\$729 Neighborhood Fire Shield Chris Gilbert Waltzek PhD Goldseek.com Radio

Abstract

This brief paper outlines an economical solution to the perennial inferno-problem plaguing California, resulting in tragic-fatalities and billions of dollars in property damages. While the valiant efforts of fire fighters improved conditions, still approximately 100 lives and 12,000 structures were lost in the November 2018 Paradise CA blaze. The research suggests that a fail-safe option could significantly improve conventional fire fighting methods. *The \$729 Firezat home shield represents an inexpensive, practical, and mobile neighborhood fire-defense of last resort.*

\$729 Neighborhood Fire Shield

Introduction

The 2018 California infernos were the most devastating on record, registering "National Disaster, status." In Paradise CA alone, over 10,000 homes and 12,000 structures were lost, virtually the entire town. An earlier 2018 blaze in Redding CA resulted in hundreds of lost

homes, many tragic fatalities and 300,000 evacuations. While some pundits blamed inadequate water resources as a key issue in combating the wild fires, local authorities countered that ample water was available. The more likely culprits cited were arid

conditions, foliage overgrowth, and urban sprawl in remote fire-prone forest regions. While the valiant efforts of fire fighters saved numerous lives, over 12,000 structures were still lost (figure 1.1.). Although home insurance is a relief for some victims, delays in payouts and difficulty finding temporary dwellings can be devastating. In addition, jobs losses magnify distress; temporary living arrangements tend to be a haven for nasty viruses and bacterial infections, a key factor for seniors and those with distressed immune responses. Stories continue to emerge of formerly wealthy families who lost thousands and even millions in cash / jewelry / bullion / artwork, most of which was not coverable by typical insurance policies. Clearly, a fail-safe option is required to assist conventional fire fighting methods. At the heart of this simple proposal, the inexpensive Firezat shield represents a remarkable product that has proven its

worth through the years by forest management and fire fighting professionals.

The impact of future infernos could be vastly lessened via fire shields that halt the advance of

infernos gaining precious time for firefighters and aerial support to arrive at the scene (figure 1.2.). Customizable Firezat shields are re-useable, withstand up to 1100 degrees Fahrenheit, store for at least a decade, and are available to authorities. A siren advisory would alert citizens to install the home covers, thereby averting much of the destruction, particularly in areas most remote from forestations, with lower water access and in various higher risk hotspots. Shipping facilitates the distribution of heavy duty, yet lightweight, fire resistant Mylar sheeting to every house in each neighborhood. The expense to cover and protect a typical cabin or home with a Firezat shield is merely \$729. Therefore shielding 10,000 homes in a typical town requires an insignificant investment of only \$7.29 million, a fraction of the cost when compared to the potential for billions of dollars of property losses, illustrating the economic feasibility of

Figure 1.2. Firezat - Mylar Household Fire Shields

shielding every high risk, US home or structure.



Note. Video and all images in this article were provided courtesy of Youtube.com and Google images.

Near-Term Action Plan

Home Fire Shields

All fire prone towns receive ample \$729 Firezat Mylar fire shields that only require two people

and 20 minutes to install. Additional fire shield support is made available via the proposed distribution network. High-risk areas are determined via qualitative and quantitative models. Qualitative models include the surveyed opinions of key fire fighting officials in each area / region. Quantitative models include variables such as current annual rainfall statistics, population density, incidence of previous infernos, and access to key fire fighting resources. Suggested regulation improvements *include* encouraging homeowners to update highly flammable tar roofing with the suggested non-flammable materials as *metal and concrete roof tiles slow the advance of the inferno that typically spreads from roof to roof.* In addition, the improvements could incentivize insurance carriers to offer lowered

premiums and rebates. Officials are further encouraged to insure that every home receives the needed upgrade regardless of income level as each home lost represents a local and state tragedy with significant economic losses.

