

MAXIMUM FLIGHT EFFICIENCY

SIMPLE TIPS FOR EVERY CJ PILOT



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CONTENTS

01 CJ EFFICIENCY THROUGH SIMPLICITY

This eBook is designed to provide simple steps for any CJ owner.

03 ACHIEVING THE PERFECT LEVEL-OFF

Transitioning from a careful climb to a perfect level off.

05 EXECUTE A SIMPLE DESCENT

Good planning + a good approach = success + safety.

07 ABOUT TAMARACK AEROSPACE

Go fly your best range!

02 MAXIMIZE YOUR CLIMB SPECIFIC RANGE

Climb Specific Range is a key factor in maximizing your CJ's efficiency.

04 CRUISE YOUR PERSONAL BEST RANGE

Control your cruise and get the most out of your CJ.

06 COMPLETE AN EFFICIENT MISSION

Think through your descent.



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CJ EFFICIENCY THROUGH SIMPLICITY

This eBook is intended for the thoughtful pilot, designed to provide simple tips for any CitationJet owner. Curated by Tamarack® engineers, the information within offers helpful suggestions to ensure maximum flight efficiency on an everyday basis. We invite you to discover your jet's true potential.



Nick Guida, Founder, Tamarack Aerospace

When you fly, keep the future in mind. As you contemplate the future of aviation, it is important to consider that it may already be upon us. New breakthroughs and technologies race against various challenges and increasing environmental detriments – but we continue to push for a reality that we know can exist. Flying smarter does not mean simply saving dollars with every gallon of fuel saved. Flying smarter means investing in the future with every gallon of fuel saved. Flying smarter is the future. Efficiency is the future.

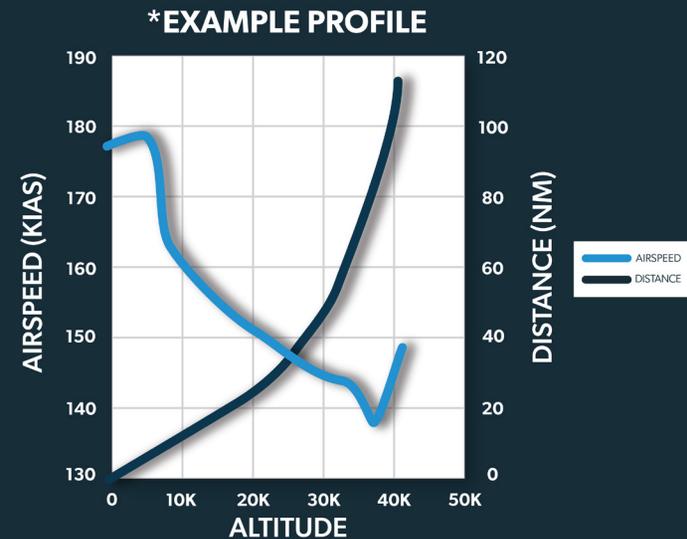
TIP # 1

MAXIMIZE YOUR CLIMB SPECIFIC RANGE

No aircraft is the same, as every climb profile depends wholly on flight conditions combined with your unique CJ's performance abilities. Specific temperature and winds, along with the weight of the aircraft, are all considered key factors. Keep in mind that airspeed and N1 are the main conditions a pilot can control.

TIP: *Be smooooooth!* Rapid changes in airspeed and throttle are disruptive to proper energy management.

TIP: *Temp matters.* Do not underestimate the impact of a hot day. At higher altitudes, each degree of ISA is equal to about 100 ft. of climb range.



KEEP IN MIND: Airspeed and N1 are the only two variables a pilot can control - power and pitch.

**Specific take-off rate, wind & temp aloft*

TIP # 2

ACHIEVING THE PERFECT LEVEL-OFF

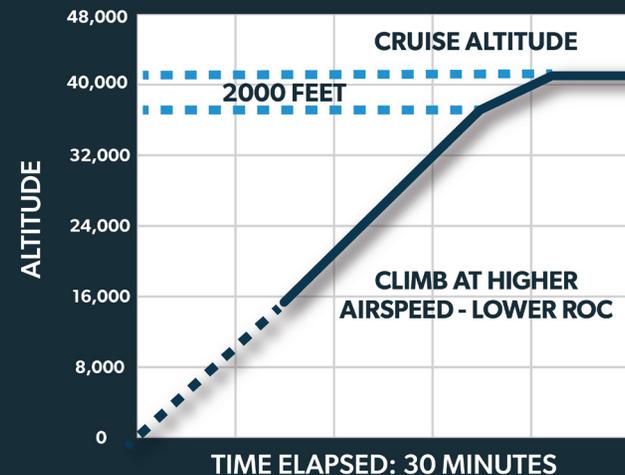
Transitioning from climb to level-off is a crucial step in smoothly flying your CJ to its fullest potential.

