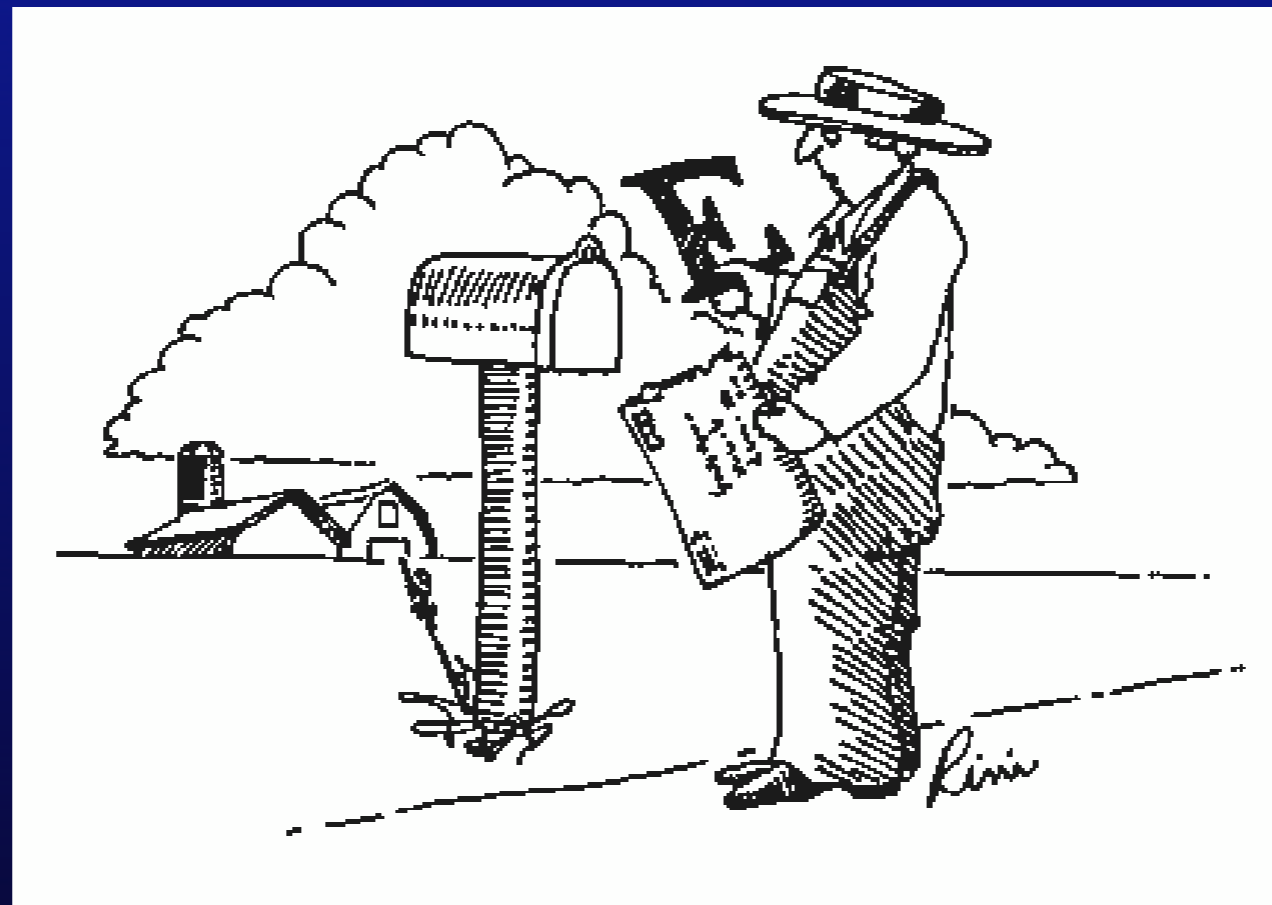






Return to Sender: Experiments with the US Postal System



v2.0

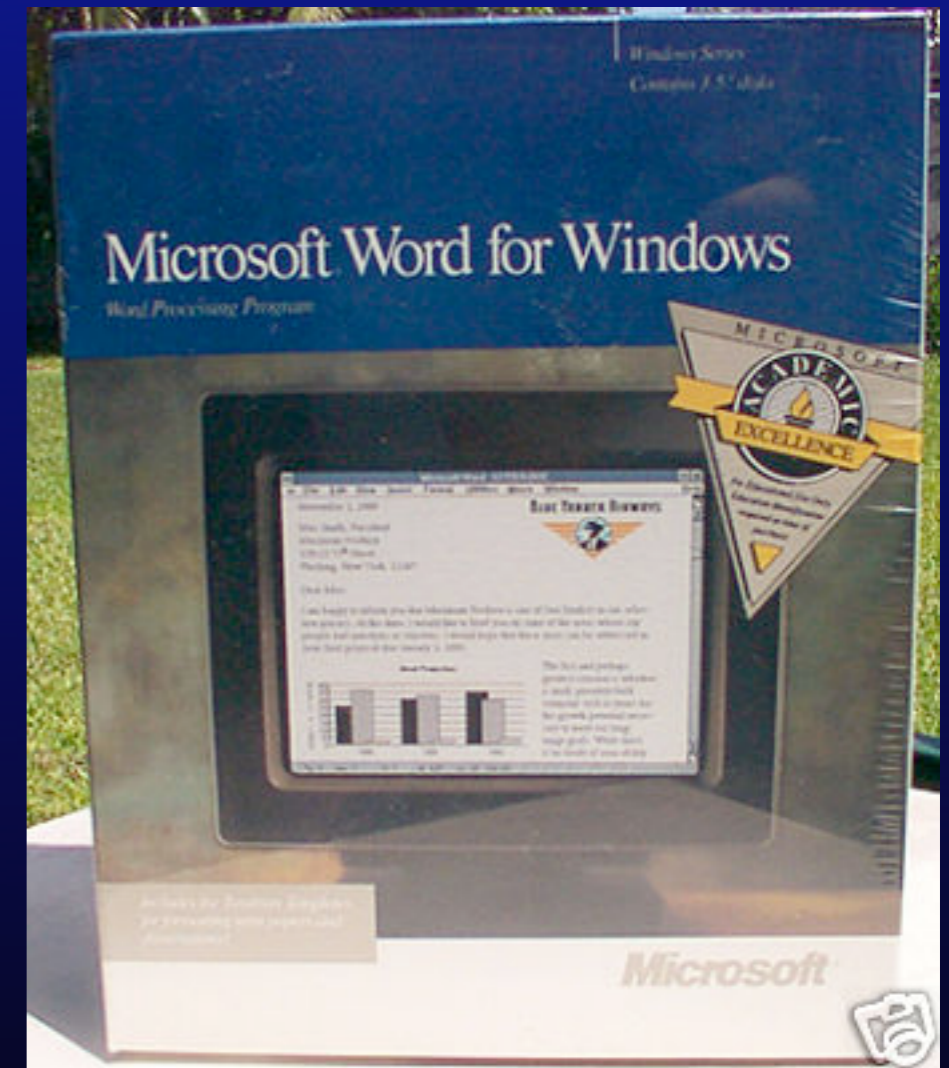
Meta Data

- Who am I?
- We're going to mail weird things.
- Presentation runs about 25 minutes
- Please hold questions.
- There will be ample discussion time.
- Plus, I have questions for *you*.

How it started...



- As a teenager in 1988, downloaded a macro from a BBS
- Couldn't afford it, so I wrote my own
- Learned social engineering along the way



How it got worse

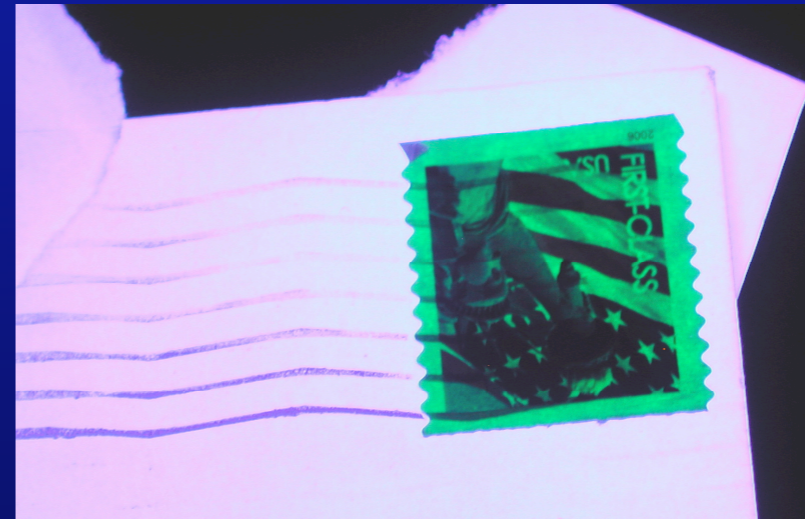
