Restoration Projects for consideration By the FRRS Board of Directors

January 2003

1. Freight Cars

Ballast cars WP 10649 and WP 10760

Sandblast, repaint, re-stencil; estimated cost $2000 (hired out)

Covered Hopper SN 5005

Finish painting car & trucks, finish relettering; estimated cost $300

Others that have been mentioned, costs not yet developed:

Waste oil tank car WPMW 1132 (sandblast & paint)

WP 20006 (silver box car); repaint feather & restencil

WP 0318Y and WP 8514 (old vista-flats); total rebuild

PFE/WP reefers (rapidly deteriorating, floor collapsing under the one on the ground; major project in the making)

2. Passenger Cars

Power Car FRRX 594

Complete electrical work, sand/prime/paint, replace flooring in center of car, install fire pump & plumb to water tanks, replace bad wheel sets; estimated cost $12,000 (mostly hired out)

Business Car UP 105

Complete roof repair/replacement; estimated cost $5000 (some funding is available in the UP 105 fund); car then can be left outside, making more shop space available (hired out).

Sleeper FRRX 1112

Prep and paint car roof light gray (matching our other cars); first step in repainting car to match others; will reduce heat load on car's A/C during summer; estimated cost $1000 (hired out)

Lounge Car FRRX 754

Install A/C; finish rewiring of car to be compatible with power car; estimated cost $6000 (hired out)

Baggage Car FRRX 5653

Add wiring/conduit to make compatible with power car; estimated cost $500 (hired out/volunteer work)

Dome/Dormitory/Lounge Car WP 832 (Silver Hostel)

Work on this car is under the direction of the Zephyr Project.

Troop Sleeper (USAX 8300)

Swap trucks with office car to make car roadworthy; repaint car into Pullman green as used in troop service, and make a display car out of it, telling its story both at the Museum and on the road. Estimated cost for painting (hired out) $8000; display setup can be done in-house.

3. Cabooses

UP 25283 (Silver Palace)

Repaint to full UP in-service scheme (yellow with red trim); estimated cost $1000 (for hired work; volunteer input needed); several UP officials have expressed interest in seeing us work this project. Will also improve the appearance of the caboose train.

UP 25049

The "other" UP caboose, not used due to its draft gear movement. Needs interior work; should be considered if enough paint is obtained. Car was delivered in 1942, in boxcar red (brown) with white lettering as part of UP's first order of steel cabooses; now in yellow/red, as painted when modified for pool service. Rough cost estimate $1000 with donated paint, hired painter, and volunteer prep labor, same as UP 25283.

WP 484

Prep and repaint; minimal bodywork needed. Major problem with car is oil-soaked flooring on "A" end of car, which should be replaced. Cost to repaint estimated at $700; more if floor work is undertaken.

ATSF 999414 (1500)

Car has been designated to become a locker room for volunteers, located next to the sleeper. Work has started to repair body cancer on car; interior is gutted, will make good locker area. Outside appearance of car will not be affected by its use. Recommend car be painted boxcar red and given its original number, 1500. Significant in that this was Santa Fe's first steel caboose, originally built in 1927. Rough cost estimate to repaint $1000.

WP 614 (veranda)

Prior to undertaking restoration projects involving wood, I recommend that we obtain the assistance of people/groups that have experience in such work, whether they be volunteers, consultants, or whatever. The 614 has a new roof and acceptable paint at this time; it needs major metal work on the end sills and platforms in order to make it safe to bring out from behind barricades (which has been started). This work will also allow drawbars to be installed, allowing the car to be moved much more easily. The immediate goal is to get the car out of the shop, freeing up shop space for other projects (Silver Hostel). Estimated cost for metal work is $2000; no estimate for any woodwork to be done.

SN 1632

The same caveat applies here as to the woodwork needed on this car. This car has a decent roof, but is left inside during the winter due to the rapid deterioration of the car's wood.

