SPETS
TECHNO
EXPORT

ANTONOV AN-1x8 FAMILY

AN-148 • AN-158 • AN-178 • AN-188

AN-148

PASSENGER REGIONAL
AIRCRAFT

SPETS
TECHNO
EXPORT

SPETS TECHNO EXPORT

FAMILY OF THE AN-148 PASSENGER REGIONAL AIRCRAFT

UKROBORONPROM
Ukrainian Defence Industry

AN-148
Basic Aircraft

AN-148-100A/B/E
AN-148-201A/B/E
Passenger Aircraft

AN-148-100EA/EM
AN-148-201EA/EM
Special Aircraft

AIRPLANES OF THE AN-148 are intended for passenger, mixed cargo-passenger and cargo transport operations on regional and short-range air lines. The AN-148 feature a high-wing monoplane configuration with two engines arranged under the wing. Such configuration improves protection of the engines and wing structure against damage and makes it possible to operate the aircraft on poorly-equipped aerodromes

The airplanes ensure a high level of cost efficiency, a wide range of functional capabilities, and a modern level of engineering and operational perfection

SPETS TECHNO EXPORT

RANGE OF ABILITIES OF THE AN-148 AIRCRAFT

UKROBORONPROM
Ukrainian Defence Industry

AIRCRAFT HAS BEEN TESTED:

under natural icing formation conditions with air temperatures down to -30°C

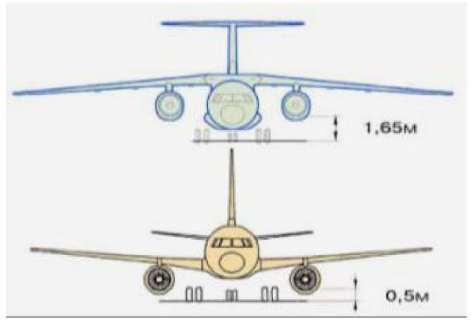
at hot climate (up to +45°C) and high mountain (up to 4100 m) conditions

under ultra cold conditions (down to -55°C)

from unpaved runways

APPROVED FLIGHT CONDITIONS:

- in basic navigation system (B-RNAV)
- in precise navigation system (P-RNAV)
- in zones of reduced vertical separation minimum (RVSM)
- under ambient air temperatures at ground from -55°C to +45°C
- at airfields with elevation up to 4,100 m above SL
- with crosswind up to 15 m/s
- at visual and instrument flight rules (VFR and IFR)
- under conditions of high latitudes down to 73 of North altitude



The probability of early engine removal for a low-wing configuration is **2 to 3 times higher** than for a high-wing configuration

SPETS TECHNO EXPORT

THE AN-148 AIRCRAFT OPERATION RESULTS

UKROBORONPROM
Ukrainian Defence Industry

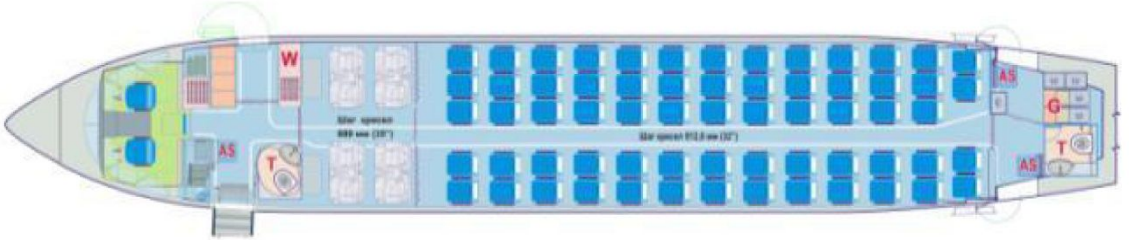
AVERAGE RUNNING TIME	300 FH / MONTH
MAXIMUM RUNNING TIME	400 FH / MONTH
AIRCRAFT IN THE AIR	UP TO 12 H PER DAY
AVERAGE QUANTITY OF FLIGHTS	6÷8 PER DAY

AN-148-201 – NEW VARIANT OF AN-148 AIRCRAFT

	AN-148-201A	AN-148-201B	AN-148-201E
MTOW	38.95 t	41.95 t	43.70 t
MAX PASSENGER CAPACITY	92 seats		
MAX PAYLOAD	9 t		
CRUISING SPEED	800-870 km/h		
CRUISING ALTITUDE	Up to 12,200 m		
SERVICE RANGE with 89 passengers in ISA, SL, MTOW	1,200 km	2,600 km	3,500 km
SERVICE RANGE with 89 passengers in ISA +30°C (+45°C), SL	1,200 km	2,600 km	2,890 km
REQUIRED TO FIELD LENGTH (ISA, SL, MTOW)	1,485 m	1,730 m	1,885 m
ICAO LANDING CATEGORY	II		
ENGINES	2 x D-436-148		
ENGINES THRUST	2 x 6,830 (7,500 at APR)		
CREW	2 pilots + 2 attendants		

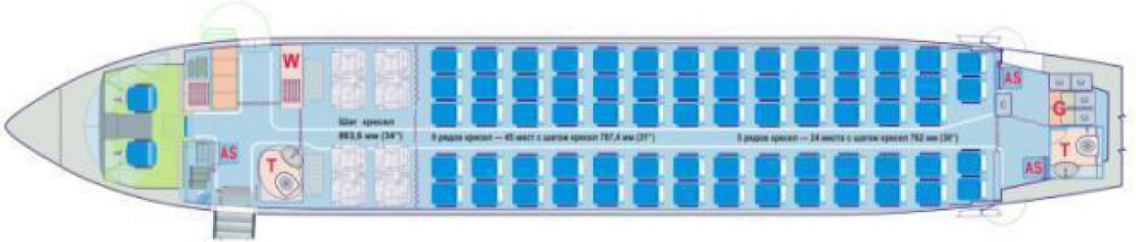
AN-148-201 PASSENGER CABIN

72-SEAT TWO-CLASS LAYOUT



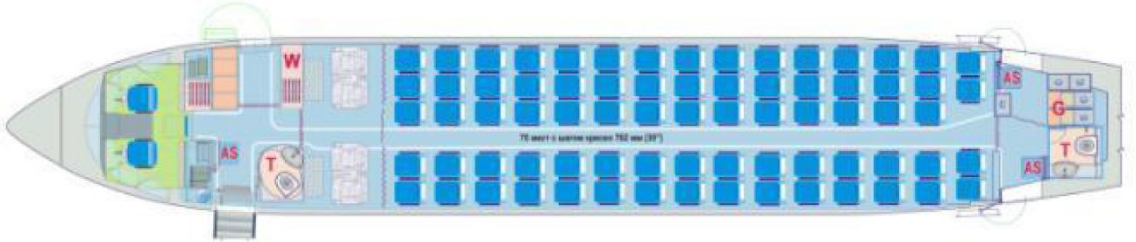
8-Business Class, seats pitch 35“(889 mm)
64-Economy-Class, seats pitch 32“(812,8 mm)

77-SEAT TWO-CLASS LAYOUT



8-Business Class, seats pitch 34“(863,6 mm)
69-Economy-Class, seats pitch 30-31“(762 mm-787,4 mm)

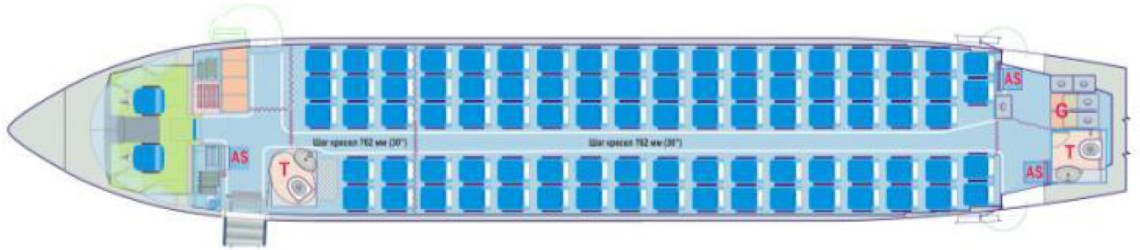
78-SEAT TWO-CLASS LAYOUT



4-Business Class
74-Economy-Class, seats pitch 30“(762 mm)

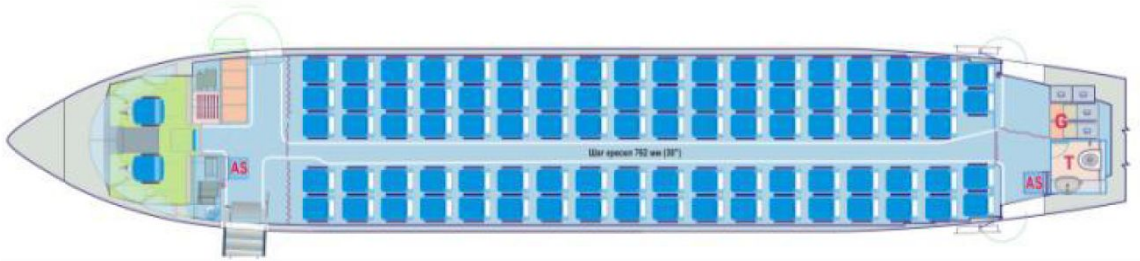
AN-148-201 PASSENGER CABIN

87-SEAT TWO-CLASS LAYOUT



13-Improved Economy Class, seats pitch 30“(762 mm)
74-Economy-Class, seats pitch 30“(762 mm)

89-SEAT TWO-CLASS LAYOUT



Economy-Class, seats pitch 30“(762 mm)

CERTIFICATION

The Aircraft family is designed in compliance with the **AP-25** and **FAR-25**

PRIMARY AIRWORTHINESS CERTIFICATION
- is performed in compliance with procedures of the AP-21 Aviation Regulations per the following requirements:
- aircraft - AP-25
- engine - AP-33
- APU - AP-VD

NOISE REQUIREMENTS – in compliance with requirements of Chapter 4 (with reserve up to -5 dB) International Standard “Environmental Protection”, Annex 16 to the Chicago Convention on International Civil Aviation (Volume I «Aircraft noise», issue 4 with Amendments 1... 7) and AP-36 Aviation Regulations


СЕРТИФИКАТ ТИПА

CERTIFICATES OF AN-148-100:

- Type Certificate No.ST 246AN148 issued by the Aviation Register of the Interstate Aviation Committee (AR of IAC) on 26.02.2007;

- Type Certificate No.TL 0036 issued by the State Aviation Administration of Ukraine on 26.02.2007

- Noise Certificate No.SSh 169AN148100 issued by the AR of IAC on 22.02.2007

EMISSIONS – in compliance with requirements of Annex 16 to the Chicago Convention on International Civil Aviation (Volume II “Aircraft Engine Emissions”, issue 1981 with Amendments 1 ... 4) and AP-34 Aviation Regulations.

ENSURING OF TRANSPORTATION SAFETY

1. THE AIRPLANE IS EQUIPPED WITH

- bulletproof doors
- special crew and cabin attendants communication devices
- video surveillance system
- a case to accommodate arms and ammunition carried
- masked passageways
- anti-hijack devices
- special accommodation for explosive device should such device be detected aboard in flight.

