GATED WYE

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Springfield Eugene Fire awarded hazard house trailer

Springfield Eugene Fire was selected as the winning applicant for the OSFM's Multi-Hazard House Trailer (MHHT). Six departments submitted applications for the MHHT.

State Fire Marshal Mark Wallace (in tie) with Springfield Eugene Fire representatives (left to right) Deputy Fire Marshals Brian Parmalee and Amy Linder, and Fire Marshal Alan Gerard.

The MHHT is an educational prop used to demonstrate fire prevention and safety skills to all members of a community. The house is a hands-on learning tool that gives children and their families the skills and knowledge needed to create safer homes and communities.

Applications were reviewed by a seven-person panel with representatives from OSFM, Oregon State Police, and the Oregon Department of Forestry.

State Fire Marshal Mark Wallace noted at the hand-over ceremony July 17, that Springfield Eugene Fire's application stood out by demonstrating their commitment to fire prevention education in the community and their willingness to share the resource with other fire agencies.

Using the MHHT allows prevention and safety educators to teach students the correct response to the sound of a smoke alarm, correct exiting procedures in case of a fire, and demonstrate how to report a fire or other emergency. The prop may also be used to demonstrate cooking and kitchen fire safety and the effectiveness of a home fire sprinkler system.

Springfield and Eugene, previously separate fire departments, are working under a functional consolidation sharing resources and services across their metro area. Their combined service area includes 216,000 residents, 45 elementary schools, and covers 59 square miles.

They plan on integrating the MHHT into their annual elementary school program as well as other public safety education events.

OSFM Training and Development Specialist Colleen Olson (far right) explains the trailer's features to Alan Gerard and Amy Linder.

From the desk of the State Fire Marshal

> "Our objective is to connect the action plans of today with the long-term goals of the future."
>
> – SFM Mark Wallace

Strategic planning/wildfire

The 2013 legislative session has ended and the Office of State Fire Marshal had a great outcome, thanks to the help and support of many individuals and organizations across Oregon, the hard work of the OSP leadership, and extra effort and insight by the OSFM staff. The FY 2013-2015 budget has been approved with revenue increases that will help us stay financially sound, once they take effect and we begin to receive them.

However, with each ending there is a new beginning. Now that the budget cycle is approved and implemented, the strategic planning cycle begins. Over the next few months, we will address the strategic issues facing us and those of the Oregon fire service. This includes working on a new edition of the OSFM Strategic Plan. This will be a continuation, update, and enhancement of previous strategic plans. It will also become part of the OSFM Master Plan as we look at least ten years into the future.

Our objective is to connect the action plans of today with the long-term goals of the future. This involves understanding the connection between what the OSFM and Oregon fire service does today, and what impact it will have on the future. The challenge is that the farther into the future we try to predict the needs of the citizens and fire departments of Oregon, the less certain the outcomes. This is why planning is cyclic and a never ending challenge.

At the same time, the 2013 fire season is here and the first conflagration of the season was declared by the Governor for the Pacifica Fire, a few miles south of Williams. The Pacifica Fire took many resources from local fire departments, the sheriff's office, ODF, and our Blue Incident Management Team. Strike Teams responded from Linn, Lincoln, Lane, and Marion counties.

Although one residence was lost in the initial phase, the unified and coordinated resources kept the fire from damaging additional structures even

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State Fire Marshal
Mark Wallace

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SFM Wallace

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though an estimated 150 homes were threatened.

Using the median home value in the zip code where the fire occurred, the value of the threatened but saved property is approximately $36.45 million for Josephine County. The final cost of the fire is still being calculated and may approach $1 million. Thus, saving $36.45 million is a significant positive outcome for this conflagration. Congratulations to everyone involved for a job well done!

Many close calls have occurred so far this season, but quick working fire crews and their aggressive actions have been successful. August and September are normally the most active time for wildland fires. One lightning filled thunderstorm can send over a thousand lightning strikes to the ground in a short period of time. Often, each cloud to ground lightning bolt is a potential conflagration site. ODF and local crews chased 70 lightning-caused starts during the latest storm (7/26) in southern Oregon. If lightning occurs in your area, pay attention and watch for "smokes." If we catch incipient fires before they grow, we can hook and stop them quickly, preventing more conflagrations.

