UKROBORONPROM

Ukrainian Defence Industry

YOUR RELIABLE PARTNER
IN THE WORLD OF DEFENCE

AVIATION INDUSTRY

CATALOGUE

WHO WE ARE

Ukroboronprom was established in 2011 for improving coordination and performance of the military-industrial complex of Ukraine. Ukroboronprom is the largest state defence holding company in Ukraine, uniting 130+ enterprises, some of which have more than 70 years of experience in the field of defence and security.

- Scientists and engineers of 31 Ukroboronprom design bureaus make remarkable contributions to scientific and technological progress of the country.
- Near 80000 of highly trained employees both in production and engineering are working for Ukroboronprom in 5 major defence industry sectors. 40%+ high-level specialists with degrees in engineering, applied math, physics, etc. The top management understands the need to attract skilled and educated professionals to move forward, that is why we expand long-term cooperation with the best universities of Ukraine.

OUR MISSION:

HELP OUR CUSTOMERS SOLVE COMPLEX TASKS USING ADVANCED TECHNOLOGIES AND INNOVATIVE APPROACH

OUR VISION:
TO BE A RELIABLE PARTNER IN THE WORLD OF DEFENCE

OUR VALUES:

- We value and protect human life as a main priority
- We are constantly searching for new ideas to ensure peace and security
- We put quality as the basis of our production
- We enhance Ukraine's defence capability, preventing new threats

NEAR 80 000 EMPLOYEES

Ukroboronprom management has developed a promising model of industry-specific clusters with clear specialization. We are proud that Ukraine is one of the few countries in the world that has great technological knowledge in the industry and a full production cycle.

- ARMORED MILITARY VEHICLES
- AVIATION INDUSTRY
- SHIPBUILDING AND MARINE EQUIPMENT INDUSTRY
- RADAR, RADIO COMMUNICATION AND AIR DEFENCE SYSTEMS
- ROCKET ARTILLERY WEAPONS AND MUNITIONS

GOVERNMENT-AUTHORIZED EXPORTERS

UKRINMASH

UKRSPECEXPORT

SPETSTECHNOEXPORT

PROMOBORONEXPORT

UKROBORONSERVICE

PROGRESS

GOVERNMENT-AUTHORIZED EXPORTERS TO CARRY OUT EXPORT AND IMPORT OF MILITARY AND DOUBLE USE PRODUCTS WITH 20+ YEARS OF EXPERIENCE IN 90+ COUNTRIES WORLDWIDE:

- weapons and ammunition
- military and special purpose equipment
- dual-use materials and technologies
- maintenance of military and dual-purpose products

Being the part of Ukroboronprom, exporters ensure and facilitate trade of military and double-use products across the border, acting as intermediate agents for Ministry of Defence, Armed Forces, Emergency Situations Service, as well as other companies in Ukraine, specialized in development, production, maintenance and repair for defence/military purposes.

AVIATION INDUSTRY

YOUR RELIABLE WINGS

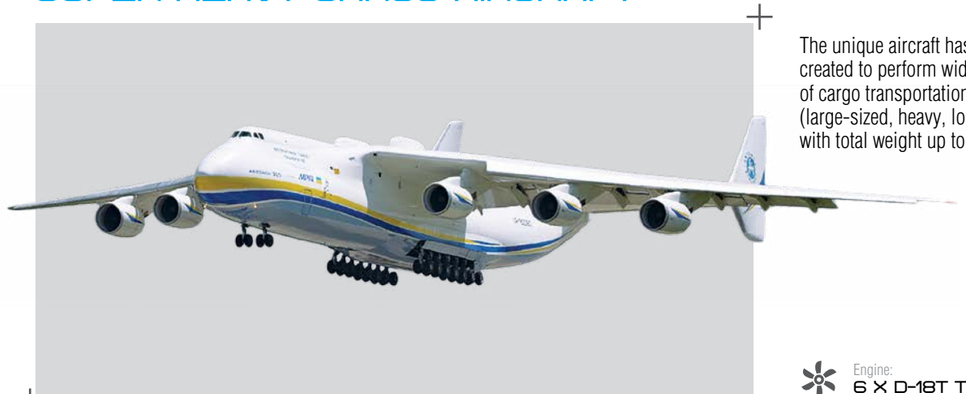
Ukroboronprom Aviation cluster - Ukrainian Aircraft Corporation with powerful aircraft repair enterprises - also has a unique enterprise “Antonov” with a complete cycle of modern aircraft and UAV production: 70 years of activity, + 22000 aircrafts, + 100 types and modifications. Our aircraft are used in 78 countries.

WE DO:

- aircraft research, design, production, overall repair and modernization
- design, development, production, maintenance, repair, and certification of military and civil aircraft engines. UAV engines.
- UAV design and production.
- produce:
  - relevant equipment, systems, aggregates and devices
  - radio-electronic equipment
  - ground launchers, maintenance equipment
  - rotary wings and fighting fixed wings platforms
  - platforms overall repair and modernization
  - control systems

AN-225 MRIYA

SUPER HEAVY CARGO AIRCRAFT



The unique aircraft has been created to perform wide-range of cargo transportation services (large-sized, heavy, long-size) with total weight up to 250 t.

Engine: 6 X D-18T TURBOFAN
Cruising altitude, m: UP TO 12000
Max payload, kg: 250 000
Cruising speed, km/h: 850
Cargo compartment volume, m³: 1 300

Main Specifications:

Flight range with 200 t payload	4000 km
Flight range ferry	14400 km
Runway lenght	3000-3500 m

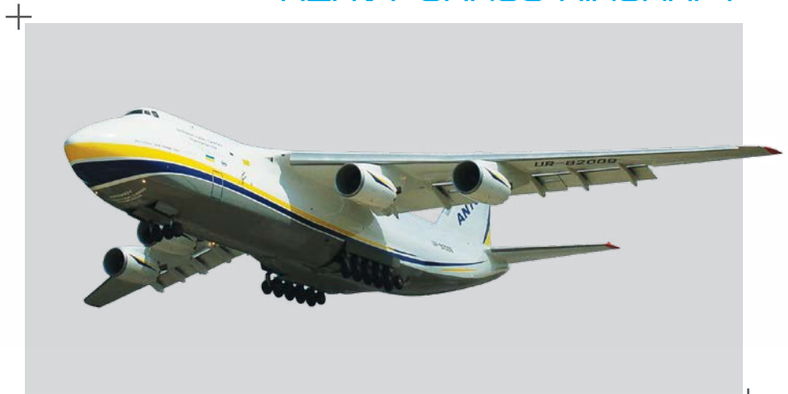
- MRIYA has set up 240 world records, including transportation of the heaviest cargo of 253 tons, the heaviest single piece cargo of 186,7 t, as well as the longest cargo with a total length of 42,1 m. MRIYA is robust.
- Most of the MRIYA systems, including the loading/unloading one, were adopted from AN-124.
- The aircraft is capable to transport unique oversized and over dimensional cargoes outside the fuselage.

AN-124 RUSLAN

HEAVY CARGO AIRCRAFT

The RUSLAN is heavy military transport aircraft. It is the biggest serial heavy lifter in the world. It is intended for the transportation of heavy and oversized cargo and various special-purpose vehicles.

Engine: 4 X D-18T, SERIES 3
Cruising altitude, m: 8000-9000
Max payload, kg: 120 000-150 000
Cruising speed, km/h: 800-850
Cargo compartment volume, m³: 1 160



Main Specifications:

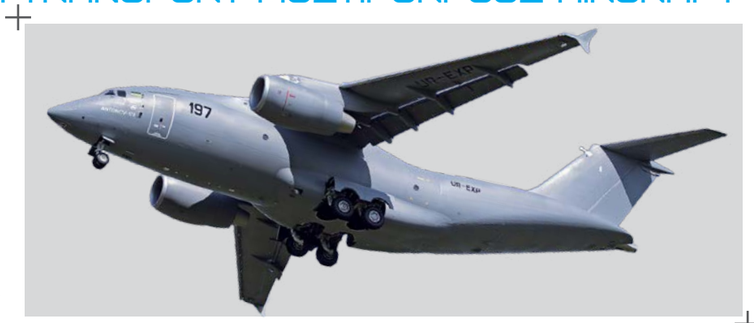
	AN-124-100 aircraft	AN-124-100M-150 aircraft
Flight range with 120 t	4650 km	5400 km
Flight range ferry	14200 km	14400 km
Runway lenght	2800 m	3000 m
Maximum payload	120 t	150 t

AN-178

MEDIUM TRANSPORT MULTIPURPOSE AIRCRAFT

The AN -178 is medium transport multipurpose aircraft of the family AN -148/-158 (avionics and systems from AN-148/AN-158).

Engine: 2 X D436-148FM
Cruising altitude, m: 12 200
Max take-off, t: 51 /52,4
Cruising speed, km/h: 825
Cabin volume with cargo ramp, m³: 167
Ferry range, km 5 300



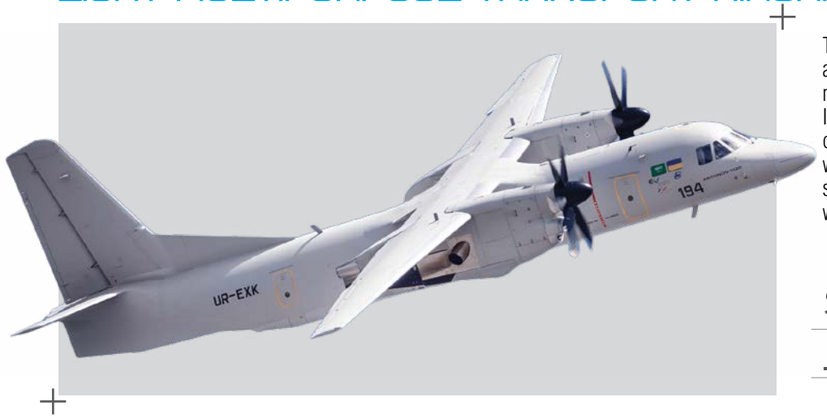
Main Specifications:

AN-178 is intended to replace AN-12 and C-160 and provides with the following:

- full replacement through dimensions and cargo capacity
- maximum efficiency owing to superiority by all flight and technical characteristics
- reduction of operating cost owing to installation of two turbojets instead of four or two turboprops
- correspondence to all modern requirements and standards due to airborne equipment and avionics of a new generation

AN-132D

LIGHT MULTIPURPOSE TRANSPORT AIRCRAFT



The AN-132D aircraft is a new generation of light multipurpose transport aircraft. It is designed for transportation of personnel, paratroops and wounded persons, various special-purpose vehicles, as well as for cargo airdropping.

