COMMUTER CUB

United 410, slow to 85 knots, traffic is 12 o'clock, five miles, a Cub on the ILS for Runway 36

BY J. JEFFERSON MILLER

J. Dawson Ransome and his Cub: ready to head to the office.

PHOTOGRAPHY BY WILLIAM A. FORD

continued

COMMUTER CUB

For Ransome, the Cub is the only way to commute.

Most Super Cubs seem to lead blue-collar lives. Towing banners, flying pipeline patrol, slipping into a rancher's south forty—these are traditional Super Cub jobs. Sure, the powerful little Pipers can be fun to fly. But owners value Super Cubs, above all, for their utility as workhorses.

Like other Super Cub owners, J. Dawson Ransome, AOPA 45727, values his airplane for the work it performs. But Ransome's airplane does not fit the mold of the typical, hard-working Super Cub. That is apparent with one glance at the Cub's well-equipped IFR panel. For Ransome, who also flies a Cessna Citation I, the Super Cub is simply another means of executive transportation.

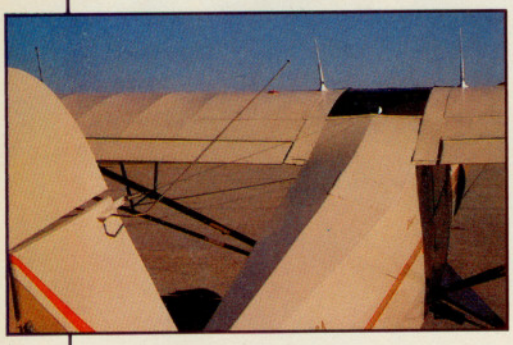
Ransome uses the Cub to commute from his home in Solebury, Pennsylvania, about 25 miles north of Philadelphia, to his office on the Northeast Philadelphia Airport, where the headquarters of his business, Ransome Airlines, is located.

Ransome flies out of a 1,200-foot grass strip in back of his house. When the weather is below VFR minimums, he receives his IFR clearance on a clearance delivery frequency established for a number of non-tower airports north of Philadelphia (the transmitter is atop a nearby hill). He usually is routed direct to the Yardley VOR, located about 10 miles south, then direct to Northeast Philadelphia. Total flight time: about 10 minutes. Before Ransome bought the Cub, he drove to work—an hour each way.

Ransome often returns home after dark. Therefore, he has equipped his strip with runway lights, as well as a lighted windsock and a lighted, homemade, three-bar VASI for approach slope guidance. Only ceilings below 1,000 feet or fog are able to force Ransome to revert to ground transportation for the trip home.

On weekends, Ransome flies the Super Cub to motocross racing events, in

Headed for the office, the view from the Cub beats the scenery along the highway. Part of the fun of Ransome's daily round-trip is scooting in and out of a 1,200-foot backyard landing strip.



The Cub's panel arrangement is logical and relatively uncrowded, a tribute to the technicians at Ransome Avionics. Ransome's Apollo II Loran is the preferred method of navigation: Course information can be channeled to HSI.

which his youngest son is a participant. Ransome uses his Loran C to locate one of the small airstrips near the motorcycle race course. "I almost never use the VORs," he says.

Ransome bought his Super Cub, a 1951 model with a 125-hp Lycoming O-290, four years ago. The Cub had spent its entire life on powerline patrol duty for an electric company. To turn the bare-bones Super Cub into an IFR commuter required large infusions of time, money and materials. The transformation took place in Ransome's own maintenance and avionics facilities at Northeast Philadelphia.

Under a supplemental type certificate obtained from Wag-Aero (1216 North Road, Lyons, Wisconsin 53148), a 150-hp Lycoming O-320 was installed. A Hartzell constant-speed propeller was installed under the provisions of an STC from Alaska Propeller Services, Incorporated, 5251 Lakeshore Drive, Anchorage, Alaska 99503.

Demer's Supertips (available from Madras Air Service, Route 2, Box 1225, Madras, Oregon 97741) were added. According to promotional literature for the Supertips, they increase cruise speed seven to 10 percent, increase rate of climb 20 percent, decrease stall speed 20 percent and decrease takeoff distance 20 to 25 percent.

The new engine, prop and wingtips

COMMUTER CUB

have improved the Super Cub's performance considerably, according to Ransome. At gross weight, the airplane will land and come to a full stop in 250 feet and take off in 150 feet. It cruises at 102 knots at 23 inches manifold pressure and 2,300 rpm. Climb performance is improved, Ransome says, and the addition of the constant speed prop has reduced vibration.

