing, and re-chrome plating has also extended proof die life dramatically.

Die Production Technology. Single squeeze pilot production of cent reverse dies was successful. Larger scale tests, including other denominations, are planned for FY88.

Medal Production Technology. Single squeeze medal making press and tooling was specified and ordered for delivery in FY88.

ADMINISTRATIVE ACTIVITIES

Personnel, Safety, EEO Programs. During FY87, the Office of Personnel and Safety assumed the Equal Employment Opportunity (EEO) functions for the U.S. Mint. The resulting new office became the Office of Personnel, Safety and EEO Programs. Following are major accomplishments made during FY87:

- Along with the addition of the EEO functions, the Office of Personnel, Safety and EEO Programs reorganized into two divisions, creating a Deputy Assistant Director and 3 additional staff positions.

- Due to the lack of space, the Mint's headquarters Office of Personnel, Safety and EEO Programs relocated from 633 Third Street, NW, to 1730 K Street, NW in Washington, D.C.

- In order to more efficiently process formal discrimination complaints, the Department of the Treasury, in 1985, established four regional complaint centers located in Washington, D.C, Chicago, Dallas and San Francisco. The centers were phased in during 1986 and 1987. During FY87, the four regional complaint centers received 24 formal complaints from Mint employees alleging discrimination.

- Under the Equal Employment Opportunity Program, the Mint continued employing minorities and women in all positions as well as in specifically targeted occupations during FY87. The employment breakdown of the total Mint work force at the close of FY87 reveals that of 2320 employees, 602 (26%) were women, while 1718 (74%) were men. Further, 373 (62%) of the total 602 women were minorities and 912 (53%) of the total 1718 men were minorities.

Following is a breakdown of the total Mint work force at the close of FY87:

CATEGORY	PERCENT OF TOTAL MINT-WIDE EMPLOYMENT
TOTAL WOMEN	26%
TOTAL MEN	74%
MINORITY WOMEN	16%
NON-MINORITY WOMEN	10%
MINORITY MEN	39%
NON-MINORITY MEN	35%

- A plan was developed in response to President Reagan's September 15, 1986, Executive Order establishing the goal of a drug-free federal work place. The Mint plan provides for randomly testing employees in sensitive positions for illegal drugs (marijuana, cocaine, opiates, amphetamines and PCP). Education, counseling and treatment referral on drug use are also included in the plan.

- The various Mint personnel offices filled approximately 747 positions during FY87. Emphasis continued on the employee recognition program, the employee beneficial suggestion program, performance and evaluation procedures, and training and development to improve employee work performance.

- In FY87, the Mint and the Mint Council, American Federation of Government Employees (AFGE), completed negotiating a new three-year national agreement that went into effect April 13, 1987. The union filed

3 unfair labor practice claims with the Federal Labor Relations Authority. Two claims have been withdrawn and one is still pending on appeal. Mint employees filed 41 grievances during FY87, a decrease of approximately 20% from the previous year.

- The Department of Labor's Office of Workers Compensation Programs reported a dramatic drop in Federal Employees' Compensation Act (FECA) costs for the Mint in FY87. The reported 22% decrease in costs over the previous year reflected a reduction in both the number and severity of injuries for Mint employees.

- The Mint continued to develop asbestos abatement procedures to help provide a safer and more healthful working environment.

Procurement. To carry out its missions, the Mint relies extensively on procurement of private sector goods and services.

- A Special Projects Division was created within the Office of Procurement in FY87 to handle the increasing contract workload generated by the ongoing American Eagle Gold and Silver Bullion Coin Program and other commemorative coin marketing programs which are specifically authorized by Congress and which fall outside of domestic circulation coinage production.

- The American Eagle Bullion Coin Program, in its first full year of operation, required the close administration of various advertising, coin blanks, and packaging contracts for the uncirculated and proof gold and silver bullion coins. The gold bullion purchasing system underwent extensive refinement in terms of automation and tracking. Daily offers from gold suppliers and the placement of Mint orders were automatically input into a large database where reporting information was then captured by hallmark, supplier, newly-mined vs. other than newly-mined purchases, and uncirculated vs. proof bullion purchases.

- Passage of the Bicentennial of the U.S. Constitution Commemorative Coin Program required the negotiation and award of such indefinite quantity contracts as domestic and international marketing and public relations services, blanks, capsules, and presentation cases. Legislation which waived the program from federal procurement regulations allowed contracts to be executed in a most expeditious and cost-effective manner. The placement of temporary personnel services contracts also contributed significantly to the success of the U.S. Constitution Program.

- Coinage metals continue to be the greatest volume of purchases made by the Mint, purchases which are subject to the federal acquisition regulations. During FY87, the Mint continued to purchase cupronickel five cent strip and clad strip through competitive bidding. New procedures have been developed which provide for the strip material to be purchased through basic ordering agreements. This new ordering mechanism has allowed paperwork to be minimized along with the expediting of order placement.

- Utilization of automation enabled the Office of Procurement to network personal computers so that information may be shared or accessed instantaneously. Updated regulations maintained in the computer network enabled all contracting personnel immediate access and facilitated the assembly of solicitations and contracts.

