



STRATOS

Investing in Aviation

Airline Economics : Growth Frontiers New York

Gary Fitzgerald, Managing Director, Stratos

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Stratos: Company Highlights

- ✦ Aircraft servicer & advisory firm created in 2013, specialising in aircraft metal (remarketing, financing via debt funding and operating leasing, management)
- ✦ Based in Monaco & Ireland, with team members also located in UK, Asia & US
- ✦ Services a Portfolio of 3 aircraft (soon to be 11)
- ✦ Clients include many of the worlds largest airlines, lessors, OEMs & aviation lenders
- ✦ Track record - \$1.6bn of commercial aircraft & and raising/trading aircraft debt:
- ✦ Sold: 3xNew A320s, 2xUsed A320s*, 2xATR72, 3xA340s, 6xA319s*
- ✦ Leased: Used A321 & 5x New ATR72-6
- ✦ SLB: 1xNew A320, 6xUsed ATR72-5, 4x739Max*
- ✦ Purchased: 6x757, 1xA333, 2xA320, 1xA319, 2x773ER*
- ✦ Financed: 4xA320, 1xA319

Green: With lease attached

* Committed/Pipeline



Stratos: Our Team & Network



Commercial & Marketing



Gary Fitzgerald
Managing Director



Camille Pousseur
Marketing Director



Mark Shaw
Marketing Director



Mike Sanders
Marketing Director



Finance & Admin



Lourens Geldenhuis
Corporate Finance Director



Kristian Lindberg
Lease & Finance Manager



Ana Urien
Legal & Contracts Manager



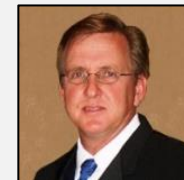
Hiro Matsuo
Commercial Manager



Technical Services



Ian Butcher
Technical Director



Erv Bach
Technical Advisor
Structures Specialist



Ben Hogan
Technical Advisor
Engine Specialist



Investment Objectives

- 🚀 Key investment targets: Return (IRR), running yield (return to investors during term) and residual value assumptions.

- 🚀 Investment ticket also heavily influences strategy:
 - \$50m – sub portfolio with modest leverage
 - \$200m – suggests sidecar or direct investment model (organic growth)
 - \$500m – shop for a platform: extremely difficult to grow organically & competitively at this volume

- 🚀 Risk / reward appetite is key: tax investors = any loss can be catastrophic

- 🚀 High level restrictions: regulatory (insurers = Solvency II, banks =Basel III..)

