25X1

Approved For Release 2009/07/27 : CIA-RDP80T00246A001600090001-4

C-O-N-F-I-D-E-N-T-I-A-L | SEE BOTTOM OF PAGE FOR SPECIAL CONTROLS, IF ANY

INFORMATION REPORT

PREPARED AND DISSEMINATED BY
CENTRAL INTELLIGENCE AGENCY

COUNTRY: Hungary	[redacted] 25X1
SUBJECT: MIG-17/Physical Characteristics	DATE DISTRIBUTED: 20 June 1957
	NO. OF PAGES: 4 / NO. OF ENCLS.:
	SUPPLEMENT TO REPORT #: [redacted] 25X1

[redacted]

THIS IS UNEVALUATED INFORMATION

[redacted] 25X1

[redacted] a sketch of the MIG-17 (front, side and top views) showing the following points: [redacted] 25X1

Physical Characteristics 25X1

A. Wings:

Pt #11: Wing. The wings are mid-mounted to the fuselage and are of all-metal construction. Flush type riveting is used throughout and from wing tip to wing tip the span is 10 meters 11cm. When viewing the aircraft from the front, the wings appear to droop. The wings are sharply swept on the leading and trailing edges with tips that are curved on the front side and straight at the rear. The wing is one meter wide and 15-16cm thick at the base, next to the fuselage, and about two feet wide at the tip. 25X1

Pt #12: Pitot Tube. A pitot tube is located in the leading edge of the right wing half-way between the fuselage and the wing tip. The tube is about 70cm long. [redacted] 25X1

Pt #13: Aileron Trim Tab. Both the right and left ailerons have trim tabs which are made of metal and are 20-25cm long and five to six cm wide.

Pt #14: Ailerons. The ailerons are similar to those of the MIG-15. Mechanics moved the aircraft by pushing on the wing tips.

Pt #18: Flaps. Flaps are the thin, plain type and are 1.80 meters to two meters long and 30cm wide.

B. Fuselage:

Pt #1: Canopy. It is made of clear plastic and is thick enough to be bullet proof. The rear portion of the canopy is opened by

C-O-N-F-I-D-E-N-T-I-A-L

DISTRIBUTION	STATE	ARMY	NAVY	AIR

25X1

sliding it back on tracks. The entire cockpit area is pressurized by the use of rubber sealing tubes mounted on the non-moveable canopy section and the tracks of the rear canopy section. To pressurize, the rear section is closed and locked in position. Air is forced into the rubber tubes by means of an air tank and motor-driven pump located in the fuselage section, which causes the tubes to expand, forming an air-tight seal.

Pt #7: Plastic Bump. It is located on the rear underside of the fuselage. The bump is approximately six inches in diameter. 25X1 it has some connection with the Lokator unit [sic].

25X1

Pt #17: Dive Flaps. The MIG-17 has dive flaps located on both the right and left rear sides of the fuselage. The flaps are 80-90cm long and 30-50cm wide and can be extended by the use of a telescoping rod. The flaps are wider where hinged and smaller at the rear.

Pt #28: Fuselage. 25X1 like a large fat cigar with an overall length of approximately 10 meters. The cockpit is located on the top front portion just ahead of the leading edge of the wings. The fuselage is all metal construction utilizing flush type riveting and in general has a clean smooth surface.

C. Empennage:

Pt #3: Vertical Stabilizer. The vertical stabilizer is slightly higher than the stabilizer of the MIG-15. It is sharply swept on the leading and trailing edges with the tip being rounded at the front side and straight on the rear. 25X1

Pt #4: Rudder Trim Tab. The rudder has a trim tab that is 20-25cm long and five to six cm wide. 25X1 it is below the horizontal stabilizer.

Pt #5. Rudder. The rudder is of all-metal construction and is approximately 70cm long and 30-40cm wide. The rudder does not extend to the fuselage line. Mechanics frequently push the aircraft from a point directly above the exhaust cone.

Pt #15: Elevator Trim Tabs. The left and right elevators have trim tabs made of metal and are 20-25cm long and five to six cm wide.

Pt #16: Elevator. It is about the same as the MIG-15 elevator.