Engine: 2 X PW 150

Cruising altitude, m: 8 230

Max payload, kg: 9 200

Cruising speed, km/h: 550

Cargo cabin volume with cargo ramp, m³: 65

Main Specifications:

Flight range with max. payload (45 min. fuel reserve)	1900 km
Flight range with 6 t payload	3600 km
Ferry range	4900 km

- Avionics by Honeywell (USA)
- Control column by Crouzet (France)
- Oxygen equipment by Zodiac Aerospace (France)
- Air conditioning system by Liebherr (Germany)
- Main engines PW 150A by Pratt&Whitney (Canada)
- Propellers R408 by Dowty (United Kingdom)
- Pilot seats by Ipeco (United Kingdom)

AN-148

REGIONAL AIRCRAFT

AN-148 is a high-performance aircraft, intended for passenger, cargo–passenger and cargo transportations on regional and short–haul air routes.

Engine: 2 X D436-148 TURBOFAN

Cruising altitude, m: 12 200

Maximum payload, kg 9 000

Cruising speed, km/h: UP TO 870

Maximum passenger capacity, pax 85

Main Specifications:

Series	AN-148-100A	AN-148-100B	AN-148-100E
Service range, km with 75 pax	2 100	3 500	4 400
Take-off length required, m	1 600	1 800	1885
ICAO Landing Category	III A		
Aircraft noise level	Chapter IV		

AN-158

REGIONAL PASSENGER AIRCRAFT

It is an upgraded version of AN-148 regional jet airliner. It can perform transportation of 86 passengers in a double-class layout with a flight range up to 3100 km and up to 99 passengers in a single-class layout with a flight range up to 2500 km. An-158 is able to operate at high altitudes and get into the aerodromes, located at altitude of 4000 meters above sea level.

Engine: 2 X D436-148 TURBOFAN

Cruising altitude, m: 11 600

Maximum payload, kg 9 800

Cruising speed, km/h: 780 - 820

Passenger capacity UP TO 99

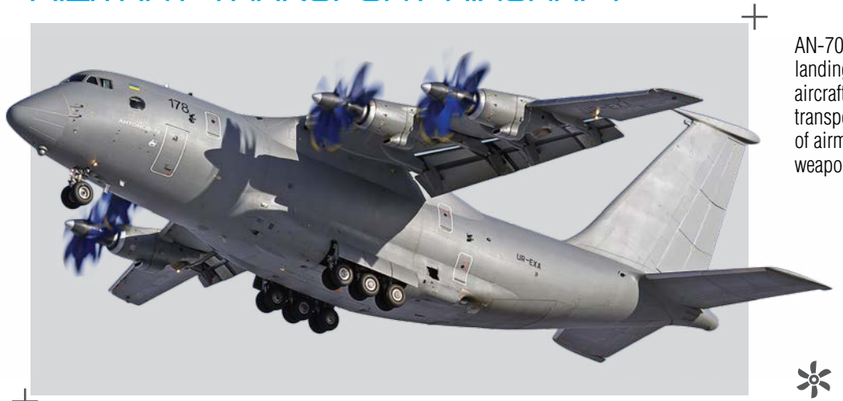
Main Specifications:

Take-off length required (concrete), m	up to 2000
Aircraft service life	hours 80000 / flights 30000

ICAO Landing Category II-III A Aircraft Noise Level Chapter IV

AN-70

MILITARY TRANSPORT AIRCRAFT



AN-70 is a short take-off/ landing military transport aircraft, designed for transportation of a full range of airmobile equipment and weapons.

Engine: 4 X D-27, PROPFAN

Cruising altitude, m: 9 000 - 12 000

Max payload, kg: 47 000

Cruising speed, km/h: 700 - 750

Cargo compartment dimensions, m: 36,5X6,4X4,4

Main Specifications:

Flight range with 47 t / 35 t / 20 t payload	3000 km / 5100 km / 6600 km
Flight range ferry	8000 km
Runway length	
▮ Short	600-700 m Unpaved / Ground
▮ Conventional	1550-1800 m paved / concrete

■ Four D-27 engines with SV-27 coaxial prop-fans ensure high cruising speed with 20-30% fuel saving, when compared to other modern aircrafts with turbojet engines.

■ The aircraft operates on both 1550-1800 m paved and 600-700 m unpaved runways, depending on use and take-off weight.

■ A built-in aerial delivery system ensures self-contained loading, unloading and air landing of a wide range of cargoes.

■ AN-70 ensures transportation of 35-47 t. cargoes at 3000 km, airborne assault of up to 110 paratroops and materiel, including single cargo items, weighing up to 21 t, for landing of 300 soldiers with individual weapons and evacuation of 206 injured and ill people.

AN-74

SPECIAL-PURPOSE FREIGHTER

AN-74 is a twin-turbofan airplane, designed for support of research, ice floe reconnaissance and transport operations in the Arctic and the Antarctic, as well as for commercial cargo carriage over medium-haul routes in all climatic conditions.

Engine: 2 X D-36-(3A)

Cruising altitude, m: 10 100

Maximum payload, kg: 10 000

Cruising speed, km/h: 700

Cargo compartment dimensions, m: 25,74 X 3,10

Main Specifications:

Range, km:	
- with max load	1450
- with max fuel load (cargo, t)	4400 (3,05)
Required runway, m	1800

AN-74MP

SEA PATROL AIRCRAFT

The aircraft is capable for maritime patrolling, search and rescue operations, sea-surface pollution detecting, fishing control, as well as for air transport operations. Cabin is equipped with additional space for the navigator and radio operator. Both workplaces are located near the blisters to conduct visual inspection of the surface of the land or sea area.

Engine: 2 X D-36

Cruising altitude, m: 10 100

Maximum payload, kg: 10 000

Cruising speed, km/h: 600-700

Main Specifications:

Patrolling altitude	500-1000 m
Patrolling speed	280 km/h

AN-32P

FIRE-FIGHTING AIRCRAFT

The aircraft is designed for firefighting by draining-off the extinguishing liquids. It is also capable of delivering and airdropping the smoke jumpers and special equipment, fire-extinguishing means to the fire sites. When dropping 8 t of extinguishing liquid out of two tanks from an altitude up to 50 m at speed of 260 km/h, a water spot of 120-160 m long and 10-35 m wide is formed on the ground.

Engine: 2 X AI-20D, SERIES 5

Max. weight of extinguishing liquid, kg: 8 000

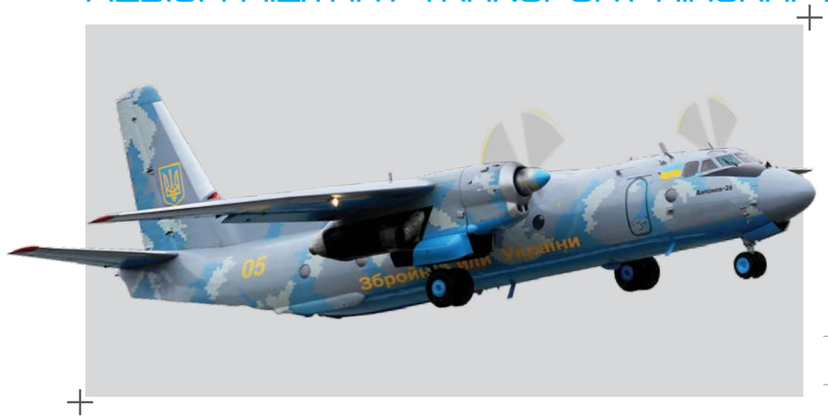
Cruising speed, km/h: 500

Main Specifications:

Total volume of liquid dropped for an hour of work in the flight range of:	
15 km	32 t
150 km	16 t
300 km	8 t
Flight ferry range	1700 km
Operating range with maximum liquid and 30-min fuel reserve	330 km

AN-26

MEDIUM MILITARY TRANSPORT AIRCRAFT



AN-26 Medium military transport aircraft is equipped with a big cargo door, lowering cargo ramp, mechanization facilities for handling and is intended to transport cargos, military equipment, personnel, wounded and sick persons, as well as for air landing of personnel and military equipment.

Engine: 2 X AI-24VT

Service ceiling, m: 7 500

Max takeoff, kg: 23 800

Cruising speed, km/h: 400

Operating range, km 850

IL-76

HEAVY TRANSPORT AIRCRAFT

Heavy transport aircraft IL-76 is designed for carrying of cargoes, air-dropping and air-landing of personnel and equipment, as well as transportation of wounded and ill personnel. The IL-76 has pressurized cabin, lowerable loading ramp, two pull cargo winches, four electric hoists, and four ramp extensions. A fire-fighting version of the aircraft, capable to carry up to 44 tones of water.

