



Solakonferansen 2022
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VSR700

BENEFITS OF MEDIUM VUAS

A capability enhancement for individual units, ships or fields

Operate with helicopters & ships – Manned Unmanned Teaming (MUMT) – AH at LOI 5

D³ (Dull, Dirty, Dangerous) missions -preserve helicopter & aircrew hours, avoid damage

Economies - smaller airframe, minimise manpower costs, simpler maintenance.

Full helicopter sensor capability - extended periods - long range missions without helo limitations





Much wider weather limits than SUAS (Small Unmanned Air Systems), greater quality payloads, auto takeoff/ land, light platforms, much heavier cargo lift

Capable of operations from land, civil shipping and naval or Public Service ships – use diesel fuel - with wide area coverage , forward basing or return to base, ready for BLOS (Beyond Line Of Sight) beyond 80nm.



AIRBUS

UAV SIZES & BASIC PERFORMANCE

		MAUW	Operational Endurance	Underslung loads	Fuselage Length	Rotor diameter
	SCHIEBEL S-100	200kg	>6hr with 34kg	tbc	3.11m	3.4m
	Skeldar V-200B	235kg	5hr with 40kg	tbc	4.03m	4.6 m
	VSR700	700kg	>10hr with 100kg	220kg	6.22m	7.2m
	FIRESOULT C	2,722kg	10 hrs with 135kg	1200kg	10.57m	10.67 m

VSR700

ID CARD



VSR700 is a UAS – A System

With the only VUAV to fit all today's naval needs

Potential for Civil Offshore



Operational efficiency

The best Payload/Range
Very wide operational limits
Manned Unmanned Teaming
Civil / military certification



Optimal Size/Performance

Full tactical load
Helicopter sensors and
potential for effective
armament



Versatility

Rapid role change
Multiple roles & missions



Low Logistic & Physical Footprint

Use units own maintainers
Simple to store & recover
Full complementarity with organic
manned helicopter

AIRBUS

GENERAL CHARACTERISTICS



700 kg

Max Takeoff Weight
(MTOW)



FUEL

Diesel / Turbine

JP5 / Jet A1 / F35 / F44 / F76

PAYLOADS



ISTAR

Cargo / Warfare
In development

DESIGN TARGET - MAIN PERFORMANCE



185 km/h

120 kts
Max speed

10hr

with 100kg to
100nm (185km)

6000 m

20 000 ft
Operating ceiling

>12h

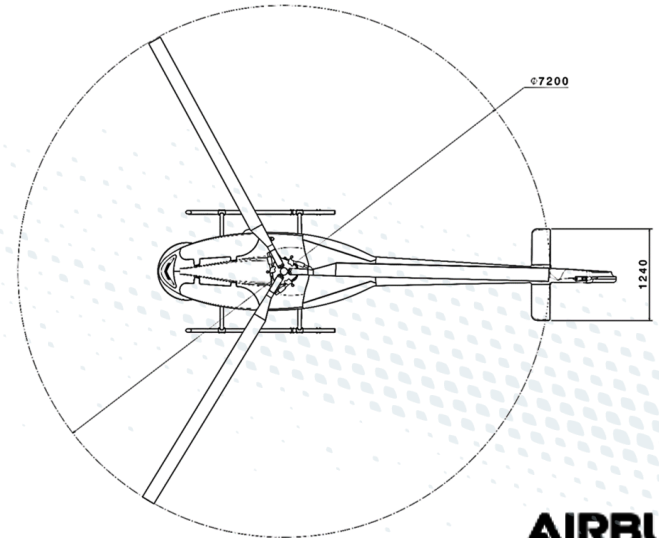
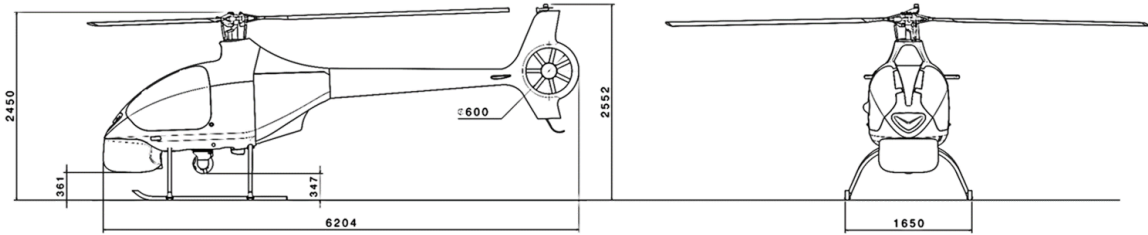
-
300kg

