

Mi-171A2



Mi-8/17 FAMILY TREE:

**Mi-8MT aka Mi-17 Upgraded Model of Mi-8T
with twin turboshaft engines TV3-117MT
(with air start) and APU AI-9V
First flight August 17, 1975**



**Mi-8P First passenger model
with twin turboshaft engines TV2-117V
(with electric start)
First flight August 2, 1962
In production since 1965**



**Mi-8T First model in bench production
Cargo helicopter with twin turboshaft
engines TV2-117V (with electric start)
In production since 1964**



**First Prototype Mi-8A (Project name V-8)
Single turboshaft engine AI-24V (with electric start)
First flight June 24, 1961**

Mi-8/17 FAMILY TREE:

Mi-171A1 model of Mi-171A for Brazilian operator
Type certificate № 132-171A
Data sheet issued April 05, 2005



Mi-171A Cargo-passenger version of Mi-171
Type certificate № 132-171A
issued June 03, 1997



Mi-171 Certified version of Mi-8AMT
Type certificate № 90-171
issued December 29, 1995

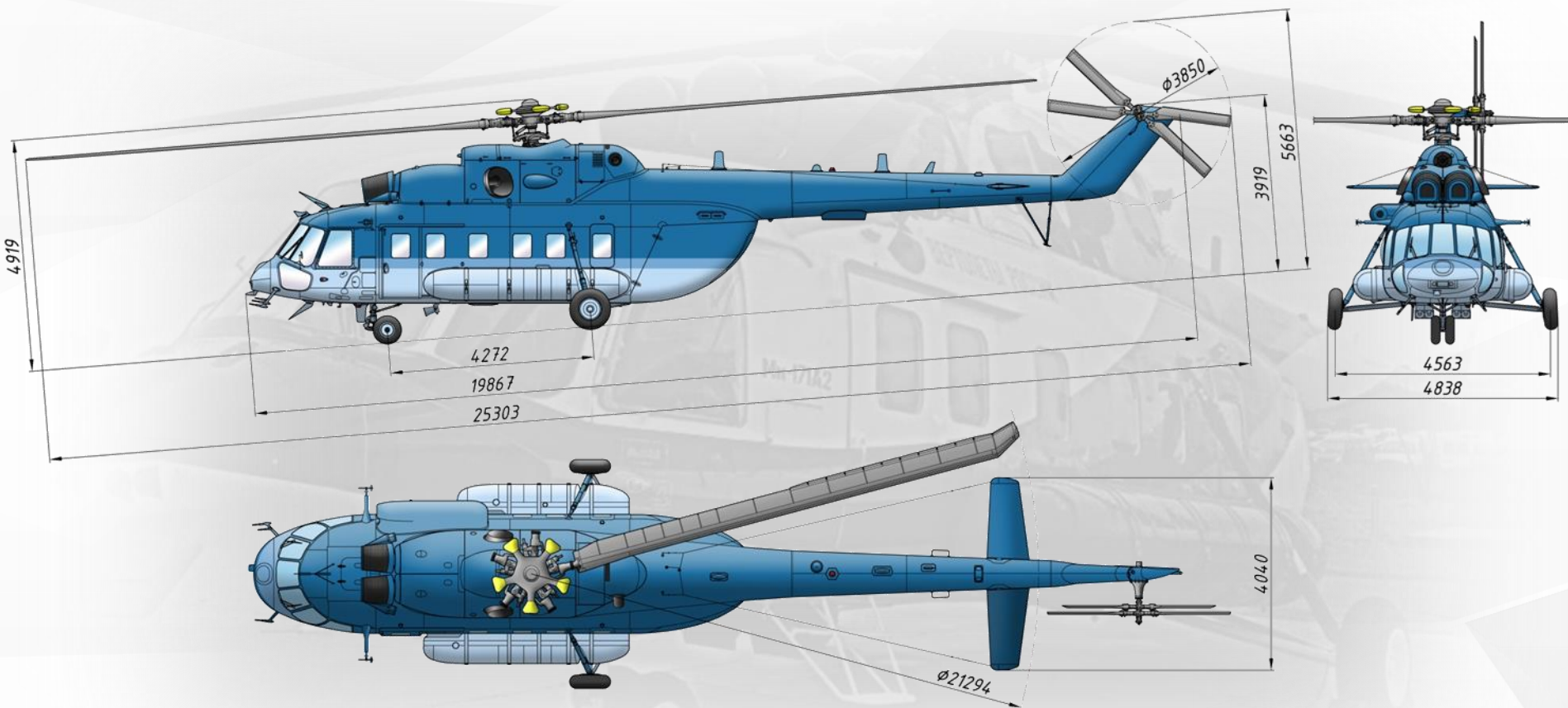


Mi-8AMT Modified Mi-8MT for Ulan-Ude Aviation plant, JSC
with twin altitude engine TV3-117VM(A) (with air start) and
APU AI-9V
In production since 1991