2. THE AIRCRAFT MEETS THE REQUIREMENTS OF:

- ICAO Annex 6 (Part I. Chapter 13 ‘Security’)
- ICAO Annex 8 (Part IIIB, section K ‘Aviation Security’)
- AP-25.795, CS-25.795 and FAR-25.795
- Directive of FAS of Russia No. 36I dated 24.04.1997
  and Russian Government regulation No. 282 dated 14.05.2003

AVIONICS OF AN-148 AIRCRAFT

The flight, navigation and radio communication equipment is compliant with current and future ICAO recommendations and EUROCONTROL requirements, including:

- Precise navigation in accordance with RNP-5 and RNP-1
- Flying in RVSM zones
- Automated flight planning with navigation database
- Flights in automatic mode by SID, STAR, APPROACH, MISSED APPROACH standard schemes
- II Landing Category
- Early ground proximity warning system
- Air collision avoidance system
- Detection of wind shear
- Radio communication within 8.33 kHz channel spacing
- Two-way communication within HF range
- Documentation of the crew members conversation during two hours

POWERPLANT OF AN-148 AIRCRAFT

ENGINE

AN-148 is equipped with D-436-148 engine (takeoff thrust 6,830 kgf) designed by SE Ivchenko-Progress and produced by Motor Sich motor-building plant

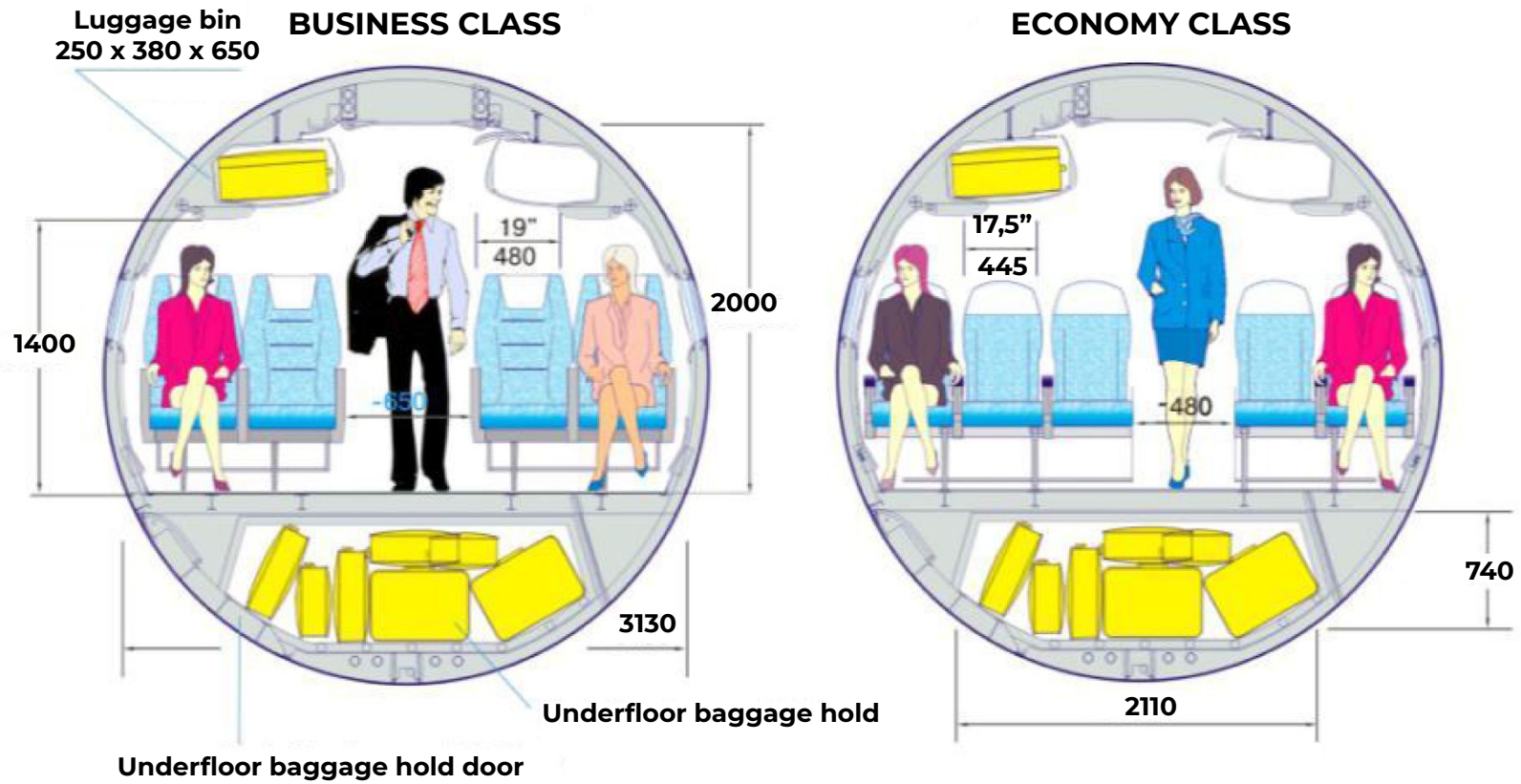
The engine is fitted with complex digital automatic control system. The engine life period is 40,000 flight hours and 20,000 cycles.

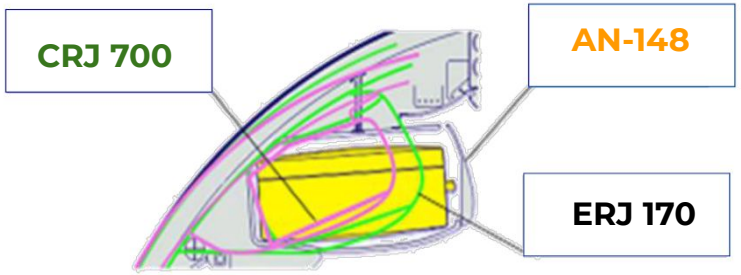
APU

AN-148 is equipped with APU AI-450 MS designed by SE Ivchenko-Progress and produced by Motor Sich motor- building plant.

The APU life period is 16,000 flight hours and 32,000 cycles.

AN-148-210 PASSENGER CABIN CROSS-SECTIONS



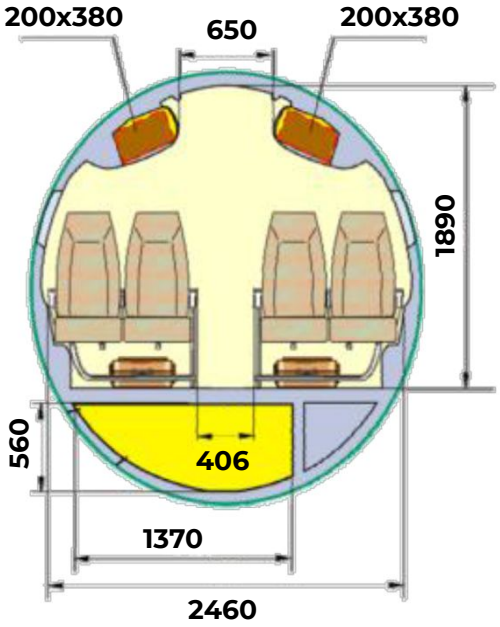


THE BIGGEST BAGGAGE BIN IN THE CLASS

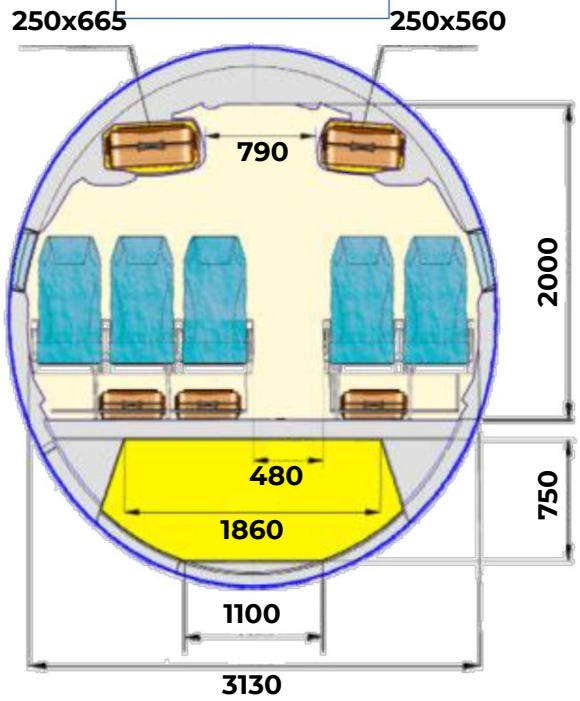
AN-148	250 x 650
CRJ 700	200 x 380
ERJ 170/175	250 x 400

THE AN-148-210 PASSENGER CABIN

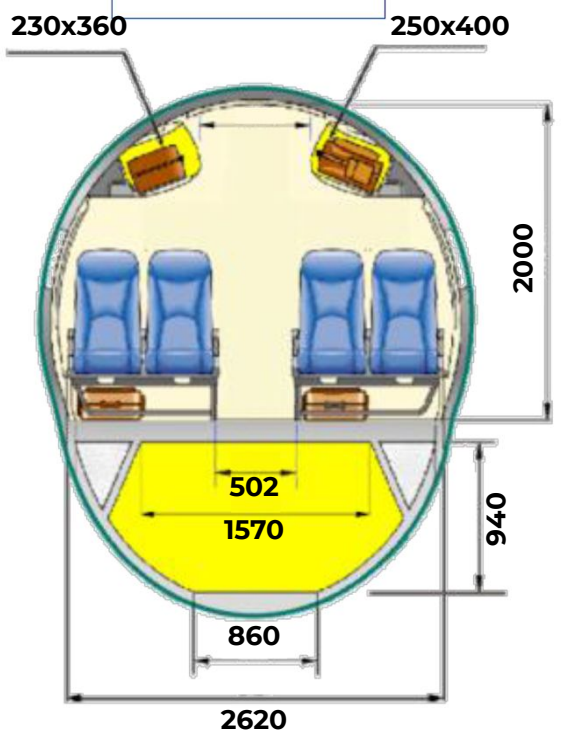
CRJ 700



AN-148



ERJ 170



BAGGAGE BIN VOLUME PER 1 PASSENGER

AN-148-100	0,056 m³
CRJ 700	0,040 m³
ERJ 170	0,055 m³

BAGGAGE HOLDS VOLUME PER 1 PASSENGER

AN-148-100	0,213 m³
CRJ 700	0,177 m³
ERJ 170	0,207 m³

SPETS TECHNO EXPORT

AN-148-301
NEW LONG RANGE BUSINESS JET AIRCRAFT

UKROBORONPROM
Ukrainian Defence Industry

MTOW
43,7 t

MAX PASSENGERS CAPACITY
19 pers. at VIP-layout
51 pers. at Special layout

MAX CRUISING SPEED
870 km/h

MAX CRUISING ALTITUDE
12,200 km

ENGINES
2 x D-436-148

ENGINES THRUST
2 x 6,830
(7,500 at APR)

TOFL (MTOW, ISA, SL)
1900 m

SERVICE RANGE WITH 12 PAS.
7000 km

14 SEATS LAYOUT

18 SEATS LAYOUT

19 SEATS LAYOUT

SPECIAL VERSIONS OF AN-148-301

AN-148-201E

AN-148-201EA
(command)

- Four class layout with cabin of the main passenger
- Rear stairs/door
- Onboard defense complex
- Operation from poorly equipped airfields

AN-148-201EM
(medevac)

- Passenger cabin
- Medical modules
- Equipment for embarkation of wounded men
- Transport equipment Onboard defense complex
- Operation from poorly equipped airfields

AN-148-301MP
(maritime patrol)

- Additional dorsal fuel tank
- Complex of special equipment:
  - Optotelevision infrared instrument – 360° surveillanceradar
  - System of avionic and radio technical intelligence and defense
  - Videocamera
  - Link communication intelligence system
  - Satellite navigation
- Additional communication equipment
- Onboard defense complex

SPETS TECHNO EXPORT

AN-148-201EA
COMMAND AIRCRAFT

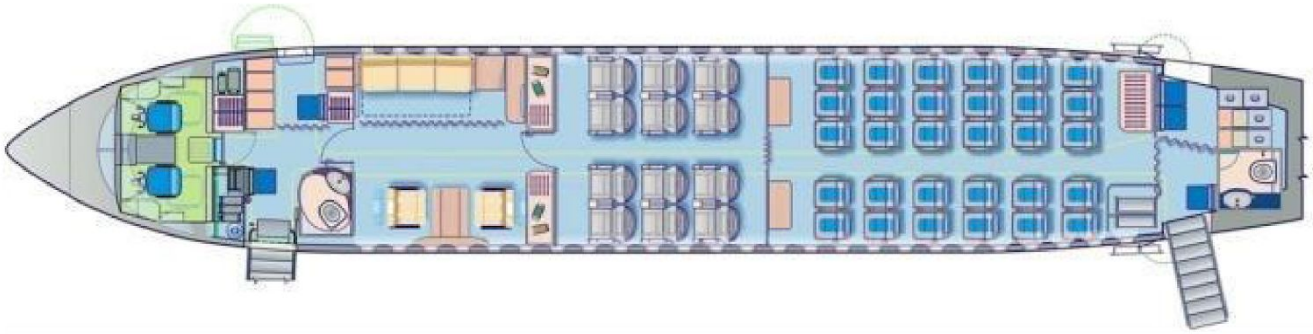
UKROBORONPROM
Ukrainian Defence Industry

- Transportation of command staff of Armed Forces
- 4 class layout with the cabin of the main passenger
- Equipped with special onboard communication center and onboard defense complex
- Operates from poorly equipped airfields

PASSENGER CAPACITY
44 pax.

