



# FIRESCOPE QUARTERLY BRIEF March 2024

## CAL FIRE/RIVERSIDE COUNTY FIRE – JANUARY 2024



# Departing Accolades



**Mike Minton**

**Region Chief, Wildland Fire and Aviation  
National Park Service**

**33 years of service**

Member of FIRESCOPE Board of Directors

FIRESCOPE would like to thank Director Minton for his leadership, commitment, and contributions to the fire service in California! Their selfless dedication embodies the spirit and mission of FIRESCOPE.

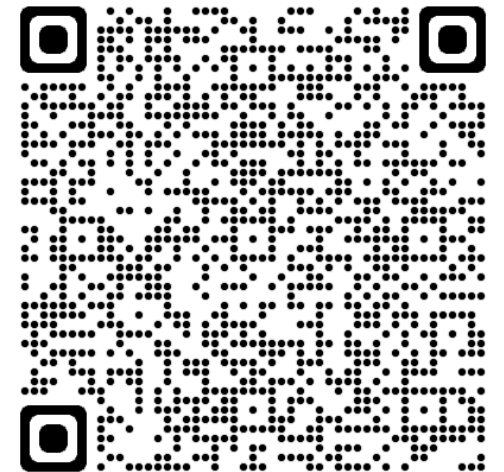
March 2024

# Board Members in Action

**Fire Chief Dan Munsey (BDC) addressed the Committee on Science, Space and Technology regarding the challenges and hazards of EV fires facing the fire service in Washington D.C. February 29<sup>th</sup>, 2024**



[Watch Testimony Here](#)



# MUTUAL-AID IN ACTION

## JANUARY FLOODS

### WINTER FLOODS CALOES MUTUAL AID SUPPORT

January 2024 OES Prepositions		
Region	OA Initiated	Cal OES Initiated
Reg. I	2	0
Reg. II	11	2
Reg. III	3	0
Reg. IV	3	1
Reg. V	2	0
Reg. VI	1	1
<b>Grand Total</b>	<b>22</b>	<b>4</b>

January 2024 OES Prepositioned Resources	
Total OES Engines	15
Total LG Engines	75
Total LG Dozers	7
Total LG Water Tenders	4
Total LG Aircraft	1
Total LG Hand Crews	3
Dispatcher	14
LG OH/IMT	72
Total RTF	1
Total SF/S&R	16

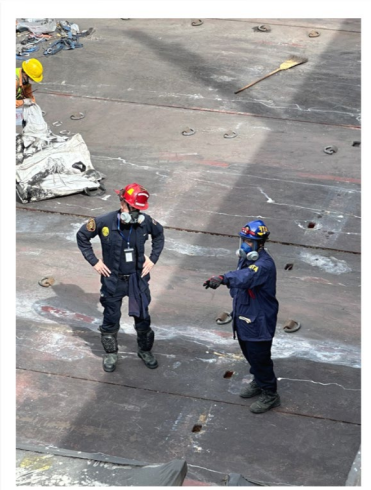
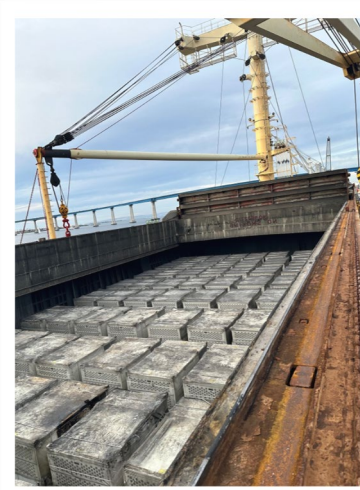




# GENIUS STAR XI SHIPBOARD BESS FIRE

## TIMELINE

- DESTINED FOR SAN DIEGO, CA
- DECEMBER 25, 2023
  - ENCOUNTERS ROUGH SEAS IN THE BERING STRAIT
  - STRAPS FAIL IN HOLD 1 AND 2
  - THERMAL RUNAWAY IN HOLD 1
- DECEMBER 28, 2023
  - THERMAL RUNAWAY IN HOLD 2
  - COOLING OF CARGO HOLD BOUNDARIES (HATCH, SIDE WALLS, ET.C) INITIATED
  - HEADS FOR BUOY OFF OF HOG ISLAND, AK (NEAR DUTCH HARBOR)
  - COAST GUARD ASSUMES COMMAND
- ENERGY SECURITY AGENCY (ESA) CONTRACTED TO ASSESS AND RENDER SAFE BATTERIES
  - 8.5 BESS UNITS IDENTIFIED FOR BATTERY REMOVAL AND PACKAGING
  - 47 BESS UNITS IDENTIFIED AS "DAMAGED". BATTERIES TO BE RECYCLED
  - REMAINING BESS UNITS TO BE FURTHER ASSESSED BY BESS COMPANY TECHNICIANS (APPROXIMATELY 150 UNITS) IN ARIZONA.
  - UNIT STRAPPING UPGRADED. UNITS RE-SECURED ON SHIP



