



## **OPERATIONAL EVALUATION REPORT**

**AIRCRAFT ATR 42/72-600  
(ATR, ICAO AT46/AT76)**

RIO DE JANEIRO, BRAZIL

REVISION 1 – OCTOBER, 2013

## **ATR 42/72-600**

### **GRUPO DE AVALIAÇÃO DE AERONAVES (GAA)**

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## REVISION RECORD

**Revision 1 (Oct/2013):** Editorial Changes; changes in the type rating list; inclusion of new differences training from the ATR-500 to the -600 based on different pre requisites; review of differences level in Recurrent Training; review of the determination for currency; exclusion of Appendixes 3, 4 and 5 of revision O; included the requirement for ANAC qualification of the devices VHP and FFT.

## INDEX

1. INTRODUCTION .....	5
2. SUMMARY AIRCRAFT DESCRIPTION .....	6
3. PILOT TYPE RATING .....	7
4. MASTER DIFFERENCE REQUIREMENT (MDR).....	8
5. OPERATOR DIFFERENCES REQUIREMENT (ODR) .....	8
6. SPECIFICATIONS FOR PILOT TRAINING .....	9
7. SPECIFICATIONS FOR CHECKING .....	13
8. SPECIFICATIONS FOR CURRENCY .....	13
9. OPERATION EXPERIENCE AND OPERATION CYCLES .....	14
10. FLIGHT SIMULATION TRAINING DEVICES (FSTD).....	14
11. COMPLIANCE TO RBHA 91 AND RBAC 121.....	15
12. MANUALS.....	15
13. APPENDIX.....	15
APPENDIX 1.....	16
APPENDIX 2.....	17
APPENDIX 3.....	18

## 1. INTRODUCTION

This report presents ANAC results of the operational evaluation of the ATR 42/72 family aircraft commercially known as “ATR-600”. The term “ATR-600” is used in this document to refer to both, the “ATR 42-600” and the “ATR 72-600.”

The evaluation was divided into three main phases. In the first phase, it was evaluated the differences in pilot training, checking and currency requirements from the ATR 72 – “500” to the “-600”. This evaluation was conducted by a joint operational evaluation board (OEB) comprised by ANAC, the Federal Aviation Administration (FAA), the European Aviation Safety Agency (EASA), and Transport Canada Civil Aviation (TCCA). ANAC conducted the T3 test in accordance with IAC 121-1009.

The second phase consisted in evaluating the initial type rating training program of the ATR-600. This evaluation was conducted by EASA who applied the T5 test in accordance with EASA Common Procedures Document, similar to IAC 121-1009. The results were further validated and adopted by ANAC.

The third phase consisted in reassessing the pre requisites for a pilot to enroll the differences training from the ATR-500 to the ATR-600 and consequently establishing an additional differences training program. This evaluation was conducted by EASA who applied the T3 test. The results were further validated and adopted by ANAC.

In addition to the operational evaluation phases described above, ANAC is constantly monitoring the quality of pilot training and the proper operation of ATR 42/72 variants through its oversight program over RBAC 121 operators. Results of this oversight program may also lead to the revision of the operational evaluation determinations.

This report supplements the instructions contained in IAC 121-1008 – Approval and Standardization of crew training and qualification in the airplanes ATR-42 and ATR-72.

### 1.1. Purpose

This report:

- Defines the Pilot Type Rating assigned for the ATR-600;
- Defines the requirements for training, checking and currency applicable to flight crew;
- Provides the Master Differences Requirements (MDR) for crews requiring differences qualification for mixed-fleet-flying;
- Provides an acceptable Operator Differences Requirements (ODR);
- Describes the required Flight Simulation Training Device (FSTD) for crew training and checking.

### 1.2. Applicability

This report is applicable to:

- Brazilian Operators of ATR-600 under RBHA 91 and RBAC 121 rules;
- RBAC 142 Training Centers;
- Civil Aviation Inspectors ( INSPAC) related to safety oversight of ATR-600;
- ANAC Principal Operations Inspector (POI) of ATR-600 operators.

### 1.3. ANAC Responsibility/Authority.

Determinations made in this report are based on the evaluations of specific ATR 72-600 aircraft type and model equipped in a given configuration and in accordance with current regulations and guidance. Modifications and upgrades made to the model evaluated, or introduction of new aircraft variants, may require amendment of the findings in this report. ANAC has responsibility and authority to re-evaluate and modify sections of this report based on new advisory material or regulations, aircraft operating experience, or testing of new or modified aircraft.