Engine: 4 X D-30KP-2

Cruising altitude, m: 12 000

Maximum take-off, kg 190 000

Cruising speed, km/h: 750 - 850

Operating range, km 7 300

Main Specifications:

Weight, kg:	
- operating	89 500
- fuel	114 600
Ferry range, km	10 000
Payload	140 soldiers or 128 paratroops

IL-78

AERIAL REFUELLING TANKER

The IL-78 enables to carry out missions for delivering of attacks against long-distance strategical objects or opposition to enemy's offensive means, as it is designed for in-flight refueling of heavy bombers, basic patrol aircraft, airborne early warning aircraft and tactical aircraft. The IL-78 performs simultaneous refueling of one heavy bomber and two Su-24 type aircrafts. It can also be used as a ground fuel-servicing aircraft and as a transport aircraft.

Engine: 4 X D-30KP-2

Service ceiling, m 12 000

Maximum take-off, kg 190 000

Cruising speed, km/h: 800

Operating range, km 7 300

Armament:

Weight, kg:	
- empty	40 000
- internal fuel, l	82 000
Speed for refueling, km/h	400-600
Useful payload, max, kg	65 000

MIG-21

FIGHTER

MiG-21 front-line fighter is intended to destroy aerial targets day and night in normal and adverse meteorological conditions, as well as to defeat ground objects by unguided means of destruction in visibility conditions.

- Engine: R25-300
- Service ceiling, m: 17 500
- Max takeoff, kg: 10 400
- Maximum speed, km/h: 2 175
- Operating range, km: 500

Armament:

Two guided missiles air-to-air K-13
Aircraft rocket pods of 57 mm and 240 mm calibers
Free-falling training and live bombs of different types in two hard points of the external suspensions

MIG-23

FIGHTER

MiG-23 is all-weather multifunctional and effective front-line tactical fighter with a variable-sweep wing. It is intended to intercept all types of aerial targets, to detect and destroy ships, small-sized ground and radio emitting targets day and night, as well as to defeat ground objects by unguided means of destruction in visibility conditions. Wing sweep in maneuverable position is changed from 45° to 33°.

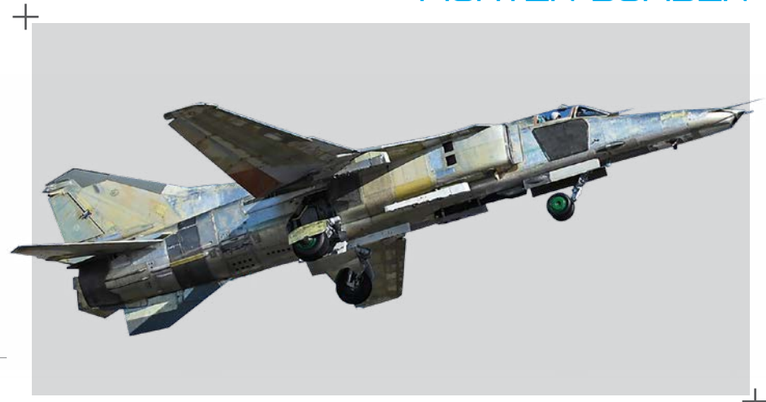
- Engine: R-29-300
- Service ceiling, m: 17 500
- Max takeoff, kg: 20 670
- Maximum speed, km/h: 2 445

Armament:

One 23 mm gun GSh-23L (200 cartridges)
Ammunition load – 2000 kg in 5 hard points of the external load (max – 4500 kg)
2 air-to-air middle range guided missiles R-24R and 4 air-to-air short range guided missiles R-60 or 2 x R-73
1 guided missile Kh-23
unguided rockets blocks of 57 mm or 80 mm caliber, aerial bombs of 100-500 kg
gun pods UPK-23-250

MIG-27

FIGHTER-BOMBER



MiG-27 fighter-bomber is intended to defeat fixed and mobile targets (including small-sized and high-strength ones) at extreme low, low and medium altitudes in visibility conditions, to strike operating ground radars by guided missiles, as well as to destroy aerial targets in visibility conditions.

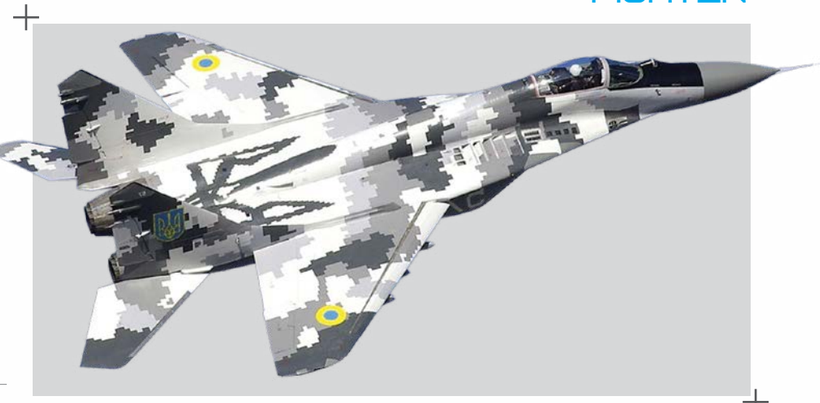
- Engine: R-29B-300
- Service ceiling, m: 15 500
- Maximum take-off, kg: 20 670
- Max speed, km/h: 1 810
- Operating range, km: 800

Armament:

30 mm 6-barrel gun GSh-6-30A (250 cartridges)
Ammunition load – 4000 kg in seven hard points of the suspension: Short range air-to-air guided missiles R-60,air-to-ground guided missiles Kh-23M, Kh-25, Kh-25ML and MR, Kh-29L and T, anti-radar missile Kh-27PS or Kh-25MP
Rocket S-5, S-8, S-13 or S-24, aerial bombs – up to 8 x FAB-500 (nuclear bombs load is possible of 10-30 kt), cluster bomb RBK-250, antirunway bomb BetAB-250 and BetAB-500, AP-bomb

MIG-29

FIGHTER



MiG-29 extremely effective front-line fighter is intended to gain air superiority and to cover troops and rear objects from air strikes, to counterforce enemy air reconnaissance day and night in normal and adverse meteorological conditions, to defeat mobile and fixed ground and sea targets by missile-bomb armament, as well as by unguided means of destruction.

- Engine: 2 X RD-33
- Service ceiling, m: 18 000
- Maximum take-off, kg: 17 700
- Max speed, km/h: 2 450
- Operating range, km: 650

Armament:

One 30-mm gun GSh-301 (150 rounds)
Combat load - 2000 kg on six underwing hardpoints
Up to 6 close air combat missiles R-73 or R-60M
Bombs 250- or 500-kg, pod KMGU-2, ZB-500
80 unguided air missile S-8 in blocks B-8M1 and 4 unguided air missiles S-24B
2 pods UPK-23-250

SU-22

FIGHTER-BOMBER

Su-22 fighter-bomber with a variable-geometry wings is intended to defeat ground and aerial targets of enemy, to support ground troops, to deliver tactical air reconnaissance day and night in normal and adverse meteorological conditions.

- Engine: AL-21F3S
- Service ceiling, m: 15 250
- Max takeoff, kg: 19 630
- Maximum speed, km/h: 2 230
- Operating range, km: 400 - 600

Armament:

Two 30 mm guns NR-30 (80 rounds per gun)
Combat load - 4070 kg on 12 hardpoints
Air-to-air guided missile R-60
Surface-to-air guided missile X-28, X-27PS, X-25ML, X-58U, X-29T
Free fall bombs up to 500 kg
Multipurpose air bomb KAB-500Kr and KAB-500T

SU-24

BOMBER

Su-24 strike front-line bomber is intended to breakthrough enemy air defense and to to gain air superiority in any meteorological conditions, day and night, in tactical and operative-tactical depth.

- Engine: AL-21F3-3A
- Service ceiling, m: 18 000
- Max takeoff, kg: 39 700
- Maximum speed, km/h: 1 550
- Operating range, km: 390-570

Armament:

One in-built 23 mm gun GSh-6-23M with 500 rounds
Guided and correcting air-to-surface armament, air bombs
Rockets
Air-to-air guided missile armament (up to2 missiles R-60 or R-60M)

DELFIN

LIGHT MULTI-PURPOSE AIRCRAFT

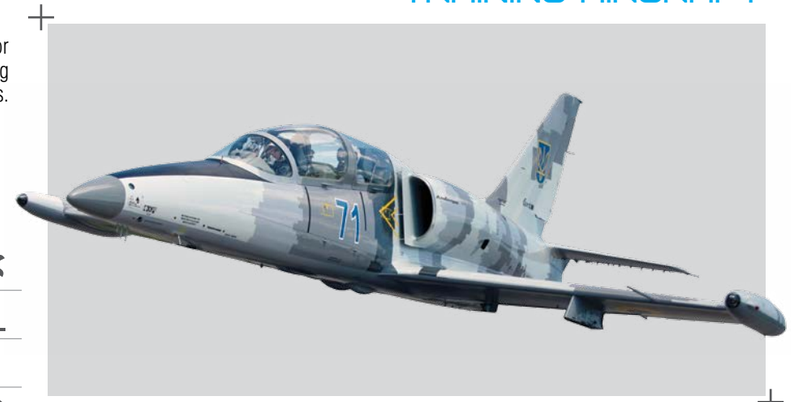
Light multi-purpose aircraft “Delfin” is a single-engine classic all-metal cantilever monoplane with lowmounted wings, vertical and horizontal tails, located on airframe stern-post and triple retractable landing gear with controllable nose leg. Aircraft Y1 "Delfin" is equipped with quick-acting recovery parachute system (QPS) KC-1500, ensuring safety of the crew and the aircraft in general.

