

Emergency Preparedness: Amateur Radio Interface with Governmental Emergency Response Agencies

Frank Sebastian, K7FNS

Emergency Management Group -- Washington

March 11, 2021



Preface

Emergencies come in all sizes and scope; clear and concise communications, both within the public safety community and externally with the citizens, is a critical function. Amateur Radio operators extend this capably and provide a resource to the incident command or emergency manager. The Federal Communications Commission (FCC) has authorized emergency management organizations to officially organize and employ radio amateurs to supplement state and local government communications systems during emergencies or disaster operations. The FCC advocates the principle that a fundamental basis and purpose of the is to provide voluntary noncommercial emergency communications to the public. Amateur radio operators are often needed to assist in communications during an planned or spontaneous emergency incident. This presentation will examine basic steps to integrate amateur radio operators in the emergency incident operations and special events.

EMG-WA Events

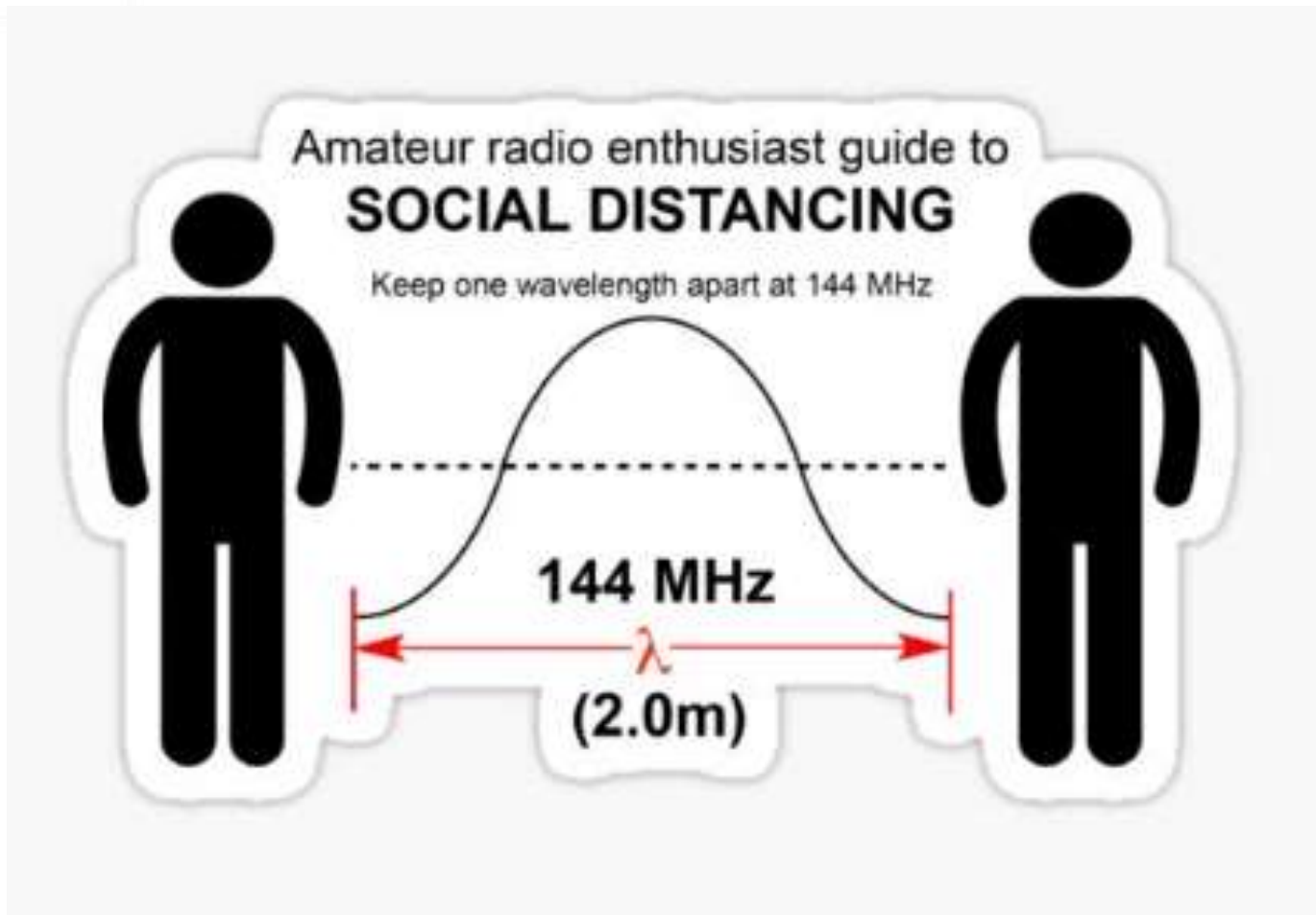
- Seafair – major events – July 4th, Torchlight, Hydros, Airshow
- Special Olympics Washington
- 2018 Special Olympics USA Games
- Seahawk Victory Parade
- Sounders MLS cup X2
- SR99 Tunnel Viaduct Opening Event

- WA7EMG ARC
- EMGWA ARES

- www.EMGWA.org

Tonight

- SARS-CoV-2 (COVID 19) Where we are and future
- ARS: Augment emergency communications
- Special Event industry status and resumption
- Amateur Radio at Special Events
- Security Awareness for mass-gatherings
- New roles for ARS at Events