## 2. SUMMARY AIRCRAFT DESCRIPTION

### 2.1. ATR 72-600

“ATR-600” is the commercial designation used by ATR to refer to the basic ATR72-212A aircraft model incorporating the following major changes:

- 05948 ISSUE 5 - INSTALL NEW AVIONIC SUITE GLASS COCKPIT;
- 05977 ISSUE 2 - INSTALL NEW FUEL GAUGING SYSTEM IN KG ON ATR 72-212A.

The ATR 72-600 is a high wing airplane, T-tail, tricycle landing gear, powered by two Pratt & Whitney PW127 engines. The avionic suite incorporates a “glass cockpit” philosophy with five LCD displays units.

A summary of the airplane specification is presented in table 1 below. For more information, the *Type Certificate Data Sheet – TCDS*, issued by ANAC Product Certification Management (Gerência Geral de Certificação de Produto - GGCP), may be consulted. In case of information disagreement between table 1 and the TCDS, this last source shall prevail:

**Table 1 – ATR 72-600 information**

	<b>ATR 72-600</b>
Certification Basis	RBAC 25.
Engine	Two Pratt & Whitney Canada, Inc. PW127 M or Pratt & Whitney Canada, Inc. PW127 F.
Propeller	Two Hamilton Standard six Bladed, 568 F-1 Blade.
Minimum Crew	Two: One pilot and one co-pilot.
Maximum Passengers	74.
Maximum Weights	See AFM.
Speeds	Maximum operating (VMO): 250 kias Maximum operating mach (MMO): 0.55 Landing Gear Operation (VLO): 170 kias Landing Gear Extended (VLE) 185 kias.

## 2.2. Three Views

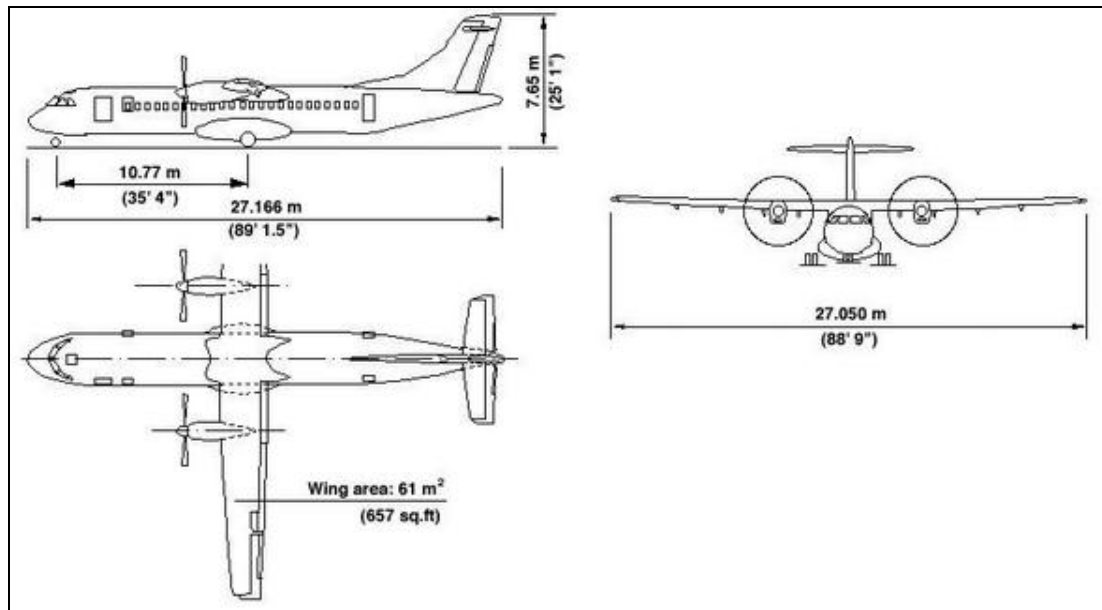


Figure 1 – Three Views

## 3. PILOT TYPE RATING

A common type rating is applicable between the ATR-600 and others ATR 42/72 family aircraft, and is designated AT47. The GAA recommends updating ANAC type rating list as indicated in table 2 below.

Table 2 – ANAC Type Rating List revision

X – Habilitação de Tipo (Avião) – Terrestre – Operação Multi Pilot, Multi Engine (Motor a Reação)				
FABRICANTE (1)	AERONAVE (2)		OBS (3)	DESIGNATIVO (4)
	MODELO	NOME		ANAC
ATR	ATR 42-200/300	ATR 42-200/300	D	AT47
	ATR 42-500	ATR 42-500		
	ATR 72-100/200/212	ATR 72-100/200		
	ATR 72-212A	ATR 72-500		
	-	ATR 42-600 <sup>(1)</sup>		
	ATR 72-212A-Mod 5948	ATR 72-600		

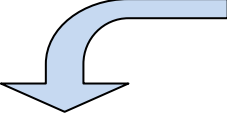
<sup>(1)</sup> Variante não certificada pela ANAC (out/2013).