- Engine: SR305-230-E
- Maximum flight altitude, m: 3 000
- Maximum take-off, kg: 1 400
- Max speed, km/h: 350
- Operating range, km: 1 550

L-39

TRAINING AIRCRAFT

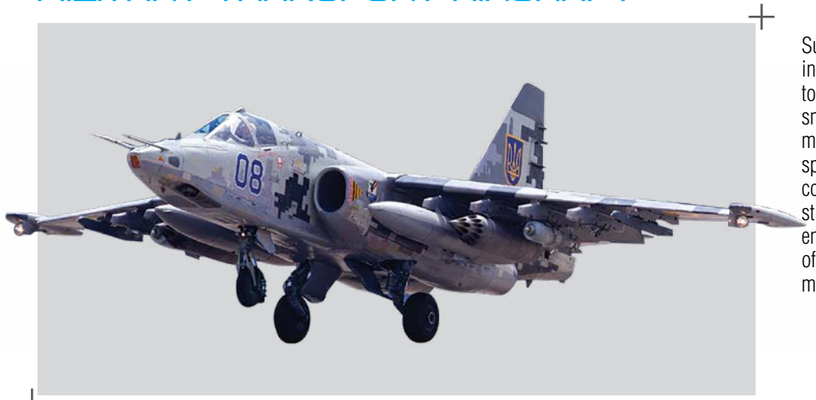
The L-39 aircraft is intended for training and maintaining of flying skills.



- Engine: AI-25TLSH
- Maximum flight altitude, m: 11 500
- Aircraft weight, kg: 3 500
- Max speed, km/h: 785
- Operating range, km: 980

SU-25

MILITARY TRANSPORT AIRCRAFT



Su-25 attack aircraft is intended to support troops, to destroy group and single small-sized ground objects, to mine from air and to defeat low speed aerial targets in visibility conditions, day and night at strong fire countermeasure of enemy. It features high level of combat survivability and manoeuverability.

Main Specifications:

Aircraft modification	Su-25, Su-25M1, Su-25M1K	Su-25UB, Su-25UBM1, Su-25UBM1K
Crew, human	1	2
Aircraft length, m	15 360	
Wingspan, m	14 360	
Aircraft height, m	4 800	5 200
Propulsion	2×turbojet engine Р95Ш	
Maximum speed, ground-level, km/h	975	940
Maximum takeoff, kg	17 600	18 000
Practical range, km	1850	1820

Installation of new equipment:
- satellite navigation system СН-3307;
- light-sized parameters counter МВП-1-1В;
- parameters input console МВП;
- digital parameters registration block БРЦП.

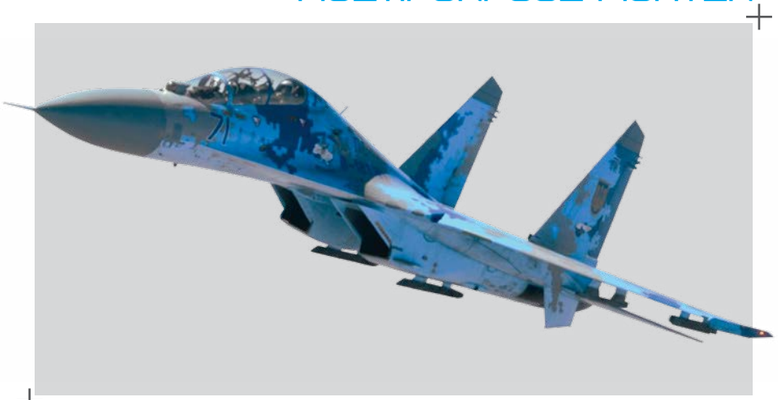
Arming:

Rifle-cannon	1×30 mm cannon ГШ-30
Allowance of ammunition, pcs	250
Points of suspension	10
Combat load, kg	4 200
Missiles "air-to-air" and "air-surface"	2×Р-60 and Х-25МЛ, Х-29Л, С-25Л
Unmanaged air missiles	8×УБ-32М with missiles 32×С-5; 8×Б-8М1 with missiles 20×С-8; 8×О-25 with missiles of type С-25; 8×АПУ-68УМ2(УМ3) with missiles of type С-24
Airborne bombs	8×500 kg or 8×250 kg or 8×100 kg

SU-27

MULTIPURPOSE FIGHTER

Su-27 multipurpose fighter is intended to gain air superiority, to cover ground troops from enemy air strikes and air reconnaissance. It is capable to defeat ground targets by guided and unguided missile-bomb armament day and night, in normal and adverse meteorological conditions, as well as for air reconnaissance.



Main Specifications:

Aircraft modification	Cy-27S(P), Cy-27s(P)1M	Cy-27UB(UP), Cy-27UB(UP)1M
Crew, human	1	2
Aircraft length, m	21 935	
Wingspan, m	14 698	
Aircraft height, m	5 932	6 537
Propulsion	2×turbojet engine АЛ-31Ф	
Weigh maximum takeoff, kg	30 000	30 500
Maximum speed, km/h	2 500 (2,35M)	2 125 (2,0M)
Practical range, km	3 900	3 000

- 30% increase in the range of detection of air targets;
- increasing the accuracy of launching at a given point with a deviation of not more than 25 m using the equipment of satellite navigation systems GLONASS and GPS NAVSTAR СН-3307-02;
- approach and landing on an unequipped aerodrome using coordinates of the control point;
- target reconnaissance , memorizing the coordinates;
- to perform the flight along the route in the "radio silence" mode (without the use of radio engineering means)

Arming:

Rifle-cannon	1×30 mm cannon ГШ-301
Allowance of ammunition, pcs	150
Points of suspension	10
Combat load, kg	8 000
Missiles "air-to-air"	6×Р-27 and 4×Р-73
Unmanaged air missiles	80×С-8 or 20×С-13 or 4×С-25
Airborne bombs	8×500 kg or 31×250 kg or 38×100 kg / 10×500 kg or 31×250 kg or 50×100 kg

KT-112UD
HELICOPTER

KT-112 "Combat" is a light combat helicopter designed to fight armoured targets, low and medium altitude aircrafts.

- Engine: ROTAX 914
- Service ceiling, m: 4 000
- Takeoff weight, kg: 1 000
- Maximum speed, km/h: 200
- Fuel volume, l: 88

Armament and special equipment:

- Antitank Guided Missile (ATGM) “Barrier-V” – 4 pcs.
- Man-Portable Air Defence System “Strela-2”/”Igla” – 6 pcs.
- Machine Gun PKT – 1 pc.
- Gyro-stabilized platform with thermal camera and control channel of ATGM

MI-24
HELICOPTER

Mi-24/35 helicopter is designated to increase the mobility of the land forces and provide covering fire at the battlefield. Can be used for combat, troop-carrying or transportation purposes. Can be used for UN missions and for flying on international air lines in compliance with ICAO requirements.

- Engine: 2 X TV3-117VMA
- Service ceiling, m: 4 500
- Max takeoff, kg: 11 500
- Maximum speed, km/h: 335
- Combat range, km: 450

Upgrade of Mi-24:

- FPM-01KV Laser System for Sight Mark Forming
- “ADROS” KT-01AV IR Jammer
- “ADROS” KUV 26-50 Flare Dispenser
- “ADROS” ASH-01V Engine Exhaust Suppressor
- EBC-406AFHM Emergency Locator Transmitter
- GPSMAP 695 / 696

MI-8
HELICOPTER

Mi-8/17 helicopters make up the bulk of the helicopter military transport aviation of many world countries.
The application filed: aerial transportation of weapons and warlike equipment, carrying assault troops, fire support of the land forces, SAR and UN missions.

- Engine: 2 X TV3-117VM
- Service ceiling, m: 6 000
- Maximum take-off, kg: 13 000
- Max speed, km/h: 250
- Operating range, max, km: 1 100

Upgrade of Mi-8MT(MTV)

- Armour plates set
- RDR 2000 / 2100 Weather Radar
- GPSMAP 695 / 696
- “ADROS” KT-01AV IR Jammer
- “ADROS” KUV 26-50 Flare Dispenser
- EBC-406AFHM Emergency Locator Transmitter

MI-14
HELICOPTER

Mi-14PL – anti-submarine helicopter, also capable of guarding and patrolling of combat, assault and transport ships. Can fly by 400 km off-shore and patrol there for 1 hour.
Mi-14PS – search and rescue helicopter, allowing for external sling and rescue equipment installation. Can be employed in attack variant. In ferry version - fitted with an additional fuel tank in the tail section.

- Engine: 2 X TV3-117M
- Service ceiling, m: 4 000
- Maximum take-off, kg: 14 000
- Max speed, km/h: 230
- Maximum range, km: 1 135

SPECTATOR

UNMANNED AIRCRAFT COMPLEX

Purpose:
Optoelectronic reconnaissance of the terrain.
Monitoring of water areas and forest tracts.
Monitoring of oil and gas pipelines, power lines.
Frontier monitoring.
Aerial photography.
Search and rescue operations.

Flying range, max, km: 30/50
Maximum flight altitude, m: 2 000
Max takeoff, kg: 7
Mass of payload, kg: 1.5
Speed of flight, km/h: 40 - 120

Main Specifications:

Type of power plant	Electric
Starting	Hand starting or from starting device
Modes of control	Automatic, semiautomatic, manual

HORLYTSYA

TACTICAL UNMANNED AVIATION COMPLEX

The striking tactical unmanned aviation complex Horlytsya is designed for day/night airborne reconnaissance and for defeating targets with weapons.

Tactical range, km: 120
Cruising altitude, m: 1800 - 2400
Max takeoff, kg: 200
Mass of payload, kg: 50
Speed of flight, km/h: 150 - 180

Main Specifications:

Practical range	1050 km
Duration of air reconnaissance	7 hours
Method of taking off	from a catapult device, from the prepared field runway
Method of landing	on a wheeled chassis

COMMANDOR

UNIVERSAL FLYING PLATFORM

Universal flying platform COMMANDOR is a multi-rotor aircraft designed for various kinds of cargo transportation (50 kg) and military tasks. Can work in automatic mode, manual, with the possibility of adjustment the flight and commands transmitted from the ground station.