Many of the recent fires have been human-caused, so caution is a must whenever and wherever any activity involves flames. Anything from a discarded cigarette to an unattended campfire can make the difference in the results of the 2013 fire season.

We have many weeks left until the rains come and the fire season ends. So, don't let your guards down; stay ready to go; if mobilized, don't forget your 72 hours of food and water; and above all – STAY SAFE because ***your safety is job one!***

Douglas County Complex

As this issue went to press, the OSFM's Green Incident Management Team and four structural task forces were working on the second declared conflagration of the year. The Douglas County Complex is burning just outside Glendale, Oregon.

Pacifica fire is first conflagration of 2013

The OSFM Blue Incident Management team was on call when Governor John Kitzhaber declared the Pacifica Fire burning just outside the community of Williams a conflagration, on July 19.

It's unclear how the fire started, but it grew quickly and it didn't take long for mutual aid resources to be exhausted.

Upon the declaration, the OSFM activated command and general staff elements (11 persons) of the OSFM Blue Incident Management Team and four strike teams. The strike teams came from Lane, Lincoln, Linn, and Marion counties.

Approximately 150 structures were threatened. One home, six outbuildings, and one vehicle were destroyed before any OSFM strike teams arrived at the fire. No other structures were lost or damaged.

Evidence of a home saved, inside the fire line of the Pacifica Fire.

In just 24 hours, wildland and structural firefighters made great progress allowing for the Lane County strike team to be demobilized during the evening of July 20. The other three strike teams were demobilized the following morning.

"Members of the incident management team and strike teams did a great job under tough circumstances," said Chief Deputy State Fire Marshal Jim Walker. "A lot of resources assembled in a short time in unfamiliar territory, under hot, dry conditions and long hours. Everyone did an excellent job bringing order to a chaotic situation."

In memoriam

John J. Percin Jr.
1988 - 2013

John Joseph Percin Jr., a member of the Granite Mountain Hotshots, died protecting the lives of others on June 30, 2013 in Yarnell, Arizona.

John was born November 3, 1988 and grew up in West Linn, Oregon.

He was a gifted athlete and played a variety of sports including football and golf, but his first love was basketball. He also loved hiking and the outdoors and dedicated much of his free time lending a helping hand to his neighbors, friends, and family.

In September of 2010, John moved to Prescott, Arizona in an effort to move his life forward; he wanted his life to make a difference. Many in the Prescott community were touched by his compassion and his innate desire to help others.

Because of his hard work and focused goals, John achieved his dream of becoming a member of the elite firefighter group called the Granite Mountain Hotshots. John's courage and strength were an inspiration. His laugh was unforgettable as was his passion for life.

He died battling the Yarnell Hill wildfire in Arizona alongside 18 members of his elite crew. He will always be remembered for his bravery.

John is survived by his father and mother, John and Mary Percin of West Linn; brothers, Robert and Matthew; grandparents, Patricia Percin and Richard and Shirley Moore; and several aunts, uncles, and cousins.

Donations may be made to 100 Club of Arizona, in memory of Granite Mountain Hotshots, 5033 North 19th Avenue, Suite 123, Phoenix, AZ 85015.

Portland fire and police "Lowered the Boom"

For the fourth year in a row, Portland Fire & Rescue and Portland Police teamed up to patrol city streets to confiscate illegal fireworks and write citations. Patrols started Wednesday, July 3 and continued through Sunday, July 7. Patrol teams wrote 135 citations with a total fine amount of $70,500, almost three times the dollar amount from 2012. The retail value of the confiscated fireworks is estimated at more than $35,000.

The enforcement operation was coupled with an education campaign using newspapers, radio, and social media to explain why illegal fireworks are such a concern to citizens and public safety agencies. The theme of the educational campaign was "Fireworks: Who Cares? Your neighbors, pets, veterans, and children care." The message content was positive with wording such as "Be a good neighbor. Leave the big fireworks to the pros." Included in the message was the option to drop off unused illegal fireworks at fire stations and police precincts, without penalties, and a reminder that illegal fireworks can result in fines up to $1,000.