- Saw an article in *Annals of Improbable Research*
- Wired's *Return to Sender Contest*
- *High Weirdness by Mail*



Why the Post Office Matters

- Cheap delivery coast-to-coast.
Important to the economy.
- Fiscally independent government service
- Useful to explain hacking to tech-muggles.

A Letter's Journey



- Stamps glow under UV-B
- Used for orientation and cancellation

DANGER

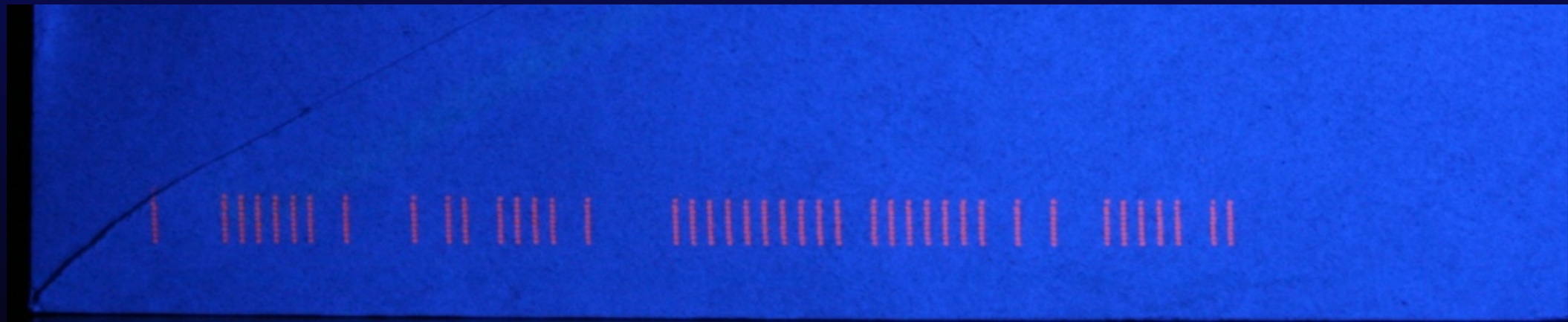
- UV-B will burn your retinas
- **Wear proper eye protection!**
- Working in the dark enlarges your pupils and lets in more evil UV-B
- Don't let your eyes get a sunburn!

