## Coins Made From:

# Wrong Design Dies, <br> Transitional Design Dies, 

## And

## Mid-Year Die Changes.

## By: John H. Miller Jr.



## Table of Contents

## CLICK ON PAGE NUMBER TO GO TO THAT SECTION

| Introduction | Page 2 |
| :--- | :---: |
| Definitions | Page 5 |
| The Cents | Page 10 |
| The Nickels | Page 17 |
| The Dimes | Page 21 |
| The Quarters | Page 31 |
| The Halves | Page 38 |
| The Dollar coins | Page 44 |
| One Dollar Silver Eagle | Page 46 |
| One Dollar Bill | Page 49 |
| Other Possible coins | Page 50 |
| Bibliography | Page 51 |

ALL RIGHTS RESERVED: No part of this CD-ROM may be reproduced by any means without the written permission by the author.

E-mail John H. Miller Jr. at: ONECENT1909@GMAIL.COM

All Photos By: John H. Miller Jr. unless noted. COPYRIGHT 2019 John H. Miller Jr.

## Author: John H. Miller Jr.



John H. Miller Jr. started collecting coins in Florida in 1981. He has gone on to complete many coin series from Indian and Lincoln Cents, to Peace and Ike Dollars.

In 1999 while trying to locate a 1909 S VDB cent, he was introduced to the Cherrypickers Guide and a 1909 DDO-1 cent. From that day on he has studied everything he can about varieties and errors.
In 2001 he located a 2000 Wide AM cent in change from a local Publix supermarket. This was the start of the collection that helped to create this CD-ROM.
John has won awards from F.U.N. and the ANA for his exhibits and from CONECA for an article he wrote. He was a member of the U.S. Mint Numismatic Forum in Philadelphia in 2016. He is a Member of FUN, ANA (Florida State Representative),CONECA (Florida State Representative), The Ocala Coin Club (Recording Secretary 2016-2021), and the Lincoln Cent Forum.

## Why take the time and view this CD-ROM?

## What is it that you can possibly learn from it?

Imagine today you go into one of your favorite coin shops. While looking at the Indian Head cents you ask to see a 1859 cent. As you start to examine the coin you flip it over and there you see a shield above the wreath on the reverse. You start to think "That is not supposed to be there. The shield reverse was created to be used in 1860, not during 1859."


What you would have just found is a special error coin called a Transitional Die Coin, which is a subset of a Wrong Die coin. Most of these special 1859 cents with the 1860 shield reverse have been found and are quite valuable. However They could still be out there. There are quite a few coins that can be found that used either Wrong Dies or Transitional Dies. These coins can be found today in circulation or inside of a dealer's inventory for the same price as a standard coin. On this CD-ROM we will be looking at several of these coins and seeing what makes them different. By learning this information you may be able to locate them for yourself.

## Now let's read a few definitions and terms that may help us to understand some of these varieties.

WORKING HUBS: These are steel rods with the images of the coins just as you would see them normally, raised up. The working hubs create the working dies by using the hubbing process.

THE HUBBING PROCESS: The working hub is pressed into a cone shaped blank rod using a high pressure press. This will create a working die. Before 1997 this step had to be done multiple times in order to get the design onto the die deep enough. After 1997 this process was done with a special super high pressure press that only needed one pressing to create the working dies.

WORKING DIES: Also a steel rod, but the coin images are sunk into the rods and backwards. This will allow the coin's metal to fill in the image to have a raised design on the coin after being struck. The working die is what is actually used to make a coin. At the end of each year the face of these dies are ground down to cancel out the die. New working dies are made each and every year.


BUSINESS STRIKE DIES: These working dies are used to make business strike coins, the coins we see and use during everyday exchanges. They will strike a standard quality, common looking coin. There is no special treatment of these dies. They are the work horse for the United States Mint.


PROOF DIES: These working dies are specially produced and polished to be used for proof coins that are then sold to collectors. The proof coins have a mirrored field with frosted devices and are produced to render a more attractive coin. Sandblasting and polishing the proof dies are what helps to produce this special coin. Great care is taken to protect these dies from being damaged. Sometimes the design elements used on proof coins are slightly different than business strike dies.


NOTE: These proof coins were photographed to highlight the
frosted devices. Proof coins have a mirrored shiny field.

WRONG DESIGN DIE COIN: A coin where the dies that struck the coin were not intended to have been used together on that coin by the Mint.
Example: A cent with a business strike obverse die and a proof style reverse die.


When discussing Wrong Die Coins we will limited them to coins that are not transitional, those will be listed separately. Wrong Die Coins almost always affect the reverse, and usually are proof dies used on business strike coin. These dies were never polished so they have the same look as a standard business strike coin, but they have the design elements of the proof dies. There can be from one die to many dies that will make these coins. For this reason the coins made from these dies are harder to find and usually more valuable than normal coins. The coins and Bill in this list we will look at are:

1998 P, 1999 P, and 2000 P Cents
1969 P and 1970 P and 1970 D Dimes
1969 D to 1972 D Quarter Dollars
1959 P Half Dollar Doubled Die Reverse
1971 D Dollars

1998 S and 1999 S Proof Cents
1956 P to 1964 P Quarter Dollars
1958 P and 1959 P Half Dollars
1964 P Proof Half Dollars
1972 P Dollars

[^0]TRANSITIONAL DESIGN DIE COIN: A coin struck with a die that the Mint intended to be used, before or after the year on which that coin was struck.

## Example: A 1859 obverse die with a 1860 reverse die on a cent.



Transition Die Coins are by far the rarest coins on this list. They were almost always made by only one die. For this reason not very many were made in comparison to the Wrong Die Coins. The value for these coins is higher on average than on the Wrong Die Coins.