- FEBRUARY
  - SHIP DEPARTS FOR SAN DIEGO, CA WITH ALL BATTERIES ON BOARD
  - ARRIVES TO PORT OF SAN DIEGO ON FEBRUARY 23, 2024
  - NTSB, ATF, EPA, SDFD ASSESS SHIP AND UNITS UPON ARRIVAL
  - UNITS OFF LOADED AND TRANSPORTED OFF SITE WITHIN 1 WEEK

March 2024

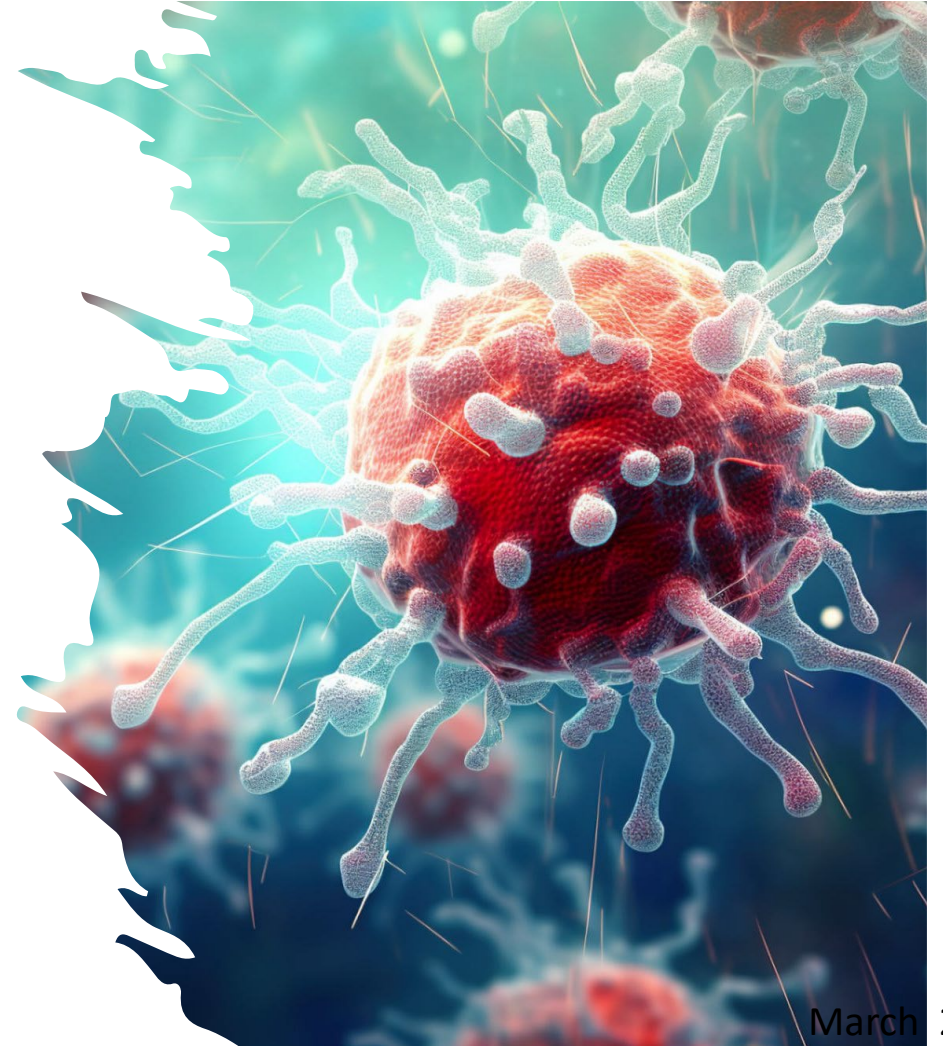
# ASSEMBLY BILL (AB) 700

## California Firefighter Cancer Prevention and Research Program



AB 700 Bill Language

- In September of 2023, the California State Assembly passed AB 700
  - \$7 million in research funding.
  - Collaboratively administered by the University of California Research Grants Program Office and FIRESCOPE.
  - Funds joint University of California and fire service research.
- The program will support research focused on:
  - Carcinogens associated with firefighters' occupational exposures.
  - Characterizing biomarkers of cancer susceptibility or risk in firefighters.
  - Understanding carcinogenic exposures among firefighters.
  - Informing intervention strategies to lower risks of developing cancer in firefighters.
- There are two award categories:
  - Pilot Grants: up to \$300,000 direct costs over 2 years.
  - Full Grants: up to \$750,000 direct costs over 3 years.
- Proposal are due on June 13, 2024
- For additional information, use this QR code:

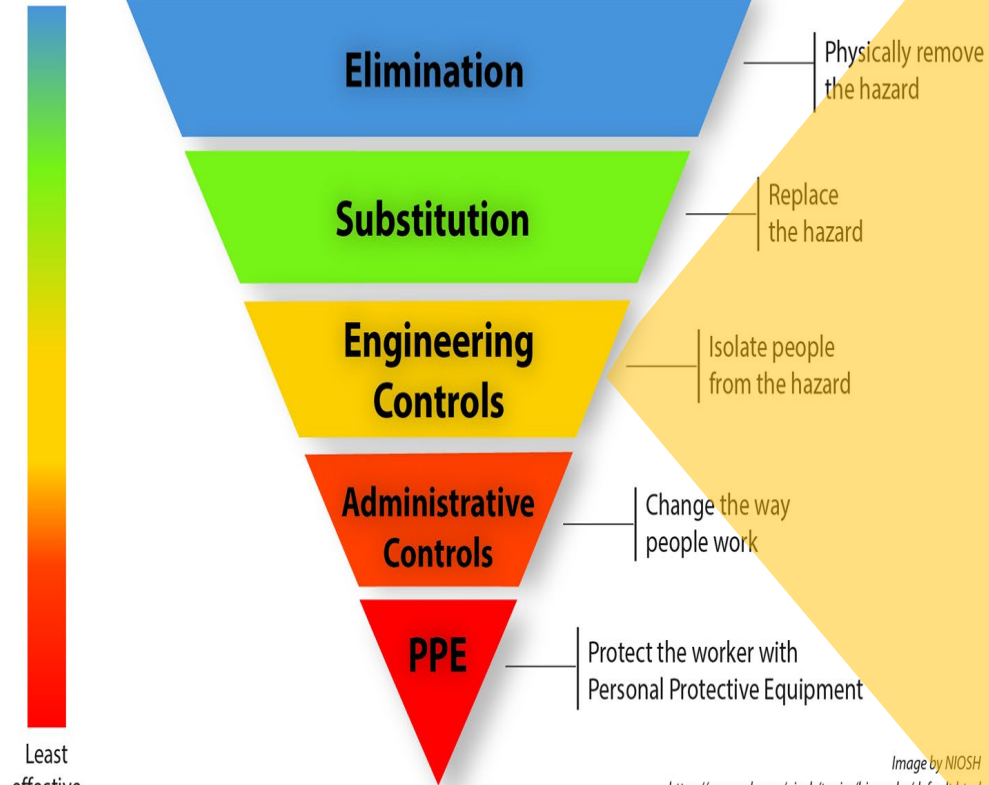


# THE NIOSH HIERARCHY OF CONTROLS FOR EXPOSURE REDUCTION: ENGINEERING CONTROLS



## Hierarchy of Controls

Most effective



Least effective

Image by NIOSH  
<https://www.cdc.gov/niosh/topics/hierarchy/default.html>

## ISOLATE PEOPLE FROM THE HAZARD

- Firefighters are exposed to many carcinogenic agents in the line of duty, and while eliminating sources of exposure is the most effective way to reduce cancer risk for firefighters, isolating firefighters from sources of exposure by applying engineering controls whenever possible is also highly effective.
- Public safety duties remain our highest priority, but engineering controls can be applied at little to no cost in emergency and non-emergency settings to keep firefighters healthy.
- The Hierarchy of Controls is **not a checklist**, it is **an approach that can be applied** in a multitude of settings **by all members of the fire service** ranging from chief fire officers developing policies to individual firefighters making simple decisions each day (e.g., always hooking up the apparatus diesel exhaust removal system in the fire station). Below is a brief set of illustrative examples outlining how engineering controls can be applied in the fire service, and we encourage all members of the fire service to have constructive discussions in this arena.

