

high performance wireless research and education network

Since 2001, the High Performance Wireless Research Network (HPWREN) team has been working with San Diego County first responders to better understand how high-speed wireless ad-hoc networking can assist with public safety in hard-to-reach areas. HPWREN-connected cameras, meteorological sensors, and alert systems located on a dozen mountaintop towers provide first responders and rural community members with real-time images, environmental conditions, and public safety alerts throughout San Diego County.



Ron Serabia and Jim Hale here are unloading three new large antennas, previously assembled at the Palomar Observatory, for temporary storage at the Ramona Cal Fire Air Attack Base.

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For instance, the 2007 Harris Fire was closely monitored by the California Department of Forestry and Fire Protection (CAL FIRE) and the San Diego County Sheriff's Department via HPWREN-connected cameras atop Lyons Peak.

http://hpwren.ucsd.edu/Fires/20071021-20071028_LP/



November 3, 2007 image of the week which was taken shortly after the Harris fire.

Lyons Peak nine months later near the same location as the image at left.

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Before any HPWREN Tower Climbing is done, all participants and collaborators are issued Certified Fall Arrest Equipment such as FA Harnesses and FA Lanyards, as well as training from an OSHA standards qualified Instructor.

All regular HPWREN team members are OSHA standards certified climbers and High Safety Standards are maintained by regular training and rigorously supervised "on tower" practice sessions.

This event was hosted by CalFire on the Red Mountain tower near Fallbrook. This event differed in that we rappelled from the 80 foot level on a 3 degree incline forcing the climbers to negotiate the steel obstructions of the tower below them, adding another degree of difficulty to their experience.

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Fire photos posted on HPWREN webpage, taken by Ron Serabia while working fires from CDF Air Attack 330



November 24, 2007 at 0955 a new wildfire started during Santa Ana winds in the Ramona area causing a rapid response by ground and aerial resources in the area. There were six air tankers, six helicopters and one air attack launched to assault this new fire from the Ramona AAB. This fire was contained at 30 acres with the rapid aerial and ground response, with no structures burned. These are a few of the photos were taken over the incident by Ron Serabia flying as the spotter (Air Tactical Group Supervisor) in AA-330.

<http://hpwren.ucsd.edu/firephotos/>