

DORNIER SEAPLANE COMPANY

Building on a heritage of 100 years of seaplane design, development and engineering, the Dornier Seaplane Company proudly presents the all-composite Dornier Seastar CD-2. The most advanced seaplane in the world, the Seastar provides the fastest cruise speeds, the most comfortable cabin and the greatest reliability of any amphibious aircraft available.



Conrado Dornier

IN THE EARLY 1900S, CLAUDIUS DORNIER BEGAN WORKING WITH COUNT ZEPPELIN AND THE SEEDS FOR A FAMILY TRADITION IN AVIATION WERE SOWN. THE DORNIER NAME WAS FIRST ASSOCIATED WITH AIRCRAFT PRODUCTION IN 1914 WHEN CLAUDIUS FOUNDED DORNIER METALLBAUTEN. OVER THE LIFESPAN OF THE COMPANY, IT PRODUCED MORE THAN 100 DESIGNS FOR BOTH THE CIVIL AND MILITARY MARKETS AND MANUFACTURED OVER 10,000 AIRCRAFT.

CLAUDIUS DORNIER DORNIER IL Dornier rose to prominence in the1920s and 1930s as a manufacturer of large, all-metal flying boats, including the 1924 Wal and the 12 engine, 170passenger Do-X. The company also built a series of successful land planes, including the Komet and Merkur that were used by Lufthansa and other European carriers during the 1920s and early 30s. Among Dornier's many technological innovations:

- First fully metal aircraft.
- Do-X flying boat The world's largest aircraft at the time.
- Do-31 The world's only jet transport aircraft capable of vertical take-off and landing.

Seastar History: Seastar is the latest member of the "Wal" family of flying boats that ranged from the two-seat Libelle to the 169-seat Do-X. Seastar



was conceived by Claudius Dornier Jr. It represents the culmination of decades of Dornier experience and technological innovation in the design, production and operation of flying boats. Conrado Dornier, son of Claudius Dornier Jr., and his family are the primary owners of the Dornier Seaplane Company and he serves as Company Chairman.

During the initial design, the primary goal was to create a radical new amphibious aircraft that would overcome the two essential shortcomings of the existing seaplane fleet: corrosion and leakage of the structure. After the development of the prototype, Conrado Dornier took over the program from his father and managed its development through to the issuance of the type certificates by both the European (EASA) and the U.S. (FAA) aviation authorities, thus obtaining the first type certificate for an all composite commercial aircraft.

PERFORMANCE

THE SEASTAR CD-2 IS PURPOSELY DESIGNED FOR THE MISSION IT FLIES. ITS INTEGRATED-HULL FLYING BOAT DESIGN REDUCES DRAG AND PROVIDES THE AIRCRAFT WITH A CONSIDERABLE SPEED ADVANTAGE. WITH A MAXIMUM CRUISE SPEED OF 180 KTAS, THE SEASTAR IS 40–60 KNOTS FASTER THAN ITS COMPETITION.

PAYLOAD RANGE DIAGRAM

2500 ISA,MTOW, CRUISE AT 10,000 FT TAKEOFF AND LANDING AT SEA LEVEL 2000 45 MUNITE RESERVE (B1) 1500 1000 1000 500 200 400 600 800 1000 RANGE (NM) — MAX CRUISE SPEED (180 KTAS) MAX RANGE SPEED (150 KTAS)

Operational Capabilities: The Seastar is a true seaplane - it can operate in seas up to three feet (demonstrated, not limiting). In comparison float-planes can handle only 12 inch swells. The powerful PT6-135A Pratt & Whitney turboprop engines provide Seastar with 1300 horsepower. This allows Seastar to become airborne quickly with a takeoff run of only 2,500 feet on water and 1,850 feet on land. The fully-reversible engines provide Seastar with a landing distance of only 2,480 feet on water and 2,250 feet on land. Further, the integrated-hull design reduces drag, provides greater fuel efficiency and increases Seastar's payload/range significantly over float-equipped aircraft. The Seastar has a maximum cruise speed of 180 KTAS, yet a stall speed of only 69 KIAS.

Reliability: With two PT6-135A Pratt & Whitney Canada engines, the Seastar is extremely reliable, safe and efficient. The

in-line engine configuration eliminates the possibility of asymmetric thrust in the event of an engine failure. And the unique over-wing placement reduces the possibility of foreign object debris (FOD) and water ingestion into the engine intakes.

