

~~SECRET~~

4

Intelligence Requirements on Flying-Saucer Type Aircraft

Hq, USAF - AFOIR

30 OCT 1947
Lt Col Garrett/mcb/4544

CSGID
Attn: Plans and
Collection Branch

1. It is requested that a Collection Memorandum, similar to the attached draft, be issued to the addressees indicated thereon. This is in accordance with conversation between Lt. Colonel Smith and Lt. Colonel Garrett.
2. It will be appreciated if, at the time this Memorandum is reproduced, ten (10) additional copies could be run off and sent to the Directorate of Intelligence, Air Intelligence Requirements Division, Collection Branch, for file purposes.

FOR THE SECRETARY OF THE AIR FORCE:

2 Incls.

1. Intelligence Requirements
2. Draft of Collection Memorandum

GEO. F. SCHULGEN
Brigadier General, U.S.A.F.
Chief, Air Intelligence Requirements Div.
Office of Ass't. Chief of Air Staff-2

AAF
30 OCT 1947
AAG - MAIL BRANCH

PRM 11681

DECLASSIFIED
E.O. 11758, Sec. 1.3
DATE 76 0168
BY 0612 MARS, Date 1/97

3500
Intelligence

OFFICE SYMBOL	1. AFOIR-CO	2. AFOIR	3.	4.	5.
NAME AND GRADE OF ADDRESSEE	Col Taylor 3rd	Geo. F. Schulgen			
	Lt Col Garrett	Brig. Gen., USAF			

~~SECRET~~

INCLOSURE NO. 1

1. Research and Development

- 7091 - Peoples* *X201-1000*
- a. What German scientists had a better-than-average knowledge of the Horten brothers' work and perspective thinking; where are these scientists now located, and what is their present activity? Should be contacted and interrogated.
 - b. What Russian factories are building the Horten VIII design?
 - c. Why are the Russians building 1,800 of the Horten VIII design?
 - d. What is their contemplated tactical purpose?
 - e. What is the present activity of the Horten brothers, Walter and Riemar?
 - f. What is known of the whereabouts of the entire Horten family, particularly the sister? All should be contacted and interrogated regarding any contemplated plans or perspective thinking of the Horten brothers, and any interest shown by the Russians to develop their aircraft.
 - g. Are any efforts being made to develop the Horten "Parabola" or modify this configuration to approximate an oval or disc?
 - h. What is the Horten perspective thinking on internal controls or controls that are effective mainly by streams of air or gas originating from within the aircraft to supplant conventional external surface controls?

2. Control

For any aircraft whose shape approximates that of an oval, disc, or saucer, information regarding the following items is requested:

- a. Boundary layer control method by suction, blowing, or a combination of both.
- b. Special controls for effective maneuverability at very slow speeds or extremely high altitudes.
- c. Openings either in the leading edge top and bottom surfaces that are employed chiefly to accomplish boundary layer control or for the purpose of reducing the induced drag. Any openings in the leading edge should be reported and described as to shape, size, etc. This investigation is significant to justify a disc shape configuration for long-range application.

DECLASSIFIED

E O 1286, Sec. 3.3

NA 76 0169

31 REZ MAR 2007 197

~~SECRET~~

~~SECRET~~

- d. Approximate airfoil shape in the center and near the tips.
- e. Front view and rear view shape.

3. Items of Construction

- a. Type of material, whether metal, ferrous, non-ferrous, or non-metallic.
- b. Composite or sandwich construction utilizing various combinations of metals, plastics, and perhaps balsa wood.
- c. Unusual fabrication methods to achieve extreme light weight and structural stability particularly in connection with great capacity for fuel storage.

