



July 27, 2022

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Governing Board Communication

Agenda Item C-1

**TO: MERA Governing Board**

**FROM: Todd Williams - Operations Officer**

**SUBJECT: MERA System Operations Update - June 2022**

**June 2022, the Telecommunications Division provided the following support to MERA:**

**Intermittent loss of T1 signals on the microwave loop @ San Pedro (outage 3 days. Permanent fix high level mux card**

- Sites effected (San Pedro, Tiburon, Dollar, and Forbes
- **On Sunday 06/05/2022 Major alarms Civic Center microwave** (T1 signal missing or degraded)
- **Initial trouble shooting efforts**, spent a few days **reseating cards and replacing T1 cards** at multiple sites (Civic Center, Tiburon, Dollar Hill, Forbes, San Pedro, Tam and Big Rock).
- **Results temporary, short-term fixes only** (noted 10 second interval transmission loss).

July 27, 2022

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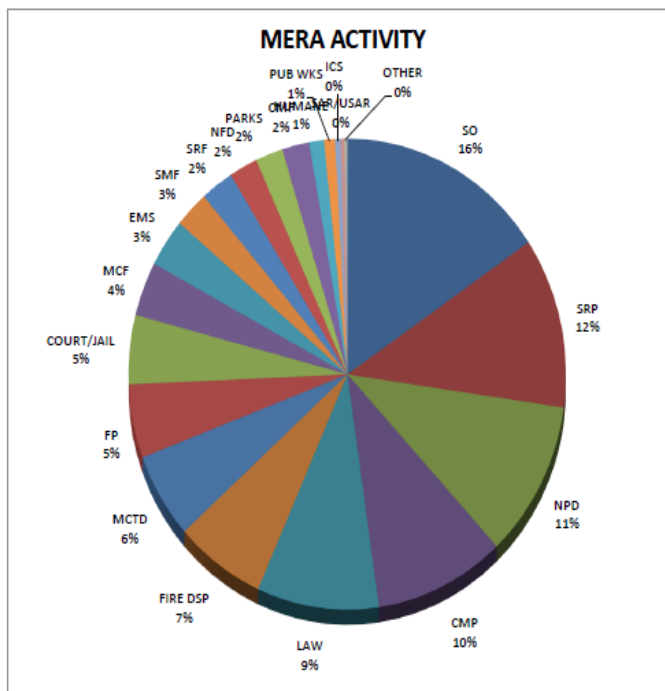
- **Secondary trouble efforts**, spent a **couple weeks trying to duplicate issue by switching out spare parts** (loop protection created fail-safe preventing duplication of failures (validated good system redundancy ONLY but didn't identify issue)
- **On Wednesday 06/29/2022 Major alarms now on several sites.** This time loss transitioning back after 10-15 seconds of being down (all sites came back except San Pedro). **Now there were several alarms at several sites including Big Rock, Tiburon and Dollar Hill.**
- **On Thursday 06/30/2022, troubleshooting efforts continued.** Swapped out card at multiple sites Tiburon and Big Rock with no success (switching out parts created more in dealt issues).
- **Conclusion** it was determined that the **high-level mux card at San Pedro was bad (problem solved).** Motorola no longer support obsolete equipment; **Next Gen can't come soon enough.**

**MERA SYSTEM OPERATION**

June 2022

Agency Grouping	Radio Calls	Call Time	Busy Time
SO	33,530	101:56:47	0:00:00
SRP	27,130	76:59:34	0:00:00
NPD	24,363	70:49:39	0:00:00
CMP	20,822	63:19:45	0:00:00
LAW	20,114	58:59:50	0:00:00
FIRE DSP	17,368	43:48:35	0:00:00
MCTD	12,849	38:41:56	0:00:00
FP	11,856	33:14:59	0:00:00
COURT/JAIL	14,670	31:03:54	0:00:00
MCF	8,141	24:25:38	0:00:00
EMS	3,257	21:45:23	0:00:00
SMF	6,197	16:36:31	0:00:00
SRF	6,811	15:57:28	0:00:00
NFD	5,116	13:49:44	0:00:00
PARKS	4,712	13:19:26	0:00:00
CMF	5,155	13:11:45	0:00:00
HUMANE	2,613	7:08:57	0:00:00
PUB WKS	2,286	5:15:39	0:00:00
ICS	961	2:39:53	0:00:00
SAR/USAR	658	1:52:55	0:00:00
OTHER	155	0:32:51	0:00:00
FIRE MSC	100	0:23:18	0:00:00
SMP	111	0:19:20	0:00:00
MUT AID	84	0:11:51	0:00:00
<b>TOTAL:</b>	<b>229,059</b>	<b>656:25:38</b>	<b>0:00:00</b>

