

PERSONAL AIRCRAFT AUDIT GROUP (PAAG)

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Table of Contents:

Personal Aircraft Audit Group – PAAG 3
Abbreviations and definitions 3
Mission 3
Organizational Structure 4
Composition 4
Fields of Expertise 4
PAAG Functions 4
Financing and Fee Structure 5
Sanctions 5
Services 5
Forms 6
Project acceptability test 6
Reporting 6
Auditors 6
Manufacturing Audits 6
Procedure for Transparency and Disclosure 7
APPENDIX A 9
APPENDIX B 10

Personal Aircraft Audit Group – PAAG

PAAG is to seek Transport Canada recognition for its activities as an independent auditing authority on behalf of Light Aircraft manufacturers Association, **LAMAC**, companies and owners of **LAMAC** produced products. Minister’s Delegate-Recreational Aircraft, MD-RA, is the example, which demonstrates that no large or internationally recognized Standards group certification is required.

Abbreviations and definitions

AMC	- Approved Manufacturer’s Certificate
LAMAC	- Light Aircraft Manufactures Association of Canada
OEM	- Original Equipment Manufacturers, their dealers or distributors.
PAAG	- Personal Aircraft Audit Group
PLA	- Personal Light Aircraft
SOAP	- Safety Oversight Audit Program
TC	- Transport Canada

Approved Manufacturer – A manufacturer recognized by LAMAC as having met all the requirements set forth by LAMAC for recognition.

Approved Manufacturer’s Certificate for Personal Aircraft – The certificate issued by LAMAC in recognition of the manufacturer having met LAMAC recognition requirements.

Certificate of Conformity - a certificate issued by an approved manufacturer attesting to the fact that a production aircraft conforms to the manufacturer’s type definition of a particular model PA.

Personal Light Aircraft (PLA) – An aircraft as defined in the document “Design Standards for a Personal Light Aircraft”

Mission

- In partnership with Transport Canada and LAMAC, to provide Airworthiness and Compliance oversight for Personal and Recreational Aircraft, consistent with the highest standards of safety and quality.
- To provide this service with transparency and fairness and efficiency, thereby ensuring fullest participation from Transport Canada and the recreational aviation community.
- To provide this service within an economic structure that will be of benefit to all segments of the industry.
- To participate in ongoing bilateral partnerships to foster growth and progress in harmony with international trade opportunities.

Organizational Structure

- An incorporated body
- A not-for-profit body
- A body recognized by LAMAC and Transport Canada
- A President, Vice President, Secretary and Board of Directors.

Composition

- Directorship of five individuals, two of whom are also directors of LAMAC
- Subject Matter Experts with demonstrated expertise that are not active owners or employees of LAMAC OEM companies (including dealers or distributors).
- Experts with geographical jurisdictions

Fields of Expertise

- Regulatory Environment
- Standards Procedures
- Manufacturing Processes
- Aircraft Design
- Airworthiness
- Flight Testing
- Quality Assurance
- Management and Control
- Configuration Management and Control

PAAG Functions

- To provide an independent audit resource for **LAMAC** member companies seeking to obtain or retain **LAMAC** Manufacturing accreditation.
- To provide an independent resource to carry out **LAMAC** OEM produced aircraft compliance inspections.
- To act on behalf of Transport Canada in determining through inspection a foreign manufacturer's product compliance with Canadian Standards fitness for flight, prior to the issuance of a Canadian flight authority.
- In case of dispute between a manufacturer and an owner, to inspect an aircraft to determine compliance with its Certificate of Conformity.
- To assist **LAMAC** in its development of new standards.
- Logistical support, data, statistical and record keeping.
- To act as a resource to Transport Canada, LAMAC member companies, owners of LAMAC recognized aircraft and other sectors of the aviation industry.

- To act as a resource and ‘clearing house’ for interests, such as insurance or finance companies and government, who require an independent assessment of a product, process or circumstance.