Although a common type rating is established as shown in column 4 of table 2, there are considerable differences between some of the variants (identified by the horizontal lines in column 2), which need to be addressed by the crew in terms of training, checking and currency. The Master Difference Requirement table presented in section 4 details the level of the differences between the variants.

**4. MASTER DIFFERENCE REQUIREMENT (MDR)**

Master Difference Requirements for variants of the ATR 42 and ATR 72 are shown in table 3. These provisions apply when differences between variants exist which affect crew knowledge, skills, or abilities related to flight safety. The criteria for the construction of the MDR table is defined in IAC 121-1009.

**Table 3 – ATR 42/72 MDR**

		From Airplane					
		ATR 42-200/300	ATR 42-500	ATR 42-600	ATR 72-100/200	ATR 72-500	ATR 72-600
To Airplane	ATR 42-200/300	- / - / -	B/A*/B	(2)	B/A*/B	B/A*/B	(2)
	ATR 42-500	B/A*/B	- / - / -	(2)	A/A*/A	A/A*/A	(2)
	ATR 42-600	(2)	D/C*/C	- / - / -	(2)	(2)	(2)
	ATR 72-100/200	B/A*/B	A/A*/A	(2)	- / - / -	A/A*/A	(2)
	ATR 72-500	B/A*/B	A/A*/A	(2)	A/A*/A	- / - / -	(2)
	ATR72-600	(2)	(2)	(2)	(2)	D/C*/C	- / - / -

**Note:**  
 (1) The \* denotes the need of operation experience with an instructor.  
 (2) Not evaluated.

**5. OPERATOR DIFFERENCES REQUIREMENT (ODR)**

Each operator of a mixed fleet of ATR 42/72-600 and other variants shall produce its own ODR, as required by IAC 121-1009.

ATR provided a generic ODR table, which was considered acceptable by ANAC. This generic ODR may serve as a basis for the Operator to develop its own ODR tables to address the differences indicated in the MDR.



## 6. SPECIFICATIONS FOR PILOT TRAINING

### 6.1. ATR-600 Pilot Type rating Course

The initial pilot type rating course described in this section was evaluated by EASA OEB and ANAC has found it to be compliant with the requirements of RBAC 61 Subpart K, RBAC 121.419 and 121.424. This course is recommended to be used as a baseline for ATR-600 type rating training.

#### 6.1.1. Pre requisites

##### 6.1.1.1. Pilot in Command (PIC)

To enroll the training the pilot must as a minimum:

- hold a commercial pilot license;
- have at least 1500 hours in total as pilot of airplanes;
- hold an IFR rating;
- hold a Land Multiengine Class Rating (MLTE) or a type rating of a multiengine aircraft;
- had been approved in the theoretical exam of ANAC Airline Transport Pilot License (PLA).

##### 6.1.1.2. Pilot Second in Command (SIC)

To enroll the training the pilot must as a minimum:

- hold a commercial pilot license;
- have at least 70 hours as pilot in command of airplanes;
- hold an IFR rating;
- hold a Land Multiengine Class Rating (MLTE) or a type rating of a multiengine aircraft;
- had been approved in the theoretical exam of ANAC Airline Transport Pilot License (PLA).

In addition to the requisites listed above, ATR recommends that pilots with less than 500 flight hours should enroll a Entry Level Training (ELT), prior to commencing the type rating course. The ELT is provided by ATR Training Center and uses a combination of ground instruction and flight instruction in a Flight Simulation Training Device.

#### 6.1.2. Type Rating Base Curriculum

The base curriculum is outlined in Appendix 1. The course is comprised of the ground segment and the flight segment.

The ground segment uses a combination of the following resources: Web Based Training (WBT), Classroom instruction and a procedures trainer referred to as Virtual Hardware Platform (VHP).

The flight segment uses two Flight Simulation Training Devices (FSTD): the Full Flight Trainer (FFT) and the Full Flight Simulator (FFS). The FFT is used in the first 4 sessions of the flight

segment and the FFS is used in the other 6 sessions and in the proficiency check session. Any of the FFT sessions may be replaced by FFS sessions.

More information on the FSTDs can be found in section 10 of this report.

## **6.2. Differences Training: ATR-500 to ATR-600**

Two differences training courses, with distinct pre requisites for pilots, were evaluated and found to be compliant with the requirements of RBAC 121.418. ANAC recommends these courses to be used as baseline for the development of ATR-500 to 600 differences training by operators.

The differences training is applicable to pilots qualified in the ATR 42-500 transitioning to the ATR 42-600, and to pilots qualified in the ATR 72-500 transitioning to the ATR 72-600.

