

### **Traffic Situation Awareness with Alerts (TSAA)**

The intended function of TSAA is to increase flight crew traffic situation awareness by providing timely alerts of airborne traffic in the vicinity. TSAA is intended to reduce the risk of a near mid-air or mid-air collision by aiding in visual acquisition as part of the flight crew's existing see-and-avoid capability.

TSAA provides alerts using the Traffic Display and aural messages to direct attention out the window, assisting the pilot or flight crew with visual acquisition in both Visual Meteorological Conditions and Instrument Meteorological Conditions, if possible. The application functions under both Visual Flight Rules (VFR) and Instrument Flight Rules (IFR). When a Traffic Display is available, it builds on the Enhanced Visual Acquisition, or AIRB application. TSAA is also capable of providing alerts without a Traffic Display. These alerts are for predicted airborne conflicts or relevant nearby traffic.

The alert acts as an attention-getting mechanism that reduces the effort used to scan the traffic display (if installed) while still permitting the pilot or flight crew to determine if a conflict exists and which aircraft are in conflict. After receiving the alert, the pilot or flight crew will take the necessary action in accordance with the operational rules in effect at the time.