Legal Issues. The Mint Counsel's office participated in various matters affecting the agency. One of the most significant cases in FY87 included the following:

- *Mesaros Lawsuit.* In FY86, the Mint litigated in the U.S. District Court of Georgia the case of *Mesaros v. Department of the Treasury*. Plaintiffs sued claiming that the U.S. Mint improperly rejected their Statue of Liberty gold coin order, thus breaching an alleged contract that existed between the above parties. In FY87, the U.S. District Court of Georgia granted the Government's motion for summary judgment and dismissal. At the close of FY87, the case was on appeal in the U.S. Court of Appeals for the Federal Circuit.

Financial and Cash Management. During FY87, the Mint continued its utilization of a lockbox arrangement for processing receipts from coin sales.

- Depositing \$468 million in receipts, the Mint generated \$913,000 in actual interest savings to the Treasury. Also, during the same period, interest savings of \$1.020 million were generated as the result of utilizing the Treasury Financial Communication System (TFCS) for wire transfer payments of \$1.224 billion for gold and silver bullion coin sales to the Mint's authorized purchasers.

- In FY87, the Mint accomplished the automation of a Supply (Inventory Control) Module using Cullinet Software and completed a "bridge" from our fully automated General Ledger Trial Balance to the Standard General Ledger format. Plans were formulated for the implementation to automated systems for the following:

<i>Automation Plans</i>	<i>Target Date</i>
Procurement Module	June, 1988—FY88
Accounts Payable Module	October, 1988—FY89
Commitment Tracking System	October, 1988—FY89
Cost Accounting Module	December, 1989—FY90
Bullion/Coinage Metal Funds	October, 1990—FY91

Internal Control. During FY87, the major accomplishments of the Mint's Internal Control Program were:

- Two changes were made to the assessment process to improve efficiency and reduce the workload of each unit manager. The number of assessment forms was reduced from five forms to two forms, and the assessment process was spread over a six-month period instead of the two-month time frame used in previous years.

- The numismatic order processing system was audited in FY87. Controls were found to be effective with no material weakness reported. Passwords, ID's, edit reports, separation of duties and independent verifications are some of the controls used in managing the process.

- All corrective actions recommended as a result of the 1986 management review of the Mint Headquarters property management program were implemented during FY87, including the establishment of procedures, updating of Treasury regulatory requirements, and improvement of controls over sensitive property.

- The personal property accountability systems operated by the three largest Mint field offices were reviewed during FY87. The physical security of personal property assets was recognized as a strong element of the field office systems. The study provided a number of recommendations for improving controls over the management of personal property; for example, improvements in the use of annual inventories for verifying the physical presence of property as well as documenting the personal accountability aspect of property management, improvements in controls over sensitive property, and improvements in the separation of duties which are necessary to the performance of property management operations. Another recommendation for improving the overall management of the Mint property management program was that the Mint property management officer conduct periodic reviews of facility property management programs to ensure that management controls are adequate and being properly applied.

- The Mint reviewed its "payments to vendors" process in FY87 in accordance with Treasury Department guidelines. Headquarters tested an Invoice Tracking System during FY87 which will monitor invoices as they are received, match them with a Receiving/Acceptance Report, and schedule payments based on Prompt Payment Act principles. The system is currently being implemented throughout the Mint and will provide enhanced cash management controls over payables.

- The Mint is enhancing its controls over cash management transactions through automation. Debt collection, particularly in the area of credit card chargebacks, is constantly monitored and new or improved methods of collecting outstanding debts are implemented as determined necessary. Reporting to the Department of Commerce Credit Operations any indebtedness to the Mint and the use of a debt collection agency are two new initiatives planned by the Mint in FY88.

Security. The Security Staff continued its program to improve the physical protection of all Mint facilities. Computerized control centers, modern electronic sensors, and integrated television cameras continue to be installed at each facility to ensure that Mint facilities are protected with modern state-of-the-art technology.

- The Personnel Security Program processed 534 background investigation cases and updated the background checks of 29 employees in sensitive positions. The Security Staff also completed 33 background investigation cases for contract employees and processed 494 pre-appointment investigation waiver requests.

- The Mint submitted the West Point Bullion Depository, the Fort Knox Bullion Depository and the San Francisco Assay Office for listing on the National Register of Historic Places.

Revenues Deposited. The Mint deposited \$876 million to the General Fund of the Treasury for FY87 compared to \$518 million for FY86. FY86 and FY87 deposits included the following amounts in millions:

	FY87	FY86
Seigniorage on U.S. coins:	\$458.071	\$392.446
Proceeds from sales of:		
American Eagle Gold	20.339	—0—
Bullion Coins		
Numismatic Sales	154.295	73.800
Profit on Gold Sales	172.555	—0—
Gold Medallions	—0—	10.654



Donna Pope, Director of the Mint, and her staff
(from left to right, standing) William Daddio, Daniel Cahill, Andrew Cosgarea, Michael Hill, Michael Brown
(from left to right, sitting) Eugene Essner, Donna Pope, Kenneth Gubin



(Obverse)



(Reverse)

GOLD AMERICAN EAGLE COIN



(Obverse)



(Reverse)

