APPENDIX 12

COMMENT AND JUSTIFICATION:-

Restricted Privilege TRI MPA

Appendix 12 appears to be designed as a "One Test Fits All" process with particular emphasis on the requirements for Instructors who are required to instruct in an aircraft. Other aspects of the skills test process support the perception that Appendix 12 is designed to cater for FIs and not for TRI MPAs. Among these are: -

- The need to lecture on Aircraft General Knowledge, Meteorology, and Operational Procedures
 etc. Having trained hundreds of SFIs and TRIs we can confidently state that the requirement to
 lecture on these matters is not relevant to a TRTO or Airline
- The emphasis on demonstrations and handling skills clearly indicates that these aspects of Appendix 12 are not directed at instructors in highly automated MPAs operating to strict Standard Operating Procedures.
- 3. Mention of "aircraft class" in the text.

We are concerned that there has been insufficient recognition of or emphasis on the process of checking the Restricted Privilege TRI (or SFI). These instructors form the great majority of instructors in a large ATO or Airline. The vast majority of such Instructors will never become un-restricted and will spend all their careers instructing in a simulator. Accordingly, a specific test needs to be devised that thoroughly explores such Instructor's skill and knowledge in the areas that they will be required to teach and, occasionally, demonstrate in a simulator.

Another issue that must be raised here is the extra cost that the requirements of Appendix 12 will impose on a ATO or an Airline. At present, a TRI can be assessed in a simulator conducting real training with crews who are actually involved in a type rating course. Thus, the session is productive and cost-effective. If Appendix 12 is imposed on ATOs and Airlines the following resources will have to be provided for the qualification and revalidation of Restricted Privilege TRIs (and SFIs): -

- 1. A Level B, C or D simulator.
- 2. An Examiner. Ryanair TRE(S)s have conducted the great majority of TRI and SFI assessments in Ryanair in recent years.
- 3. A TRI or SFI to act as the student.
- The TRI or SFI to be tested or re-validated.

This is a massive cost to any organization and the requirements of FCL must allow an operator or ATO to conduct its operation in an efficient manner.

AMC No 1 to FCL.930.TRI 8 appears to recognize that a "formal test" is required at the end of Synthetic Device Training. However it does not specify that this test must be in accordance with Appendix 12. Indeed, how could it, when Appendix 12 is clearly designed around the need to test instructors in an aircraft. The AMC does not give any indication of what other format the test should take.

This is where we see the proposal laid out below fitting in. The proposal would exist in Appendix 12 but in a separate section specifying the details of a skills test which will qualify and re-validate Restricted Privilege TRIs. It gives the ATO or Airline the option of conducting the test with a real crew or with a simulated crew.

This proposal is based closely on the process that Ryanair and the IAA have developed together and which has been in use for many years.

PROPOSAL:

SFI/TRI SKILL TEST FOR THE INITIAL ISSUE OF THE INSTRUCTOR CERTIFICATE (MULTI ENGINE, MULTI-PILOT AIRPLANE - RESTRICTED PRIVILEGES) [See AMC No 1 to FCL.930.TRI 8.]

AND

SFI/TRI PROFICIENCY CHECK FOR THE REVALIDATION OF INSTRUCTOR CERTIFICATE (MULTI ENGINE, MULTI PILOT AIRPLANE)

GENERAL

- 1. The format and application form for the skill test shall be determined by the Authority.
- 2. The instructor skill test shall comprise preflight and post flight briefings and inflight demonstrations during skill tests in the simulator appropriate to the required aircraft.
- 3. An applicant for the skill test shall have received instruction in the simulator of the same type or class as the aircraft used for the test.
- 4. Before taking the skill test for initial issue of an instructor certificate (Restricted Privileges) an applicant shall have completed the required training. The approved training organisation shall produce the applicant's training records when required by the examiner.
- 5. During the skills test for initial issue of an instructor certificate (Restricted Privileges) the applicant shall:

SECTION 1 – THE BRIEFING

- a. demonstrate to the satisfaction of an examiner the ability to:
 - i. prepare resources

- ii. Create a climate conducive to training
- iii. Demonstrate good visual presentation techniques
- iv. Be technically accurate
- v. Explain subject matter clearly
- vi. Demonstrate clarity of speech
- vii. Demonstrate sound instructional technique
- viii. Use models and training aids
- ix. Present knowledge
- x. Integrate threat/error management and Crew resource management
- xi. Manage time to achieve training objectives
- xii. Facilitate learning
- xiii. Facilitate active participation of the students

This shall be demonstrated during a briefing session which will be structured in either of the following ways:

- xiv. Under the supervision of the instructor/examiner during the briefing of a crew who are undergoing initial type rating training or,
- xv. Under the supervision of the instructor/examiner during the briefing of a crew who are undergoing recurrent simulator training as required by OPS or,
- xvi. Under the supervision of the examiner during a briefing specifically established to test the candidate's ability in the above competencies.