These coins are named by using the year the coin is made, then the words "Reverse of " and then the year of the transition.
EX: 1859 Reverse of 1860 Cent

The coins in this list are:

$$
\begin{array}{ll}
1988 \text { P and D Cents } & 1989 \text { P and D Cents (possible) } \\
1992 \text { P and D Cents } & 1972 \text { P and D Nickels (possible) } \\
1964 \text { D Quarter Dollars } & 2008 \text { W Burnished Silver Eagle }
\end{array}
$$

As you can see this list is much smaller than the Wrong Die Coin list. Most collectors will covet and pay a heavy price to own a mint state example of any of these coins.

MID-YEAR DIE CHANGE COIN: A denomination that in one year had at least two different designs that the mint intended for use.

## Example: The 1909 Indian Head and Lincoln Cents.



Mid Year Die Changes happen quite often. Quite a few are listed in the Red Book(see the 1909 cents or the dimes of 1916). Most of the time it is just the mint changing a design, however sometimes the reason is a flaw on the die. This flaw will prompt the Mint to make a minor adjustment after the start of the yearly run of coins. For the coins in this set, from a few dies up to more than half of all the dies produced would be Mid Year Die Changes. Very few of these coins carry a premium, however some people still want both the normal die, and the Mid Year Die Change coins in their collections.

The coins in this list are:

1909 P VDB Cents
1939 P, D, and S Nickels
1964 P, D, and Proof Dimes
1956 P Proof Half Dollars
1972 P Dollars

1909 P and S Cents
1982 P and D Nickels
1968 S Proof Dimes
1964 P, D, and Proof Half Dollars
1979 P Dollars

The way the Mint intended to use or not use the dies is how to tell which definition you are talking about.

## First up my favorite coin......

## The Fascinating CENT.

Lincoln:


1) The first regular coins made by the U.S. Mint.
2) Large size (1793-1857) and Small size (1857-crrent).
3) Has been made with 5 different compositions: Copper, Copper Nickel, Bronze, Steel, Copper Plated Zinc.
4) Made continually from 1793 till current except for 1815.
5) The Lincoln cent obverse is the longest running coin design ever: 105+ years.

# 1909 P VDB Reverse of 1909 and Reverse of 1910 <br> 1909 P Reverse of 1909 and Reverse of 1910 <br> 1909 S Reverse of 1909 and Reverse of 1910 



Most Coin Collectors know about the 1909 P VDB, 1909 S VDB, 1909 P, and the 1909 S. However for each of those coins not counting the 1909 S VDB there is a Reverse of 1909 and a Reverse of 1910.
We can see the shape of the N in UNITED, mainly the cuts where the diagonal line meets both Vertical lines. There are a few other differences but they are not as easy to spot. These include the squareness of the edges of the $E$, the inside triangle of the A and the center of the M in AMERICA.
Even though there is no price difference to each coin, and they are not well known, You could put together a set of ALL 1909 cents. There would be 9 coins.

Indian head: 1909
1909 S

Lincoln: 1909 VDB reverse of 1909
1909 VDB reverse of 1910
1909 S VDB reverse of 1909
1909 reverse of 1909
1909 reverse of 1910
1909 S reverse of 1909
1909 S reverse of 1910

## 1988 P Reverse of 1989 AKA RDV-006 1988 D Reverse of 1989 AKA RDV-006



These coins were made from a Transitional Design Die. This is a 1988 obverse or "heads" die that was paired with a 1989 reverse or "tails" die.

In 1989 the reverse dies were modified. On the 1989 reverse dies the vertical bar of the " $\mathbf{G}$ " in the designer's initials shows a straight line at the top going inward and it drops down below the lower curve. In contrast the 1988 dies have a plain " G " with no fancy lines at all. This variety was first discovered in 2007, nineteen years after it was created. It is believed that the die technicians grabbed some 1989 reverse dies at the end of the 1988 year and put them with the some 1988 obverse dies.

The coin in question shows that 1988 obverse die paired with a 1989 reverse die. This is a very small detail change. Pay close attention to all 1988 cents as this variety can and has been overlooked. Currently the 1988 D has 11 different dies identified and the 1988 P has 7 different dies identified. However the number of "found" coins total 3 to 1 for the 1988 P over the 1988 D. A possible reason for this is that the Denver mint discovered the mix-up early in the striking of these coins, and removed all of the 1989 reverse dies. Currently this is why the 1988 D is currently very rare and the 1988 P is just listed as rare.

# 1989 P Reverse of 1988 AKA RDV-005 (possible) 1989 D Reverse of 1988 AKA RDV-005 (possible) Is it a real variety? 

This is a standard 1989 reverse die. Notice the top of the $\mathbf{G}$ stops in the middle of the vertical bar.

This is the standard RDV-006 die.


A standard 1988 Die has the top of the G stop at the end of the horizontal line. This is the standard RDV-005 die.

This is what is some call a 1989 Reverse of 1988. Notice where the top of the $\mathbf{G}$ stops. The horizontal inline has been polished. This is a polished standard RDV-006 die.


This is not a variety and should not be bought at any premium at all.
The author has discussed this coin with Dr Wiles who attributes for CONECA and who also came to the same conclusion.

## Now a special set of cents, The WAMs And CLAMs.



The names WAM and CAM refer to a set of cents that the "AM" in the word AMERICA on the Reverse has either a Wide AM (WAM) or a Close AM (CAM). The space between the " A " and " M " is the area in question. The " M " is centered between the "A" and the "E" on a Wide AM. That " M " is closer to the "A" on a Close AM cent. The U.S. Mint has modified the reverse of the Memorial Cent many times. The modifications is where these coins come in.