SILVER AMERICAN EAGLE COIN



(Obverse)



(Reverse)

U.S. CONSTITUTION FIVE DOLLAR COIN



(Obverse)

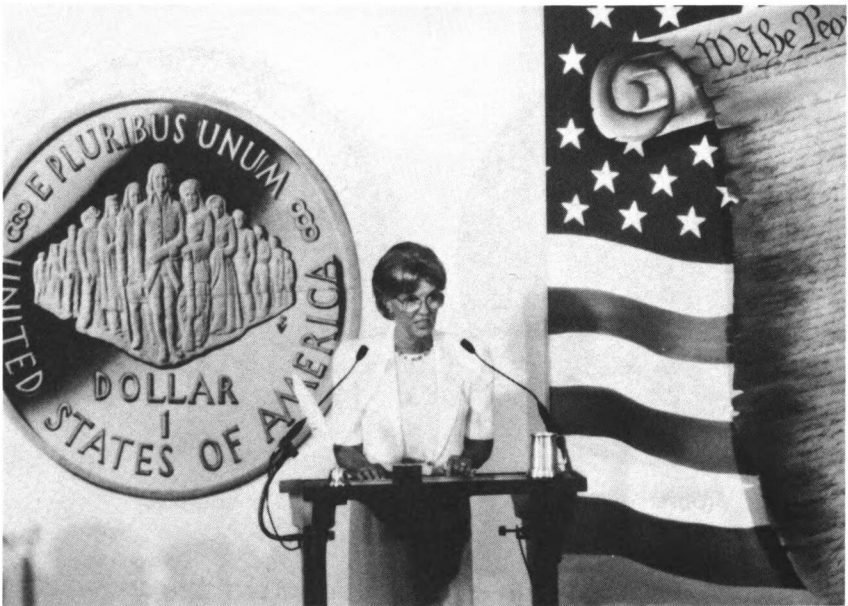


(Reverse)

U.S. CONSTITUTION SILVER ONE DOLLAR COIN



Mrs. Donna Pope, Secretary James A. Baker III and Mrs. Katherine D. Ortega at the first strike ceremony for the American Eagle Gold Coin



Mrs. Donna Pope addresses audience at first strike ceremony for the U.S. Constitution Coins

TABLES

TABLE 1—Fiscal year 1987 highlights

Coins manufactured:	
U.S. circulation	12,650,119,714
Foreign	0
Numismatic program sales:	
1987 proof sets (Including Prestige Sets)	3,282,440
1986 proof sets (Including Prestige Sets)	574,628
1987 uncirculated sets	2,589,915
1986 uncirculated sets	203,578
1986 American Eagle proof gold one ounce coin	446,294
1986 American Eagle proof silver one ounce coin	1,446,835
Constitution gold proof 5 dollar	576,421
Constitution gold uncirculated 5 dollar	211,687
Constitution silver proof 1 dollar	1,428,517
Constitution silver uncirculated 1 dollar	309,057
Statue of Liberty gold proof 5 dollar	58
Statue of Liberty gold uncirculated 5 dollar	7
Statue of Liberty silver proof 1 dollar	1,808,775
Statue of Liberty silver uncirculated 1 dollar	60,615
Statue of Liberty clad proof half dollar	2,023,637
Statue of Liberty clad uncirculated half dollar	90,184
Bicentennial uncirculated sets	269,380
Deposits to the General Fund of the Treasury	\$876,072,000
Seigniorage	\$458,071,000
American Eagle bullion coin sales	\$114,564,000
Numismatic sales	\$232,625,000
Full-time Equivalent Workyears Utilized	2,097

TABLE 2—U.S. coins manufactured for general circulation, fiscal year 1987

	50 cents		25 cents		10 cents	
	Number of pieces	Face value	Number of pieces	Face value	Number of pieces	Face value
General Circulation:						
Philadelphia Mint	501,358	\$250,679.00	627,301,358	\$156,825,339.50	691,891,358	\$69,189,135.80
Denver Mint	334,002	\$167,001.00	683,006,660	\$170,751,665.00	585,502,974	\$58,550,297.40
San Francisco Assay Office	0	\$0.00	0	\$0.00	0	\$0.00
West Point Bullion Depository	0	\$0.00	0	\$0.00	0	\$0.00
Total	835,360	\$417,680.00	1,310,308,018	\$327,577,004.50	1,277,394,332	\$127,739,433.20

	5 cents		1 cent		Total Coinage	
	Number of pieces	Face value	Number of pieces	Face value	Number of pieces	Face value
General Circulation:						
Philadelphia Mint	347,433,358	\$17,371,667.90	4,629,793,808	\$46,297,938.08	6,296,921,240	\$289,934,760.28
Denver Mint	359,527,140	\$17,976,357.00	4,724,827,698	\$47,248,276.98	6,353,198,474	\$294,693,597.38
San Francisco Assay Office	0	\$0.00	0	\$0.00	0	\$0.00
West Point Bullion Depository	0	\$0.00	0	\$0.00	0	\$0.00
Total	706,960,498	\$35,348,024.90	9,354,621,506	\$93,546,215.06	12,650,119,714	\$584,628,357.66