"Portland Fire & Rescue inspectors, along with our partners at the Police Bureau, worked hard to reduce injuries, property loss, environmental impact, and anxiety to people and pets this Fourth of July season. My hope is that each year our collaboration lessens the problem," said PF&R Chief Erin Janssens.

In 2012, Chief Janssens granted authority to Portland police officers to issue fire citations for illegal fireworks. In the past, police officers had not had this option; they would have had to arrest for a misdemeanor. "Illegal fireworks use and misuse are not a victimless crime. Our partnership with PF&R is a great collaboration that allows us to educate and enforce these laws. We want Portlanders to have safe and legal Independence Day celebrations," said Portland Police Chief Mike Reese.

Please submit your fireworks education and enforcement examples to Lori Van Dan Acker at lori.vandanacker@state.or.us or 503-934-8274.

DATA *Connection*

News from the Data Collection & Research Unit
by Program Coordinator Dave Gulledge

2012 Fire Statistics

The Supplement to the Office of State Fire Marshal (OSFM) Annual Report is a compilation of Oregon fire statistics for 2012, and is now available online. Following are some highlights from the report.

In 2012, there were 316 structural fire protection agencies in Oregon, 258 (81%) of which reported their incidents to the OSFM. Based on state population estimates from Portland State University and estimated populations provided by local fire jurisdictions, these 258 reporting agencies represent 98% of the state's total population.

Oregon fire service agencies reported 262,209 total incidents to the OSFM in 2012, a 4% increase from last year. Emergency medical incidents accounted for 69% of all incident responses, while only 4% of all responses were to fires.

The 11,207 fires that were reported in 2012 resulted in:

- $148.8 million in estimated losses,
- 21 confirmed deaths,
- 298 civilian injuries, and
- 76 firefighter injuries.

Structure fires alone accounted for a third of all fires and resulted in 19 deaths, 243 civilian injuries, 59 firefighter injuries, and $128 million in estimated damage.

There were 1,410 fires reported as intentional in 2012, accounting for 12.6% of all fires. Using the methodology developed by the U.S. Fire Administration for causal determination, this was Oregon's leading fire cause in 2012. The second leading cause was smoking, which was the reported cause in 1,254 fires.

In 2012, there were 2,811 residential structure fires. The leading cause was cooking fires, which accounted for 15.8% of all residential structure fires. This was followed very closely by heating fires which accounted for 15.7% of all residential structure fires. More than $63 million in estimated damage was caused as a result of residential structure fires.

One in four residential structure fires started in the kitchen or cooking area. Stoves were the most commonly identified equipment involved in those fires. Failure to clean, abandoned or unattended materials, and heat sources too close to combustibles, were the top three contributing factors which accounted for a third of all residential structure fires.

In 2012, 14.9% of residential structure fires were in homes with no operating smoke alarm. Of the 1,673 residential structure fires with a smoke alarm present, one of every three failed to operate. In situations where the fire was large enough to activate the smoke alarm, the leading reason for alarm failure was a missing or disconnected battery. Only six alarms were determined to be defective.

Fires caused by cigarettes proved to be the most deadly in 2012, as nine of the 21 confirmed fire-related deaths resulted from these types of fires.

Other fatal fires where a cause was determined, involved combustibles too close to a heat source (four deaths) and smoking while on oxygen (two deaths). More than half (52.4%) of all fire related deaths involved people over the age of 60.

To view these statistics and more Oregon fire statistics, go to the 2012 Annual Report Supplement on the OSFM website.

Providing this report in a new, all electronic format is part of the OSFM's strategic plan to provide optimal accessibility, enhance efficiency, and reduce costs through the use of technology. The aim of the new format is to make the information easier to access and allow greater flexibility to view and use the information. Electronic copies of this report are available in a different format upon request.

We welcome and appreciate any feedback you may have on the new format and presentation of this report.

Questions? Please contact the Data Collection & Research Unit at 503-934-8250, toll free at 877-588-8787, or email osfm.data@state.or.us.

Home Fire Sprinkler Coalition appoints new president

The nonprofit Home Fire Sprinkler Coalition (HFSC) has appointed Lorraine Carli president of its Board of Directors.

Carli is vice president of communications for the National Fire Protection Association and also manages NFPA's Wildland Fire Operations and Public Education divisions. In addition, Carli is a member of the Board of Directors for The Phoenix Society for Burn Survivors, and Electric Safety Foundation International.

