

Do228 NXT | FACTS & FIGURES



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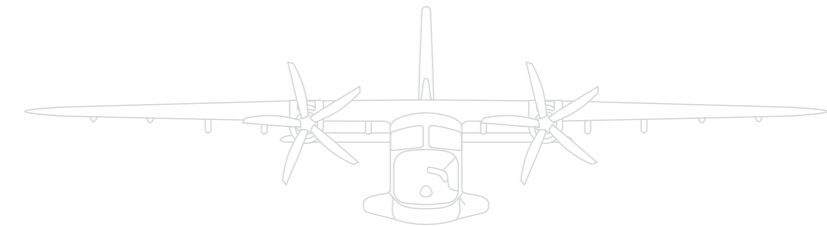
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MISSION CHALLENGES

The Do228 NXT is the platform of choice for special mission operations taking place between low level altitude and 10,000 ft (certified up to 25,000 ft). Military and government law enforcement organisations operate the Do228 worldwide for maritime patrol (pollution control, search and rescue, border control, fishery patrol), research flights, surveillance and reconnaissance, as well as light transport operations (cargo, paratrooper, passenger, MedEvac).



Environmental & Pollution Control

A challenging environment



Cargo Transport

Maritime Patrol

- detecting oil spills from ships, especially tankers
- Increased demand in Search and Rescue (SAR)
- Protection from piracy, that causes high economic damage
- Continuously increasing illegal immigration due to political and social instability can be better detected
- Enforcement of international Individual Fishing Quotas (IFQs)

Light Transport

- Increased demand in MedEvac operations
- Able to operate on a wide range of runway surfaces (remote airstrip)
- Providing food and supplies to people in hard-to-access regions
- Operational in crisis reconnaissance and response
- Suitable for disease control and medical supply transport



Law Enforcement



Fishery Monitoring



Search and Rescue



Passenger Transport



MedEvac



Paratrooper Transport



MULTIROLE PLATFORM

The Do228 NXT is the most advanced aircraft in its class, offering unsurpassed effectiveness and efficiency with superb versatility. This is why authorities all over the world count on it when it comes to challenging special missions of various kinds.

Key features of the aircraft are the long range, high utilization rates and high payload – and all this at impressively low operational costs. With the aircraft's state-of-the-art technology, pilots are able to maintain superior situational awareness throughout the most demanding missions. No other aircraft in this class combines safety and efficiency to the level offered by the Do228 NXT.

Best platform in its class

Operational advantages

- Speed performance: high speed cruise and range of operating speeds
- Endurance: operational for up to 10 straight hours
- Range: over 1000 NM with a significant payload
- Productivity and flexibility: largest payload/range ratio

Economic advantages

- Lowest fuel consumption per NM
- Lowest operating cost per NM

Mission advantages

- Flexibility in equipment installation thanks to a large square cab section
- UNIVERSAL® military grade avionics

Payload advantages

- PAX space/seating comfort in individual seats
- Cargo transportation volume and loading
- Cargo/PAX versatility
- Quick swap cargo door

MISSION MATCH – ALL AROUND THE WORLD

Maritime environment monitoring

The Do228 is used as a mission aircraft for pollution control in the North and Baltic Sea on a daily basis. For this task the aircraft fulfills all requirements for low level flights and long endurance over sea.



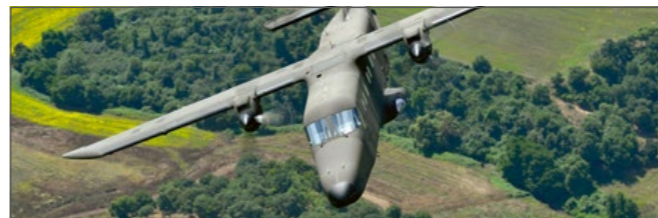
Border surveillance

The aircraft's performance and mission equipment enables the crew to provide reliable, accurate and real time maritime situational awareness to maintain border and maritime security, and fight against illegal immigration as well as maritime pollution.



Coast guard operations

The Do228 complies with the squadron slogan 'All Day, all Night, all Purpose' as the aircraft convinces by its capabilities and easy maintenance. It is economical to operate and ideally suited for coast guard missions.