4. Items of Arrangement

- a. Special provisions such as retractable domes to provide unusual observation for the pilot or crew members.
- b. Crew number and accommodation facilities.
- c. Pressurized cabin equipment.
- d. High altitude or high speed escapement methods.
- e. Methods of pressurization or supercharging from auxillary units or from the prime power plant.
- f. Provisions for towing - especially with short fixed bar, and for re-fueling in flight.
- g. Provisions for assisted take off application.
- h. Bomb bay provisions, such as dimensions, approximate location, and unusual features regarding the opening and closing of the doors.

5. Landing Gear

- a. Indicate type of landing gear - whether conventional, tricycle, multiple wheel, etc.
- b. Retractable, and jettison features for hand gear.
- c. Provisions for takeoff from ice, snow, or water.
- d. Skid arrangements for either takeoff or landing.

~~SECRET~~

6. Power Plant

- a. Information is needed regarding the propulsion system used in the aircraft. Possible types of engines that could be employed include:
 - (1) Reciprocating (piston type) engine or gas turbine. Either or both of these could be used to drive propellers of conventional or special design, rotating vanes, ducted fans, or compressors.
 - (2) Jet propulsion engines including turbo jets, rockets, ramjets, pulse jets, or a combination of all four.
 - (3) Nuclear propulsion (atomic energy). Atomic energy engines would probably be unlike any familiar type of engine, although atomic energy might be employed in combination with any of the above types.

Aircraft would be characterized by lack of fuel systems and fuel storage place.

- b. The power plant would likely be an integral part of the aircraft and could possibly not be distinguished as an item separate from the aircraft. If jet propulsion is used, large air handling capacity, characterized by a large air inlet and large exhaust nozzle, should be evident. The size of entrance and exit areas would be of interest. It is possible that the propulsive jet is governed or influenced for control of the aircraft. The presence of vanes or control surfaces in the exhaust or methods of changing the direction of the jet should be observed.

- c. Information desired on the propulsion systems pertains to the following items:
 - (1) Type of power plant or power plants.
 - (2) General description.
 - (3) Rating (thrust, horsepower, or air flow).
 - (4) Type of fuel.
 - (5) Catalytic agents for super-performance or normal cruising power.

~~SECRET~~

DRAFT OF COLLECTION MEMORANDUM

OBJECT

1. This Memo sets forth the current intelligence requirements in the field of Flying Saucer type aircraft.

GENERAL

1. An alleged "Flying Saucer" type aircraft or object in flight, approximating the shape of a disc, has been reported by many observers from widely scattered places, such as the United States, Alaska, Canada, Hungary, the Island of Guam, and Japan. This object has been reported by many competent observers, including USAF rated officers. Sightings have been made from the ground as well as from the air.

2. Commonly reported features that are very significant and which may aid in the investigation are as follows:

- a. Relatively flat bottom with extreme light-reflecting ability.
- b. Absence of sound except for an occasional roar when operating under super performance conditions.
- c. Extreme maneuverability and apparent ability to almost hover.
- d. A plan form approximating that of an oval or disc with a dome shape on the top surface.
- e. The absence of an exhaust trail except in a few instances when it was reported to have a bluish color, like a Diesel exhaust, which persisted for approximately one hour. Other reports indicated a brownish smoke trail that could be the results of a special catalyst or chemical agent for extra power.
- f. The ability to quickly disappear by high speed or by complete disintegration.
- g. The ability to suddenly appear without warning as if from an extremely high altitude.
- h. The size most reported approximated that of a C-54 or Constellation type aircraft.
- i. The ability to group together very quickly in a tight formation when more than one aircraft are together.
- j. Evasive action ability indicates possibility of being manually operated, or possibly by electronic or remote control devices.
- k. Under certain power conditions, the craft seems to have the ability to cut a clear path through clouds -- width of path estimated to be approximately one-half mile. Only one incident indicated this phenomenon.

DECLASSIFIED

7 0 12344, 240, 23

DECLASSIFIED

100 100 23 16015

By *Rich* MARK, Date 1/4/7

~~SECRET~~

~~SECRET~~

3. The first sightings in the U.S. were reported around the middle of May. The last reported sighting took place in Toronto, Canada, 14 September. The greatest activity in the U.S. was during the last week of June and the first week of July.

