

## **AVIATION SERVICES**

COLLEGE OF WILLIAM AND MARY VIRGINIA INSTITUTE OF MARINE SCIENCE YORK RIVER CAMPUS

## **SPECIFICATIONS**

Type aircraft U-6A, Beaver, 6 place,

single-engine high-wing

Manufacturer DeHavilland of Canada, Ltd.

Engine Pratt & Whitney R-985
450 hp, 9 cylinders

Seats 6. maximum

Payload 1,500 pounds (approx.)

Speed cruise 110 knots

minimum flight 50 knots

Endurance 6 1/2 hours +

The Virginia Institute of Marine Science of the College of William and Mary operates a U-6A DeHavilland Beaver in the furtherance of its research and educational mandates. The singleengine, high-wing plane has flown almost 4,000 hours on nearly 2,000 separate flights. The aircraft is used for aerial photography, reconnaissance, observation and transportation in support of the Institute's research mission. Designed for Canadian bush operations, the plane with its 450 horsepower Pratt & Whitney R-985 engine will carry three-quarters of a ton of cargo or passengers at 110 knots. The very low minimum controlled flight speed is an asset both to aerial observation and photography and to operations in and out of short, unimproved landing areas. The sturdy construction and simple design of the airplane and a careful program of maintenance contribute to a very high dispatch reliability. The Beaver has recently undergone a complete engine and airframe overhaul. Other improvements include installation of new NAV and COM radios, soundproofing, new interior and Loran capability (1987). Less than one flight per year has been cancelled for unscheduled maintenance. Response time often is as short as 40 minutes between the initial call for a flight and takeoff.

The Institute has the capabilities to obtain vertical photography in 70-mm format on any of a variety of films. Two Hasselblad 500ELM cameras can be used together allowing the acquisition of identical images on two different film types. The cameras are equipped with motor driven film advances, simultaneously controlled, electronic shutter releases, and an intervalometer. Sufficient overlap for stereographic coverage is routine. Several pieces of analytical equipment including a densitometer and a B & L Zoom Transfer Scope are available in the laboratory. A 1/2 inch VHS Video camera is also available for airborne videotaping. The addition of Loran capability for the aircraft enables users to fix locations of observations or photographs. In addition, flying transects over water is optimized by having Loran capability.

Sam White, the Institute's pilot, is an instrument rated commercial pilot with a rating for float planes as well as for single and multiengine land planes. Over 4,000 of his 10,000+ flight hours are in the Beaver. The VIMS aircraft is available to state or local government agencies for emergency search and rescue operations. Visibility for observers is excellent and the slow flight characteristics of the Beaver enhance this capability. Emergency use of the VIMS aricraft is coordinated thru the Office of Emergency Services in Richmond.

The aircraft is based at Patrick Henry International Airport in Newport News, Virginia. Typical flying times to certain locations within flying capability of the aircraft are listed on the back of the brochure.

The aircraft is also available to qualifying state, federal, and local agencies for their use. For further information, please contact:

Aircraft Administrator
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
804-642-7003

## VIRGINIA INSTITUTE OF MARINE SCIENCE

VIRGINIA AIRPORTS FREQUENTED	Flight Time (Hours) <sup>1</sup>
Washington National	1.1
VPI	1.8
Charlottesville	1.1
Chincoteague (Wallops Island)	.7
Wachapreague (Melfa)	.5
Fish and Wildlife Facility	.3
Tip of Eastern Shore	.3
Tangier Island	.5
NORTH CAROLINA AIRPORTS FREQU	ENTED
Morehead City	2.0
Ocracoke	1.4
Hatteras	1.3
Kitty Hawk	.7
MARYLAND AIRPORTS FREQUENTED	
Baltimore	1.2
Ocean City	.9
College Park (U.MD)	1.0
Annapolis	1.1
Horn Point (Cambridge, MD)	1.0
Havre DeGrace	1.5
Easton	1.1
St. Marys	.7
Shady Side	1.0
Salisbury	.8
NEW JERSEY AND DELAWARE AIRPOR	RTS FREQUENTED
Rehoboth Beach, DE	1.1
Dover, DE	1.5
Wilmington, DE	1.6
Millville, NJ	1.6
Cape May, NJ	1.3
1	

<sup>&</sup>lt;sup>1</sup>Flight time predicated on 105 kt. groundspeed, no wind.