- 🚀 Macro beliefs – fuel evolution, airline growth sustainable etc



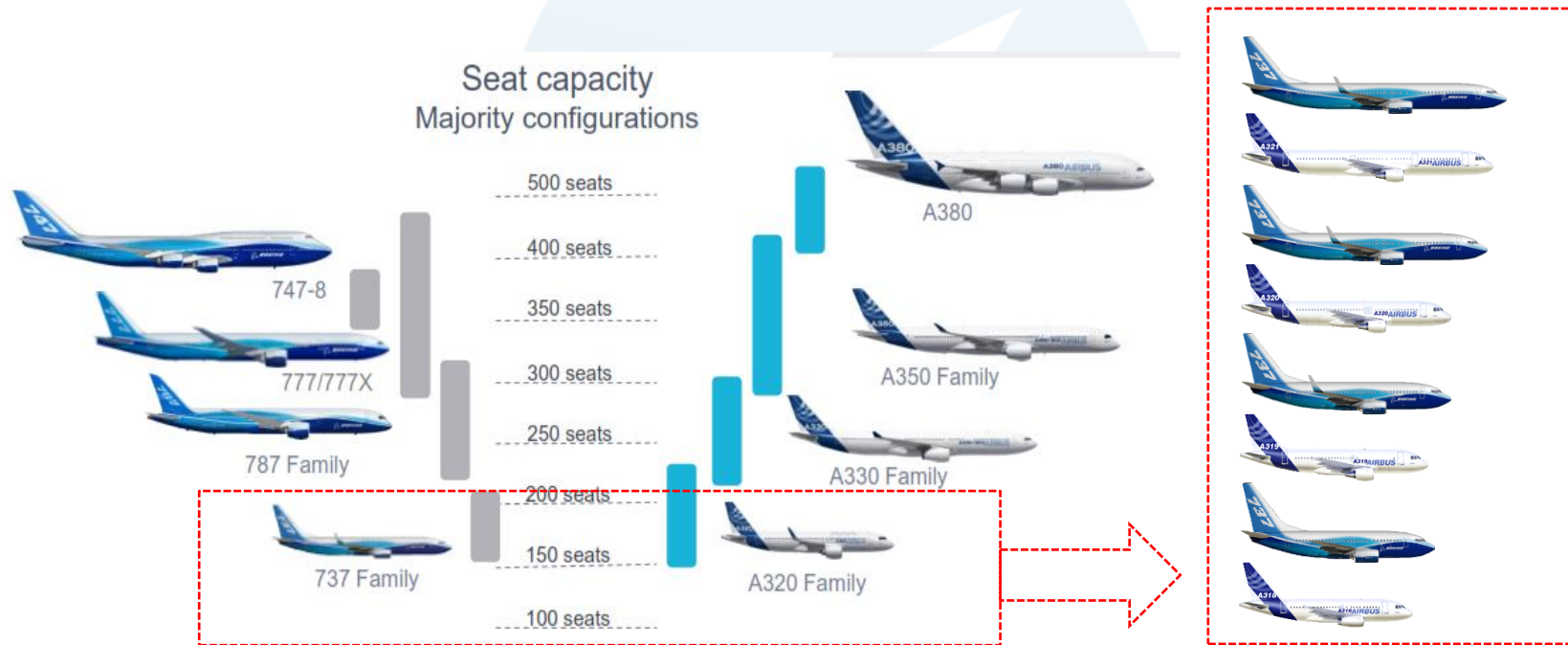
Ways to Invest in Aviation Assets

Entry Points:	Control	Ease	Alignment	Risk Mgmt
Build or buy a Lessor	Full	Difficult	Full	Investor
Direct investment in listed lessor	No	Easy	Partial	Reliant
'Sidecar' with operating lessor	Partial	Easy	V.Limited	Reliant
Invest in co-mingled fund/ ABS	Limited	Easy	Minimal	Reliant
Direct investment in metal or debt	Full	Medium	Substantial	Investor



Aircraft Investment Principles - Beware Variants...

- All 'families' have multiple variants, each variants several types:
 - Stretched or extended range
 - Different engine manufacturers (cannot swap engine types!)
 - Upgraded platforms (777X, A320 NEO, 737 MAX etc.)
- Example: 2 narrowbody families (below) each have at least 5 "in production" variants



