

The Superdog & SuperDog II The Developmental History



The Cessna Model 305 Birddog



The Cessna Model 305 Birddog

- Simple design
- All metal airframe
- STOL aircraft
- No Airworthiness Directives
- 213 HP Continental O-470-11 engine
- 90-inch, McCauley two-blade propeller
- Excellent cockpit visibility
- Built for bush flying
- Outstanding for glider/banner towing operations

The Noyes Enterprises Superdog



What is a Superdog I?

- A Cessna Model 305 which has been modified by STC SA1201SW;
- 250 HP Factory New Lycoming O-540-A4E5 with an 80-inch, Hartzell three-blade constant speed propeller;(1197 lbs thrust!)
- Gravity fuel system;
- Gross weight increase;
- Expanded C of G envelope; and
- Modern Instrument Panel.

250 HP Lycoming O-540-A4E5



- Firewall forward conversion
- 2000 hour TBO
- No timed power limitation
- Modern oil cooler with increased cooling capacity
- Modern lightweight starter & 50 amp/24V Alternator
- Includes a cowl flap
- New “easy access” location for oil service/dipstick

Hartzell Three-Blade Constant Speed Propeller



- Less chance of FOD damage due to improved ground clearance with 80-inch propeller
- Significant noise reduction due to three-blade propeller & Cherokee 6 exhaust system
- Reduced “Flex” Power Takeoffs are possible
- “Flex” Power Takeoffs offer operators a better noise foot print, reduced operating costs & better directional control

Optional STOL Conversion Kit



- Optimized wing for improved performance
- Reduced Takeoff Distance
- Reduced Distance to Clear a 50' Obstacle
- Reduced takeoff & landing speeds (by 5 MPH)
- Improved gliding distance
- Improved aircraft handling at low speed

Gravity Fuel System



- Simple design: On / Off
- Optional Four position fuel selector – including: Left, Right, Off and BOTH position (both for take off and landing).
- No electric fuel pump
- No Bendix Pressurized Carburetor
- Option for an increased fuel capacity to 52 US Gallons, (47 Gal. Usable).

Gross Weight Increase



- 2300/2400 pounds gross weight configurations for Cessna Model 305As
- 2400 pounds for all other Cessna Model 305s
- Conversion to Superdog decreases empty weight, increases useful load.

In all conversions the Superdog's Empty Weight actually decreased

Expanded C of G Envelope



- Superdog STC uses the expanded C of G envelope from Cessna Model 305C
- Includes an enlarged elevator trim tab

Optional Relocated Aircraft Battery



- Battery relocated aft of baggage compartment
- Helps maintain aft center of gravity (if need be)
- More room in the cockpit
- Note: 14 lbs of battery cable is required

Superdog Trainer Interior



Superdog Instrument Panel

Standard “6 pack”
steam gauge panel



Superdog Modern panel

18 lbs lighter than
steam gauge
panel



What is a SuperDog II?



- Noyes Enterprises Superdog feels that the handling qualities of the Superdog can be improved as well as made more benign by changing the planform of the original Birddog's empennage and tailwheel configuration

SuperDog II Improvements



- Equipped with new empennage for improved flight & ground handling qualities
- Landing speed is reduced to 38 MPH
- Equipped with a new Model 3400 Tailwheel Assembly for more benign ground handling qualities
- New empennage is similar in planform to other high horsepower Cessna tailwheel aircraft
- New tailwheel adds 8.5 inches to wheel base to help reduce ground-looping tendencies
- Rotation plane of new tailwheel is now parallel to the ground for better ground maneuvering

SuperDog II Enhancements



- Equipped with a LED beacon on the vertical stabilizer for improved inflight visibility
- Equipped with a cockpit entry step
- Conversion to SuperDog II has negligible difference in aircraft empty weight from original Birddog/Superdog

Land at 38, Cruise 140+ Mph

