



QUEST AERONAUTICS
Advanced Solutions for General Aviation

CHEAT SHEET

MAINTENANCE SHOP COMMUNICATION

HOW TO CHOOSE THE RIGHT SHOP — AND STAY IN
CONTROL OF YOUR AIRCRAFT'S MAINTENANCE



Start With the Right Maintenance Partner

Your maintenance outcomes depend more on who works on your aircraft than anything else. Choose a shop within one flight hour that demonstrates all Three Cs:

COMPETENT – A COMPETENT SHOP:

- has proven experience with your aircraft type and engine model
- understands common issues, ICAs, and proper troubleshooting procedures
- uses data (engine monitor, oil analysis, borescope) instead of guessing
- isolates root causes rather than treating symptoms

COMMUNICATIVE – A COMMUNICATIVE SHOP:

- keeps you informed when new findings arise
- provides written discrepancy lists (not verbal summaries)
- explains the impact, options, and cost differences clearly
- never starts additional work without your approval

COOPERATIVE – A COOPERATIVE SHOP:

- works with you, not around you
- respects your decisions and budget
- welcomes engine data and independent input
- is transparent, honest, and open to showing removed parts

IF A SHOP FAILS EVEN ONE OF THE THREE CS — WALK AWAY.



The Five Rules of Cost-Effective Aircraft Maintenance

Rule 1 — Select the Right Shop (The 3 Cs)

Everything else depends on this decision.

Rule 2 — Demand a Written Estimate

Before work begins, insist on:

- a written, itemised estimate (parts, labour, third-party services)
- clear scope of work
- commitment that no additional work will be performed without approval

This aligns with the Annual Inspection Contract wording, for example:

“Please perform an airworthiness review of the Aircraft Make/Model/Variant – Registration – S/N at the agreed to flat rate charge of € XXX, and provide me/us (Name of the Owner) or Quest Aeronautics GmbH with your findings in the form of a detailed discrepancy list with repair recommendations and cost estimates.

The detailed discrepancy list shall include the discrepancy, recommended corrective action, type of discrepancy (airworthiness item, recommended, or discretionary), and cost estimates for parts, labour and purchased/third-party services.

You are not authorised to perform any repair or order any parts at this point. Once the inspection is complete, we or Quest Aeronautics will review the discrepancy list with repair recommendations and decide what repairs we will authorise you to perform.”



Rule 3 — Don't Fix What Isn't Broken

For Part-NCO/Part-91 owners, manufacturer schedules are recommendations, not mandatory — unless required by AD or regulation. Use condition-based maintenance where appropriate. Differentiate items that need scheduled action (e.g., magnetos) from those that can be maintained based on actual condition.

Rule 4 — Confirm the Problem Before Repair

Avoid “shotgunning.” Always ask:

- What symptoms were observed?
- How was the issue reproduced?
- What troubleshooting steps were completed?
- What is the verified root cause?

Rule 5 — Don't Exceed What's Necessary

Every discrepancy must be categorised as:

- **Airworthiness** (must be done),
- **Recommended** (sensible, condition-based),
- **Discretionary** (optional).

This matches your Discrepancy List Template (see attached). Ask:

- “What happens if I defer this?”
- “Is repair sufficient, or is replacement required?”



Essential Questions to Ask Your Maintenance Shop

Before choosing a shop:

- How many aircraft of my type do you maintain?
- Do you provide written discrepancy lists?
- How do you troubleshoot engine/avionics issues?
- Do you separate labour, parts, and third-party costs in estimates?
- Will you notify me and wait for approval before additional work?

During the annual or inspection:

- Is this Airworthiness, Recommended, or Discretionary?
- What evidence supports this?
- What happens if this is deferred?
- Is this a root cause or a symptom?
- Are there alternative repair options?

Before approving any work:

- Has the issue been fully diagnosed?
- Can I see photos or measurements?
- What is the worst-case cost scenario?
- Can I see removed parts afterward?

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Mistakes to Avoid

- Approving repairs you don't understand
- Accepting verbal findings — always get it in writing
- Confusing “recommended” with “required”
- Letting urgency pressure you into decisions
- Assuming the shop is automatically acting in your best interest
- Allowing work without a written estimate

Your Rights as a Pilot-Owner

You have the right to:

- receive a written estimate
- approve or decline any repair
- see evidence for all findings
- receive a written, categorised discrepancy list
- understand options, risks, and alternatives
- inspect removed parts
- seek independent expert advice

If you'd like help interpreting a discrepancy list, selecting the right shop, or establishing a maintenance strategy, you can schedule a **Professional Diagnostic Session anytime.**



QUEST AERONAUTICS
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Independent Support for Aircraft Owners

We believe aircraft ownership should feel structured, understandable, and controllable.

Quest Aeronautics helps pilot-owners make more confident ownership and maintenance decisions through independent consulting, operational thinking, maintenance strategy, and data-driven decision frameworks.

Our goal is to help owners move from reactive aircraft ownership to confident, structured operation.

Every two weeks, we host **professional workshops** for pilot-owners covering topics such as:

- aircraft ownership strategy
- maintenance oversight
- engine reliability
- operating costs
- acquisition decisions
- long-term ownership planning

For owners seeking more individualized support, we also offer **professional diagnostic sessions** focused on ownership strategy, maintenance concerns, and operational decision-making.

[EXPLORE UPCOMING WORKSHOPS](#)

[BOOK A DIAGNOSTIC SESSION](#)



Airworthiness Review Discrepancies List

This template is provided as a reference to help you understand how a professional discrepancy list should be structured.

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