Mi-8/17 FAMILY TREE:



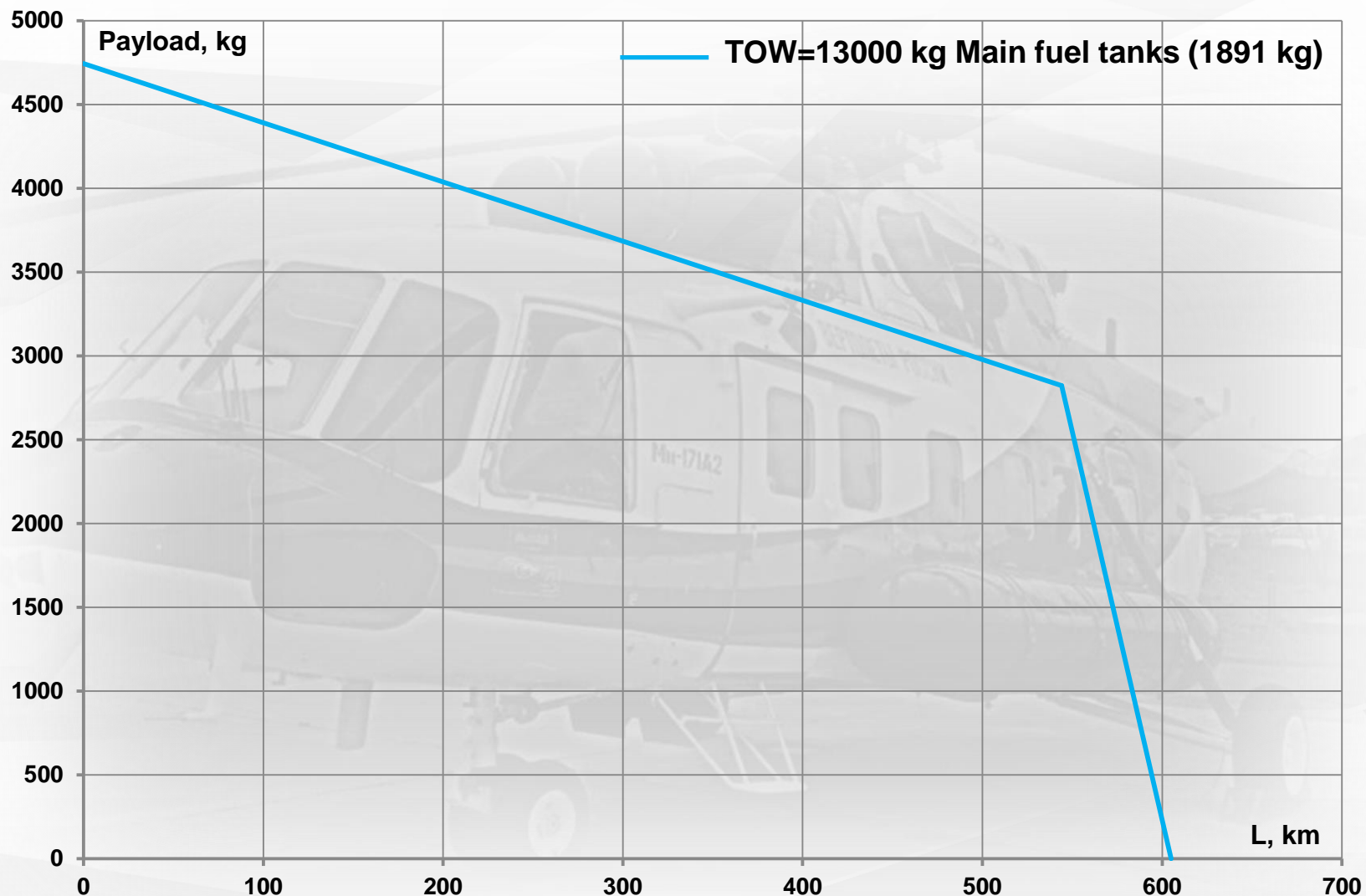
Mi-171A2 HELICOPTER GENERAL DIMENSIONS



Mi-171A2 FLIGHT PERFORMANCE

Characteristics	Value
Max. take off weight	13000 kg / 28660 lb
Max. take off weight with external load	13500 kg / 29762 lb
V _{NE}	280 km/h / 174 mph
Cruising speed	260 km/h / 161,6 mph
Service ceiling	6000 m / 19685 ft
Engine 2,5 min OEI power	2700 hp / 1986 kW
Engine take-off power	2000 hp / 1471 kW
Engine max continuous power	1700 hp / 1250 kW
Range with 2800 kg (4409 lb) payload	550 km / 297 nm
Max. internal load weight	4000 kg / 8818 lb
Max. external load weight	5000 kg / 11023 lb
Capacity (with one air steward)	17-23 passengers

Mi-171A2 HELICOPTER PAYLOAD/RANGE



Mi-171A2 Payload/Range Diagram

Mi-171A2 CARGO CABIN

- High-volume cargo cabin with wide cargo door-apparel
- Width slide door on starboard (w = 1,12m)
- Internal payload up to 4000 kg
- External payload up to 5000 kg



