Tuskegee Reunion

Tuskegee Airmen Reuninon, August 17-20, Tuskegee Institute, Alabama. Enlisted officers, civilians, ex-cadets, instructors, dependents of deceased personnel, currently affiliated AF active duty personnel and those of the 99th FS, 322nd FG, 477th BG(M), 553rd FS, 118th and 126th ABGs (SQ-F) and supporting units of WW II at Tuskegee Institute, Tuskegee AAF, Freeman AAF, Walterboro AAF, Godman AAF, Lockbourne AFB and overseas are invited. Minority cadets from ents are also invited. Contact: Hervert E. Carter, 201 Bulls Avenue, Tuskegee Institute, Alabama 36088.

Fire Fighting

Lightning strikes in a remote area of Nevada and starts a fire. It burns for hors before it is spotted. Fire fighting crews are mobilized and dispatched, but by the time they arrive, it has already burned hundreds of acres, destroyed valuable resources and is out of control.

This scene is reminiscent of many long, hot, lightning-charged summers in Nevada and other western states. Until now, not much could be done about it. But this summer fire fighters will be able to find out in advance where lightning activity is occurring, providing them the opportunity to be there before the fire gets out of hand.

How? By use of a lightning detection system being installed by the Bureau of Land Management (BLM) in Nevada and other western states. Because of its central location, the Nevada facility at Elko will serve as the coordination center for the entire Great Basin system, connecting units in Susanville, Calif.; Vale, Ore.; Cedar City, Utah; and Shoshone, Idaho.

The new system, which began operation July 1, is a network of electronic scanning units that can instantaneously compute and locate lightning-struck sites over 100 million acres, according to Fred McBride, Nevada BLM fire management officer.

As McBride explains it, the heart of the detection system, which was perfected by two physicists at the University of Arizona, is a simple and relatively inespensive magnetic direction finder. Basically, the instrument senses the magnetic field created by a stroke of lightning as it returns from the ground to the thundercloud where it originated. Information transmitted by the direction finder is coupled with data from radar or a second direction finder to plot by triangulation the strike's location with a few hundred feet.

McBride says the system was fully tested last summer in Alaska and proved to be a success, accurately identifying every fire caused by lightning over a 222,000 square mile area.

Nevada's high incidence of lightning-caused fires, combined with this drough year's high fire danger should give the system a good workout, he says. He points out that lightning is the single largest cause of wildfires in Nevada. During the last 10 years, 2,400 lightning-caused fires occurred in the Silver State burning more than 400,000 acres. The worst year on record was 1964, when lightning fires burned more than a million acres. By contrast, man-caused fires burned about 100,000 acres in the past 10 years.

"The big difference in acreage burned is due to some simple facts: man-caused fires normally occur close to places frequented by man and are reported early. Alightning fire can occur anywhere and may not be spotted until hours after ignition. By the time fighters reach it, it usually has built up a head of steam and is a major suppression problem. Man-caused fires, on the other hand, are generally smaller and easier to control. Of course, there are exceptions, but that's the general rule," he says.

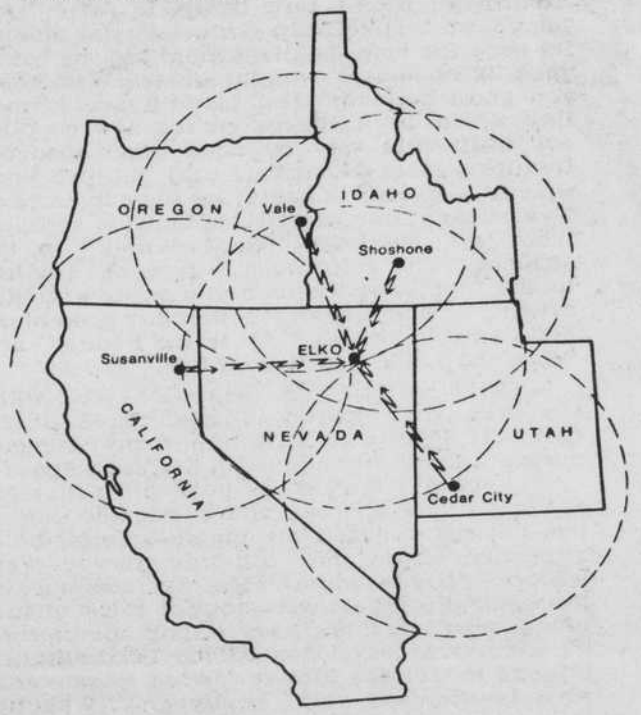
McBride explains the system will pinpoint areas of high lightning activity. "So instead of waiting for a lightning-caused fire to be reported, fire personnel can be sent to areas where the chances of a fire are very high. That way, lightning fires can be extinguished while they're still relatively small and before substantial damage occurs."

Ed Zontek, Elko BLM fire management officer, who will be in charbe of the Nevada unit, explains just how the system will work: "The Elko station will receive data from the other four stations, correlate the position of the lightning activity and inform personnel at the closest station. They will notify the fire attack base nearest the strike. That base may be operated by federal, state or local fire fighters, so it's really a totally coordinated system."

Zontek is familiar with the unit's capabilities since one of those tested in Alaska was also tried out in Elko on a small scale late last summer. He says last year's model proved to be "real effective," pinpointing lightning strikes accurately in northeastern Nevada and western Utah. The new unit has been changed substantially based upon Alaska's and Elko's experience and should do "even better," he says.

Although most Nevada thunderstorms are dry, and little or no moisture is generated, McBride says the system will also be combined with radar to determine how much moisture is coming from the storm. "If this works, it will hopefully prevent us from making false runs on very wet thunderstorms," he says.

Other western states will be afforded this same protection next summer, McBride says. Plans are already in the works for seven more stations joining the detection network to monitor an additional 100 million acres of western lands.



BLM'S LIGHTNING DETECTION SYSTEM
250 MILE RADIUS 100 MILLION ACRES