Flying range, max, km: 200
Cruising altitude, m: 5 - 1500
Take-off weight, kg: 90
Load-lifting capacity, kg: 30
Speed range, km/h: 0 - 60

Main Specifications:

Fuel	Petrol + oil in the ratio 1:50
Combustion engine	2 units of 16000 W with automatic start-up and warm-up system
Electric motor	8 units of 4000 W, 50 V

PHASE ONE X2.4.

UNMANNED AERIAL SYSTEM

Unmanned Aerial System including the quad-copter is designed for prompt aerial surveillance and monitoring of facilities and small areas located at the distances up to 5 km.

Employment range, km: 10
Flight altitude, m: 2 000
Flight endurance, min: 40
Number of replaced batteries: 3
Maximal wind speed, m/s: 15

Main Specifications:

Control modes	manual or automatic
Payload	30x video camera, 18 MP photo camera, or various specialized sensors

SPARROW

UNMANNED AERIAL SYSTEM

SPARROW Unmanned Aerial System is designed for aerial surveillance at a range up to 20 km. The wingspan up to 980 mm significantly increases the UAV's flight characteristics comparing with the other systems of this category. Due to small dimensions and materials used it remains invisible both for visual observation and for radar systems.

- Maximal flight range, km: 70
- Maximum flight altitude, m: 1 500
- Max takeoff, kg: 3
- Mass of payload, kg: 0.5
- Speed of flight, km/h: 60 - 110

Main Specifications:

Propulsion	Electric engine
Data transmission, inscription	Digital channel, 128 bit key
Navigation	2-axes stabilized gimbal equipped with 10x guided videocamera or with thermal imager
Navigation	Global Navigation Satellite System

SPARROW LE

UNMANNED AERIAL SYSTEM

SPARROW LE Unmanned Aerial System is designed for aerial surveillance at a range up to 20 km. The wingspan of 3200 mm significantly increases the UAV's flight characteristics comparing with the other systems of this category. Due to small dimensions and materials used remains invisible both for visual observation and for radar systems.

- Maximal flight range, km: 250
- Maximal flight altitude, m: 5 000
- Max takeoff, kg: 7
- Speed of flight, km/h: 60 - 110

Main Specifications:

Flight range with data online transmission	Up to 20 km
Propulsion	Electric quiet brushless engine
Sensors	2-axes stabilized gimbal equipped with 10-20x guided videocamera or 4x thermal imager
Navigation	IMU, Global Navigation Satellite System

ANSER

UNMANNED AERIAL SYSTEM

ANSER Unmanned Aerial System is designed for aerial surveillance day and night. Various payload allows to transform the UAV into radio relay system, radiochemical detector etc. The system does not need any specially prepared area for take-off and for landing, and can be operated almost in any weather conditions.

- Distance, km: 400
- Flight altitude, m: 3 000
- Maximal takeoff weight, kg: 23
- Time in flight, min: 360
- Cruise speed, km/h: 70 - 120

Main Specifications:

Engine	Fuel
Navigation	Global Navigation Satellite System
Sensors	heading camera, 2-axes stabilized gimbal equipped with 30x guided videocamera or with thermal imager

OBSERVER-S

UNMANNED AIRCRAFT SYSTEM

OBSERVER-S - an unmanned aerial vehicle of the aircraft type (monoplane) with a puller propeller. The vehicle is used for aerial reconnaissance in the conditions of warfare, detection and determination of coordinates of military equipment, location of troops, fortification of enemy positions for target designation, correction of artill ery fire.

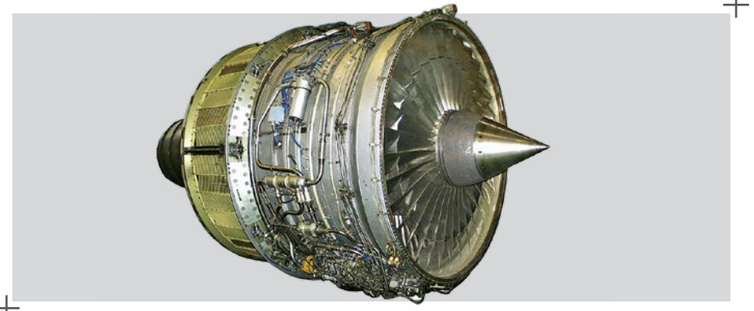
- Distance, km: 75 - 100
- Payload, kg: 1 - 1.5
- Flight duration, min: 90 - 300

Main Specifications:

Distance from the reference point	25-30 km
Maximal takeoff weight	5.5 - 6.5 kg
Data link	Carrier Digital channel 917 - 928 MHz, PPRF applied
Video channel range	up to 30 km

D-18T FAMILY

TURBOFAN ENGINE



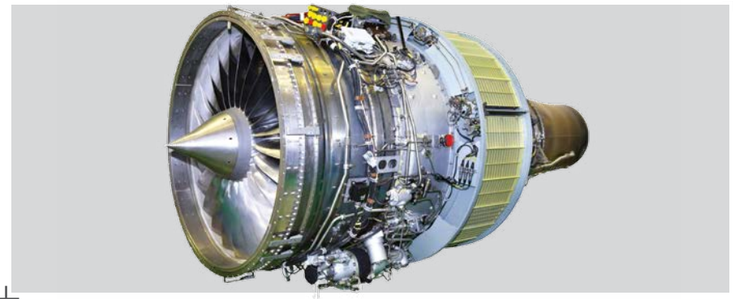
The D-18T engine and its derived versions series 1 and 3 designed to power An-124 and An-225 family heavy transport airplanes. To improve the An-124-100 effectiveness the D-18T series 3M engine version was developed.

Main Specifications:

Engine	D-18T series 3	D-18T series 3M
Takeoff (SLS, ISA)		
Thrust, kgf	23.430	
Thrust increase at ISA + 15 °C, kgf	340	
Max cruise (H=11,000 m; M=0.75; ISA)		
Thrust, kgf	4.860	
SFC, kg/h/kgf	0.546	
Thrust increase at ISA + 10 °C, kgf	765	
Assigned operating time, h	20 000	50 000

D-436 FAMILY

TUBRBOFAN ENGINE



D-436-148FM is designed to power the An-178 short-distance military transport aircraft, the modifications of the An-148 jet and the An-158 regional passenger aircraft.
The D-436TP, D-436-148 engines have received the Type Certification. They meet the effective environmental requirements of ICAO standards

Main Specifications:

Engine	D-436-148B	D-436-148D	D-436TP	D-436-148FM
Max emergency (SLS, ISA)				
Thrust, kgf, not less	7,282	7,688		8,790
Takeoff (SLS, ISA)				
Thrust kgf	6,570	7,010	7,650	7,876
SFC kg/h/kgf	0.351		0.370	
Max cruise (H=11,000 m, M =0.75, ISA +10°C)				
Thrust, kgf	1,572		1,500	1,700
SFC kg/h/kgf	0.592		0.610	0.607

D-36 FAMILY

TURBOFAN ENGINE

The D-36 series 1 engine was installed on the Yak-42 passenger aircraft, the D-36 series 1A, 2A on the An-72 transport aircraft, the D-36 series 2A, 3A on the An-74 transport aircraft.
The D-36, Series 4A (with trust reversal) is designed to power medium-haul passenger and transport aircraft. Installed on the An-74TK-300 convertible aircraft.
The engines have the Type Certification. Meets existing ICAO Environmental Standard requirements.

Main Specifications:

Engine	D-36 series 1	D-36 series 2A	D-36 series 3A	D-36 series 4A
Take-off (SLS, ISA)				
Thrust, kgf	6 500			
SFC, kg/h/kgf	0.365			
Cruise (H = 8 000 m, M = 0.75, ISA)				
Thrust, kgf	1 600			
SFC, kg/h/kgf	0.650		0.630	
Weight, dry, kg	1 124			1 130

D-27

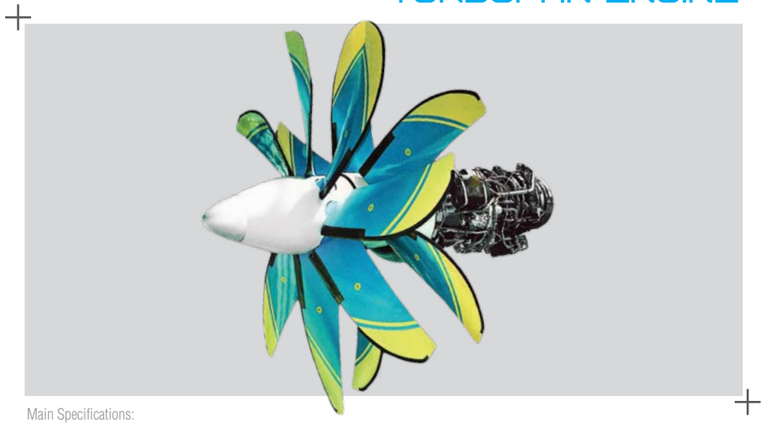
TURBOFAN ENGINE

Designed to power high-performance passenger and transport aircraft with improved take-off and landing performance in the load-carrying capacity class of 50 tons. Installed on the An-70 military transport aircraft. In operation since 2014.

