

TALKING POINTS

Several entities and concepts are involved with Engine 557. Communications about Engine 557 should be expressed with a clear and consistent message.

- Engine 557 is former Alaska Railroad steam locomotive number 557.
- The Engine 557 Restoration Company is a non-profit corporation and the organization which owns the locomotive. It is wholly responsible for planning and executing the restoration, conducting and preparing interpretive and educational activities and materials, conducting all business activities necessary to fulfill the mission statement, raising funds, and eventually, working with the Alaska Railroad to operate the locomotive and ensure its maintenance.
- The Engine 557 “restoration project” is the means to return Engine 557 to operational condition.
- The Engine 557 Restoration Fund was established controlled by the Alaska Community Foundation to receive, track, and disperse donations intended for use in the locomotive restoration. It was retired in early 2015 and all remaining monies have been disbursed to the Engine 557 Restoration Company.

1) How are we thinking about measuring effectiveness? What will success look like when the purpose of the grant is completed?

The ultimate measure of success of this project will be the restored Engine 557, fully ready to operate for passenger service. The Federal Railroad Administration’s (FRA) certification and ARRC’s acceptance will demonstrate the project’s effectiveness.

1. The project to restore Engine 557 to operation is the initial phase to fulfilling the Company’s mission statement.
2. The second phase towards meeting the mission statement will be the operation and ongoing maintenance of Engine 557.
3. A third and expanded phase will be the development of an interpretive/maintenance facility and to prepare and offer comprehensive interpretive and educational programs.

2) How have we exhibited bringing best practices from our own sector (or from outside sector) to our project as well as ongoing work?

Over 20,000 volunteer injury-free man hours invested to date have brought the restoration to an estimated 55% completion.

Best practices that have been incorporated or are planned involve technical upgrades and improvements not practical when the locomotive was built under wartime material restrictions and available technology. All are evolutionary changes and are economically viable because the improvements involve incremental upgrades to components already being overhauled or replaced. They include:

- Install 400 flexible stays in place of rigid stays to minimize breakage and prevent potential cracking of the boiler firebox.

- Increase the firebox crown and side sheets' thickness for an increased safety factor and projected service life of the firebox.
- Upgrade the locomotive's tender and lead truck bearings from bronze to roller bearings for improved efficiency and decreased maintenance.
- Modify the driver journal bearings and their lubrication system for increased reliability.
- Replace cast iron shoes and wedges with bronze for decreased wear.
- Configure the firing arrangement to use recycled oil products to lessen fuel costs and to be more ecologically responsible.
- Apply modern, specialized coatings that either weren't available or weren't in the original design. e.g., Apexior on the inside of the boiler and tender water tank and epoxy paints on the exterior of the locomotive and frame.

Best practices under consideration -

- Wherever possible, LEDs for lighting to stretch the capacity of the turbo generator and decrease maintenance needs.
- Running automatic lubrication to a number of bearings that are currently manually oiled. (I don't know if Jeff is on board with this, he wanted to make a decision on whether it was needed.)
- Modify the water glasses to meet current operational standards.
- Add a tender oil shut off valve.

3) What are the ways we articulate or demonstrate that the project is central and important to more effectively fulfil the mission?

Engine 557 Restoration Company's mission is to "restore, operate, conserve, and display the former Alaska Railroad steam locomotive number 557 for the education and enjoyment of Alaskan residents and visitors." The restoration of Engine 557 is the heart of this mission.

This restoration project is critical to fulfilling the Company's mission by focusing on long-term reliability, maintainability, and operational integrity and ensuring Engine 557 will be in compliance with all FRA requirements.

4) What are the evidences of the organization's leadership to implement and execute the project at hand and how does this move the mission forward?

Two directors lead project implementation and volunteer extensively for the organization. As evidence of their level of commitment to the mission, one has served for the last three years as full-time restoration project manager. The other has spent an average of 25 hours per week for the last three years as administrative officer, grant writer, and technical researcher. Another director serves as web master for the organization's Internet site.

The organization's leadership demonstrated their capabilities by raising over \$700,000 in monetary and \$600,000 in in-kind support, recruiting, training, and leading volunteers in over 20,000 accident-free hours of service, and passing the 50 per cent completion mark in the restoration. Beneficial relationships have been established with over 100 businesses and organizations. The leadership has also developed and implemented administrative management systems and internal controls, applied for and received a

501(c)(3) exemption from Federal income taxes, obtained business licenses and permits, and submitted required corporate reports and tax filings.

