

The Chart Page

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Competition Saves Money and Increases Capability

During the sole-source period, the Air Force was buying F-15 and F-16 fighter engines from one supplier, Pratt & Whitney. In 1983, USAF began an annual fighter engine competition in an effort to improve quality and cut costs. In this Alternate Fighter Engine (AFE) program, General Electric entered its F110-GE-100 engines against Pratt & Whitney's F100-PW-220 engines. The Increased Performance Engine (IPE) program will pit GE's upgraded F110-GE-129 engines against Pratt & Whitney's upgraded F100-PW-229 powerplants.

Not only did the Air Force end up paying much *less* for engines once competition began, but engine quality improved as well. USAF expects that, by 1993, it will be acquiring engines significantly more powerful, reliable, and durable than those of 1980.

F100-PW-100 / 200

Baseline thrust

Baseline R&M

Minimum 1,800 tac cycles between engine hot-section overhauls

Restricted throttle

ALTERNATE FIGHTER ENGINE (AFE)

5-15 percent increase in thrust over baseline

Twice as good as baseline R&M

Minimum 4,000 tac cycles between engine hot-section overhauls.

Unrestricted throttle

INCREASED PERFORMANCE ENGINE (IPE)

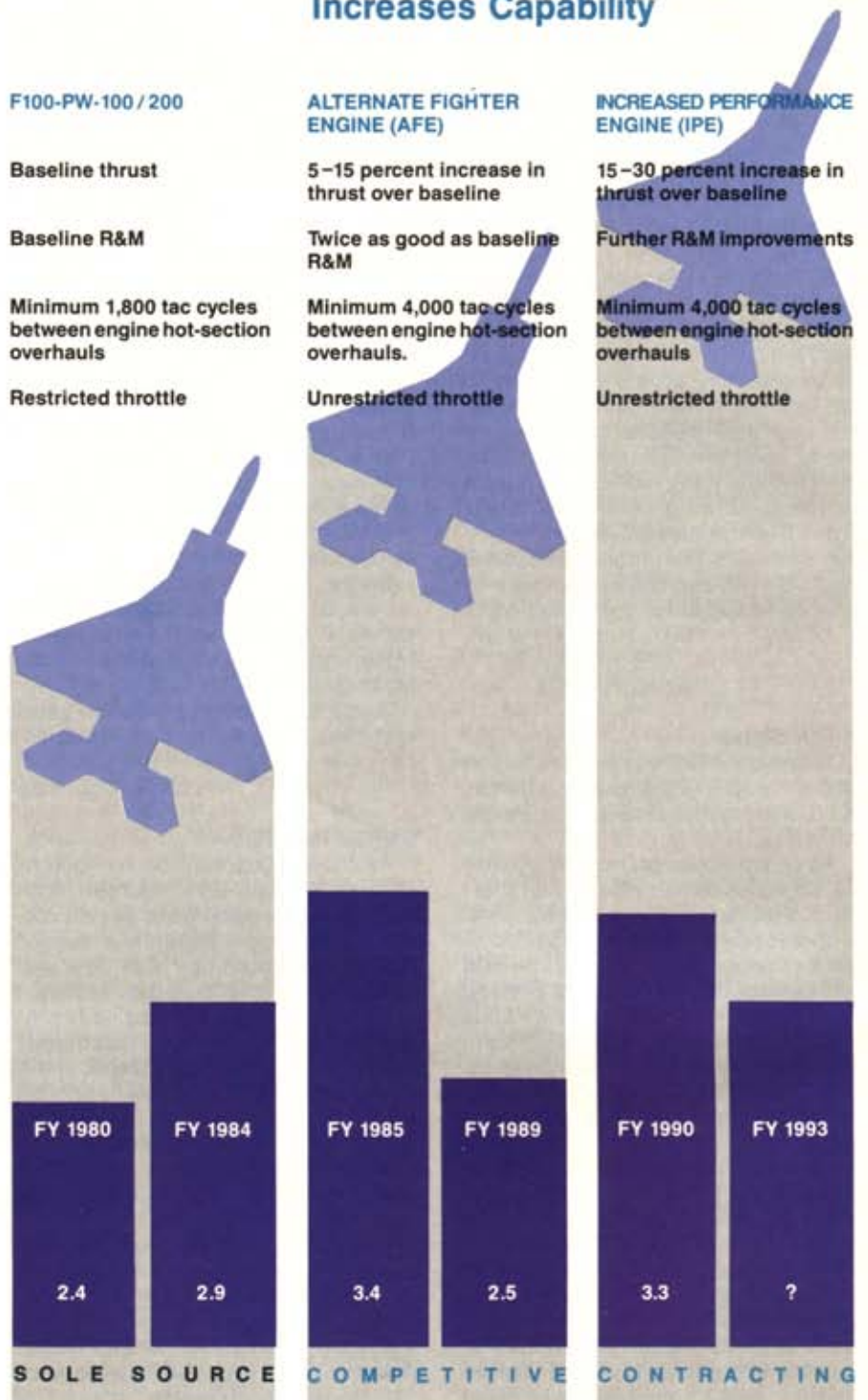
15-30 percent increase in thrust over baseline

Further R&M improvements

Minimum 4,000 tac cycles between engine hot-section overhauls

Unrestricted throttle

Average Unit Flyaway Cost
(in millions of 1988 dollars)



Source of Data: USAF Aeronautical Systems Division.