Dimensions:
2065 × 880 × 1210

Weight, dry, kg:
1 650

Assigned operating time, h
18 000

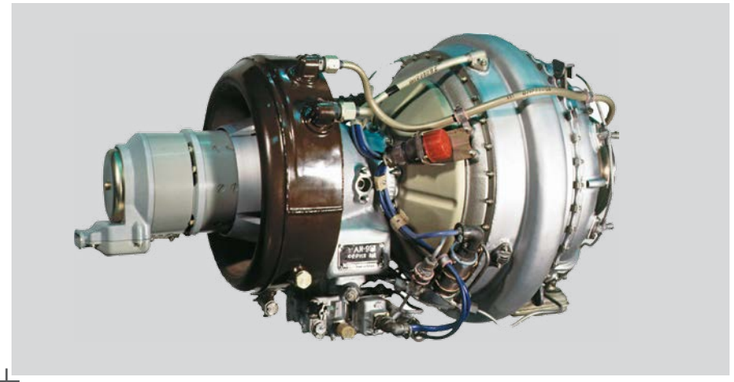


Main Specifications:

Takeoff (SLS, ISA +30 °C, 730 mm mercury)	
Equivalent power, ehp	13240
SFC, kg/h/ehp	0.180
Max cruise (H=11,000 m, M=0.7, ISA)	
Equivalent power, ehp	6750
SFC, kg/h/ehp	0.140

AI-9V FAMILY

AUXILIARY ENGINE



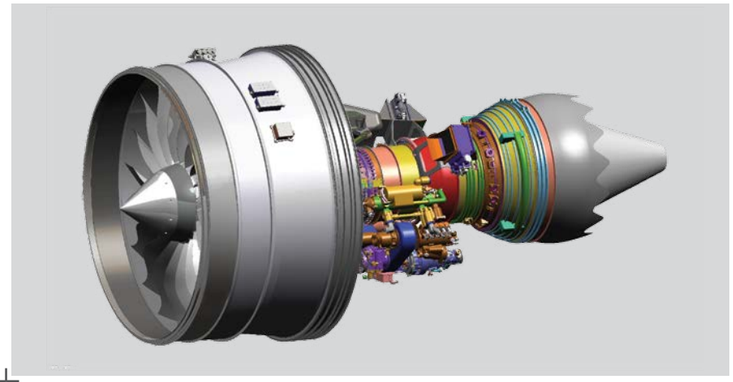
The engine is used as a ground and in-flight power source which supplies the compressed air to the helicopter engine starting system and the electric power to the helicopter mains during the check of the helicopter electrical and radio equipment. Installed on the Mi-8 (Mi-8AMT, Mi-8MTV, Mi-17, Mi-171, Mi-172), Mi-24 (Mi-35), Mi-28 helicopters. The engines has received the Type Certification.

Main Specifications:

Specification	AI-9V	AI-9V series 1
Rated rotational speed, RPM	3 6750+475	3 6750+475
Air bleeds, kg/s	0.4	0.4
Bleed air total pressure, MPa, min	0.29	0.31
Power across generator terminals, kw	3	3; 4.5
Fuel consumption, kg/h, max	75	76

AI-28

TURBOFAN ENGINE



The AI-28 is an ultra bypass engine of the new generation. It is designed to power An-178 as well as newly developed advanced passenger and transport aircraft. High thermodynamic cycle characteristics and advanced design offer essentially improved environmental characteristics, well as SFC by 15...20% lower as compared with existing engines in this thrust class.

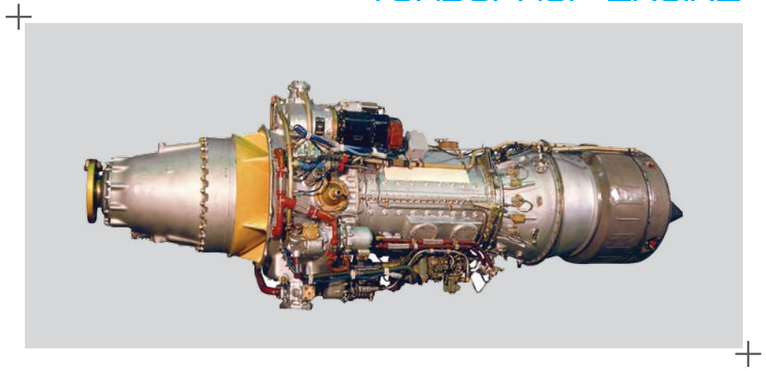
Main Specifications:

Max takeoff (SLS, ISA +30°C)	
Thrust, kgf	10300
Takeoff (SLS, ISA +30°C)	
Thrust, kgf	9400
Max cruise (H =11,000 m, M = 0.8 +10°C)	
Thrust, kgf	1860

AI-20 FAMILY

TURBOPROP ENGINE

Designed for use as a sustainer propulsion system on two or four-engine passenger and transport multi-purpose aircraft on short-haul and medium-haul (up to 6500 km). It powers: An-8, An-10, An-12, An-32, Be-12, Il-18, Il-20, Il-22, Il-38 aircrafts and their modifications. Meets the environmental requirements of ICAO standards.



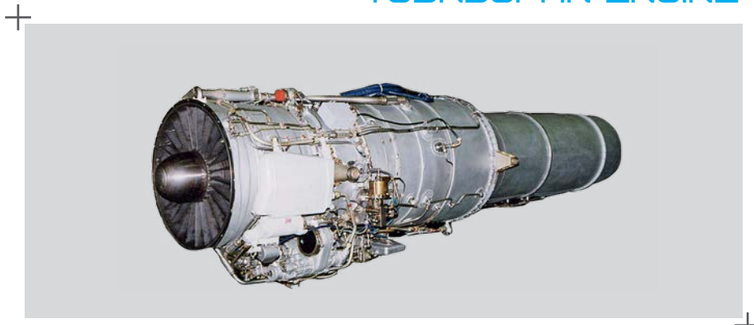
Main Specifications:

Engine	AI-20K	AI-20M	AI-20D, Series 4	AI-20D, Series 5	AI-20D, Series 5M
Take-off power (SLS, ISA)					
Equivalent power, eq.h.p. (eq.kW)	4 000 (2 941)	4 250 (3 125)	5 180 (3 809)	5 180 (3 809)	4 750 (3 493)
Specific fuel consumption, kg/eq.hp.•h (kg/eq.kW•h)	0,270 (0,367)	0,239 (0,325)	0,227 (0,309)	0,227 (0,309)	0,240 (0,313)
Cruise power, (H=8 000 m; Mfl =0,57; ISA)					
Equivalent power, eq.h.p. (eqkW)	2 490 (1 844)	2 700 (1 986)	2 725 (2 004)	2 725 (2 004)	2 725 (2 004)
Specific fuel consumption, kg/eq.hp.•h (kg/eq.kW•h)	0,210 (0,286)	0,197 (0,268)	0,199 (0,271)	0,199 (0,271)	0,199 (0,271)
Engine dry weight, kg	1 080	1 040	1 040	1 040	1 040

AI-25TL FAMILY

TUBRBOFAN ENGINE

The AI-25TL engine is designed for the installation on trainers, combat trainers, and light attack aircraft in the class of take-off weight up to 4,700kg. Installed on the L-39 trainer, AI-25TLK on the JL-8, K-8J aircraft. The AI-25TLSH engine is designed to power trainers and combat trainers, as well as tailored for light attack aircraft. Installed on the L-39M1 trainers.



Main Specifications:

Engine	AI-25TL	AI-25TLK	AI-25TLSH	
Takeoff (SLS, ISA)			Combat	Training
Thrust, kgf	1,720	1,720	1,720	1,850
SFC, kg/h/kgf	0.6	0.6		0.58
Cruise (H=6,000 m, M=0.483, ISA)				
Thrust, kgf	515	515	515	
SFC, kg/h/kgf	0.815	0.815	0.790	
Dimensions, mm	3,358 x 985 x 958	2,860 x 868 x 959.5	3,358 x 985 x 958	
Weight, dry, kg	350			

D-136/AI-136T FAMILY

TURBOSHAFT ENGINE

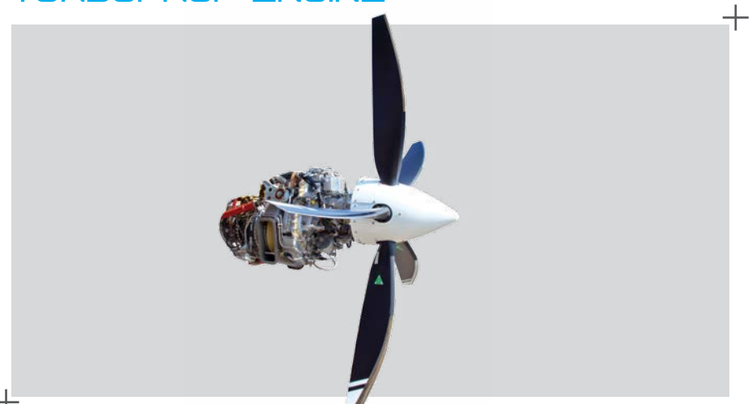
The D-136 and D-136 series 1 are used to power the Mi-26 and Mi-26T helicopters.
The AI-136T-2 turboshaft engine is designed for updating a powerplant for heavy transport helicopters to improve their performance characteristics when operated under high temperature environmental and mountain conditions.

Main Specifications:

Engine	D-136	AI-136T-2
Power within 2.5 minutes with one engine inoperative (SLS, ISA)		
Shaft power, hp:	12,200	
Takeoff (SLS, ISA)		
Power, hp:	10,000	
Rated power (SLS, ISA +400C)		
Power, hp	8,500	
SFC, kg/h/hp	0.210	

AI-450C FAMILY

TURBOPROP ENGINE



The AI-450C (CM, CD, CP) turboprop engine is designed for use as part of powerplants installed in light multipurpose aircraft and civil UAVs. The AI-450C (CM, CD, CP) is developed on the basis of the AI-450M engine gas generator.
The engine can be used both with tractor and pusher propellers. The engines has received the Type Certification.

