Hunting the Bison - Hunting for Answers

By Alan Thomson

When a stamp printer produces an issue in a style or format that is new to the company, we can look forward to some unusual and sometimes puzzling features on the stamps. The Bureau of Engraving and Printing demonstrated this with its first small roll (100) pressure sensitive adhesive (PSA) coil, the Flag Over Porch. We found all sorts of new and unusual characteristics on them that swelled our collections beyond simple plate number accumulating. Die cutting variations were most responsible for this.

The 21¢ Bison coil assigned by USPS to Avery-Dennison is Avery's first venture into the small roll PSA coil world and it is not disappointing the PNC variety specialists. Only one cylinder combination has been found so far, V1111, but that has not limited collecting to one strip. Avery has shown us some innovations in its processes, and one number can turn into three or more collectible strips. And that doesn't consider some of the freaks found to this point.

Avery used a Dai Nippon Kiko gravure press with a cylinder circumference of 35 stamps and a width of 11 stamps (rows). Plate numbers are at five stamp intervals.

The Bison coil was issued 22 February 2001 and almost immediately some collectors and dealers said they had found two die cut types. Both types counted 10 peaks on each side of the stamp, but the left side of one started with a peak (P) and ended with a valley (V). This is commonly referred to as a PV type. The other style started with a valley and ended with a peak on the left side, and is known as a VP type.

To have such a distinction, there must be some separating device in the serpentine line that defines a start and stop point for the cut on each stamp. If it's not there, the serpentine line is just like a row of perforation holes that moves non-stop across the entire web. A defining point is not readily apparent on the Bison. The question became, "Is one there, and if so, what is it?"

On the Porch Flag coil the interruption, or separator, in the serpentine line was simply a straight line. It was usually easily seen at both the top and bottom of both sides of the stamp. To illustrate how this little straight cut crossed from one row in the printed web to the next we just took two successive stamps from a roll and placed one above the other. The lines matched perfectly. Figure 1 shows how this was done. But using stamps from the same roll worked only because all the separators were the same; all straight lines.



Fig. 1

There was much speculation and several theories were offered about what the Bison separator was or whether it even existed. It was not at all evident by just examining a single stamp. I decided to repeat the row above row simulation that had worked on the FOP, with disastrous results. Figure 2 shows the die cuts did not match at all and no separator was revealed.

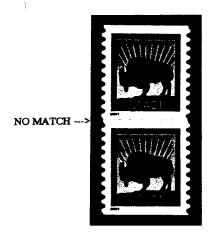


Fig. 2

One stamp was inverted and the die cuts matched but that suggested the stamps were printed tete-beche. That was not likely because then half the rolls would be wound backward when the stamps were processed. No one had found even one roll that was wound so that it unrolled to the right instead of the standard left.

Fate, and some hunting, intervened. I located a post office that had over 400 rolls of the Bison. Searching through them for some clue, I found two rolls that were so badly sliced the dates and the plate numbers were on top of the stamps. One roll revealed a separator that is a shallow elongated valley with a normal peak at either end. This would define a PV die cut. Looking across to the right side, the matching form was a stubby vertically elongated peak with a standard valley at either end. Figure 3 shows the miscut stamp. The shallow valley appears to be just half normal depth, and the stubby peak seems to be half as tall as a normal one.

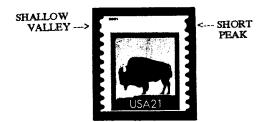


Fig. 3

The other roll solved the puzzle. It had the two separator shapes reversed. The stubby peak is on the left and the shallow valley is on the right at the top. This defines a VP type die cut. By placing a stamp from each roll one above the other, the continuity of the die pattern came to life. It was a perfect match and showed that the two types of separators alternated from row to row. If row 2 had a shallow valley at the top, row 3 had a stubby

peak at the top. Figure 4 shows the stacked stamps and how they fit together. This discovery not only proved the two types of cuts, PV and VP, but showed that the available quantities of each were about equal. To this point the Bison had two different separators.

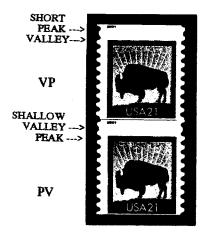


Fig. 4

I wondered how the beginning and the end of the die cut looked and returned to the lucky find post office. Combing through the rolls again I found another misscut roll but it had no dates or plate numbers on top, just a big white margin. It was the very top row in the web and it had a different shape at the top; perfectly straight lines on both sides. That made three different separators. This top row started with a valley below the straight line and made that row a VP type. The top row misscut is shown in Figure 5. Notice that the straight line, if extended downward, would pass through the center of the peaks along the side.



Fig. 5

The fact that all three separators are only half as high or deep as the peaks and valleys on the side of the stamp is a key to identifying a PV or a VP type on a normally sliced stamp. More about that later.