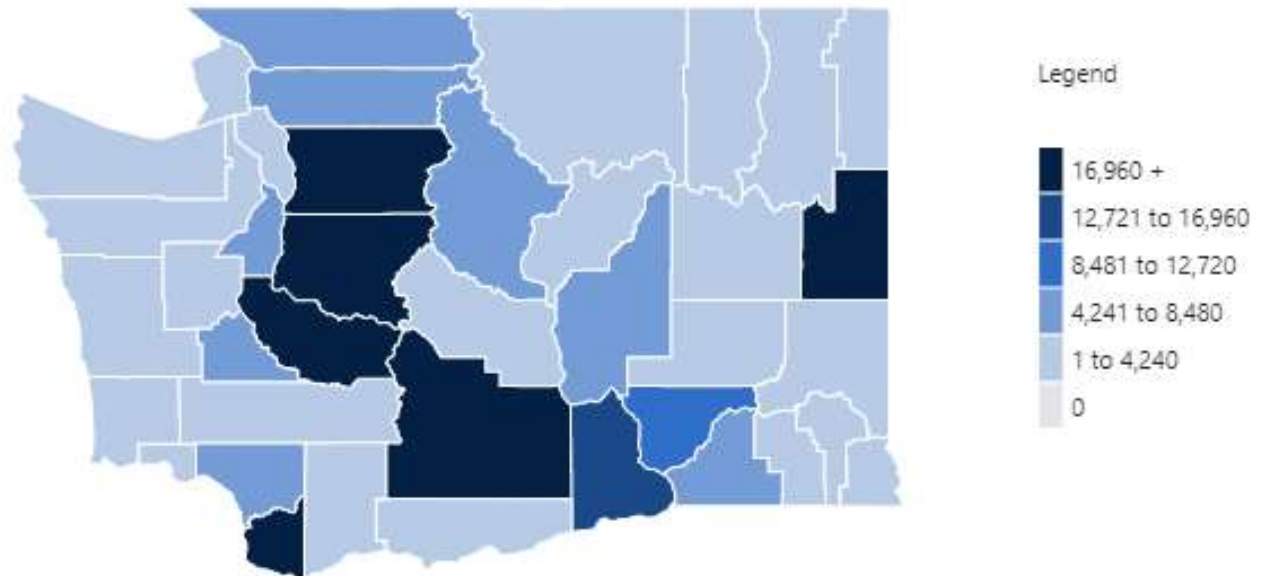


<https://www.redbubble.com/i/sticker/Amateur-radio-Social-Distancing-by-Feek/46242603.EJUG5>



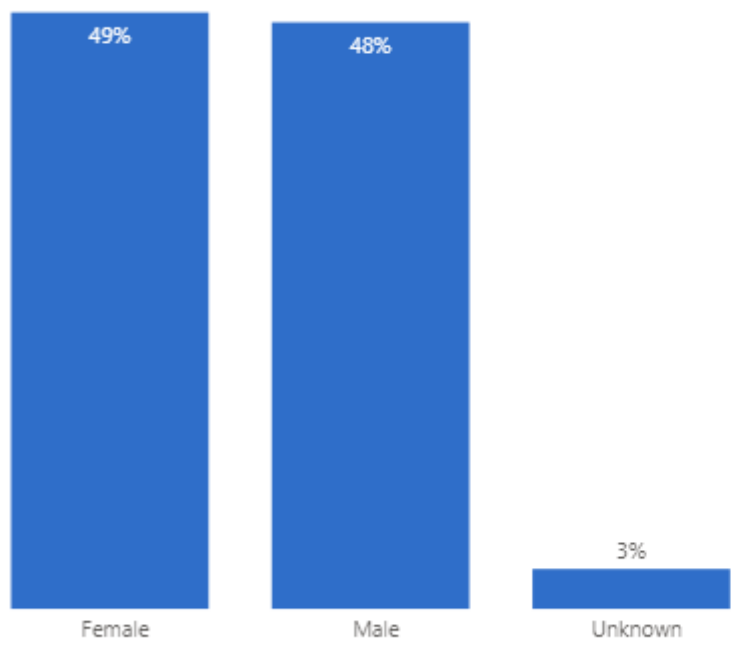
Confirmed Cases	324,469
Probable Cases	19,399
Total Cases	343,868
Hospitalizations	19,556
Deaths	5,041
Percent of Deaths (deaths/total cases)	1.5%
Total Molecular Tests	5,369,716
Number of Vaccine Doses Given	1,865,640

