

THE GO-AROUND AND THE INSTRUCTOR/EXAMINER

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Introduction

2

- Opportunities for instructors
- Opportunities and restrictions for examiners
 - ▣ Initial training
 - ▣ Upgrade training
 - ▣ Recurrent training
 - ▣ ATQP - Case Study
- Conclusions

Initial Training

3

□ Type Rating Conversion (A320 Series)

□ Classroom CBT

1ENG

2ENG

□ APT 1-9

2ENG & 1ENG go-around

4

1

□ FFS 1-7

2 ENG normal go-around

1

2 ENG High Energy

1

2 ENG REJECTED Landing

1

1 ENG go-around

2

windshear on approach

1

□ LOFT

□ Skill TEST

same requirement LPC

□ LVO

3 go-around

□ Base or ZFT training

no go-around – 4/6 landings

The Go-Around Forum

Upgrade Training

4

Ab-initio F/O ORO.FC.215	Command course ORO.FC.205
Initial CRM - TEM Situational Awareness <i>Monitoring</i> Cooperation <i>Assertiveness</i>	Advanced CRM - TEM Decision Making <i>Risk assessment & option generation</i> Leadership <i>Workload management</i>

Upgrade Training

Loss of Control Action Group



Monitoring Matters
Guidance on the Development of Pilot Monitoring Skills
CAA Paper 2013/02