DANGER



USPS Takes a Picture of Your Mail

- Scan envelope, spray orange barcode
- Figure out address - OCR or Humans
- Apply forwarding orders
- Add extra digits for carrier pre-sorting



Extended Sorting

Matching Addresses	ZIP + 4 Code
(ODD Range 801 - 813) BRAESRIDGE WAY ALPHARETTA GA	30022-8556
815 BRAESRIDGE WAY ALPHARETTA GA	30022-8557
(EVEN Range 800 - 898) BRAESRIDGE WAY ALPHARETTA GA	30022-7534
(ODD Range 817 - 899) BRAESRIDGE WAY ALPHARETTA GA	30022-7542
(ODD Range 901 - 965) BRAESRIDGE WAY ALPHARETTA GA	30022-8506

Carrier Route

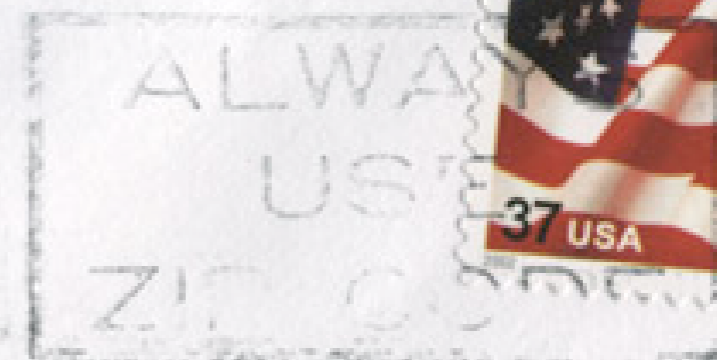
C082

County

FULTON

Delivery Point Code

85



30342-0365

30342/0365



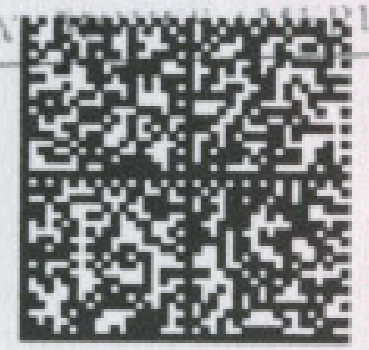
\$0.230

US POSTAGE
FIRST-CLASS

062S0005031485

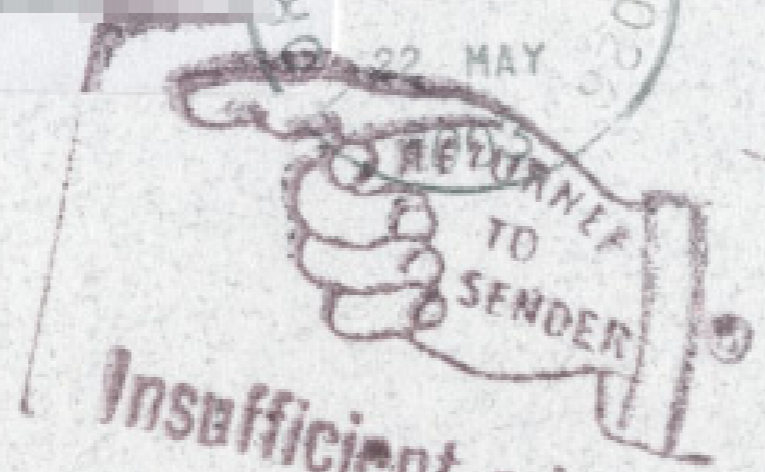
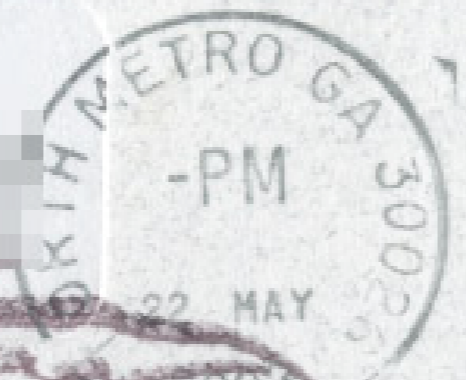
30043

