




Human Resource Development for The Canadian Aviation and Aerospace Industry

**ICAO Symposium
Montreal, Quebec
March 2010**

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Executive Director**

- 
- **What is a Sector Council?**
 - **Canadian Aviation & Aerospace Council**
 - **Training/Skills Development**
 - **Curricula, Accreditation, Certification, Occupational Standards etc.**
 - **Demographics/critical skills shortage**
 - **Funding**

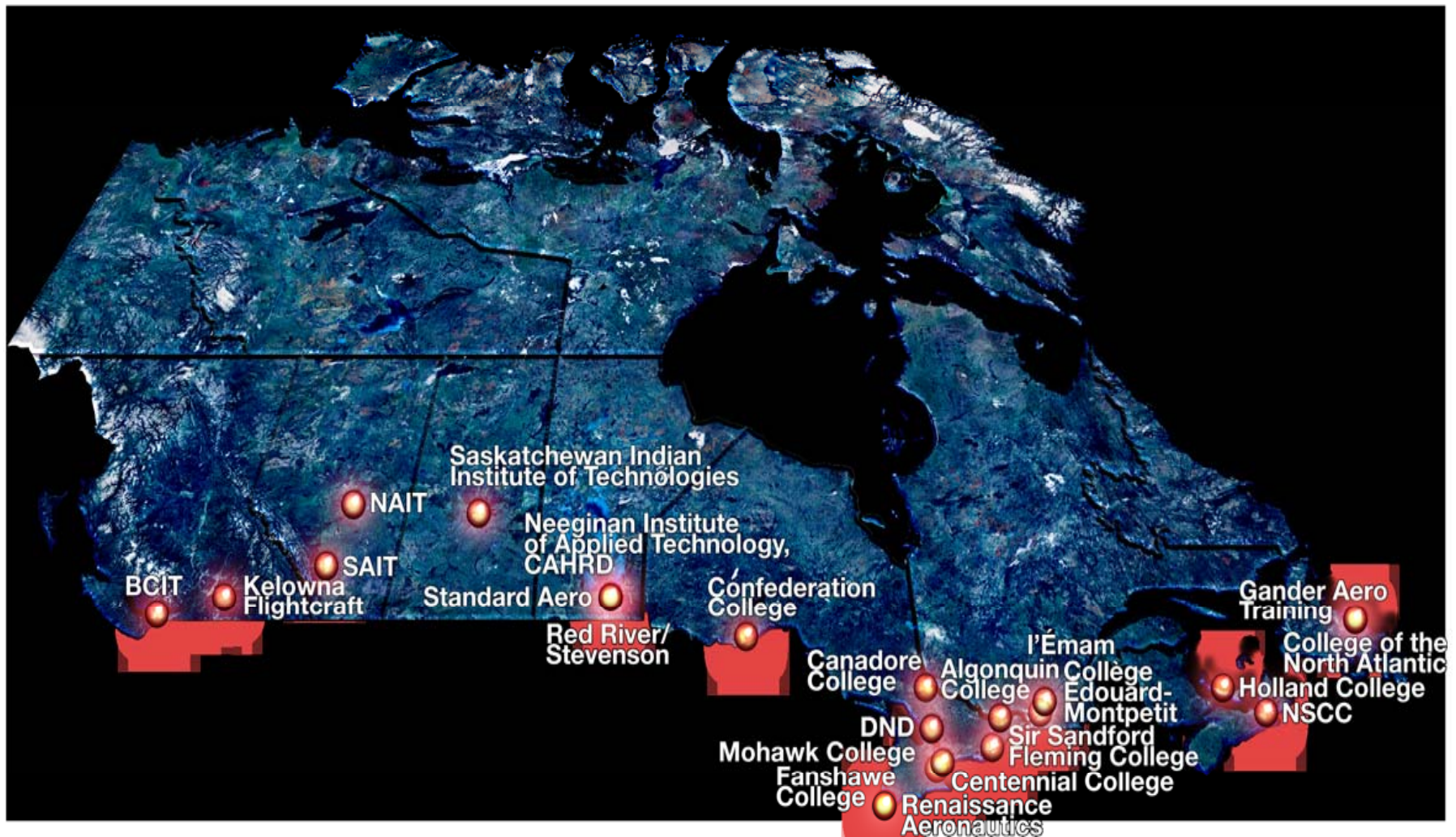
CAMC Accreditation

- Ensures Training Organizations have an integrated and standardized approach to training, which is documented and demonstrated during the audit process.
- Every aspect of the training program is examined:
 - > Program Content
 - > Resources
 - > Facilities
 - > Administration
 - > Quality System
 - > Tools & Equipment
 - > Record Keeping
 - > Advisory Committee
 - > Faculty Professional Development
 - > Management and Organizational Structure

Industry values and recognizes accredited training organizations.

