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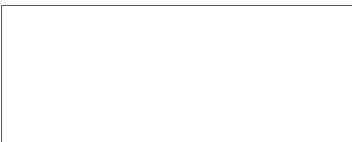
**Top Secret**

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**Imagery analysis report**

# **First Observation of the Yugoslavian G-4 Super GALEB (S)**

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### FIRST OBSERVATION OF THE YUGOSLAVIAN G-4 SUPER GALEB (S)

1. (TSR) The first observation of the new Yugoslavian G-4 Super GALEB aircraft (Figure 1), the eventual successor to the G-2A GALEB trainer, was made on [redacted] imagery of Batajnica Airfield [redacted]. This airfield, which supports a Yugoslav Air Force (YAF) interceptor regiment, also functions as the test and flyaway field for Batajnica Aircraft Assembly Plant [redacted] and as the primary flight test center for the Yugoslavian aircraft industry. Other major aircraft which were flight tested at Batajnica Airfield were the SOKO ORAO (JUROM) multifunction fighter and the UTVA-75 basic flight trainer.<sup>1</sup> This report summarizes activity related to the G-4 Super GALEB program and provides a photograph of the G-4 Super GALEB (Figure 1), a conceptual drawing (Figure 2), and a table of measurements.

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2. [redacted] The G-4 Super GALEB observed at Batajnica (Figure 1) is a twin-seat trainer which exhibits characteristics of both the G-2A GALEB and the SOKO ORAO (JUROM). Figure 2 is a conceptual drawing of this new aircraft. That the G-4 Super GALEB exhibits physical similarities to both the G-2A GALEB and the SOKO ORAO (JUROM) is not surprising, since it was reportedly designed to perform at least one of the functions of each aircraft.<sup>2</sup> As an intermediate flight trainer, the G-4 Super GALEB will eventually replace the G-2A GALEB in the YAF inventory;<sup>2</sup> thus, the G-4 Super GALEB (Figure 2) retains the basic GALEB fuselage design, the low-mounted wing, the tandem-seat cockpit, and a narrow dorsal spine. As an advanced flight trainer and weapons training platform, the G-4 GALEB will be used in concert with the two-seat ORAO (JUROM) trainer<sup>2</sup> and therefore must have some capabilities similar to those of the ORAO. Thus the G-4 Super GALEB features a swept-wing, a redesigned (swept) horizontal stabilizer, an aft-canted vertical stabilizer, and, reportedly,<sup>3</sup> the Rolls-Royce Viper 632-41 engine used in the ORAO.<sup>2</sup> The G-4 Super GALEB also is reportedly fitted with two underwing weapons pylons, as well as a pylon under the fuselage.<sup>3</sup> The table below provides measurements for the G-4 Super GALEB\* as well as comparative figures for the G-2A GALEB and the SOKO ORAO (JUROM).

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	G-4 Super GALEB	G-2A GALEB	SOKO ORAO (JUROM)
Length overall	[redacted]	[redacted]	[redacted]
Wingspan			
Fuselage diameter			
Nose-to-wing leading edge			
Wing root chord			
Wing tip chord			
Horizontal stabilizer span			
Wing leading edge sweep angle			

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3. [redacted] The initial design phase of the G-4 Super GALEB probably began in the mid-1970s at Zarkovo Air Research Institute [redacted], near Belgrade. Flight testing reportedly began in September 1978,<sup>4</sup> and during 1980 the two flight-test prototypes were trans-

