



A Friendly Ghost Story

ADDING WHITE LASER PRINTER TONER TO MY CUSTOM DECAL TOOLKIT

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Decals: A Brief History

2-D pattern that is too intricate to reliably draw, paint, or cut a mask



Decals: A Brief History

- 3 ELEMENTS

- COLOR

- TRANSFER MEDIUM

- BACKING



Decals: A Brief History

- DECALQUER – for pottery, by Simon François Ravenet, about 1750
 - Pigment, tissue transfer medium, backing of engraved copper/limestone/zinc plates



Decals: A Brief History

- “Duplex” paper decal—Brittain’s Limited Company, about 1895
 - Tissue and heavy paper backing sandwiching the pigment




Decals: A Brief History

- WATER SLIDE DECAL—for the glass industry, early 20th century
 - SILK SCREEN PROCESS—originally for lacquer transfer medium, not for color

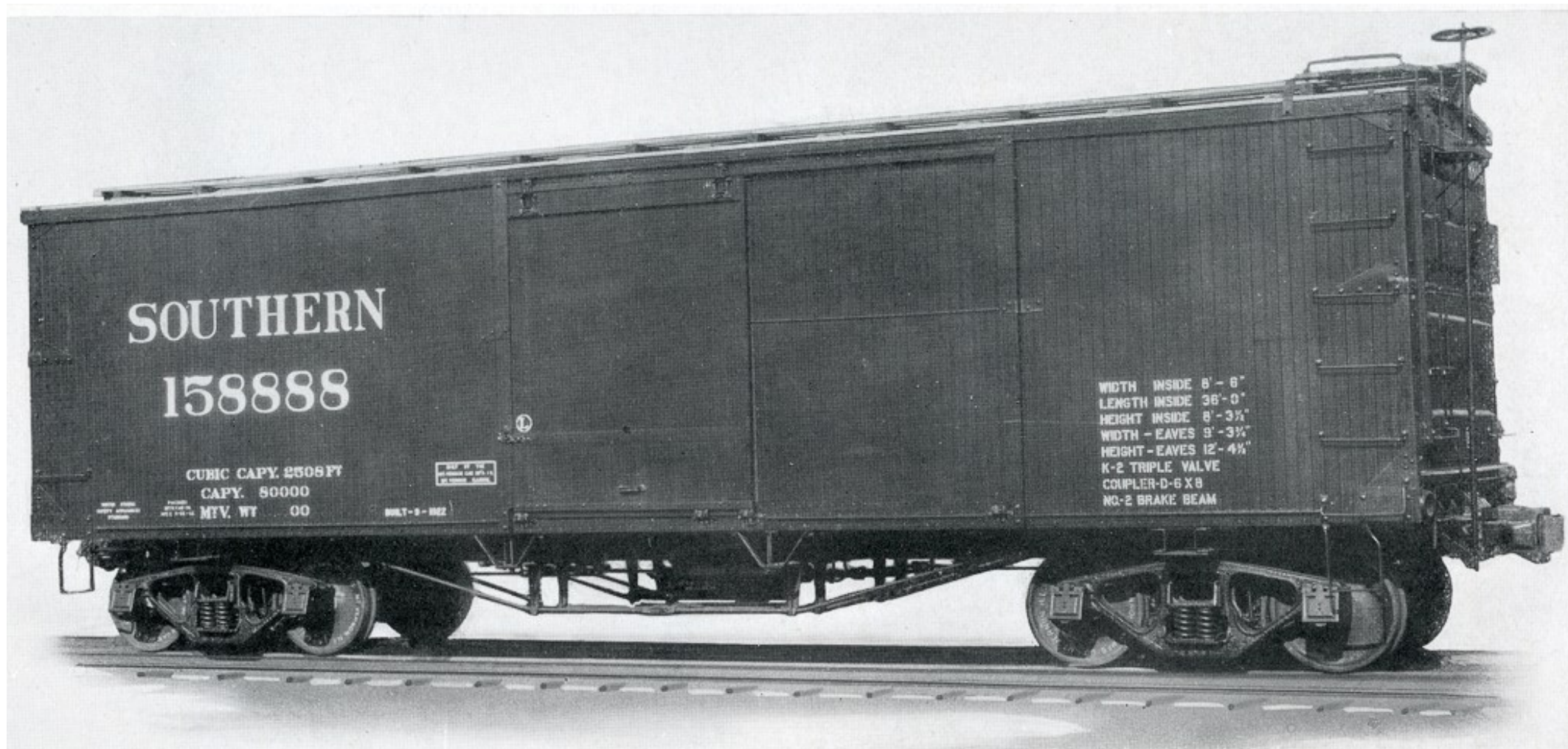




Custom DIY Decals

- As an RPM modeler, I want to match a prototype
 - Not all prototypes have models commercially available and fewer have accurately lettered models for my specific time period, 1934.
 - 1997-2015 (in the US) modelers could buy an ALPS micro-dry printer and ink cartridges to print custom decals for nearly any color, including white
 - It's 2019 and ALPS are disappearing.
 - Enter...a friendly ghost
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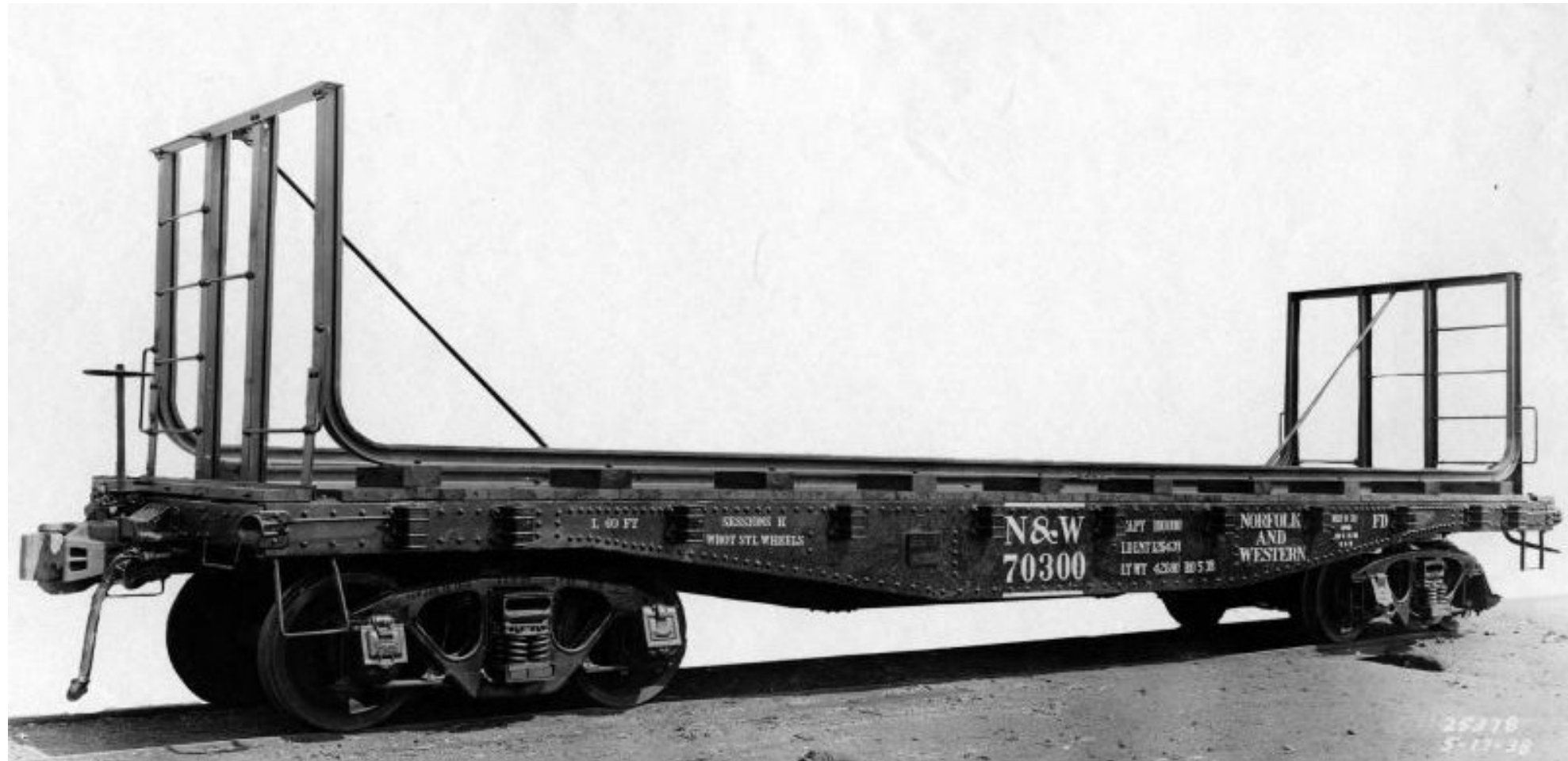
Southern SU 36' box car in 1922