The first Wide AM coin found was by Maximillian Lucas , a 2000 WAM. It was reported in January of 2001. Soon after that the hunt started for the 2000 dated coins. While hunting the 2000 WAMs, the 1998 WAM and then 1999 WAM were found. There were two other WAMs reported: a 1996 and a 1993 but they were never verified and have since vanished.

In 2005 a Close AM proof cent was found, a 1999 S CAM. This again set off a searching frenzy yielding the discovery of the 1998 S CAM. No 2000 S CAM cents have been found. It is believed that as the proof dies stayed at the Philadelphia Mint the business strike dies left and went to the San Francisco Mint.

The last 2 cents in this grouping are by far the rarest of all of the WAMs or CAMs. In December of 2001 it was reported that a 1992 D Close AM cent had been found. Then in March of 2006 a 1992 P Close AM cent was found. These two coins are very rare and command great prices when sold at auction or in private sales.

A list of the WAMs and CAMs would include 3 WAMs and 4 CAMs or 7 coins total for a full set. It is a set that can be completed, but is extremely challenging to find and/or quite expensive to buy.

## 1992 P Reverse of 1993 AKA CLose AM or CAM 1992 D Reverse of 1993 AKA CLose AM or CAM



An amazingly rare Transitional Die Coin. This 1992 obverse die is paired with a 1993 reverse die. The space between the A and M in America was reduced in 1993 creating the Close AM cent. The FG (designer's initials) was also moved farther away from the building on the 1993 dies.

It has been theorized that the mint wanted to test the striking of the new dies. This led to a few being struck however some got out into circulation. Another possibility is that someone grabbed the wrong die at the end of the year and struck the CAM coins by mistake. This allowed a small production run to get out. Since few have been found so far, it is my opinion that the first theory is the most likely cause.

With only 5 to 151992 P CAMs and 20 to 301992 D CAMs reported you can see that these coins are the rarest of all of the WAM and CAM varieties that have been found so far. Every year more of them have been found but the totals are very small even after 8 years of searching.

# 1998 P RDV-006 AKA Wide AM or WAM <br> 1999 P RDV-006 AKA Wide AM or WAM <br> 2000 P RDV-006 AKA Wide AM or WAM 



This is the first Wrong Die Coin on our list as these coins were made using a business strike obverse die and a proof style reverse die. This proof reverse was not polished so it looks like it is a business strike die but with the designs of the proof die.

Starting in 1993 the one cent proof reverse dies were made with the space between the $A$ and $M$ in America farther apart than on the business strike dies. The "FG" (designer's initials) is also closer to the building than on the business dies.

It has been theorized that the San Francisco mint asked the Die Shop at the Philadelphia Mint to produce some extra proof dies. The die shop made the proof dies but sent the San Francisco Mint business strike dies by mistake. This left the proof dies to be used on the business strike coins as WAMs.

The 1999 WAM cents are the rarest of these coins with the 1998 scarce and the 2000 a little more common but still hard to find. With a lot of searching these coins can still be pulled out of circulation.

## 1998 S RDV-007 AKA CLose AM or CLAM 1999 S RDV-007 AKA CLose AM or CLAM



NOTE: These proof coins were photographed to highlight the frosted devices. Proof coins have a mirrored shiny field.

These 2 coins are proof coins struck with a polished business strike die, making them once again Wrong Die Coins. They are the opposite of the previous coins: the 1998,1999, and 2000 WAMs. They are both Close AMs or CAMs.

The dies used to make these coins were probably business strike dies that got sent to the San Francisco Mint by mistake. These coins have the AM in America touching and the FG being farther from the Memorial Building.

Of these 2 proof coins, the 1998 S CAM is extremely rare and the 1999 S CAM a little more common but still rarer than the 1999 WAM.

Is there a Wrong Die Coin found here, Up next.......

## The NICKEL!

Jefferson:


1) The "Nickel" composition except during the war years: 75\% Copper and 25\% Nickel.
2) From 1942 to 1945 composition changed for the war: 56\% Copper, 35\% Silver, 9\% Manganese.
3) 4 designs make up the whole list of nickels: Shield, Liberty, Buffalo, and Jefferson.
4) 1944 Nickel with no "P" on reverse is a counterfeit.

## 1939 P Reverse of 1938 and 1939 P Reverse of 1940 <br> 1939 D Reverse of 1938 and 1939 D Reverse of 1940 1939 S Reverse of 1938 and 1939 S Reverse of 1940



The Jefferson "Nickel" (made out of 75\% copper and 25\% nickel) was created in 1938. During 1939 or the 2nd year of production, Monticello's steps were modified and strengthened. The two dies used that year were later called the reverse of 1938 (mushy steps) and the reverse of 1940 (strong steps).

Since we know that both dies were intended by the Mint to be used in 1939, we can use our definitions we studied to say these nickels are NOT Wrong Die Coins or Transitional Die Coins. However, they do share a similarity to some other nickels: the 1867 with rays or without rays, the 1883 with cents or without cents, and the 1913 buffalo on the mound or buffalo on the plains nickels. They have two different dies intended for use in the same year or per our definitions a Mid-Year Die Change Coin.

Even though these coins are Mid-Year Die Change Coins, there is still a premium paid for the 1939 reverse of 1940 nickels from all mints.

## 1972 P Reverse of 1967 (possible) 1972 D Reverse of 1967 (possible)

1971 Reverse


1967 Reverse


In February 2016 an article in Coin World talked about a 1972 Nickel that had a reverse of 1967. But I ask you, does it exist?