RANGE WITH 30 PAX.
4800 km

CRUISING SPEED
850 km/h



SPETS TECHNO EXPORT

AN-148-201EM
CONVERTIBLE MEDEVAC AIRCRAFT

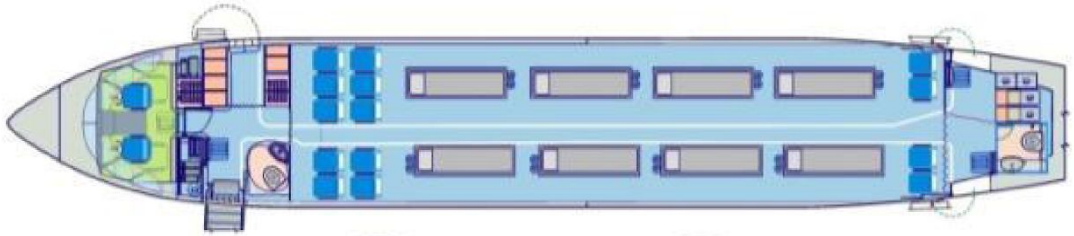
UKROBORONPROM
Ukrainian Defence Industry

PASSENGER CAPACITY
89 pax.

CRUISING SPEED
850 km/h

RANGE
(14 seats + 24 stretchers)
4900 km

TYPICAL LAYOUT
14 seats + 8 medical modules / 24 sanitary stretchers



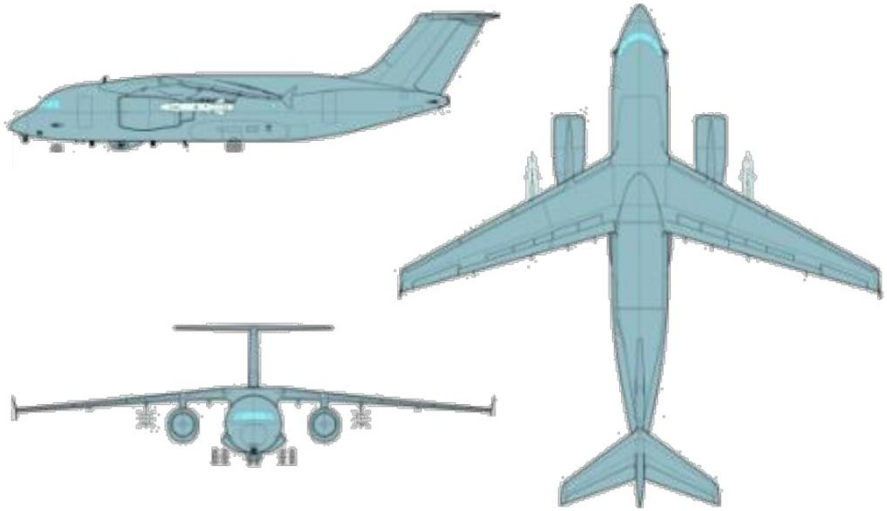
Placement of sanitary stretchers

Placement of medical modules

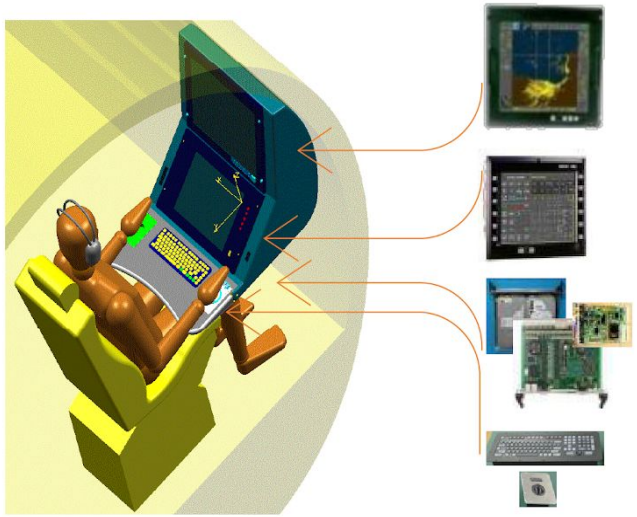
- Conversion in medevac or passenger version in conditions of aviation unit
- Transportation of passenger and sanitary equipment on board in cargo compartments

AN-148-301MP
MARITIME PATROL AIRCRAFT

FLIGHT ENDURANCE
up to 10÷12 hours



- Maritime patrol
- Combat actions against above-water targets
- Electronic surveillance
- Electronic reconnaissance
- Radio/electronic countermeasures (ECM)
- Radio intelligence, search and resque
- (SAR) operations



AN-158

PASSENGER REGIONAL
AIRCRAFT

SPETS
TECHNO
EXPORT

SPETS TECHNO EXPORT

AN-158-100
REGIONAL PASSENGER JET

UKROBORONPROM
Ukrainian Defence Industry

PASSENGER CAPACITY
102 pax.

CRUISING SPEED
850 km/h

RANGE WITH 89 PASS
2600 km

CREW
2 pilots + 2 cabin attendants

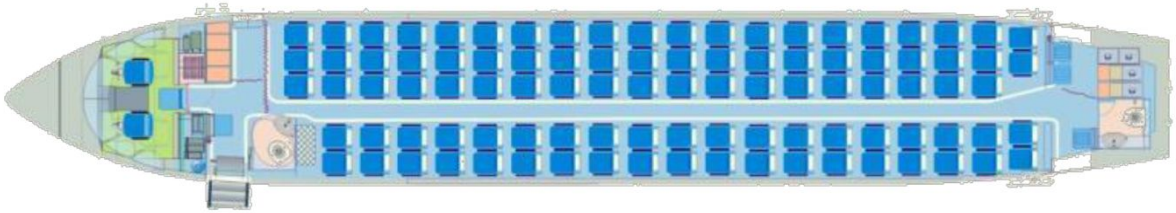
AN-158-100
MAIN DATA

	single-class	two-class
MTOW (Maximum takeoff weight)	43,7 t	
MLW (Maximum landing weight)	37,8 t	
MPL (Maximum payload)	9,8 t	
PASSENGER CAPACITY		
Economy class with 30” seat pitch	102 seats	-
Two-class layout, including:	-	89 seats
• economy class with 31” seat pitch	-	79 seats
• business class with 34” seat pitch	-	10 seats
CRUISING SPEED	800-870 km/h	
CRUISING ALTITUDE	11,600 m	
SERVICE RANGE in ISA, SL, MTOW (with passenger)	2,600 km (102 pax)	3,100 km (89 pax)
SERVICE RANGE with passengers in ISA +30°C (+45°C), SL	1,800 km (99 pax)	2,275 km (89 pax)
REQUIRED TO FIELD LENGTH (ISA, SL, MTOW)	1,900 km	
CREW	2 pilots + 2 attendants*	

*Number of cabin attendants may be optionally increased at Customer option

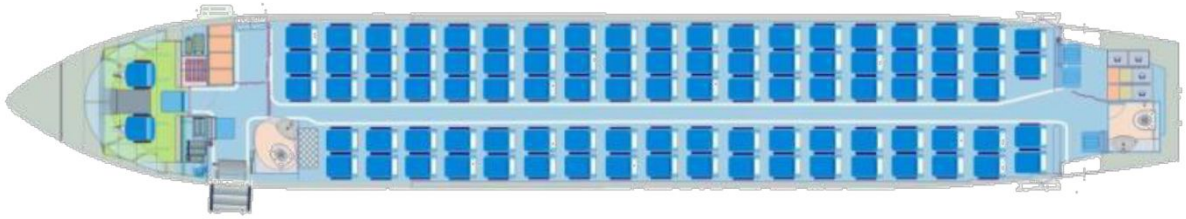
AN-158-100
PASSENGER CABIN

97-SEAT SINGLE-CLASS LAYOUT



Economy-Class, seats pitch 30“ (762 mm)

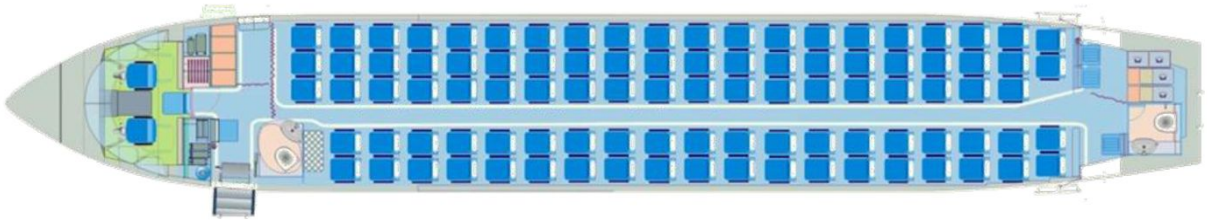
92-SEAT SINGLE-CLASS LAYOUT



Economy-Class, seats pitch 32“ (813 mm)

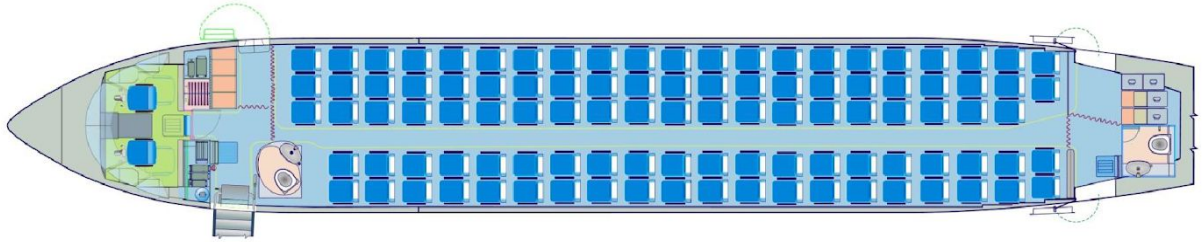
AN-158-100
PASSENGER CABIN

SINGLE-CLASS LAYOUT FOR 97 PASSENGERS



Economy class, 30“ (762 mm) seat pitch

SINGLE-CLASS LAYOUT FOR 102 PASSENGERS



Economy class, 28“ (711 mm) seat pitch

AN-148/AN-158 MAINTENANCE STRUCTURE

CHECK	TIME INTERVAL
LINE MAINTENANCE	
DAILY «E» CHECK	At least once every two days (48 hours)
FORTNIGHTLY «W» CHECK	Once every 15-20 days
BASE (PERIODIC) MAINTENANCE	
«A» CHECK	750 hours
«C» CHECK	36 months (about 7,500 hours)
PERIODIC MAINTENANCE FOR AIRFRAME AND CRITICAL PARTS OF AIRFRAME	
«SA» CHECK	Every 300 landings or 6 months
«SC» CHECK	Every 36 months or 3,000 landings

