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Sommario/riassunto	<p>Demonstrations of avionics system and subsystem diagnostic capability are performed before a system or subsystem is verified. This ordinarily happens during the system design and demonstration phase of a program. In the case of aircraft or ground vehicles, there are several subsystem demonstrations, followed by a single system-level event. By the time a system or subsystem is ready for a functional demonstration of its diagnostic capability, there is already significant programmatic inertia towards achieving the next programmatic or contractual milestone. There is typically not enough available manpower, time-on-system, or even funding to test every possible fault in a given system or subsystem. Indeed, testing only the "relevant" faults, which the system's diagnostics have been built to address, can be a hugely time-consuming effort. Due to these constraints, diagnostic demonstrations are sometimes not conducted in a scientifically robust manner. Sometimes, certain testing techniques are used in an effort to expedite testing. These techniques include: emulating hardware faults and their detection circuitry in software, selecting only those faults which are easy to test or guaranteed to work, and choosing faults which do not significantly stress the diagnostics system. This paper describes a survey of diagnostic program managers in an attempt to characterize, and suggest remedies for, the time and budget-constrained fashion in</p>

which avionics diagnostics systems are functionally demonstrated today.

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