CASES BY COUNTY

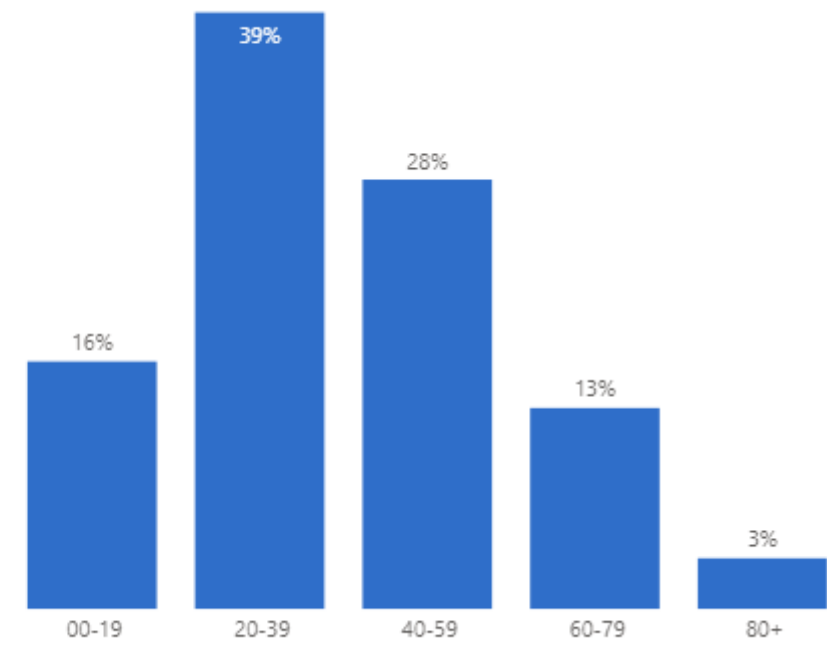


Data as of 03/06/2021 WA Dept. of Health

CASES BY SEX



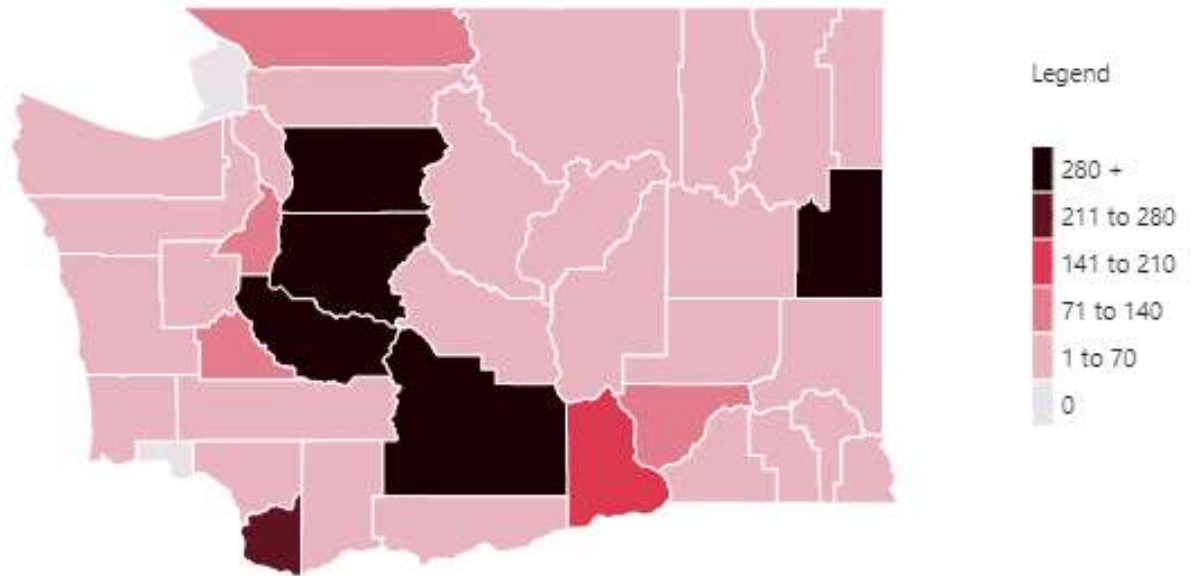
CASES BY AGE GROUP



Data as of 03/06/2021 WA Dept. of Health

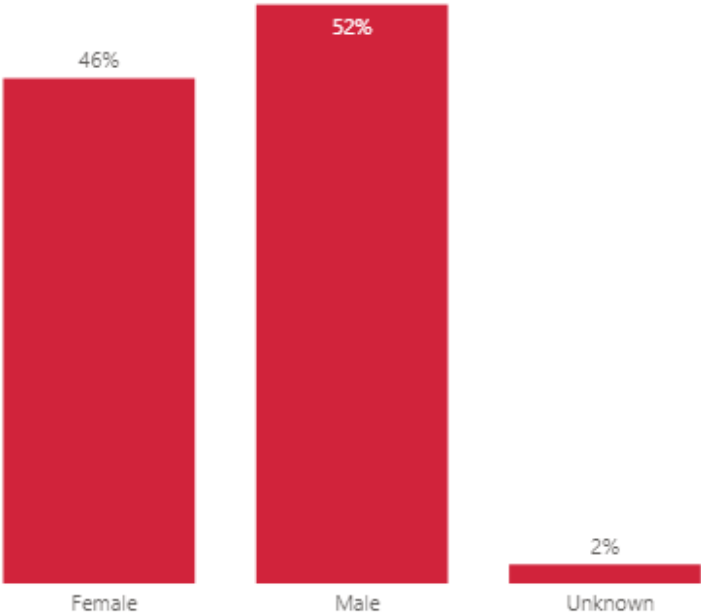
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DEATHS BY COUNTY