The front door and windows on Monticello are recessed on the 1967 die. These design elements are raised on the 1971 dies. look at the top of the windows on either side of the front door. On the 1967 dies they are straight. On a 1971 die the top slants downward.

I have never seen a 1972 P or D reverse of 1967. Two Jefferson Nickel experts and authors Mr. Bernard Nagengast and Mr. Richard Bousquet have informed me that they have never seen one either. If these coin varieties do really exist, they would be a very rare and valuable Transitional Design Die Coins.

## 1982 P Reverse of 1977 and 1982 P Reverse of 1983 <br> 1982 D Reverse of 1977 and 1982 D Reverse of 1983



In 1982 the reverse of the nickel was modified. The details on Monticello's dome were strengthened. At the same time "E Pluribus Unum" and "United States Of America" were moved away from the rim slightly. The older die (1977) has soft details and the "E Pluribus Unum" and "United States Of America" very close to the rim.

The number of 1977 reverse dies used has not been verified yet. There has not been a lot of information published on these dies yet. Ongoing investigations have yielded that the new dies were issued around April of 1982. Because of this these dies are considered Mid-Year Die Changes, an intended die change made part of the way through the year.

This variety needs to be studied more. Anyone with any more information about these nickels is asked to E-MAIL the author.

Now we will look at a small interesting coin......

## The DIME.

Roosevelt:


1) By size: it currently is the smallest circulating coin.
2) Has been made with 3 compositions: 89\% SILVER, 90\% Silver, and Copper-Nickel.
3) Only non bullion coin to have a "W" mint mark: 1996 W Roosevelt dime included only in Mint Sets.
4) The Roosevelt dime was created shortly after his death.

1964 P Pointed 9
1964 D Pointed 9


Early in 1964 the obverse dies of the Roosevelt dime were modified most notably at the date. The " 9 " went from a pointed tail " 9 " to a squared tail " 9 ". With this being an intended die change these dimes would be a considered Mid-Year Die Change Coins.

Because the dies changed very early in the year, the pointed " 9 " is the rarer of the two types. A lot of speculation over the value of these variety drove the price of the pointed "9" up in 1964 and 1965. Now these pointed " 9 " dimes can be found with some searching but only carry a small amount of a premium.

Numismatists specialist Walter Breen puts possible mintages as follows:

1964 P Pointed 9: Under 2,000,000
1964 D Pointed 9: Under 40,000,000

1964 P Blunt 9: Over 927,000,000
1964 D Blunt 9: Over 1,317,000,000

## 1964 P Proof Pointed 9



NOTE: These proof coins were photographed to highlight the frosted devices. Proof coins have a mirrored shiny field.

The 1964 proof dime also comes as a pointed 9 or a blunt 9
Again the change to a Blunt 9 was early in the year so the pointed nine is rarer and is also harder to find.

Again this would be a Mid-Year Die Change Coin. The premium paid for the Proof Pointed 9 dimes is better than the Business strike versions. On EBay these dimes do carry a premium

However if you find a Point 9 Proof Dime inside of an intact proof set, also look at the Half Dollar. These "early in the year" Proof sets can have both a Pointed 9 Dime and a 1964 Proof accented hair halves which we will discuss later.

## 1968 S Reverse of 1968



NOTE: These proof coins were photographed to highlight the frosted devices. Proof coins have a mirrored shiny field.

These are Mid-Year Die Change Coins, but this time proof coins. In 1968 the reverse dies for the proof dimes were modified to show among other things two deep cuts on the flame of the torch. Not much in the way of research has been printed on these proof coins. While looking at 40 E-BAY listed 1968 S dimes, 16 were reverse 1967, 18 were reverse 1968, and 6 could not be identified from the pictures. The two different designs are easy to spot and can be found with a little searching.

In any case either of these 1968 S proof dimes can be bought for the same price. You can locate both of them while searching at most coin shows fairly easily. If you collect Roosevelt dimes, proof coins, or just coins in general these two coins would be a nice addition to anyone's collection. Just think, you may be ahead of the searching game for both varieties if you start looking now. If one of the two dies would catch on these coins may go up in value. Locating them now may be a steal compared to later when they get more exposure.

## 1969 P Proof Reverse AKA Reverse of 1968 <br> 1970 P Proof Reverse AKA Reverse of 1968 <br> 1970 D Proof Reverse AKA Reverse of 1968



During 1968 the reverse dies for proof dimes were modified to show among other things two deep cuts on the flame of the torch. The business strike dies do not show both cuts and were in use from 1947 to 1970.
The two cut or proof style die started as the only die used for both the business strike and proofs strike coins in 1971.

So what should these dimes be called: a Wrong Die Coins, a Transitional Die Coins, or a Mid-Year Die Change Coins?

During 1969 and 1970 this style die was intended to be used on proof coins only. We can see by using our definition that these are Wrong Die Coins. They were struck using obverse business strike dies and reverse proof style dies. This proof reverse was not polished so it looks like it is a business strike die but with the designs of the proof die. Out of the three coins the 1969 P has been the hardest one to locate, with the 1970 D the easiest.

This variety was first published in the 2012 Cherrypickers' Guide 5th edition Volume 2 book. Proving that after 42 years you can still find new unknown varieties on older coins.

It has more Wrong Die Coins than any other....

## It's The QUARTERS.

Washington:


1) Called " 2 bits": A Spanish bit was 12 and $1 / 2$ cents Ever heard of 2 bits, 4 bits, 6 bits, a dollar?
2) Has been made with 4 compositions: $89 \%$ SILVER, 90\% Silver, 40\% Silver, and Copper-Nickel.
3) Used widely in vending machines, pay phones, video games, parking meters, and laundry mats.

