



Aircraft Acquisition

Venture Model

- Aircraft Acquisition Analysis
- Ownership Investment Budget
- Flight Operations Planning
- Dry-Lease Cost-Offset Evaluation
(Includes data-populated Dry-Lease contract)

*Your complete **venture plan** for
buying an airplane.*

Gracen Jules LLC is a venture development firm focused on aviation startups and aircraft transactions (gracenjules.com).

Introduction

The Aircraft Acquisition Venture Model is the most comprehensive, user-friendly and intuitive analysis platform in the industry for evaluating your plane purchase.

The Excel-based model walks you through the research, budgets and logistics associated with every step of your aircraft purchase, and only requires a few user-inputs associated with your target aircraft to populate an entire financial model towards acquisition analysis, ownership budgets, operational planning, bank presentation (aircraft financing), and dry-lease opportunity.

Unlike aircraft cost software that presents typical budgets associated with various aircraft types, the Aircraft Acquisition Venture Model captures every unique detail associated with your aircraft selection and acquisition plan towards customizing the most realistic look at your aircraft purchase, ownership and operation.

The model also includes an Aircraft Dry-Lease section which details the program assumptions and cost-offset projections you'll need to consider in exploring potential dry-lease arrangements on your aircraft. With a few inputs, you can generate a detailed look at ownership cost-offset

benefits, as well as populate a companion Word-based Dry-Lease Agreement ready for review (all compliant with FAA Advisory Circular 91-37B "Truth in Leasing" guidance).

Aircraft acquisition is a venture, just like any startup, and requires a solid foundation of "narrative and numbers" to identify the aircraft opportunity, investment and logistics. Send an email to Jay Taffet/Gracen Jules (jay@gracenjules.com) to receive the Dropbox link to the Model, and you'll be just a few user-friendly minutes away from answering all your cost and process questions related to buying your aircraft!

Gracen Jules LLC is a venture development firm focused on aviation startups and aircraft transactions. We are here to assist you in your aircraft acquisition venture with purchase, basing, and/or dry-lease support.

Data Inputs

User inputs in **Blue. Calculations and cell references indicated in **Black**.*

Aircraft Make/Model	Piper	Saratoga II HP	
Aircraft Model Code		PA-32R-301	
Projected Annual Flight Hours		200	
CFI/Pro Pilot Fee per Hour		\$50	If require CFI for aircraft check-out, Instrument training, etc. and/or CFI requirement for potential Dry-Lessees that need Transition pilot services if not qualified as PIC on the aircraft (see "Dry Lease" section below).
<i>*Complete when Target Aircraft Identified</i>			
FAA Registration N-Number		N22GJ	
Date of Manufacturer (DOM)		1985	
Aircraft Serial Number		3213222	
Target Purchase Price		\$165,000	Target acquisition features: 3,000-5,000 hours total time, 1,000 + hrs engine life, 3-blade prop, Garmin 530W/ADS-B, good paint/interior.
Estimated Escrow Fees		\$700	Aero-Space Reports (non-IR): up to \$50,000 - \$500 \$50,001-\$100,000 - \$600 \$100,001-\$200,000 - \$700 \$200,001-\$300,000 - \$800 \$300,001-\$400,000 - \$850 \$400,001-\$500,000 - \$900 \$500,001-\$600,000 - \$950
Broker/Project Management Fee		\$0	Input \$0 if not using a broker or project manager for aircraft acquisition or dry-lease program set up (see "Dry-Lease Plan" page). If working with Jay Taffet Gracen Jules: 5% of purchase price or \$7,000, whichever is higher.
Pre-Purchase Inspection Budget Estimate		\$3,500	Includes log book review (inspection status, ADs, SBs, STCs), cylinder compressions, engine borescope, airframe corrosion check, flight control integrity, and component serviceability; owner pays for airworthiness items.
Aircraft Positioning to Inspection Facility		\$290	Reflects "Total Operating Cost" line item on Ownership Model page - assume 1 hour.
Custom N-Number Registration		\$1,000	*Mark \$0 if not desired - budget includes FAA N-number registration, Form 8050-64 filing for N-number change, decal purchase and application (will include removing existing N-number, paint touch-up, and decal application).
Aircraft Financing Preference	Yes or No	Yes	Enter Yes or No, and the model will generate your custom financing scenario on the "Ownership Operation Model" page.
Projected Cash Down		20%	Banks typically require 20%, but enter the percentage you think you'll do in a financing scenario.
Projected Loan Term		15	Banks typically look at 15 years, but enter the amortization period you think you'll be able to secure.
Projected Interest Rate		5%	Interest rate is a broad range, depending on your credit profile and aircraft type, so you may want to do some research to determine a starting assumption.