Pilots qualified in previous ATR models (ex: -200, -300) must first complete the differences training to the -500 model and then complete the training to the -600, as described in this section.

According to the MDR, the maximum level of differences between the ATR-500 and the ATR-600 is set at level D.

Course A below is applicable to pilots who meet certain pre requisites of previous operation experience on ATR 42/72 variants. Course B is applicable to pilots who do not meet the experience required for enrolling course A.

### **6.2.1. Pre requisites for enrolling course A**

The pilot must as a minimum:

- hold the AT47 type rating;
- be current and qualified on the ATR-500;
- have a minimum experience on ATR 42/72 aircraft of 500 hours total or 100 hours in the last twelve months.

### **6.2.2. Pre requisite for enrolling course B**

The pilot must:

- hold the AT47 type rating;
- be current and qualified on the ATR-500.

### **6.2.3. Base Curriculum**

The base curriculum of course A is outlined in Appendix 2. The base curriculum of course B is outlined in Appendix 3. Both courses are comprised of ground segment and flight segment.

The ground segment uses a combination of the following resources: Web Based Training (WBT), Classroom instruction and a procedures trainer referred to as Virtual Hardware Platform (VHP).

For the flight segment a Full Flight Trainer (FFT) or a Full Flight Simulator (FFS) must be used.

## **6.3. Training Areas of Special Emphasis**

ATR-600 training program must give special emphasis to the following subjects:

- Use of avionics in Normal and Abnormal/Emergency conditions;

- Use of the new Flight Management System (FMS) presented in the ATR-600;
- Operation of the Anti-icing and de-icing system, its display and its annunciation mode;
- Crew Resource Management (CRM) in the glass cockpit environment;
- Electronic Checklist (ECL).

#### 6.3.1. Failure of Display Unit (DU) #3 event: certification requirement.

In case of DU#3 failure, an automatic reversion displays the EWD format on DU#2 or DU#4, depending on the coupling side (Pilot Monitoring side). The DISP button allows to cycle between the three formats (PFD/MFD/EWD). However, it must be emphasized in the training that the flight crew must display the EWD format on DU#2 or DU#4 at any time during take off, approach and landing flight phases.

### 6.4. Recurrent Training

A recurrent training was not evaluated by GAA. The recurrent training in the ATR-600 shall be developed by the Operator or a RBAC 142 Approved Training Organization in accordance with the requirements of RBAC 121.427 and 121.433, and submitted to ANAC for approval. In addition, when developing the recurrent training, the determinations discussed in this section must also be respected.