VSR700

VUAS DEVELOPMENT

Key Milestones

- 2008 AH flew EC155 + safety pilot
- 2013 EC145 OPV flown unmanned
- 2017 OPV VSR700 with safety pilot
- 2018 MUM-T (level 5)
OPV flight no pilot over populated area
- 2019 VSR700 Prototype - 1st flight
- 2020 Takeoff & Landing on moving platform with OPV
- 2022 Trials on MV Partisan – Auto takeoff & land
- 2023 Q2 - Naval ship trials (end of de-risking phase)



VSR700

INITIAL CONFIGURATION



EO/IR / Target designation

ISR / ISTAR

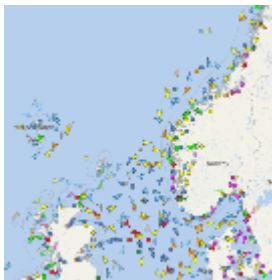
Using Optionally Piloted Vehicles (OPV) and Unmanned Air Vehicles (UAV)
With full capability role equipment



Radar



Electronic Sensors



AIS



Flotation Gear

VSR700 - OPV



VSR700 - UAV



Ground station



VSR700

DEVELOPMENT PATH

Optimal sizing

VSR-700 can be embarked in ships of about 600 Tons and above or Auxiliaries or Commercial shipping

Small enough to operate from a ships with their existing helicopter or small platforms

Large enough to carry a full set of high performance sensors for 10 hours

Radar / EOS/ AIS as in a naval helicopter

The system will be civil certified, allowing flexibility of operations

Growth – With Operators Needs

Cargo – external sling or pods. On shore or Offshore

Delivery to Offshore Wind Farms and O&G rigs

Naval growth for full role equipment for all warfare areas & logistic support

Public Service & Civil D3 tasks including:

Security, Line survey, Customs monitor & intercept, EEZ monitoring, Urgent stores supply,

VSR700 is the only platform capable of growing in this way

Balance within 300kg load / 12hr+ endurance

Exceptional flying performance, All (flying) weather capable, Flexibility



Evolution to meet customers needs

All possible within this single platform & system

SATCOM (BLOS)



Communication Relay



SAR package



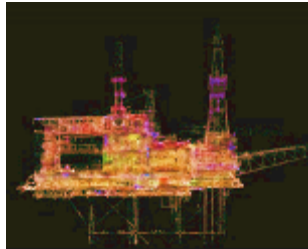
Cargo



Sound Projector
& Non-lethal effects



Laser Scanning / Lidar



Sonobuoys

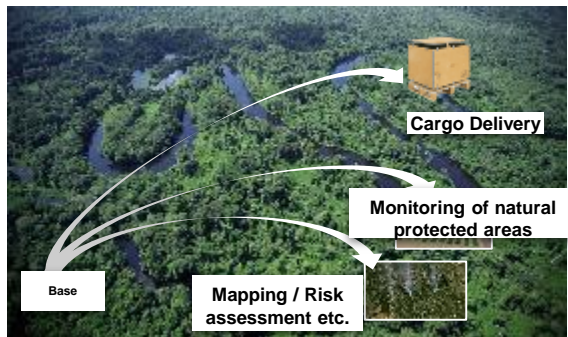


Armament

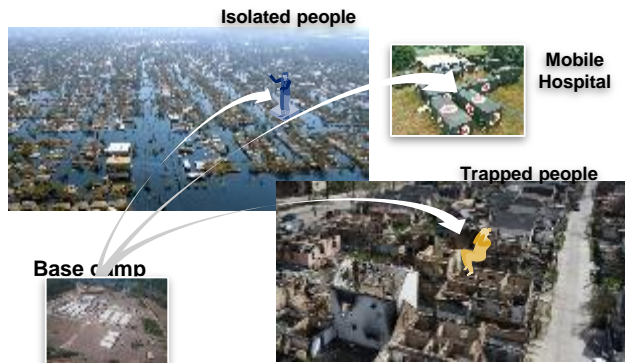


Airbus Cargo UAS for sustainable & commercial use

PREVENT - Natural Protected Areas



PROTECT - Disaster & Crisis Management



RESTORE - Humanitarian Aid



Cargo Delivery for Offshore Windfarms



Heavy Lift

AIRBUS

Payload & endurance (up to 300kg & 12+hrs)

Serious capability for (almost) all weather

Excellent maneuverability

Flight deck Ops, Survey, Turbulence,

Ability to equip with full capability sensors

Missions: ISR & Cargo then as customer needs

Role Change - One platform – all UAS roles

Certiifiability for civil & military

Low logistic / maintenance footprint

Proven diesel engine – diesel or turbine fuel



Thank you