Mi-171A2 INTERNATIONAL COOPERATION



 **PBS** Velká Bíteš

 **B/E Aerospace Fischer**

 **AVIATEST**
LNK AEROSPACE

 **PALL** Pall Corporation

Mi-171A2 TECHNICAL FEATURES



Siemens PLM Software
SIEMENS



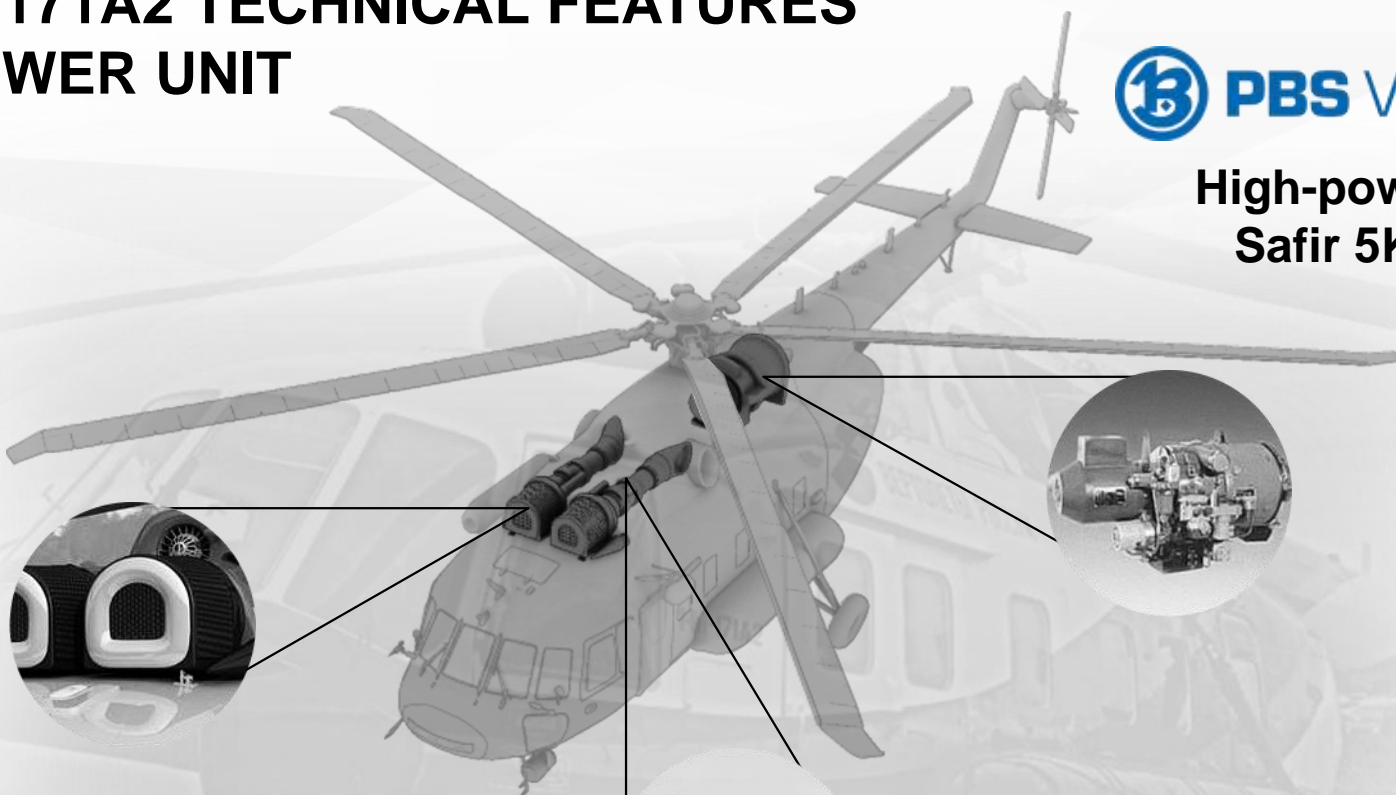
TEAMCENTER

Mi-171A2 TECHNICAL FEATURES

POWER UNIT

PBS Velká Bíteš

**High-power APU
Safir 5K/G Mi**



PALL Pall Corporation

**Engine inlets with dust
protection device ensure
up to 95% purification**

KLIMOV
UNITED ENGINE CORPORATION

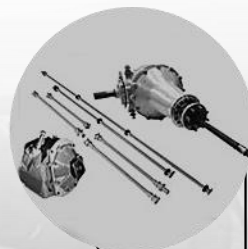
**New VK-2500PS-03 main
engines with FADEC
2,5 min OEI Power - 2700 bhp**

Mi-171A2 TECHNICAL FEATURES TRANSMISSION AND TAIL ROTOR



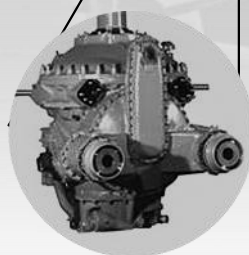
РЕДУКТОР-ПМ

**Modified Transmission
with less lube points
and longer flying life**



РЕДУКТОР-ПМ

**Main Gearbox with twin-
circles lube system**



ВПЕРЁД

**X-shape 4-blade higher
performance Tail Rotor**



Mi-171A2 TECHNICAL FEATURES

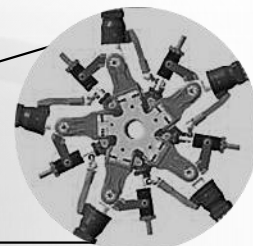
MAIN ROTOR



**Main Rotor Blade
Made of Composite
Materials**



**Modified Swash Plate
with less lube points
and longer flying life**



**Modified Hub with less
lube points and longer
flying life**

Mi-171A2 AVIONICS



The complex enables a 2-member crew to perform flights according to VFR and IFR at day and night in different geographical and climatic conditions. It includes control system for general helicopter equipment

The KBO-17 complex includes:

- piloting and navigation equipment suite
- information control suite
- radio communication equipment
- general helicopter equipment control
- emergency equipment
- backup instruments



Mi-171A2 REISSUED TYPE CERTIFICATE FOR THE MODEL



- Transport category rotorcraft
- Applicable regulation – АП-29 (harmonized with CS-29/FAR-29)
- Cargo variant/Passenger/Offshore
- Performance category A according to 29.1(c)