**TABLE 3—American Eagle uncirculated bullion coin sales,
fiscal year 1987**
(In Ounces)

Gold:	
One ounce (\$50)	1,993,500
Half ounce (\$25)	328,750
Quarter ounce (\$10)	211,750
Tenth ounce (\$5)	125,250
TOTAL GOLD	2,659,250
Silver:	
One ounce (\$1)	11,806,000

TABLE 4—Inventories of U.S. coins Sept. 30, 1986, and Sept. 30, 1987
(Number of pieces)

Denomi- nation	Sept. 30, 1986			Sept. 30, 1987		
	Mints	Federal Reserve Banks	Total	Mints	Federal Reserve Banks	Total
1 dollar	349,600,000	124,603,731	474,203,731	344,000,000	119,403,731	463,403,731
50 cents	9,900,000	58,712,164	68,612,164	0	37,112,164	37,112,164
25 cents	99,400,000	877,422,268	976,822,268	257,800,000	840,797,712	1,098,597,712
10 cents	215,900,000	704,533,680	920,433,680	83,400,000	581,500,940	664,900,940
5 cents	535,100,000	330,462,330	865,562,380	50,400,000	383,806,020	434,206,020
1 cent	2,938,900,000	2,047,553,400	4,986,453,400	1,823,500,000	1,462,633,500	3,286,133,500
TOTAL	4,148,800,000	4,143,287,623	8,292,087,623	2,559,100,000	3,425,254,067	5,984,354,067

**TABLE 5—Shipments by the U.S. Mint of newly manufactured
U.S. coins for general circulation, fiscal year 1987**

Denomination	Number of coins	Face value
1 dollar	5,600,000	\$5,600,000.00
50 cents	10,700,000	\$5,350,000.00
25 cents	1,151,900,000	\$287,975,000.00
10 cents	1,409,900,000	\$140,990,000.00
5 cents	1,191,600,000	\$59,580,000.00
1 cent	10,470,000,000	\$104,700,000.00
TOTAL	14,239,700,000	\$604,195,000.00

TABLE 6—Medals produced by the U.S. Mint, fiscal year 1987

List No.	Subject of medals	Manufacturing facility	
		Philadelphia	Denver
<i>Presidential</i>			
103	Thomas Jefferson	422	.....
116	Abraham Lincoln	193	.....
135	John F. Kennedy	525	.....
142	Ronald Reagan	2,775	.....
	Total Presidential series	3,915	.....
<i>Secretaries of the Treasury</i>			
231	James A. Baker, III	352	.....
	Total Secretaries of the Treasury	352	.....
<i>Navy</i>			
506	Captain Stephen Decatur	68	.....
510	Captain Oliver Perry	52	.....
525	Rescue of Steamship San Francisco	1	.....
534	200th Anniversary of the U.S. Navy	53	.....
535	200th Anniversary of the U.S. Marine Corps	342	.....
	Total Navy series	516	.....
<i>Miscellaneous Medals (3")</i>			
664	Lt. General Ira C. Eaker	108	.....
666	John Wayne	5,442	.....
670	Hubert H. Humphrey	158	.....
686	Vietnam Veterans National Medal	6,480	.....
707	Treasury Building	153	.....
914	Earl Warren	64	.....
	Total Miscellaneous (3")	12,405	.....
<i>Miscellaneous (1½")</i>			
536	Admiral Hyman Rickover	1,500	.....
675	Fred Waring	2,500	.....
676	Louis L'Amour	4,700	.....
677	Joe Louis	9,000	.....
679	Congressman Leo Ryan	2,000	.....
680	Danny Thomas	2,000	.....
681	Harry S Truman Centennial	4,050	.....
683	Elie Wiesel	2,500	.....
684	Roy Wilkins	4,174	.....
685	Vietnam Veterans National Medal	32,850	.....
	Total Miscellaneous (1½")	65,274	.....