5) What methodologies are we utilizing in our assessment and are those most appropriate for what we are seeking to assess? How does what we learn work its way back into the ongoing work of the organization? Does the organization seek to continue to grow, improve, and be more effective and efficient?

Federal railroad regulatory standards and industry accepted practices are being used to assess the quality of work and acceptability for operation of the locomotive. When Engine 557 receives acceptance and certification for operation by both the Federal Railroad Administration and the Alaska Railroad Corporation, the Company will have met the restoration project goal.

Mr. Robert Fanzen, P.E., of Steam Services of America provides leadership and direction to ensure that volunteer efforts are effective and comply with Federal regulatory requirements. His recommendations are always given careful consideration and are typically accepted and implemented.

When the Company commenced operations in August, 2012, it had the minimally required corporate documents, a vacant warehouse for a workspace, no tools or technical documentation, and a worn out locomotive. During the last three years its resources and abilities have expanded exponentially, while at the same time, making steady progress on the restoration.

During its three years of operation, the organization has established management, restoration, and administrative infrastructures. A full-time project manager and half-time administrative officer were found and have now donated a combined 9,000 hours of their time. The core group of mechanical department volunteers has grown to approximately 25 individuals and additional volunteers continue to be recruited and trained in the lost arts of steam locomotive overhaul and maintenance. Capable leadership and a shared vision has resulted in stable workforce and several of the Mechanical department volunteers have been working on the restoration since the first winter, even before heating was installed in the "engine house." The skills and knowledge base of the volunteers continues to grow.

Through donation and purchase the organization has established a restoration infrastructure of standard and specialized hand, power, and machine tools, indoor and supplemental outdoor storage, approximately 1,000 original engineering drawings and several hundred pages of original, 1942 engineering notes. Administrative systems for accounting and inventory have been established. With the support of pro-bono legal assistance, a Federal tax exemption under 501(c)(3) was requested and received. Appropriate city, borough (county), and state business licenses were acquired and necessary business and corporate reports have been filed. After an unsuccessful search for a professional fundraiser, a fundraising and grant writing team was created. Upon receipt of a 501(c)(3), a smooth transition was made from a process in which all funds were received and distributed by a fiscal sponsor under a contractual agreement. This function has been taken over with in-house resources.

Future growth within the mechanical department will be realized as tasks requiring new skill and knowledge are encountered. Upon completion of the restoration, the mechanical depart will evolve from performing the locomotive overhaul to conducting routine and special ongoing maintenance. Another area of growth will be developing a cadre of individuals with the skills and qualifications to operate the locomotive in passenger operations and establishing a formal operating agreement with the Alaska

Railroad Corporation. Operations are tentatively projected to be done by steam locomotive operating crews from the organization (who must be trained and certified) in conjunction with a qualified “pilot” engineer from the Alaska Railroad who has knowledge of the railroad necessary to direct the steam crew. Other areas of growth include establishment of a facility which will allow both locomotive maintenance and a visitor safe area where interpretive and educational activities can be conducted. Another area of growth is to develop more formal interpretive and educational materials and programs.

6) How will the organization sustain the project when special funding runs out?

The restoration is a multi-year project, entering the fourth of its estimated five year duration and there are ongoing fund raising and revenue needs. To fully realize project funding needs the Board and fund raising committee are pursuing donations from corporate and individual community members, grant opportunities, and are investigating other fundraising opportunities.

When the restoration project has been completed and the locomotive has entered revenue service the funding for operational expenses and maintenance will be raised by a combination of fares, supplemental fund raising, volunteer labor, and in-kind donations of goods and services.

7) How might the group leverage what we give to change their work and build the capacity of the organization or more effectively deploy their resources?

Monetary donations leverage volunteer labor and in-kind donations of goods and services to purchase parts and specialized services not available through donation. A portion of Murdock funding will be spent to engage Mr. Robert Franzen, P.E., of Steam Services of America to continue providing expert advice on boiler reconstruction, and fabrication and overhaul of individual parts. His firm is also contracted to provide custom manufacturing of replacement parts and to perform hands-on work in boiler overhaul, critical welding tasks, and final assembly. Volunteers have carried out the work of cleaning, disassembly, rehabilitation of appliances and preparation of the locomotive and tender, additional expert advice and periodic professional oversight enables volunteers to perform more specialized tasks such to include reassembly, precision adjustment and alignment of locomotive systems, and quality and performance testing. An example of the ability to leverage short-term, expert visits, when Mr. Franzen and one of his employees were on-site for two intensive 10-day periods, we were able to execute a surge in volunteer participation in which progress was measured in days, not months.

