

Galveston Railroad Museum
Jordan Cartwright
Eagle Scout Project Work Plan

Weekend #1 (Saturday) (June 22, 2013) (3 adults, 1 Scout)
Hours: 8 hours x 4 people = 32 hours

- **Roof Repairs**
 - Adults will use wire brush to scrape any rust off of roof
 - Adults sand cupola
 - Adults wipe off any loose material
- **Power washing caboose**
 - Buy gas for power washer if gas powered
 - Seal windows with tape
 - Put tarps inside caboose to catch water
 - Hook up hose to the faucet
 - Plug in extension cord for power washer (if electric)
 - Power wash around wheels and underneath caboose
 - Power wash each end of caboose
 - Get ladder or scaffolding and power wash top of caboose
 - Power wash front of caboose
 - Power wash back of caboose
 - Power wash each side of the caboose
- **Roof Repairs**
 - Let dry
 - Adults clean cupola with solvent, then paint with primer (~ 105 sq ft)
 - Adults coat roof with OSPHO ~ 300 square feet

Weekend #2 (Saturday) (June 29, 2013) (2 adults, 2 Scouts)
Hours: 6 hours x 10 people = 60 hours

- **Preparing right side of caboose (upper half) (adults)**
 - Put up scaffolding and start at the top of the caboose
 - Prepare top left side of the caboose (~ 10' x 5') area
 - Sand this section, wipe it clean with solvent and apply paint primer
 - Prepare top middle side of the caboose (~ 10' x 5') area
 - Sand this section, wipe it clean with solvent and apply paint primer
 - Prepare top right side of the caboose (~ 10' x 5') area
 - Sand this section, wipe it clean with solvent and apply paint primer
- **Preparing interior of caboose (Scouts)**
 - Scouts remove debris from inside caboose
 - Scouts sand any rusted areas on the inside of the caboose
 - Scouts sand floor on inside of caboose
 - Scouts sweep out inside of caboose

Weekend #3 (Friday, Saturday) (July 5-6, 2013) (4 adults, 6 Scouts each day)
Hours: 6 hours x 10 people = 60 hours

- **Preparing right side of caboose (lower half) (adults)**
 - Move scaffolding to the other side of the caboose
 - Prepare lower left side of the caboose (~ 10' x 4') area
 - Sand this section, wipe it clean with solvent and apply paint primer
 - Prepare lower middle side of the caboose (~ 10' x 4') area
 - Sand this section, wipe it clean with solvent and apply paint primer
 - Prepare lower right side of the caboose (~ 10' x 4') area
 - Sand this section, wipe it clean with solvent and apply paint primer
- **Preparing interior of caboose (Scouts)**
 - Open doors and put a fan inside the caboose to ventilate
 - Scouts clean interior of caboose with solvent
 - Scouts paint interior of caboose with gray paint
 - Scouts leave floor unpainted until the end of the project

Weekend #4 (Saturday) (July 13, 2013) (4 adults, 6 Scouts)
Hours: 6 hours x 10 people = 60 hours

- **Preparing left side of caboose (upper half) (adults)**
 - Put up scaffolding and start at the top of the caboose
 - Prepare top left side of the caboose (~ 10' x 5') area
 - Sand this section, wipe it clean with solvent and apply paint primer
 - Prepare top middle side of the caboose (~ 10' x 5') area
 - Sand this section, wipe it clean with solvent and apply paint primer
 - Prepare top right side of the caboose (~ 10' x 5') area
 - Sand this section, wipe it clean with solvent and apply paint primer
- **Preparing back end exterior of caboose (Scouts)**
 - Scouts use hand sanders to sand whole rear of caboose
 - Adults might have to sand high areas
 - Scouts use solvent to clean rear area of caboose
 - Scouts paint rear area of caboose with primer

Weekend #5 (Saturday) (July 20, 2013) (4 adults, 6 Scouts)
Hours: 6 hours x 10 people = 60 hours

- **Preparing left side of caboose (lower half) (adults)**
 - Move scaffolding to the other side of the caboose
 - Prepare lower left side of the caboose (~ 10' x 4') area
 - Sand this section, wipe it clean with solvent and apply paint primer
 - Prepare lower middle side of the caboose (~ 10' x 4') area
 - Sand this section, wipe it clean with solvent and apply paint primer
 - Prepare lower right side of the caboose (~ 10' x 4') area
 - Sand this section, wipe it clean with solvent and apply paint primer
- **Preparing front end exterior of caboose (Scouts)**
 - Scouts use hand sanders to sand whole front of caboose
 - Adults might have to sand high areas
 - Scouts use solvent to clean front area of caboose
 - Scouts paint front area of caboose with primer

Weekend #6 (Saturday) (July 27, 2013) (4 adults, 8 Scouts)
Hours: 8 hours x 12 people = 96 hours

- **Painting the caboose with the first coat of paint**
 - Adults will paint the high areas of the caboose using rollers and brushes
 - Scouts will paint the low areas using rollers and brushes

Weekend #7 (Saturday) (August 3, 2013) (4 adults, 8 Scouts)
Hours: 8 hours x 12 people = 96 hours