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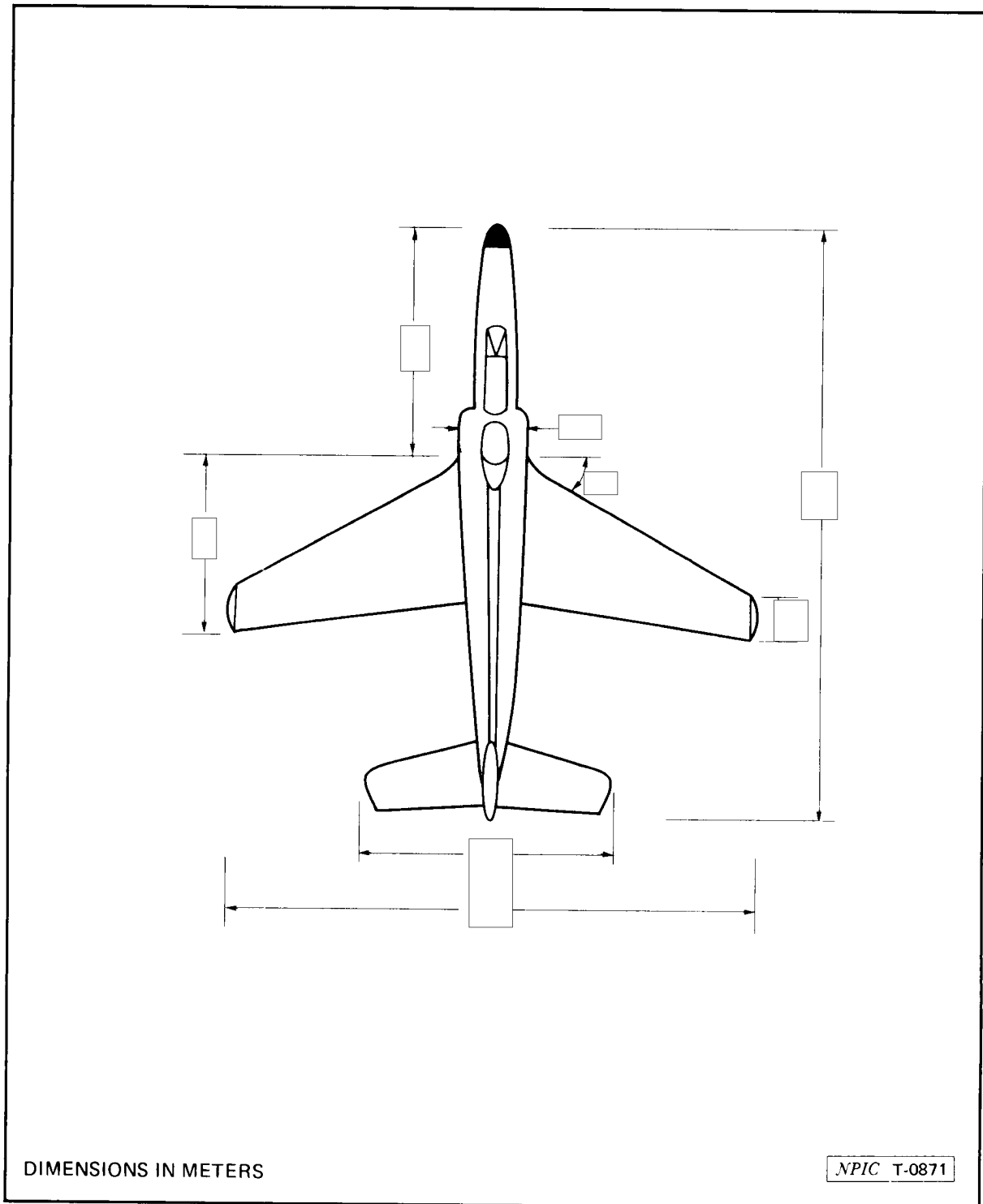
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**FIGURE 2. CONCEPTUAL DRAWING, G-4 SUPER GALEB AIRCRAFT**

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ferred from Mostar Airframe Plant SOKO [redacted] to Batajnica for final preseries production tests.<sup>3,5</sup> Three additional G-4 Super GALEB fuselages, probably preseries aircraft, were reportedly observed on the assembly line at Mostar on [redacted]. One additional G-4 Super GALEB, with the entire aft fuselage section removed, was observed at Batajnica Airfield on [redacted].

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**REFERENCES**

**IMAGERY**

(S/D) Satellite imagery of [redacted] was used in the preparation of this report.

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**MAPS OR CHARTS**

US Air Target Chart. Series 200, Sheet 0251-16, scale 1:200,000

**DOCUMENTS**

1. NPIC. [redacted] IAR-0014/80, *Batajnica Aircraft Assembly Plant, Yugoslavia (S)*, Mar 80 (TOP SECRET [redacted])
2. DOD. IIR 1 521 0698 80, *ORAO/IAR-93 Development (U)*, 31 Oct 80 (SECRET [redacted])
3. DOD. IIR 1 521 0700 80, *Data on SUPER GALEB/GALEB 4 (U)*, 30 Oct 80 (SECRET [redacted])
4. DIA. [redacted] DDB-1923-2-80-SAO, *Foreign Aircraft Production (FOAP) Communist World (U)*, Jun 80 (TOP SECRET [redacted])
5. DOD. IIR 6 904 0140 80, *Yugoslav Aircraft Production*, 24 Jul 80 (CONFIDENTIAL)

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\*Extracted material is classified TOP SECRET [redacted]

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\*\*Extracted material is classified TOP SECRET [redacted]

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

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