## Let's look at a few Type B Quarters

1956 P Type B reverse<br>1957 P Type B reverse<br>1958 P Type B reverse<br>1959 P Type B reverse<br>1960 P Type B reverse<br>1961 P Type B reverse<br>1962 P Type B reverse<br>1963 P Type B reverse<br>1964 P Type B reverse



## That's a lot of Wrong Design Dies!

## 1956 P To 1964 P Type B reverse



Starting in 1950 the U.S. mint created a Type B reverse for the proof quarters. There are a few differences that can be easily seen. On this die the leaf to the left of the arrow is pointed and rises above the arrow heads. On the type A or business strike dies that leaf is rounded and stays below the arrow tips. The second difference is the space between the E and S of states is wider on these proof dies than on the business strike dies.

From 1956 up to 1964 some reverse proof dies were used to strike business strike quality quarters making Wrong Die Coins. This proof reverse was not polished so it looks like it is a business strike die but with the designs of the proof die. The 1956 is the rarest of the type B quarters with the 1959 and 1960 the most common.

## 1964 D Reverse of 1965 AKA Type C Reverse



This is a special Transitional Die Coin quarter. The 1964 dated quarters were struck from 1964 into the middle of the 1965 year. On the reverse dies produced for the 1965 dated quarters the tail feathers of the eagle are stronger with a center line on each feather. Also on these dies the leaf to the left of the arrow is pointed but it does NOT rise above the arrow heads. The 1964 circulation die has a weak more rounded leaf but it too does not rise above the arrow heads.

There was only one 1965 reverse die that received a "D" mint mark and was matched with a 1964 obverse die. The 1964 D Type C quarter is considered extremely rare. Even an Almost Uncirculated example is harder to find than Mint State examples of most of the 1956 to 1964 Type B quarters. As more and more 1964 dated quarters are being melted for their silver content, the number of surviving type C quarters is slowly disappearing without ever being found.

## 1969 D Proof Reverse AKA Type H Reverse 1970 D Proof Reverse AKA Type H Reverse 1971 D Proof Reverse AKA Type H Reverse 1972 D Proof Reverse AKA Type H Reverse



From 1969 to 1972 at the Denver mint at least one proof style die was used each year, creating a working die with a proof design.

These quarters look like type B quarters with the type C tail feathers.
They are Wrong Design Die Coins. The leaf to the left of the arrow tip is above those tips. and there is a bigger space than normal between the E and S in STATES.

These 4 coins are extremely hard to locate in circulated condition and almost impossible to find in mint state. The author knows of 4 Mint State coins total: two that are dated 1969 D, one 1971 D, and one 1972 D.
The author has only located one 1969 D and one 1971 D Type H quarters, both of them are in circulated condition.

Now a Wrong Die Coin and a Doubled Die coin... The HALF DOLLARS.

Franklin:


Kennedy:


1) Has had 4 compositions: $89 \%$ Silver, $90 \%$ Silver, 40\% Silver, and Copper-Nickel.
2) Currently largest sized circulating coin the U.S. Mint makes: Kennedy Half Dollar.
3) The fastest coin put into production: 4 months The 1964 Kennedy Half Dollar

## 1956 Early Proof Style Reverse AKA Type 1 Reverse <br> 1956 Late Proof Style Reverse AKA Type 2 Reverse



1956 Proof Type 1


1956 Proof Type 2

In 1956 the proof half dollar dies were modified to enhance the design of the coins. The main pick up point is the design and number of the eagles wing feathers. On the proof dies that started the 1956 year the feathers were weak and "flat". There are 4 feathers located to the left of the branch the eagle stands on. However early in the year the modified dies started striking coins, yielding a stronger and bolder feather appearance. This die has 3 feathers located to the left of the branch. This change by the Mint is what makes these Mid-Year Die Change coins.

The type 1 dies were only used for a very short time. The estimated percentage of type 1 proof coins struck is $5 \%$ of the yearly total or less than 34,000 coins. This makes them valuable and very hard to find.

The type 2 die was used throughout the rest of the Franklin Proof half dollar production run. The business strike coins were struck with the type 1 reverse, except for a few coins in 1958 and 1959.

Let's take a look at those coins now.

## 1958 Type 1 and Type 2 Reverse <br> 1959 Type 1 and Type 2 Reverse



The next 2 halves we will look at are Wrong Die Coins, as they are again a proof style reverse die used with a business strike style obverse die. In 1956 the proof half dollar dies were modified to enhance the design of the coins. One of the modifications on the reverse is to the eagle's right wing feathers (the views left side). These dies have 3 strong feather tips while the standard business strike style coins (or Type 1 dies) have 4 weaker tips. Some proof dies were used on the business strike coins of 1958 and 1959.

Numismatist author Walter Breen has stated in his book: "The Complete Encyclopedia Of U.S. And Colonial Coins", that up to 20\% of all 1958 and $70 \%$ of all 1959 business strike halves have the Type 2 dies. As the details are quite big, this variety can be noticed even without a magnifying glass. These coins can be found on E-bay or in most dealer's inventory.

## 1959 Doubled Die With The Type 1 And Type 2 Reverse AKA Type 3 Reverse



The last half dollar coin shown here is a 1959 half that has a doubled die reverse. This die was made first using a Type 1 hub to start the working die then later a Type 2 hub was used to finish this working die.

This single unique working die shows both the weaker wing tips of a type 1 die and the strong wing tip of a type 2 die on the same coin. This is a very special Wrong Die Coin, and has been called a hybrid "Type 3" coin. The die in question also shows some doubling on parts of the bell handle and the motto areas of the reverse as well.

