Newsletter



Southern California Association of

Foresters & Fire Wardens

OFFICERS AND DIRECTORS 2021-2022 OFFICERS

President— Tim Ernst—LFD
First Vice President — Curt Schwarm—LPF
Second Vice Pres.– Dave Fowler—SLU
Secretary Tim Chavez—RRU
Treasurer Phil Johnson—ORC

DIRECTORS

Dan Snow—BDF
Trevor Johnson—VNC
Kevin Johnson—LAC
Troy Whitman—SCE
Tim Dunfee—ANF
Bryan Gaines—SQF
Rusty McCulley—BDU
Chris Childers—SBC
Brook Spellman—CSR
Stan Hill—CNF
Josh Black—MVU
Andrew Kennison—KRN

Ed Shabro—Vendor Representative Doug Lannon—Arrangements Chair Don Forsyth—Safety Chair

We, the members of the Southern California Association of Foresters and Fire Wardens, do band together for the purpose of strengthening inter-agency cooperation, fire safety coordination, and fellowship. An Association dedicated to the Training and Safety of Southern California Wildland Firefighters for 90 years.





Minutes of the Board of Directors meeting of the Southern California Association of Foresters and Fire Wardens Santa Anita, CA, California Smoke is entrained in mountain waves on the Marshall Fire, Superior CO Dec 2021– Credit Weather.Gov



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Did you or are you thinking of changing your E-mail address?
Please remember to contact the SCAFFW at SCAFFW@GMAIL.com and let us know so we can send you your newsletters and other important infor-

2020 ANNUAL CONFERENCE OF THE SOUTHERN CALIFORNIA ASSOCIATION OF FORESTERS AND FIRE WARDENS

The board of directors will begin working on the programs and speakers for the 90TH Annual Wildland Fire Training and Safety Conference that will be held on May 5th and 6th, 2022 at Camp Pilgrim Pines in beautiful Oak Glen, California. This promises to be another exciting and informative conference and we look forward to seeing you back at Pilgrim Pines.







You can now go directly to our web site by scanning the QRC (quick response code) with your smart phone.

Cover Photo

A rare December grassfire in Superior, CO causes the destruction of over 1000 structures on December 30, 2021 in what can only be described as an urban firestorm. Credit Widlfire Today

SOUTHERN CALIFORNIA ASSOCIATION OF FORESTERS AND FIRE WARDENS 90 TH ANNUAL WILDLAND FIRE TRAINING AND SAFETY CONFERENCE.

May 5-6, 2022

Check our web site for further information www.scaffw.org

SOUTHERN CALIFORNIA ASSOCIATION of FORESTERS & FIRE WARDENS BOARD OF DIRECTORS MEETING December 3, 2021



BOARD OF DIRECTORS MEETING NOTES

The meeting of the Southern California Association of Foresters and Fire Wardens was called to order by President at 0905 hours at Santa Anita, California on December 3, 2021. A round of introductions were made. President thanked Director Dunfee for making the arrangements for the meeting.

Officers and Directors Present:

Tim Ernst - President- Los Angeles Fire Dept. Curt Schwarm -First Vice President- Los Padres National Forest

Dave Fowler - Second Vice President- CAL FIRE - San Luis Obispo Co.

Phil Johnson – Treasurer – Orange County Fire Authority Tim Chavez – Secretary, CAL FIRE – Riverside County Doug Lannon - CAL FIRE Retired Arrangements Chair

Don Forsyth - OCFA Retired Safety Chair

Chris Childers – Santa Barbara County Fire Dept

Kevin Johnson – Los Angeles County Fire Dept. Troy Whitman – Southern California Edison

Tim Dunfee - Angeles National Forest

Trevor Johnson – Ventura County Fire Dept.

Dan Snow - San Bernardino National Forest

Garrett Huff- Member- Santa Barbara County Fire Dept.

