Incident Name:	Incident Date & Time:
Rainbow Springs Fire	04/24/1984 @ 16:50
Incident Location:	Incident Size:
Mena, Arkansas	450 acres
Types of resources involved:	# of Fatalities/injuries:
US Forest Service firefighters with heavy equipment	2 fatalities

Reason this fire was selected for the 100 Fires list:

Fire made a notable impact within the wildland fire service

Conditions leading up to the event:

The Rainbow Springs incident was first reported on April 25, 1984 at 13:55. Weather observations for the day were: Temperature - 82* Relative Humidity - 27%

Winds - South to Southeast up to 30 mph Fire Danger Rating - Extreme.

April in Arkansas is nearing the end of their fire season. The fire season as a whole leading up to the Rainbow Springs incident had been quite slow and uneventful. With April being considered late season for this area - the operational tempo could be considered low. The area was showing signs of "green up" possibly lending to the perception that fire season was coming to end for this region. The weather conditions present on April 25 were not that of a low potential day and the conditions for extreme fire behavior were present. This information of the Fire Danger Rating being bumped up to Extreme was never relayed to the field going folks.

Brief description of the event:

The Mena Dozer was dispatched to a new start called Rainbow Springs. Upon arrival to the incident they were tasked with constructing indirect fireline on the south and west flanks. The Mena dozer was described as inexperienced and the Rainbow Springs incident being the first fire assignment for the Mena Dozer Operator.

The Poteau Dozer was the second dozer to arrive to the incident at 15:21. They were instructed to tie in with the Mena Dozer as the east flank was deemed too steep and rough for a dozer to work. Once they tied in with the Mena Dozer on top of the ridge - they were then directed to return back to the bottom of the fire and to start working the east flank as a line scout had determined they could actually work a dozer on the east flank. Further direction was given to them to improve the line on the west flank as the inexperienced Mena Dozer Operator had poor placement of the line and many doglegs were present. There was also a section of incomplete line.

While the Poteau Dozer was cleaning up the west flank indirect line, a spot fire started directly below them in a chute which was at the base of the saddle where the Poteau Dozer was working. A volunteer fire department engine was the only resource which could see this spot fire. In 1984 they did not have common radio frequencies and information about this spot fire could not be passed on to the Poteau Dozer. The operator, Thurman Paul Keener, and the swamper, James Frizzel, were found deceased, not having deployed their shelters.

Fire behavior factors that were present during the event:

Fire Danger Rating was Extreme with low Relative Humidity and high winds - all of these factors aligned with the topography and fuels for a rapid rate of spread to the northwest edge of the fire.

Operational lessons available for learning from this incident:

Mindsets:

- Slow fire season with low resistance to suppression efforts.
- ➢ Green up under way in the fuels.
- Extreme Fire Danger given for the day.

The three bullets above could all lead to the presence of complacency, or to think it's just another routine day...not allowing us to be properly prepared and in the right head space for rapid fire development.

Indirect Line Construction:

Having unburned fuel between you and the fire, no lookouts posted, and inexperienced personnel engaged without direct supervision that has experience could lead to poor line placement and poor line quality.

Communications:

The spot fire below the Poteau Dozer was identified by a volunteer firefighter. This firefighter did not have a radio and was unable to relay the information to anyone. Radios were not as readily available as they are now.

Notable impact or historical significance for the wildland fire service from this incident:

The Rainbow Springs Fire was one of the incidents that became a catalyst for NWCG to adopt the Annual Refresher Training requirement.

Links to more information on this incident:

https://wlfalwaysremember.net/1984/04/25/paul-keener-james-frizzell-rainbow-springs/ https://www.coloradofirecamp.com/swiss-cheese/rainbow-springs-introduction.htm

Video:

https://www.youtube.com/watch?v=hKfP931-gtg

 Wildland Fire Lessons Learned Center offers an excellent site which provides information on many wildland incidents.

 Wildland Fire Lessons Learned Center's Incident Review Database (IRDB) (wildfire.gov)

This summary page was proudly provided by: Diamond Mountain IHC - Dan Dobyns

WILLIAN & SATTERFIELD

September 2023

James H. Frizzell and Thurman Paul Keener, Jr. Honored on the: US Fire Administration, National Fallen Firefighters Memorial, Emmitsburg, Maryland Plaque for 1984, organized by state



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ALABAMA GERARD OLJOHN ARKANSAS JAMES H. FRIZZELL THURMAN P. KEENER. JR. EOWIN G. MURPHY ARIZONA RICKY S. PEARCE CALIFORNIA RAYWOND E. EICHERT DAVIO GARDELLA EARL L. HILIARD MICHAEL P. MATTIODA BENJAMIN PINEL JOSE A. SILVA COLORADO	HAWAIL HENRY V. S. SUR IDWA JOHN D. EVANS HAROLD L. HANSEN ILLINDIS KENNETH E. ARNGUR THOMAS BARON LOTHAR S. COGAR DAVID E. FDECKING KATHERINE A. HUGHES PHILIP KENNEALLY UAMES J. LAUSCH PERRY E. PARKES ROBERT F. PLESK BARNEY D. STAGGS CHARLES R. STAGGS BELLE C. SULLIVAN-WEISS	MASSACHUSETTS JAMES A. FLANAGAN MARY LANU WALTER J. BAWROSKI, SR. JAMES A. KIMBEL HENRY W. RAYNER, JR. MELVIN S. ROSEWAG, JR. MICHIGAN MAX D. NASON MINNESOTA THOMAS K. HOLLINGSWORTH MISSOURI RONALD D. HULLINS WILLIAM R. SKART, JR. MISSISSIPPI JAMES E. FRAZIER, JR.	NEW YORK ROBERT C. AVERS JOHN L. CARLSUM KEVIN J. CIOFTI PHILLIP C. D'ADAMU RUSSELE H. DIXON EPIFANID J. GONZALEZ RALPH E. HADER, JR. JOHN C.HUSS JANES JIMENEZ HARRY M. KORWATCH OAVID F. MURRY FRANK J. NERNEY ANTHONY SHANOS WITCHEL E. SPOTH DHID ROBERT G. CHILCOTE H JANES B. DANIELS JOHN W. WALSH	TENNESSEE MILTON A DENSFORD WILLIS D. FRY JIMNY R. KENNEDY TEAAS JEFFREY A. HARDIN ELMER HOMILIUS KEITH A. HORNAN JAMES E. PRESSNAILL ROBERT M. REVES MARVIN B. RIOGWAY THOMAS C. ROSS JAMES C. SIMPSON LARRY D. STEPHENS EARL W. WALKER VIRGINIA CALVIN C. GARRETT MICHAEL G. SIMS
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