"On the Augmented Cognition Approach to Early Warning Systems-Human System Integration NASA Experiance

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The authors present results related to the implementation of augmented cognition approach to severe weather early warning systems in aviation and aerospace operational environment. The limitations of automation and adaptive approach in severe weather warning systems are discussed.

Also the positive impact of HSI (Human System Integration) NASA approach will be shown, in the process of pilot training in minimal weather conditions. The flight safety procedures related to weather conditions will be analyzed and the meteorological general aviation weather support product developed at IMGW will be presented. Special emphasis will be put on the integration of the military and civilian weather radar/lighting detection systems and the impact of space weather on aerospace operations including the use of unmanned RPAS (Remotely Controlled Aircraf Systems).

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