TABLE 6—Medals produced by the U.S. Mint, fiscal year 1987, continued

List No.	Subject of medals	Manufacturing facility	
		Number of medals produced	
	<i>Miniature Presidential (1$\frac{1}{16}$")</i>	<i>Philadelphia</i>	<i>Denver</i>
801	George Washington	18,644	
802	John Adams	22,298	
803	Thomas Jefferson	25,616	
804	James Madison	20,571	
805	James Monroe	22,688	
806	John Quincy Adams	26,294	1,490
807	Andrew Jackson	20,449	547
808	Martin Van Buren	14,432	596
809	William Henry Harrison	23,513	1,279
810	John Tyler	20,981	1,236
811	James K. Polk	23,560	917
812	Zachary Taylor	20,887	962
813	Millard Fillmore	31,359	911
814	Franklin Pierce	21,130	1,217
815	James Buchanan	15,517	609
816	Abraham Lincoln	46,589	2,008
817	Andrew Johnson	18,566	1,703
818	Ulysses S. Grant	23,202	1,524
819	Rutherford B. Hayes	17,493	
820	James A. Garfield	22,372	615
821	Chester A. Arthur	18,729	603
822	Grover Cleveland	17,185	624
823	Benjamin Harrison	20,002	615
824	William McKinley	20,826	616
825	Theodore Roosevelt	17,948	626
826	William H. Taft	17,684	
827	Woodrow Wilson	26,153	
828	Warren G. Harding	17,364	903
829	Calvin Coolidge	17,230	613
830	Herbert Hoover	18,653	
831	Franklin D. Roosevelt	17,030	670
832	Harry S. Truman	16,958	616
833	Dwight D. Eisenhower (1st term)	23,639	475
835	John F. Kennedy	28,201	1,715
837	Lyndon B. Johnson (2nd term)	19,008	3,925
838	Richard M. Nixon (1st term)	21,888	
839	Richard M. Nixon (2nd term)	5,500	475
840	Gerald R. Ford	23,294	1,856
841	Jimmy Carter	27,394	2,116
842	Ronald Reagan	19,469	5,318
Total Miniature Presidential (1 $\frac{1}{16}$ ")		850,316	37,380
<i>Miniature Miscellaneous (1$\frac{1}{16}$")</i>			
230	Donald T. Regan	1,500	
667	John Wayne	26,269	
678	Missing in Action in Southeast Asia	4,000	
706	The White House	27,037	
Total Miniature Miscellaneous (1 $\frac{1}{16}$ ")		58,806	
Grand total, all series		991,584	37,380

**TABLE 7—Gold transactions of the U.S. Mint,
fiscal year 1987**

(In fine ounces rounded to whole ounces)

RECEIPTS AND DISBURSEMENTS OF GOLD BULLION

Institution	Balance on hand Sept. 30, 1986	Receipts (including transfers)	Total	Disbursements (including transfers)	Balance on hand Sept. 30, 1987
Philadelphia . . .	784	173,321	174,105	3	174,102
San Francisco . .	10,654	185	10,839	0	10,839
Denver	43,853,875	0	43,853,875	0	43,853,875
West Point	57,854,498	2,910,795	60,765,293	3,307,582	57,457,711
Fort Knox	147,342,025	0	147,342,025	0	147,342,025
Total	249,061,836	3,084,301	252,146,137	3,307,585	248,888,552

DETAILED RECEIPTS OF GOLD BULLION

Institution	Deposits	Surplus bullion recoveries	Transfers from mints and assay office	Total receipts
Philadelphia . . .	84	0	173,237	173,321
San Francisco . .	0	0	185	185
Denver	0	0	0	0
West Point	4	0	2,910,791	2,910,795
Fort Knox	0	0	0	0
Total	88	0	3,084,213	3,084,301

DETAILED DISBURSEMENTS OF GOLD BULLION

Institution	Used in Liberty \$5 coin	Sold in sweeps, operating losses, etc.	Sold in Gold Medallions	Transfers to mints and assay office	Total disbursements
Philadelphia . . .	0	0	0	3	3
San Francisco . .	0	0	0	0	0
Denver	0	0	0	0	0
West Point	3,133,658	0	0	173,924	3,307,582
Fort Knox	0	0	0	0	0
Total	3,133,658	0	0	173,927	3,307,585

**TABLE 8—Gold transactions of the U.S. Mint, fiscal year 1987,
dollar value**

(Valued at \$42.2222 per fine troy ounce)

RECEIPTS AND DISBURSEMENTS OF GOLD BULLION

Institution	Balance on hand Sept. 30, 1986	Receipts (including transfers)	Total	Disbursements (including transfers)	Balance on hand Sept. 30, 1987
Philadelphia . . .	33,039	7,317,999	7,351,038	100	7,350,938
San Francisco . .	449,882	7,822	457,704	51	457,653
Denver	1,851,607,086	11	1,851,607,097	0	1,851,607,097
West Point	2,442,744,137	122,900,213	2,565,644,350	139,653,386	2,425,990,964
Fort Knox	6,221,104,477	0	6,221,104,477	0	6,221,104,477
Total	10,515,938,621	130,226,045	10,646,164,666	139,653,537	10,506,511,129

DETAILED RECEIPTS OF GOLD BULLION

Institution	Deposits	Surplus bullion recoveries	Transfers from mints and assay office	Total receipts
Philadelphia . . .	3,563	0	7,314,436	7,317,999
San Francisco . .	0	0	7,822	7,822
Denver	0	11	0	11
West Point	122,900,062*	0	151	122,900,213
Fort Knox	0	0	0	0
Total	122,903,625	11	7,322,409	130,226,045

*Statutory value of newly mined domestic gold purchased

DETAILED DISBURSEMENTS OF GOLD BULLION

Institution	Used in Liberty \$5 coin	Sold in sweeps, operating losses, etc.	Sold in Gold Medallions	Transfers to mints and assay office	Total disbursements
Philadelphia . . .	0	0	0	100	100
San Francisco . .	0	0	0	51	51
Denver	0	0	0	0	0
West Point	132,309,938	7	0	7,343,441	139,653,386
Fort Knox	0	0	0	0	0
Total	132,309,938	7	0	7,343,592	139,653,537

TABLE 9—Summary of silver receipts, issues, and balances of the U.S. Mint, fiscal years 1934—1987

