TOMAHAWK CRUISE MISSILE
SAFETY OF FLIGHT VIA RF LINK

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ABSTRACT

The Tomahawk cruise missile is configured for launch from a submarine, surface ship, or ground installation. The boost-phase propulsion is supplied by a jettisonable, solid-fuel booster engine. Upon jettison of the booster, an airbreathing, liquid-fuel turbofan engine is ignited to provide propulsion for the duration of the flight. Flight control is autonomous.

The development of a program such as the Tomahawk requires that missiles be configured for test flights. These configurations require telemetry and tracking systems to aid in flight performance evaluation and an RF link range safety command system to provide for safe conduct of the flight. The subject of this paper is the range safety command system with emphasis on emergency commanded flight termination, automatic flight termination modes, remote flight control capability, and prelaunch checkout of the system.