# THE NIOSH HIERARCHY OF CONTROLS FOR EXPOSURE REDUCTION: ENGINEERING CONTROLS

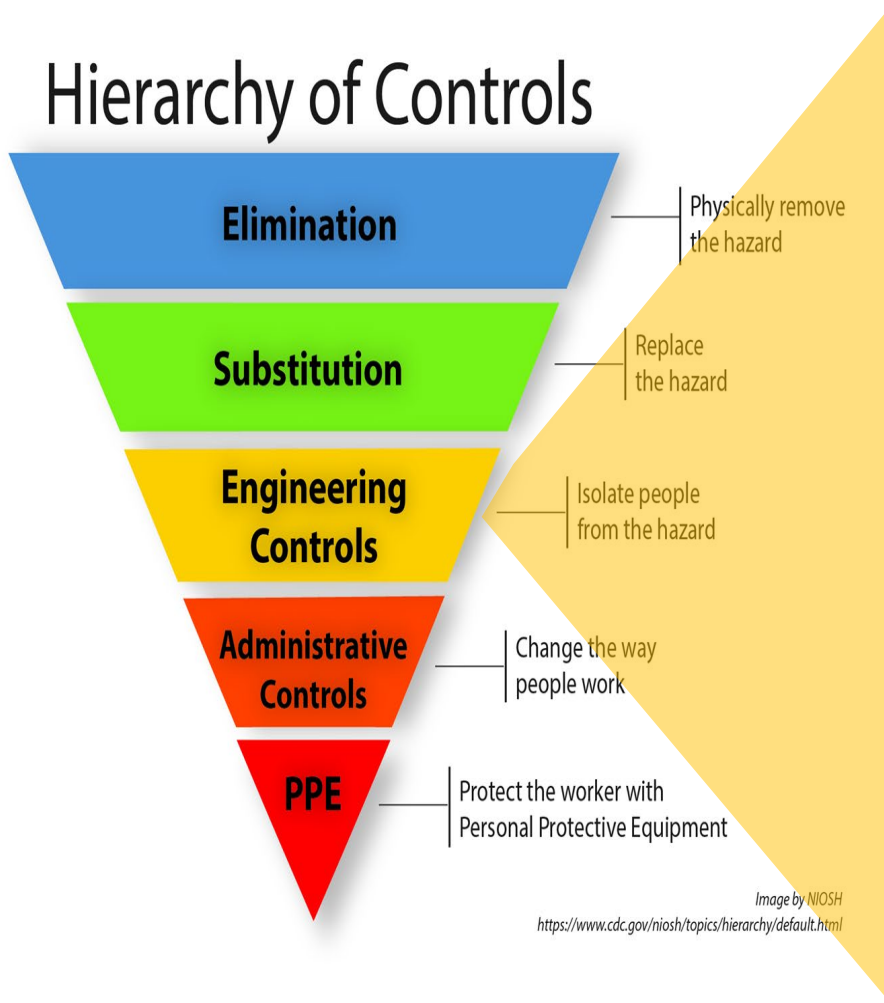


## Hierarchy of Controls

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## HOW ENGINEERING CONTROLS CAN BE APPLIED IN THE FIRE SERVICE (1 of 4)

- **Fire Station Diesel/Automotive Exhaust Removal Systems:** The International Agency for Research on Cancer (IARC) classifies diesel exhaust [1] and other contaminants from automotive exhaust as Group 1 known human carcinogens.
  - The apparatus garage and living areas in a fire station can become heavily contaminated when diesel and other automotive exhaust is allowed to flow freely.
  - Properly installed, maintained, and utilized diesel/automotive exhaust removal systems can be effective at isolating firefighters from exposure to these emissions.
  - These systems can also be effective at preventing contamination of equipment and surfaces that may result in secondary exposures.
  - Properly installed/maintained weather stripping on doors and self closing doors that lead into/out of the apparatus garage are essential parts of a complete set of engineering controls that can isolate firefighters from exposure to diesel/automotive exhaust.

[1] [https://www.iarc.who.int/wp-content/uploads/2018/07/pr213\\_E.pdf](https://www.iarc.who.int/wp-content/uploads/2018/07/pr213_E.pdf)