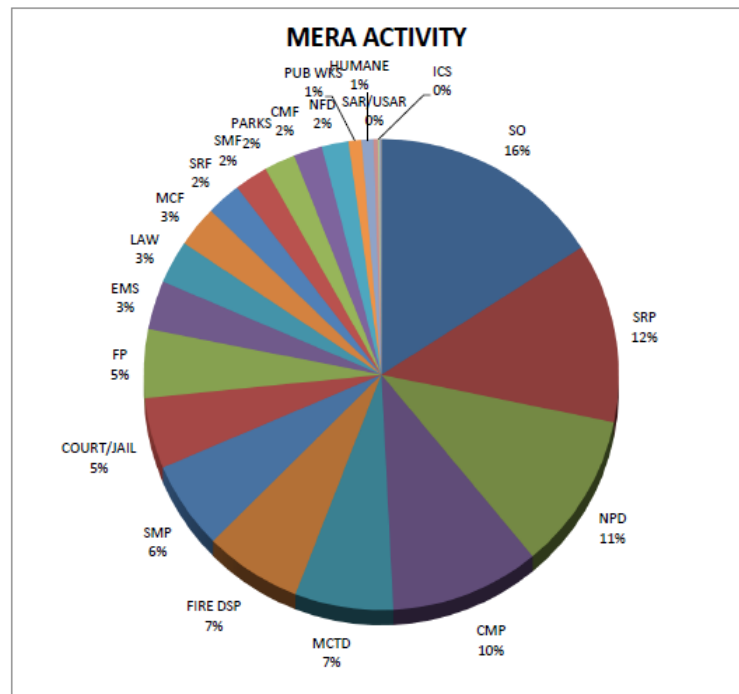
Category	Radio Calls	Call Time	Busy Time	Percent Usage
LAW TOTAL:	152,596	436:43:48	0:00:00	66.5
FIRE TOTAL:	52,803	151:51:17	0:00:00	23.1
PUBLIC WORKS TOTAL:	20,963	60:29:45	0:00:00	9.2
NON-MERA TOTAL:	2,697	7:20:48	0:00:00	1.1
<b>TOTAL:</b>	<b>229,059</b>	<b>656:25:38</b>	<b>0:00:00</b>	<b>100.0</b>



**MERA SYSTEM OPERATION**

Annual	2022		
Agency Grouping	Radio Calls	Call Time	Busy Time
SO	194,670	589:56:34	0:00:00
SRP	161,972	456:21:33	0:00:00
NPD	140,338	398:43:27	0:00:00
CMP	123,570	377:14:24	0:00:00
MCTD	81,258	247:31:47	0:00:00
FIRE DSP	98,491	245:16:21	0:00:01
SMP	75,379	223:23:09	0:00:00
COURT/JAIL	86,337	179:48:55	0:00:00
FP	63,700	174:15:10	0:00:03
EMS	18,272	124:09:07	0:00:00
LAW	38,457	109:29:50	0:00:00
MCF	34,008	105:01:57	0:00:00
SRF	37,617	87:27:34	0:00:00
SMF	32,658	84:30:35	0:00:00
PARKS	27,362	78:21:11	0:00:00
CMF	28,208	72:01:59	0:00:00
NFD	26,256	67:28:34	0:00:01
PUB WKS	14,167	32:19:39	0:00:00
HUMANE	11,374	30:31:20	0:00:00
SAR/USAR	3,348	10:10:01	0:00:00
ICS	1,752	4:34:05	0:00:00
FIRE MSC	432	1:48:39	0:00:00
MUT AID	970	1:44:08	0:00:00
OTHER	343	1:12:32	0:00:00
<b>TOTAL:</b>	<b>1,300,939</b>	<b>3703:22:31</b>	<b>0:00:05</b>

