



# WHY R/STOL?

*"Why install R/STOL on my aircraft when I only fly from long runways?" My airplane is okay for the way I use it. I don't need the increased performance of an R/STOL installation."* These are typical comments from many pilots who don't realize the benefits of an R/STOL-equipped aircraft's extra performance and flexibility.

No, the R/STOL system is not for everyone. It is designed for experienced pilots who demand the utmost in performance from their aircraft. In the hands of a skilled pilot, the unique R/STOL combination of wing stall fences, leading edge modifications, symmetrically drooped ailerons and automatic trim interconnect can make a dramatic difference in your aircraft's capabilities.

Owners of R/STOL-equipped aircraft enjoy the increased flexibility it affords - whether on short runways or international airports. Hundreds of pilots who fly through small and metropolitan airports every day are using R/STOL's enhanced performance to gain extra time, avoid delays, reduce aircraft wear and tear and cut operating costs.

Experience expanded utility, increased safety and improved performance — R/STOL aircraft allow you to get off the ground and back, shorter, faster and safer. Proven over 4+ decades, this system offers:

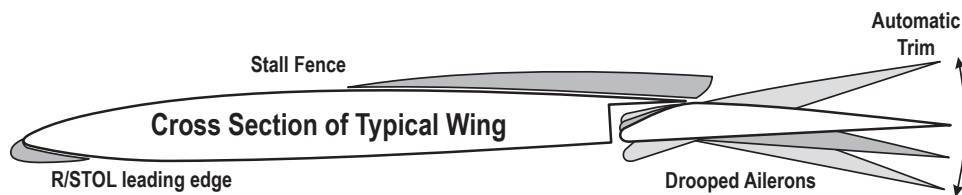
- Enhanced operator convenience and safety
- Sharp, crisp low speed characteristics
- Up to 47% shorter takeoff and landing distances
- Lowered nose permits safe and practical obstacle clearance on difficult approaches and departures
- Improved high angle stall characteristics
- Higher cruise speeds
- Improved high density altitude performance
- Operation into and out of smaller airstrips with greater safety and convenience
- Up to 1100 ft. higher service ceiling



## Enhanced Techniques:

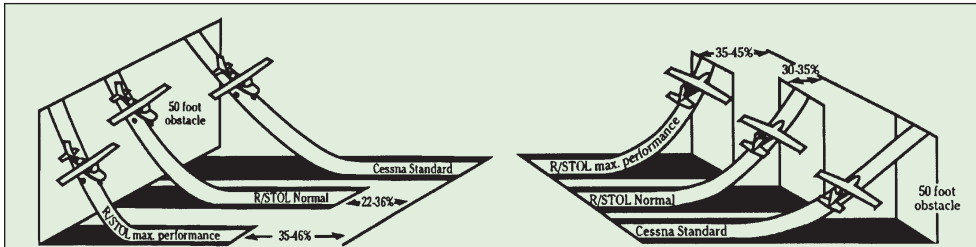
- Intersection Takeoffs
- Less Sequencing
- Long Landings
- High Altitude Climbs
- Stall-Spin Resistance
- Steeper Approaches
- Climb-Power Takeoffs





## R/STOL kits for CESSNA:

- 150 / 152
- 172
- 180
- 182
- 185
- 206
- 207
- T207
- 210
- T210
- P210



### R/STOL Operational Notes:

*R/STOL NORMAL technique is specifically tailored for the average pilot who desires increased safety margins, utility and peace of mind.*

*R/STOL MAX. PERFORMANCE technique is for use by experienced pilots when emergency conditions or operations into and out of austere fields requires the utmost from your aircraft, consistent with safety.*

## R/STOL High Lift System Benefits

### DURING APPROACH AND LANDING

R/STOL permits slow approaches with sharp, crisp control at slow speeds, you gain more decision time for correction and confident handling during crosswinds and gusts. Even with power off you retain confident control, with reduced risk of stalling. R/STOL Hi-Lift systems permit lower landing speeds that reduce wear and tear on landing gear, brakes and tires. Overall, the R/STOL Hi-Lift system allows 15 to 25 MPH slower approaches and requires up to 40% less runway distance.