 РОССИЙСКАЯ ФЕДЕРАЦИЯ RUSSIAN FEDERATION МИНИСТЕРСТВО ТРАНСПОРТА РОССИЙСКОЙ ФЕДЕРАЦИИ MINISTRY OF TRANSPORT OF THE RUSSIAN FEDERATION ФЕДЕРАЛЬНОЕ АГЕНТСТВО ВОЗДУШНОГО ТРАНСПОРТА FEDERAL AIR TRANSPORT AGENCY	
СЕРТИФИКАТ ТИПА TYPE CERTIFICATE № FATA-42023R	
ИЗДЕЛИЕ ПРОДУКТ НАСТОЯЩИЙ СЕРТИФИКАТ ВЫДАН THIS CERTIFICATE ISSUED TO ГОСУДАРСТВО РАЗРАБОТЧИКА STATE OF DESIGN МОДЕЛИ MODELS	Вертолет Ми-171А Helicopter Mi-171A АО «Московский вертолетный завод им. М.Л. Миля» MI Moscow Helicopter Plant, SC Российская Федерация Russian Federation Ми-171А Ми-171А1 Ми-171А2
УДОСТОВЕРЯЕТ, ЧТО ТИПОВАЯ КОНСТРУКЦИЯ УКАЗАННОГО ИЗДЕЛИЯ СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ РАСПРОСТРАНЯЕМОГО НА НЕГО СЕРТИФИКАЦИОННОГО БАЗИСА CERTIFIES THAT THE ABOVE-MENTIONED PRODUCT TYPE DESIGN MEETS ITS CERTIFICATION BASIS REQUIREMENTS	