Category	Radio Calls	Call Time	Busy Time
LAW TOTAL:	884,423	2509:13:02	0:00:03
FIRE TOTAL:	279,290	797:54:47	0:00:02
PUBLIC WORKS TOTAL:	124,882	363:59:14	0:00:00
NON-MERA TOTAL:	12,344	32:15:28	0:00:00
<b>TOTAL:</b>	<b>1,300,939</b>	<b>3703:22:31</b>	<b>0:00:05</b>





July 27, 2022

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**TO: MERA Operations Board**  
**FROM: Todd Williams - Radio Telecommunications Officer**

**SUBJECT:** Request to add MERA frequencies to BATFE code plug (Board Action)

#### Recommended Action

Approve the Bureau of Alcohol, Tobacco, Firearms and Explosives (BATFE), San Francisco Division request to add Marin Emergency Radio Authority (MERA) frequencies into BATFE-owned radios. The request to add these frequencies is for mutual aid assistance and not for day-to-day operations.

#### Background

On August 10, 2021, the Radio Shop was notified concerning adding MERA frequencies to there existing 2 consolette radios, 65 mobile radios and 80 portable radios.

- BATFE is requesting to add primary and secondary talkgroups for all Marin Fire/EMS, Law Enforcement Agencies, Blue Command and Blue Tactical channels, as well as Police Department APB, all ICS talkgroups, and any direct Dispatch channels available.
- BATFE's local Radio Telecommunications Specialist will handle all programming of there existing APX 8000 and 7500 series multi-band radios(radios are compatible with the MERA Next Gen System).
- The radio code plug programming will be removed when the radios are no longer needed. Radio training will be provided to end users.
- Please contact Radio Telecommunications Specialist Alan Chin email address [Alan.Chin@atf.gov](mailto:Alan.Chin@atf.gov) (707)708-1597 or Special Agent in Charge Patrick Gorman email address [Patrick.Gorman@atf.gov](mailto:Patrick.Gorman@atf.gov) (925)557-2802 with any question.

Per MERA policy, the BATFE request to add MERA frequencies to the BATFE code plug will be forwarded to the next level i.e., MERA Executive Board if approved with no objections during the MERA Governing Board Meeting.



July 27, 2022



**U.S. Department of Justice**

Bureau of Alcohol, Tobacco,  
Firearms and Explosives

[www.atf.gov](http://www.atf.gov)

August 10, 2021

Andrew LeBlanc  
Department of Public Works  
County of Marin  
3501 Civic Center Dr. #304  
San Rafael, CA 94903

Dear Mr. LeBlanc:

The Bureau of Alcohol, Tobacco, Firearms and Explosives, San Francisco Field Division requests your assistance with adding Marin Emergency Radio Authority (MERA) frequencies into BATFE-owned radios. The request to add these frequencies is for mutual aid assistance and not for day-to-day operations.

We request to add MERA frequencies to our existing 2 console radios, 65 mobile radios and 80 portable radios. Specifically, we request to add the primary and secondary talkgroups for all Marin Fire/EMS, Law Enforcement Agencies, Blue Command and Blue Tactical channels, as well as Police Department APB, all ICS talkgroups, and any direct Dispatch channels available.


BATFE's local Radio Telecommunications Specialist will handle all the programming of our existing APX 8000 and 7500 series multi-band Motorola radios (these radios are compatible with the MERA Next Gen System). The code plug programming will be removed when the radio is no longer needed. Radio training will be provided to end users.

Please contact me or the Radio Communications Specialist with any questions:

Patrick Gorman [Patrick.Gorman@atf.gov](mailto:Patrick.Gorman@atf.gov), (925) 557-2802  
Special Agent in Charge

Alan Chin [Alan.Chin@atf.gov](mailto:Alan.Chin@atf.gov), (707) 708-1597  
Radio Telecommunications Specialist

Sincerely,

*for*  ASAC  
Patrick Gorman  
Special Agent in Charge  
San Francisco Field Division



July 27, 2022

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**TO:** MERA Operations Board  
**FROM:** Todd Williams - Radio Telecommunications Officer

**SUBJECT:** Request to increase Search and Rescue (SAR) portable radio cache

#### Recommended Action

Please approve Marin County SAR's request to increase their portable radio cache with existing repurposed Motorola handheld surplus radios. The existing MERA programming matrix covers all fire, parks, ICS, and events channels as well as most law enforcement agencies; therefore, there is no need for additional network changes.