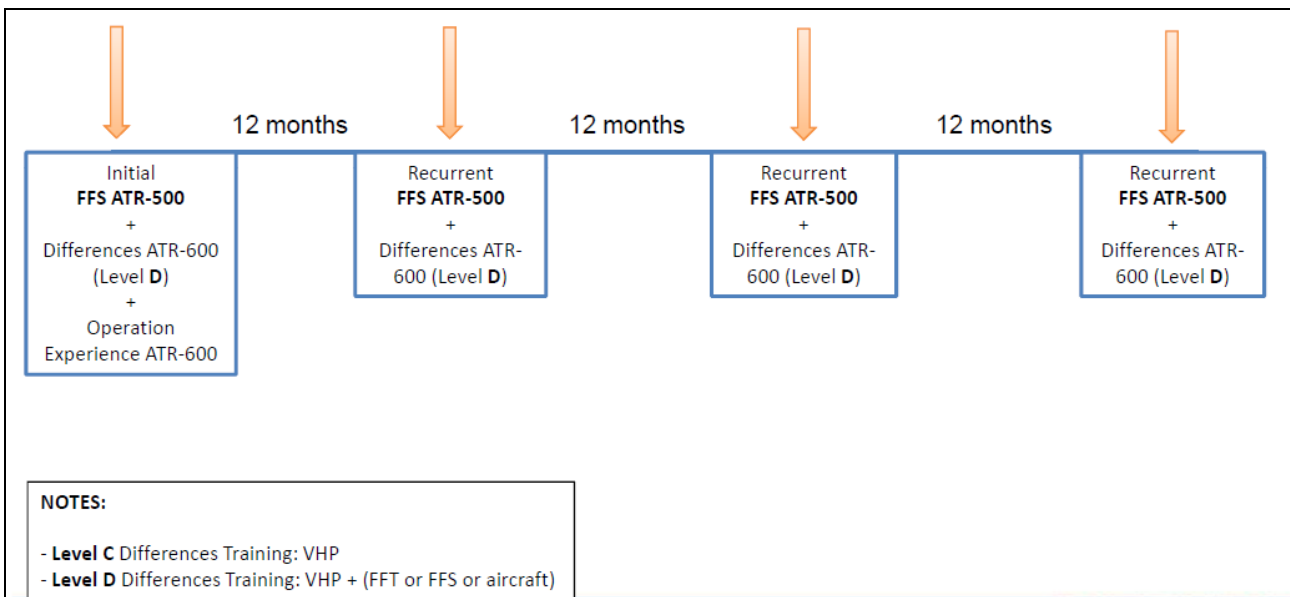
#### 6.4.1. Mixed Fleet Operation

When operating the ATR-600 in a mixed fleet with other ATR 42/72 variants, it is recommended that the recurrent training is performed alternating yearly the variant of the FFS used: ATR-600 FFS in one year and other ATR 42/72 variant FFS in the subsequent year, respecting the period between the trainings as required by 121.433.

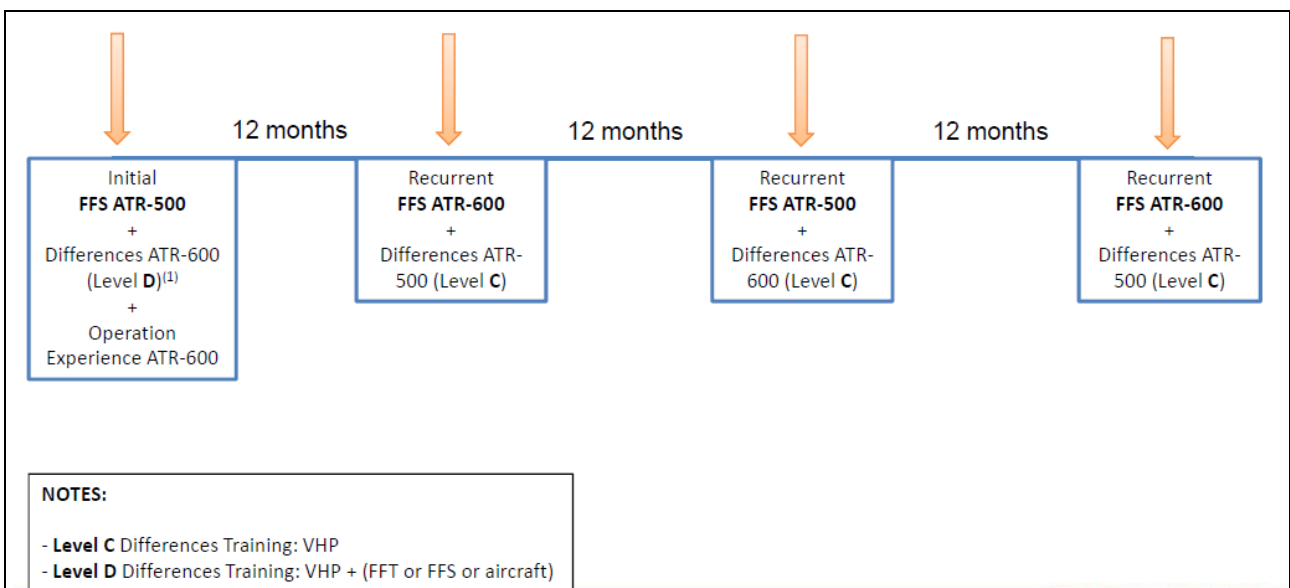
The differences between the variants flown by a pilot shall also be addressed during the recurrent training. For recurrent training, the differences level between the ATR-500 and ATR-600 is set at **level D**, therefore a device such as the FFT or higher device must be used to address the differences between the variants.

Exception exists when the pilot and the operator alternate yearly the variant of the FFS used for training and checking, as discussed above. In this case, **level C** differences training apply and a device such as the VHP or a higher device must be used to address the differences between the variants.

Figure 2 illustrates an example in which level D differences in recurrent training would apply. Figure 3 illustrates an example in which level C would apply.



**Figure 2 – Level D Differences in Recurrent Training**



**Figure 3 – Level C Differences in Recurrent Training**

#### 6.4.2. Operation of only ATR-600

It is recommended that the recurrent training is accomplished in the FFS of the variant flown. Operators of only ATR-600 should use only the FFS of this variant for pilot recurrent training.

In case the operator exclusively of ATR-600 uses a FFS of other variant for pilot recurrent training, as example a FFS of ATR-500, the pilot must:

- Reestablish currency on the ATR-500 in accordance with section 8, before commencing the ATR-500 FFS sessions;

- Complete a level D differences training from the ATR-500 to the ATR-600, after the completion of the recurrent training and checking.