# THE NIOSH HIERARCHY OF CONTROLS FOR EXPOSURE REDUCTION: ENGINEERING CONTROLS



## Hierarchy of Controls

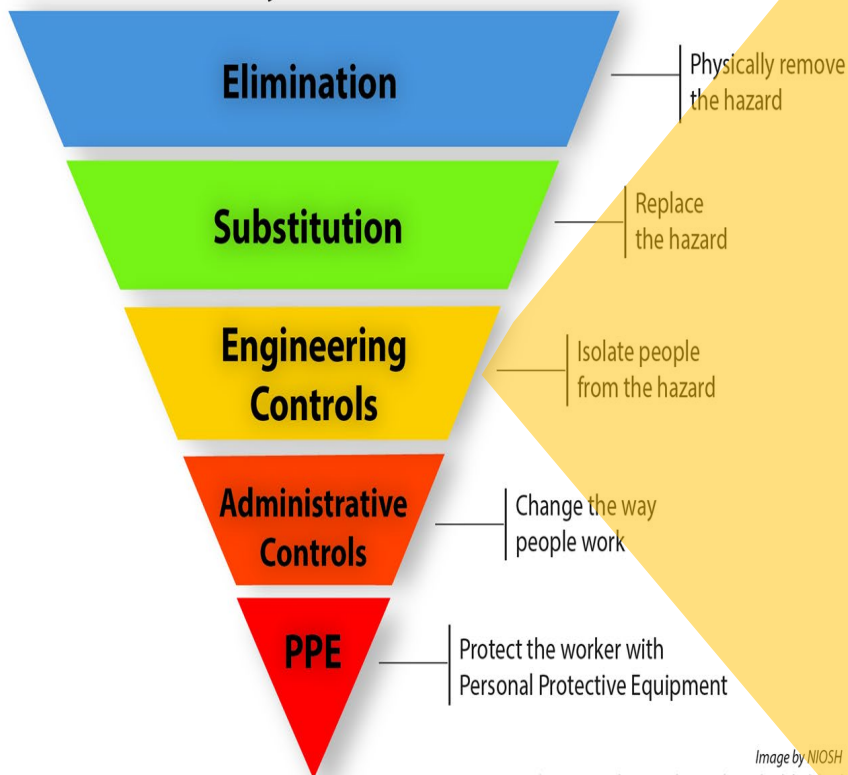


Image by NIOSH  
<https://www.cdc.gov/niosh/topics/hierarchy/default.html>

## HOW ENGINEERING CONTROLS CAN BE APPLIED IN THE FIRE SERVICE (2 of 4)

- **Fire Apparatus Environmental Controls:** Effective use of environmental controls on fire apparatus can isolate firefighters from sources of exposure and prevent contamination of the interior of the fire apparatus.
  - Application of fire apparatus environmental controls can be as simple as manually rolling up windows en route to a fire incident and can range in complexity to automated systems that roll up windows when the apparatus is placed in pump.
  - Effective cab filtration systems, recirculating air, and properly installed/maintained weather stripping are also key components of fire apparatus environmental controls that can isolate firefighters from sources of exposure.