Paratrooper training platform

Due to their versatility and their STOL capability the Do228 has been employed for different tasks (passenger and cargo transport) in different environments, including the training of paratroopers.



Passenger transport in extreme climate

The Do228 has been specially equipped for passenger transport in arctic climate. It has already proven that it is the perfect aircraft for operations under such harsh conditions.



Do228 as research platform

The aircraft can be used for atmospheric science and earth observation. The Do228 has been specifically chosen for operations using radar, multispectral and camera instrumentations.



MISSION ADAPTABLE

The Do228 NXT in customized maritime patrol configuration is the most suitable and economical solution for your mission.

The Do228 NXT ergonomics, outstanding field of view and comfortable environment substantially reduce crew fatigue and workload, thus a high level of vigilance is maintained throughout low level operations and long missions. Our aerodynamic expertise and system integration experience will ensure a seamless integration of your choice of sensors and mission systems to make the Do228 NXT as cost effective as it gets.



1 Integrated Glass Cockpit



2 Operator Console



3 Bubble Windows



4 SLAR (Side-Looking Airborne Radar)

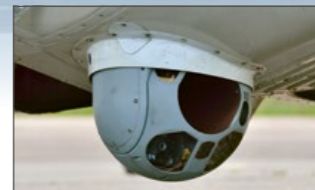


5 360° Surveillance Radar



6 VIS Line Scanner 8 MWR

7 UV/IR Scanner

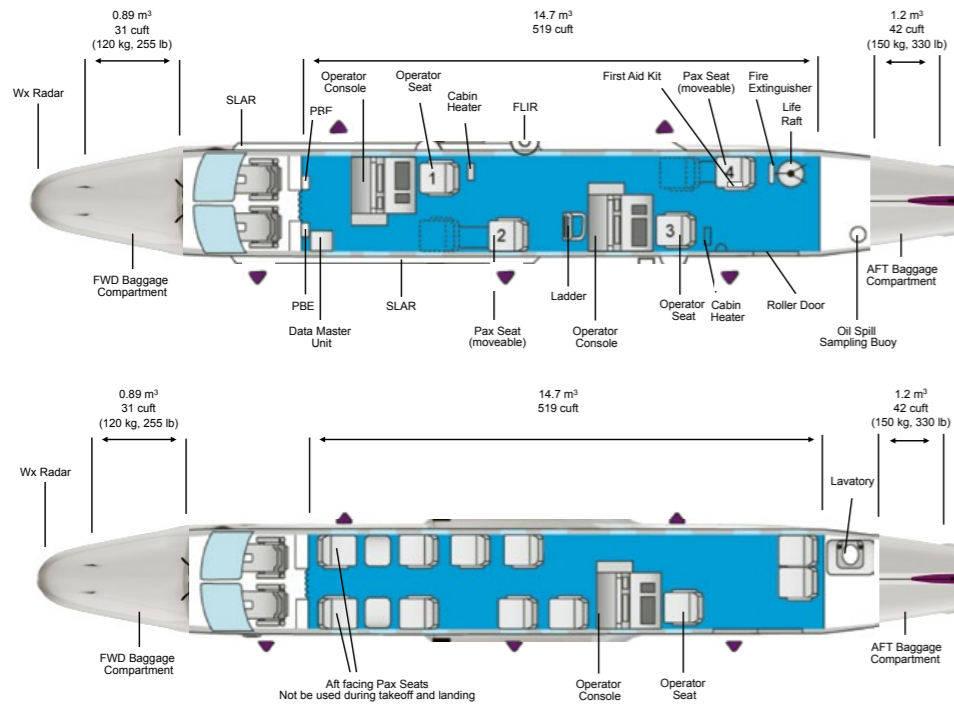


9 EO/IR Turret



10 Cargo Door Pax Door

MARITIME PATROL



Maritime Patrol layout

2 Operators, 1 Observer,
1 SAR Operator

Maritime Patrol layout

1 Operator, 8 Passenger Seats,
Toilet

- ▲ Emergency Exits
- Baggage compartment
- Cabin



LIGHT TRANSPORT

The Do228 NXT is «flying flexibility». The aircraft can be quickly re-configured from passenger to cargo transportation layout with minimum personnel.