4. This strange object, or phenomenon, may be considered, in view of certain observations, as long-range aircraft capable of a high rate of climb, high cruising speed (possibly sub-sonic at all times) and highly maneuverable and capable of being flown in very tight formation. For the purpose of analysis and evaluation of the so-called "flying saucer" phenomenon, the object sighted is being assumed to be a manned aircraft, of Russian origin, and based on the perspective thinking and actual accomplishments of the Germans.

5. There is also a possibility that the Horten brothers' perspective thinking may have inspired this type of aircraft - particularly the "Parabola", which has a crescent plan form. Records show that only a glider version was built of this type aircraft. It is reported to have been built in Heiligenberg, Germany, but was destroyed by fire before having ever been flown. The Horten brothers' latest trend of perspective thinking was definitely toward aircraft configurations of low aspect ratio. The younger brother, Riemar, stated that the "Parabola" configuration would have the least induced drag - which is a very significant statement. The theory supporting this statement should be obtained if possible.

6. The German High Command indicated a definite interest in the Horten type of flying wing and were about to embark on a rigorous campaign to develop such aircraft toward the end of the war. A Horten design, known as the IX, which was designated as the Go-8229 and Go-P-60 (night fighter) was to be manufactured by the Gotha Plant. It is reported that a contract for fifty such aircraft was planned, but only three or four were built. This plant is now in the hands of the Russians. A recent report indicates that the Russians are now planning to build a fleet of 1,800 Horten VIII (six engine pusher) type flying wing aircraft. The wing span is 131 feet. The sweepback angle is 30 degrees. The Russian version is reported to be jet propelled.

REQUIREMENTS

1. Requirements appear at Inclosure No. 1.

SPECIAL INSTRUCTIONS

Control No. A-1917

DISTRIBUTION

1. To MA's England, France, Sweden, Finland, USSR, Turkey, Greece, Iran, China, Norway, Philippines, and to Commander-in-Chief, Far East, and Commanding General, United States Air Forces in Europe, through Commanding General, EUCOM.

~~SECRET~~

By W.G. Lewis

MARS, Date

Jan 29, 1985

DEPARTMENT OF THE AIR FORCE

~~SECRET~~

AIR-CC/Lt Col Garrett, 28 Oct 47

Intelligence Requirements on Flying Saucer Type Aircraft

X452.1/Misc

X0009
Phumena

30 OCT 1947

Hq, USAF - AFQIR

Lt. Col. Garrett/280/4544

1: Plans and Section Branch

1. It is requested that a Collection Memorandum, similar to the attached, be issued to the addresses indicated thereon. This is in accordance with a conversation between Lt. Colonel Smith and Lt. Colonel Garrett.
2. It will be appreciated if, at the time this Memorandum is reproduced, (10) additional copies could be run off and sent to the Directorate of Intelligence, Air Intelligence Requirements Division, Collection Branch, for its purposes.

FOR THE SECRETARY OF THE AIR FORCE:

- Incls.
1. Intelligence Requirements
 2. Draft of Collection Memorandum

GEN. F. SCHULGEN
 Brigadier General, U.S.A.F.
 Chief, Air Intelligence Requirements Div.
 Office of Asst. Chief of Staff-C

U AAF
 30 OCT 1947
 AIR-MAIL BRANCH

PRM 11581

THIS IS THE
 FAKE SCHULGEN
 MEMO.
 Wendy

SYMBOL	AF AIR-CC			
--------	-----------	--	--	--

~~SECRET~~

DRAFT INCLOSURE NO. 1

1. Research and Development

- a. What German scientists had a better-than-average knowledge of the Horten brothers' work and perspective thinking; where are these scientists now located, and what is their present activity? These should be contacted and interrogated.
- b. What is the present activity of the Horten brothers, Walter and Riemar?
- c. What is known of the whereabouts of the entire Horten family, particularly the sister? All should be contacted and interrogated regarding any contemplated plans or perspective thinking of the Horten brothers, and any interest shown by the Russians to develop their aircraft.
- d. Are any efforts being made to develop the Horten "Parabola" or modify this configuration to approximate an oval or disc?
- e. What is the Horten perspective thinking on internal controls or controls that are effective mainly by streams of air or gas originating from within the aircraft to supplant conventional external surface controls?