Fire Shield Distribution and Installation

A stockpile of fire shields maintained by state / federal authorities of at least 12,000 initially

could serve as a mobile fire fighting resource. Highrisk areas could maintain a local stockpile of shields, distributed to high-risk neighborhoods, while helicopter support facilitates emergency drop-offs. Commercial



the shields to local volunteer groups with small trucks / SUVs, one team per subdivided neighborhood, 10-20



trucks and teams. In addition, state and federal authorities would maintain a small fleet of medium sized U-Haul type vehicles with trained installation crews to facilitate quick deployment and installation.

Safe Storage



Residents in high-risk regions receive free training to

facilitate shield installation and the storage of flammable items located outside on lawns, such as furniture, toys, above ground pools, mailboxes, flags, bicycles, motorcycles and vehicles, which are placed in fire-shielded vehicles, garages, structures, barns and sheds. All remaining vehicles on public

roads, parking lots, and driveways are covered by deployment teams en route.

Long-Term Action Plan

Flame Resistant Roofing, Siding, Doors, Overhang & Shutters

To lower the risk of home fire ignition, every home and business owner who replaces flammable



roofs, siding, doors and window frames with metal

roofing, aluminum, brick, and stucco siding, metal doors, metal shutters, and window



frames. In addition, it is advisable to encourage the

replacement of flammable bushes and trees with rock garden lawns; officials are urged to consider dropping, *property taxes and home insurance* premiums until 100% of costs are recouped.

Economic Assistance

Homeowners, who cannot afford the expense of replacing siding and roofing, are compensated receive compensation from local, state, and federal officials and discounts on home insurance premiums.

Regular Inspections



All structures are inspected for compliance by the local and state fire authorities with tax break vouchers issued, biannually.

Emergency Parking Lots



lawns would create an emergency
evacuation point of last resort. In addition,
GPS location finder and radio contact
would facilitate helicopter emergency

In the aftermath of the 2018 CA infernos, the only untouched areas were large paved lots devoid of flammable materials making safe haven parking lots advisable in each fire prone community. Football stadium-sized paved lots surrounded by deforested

landings to evacuate urgent need patients. Non-vacated vehicles are deposited and buses are maintained to evacuate residents. Oxygen tanks and masks are maintained for those with compromised lung conditions.

Drone Evacuation / Medical Supplies / Fire Fighting Support

Automated and radio controlled drones with infrared video capabilities and audio voice microphone. / speakers facilitate the location and communication of trapped / lost people and

pets, directing evacuation teams and even supplying



medical supplies, such as respirators, oxygen and burn management tools. Evacuation

drones can remove one patient even in smoky conditions where helicopter support may be challenged to find a landing spot (see





photo).

Underground Rainwater Catchment Systems

Residents and towns that install solar powered, fully automated water sprinklers attached to protect structures and premises, receive tax breaks until all funds are recouped.

Human / Pet Emergency Tents & Auto Covers

In addition to home shields, officials are advised to distribute to every neighborhood and in-the-

field personnel, human / pet



Perfect For: Outdoor, Survival, Comping, Hiking, Running

fire tents and auto covers for every vehicle in fire prone regions. It may be advisable



to make both shields required storage in or on the vehicle at all times to shield trapped occupants from 95% of fire related heat, per item description.

Challenges / Solutions

The relatively slow progression of most forest fires typically offers enough time to implement fire shield protection in particular, the peripheral regions in the path of the blaze, similar to a hurricane vs. more speedy tornados and earthquakes. However, potential hurdles to the implementation of the innovative strategies include:

- False positive, Type II events; apathy develops following several false alarms.
- Consecutive rainy seasons could increase ambivalence toward the obvious risks posed by firestorms.

Nevertheless, a centralized, emergency fire alert

(EFA), comparable to the successful emergency
weather system, would reduce Type II, false
alarms to significantly, increase response time
while reducing the overall impact of infernos.