Aircraft and performance features

- Renown short-field performance
- Renown hot and high performance
- Unprepared airfield operations
- Simple single point refueling in 10 minutes
- Pax/cargo door swap in 15 seconds
- Pax to cargo configuration change in about 1 hour by one person



Cargo door



Pax door



Unprepared airfield operation,
Nigeria



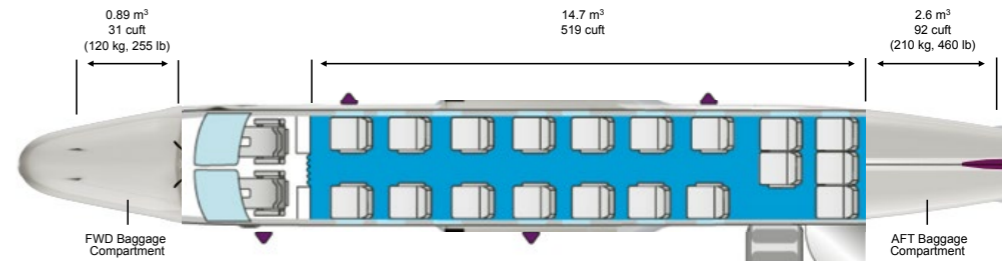
Tensing-Hillary Airport (9100 ft),
Lukla, Nepal

PAX

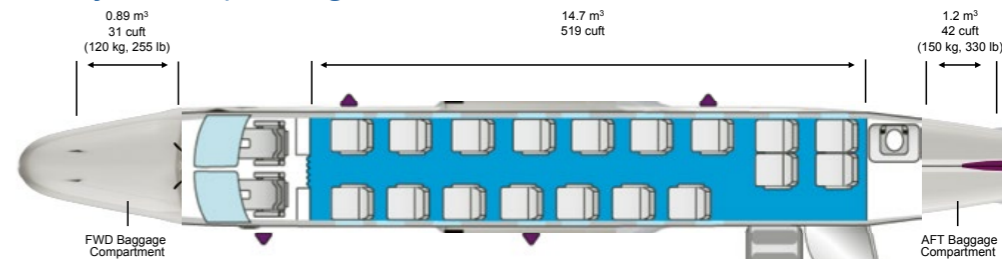
A high standard of passenger comfort is the primary consideration in the Do228 NXT design. The standard cabin consists of 19 individual passenger seats with 30-in pitch and offers airline standard passenger comfort in single seat configuration.

Its rectangular cross-section is the ideal shape for utility applications and provides passengers with ample space at shoulder height, extra passenger headroom and cargo storage space. Passengers enter through a passenger door with built-in steps on the LH side of the rear fuselage. An 18 seats layout, with a toilet located aft of the cabin, is also available.

PAX layout – 19 passenger seats



PAX layout – 18 passenger seats with toilet



- ▲ Emergency Exits
- Baggage compartment
- Cabin

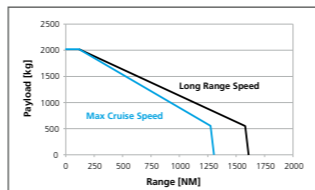
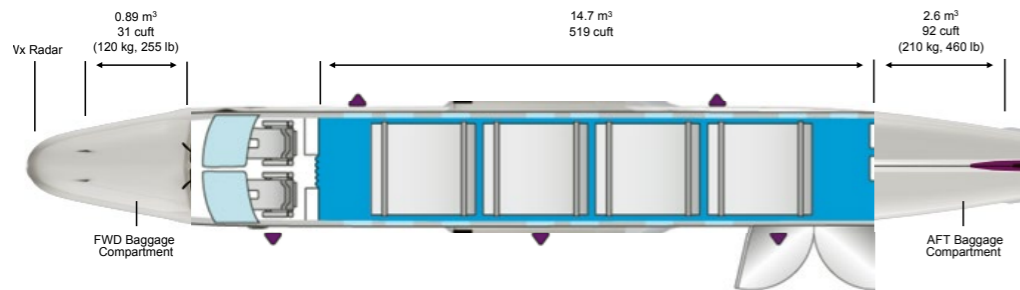
LIGHT TRANSPORT