#### Background

On July 8, 2022, the Radio Shop was notified in writing concerning SAR request to source additional radios in efforts to support a higher demand operational tempo. Throughout the years SAR has not added any additional portable radios to the network.

- Marin County SAR is requesting 60 additional portable radios be added to the MERA 1<sup>st</sup> Gen public safety network (new radios will not be included in future Next Gen network upgrades).
- The SAR team has maintained a cache of only 21 portable radios for over 15 years. However, the team has grown from 40 members to over 110 members.
- There has been concerns expressed about adding additional resources and the increased usage impact on the existing network; however, the SAR team only operates on a couple channels (SAR 1 & 2 and ICS 3 being the most common).
- Last year SAR increased their search efforts to well over 200 searchers (many of which responded from externally). As a result, additional high-band portable radios were sourced outside the MERA network. Lack of communication, planning, operational and logistics could create future mishaps which is unacceptable.
- In addition, the SAR team must consistently ration out limited communications resources from an already depleted inventory. Consequently, lacking essential communications resources creates additional risk and safety hazards conditions for mutual aid during optimal times.
- Please contact Operations Director Marin County Sheriff Search and Rescue Rich Riechel @ email [richr@marinsar.org](mailto:richr@marinsar.org) or (415)847-5035 for any additional questions or concerns.

Per MERA policy, the SAR request to add radios to the existing network will be forwarded to the next level i.e., MERA Executive Board if approved with no objections during the MERA Governing Board Meeting.





July 27, 2022



## Marin County Search and Rescue

1600 Los Gamos Drive Suite 200 San Rafael, CA 94903

415.473.7437 Ext. 2 [www.marinsar.org](http://www.marinsar.org)

MERA Operations Director  
Dept of Public Works  
3501 Civic Center Dr.  
San Rafael, CA 94903

08 July 2022

**Unit Leader**

*Michael St. John*

**Administrative Director**

*Molly Williams*

**Finance Director**

*Rich Shelton*

**Operations Director**

*Rich Riechel*

**Support Director**

*Bob Gehlen*

**Officers**

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*Oliver Goldman*

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**Secretary**

*Shea Sorcher*

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*Daegan Cutter*

**Boot Camp Manager**

*Clara Cox*

**Canine Manager**

*Kevin Lundquist*

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*David Gannon*

**Equity/Inclusion Manager**

*Jim Freed*

**Fundraising Manager**

*Gideon Bernstein*

**Medical Manager**

*Michael Yuan*

**MRA Team Manager**

*John Van Hooser*

**Personnel Manager**

*Tate Thompson*

**Technology Manager**

*Justin Buzon*

**Training Manager**

*Wendy Dalia*

Marin County Search and Rescue would like to increase our portable radio cache with repurposed Motorola handhelds which the County has in storage.

Marin SAR has maintained a cache of 21 portable radios for over 15 years. In that time our team has grown from 40 members to over 110 members today. We have added no additional portable radios during that period. As a result, we have constantly had to ration radios during searches which has been a safety issue as the team has expanded.

There has been concern that we may impact the current system with our increased usage but we typically operate on just one or two channels (SAR1 & 2 and ICS3 being the most common) which limits the number of radios transmitting at the same time.

In addition to our increased team needs, we have a distinct and real need to maintain a reserve cache of portable radios for our mutual aid incidents. All surrounding counties maintain a significant number of reserve radios to provide incoming mutual aid resources and we would like to offer the same to responding resources in our times of need. Last year we had an extended search with well over 200 searchers, many of which responded to Marin from outside the county. We had to improvise and make use of high-band portable radios in addition to our MERA portables during this search due to the lack of available MERA portables to offer to incoming teams. This caused communication, planning, operational and logistical issues which we would like to prevent in the future.

This reserve radio cache could also be used by allied agencies during large-scale incidents. Our MERA programming matrix covers all fire, parks, ICS, and event channels as well as most law.

We recognize that these additional portable radios will not be included in the upgrades to the new MERA system once that process is underway.

For the reasons described above Marin SAR is requesting 60 additional portable radios be added to the MERA system. These radios will be obtained from the existing retired radios in the radio shop storage inventory

Sincerely,

Rich Riechel  
Operations Director  
Marin County Sheriff Search and Rescue

A Volunteer Division of the Marin County Sheriff's Office  
Sheriff Robert T. Doyle