201096736-015



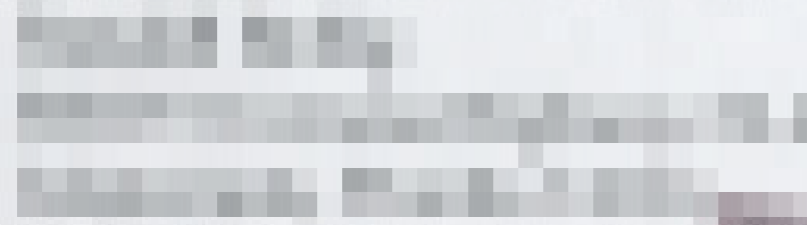
stamps.com stamps.com stamps.com

stamps.com

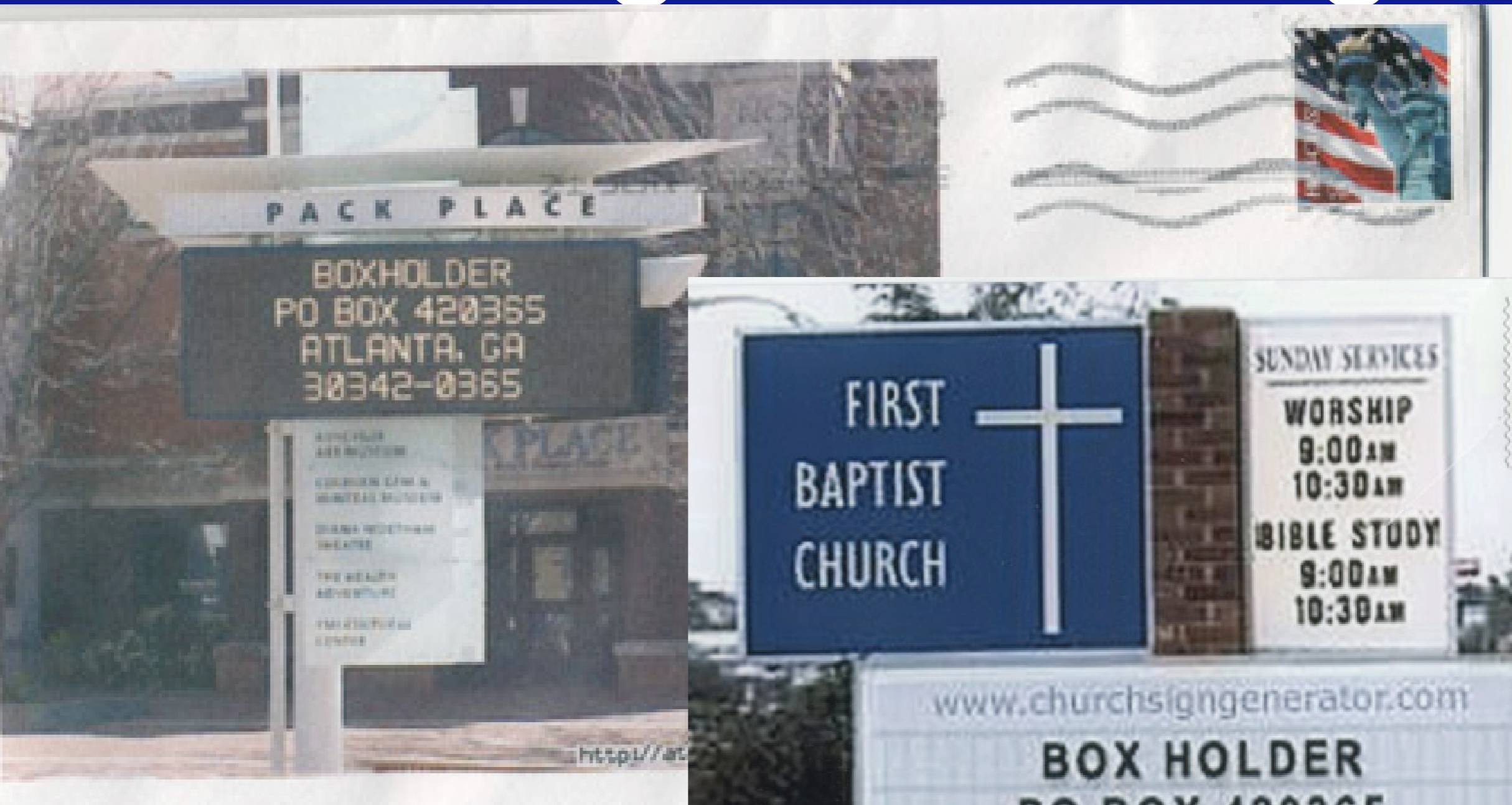


RETURNED
TO
SENDER

Insufficient address



Strange Addressing



Boxholder
PO Box 420365
Atlanta GA 30342

Boxholder
PO Box 420365
Atlanta GA 30342

Boxholder
PO Box 420365
Atlanta GA 30342

Boxholder
PO Box 420365
Atlanta GA 30342

One Code



- POSTNET + PLANET
- Reports appearance information
- Doesn't replace Delivery Confirmation
- Monitor status of mailings
- Incoming Reply Notification

