To: FRRS Board of Directors
From: Paul Finnegan, Webmaster
Re: Museum Web Page
Date: September 8, 2020

COVID-19 Update

The website has been kept up to date with all the new museum information regarding the COVID-19 health emergency. The home page, the Latest Museum News column, the calendars, etc. have been updated to show the museum is closed for the remainder of 2020.

Rare, but persistent, email Forwarder Failures

Over the last several years, I have occasionally noticed, or have received reports of, bounced emails when people have used one of our <address>@wplives.org (e.g. election@wplives.org). The bounce message is something like: "Our system has detected an unusual rate of 421-4.7.28 unsolicited mail originating from your IP address. To protect our 421-4.7.28 users from spam, mail sent from your IP address has been temporarily 421-4.7.28 rate limited." These messages come from gateway##@websitewelcome.com. I was unable to reproduce the problem, and months would go by with no issues.

While working on a different project for the FRRS Signal Department, I believe I now understand the root cause. When people use the <something>@wplives.org email forwarder, the email is received at Hostmonster and then resent from Hostmonster to the list of email addresses for that forwarder. We have used this feature at Hostmonster for many years. At Hostmonster, wplives.org is on a shared server. I have asked, but Hostmonster has refused to tell me, how many accounts are hosted on the server. I can't tell for sure, because we are forced to work in what is known as a jailshell so users cannot see the other users on the same server. However, I have identified 60 different non-privileged accounts on our server at Hostmonster (host2056).

The email forwarder failure is cause by any user on the shared server being a bad actor and sending a very large amount (probably spam) of email. Hostmonster has policies that prohibit using their system to send spam, but I doubt it is really enforced. From my research, there is no fix or workaround if we continue to use the mail server at Hostmonster from a shared server.

Improved email Servers Activated

Kenneth Finnegan and I have been working on improving the website service, performance and reliability for the past several months. One of our areas of focus was to improve the email system used by the wplives.org domain. This includes the email forwarders that our members and the public use to communicate with the society.

On Saturday, September 5, 2020, we supplemented the mail host provided by Hostmonster. Previously our email system relied on the same-shared host at Hostmonster that serves the website. This created a single point failure infrastructure that we essentially had no control over. Using Kenneth's PhirePhly Design's resources, we have now added three additional mail hosts to the wplives.org email system. They provide redundancy and now we have full control over the email system's configuration. The new mail servers have a prioritized order. The default server is in Kenneth's rack in Fremont. The secondary server is in the same facility, but on a different network. The next server is in London and last in line is the server at Hostmonster in Utah. We will likely remove the Hostmonster server after we gain complete confidence in our new approach. For our needs, this is really outrageous redundancy, but we had it available so we used it.

Additionally, the new mail servers add significantly better authenticity to the emails sent and forwarded by wplives.org. I expect this to eliminate the email issue described above as the rare, but persistent issue. The users should see no difference in usage.

Latest Museum News Column

I thought it might be helpful if I shared how I manage the Latest Museum News Column that appears on the desktop and mobile home pages, and the desktop webcam page. At the top of the column, I have date that the news column was last updated and a link to the revision history of the column.

The revision history link is in response to a user request to be able to tell what is new without having to read the whole column. For that same reason, the column is essentially a push-down stack, where the latest posting is generally added at the top. Sometimes I make an exception for something very unusual, e.g. that we are closed all this year will remain as the lead story until 12/31/20.

When a new item is added, I also add a WPRM_OUT_OF_DATE token with a date encoded when the item should be removed to the HTML code. This automates the removal of old material. Often this is the day after an event (e.g. the last Santa Train). If there is not a specific date associated with then entry, I generally set the expiration date to be three months after the date of posting. The basic idea here is the latest news is at the top, and old news goes away in a timely manner. A few things, e.g. the link to the museum/society apparel & products at teespring.com, stay near the bottom forever.

Special 10% off Promotion on FRRS/WPRM Apparel and Products at teespring.com

The FRRS has a storefront at teespring.com that offers FRRS/WPRM apparel and products. There is a link in the Latest Museum News column on the home page and the desktop webcam pages to the storefront. During the last weekend of August, teespring.com sponsored a special 10% off promotion. I put a notice in the Latest Museum News column and sent an email announcing the promotion with the promo code to the 399 FRRS members that I had an email addresses for. Over the weekend, we had 66 views of the storefront and 8 sales which resulted in $54.11 profit for the society. This is almost half of the $110.62 year-to-date profit from the FRRS storefront.

General Items

8/5/20 – Posted Preliminary Agenda for August Board Meeting to Minutes & Reports webpage.

8/6/20 – Updated Staff webpage and FRRS Org Chart webpage per email from Greg Elems.

8/8/20 – Posted additional report for August FRRS Board meeting to Minutes & Reports webpage.

8/9/20 – Updated museum closure information on website, closed for remainder of 2020.

8/11/20 – Posted Rev 16 of Department and Committee List, updated Staff and Org Chart pages.

8/14/20 – Posted photos from Greg Elems and Bob Sims to Around the Museum 2020 gallery.

8/16/20 – Received an email from Bob Chaparro, he pointed out some issues with the page we had for the SFRD 8199 car. I created a new collection page for it adding his information.

8/19/20 – Added three photos from Greg Elems to the Around the Museum 2020 gallery. Also added one of them to the UP 900002 Snow Plow collection page.

8/20/20 – Added new photos from Greg Elems to the Around the Museum 2020 gallery and the home page random photo gallery.

8/22/20 20:00 PDT – Removed 2020 Book Fundraiser from website per email from Eugene Vicknair.

8/24/20 – Posted 23 Minutes from FRRS Board Meetings to Minutes & Reports webpage sent to me by Eugene to work on filling in the gaps. These were for years 2001, 2003 and 2005.

8/29/20 – Posted updated FRRS calendar (added Oct. Work Steam Session) from Eugene Vicknair.

8/30/20 – Posted new photo of WP 705 in Perlman Green from Eugene Vicknair on the homepage and on the WP 705 collection page.

8/30/20 – Posted three new photos of the Water Buffalo project from Greg Elems to the [Around the Museum 2020](#) gallery.

9/1/20 – Updated the Latest Museum New Column's "from the archive" link to "1980 Western Pacific Hayward CA Derailment Report April 9, 1980"

9/1/20 – Added a new link to "THE WESTERN PACIFIC Headlight Article Reprints" in the list FRRS Publications on [Historical/Archive page](#).

9/5/20 – Created collection page for [PFE 11454](#).