



FDM and ATQP

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ATQP

Alternative Training & Qualification Programme

OPS 1.978

Objectives of ATQP

- To allow an operator to establish an alternative training and checking programme that maintains the same or better levels of proficiency as existing OPS requirements
- To enable an operator to develop a training syllabus that will improve the training and qualification standards of flight crew

Traditional training programme

- Fixed training and check items
- Identical for all aircraft types and operators

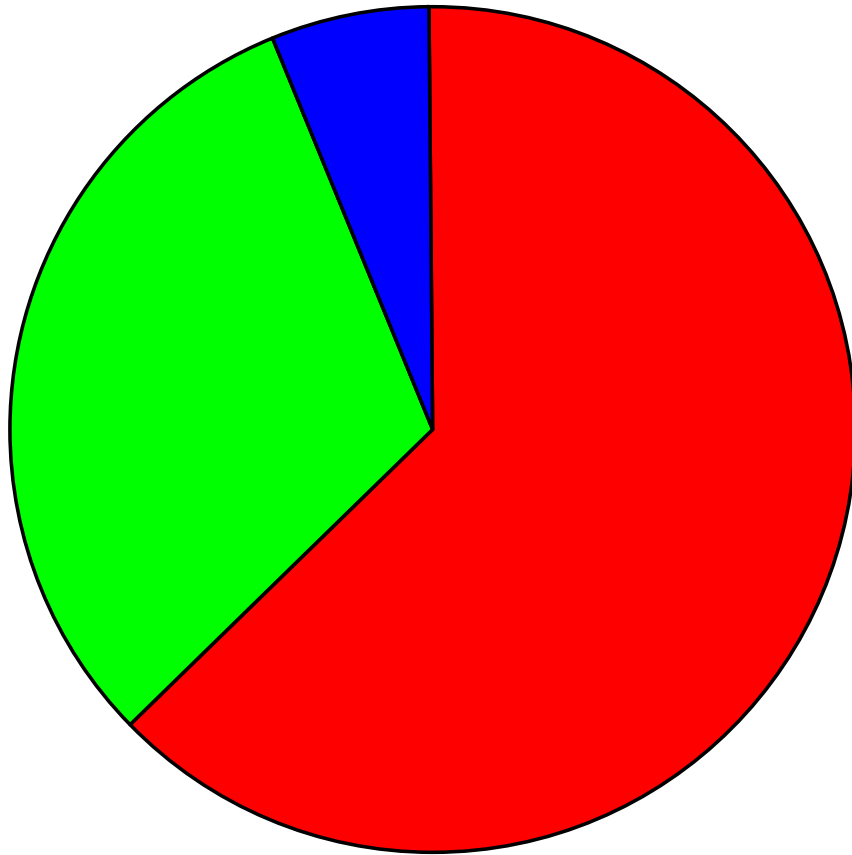
ATQP training programme

- Syllabus is based on training needs analysis
- Training is specific to each operator and fleet

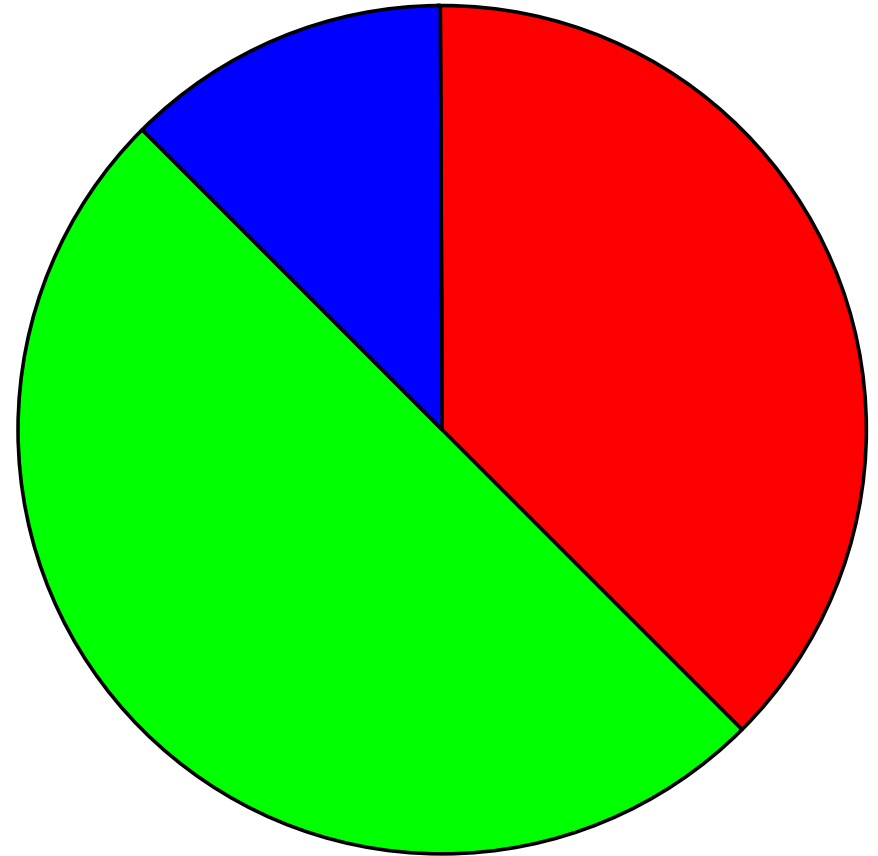
Periods of validity under ATQP

- OPC Every 12 months
- Line Check Every 24 months
- SEP Every 24 months

Old training year



ATQP training year



Tests

Training

LOFT/LOE

Elements of an ATQP

- Task analysis and training needs analysis
- New training syllabus and objectives
- Line Orientated Evaluation (LOE)
- Feedback loop
- Safety case or implementation plan
- FDM programme