In either case the examiner is encouraged to question the applicant on any of these competencies or any theoretical or technical matter to confirm the applicant's level of knowledge in these areas.

SECTION 2 – THE SIMULATOR SESSION

- b. Conduct a training session as Instructor from the Simulator Instructor Operating Station (IOS). During this training session the applicant shall demonstrate to the satisfaction of a suitably qualified examiner the ability to:
 - i. Manage the progress of the lesson efficiently

- ii. Manage the IOS efficiently
- iii. Manage the simulated flight efficiently
- iv. Impart knowledge and skill
- v. Assess trainee performance
- vi. Monitor and review progress
- vii. Evaluate the training session

This shall be demonstrated during a full flight simulator session which will be structured in either of the following ways:

- viii. Under the supervision of the instructor/examiner during the conduct of a full flight simulator session involving a crew who are undergoing initial type rating training or,
 - ix. Under the supervision of the examiner during the conduct of a full flight simulator session involving a crew who are specifically selected to test the candidate's ability in the above competencies.

The examiner or another suitably qualified crewmember shall function as the 'student'. The applicant shall be required to explain the relevant exercises and to guide the student during the conduct of the exercise. The 'student' shall include mistakes typical of inexperienced students as determined and briefed by the examiner. The applicant is expected to correct mistakes orally or, if necessary, by intervening.

SECTION 3 – DEMONSTRATED EXERCISES

c. In addition, the applicant will be required to give a pattered demonstration of a training exercise during the simulator check from either pilot seat.

SECTION 4 – THE DEBRIEFING

- d. Conduct a debriefing to the satisfaction of a suitably qualified examiner demonstrating the ability to:
 - i. prepare resources
 - ii. Create a climate conducive to training
 - iii. Demonstrate good visual presentation techniques

- iv. Be technically accurate
- v. Explain subject matter clearly
- vi. Demonstrate clarity of speech
- vii. Demonstrate sound instructional technique
- viii. Use models and training aids
- ix. Present knowledge
- x. Integrate threat/error management and Crew resource management
- xi. Manage time to achieve training objectives
- xii. Facilitate learning
- xiii. Facilitate active participation of the students
- xiv. Report outcome

The examiner is encouraged to question the applicant on any of these competencies or any theoretical or technical matter to confirm the applicant's level of knowledge in these areas.

6. All relevant sections of the Instructor Skills test shall be completed on the same day. Failure to attain competency in any section of the skills test will result in a failure of the entire test. The test may be retaken following appropriate retraining which the examiner may specify. The examiner may terminate the test at any stage if they consider that a retest is required.

COMMENT AND JUSTIFICATION

Un-restricted TRI MPA

Continuing from the above discussion the structure, content and process of Appendix 12 does not recognize the realities involved in training un-restricted TRI MPAs in an Airline. These un-restricted TRIs will only be required to train type rating students in the required six take-offs and landings. The "one test fits" all approach breaks down in a two areas: -

1. Applicability

- a. The emphasis on demonstrations in the skills test proposed in Appendix 12 does not seem to take into account the fact that the TRI's students will have been trained and tested in a Level B, C or D simulator. They will have received concerted training in all the maneuvers required to operate the aircraft in normal and non-normal circumstances. They are not students who require initial training on the aircraft.
- b. The need for a TRI who will conduct aircraft training in a B737 800 to lecture on Aircraft General Knowledge, Meteorology, and Operational Procedures etc to pilots who have just completed a MPA type rating course is unlikely. Such pilots let us remember, will have recently successfully completed:
 - i. The theoretical exams associated with the ATPL
 - ii. Multi-engine Instrument Rating
 - iii. MCC
 - iv. Human Factors training

It is extremely difficult to predict a situation where a TRI in an Airline who is about to take a pilot into the circuit to complete the six required take-offs and landings would be required to give a lecture on any of the subjects listed in Appendix 12. Instead the TRI will need to give a detailed brief on: -

- v. The transit to and entry into the circuit pattern
- vi. Landing techniques
- vii. Touch and go procedures
- viii. Rotation techniques
- ix. Attitude flying
- x. The effects of thrust and primary/secondary flight controls

- xi. Speed control
- xii. Full stop landing techniques.

