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Imagery analysis report

Chinese Y-10 Aircraft Development 1970 – 1980 (S)

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CHINESE Y-10 AIRCRAFT DEVELOPMENT, 1970 – 1980 (S)

INTRODUCTION

1. [redacted] An indigenously designed civil air transport aircraft, designated Y-10, has been built by the Chinese. Development of this medium range, 120-passenger, four-engine jet aircraft began in the early 1970s as an attempt by China to produce a large transport aircraft from the ground up. It may have originally been intended for series production but has subsequently evolved into a large-scale test bed for Chinese engineers in aircraft development and production techniques.[1] Prior to this time, the largest transport aircraft produced by China was the Soviet-designed AN-2 COLT. 25X1

STATUS

2. [redacted] On [redacted] a Y-10 was observed for the first time on satellite imagery at Shanghai/Dazhang Aircraft Repair Base [redacted] it has been on the parking apron outside a large new hangar at the aircraft repair base, occasionally in company with a Boeing 707 (Figure 1). This Y-10 aircraft (Figures 2 and 3) is apparently prototype number 2 [redacted] and will reportedly be used for taxi tests and eventually test flown. Prototype number 1 was reportedly used for structural and systems testing in 1978.[1] Apparently, only two prototype aircraft have been produced; the third (prototype number 3), which is probably the final aircraft, is still under construction at Shanghai/Dazhang Aircraft Repair Base.[1] 25X1 25X1 25X1

DISTINGUISHING FEATURES

3. (S/D) The Y-10 and Boeing 707 are quite similar in overall configuration; however, many external differences are especially noticeable when the two aircraft are seen in close proximity. The Y-10 is slightly smaller than the 707 (Table 1). The Y-10 wing is significantly different from that of the 707; the Y-10 has less wing-sweep, less overall wing area, and the trailing-edge plan form is more sharply angled than that of the 707. The cockpit/nose area is shaped differently from that of the 707 and should offer enhanced visibility (Figure 2).[1] [redacted] 25X1

[redacted] 25X1

(Figure 3). Both aircraft use the same powerplant—the Pratt & Whitney JT3D turbofan engine. These engines were originally purchased as spares for China's 707 fleet in 1972-73.[1]

[redacted]

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Table 1.
Comparison of Dimensions of Y-10 and Boeing 707

This table in its entirety is classified SECRET/WNINTEL

	Y-10	Boeing 707
	(meters, except where indicated)	
Wingspan	[redacted]	
Wing cord at root		
Wing cord at tip		
Length overall		
Length of fuselage		
Height overall		
Tailplane span		
Wing sweep		
Tail sweep		
Vertical stabilizer sweep		
Tail cord root		
Tail cord tip		
Nose to leading edge of wing		
Engine diameter		
Engine extension from leading edge of wing		

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*Dimension given in degrees.