Figure 4 illustrates the situation described before:

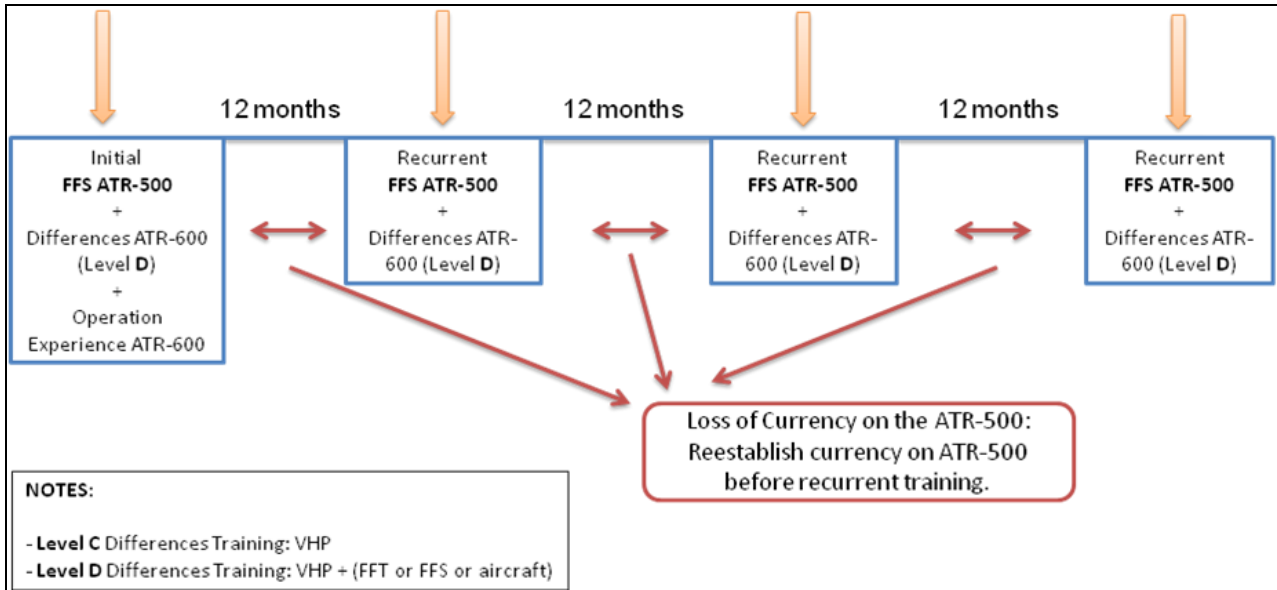


Figure 4 – Level D Differences in Recurrent Training with loss of Currency

## 7. SPECIFICATIONS FOR CHECKING

### 7.1. Proficiency Check

Proficiency check for initial ATR-600 type rating must be performed in accordance with RBAC 121.441 and RBAC 61. Additionally, it shall incorporate the subjects described in section 6.3 of this report.

When operating the ATR-600 in a mixed fleet with other ATR 42/72 variants, it is recommended that the recurrent check is performed alternating yearly the FFS variant used, in line with the device used to accomplish the recurrent training described in section 6.4.

### 7.2. Route Check

Pilot in command (PIC) of ATR 42/72 must perform route checks in accordance with RBAC 121.440.

## 8. SPECIFICATIONS FOR CURRENCY

Pilots operating the ATR-600 and other ATR 42/72 family models in mixed fleet flying must complete at least **three** sectors in both variants, acting as Pilot Flying (PF) or Pilot Monitoring (PM), in the preceding 90 days.

Currency level is set at level C, because some maneuvers and procedures will have to be executed by the pilot when reestablishing currency.

## **8.1. Reestablishing Currency**

After 90 days without the operation of a variant, 5 consecutive sectors on this variant must be accomplished with an instructor before resuming mixed fleet flying.

After 180 days without operation of one variant, 10 consecutive sectors on this variant must be accomplished with an instructor before resuming mixed fleet flying.

A session on a FFS or FFT of the variant in which currency was lost is also acceptable for reestablishing currency.

## **9. OPERATION EXPERIENCE AND OPERATION CYCLES**

### **9.1. Following the completion of the initial type rating training and checking**

The operation experience and operation cycles must be completed in accordance with RBAC 121.434.

### **9.2. Following the completion of the differences training ATR-500 to ATR-600**

After the completion of the differences training, the pilot shall complete at least 10 sectors of route experience with an instructor in the ATR-600, acting as Pilot Flying (PF) or Pilot Monitoring (PM). The instructor has the authority to increase the number of sectors according to the skill demonstrated by the pilot under operation experience.

A sector of operation experience, as defined in this report, shall be accomplished between two different airports and shall include all phases of flight: Take off, climb, cruise, descent, approach and landing.