### DURING TAKEOFF

No (or less) offloading when flying from high altitude or high temperature airports with your SIER-RA-equipped aircraft. Hi-Lift extends sea level, standard day performance to higher density altitudes — allows you to lift off with heavier payloads from short runways or to fly with full loads safely. Take off with enough fuel to avoid an extra fuel stop. R/STOL's extra performance adds flexibility to your flight operations — avoids extra trips — lets you fly into small airfields closer to your final destination.

### R/STOL LEADING EDGE

A slight downward droop of the leading edge results when a cuff is added to the aircraft's wing. Cessna has incorporated the drooped leading edge on many of their models built since 1972. The drooped cuff recontours and smooths airflow over the wing, particularly at high angles of attack. The R/STOL Leading Edge postpones wing stall and gentles stall action when it does occur.

### STALL FENCES

A chord-wise fence, installed on the upper wing surface forward of the flap-aileron location, restricts outboard movement of low-speed air which develops at the wing root when a stall begins. By maintaining a smooth unstalled airflow over the ailerons, full and responsive aileron control remains available well into the stall.

### AUTOMATIC TRIM

The R/STOL patented system interconnects the stabilizer with the flaps to relieve the pilot from frequent retrimming as the flaps are lowered. This automatic trim operation eliminates one pilot activity during landing approach or when "cleaning up" after takeoff.

### DROOPED AILERONS

The R/STOL patented system droops ailerons symmetrically whenever the flaps are extended. In their drooped position, the ailerons increase outboard wing lift by recambering airflow as the flaps do for the inboard wing section. Full aileron roll control response is maintained in the drooped position.

*Call us at 830-900-7032 today for more details on the exciting R/STOL upgrade for your classic or contemporary aircraft.*



# R/STOL Performance Comparisons

## R/STOL Performance Comparison — Cessna Single Engine Aircraft

Aircraft Model:	P210	T210	210	T207	207	206	185	182	180	172	152/ 150
Gross Weight (lbs)	4,000	3,800	3,800	3,800	3,800	3,600	3,350	2,950	2,950	2,300	1,600
<b>Takeoff Distance over 50 ft</b>											
R/STOL Normal technique	1,621	1,318	1,232	1,280	1,280	1,155	870	885	1,320	990	895
R/STOL Max. technique*	1,318	1,075	1,070	1,090	1,090	990	763	815	1,210	900	815
Cessna Handbook Data	2,265	2,030	1,900	1,970	1,970	1,780	1,365	1,350	1,860	1,525	1,385
<b>Takeoff Speed, MPH (IAS)</b>											
R/STOL Normal technique	63	56	56	57	57	52	50	50	49	45	40
R/STOL Max. technique	59	52	52	53	53	48	46	45	46	40	36
Cessna Handbook Data	84	82	82	84	84	78	65	63	61	70	64
<b>Cruise Speed, MPH (TAS)</b>											
R/STOL	222	220	192	180	164	170	172	165	153	134	119
Cessna	219	217	188	176	159	164	169	160	147	131	117
<b>Service Ceiling, ft</b>											
R/STOL	24,100	26,600	16,100	25,100	13,800	15,400	17,850	18,400	17,700	13,600	13,150
Cessna	23,000	28,500	15,500	24,200	13,300	14,800	17,150	17,700	17,000	13,100	12,650
<b>Final Approach Speed, MPH (IAS)</b>											
R/STOL Normal technique	69	59	59	60	60	58	57	54	51	48	44
R/STOL Max. technique*	66	55	55	55	55	53	52	49	47	41	37
Cessna Handbook Data	84	82	82	87	87	75	80	69	70	65	58

Data shown are typical — specific models will vary. R/STOL Normal technique is specifically tailored for the average pilot who desires increased safety margins, utility and peace of mind. \* R/STOL Max. technique is for use by the experienced pilot when emergency conditions or operation into austere fields requires the utmost from your aircraft, consistent with safety.



**Enjoy maximum performance and utility from your Cessna aircraft!**

Contact our in-house expert Pete Conrad at 830-486-5274 or email [pete@skyway-mro.com](mailto:pete@skyway-mro.com) today for more details and pricing.



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