AN-178

MEDIUM TRANSPORT
MULTIPURPOSE AIRCRAFT

SPETS
TECHNO
EXPORT

MAIN SPECIFICATIONS

AN-178 IS MEDIUM TRANSPORT MULTIPURPOSE AIRCRAFT
of the family AN-148/158 (avionics and systems from AN-158).
It was designed to replace AN-12 and C-160

AN-178 with a cargo door and a ramp in the tail section is intended for delivery of personnel, weaponry and light military vehicles, for transportation of material assets, mail and other cargoes in bulk, containerized and palletized freights. The maximum payload is 18 tons. In emergency situations, AN-178 is able to evacuate civilians from disaster areas, casualties at standard stretchers and airdrop paratrooper rescue teams

CRUISING ALTITUDE
12200 m

CRUISING SPEED
825 km/h

FLIGHT RANGE WITH CARGO 10 T
3680 km

MTOW (STANDARD/OVERLOAD)
51000 kg/52400 kg

MAX CARGO LOAD
18000 kg

ENGINES
2 X D436-148FM

MAIN SPECIFICATIONS

AN-178 can be operated from/to both unpaved runways and those with an artificial pavement. The airplane allows flying by day and night under normal and adverse meteorological conditions operating from aerodromes located in geographic latitudes between from 73° North to 55° South

OVERALL LENGTH
32,23 m

OVERALL HEIGHT
9,65 m

WINGSPAN
30,57 m

CREW
2+1

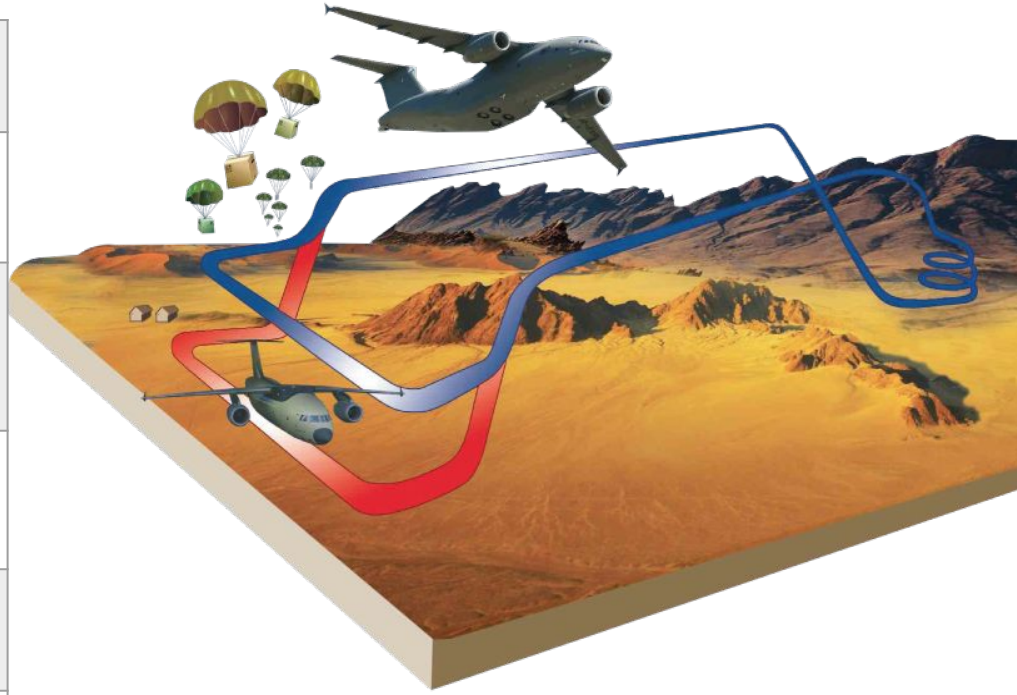
SOLDIERS
100 persons

PARATROOPERS
84 persons

WOUNDED AT THE STRETCHERS + AT SEATS
40+15 persons

MODIFICATIONS

	CIVIL AIRCRAFT	MILITARY AIRLIFTER		
	Ordinary runway	Ordinary runway		STOL
MAXIMUM PAYLOAD	16,0 t	15,0 t	18,0 t (overload)	7,0 t
PRACTICAL RANGE WITH CARGO				
18 T	-	-	990 km	-
15 T (16 t for civil aircraft)	1620 km	1610 km	2040 km	-
10 T	3950 km	3500 km	3890 km	-
5 T	4700 km	4620 km	4620 km	2000 km
FERRY RANGE	5300 km	5230 km	5230 km	4380 km



TRANSPORT MISSION

AN-178 transport aircraft is a platform for the development of the whole range of modifications for civil and military purposes:

- Military transport aircraft
- Civil transport aircraft
- SAR
- Medical aircraft
- Aircraft for emergency situations

HIGHLIGHTS

ONBOARD MAINTENANCE CONTROL SYSTEM
for optimization of the maintenance process

LANDING GEAR
for operations on unpaved runways

WINGLETS
fuel consumption reduction

PRACTICAL RAMP
with a kneeling system

PRESSURIZED CARGO CABIN
for the purpose of completion of standard military and civil missions

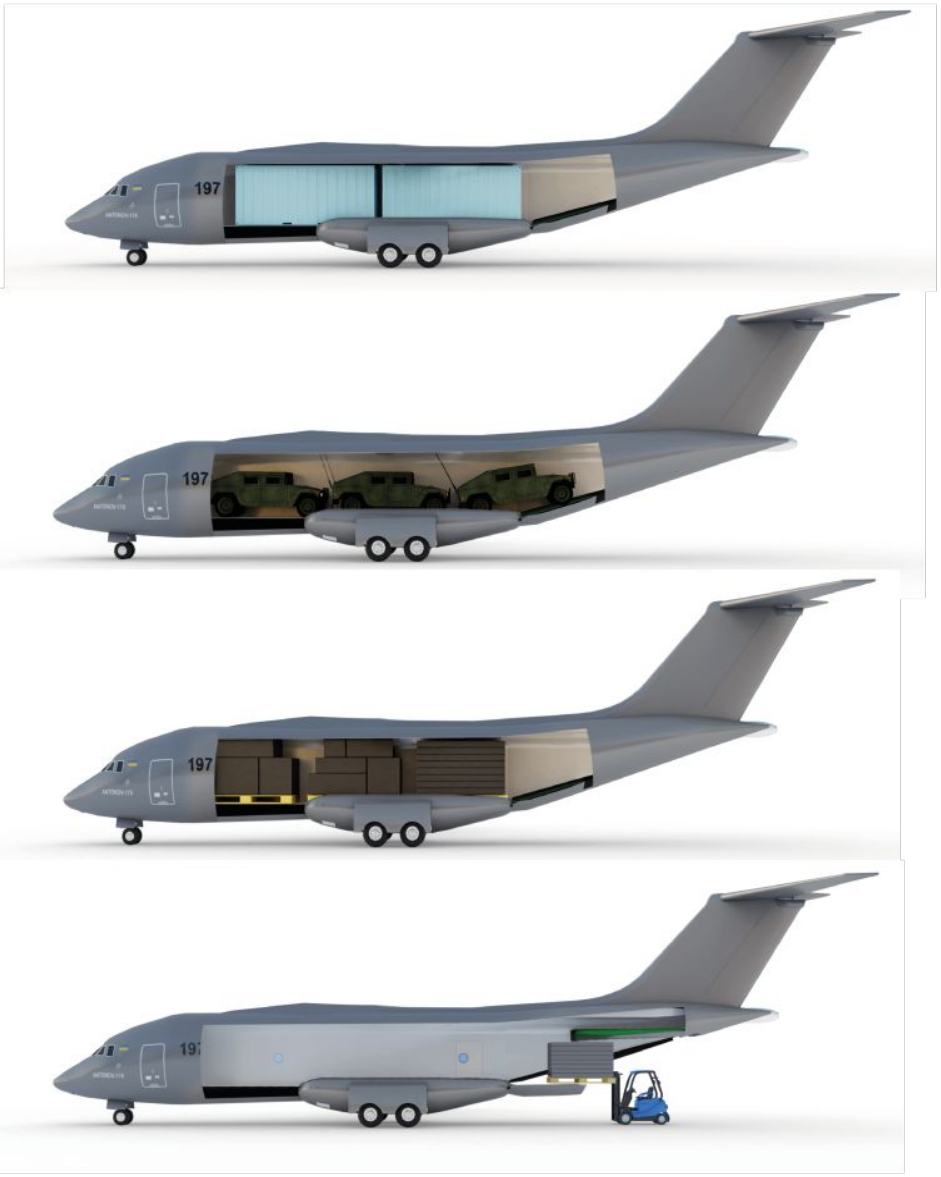
APU
autonomous operations

EMBEDDED DOOR
with integrated stairs

EMERGENCY HATCH
evacuation of personnel at emergency conditions

CARGO COMPARTMENT CAPABILITIES

AN-178 cargo compartment dimensions are capable of carrying a wide range of general cargoes, including sea containers, military and humanitarian cargoes. The aircraft is equipped with a main landing gear kneeling system intended to simplify the loading of the vehicles into the cargo compartment. Due to the capabilities of the onboard loading complex (option), AN-178 can perform autonomous cargo loading/unloading when additional ground handling equipment is not required



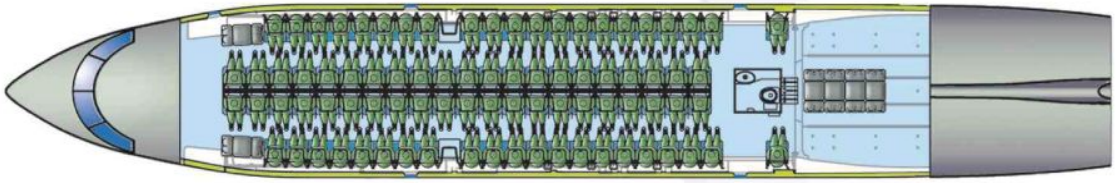
THE AERIAL DELIVERY SYSTEM ENABLES TO CARRY OUT THE FOLLOWING

- single, group and serial airdropping of cargoes, as well as air mission landing

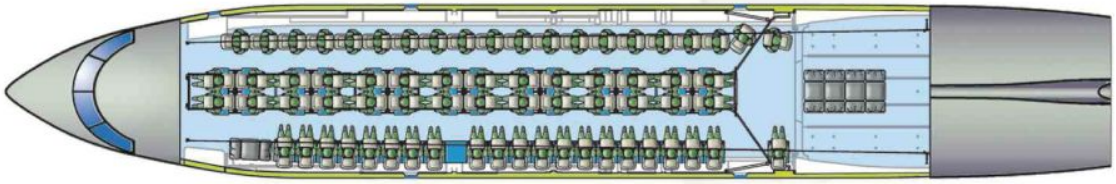
- transportation of troops and their para dropping through the cargo hatch and fuselage doors in two groups (option) or through the cargo hatch in one group

