Poway Stamp Club

Philatelic Grading:
A Review

by

David B. Waller

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About the Presenter

Experience:
Research Scientist for 10 years
Patent Agent for over 25 years

Degrees:
Bachelors Chemistry, UCSD, Revelle College
Masters Biochemistry, University of Denver
Juris Doctor, Thomas Jefferson School of Law

Research:
Institutes: UCSD, Scripps Clinic and Research Foundation, University of Denver
Industry: Molecular Biosystems. Inc., Synbiotics Corp., ImmunoPharmaceutics, Inc.

Patent Law:
Industry: Viagene, Inc., Genta, Inc.
Law Firms: Patent Success Strategies, LLC, The Nath Law Group, Gordon & Rees

Early Grading Systems

- Letter grades (*e.g.*, G, F, VF, ExF, Gem)
- Based primarily on centering and gum condition (*e.g.*, NH, H, HR, thin, gum skip, crease)
- Early certifications included authenticity (*i.e.*, whether the stamp is “Genuine”)

Problem

So why is a letter grading system a problem?

Which one is VF ?

www.patentsucssstrategies.com

Which one is ExF ?

?

It’s a trick question, all these stamps are listed by the Seller as VF.

Answer

Subjective vs. Objective Information

Subjective: anecdotal information that comes from opinions, perceptions or experiences.

Objective: factual information gathered through observation or measurement regardless of personal opinions.

Resolution

Convert all subjective determinations to objective ones.

OK!, How?

How?

Mathematics

Premise: If it can be calculated, it is in essence objective because others can perform the same calculations to obtain the same results.

Define Criteria

What criteria should be used when grading a stamp:

- Centering
- Perforations
- Registration
- Engraving
- Color
- Gum
- Others?

Discussion

Let's focus on the six criteria listed for this discussion

and

apply mathematics to obtain a grade from 1-100

(*i.e.*, from 50-100, but realistically 80-100)

Centering


0.71:0.77
3.50/4.90 = 0.71
3.75/4.90 = 0.77
3.50
3.75
3.75
3.57/4.90
= 0.77
4.60
4.60/4.90
= 0.94
0.77:0.70
0.94:1.00
3.45/4.90
= 0.70
4.90/4.90
= 1.00
3.45
4.90
4.65
4.60
4.65/4.90 = 0.95
4.60/4.90 = 0.94
0.95:0.94
U.S.POSTAGE
ALASKA-YUKON-PACIFIC-1909
WILLIAM H. SEWARD
TWO CENTS

Centering

Calculation (PSC Newsletter May 2023)

Scott # 370 has been enlarged. The margins in each corner are measured by caliper. These values are normalized by dividing by the highest calculated value and then presented as a ratio, left margin 0.77:0.70, right margin 0.94:1.00, upper margin 0.71:0.77 and bottom margin 0.95:0.94. All eight normalized values are added together, divided by 8 and multiplied by 100. The grade of Scott #370 in the last slide is 85.

Perforations

A B

Perforations

Calculations (PSC Newsletter July 2023)

A) Scott no. 367 with a short perforation indicated by the arrow, the calculation for the perforation grade is 14 (left side perfs) + 14 (right side perfs) + 13 (top perfs) + 13 (bottom perfs) = 54 - (1 (short perf) X 2 (small stamp multiplier)) = 52/54 X 100 gives a grade of 96.

B) Scott no. 372 with a missing perforation shown by the arrow, the calculation for the perforation grade is 14 (left side perfs) + 14 (right side perfs) + 21 (top perfs) + 21 (bottom perfs) = 70 – (1 (missing perf) X 3 (large stamp multiplier) = 67/70 X 100 = 96 rounded up.

Registration

A

B

Registration

Calculation (PSC Newsletter June 2023)

Prepare an enlarged image of the stamp, physically measure the four distances from the vignette to the frame at the top and bottom center and left and right, multiply the normalization ratio, if present, by the highest value measured, divide each of the measured values by their corresponding normalized ratio value, multiply these values by 100, add the four values together, divide by four and round up to obtain a two-digit registration value.

Engraving


UNITED STATES OF AMERICA
POSTAGE ONE CENT
1
1


POSTAGE & REVENUE
2/6
2/6

Engraving

Computer stores proof images.

Computer compares the proof to actual engraving in two image subtraction processes.

1. actual from proof objects stuck in engraved lines (subtracted ink)
2. proof from actual breaks or gouges in engraved plate (added ink).

Producing a quantifiable black field image for grading purposes.