Cancellation Errors

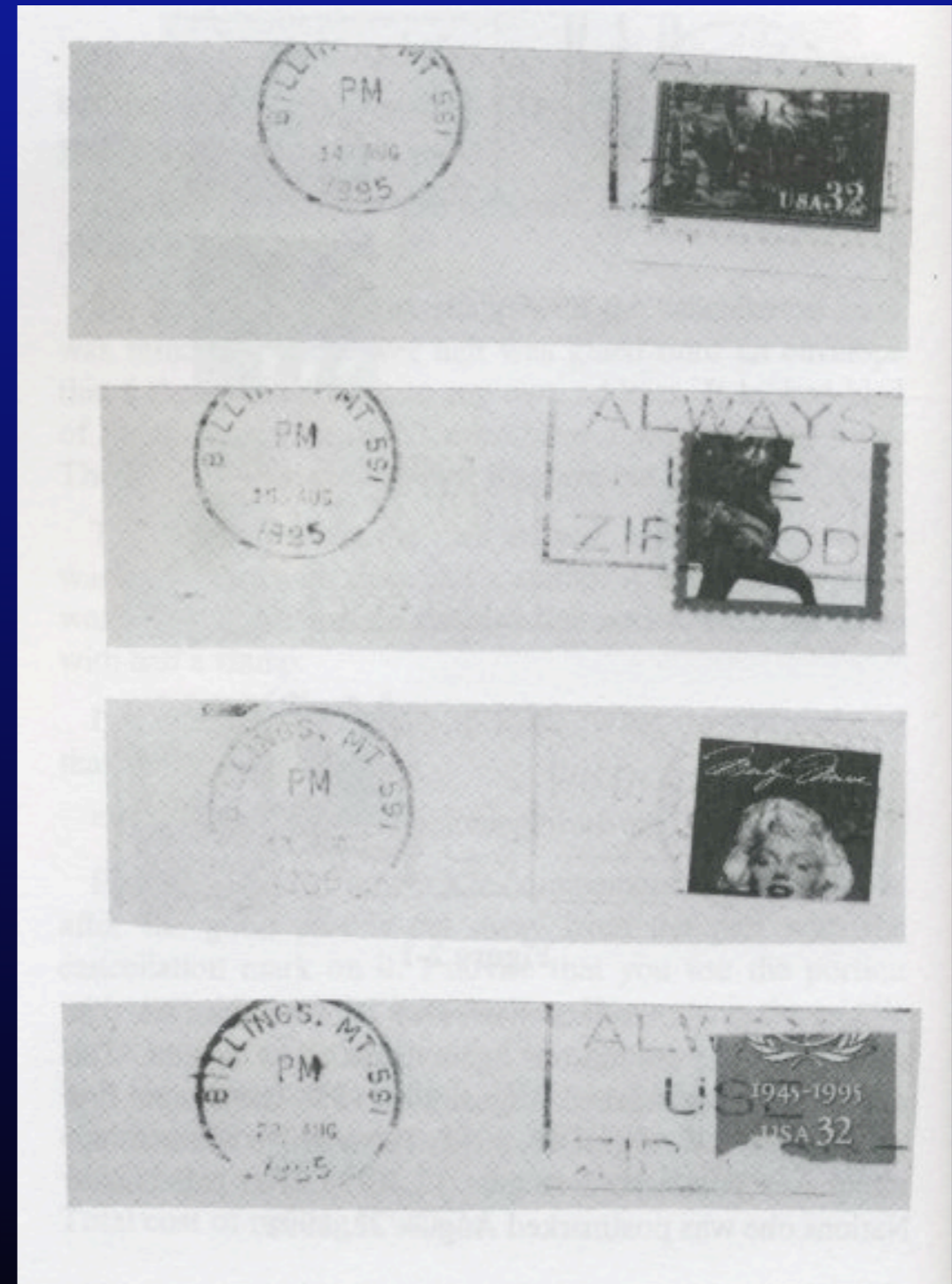
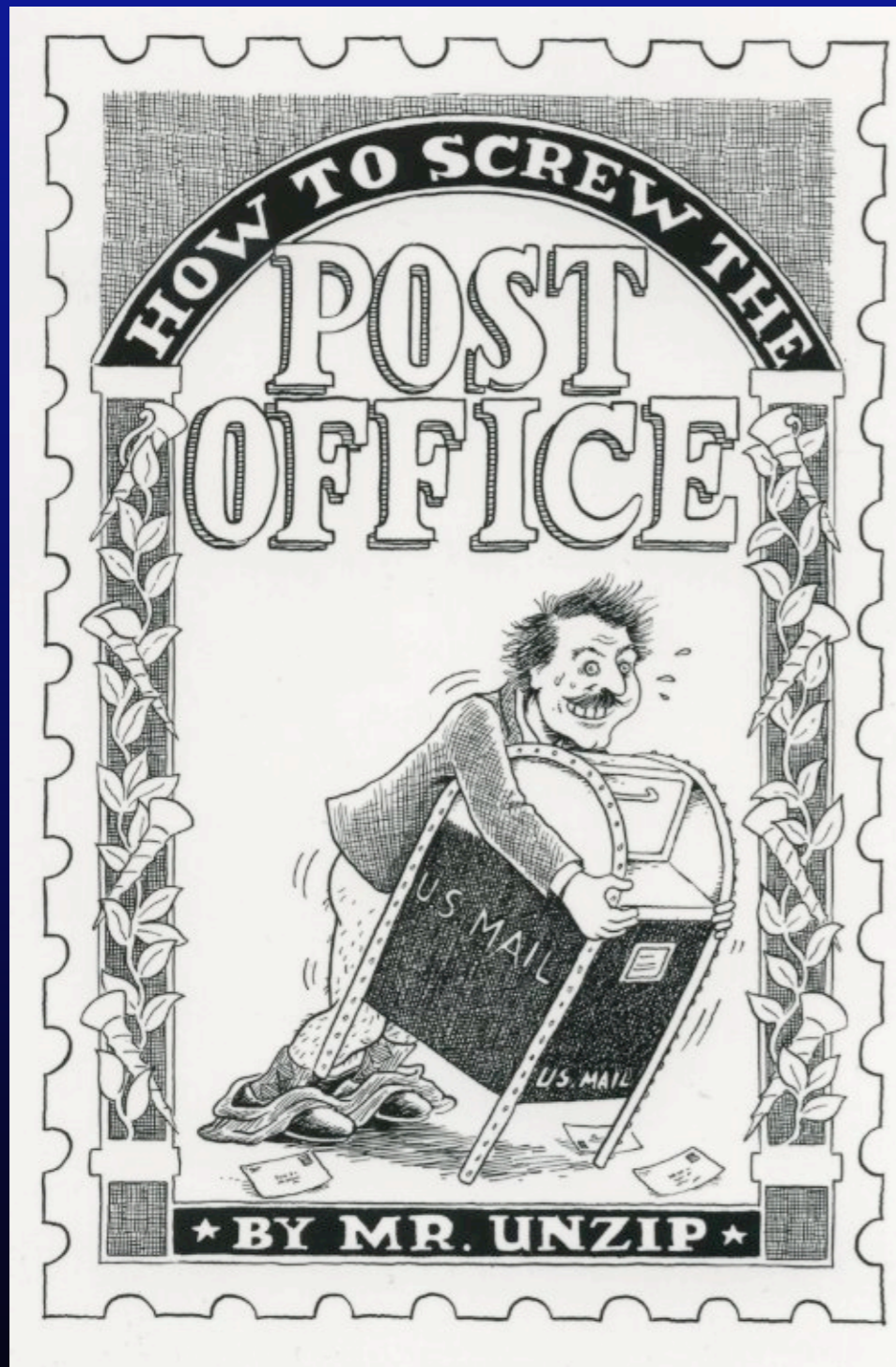
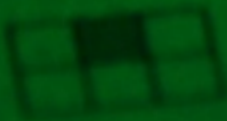