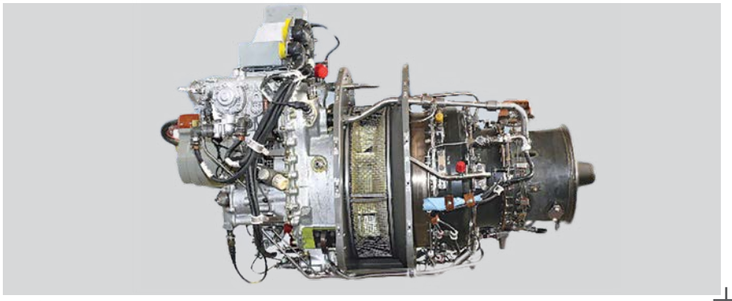
Main Specifications:

Engine	AI-450C (CD)	AI-450CP(CM)
Max takeoff (SLS, ISA)		
Power, hp	450	495
Takeoff (SLS, ISA)		
Power, hp	450	
SFC, kg/h/hp	0.277	

AI-450M FAMILY

TURBOSHAFT ENGINE

The AI-450M (M1, M2) engine is designed to power modernized Mi-2M, Mi-2MSB, MSB-2 and new perspective helicopters. The engines has received the Type Certification. In commercial



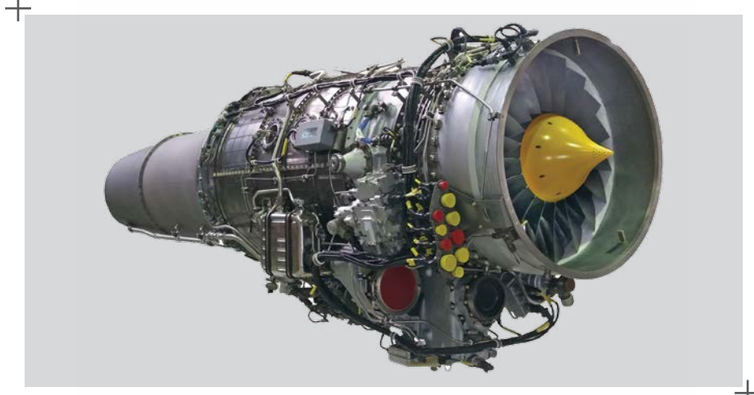
Main Specifications:

Engine	AI-450M (M1, M2)	AI-450M-P (M1-P, M2-P)
Takeoff (SLS, ISA)		
Power, hp	400	465
SFC, kg/h/hp	0.28	0.27
Max cruise (SLS, ISA)		
Power, hp	285	300
SFC, kg/h/hp	0.320	0.312
Dimensions, mm	1,115 x 648 x 534	

AI-322 FAMILY

TURBOFAN ENGINE

Designed to power modern trainers and combat trainers. The AI-322 engine is installed on the L-15 AJT. An afterburning version of the AI-322 engine, the AI-322F, is currently under development. The engine is designed to power trainers and combat trainers with a max speed of about Mach 1.6 - 2.0.



Main Specifications:

Engine	AI-322	AI-322F (with afterburner)
Full augmented power (SLS, ISA)		
Thrust, kgf	4,200	
SFC, kg/h/kgf, not more	1.9	
Thrust, kgf (H = 11,000 m; M = 1.4)	2,760	

ADROS KT-01AVE

STATION FOR OPTICALELECTRONIC SUPPRESSION

The station for opticalelectronic suppression, "Adros" KT-01 AVE is designed for active protection of helicopters against guided missiles with infrared homing heads; for suppression of infrared homing heads with amplitude-phase modulation (APM). The KT-01AVE is designed for installing on Mi-24, Mi-8, Mi-17 helicopters, etc.

Direct current: 27 VDC

Weight, kg: 25

Main Specifications:

Helicopter protection probability	0.7 – 0.8
Time needed to divert a missile from its course	0.5 – 0.8 sec
Spectral range of radiation	1.8 – 5.5 μm
Power supply:	
- three-phase	208VAC, 400 Hz
- single-phase	115 VAC, 400 Hz
Protection zone	circled in azimuth +20°…-30° in elevation

ADROS KT-03UE

STATION FOR OPTICALELECTRONIC SUPPRESSION

IRCM station "Adros" KT-03UE is intended for active protection of airplanes with two turbojet engines and helicopters against guided missiles equipped with infrared homing heads. The station "Adros" KT-03UE can suppress infrared homing heads with heightened noise immunity for other types of modulation (FPM and PLM). The "Adros" KT-03UE is designed for installing on An-26, An-32 airplanes and helicopters. Two stations "Adros" KT-03UE in special containers jointly flare dispenser "Adros" KUV 26-50E and "Adros" AV-26V are installed on airplane

Direct current: 27 V

Weight, kg: UP TO 35

Main Specifications:

Aircraft protection probability	0.7 – 0.8
Time needed to divert a Stinger-type missile from its course	0.5 – 0.8 sec
Spectral range of radiation	1,8 – 5,5 mcm
Airborne line-operated	
Single-phase	115 V, 400 Hz
Protection zone	circled in azimuth

ADROS KUV 26-50

COMBINED FLARE DISPENSER

"Adros" KUV 26-50 flare dispensers are intended to create noise to missiles with infra-red (IR) seekers. Can be installed on Su, An series aircraft and Mi series helicopters. The jamming is performed in accordance with the special program to create complicated jamming situation for infra-red homing heads of guided missiles.

Dimensions of holder, mm: 808 X 178 X 105

Rated supply voltage, V: 27

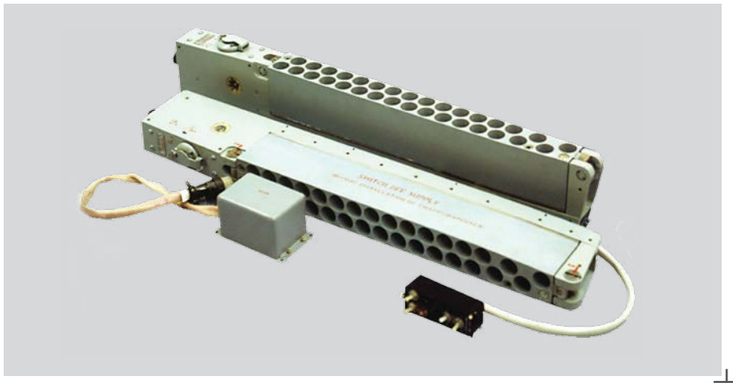
Main Specifications:

Flare caliber	26 mm and 50 mm
One holder flare number	20 of 26 mm / 10 of 50 mm
Holder number, controlled by one control unit	2N or 3N, when N = 1…10
Readiness time	30 s
Power consumption	up to 250 W
Built-in-test	

ASO-2V, ASO-2VM

CHAFF / FLARE DISPENSERS

Are mounted on the An series aircraft and Mi series helicopters and are intended for jamming missile radar and IR seekers. Jamming is carried out in trains of 4 or 16 rounds at 2s and 4s intervals (ASO-2V. 0000-0-04 - at 2s or 6s intervals). Dispensers of the ASO-2VM type perform jamming in closesequence salvo of 2, 4 or 8 rounds. The ASO-2V. 0000-0-01 and ASO-2VM dispensers can shoot-off rounds with barrel facing up or down, while others operate with barrels directed downwards.



Main Specifications:

Operating voltage, V	27 (±10%)
Magazine capacity (Qty of rnds in 1 beam)	32
Overall dimensions (without connectors, mm)	768,5x125,5x60,5

ADROS ASH-01V

ENGINE EXHAUST SHIELDS

Engine Exhaust Shields (EES) "Adros" ASh-01V are intended to reduce infrared visibility of Mi-8, Mi-35 type helicopters of all modifications, equipped with turboshaft TV3-117 type engines with the purpose to decrease IR guided missile attack probability.

Main Specifications:

Design	Multi-loop ejector with changeable geometry
IR emission suppression level in 3-5 μm band	4-5
Free turbine power losses	up to 2-3%
Aerodynamic drag does not exceed value of original EES	

Weight, kg:
UP TO 35

ADROS FPM-01KV

LASER SYSTEM FOR SIGHT MARK FORMING

Laser system for sight mark forming FPM-01KV allows operative combat application of helicopter unguided weapon in dark conditions. It forms laser beam with sight mark at the beam end directly on the ground target. Beam and sight mark can be visible only through the pilot's NVG.
FPM-01KV system is designed to install on Mi-8, Mi-17, Mi-171, Mi-24, Mi-35, Mi-2 and other gunships.

Main Specifications:

Laser beam angular velocity	up to 20 deg/s
Beam deviation angles, azimuth	± 12°
Beam deviation angles, elevation	from – 30° to +6°
Beam positioning accuracy	not worse than 1.5 mrad
Power supply	27 VDC, 40W / 36 VAC, 400 Hz, 70VA

Readiness time, min:
UP TO 3

Weight, kg:
UP TO 5

АПУ-470М

RAIL LAUNCHER

Rail launcher АПУ-470М consists of the body with the front and back suspension units, the front, top and back fairings, latch block and connector docking mechanism that are joined into a functional block. Items of electrical system, waveguide and nitrogen supply system are also included. This is a standard armament of Su-27 and MiG-29 aircraft.

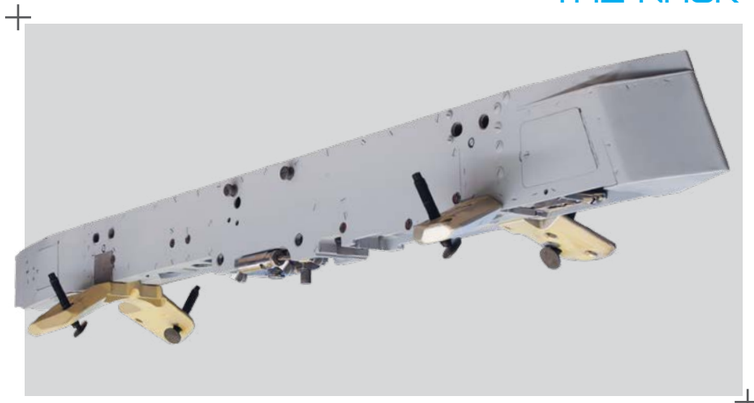
Main Specifications:

Functional block
Connector docking mechanism
Latch block
Nitrogen cylinder

БДЗ-УСК

THE RACK

The rack is a pylon equipped with missile tongs, an ejector ДЗ-УМ for cargo and detachable equipment, elevation mechanism, switch box, bracket arm electric actuator МПИ-155, ПУС-36-71 and МВН-66.