AN-178 enables to perform airdropping of mono cargoes weighing up to 7.5 t

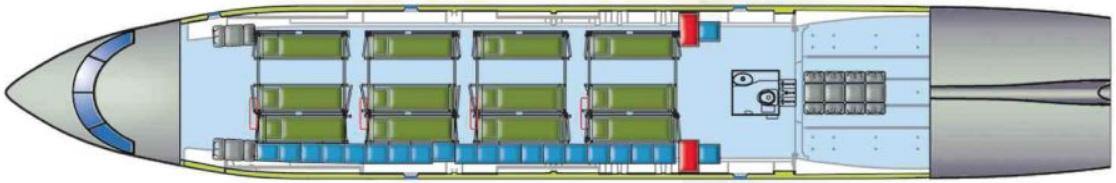
TRANSPORTATION OF PERSONNEL



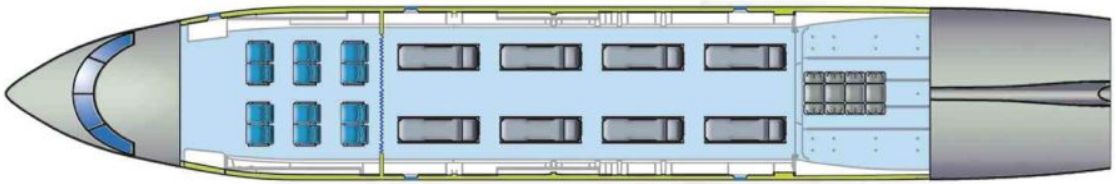
100 SOLDIERS



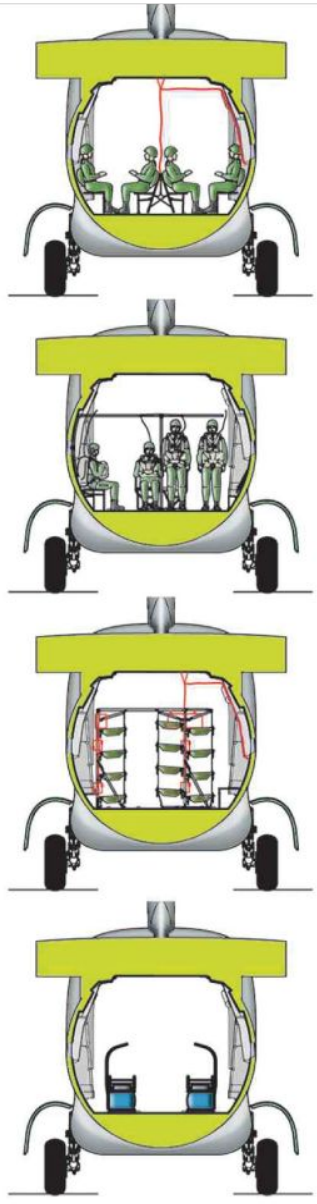
84 PARATROOPERS



40 WOUNDED AT THE STRETCHERS + 15 AT SEATS



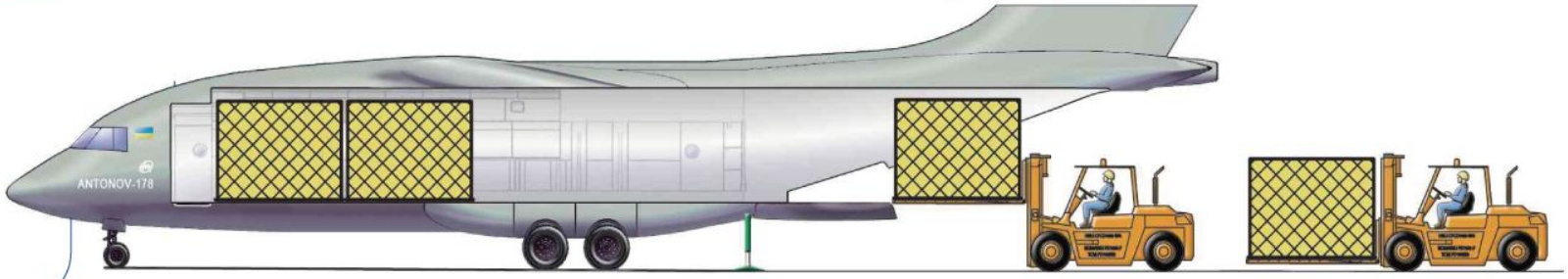
8 MEDICAL MODULES + 12 ATTENDANTS



LOADING OPTIONS

LOADING OF PALLETS AND CONTAINERS BY HANDLING MACHINE

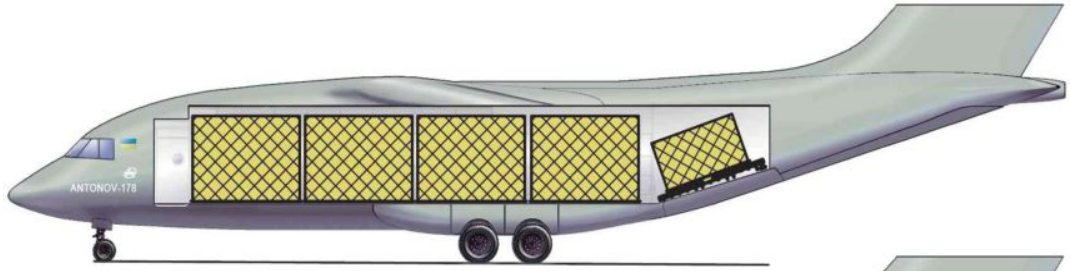
LOADING BY FORKLIFT



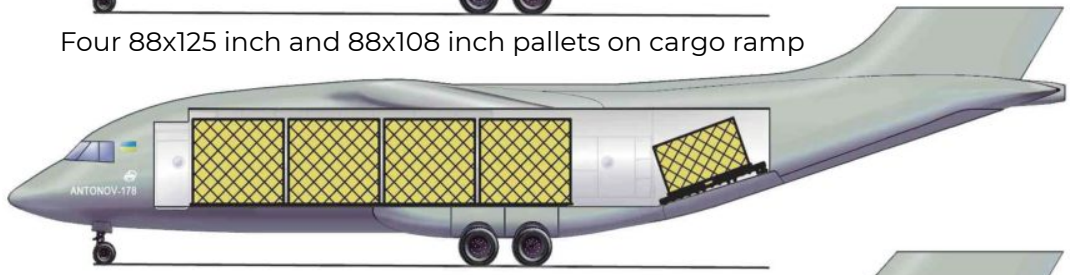
LOADING THE TURBOJET ENGINE BY UPPER HANDLING EQUIPMENT (OPTION), MAX CARGO WEIGHT UP TO 8 T

TRANSPORTATION OF CONTAINERS AND PALLETS

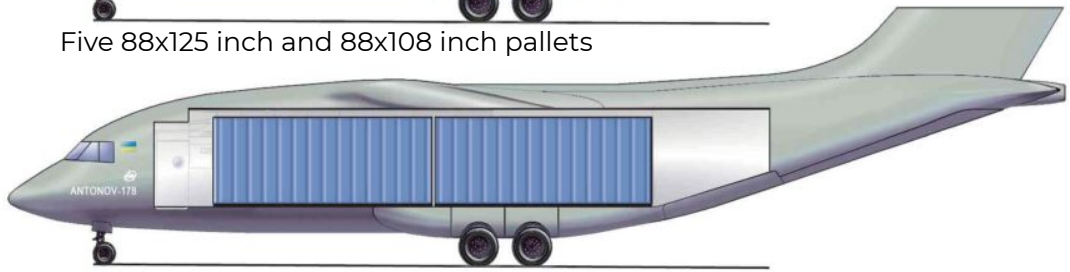
CARRIAGE	ITEMS	WEIGHT
CONTAINERS		
M1 96x96x125 in (2,438x2,438x3,175 m)	4	16,0 t
M2 96x96x238,5 in (2,438x2,438x6,058 m)	2	16,0 t
M3 88x96x125 in (2,235x2,438x3,175 m)	4	16,0 t
1D 96x96x117,8 in (2,438x2,438x2,991 m)	2	16,0 t
1C 96x96x238,5 in (2,438x2,438x6,058 m)	2	16,0 t
PALLETS		
88x108 in (2,235x2,743 m)	5	16,0 t
88x125 in (2,235x3,175 m)	4	16,0 t
96x125 in (2,438x3,175 m)	4	16,0 t
96x238,5 in (2,438x6,058 m)	5	16,0 t



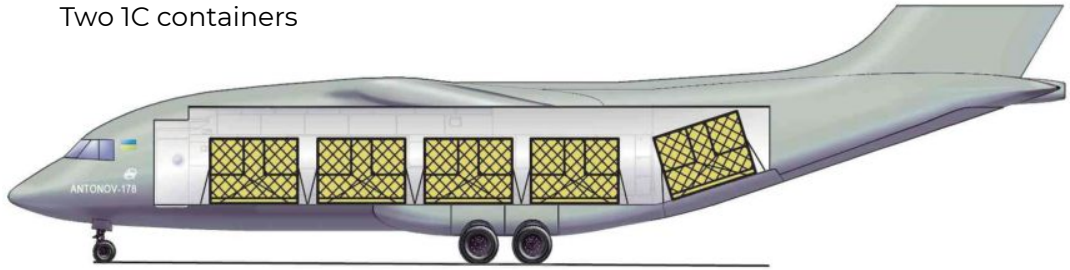
Four 88x125 inch and 88x108 inch pallets on cargo ramp