HFSC creates and provides no-cost, high-quality, educational material and activities to help the public understand the grave danger of fire and the need for fire sprinkler protection in new homes.

To download or order free home fire sprinkler education materials, visit the HFSC website.

Fallen brother memorial motorcycle run

The Jeff Common Foundation in Coos Bay is hosting a motorcycle memorial run September 7, 2013. Proceeds from the event will be used by the foundation to educate and promote firefighter safety.

The memorial run is a tribute to Firefighter Jeff Common who died in the line of duty (along with Randy Carpenter and Chuck Hanners) in November 2002, while battling a commercial fire in Coos Bay.

The event is open to any make or model of motorcycle, classic car, or whatever you choose to bring. Each $50 donor receives: T-shirt, refreshments, lunch, dinner, and games. There will also be an auction for a seven-night stay in Mazatlan, Mexico.

To register, visit the Jeff Common Foundation website. For questions or more information, call 541-297-0091.

Fire grant update

by Hines Lieutenant/Grant Writer Jonathan Manski

Let's review and then wait to see what the future brings. It was a mixed bag of success for Oregon in 2012 when looking at the "big three" fire grants.

With more than $22 million already awarded for Fire Prevention & Safety, the 2012 award account has little left. Oregon received five awards amounting to more than $414,000. Three of the awards went to fire departments and two to organizations. Succeeding is difficult and I would give Medford Fire & Rescue an A+ for receiving three awards over the course of the program's history. This is a noteworthy feat.

The 2012 Staffing for Adequate Fire & Emergency Response Grants (SAFER) provided Oregon with nine awards and more than $3.36 million. The big prize this year went to Gresham Fire & Emergency Services, with a "Hiring" award of more than $1 million. The 2013 SAFER awards to Oregon were 18% higher than the past seven-year average. We are being innovative in short term funding of our folks, which may be good or bad depending on the sustainability of the programs. SAFER is just a short term fix.

Finally, the 2012 Assistance to Firefighters Grant program provided Oregon departments with the fewest number of awards and funding since the program's inception. Just 41% of the average funding for the past seven-year period came our way, and 51% of the same period's number of awards. Oregon received 27 awards for nearly $2.7 million. Noteworthy however, are the large awards that went to Eugene Fire & EMS and Estacada RFD #69.

This is the first year since the AFG program started in 2001 that Oregon did not receive a single vehicle award. It seems all 45 departments received a vehicle denial letter. Hmmm, bah humbug. I'm going to hold out for a last minute reprieve, but I am not holding my breath. I would like to congratulate all the successful departments, and acknowledge the hard work involved. Remember, if it were easy we'd all be rolling in the money.

Next up is the 2013 SAFER program, followed by the 2013 AFG. Use your lead time wisely folks.

Visit the FEMA fire grants webpage for more federal grant information.

Chemical of the month by Aleta Carte

Hazards of Flammable Gas Refrigerant Alternatives

EPA Warns Against Use of Refrigerant Substitutes That Pose Fire and Explosion Risk

The U.S. Environmental Protection Agency (EPA) is warning homeowners, propane manufacturers and sellers, home improvement contractors, and air conditioning technicians of potential safety hazards related to the use of propane or other unapproved refrigerants in home air conditioning systems. EPA is currently investigating instances where propane has been marketed and used as a substitute for HCFC-22 (R-22), a refrigerant that is widely used in home air conditioning systems.

Warnings are on the Significant New Alternatives Policy (SNAP) website. Frequently asked questions are also available on the EPA website.

"EPA has not listed any flammable hydrocarbons[1] as acceptable substitutes for use in air conditioning equipment to date; however, **EPA has listed a number of flammable hydrocarbon refrigerants as acceptable substitutes for specific refrigeration uses, including**:

- butane, propane, propylene, Hydrocarbon Blends A and B (trade names OZ-12® for blend A; and HC-12a® and DURACOOL 12a® for blend B) in industrial process refrigeration;
- isobutane (R–600a) as acceptable, subject to use conditions, in new household refrigerators, freezers, and combination refrigerators and freezers;
- propane (R–290) as acceptable, subject to use conditions, in new retail food refrigerators and freezers (stand- alone units only); and
- R-441A, a hydrocarbon refrigerant blend consisting of ethane, propane, isobutane, and n-butane (trade name HCR-188C), found acceptable subject to use conditions, in new household refrigerators, freezers, and combination refrigerator/freezers."