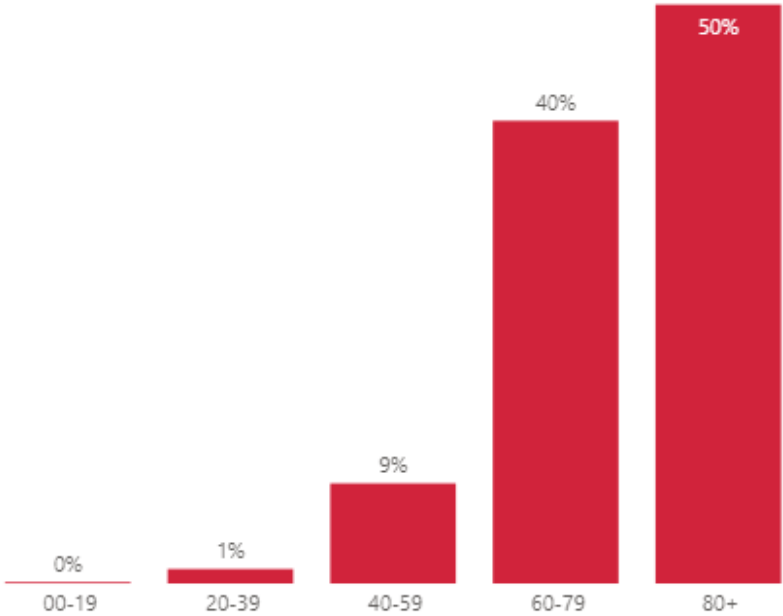


Data as of 03/05/2021 WA Dept. of Health

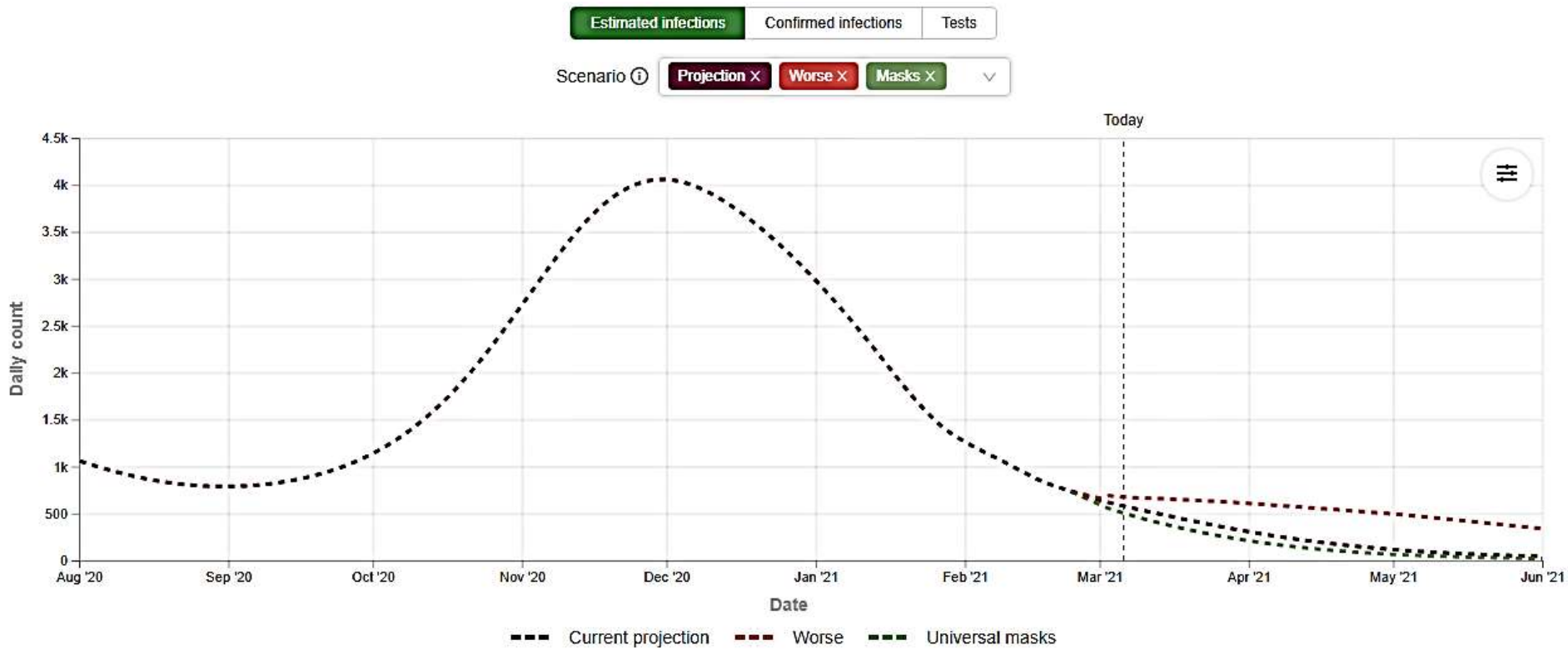
DEATHS BY SEX



DEATHS BY AGE GROUP



Data as of 03/052021 WA Dept. of Health



Data as of 03/05/2021 Institute for Health Metrics and Evaluation

WASHINGTON'S COVID-19 VACCINE PHASES

Phase 1 Estimated Start Dates (Tiers A and B)

Find out if it's your turn at **FindYourPhaseWA.org**



Use of Amateur Radio Operators to Augment Emergency Communications: Amateur Radio Operator Points of Contact (POCs)

Establish POCs with major ARS organizations capable to support emergency communications

Radio Amateur Civil Emergency Services (RACES)

When establishing a RACES unit, FEMA regulations require that the director or a designated representative of the state or local EMA or emergency operations center (EOC) appoint, in writing, a RACES officer.

RELATED TERMS <ul style="list-style-type: none"> • HAM radio • Auxiliary Communications • RACES • ARES 	 Lessons Learned Information Sharing LLIS.gov	PRIMARY DISCIPLINES <ul style="list-style-type: none"> • Emergency Communications • Emergency Management
BEST PRACTICE		
Use of Amateur Radio Operators to Augment Emergency Communications: Amateur Radio Operator Points of Contact (POCs)		
PURPOSE Emergency management agencies seeking to integrate amateur radio operators into emergency management communications should establish POCs with the major amateur radio organizations that can support emergency communications.		
SUMMARY Emergency management agencies should establish relationships with existing amateur radio organizations through a designated POC. These amateur radio organizations can assist agencies during emergencies by providing auxiliary communications capabilities to local responders.		
DESCRIPTION In order to successfully integrate amateur radio organizations into an emergency communications structure, emergency managers need to identify and establish a relationship with an experienced amateur radio operator in their area to serve as a POC. Emergency managers should seek out POCs from one of the major amateur radio organizations that specialize in emergency communications.		
Radio Amateur Civil Emergency Services (RACES) is a volunteer organization of licensed amateur radio operators who provide communications to state and local government agencies during emergencies. RACES units are organized and administered at the state and local levels by civil defense or emergency management agencies and serve as official auxiliary communications systems for their supervisory government agency. The Federal Emergency Management Agency (FEMA) provides planning and technical assistance to state and local agencies to establish and integrate RACES units into communications protocols. Federal Communications Commission (FCC) regulations outline the specific operational and technical details for RACES communications.		
A state or local emergency management agency (EMA) can organize its own RACES unit from the bottom up, can develop a non-governmental amateur radio operator unit (e.g. ARES units) into a RACES unit, or can integrate existing RACES units into an emergency management communications system. To develop a non-governmental radio operator unit into a RACES unit or to incorporate an existing RACES unit, the state or local EMA should reach the POC from the nearest local or state amateur	When establishing a RACES unit, FEMA regulations require that the director or a designated representative of the state or local EMA or emergency operations center (EOC) appoint, in writing, a RACES officer. The responsibilities of the RACES Officer are: <ul style="list-style-type: none"> • To serve as a liaison between the RACES unit and the EMA/EOC; and • To recruit other amateur radio operators into the RACES unit. 	

