

EXECUTIVE SUMMARY

INTRODUCTION

In August 1999, the Saskatchewan Aviation Sector Partnership Steering Committee was formed with assistance from Saskatchewan Post Secondary Education and Skills Training (PSEST). Trimension Training & Consulting Group was contracted to research and help identify the human resource and training needs of the industry.

This report presents the results of this research. A report profiling the industry and its two main occupations, pilots and Aircraft Maintenance Engineers (AMEs), can be obtained from the Saskatchewan Aviation Council or PSEST.

METHODOLOGY

Two surveys were conducted to assess the human resource and training needs of the industry. The first survey was conducted with a cross section of 20 aviation businesses. Respondents were drawn from lists supplied by the *Saskatchewan Aviation Council* and *Transport Canada*. The second survey was conducted with 12 Approved Maintenance Organizations (AMOs). The AME sub-committee worked with Trimension Group to develop the survey instrument. *Transport Canada* supplied the lists. The AME sub-committee identified key businesses to ensure a high proportion of the AME workforce was captured.

NorSask Consumer Interviewing Services, a professional interviewing service in Saskatoon, was subcontracted to conduct both sets of surveys. The first survey was conducted between September 28 and October 7, 1999. The second survey was conducted November 1999. Trimension Group analyzed the data using *SPSS for Windows*, a statistical software package.

KEY FINDINGS¹

Company Information

- Business areas included in the surveys were charter and scheduled service, seasonal, medivac, fire fighting, arial applicators, flight training units and Approved Maintenance Organizations
- 90% of those surveyed are fixed wing operations. The remaining 10% are rotary.
- 16 (80%) are corporations; 3 (15%) are government organizations; 1 (5%) is a flying club.
- 7 (35%) of the sample employ fewer than 10 people. 13 (65%) employ more than 10 people.
- The first survey captured 818 employees. 49 people are employed with small companies (less than 10 employees). 769 are employed with large companies (10 or more employees).
- On average companies generated 86% of their revenue in Saskatchewan. 9 companies (45%) generated on average 22% of their revenues out of the province and 5 companies (25%) generated 10% of their revenues in international markets on average.
- Companies surveyed owned a total of 216 aircraft.

Outsourcing

- Operators typically have avionics and hydraulics maintenance done in the province and send engine and instrument overhauls out of the province.
- AMOs typically conduct a variety of electrical and structural repair and running maintenance and send avionics, hydraulics and engine and instrument overhaul out of the province.
- If there were trained personnel available, companies said they would expand into avionics, all aspects of maintenance, and engine overhaul.

Employment Projections

- The five occupations with the largest number of employees are pilots, AMEs, clerks, and flying instructors. Companies expect growth in the next five years among airline sales agents (250%), flight attendants (167%), pilots (20%), and flying instructors (17%).
- Industry estimates it needs 16 AMEs immediately and 45 in the next 1 to 2 years. *
- 75% of AMOS surveyed hire from outside of the province, as there is not AME training in Saskatchewan. *

¹ Most of the information in the key findings is from the first survey of 20 companies. Information for the second survey of 12 AMOs is marked by an asterisk.

- 84% agree that people who have been in the province for a number of years would be more likely to stay in Saskatchewan. *
- 92% of AMOS said that Saskatchewan is presently experiencing a shortage of licensed and apprentice AMEs and CAMC certified technicians. *

Employee Profile

- 75% of pilots and flying instructors are between the ages of 25 and 44. 69% of the total provincial employed labour force is between 25 and 54 years old. 13% of pilots are over 45, compared to the provincial average of 15%.
- 80% of AMEs are between 25 and 44 years old.
- Representation of Aboriginal peoples among pilots, flying instructors and AMEs is 3% in each category, slightly under the province average of 4%.
- 6% of pilots and 1% of AMEs are women. 44% of the provincial employed labour force are women.
- Less than 1% of pilots and 1.5% of AMEs are people with disabilities. 5% of the provincial employed labour force are people with disabilities.
- Entry level pilots and AMEs can expect to earn around \$26,000 to \$26,500. An experienced pilot or flying instructor can expect to earn about \$47,400 and an experienced AME's average salary is about \$48,300.

Recruitment

- The cost of training and a good work ethic are the two biggest barriers people face in getting a job as a pilot or AME.
- The shortage of trained and experienced pilots, flying instructors and AMEs are the biggest problems employers' face when recruiting.
- The average turnover rate for pilots/flying instructors was 17%. For AMEs it was 7%.
- Pilots, flying instructors and AMEs leave their jobs to move to a bigger centre or a more desirable location. They found the job too stressful and the industry too difficult. Pilots left to fly for larger carriers.

Skill Requirements and Training

- Typically companies are looking for a good work ethic, common sense, people and communication skills as well as some level of aviation experience in an entry-level pilot.
- There are a variety of skills employers said entry-level pilots are lacking, including math, communication, business skills and aviation experience.

- While employers are looking for some level of knowledge and experience among entry-level AMEs, they also require problem solving and learning skills and a good attitude and work ethic.
- Respondents say that entry-level AMEs typically lack industry knowledge and experience, problem solving skills, and the ability to apply mechanical knowledge.
- Respondents indicated that a combination of both external and in-house training was the best method to provide initial and recurrent training to pilots and AMEs.
- Employers have difficulty meeting their training objectives because of difficulties in scheduling training, lack of time, distance to training institutions, and cost.

Industry Trends

- 25% of companies (5) indicated they expect their formal education and training requirements for pilots to change over the next five years. The main reasons are changes in regulations and standards set by Transport Canada and technology.
- Companies are expecting a consolidation of aviation technicians to emerge as a new occupation and more specialized aviation technician jobs to emerge.
- GPS, communication and computer technology will impact aviation over the next 5 year. The biggest impact technology will have is in training.

Training Options – Awareness and Assessment

- In both surveys and in participation in the sector partnership, the Saskatchewan aviation industry has indicated its willingness to contribute resources to new training programs for pilots and AMEs.