WP Camp Car

Other than getting this car on a flat car or on some wheels, no work should be undertaken on this project until it is evaluated by someone experienced in wood restorations, as for the 614 and the SN 1632.

4. Locomotives

WP 921-D (EMD F-7A)

We have talked about working on this locomotive for many years; we must now decide to commit. This locomotive is a favorite in the RAL program, and as such, is rarely out of service. There are many little things wrong with this engine, as well as its need for significant cosmetic work. To be done right, this engine will require being removed from service for most or all of at least one complete season, and the work will have to be largely hired out, so that it doesn't become a hangar queen. Work required includes repairs to radiators and blower seals, electrical cabinet cleaning and restoration, truck and wheel work, and complete cosmetic restoration, including removal of the grilles, batten strips, and body panels to arrest corrosion behind these components. To do all this work in a timely manner, it must be hired out; therefore, I estimate we will need $50,000 to $60,000 to completely restore this locomotive. It has probably made nearly that much for us during its time in the RAL program; it's time to put something back into this artifact. I recommend it be painted in the silver/orange freight scheme from the 1960's (black extends down over the windshield posts) with the 14" lettering.

WP 805-A (EMD FP7-A)

Work on this locomotive will largely be done under the Zephyr Project; the major work will be repair/ replacement of the prime mover, options for which are still being investigated.

WP 731 (EMD GP-9)

This engine needs radiator and water pump work from the mechanical standpoint, and major cosmetic work. It also has very thin, but still legal, wheels. Estimate for cosmetic work is $18,000, based on the extent of work required, and comparison to the work done on WP 707 in 2001 (assumes most work to be hired out). Recommend it be painted in the orange/silver scheme, with tiger stripes, same as WP 2001. Cab interior is in good shape, with minimal work required. There is funding available in the GP-9 fund to consider starting work on one of these engines soon.

WP 725 (EMD GP-9)

Mechanically, this engine presents some problems. It has produced smoke up into the valve covers when running (cause undetermined), and has both high- and low-voltage electrical grounds. However, both this engine and the 731 have been running since we got them. This engine is not quite as bad cosmetically as the 731, but it will still be an estimated $16,000 job, hired out, like the projects in 2001. Recommend this engine be painted in the Perlman green scheme with orange stripes, with the staggered "WP" on the nose. The cab on this engine is also in good shape.

SP 4404 (EMD SD-9E, 5428)

While this engine is of minimal use to us at the Museum due to its weight and worn suspension equipment, it represents a significant niche in the operations of our neighbor Southern Pacific. In light of our invitation to venues on the ex-SP in recent years, I believe it is to our advantage to upgrade this engine's appearance, returning it to SP's famed "Black Widow" paint scheme, and it's original number, 5428. There is apparently some unfinished business from the 2000 Truckee Railroad Days, whereby there is paint available for most of the job. We will have to do the work, but we have the Black Widow painting diagrams on hand. This engine also needs mechanical work to correct a loading problem, some excessive smoking, and high oil pressure, but is definitely serviceable. Estimated cost to hire out this cosmetic work is $14,000, based on the prep work required, the size of the locomotive, and the complexity of the new paint scheme. It is expected that this engine could generate significant interest in our facility due to appearances on the road.

UP 849 (EMD GP-30)

Little use has been made of this engine in recent years, due to its tendency to throw oil out the exhaust stack when running. After a lot of work on this problem last year, the problem has been mitigated to where it now only throws oil in the higher throttle settings (6, 7, and 8). This engine made the trip to Truckee last year, and has generated some interest among some of our friends at Union Pacific. There is a possibility of getting this engine restored with assistance from the UP, but we cannot bank on it. The cab was repainted last year; cost estimate for a total repaint of the engine is $15,000, on a hire-out basis. UP's custom, and expensive, Scotchlite red reflective lettering could add considerably to this cost; however, assistance from the UP in this regard is likely. As is, this engine can be recommended as a replacement in the RAL program, if the 921-D is taken out for its restoration.

