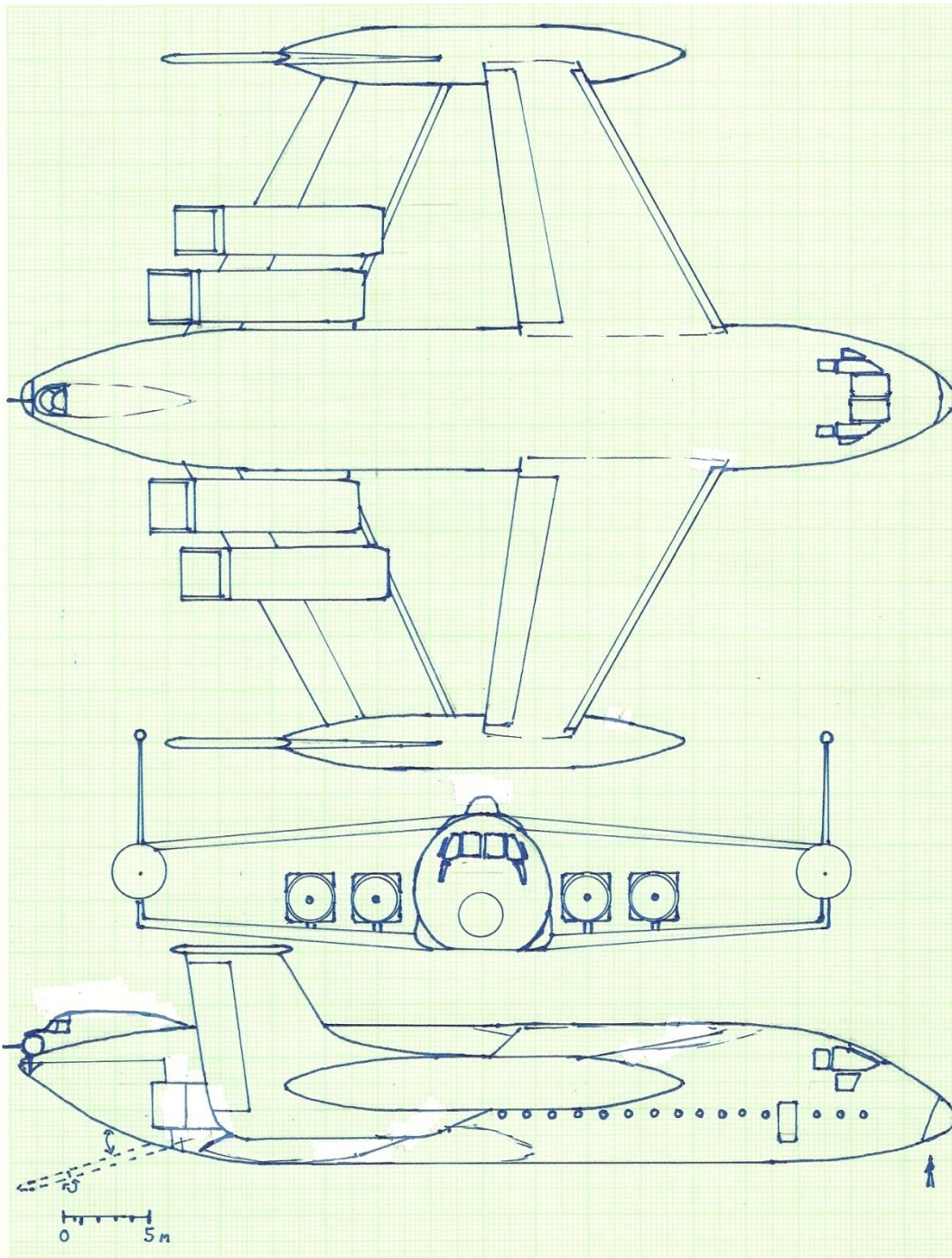


Douglas C-152 GLOBEMASTER



Characteristics :

- Heavy tactical long range cargo aircraft.
- Crew : 6 (Pilot, Copilot, Navigator/Radio, Flight Engineer, Cargo Master, Tail Gunner).

- Length : 56 m.
- Span : 44.3 m.
- Height : 14.5 m.
- Weights : 130,000 kg / 286,000 lb (empty, operational); 380,000 kg / 836,000 lb (max takeoff).
- Wing area : 621 m².
- Wing loading : 612 kg/m² (at max takeoff mass).
- Engines : Four General Electric TF-2000P augmented high-bypass turbofans with 2D nozzles and thrust reversers. Total thrust of 958.8 KN / 98,000 kg st dry thrust. Total augmented thrust of 1,174 KN / 120,000 kg st. All four engines mounted on rails allowing to shift them aft or forward to help trim the plane when center of gravity shifts.
- Thrust/weight ratio : 0.258 (dry thrust, max takeoff mass) / 0.316 (augmented thrust, max takeoff mass).
- Fuel : Total of 208,000 kg / 260,000 L of internal fuel (most of it in wing tip tanks). Retractable air refueling probe.
- Cargo cabin : Pressurized cabin, 35 m long, 5.8 m wide, 4.1 m head clearance. 120 folding side jumpseats. Integrated retractable floor rollers system for moving cargo pallets around the cabin. 5.8 m wide rear cargo ramp. Forward nose cabin for 24 passengers. Onboard toilet and shower facilities for crew and passengers.
- Construction : Classic aluminum alloy structure, except for hot engine parts (stainless steel alloy). Wings are of 'joined wing' design patented by Ingrid Dows and feature 'flexible wing profile' leading and trailing edges (also patented by Ingrid Dows), which help reduce aerodynamic drag, save fuel and increase range while greatly increasing lift during landings and takeoffs. (N.B. : USAF can use those patents for nominal cost of \$1.00).
- **Armament :**
 - Tail turret with twin 20mm cannons directed by radar or manually sighted.
- **Sensors/Electronics :**
 - Air surveillance radar in nose.
 - Surface mapping and navigation radar in chin.
 - Inertial navigation system with cockpit map display unit.
 - Tail warning and gunnery radar in tail.
 - Radar altimeter.

- Heads-up display units for pilot and copilot, linked with forward-looking e/o camera pack (FLIR + LLLTV) and aircraft attitude display.
- Four other e/o camera packs giving night view in frontal arc, down-forward and down vertical views.
- Radar warning receiver set.
- Encrypted long range secure HF radio and telex.
- Four clear comms radios (2 UHF, 1 VHF, 1 HF) for joint services communications.
- TACAN receiver.
- IFF transponder.
- ILS and VOR navigation and landing aids systems.
- **Performances :**
 - Max speed : Mach 0.9 (Mach 0.85 cruising speed).
 - Payload : Normal maximum payload of 80,000 kg. Emergency payloads for short trips can go up to 100,000 kg. Seating for 120 paratroopers in cargo cabin, plus 24 passengers in nose cabin.
 - Tactical mission radius (80 metric tons payload, rough field conditions) : 2,500 miles / 4,000 km.
 - Range (80 metric tons payload) : 5,500 miles / 8,800 km; (with 40 metric tons payload) 7,500 miles / 12,000 km.
 - Ferry range (no payload, max 24 passengers) : 9,500 miles / 15,200 km.
- **Variants :**
 - **C-152A** : Long range heavy tactical transport. In USAF service in December 1952 'C'.