### **9.3. Operation of more than one ATR variant in a mixed fleet**

In case of mixed fleet operation, after the completion of the differences training from the ATR-500 to the ATR-600 and the operation experience described in 9.2, it is recommended a consolidation period of 30 sectors in the ATR-600 prior going back to other ATR models. This is important to consolidate the pilot training in the glass cockpit aircraft. For this experience it would not be necessary the supervision of an instructor.

## **10. FLIGHT SIMULATION TRAINING DEVICES (FSTD)**

Full Flight Simulators used as described in section 6 and to be used in accordance with RBAC 121.409 must be qualified by ANAC as level C or D, under JAR-FSTD A or FAA FAR Part 60.

The Full Flight Trainer used as described in section 6 and to be used in accordance with RBAC 121.407 must be qualified by ANAC as JAR-FSTD A FTD/FNPT Level 2 or FTD level 6 by FAA FAR Part 60.

The VHP used as described in section 6 and to be used in accordance with RBAC 121.407 must be qualified by ANAC as FTD Level 4 per FAA FAR Part 60, or other equivalent level.

## **11. COMPLIANCE TO RBHA 91 AND RBAC 121**

ATR did not provide a compliance statement of ATR-600 to RBHA 91 and RBAC 121.

## **12. MANUALS**

### **12.1. Master Minimum Equipment List - MMEL**

ATR-600 MMEL approved by the primary certification authority shall be used by Brazilian operators as a basis for developing their Operator Minimum Equipment List (MEL).

### **12.2. Airplane Flight Manual - AFM**

Brazilian AFM of ATR-600, approved by GGCP shall be used by Brazilian operators as a basis for developing their Operator Airplane Operation Manual (AOM).

## **13. APPENDIX**

Appendixes 1, 2 and 3 present the footprint of pilot training courses.

## APPENDIX 1

### ATR 72-600 TYPE RATING TRAINING

Day 1	Day 2	Day 3	Day 4	Day 5
<b>Introduction</b> (3:00) <b>WBT</b> (4:00) <b>VHP A</b> (1:00)	<b>GI</b> (1:00) <b>WBT</b> (4:00) <b>VHP B</b> (1:00)	<b>GI</b> (1:00) <b>WBT</b> (4:00) <b>VHP C</b> (1:00)	<b>GI</b> (4:00) <b>GI - Icing</b> (1:30) <b>GI - Safety</b> (1:00)	<b>FFT 0</b> (2:00) <b>FMS 1/2 - VHP</b> (4:00)
Day 6	Day 7	Day 8	Day 9	Day 10
<b>GI - CRM</b> (7:00)	<b>VHP 1</b> (3:00) <b>WBT</b> (2:00)	<b>VHP 2</b> (3:00) <b>WBT</b> (2:00)	<b>VHP 3</b> (3:00) <b>WBT</b> (2:00)	<b>VHP 4</b> (3:00)
Day 11	Day 12	Day 13	Day 14	Day 15
<b>VHP 5</b> (3:00)	<b>VHP 6</b> (3:00)	<b>FFT 1</b> (3:00)	<b>FFT 2</b> (3:00)	<b>FFT 3</b> (3:00)
Day 16	Day 17	Day 18	Day 19	Day 20
<b>Theoretical Knowledge Test</b> (3:30) <b>GI - TEM Briefing</b> (2:00)	<b>FFT 4</b> (3:00)	<b>FFS 1</b> (3:00)	<b>FFS 2</b> (4:00)	<b>FFS 3</b> (3:00)
Day 21	Day 22	Day 23	Day 24	
<b>FFS 4</b> (4:00)	<b>FFS 5</b> (3:00)	<b>FFS 6</b> (3:00)	<b>Skill Test - FFS</b> (4:00)	
<b>Notes:</b> <b>FFS = Full Flight Simulator (ATR-600 FFS Level C or D)</b> <b>FFT = Full Flight Trainer (JAR-FSTD A FTD/FNPT Level 2)</b> <b>GI = Ground Instructor</b> <b>TEM = Threat and Error Management</b> <b>VHP = Virtual Hardware Platform Trainer</b> <b>WBT = Web Based Training</b> <b>FFS, FFT and VHP sessions DO NOT INCLUDE time for briefing and de-briefing.</b>				

The training outlined above reflects the training evaluated by ANAC and considered acceptable for the ATR 72-600 type rating training of Brazilian pilots. An operator or a training center may develop a variation of this training, provided it is proven that it maintains an equivalent level of safety. Depending on the level of the modification, ANAC may judge necessary an operational evaluation of the proposed training.