Use of Amateur Radio Operators to Augment Emergency Communications: Amateur Radio Operator Points of Contact (POCs)


Establish POCs with major ARS organizations capable to support emergency communications

Amateur Radio Emergency Services (ARES) is a group of FCC-licensed amateur radio operators who volunteer their services and equipment to public or private agencies during emergencies. ARES units can perform similar emergency communications functions as sRACES units, but ARES units are not governed by the FCC's technical RACES guidelines or FEMA's operational RACES guidelines.

ARES units operate under the auspices of the American Radio Relay League (ARRL), a national, not-for-profit organization. The ARRL is a recognized affiliate program with the Department of Homeland Security's Citizen Corps initiative and is a member of the National Voluntary Organizations Active in Disasters (NVOAD).

RELATED TERMS

- HAM radio
- Auxiliary Communications
- RACES
- ARES

**Lessons Learned
Information Sharing**
— LLIS.gov

PRIMARY DISCIPLINES

- Emergency Communications
- Emergency Management

BEST PRACTICE

Use of Amateur Radio Operators to Augment Emergency Communications: Amateur Radio Operator Points of Contact (POCs)

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Emergency management agencies seeking to integrate amateur radio operators into emergency management communications should establish POCs with the major amateur radio organizations that can support emergency communications.

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Emergency management agencies should establish relationships with existing amateur radio organizations through a designated POC. These amateur radio organizations can assist agencies during emergencies by providing auxiliary communications capabilities to local responders.

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The responsibilities of the RACES Officer are:

- To serve as a liaison between the RACES unit and the EMA/EOC; and
- To recruit other amateur radio operators into the RACES unit.

CEMP and ARS Operators



- Be registered emergency/disaster workers under state law;
- Possess certificates for (sometimes many) FEMA training classes;
- Have passed law enforcement background checks; and
- May be engaged in other volunteer activities such as Search and Rescue (SAR) or Community Emergency Response Teams (CERT).

ARS Opportunities to Service in EM

- Large-scale incidents with disruption of “normal” communications
- Emergency Operations Center (EOC) support
- Exercise execution – FTX, Full-scale, Functional
- Special Events – Runs, Sports, Fairs, Parades, Airshow, Races, Concerts
- Staff Augmentation
- NGO/FBO Support
- Situational Observers
- Crowd Observers
- EOC Training

ARS Opportunities to Service in EM

- Create communications links between similar agencies across political boundaries, especially where there are misalignments in frequency bands and modes;
- Create communications links between public service agencies and private sector stakeholders;
- Establish communications in locations outside the existing or operational coverage areas of public service and commercial communications systems;
- “Shadow” critical public officials and emergency management personnel to facilitate constant and rapid contact;
- Monitor crucial infrastructure (such as highways and bridges) and provide situation reports; and
- Staff observation posts (river levels, flooding, damaged areas) and provide situation reports

Disaster

- a sudden calamitous event bringing great damage, loss, or destruction
- a sudden or great misfortune or failure





City of Kirkland

COVID-19 EVENT SAFETY PLAN GUIDE for OUTDOOR EVENTS

Pursuant to the Governor's order to allow public gatherings in Washington State, City of Kirkland Special Event Permit Applications will be considered for events that are able to meet all guidelines set forth by Washington State's [reopening guidance](#). The City of Kirkland's ("City's") requirements will meet state and public health guidelines.

If Washington State or King County changes the guidance for events or reopening phase status for the County as a whole, Special Event Permits may be suspended.

According to Washington "Safe Start" Plan requirements, each business, entity or individual ("applicant" or "event organizer") must develop a written Safety Plan outlining how its workplace (i.e. event site/venue) will help prevent the spread of COVID-19 on a basis that is at least as protective as the requirements from the Department of Labor & Industry (L&I) and state and public health guidelines. This plan must be submitted with the Special Event Permit Application, must be retained on the premises of the event, and must be made available to the Washington State regulatory agencies or local health or safety authorities in the event of an inspection or other request. Applicants will be required to follow the state's industry specific guidance, once provided.

I. BACKGROUND & PRE-PLANNING

Before you begin drafting your written plan, you are required to review the established guidelines below. You are required to adhere to Washington State Labor & Industry (L&I) requirements to protect workers and volunteers.

ESTABLISHED GUIDANCE	<p>Review the following established guidance:</p> <ul style="list-style-type: none"> Washington State COVID-19 Reopening Guidance for Businesses and Workers https://lni.wa.gov/forms-publications/F414-164-000.pdf L&I General Requirements and Prevention Ideas for Workplaces https://www.doh.wa.gov/Coronavirus/workplace Washington State Department of Health Workplace and Employer Resources & Recommendations https://www.kingcounty.gov/depts/health/covid-19.aspx
L&I and Public Health REQUIREMENTS	<p>Event Organizers must adhere to L&I and public health COVID-19 requirements to protect workers and volunteers, including:</p> <ul style="list-style-type: none"> Write a COVID-19 Safety Plan that outlines procedures for operations that comply with all safety and health requirements per the guidance above.

City of Kirkland
COVID-19 Event Safety Plan Guide for Outdoor Events
Created October 2020
Page 14



City of Seattle SPECIAL EVENT PUBLIC SAFETY & EVENT MANAGEMENT PLAN

Office Use Only

Return To:

Seattle Special Events Office
Chris Swenson, Special Events Committee Chair
PO Box 94708, Seattle, WA, 98124-4708

specialeventsoffice@seattle.gov
Phone: 206-733-9245
Fax: 206-684-7025

This template has been produced to aid event organizers in planning safe and exciting events with 1,000 or more attendees. This document, along with the Special Event Application, are reviewed by the Seattle Special Event Committee to ensure that all safety aspects have been met.