As this is the only 1959 die affected this way, the estimated number of coins stuck by this die is 250,000 to 500,000 coins. The total number of halves stuck in 1959 at the Philadelphia Mint was 7,349,291.

## The Kennedy Half Dollar Story.



With the assassination of President Kennedy on November 22, 1963 America was in morning. Congress and the U.S. Mint wanted a coin in remembrance of President Kennedy. They started working on this right away by modifying the dies that were used for President Kennedy's inaugural medal.

By December 13th the mint had the first dies ready and produced a few trial strike specimens. On December 27 th Mrs. Kennedy was shown the first and original designed coins. She commented that the Presidents hair at the part line was not quite right. This led the Mint to make a change in the dies. The new dies had the hair modified slightly by removing some of the heavy cut lines in the hair. However on January 2, 1964 the first die design, the Accented Hair Die was already striking Proof 1964 halves.

The new dies had not been produced yet, and Proof production was already underway. Production of regular coins began January 30th at the Denver Mint, then at the Philadelphia Mint. The day of March 5th the new halves were being released to the general public. Within 4 months a bill had been introduced, Congress voted yes on that bill, dies were produced, and the coins were made and started to be distributed.

But what about those first Proof dies and coins that were made with them before the new modified dies were produced?

## 1964 P Accented Hair AKA ODV-001



The coins that were created by the first proof dies have extra lines in the hair below the part line in the shape of an upside down wishbone. They also have a broken bottom left serif on the letter "I" in LIBERTY. The standard coins do not have this broken serif or the extra hair lines. A majority of the Accented Hair Proof Coins tend to have a milky haze for some reason. Finding unblemished high grade examples can be a challenge. It has been estimated that the mintage of the Accented Hair coins are somewhere between 100,000 and 120,000.

These dies were put into production and some proof coins were produced before the new dies were created. Then the mint introduced the new style Proof dies. The Accented Hair Dies were not supposed to have been used. By using our definitions we see that we should call them Wrong Die Coins. These are proof strike obverse dies that were not intended to be used with any reverse die at all.

## 1964 P Accented Hair Reverse AKA RDV-001 1964 D Accented Hair Reverse AKA RDV-001 1964 Proof with the Accented Hair Reverse AKA RDV-001



The 1964 accented hair proofs had a reverse most people call RDV-001 This reverse has the rays near the stars on the reverse broken and going around the stars. The rays do not touch the stars.

RDV-002 which was used after the start of production shows the rays behind the stars, not broken. The Rays do touch the stars.

Both RDV-001 and RDV-002 can be found on 1964 Philadelphia and Denver circulation halves. The RDV-001 are slightly scarcer but how much more, we do not know yet. There has been no studies of these coins published yet.

At the same time the RDV-001 and RDV-002 reverses can be found on proofs that are not accented hair. These proof coins are again scarcer but we do not know how much as no studies on these have been done either.

This would be a Mid-Year Die Change that does not bring much extra value at this time. If it were to catch on, who knows what the premium for these coins could be.

# The largest denomination with a Wrong Die Coin... The Often Overlooked DOLLARS. 

Eisenhower:


Susan B. Anthony:

1) 2 sizes: Large 1794 to 1978 and Small 1979 to current.
2) 5 compositions: $89 \%$ Silver, $90 \%$ Silver, $40 \%$ silver, Copper-Nickel, Manganese Covered Copper.
3) Second most popular collected coin:

Number one is the Cent.

## 1971 D RDV-006 AKA Friendly Eagle Variety



The Friendly Eagle Eisenhower Dollar is a funny coin. This die was intended to be used in standard production, but the U.S. Mint decided to not use it. It has been worked out that this die did not stand up to production test for the Copper-Nickel planchet. These dies were put into use at the Denver Mint as they did not have the standard type 1 dies to begin with. They are the First Design Dies for the Eisenhower dollars, but were not given a RDV number till late so they are listed as RDV-006.

The original drafted look the designer Frank Gasparro wanted has a furrow cut above the eye of the eagle. This gave the look of being a angry, furious eagle. However the Mint director wanted a more friendlier looking Eagle of Peace. Mr. Gasparro had to remove the furrow creating the dies that we are talking about, the Friendly Eagle Variety. After testing showed that these dies would not stand up to the pressure of the Copper-Nickel planchet, Mr. Gasparro had to hurry and change the die design. This gave him the opportunity to add the furrow that he wanted and that we now see on the common reverse dies.

Funny, the original draft was a Angry Eagle, the first designed dies are the Friendly Eagle, the dies used for the standard common coin is the Angry Eagle, and the rare 1971 D coin is the Friendly Eagle.

What should we call this coin? The mint did not want this die used in coin production, as it would not stand up to the striking pressures. We should call it a Wrong Die Coin. This is a strange and different story for a coin die, but if we use our definitions, it is a Wrong Die Coin never the less.

1972 P Type 1 AKA Low Relief AKA RDV-001
1972 P Type 2 AKA High Relief AKA RDV-002
1972 P Type 3 AKA Modified High Relief AKA RDV-003
A WRONG DIE and a MID-YEAR DESIGN CHANGE in the same year!

Low Relief


High Relief


# 1972 P Type 1 AKA Low Relief AKA RDV-001 <br> 1972 P Type 2 AKA High Relief AKA RDV-002 



In 1972 three different dies were used on the reverse of the Philadelphia Eisenhower dollars.

The Type 1 dies were made for business strike coins and the type 2 dies for the proof coins. The Type 1 dies were made as a low relief die. The Type 2 dies were made as a high relief die.