Five 88x125 inch and 88x108 inch pallets



Two 1C containers



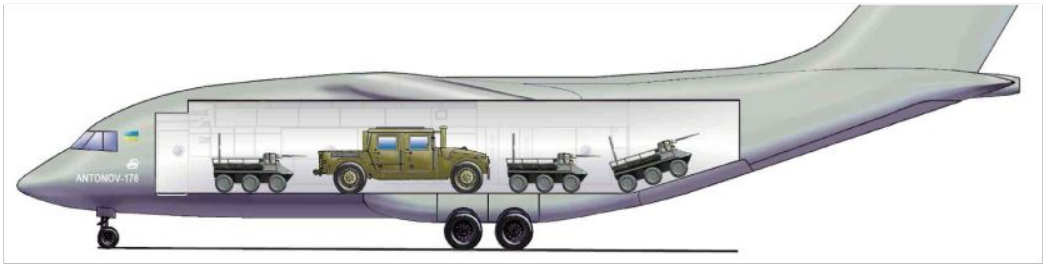
Cargo in bulks under a net

TRANSPORTATION OF SELF-PROPELLED VEHICLES

EAGLE 4x4 + SHERPA 2 4x4

HMMWV M1165A1, M1167A1, M1152A1

M113A-3 + GAZ 66



HMMWV M1165A1 + 3 Fantoms

KMW F2

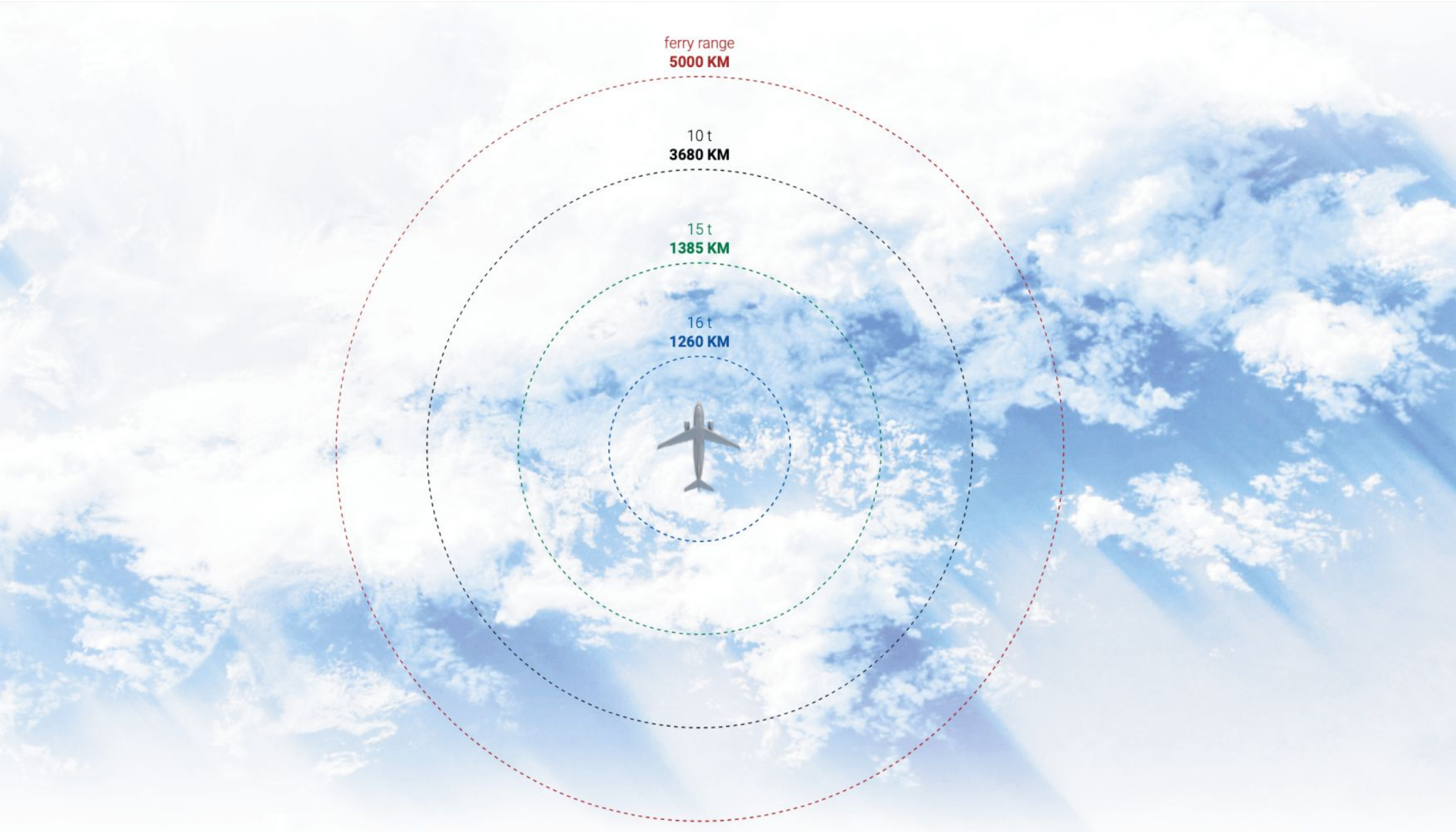
BARS 8 and BARS 6

AIRCRAFT EXTERIOR

AIRCRAFT EXTERIOR

AIRCRAFT EXTERIOR

FLIGHT RANGE OF AN-178



AN-188

MEDIUM TRANSPORT
MULTIPURPOSE AIRCRAFT

SPETS
TECHNO
EXPORT

SPETS TECHNO EXPORT

AN-188 – MEDIUM TRANSPORT MULTIPURPOSE AIRCRAFT

UKROBORONPROM
Ukrainian Defence Industry

ENGINE
4 x CFM LEAP1

MAX PAYLOAD
47 t

CRUISE SPEED
750-800 km/h

CRUISE ALTITUDE
9000-12000 m

FUEL CONSUMPTION
4200 kg/h

The **AN-188** medium multipurpose aircraft is a modification of AN-70 medium-range transport aircraft developed by Ukrainian aircraft manufacturing company Antonov

MILITARY AIRCRAFT

- Military Transport Aircraft
- Medevac Aircraft
- Special mission aircraft
- Tanker
- Gunship aircraft

CIVIL AIRCRAFT

- Civil Cargo Aircraft
- Search and rescue aircraft
- VIP

SPETS TECHNO EXPORT

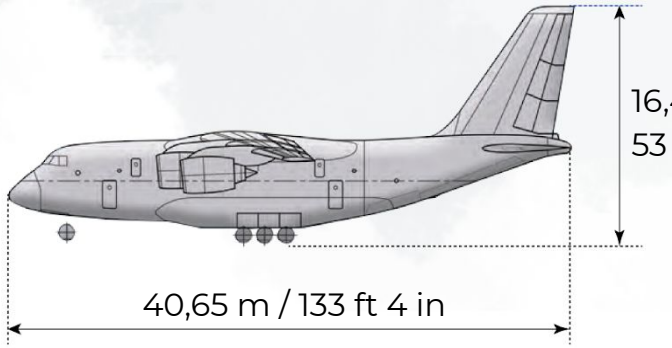
AN-188 – MEDIUM TRANSPORT MULTIPURPOSE AIRCRAFT

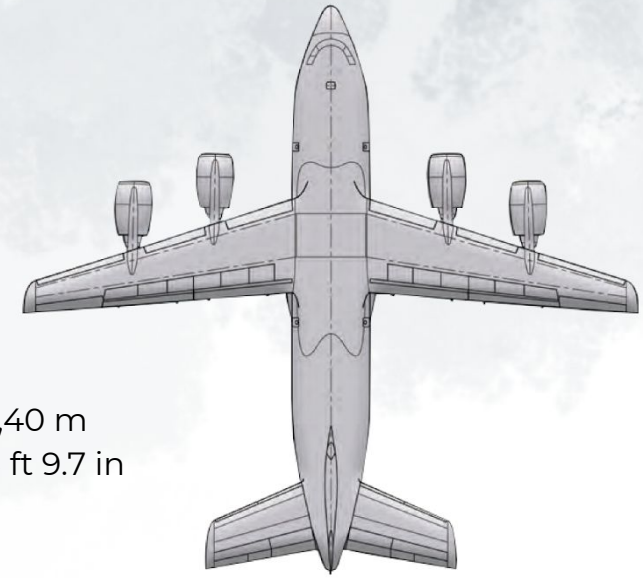
UKROBORONPROM
Ukrainian Defence Industry

AN-188 can be operated from/to both unpaved runways and those with an artificial pavement

The airplane allows flying by day and night under normal and adverse meteorological conditions operating from aerodromes located in geographic latitudes between 75° North and 55° South

The aircraft and its systems remain operable in the temperature range specified above after a ground cold-soak at OAT between - 55°C and + 55°C



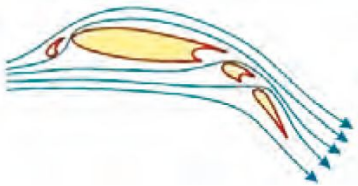


HIGHLIGHTS

- **HIGH EFFICIENT TWO-LINKS CONTROL SURFACES**

- **FLY-BY-WIRE CONTROL SYSTEM**
  with reserve hydro-mechanical system

- **OPERATION FROM UNPAVED AIRFIELDS**
  σ ≥ 6 kgf/cm2
- **BLOWING LIFT DEVICES**

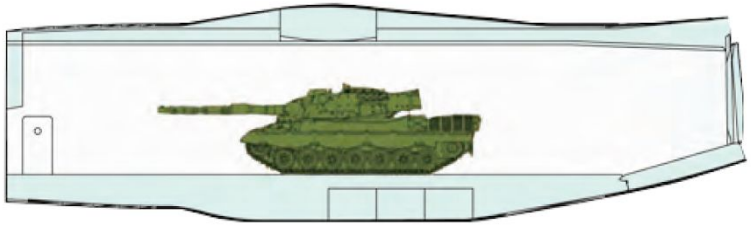


- **SHORT TAKE-OFF AND LANDING**
  at the airfields of 600-800 m length
- **THICK WING**
  with supercritical profile
- **WIDE FUSELAGE**
  with 5.6 m diameter
- **MULTI-LEG MAIN LANDING GEAR**

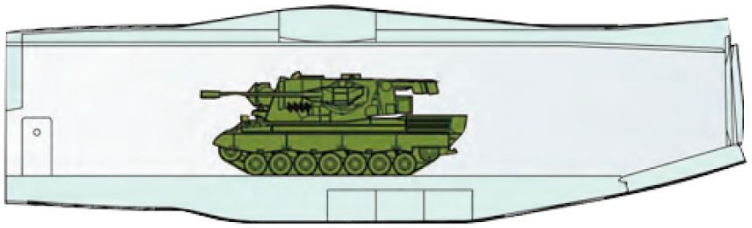
MAIN SPECIFICATIONS

BASE CONDITIONS	normal	STOL	
	concrete	concrete	ground
RUNWAY	1900 m	915 m	600-800 m
PAYLOAD maximum design	 47 35	 35	 20
ENGINES	Turbofan CFM Leap 4 x 14,58 tf		
MTOW	145 t	139 t	118 t
CRUISING SPEED	750-800 km/h		
CRUISING ALTITUDE	9450-12000 km		
FLIGHT RANGE – with 47 t cargo – with 37 t cargo – with 35 t cargo – with 25 t cargo – with 20 t cargo – ferry	 2720 km 4350 km 4700 km 6050 km 6300 km 7370 km	 3840 km 6500 km 6300 km 7370 km	 3370 km 7370 km
FUEL CONSUMPTION	155 g/t-km		
TRANSPORTATION ABILITY PERSONS -paratroopers - soldiers with weapons - injured with medical staff	110 persons 174-300 persons 100-206 persons		

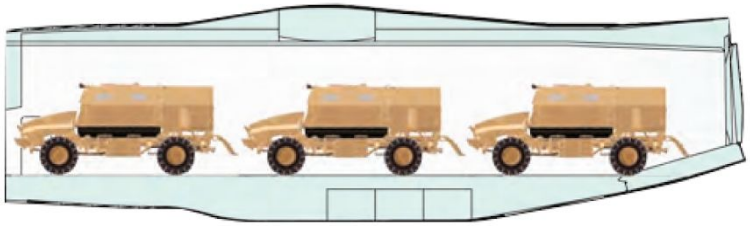
CARGOES



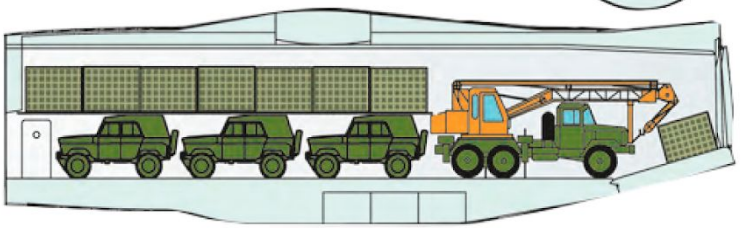
Tank 43 t



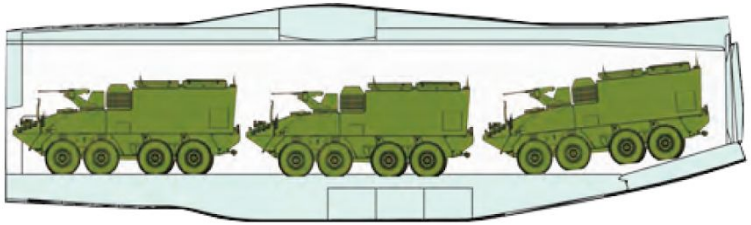
Anti-Aircraft Gun
47 t



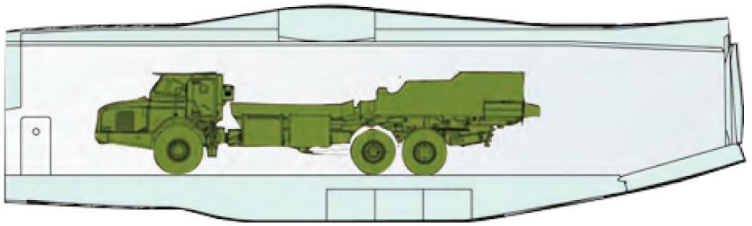
3 Armored Vehicle 4x4 (3 x 12,6 t)



