

~~CONFIDENTIAL~~

APPENDIX "D"

FLYING WING TYPE AIRCRAFT

1. AERONAUTICAL ENGINEERS in several countries have been engaged for some time in the design, construction, and flight of flying wing type aircraft. The study of flying objects requires, at least, a brief examination of proposed and existing unconventional aircraft whose configurations, when seen by the uninitiated, could lead to reports of strange flying devices. A description of some of the more significant types by country follows.

2. GERMANY. At the end of World War II, German aircraft designers had numerous projects under way concerning tailless aircraft which conceivably could be mistaken for "Flying Saucers" or disc-like objects. It is not clear just what the Soviets are doing in the way of developing these projects but it is considered that German studies on tailless, delta-wing, and related configurations are available to the U.S.S.R.

a. ARADO NIGHT AND BAD WEATHER FIGHTER, PROJECT 1. This is a tailless, low-wing monoplane with swept-back wing of large root chord and having a long, narrow fuselage.

Span	60.3 feet
Length	42.5 feet
Power Plant	2 HeS O11 turbo jet units
Max. Speed (sea level)	441 mph
Max. Speed (28,500 feet)	503 mph

b. ARADO E 581-4. A high-wing tailless single-seater with a single jet unit mounted in the fuselage. Fin and rudder units are mounted on the wing midway between fuselage and wing tip at the trailing edge.

Span	29.3 feet
Length	18.4 feet
Power Plant	1 HeS O11 turbo jet unit
Max. Speed (sea level)	--
Max. Speed (service ceiling)	--

c. GOTHA P 60 A. This was the first of the P 60 series of jet fighters. It is a flying wing type and, since the pilot and observer lie prone, there is no projecting canopy, thus permitting a particularly clean design. The jet units are mounted at the rear of the center section, one above and one below.

Span	40 feet 8 1/2 in.
Wing Area	504 square feet
Power Plant	2 BMW 003 turbo jet units
Max. Speed (23,000 feet)	586 miles per hour

d. HEINKEL P 1080. This is a single-seat fighter with a sharply swept-back wing, resembling a flying wing type, but having a single fin and rudder with no tail plane.

Span	29.2 feet
Wing Area	219 square feet
No performance estimates are available.	

e. JUNKERS EF 130. Of the flying wing type, this project was established as a long-range, high-speed jet bomber.

Span	78.8 feet
Wing Area	1290 square feet
Power Plant	4 HeS O11 turbo jet units
Max. Speed	620 miles per hour
Range	3700 miles

~~CONFIDENTIAL~~