The difference between the two dies can easily be seen by looking at the planet Earth. The area to look at is the islands that are located below and to the right of Florida on both dies. On the Type 1 die there are 3 islands that are raised from the field. On the Type 2 dies, these islands are seen as sunken water lines that are used to represent the location of those islands.

In 1972 one of the type 2 dies was used at the Philadelphia Mint by mistake, creating a Wrong Die Coin. This is a proof style reverse die and a business strike obverse die on the same coin. The 1972 P Type 2 dollars have been a very hard Eisenhower dollar coin to find.

## 1972 P Type 1 AKA Low Relief AKA RDV-001 <br> 1972 P Type 3 AKA Modified High Relief AKA RDV-003



Later, around September of 1972, a new modified high relief die was formed using a new die steel. These dies were made to be used on business strike coins. This Type 3 die has the three raised islands located directly below and left of Florida. On a Type 1 die the three islands are located below and to the right of Florida. The Type 3 coins are a MID-YEAR DIE CHANGE from the original Type 1 coins, as they were an intended design change. The Type 3 dies were used for the rest of the time of the Eisenhower dollar run.

The Type 2 dies are very hard to find and quite valuable. The Type 1 and Type 3 dies have no difference in price tags, even though there are less type 3 than there are of the Type 1s. However to form a complete coin set of the 1972 Philadelphia Eisenhower dollars, you will have to locate all three types of coins.

With searching dealer stock both type 1 and type 3 dies can be easily found. The Type 2 die is now listed in most guides. This makes it harder to located the coin without it being listed as a Type 2 and paying a higher price. However with some searching and a little patience, they can still be found in shops.

## 1979 P Wide Rim AKA Near Date



This is our first coin where we will look at the obverse, and not the reverse.
In 1979 with the start of the Susan B. Anthony dollar (SBA dollar) the mint was trying to get dollar coins to circulate by reducing the size of the coins. This created a problem as they now were similar in size, shape, and color to a quarter. For this reason the mint made a 11 sided rim so the public could tell them apart. This small detail was not enough of a difference for the public, but did create a neat and valuable MID-YEAR DIE CHANGE COIN.

Sometime after the start of the production run, the rim was widened. This made a new die design type that was used by all three mints starting in 1980. Because of this change the date looks nearer to the rim. This is clearly seen by examining how close the " 1 " is from the rim. On the Wide Rim coins the " 1 " is less than the thickness of itself from the rim. However, this design was used late in 1979 only at the Philadelphia Mint. This created a MID-YEAR DIE CHANGE. Because the change happened so late in the year this style coin is harder to find than the more common narrow rim coin.

The wide rim die change is a highly collected special variety, and people will pay a premium for them. However they may still be found while looking through circulation. Most Susan B. Anthony coin collectors try to include this coin in their collection.

## A 21st century Transitional design die coin.... The American Silver Eagle

Silver Eagle


1) Silver Eagles started in 1986.
2) Has had 5 different finishes: Standard Bullion, Proof, Burnished, Reverse Proof, and Enhanced Proof.
3) The Obverse is designed after the Walking Liberty Half Dollar, and the Reverse was designed for this coin by John Mercanti.
4) The rarest of the Silver Eagles is a 1995 W proof coin issued only in a 10th anniversary set of Proof Gold Eagles: only 30,125 made.

## 2008 Burnished Reverse of 2007 Silver Eagle



## Both Coins Shown Are Owned By: Paul Conner

In 2008 the reverse die of the Silver Eagle one dollar coin was changed. Among the differences was the addition of a straight line on the bottom right side of the "u" in UNITED. The 2007 Reverse dies had no straight lines and looks like a plain "U". At the time of the change three different finishes were being created. A standard coin finish or bullion coin, a proof coin finish, and finally a burnished or sandblasted finish.

Around April of 2008 a coin collector from Georgia reported that he found a burnished finished Silver Eagle with a 2008 obverse and a 2007 straight "U" reverse. This is a Transitional Die Coin.

By May 31 2008, the U.S. Mint estimated that there were no more than 47,000 of the 2008 W reverse of 2007 Silver Eagles minted. These coins carry a very high price tag and most have been found.

# Wrong Designs are not just limited to coins.... The ONE DOLLAR Bill ! 



## Obverse or Face of \$1.00 bill



Reverse or Back of $\$ 1.00$ bill

The dies that make our paper money are called Plate Dies. Every plate has a identifying number on it, the face plate number, or the back plate number. It is these plate numbers we will be using to identify this very rare bill.

All of the United States currency is printed at one of two of the Bureau of Engraving and Printing locations. There is the Washington, D.C. B.E.P. which prints for the eastern federal reserve banks. There is also the Fort Worth, Texas B.E.P. which prints for the western federal reserve banks.

Face plate die numbers


On a Washington D.C. face plate the plate number is located on the bottom right of the bill.

However, on a Fort Worth printing the face plate can be identified by the "FW" on the bottom right of the bill, next to the face plate number.

Back plate die number


A Washington, D.C. back plate will have small size numbers located at the bottom right of the bill for the plate number.

The back plate on a Fort Worth bill will have larger size numbers for the plate number again located at the bottom right corner of the bill.

## 1995 Fort Worth Reverse of Washington, D.C. AKA 1995295 Error bill

## Face Plate



Back Plate


This "Error" bill has the Fort Worth face plate number FWD347. It also has the Washington, D.C. back plate number 295. The wrong printing back plate was sent to Fort Worth to be used in printing this dollar bill. This combination would be labeled as a Wrong Design Die dollar bill. It has one branch face plate (Fort Worth), with another branch back plate (Washington, D.C.) and they should not have been used together.