If any section duplicates information provided in the Special Event Application submitted for your event, please refer to that information in the applicable section. Please attach supporting documents and addendums as needed for each section. Please note that not all parts of the template may be relevant for every event.

Once reviewed by the Special Events Committee, conditions and requirements will be set by the Seattle Fire Marshal, Seattle Police Department, and Special Events Office and shared with you. Thank you for hosting your event in Seattle!

1. EVENT OVERVIEW

EVENT NAME	
EVENT DATE	
AUDIENCE	The event's audience profile is essential when planning for risks and ensuring that appropriate control measures and facilities are in place for the event. Include previous history, entertainment type, and ticket sales to help in indicating the audience profile.

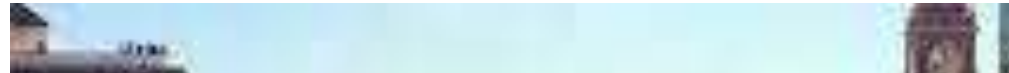
Special Event

A special event can be defined as any event where a large number of people are brought together to watch or participate. Some other characteristics of special events may include:

- Food services
- Alcohol services or illegal consumption
- Involvement of promoters or entrepreneurs
- Using temporary stands
- Setting off fireworks
- Use of temporary structures and wiring
- Impact on traffic flows or road closures
- Potentially creating dangers for spectators
- Use of volunteers to carry out the event



Examples of special events include summer festivals and concerts, races, running events, airshows, national celebrations, sporting competitions, exhibitions, tractor pulls and demolition derbies.

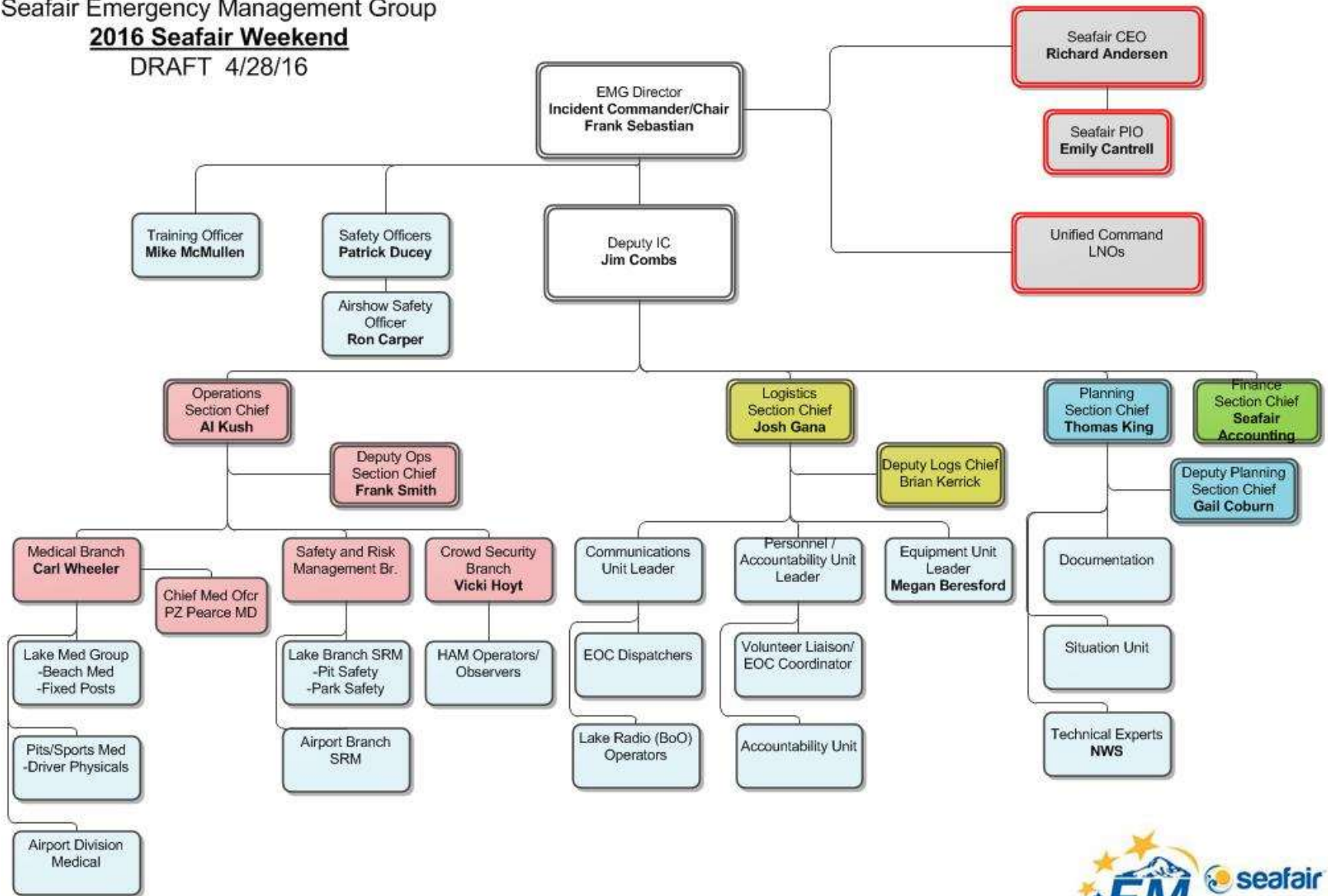


Organizational Structure

Seafair Emergency Management Group

2016 Seafair Weekend

DRAFT 4/28/16



Seafair EMG Functional Areas

- Provisioning and staffing of Seafair Emergency Operations Center
- Training support for staff, event families, committees
- Communications infrastructure
- Emergency incident overhead team
- Crisis management team
- Accountability
- Geospatial mapping

Westlake Holiday Tree Lighting

November 27, 2015

Operational Period: 12:00 – 20:00 Local Time
Seafair Emergency Management Group (SEMG)

EVENT/INCIDENT ACTION PLAN (IAP)

Final



DOWNTOWN
SEATTLE
NOVEMBER 27, 2015



Frank Sebastian – SEMG Incident Commander
Thomas King – Planning Section Chief
Gail Coburn – Deputy Planning Section Chief

This document, in entirety, contains confidential information intended only for those persons authorized to receive such content. If you are not the intended recipient, contact: Thomas King Planning Section Chief, Seafair EMG at: 509-734-1980 or email to: planning@seafair.org.