Finding the top row stamp with its straight line ending suggested that the bottom row in the web also had a straight line, but at the bottom. It does. The stamp in Figure 6, although not misscut to the same extreme as the top row stamps, shows the straight line. The pictured stamp has a very small top margin and a jumbo bottom margin which reveals enough of the final cut to determine it is straight, and not part of a shallow long valley or stubby broad based peak.



Fig. 6

For full clarity I decided to reconstruct the top four rows of the web. The stack of four stamps in Figure 7 is built entirely from misscut rolls and demonstrates the relative positions of the three kinds of separators and how the two interior types alternate in the descending rows. Note that plate number/date-on-top freak strips exist in both the PV and VP varieties.

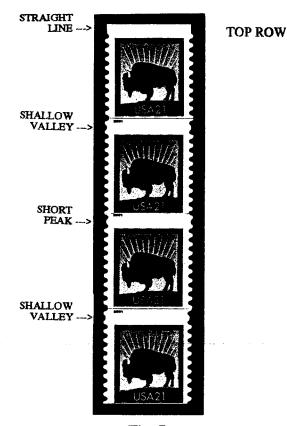


Fig. 7

Distinguishing PV and VP strips from normally sliced rolls is not easy on the Bison coil. As previously mentioned the fact that the separating device is only half the height or depth of a regular peak or valley is the key. Look in the upper left corner of the stamp in Figure 8, the extreme top half shape sticks out only half as far as the first full peak below it. It's a stubby peak. The first full shape below the stubby peak is a valley. The last shape at the bottom is a peak that turns into the start of a shallow valley. The starting valley and ending peak make this stamp a VP. Now look at the normal stamp in Figure 9. The converse is true. The upper left partial

shape is a shallow valley with a full peak directly below it. In combination with the lower left final complete shape, which is a valley, this is a PV type.

PART SHORT
PEAK --->
VP

Fig. 8

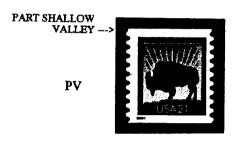


Fig. 9

Avery didn't stop with a new kind of die mat design. At a very early stage a collector found and reported a large nine digit number printed at 35 stamp intervals on the backs of two or three adjacent stamps. The number is printed by black dot matrix and the digits are approximately 6mm tall. The number usually has one or more leading zeros, and is always inverted in relation to the stamp face.

The value of the number increases by one with each appearance and, due to the 35 stamp spacing, the maximum times it appears in a roll is three. It will be two if the first appearance is far enough into the roll.

The range of stamps on whose backs the number appears (in relation to the plate numbered stamp) is not uniform. While some of the nine digits may extend over three adjacent stamps, this span has been found anywhere from 4L to 2R. (The plate number stamp is 1L.) This range has been expanding since the first report was made. The number location can change vertically as well, appearing either at the bottom, in the middle or at the top of the stamp back. It's in the middle most frequently and that's where it's probably intended to be.

This number serves as an internal accounting device. It is not just a record of cylinder impressions per se. Avery is using it as a wastage control and to track the quantity of stamps processed and shipped.

The number is applied only to the bottom row in the web and starts at zero when the first run of the design is printed. The value of the number at the beginning of subsequent runs picks up where the last run stopped. Lower numbers come from earlier runs.

A photocopy of the roll backing doesn't work well. It shows the counter number but doesn't show the location of the stamp seams on the other side. In Figure 10 lines have been added to indicate where the die cut seams are on the front. Stamp positions have also been added and placed as if they read "on the back of". The 1L position

in the photo is the back of the plate number stamp.

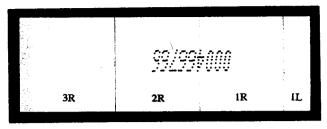


Fig. 10

The back number is applied to only one row. This statement was initially based on a statistical relationship derived from the number of rolls with the number compared to the quantity without a number throughout a large group from several flats of 50. The calculation takes into consideration the number of rows in the web and that only six of the rows are VP. Rolls with a number are only the VP type. Avery has since confirmed that this statistical computation leads to the right answer.

There is a great deal of interest in this number and collectors and dealers are looking for a way to increase the odds of picking one out of a group of rolls. The two clues to a correct selection are the VP type and that bottom straight line. It may not prove to be sure-fire because there is a catch. The catch is insuring you really have a roll with a straight line at the bottom. It's difficult to be sure when looking at a normally sliced stamp.

The Bison coil has one other peculiarity. It is sliced so that it's just under 1mm taller than PSA rolls of 100 of other issues that have come from BEP and Banknote Corporation of America.

Measured with a perforation gauge the die cut is 8.4 and has 10 peaks on each side. This 10/10 mat layout conforms to the PSA coil standard established by USPS after the FOP wild ride. In our language the full designations for the two types of the Bison are 10VP/10PV and 10PV/10VP.

More questions about this new coil may arise but this is a start. It's created a new item of study for us.

I wish to thank Richard Nazar for his help in gathering information from Avery. My appreciation is also extended to the Avery technical representative who supplied critical information that helps us understand this interesting new coil stamp.