Data Inputs

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Annual Insurance Expense		\$3,000	Part 91 Pleasure/Business. Estimate shown assumes owner has less than 500 hours and/or requires PIC check-out in the aircraft (much lower est. if PIC-qualified/more hours). Add \$500 for each Dry-Lessee (see below).
Annual Hangar Expense (month/year)	\$450	\$5,400	See aircraft dimensions below - measurements potentially required by FBO/hangar owner for lease calculation and/or space fit.
Avionics Data Upload		\$1,000	Panel Garmin/ForeFlight (Ipad/Iphone)
			<i>* Recommended aviation insurance firm for policy research: Travers Aviation - Mike Travers 314-963-1407 mtravers@traversaviation.com</i>
Wingspan	36' 2"	36.2	
Length	27' 10.5"	27.9	
Height		8' 6"	
Aircraft Footprint	sf	1,010	For FBO Community Hangar lease estimate (if rate based on aircraft footprint sq ft); dimensions also important for T-hangar clear door fit.
Annual Inspection Budget		\$5,500	Base inspection cost plus airworthiness and proactive/elective repairs, including parts and labor.
Contingency Maintenance		\$3,000	Airworthiness and elective repairs (airframe/engine/avionics) between annual inspections.
Fuel Burn	gph	16	
Projected Base Airport (FBO) Fuel Price		\$5.25	Reflects based tenant discount typically offered by home FBO.
Estimated Fuel Price Away from Home Base		\$5.75	
% Home Base Fuel Purchases		70%	Reflects aircraft mission, i.e. local time-building or cross-country trips.
% Away Fuel Purchases		30%	
Oil Burn/Consumption per Hour		0.5	
Cost of Oil Quart		\$8.00	
Min Oil Volume for Flight Operations		9	

Data Inputs

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Oil Quarts Required at Oil Change		12	
Oil Change Interval	hours	50	
Oil Change Labor Cost	flat rate	\$150	
Oil Analysis Cost	flat rate	\$120	Lab-based oil analysis (highly recommended for engine life monitoring) - includes cost of oil sample shipping.
Annual Oil Change Cost		\$1,500	Rounded to simplify flight planning budget.
Engine Life Remaining at Aircraft Acquisition	hours	1,000	
Engine Overhaul Cost		\$30,000	Includes cost of engine, deinstallation, installation, testing.
Prop Life Remaining at Aircraft Acquisition		1,000	Estimate based on prop service history and preference for prop condition.
Prop Overhaul Cost		\$5,000	Includes cost of prop labor, deinstallation, installation, balancing.
<i>Dry-Lease Analysis</i>			
Projected Number of Dry-Lesseees		3	3-4 assumed maximum allowed by insurance to maintain "Business and Pleasure" policy and not be classified as a "Flying Club".
Dry-Lease Rate per Hour		\$140	Based on maintenance, engine/prop overhaul and fixed cost allocations used to calculate Dry Operating Cost per Hour (does not include Fuel/Oil).
Minimum Block Purchase per Dry-Lessee	hours	10	Minimum block purchase required at start of Dry-Lease Agreement.
Minimum Annual Aircraft Utilization per Dry-Lessee	hours	25	Minimum hours of aircraft operation per year per Dry-Lessee.
Estimated Number of Additional Dry-Lease Hours		15	Projected hours each Dry-Lessee will operate the aircraft each year beyond the "Minimum Annual Aircraft Utilization" requirement.
Projected Total Annual Dry-Lease Hours		120	
Projected Annual Flight Hours		200	Total annual flight hours on aircraft (Owner and Dry-Lesseees) - assumption input above.