ОПИСАНИЕ ТИПОВОЙ КОНСТРУКЦИИ И СЕРТИФИКАЦИОННОГО БАЗИСА, ОСНОВНЫЕ ЭКСПЛУАТАЦИОННЫЕ ОГРАНИЧЕНИЯ И ХАРАКТЕРИСТИКИ ИЗДЕЛИЯ СОДЕРЖАТСЯ В КАРТЕ ДАННЫХ СЕРТИФИКАТА ТИПА № FATA-42023R, КОТОРАЯ ЯВЛЯЕТСЯ НЕОТЪЕМЛЕМОЙ ЧАСТЬЮ НАСТОЯЩЕГО СЕРТИФИКАТА THE DESCRIPTION OF TYPE DESIGN AND CERTIFICATION BASIS, BASIC OPERATING LIMITATIONS AND THE PRODUCT PERFORMANCE ARE PRESENTED IN THE TYPE CERTIFICATE DATA SHEET № FATA-42023R WHICH IS AN INTEGRAL PART OF THIS CERTIFICATE	
ЗАМЕСТИТЕЛЬ РУКОВОДИТЕЛЯ DEPUTY DIRECTOR GENERAL Подпись: М.В. Буланов Signed: M.V. Bulanov	 М.В. БУЛАНОВ 15 августа 2017 г.

Mi-171A2 HELICOPTER CERTIFICATION TESTS: HIRF & LIGHTNING

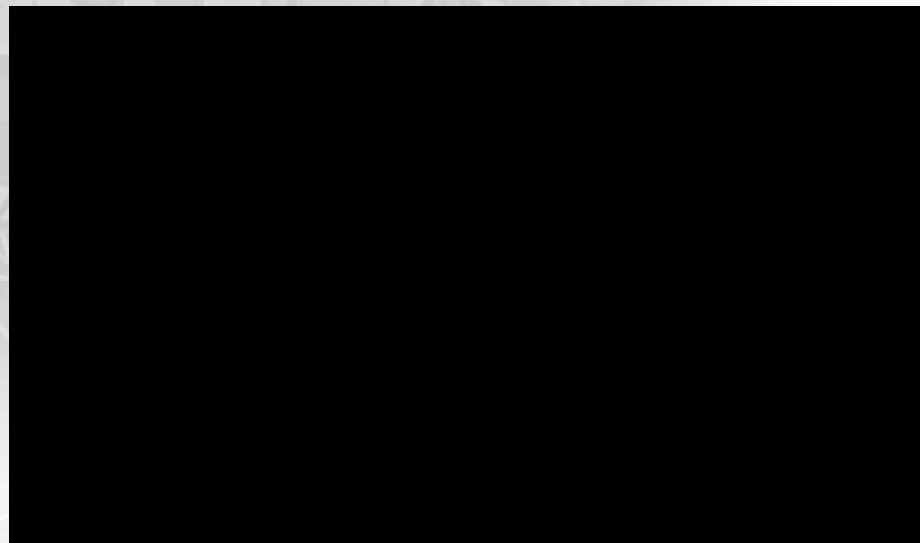
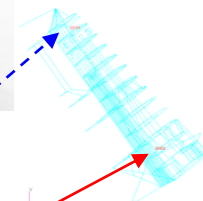
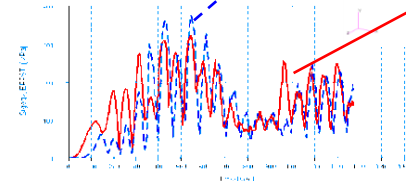
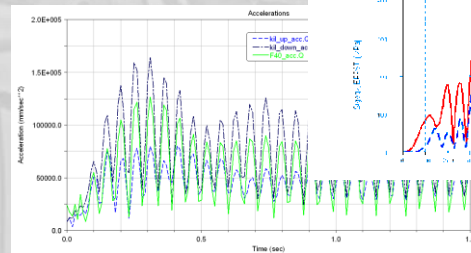
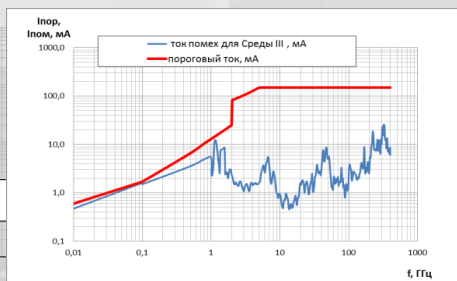
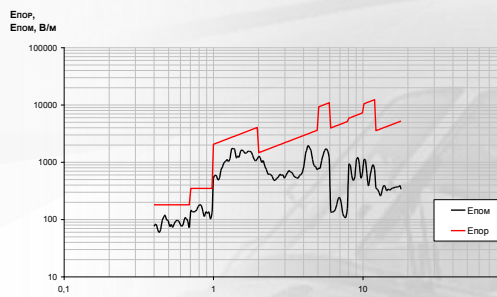