CAMC's Accredited Training Institutes

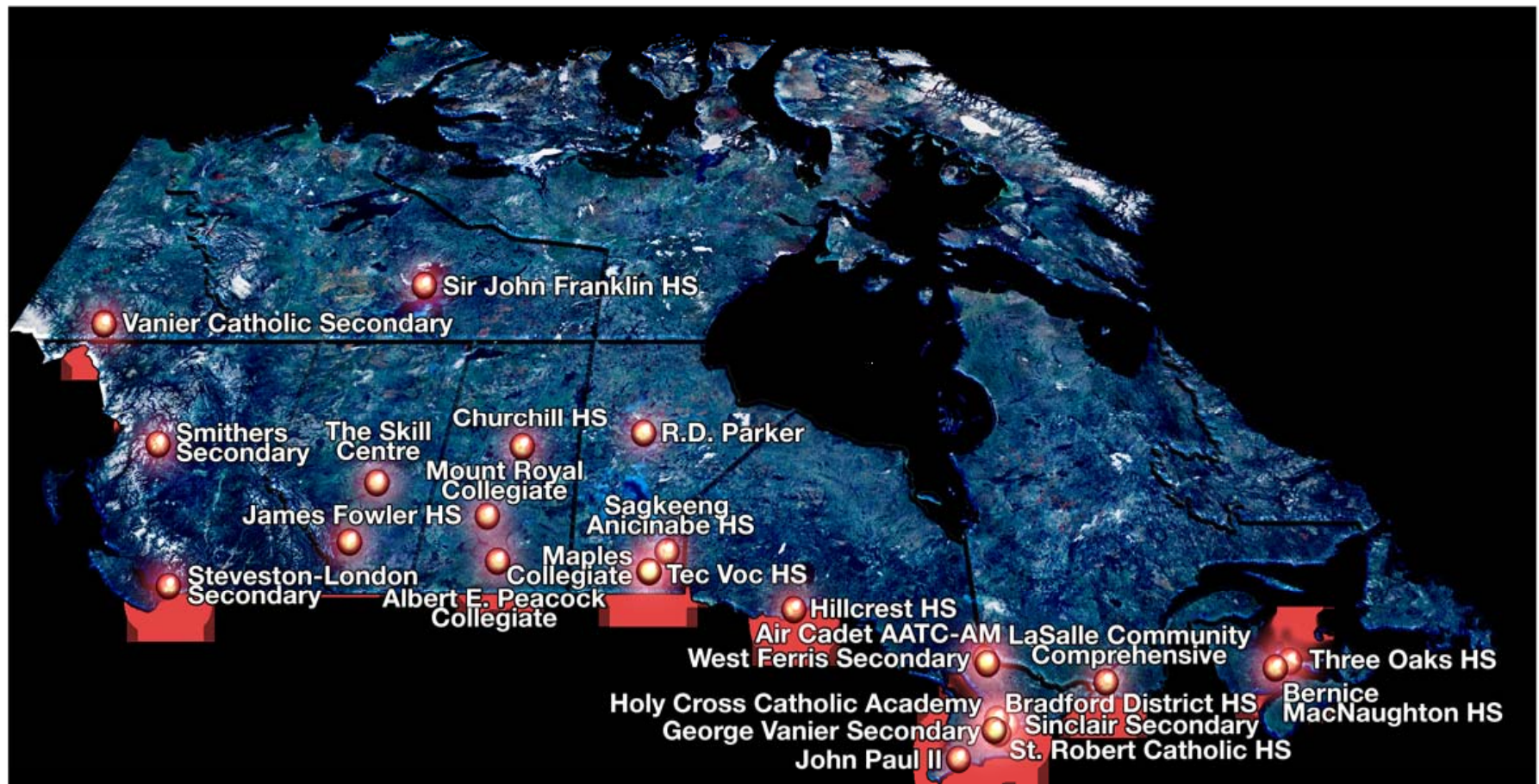
Post-Secondary – 43 Programs – 23 Institutions



