

# MAINTENANCE STRATEGIES AND PRACTICES FOR THE SMALL FLIGHT DEPARTMENT



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# WE'LL DISCUSS:



Responsibility  
for Airworthiness

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MX Program  
Management

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In the Shop

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Departure and  
Invoicing

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# RESPONSIBILITY FOR AIRWORTHINESS

- The owner (lessee) is responsible for airworthiness of the aircraft
- The PIC is responsible for ensuring the aircraft is airworthy for the flight he is commanding.
- EASA mandates the use of a professional maintenance oversight organization (CAMO)
- Secure the services of your own maintenance professional. Consistent oversight of the mx program will ensure airworthiness compliance.



# MAINTAINING AIRWORTHINESS

39052001531C4	HRS		1070:18		
	AFL		621		
<b>30-00-203 FUNCTIONAL TEST APU BATTERY (CAPACITY CHECK) (MRB)</b>					
40178-24	MOS	6 (+/-)	14-Mar-20		14-Sep
3905200160E13	HRS		1070:18		
	AFL		621		
<b>605-28-010 REV 03 SPECIAL CHECK - STANDBY FUEL FEED SYSTEM AND AUXILIARY POW</b>					
	MOS	12	27-Sep-19		27-Sep
	HRS	600	1057:58		1657:
	AFL		614		
Position: RECOMMENDED					
<b>CA CF-2016-32 R03 FUEL - ENGINE AND AUXILIARY POWER UNIT ELECTRICAL FUEL PUM</b>					
	MOS	12	27-Sep-19		27-Sep
	HRS	600	1057:58		1657:
	AFL		614		
Position: MANDATORY					
<b>SA 2019-0235 PARA (1) THRU (4) CONCURRENTLY ACCOMPLISH PARAS (1.1) AND (1.2) OF</b>					
	MOS	T:12			04-Oct
	HRS				

- Know your maintenance program
  - Put it on a computerized tracking program and keep it up to date with aircraft hours and cycles and compliance activity
  - Learn inspection intervals, grace periods, hard limits (tasks without grace)
  - Run monthly due lists. Project at least 90 days forward.
  - Which Airworthiness Directives are applicable to the aircraft? Are any of them repeat?
    - AD74-08-09R3 – every 1,000 hours is applicable to every Part 25 aircraft.
  - Use the tracking program's analyst service. Expert advice is part of the subscription
    - The tracking service assumes no responsibility for airworthiness. Owner remains accountable for any errors in tracking or compliance recording.





# RECORDS DEMONSTRATE AIRWORTHINESS

- Organize your records
  - A line item in a tracking program is not a compliance document. Wet signature (photocopies are ok) or electronic signature (if authorized to use) demonstrate compliance.
  - Save all documentation related to life limited parts
- Store records like they're the family jewels
  - Quality of historical records reflects on quality and integrity of the aircraft's maintenance history



# TIMING YOUR INSPECTIONS

- **Inspection Yield and Packaging:**
- Yield is the amount of green time consumed prior to an inspection being performed.
- Packaging is the combining of discreet inspections coming due within a window of time into a single event.
- Yield management and packaging efficiency drive maintenance costs and aircraft utility.





Outline work requested  
in very specific terms



Define discretionary  
tasks in detail – be  
precise



Specify warranty status  
for the aircraft in the  
request for proposal

# THE BIDDING PROCESS

## DEFINE YOUR WORK SCOPE



# BIDDING PROCESS

## QUALIFY BIDDERS



- Experience with type
- Business Terms
- Shop capability
  - Is equipment and tooling adequate to manage any inspection findings?
  - Do they have the manpower to complete the work in the required time?
  - Do they work multiple shifts and weekends?
  - Are they authorized to perform warranty or administer service programs



# BIDDING PROCESS ANALYZE QUOTES

- Compare Apples to Apples.
  - a) Build a work scope spreadsheet to help you extract quote information and insure an accurate comparison.
  - b) Quote comparisons should be organized to show comparative costs for required MX service bulletins, warranty (some shops may not be able to do warranty work), and discrepancy MX, as well as incentives.
- Use the proposal to QC the bidding process.
  - a) Work scope spreadsheet becomes the checklist to ensure quote includes all requested work.
  - b) If a quote brings additional MX requirements to light and these are valid and desired, send the additional requirements to all bidders. However, don't forward email communications from one bidder to other bidders.
  - c) Quote also QC's the work scope to ensure it includes related work.

