

July 26, 2023

Governing Board Communication

Agenda Item C-1

TO: MERA Governing Board
FROM: Todd Williams - Operations Officer

SUBJECT: MERA System Operations Update June 2023

MERA July System Maintenance Report (Prior Month June Reporting)

The Radio Communications division provided the following support to MERA:

Mt. Sonoma MERA Mountaintop Site Outage - Loss of service via channel 3 between the Sonoma and Big Rock Mountaintop links. Issued resolved via replacement spare channel bank.

- o The microwave link servicing Sonoma to Big Rock went out several times within a short period, from 12:00 noon - 05:00 p.m. in the same day, partially due to foggy conditions.
- o Consequently, the above occurrence is normal or routine with old channel bank equipment. In most cases, the channel banks come back up on their own the following night or via remote means. However, unfortunately in this instance, the channel bank did not come back up on its own within 3 days (not good!).
- o After multiple attempts to manually reset the channel bank, there was no success. The following day, Radio Communications went to the actual Sonoma site to reset power and conduct a hard reset of the channel banks. Again, with no success.
- o After many attempts and failed troubleshooting efforts, the channel bank was replaced with a spare which resolved the issue immediately.
- o Ultimately, the channel bank's main purpose or role is breaking up the microwave T1 signal apart into individual time slots, which assist with the proper distributions of radio frequency (RF) signals, etc.
- o The Radio Communications division continues to monitor this service link with no further findings, concerns, and/or reasons to remain alarmed.
- o Furthermore, it's a growing concern for Radio Communications, as we thoroughly conduct quarterlies. Our major concerns remain; feasibility of used/aged spare parts/equipment, low stock concerns, reliability of non-warrantied equipment, and potential delays while transitioning to the new Next Gen network.

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Civic Center Generator Air Conditioner (AC) Deficiencies - Major concerns pending from excess heat at various MERA sites. Issue addressed; however, permanent resolutions are ongoing).

- o Unfortunately, the heat is not letting up any time soon. Most of our mountaintop site AC units have either been replaced, scheduled for replacement, or there's a nearing solution.
- o The Civic Center Prime Site is our most recent and concerning site. Concerns linger around power, AC feasibility, and/or reliability supporting service equipment, i.e., the Prime Site is the brain of the MERA network.
- o Historically, the Civic Center facility has always brought about its own challenges, i.e., vintage facility, equipment, access, pathways, and/or structural deficiencies, etc.
- o The DPW Facilities Maintenance Division has been continuously working on mitigation efforts, solutions, and challenges, i.e., installing/running/maintaining two separate "move and cool" units, insulating of overhead ceiling installation, disabling supported/unsupported exhaust fans, and redesigning primary/alternate unit replacement systems with quotes, etc.
- o Currently the two "move and cool" units are being monitored 24/7 by both our local Radio Communications and Facilities Maintenance staff.
- o We are confident that through collaborative efforts between Facilities Maintenance, Radio Communications, MERA Executive leadership, DPW Executive leadership, and various other supporting agencies, that we are approaching a permanent solution to prevent further uncertainty, unreliability, and vulnerabilities, etc.