## APPENDIX 2

### DIFFERENCES TRAINING ATR-500 TO ATR-600

#### COURSE A

Day 1	Day 2	Day 3	Day 4	Day 5
<b>Introduction, Description of the Colour Code</b> (0:30)	<b>Daily Briefing</b> (0:30)	<b>Briefing</b> (0:30)	<b>Briefing</b> (0:30)	
<b>CRM Module</b> (3:00)	<b>WBT</b> (2:00)	<b>WBT</b> (2:00)	<b>Abnormal /Emergency Briefing</b> (1:30)	
<b>VHP Introduction</b> (0:30)	<b>ATR 500/600 Systems</b> (2:30, with GI)	<b>VHP 2</b> (1:30)	<b>WBT</b> (1:30)	<b>FFT (4:00)</b>
<b>WBT</b> (3:00)	<b>Training Devices (DU, IESI, VCP)</b> (1:00, with GI)	<b>FMS Ground Course</b> (1:30, with GI)	<b>VHP 4</b> (1:30)	
	<b>VHP 1</b> (1:30)	<b>VHP 3</b> FMS (1:30)	<b>VHP 5</b> (1:30)	
<p><b>Notes:</b>  <b>FFS = Full Flight Simulator (ATR-600 FFS Level C or D)</b>  <b>FFT = Full Flight Trainer (JAR-FSTD A FTD/FNPT Level 2)</b>  <b>GI = Ground Instructor</b>  <b>VHP = Virtual Hardware Platform Trainer</b>  <b>WBT = Web Based Training</b>                      FFS, FFT and VHP sessions DO NOT INCLUDE time for briefing and de-briefing.</p>				

The training outlined above reflects the training evaluated by ANAC and considered acceptable for the ATR-500 to ATR-600 differences training of Brazilian pilots. An operator or a training center may develop a variation of this training, provided it is proven that it maintains an equivalent level of safety. Depending on the level of the modification, ANAC may judge necessary an operational evaluation of the proposed training.

## APPENDIX 3

### DIFFERENCES TRAINING ATR-500 TO ATR-600

#### COURSE B

Day 1	Day 2	Day 3	Day 4	Day 5
<p style="text-align: center;"><b>Daily Briefing</b></p> <p><b>Systems Differences</b></p> <p style="text-align: center;"><b>LMS</b> Glass Cockpit Familiarisation</p> <p style="text-align: center;"><b>VHP 1 (3:00)</b> Flight Instruments / AFCS / VCP</p>	<p style="text-align: center;"><b>Daily Briefing</b></p> <p style="text-align: center;"><b>FMS Course</b></p> <p style="text-align: center;"><b>LMS</b> VCP / Flight Instruments</p> <p style="text-align: center;"><b>VHP 2 (3:00)</b> Synoptic: ENG / CABIN / ELEC / HYDRAULIC / EWD</p>	<p style="text-align: center;"><b>Daily Briefing</b></p> <p style="text-align: center;"><b>LMS</b> IMA / FWS Abnormal / Emergency Procedures Briefing</p> <p style="text-align: center;"><b>VHP 3 (3:00)</b> FMS / INIT / NAV / PERF / COM / Failure Management</p>	<p style="text-align: center;"><b>Daily Briefing</b></p> <p style="text-align: center;"><b>LMS</b> AFCS / Navigation / Communication</p> <p style="text-align: center;"><b>VHP 4 (3:00)</b> Use of all means for normal flight planning</p>	<p style="text-align: center;"><b>Daily Briefing</b></p> <p style="text-align: center;"><b>Review</b></p> <p style="text-align: center;"><b>VHP 5 (3:00)</b> LOFT</p>
Day 6	Day 7	Day 8	Day 9	Day 10
<p style="text-align: center;"><b>FFT 1 or FFS 1</b> (3:00) Normal Procedures</p>	<p style="text-align: center;"><b>FFT 2 or FFS 2</b> (3:00) Emergency Procedures</p>	<p style="text-align: center;"><b>FFT 3 or FFS 3</b> (3:00) Emergency Procedures and severe icing conditions</p>	<p style="text-align: center;"><b>FFT 4 or FFS 4</b> (3:00) LOFT</p>	<p style="text-align: center;"><b>FFT 5 or FFS 5</b> (3:00) LOFT</p>
<p><b>Notes:</b></p> <p><b>FFS = Full Flight Simulator (ATR-600 FFS Level C or D)</b></p> <p><b>FFT = Full Flight Trainer (JAR-FSTD A FTD/FNPT Level 2)</b></p> <p><b>VHP = Virtual Hardware Platform Trainer</b></p> <p>FFS, FFT and VHP sessions DO NOT INCLUDE time for briefing and de-briefing.</p>				

The training outlined above reflects the training evaluated by ANAC and considered acceptable for the ATR-500 to ATR-600 differences training of Brazilian pilots. An operator or a training center may develop a variation of this training, provided it is proven that it maintains an equivalent level of safety. Depending on the level of the modification, ANAC may judge necessary an operational evaluation of the proposed training.