To Whom It May Concern:

Our submission to IEEE *Access*, “Hierarchal Application of Receding Horizon Synthesis and Dynamic Allocation for UAVs Fighting Fire”, balances both theoretical advances and experimental application through simulation. This work is an extension of our conference submission to the 2018 IEEE Conference on Control Technology and Applications, titled “Receding Horizon Synthesis and Dynamic Allocation of UAVs to Fight Fires.” Compared to such, this journal expands on a proof for our further detailed theoretical framework, and it also presents a much more realistic simulation model.

While fighting wildfires with autonomous aerial vehicles is an application rarely seen in typical IEEEentries, it’s also rarely seen in the target domain of aerospace engineering. We believe that IEEE *Access’s* unique position in interdisciplinary submissions and application-oriented subjects presents a strong platform for publishing this journal despite this application domain. At its core, our journal provides an application-oriented approach for expanding the use of reactive synthesis on complex problems that contain extensive environmental inputs. We also provide one of the few simulated uses of wildfire modelling principles when directly examining the effectiveness of autonomous drones in managing such. As such, the primary contribution of our journal is of concern to computer science-based approaches in high-level system design, ones that must consider the impacts of unique environments and how to deal and/or model such. We believe that this perspective helps highlight our journal as a strong entry to IEEE *Access’* broad published library.

We would like to thank all reviewers for their time and energy. We hope our journal submission can provide new insight on both the theoretical and application fronts while also supporting a compelling look into its domain of application.

Sincerely,

Joshua Shaffer

Contributing Author