

SECRET

APPENDIX "J"

USAF EVALUATION OF THE CF-105 AIRCRAFT AND PS-13 ENGINE

1. The aircraft and engine programs are technically sound.

2. CF-105 vs F-102B

- (a) (1) The F-102B will be operationally available one and a half years earlier than the CF-105.
- (2) The CF-105 has a 61,400' combat altitude versus 55,400' for the F-102B. However, the F-102B can snap up Falcons to about 68,000' which appears adequate to meet any foreseeable manned bomber threat.
- (3) The CF-105 weight empty is twice that of the F-102B. Cost differentials can be expected to be comparable to weight differentials.

(b) In a sophisticated ground electronic environment and/or where crew survival presents no unusual problems, we prefer the F-102B for reasons of cost and timing.

(c) For operations off shore or in northern areas we prefer the CF-105 by a fair margin over the F-102B. This due to the CF-105 having twin engine reliability; having with its additional crew man, a better navigation and radar search capability; being better adapted to operations from marginal airfields in poor terminal weather due of its low approach speed of 130 knots vs 170 knots for the F-102B.

3. CF-105 vs F-101B

(a) The F-101B will become operational in May 1958. It will have a speed of M 1.5 and a combat altitude of 48,500' at its maximum radius of 322 NMs. It can snap up Falcons to about 62,000'.

(b) Canadian based CF-105's, although limited to 400 NMs radius of action and becoming operational at least a year later than the F-101B will, with their M 2.0 speed and their 61,400' combat altitude, be a valuable complement to our F-101B long range interceptor operations.

4. CF-105 vs LRIX 1

(a) The LRIX 1 will be operationally available about 3 years later than will the CF-105.

(b) The LRIX 1 will have about the same speed and altitude capabilities as the CF-105 and at a radius of 1000 NMs 400 NMs vs for the CF-105.

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