All-Composite, Corrosion Free **Exterior:** One of the most important benefits offered by the Seastar is the prospect of lower maintenance costs. Aircraft that operate on or around water are extremely susceptible to corrosion. Simply put, corrosion weakens metal structures and must be diligently controlled in order to keep aircraft in a safe, airworthy condition. This is especially true for aircraft operating on and around salt water. Other seaplane or floatplane manufacturers construct their aircraft of aluminum, so the airframe and skin will corrode over time. This results in costly maintenance activities and

extensive down time. The Seastar is all-composite, providing an aircraft that is effectively corrosion free. According to estimates by Conklin and deDecker (the pre-eminent provider of aircraft cost and performance reports), the total maintenance cost per flight hour of the twin-engine Seastar is 5% less than the single-engine Caravan on floats, and 40% less than the twin-engine Twin Otter on floats. This translates into a maintenance-per-seat mile cost that is 2/3 the cost of either the Caravan or the Twin Otter - a sizeable advantage for the Seastar. In addition to lower maintenance costs, greater reliability and less down time, the Seastar will retain a much higher residual value than aluminum aircraft.



THE SEASTAR OFFERS THE WIDEST, MOST LUXURIOUS CABIN IN ITS CLASS. COMFORTABLE SEATING AND A SPACIOUS CABIN WITH LARGE WINDOWS AND AMPLE STORAGE ASSURES YOUR PASSENGERS OF A COMFORTABLE RIDE AND AN ENJOYABLE EXPERIENCE.



Versatile Cabin: The Seastar's comfortable cabin features more shoulder room than any aircraft in its class. It features flexible seating arrangements for six to 12 passengers. The luxurious executive interior offers ergonomically-designed seating and an optional fully-enclosed lavatory. With a choice of premium quality leathers, fabrics, wood veneers and metal plating, you can create an interior that suits your individual taste and provides you and your passengers an elegant, comfortable ride to your destination. Passengers have in-flight access to storage and closet space, allowing you to retrieve items or belongings as needed.

For commuter or other higher density operations, the Seastar offers comfortable seating for up to 12 passengers.



Advanced Cockpit Design: The Seastar's advanced avionics feature a three tube, flat screen LCD display for reduced pilot workload and enhanced safety. Seastar is also certified for day/night VFR and IFR operations.

EXCEPTIONAL DESIGN

D-ISEA

THE SEASTAR IS AN FAA AND EASA CERTIFIED AMPHIBIAN CAPABLE OF LANDING ON WATER OR LAND. IT IS THE PERFECT COMBINATION OF UTILITY AND COMFORT MAKING IT IDEAL FOR COMMERCIAL, GOVERNMENTAL OR PERSONAL USE.



Exceptional Comfort and Utility: Seastar is a unique blend of performance, comfort and utility. It is an experience that you will find in no other aircraft, regardless of the price. Seastar is the only new aircraft in the world that gives you the utility and thrill of landing on isolated lakes, ocean bays and island coves, in seas up to three feet, while still allowing you to ride in spacious comfort.

In comparison to the leading turboprop float planes, Seastar's exceptional design, performance and quality are evident. By every important measure – speed, range, safety, cabin size, lower maintenance cost per flight hour, lower operating cost per seat mile – *Seastar is exceptional*.







SPECIFICATIONS

		6.65 ft (2.0 m)
		13.96 ft *
	5 6 M	(4.25 m)
		cm) (1.30 m)
The	ese dimensions are based on aircraft jacks with wheels touching the ground.	
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	Califor .	(3.04
	8.20 ft	
	(2.50 m)	
	58.20 ft (17.74 m)	

ENGINES Manufacturer Pratt & Whitney Canada Model PT6A-135A Shaft-Horsepower per Engine 650 (Flat Rated) PROPELLERS Manufacturer McCauley Number of Blades 4 **EXTERNAL DIMENSIONS** 58 ft 2 in Wing Span Length 41 ft 7 in Height 15 ft 9 in 329 ft2 Wing Area **INTERNAL DIMENSIONS** Cabin Length 13 ft 1 in Cabin Height 4 ft 6 in Cabin Width 5 ft 4 in Cabin Volume 348 ft3 ACCOMMODATIONS Crew Seats (One Pilot Required) 2 Passenger Seats 2+12 Baggage Capacity 397 lb WEIGHTS Basic Empty Weight 7,230 lb Maximum Ramp Weight 10,251 lb Maximum Takeoff Weight 10,141 lb Useful Load 2.911 lb Maximum Landing Weights Land 9,920 lb Water 10,141 lb FUEL CAPACITY Useable 458 U.S. gal SPEEDS 180 KTAS Maximum Cruise Speed 69 KIAS Stall Speed (Landing Configuration) RATE OF CLIMB Two Engines at MTOW 1300 ft/min One Engine at MTOW 490 ft/min CEILING Maximum Operating Altitude 15,000 ft TAKE-OFF DISTANCES Sea Level, ISA, Over 35ft. Obstacle Land 1850 ft Water 2500 ft

LANDING DISTANCES Sea Level, ISA, Over 50ft. Obstacle

Land 2250 ft Water 2480 ft



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