Financing and Fee Structure

- **PAAG** will operate on a fee-for-service basis
- It is anticipated that **PAAG** would be fully financially independent within five years, but in the interim will seek start-up funding from TC for administrative costs and training of auditors.
- Liability protection will be undertaken through the auspices of TC in the same manner that MD-RA’s are covered.
- All anticipated direct costs for audits will be paid in advance – e.g., transportation, lodging, meals, and materials.
- Fees will be charged for Research; Data; **LAMAC** Documents; review of Initial Demand for **LAMAC** Recognition; Pre-Audit, Physical Audit and Post Audit; Telephone Consultations and engineering work.

Sanctions

- Categories of compliance are: Compliant; Pending; Non-Compliant; Revoked
- Compliant companies will be “Recognized” and thus ‘listed’ by **LAMAC** and will require no further audits; Pending companies will be listed as ‘Applicant’ until a subsequent audit determines its status; Non-Compliant companies will not be listed.
- Non-compliant companies will be provided with the specifics of their non-compliance and provided with appropriate due process and transparency.
- Companies will be given a reasonable time period to rectify non-compliances.
- Noncompliant companies will be de-listed from the group of **LAMAC** “recognized” companies.

Services

- Consult with and assist **LAMAC** member companies on the interpretation of the Design Standard for **PLA** requirements.
- Perform audits of processes and products falling under the interests of **LAMAC** member companies
- Undertake initial audits of companies seeking **LAMAC** recognition for their products
- Establish a foreign company’s and its product’s compliance before such products are sold into Canada.
- Generate various ‘Checklists’ to be used for compliance audits of manufacturers, finished aircraft, repaired and modified aircraft, and imported aircraft.

Forms

- Audit Request
- Criteria of Eligibility
- Work Contract
- Sample completed forms as guidance material

Project acceptability test

- Non-Type certificated product
- With support/knowledge of Transport Canada
- **LAMAC** member
- Not involved in a legal dispute with the manufacturer
- Within the scope of **LAMAC**'s products and activities
- Availability of expertise

Reporting

- **PAAG** will list its demands for audits on its website
- **PAAG** will list its approvals on its website
- **PAAG** will notify **TC** of non-compliances found and not rectified

Auditors

- Engineering and Design Compliance- Ken Minchau, Montreal (proposed)
- Flight Test – Rainer Rau, Montreal (proposed)
- Airworthiness – Frank Hofmann, Montreal (proposed)
- Manufacturing Standard – Frank Hofmann, Montreal (proposed)

Manufacturing Audits

- Verify company's legal status – owners, contacts, contracts, advertising literature, website;
- Verify design's compliance to the Design Standard for **PLA** using **LAMAC** Check Sheet;
- Verify company's record keeping system for raw materials, purchased and produced parts, defect control, customer contact list status;
- Review internal audit findings and consequent actions;
- Review the qualifications and training of the human resources engaged by the company;
- Rate organization, safety management system and cleanliness of shops;
- Review completeness of production instructions and sequences;
- Inspect critical components for quality of workmanship;
- Inspect tooling and jigs;
- Review final inspection check sheets;
- Verify the timeliness and completeness of answers to queries from customers;
- Audits will be repeated every 5 years or as deemed necessary;

Procedure for Transparency and Disclosure

PAAG presents a procedure for action concerning safety-related deficiencies, which includes the use of principles and safety risk indicators. Should a participating company disregard its safety oversight obligations and fail to carry out relevant recommendations or determinations by **PAAG** concerning the company's significant compliance shortcomings, the procedure requires **PAAG** to inform Transport Canada accordingly, as a last step in the process of providing transparency concerning critical safety-related information.

PAAG's Safety Oversight and Audit Program, SOAP, will share critical safety information, facilitate access to all relevant safety information and will develop practical means to facilitate the sharing of all safety information among **LAMAC** member companies. As a result, the principles of transparency and disclosure, both applicable equally to safety-related information obtained through safety oversight audits and other sources, are expected to evolve further. This will assist companies in making full use of available safety data when performing their safety oversight functions. It will also serve as an additional incentive for each audited company to submit and implement an acceptable corrective action plan as part of the **SOAP** auditing process.

The transparency and disclosure principles of the **PAAG** strategy are not limited to **SOAP**-derived information, but also apply to the sharing among **LAMAC** companies of critical safety information which companies are encouraged to use when performing their safety oversight functions.