Using the quantitative and qualitative multivariate

regression models outlined earlier in the paper would facilitate effective outcomes. Early responders are encouraged to attack each situation in stages, methodically corralling the encroaching firestorms by focusing initial efforts on the closest neighborhoods to the blaze, thereby slowing the advance markedly by reducing fuel sources to virtually nil. With the help of an emergency fire alert center the minimal expense associate with maintaining a state mandated stockpile of Firezat shields combined with the obvious benefits of a fail-safe fire deterrent make

this project worthy of further investigation.

Discussion

The discussion includes a bullet list of key takeaway points:

- The minimal \$729 expense of each Firezat home shield as well as the obvious benefits of a fail-safe fire deterrent makes maintaining a state mandated stockpile feasible and this project worthy of further investigation.
- \$7 million is all that has required state and federal officials to establish a mobile stockpile of 10,000 Firezat shields, enough to have protected the entire missing town of Paradise, CA.
- Shields are deliverable for quick assembly in any CA town where a blaze is registered before the inferno builds momentum to engulf the neighborhood.
- \$7 million versus thousands of lives, hundreds of billions in property losses represents an opportunity for ANY official with leadership skills to heroically, reduce unnecessary suffering.
- A centralized, emergency fire alert (EFA), comparable to the successful emergency weather
 system, would reduce Type II, false alarm issues via the proposed quantitative and qualitative
 multivariate regression models to significantly, increase response time while reducing the overall
 impact of infernos.
- Early responders are encouraged to corral the encroaching infernos by focusing initial efforts on the closest neighborhoods to the blaze, thereby slowing its advance markedly by reducing fuel sources to virtually nil.
- Clearly the minimal expense associate with maintaining a state mandated stockpile of Firezat shields combined with the obvious benefits of a fail-safe fire deterrent make this project worthy of further investigation.

Conclusion

This brief paper presents an economical solution to the perennial inferno-problem plaguing California where the November 2018 Paradise CA blaze alone resulted in approximately 100 tragic-fatalities, the loss of 10,000 homes, and billions of dollars in property damages. To significantly, enhance the valiant efforts of fire fighters, a fail-safe option is identified to assist conventional fire fighting methods. The minimal \$729 expense of each Firezat home shield as well as the obvious benefits of a fail-safe fire deterrent makes maintaining a state mandated stockpile feasible and this project worthy of further investigation. \$7 million is all that's required for state and federal officials to establish a mobile stockpile of 10,000 Firezat shields; \$7 million versus thousands of lives, hundreds of billions in property losses. A centralized, emergency fire alert (EFA), comparable to the successful emergency weather system, would reduce Type II, false alarm issues via the proposed quantitative and qualitative multivariate regression models to significantly, increase response time while reducing the overall impact of infernos. Early responders are encouraged to corral the encroaching infernos by focusing initial efforts on the closest neighborhoods to the blaze, thereby slowing its advance markedly by reducing fuel sources to virtually nil. Clearly the minimal expense associate with maintaining a state mandated stockpile of Firezat shields combined with the obvious benefits of a fail-safe fire deterrent make this project worthy of further investigation. The research suggests the \$729 Firezat home shield represents an inexpensive, practical neighborhood fire-defense of last resort when facilitated by an emergency fire-alert system and distribution network.

References

Firezat Inc. © Copyright 2007- 2018: Firezat TM inc.: All Rights Reserved - Firezat Inc. Patent

Pending. Retrieved from: http://www.firezat.com/

Appendix

This proposal is an open dialogue - suggestions are welcomed and encouraged gsr@hughes.net. The document was forwarded to the Orange County Fire Authorities, Chief Marc Stone, and the US White House. In addition, the visionary CA leaders, Elon Musk and Tim Draper received copies of this proposal. If only one home is spared destruction including the occupants, pets, contents and premises, this project will be deemed a success, at least to the author who is not affiliated with or receiving any compensation from Firezat; this proposal is merely an opinion, but one the author values, highly.