Role of the Regulator: Improving Flying Training Standards

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Safety through standards
Section 3A: Main object of this Act

Section 9: CASA’s functions

Section 9A: Performance of functions
Our goal

- Improved **safety** through improved flying training standards
Data driven approach
High capacity (VH- registered) aircraft involved in accidents per million departures, 2001 to 2009
“The goal is to transform data into information, and information into insight”

Carly Fiorina
(former CEO of Hewlett-Packard)
43% loss of control – fatal General Aviation accidents

84% skill based errors – all accidents

Controlled Flight Into Terrain

Runway excursions

Loss of Control = highest cause of fatalities

Automation = manual skill degradation?

Pilot shortage…

PRIMACY = importance of good ab initio training

RECENCY & EXERCISE = robust training & checking
Flying Training & Checking Continuum
Traditional, outdated, training methods of rote and replication are primarily used to teach flying instructors.

Henley, 1991

A blend of instructional and educational theory is required for specialised field of flight instruction.

Telfer, 1994

Check airmen selection based on experience rather than teaching skills is causing poor training outcomes and high wastage rates.

Mason, Henschke & Weitzel, 2001

Many airline pilots do not have a full understanding of basic aerodynamics such as stalling.

Learmount, 2009
“Normalisation of deviancy”

Vaughn, 1996
Enforcement
Re-education
Surveillance
Intelligence
Guidance Material
Entry Control
Data Analysis
Education

Legislation & Competency Standards
CASA conducted initial issue Flying Instructor flight tests
Private Pilot Licence Results

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<thead>
<tr>
<th>PASS</th>
<th>FAIL</th>
<th>FAIL RATE %</th>
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<tr>
<td>1150</td>
<td>311</td>
<td>21%</td>
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Common fail items

- Navigate aircraft
- Situation awareness maintained
- Operational decisions made promptly and correctly
# Commercial Pilot Licence Results

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<tr>
<td>936</td>
<td>323</td>
<td>26%</td>
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**Common fail items**

- Navigate aircraft
- Situation awareness maintained
- Operational decisions made promptly and safely
“It is a capital mistake to theorize before one has data”

Sherlock Holmes
(Arthur Conan Doyle, Snr)