**Decision making on the fireground**

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**Abstract**

Effective fireground decision-making requires good Situation Awareness (SA) and appropriate selection from the information available to the incident commander. Individuals can display different biases in their view of the operational incident: either a liberal bias towards accepting information as true and or a more conservative bias towards rejecting information. The former may carry risk of “false alarm” errors and the latter of “misses”. Such decision-making biases were examined for 20 plus operational FRS incident commanders in a development / assessment simulated fireground incident in 2012 and again in 2013 in an assessed simulated fireground incident. The simulated fireground incidents were based on a realistic and developing incident that each individual had to take over command of from the first attendance commander and move towards a successful conclusion from an operational, environmental and social perspective. In both experiments, participants were required to answer True or False to a series of probe statements about the incident which were analysed by a signal-detection-type tool (QASA) to give a measure of SA and Bias. In relation to the simulated fireground incidents; for SA: there was no significant correlation: r = -.120 and p= .623; for Confidence: there was found to be a significant positive correlation: r =.577 and p = .012; and for bias there was found to be a very positive significant correlation across the two sets of scores: r = .592 which is significant at the .008 level. The conclusion is that individual hold bias tendencies that are sleeping and will impact (condition) their decisions and the way they respond during periods of operational command when under stressful conditions.