Cargo

Seats can be quickly removed to convert the cabin for cargo transportation; to ease loading the normal passenger door can be opened sideways, which together with the adjacent door, creates a massive opening for bulky or heavy cargo. Parcels and crates of all sorts can be distributed quickly and easily inside the cabin by means of the integrated roller system. While smaller and lighter cargo items can be secured with nets, bulky and heavier cargo stacked on pallets can be locked to the seat rails.

The rectangular cabin with its 23 ft of usable length significantly eases the transportation of bulky cargo or longer goods. Whatever your cargo may be, a total of 2 tons (512 cu ft) can be transported.

Cargo layout



- ▲ Emergency Exits
- Baggage compartment
- Cabin

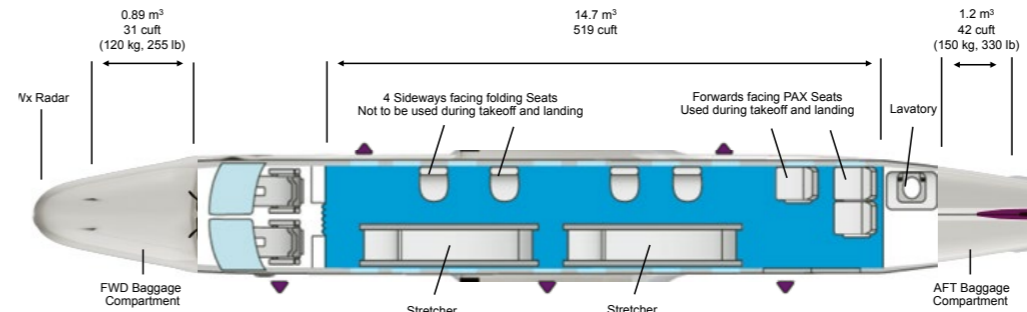
MedEvac

The ambulance equipment has been designed to cover different mission aspects. The complete equipment is sectionalized in separate specific modules, which enable quick change, if required, to support the multi purpose operation of the Do228 NXT.

In accordance with MedEvac hygienic requirements, the cabin roof and walls of the Do228 NXT are covered with a polycarbonate lining with a washable surface and can be easily sanitised. The cabin floor is covered with a special washable, anti-skid coating to protect the aircraft's lower structure against contamination by fluids.

The cabin can be equipped with various combinations of forward and side facing seats and double stretcher as well as intensive care stations. The ambulance transport layout may be easily combined with trooper and paratrooper transport layouts.