Ab-initio F/O
ORO.FC.215

Initial CRM - TEM

Situational Awareness

Monitoring

Cooperation

Assertiveness



The Go-Around Forum

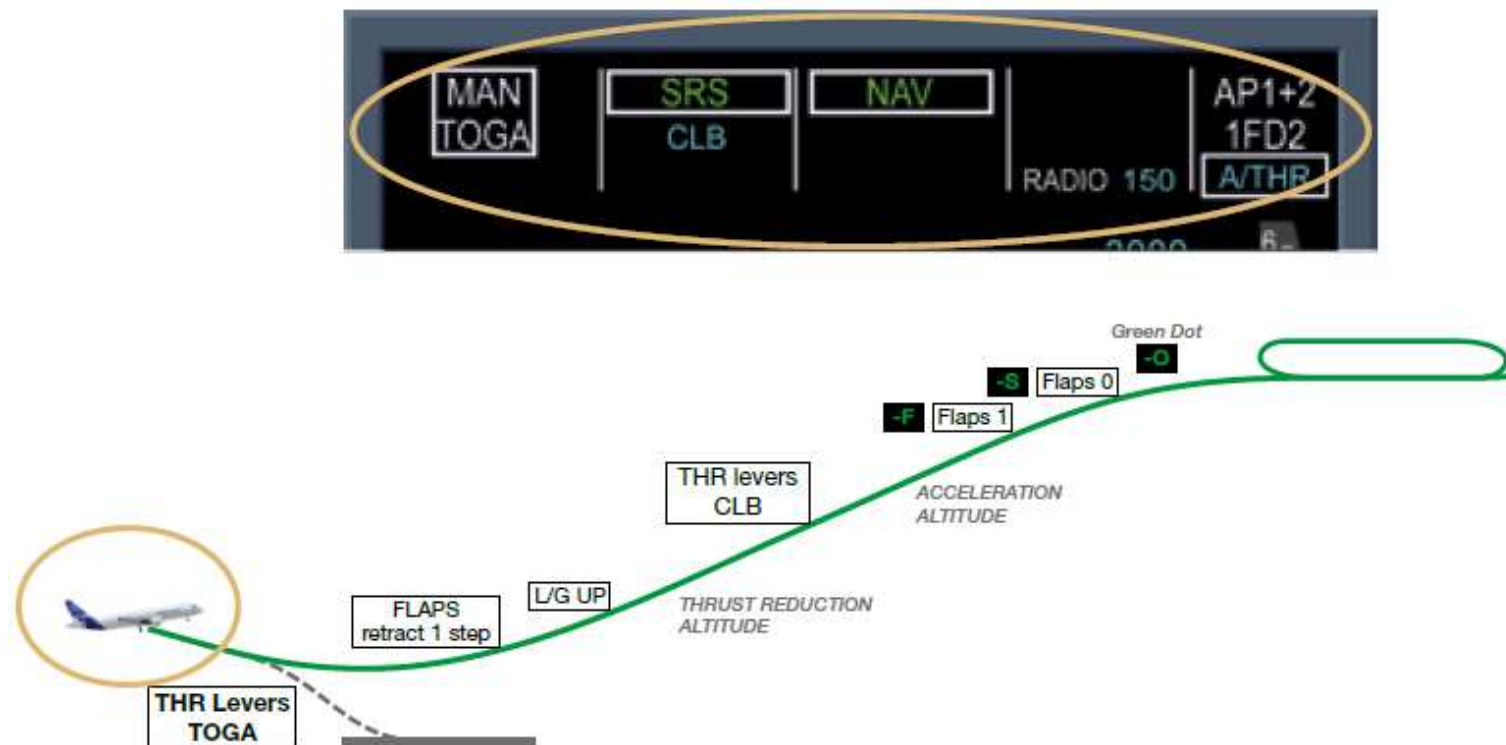
Upgrade Training

6

Ab-initio F/O ORO.FC.215	Command course ORO.FC.205
Initial CRM - TEM Situational Awareness <i>Monitoring</i> Cooperation <i>Assertiveness</i>	Advanced CRM - TEM Decision Making <i>Risk assessment & option generation</i> Leadership <i>Workload management</i>

Training – Real Life Env.

7

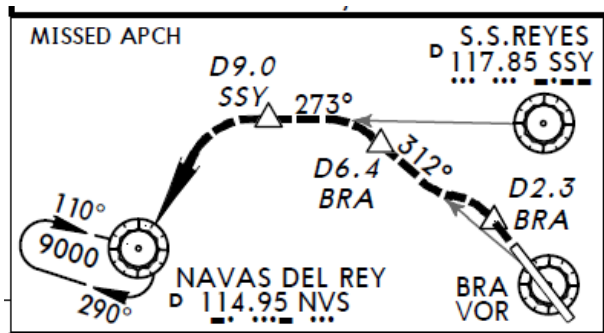


Line Training – Real Life Env.

8

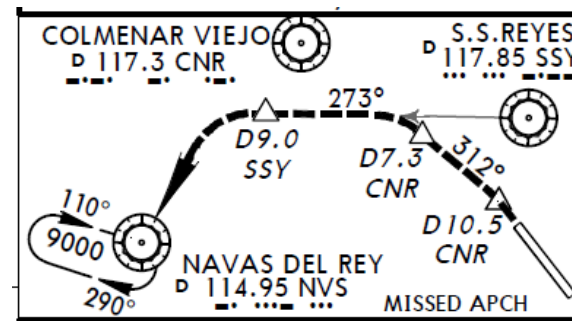
ILS X or LOC X Rwy 32L

MISSED APCH: Climb on rwy heading to D2.3 BRA at or above 2400' (LOC: 2600'). Turn LEFT and follow R-312 BRA to D6.4 BRA. Turn LEFT (MAX 185 KT) to intercept R-273 SSY. Pass D9.0 SSY at or above 4000', then turn LEFT (MAX 220 KT) to NVS VOR to join holding at 9000'. Contact ATC before reaching 4000' and follow instructions.



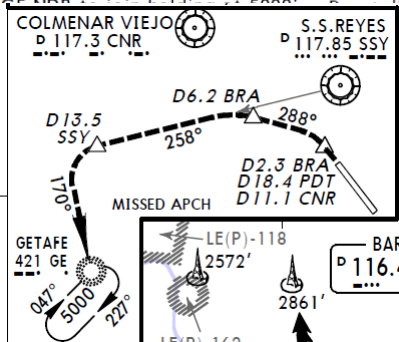
ILS Y or LOC Y Rwy 32L

MISSED APCH: Climb on rwy heading to D10.5 CNR at or above 2500' (LOC: 2700'). Turn LEFT onto 312° to D7.3 CNR. Turn LEFT (MAX 185 KT) to intercept R-273 SSY to D9.0 SSY at or above 4000'. Turn LEFT (MAX 220 KT) to NVS VOR to join holding at 9000'. Contact ATC before reaching 4000' and follow instructions.



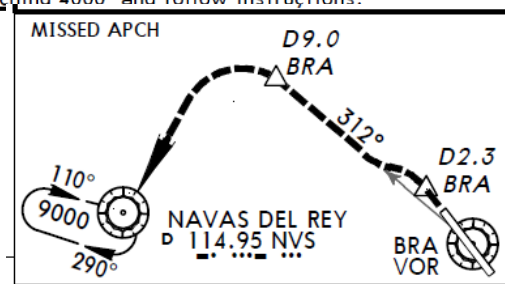
ILS Z or LOC Z Rwy 32L

MISSED APCH: Climb on rwy heading to D2.3 BRA at or above 2400' (LOC: 2600'). Turn LEFT (MAX 185 KT) onto 288° to D6.2 BRA at or above 3000'. Turn LEFT (MAX 185 KT) to intercept R-258 SSY. Pass D13.5 SSY at or above 4400', then turn LEFT (MAX 220 KT) onto 170° to D2.3 BRA at or above 5000'. Contact ATC before reaching 4000' and follow instructions.