Officers and Directors Absent:

Nick Ferrari- Publicity Chairman- Los Angeles Fire Dept. Stan Hill - Cleveland National Forest Andrew Kennison- Kern County Fire Dept. Brook Spelman - CAL FIRE - Southern Region Rusty McCulley – CAL FIRE – San Bernardino Co. Josh Black – CAL FIRE – San Diego County Ed Shabro – Vendor Representative Bryan Gaines - Sequoia National Forest Matt Ahearn- Member- San Bernardino National Forest

Guests:

None

Minutes: President Ernst presented the minutes of the November Special meeting. Motion by Chairman Forsyth seconded by Director Whitman, to approve the minutes. The motion was approved.

Treasurer's Report: Treasurer Phil Johnson presented his report covering May 7, 2021 to December 2, 2021:

Balance as of May 7, 2021 \$46653.75 Receipts:

Disbursements:

Balance on hand:

Dues and Conference Registration \$.00 (Several membership renewals in Paypal Account will be added later)

Total Receipts: SCE Grant August 24,2021

\$5000.00

Total Disbursements: \$.00

Last year at this time: \$40653.75

Motion by Director Snow, second by Director Schwarm to approve the Treasurer's report as presented. The motion was approved.

\$45653.75

Committee Reports:

Arrangements:

Camp Pilgrim Pines is open and has been hosting visitors. So far unscathed by debris flows. Several trees had to be removed including the large oak in the center of the facility. An outside vendor for dinner was agreed to by the staff if desired. They have an outside amphitheater that will support 200 people if needed for an open-air venue. Perhaps a 3 sided tent would be needed for A-V screen and equipment. The Oak Glen Steakhouse has been approached for Directors Dinner, and they will handle additional members if invited. Discussion of outside vendor for Thursday lunch or Dinner, DOG's (Dozer Operators Group) or food truck of some kind. Another payment of \$12,675 is due on March 1. We currently have a credit of \$10,383, leaving a balance due of \$2,183.39. Chairman Forsyth volunteered that he has a contact for a meat supplier. Luther Glen Camp contacts still need to be made. Do we need to prepare to stream or broadcast the meeting? Does the Camp WIFI have sufficient bandwidth? These are questions that we need to ask.

Video recording will be by the RRU Public Affairs Unit. Checking on a Radio Cache through RRU.

Exhibits and Demonstrations:

All Directors need to canvas their department for displays of equipment. Some suggestions are the LFD Electric engine, OES Type 6's, any departments drone program, LFD's robotic engine, any other equipment or technology demos.

Registration and Membership:

Director Fowler advised there had been 10 membership renewals. The system is ready for new registrations. A discussion on how to increase attendance occurred:

Marketing through social media

Increased contact with Department PIOs

A Chief letter reminding the Department heads of our purpose and story, including a history book

The Video trailer that was being worked on last year

Each Director is responsible for making contacts to local government fire departments in their county

Why come to the conference, networking and presentations

Possibility of remote presenters

President Ernst reminded each Director that they can sponsor an new member at the conference.

Entertainment and Raffle:

Director Trevor Johnson advised he would use the \$2500 for raffle prizes again, and would handle bingo and the music in between sessions.

Publicity: No report

Historian:

Director Whitman has the latest History book in draft form. Discussion of what to call it. Is it the 90th Conference History or the 92nd year of our Association we want to emphasize?

Nothing to report

Golf:

Director Snow is Exploring possibility of renewing Golf for Do we want to have a 90th conference T-Shirt? the conference. More to follow. If interested contact Director Snow or any Board member

Newsletter:

Secretary Chavez advised Still working on getting videos of past conferences on our You Tube channel.

Old Business:

President Ernst discussed the possibility of adding a Board position for Liaison to Departments. This would require a change in the Bylaws. For now Director Snow (who is retiring at end of year) will act in the position. His email will be dvdan214@hotmail.com after retirement.