Southern ventilated box car, 1941+



N&W pulpwood rack in 1938



Custom 'Decals' Until 1997

- PRESSURE SENSITIVE DECALS (aka stickers!)
 - Too thick; adhesive not ideal for long term on models
- RUB-ON DECALS (aka dry transfers)
 - Relied on pre-made patterns; applied separately, best on smooth surface
- PRINTED PAPER
 - Black only; eventually color; white paper, not white ink
 - Too thick; no adhesive; opaque



Print Black, Leave White



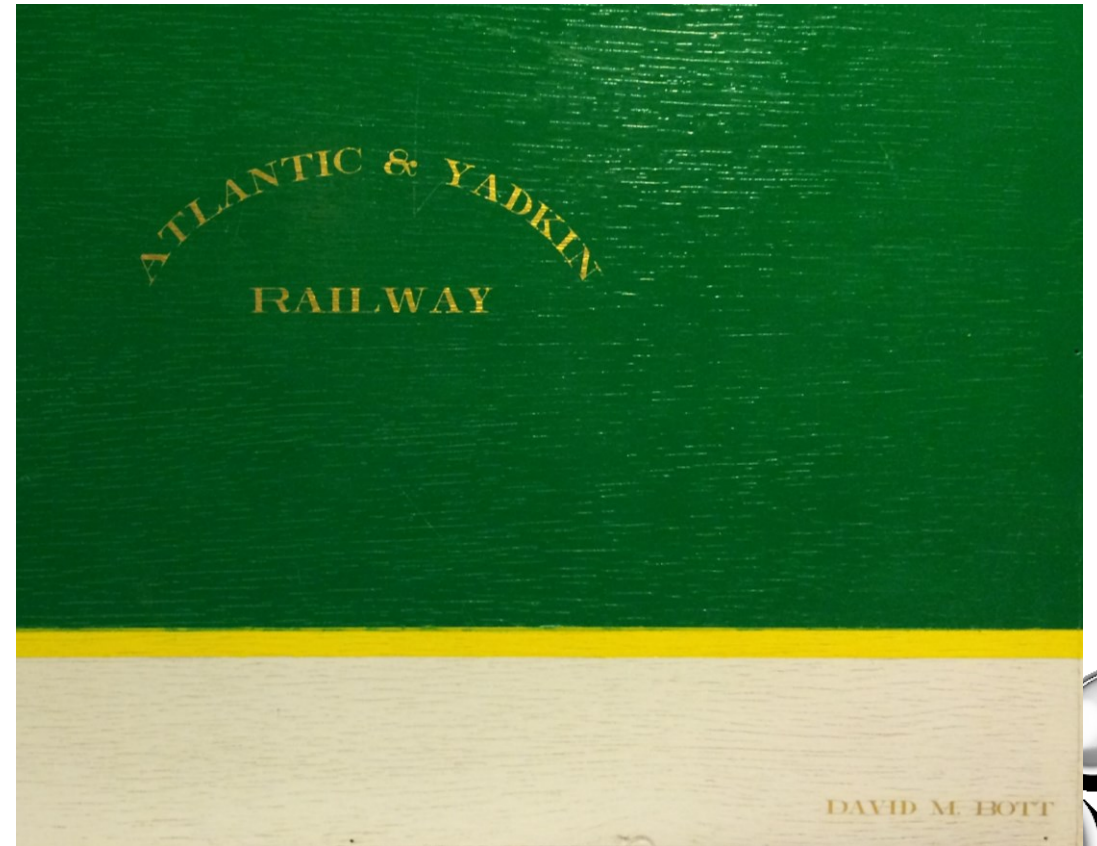
ALPS Micro-dry Printers

- Wax film cartridges with inks applied precisely by thermal transfer
- White, gold, silver, and other metallic colors