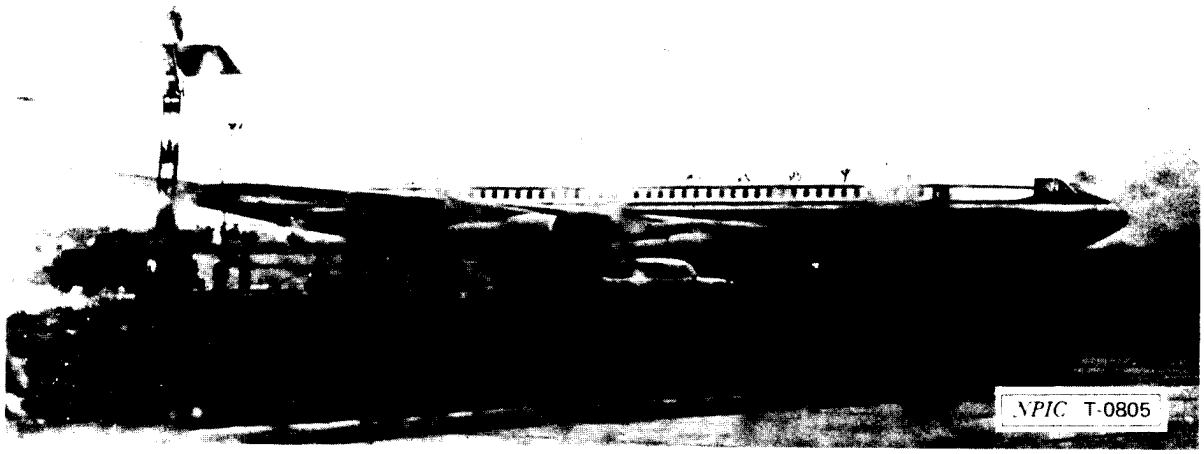

FIGURE 2. FULL SIDE VIEW, Y-10 PROTOTYPE NUMBER 2, SHANGHAI/DAZHANG AIRCRAFT REPAIR BASE

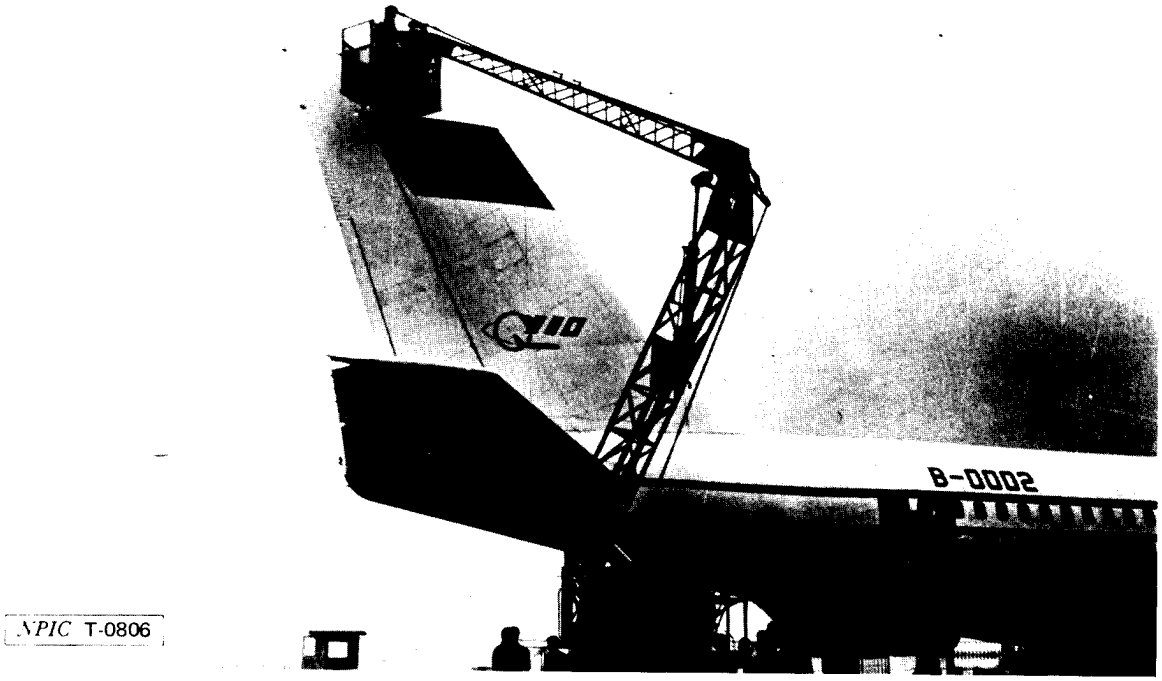

FIGURE 3. TAIL SECTION OF Y-10 PROTOTYPE NUMBER 2, SHANGHAI/DAZHANG AIRCRAFT REPAIR BASE

REFERENCES

IMAGERY

(S/D) All applicable satellite imagery aquired from [redacted] was used in the preparation of this report. 25X1

SMALL-FORMAT IMAGERY

USDAO. IR 6814-0114-80, *The YC-10*, 27 Jun 80 (CONFIDENTIAL [redacted] 25X1

DOCUMENTS

1. DIA. IR 6-842-0293-80, *Y-10, The Real Skinny (U)*, 8 Jun 80 (CONFIDENTIAL [redacted] 25X1
[redacted] 25X1

(S) Comments and queries regarding this report are welcome. They may be directed to [redacted] 25X1
Asian Forces Division, Imagery Exploitation Group, NPIC, [redacted] 25X1

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