Example: Proposal requests tire change. Quote should include tire change, wheel NDT, bearing lube, Axle shaft AD





Remember, \$5,000 is meaningless savings



when the aircraft is overdue, over budget, or



out of service due to quality issues resulting



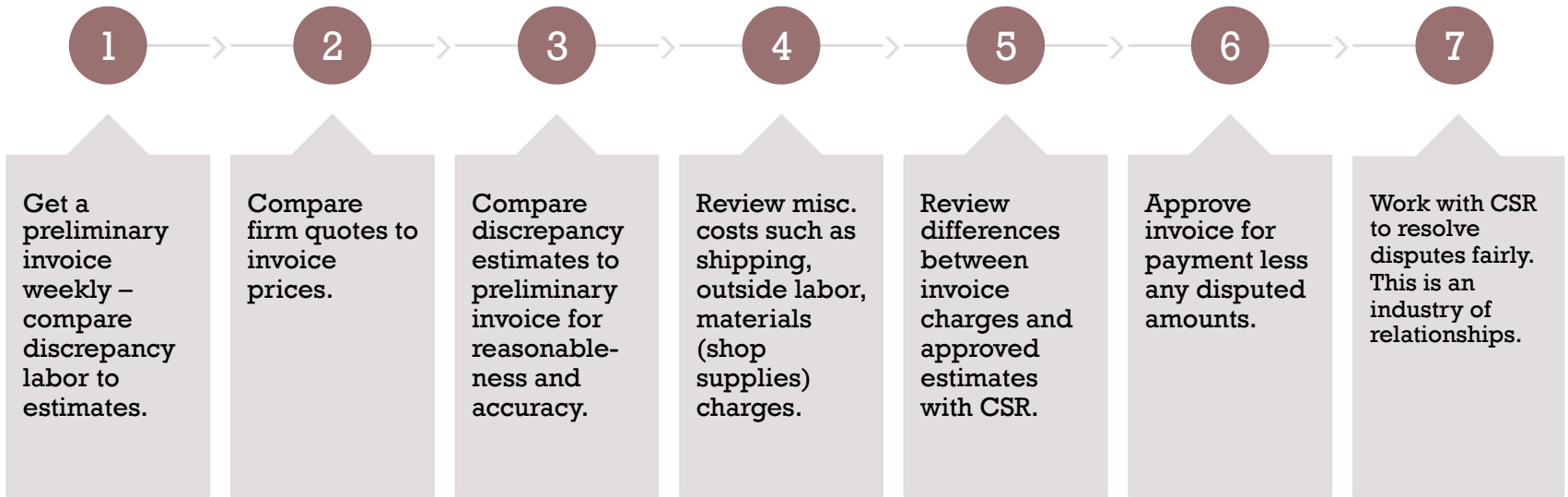
from selecting a less-than-capable facility based on price alone.

**MONEY  
ISN'T  
EVERY-  
THING.**



# SHOP VISIT DISCREPANCY MANAGEMENT

 Don't approve	Don't approve blanket discrepancy cost limits.
 Have	Have all discrepancies estimated for approval.
 Approve	Approve only estimates you are comfortable with and that are reasonable for the work to be performed.
 Get	Get a detailed explanation when the reason for an expense is not obvious.
 Ensure	Ensure you understand what is included in an estimated price. Are access, expected parts, and troubleshooting included?
 Authorize	Authorize continued troubleshooting of -X- hours instead of blanket approval of the repair
 Ride	Ride herd on outside engineering when required for repairs.



# SHOP VISIT INVOICING



THANK YOU

Dave Colbert

DC 55 Group, LLC



# DC55 GROUP, LLC

- Dave Colbert – Brief Bio
- Dave has 44 years of experience in aircraft operations, aircraft maintenance, and operating within the 14 CFR Part 135 regulatory environment. He is currently the General Manager of DC55 Group, LLC specializing in maintenance strategies for Part 135 Operators and Flight Departments.
- Dave completed 14+ years of employment with XOJET Aviation, LLC in May 2020. He was a member of XOJET's Executive Leadership team. He was also on the Board of Directors of XOJET's GMJ Airshuttle subsidiary, a 14 CFR Part 125 air carrier.
- Dave is originally from Pittsburgh, PA. He graduated first in class from Pittsburgh Institute of Aeronautics. He started his professional career as an A&P technician with Grumman American (now Gulfstream Aerospace) in Savannah, GA in 1976. Over the decades Dave's operational and leadership experience has grown to include international operations in Riyadh and Jeddah, Saudi Arabia; corporate flight operations with Chevron's corporate flight department in San Francisco; aircraft management with Aviation Methods in San Francisco; aircraft charter, management, acquisition and sales, completion and FBO operations with ACM Aviation in San Jose, CA; high utilization, floating fleet maintenance and operations with XOJET Aviation, LLC in Brisbane, CA. Dave has unparalleled expertise in all facets of 14 CFR 135 operations. He enjoys a well-respected relationship with local regulators, crewmembers, company employees, vendors, and industry leaders.
- Dave's breadth of experience across all functional areas of an operation along with his general management skills provide his clients with tangible and actionable strategies for embodying a safety and compliance-oriented culture while driving operational efficiencies and commercial accountability within the maintenance organization.

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