Item	Fine Ounces	Value
Balances June 30, 1933:		
Silver bullion ordinary	13,831,051.05	6,588,389.06
Recoinage silver	13,925,846.32	19,251,049.27
	<u>27,756,897.37</u>	<u>25,839,438.33</u>
Receipts (July 1, 1933—Sept. 30, 1987)		
Silver Purchase Act silver (act of June 19, 1934, 48 Stat.1178)	2,048,490,530.48	1,027,637,216.75
Nationalized silver (Executive order 6814, Aug. 9,1934) .	113,032,915.78	56,528,353.08
Foreign debt silver (title III, act of May 12, 1933, 48 Stat.31, 53)	22,734,824.35	11,367,412.18
Newly mined domestic silver:		
Executive Proclamation silver (E.P. 2067 of Dec. 21, 1933, and amendments)	301,226,723.50	216,588,371.53
Act of June 6, 1939 (53 Stat.998)	206,287,208.67	146,693,123.94
Act of July 31, 1948 (60 Stat.750)	376,686,164.80	340,919,995.60
	<u>884,200,096.97</u>	<u>704,201,491.07</u>
Silver bullion ordinary	404,887,413.96	290,831,667.23
900 fine Statue of Liberty \$1 coin melted	923,649.26	1,194,278.49
900 fine subsidiary coin melted	275,660,797.81	390,876,583.90
Recoinage bullion from uncurrent silver dollars	45,936,330.61	61,818,618.00
Seigniorage accruing from revaluation of silver	0.00	1,179,406,984.67
Silver bullion for coinage or for sale at \$1.29+	163,844.32	211,839.12
Silver for numismatic coinage	525,207.32	700,754.27
Silver bullion from GSA stockpile (act of Dec. 31, 1970, 84 Stat.1769)	25,500,000.00	32,969,696.95
Silver bullion purchased from GSA (PL 99-61, 7/9/85) ..	28,407,601.27	36,798,976.16
Total receipts	<u>3,850,463,212.13</u>	<u>3,794,543,871.87</u>
Total silver available fiscal years 1934 through 1987	<u>3,878,220,109.50</u>	<u>3,820,383,310.20</u>
Issues (July 1, 1933—Sept. 30, 1987):		
Silver processed into U.S. coins	2,010,342,193.59	1,935,539,279.38
Silver lend-leased to foreign governments (act of March 11, 1941)	410,814,344.19	191,713,360.44
Silver sold:		
Under Green Act (act of July 12, 1943, 57 Stat.520) ..	167,380,240.92	78,110,778.17
Under act of July 31, 1948 (60 Stat.750)	138,971,143.85	103,749,218.68
Other	387,619,310.26	515,016,899.25
Wasted in operation	1,160,685.90	905,949.44
Melting losses—uncurrent coin	0.00	9,535,449.86
Silver used for redemption of silver certificates	553,386,662.70	715,516,281.00
Silver transferred to stockpile (act of June 24, 1967, 81 Stat.77)	165,000,000.00	213,333,333.18
Total issues	<u>3,834,674,581.41</u>	<u>3,763,420,549.40</u>
Balances Sept. 30, 1987:		
Silver bullion ordinary	11,214,483.18	14,505,897.81
Silver for numismatic coinage	32,331,044.91	42,456,862.99
Total balances	<u>43,545,528.09</u>	<u>56,962,760.80</u>
Total issues and balances	<u>3,878,220,109.50</u>	<u>3,820,383,310.20</u>

¹For silver clad coin.

²Silver purchased from GSA Stockpile to replenish Mint silver used in Statue of Liberty Commemorative Program.

³Silver bullion of the Treasury in custody of the U.S. Mint, amounting to 120,371,251.81 fine ounces valued at \$155,631,517.38 was transferred to the U.S. Government stockpile during the fiscal year 1968. In addition, silver bullion of the Treasury in custody of the Atomic Energy Commission, amounting to 44,628,748.19 fine ounces valued at \$57,701,815.80, was transferred to the stockpile during fiscal 1968 making total transfers of 165,000,000 fine ounces valued at \$213,333,333.18. (Strategic and Critical Materials Stockpiling Act, Public Law 520, approved July 23, 1948, 60 Stat.596, 50 U.S.C.98, 98a-g (1951); Public Law 90-29, approved June 24, 1967, 81 Stat.77,31 U.S.C. 322 (supp. 1967).)

**TABLE 10—Silver bullion transactions of the U.S. Mint,
fiscal year 1987**

	<i>Fine troy ounces</i>
Balances on hand September 30, 1986:	
Silver bullion ordinary	9,215,824.07
Coinage metal fund silver	26,426,973.25
Total	<u>35,642,797.32</u>
Increases during the fiscal year:	
Purchased from GSA for Statue of Liberty Program replacement	24,908,830.45
All other	22,869.09
Total increases	<u>24,931,699.54</u>
Decreases during the fiscal year:	
Contained in SOL gold coins sold	8,167.47
Contained in American Eagle gold bullion coins sold	100,916.18
Contained in Bicentennial of the Const. gold coins sold	1,853.85
Issued as U.S. silver clad coin	126,932.77
Issued as G.W. commemorative coin	1,583.51
Issued as Olympic commemorative coin (\$1)	27.87
Issued as Statue of Liberty commemorative coin (\$1)	5,106,577.83
Issued as American Eagle Bullion Coin (\$1)	11,673,848.40
All other	9,060.89
Total decreases	<u>17,028,968.77</u>
Balances on hand September 30, 1987:	
Silver bullion ordinary	11,214,483.18
Coinage metal fund silver	32,331,044.91
Total (Balance in Mint Only)	<u>43,545,528.09</u>