Pallets on the upper deck and ramp
vehicles on the lower deck

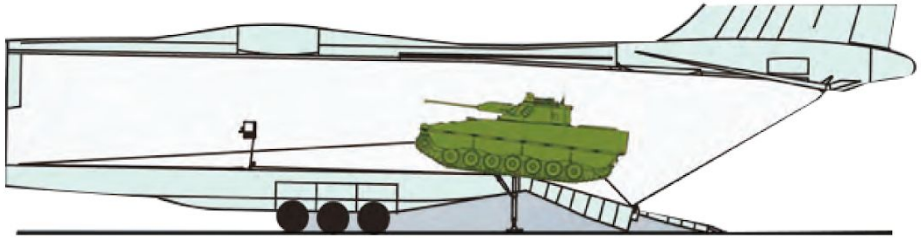


3 Armoured Vehicle Piranha 8x8 (3 x 14,7 t)

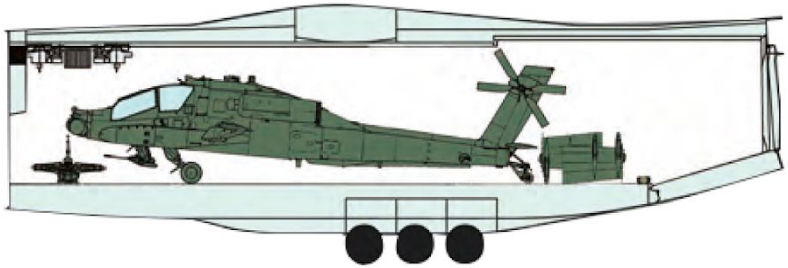


Autonomous Artillery Gun System (30 t)

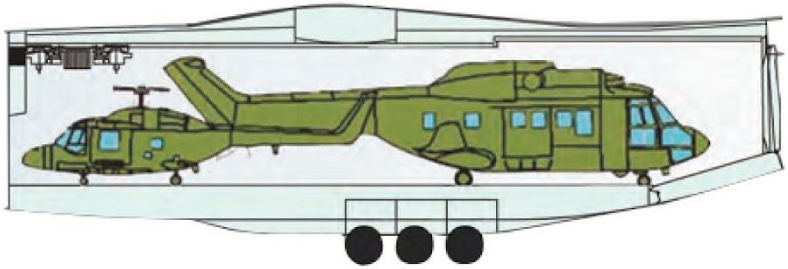
CARGO LOADING BY WINCHES:
maximum cargo weight - 35



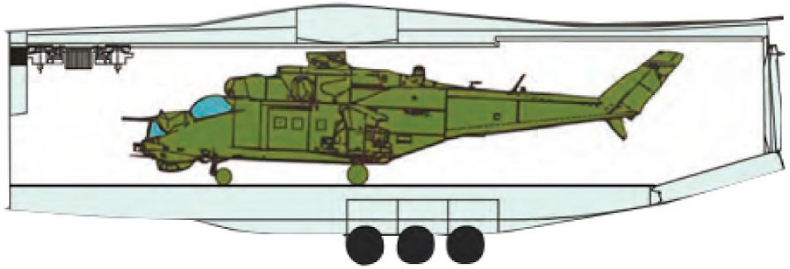
Armored Infantry Fighting Vehicle



AH-64 Apache (5,2 t)

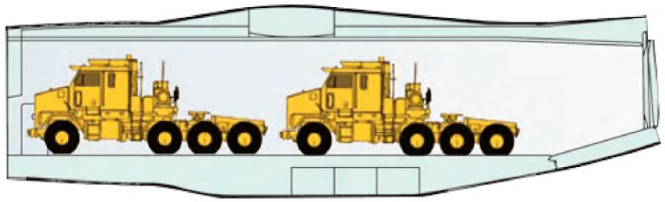


PUMA and LYNX Helicopters

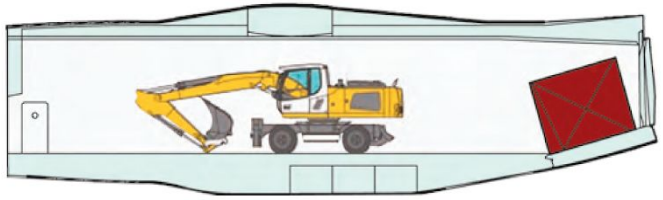


Mi-24 Hind (7.6 t)

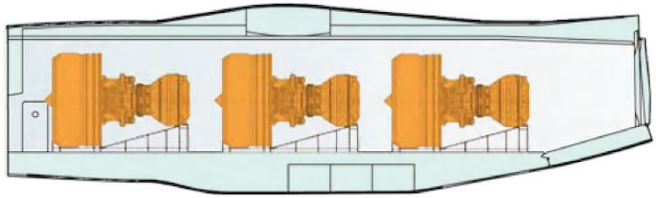
CARGOES TRANSPORT MISSION



2 Heavy Equipment Transporter (2 x 19 t)

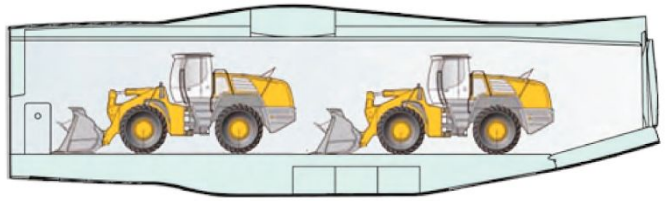


Wheel Excavator (28 t) + container on ramp

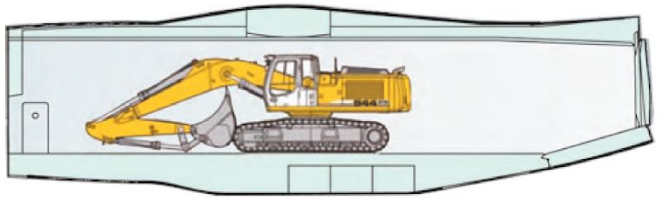


3 GE Engines (3 x 8.7 t)

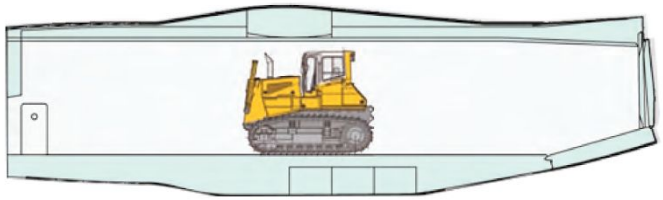
2 Rescue Boats (2 x 20 t)



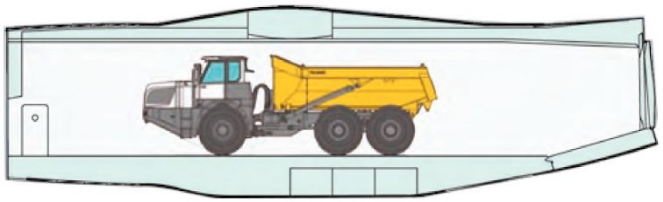
2 Lift Trucks (2 x 23 t)



Caterpillar Excavator (44 t)



Crawler Bulldozer (39 t)



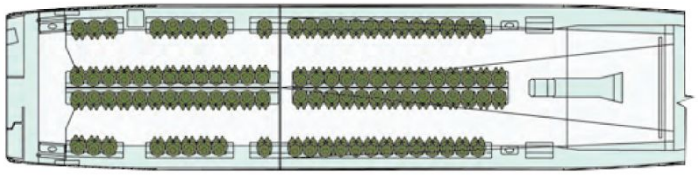
Articulated Dumper (35 t)

CARGOES AIR DELIVERY

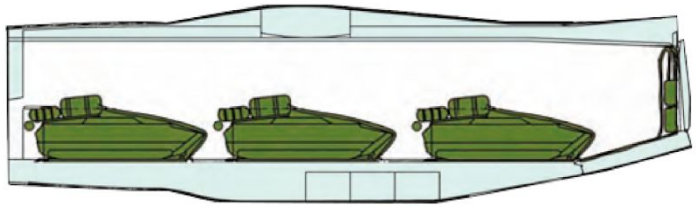
Aerial delivery equipment enables to perform:

- airdropping of all types of weaponry and materiel of airborne troops;
- airdropping of cargo items weighing up to 21 t;
- airdropping of paratroopers in 3 or 4 batches through fuselage doors and ramp.

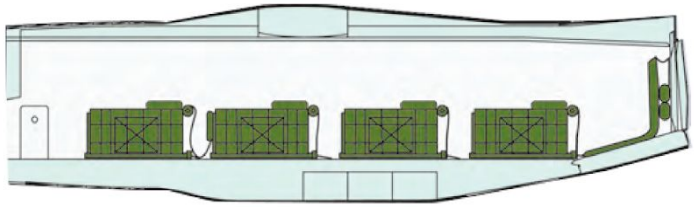
Pinpoint accuracy of personnel and cargo delivery is attained due to air- drop at lower speeds than similar aircraft



Aerial delivery of 110 paratroopers



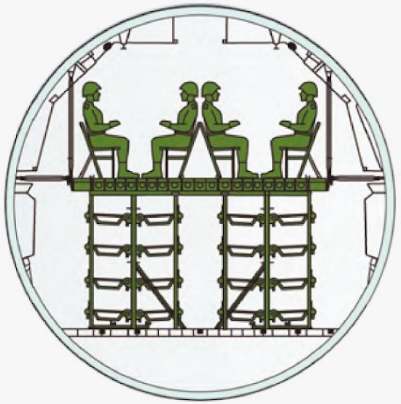
Aerial delivery of technics



Supply airdropping
Total weight - 35 t

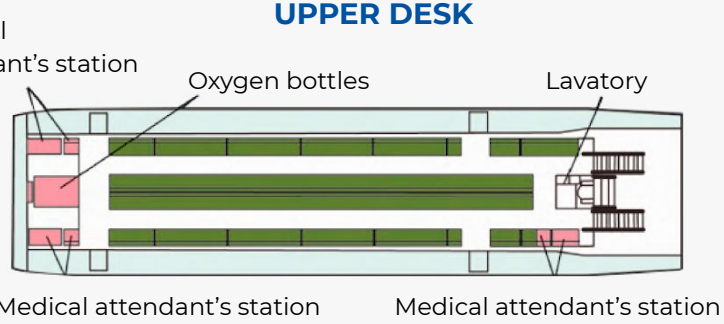
CARGOES EMERGENCY

110 persons
sitting on the upper deck

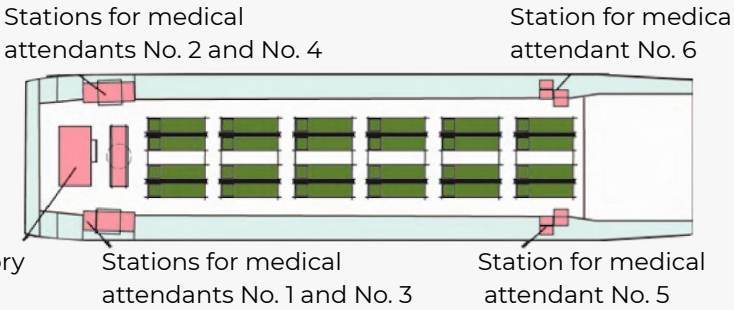


96 persons
on stretchers on the lower deck

UPPER DESK



LOWER DESK

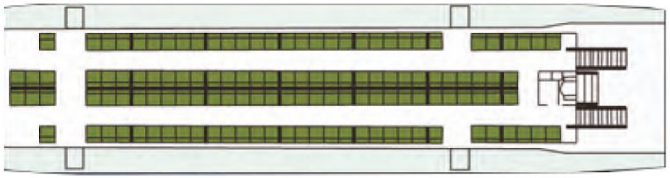


It takes 1 h to 3 h 40 min (if the upper deck is installed) to convert the cabin from the cargo ver- sion into the version for transportation of personnel or casualties

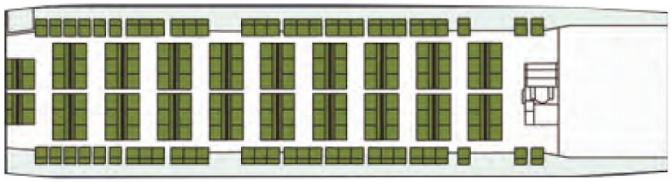
The AN-188 aircraft can carry up to 206 casualties with 6 medical attendants on the upper and lower decks, the required medical equipment and oxygen installation can be also mounted