Data Inputs

User inputs in **Blue . Calculations and cell references indicated in **Black** .*

Aircraft Management/Scheduling App		Coflyt	coflyt.com
App Subscription (Month/Annual)	\$36	\$432	\$36 per month subscription - unlimited pilots/on-app payment platform for Dry-Lessee charges.
<i>Dry-Lease Setup</i>			
Dry-Lessor Name		Joe Lessor	Enter your name if you are dry-leasing individually, or an entity if you have incorporated your aircraft into an LLC or another type of entity.
Dry-Lessor Address		Street Number, City, State, Zip	
Dry-Lessor Home Base Airport		KAAA	
Dry-Lessor Home Airport Name		Airport Name	
Dry-Lessor Base FBO		Base FBO	Identify the facility where the aircraft will be stored for access by Dry-Lessee.
Dry-Lease Agreement Governing State		State	Typically Dry-Lessor's home state, but consult with an attorney to confirm the contract venue.
<i>Dry-Lesseees</i>			
Dry-Lessee Name	1	Joe Dry-Lessee	
Agreement Date		October 1, 2020	
Dry-Lessee Address		Street Number, City, State, Zip	
Dry-Lessee Name	2	Joe Dry-Lessee	
Agreement Date		October 1, 2020	
Dry-Lessee Address		Street Number, City, State, Zip	
Dry-Lessee Name	3	Joe Dry-Lessee	
Agreement Date		October 1, 2020	

Data Inputs

User inputs in **Blue . Calculations and cell references indicated in **Black** .*

Dry-Lessee Address		Street Number, City, State, Zip	
Dry-Lessee Name	4	Joe Dry-Lessee	
Agreement Date		October 1, 2020	
Dry-Lessee Address		Street Number, City, State, Zip	

Financial Summary

**Financial results generated from "Aircraft Profile Inputs" and "Ownership Operation Model" pages.*

		N22GJ	
Total Acquisition Cost		\$170,140	
Total Annual Ownership Cost Before Operation		\$19,832	
		\$9,832	Annual Fixed Cost
		\$5,500	Annual Inspection
		\$3,000	Contingency Maintenance
		\$1,500	Oil Change Maintenance
Total Operating Cost per Hour		\$290	
		\$140	Dry Cost per Hour
		\$100	Fuel/Oil Cost per Hour
		\$50	CFI/Pro Pilot Fee per Hour
Total Annual Dry-Lease Revenue		\$16,800	
		3	Projected Number of Dry-Lessees
		\$140	Dry-Lease Rate per Hour
		120	Projected Total Annual Dry-Lease Hours
Net Annual Ownership Cost with Dry-Lease Offset		\$3,032	

Ownership & Operation Model

**Data populated from inputs on "Aircraft Profile Inputs" page and automatic calculations.*

<i>Acquisition Budget</i>			
Purchase Price		\$165,000	
Escrow Fee		\$350	1/2 Escrow Fee paid by seller - amount reflects 1/2 total fees.
Pre-Purchase Inspection		\$3,790	Includes cost of positioning aircraft at inspection facility - assumes 1 hour.
Project Management Fee		\$0	
Custom N-Number on Aircraft		\$1,000	FAA N-number registration, Form 8050-64 filing for N-number change, decal purchase and application (will include removing existing N-number, paint touch-up, and decal application).
Total Acquisition Cost		\$170,140	
<i>Note Only: Aircraft Financing</i>			
Cash Payment	20%	\$34,028	
Principal Financed		\$136,112	
Aircraft Annual Debt Service		\$12,916	
Aircraft Monthly Debt Service		\$1,076	
<i>Ownership Cost</i>			
Annual Fixed Cost		\$9,832	Insurance, hangar, avionics data, aircraft scheduling app.
Annual Inspection		\$5,500	
Contingency Maintenance		\$3,000	
Oil Change Maintenance		\$1,500	
Total Annual Ownership Cost Before Operation		\$19,832	

