

## In Memoriam

### Craig Clayton Chandler

22 September 1926–27 September 2017

It is with sadness we note the 2017 passing of Craig Clayton Chandler (C<sup>3</sup>) after 91 years of eventful life. Craig was an influential figure in the evolution of forest fire research in the United States, beginning with post-World War II (WWII) large scale field experiments, through the early employment of computer-based fire information and management systems. Craig was instrumental in assuring that those systems were nationally consistent and fully interagency in performance. He was a founding member of the National Wildfire Coordinating Group (NWCG), which was chartered in 1976 to ‘... coordinate programs of the participating agencies so as to ... provide a formalised system to agree upon standards of training, equipment, aircraft, suppression priorities, and other operational areas.’ Craig and other NWCG members were directly responsible for the acceptance of The Incident Command System (ICS) and the National Interagency Incident Management System (NIIMS) that are the foundations of modern fire management.

Craig was born 22 September 1926 in San Francisco and served in the Navy during WWII. After the Navy, he attended the University of California, graduating with a B.Sc. degree in forestry (1951). He joined the US Forest Service Pacific Southwest Experiment Station (PSW) in Berkeley, CA, and taught at the University of California School of Forestry (1953–1956). He then returned to the Forest Service and became project leader of conflagration-control research at PSW, with considerable funding involving the fire effects of nuclear explosions. Much of Craig’s research at PSW was reflected in his final report ‘Prediction of fire spread following nuclear explosions’ to the Office of Civil Defence, US Department of Defence (Chandler *et al.* 1963). Although the ignition source was different, much of the insightful information in this report resonates with our current wildland–urban interface (WUI) and the mass fires being experienced in California today.

Craig moved from PSW to Forest Service headquarters in Washington, DC, where he was Assistant Director, and then Director, of the Division of Forest Fire and Atmospheric Sciences Research (FFASR), until his retirement in 1982. As FFASR Director, Craig was instrumental in the development of integrated, interagency fire management and the application of fire research to support management as exemplified by NIIMS, the National Fire Danger Rating System (NFDRS) and Fire-fighting Resources of Southern California Organised for Potential Emergencies (FIREScope) (Chase 1980). FIREScope laid the foundation for NIIMS, Remote Weather Stations (RAWS) and airborne and satellite active fire monitoring as a precursor of modern satellite systems that have revealed the global nature of 21st century fire. Craig capped his professional career with the two-volume opus, ‘Fire in Forestry’ (Chandler *et al.* 1983a, 1983b).



Craig’s life and tenure as FFASR Director cannot solely be measured by his influence on current fire research and management. Craig’s C<sup>3</sup> sobriquet (he said ‘C cubed’ or ‘C three’ reflected the mathematical cognisance of the interviewer) and his signature corn-cob pipe exemplified his Puckish sense of humour, which endeared him to some associates but caused him immeasurable grief from others. This was no better demonstrated than by his ‘Smoky Mouse – The Living Symbol of Fire Research’ campaign, which he impishly offered as a more-sustainable alternative to the Smokey Bear effort. Craig promoted the independent, but supportive, importance of fire research relative to the overall fire management needs of the nation and world throughout his headquarters career.

It is difficult to document the influence and historic contributions of Craig, and other important fire researchers of his generation who lived in the pre-internet age and much of whose work was classified. Nevertheless, it is essential to signify and remember their contributions in the *International Journal of Wildland Fire* (IJWF). This journal exemplifies the integrative role of fire research that Craig fostered, although IJWF had not started until after his active professional life was completed. He personified the objective of openly sharing thoughts, understanding, knowledge and experience crucial to the use of fire research in integrated fire management that is so critically needed today.

*William T. Sommers*  
 Research Professor, George Mason University

### Acknowledgements

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