CAMC's Secondary School Programs

24 High Schools – 8 Provinces, 2 Territories

ACLC – 458 Squadrons / 25,000 Cadets



CAMC Certification of Individuals

- Provides National recognition of overall competencies and capabilities
- Establishes minimum professional occupational standard
- Provides credibility, credential and proof of qualifications
- Enables portability of qualifications
- Facilitates the employer's recruitment process
- Increases employer and public confidence
- Promotes professionalism within the industry

CAMC – 26 Industry Occupations

Using technical committees of experts and practitioners from all sectors of the industry, CAMC has developed 26 national occupational standards:

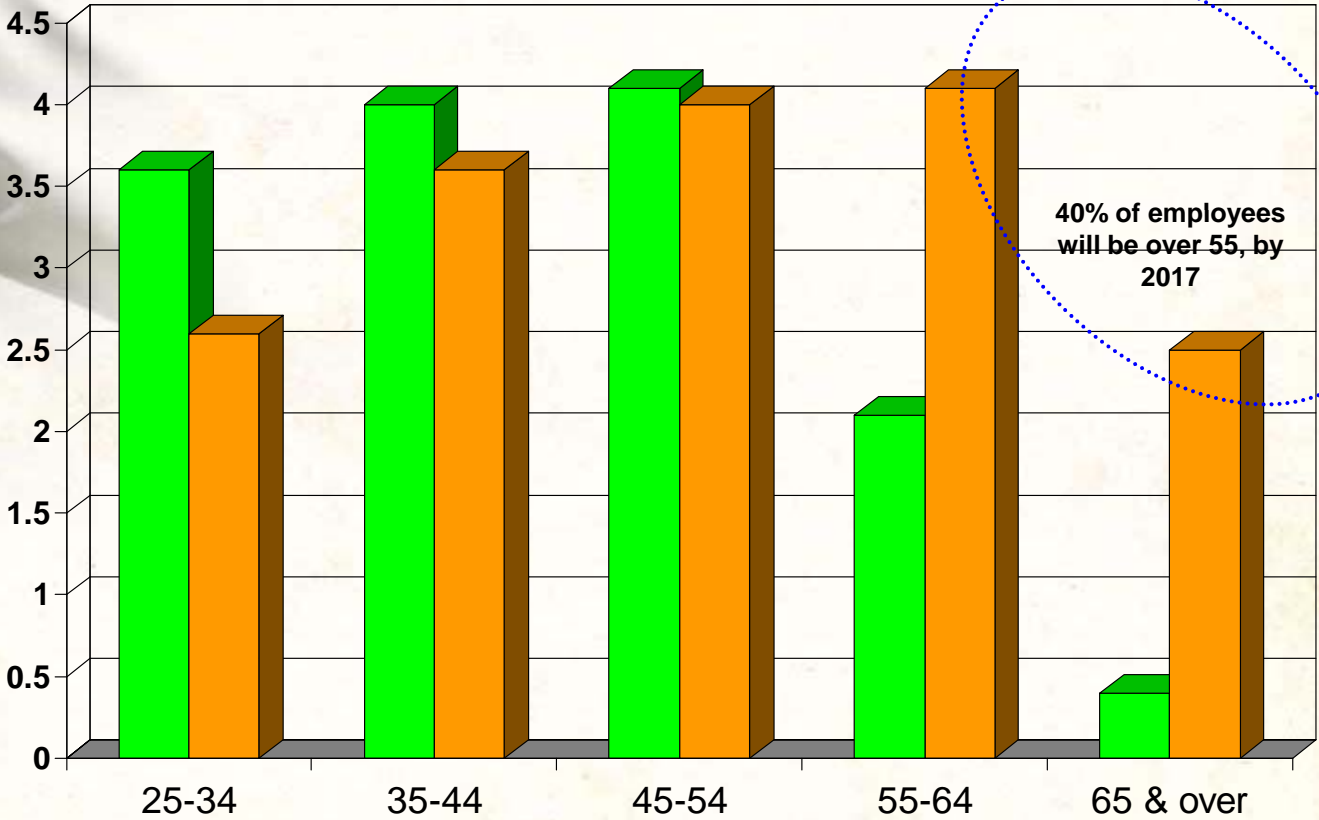
- Aircraft Gas Turbine Engine Repair and Overhaul Technician
- Aviation Painter
- Aircraft Interior Technician
- Aviation Special Processes Technician
- Aircraft Maintenance Technician
- Aviation Welding Technician
- Aircraft Propeller Systems Technician
- Avionics Maintenance Technician
- Aircraft Reciprocating Engine Technician
- Aircraft Simulator Technician
- Aerospace Materials Specialist
- Aircraft Structures Technician
- Electrical/Electronics/Instrument Component Technician
- Aviation Machinist
- Aviation Maintenance Inspector
- Aviation Mechanical Component Technician
- Aviation Non Destructive Inspection Technician
- Aircraft Refueller
- Aviation Ground Services Attendant
- Aircraft Mechanical Assembler
- Aviation Maintenance Manager
- Composite Fabricator
- Aircraft Structures Assembler
- Electrical/Electronic Assembler
- Quality Assurance Manager
- Quality Systems Auditor

