

Aircraft mechanics and aircraft inspectors

[Environment](#), [Air](#)



Aircraft mechanics maintain, repair and overhaul aircraft structures, mechanical and hydraulic systems. Aircraft inspectors inspect aircraft and aircraft systems following manufacture, modification, maintenance, repair or overhaul.

Common Job Titles Aircraft Maintenance Technician (AMT) Aircraft Structures Technicians (AST) Aircraft Maintenance Engineer (AME) Avionics Maintenance Technicians (AvMT) Aviation Maintenance Inspector Aircraft Mechanic, Engine Overhaul Aircraft Systems Inspector Certified Aircraft Technician Hydraulics Mechanic Inspector, Flight Test Inspector, Repair and Overhaul Mechanic, Aircraft Maintenance Shop Inspector, Aircraft Repair Typical Employers aircraft and parts manufacturers federal government airline companies service firms to air transport companies defense services Selected Main Duties

Aircraft mechanics perform some or all of the following duties: Troubleshoot aircraft structural, mechanical or hydraulic systems to identify problems and adjust and repair systems according to specifications and established procedures; Repair and overhaul aircraft structural, mechanical or hydraulic systems; Install or modify aircraft engines or other aircraft systems; Dismantle airframes, aircraft engines or other aircraft systems for repair and overhaul, and reassemble; Work on specific aircraft systems such as engines, engine accessories, airframes or hydraulic systems; Perform and document routine maintenance. www.ontario.ca/jobfutures © Queen's Printer for Ontario, 2009 Aircraft inspectors perform some or all of the following duties: Inspect structural and mechanical systems of aircraft and certify that these systems meet Transport Canada and company standards

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of performance and safety; Inspect work of aircraft mechanics performing maintenance, repair and overhaul, or modification of aircraft and aircraft mechanical systems to ensure adherence to standards and procedures; Maintain detailed repair, inspection and certification records and reports.

Operations, which are carried out mostly in hangars, expose workers to noise, vibration, liquids, fumes and other hazards requiring the use of safety equipment and clothing. A five-day, 40-hour workweek including shift work and overtime is normal. Education/Training Aircraft Maintenance Technician (AMT) A minimum of high school education as well as a community college certificate in aircraft maintenance is required.

Most colleges are dual- accredited by both Transport Canada and Canadian Aviation Maintenance Council (CAMC), meaning that graduates get credit for the technical examination towards Aircraft Maintenance Engineer (AME) licensing and credit towards CAMC certification as an aircraft maintenance technician. Aircraft Structures Technician (AST) The minimum education level is high school plus a formal community college training program in aircraft structures.

Most colleges are dual accredited by Transport Canada and CAMC meaning that graduates get credit for the technical examination toward Aircraft Maintenance Engineer (AME) licensing and credit toward CAMC certification as an aircraft maintenance technician. Several years of on the job training are then required to gain the necessary experience for CAMC certification and/or Transport Canada licensing. Experienced structures technicians with the equivalent of three years of documented experience can apply for an S category licence.

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Avionics Maintenance Technician (AvMT) There are basically two types of avionics maintenance technicians. One works at a bench/station in the electrical/avionics backshop where tests are conducted with specialized test equipment, and repairs are made or parts replaced. The second type of technician works in line maintenance and is a specialist in trouble shooting and solving avionics problems at the “ gate”. The minimum education level is high school with good physics and mathematics attributes.

A structured community college certificate is also required or a recognized apprenticeship program. Most colleges are dual accredited by Transport Canada and CAMC meaning that graduates get credit for the technical examination towards Aircraft Maintenance Engineer (AME) licensing and credit towards CAMC certification as an aircraft maintenance technician. After two to three years experience, the technician can apply for CAMC certification. After the equivalent of four years experience, an avionics repair technician can apply for an E category licence. Aircraft Maintenance Engineer (AME) Page 2 www.ontario.ca/jobfutures After the equivalent of four years on the job experience, an aircraft maintenance technician can apply for an AME licence. An M1 or M2 license is awarded depending on the aircraft size for which the job experience applies. Military aircraft technicians can apply for a civil AME after civil aircraft experience is obtained.