TIP: *Find the right spot.* Ensure you have reached the highest possible altitude that allows an easy acceleration to cruise speed.

TIP: *Center yourself.* An aft CG loading is optimal. This will reduce downforce on the tail, which in turn, reduces wing lift and drag.

PRO TIP: Every 1,000-foot increase in cruise altitude increases specific range by approximately 3.2%. When seeking maximum range or efficiency, get higher.

ALTERNATE END OF CLIMB LEVEL-OFF PROFILE



PRO TIP: The tail balancing load is usually a downforce. Help reduce it by loading to AFT CG.

TIP # 3

CRUISE YOUR PERSONAL BEST RANGE

Flying as fast as possible in a headwind is not always ideal for maximizing range. Temperature, altitude, and aircraft weight also play into it, so look at the cruise charts to maximize your mission's efficiency. Often it is better to get up to lower headwinds than it is to brute-force it down low.

TIP: *Control your cruise.* Maintain speed and throttle position, adjusting as little as possible.

TIP: *Fly smoothly.* If applicable, stay a few knots below MMO to avoid jockeying the throttle. 3 KTS on flights less than 3 hours saves the equivalent of 80 seconds in travel time... Don't be silly!



PRO TIP: Slow down. If you want to go far, decreasing air-speed five knots will increase range while costing only three minutes per 1,500 nm trip – and you will save fuel. Examine and use your cruise charts.

TIP # 4

EXECUTE A THOUGHTFUL DESCENT



PRO TIP: A well-planned descent saves fuel and increases range. When allowed by ATC, minimize level-offs and hit assigned altitude targets as close as possible. Dragging it in will increase fuel burn and create more pilot workload.

One size does not fit all. Every descent is dependent upon temperature, winds, and aircraft weight. Review your descent tables.

TIP: *Slow it down, again.* Consider pulling back earlier and descend at a lower ROD, rather than postponing the descent and diving at idle. What do your descent tables show for today's conditions? Think it through.

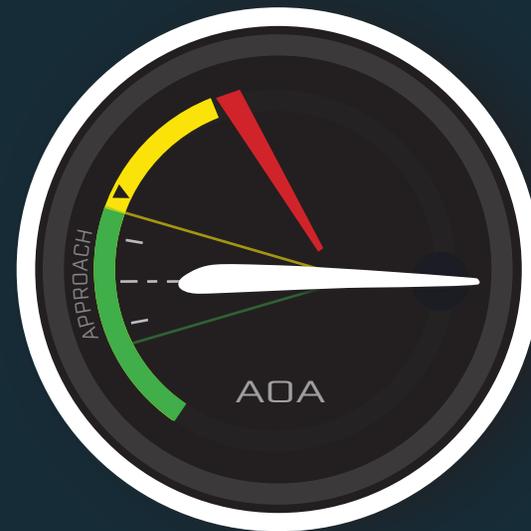
TIP # 5

COMPLETE AN EFFICIENT MISSION

Remember that flying a STAR is not generally the most advantageous way to ensure an efficient route. But, if you are on a STAR, stay higher if allowed; dragging it into each waypoint uses more fuel.

TIP: *Good altitude planning.* Flying at lower altitudes requires increased high-power usage and fuel consumption rate.

TIP: *Ground yourself.* A stabilized approach with fewer power changes will increase fuel efficiency with every landing.



PRO TIP: Find Your Best Angle. Flying AOA keeps you safe by creating margins on several aspects of landing - and landing is how most people get hurt.



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We hope this material has provided helpful insight into maximizing your CitationJet's efficiency. At Tamarack[®], we are committed to the ongoing reformation of aerospace emission use, especially during what may be one of the most significant years in modern history.

Our technology reflects the commitment we have to disrupting the inefficient ways in which we fly today. Active Winglets (built with patented ATLAS technology) provide the most efficient flight performance possible for CitationJets while adding immediate and substantial value.

LEARN MORE 1.208.255.4400

To schedule custom installation of Tamarack Active Winglets on your CitationJet — limited reservations available

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