Department of the Air Force
Scientific Advisory Board

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE
WASHINGTON DC

Aircraft Oxygen Generation Study (Quick Look)

Abstract

Airborne Oxygen Generation (AOG) Systems are used on most fighter aircraft due to reduced servicing and logistics support, and safety considerations. The F-22 aircraft is equipped with such a system to provide breathing air to the pilot. This system takes engine bleed air and concentrates it to the appropriate partial pressure of oxygen as determined by the cabin altitude.

Beginning in 2008, the F-22 aircraft began to experience a significantly higher rate of hypoxia-like incidents with unknown causes as reported by the pilots. The Air Force was not able to determine the root cause for these incidents and a further review was recommended to the Secretary of the Air Force.

The Secretary then tasked the United States Air Force (USAF) Scientific Advisory Board (SAB) to perform a Quick look Study to cover three areas

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