MedEvac layout



- ▲ Emergency Exits
- Baggage compartment
- Cabin

LIGHT TRANSPORT

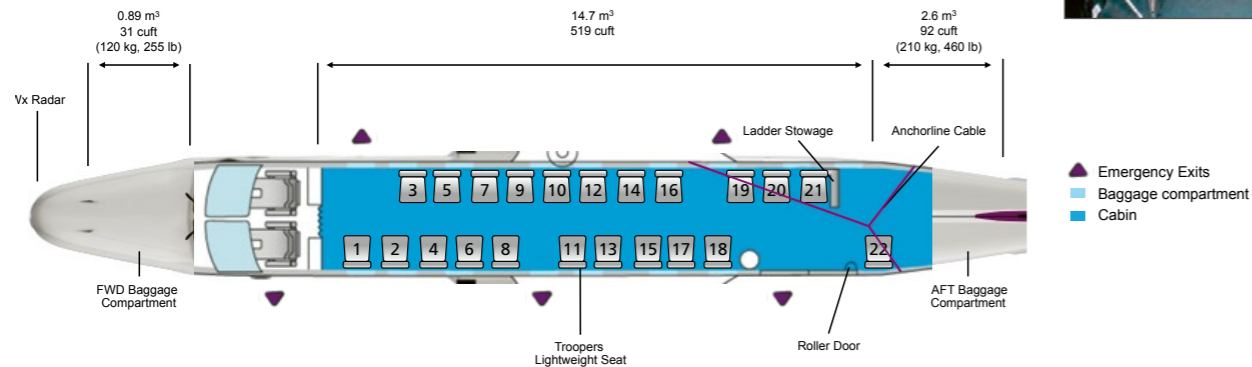
Paratrooper

In this configuration 21 paratroopers and 1 jumpmaster can be transported (limited to 19 paratroopers under civil registration). The paratrooper version is easily changeable to the trooper version by removing the anchor line cable and jump master equipment.

The paratrooper version is characterized by the following equipment:

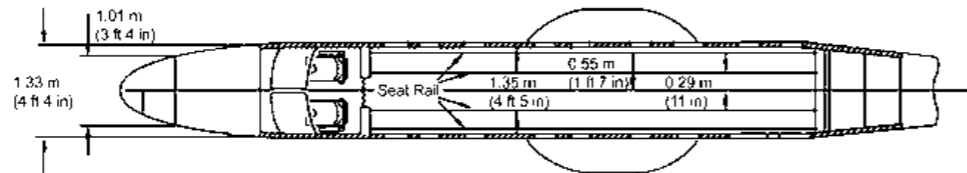
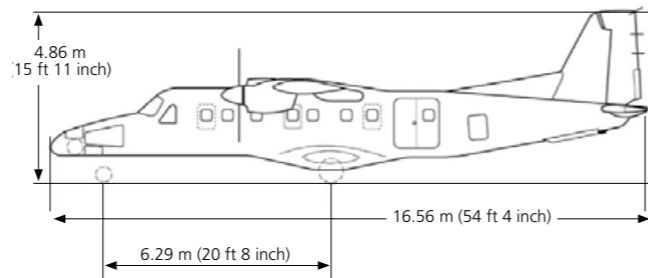
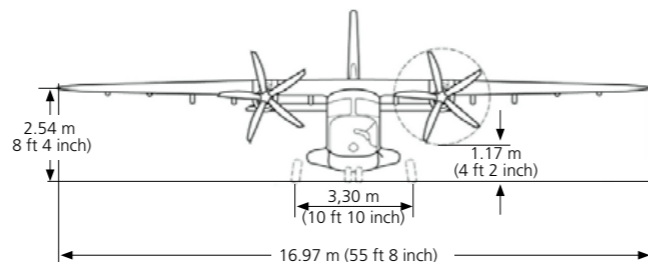
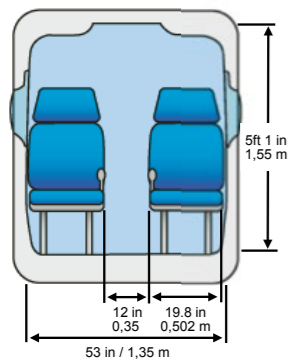
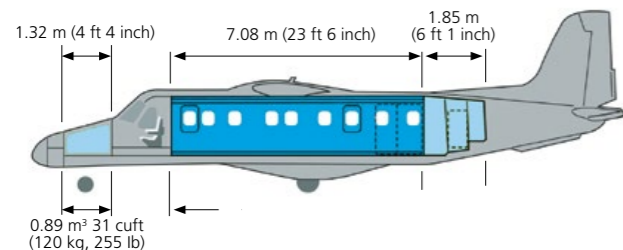
- Side facing, lightweight fold-up troop seats
- Roller door with ladder
- Anchor line cable
- Side wall protection

Paratrooper layout (21 Paratroopers, 1 Jumpmaster)



SPECIFICATIONS

Dimensions



Aircraft data

DIMENSIONS

Overall height	15 ft 11 in (4.86 m)
Overall length	54 ft 4 in (16.56 m)

WING

Span	55 ft 8 in (16.97 m)
Area	344.3 ft ² (32.00 m ²)
Aspect ratio	9.0
Taper ratio	0.7
Sweepback of leadingedge inboard	0°/outboard 8°