DO NOT COPY, PRINT, ELECTRONICALLY STORE OR TRANSMIT ANY PORTION OF THIS DOCUMENT UNLESS AUTHORIZED.

Organizational Structure

- **What Is Unified Command?**

In incidents involving multiple jurisdictions, a single jurisdiction with multiagency involvement, or multiple jurisdictions with multiagency involvement, Unified Command allows agencies with different legal, geographic, and functional authorities and responsibilities to work together effectively without affecting individual agency authority, responsibility, or accountability.



Recommended ICS Courses for Special Events

- IS 100
 - IS 200
 - IS 700
 - IS 15b
-
- Available at training.fema.gov/nims/



CONFIDENTIAL – DO NOT DISTRIBUTE

The Seahawks Welcome Home Celebration

2015

(Aka: "The Victory Parade")



Seafair Emergency Management Group

EVENT/INCIDENT ACTION PLAN (IAP)

Event Date: 04 February 2015

Sheila Betts, Deputy Planning Section Chief – SEMG
Thomas King, Planning Section Chief - SEMG

1. Incident
Seahawks
3. Basic Info
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6. Prepared
ICS Form 2

Security Awareness



Security Awareness

- **See something; say something**
- Safety is everyone's responsibility
- Know your location at all times
- Know how to report incidents

Seafair EOC 206-934-1075



FEDERAL BUREAU OF INVESTIGATION

SEATTLE DIVISION, INLAND JTTF,
SPOKANE RESIDENT AGENCY

REQUEST FOR PUBLIC ASSISTANCE

THE FBI IS OFFERING A \$20,000 REWARD FOR INFORMATION
LEADING TO THE ARREST AND CONVICTION OF INDIVIDUAL(S)
RESPONSIBLE FOR PLACING A DESTRUCTIVE DEVICE IN
SPOKANE, WASHINGTON ON MONDAY, JANUARY 17, 2011

A mugshot of Kevin William Harpham, a man with short brown hair and a light beard, wearing a dark blue shirt. The image is split into two panels: a front-facing view on the left and a profile view on the right. The background is a plain, light-colored wall.

On March 9, 2011 the FBI arrested
Kevin William Harpham, 36, of Addy,
Washington. On December 20, 2011
he was sentenced to 32 years in
prison for the attempted bombing.

26 months later...



What is Terrorism?

“The unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives.”

Federal Bureau of Investigation (FBI)

8 Pre-Attack Indicators of Terrorism

1. Financing Activities
2. Surveillance
3. Active Elicitation
4. Probing Security
5. Acquiring Supplies
6. Impersonation
7. Rehearsal
8. Deploying Assets



How to get radio involved:

- Gain acceptance of event sponsors & incident commandres, and emergency managers
- Gain acceptance of police, fire, and emergency management
- Event sponsors, police and fire officials are cautious and skeptical of those who are not part of their profession
- They do not perceive the value in the level of discipline and expertise of amateur radio, as a resource
- Establish a track record of performance
- Demonstrate with examples
- **Know your role; Don't exceed**



How to get radio involved:

- Convince organizer or responsible official amateur radio offers a cost-effective substitute for paid (too expensive) function.
- Demonstrate reliability and clarity of amateur equipment.
- Offer how you can be of needed and valuable assistance.
- Demonstrate ability to be force multiplier in emergency situations.
- Demonstrate how easily amateurs and their equipment can interface into event and public safety efforts.
- Be realistic and objective on what you can do.
- Keep promises and competence.



How to get radio involved:

- Event organizers must want you there.
- Event organizers and operators must agree in advance on Amateurs role in the operation.
- Operations must be planned and organized.
- Determine what the event's needs are and how you can provide.
- Set objectives and tactics.
- Follow the guidance for agreed objectives and tactics.
- Stay “in your lane”



Your role:

- All event officials need to have a clear and absolute understanding of the roles of amateur radio operators. Be clear on what you can and cannot do. Amateurs are trained communicators, not crowd control, traffic control, medical providers, parking lot attendants.
- Have an operational plan. Know your role in the plan.
- Have appropriate event credentials, issued by event official.
- Do not abuse your credential – no assumed privileges.
- **Be prepared!!!**
- Don't do anything you are not competent or authorized to do.

Your Assignment:

- Shadow/adjunct of officials
- Crowd observer
- Public Health Monitor
- Timer/spotter
- Safety observer
- ComT/ComL
- Net control
- EOC operator
- Forward Observer
- Logistics



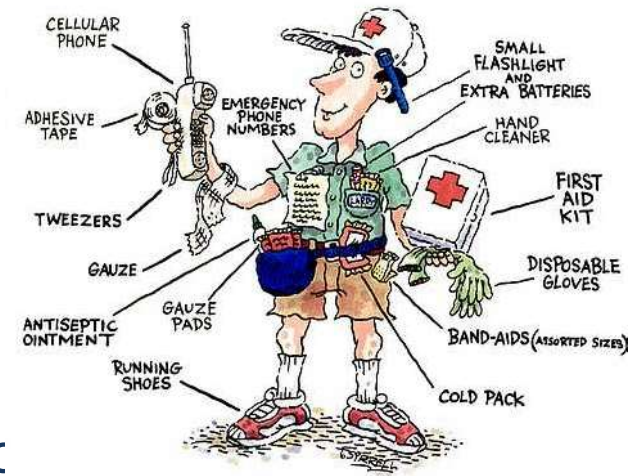
Equipment:

- Bring portable or mobile, as directed.
- Know frequencies used and how to program radio.
- Know “net” protocol in place.
- Follow “net” protocol.
- Don’t program or use non-ham frequencies unless authorized.
- Bring the “right” equipment.
- Have spare batteries.
- Use ear-piece.
- Use tactical calls.
- APRS if authorized.