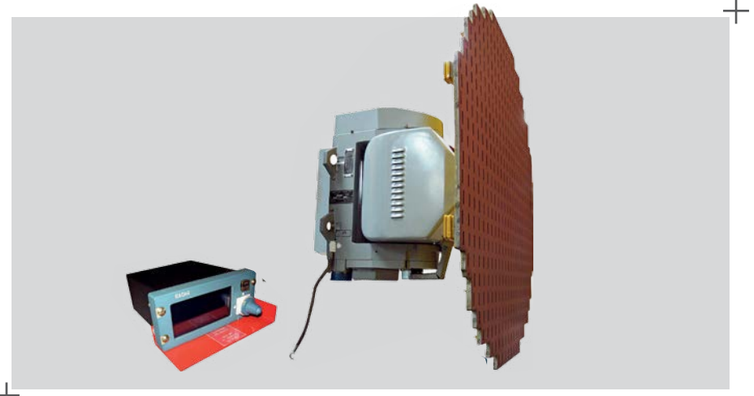


Main Specifications:

ДЗ-УМ ejector
Cord
Side panel
Bars
Mechanisms block

BURAN-A

ONBOARD METEO-NAVIGATION RADAR STATIONS



It is inteded to provide navigation ground survey; detection of meteorological formations dangerous for flight, including turbulent zones and oncoming aircrafts; analysis and display of the vertical profile meteo-objects.

Main Specifications:

Carrier frequency, MHz	± 25
Pulse power, W	85 no less
Beam width, degree	4/6x10
Antenna gain, dB	33/27
Msumption, on 27 V power system	2,0A not more
Current, on 115 V, 400 Hz power system	0,5A not more

СПС-2000

TRAFFIC COLLISION AVOIDANCE SYSTEM

"СПС-2000" Traffic Collision Avoidance System is designed to provide safe separation between aircrafts if path forecast shows the probability of a collision and simultaneously minimize the deviation from the prescribed flight parameters.

Main Specifications:

Transponder characteristics at TCAS mode:	
frequency	1 030±0,01 MHz
Max power	55,0 dBm
Transponder characteristics at S mode:	
frequency	1 090±3 MHz
Max power	52,0 dBm

A-511

AIRCRAFT TRANSPONDER

Device is designed to work with secondary air traffic control radar systems of A and AC and РСП standards. It transmits information automatically on their request about the aircraft tail number, altitude, fuel load, a signal of plane selection from the group, "Alarm" signal, landing gear extension signal.

Main Specifications:

Transmitter pulse power:	300…800 W
Receiver sensibility:	
РСП mode	minus (84±4) dB/Wт
УВД mode at 837,5 MHz	minus (66±4) dB/Wт
A and AC mode at 1030 MHz	minus (104±4) dB/Wт
Transmitting frequency:	
РСП and УВД mode	(740±2) MHz
A and AC mode	(1090±3) MHz

CO-72M

AIRCRAFT TRANSPONDER

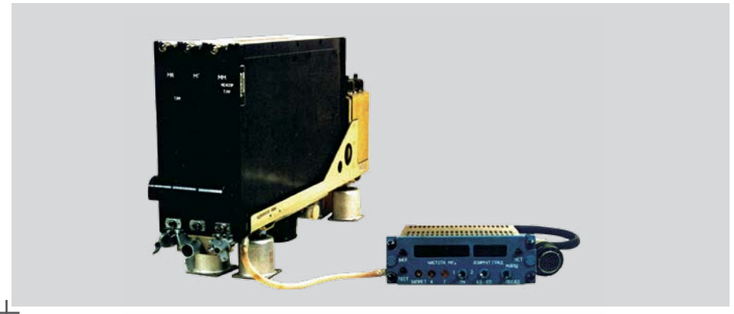
It is designed for operation with secondary A and AC, РСП radar systems as well under the УВД standard while flying in the Commonwealth of Independent States airspace.

Main Specifications:

Sensitivity of the receiver:	
in РСП mode	minus (84±4) dB/W
in УВД mode at 837.5 MHz frequency	minus (66±4) dB/W
in A and AC mode at 1,030 MHz frequency	minus (104±4) dB/W
Frequency of the transmitter:	
in УВД, РСП modes	(740±2) MHz
in A and AC modes	(1.090±3) MHz
Impulse power of the transmitter	300…800 W

KURS-93M

ONBOARD INTEGRATED NAVIGATION AND LANDING EQUIPMENT



The Equipment provides aircraft navigation by radio beacons of VOR system, pre-landing maneuvers and approach landing by ILS and SP-50 radio beacons, as well as marker radio beacons fly by signaling.
The Equipment comprises radio receiving block RRB on damper frame and control panel CP.

Main Specifications:

Radio receiving block RRB:	
Weight with the frame	6,3 kg
Power consumption	30 W from the onboard 27 V power system
Ventilator supply from the onboard power system	115 V, 400 Hz
Pulse duration	0.3-1.0 mcs
Overall dimensions	155x48x145 mm
Weight	1 kg
Power consumptionw	10 W from the onboard 27 V power system

OSMINOG-E

TARGET SEARCH AND TRACK SYSTEM

"OSMINOG-E" target search and track system is installed in KA-28 naval helicopter and designed for searching, tracking and data producing to weapon systems about detected submerged or surfaced targets, as well as radar-visible targets.

Main Specifications:

Power consumption (not more than):	
▮ on mains 200 V; 400 Hz	2,0 kVA
▮ on mains 36 V; 400 Hz	0,1 kVA
▮ on mains 27 V	1,0 kVA

Detection range of submerged objects, km: 8

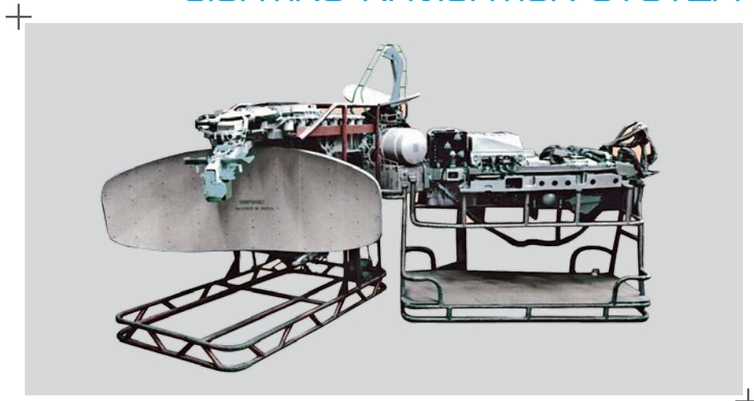
Detection range of surfaced objects, km: 30

Weight, kg: 459

PNS-24M

SIGHTING-NAVIGATION SYSTEM

Sighting-navigation system PNS-24M is installed on SU-24M aircraft and provides solution of following complex tasks:
- ▮ automatic flight as per set programmed and strategical itinerary points with correction of current position;
- ▮ detection of objects and aimed pointing of all kinds of aviation armament on ground (hidden and open), air and water-surface targets;
- ▮ safe fly-around at the altitudes from 50 to 600 m automatic and semi-automatic modes.



Main Specifications:

Power supply:	three phase, 200V, 400Hz
Power supply:	direct current, 27V
Weight	not more than 837 kg
Power consumption, not more than:	
- in 200 V, 400 Hz circuit, V	7 800
- in 27 V circuit, W	3 100

BEEP-M

CLOSE NAVIGATION AND LANDING EQUIPMENT

Equipment is designed for automatic transmission of the aircraft direction and distance data relative to a ground-based radar station. In the "landing" mode it provides landing approach and generates signals of deviation from the equisignal area of course and glissade, and slant range distance to a landing beacon.

Main Specifications:

Range at 10,000 m altitude	≥ 350 km
Directional reading error	±0,125 grades
Distance reading error	±(250±0.05%D) m

GOVERNMENT-AUTHORIZED EXPORTERS

UKRINMASH

tel.: +38044-461-92-75
fax: +38044-461-92-76
uim@uim.kiev.ua
www.ukrinmash.com
36, Dehtiarivska str.,
Kyiv, 04119, Ukraine

UKRSPECEXPORT

tel.: +38044-461-94-17
fax: +38044-461-97-59
aira@ukrspecexport.com
www.use.ua
36, Dehtiarivska str.,
Kyiv, 04119, Ukraine

SPETSTECHNOEXPORT

tel.: +38044-568-50-70
fax: +38044-568-50-68
office@ste.kiev.ua
www.spetstechnoexport.com
7, Stepan Bandera Avenue,
Kyiv, 04073, Ukraine

PROMOBORONEXPORT

tel.: +38044-461-97-60
fax: +38044-489-32-76
info@poe.com.ua
www.poe.com.ua
36, Dehtiarivska str.,
Kyiv, 04119, Ukraine

UKROBORONSERVICE

tel.: +38044-586-62-00
fax: +38044-586-62-03
uos@uos.ua
www.uos.ua
3a, Rossoshanska str., P.B.
49, Kyiv, 02093, Ukraine

PROGRESS

tel.: +38044-568-51-98
fax: +38044-568-51-98
progress@progress.gov.ua
progress.gov.ua
2/10, Melnykova str.,
Kyiv, 04050, Ukraine

UKROBORONPROM

Ukrainian Defence Industry

"UKROBORONPROM"
36, Dehtiarivska str., Kyiv, 04119, Ukraine
tel.: +38044-458-46-81
fax: +38044-586-24-77
kanc@ukroboronprom.com
www.ukroboronprom.com
Press Office: tel.: +38044-586-24-72
pr@ukroboronprom.com