TABLE 11—Monetary metals operated on and operating gains and losses of the mints, 1987

Operating division and unit quantity	Philadelphia Mint	San Francisco Assay Office	Denver Mint	West Point Depository	Total
METALS OPERATED ON					
Gold bullion:					
Coining fine troy oz	420,000.000			3,367.906	423,367.906
Coining (Medals & Medallions) do	4,033.431			871,029.092	875,062.523
Silver bullion:					
Coining do	5281.17				5,281.17
Silver bullion dollar (999 Fine):					
Coining do		19,306,394.12	755,170.08		20,061,564.20
Silver alloy (900 fine):					
Coining gross oz		19,366,084.51	196,899.62		19,562,984.13
Silver clad alloy (400 fine):					
Coining do		5,414,398.54			5,414,398.54
Cupronickel clad alloy:					
Melting lb. avdp	954,669.00				954,669.00
Coining do	22,780,874.00	764,529.00	14,358,380.00		37,903,783.00
Cupronickel alloy:					
Melting do	312,563.00				312,563.00
Coining do	8,399,626.00	184,912.00	5,181,603.00		13,766,141.00
Bronze alloy:					
Melting do	522,671.00				522,671.00
Coining do					0.00
Copper plated zinc alloy:					
Melting do	464,987.00				464,987.00
Coining do	37,508,804.00	97,207.00	25,020,624.00		62,626,635.00
Copper:					
Melting do	24,089.00				24,089.00

¹This table is based on the Annual Settlements which were performed at the West Point Bullion Depository on 12-21-87, at the Denver Mint on 6-30-87, at the Philadelphia Mint on 12-31-87, and at the San Francisco Assay Office on 12-31-87. Gains and losses determined by inventories on these dates.

TABLE 11—Monetary metals operated on and operating gains and losses of the mints, 1987—continued

Operating division and unit quantity	Philadelphia Mint	San Francisco Assay Office	Denver Mint	West Point Depository	Total
OPERATING GAINS AND LOSSES					
Gold bullion:					
Coining fine troy oz		0.269	(4.215)	(3.946)	
Coining (Medals & Medallions) do	(0.583)			(126.657)	(127.240)
Silver bullion:					
Melting do			8.32		8.32
Coining do	(0.34)	(2.10)			(2.44)
Silver bullion dollar (999 fine):					
Melting do					0.00
Coining do		(10,446.88)	(66.93)		(10,513.81)
Silver alloy (900 fine):					
Coining gross oz	23,610.23	(1,053.93)		22,556.30	
Silver clad alloy (400 fine):					
Coining do		3,790.70			3,790.70
Cupronickel clad alloy:					
Melting lb. advp	(11,211.00)				(11,211.00)
Coining do	(13,256.00)	(2,468.00)	1,825.00		(13,899.00)
Cupronickel alloy:					
Melting do	(10,377.00)				(10,377.00)
Coining do	(2,581.00)	3,470.00	2,109.00		2,998.00
Bronze alloy:					
Melting do	(1,896.00)				(1,896.00)
Coining do					0.00
Copper plated zinc alloy:					
Melting do	(6,708.00)				(6,708.00)
Coining do	(65,479.00)	(310.00)	20,122.00		(45,667.00)
Copper:					
Melting do					0.00

TABLE 12—Stocks of unrefined and semiprocessed gold and silver bullion held at the mints and assay office, Sept. 30, 1987
(in fine troy ounces)

Institution	Gold bullion		Silver bullion	
	Unrefined	Semiprocessed	Unrefined	Semiprocessed
Philadelphia				
San Francisco	12.22		316.88	
Denver	41.27		89.07	
West Point	8,110,870.88	2,816,338.52	4,609,999.96	2,535,800.00
Total	8,110,924.37	2,816,338.52	4,610,405.91	2,535,800.00
Tonnage (short tons) . . .	278.09	96.56	158.07	86.94

TABLE 13—Analysis of monetary assets and liabilities of the U.S. Mint, Sept. 30, 1987