Pt #20: Horizontal Stabilizer. The stabilizer is sharply swept on the leading and trailing edges with a rounded tip on the front curving to the rear. The leading edge is 10cm thick in the center and tapers off to two cm thickness on the trailing edge. The stabilizer is mounted about two-thirds of the way up on the vertical stabilizer and is of all-metal construction utilizing flush type riveting.

D. Landing Gear:

Pt #8: Nose Wheel Doors. The aircraft has double nose wheel doors of unknown size. The doors are operated by a mechanical linkage to the nose strut and when closed, form a tight fit at the center.

Pt #21: Main Strut. The MIG-17 has two main landing gears that are hydraulically operated and mounted under each wing. The landing gear retracts inboard toward the fuselage, and to take up landing shock, the oleo type strut is pumped up 20-30cm.

25X1

Pt #23: Nose Tire. the black rubber casing is 30cm in diameter and 10-12cm thick. 25X1

Pt #24: Nose Strut. The nose wheel strut is of off-set construction and retracts to the rear into the nose section. When extended it has a brace on the rear side that forms a scissor with an adapter to eliminate shimmy during take-off and landing.

Pt #25: Main Tire. The black rubber casing is 70-80cm in diameter and 12cm thick. 25X1

E. Engine Installation: 25X1

The aircraft is started by the use of a mobile 24 volt battery cart. 25X1

Pt #6: Exhaust Cone. The MIG-17 aircraft has an afterburner unit and the exhaust outlet is approximately 60-70cm in diameter. Pilots are continually cautioned against using the afterburner for extended periods as it would burn out the tail pipe.

Pt #19: Air Intake. The air intake for the MIG-17 is located beneath the Lokator unit [sic]. The inside diameter of the air intake is approximately two feet.

F. Armament:

Pt #9: Gun Package. The MIG-17 is equipped with a retractable gun package similar to the MIG-15. The tray is lowered on four steel cables six to eight mm in diameter by means of a hand crank. The 37mm cannon is mounted on the right side and the two 23mm cannons are mounted on the left side of the tray. The 37mm gun is called a Nuderman rapid fire cannon and is capable of firing 410 rounds per minute, but the ammunition cans are loaded with 40 rounds for a mission. The two 23mm guns are called Nuderman and Rikov rapid fire cannons and have a firing rate of 870 rounds per minute. These cannons are loaded with 80 rounds each for a mission. The 37mm and the 23mm cannons use three different types of projectiles: tracer, incendaries, and detonators. The detonators, have a slow burning powder that explode the shell at a given range. The most commonly used linking of shells consisted of one tracer, three detonators, and two incendaries. 25X1

gun stoppages, but when one occurs it is impossible to recharge the guns in flight. When mounted only the two 23mm cannons are adjustable for alignment to the gun sight. Upon return from a firing mission, it takes five to 10 minutes to reload the gun tray. On the front left side of the tray is a bump which is a housing for a reel to lower the entire package. 25X1

Pt #10: Lokator. 25X1

it has some connection to the gun sight The outer cover is made of a compressed composition material light brown in color.

Pt #22: Two 23mm cannons mounted in a retractable gun tray. Both cannons fire straight ahead and are loaded with 80 rounds each.

Pt #27: One 37mm cannon mounted on the right side of a retractable gun tray. This weapon fires straight ahead and is loaded with 40 rounds of ammunition.

Pt #29: Gun Sight. 25X1

note: a gun sight similar to the one shown in Fig #17, Section III, Tab-6 of the Air Intelligence Guide. 7

it worked in relation with the Lokator unit.

G. Communication:

Pt #2: Knife Antennas. The aircraft has normal radio communications described as four channel, crystal controlled. Channel #1 is for standard use, Channels #2 and 3 are changed at various times, and Channel #4 is used by both Hungarian and Soviet Air Forces and is never changed. The only visible antenna is a knife mast mounted on the right top side of the fuselage and to the rear of the canopy. The knife is 70cm high, four to five cm wide and constructed of a compressed material with a slight tilt to the rear.

H. Flying Safety: The MIG-17 is equipped with an ejection seat that is operated by firing a propellent charge. [redacted] 25X1
[redacted] a test ejection when the seat flew about 17 meters into the air. 25X1

[redacted] 25X1

- End -

25X1