As of 06/14/2005 an online censes reported that 28,556 of the 295 error bills have been cataloged. This may seem like a large number, but a total of 8,191,344,000 1995 Fort Worth bills were printed. This means that around .0034\% of all the 1995 Fort Worth bills out in the world have been reported as 295 errors. There may be more out there, but they are disappearing fast.

## What else could be out there but not yet found?

## Here is a list of some possible design changes. Could you have one and not even know it? Check out these possibilities, then go look for them.

1) 1973 cent: Only year in which the " $F$ " in " $F G$ " is level with the top edge of the steps of the Memorial Building on the reverse. Look for the tall "F" on the 1972 or 1974 cents.
2) 1989 P and D cents with the reverse of 1988: if there are 1988 with the reverse of 1989, why can't there be a 1989 with the reverse of $1988 ?$
3) From 1993 to 1997 P and D, 1998 D to 2000 D, plus 2001 to 2008 P and D WAM cent: Any of these cents may exist as a WAM coin, check all of them.
4) 1966 nickel: The designer's initials "FS" were added to the bust area on the obverse. Look for a no "FS" on the 1966 nickels.
5) 1969 D dimes: Try looking for the proof style reverse of 1968 or the 2 cut dies on the 1969 D dimes. This die may have been used at both mints like in 1970.
6) From 1950 to 1955 P and D quarters and 1956 D to 1964 D quarters: Try looking for the Type B or Proof Style Reverse on quarters of all those years.
7) 1956 to 1964 Proof Quarters with a Type A reverse: both reverses were in use at the same mint... who knows if this coin might be out there.
8) 1956 to 1957 and 1960 to 1963 dated halves: Look for business strike Franklin half dollars with a Type 2 or proof style reverse on them at both mints.
9) 2008 proof and bullion silver eagles: look for reverse of 2007 on these coins. None have been reported, but one may have been stuck and got out.
10) Try to examine coins that are a year apart. If you notice any difference, write it down and examine all coins either side of that year. Look for the difference.

## Would you enjoy learning more about Wrong Dies or Transitional Dies?

 The information given here was compiled using these Books, CD-ROMS, and Websites. Take a minute or two and check them out.
## BOOKS:

1) The Official Red Book, A book everyone should own by R.S. Yeoman Edited By K. Bressett
2) Complete Encyclopedia Of U.S. And Colonial Coins, By Walter Breen
3) The Authoritative Reference On Lincoln Cents, By John Wexler and Kevin Flynn
4) The Jefferson Nickel Analyst, By Bernard A. Nagengast
5) The Authoritative Reference On Eisenhower Dollars, By John Wexler and Kevin Flynn
6) American Silver Eagles: A Guide to The U.S. Bullion Coin Program, By J. Mercanti
7) The Cherry Pickers Guide Volumes 1 and 2, By Bill Fivaz and J.T. Stanton
8) Strike It Rich With Pocket Change $4^{\text {th }}$ Edition, By Ken Potter on varieties
9) 100 Greatest U.S. Modern Coins, By Scott Schechter and Jeff Garrett

## CD-ROMS:

10) Master Hubs \& Master Dies Of The Lincoln Cent 1909-2006, By B.J. Neff
11) A Detailed Analysis Of Lincoln Cent Varieties 1909-2009, By Billy Crawford

## WEBSITES:

12) www.lincolncentforum.com, Website and forum for Lincoln cent varieties
13) www.washingtontype-b.com, Website for Type B quarter collectors
14) www.franklinlover.yolasite.com, Website for Franklin half dollars
15) www.ikegroup.info, Website for Eisenhower dollars
16) www. doubleddie.com, Website by John Wexler listing all forms of die varieties
17) www.error-ref.com, Website for error and variety information
18) www.varietyvista.com, Website with a master list of die varieties from CONECA
19) http://koinpro.tripod.com/, Website by Ken Potter: Selling coins but with information
20) www.smalldollars.com, Website discussing small size dollar coins

Start reading and searching your coins now!
You never know if the next Wrong Die Coin that is found will be yours or another person who is also reading this information!

## I would like to Thank the following people

An over whelming Thank You has to be given to all of my family, but mostly to my Wife Peggy Miller and Son, Alex Miller. The two of you have allowed me to study, write, search, rewrite, complain, and enjoy my hobby. Thank you for your help, support, editing, and love. I could have never done this without the both of you. I could never thank the two of you enough.

This CD-ROM is dedicated to two people, my mentor and a very good friend. First, Michael Cockfield who passed away on May 27, 2013.
He started teaching me about varieties in 1999, and never stopped. Born in 1959 in Rhode Island he lived in Ocala, Florida for the last 22 years of his life. I would see him with his wife by his side at 4 or 5 shows every year. He had a laugh that would make everyone smile. Always searching the shows to buy silver bullion, key date coins, and some nice varieties. He would go dealer to dealer examining and buying the right ones for him.
He occasionally pointed out variety coins to people and dealers, so they may be able to sell them for more money. Always willing to help anyone who asked, he was a quiet giant among mortal men.

Mike, you will be missed this is for you.

Now my friend, Bob Mellor. You are a friend that I can bounce ideas over to. We may have only known each other for a few years, but it has felt like forever. The way you share your knowledge has been a help with this CD-ROM.
From the FUN show, to the ANA show, and stops at working at the CONECA table, and the ANA Summer Seminar. Thank You for phone calls, Emails, and help with all the coins.

I will see you at the next show, and call you soon.


[^0]:    1995 FW Dollar Bill