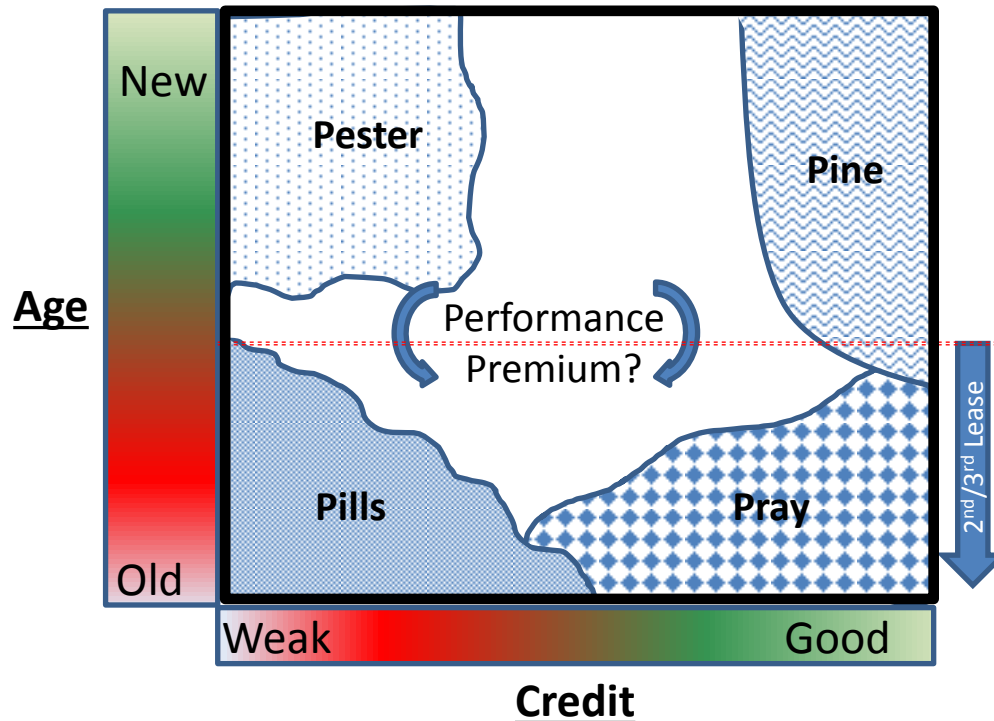


Aircraft Investor Myths:

- ✿ Aircraft <20yrs old will always have a lessee, its purely a question of price & credit
- ✿ Maintenance reserves should be considered investor income
- ✿ There is a 'pedigree premium' for aircraft at top tier airlines
- ✿ Aircraft / engine leasing is readily scalable
- ✿ SLB provides better value than buying with lease attached from a lessor
- ✿ Aircraft have become liquid commodities, strong relationships are now obsolete
- ✿ Appraised values are totally dependable: based on open & reliable trade data points



Investing in 'Liquid' Aircraft



Pine: Limited equity opportunities, dominated by cheap financing & tax leases

Pester: Weekly calls to servicer to verify coverage & lessee to encourage regular rent

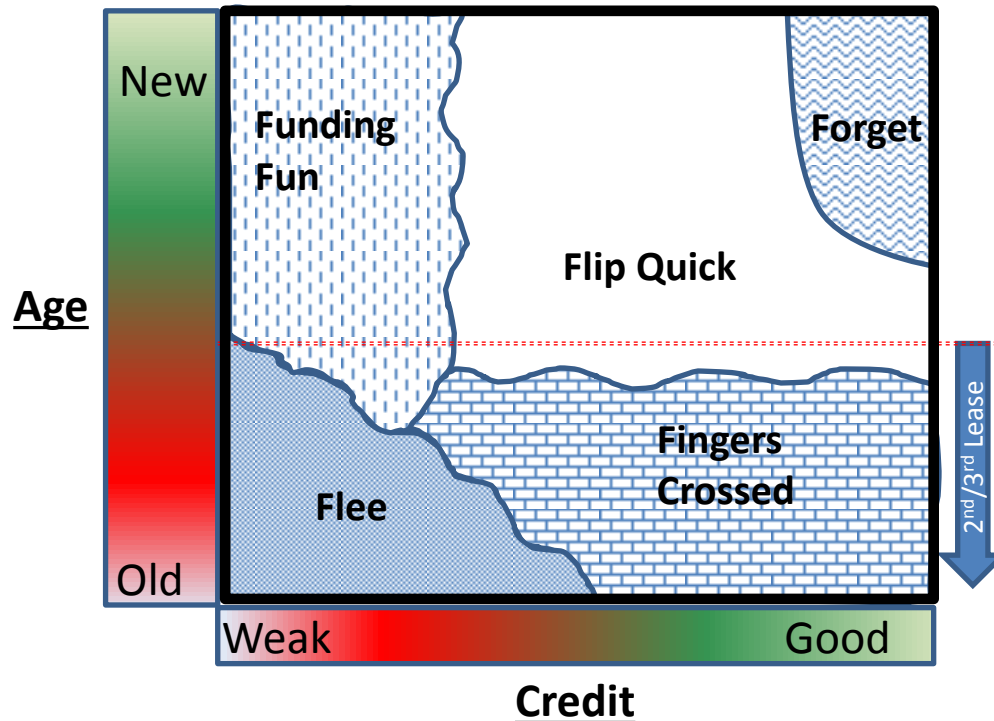
Pray: either for an extension or that you calculated your intrinsic maintenance RV correctly..

