(1) Cessna's new high-performance, single-engine plane, Model 210, in flight with landing gear retracted. Capable of a top speed of 199 m.p.h., the 210 is equipped with a 260 h.p. Continental engine. Two short masts seen on the plane's belly support a low-frequency receiver antenna. The big bulge further back houses an ADF antenna. Note the curved wing-tips, a feature of the 210 (2) Close-up view of the curved Cessna 210 wing-tip, an interesting feature of the 210. Conical camber tips, giving wings qualities similar to those of a soaring bird, increase the airplane's spiral stability, Cessna says (3) Closeup of 210 gear. Note that all housing doors are closed on the ground as well as in the air. They open only during actual retraction or extension cycle. Rear wheels are on a single-piece spring steel gear popularized by Cessna. This is the first time this type of gear has been made retractable (4) This view of the 210 taking off shows how landing gear performs; nose wheel goes forward, main wheels inward and backward. All the open doors close flush



Cessna's New 210

Priced at \$22,450, the single-engined, high-performance plane will be available at year's end. It is capable of making 199 m.p.h. and cruises at 190

Details are out at last on a brand new, high-performance, highwing, single-engine airplane—Cessna's Model 210.

Equipped with fully retractable tricycle landing gear, the four-place 210 has a 10-470-E six-cylinder, horizontally opposed, air-cooled, direct drive 260 h.p. Continental engine with fuel injection. It uses 100/130

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octane fuel. The new model has a top speed of 199 m.p.h. and a cruising speed of 190 m.p.h. at 75% power at 7,000 feet.

The continuous flow fuel injection system is unique in that fuel is metered into the intake valve port of each cylinder. This allows the fuel to be mixed in the cylinder head which provides even fuel-air mixtures, which the manufacturer says results in more power, smoother operation and lower cost per pound of engine weight.

Cessna officials say that the 210's retractable "Land-O-Matic" landing gear is the same chrome vanadium spring steel gear in use on other Cessna planes since 1940. Hydrauli-(Continued on page 49)

Cessna's New 210

(Continued from page 31)

cally operated, the 210's gear incorporates individual nose and main gear actuation cylinders. The main gear retracts aft in the bottom of the fuselage and the nose gear retracts forward. The latter is stored vertically in a sealed compartment under the engine.

"Exceptionally good lateral, directional and longitudinal stability" is claimed for the 210. This is attributed to a combination of using new "conical camber" wing tips which turn downward, and the "flight swept vertical tail" design. The new wing tips improve spiral stability, while the new tail design contributes to greater directional stability and control, the manufacturers say. The tail assembly of the new plane has been swept a full 35° from vertical.

The interior and exterior of the 210 have been designed with both functional and appearance considerations in mind. Front door posts of small cross-sectional area provide good forward and side visibility as well as rigid support for door hinges and wing spar structure. A low cabin floor permits easy entrance to both front and rear seats and ample head clearance for both front and rear seat occupants.

A well-lighted instrument panel has been designed with flight and engine instruments functionally grouped so that surveillance of necessary instruments is obtained with minimum eye and head movement. Two full-sized radios may be mounted side by side in the center of the panel, and there is room for an ADF or low frequency radio receiver on the lower left portion of the panel.

Both rear and front seats have been

covered with deep pile foam rubber cushioning. Front seats are individually adjustable, both fore and aft, as well as tilting into three positions. The rear seat back is adjustable to three positions for passenger comfort.

Exterior of the 210 is available in a multiple choice of colors in threecolor vinyl paint design.

Cessna has set a price of \$22,450 for the standard-equipped 210. Deliveries are expected to start around the end of this year.

Below are performance data and specifications of the new plane:

SPEED: BEST POWER MIXTURE Maximum @ Sea Level 199 m.p.h. Maximum @ Commended Cruise, 190 m.p.h. 70% Power @ 8000 ft. 187 m.p.h. RANGE: NORMAL LEAN MIXTURE Maximum Recommended Cruise, 755 miles 75% Power @ 7000 ft. 755 miles 55 Gallons, No Reserve 4.0 hours 188 m.p.h. 70% Power @ 8000 ft. 780 miles 70% Power @ 8000 ft. 780 miles 4.2 hours 186 m.p.h. 70% Power @ 10,000 ft. 100 miles 55 Gallons, No Reserve 8.0 hours 136 m.p.h. MAXIMUM RANGE MIXTURE: Maximum Range @ 10,000 ft. 1,100 miles S5 Gallons, No Reserve 8.0 hours 137 m.p.h. STALL SPEED (FLAPS DOWN) 59 m.p.h. 59 m.p.h. SERVICE CEILING 20,700 ft. 1,35 ft. LANDING: Ground Distance 740 ft. 1,35 ft. LANDING: Ground Distance over 50-ft. Obstacle 1,190 ft. 1,190 ft. LANDING: Ground Distance over 50-ft. Obstacle 1,190 ft. 1,190 ft. MAXIONING RUMON COMUNC ADDING RUMANA 50 ft. 1,55 ft. <th>GROSS WEIGHT</th> <th>2,900</th> <th>lbs.</th>	GROSS WEIGHT	2,900	lbs.
Maximum @ Sea Level 199 m.p.h. Maximum Recommended Cruise, 75% Power @ 2000 ft. 190 m.p.h. 70% Power @ 8000 ft. 187 m.p.h. RANGE: NORMAL LEAN MIXTURE Maximum Recommended Cruise, 755 miles 75% Power @ 7000 ft. 755 miles 55 Gallons, No Reserve 4.0 hours 188 m.p.h. 70% Power @ 8000 ft. 755 miles 70% Power @ 8000 ft. 780 miles 4.2 hours 186 m.p.h. 70% Power @ 10,000 ft. 1,100 miles 8.0 hours 186 m.p.h. MAXIMUM RANGE MIXTURE: 8.0 hours Maximum Range @ 10,000 ft. 1,100 miles STALL SPEED (FLAPS DOWN) 59 m.p.h. SERVICE CEILING 20,700 ft. ABSOLUTE CEILING 20,700 ft. TAKE-OFF: Ground Distance 740 ft. Ground Distance 520 ft. 1,135 ft. LANDING: Ground Distance over 50-ft. Obstacle 1,190 ft. WINC LADINO. 520 ft. 1,190 ft. VINC LADINO. 50 hbs. 1,50 hbs.	SPEED: BEST POWER MIXTURE		
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RANGE: NORMAL LEAN MIXTURE Maximum Recommended Cruise, 75% Power @ 7000 ft. 55 Gallons, No Reserve 188 m.p.h. 70% Power @ 8000 ft. 780 miles 4.0 hours 188 m.p.h. 70% Power @ 8000 ft. 780 miles 4.2 hours 186 m.p.h. MAXIMUM RANGE MIXTURE: Maximum Range @ 10,000 ft. 1,100 miles 8.0 hours 137 m.p.h. RATE OF CLIMB @ SEA LEVEL 1,300 f.p.m. STALL SPEED (FLAPS DOWN) 59 m.p.h. SERVICE CEILING 20,700 ft. ABSOLUTE CEILING 20,700 ft. Total Distance Ground Distance Ground Distance Total Distance over 50-ft. Obstacle 1,190 ft. LANDING: Ground Distance over 50-ft. Obstacle 1,190 ft. EMPTY WEIGHT 1,760 lbs.	75% Power @ 7000 ft 70% Power @ 8000 ft	190 187	m.p.h. m.p.h.
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wing LOADing: Pounds per square foot . 10.5	WING LOADING: Pounds per square foot .	16.5	
POWER LOADING: Pounds/HP 11.2 FUEL CAPACITY: Total 65 gals. OIL CAPACITY: Total 12 qts.	POWER LOADING: Pounds/HP FUEL CAPACITY: Total OIL CAPACITY: Total	11.2 65 12	gals. qts.
POWER—Continental 10-470-E Engine, 260 rated HP at 2625 RPM. WING SPAN—36.5 feet. WING AREA—175.5 square feet. LENGTH—26.4 feet. HEIGHT—8.15 feet. TREAD—8.2 feet. BAGGAGE—120 lbs.	POWER—Continental 10-470-E Engine, 260 2625 RPM. WING SPAN—36.5 feet. WING square feet. LENGTH—26.4 feet. HEIGH TREAD—8.2 feet. BAGGAGE—120 lbs.	rated AREA- T—8.15	HP at 175.5 feet.

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Cessna 210's instrument panel (below) has complete IFR setup. Radio at top center of panel is a Narco Mark II, with the Narco Mark V directly to the right of it. A Lear ADF-12E is mounted in the bottom lefthand corner of the panel, just under the left control wheel. Gear and flap handles are at bottom center of the panel while directly above those handles are knobs for the throttle (left) and propeller control (right)



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