- **Painting the caboose with the second coat of paint**
 - Adults will paint the high areas of the caboose using rollers and brushes
 - Scouts will paint the low areas using rollers and brushes
 - Scouts will clean and paint the floor in the inside of the caboose

Weekend #8 (Saturday) (August 10, 2013) (3 adults, 2 Scouts)
Hours: 6 hours x 5 people = 30 hours

- **Painting the caboose with the yellow paint stripe and putting on the Santa Fe decals**
 - Adults will use painter's tape to line up the area for the yellow stripe painting
 - Scouts will paint the stripe using rollers and brushes
 - Replace the plexiglass in the windows and clean and paint the window frames
 - The Railroad Museum will supply the Santa Fe caboose decals and everyone will help put them on.
 - Celebrate the finished caboose.

Total number of volunteers estimated = 73 (some volunteers could come back more than once)
Total number of hours = 494

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Caboose exterior surface area sq ft = ~ 1330 sq ft

- Caboose exterior sides = $\sim 30' \times 9' = 270 \text{ sq ft} \times 2 \text{ sides} = 540 \text{ sq ft}$
- Caboose ends = $\sim 10' \times 9' = 90 \text{ sq ft} \times 2 \text{ sides} = 180 \text{ sq ft}$
- Caboose roof = $\sim 10' \times 30' = 300 \text{ sq ft}$
- Caboose cupola area sq ft = $\sim 105 \text{ sq ft}$

Caboose interior surface area sq ft = ~ 1050 sq ft

Materials

Paint primer (Rustoleum oil based “Rusty Metal” Primer)

- 1 gal primer covers 300 sq ft (1 coat)
- $1330/300 = 4.43$ or 5
- 2 coats = 10 gallons primer
- 10 gallons primer x \$30 = \$300

Red Caboose Paint (Rustoleum oil based rust preventing paint)

- 1 gal paint covers 300 sq ft (1 coat)
- $1330/300 = 4.43$ or 5
- 2 coats = 10 gallons paint
- 10 gallons paint x \$30 = \$300

Other Paint

- 1 gallon Santa Fe yellow stripe paint x \$30 = \$30 (Rustoleum oil based rust preventing paint)
- 1 gallon white hand rail paint x \$30 = \$30 (Rustoleum oil based rust preventing paint)
- Interior gray oil based paint (Rustoleum oil based rust preventing paint)
 $\sim 1050 \text{ sq ft (1 coat)} / 300 = 3.48 \text{ gallons} = 4 \text{ gallons} \times \$30 = \$120$

Other Materials

- OSPHO roof coat material for $\sim 300 \text{ sq ft}$; 1 gallon x \$40 = \$40
- Varsol, Rustoleum Rust Stripper or Kleen Strip cleaning solvent; 32 oz = \$7 x 4 = \$28
- Plexiglass replacement windows; 72” x 36” polycarbonate sheets x 4 = \$100 x 4 = \$400.

Supplies

- Paint roller replacements: package of 6 = \$11 x 2 = \$22
- Painter’s tape: 2 rolls x \$10 = \$20
- Tarps: 4 (borrowed)
- Garbage bags
 - 1 box x \$14 = \$14
- Rags: 1 Bag of 60 terry cloth rags x \$20 = \$20
- Gasoline: 10 gallons x \$3.50 = \$35.00
- Windex: 2 bottles x \$3 = \$6.00

- Sand paper
 - 5 packs of 50 Diablo 5" sanding discs (80 grit) = $\$20 \times 5 = \100
 - 10 packs of 5 sheets sanding block sand paper = $\$3.50 \times 10 = \35

Tools

- Power sanders
 - 2 sanders: borrowed
- Power washers
 - 1 power washer: borrowed
 - Water hose (300 feet) (RR Museum)
- Hand sand blocks
 - 4 sand blocks $\$8 = \32
- Wire brush with long handle for roof repair = $\$7 + \$5 = \$12$
- Eye protection
 - 4 pairs of goggles for power sanders (Troop 123)
 - 8 pairs of eye protection glasses (Troop 123)
- Dust masks
 - 1 pack of 20 x $\$20 = \20
- Gloves
 - Disposable plastic gloves for solvent cleaning, painting
 - 2 boxes of 50 disposable vinyl gloves = $\$5 \times 2 = \10
 - Work gloves borrowed
- Ladders or scaffolding
 - borrowed
 - 2 ladders (adults) borrowed
 - 1 portable scaffold (RR Museum)
- Generator: (RR Museum)
 - Paint brush rollers (4) Borrowed
- Paint brushes
 - 10 brushes
 - 5 packs of 2 x $\$7.50 = \37.50
- Buckets Borrowed

Other

- Tent canopy for shade: borrowed
 - Can you hang a tarp off the caboose for shade?
- Ice Chests for drinks: borrowed
- Table for set up: borrowed
- Chairs for resting: borrowed
- Fan for breeze?: Borrowed
- Food for lunches, snacks
- Drinks: water and Gatorade