- Finicky, slow, md-1000 only dithering; later md-5000 dye-sublimation
- Who cares? I had white and even gold!!!

ALPS Let Me Print White & Gold



No more ALPS for me: 2015 house fire

My ALPS replacement options were expensive \$\$\$

\$1500-\$1800 on eBay for an unsupported printer



ALPS stopped

- support outside Japan (2007)
- making printers in 2010, and
- making supplies after 2015.




ST WHITE TONER





What Ghost White Toner **Is/Does**

- A white toner in a cartridge for color laser printers
 - Substitute for the black cartridge
 - Allows a printout of a “pure” white design
 - Works on waterslide decal paper for laser printers
 - Allows reuse of the black cartridge for regular printing
 - A good option for white custom decals today
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Ghost White Toner **Is**

- A **bad** solution to generate opaque white background for more transparent colors like **orange** or **yellow** in most scales for railroad modelers.
- I chose Highball Graphics to print my Dulux Gold decals. Their commercial Epson printer can print opaque white background, then gold, in *one pass*, so no registration problems, looks great on any paint background.



Q&A'S

- Can you print a multi-color image with white?
 - Answer: **not really**, but in some cases (grey background) it is possible. You have to play with other colors so that where the printer thinks its darkening a color with black, it's actually lightening it with white. The opacity of the decal is still going to be a problem.