2. Control

For any aircraft whose shape approximates that of an oval, disc, or saucer, information regarding the following items is requested:

- a. Boundary layer control method by suction, blowing, or a combination of both.
- b. Special controls for effective maneuverability at very slow speeds or extremely high altitudes.
- c. Openings in either the leading edge top and bottom surfaces that are employed chiefly to accomplish boundary layer control or for the purpose of reducing the induced drag. Any openings in the leading edge should be reported and described as to shape, size, etc. This investigation is significant to justify a disc shape configuration for long-range application.
- d. Approximate airfoil shape in the center and near the tips.
- e. Front view and rear view shape.

3. Items of Construction

- a. Type of material, whether metal, ferrous, non-ferrous, or non-metallic.
- b. Composite or sandwich construction utilizing various combinations of metals, metallic foils, plastics, and perhaps balsa wood or similar material.
- c. Unusual fabrication methods to achieve extreme light weight and structural stability.

~~SECRET~~

~~SECRET~~

4. Items of Arrangement

- a. Special provisions such as retractable domes to provide unusual observation for the pilot or crew members.
- b. Crew number and accomodation facilities.
- c. Pressurized cabin equipment.
- d. High altitude or high speed escapement methods.
- e. Methods of pressurization or supercharging from auxillary units or from the prime power plant.
- f. Provisions for towing - especially with short fixed bar, and for re-fueling in flight.
- g. Provisions for assisted take off application.
- h. Unusual features or provisions regarding the opening and closing of the doors.
- i. Bomb bay provisions, such as dimensions and approximate location.

5. Landing Gear

- a. Indicate type of landing gear - whether conventional, tricycle, multiple wheel, etc., or of an unconventional type such as tripod or skid.
- b. Retractable, and jettison features for hand gear.
- c. Provisions for takeoff from ice, snow, sand or water.

6. Power Plant

- a. Information is needed regarding the propulsion system used in the aircraft. Possible types of engines that could be employed include:
 - (1) Reciprocating (piston type) engine or gas turbine. Either or both of these could be used to drive propellers of conventional or special design, rotating vanes, ducted fans, or compressors.
 - (2) Jet propulsion engines including turbo jets, rockets, ramjets, pulse jets, or a combination of all four.
 - (3) Nuclear propulsion (atomic energy). Atomic energy engines would probably be unlike any familiar type of engine, although atomic energy might be employed in combination with any of the above types.

Aircraft would be characterized by lack of fuel systems and fuel storage space.

The presence of an unconventional or unusual type of propulsion system cannot be ruled out and should be considered of great interest.

~~SECRET~~

~~SECRET~~

- b. The power plant would likely be an integral part of the aircraft and could possibly not be distinguished as an item separate from the aircraft. If jet propulsion is used, large air handling capacity, characterized by a large air inlet and large exhaust nozzle, should be evident. The size of entrance and exit areas would be of interest. It is possible that the propulsive jet is governed or influenced for control of the aircraft. The presence of vanes or control surfaces in the exhaust or methods of changing the direction of the jet should be observed.
- c. Information desired on the propulsion systems pertains to the following items:
- (1) Type of power plant or power plants.
 - (2) General description.
 - (3) Rating (thrust, horsepower, or air flow).
 - (4) Type of fuel, or, conversely, lack of visible fuel supply.
 - (5) Catalytic agents for super-performance or normal cruising power.