ILS W or LOC W Rwy 32L

MISSED APCH: Climb on rwy heading to D2.3 BRA at or above 2400' (LOC: 2600'). Turn LEFT and follow R-312 BRA to D9.0 BRA at or above 3500'. Turn LEFT (MAX 220 KT) to NVS VOR to join holding at 9000'. Contact ATC before reaching 4000' and follow instructions.

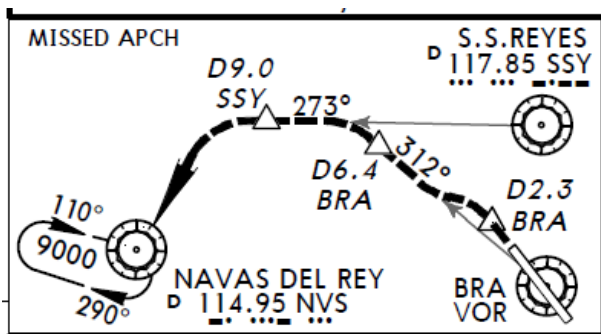


The Go-Around Forum

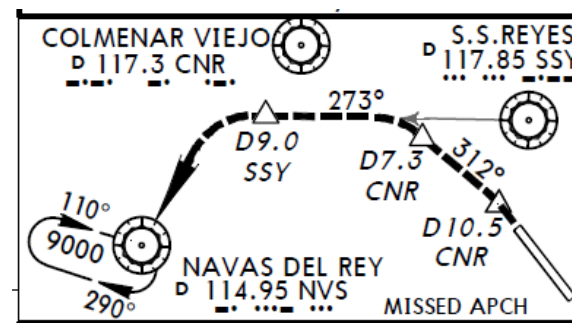
Line Training – Real Life Env.

9

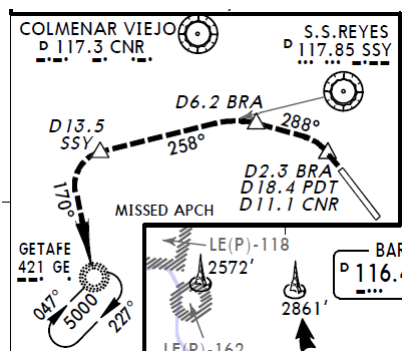
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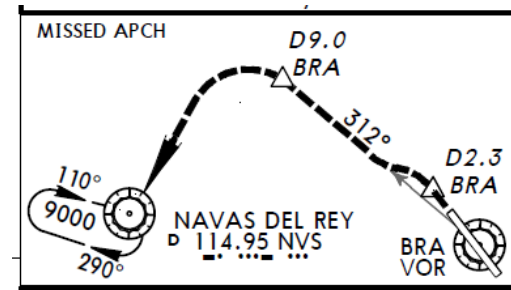
ILS Y or LOC Y Rwy 32L



ILS Z or LOC Z Rwy 32L



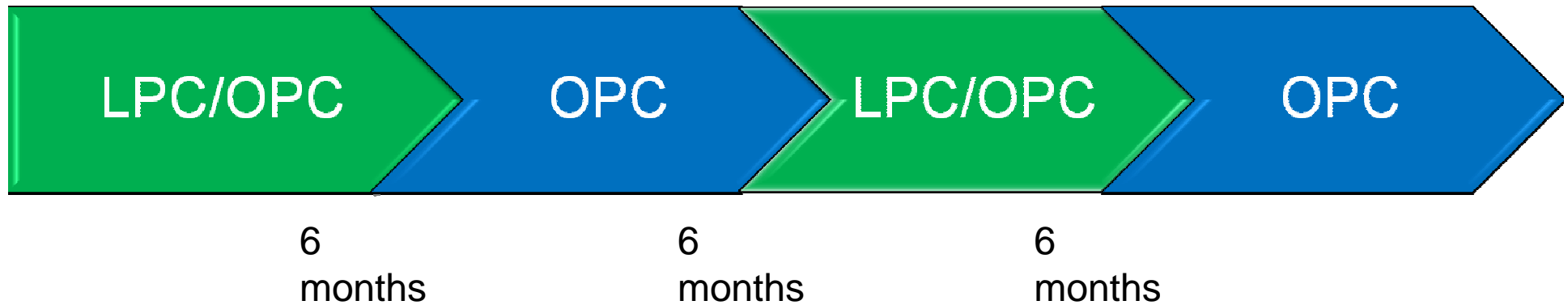
ILS W or LOC W Rwy 32L



Recurrent Training

10

“Classic” Program



Recurrent Training

11

LPC/OPC

license revalidated (PART FCL) + (doc24)

LOFT exercise (realistic real time scenario)

Madatory items

manually flown 1 ENG ILS to DH

manually flown 1 ENG go around from DH

3 yearly system operations

3 yearly emergency proc.