As designed



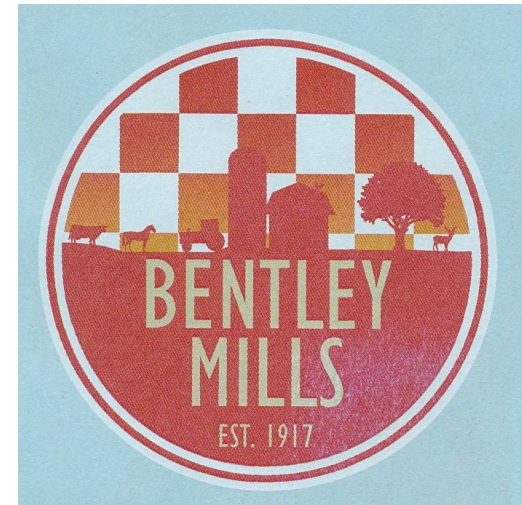
On decal paper



Revised on computer



Revised on decal paper



How You Create/Print A White Decal

- Replace the black cartridge in your printer with the Ghost White substitute

Remove black cartridge



Get Ghost White cartridge



Insert Ghost White cartridge



Save black for use later



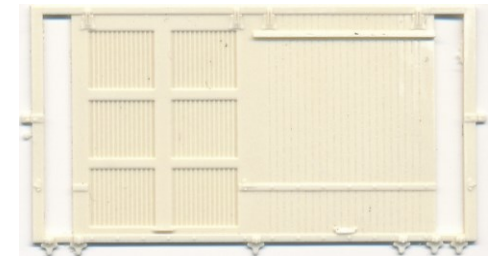
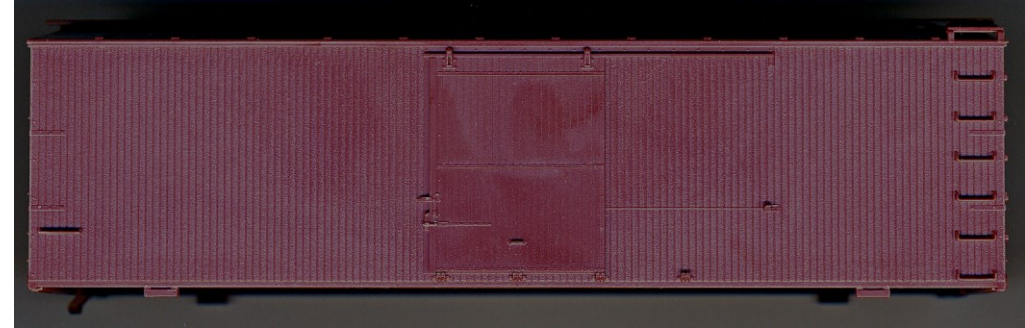
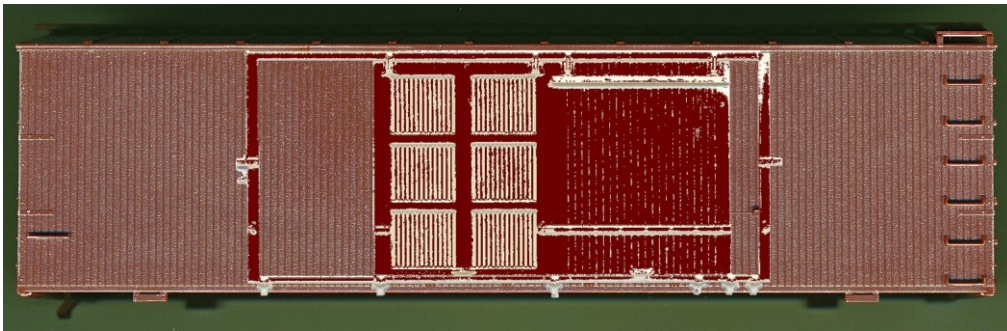
How You Create/Print A White Decal

- Replace the black cartridge in your printer with the Ghost White substitute cartridge
- Choose a project – Southern 36' vent box car



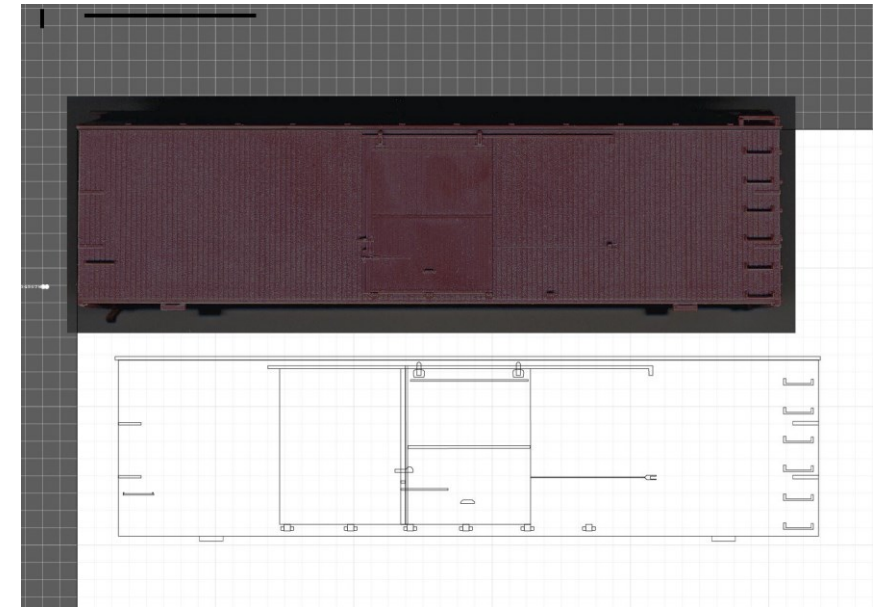
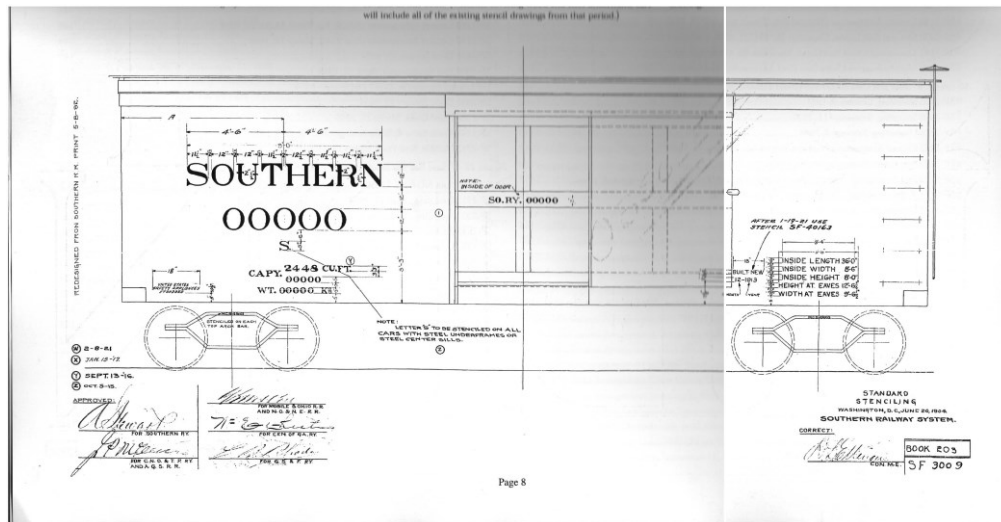
How You Create/Print A White Decal

