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Necessary, but not Sufficient: What Flight Training Organisations Teach is No Longer Adequate for a Demanding Market that Needs 'Captains Out-of-the-Box'

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Training Pilots of the Future - Techniques & Technology

NECESSARY - BUT NOT SUFFICIENT:
What Flight Training Organisations Teach is No Longer Adequate for a Demanding Market that Needs...
‘CAPTAINS OUT-OF-THE-BOX'

Capt Mike Mylan BA MSc FRAeS
What?
A FAST-GROWING LOW-COST ASIAN AIRLINE’S PROBLEM:

- “We are expanding faster than we can mature our first officers to command.”

- “We must distil the command knowledge and maturity, traditionally attained through ten years of right-seat osmosis, into **three years**.”

- “Most basic CPL/IR + Type Rating candidates are inadequate for this.”

- 4. “We must recruit Captains-In-Waiting.”
“Over 50% of the pilots who will fly the world’s commercial aircraft in 10 years have not yet started to train.”

**DO THE MATH(s)**

- **50%**
  - Of pilots flying by 2027 have not started to train yet

- **70**
  - New pilots/day

- **180k**
  - New captains

- **255k**
  - New pilots required for growth and replacement

= **CAPTAINS** PER HOUR
“Not properly planning for the growing pilot shortage could very well put some airlines out of business.”
Utah flight programs increase fleets, partner with airlines to meet 'insatiable' demand for pilots.
So What?
‘Welcome aboard, this is your first officer speaking.’
MY FATHER PAID FOR MY TRAINING
SO I DIDN’T HAVE TO DO AN APTITUDE TEST.
I HAVE 200 HOURS SINGLE ENGINE
PLUS THIS JET TYPE RATING
SO SIT BACK, RELAX AND ENJOY YOUR FLIGHT
How to turn qualified pilots into competent pilots

The European Aviation Safety Agency is working with airlines on a post-CPL/IR course of 4 classroom days plus 40 simulator hours – the Airline Pilot Certificate.

This is being done because the present system produces pilots with licences that make them legally qualified to fly...

but half of whom – according to the airlines – are NOT good enough!
Beginning pilots could swap classroom training for flying under Senate bill

(FAA First Officers used to qualify with 250 hours of flight time, rather than the 1,500 hours they require now.)
Now What?
THREE YEARS TO COMMAND?
I want to be a PILOT!
PARETTO’S 80/20 PILOTS

(A ROUGH GUIDE)
First Officer
Luke Elsworth
19

Captain
Kate McWilliams
26

EasyJet UK
Ten years of experience is no guarantee of competence
“Go Around!”
2016 ASL for DHL Milan
Wet (10kts h/w night)
25 mph too fast
3 x too high
14” float
Landed >>> 2000 m
Runway 2800 m
Perimeter fence @ 125 mph
Two roads, a parking lot, a highway lane & another highway lane.
Industry Knowledge
“Taxi and pushback are unglamorous, often overlooked and sometimes dangerous parts of every airline flight.”

Wings act as giant brooms which sweep people and objects off high places.
You have just landed and Crash Fire Rescue...
Aircraft Recognition Quiz

1. Airbus A320
2. Airbus A330
3. Boeing 737
4. Boeing 777
5. Tupolev Tu-134

10. Airbus A330
11. Embraer E-Jet
12. McDonnell Douglas MD-88
13. Tupolev Tu-134

Submit Your Answers
Air Traffic Controllers are rained in Aircraft Recognition.

They can instruct Airline Captains to enter a runway “after the Boeing 757 has landed.”

But Airline Captains are NOT trained in Aircraft Recognition.

Is this safe?

QUESTION #1
Should Airline Captains be trained in Aircraft Recognition?
I Learned About Flying From That:

An Airline Crew's Close Call. Why you should always be aware of your surroundings.

By Andrew Ross
Textbook No 2
3 YEARS
1,500 SECTORS

(50 sectors a month, 10 months per year = 500 sectors p.a.)
Empirical semi-log graph to illustrate a three year experience point.

Ten thousand hours...

is

Two thousand hours

Five times

IF THE CAP FITS – WEAR IT
3 Years to Command satisfies Noel Burch’s 4 Stages of Competence

1. Unconscious Incompetence
2. Conscious Incompetence
3. Conscious Competence
4. Unconscious Competence

"Ouch!" (Learning / Change)
"Aha!" (Awareness)

MASTERY! (Second nature)

Year 3 Contributor
Year 2 Participant
Year 1 Awe

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The Captain First – Pilot Later Concept (CFPL)

WHO GAINS, WHO LOOSES?

**Students** gain / experience / interview advantage / earlier command / and financial return.

**Airlines** gain / well rounded entrants / ‘right’ thinking / with command ‘smarts’.

**Passengers** gain / the same as the airlines!

WHO LOOSES?

No one.
ACADEMIC VALIDATION

This will be a 5-year project

It could be worth one of these...
Dear Chief Pilot and Chief Training Captain,

Greetings from Aerudite™.

May we introduce you to the latest Captain Training’ development that starts even before first flight!

And when development and beta testing show the results we expect, we will write to Airlines for comment and endorsement.

Yours aye, Capt Mike Mylan

Now is the time for this concept to be aired, whilst we are at the beta stage, to obtain feedback from key industry players such as yourselves. This presentation of concept will be made in the USA, Asia and the UK this year.
Please contribute to this ‘Captain First-Pilot Later’ (CFPL) concept by emailing your thoughts / ideas / CRITICISMS / to: consultants@Aerudite.aero

THANKS!