~~SECRET~~

~~SECRET~~

DRAFT OF COLLECTION MEMORANDUM

OBJECT

1. This Memo sets forth the current intelligence requirements in the field of Flying Saucer type aircraft.

GENERAL

1. An alleged "Flying Saucer" type aircraft or object in flight, approximating the shape of a disc, has been reported by many observers from widely scattered places, such as the United States, Alaska, Canada, Hungary, the Island of Guam, and Japan. This object has been reported by many competent observers, including USAF rated officers. Sightings have been made from the ground as well as from the air.

2. Commonly reported features that are very significant and which may aid in the investigation are as follows:

- a. Relatively flat bottom with extreme light-reflecting ability.
- b. Absence of sound except for an occasional roar when operating under super performance conditions.
- c. Extreme maneuverability and apparent ability to almost hover.
- d. A plan form approximating that of an oval or disc with a dome shape on the top surface.
- e. The absence of an exhaust trail except in a few instances when it was reported to have a bluish color, like a Diesel exhaust, which persisted for approximately one hour. Other reports indicated a brownish smoke trail that could be the results of a special catalyst or chemical agent for extra power.
- f. The ability to quickly disappear by high speed or by complete disintegration.
- g. The ability to suddenly appear without warning as if from an extremely high altitude.
- h. The size most reported approximated that of a C-54 or Constellation type aircraft.
- i. The ability to group together very quickly in a tight formation when more than one aircraft are together.
- j. Evasive action ability indicates possibility of being manually operated, or possibly by electronic or remote control devices.
- k. Under certain power conditions, the craft seems to have the ability to cut a clear path through clouds -- width of path estimated to be approximately one-half mile. Only one incident indicated this phenomenon.

~~SECRET~~

~~SECRET~~

3. The first sightings in the U.S. were reported around the middle of May. The last reported sightings took place in Toronto, Canada, 14 September. The greatest activity in the U.S. was during the last week of June and the first week of July.

4. This strange object, or phenomenon, may be considered, in view of certain observations, as long-range aircraft capable of a high rate of climb, high cruising speed and highly maneuverable and capable of being flown in very tight formation. For the purpose of analysis and evaluation of these so-called "flying saucers", the object sighted is being assumed to be a manned craft of unknown origin. While there remains the possibility of Russian manufacture, based on the perspective thinking and actual accomplishments of the Germans, it is the considered opinion of some elements that the object may in fact represent an interplanetary craft of some kind.

5. There is also a possibility that the Horton brothers' perspective thinking may have inspired this type of aircraft - particularly the "Parabola", which has a crescent plan form. Records show only that a glider version was built of this type aircraft. It is reported to have been built in Heiligenberg, Germany, but was destroyed by fire before having ever been flown. The Horton brothers' latent trend of perspective thinking was definitely toward aircraft configurations of low aspect ratio. The younger brother, Riemar, stated that the "Parabola" configuration would have the least induced drag - which is a very significant statement. The theory supporting this statement should be obtained if possible.

6. The German High Command indicated a definite interest in the Horton type of flying wing and were about to embark on a rigorous campaign to develop such aircraft during the end of the war. A Horton design, known as the IX, which was designated as the Co-8-229 and Co-P-60 (night fighter) was to be manufactured by the Gotha Plant. It is reported that a contract for fifty such aircraft was planned, but only three or four were built. This plant is now in the hands of the Russians.

REQUIREMENTS

1. Requirements appear at Incomuro No. 1.

SPECIAL INSTRUCTIONS

Control No. A-1917

DISTRIBUTION

1. To MA's England, France, Sweden, Finland, USSR, Turkey, Greece, Iran, China, Norway, Philippines, and to Commander-in-Chief, Far East, and Commanding General, United States Air Forces in Europe, through Commanding General, EUCOM.

~~SECRET~~