TRANSPORT MISSION AND VIP VERSION

Total transportation of 300 persons



UPPER DECK (126 persons)

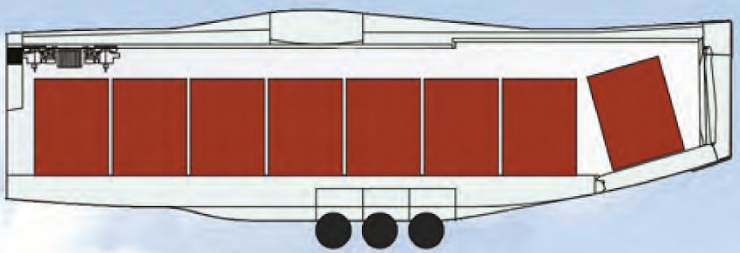


LOWER DECK (174 persons)

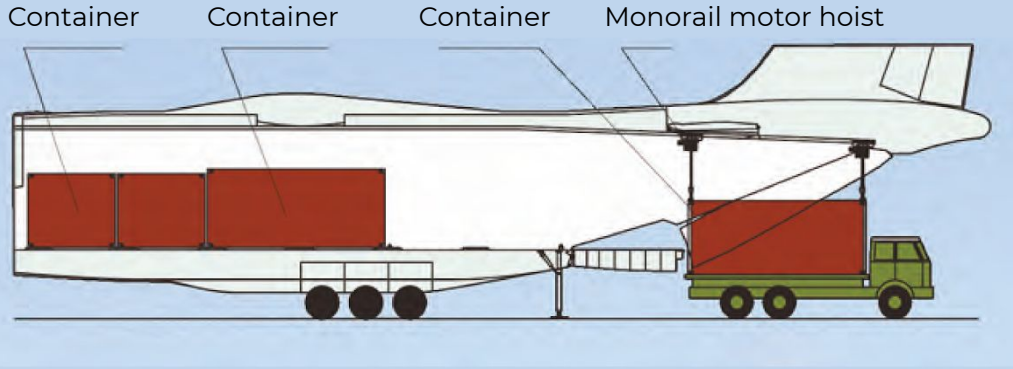
The aircraft may be equipped by VIP module (option)

CONTAINERS

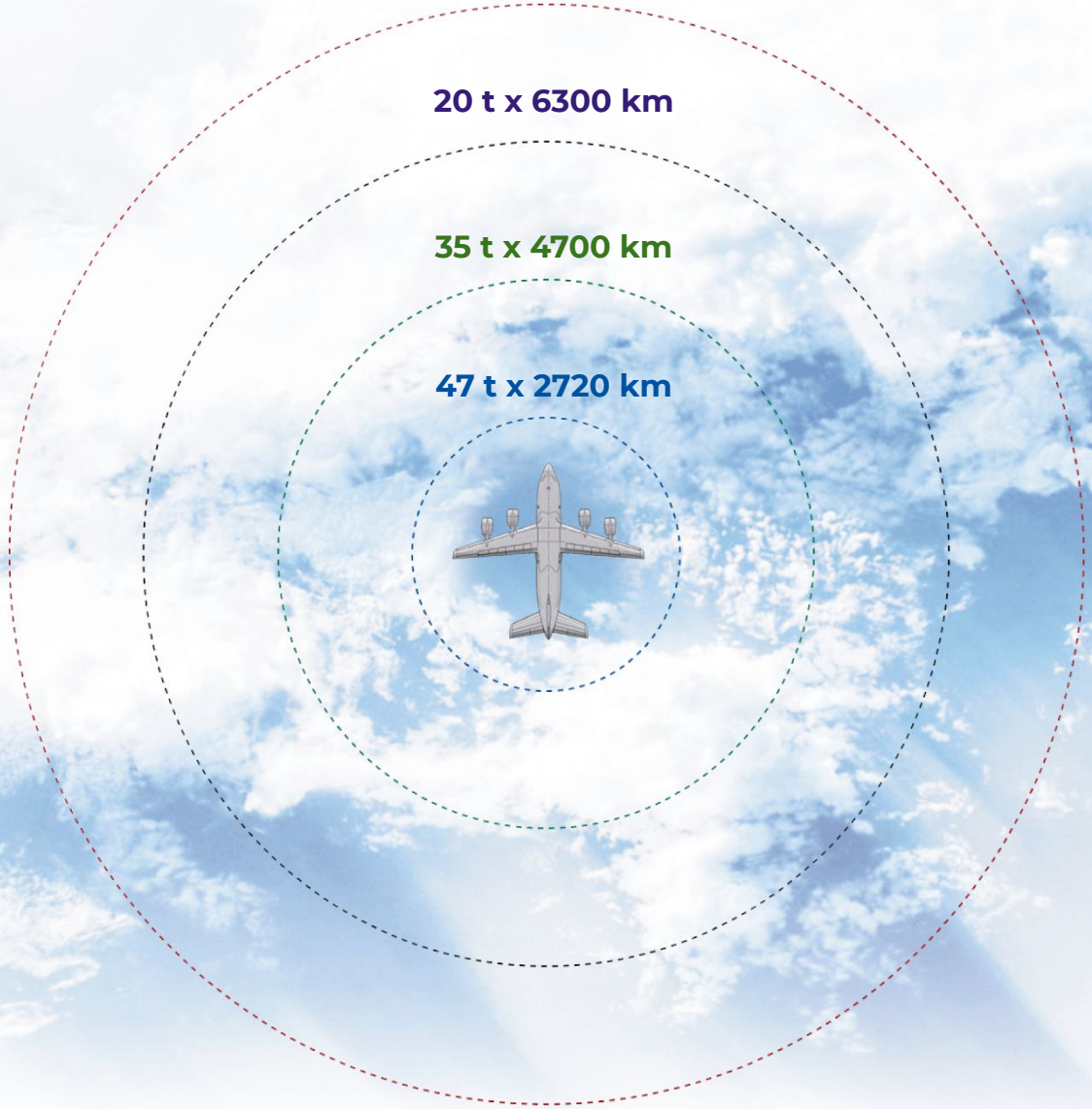
8 M1H containers (96"x96"x125") or
8 M1H pallets (96"x125")
Maximum cargo weight: 35 t



Cargo loading by means of monorail motor hoists



FLIGHT RANGE



AVIONICS

The avionics of the An-188 aircraft provides:

• execution of flight missions in various geographic regions without any restrictions on latitude, during the day and at night, in favorable and adverse weather conditions, over air routes equipped with radio/radar equipment and in airspace beyond them, including unmarked areas;

• formation flight;

• automation of air navigation and piloting at all flight phases with provisions for flight over preprogrammed flight paths and routes, spot paradropping with the use of dependent and independent navigation aids and targeting system;

• execution of ICAO Category I and Category II automatic and flight director approach, as well as support for landing on unprepared fields in STOL mode;

• piloting in automatic and flight director modes at altitudes of 120 m and higher, as well in manual flight mode within the entire range of altitudes;

• flights over domestic and international air routes in compliance with the effective ICAO requirements;

• reduced vertical separation minima in accordance with the RVSM requirements;

• navigation performance in compliance with ICAO regulations such as PBN RNAV 5, RNAV 1, RNP 10, RNP 4, RNP 2, RNP 1, RNP 0.3, RNP AR APCH, LPV.

POWER PLANT

Engines type:

by pass turbofan CFM LEAP
Maximum takeoff thrust
4x14,58tf / (4x32000 lbf)

The engine produced by CFM International, a joint venture company between GE Aviation of the United States and Safran Aircraft Engines of France

CARGO FLOOR HEIGHT CONTROL SYSTEM

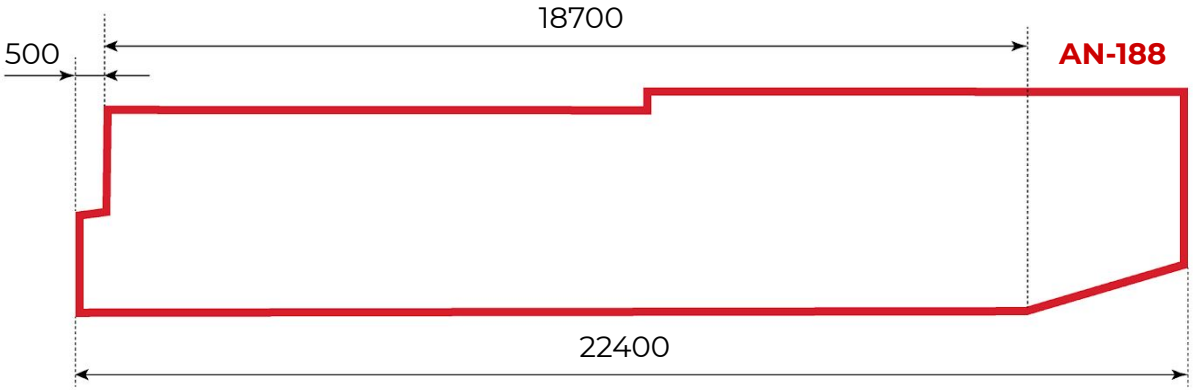
The cargo floor height control system is intended for lowering of the cargo floor height to facilitate loading / unloading operations and to improve working conditions during ground maintenance operations.

The cargo floor height control system is an electrically-signalled remote-controlled hydraulic system.

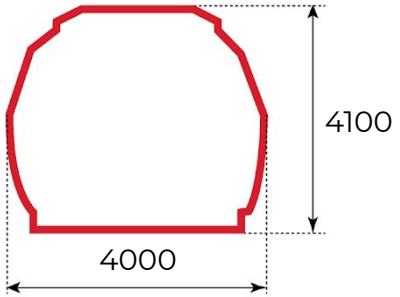
The system provides for:

• lowering and raising of the cargo floor by way of simultaneous shortening (stretching) of all main landing gear struts

• shortening (stretching) of any main landing gear strut separately



Cargo compartment volumes comparison:



AN-188
370 m³

Cargo compartment overall dimensions
and onboard integrated systems of the AN-188 aircraft enable to carry practically the whole range of military and humanitarian cargoes. Due to the capability of autonomous cargo loading/unloading, additional ground handling equipment is not required for the AN-188.

The cargo handling equipment includes:

- 4 overhead monorail motor hoists (lifting capacity: 3000 kgf each);
- 2 electric winches (tractive force: 1500 kgf each).

Moreover, the AN-188 is provided with the following additional equipment:

• roller track equipment ensuring loading and unloading of cargoes, their attachment on pallets and in containers, as well as relocation of paradropping equipment along roller tracks during aerial delivery of cargoes and vehicles
• removable set of the 2nd deck for military personnel transportation

The aerial delivery system enables to carry out the following:
• single, grouped and serial airdropping of cargoes, as well as air mission landing; • troop transportation and paradropping through the cargo hatch and fuselage doors

SPETS TECHNO EXPORT

EST. 1998

SPETSTECHNOEXPORT

A major Ukrainian state-owned foreign trade enterprise, which specializes in export and import of military and dual-use products and services globally, as well as on promoting innovations, transfer of technology and military-technical cooperation

OVER

22 years of experience

30 partner countries

170 state and private producers

30 research centers and design bureaus

UKROBORONPROM
Ukrainian Defence Industry

OUR EXPERTISE

Aircraft engineering and maintenance

UAV and Anti-UAV defense systems

Military and special purpose armored vehicles

Small arms and light weapons

Precision-guided weapons

Radars and air defense

Maritime systems

R&D services

STATE TRADE FOREIGN ENTERPRISE
SPETSTECHNOEXPORT

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