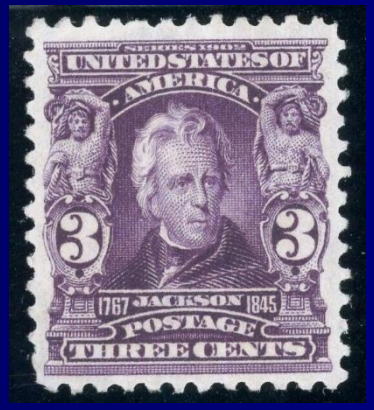
Color (No Damage)

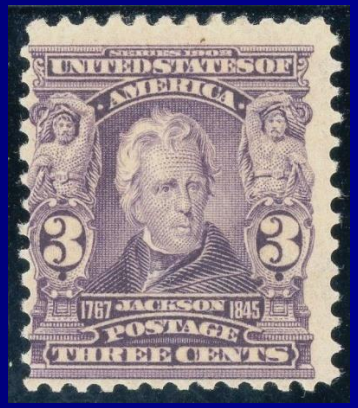
Shades

Varieties

Color (Damage)

Fading

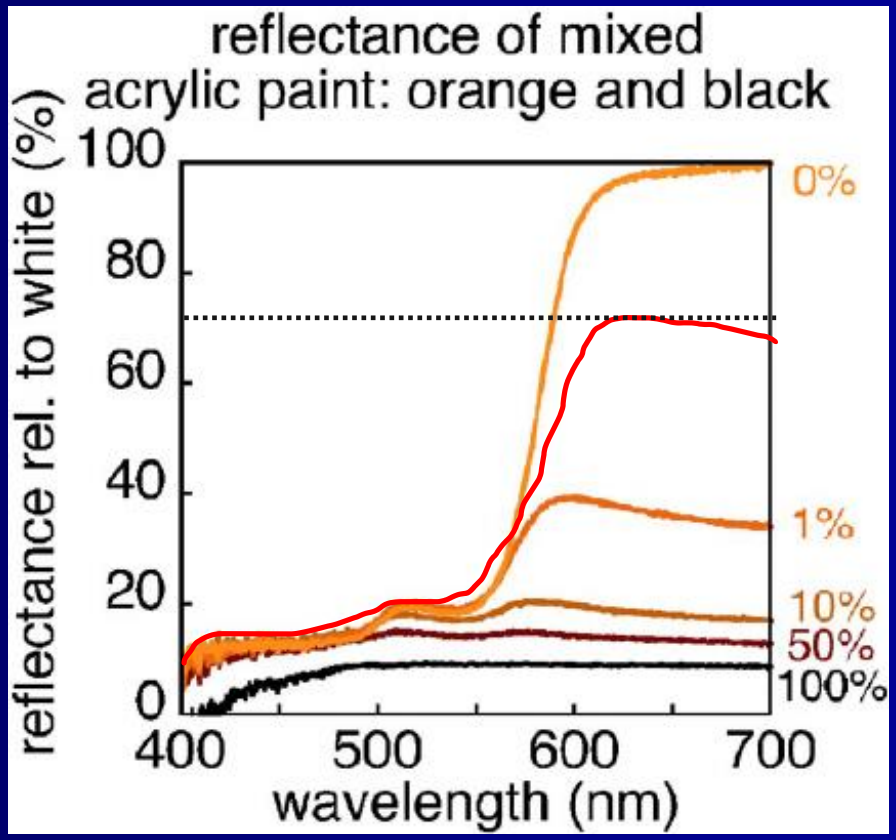




Oxidation

Color

Reflectance Spectra Analysis



Gum

Work in progress!

Considering Lazer light reflectance to observe gum texture and/or evaluate gum composition (*i.e.*, chemical fingerprint).

Certification

Enlarged Image of stamp with six sections

1. Centering (Calculations provided on image)
2. Perforations (Problem perfs. indicated on image)
3. Registration (Calculations provided on image, bicolored stamps only)
4. Engraving (Black field image provided)
5. Color (Reflectance spectra provided)
6. Gum (Reflectance spectra, chemical composition?)

Cost & Effect

This type of certification would be:

1. beneficial mostly for high value stamps (several hundred to several thousand dollars), and

2. able to withstand legal scrutiny and establish a solid provenance for the stamp into the future.

APS Comments
(July 2023)

Letters to Editors

(Re: "Certitis" Article W. Youngblood, APS May 2023)

- APS's limited Guarantee "implies certainty" in their opinion (R. Armstrong)
- "Inconsistency of… grading is epidemic" (G. Leverant)
- "Numerical grading… dishonest." (D. Saks)

Future

- The proposed grading system is applicable for most stamps in most countries.
- However, different issues, different years, and different production methods can vary.
- The proposed grading methods can be applied specifically to each issue, publication year and/or production method.

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Questions

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