FDM and ATQP

- A FDM programme is required for ATQP
- Data collection for at least 60% of flights
- All fleets planned to operate under ATQP
- All crews trained and qualified under ATQP
- Continued through the life of the ATQP

The purpose of FDM in ATQP

- Provide data to support the implementation
- Establish operational and training objectives
- Monitor the effectiveness of crew training

FDM to support the implementation

- Training needs analysis requires the frequency of training events to be established
- Training needs analysis requires the severity of training events to be established
- Both values can be derived from FDM event rates and severity rates

Risk Rating = Likelihood x Severity

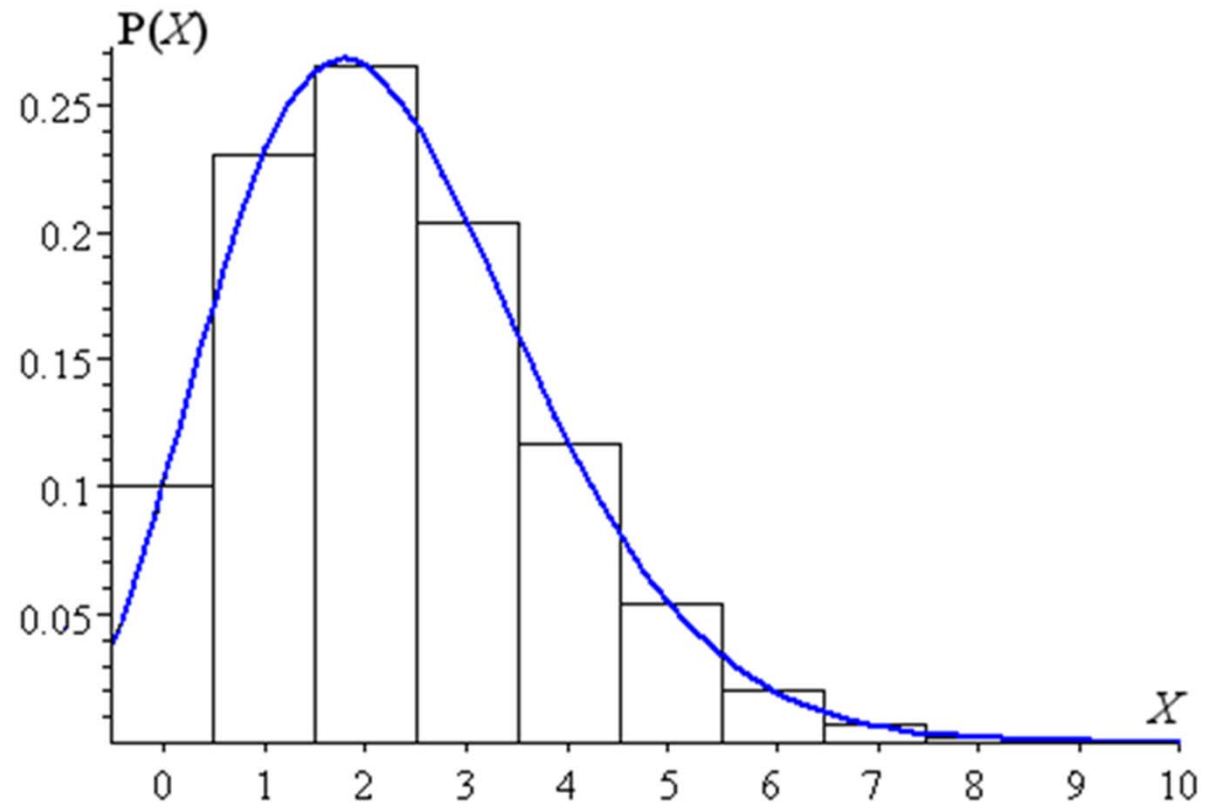
S e v e r i t y	Catastrophic	5	5	10	15	20	25
	Significant	4	4	8	12	16	20
	Moderate	3	3	6	9	12	15
	Low	2	2	4	6	8	10
	Negligible	1	1	2	3	4	5
			1	2	3	4	5
			Improbable	Remote	Occasional	Probable	Frequent
			Likelihood				

Catastrophic		STOP
Unacceptable		URGENT ACTION
Undesirable		ACTION
Acceptable		MONITOR
Desirable		NO ACTION