PLATE
POSITION



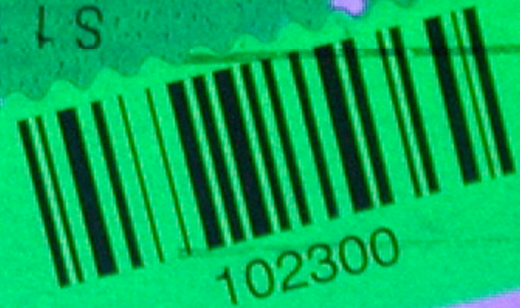
P111

3

2006 Olympic Winter Games TORINO, Italy



S 111

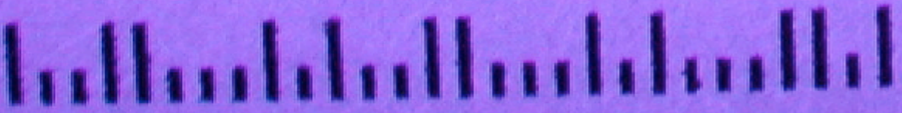


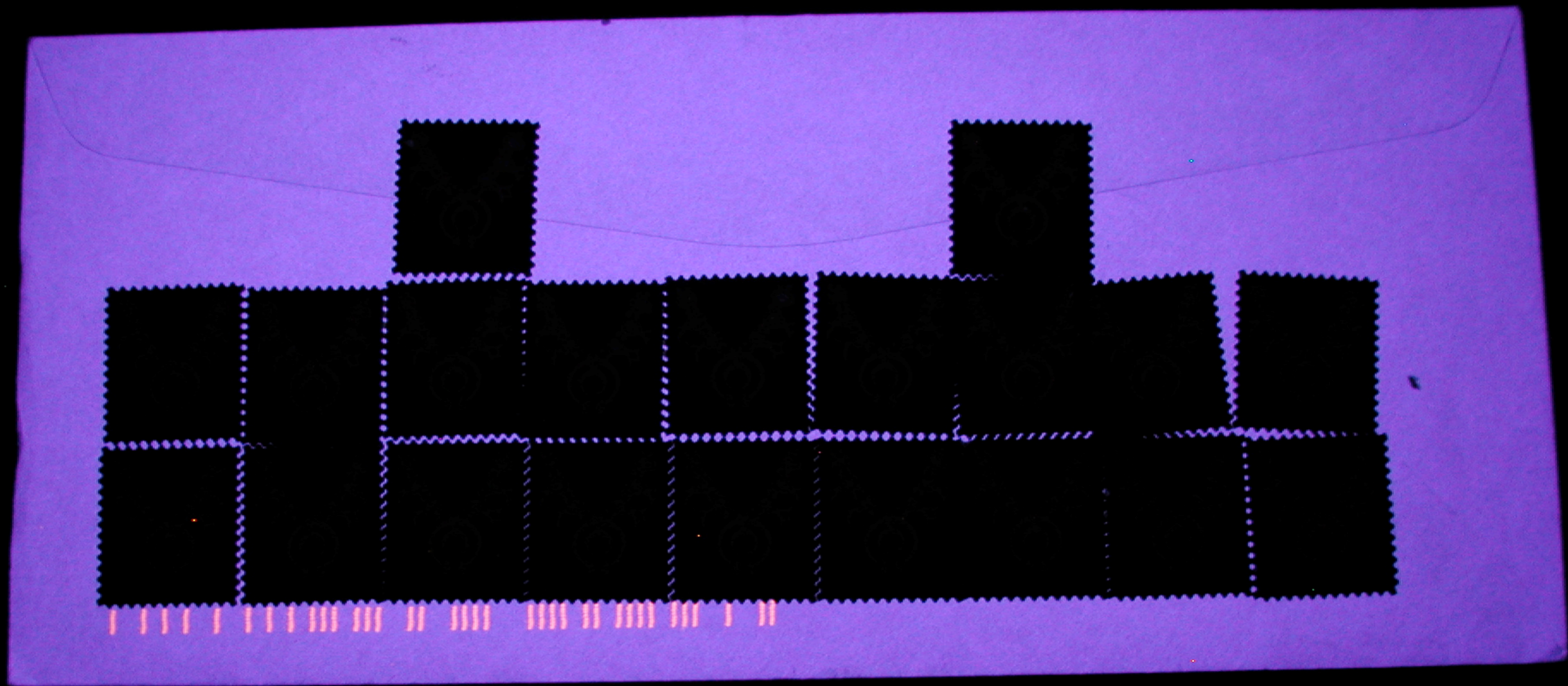
USE

ZIP CODE



Plate Position

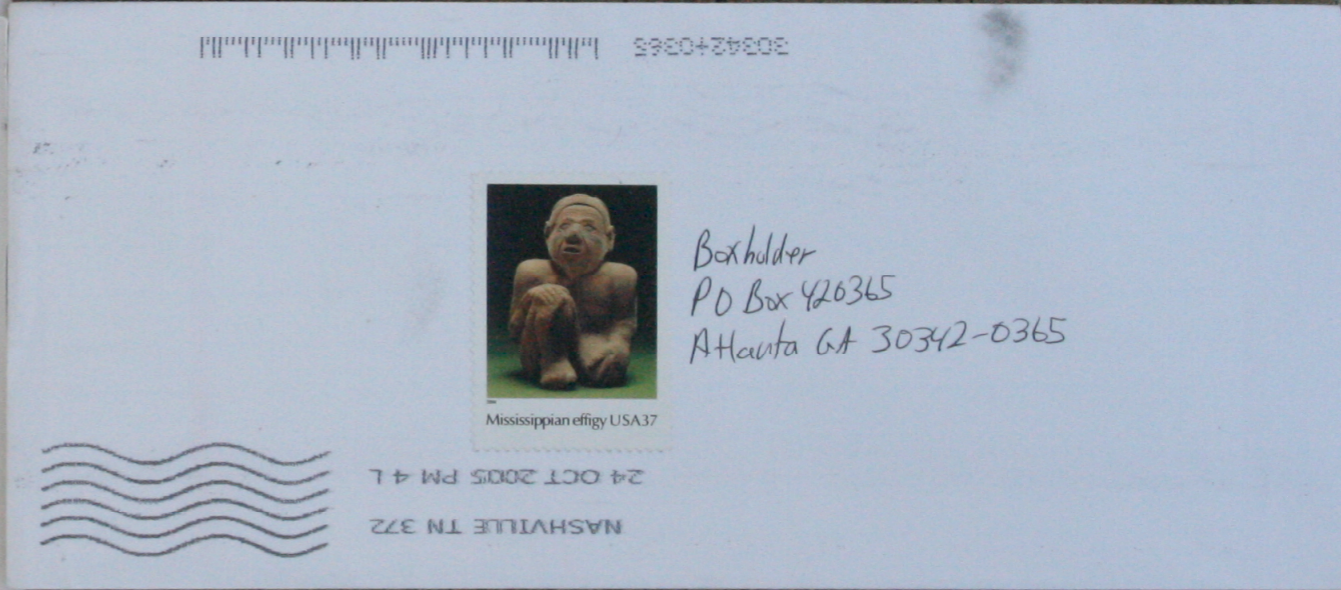
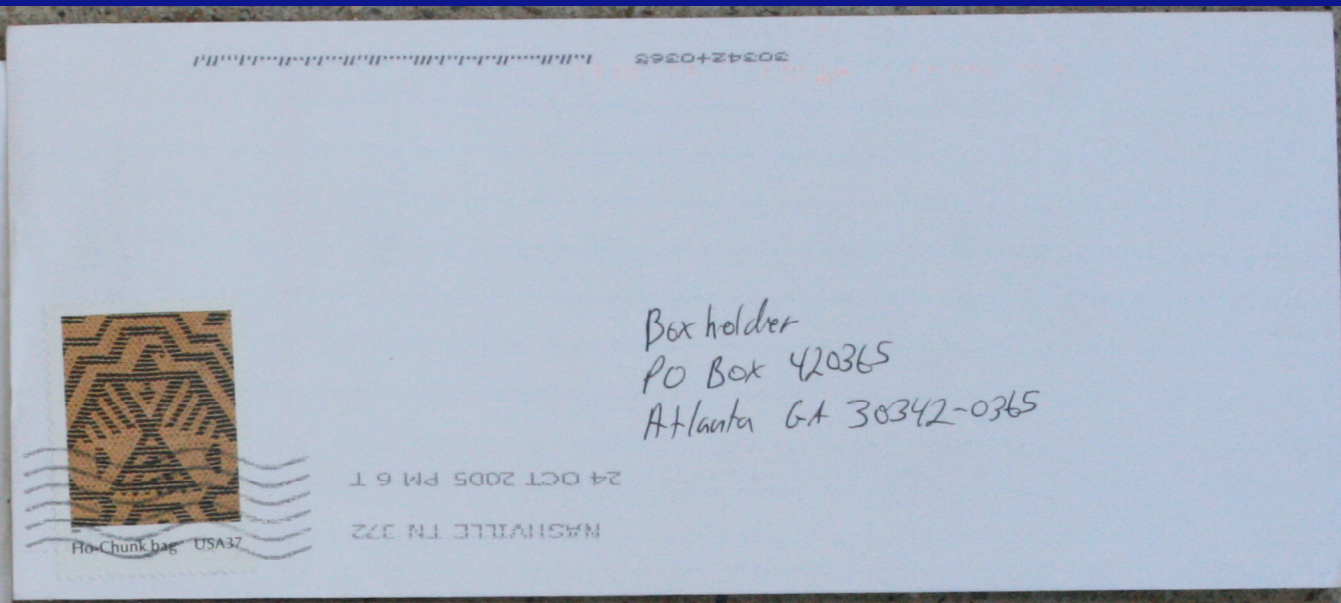