Item	Philadelphia Mint	San Francisco Assay Office	Denver Mint	West Point Depository	Fort Knox Depository	Total Sept. 30, 1987
ASSETS						
Gold bullion and coin.....	\$7,350,937.58	\$457,653.26	\$1,651,607,096.74	\$2,425,990,964.08	\$6,221,104,477.14	\$10,506,511,128.80
Silver bullion.....	\$10,859.72	\$421.65	\$12,248.23	\$14,734,496.20	\$0.00	\$14,758,025.80
Cupronickel clad dollar coin .	\$138,964,058.00	\$58,952,181.00	\$148,519,789.00	\$0.00	\$0.00	\$346,436,028.00
Subsidiary coin.....	\$23,851,876.10	\$0.00	\$49,152,236.95	\$0.00	\$0.00	\$73,004,113.05
Minor coin.....	\$9,513,852.26	\$162.01	\$11,258,885.96	\$0.00	\$0.00	\$20,772,900.23
Coinage metal other than silver.....	\$63,797,873.70	\$49,477,322.72	(\$37,421,944.14)	\$0.00	\$0.00	\$75,853,252.28
All other.....	\$1,072,764.09	\$525,146.68	\$550.91	\$1,534.25	\$0.00	\$1,599,995.93
Total assets.....	\$244,562,221.45	\$109,412,887.32	\$2,023,128,863.65	\$2,440,726,994.53	\$6,221,104,477.14	\$11,038,935,444.09
LIABILITIES						
Bullion fund.....	\$170,096,025.55	\$60,069,042.15	\$2,060,290,320.09	\$2,248,843,442.98	\$6,221,104,477.14	\$10,760,403,307.91
Coinage metal fund.....	\$68,014,976.36	\$48,685,883.45	(\$37,833,214.37)	\$191,883,551.55	\$0.00	\$270,751,196.99
All other.....	\$6,451,219.54	\$657,961.72	\$671,757.93	\$0.00	\$0.00	\$7,780,939.19
Total liabilities.....	\$244,562,221.45	\$109,412,887.32	\$2,023,128,863.65	\$2,440,726,994.53	\$6,221,104,477.14	\$11,038,935,444.09

TABLE 14—Income, expenses, and application of funds of the United States Mint, fiscal year 1987

INCOME		<i>In thousands</i>
1. Coins manufactured (face value)		\$596,379.00
2. Appropriation		\$42,930.00
3. Special Mint coin reimbursements		\$69,469.00
4. Medal sales		\$420.00
5. Foreign coinage orders		\$0.00
6. Sales of miscellaneous products		\$208,397.00
7. Profit on sale of gold (Statue of Liberty Coin)		\$172,555.00
8. Gold medallion sales		\$0.00
9. Miscellaneous reimbursements		\$50,023.00
Total income		<u>\$1,140,173.00</u>
COST OF OPERATIONS		
1. Accrued cost of operations (includes depreciation):		
a. Coinage (domestic)	\$33,522.00	
b. Protection	\$5,132.00	
c. R&D	\$237.00	
Total operating cost		\$38,891.00
2. Cost of metal used in domestic coinage		\$96,871.00
3. Distribution of domestic coinage		\$2,880.00
4. Cost of manufacturing special Mint coins		\$69,469.00
5. Cost of manufacturing medals		\$420.00
6. Cost of manufacturing foreign coinage		\$0.00
7. Cost of processing miscellaneous services		\$50,023.00
8. Less depreciation (Included in cost of operations)		(\$1,601.00)
9. Reconciliation of cost to obligations		(\$14,044.00)
Total cost of operations		<u>\$242,909.00</u>
Excess of income over cost		<u>\$897,264.00</u>
APPLICATION OF NET INCOME		
1. Deposits to the General Fund of the Treasury		\$874,352.00
2. Undeposited revenues (Seigniorage) September 30, 1987		\$4,045.00
3. Expired appropriation		\$4,552.00
4. Inventory changes		\$13,501.00
5. Net decrease in Coinage Profit Fund		\$814.00
Total funds applied		<u>\$897,264.00</u>

TABLE 15—Specifications of U.S. coins manufactured in fiscal year 1987

Denomination	Gross weight	Metallic composition	Diameter	Thickness and edge*
	<i>Grams</i>		<i>.mm</i>	<i>.mm</i>
General circulation:				
50 cents	11.340	3-layer composition: Outer cladding 75% copper, 25% nickel bonded core of pure copper.	30.61	2.18
25 cents	5.670	.....do	24.26	1.70
10 cents	2.268	.....do	17.91	1.35
5 cents	5.000	75% copper, 25% nickel	21.21	1.98
1 cent	2.500	Copper plated onto 99.2% zinc substrate	19.05	1.57
Commemoratives:				
5 dollars	8.359	90% gold, 6% silver, 4% copper	21.59	1.75
1 dollar	26.730	90% silver, 10% copper	38.10	2.84
Half dollar	11.340	3 layer composition: Outer cladding 75% copper, 25% nickel bonded core of pure copper.	30.61	2.18
American Eagle Bullion Coins:				
One ounce gold (\$50)	33.931	91.67% gold, 3% silver, 5.33% copper	32.70	2.83
Half ounce gold (\$25)	16.966	.....do	27.00	2.15
Quarter ounce gold (\$10)	8.483	.....do	22.00	1.78
Tenth ounce gold (\$5)	3.393	.....do	16.50	1.26
One ounce silver (\$1)	31.103	Minimum of 99.9% silver and the balance copper	40.60	2.94

*All coins had reeded edges, except the 5 and 1 cent pieces which had smooth edges.

NOTE—Commemorative coins were Statue of Liberty Commemorative Coins minted under Public Law 99-61 and U.S. Constitution Commemorative Coins (5 dollar and 1 dollar only) minted under Public Law 99-582.