- Replace the black cartridge in your printer with the Ghost White substitute
- Choose a project – Southern 36' vent box car
- Find/create a black version of the white design



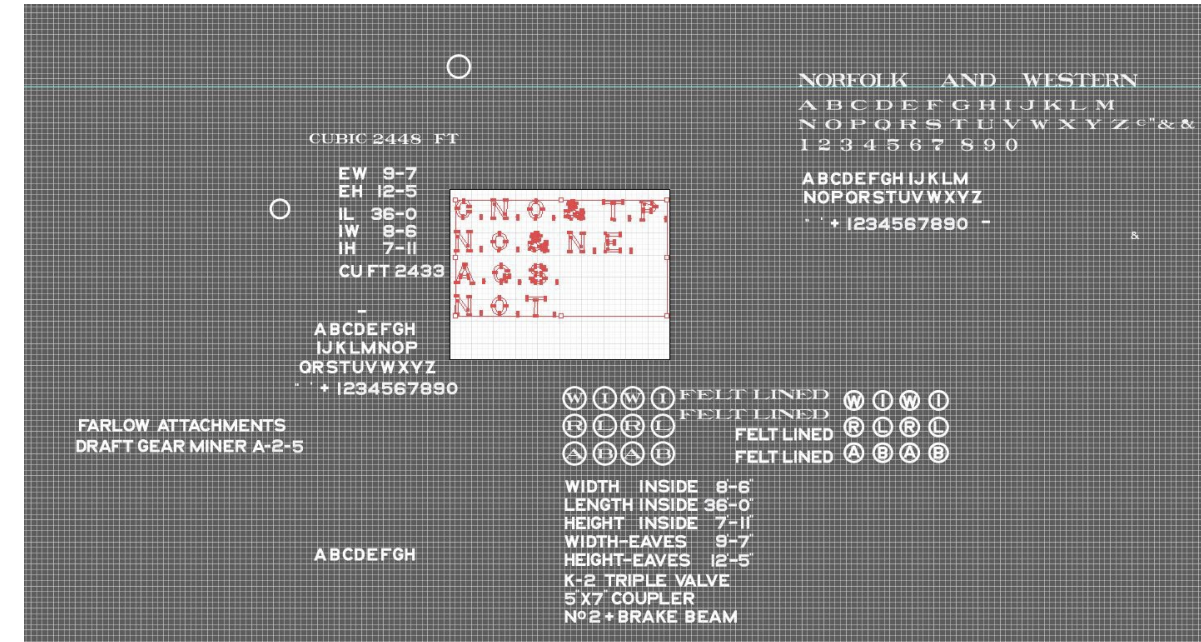
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N.O. 4-51
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CUBIC CAPY 2448 FT
CAPY 60000
WT 42400 NEW 9-14
CUBIC CAPY 2448 FT
CAPY 60000
WT 42400 NEW 9-14