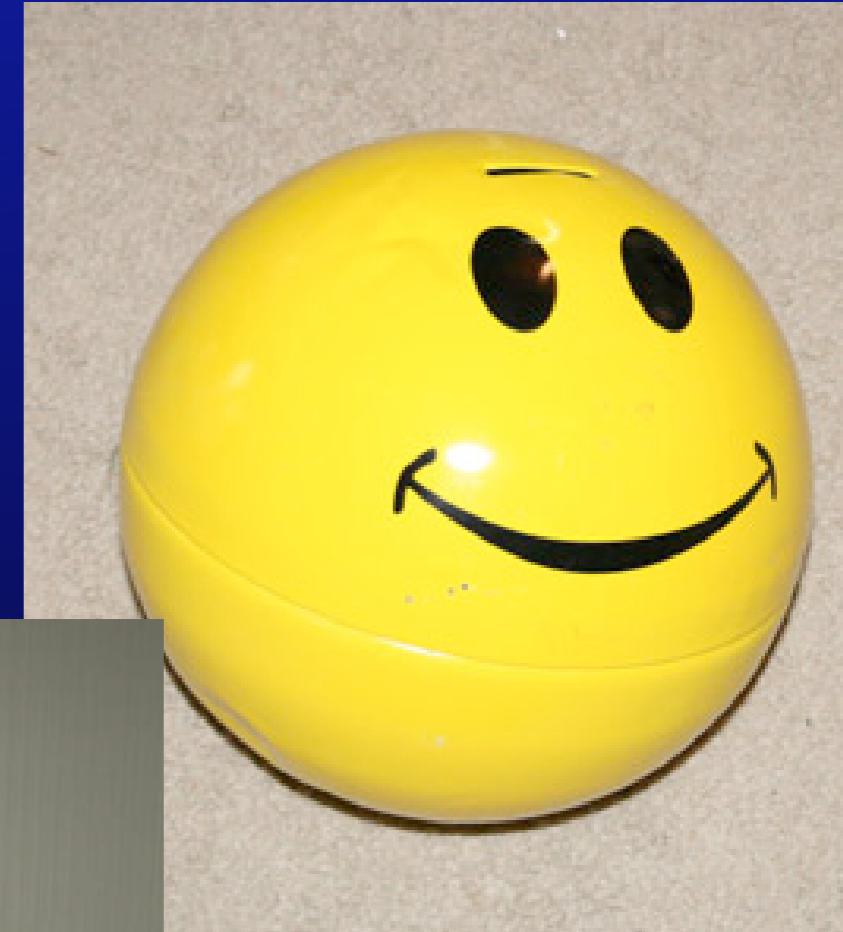
Other things glow too...



Stamp/Cancellation Error



Fun Parcels



Delivery Confirmation



What will happen?

- Only the 1st package shows up.
- Only the 2nd package shows up.
- Both packages show up.

Package Obliterated



Track & Confirm

Search Results

Label/Receipt Number: **4203 0004 9101 0385 5574 9196 7510 28**

No information is available for this item. Please contact the sender.

Track & Co

Enter Label

A Scammer's Steps

- Order from eBay
- Receive package
- Re-mail package
- Whine to PayPal - seller never shipped!
- Seller screwed.

More DC Error Details

- Doesn't happen every time.
- Seems to happen more with “user printed” barcodes.
- Green stickers use a different numbering system.

Interesting Parcels

- Smallest - Pack of Cards
- Lightest - Empty Yogurt Container
- Circles & Spheres add 3-5 days to delivery
- Sticky notes stay stuck
- Unprotected CDs
- Employee Honesty

Maximum Size

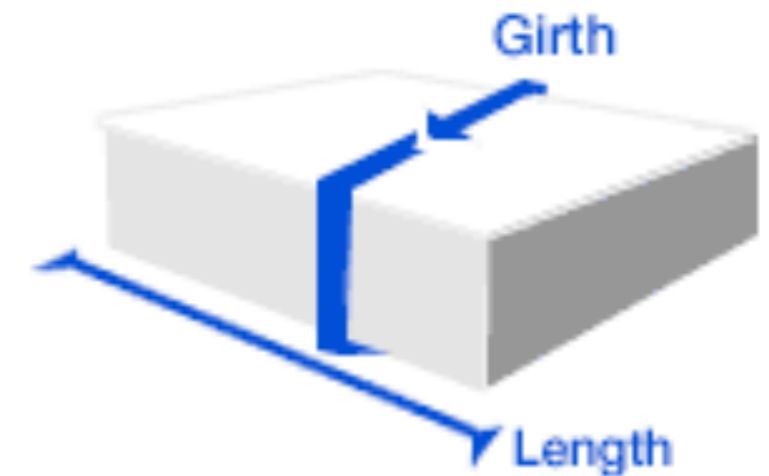
1/4" Maximum thickness for Letters

3/4" Maximum thickness for Large Envelopes

For Parcel Post, the maximum Length + Girth is 130".
For other services, the maximum Length + Girth is 108".

Length = longest side of the parcel

Girth = measurement around the parcel



Projects in Progress

- Address color blindness tests
- Strange centers of gravity
- Multiple addresses per package
- Origami and recycled envelopes



Box holder
PO BOX 420365
Atlanta GA 30342

Challenges for You

- Help decode electronic indicia
- GPS Tracking
- Mail a package for a year (LCD or eBook?)



==02-33-8011119-115116-753600000
3601482-4060933732-161-65-22-10
545-88-132621-58-305-3263-11110
4100100-49-34-815268831743-9972
119-7010659-49-79-71-69-9-10911
41

Ethical Considerations

- Don't steal from the post office
- Don't harm other people's mail
- Be nice to postal people. Don't mail dangerous items.

**No postal employee has ever made a negative comment about my projects!
Let's keep it that way...**

More info...

- <http://www.AlwaysUseZipcode.com>
- ghost@cypherghost.com
- <http://pe.usps.com>
- <http://ribbs.usps.com>
- <http://letterfu.com>
- <http://postcrossing.com>