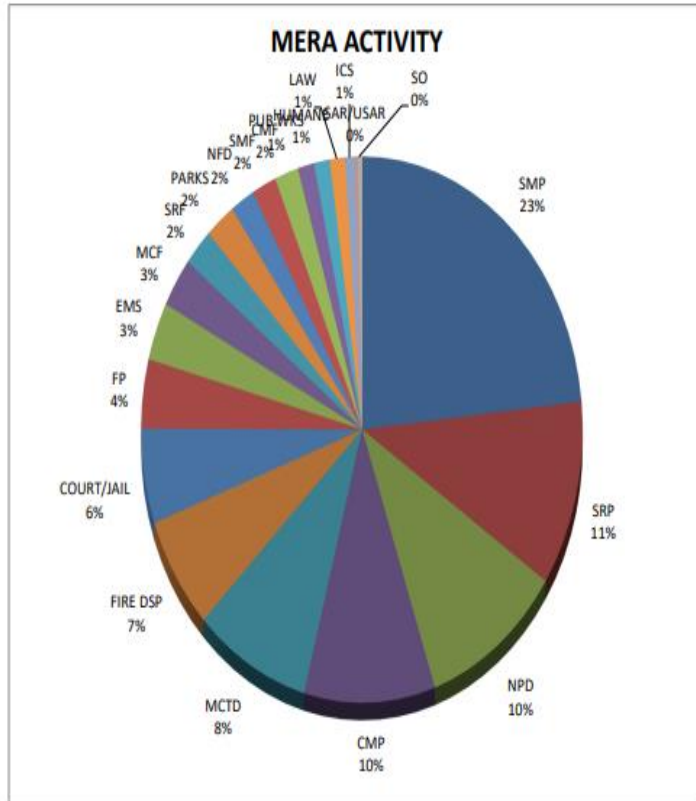


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MERA SYSTEM OPERATION

| June | 2023 | | |
|-----------------|----------------|------------------|----------------|
| Agency Grouping | Radio Calls | Call Time | Busy Time |
| SMP | 48,233 | 146:06:40 | 0:00:00 |
| SRP | 24,088 | 68:49:04 | 0:00:00 |
| NPD | 22,134 | 64:26:18 | 0:00:00 |
| CMP | 19,504 | 59:54:19 | 0:00:00 |
| MCTD | 17,096 | 53:07:04 | 0:00:00 |
| FIRE DSP | 16,829 | 41:55:59 | 0:00:00 |
| COURT/JAIL | 16,488 | 35:05:49 | 0:00:00 |
| FP | 9,157 | 25:37:57 | 0:00:00 |
| EMS | 3,158 | 21:32:29 | 0:00:00 |
| MCF | 6,196 | 18:22:34 | 0:00:00 |
| SRF | 5,934 | 13:59:17 | 0:00:00 |
| PARKS | 4,761 | 13:50:17 | 0:00:00 |
| NFD | 4,359 | 11:14:06 | 0:00:00 |
| SMF | 4,552 | 11:09:07 | 0:00:00 |
| CMF | 4,531 | 10:51:02 | 0:00:00 |
| PUB WKS | 2,963 | 7:27:46 | 0:00:00 |
| HUMANE | 2,486 | 7:09:20 | 0:00:00 |
| LAW | 2,709 | 7:01:09 | 0:00:00 |
| ICS | 1,670 | 4:27:54 | 0:00:00 |
| SAR/USAR | 700 | 1:40:10 | 0:00:00 |
| SO | 305 | 0:44:53 | 0:00:00 |
| FIRE MSC | 108 | 0:20:44 | 0:00:00 |
| OTHER | 110 | 0:19:19 | 0:00:00 |
| MUT AID | 112 | 0:14:47 | 0:00:00 |
| TOTAL: | 218,183 | 625:28:04 | 0:00:00 |

| Category | Radio Calls | Call Time | Busy Time | Percent Usage |
|---------------------|----------------|------------------|----------------|---------------|
| LAW TOTAL: | 142,618 | 407:46:09 | 0:00:00 | 65.2 |
| FIRE TOTAL: | 46,367 | 131:05:28 | 0:00:00 | 21.0 |
| PUBLIC WORKS TOTAL: | 26,600 | 79:12:20 | 0:00:00 | 12.7 |
| NON-MERA TOTAL: | 2,598 | 7:24:07 | 0:00:00 | 1.2 |
| TOTAL: | 218,183 | 625:28:04 | 0:00:00 | 100.0 |





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MERA SYSTEM OPERATION

Annual 2023

| Agency Grouping | Radio Calls | Call Time | Busy Time |
|-----------------|------------------|-------------------|----------------|
| SO | 200,788 | 610:10:33 | 0:00:00 |
| SRP | 145,277 | 410:38:48 | 0:00:03 |
| NPD | 128,654 | 374:07:42 | 0:00:00 |
| CMP | 115,915 | 360:40:25 | 0:00:00 |
| MCTD | 97,387 | 312:08:28 | 0:00:00 |
| FIRE DSP | 99,828 | 251:17:08 | 0:00:00 |
| COURT/JAIL | 96,899 | 207:10:38 | 0:00:00 |
| SMP | 62,706 | 188:02:46 | 0:00:02 |
| FP | 54,821 | 150:52:10 | 0:00:00 |
| EMS | 18,266 | 126:48:30 | 0:00:00 |
| MCF | 33,613 | 103:54:40 | 0:00:00 |
| SRF | 36,038 | 83:56:53 | 0:00:00 |
| PARKS | 27,970 | 81:59:12 | 0:00:00 |
| SMF | 29,353 | 72:37:46 | 0:00:00 |
| CMF | 27,512 | 67:47:34 | 0:00:02 |
| NFD | 25,900 | 67:08:12 | 0:00:00 |
| PUB WKS | 24,591 | 63:28:52 | 0:00:05 |
| LAW | 19,313 | 48:22:16 | 0:00:00 |
| HUMANE | 12,238 | 34:22:26 | 0:00:00 |
| SAR/USAR | 5,149 | 13:47:17 | 0:00:00 |
| ICS | 3,971 | 10:08:56 | 0:00:00 |
| FIRE MSC | 420 | 1:29:10 | 0:00:00 |
| MUT AID | 639 | 1:27:20 | 0:00:00 |
| OTHER | 293 | 0:53:57 | 0:00:00 |
| TOTAL: | 1,267,541 | 3643:21:39 | 0:00:12 |

| Category | Radio Calls | Call Time | Busy Time |
|---------------------|------------------|-------------------|----------------|
| LAW TOTAL: | 824,373 | 2350:05:18 | 0:00:05 |
| FIRE TOTAL: | 276,079 | 788:47:10 | 0:00:02 |
| PUBLIC WORKS TOTAL: | 154,212 | 468:39:25 | 0:00:05 |
| NON-MERA TOTAL: | 12,877 | 35:49:46 | 0:00:00 |
| TOTAL: | 1,267,541 | 3643:21:39 | 0:00:12 |

