Developing Singapore’s Aviation Manpower

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CAAS’ role as a regulator, service provider and industry developer

- **Air Hub**
  - Growing Singapore as a global air hub

- **Aviation Safety**
  - Upholding a safe aviation environment

- **Aviation Industry**
  - Supporting industry development

- **International Aviation**
  - Contributing to international aviation
Three-pronged approach to develop Singapore’s aviation manpower

Understand

What are our manpower challenges?

Strategise

How can we respond?

Collaborate

How can we partner industry to develop manpower?
Understand
Reliable data is key to understanding challenges and developing targeted strategies

The international picture

- Over 500,000 new pilots
- Over 560,000 new aircraft maintenance personnel
- Over 70,000 new air traffic controllers

Singapore’s situation

- Low unemployment and high labour force participation
- Competition with other growth industries
- Ageing population
- Rising educational profiles and aspirations
We first established the type of data to collect, and how to collect it

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<tr>
<th>Current headcount</th>
<th>Source</th>
<th>Intent</th>
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<tbody>
<tr>
<td></td>
<td>CAAS’ industry manpower surveys</td>
<td>To obtain data on current and projected growth and manpower, attrition, recruitment patterns and pay practices</td>
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<th>Demographic distribution</th>
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<tr>
<td>Interviews with industry experts</td>
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<td>To understand key jobs, industry challenges and changes in skills sets required</td>
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<th>Growth projections</th>
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<td>Total remuneration surveys</td>
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<td>To compare pay in similar jobs and workforce trends across multiple industries</td>
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Our data shows sector specific issues

**Airport**
- Shrinking pool of local manpower with required skills
- Training specialisations in schools can be improved
- Challenging work environments

**Airlines**
- High awareness among students on airline careers

**Air Navigation Services**
- Have done well to attract talent
- High awareness among students on ANS careers

**Aerospace**
- Expectation mismatch among students
- Long training durations
- Greater integration of regulatory requirements in education programmes needed
Strategise
Aviation manpower development requires a customised approach

- Raise awareness of careers
- Create more course specialisations in schools
- Design career upgrading pathways

Airport

- Maintain high awareness of careers
- Improve training efficiency for licensed positions

Airlines

- Maintain high awareness of careers
- Improve training efficiency for licensed positions

Air Navigation Services

- Improve flow of graduating students into industry
- Raise awareness of careers
- Improve training efficiency for licensed positions

Aerospace
A customised manpower development approach to attract, develop and retain talent in all sectors

**ATTRACT**
- Promotion of jobs and careers
- Attracting local talent

**DEVELOP**
- Enhancing training
- Scholarships

**RETAIN**
- Work environment
- Competitive Wages

Aerospace

Airport

Airlines and ANS
Collaborate
To be successful, manpower development efforts need to be carried out hand in hand with industry and schools.
Partnering industry to promote aviation careers
Aviation outreach initiatives
Attracting local talent

**School development**

- Advise on school curriculum to match industry needs
- Encourage alignment with regulatory requirements in schools to improve job readiness
- Develop new course specialisations

**Placement**

- Work with partners to provide training incentives for roles with high manpower demand
Enhancing training
Competency-based training

Multi-crew pilot licensing
- Full regulations and requirements for MPL developed in 2011
- Partnership with airline to conduct MPL trial
- One approved MPL training provider
- 6 cadets currently flying

New simulators
- Long Range Radar and Display III ATC training simulator: incorporating latest technologies and innovative features
- Constant upgrading of training simulators ensure right mix of training tools

Competency-based courses
- Singapore Aviation Academy developed an STP for training of aeronautical search mission coordinators under TRAINAIR Plus
- Competency-based aeromedical training course
Enabling HR to develop and retain talent
Enhancing aviation jobs

Scholarships
- Scholarships to support aspirations of aviation workforce to further their education
- Programmes to develop management and specialist talent

Improving work environments
- Work with partners to improve staff amenities
- Job redesign to improve workplace ergonomics

Job and career redesign
- Work with partners to encourage job redesign
- First redesign effort to revamp career progression for airport ground handling equipment operators
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Thank you

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