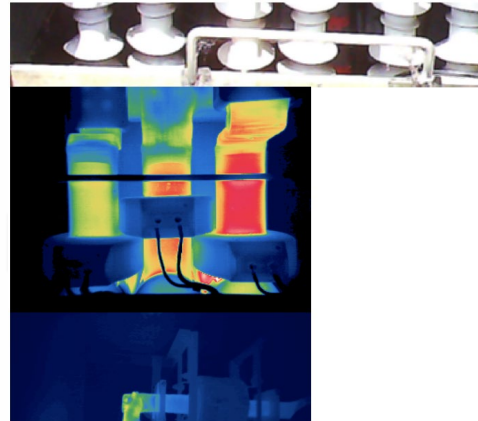
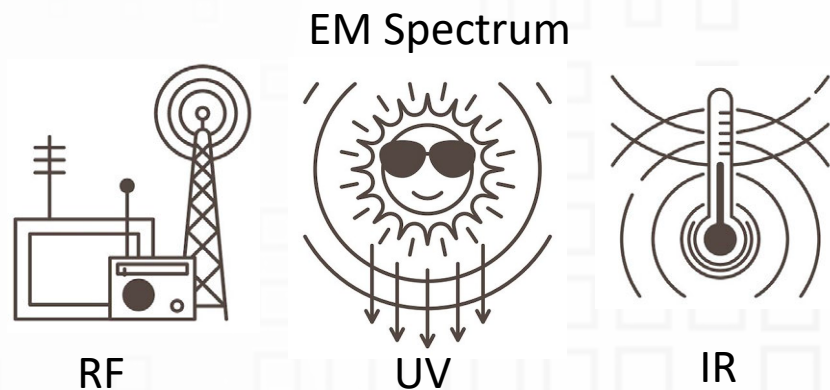
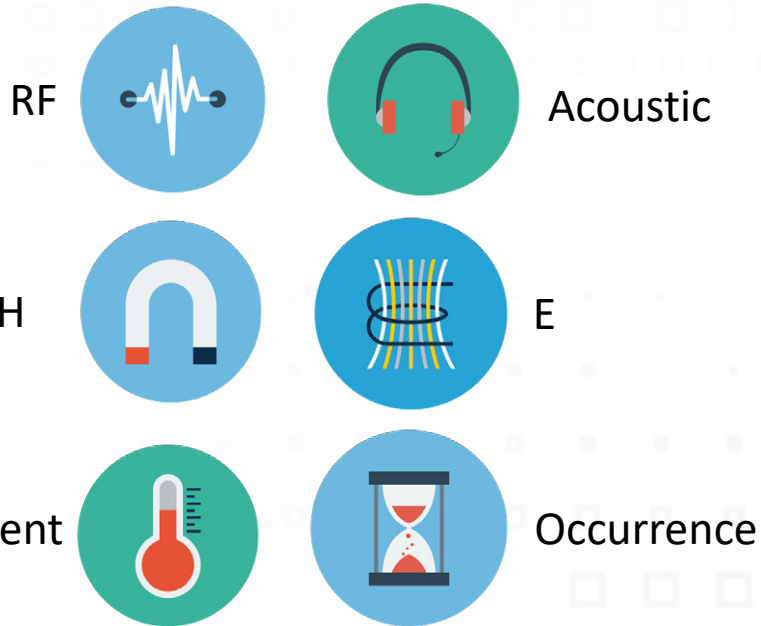