LVO training

1 LVO go-around

Any training items

Recurrent Training

12

Manoeuvres/Procedures Note: Training shall include MCC for each item	PRACTICAL TRAINING					MPL/ATPL/TYPER-RATING SKILL TEST/PROF CHECK		
	OTD	FTD	FFS	A/C	Instructors initials & date training completed	Checked in FFS A/C	Attempt Number (1 or 2)	Examiners initial & date test completed
SECTION 4								
4 Missed Approach Procedures								
4.1 Go-around with all engines operating after an ILS approach on reaching decision height			P→	→				
4.2 Other missed approach			P→	→				
4.3* Manually go-around with critical engine simulated inoperative after an instrument approach on reaching DH/MDH/A or MAP			P→	→		M		
4.4 Rejected landing at 15m (50 ft) above runway threshold and go-around			P	→				

Recurrent Training

13

Manoeuvres/Procedures Note: Training shall include MCC for each item	PRACTICAL TRAINING					MPL/ATPL/TYPE-RATING SKILL TEST/PROF CHECK		
	OTD	FTD	FFS	A/C	Instructors initials & date training completed	Checked in FFS A/C	Attempt Number (1 or 2)	Examiners initial & date test completed
SECTION 4								

SECTION 6								
6 Type rating for instrument approaches down to a decision height of less than 60 m (200 ft) (CAT II/III)	Note 1 For instrumental approaches down to a DH of less than 60 m (200 ft) Note 2 During the following instrument approaches and missed approach procedures all aeroplane equipment required for type certification of instrument approaches down to a DH of less than 60 m (200 ft) shall be used.							
6.1* Rejected take-off at minimum authorised RVR			P	X		M FFS only		
6.2* ILS Approaches. In simulated IMC down to DH, using flight guidance system. Standard procedures shall be observed.			P→	→		M		
6.3* Go-around from DH			P→	→		M		
Note 1: The training also shall include a go-around due to (simulated) insufficient RVR, wind shear, aeroplane deviation in excess of approach limits for a successful approach, and ground/airborne equipment failure prior to reaching DH and, go-around with simulated airborne equipment failure. Note 2: Special attention shall be given to go-around procedures with pre-calculated manual or automatic go-around attitude guidance.								
6.4* Landing(s) with visual reference established at DH. (Auto-land if fitted.)			P→	→		M		

Note 3: CAT II/III operations shall be accomplished in accordance with Operator's approved procedures.

Recurrent Training

14



OPC

Commercial Air Transport (PART OPS)

LOFT exercise (realistic real time scenario)