Aviation Maintenance Inspector Completion of secondary school is required. Candidates must have industry qualifications such as CAMC certification or CAMC-approved experience and training or an Aviation Maintenance Engineer (AME) licence. They must obtain an Aircraft Maintenance and Inspection Certificate for the types of aircraft and power plants upon which

the candidate is normally employed. Supervisor experience is often desired by industry for this occupation.

Candidates are required to have one year's experience performing aviation maintenance inspections on aeronautical product, and must possess formalized aviation-related trade qualifications such as an AME license or CAMC certification or a candidate must have five years of on-the-job experience performing aviation maintenance inspections in aeronautical products. An apprenticeship training program exists in Ontario for aircraft maintenance engineer but certification is not a compulsory work requirement in the province.

Entry to apprenticeship requires a job and usually completion of Grade 12. The apprentice applies directly to the employer, union or joint industry committee for an apprenticeship opening. Students who have completed Grade 10 have an opportunity to become registered apprentices while finishing high school under the Ontario Youth Apprenticeship Program. Alternatively, entry into apprenticeship can be pursued through pre-apprenticeship training. Employment Prospect

Over the next five years: Average Opportunities for employment in this occupation are expected to be average over the period from 2009 to 2013. Despite the recent difficulties facing many North American airlines, the demand for more skilled workers, particularly in the maintenance sector is increasing. In addition, an aging workforce will create additional job opportunities through retirements. Industry growth and demographics will require that the aviation sector recruit and train sufficient new entrants with

the appropriate skills in order to prevent self-induced shrinkage in that sector.

According to the CAMC, unless significant and fundamental changes occur now, shortages of Aircraft Maintenance Engineers (AMEs) and non-AME technicians will be widespread across the maintenance sub-sector through to 2015. Employment prospects will also continue to be good for these workers since many students with the aptitude to work on planes are choosing instead to go to university or work in computer related fields. Aircraft Maintenance Technician (unlicensed) are expected to possess the skills and knowledge of a licensed AME (Aircraft Maintenance Engineer).

Employers place considerable emphasis on attitude, teamwork skills and technical knowledge. Aircraft Structures Technician (unlicensed) will need to acquire experience in structures such as composite repairs in addition to aluminium sheet metal and steel as demand for lap joint repairs falls in newer aircrafts. Avionics Maintenance Technician (unlicensed) will need to obtain skills in line maintenance and troubleshooting as more elaborate electrical systems are installed on new aircrafts. Page 3 www.ontario.ca/jobfutures

Aviation Maintenance Inspector will become the “super AME” possessing in-depth knowledge of all of an aircraft’s various systems. Aviation maintenance inspectors will be supported by a team of specialist system technicians. Characteristics of Occupation Estimated Employment in 2006 4, 295 General Characteristics Male Female Full-Time Part-Time Self Employed Employees Unemployment Rate Main Industries of Employment Transportation and Warehousing Other Transportation Equipment <https://assignbuster.com/aircraft-mechanics-and-aircraft-inspectors/>

Manufacturing Public Administration Wholesale Trade All Other Industries %) 96 4 95 3 5 95 2 (%) 54 22 11 4 9 (%) This Occupation 9 7 2 46 9 11 3 (%) All Occupations 10 3 3 45 10 11 5 Employment by Economic Region Ottawa Kingston - Pembroke Muskoka - Kawarthas Toronto Kitchener - Waterloo - Barrie Hamilton - Niagara Peninsula London Page 4 www. ontario. ca/jobfutures Windsor - Sarnia Stratford - Bruce Peninsula Northeast Northwest 1 2 5 5 5 2 4 2 Income Annual Average Employment Income of Persons Employed Full-Time Full-Year in 2005 \$80, 000 \$60, 000 \$40, 000 \$20, 000 \$0 This Occupation All Occupations \$58, 294 \$56, 033

Additional Information Sources Additional information about this occupation can be obtained from the following web sites: Aerospace Industries Association of Canada (www. aiac. ca) Canadian Aviation Maintenance Council (www. camc. ca) Ministry of Training, Colleges and Universities (www. edu. gov. on. ca/eng/training/apprenticeship/appren. html) Transport Canada (www. tc. gc. ca) Page 5 www. ontario. ca/jobfutures Page 6 www. ontario. ca/jobfutures Page 7 www. ontario. ca/jobfutures