"EPA notes that the listings for household and commercial refrigerators and freezers apply only to equipment that was specifically designed to be used with that refrigerant. The agency has not found hydrocarbon refrigerants acceptable for use in refrigerators that were originally made for a different, non-flammable refrigerant."

EPA White Paper: Revisiting Flammable Refrigerants. "This paper explores the ongoing efforts by those who are anticipating the more widespread use of flammable refrigerants in HVAC equipment and appliances, with the principle focus on the use of hydrocarbons as refrigerants. It is hoped that this paper will initiate a dialog among stakeholders, and increase the likelihood that the more widespread use of flammable refrigerants does not result in a decline in safety.

Flammable refrigerant gases

Highly flammable; form explosive mixtures with air; easily ignited by heat, sparks or flame; vapors may travel to a source of ignition and flash back.

Table of physical data for the refrigerants listed above.

Refrigerant	Flash Point	Flammable Range	UN/NA #	DOT Hazard Class	Boiling Point	Vapor Density Air = 1
HC-12A	Not Avail	1.9-8.5%	1954	2.1 Flam Gas	-29.0° F	1.770
Isobutane (R-600A)	-117° F	1.8-8.4%	1075	2.1 Flam Gas	10.9° F	2.006
Propane (R-290)	-155.2°F	2.1-9.5%	1978 or 1075	2.1 Flam Gas	-43.6° F	1.6
R-441A/HCR188C	-156° F	2.2-9.5%	3161	2.1 Flam Gas	-43.7° F	Not Avail

Resources include:

CAMEO Chemicals
Guidelines for using R441A/HCR 188C and derivatives in Refrigeration and Air Conditioning Systems
Chapter 11 Refrigeration

Chemical assisted suicide

reprinted from the USFA/National Fire Academy, *Coffee Break Training*

Chemical suicide, also known as detergent suicide, is an increasingly common method of committing suicide. It is often communicated as an easy, quick, and painless way to end one's life. The technique originated in Japan but has been spreading across the United States via instructions posted on the Internet. Chemical suicide involves mixing two or more inexpensive, common household chemicals in an enclosed space. The chemical mixtures produce a heat-releasing — or exothermic — reaction and create toxic gases that quickly fill an enclosed area.

Indicators include not only the two signs but also where the car is parked - a cemetery. *Photo courtesy Region VII EMS*.

Chemical suicides typically occur in personal vehicles, closets, bathrooms, and other small, confined spaces where the concentration of gas can quickly accumulate to levels that are lethal not only to suicide victims but also to emergency responders. To prevent injury or death to emergency responders reporting to chemical suicides, it is essential to conduct a careful and detailed scene assessment and patient size-up in any situation involving an unresponsive person in an enclosed space.

Below are key indicators of potential chemical or detergent suicide scenes:

- Unresponsive subject inside the vehicle. Subject committing suicide with the proper chemical mixtures will be dead instantly. Subject may have a seat belt fastened to prevent his or her body from falling onto the horn and alerting others.
- Subject wearing goggles or gloves to prevent chemical burns before his or her death.
- Warning signs (such as HAZMAT or SUICIDE) taped to the window or door of a vehicle or room.
- Yellow/Green or white residue on a vehicle's seats or dashboard. This residue has been found in almost all chemical suicide cases.
- Windows fogged or tinted with yellow/green residue.
- Pennies in the vehicle or vehicle console area will be tarnished with residue.
- Smell of rotten eggs or sulfur, indicating the presence of hydrogen sulfide.
- Smell of bitter or burnt almonds, indicating the presence of hydrogen cyanide.
- Empty household cleaning containers on the floorboard or seat of a vehicle.
- One or more large buckets visible.
- Vehicle's inside door handles removed, which prevents a subject who has changed his or her mind from stopping the suicide process.
- Duct tape, plastic, or towels to cover air vents, windows, and doors. This prevents the deadly chemical mixture from seeping out.