Pills: suggest sleeping aids in this zone, unless you're all over the engines/carcass value

'Liquid Aircraft' currently considered to be A319, A320, A321, 738, 739ER, A332, 787



Investing in 'Illiquid' Aircraft



Forget: Dominated by cheap financing & tax leases

Funding Fun: Leverage v. tough

Flip Quick: Many lessors have a priority to resell any kit in this zone.

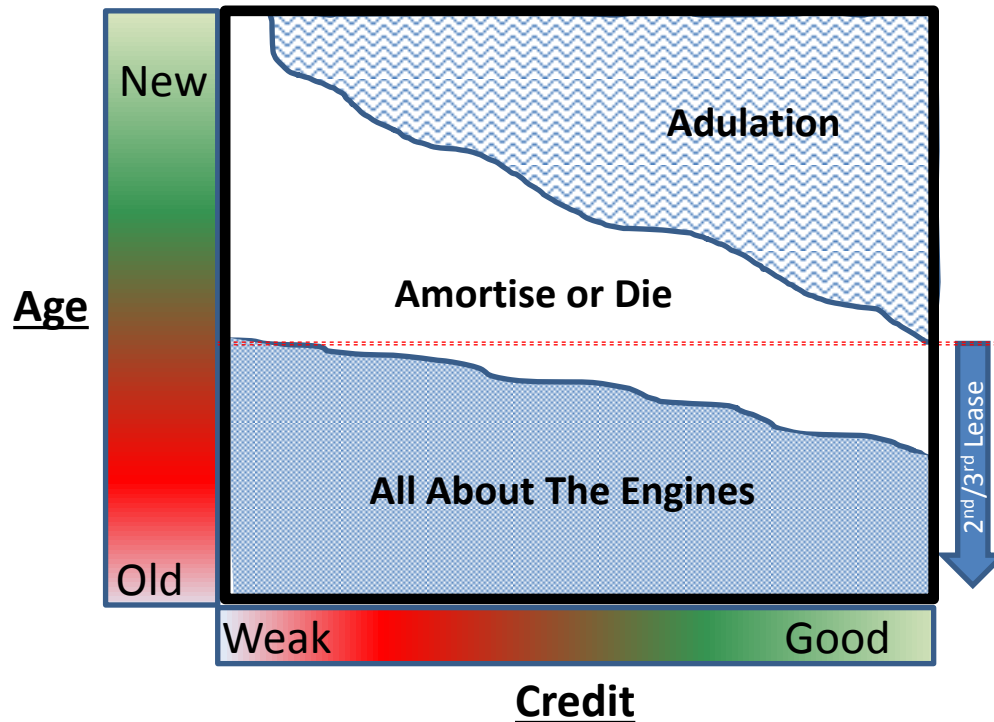
Fingers Crossed: If you get lucky engines will be valuable to original operator

Flee: Just don't go there

'Illiquid Aircraft' currently considered to be A318, 736, A340, A333, 777, A380



Investing in 'Newest Generation' Aircraft



Adulation: Most investors & lenders are chasing this segment with gusto

Amortize or Die: This territory will get tricky due to skimpy depreciation

All About The Engines: RVs are likely to be totally different to the current world fleet: engine aftermarket and limits on used material will suffocate some engine (& therefore aircraft) resale values for investors.

'Newest Generation' Aircraft currently include MAX, NEO, 787, 777X, A350



Recommendations

- Our industry is approaching a mature macro cycle: it is now critical to balance age mix (minimise volatile types, avoid aggressive lessor turf)
- Target long-term income with low volatility, Equity @ 5-7% IRR or Debt @ 4% all-in
- Focus on good quality credits: avoid chasing yield by deteriorating credit
- Balanced portfolio with selective widebodies, only liquid in-production assets but avoid first-off-the-line (heavy, bespoke) & last-off-the-line (RV hit)
- Staggered lease expiration profile with term remaining spread of 3-7 years
- Watch surprises with reconfig/ re-deployment costs & leadtimes