# THE NIOSH HIERARCHY OF CONTROLS FOR EXPOSURE REDUCTION: ENGINEERING CONTROLS

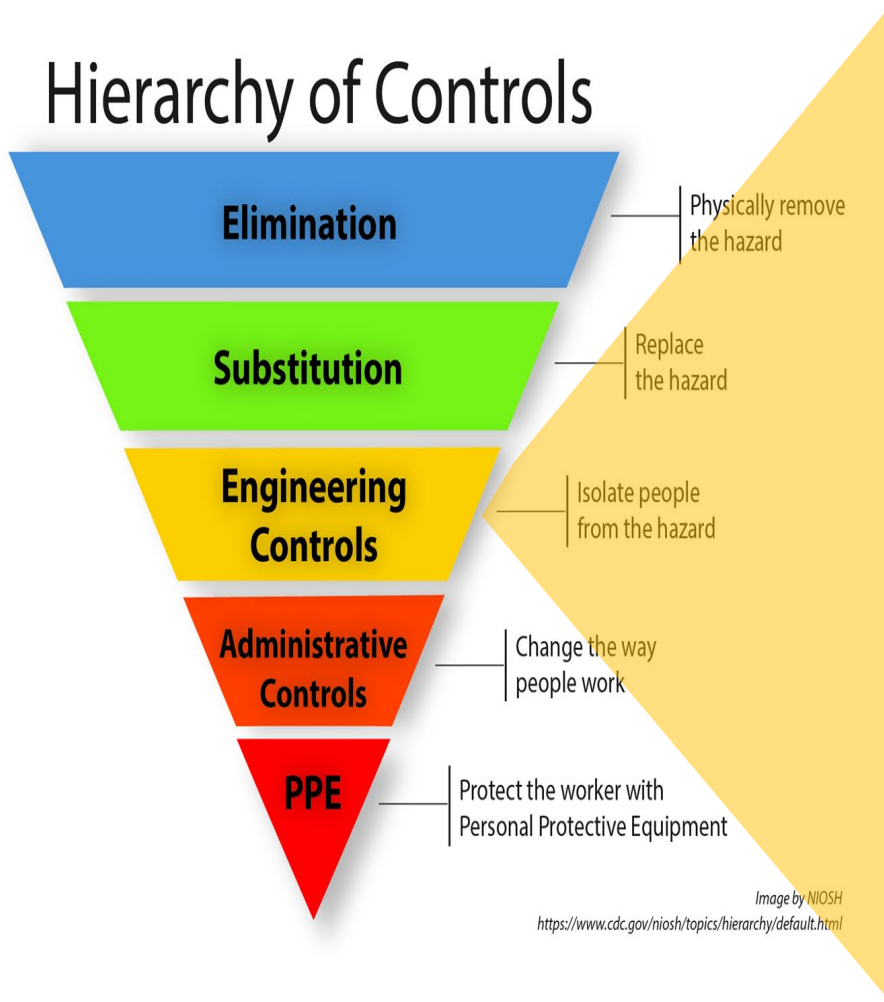


## Hierarchy of Controls

Most effective



Least effective



## HOW ENGINEERING CONTROLS CAN BE APPLIED IN THE FIRE SERVICE (3 of 4)

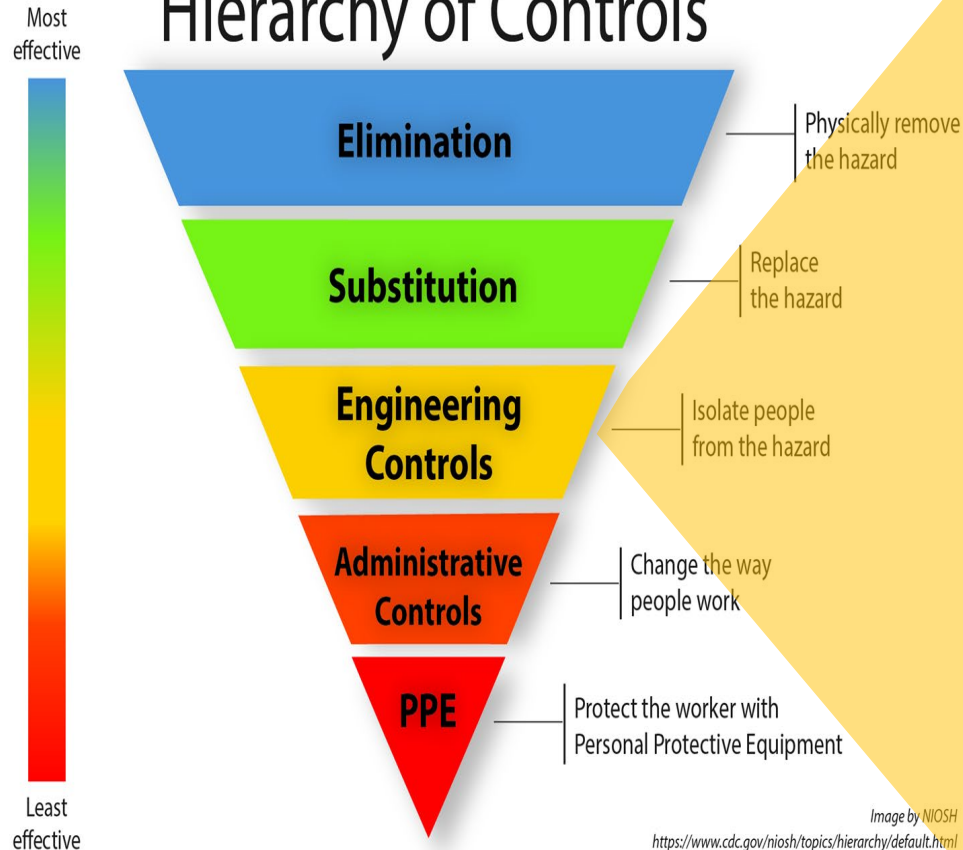
### • Fire Station Design & Modifications (Hot/Warm/Cold Zones):

- When new fire stations are designed, or existing stations are modified, exposures resulting from contaminated PPE and equipment can be minimized by specifying hot/warm/cold zones in the station. This approach is meant to minimize inadvertent migration of contaminated materials within the station.
- Appropriate PPE such as respiratory protection, latex/nitrile gloves, eye protection, and coveralls should be utilized by members working with contaminated PPE and equipment in hot and warm zones.
- Hot zones are those in which contaminated PPE and equipment should be handled/stored and an example may include the outside of the station.
- Warm zones are those in which contamination reduction activities take place and examples may include an extractor/laundry room or an equipment workroom where tools are cleaned.
- Cold zones are those into which no contaminated PPE or equipment should enter such as living, sleep, kitchen, and office spaces.

# THE NIOSH HIERARCHY OF CONTROLS FOR EXPOSURE REDUCTION: ENGINEERING CONTROLS



## Hierarchy of Controls



## HOW ENGINEERING CONTROLS CAN BE APPLIED IN THE FIRE SERVICE (4 of 4)

- **Firefighting PPE Isolation**: Firefighting PPE is a source of secondary exposure to multiple carcinogens such as products of combustion and per/poly-fluoro alkyl substances (PFAS).
- Examples of engineering controls that can isolate firefighters from contaminated PPE and limit exposure include:
  - PPE storage/isolation bags utilized inside the apparatus cab.
  - Designated PPE/SCBA compartments on apparatus.
  - Dedicated PPE storage rooms in fire stations.

# NEWLY APPROVED DOCUMENTS AND UPDATES



**FIREScope GIS Incident Dashboard Webapp, Webmap, Best Practices White Paper**



**FIREScope GIS UAS Collaboration White Paper**



**FIREScope GISS Information Portal White Paper**



**FIREScope ITSL Position White Paper**



**FIREScope Situation Unit Leader PD White Paper**



**FIREScope Wildland Dismounted Resource Tracking White Paper**

# NEWLY APPROVED DOCUMENTS AND UPDATES



[ICS 1402 Incident Dashboard, Webapp, and Webmap Best Practices](#)



[ICS 1403 FIRESCOPE GISS Informational Portal](#)



[ICS 1404 Situation Unit Leader PD](#)



[MACS 441-1 2024 Radio Communications Guidelines](#)

# Fire Asset Status Tracker (FAST)



FAST was developed and will be implemented as a modern, mobile application to optimize the California Fire Service and Rescue Emergency Mutual Aid System resource order filling and mobilization processes. The application will allow local fire agencies to provide real-time resource status updates while streamlining communication, improving coordination, and easing decision-making across the fire service to expedite all-hazard resources assignments and minimize losses to life and property.

