

412TW-PA-24109



HISTORY OF THE AFFTC, VOL 1 F-16 CHAPTER – PAGE 71

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AFFTC HISTORY OFFICE

AIR FORCE FLIGHT TEST CENTER
EDWARDS AIR FORCE BASE,
CALIFORNIA

1 JUL 74 – 30 JUN 75

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Already in September 1974, visible exhaust smoke and smoke in the cockpit were reported at an F-15 monthly program assessment review. In October and November during an acceptance run at the contractor's plant, some second-stage turbine blades failed. At Edwards during flight testing, 27 low-power compressor stalls occurred in flight, as well as seven ground aborts. (Seven low power stalls took place in the YF-16, one of which was "nonrecoverable," i.e., the engine could not be restarted. And of course a nonrecoverable stall on the single-engine YF-16 could be more serious than on the dual-engine F-15.)^{22/} There were a half-dozen other problems as well.

The cause of the stalls was "control system malfunctions, mis-set [rear compressor variable vanes], low idle speed trim, and insufficient stall margin at low power," according to the executive review group, which made recommendations for remedying the problems. At the end of this fiscal year, the problems remained.^{23/} Many of the engine stalls happened on operational TAC aircraft, and these were grounded for a short period. But because the F-15s at Edwards had different versions of the engine, they were at no time grounded.^{24/}

22. FY-75 History, Vol. I, pp. 205-214, Hq. AFSC.

23. Ibid.

24. Msg., OSAF/OIP to AFSC/CC/OI and others, Subj: F-100 Engine, 091894Z May 75.