Standards in **RED** are recognized by Transport Canada Ref: Airworthiness Notice C009 for personnel working in an Approved Maintenance Organization (AMO).

Transport Canada recognizes CAMC logbooks and curricula for the Standards in **GREEN**.

2007 > 2017 Canadian Labour Characteristics

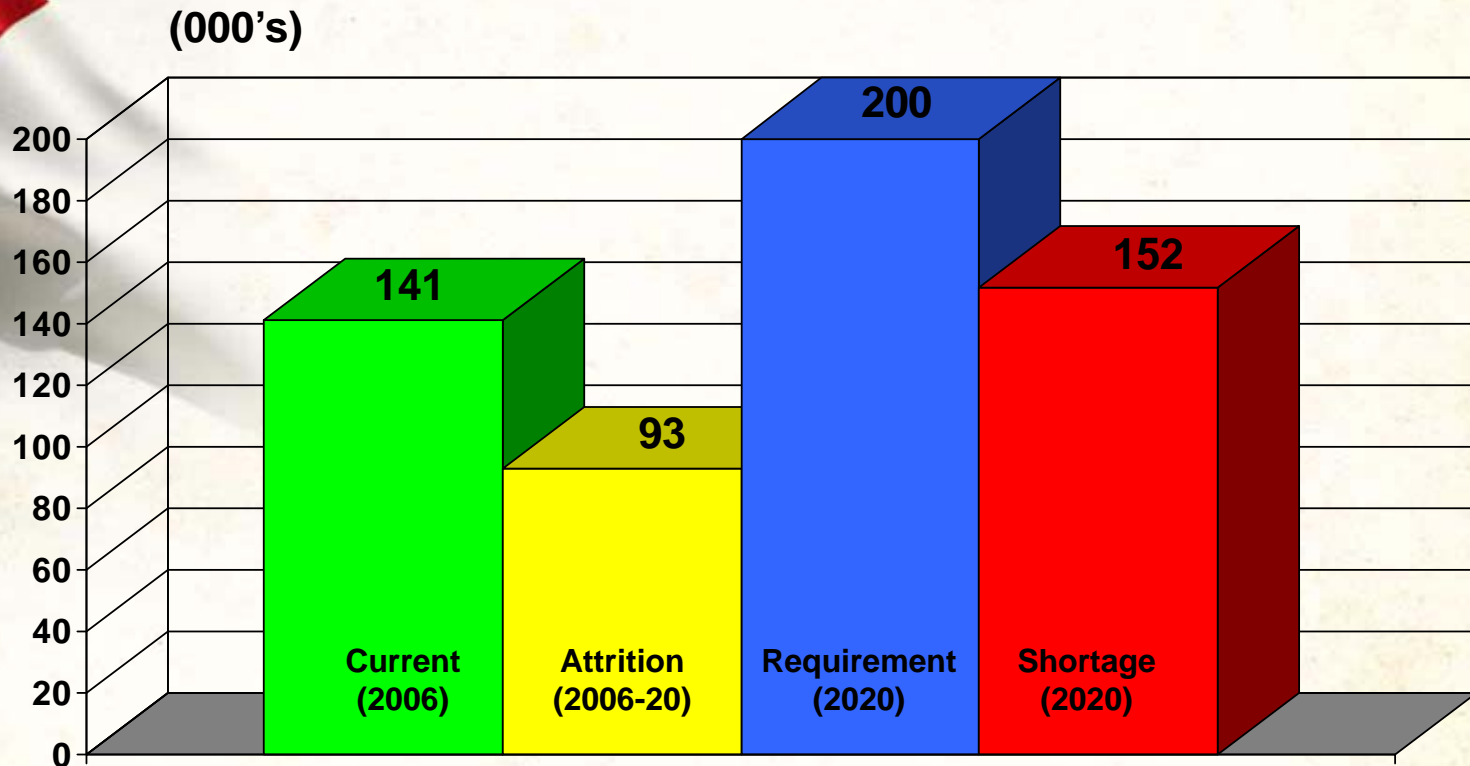
(# of employed individual over 25 years old)