Ownership & Operation Model

**Data populated from inputs on "Aircraft Profile Inputs" page and automatic calculations.*

<i>Operating Cost</i>			
Annual Flight Hours		200	
Fuel/Oil Cost		\$90	*See below for detailed analysis on all Operating Cost line items.
Maintenance Allocation		\$50	
Engine/Prop Reserves		\$35	
Fixed Cost Allocation		\$49	
Dry Cost per Hour		\$140	Rounded to simplify flight planning budget.
Fuel/Oil Cost per Hour		\$100	
CFI/Pro Pilot Fee per Hour		\$50	If require CFI for aircraft check-out, Instrument training, etc. and/or CFI requirement for potential Dry-Lesseees that need Transition pilot services if not qualified as PIC on the aircraft (see "Dry Lease" section below).
Total Operating Cost per Hour		\$290	
*Operating Cost per Hour for PIC		\$240	No CFI/Transition pilot required.
<i>Fuel/Oil Analysis</i>			
Average Fuel Burn	gph	16	
Projected Base Pricing	per gal	\$5.25	
Projected Remote Pricing	per gal	\$5.75	
Projected Annual Gallons		3,200	

Ownership & Operation Model

**Data populated from inputs on "Aircraft Profile Inputs" page and automatic calculations.*

Based Gallons	70%	2,240	
Remote Gallons	30%	960	
Total Cost of Fuel		\$17,280	
Average Cost of Fuel per Hour		\$86.40	
Average Oil Burn	qts/hour	0.5	
Oil Cost	per quart	\$8.00	
Oil Cost per Hour		\$4.00	
<i>Maintenance / Reserves Analysis</i>			
Annual Inspection		\$5,500	Base inspection cost plus airworthiness and proactive/elective repairs, including parts and labor.
Contingency Maintenance		\$3,000	Airworthiness and elective repairs (airframe/engine/avionics) between annual inspections.
Oil Change Maintenance		\$1,500	Rounded to simplify flight planning budget.
Total Annual Mx Cost		\$10,000	
<i>Engine Reserves</i>			
Engine Life Remaining at Acquisition	hours	1,000	
Engine Life Used per Year		20%	Based on projected flight hours per year.
Engine Overhaul Cost		\$30,000	Includes cost of engine, deinstallation, installation, testing.
Engine Reserves per Year		\$6,000	
<i>Prop Reserves</i>			

Ownership & Operation Model

**Data populated from inputs on "Aircraft Profile Inputs" page and automatic calculations.*

Prop Life Remaining at Acquisition	hours	1,000	
Prop Life Used per Year		20%	Based on projected flight hours per year.
Prop Overhaul Cost		\$5,000	Includes cost of prop labor, deinstallation, installation, balancing.
Prop Reserves per Year		\$1,000	
<i>Aircraft Fixed Cost</i>			
Aircraft Insurance		\$3,000	
Hangar Space		\$5,400	
Avionics Data Uploads		\$1,000	
Aircraft Management/Scheduling App	Coflyt	\$432	\$36 per month subscription - unlimited pilots/on-app payment platform for Dry-Lessee charges.
Total Annual Fixed Cost		\$9,832	
<i>Dry-Lease Revenue</i>			*See "Acquisition Dry-Lease Plan" page for program organization.
Projected Number of Dry-Lesseees		3	
Dry-Lease Rate per Hour		\$140	Based on maintenance, engine/prop overhaul and fixed cost allocations used to calculate Dry Operating Cost per Hour (does not include Fuel/Oil).
Minimum Block Purchase per Dry-Lessee	hours	10	
Starting Dry-Lease Revenue		\$4,200	Dry-Lessee contribution to maintenance, engine/prop overhaul and fixed cost at beginning of Dry-Lease program.
Minimum Annual Aircraft Utilization per Dry-Lessee	hours	25	per Dry-Lease Agreement.
Minimum Block Purchase per Dry-Lessee	hours	10	