FDM to establish training objectives

- FDM is used to supplement the syllabus derived from the training needs analysis
- The normal range for FDM events numbers/rates can be established
- Set limits beyond which review or action is required
- Establish training objectives and monitor for an operational improvement

Poisson distribution

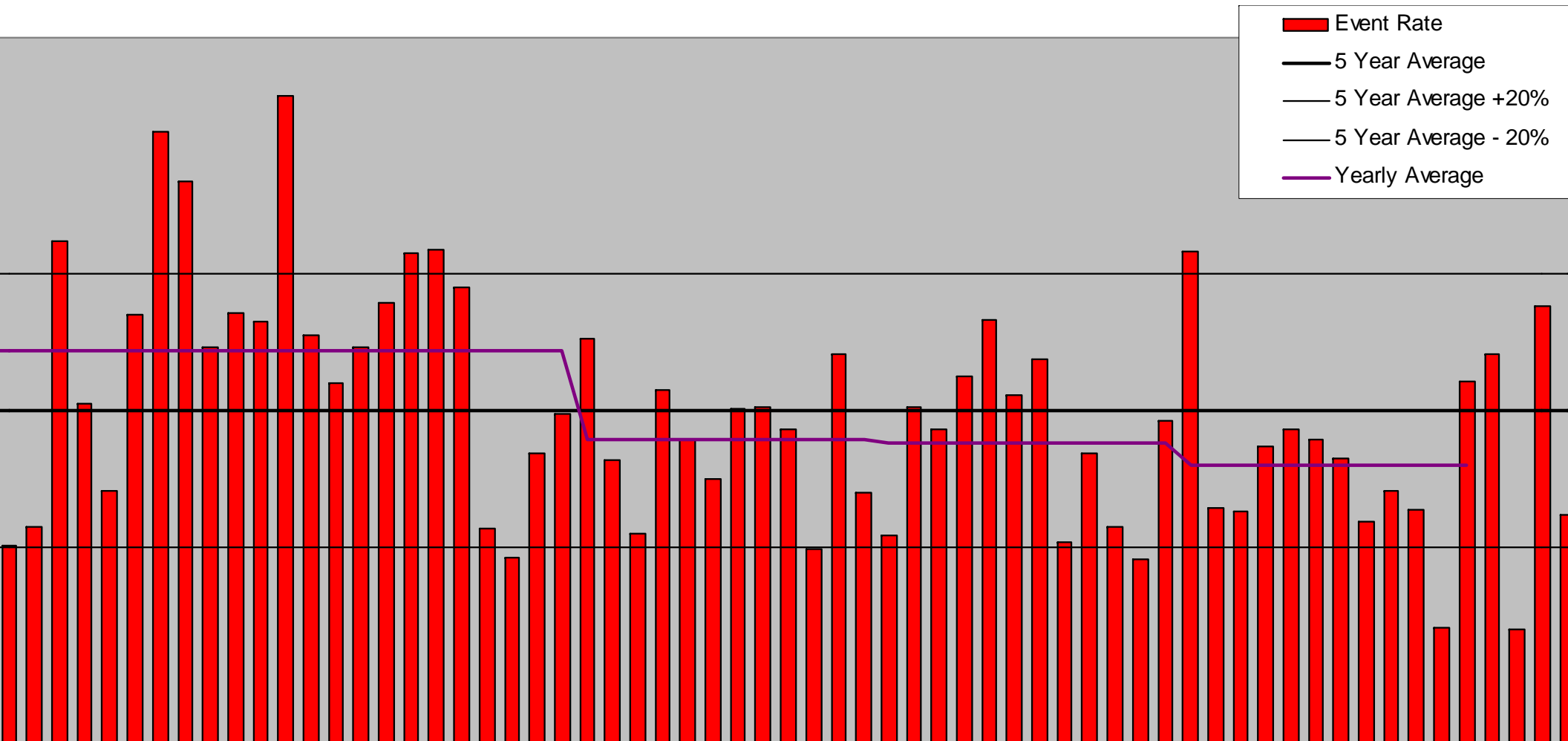


Event	Event	Events in Month	Expected Events	Poisson
77	AIRSPEED LOW FOR CONFIG	3	0.89	0.05
77	CLIMB-OUT SPEED HIGH	2	7.46	0.02
77	DEEP LANDING	2	6.49	0.03
77	SHORT LANDING	1	0	0

FDM to monitor training effectiveness

- A baseline operational standard can be established prior to the start of ATQP
- Use a core set of relevant FDM events as a measure of pilot proficiency
- Targets and upper limits can be established with set review periods

B777 Five Year Event Rate



The benefits of ATQP

- It's been very worthwhile
- We're doing less unrealistic testing
- We're doing more relevant training
- The pilots and trainers all like it
- Training proficiency and safety has improved
- We're saving money from fewer Line Checks

Some airlines doing ATQP

easyJet



Scandinavian Airlines

flybe.

BRITISH AIRWAYS



 **Thomson
Airways**

 **virgin
atlantic**



AIRFRANCE 

BRITISH AIRWAYS