LAMAC member companies have no contractual obligation to provide safety information to **PAAG** through their own initiative. However, companies will have to provide critical safety information when requested to do so by **PAAG**. Critical safety information includes flight safety information discovered during field inspections of the manufacturer's products.

Action by **PAAG** on safety related information should not merely facilitate action by **LAMAC** companies, but should also contribute to flight safety by acting on safety related information. While the **SOAP** is a primary source of information regarding compliance shortcomings with respect to conformance to **LAMAC** standards, it is incumbent for **PAAG** to act on all properly validated safety-related information concerning Personal Aircraft. The main thrust of action by **PAAG** will be to foster partnerships to assist such companies in resolving their safety-related deficiencies and implementing sustainable solutions. However, there may also be the need to inform Transport Canada in the case of a company having significant shortcomings with respect to Transport Canada safety related standards.

PAAG has developed a procedure, as contained in Appendix A, to inform all **LAMAC** member companies in the case of a company having significant compliance shortcomings with respect to safety related standards, including

failure to act in accordance with its safety oversight obligations made in agreement with **LAMAC**. The principles and safety risk indicators pertaining to the procedure are contained in Appendix **B**.

APPENDIX A

Procedure to inform Transport Canada, **TC**, in the case of a **LAMAC** member company having significant compliance shortcomings with respect to safety related standards and procedures, including failure to act in accordance with its safety oversight obligations.

1. **PAAG** monitors **PAAG**-derived and other safety information on an ongoing basis and recommends action by **T/C**. if, on the basis of safety risk indicators, it is determined that a level of risk to safety which may warrant action by **TC** has been reached.
2. If analyses of safety risk indicators in accordance with the principles listed in Appendix **B** indicate that action by **TC** may be warranted, proposals for action by **TC** will be documented in restricted working papers and discussed in a closed meeting with **TC** and no documents will leave **PAAG** offices. Companies concerned will be informed accordingly. Failure to act in accordance with safety oversight obligations will result in the following recommendations and determinations:

Recommendation: Company to explain actions within a specified time.
Recommendation: Company to remedy identified safety oversight problem within a specified time.
Determination: Company to cease and desist a specified activity clearly inconsistent with its safety oversight obligations.

3. **TC** will take the reported failure to carry out recommendations or determinations by **PAAG** into account in their surveillance of the company's Personal Aircraft operations.
4. Should a company subsequently provide further information of appropriate action having been completed and **PAAG** determines that the company has carried out the recommendations or determination, **TC** will be informed. Completion of appropriate action may need to be validated by **TC**.

APPENDIX B

1. The procedure detailed in this Appendix will be a tool to identify those companies in non-conformance:
 - a) Identify those companies that disregard regulatory safety oversight obligations;
 - b) Encourage their appropriate compliance with respect to **PAAG** safety-related standards and procedures;
 - c) Use only reliable, validated, or corroborated data in which there is a high level of confidence; and
 - d) Be accomplished by revoking the company's listing from the **LAMAC** Recognized Companies list.

2. The principles on which the procedure is based will:
 - a) Be fair and transparent;
 - b) Be non-discriminatory;
 - c) Be used for safety-related purposes only, using compliance checklists and other pertinent information.
 - d) Be a means of alerting the consumer by virtue of the product appearing on **LAMAC**'s list of recognized manufacturers.

3. The following safety risk indicators will be taken into account in determining that a level of risk to safety which may warrant action by **PAAG** has been reached:
 - a) Complete failure to participate in the **PAAG** audit process.
 - b) Failure to complete the **PAAG** Questionnaire and compliance checklists.
 - c) Failure to participate in an on-site audit under **PAAG**.
 - d) Failure to submit an acceptable corrective action plan.
 - e) Failure to resolve the safety-related deficiencies identified in a **PAAG** audit.
 - f) Level of activity inconsistent with safety oversight capability.
 - g) Nature of activity inconsistent with safety oversight capability.
 - h) Aircraft accident and incident rate.
 - i) Lack of reporting – accident, incident, production.

4. Sources of information include:
 - a) Training records
 - b) Output rate
 - c) Civil Aircraft Registry
 - d) Accident statistics
 - e) Customer surveys and reports
 - f) Audit Reports