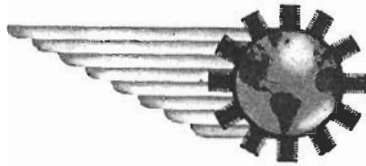


# AEROSPHERE • 1939

INCLUDING WORLD'S AIRCRAFT ENGINES  
WITH AIRCRAFT DIRECTORY



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**GULVER**

**Dart Model GK, GW and I  
2 Place**

Private and Commercial Aircraft  
A.T.C. 674, Pending and Experimental

**SPECIFICATIONS:** Span 29 ft. 7 in. Length 18.7 ft. (GK), 18.8 ft. (GW) (I). Height 6 ft. (GK), 6.1 ft. (GW), 6.125 ft. (I). Wing area 145.72 sq. ft. Power loading 17.2 lb./hp. (GK) (GW), 12.5 lb./hp. (I). Wing loading 10.7 lb./sq. ft. (GK) (GW), 12.5 lb./sq. ft. (I). Empty weight 960 lb. (GK), 950 lb. (GW), 1,140 lb. (I). Useful load 389 lb. (GK) (GW), 680 lb. (I). Gross weight 1,550 lb. (GK), 1,820 lb. (GW), 1,800 lb. (I). **Baggage** 30 lb. (GK), 50 lb. (GW), 60 lb. (I). **Fuel** 25 gal. (GK) (GW), 35 gal. (I). Oil 2.5 gal. (GK) (GW), 4 gal. (I).

**CONSTRUCTION:** Fuselage; Fabric-covered welded-steel tube structure, side-by-side seating arrangement. Wings; fabric-covered laminated spruce spars braced in torsion with deep wood box drag struts and double



internal tie rods, full cantilever, N.A.C.A. 2315 airfoil section. Tail group; fabric-covered welded-steel tube structure, full cantilever. Landing Gear; fixed, tail skid.

**STANDARD EQUIPMENT:** Wood propeller (GK) (GW), Curtiss metal propeller (I). Goodyear tires, wheels and brakes.

**INSTRUMENTS:** Pioneer tachometer, compass, U. S. Gauge altimeter, oil temperature gauge, Ford fuel gauge, Hoyt ammeter, Air Associates fuel and oil pressure gauges, Aircraft Control airspeed indicator.

**PERFORMANCE:** Maximum speed 135 m.p.h. (GK) (GW), 170 m.p.h. (I). Cruising speed 118 m.p.h. (GK) (GW), 155 m.p.h. (I). Landing speed 30 m.p.h. (GK) (GW), 45 m.p.h. (I). Service ceiling 14,850 ft. (GK) (GW), 20,000 ft. (I). Rate of climb 850 ft./min. (GK), 900 ft./min. (GW), 1,200 ft./min. (I). Cruising range 750 mi.

**ENGINE:** Rearwin 5F, 50 hp. at 2250 r.p.m. (GK). Warner "Scarab Junior" Series 50, 90 hp. at 2025 r.p.m. (GW). Warner "Super Scarab" Series 50, 145 hp. at 2050 r.p.m.



**CUNNINGHAM-HALL**

**Model PT-6F**

**1 to 6 Place**

Private and Commercial Aircraft  
A.T.C. 177

**SPECIFICATIONS:** Span 41 ft. 8 in. Length 30 ft. Height 9 ft. 7 in. Wing area 370 sq. ft. Power loading 12.5 lb./hp. Wing loading 12.3 lb./sq. ft. Empty weight 2,875 lb. Useful load 1,675 lb. Payload 1,128 lb. Gross weight 4,550 lb. Fuel 90 gal. Oil 6.25 gal.

**CONSTRUCTION:** Fuselage; metal structure with metal covering except fabric covering near tail group, hatch in ceiling and 36 in. opening in side for access to separate freight compartment having corrugated sheet metal interior which can be converted to carry four passengers. Wings; fabric-covered all-metal with bolted tubular truss spars, Clark Y airfoil section, N-type interplane struts, streamlined bracing wires at leading and trailing edges. Landing Gear; fixed.

**STANDARD EQUIPMENT:** Hamilton-Standard propeller. Goodrich landing wheel and tail wheel tires. Warner wheels and mechanical brakes. Absorber engine mounts. Cleveland pneumatic shock absorbers. Exide battery. Grimes navigation lights. Eclipse starter. Fire extinguisher.

**INSTRUMENTS:** Pioneer manifold-pressure, fuel and oil pressure and oil temperature gauges, compass, air-speed, rate of climb

and turn and bank indicators, Weston thermocouple, Elgin tachometer, Rochester fuel gauge.

**PERFORMANCE:** Maximum speed 150 m.p.h. Cruising speed 130 m.p.h. Landing speed 50 m.p.h. Service ceiling 20,000 ft. Rate of climb 1,100 ft./min. Cruising range 700 mi. **ENGINE:** Wright "Whirlwind" R975E-1, 365 hp. at 2100 r.p.m., 300 hp. at 1950 r.p.m.

**Model GA-36**

Private and Commercial Aircraft  
Experimental

**SPECIFICATIONS:** Span 30 ft. Length 20 ft. Height 5 ft. 5 in. Wing area 116 sq. ft. Power loading 14.5 lb./hp. Wing loading 18.1 lb./sq. ft. Empty weight 1,490 lb. Useful load 610 lb. Gross weight 2,100 lb. Fuel 30 gal.

**CONSTRUCTION:** Fuselage; composite structure, monocoque aft of front cockpit,

17ST covering reinforced by 2 section stringers riveted to tubular formers, cockpit reinforced by chrome-moly. steel tube structure projecting laterally to form fuselage wing stub truss and forward for engine support, nose over protection truss provided between front and rear cockpits. Wings; N.A.C.A. 2415 airfoil, high-lift, having highly differentially operated ailerons above and co-related to full-span automatically operated flaps, opposite flaps interconnected, balanced ailerons, all-metal wing frame structure, metal covering on leading edges forward of front beam for lower surface, fabric covering for upper surface aft of front beam, flaps and ailerons, open beam chrome-moly. steel tubular truss, wing quickly detachable. Tail Group; fabric-covered metal frame, leading edges metal, fin all metal, balanced elevators, adjustable stabilizer. Landing Gear; fixed, swiveling tail wheel. **STANDARD EQUIPMENT:** Bendix hydraulic pneumatic shock absorber, Hamilton-Standard or Hartzell wooden propeller optional. Parking brake, starter, navigation lights, fire extinguisher.

**INSTRUMENTS:** Altimeter, air-speed and rate of climb indicators, compass, clock, tachometer, inclinometer, fuel and oil pressure gauges, fuel gauge.

**PERFORMANCE:** Maximum speed 150 m.p.h. Cruising speed 141 m.p.h. (2160 r.p.m.), 129 m.p.h. (2050 r.p.m.) Landing speed with flaps 48 m.p.h. Service ceiling 13,000 ft. Rate of climb 790 ft./min. Cruising range 450 mi.

**ENGINE:** Warner "Super Scarab", 145 hp. at 2050 r.p.m.