Real-time Aerial Sensors for Extreme Environments

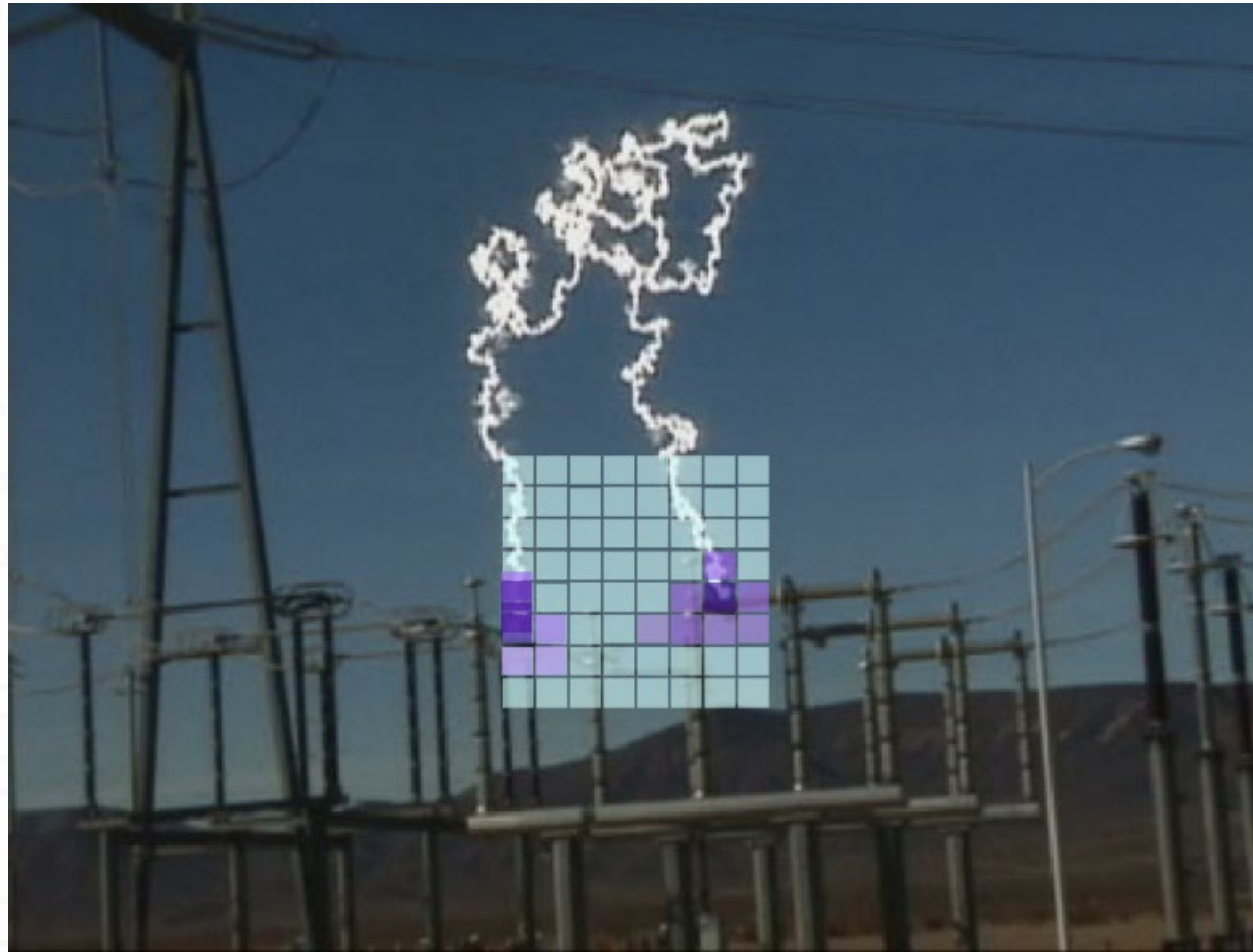
Peter Fuhr, Ph.D. Grid Communications & Security Group Leader
Tech Director UAS Research Lab

April 8, 2021

Multivariate Detection (stationary and mobile platforms)

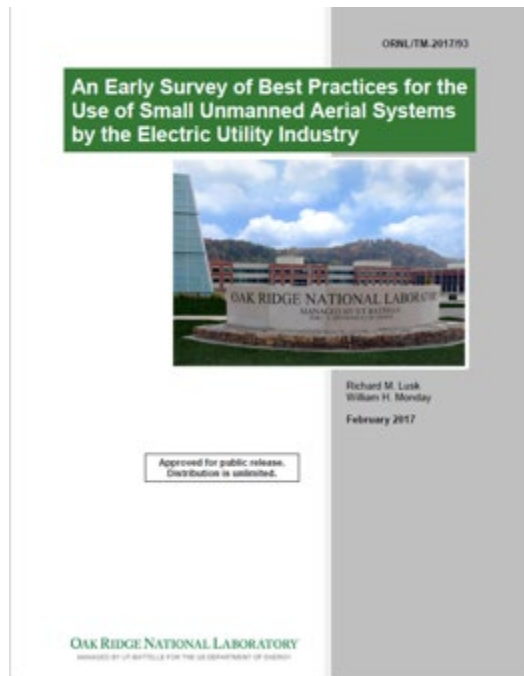


Multivariate Detection (stationary and mobile platforms)

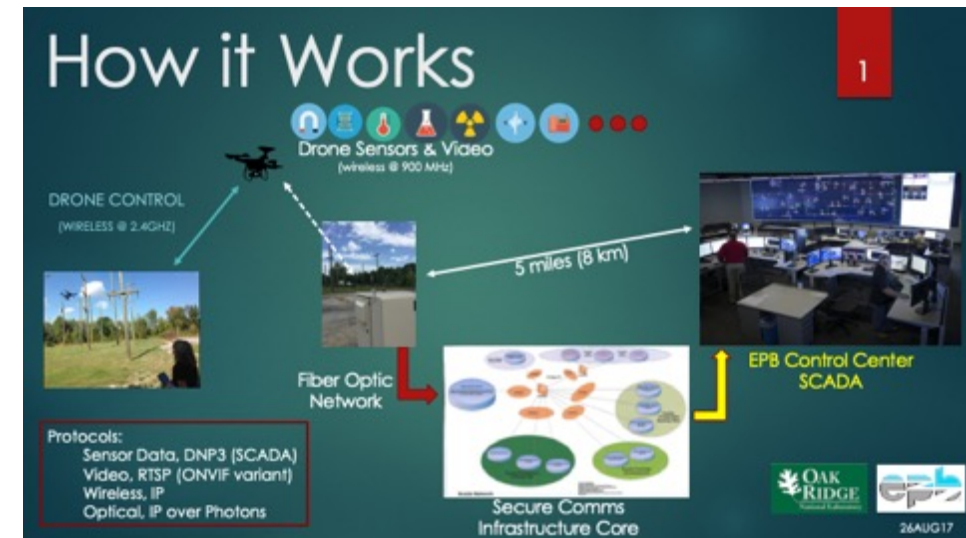


RF Overlay of Substation Arcing

UAS for Grid Visibility (GridViz): UAS-based sensors, visual & thermal imaging realtime viewing in utility control center