Personal Preparation:

- Physical capacity to complete assignment
- Proper clothing for expected environment
- Stay hydrated
- Rest breaks
- Know who your supervisor is and how to cc
- Ask for assistance early
- ICE – on cell phone.
- Use only event authorized apparel or branding
- Maintain operational security – social media
- **Stay safe!**



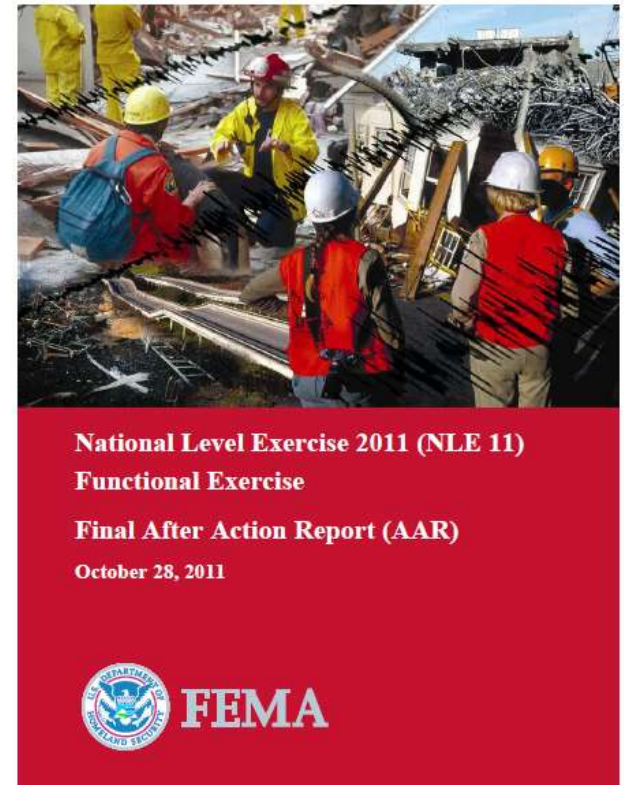
Is it Legal?

- Yes!
- Do not accept payment – donation to club is OK
- Use assigned call in addition to tactical call
- Do not rebroadcast public programming
- Do not rebroadcast any non-amateur signals
- Protect PII
- Follow traffic and event rules



After the Event

- Maintain log
- Share your experience with organizer
- Make positive suggestions
- Offer solutions
- Recruit for next event



New Role: SARS-CoV-2 Officer

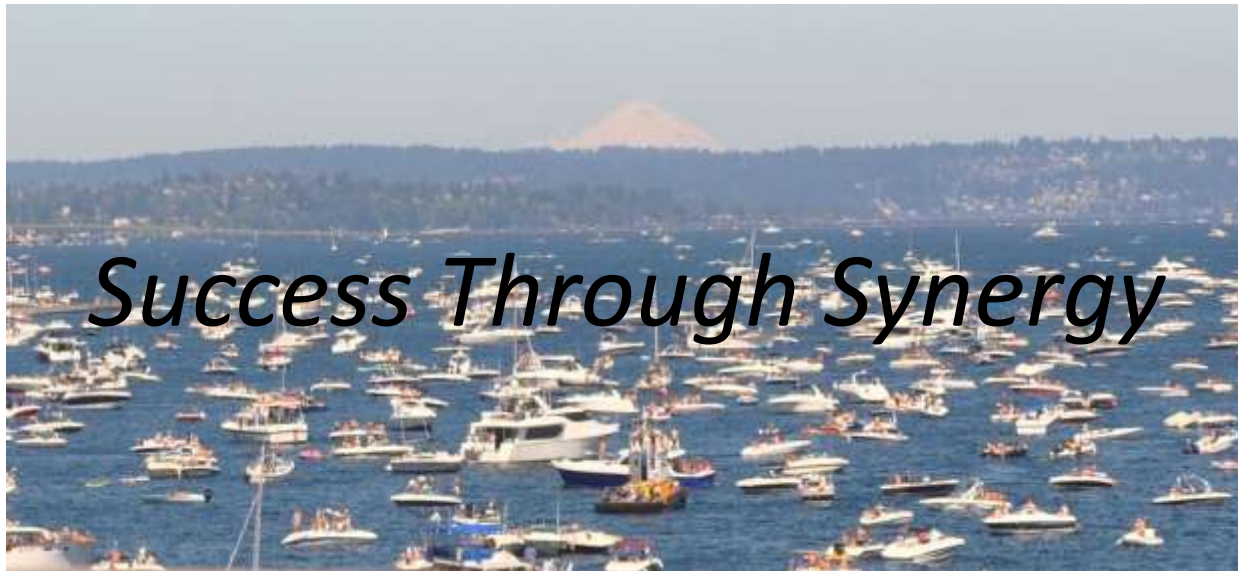


Photo credit – 2021
Ryan McCormick

Final Thoughts

“Final thoughts are so, you know, final. Let’s call them closing words.”

-Craig Armstrong



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www.EMGWA.org

WA7EMG.org



EMG-WA EOC 253-666-8340



STAY
POSITIVE
TEST
NEGATIVE