WIDTH INSIDE 8-6
LENGTH INSIDE 36-0
HEIGHT INSIDE 7-11
WIDTH-EAVES 9-7
HEIGHT-EAVES 12-5
K-2 TRIPLE VALVE
5 X7 COUPLER
Nº2 + BRAKE BEAM

120844

CAPY. 2448 CU FT
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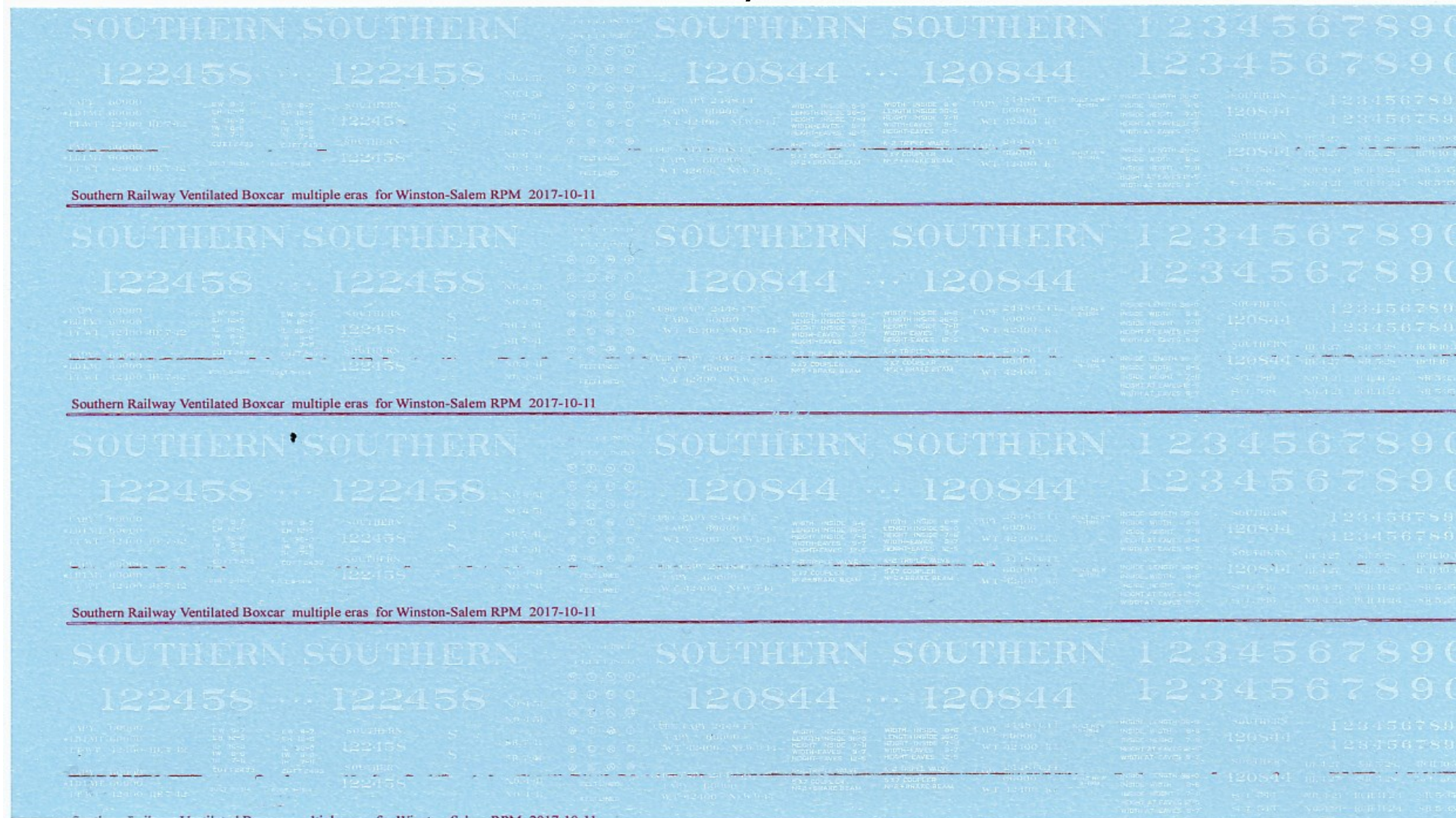
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SIL 5-16 N.O. 4-21 RCH. 11-24 SR 5-35