Ownership & Operation Model

**Data populated from inputs on "Aircraft Profile Inputs" page and automatic calculations.*

Net Dry-Lessee Hour Commitment	annually	15	
Net Annual Dry-Lease Revenue		\$6,300	Total Dry-Lessee contribution to maintenance, engine/prop overhaul and fixed cost after program start before year-end.
Estimated Number of Additional Dry-Lease Hours		15	Projected hours each Dry-Lessee will operate the aircraft each year beyond the "Minimum Annual Aircraft Utilization" requirement.
Projected Number of Dry-Lesseees		3	
Additional Dry-Lease Revenue above Minimum		\$6,300	Total Dry-Lessee contribution to maintenance, engine/prop overhaul and fixed cost if aircraft operated beyond "Minimum Annual Aircraft Utilization" for the additional hours indicated above.
Total Annual Dry-Lease Revenue with Additional Dry-Lease Hours		\$16,800	
Total Annual Ownership Cost Before Operation		\$19,832	Fixed cost (insurance, hangar, avionics data, aircraft scheduling app), annual inspection, contingency maintenance, and oil changes - does not include engine/prop overhaul reserves allocations.
Net Annual Ownership Cost with Dry-Lease Offset		\$3,032	
Projected Total Annual Dry-Lease Hours		120	

Aircraft Acquisition & Dry-Lease Plan

1	Identify hangar space options, as well as fuel/pull-out service through the FBO. Negotiate the hangar/fuel deal contingent upon aircraft acquisition.	Also identify your local maintenance resources for routine mx (oil changes, contingencies, etc.) and inspections (may want to consider a different shop for Annuals, etc. just to have fresh looks/perspectives during these scheduled events).
2	Contact insurance for policy estimate.	Travers Aviation - Mike Travers 314-963-1407 mtravers@traversaviation.com
3	Reserve custom N-number registration with the FAA (if desired).	FAA N-Number Registration: https://aircraft.faa.gov/e.gov/NN/reserve.aspx
4	Identify all target aircraft owners in your region and contact them via hard-letter to introduce your interest in acquiring this type of aircraft.	Owner data available through Airpac.com. You'll certainly want to shop on-line as well, but a targeted owner campaign is very effective towards finding options that aren't listed, but ready for sale.
5	Negotiate a first-position option on your target-selected aircraft (right of first refusal) to give you time to assemble a CFI/pro pilot bench and identify prospective Dry-Lesseees (see below).	
6	Create a professional aircraft presentation (PDF) you can circulate among prospective CFIs/pro pilots and Dry-Lesseees towards facilitating affiliation.	Feature aircraft photos, total time on aircraft, engine hours remaining before TBO, engine/prop overhaul year, avionics suite, and other STCs/upgrades - preview hangar/fuel deal, maintenance resources, insurance plan, and dry-lease terms.
7	Contact all CFIs in your area towards identifying a bench of qualified instructors for acft check-out and/or pro pilot services (*qualified per Insurance "Open Pilot Warranty" experience requirements).	Bench of qualified CFIs/pro pilots is simply a courtesy exercise to offer potential Dry-Lesseees options if not qualified to be PIC in your aircraft - recommendations only. The aircraft owner can not require the Dry-Lessee to use certain CFIs/pro pilots.
8	Solicit prospective Dry-Lessee referrals/ideas during CFI reach.	Additional Dry-Lessee solicitation strategies: All Commercial pilots within 50 miles; FBO marketing/word-of-mouth through pilot community; Law firms with regional practices; Chamber of Commerce networking to identify "mobile" companies.
9	Connect with prospective Dry-Lesseees towards securing commitments to dry-lease upon aircraft acquisition. Circulate Dry-Lease Agreement for review.	Preview renter's insurance requirement: Bodily Injury - \$50,000 each person; Property Damage - \$500,000 (\$500,000 each accident); Aircraft Damage Liability - \$5,000 each non-owned aircraft.
10	Connect all CFIs and preferred Dry-Lessee prospects with Insurance for Additional Insured (Dry-Lesseees) and Named Insured (CFIs - Open Pilot Warranty) pre-qualification and policy cost projection.	Insurance/aircraft operation stays Part 91 - Business/Pleasure if the CFIs are not Dry-Lesseees, and if the CFIs are hired directly by the Dry-Lesseees, not the aircraft owner. The aircraft owner can not require the Dry-Lessee to use certain CFIs/pro pilots.