BERIEV
AIRCRAFT COMPANY
a UAC company



The State Scientific
Research Institute of Civil Aviation

GosNII GA



Mi-38 HELICOPTER CERTIFICATION TESTS: IRON BIRD



AVIATEST
LNK AEROSPACE



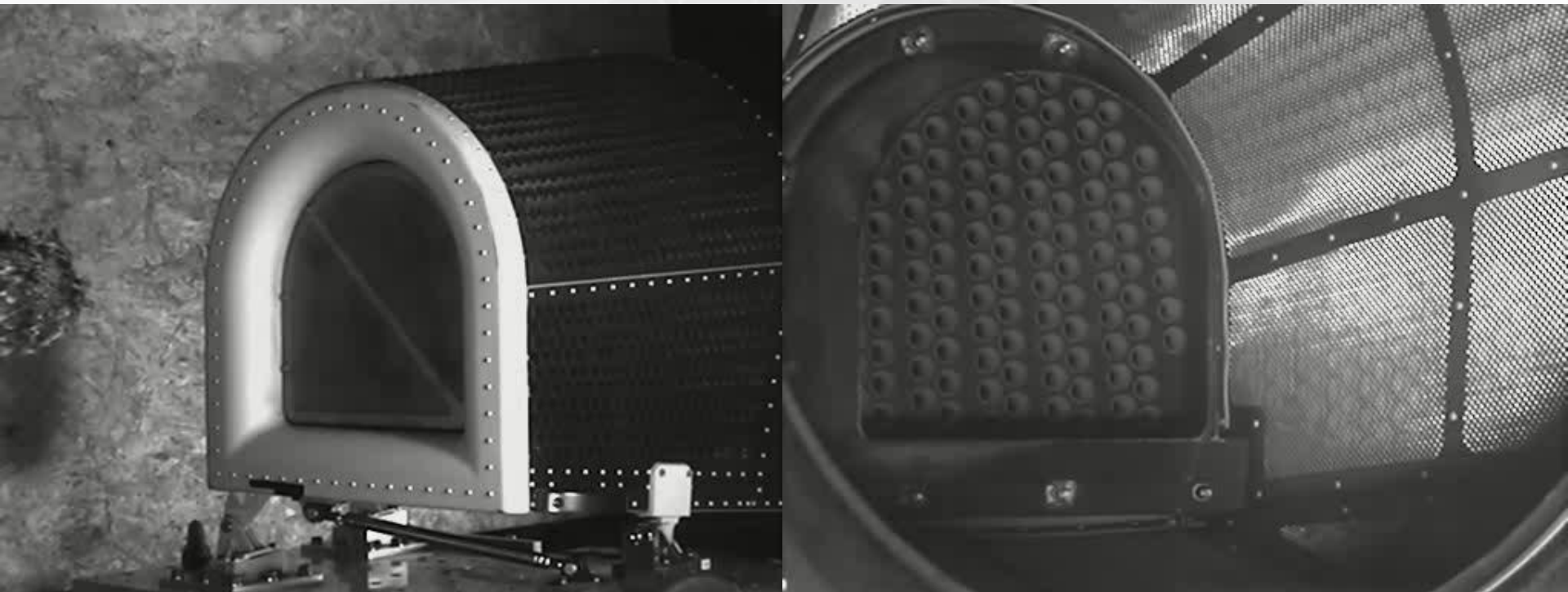
Mi-171A2 HELICOPTER CERTIFICATION TESTS: HIC