40% of employees will be over 55, by 2017

2007 2017

Aviation & Aerospace HR Forecast



Our industry is experiencing an unprecedented skilled-worker shortage. Over 12,000 people per year, will need to be hired in the next 12 years, to supply the required level in 2020.

International Data: IATA – ITQI (Report 2009 – Spring Edition)

Pilot and Training demand

	2018	2026
Total new pilots – (additional aircraft and retirement) needing ab-initio training	207,600	352,900
Total new pilots needing transition training on replacement aircraft	59,930	122,700

Maintenance demand

	2018	2026
Total mechanics needed for additional aircraft	247,100	420,000
Total mechanics including retirement	405,500	739,000

CAMC's Mission Statement

To develop, promote and administer a comprehensive and effective human resources strategy for the Canadian aviation and aerospace industry.

Board of Directors



National Maritime Council
Conseil national de la marine



CORPORATE
MEMBERS
AT LARGE



STAVEA



Active Projects and Update

- Sector Study of Commercial Pilots
- Aviation and Aerospace Technician Short Course(s) Study
- Safety Management Systems
- Sector Study of Airport Occupations
- Analysis of College Trends and Statistics (“Supply Side” Data)
- Career Focus IV (Wage subsidy program for recent graduates)
- Skilled Workforce for the Future (Youth)

Recently Approved Projects

- Commercial Pilot-Occupational Standards
- AMT Curriculum Update
- Transition and Student Workforce Issues

Pending Projects

- Composite Fabricator Curriculum Development
- Mature Workforce Retention Strategy

CAMC's Current Proposals

- New Occupational Standards
 - Remote Operations Aviation Worker
 - Transportation of Dangerous Goods Trainer
- Human Resources Action Plan for Employers and Training Organizations
- 3D Learning Tools for colleges
- Short Courses
 - Maintenance Manager
 - Document Navigation/Air Regulations Introduction and Refresher
 - Aviation English
 - Audit Management
 - Aviation Avionics
- Skilled Workforce for the Future

CAMC Quality Assurance Standards

CAMC has developed two new occupational standards which will help companies implement Quality Assurance throughout their organization.

- Quality Systems Auditor
- Quality Assurance Manager

SMS compliance is a sub set of overall quality assurance

SMS Projects

CAMC in partnership with National and Regional Associations have developed customized SMS materials for different segments of the industry:

- QSA OS Implementation Workshops
- SMS Orientation for Students enrolled on the Aviation Maintenance Orientation Program
- Best practices survey of flight schools to establish a on-line library
- “Safety Starts at Day One”- SMS awareness program for entry level employees
- CAMC Online improvements to host various training programs

Quality Assurance

An enhanced certification process has been developed to help industry implement the new “Quality Systems Auditor” occupational standard.

A series of test workshops are being held across Canada with industry partners.

Corporate Engagement

- Input on the adequacy of current College curriculum/training
 - Identify current deficiencies
 - Identify gaps
 - Identify need for new curriculum
- Labour market data
 - In order to provide you with supply – demand data and identify projected shortages and surplus
- Identify future trends in a timely manner
- Optimal value for funding dollars

Thank You



C A M C C C E A
Canadian Aviation Maintenance Council/Conseil canadien de l'entretien des aéronefs