VERTICAL STABILIZER

Height	8 ft 10 in (2.70 m)
Area	64.6 ft ² (6.0 m ²)
Aspect ratio	1.50
Taper ratio	0.46
Rudder area	16.1 ft ² (1.5 m ²)
Rudder deflection	-24°/+24°

PASSENGER COMPARTMENT

Overall length, max.	23 ft 3 in (7.08 m)
Maximum width	4 ft 4 in (1.328 m)
Maximum height	5 ft 1 in (1.55 m)

AILERONS

Span	8 ft 10 in (2.69 m)
Area	2×14.5 ft ² (2×1.345 m ²)
Deflection (Flaps 0°)	25° up/18° down
Chord	30%

HORIZONTAL STABILIZER

Span	21 ft 2 in (6.45 m)
Area	89.6 ft ² (8.33 m ²)
Aspect ratio	5.00
Taper ratio	1.00
Elevator deflection	-30°/+25°

DOORS (HEIGHT x WIDTH)

Cockpit door	2 ft 9 in × 2 ft 2 in	(0.84 m × 0.65 m)
Passenger airstair door	4 ft 5 in × 2 ft 1 in	(1.34 m × 0.64 m)
Passenger/cargo door		
(both door panels are open)	4 ft 5 in × 4 ft 2 in	(1.34 m × 1.28 m)
Baggage door (front)	3 ft 11 in × 1 ft 8 in	(1.2 m × 0.5 m)
Baggage door (rear)	2 ft 11 in × 1 ft 9 in	(0.89 m × 0.53 m)
Emergency exits (3)	2 ft 2 in × 1 ft 7 in	(0.67 m × 0.48 m)

WEIGHTS

	lb	kg
Max. take-off weight (MTOW*)	14,110	6,400
Max. landing weight	13,448	6,100
Max. zero fuel weight (MZFM)	13,095	5,940
Operating weight empty		
(with 2 Pilots) (OWE)	8,598	3,900
Mission equipment		
(incl. operator and console)	1,047	475
Max. fuel	4,156	1,885

*e.g. optional MTOW increase to 6,575 Kg (14,550 lbs) possible

PERFORMANCE

With its Transport Category OEI field performance, control and engine responsiveness and wide range of operational speeds (74 to 223 KIAS), the Do228 NXT ensures safe margins throughout the entire mission envelope.

Range of take-off distance

- 2.600 ft at MTOW, ISA, SL
- 3.150 ft at MTOW, ISA+10°C, 2000 ft elevation
- 4.000 ft at MTOW, ISA+20°C, 4000 ft elevation

Accelerate stop distance range

- 2.500 ft at MTOW, ISA at SL
- 3.000 ft at MTOW, ISA+10°C at 2000 ft elevation
- 3.600 ft at MTOW, ISA+20°C at 4000 ft elevation

Range of unfactored landing distance

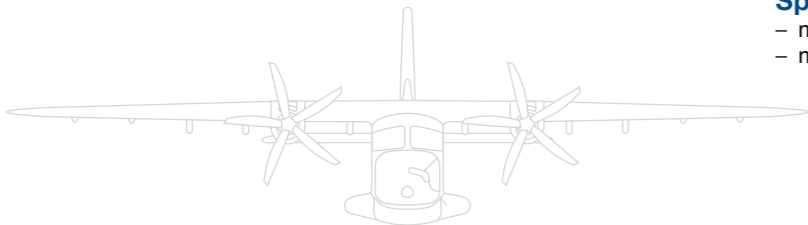
- 1.480 ft at MLW, ISA at SL
- 1.590 ft at MLW, ISA+10°C at 2000 ft elevation
- 1.730 ft at MLW, ISA+20°C at 4000 ft elevation

Climb at ISA, SL conditions

- normal 1570 ft/min
- single engine 400 ft/min

Speed

- max. cruise 223 KIAS
- minimum control 74 KIAS



GLASS COCKPIT

The cockpit is fitted with 4 large UNIVERSAL® displays, featuring one Primary Flight Display (PFD) and one Multi Function Display (MFD) in front of each crew member located on the central panel. Additionally an Electronic Standby Instrument System (ESIS) is installed between the two MFD. Those crystal clear, sunlight readable HD displays provide the pilots with the specific information required during each phase of the mission.