Aircraft Acquisition & Dry-Lease Plan

11	Execute Aircraft Purchase Agreement towards a pre-buy inspection (Agreement cancels with no penalty if you reject the aircraft at the pre-buy).	
12	Coordinate pre-buy inspection with mx shop or AP. Inspection includes log review (inspection status, ADs, SBs, STCs), cylinder compressions, engine borescope, airframe corrosion check, flight control integrity, and component serviceability.	
13	Execute one-year Dry-Lease Agreements with your preferred Dry-Lessee prospects if you accept the Aircraft at pre-buy inspection towards Closing.	See enclosed Dry-Lease Agreement (MS Word) - document configured to populate with data from "Dry-Lease Contract Data" page through the Word Mail Merge function. (*Dry-Lease Contract Data auto-populated from "Aircraft Profile Inputs".)
14	Aircraft purchase through an Escrow-based, on-line Closing (email and DocuSign exchanges). File N-number registration change with Escrow at Closing (FAA Form 8050-64), if applicable.	Coordinate insurance placement and policy endorsements for Additional Insureds (Dry-Lesseees) and Named Insureds (CFIs): Travers Aviation - Mike Travers 314-963-1407 mtravers@traversaviation.com
15	Activate app-based aircraft scheduling and payment system for Dry-Lesseees.	Coflyt (coflyt.com) recommended.

Notes

Aircraft Dry-Lease

This Dry-Lease is made as of «Agreement_Date», between «DryLessor_Name», an individual having an address of «DryLessor_Address» (“**Dry-Lessor**”), and «DryLessee_Name», having an address of «DryLessee_Address» (“**Dry-Lessee**”).

RECITALS

A. Dry-Lessor is the FAA-registered owner of the following aircraft, together with all appliances, parts, instruments, avionics and appurtenances to the aircraft, including any replacement parts or engines which may be installed on the aircraft from time to time, and all logs, manuals and other records relating to such aircraft (collectively, the “**Aircraft**”):

FAA Registration: «NNumber»
Aircraft Year: «DOM»
Aircraft Manufacturer: «Manufacturer»
Aircraft Make & Model: «Make__Model»
Aircraft Model Code: «Model_Code»
Aircraft Serial Number: «SN»

B. Dry-Lessee desires to dry-lease the Aircraft under such terms and conditions as are mutually satisfactory to both parties.

In consideration of the matters described above, and of the mutual benefits and obligations set forth in this Dry-Lease, the parties agree as follows:

1. DRY-LEASE OF AIRCRAFT

For \$«DryLease_Rate» per flight hour, Dry-Lessor dry-leases the Aircraft to Dry-Lessee. It shall be conclusively presumed between the parties that Dry-Lessee has fully inspected the Aircraft and has knowledge that it is in good condition and repair, and that Dry-Lessee is satisfied with and has accepted the Aircraft in such condition and repair.

Flight hours shall be calculated based on the Aircraft Hobbs Meter, with total Dry-Lessee flight hours beginning at Aircraft engine start at Dry-Lessor's home base at «Base_Airport_ID», «Base_Airport_Name», «Base_Airport_FBO» ("Dry-Lessor's Base"), and ending at Aircraft engine shutdown at the same.

Flight hours, as defined herein, will be recorded by Dry-Lessee in «Aircraft_Management_App», an aircraft and flight management app ("App"), which Dry-Lessor shall subscribe to and pay for without any contribution from Dry-Lessee, and which Dry-Lessee shall download for this use and other uses as further defined herein. Dry-Lessee and Dry-Lessor mutually agree that Dry-Lessee shall be obligated to purchase at least «Min_Hour_Block_Text» («Min_Hour_Block_») hours of flight time at the start of this Dry-Lease, with such start date defined in Section 2 herein, and will pay for this «Min_Hour_Block_»-flight hour block purchase through the App.

Dry-Lessee and Dry-Lessor further agree that Dry-Lessee shall be obligated to operate the Aircraft for a minimum of «Min_Hours_per_Year_Text» («Min_Hours_per_Year_») flight hours during the term of the Dry-Lease, and Dry-Lessee shall be allowed to operate the Aircraft for additional flight hours beyond this «Min_Hours_per_Year_»-