Mi-171A2 HELICOPTER CERTIFICATION TESTS: BIRD STRIKE



Центральный институт авиационного
моторостроения имени П.И. Баранова



Mi-171A2 HELICOPTER CERTIFICATION TESTS: ICING CONDITIONS



Центральный институт авиационного
моторостроения имени П.И. Баранова

1-st stage (Done):
Rotor Blades icing states analysis

2-nd stage (Currently in progress):
Rotor Blades element test in
controlled-environment test
chamber



3-rd stage (Planned):
Helicopter flight tests in natural
icing conditions





Mi-38 HELICOPTER CERTIFICATION TESTS: AUTOROTATION LANDING FLIGHT TEST



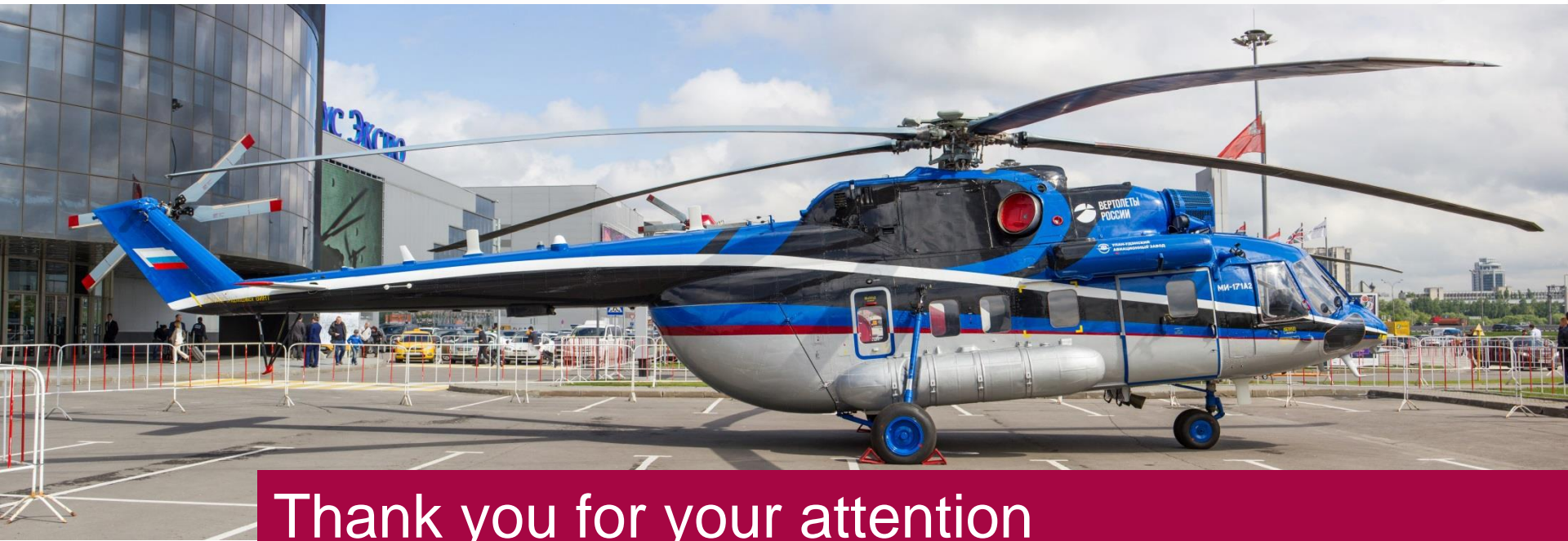
Mi-171A2 HELICOPTER CERTIFICATION: CURRENT CERIFICATION PROCESS

Icing conditions simulation and flight tests



Full ice protection system (FIPS):

- Ice detectors
- Automatic activation system with manual backup
- Engines intake protection and suitable Pureair DPD
- Heated windshield and Pitot tube
- Main and tail rotor blades protection



Thank you for your attention

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