The screen that was obtained from the old South Ops was missing some parts and the remote could not be located. The screen at the lodge at Pilgrim Pines is in poor shape and needs replacement.

A motion was made by Chairman Lannon to purchase/repair Thomas Ebrahimi November 8, 2021 screen for the Lodge at Pilgrim Pines. Seconded by Director Snow. A discussion about the ownership of the screen and why the Association is buying a screen occurred. The question was called and the motion failed 3 in favor 9 against.

Lannon amended the motion to spend \$500 or less to purchase or repair the screen and it will remain property of the Association. Motion passed 12-0.

IT/bandwidth evaluation of Pilgrim Pines needs to be done

Program:

The following program contents ere discussed

(see next page)

Life Membership Recommendations:

Stan Hill

Dan Johnson

Jeff Ohs

Gary Helming Award Nominations:

Charles Morton Family still needs to be presented

New Business:

We need to determine speaker gifts at our next meeting.

The flashlights from pelican are going to be the conference giveaway.

Next Meeting: The next meeting of the Board of Directors of the Southern California Association of Foresters and Fire Wardens will be held In Riverside County on February 4, 2022. Arrangements to be announced.

The meeting was adjourned at 1200

Respectfully submitted, Tim Chavez, Association Secretary



FROM Western Digital BLOG

ALERTWILDFIRE: How Data is fighting wild fires in the West

Natural disasters are unmistakable reminders of how powerful the forces of nature are. They devastate communities and their impacts are exacerbated by climate change. Wildfires are a particularly clear example. The 2019-2020 Australian bushfires saw a historic 42 million acres burned, and a record-breaking fire season in California saw three times more land burned in 2021 than 2020, the previous record-holding year.

To learn more about these fires, public and private entities are leveraging data to study the behaviors of wildfires. ALERTWildfire, born from the ashes of the Tubbs Fire, is one such organization hoping to leverage data to better understand wildfires, improve response time, and — most importantly — save lives and the landscape. ALERTWildfire is a consortium of three universities the University of Nevada, Reno, University of California San Diego, and the University of Oregon, and provides access to state-ofthe-art data and video of wildfire activity

Keynote	Leadership	Minda Ohs
Fenessey	Gordon Graham	Kim Lightly
Kelly Martin	Steve Pyne	Kiiii Lightiy
Keny Martin	New Director of	
	CAL FIRE (TBA)	
	Mark Smith	
M/C	Technology	
Varela Chad Cook	CAL FIRE and Technosylva	
Vaughan Miller	Matt Jolly - Severe Fire Dan- ger Index	
	Drones	
	Damian Giuliani- Mayday	
Color Guard	Season Outlook- Drew Smith	
OCFA		
CAL FIRE		
LA County		
Bell ceremony		
<u>Operations</u>		
El Dorado Accident		
August and Dixie Fires		
Route Fire Entrapment		
Carr Fire		
Pico Street en- trapment		
Silverado Burno-		
ver		



Perfect fire storm

While climate change directly and indirectly impacts nearly every aspect of life, wildfires have grown significantly worse due to a warming planet.

The size and speed of these fires present a serious challenge for fire watchers. With fires moving at unprecedented speeds, an acre can be burned in just five seconds. The harsh timeline of a growing wildfire means that even the 198 active fire watch towers in CA, aerial coverage, and support from local community volunteers are under immense pressure to provide accurate intelligence.

These challenges are part of what ALERTWildfire is attempting to address. By leveraging a network of more than 800 cameras, the organization uses a variety of technologies to identify, analyze, and alert to wildfires in California, Nevada, Oregon, Washington, Idaho, and Utah.

Dr. Neal Driscoll is a professor of geology and geophysics at UC San Diego and co-director of ALERTWildfire. He says when it comes to wildfire prevention, timing is of dire importance. "Fires all start small," said, "but when the wind blows, they just grow so quickly. It's hard to stop fires when they're the size of the Dixie Fire. If we get on these fires in the incipient phase, we have a better chance at saving lives," he said.