## **FAST proactive Impacts to the California Fire Service:**

### **Provide a primarily mobile application**

- Simplify the user experience
- Allow real-time status updates

### **Track statewide all-hazard fire resources**

- Cal OES Fire & Rescue Assignments
- Local Government Apparatus and Overhead
- Track Resource Statuses

### **Rapidly onboard agencies via Mutual Aid Reimbursement (MARS)**

- Primary and Secondary User Access

### **Provide intel with robust data collection**

- Inventory Tracker survey
- Fleet Management & Out of Service process
- Real-time dashboards and MACS 405 reports

### **Enable integration capabilities**

- Slack
- Esri / ArcGIS

## **FAST Project Status and Rollout:**

- Completed Final UAT feedback with Program Team on February 1, 2024.
- Finished development and deployed to production on February 5, 2024.
- Presented Production Release Overview and Demo on February 15, 2024.
- Present to Cal OES Fire and Rescue Chiefs on February 28, 2024.
- Enable production environment access to Cal OES in March 2024
- Rollout to the California Fire Service through an enhanced training plan.

# FIRE INTEGRATED REAL-TIME INTELLIGENCE SYSTEM PROGRAM (FIRIS) & SLACK

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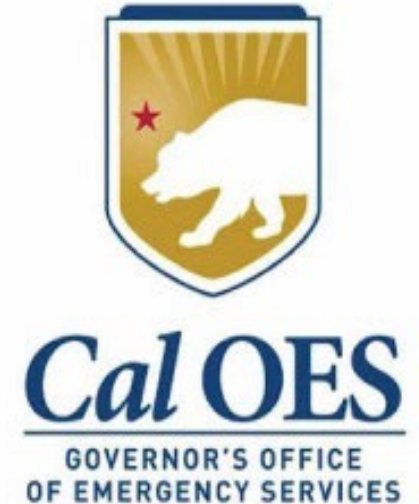
CALFIRE and CalOES have enabled SLACK to empower clear communication channels that will provide real-time Intelligence to, All hazard First Responders, and Others. With this implementation, we will increase the efficiency of first responders and decision-makers to save lives, property, and the environment while rapidly responding to California's 38 million residents who need us most.

## **Background:**

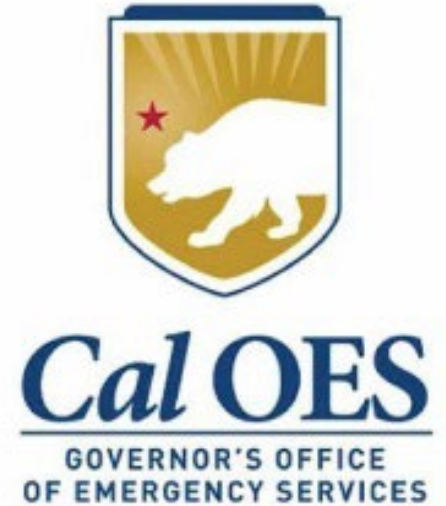
The WhatsApp application served as the official application since 2019 that provided the California First Responder community and supporting agencies a means to receive Fire Integrated Real-Time Intelligence and Information from 2 state of the art aircraft strategically positioned in Southern and Northern California.

As the Fire Integrated Real-Time Intelligence System (FIRIS) Program transitions from the Orange County Fire Authority to the State of California, Cal OES elected to migrate from WhatsApp to a more robust, secure application known as Slack.

**The FIRIS Slack Application rolled out in full production to the California Fire Service on June 15, 2023.**



# FIRE INTEGRATED REAL-TIME INTELLIGENCE SYSTEM PROGRAM (FIRIS) & SLACK



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## The FIRIS Slack Application will provide the following:

Incident alerts of emergent incidents (Fire Rescue Mutual Region Specific and statewide channel)

Wildland Fire Modeling with 3-hour spread projections without fire suppression.

FIRIS aircraft intel that includes perimeters, videos, and snapshots.

All hazard Intelligence and Information (earthquake, Tsunami, flood, mud, and debris)

To register see the FIRIS Slack Application QR Code.

Due to licensing, access is limited to your assigned Fire and Rescue Mutual Aid Regional channel. If you require additional access to the other Fire and Rescue Mutual Aid Regions, you will have the option to receive FIRIS intelligence and Information in a Statewide channel.



FIRIS SLACK  
APPLICATION



SLACK TRAINING  
VIDEO

# INTTERRA NEXT GEN SCOUT



The California Governor's Office of Emergency Services (Cal OES)—in collaboration with CAL FIRE has implemented Next Generation (NG or Nex-Gen) SCOUT (Situation Awareness and Collaboration Tool) powered by Intterra. Next-Gen SCOUT application integrates statewide data events including incidents, location (geospatial), resources, assets, and infrastructure. It provides near real-time data from the field including road closures, resource location, and video feeds. Next-Gen SCOUT will also be used for predictive fire and other hazards analytics and integrates information layers into the single.

This tool provides the California first responder community, emergency response coordinators, and other supporting agencies with a web-based tactical and operational response platform to assist in communication, coordination, and collaboration. The Next-Gen Scout tool went into live production to the California Fire Service on May 31, 2023.