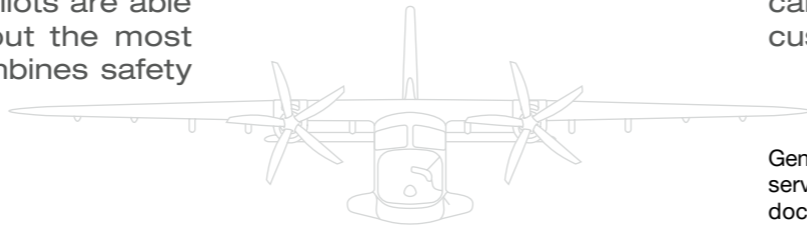


Key features

- Four 8.9 inch liquid crystal HD displays
- Designed for increased situational and flight safety awareness
- Primary Flight Display (PFD) with multiple display settings to match mission segment requirements
- Navigation display with TAWS overlay
- Terrain cross-section analysis along flight path
- Multi-sensors FMS with LPV Monitor
- Duplex communication capability between FMS and operator's consoles
- Emergency ESIS with navigation capability
- Charts and airport diagrams (optional)
- Checklist (optional)
- Moving Map (optional)
- Native NVG PFD/MFD display available (not add-on filters)
- Obstacle cross-section view along flight path
- Synthetic vision (optional)

POWERFUL COMBINATION

Key features of the Do228 NXT are the long range, high utilization rates and high payload – and all this at impressively low operational costs. With the aircraft’s state-of-the-art technology, pilots are able to maintain superior situational awareness throughout the most demanding missions. No other plane in this class combines safety and efficiency to the level offered by the Do228 NXT.



Versatility

The Do228 NXT is the most advanced aircraft in its class, offering unsurpassed effectiveness and efficiency with superb versatility. This is why authorities all over the world count on it when it comes to demanding special missions of various kinds.

Reliability

Operators can rely on the Do228 NXT at all times. The aircraft has a dispatch reliability of over 99%, a peak value that goes hand in hand with low maintenance costs. This high degree of reliability is unmatched in this aircraft class.

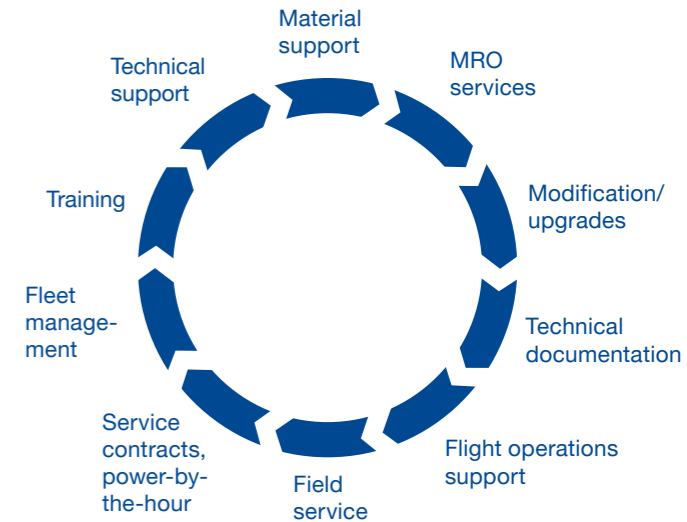
Affordability

The Do228 NXT provides mission results known only from much larger aircraft so far. With life cycle costs at a fraction of these aircraft, the Do228 NXT suits limited budgets and allows for more missions to be flown.

LIFE CYCLE SUPPORT

As Do228 NXT manufacturer, General Atomics AeroTec Systems also offers comprehensive support services, ensuring that the aircraft can be operated safely, economically and in accordance with the customer’s requirements at any time.

General Atomics AeroTec Systems international customer support services comprises technical support and supply of spare parts, documentation, field service and training. In addition, we offers operators of special versions and small fleets of the Do228 NXT a Total Aircraft Care service, which provides full technical support and guaranteed availability for a fixed price per flight hour.



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