WP 2001 (EMD GP-20)

Although this engine was repainted in 1997, it did not get the manpower-intensive prep work that the projects in 2001 did. As a result, it is now showing rust streaks, as well as some wear and tear from its time on the Yolo at Woodland. A general cleanup of the body, plus repainting and straightening the front pilot, would go a long way to improving this engine's appearance, at minimal cost. Mechanically, it needs its airboxes and exhaust system cleaned of excess oil, which will not be a pleasant job. The engine is serviceable for our use as is, and is highly recommended as a replacement, along with the 849, if and when the 921-D is taken down (it was added to the RAL program as a premium engine last year).

WP 925-C (GMDD F-9Bu)

In order to further make this locomotive represent a WP appearance, the winterization hatch on the roof should be removed, and a steam engine style back-up light should be installed on the edge of the roof on the rear end of the unit. Additionally, the engine needs radiator work (3 cores are currently leaking). The engine is a reliable and strong performer, and is one of the top choices for road trips. The cosmetic work for a more-WP appearance can be done in-house, at minimal cost; the radiator work is under the cognizance of the Mechanical Dept.

WP 501 (EMC SW-1)

This historic artifact needs a top-end overhaul on its engine due to low compression, but beyond that is in good overall condition. The paint on the body is acceptable, but the cab interior desperately needs painting. Once the engine work and cab painting is completed, this engine can be considered as an alternate for the RAL program, in event of major failure of one of the regular RAL engines.

FR&W 1857 (F-M H12-44)

Once the Mechanical Dept. resolves the oil cooler issue, this engine can be returned to service as a yard switcher. It is not recommended for the RAL program due to the prolonged idling and low-power operation seen in this use, which is detrimental to the F-M engine. With its plows and installed hot start system, it is our best-equipped locomotive for winter use. No cosmetic work is currently under consideration for this locomotive.

QRR 3 (GE 44T)

Once this locomotive returns from Virginia City, it should be evaluated for cosmetic touch-up and mechanical reliability, and then considered as a candidate for the RAL program, as well as semi-regular use on our demonstration caboose trains. We can publicize the local ties this engine has, and attempt to draw from the locals. Additionally, this engine will be economical to operate.

WP 563 (ALCo S-4)

Norman Holmes and John Ryczkowski have expressed interest in painting this engine, however, any work will need to be coordinated with the Restoration Dept. and the Yardmaster, for use of track/shop space. The paint scheme will also need to be decided upon; the 563 was one of only two WP ALCos to wear all four paint schemes used on the switchers. The cab interior has already been painted. Mechanically, the engine appears to be essentially complete and intact, except for a fuel pump. It also needs to have the brake beams on both trucks straightened. No cost estimates have been forwarded.

UP 6946 (EMD DDA40X)

While not yet a major priority, cosmetic work on this exhibit piece will need to be considered in the future. It was painted by UP prior to its donation to us in 1985; that's 18 years ago, and it's showing some rough edges and rust. We need to be cognizant of the condition of our UP and UP-donated equipment to maintain our good relationship with them.

I have attempted to gather, in one document, most, if not all, of the projects and ideas that have been mentioned over the past few years. It is probably quite short on the freight car end, which we may want to address further. This list is not intended to be totally complete, or in any type of priority arrangement, nor are any recommendations being made. Project priorities and funding are the responsibilities of the Board; given said priorities and funding, I will attempt to make things happen. If your particular pet project or concern is not listed here, it's probably due to oversight on my part. I do have my own personal preferences, and I will state that they lean toward improving our appearance and capabilities when we have opportunities to go on the road; that's how we will get our name out in front of people in the future. The added benefit of roadworthy displays is that they still look good during the 90% of the time they are set up at the Museum.

Respectfully submitted,
Steve Habeck
Restoration Manager