The Next-Gen SCOUT web application provides the following features:

- 1. Successfully operate an all-hazard incident within your agency/jurisdiction***
- 2. Common Operating Picture for your agency and other agencies of the California Fire Service Community***
- 3. Track multiple concurrent incidents within the State of California***
- 4. Predictive analytics for fire and other hazards***
- 5. Provide field workers with spotty/or no internet coverage access to use the application and have a synchronizing capability with no data loss***
- 6. Provide Fire Integrated Real Time Intelligence from 2 State of the art aircraft.***



Training and Next Gen Scout  
Information

Additional workspaces in the Next Generation SCOUT allows the end user to create an incident, gather intelligence, or pull Fire Management Assistance Grant (FMAG) Data for the Cal OES Fire Rescue Initial Request Form (ABC form). See next page for 2024 FMAG thresholds.



# 2024 FMAG Thresholds for California

• **Individual: \$3,637,517**

• **Cumulative: \$10,912,550**

San Bernardino County Blue Cut Fire  
FMAG approved 8/2016

• [FEMA FMAG Webpage](#)

• [Cal OES FMAG Webpage](#)



The Blue Cut Fire was a wildfire in the Cajon Pass, northeastern San Gabriel Mountains, and Mojave Desert in San Bernardino County, California. The fire, which began on the Blue Cut hiking trail in the San Bernardino National Forest, was first reported on August 16, 2016, at 10:36 a.m., just west of Interstate 15.

# INTTERRA NEXT GEN SCOUT INTTERRA

## ***Wildland Pre-Plans:***

In collaboration with FIRESCOPE GIS Subcommittee has a standard WPP schema into NG SCOUT. Creating your agencies wildland pre-plans does not require you to have a GIS degree. You should be able to jump in, create, and edit in your respective areas and as you do, this will be available to NG SCOUT users including current California Intterra Customers.

Cal OES has geared up to provide training on developing wildland pre-plans on the NG SCOUT platform. NG SCOUT provides the ability to create map-based plans for any area of your wildland or metro jurisdiction, then capture, record, and electronically share those plans with all users of NG SCOUT and current California Intterra Customers. The primary value is to have a preplanned response plan that can be used for response operations, community education, and mitigation actions. Depending on the department the level of effort that's put into the information gathering process of preplans ranges from simple preplans which takes a little time to gather information to complex preplans that may be created through tools in ESRI and then ingested into NG SCOUT.

## ***Fire Management Assistance Grant (FMAG):***

The FMAG is available to States, local and tribal governments, for the mitigation, management, and control of fires on publicly or privately owned forests or grasslands, which threaten such destruction as would constitute a major disaster. The FMAG declaration process is initiated when a State submits a request for assistance to the Federal Emergency Management Agency (FEMA) Regional Director at the time a "threat of major disaster" exists. The entire process is accomplished on an expedited basis and a FEMA decision is rendered in a matter of hours.

The Fire Management Assistance Grant Program (FMAGP) provides a 75% Federal cost share, and the State pays the remaining 25% for actual costs. Before a grant can be awarded, a State must demonstrate that total eligible costs for the declared fire meet or exceed either the individual fire cost threshold – which is applies to single fires, or the cumulative fire cost threshold, which recognizes numerous smaller fires burning throughout a State.

Eligible firefighting costs may include expenses for field camps; equipment use, repair and replacement; tools, materials, and supplies; and mobilization and demobilization activities. For additional FMAG information use the QR Code:



# SOPS MACS Drill and Region 6 Coordinators' Meeting - May 29



**Southern California  
Geographic Area Coordination Center**  
[23300 Castle St, March Air Reserve Base, CA 92518](https://www.fire.ca.gov/locations/geographic-area-coordination-center)

Sign up to attend:

2024 MACS Drill Exercise  
FIRESCOPE Attendee Confirmation  
Survey May 29, 2024 0900-1300



<https://forms.office.com/g/SS1xcL42dk>



## **MISSION STATEMENT**

The mission of FIRESCOPE is to provide recommendations and technical guidance to the California Governor's Office of Emergency Services (Cal OES) on matters involving mutual aid; to maintain the FIRESCOPE decision process; and to continue the operation, development, and maintenance of the FIRESCOPE Incident Command System (ICS) and the Multi-Agency Coordination System (MACS)

## **FIRESCOPE VISION STATEMENT**

The FIRESCOPE vision is to continue national leadership in the development of all-hazard incident and multi-agency coordination systems, to enhance and encourage full participation by the California fire service in the statewide Fire and Rescue Mutual Aid System, and to provide a common voice for the California fire service relating to these issues.

# FIRESCOPE ADVISORY MESSAGE



**Deputy Chief Jim Johnstone**  
[James.johnstone@caloes.ca.gov](mailto:James.johnstone@caloes.ca.gov)  
951.312.8966



The Quarterly Brief is intended to be widely shared among the California fire service, its federal partners, and affected stakeholders.

Agency Administrators, or responsible representatives, should ensure that this material is thoroughly reviewed and communicated within their respective organizations.

**VISIT THE FIRESCOPE WEBSITE:**  
<https://firescope.caloes.ca.gov>