Live viewing in utility control center



Video available at: <https://youtu.be/xUhnMWIJD4>

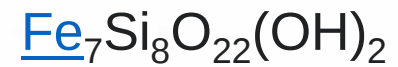
<http://info.ornl.gov/sites/publications/Files/Pub73072.pdf>

Contact: Peter Fuhr (fuhrpl@ornl.gov) or William Monday (mondayw@ornl.gov)

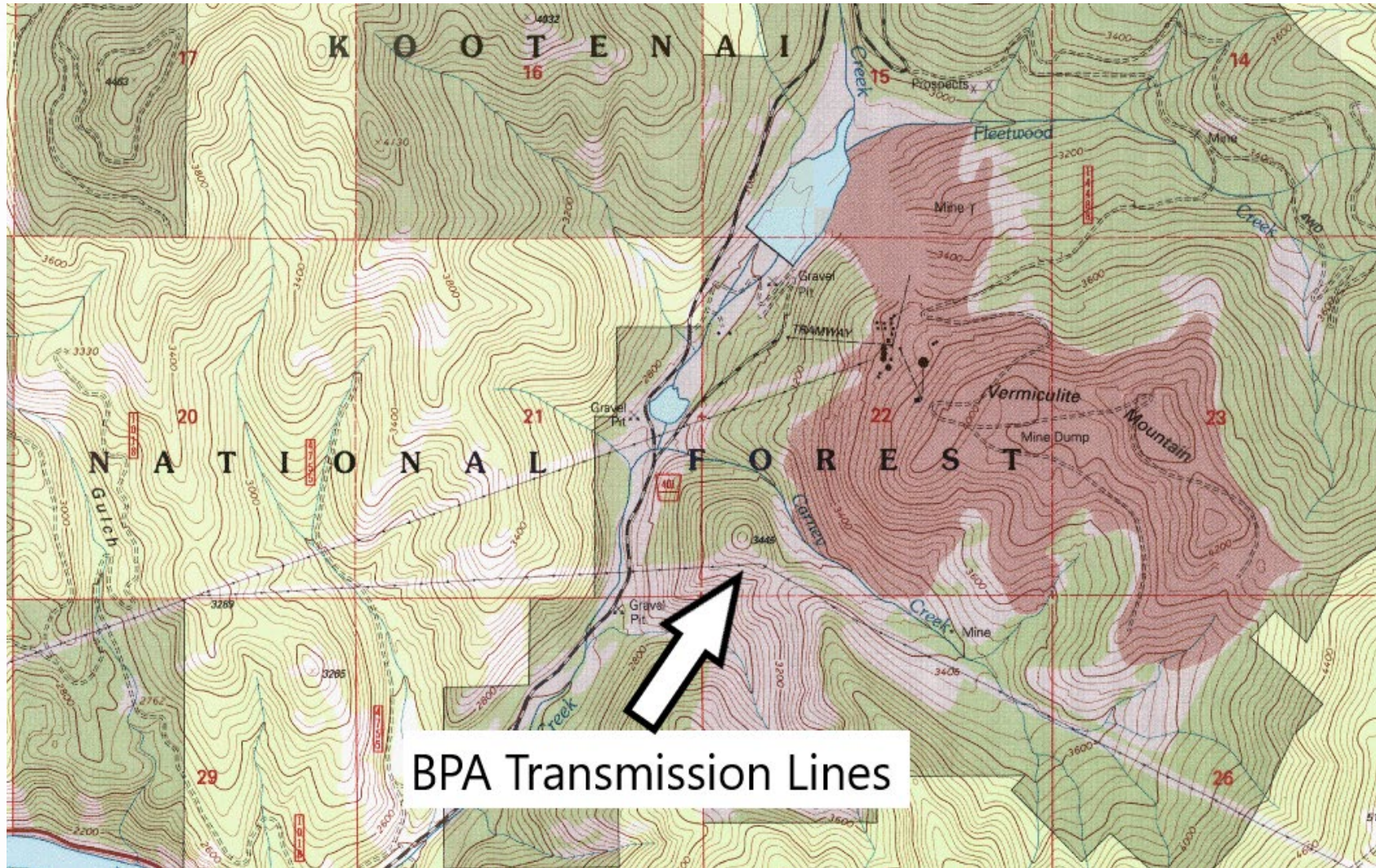
Hazardous Environment



Asbestos (Amphibole)



Hazardous Environment + BPA Transmission Lines



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