Through these contracted services, Mr Franzen provides leadership and direction. During this period 18 volunteers donated over 1,100 hours of time, with the volunteer days sometimes lasting 10 to 12 hours. Mr. Franzen was also able to prepare a plan and punch list of tasks for the organization to completed during the next 1-2 months before his next visit.

8) Describe how funds have been raised to date.

Funding Sources

Cash: Over \$740,000, including:

| Source | Amount | Notes |
|--|-----------|--|
| Rasmuson Foundation | \$350,000 | \$350,000 challenge grant has been disbursed. |
| Vic and Jim Jansen and family | \$100,000 | Personal donations. |
| Atwood Foundation | \$50,000 | Two \$25,000 competitive grants. |
| Kenai Mountain-Turn again Arm Heritage Area | \$20,000 | Two \$10,000 competitive grants |
| Museum of Alaska Transportation and Industry | \$17,000 | Proceeds from two charitable raffles for private excursion on the Alaska Railroad's "Denali" business car. |
| Dick Morris | \$11,200 | Personal Donations. |
| MEA Charitable Foundation | \$10,000 | Unrestricted grant. |
| Candice McDonald Kotyk | \$10,000 | Personal donation. |
| National Railway Historical Society | \$6,600 | \$5,000 competitive grant for purchase of replacement stays, \$1,600 contribution. |
| Christopher Aadnesen | \$5,500 | Personal donations. |
| Mike Porcaro | \$5,000 | Personal donation. |
| Al Koch | \$5,000 | Personal donation. |
| Anonymous donor | \$5,000 | Personal donation. |

In-Kind: \$550,000 in in-kind donations (not including locomotive and tender) received to date from over 50 donors, including:

| Source | Value | Contribution |
|--|-----------------------|---|
| Vic and Jim Jansen, Lynden Transport, Alaska Railroad Corporation | N/A | Engine 557. Purchased by the Jansens and donated to the ARRC, which "sold" it to the Engine 557 Restoration Company for \$1.00. Lynden Transport and ARRC contributed transportation from Washington to Wasilla. No value assigned. |
| Museum of Alaska Transportation and Industry, Alaska Railroad Corporation | N/A | Locomotive tender. Donated to ARRC and included in "sale" of the locomotive to the Engine 557 Restoration Company. ARRC contributed transportation to the restoration site. No value assigned. |
| Alaska Railroad Corporation | \$343,000 \$30,000 | Rental of restoration facility and utilities Surplus Railroad Tools and Equipment |
| Central Environmental Services/ Central Recycling Services/CEI Contractors | \$47,000 \$9,000 | Asbestos Removal Air compressor, portable office, shelving; equipment rental, tenant improvements. |
| Independent Lift Truck of Alaska | \$49,000 | Long-term forklift rental |
| Greatland Welding | \$16,000 | Tool rental, welding supplies, and custom manufacture of parts and special tools |
| Davis, Wright, Tremaine, LLP | \$14,000 | Pro bono legal assistance to prepare and file application for exemption under 501(c)(3). |
| Roger Hickel Construction | \$12,000 | Remove section of exterior wall and install overhead door in engine house. |
| Grainger | \$10,000 | Tools, expendable supplies, personal protective equipment. |
| Lynden Transport/ Alaska West Express | \$10,000 | Round-trip Transportation of several truckloads of locomotive components to the U.S. east coast for overhaul. |
| Sampson Steel | \$8,000 | Steel framing and labor to install overhead door in engine house. |
| MFCP/Jackovich Industrial & Construction Supply | \$8,000 | Air tools and lubricants |
| Alaska Airlines | \$7,500 | Travel vouchers. |
| Porcaro Communications | \$6,500 | Outreach and public relations materials and services. |
| ATS Portable Toilets | \$4,600 | Portable toilet rental and servicing. |

Other Fundraising:

- Fund raiser to "sponsor" locomotive tube and flues initiated in February, 2015. Over \$12,500 to date of a potential of \$25,000.
- In December, 2014, a \$5,000 director's challenge attracted over \$16,000 in contributions.
- Smaller cash donations are solicited and information is distributed at venues such as Anchorage's Fur Rendezvous winter carnival.
- Marketing limited edition fine art print of circa-1950 Engine 557 on Turnagain Arm.
- Numerous presentations have been made at trade and civic organizations for outreach and to solicit donations and print sales.
- Partnered in fund raiser with Arkose Brewery. In which a 557 glass and a growler filled with limited edition 557 Revival Ale was sold for \$100 with approximately 65% of the proceeds going towards the restoration.