Upgrading the toolkit

The core of ALERTWildfire's operation is a network of pantilt-zoom cameras, which offer nearly 360 degrees of coverage from a vantage point, like a repurposed fire watch tower. These video feeds are streamed directly to CAL FIRE departments in the local counties, giving first responders real-time insight. Simultaneously, the video data are fed into several machine learning algorithms to train AI to do the same work.



The computer vision technology is also being trained across a variety of environments, meaning that each AI model must be trained on the "visual language" of their respective regions. Through this layered system, ALERTWidfire provides constant surveillance on the hotbeds of wildfires across the western United States.

These visual data are combined with other sources, such as wind speeds, humidity levels, eyewitness accounts, and others to offer a holistic approach to fire monitoring. For first responders, the technology represents a powerful, sophisticated tool that will help them manage fires and protect those in the path of fires. More data means more insight, which helps in the planning of measured responses. Based on the data, fire fighters know how quickly a fire is spreading, what equipment is required, and how many units and people are needed to respond. This more precise management of resources can ease the burden and keep fire departments prepared for the inevitable breakout of larger fires.

More than first response

The information collected by ALERTWildfire is doing more than just watching for fires, though. It's empowering science of all kinds. In a recent interview with Western Digital, Dr. Falko Kuester, ALERTWildfire team member and professor at the Jacobs School of Engineering at UC San Diego, spoke of using the data to create a "digital twin" of California.

Using visual data, Dr. Kuester and his lab have constructed a digital facsimile of California, one which mirrors its geography, topography, and more. This model is empowering more research on wildfires. Kuester notes that there is still so much we don't know about wildfire behavior, and trying to study or replicate the conditions is prohibitively dangerous. But by using all the data at its disposal, ALERTWildfire is better able to understand how they burn, what conditions can lessen or heighten fire risks, and how response and containment efforts could be improved. He noted this model could be expanded to understand other macro-scale phenomenon on the state, such as tsunamis or earthquakes.





Though the data modeling isn't publicly available, the video feeds that are at the heart of ALERTWildfire are. On its website, all video feeds are open to the public, meaning locals can watch cameras for their county. This itself encourages and improves the citizen activism that CalFire relies on ALERTWildfire to assist them in monitoring for fires. Additionally, it also means that a wealth of data is available for people to study and leverage themselves.

"In the ALERTWildfire camera network we have almost 900 cameras deployed," said Eric Lo, a field robotics and cyber infrastructure engineer with ALERTWildfire, in an interview. "Each camera, on average, gives us a new image every one-and-a-half seconds."

Cameras and sensors are constantly being added to the system too. At the current system scale the sensor network captures 54 million images per day, adding approximately 15 terabytes of data per day, or 5.4 petabytes per year.

"The key aspect we needed for our storage cluster was that the data be accessible. We have 16 servers with 60 hard drives each which all adds up to 14.4 petabytes of hard drive space," Lo said. Because of the scope and size of the data involved in the project, ALERTWildfire partnered with Western Digital to provide the much-needed storage space.

The project now enters its next storage phase with a new, state of the art, custom tailored datacenter. Due to the immense needs of the project, the team is employing a variety of storage solutions to capture the valuable data. The data center will include about 1,150 Ultrastar HC550 18TB drives with a total capacity of more than 20 petabytes, with the WD Purple 1TB micro SD cards in the cameras themselves.

Public access to such a massive dataset also encourages citizen science, empowering collective action to a challenge that people all over the western U.S. face together.

While the conditions for wildfires are not likely to improve any time soon, resilience and capacity for response and suppression is already. Armed with data and knowledge, first responders, public servants, volunteers, academics, and laypeople alike are all empowered to take fire season into their own hands to protect themselves, their communities, and their state's natural beauty.