These are the areas that the TRI MPA in an Airline needs to be tested in during initial qualification and re-validation.

2. Cost

Is it really proposed that an Airline sets aside the following resources to qualify or re-validate a TRI?: -

- a. A B737 800 or Airbus A320 (for example)
- b. An Examiner. Ryanair TRE(S)s have conducted the great majority of TRI assessments in Ryanair in recent years.
- c. A TRI to act as the student.
- d. The TRI to be tested or re-validated.

Such a devotion of resources to the process of qualifying a TRI cannot be justified.

The answer is to allow initial testing and re-validation of Un-restricted TRIs to take place in an aircraft with real students at the controls. This is what has happened in the Airline environment for years and it works very well.

In summary, it is essential that the particular demands and circumstances in which Airline MPA type rating training be recognized in Part FCL. Not to do so will be a major retrograde step and will cause unnecessary confusion and cost to the industry.

Accordingly, we have proposed the following process which would become a distinct part of Appendix 12: -

PROPOSAL:

UN-RESTRICTED TRI SKILL TEST FOR THE INITIAL ISSUE OF THE INSTRUCTOR CERTIFICATE (MULTI ENGINE, MULTI-PILOT AIRPLANE)

AND

UNRESTRICTED TRI PROFICIENCY CHECK FOR THE REVALIDATION OF INSTRUCTOR CERTIFICATE (MULTI ENGINE, MULTI PILOT AIRPLANE)

GENERAL

- 1. The format and application form for the skill test shall be determined by the Authority.
- 2. The instructor skill test shall comprise preflight and post flight briefings and in-flight demonstrations during training in the required aircraft.
- 3. An applicant for the skill test shall have received instruction in the same type of aircraft used for the test.
- 4. Before taking the skill test for initial issue of an un-restricted instructor certificate an applicant shall have completed the required training. The approved training organisation shall produce the applicant's training records when required by the examiner.
- 5. During the skills test for initial issue of an instructor certificate the applicant shall:

SECTION 1 - THE BRIEFING

- a. demonstrate to the satisfaction of a suitably qualified examiner the ability to:
 - i. prepare resources
 - ii. Create a climate conducive to training
 - iii. Demonstrate good visual presentation techniques
 - iv. Be technically accurate
 - v. Explain subject matter clearly
 - vi. Demonstrate clarity of speech
 - vii. Demonstrate sound instructional technique
 - viii. Use models and training aids
 - ix. Present knowledge

- x. Integrate threat/error management and Crew resource management
- xi. Manage time to achieve training objectives
- xii. Facilitate learning
- xiii. Facilitate active participation of the students

This shall be demonstrated under the supervision of the examiner during the briefing of a crew who are undergoing initial type rating training.

The examiner is encouraged to question the applicant on any of these competencies or any theoretical or technical matter to confirm the applicant's level of knowledge in these areas.

SECTION 2 - FLIGHT

- b. Conduct aircraft training session as Instructor in the seat appropriate to the student under training. During this training session the applicant shall demonstrate to the satisfaction of an examiner the ability to:
 - i. Manage the progress of the lesson efficiently
 - ii. Manage the flight efficiently
 - iii. Exercise good Airmanship/Safety techniques
 - iv. Maintain good Situation Awareness
 - v. Impart knowledge and skill
 - vi. Assess trainee performance
 - vii. Monitor and review progress
 - viii. Evaluate the training session

This shall be demonstrated during aircraft training under the supervision of the examiner during initial type rating training.

SECTION 3 – DEMONSTRATED EXERCISES

c. The applicant will be required to give a pattered demonstration of a phase of flight appropriate to the aircraft training underway. The student will be required to "follow through" during this demonstration.

SECTION 4 - THE DEBRIEFING

- a. Conduct a debriefing to the satisfaction of a suitably qualified examiner demonstrating the ability to:
 - i. Be technically accurate
 - ii. Explain subject matter clearly
 - iii. Demonstrate clarity of speech
 - iv. Demonstrate sound instructional technique
 - v. Use models and training aids
 - vi. Present knowledge
 - vii. Facilitate learning
 - viii. Facilitate active participation of the students
 - ix. Report outcome

The examiner is encouraged to question the applicant on any of these competencies or any theoretical or technical matter to confirm the applicant's level of knowledge in these areas.

6. All relevant sections of the Instructor Skills Test shall be completed on the same day. Failure to attain competency in any section of the skills test will result in a failure of the entire test. The test may be retaken following appropriate retraining which the examiner may specify. The examiner may terminate the test at any stage if they consider that a retest is required.