Several other modifications were made to prepare the aircraft for IFR and night flight. A vacuum pump was added. A 60-ampere alternator replaced the Super Cub's generator, and a larger battery was installed. Whelen wingtip strobe lights, dual wing-mounted landing lights and taxi lights were added.

Other touches include the addition of a Scott tailwheel assembly, wheelpants and an overhead window. Control stick handles with push-to-talk switches were scavenged out of a wrecked helicopter. The airframe has been recovered in Ceconite. Carpeting and velour seat covers are from Airtex Products (259 Lower Morrisville Road, Fallsington, Pennsylvania 19054).

The most remarkable changes, however, are those in the formerly austere Super Cub panel. Ransome has added about $20,000 worth of avionics, most of it Narco equipment, including: Narco DGO10 horizontal situation indicator; Narco 120 communications radio; Narco Nav 825; Narco Nav 122 self-contained VOR/localizer/glideslope receiver and display; and Narco AT-150 transponder.

Area navigation, however, remains Ransome's preferred method of finding his way. To that end, he has installed an Apollo II Loran C unit made by II Morrow, Incorporated. Additionally, Ransome has installed a Westach four-way EGT, CHT, oil pressure and oil temperature gauge.

Ransome's Super Cub is a creative solution to one man's transportation needs, combining the best of the old and the new. At 34-years-old, his Super Cub shows no signs of being outmoded. The airplane's longevity leads one to suspect that as long as Super Cub airframes exist, people will maintain these airplanes, not as museum pieces, but as workhorses. □

1951 PA-18-150 Piper Super Cub Specifications

Powerplant	Lycoming O-320, 150-hp @ 2,700 rpm
Length	22 ft 5 in
Height	6 ft 7 in
Wingspan	35 ft 3 in
Wing area	178 ft 5 in
Wing loading	10 lb/sq ft
Power loading	11.6 lb/sq ft
Seats	2
Empty weight	930 lb
Gross weight	1,750 lb
Useful load	820 lb
Payload w/ full fuel	604 lb
Fuel capacity	216 lb/36 gal
Oil capacity	8 qt
Baggage capacity	50 lb
Performance	
Takeoff distance, ground roll	200 ft
Takeoff distance over 50-ft obst	500 ft
Rate of climb, sea level	960 fpm
Maximum level speed	113 kts
Cruise speed/range with 45 min reserve (fuel consumption) @ 75 percent power	100 kts/325 nm (54 pph/9 gph)
Service ceiling	19,000 ft
Absolute ceiling	21,300 ft
Landing distance, ground roll	350 ft
Limiting and recommended airspeeds	
Vx (Best angle of climb)	39 kts
Vy (Best rate of climb)	65 kts
Vs1 (Stall clean)	37 kts

All specifications are based on manufacturer's calculations. All performance figures are based on standard day, standard atmosphere, at sea level and gross weight, unless otherwise noted.

A MAN AND HIS AIRLINE

To many frequent airline passengers in the New England and mid-Atlantic area, the Ransome name is well known. It is displayed prominently on the red and white livery of Ransome Airlines' commuter aircraft. J. Dawson Ransome began the airline in 1966 with one Beech 18 operating between the Northeast Philadelphia Airport and Washington National Airport with eight flights a day.

Today, the Ransome fleet consists of eight de Havilland Dash 7 50-passenger STOL aircraft and four 25-passenger, French-built Nord 262 turboprops. The airline serves 11 cities from Washington, D.C., to Portland, Maine. Ransome's Dash 7s now fly between Philadelphia International and Washington National with 64 flights a day.

The Dash 7s can take off in 2,000 feet and land in 1,000 feet. They fly between Philadelphia and Washington on an instrument flight rules RNAV route established solely for the airline's use. According to Ransome, the special RNAV route and the airplane's ability to land and stop on the 2,000 feet of Runway 33 available before the intersection with runway 18-36, the longer runway used by jets, saves 20 miles on every flight.

The Dash 7s are equipped with Bendix MLS receivers. The FAA has installed an MLS system at Washington National for Runway 33, but the approach has not yet been approved for use.

Ransome recently concluded an agreement to purchase six Aerospatiale/Aeritalia ATR 42 50-passenger turboprops. These new aircraft should enter service in mid-1986, enabling the airline to expand its route system.

Not all of Ransome's aircraft purchases, however, are made on the basis of utility or passenger seat-mile cost analyses. Take, for example, the 1954 Bücker Jungmann biplane that Ransome is restoring in his spare time. That purchase was pure whim. —*JJM*

PHOTOGRAPH COURTESY RANSOME AIRLINES

Ransome's other commuter STOL airplane: a Dash 7.