CAPY 60000
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How You Create/Print A White Decal





How You Create/Print A White Decal

- Replace the black cartridge in your printer with the Ghost White substitute
 - Choose a project – Southern 36' vent box car
 - Find/create a black version of the white design
 - Print
 - Use like any other waterslide decal
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How You Create/Print A White Decal



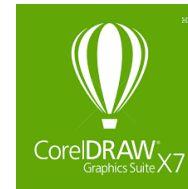
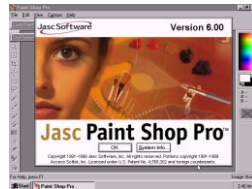
Fenton Wells model using my decals displayed at the Carolina RPM meet October 2017.

Q&A'S

- What kind of graphics program do you need to use ghost white?
 - Answer: **no graphics program is required to use Ghost White toner for decals**
 - Office apps, like PowerPoint, even Word, can be used to create and print black graphics to print white decals



- Graphics programs help a lot in **creating a design** to print. My favorites include
 - Paintshop Pro
 - CorelDraw
 - Adobe illustrator



- Fonts can be done with FontCreator



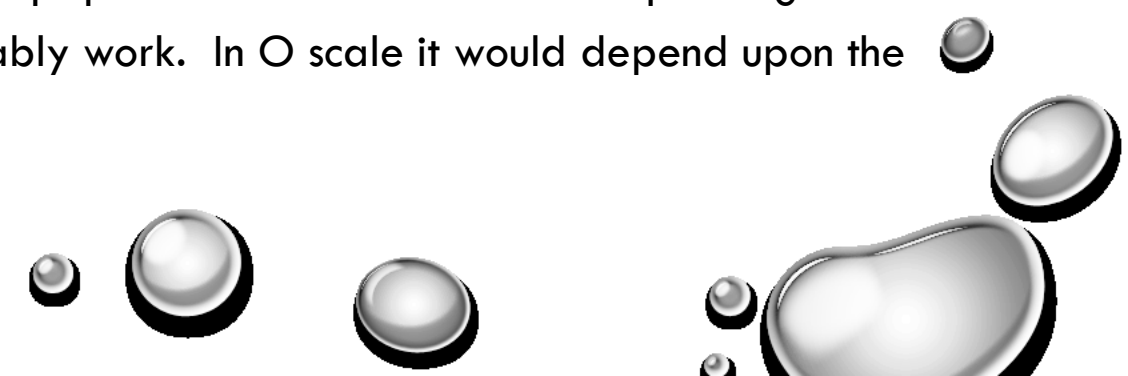


Q&A'S

- Can I print a white background, then reinsert decal paper to print foreground?
 - Answer: for HO scale, especially serif typefaces, I do not find it to work.
 - My HP Color Laser Jet Pro printer does not have good “registration.”

BAD Registration

GOOD Registration

- Unlike an ALPS, most color laser printers cannot retain the paper in its rollers so that it can print again exactly where it did before. For G scale, it would probably work. In O scale it would depend upon the size. Other printers may be better at it than mine.
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Q&A'S

- What decal paper have you tried?
 - Answer:
 - Micromark paper got “ok” results.
 - Testors paper was better.
 - Then I remembered the **Tango Papa Decal Paper** I used for the ALPS. Wow! The difference was tremendous. No top coat and no worries.

Tom Prestia started <http://www.tangopapadecals.com> to support his model rocketry. I hope he never stops!





Q&A'S

- Does the printed decal sheet need a top coat?
 - Answer: I tend to use my decals as I print them and I do not need a top coat. If I was printing and storing them long term, or if I had problems with the color not sticking to the transfer medium, I would try a top coat.





Q&A'S

- Can I use it for N or Z scale?
 - Answer: resolution is dependent upon your graphic and your printer.
 - I have been able to print 1" scale lettering in HO scale that is legible, N is doable.
Z...maybe





THE SLIDE SHOW IS ENDED

and the discussion can begin...