Mandatory items

1 ENG ILS to DH

1 ENG go around from DH

focus on company SOP

use of automation – effective CRM

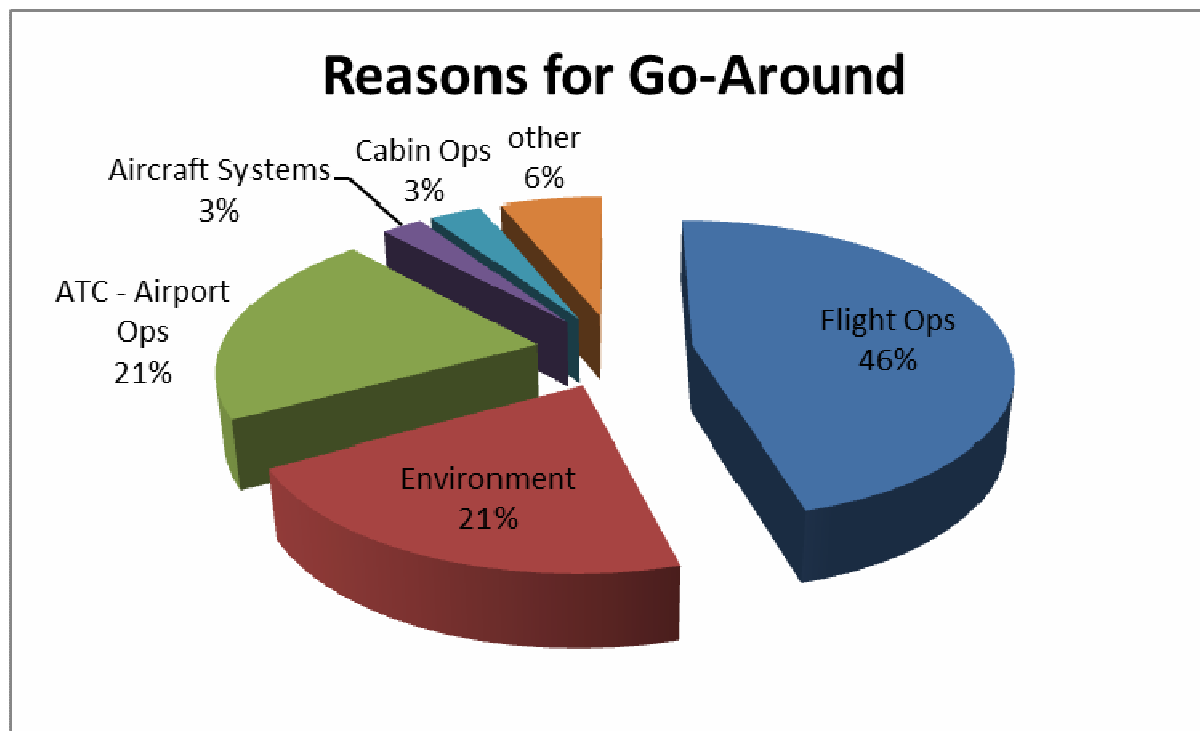
3yearly system operations

3yearly emergency proc.

Any training items

Reasons For Go-Around

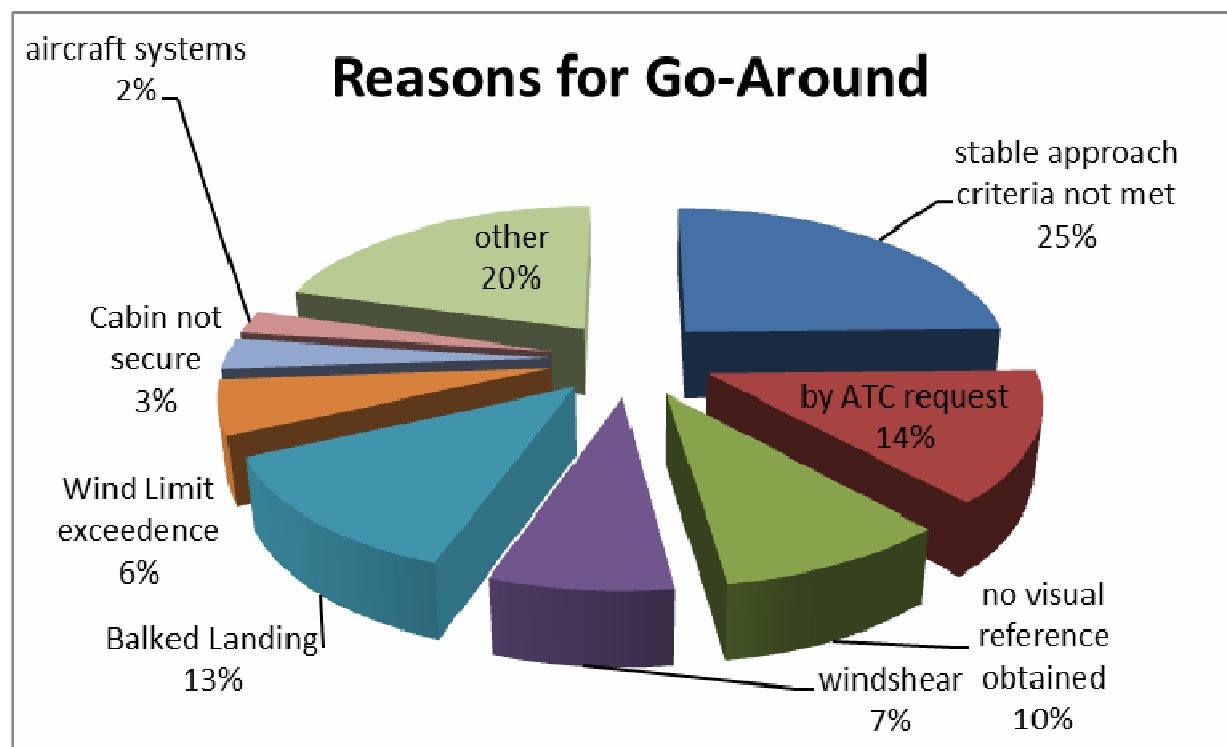
15



Example of a TOP 5 EU-AO

Reasons For Go-Around

16

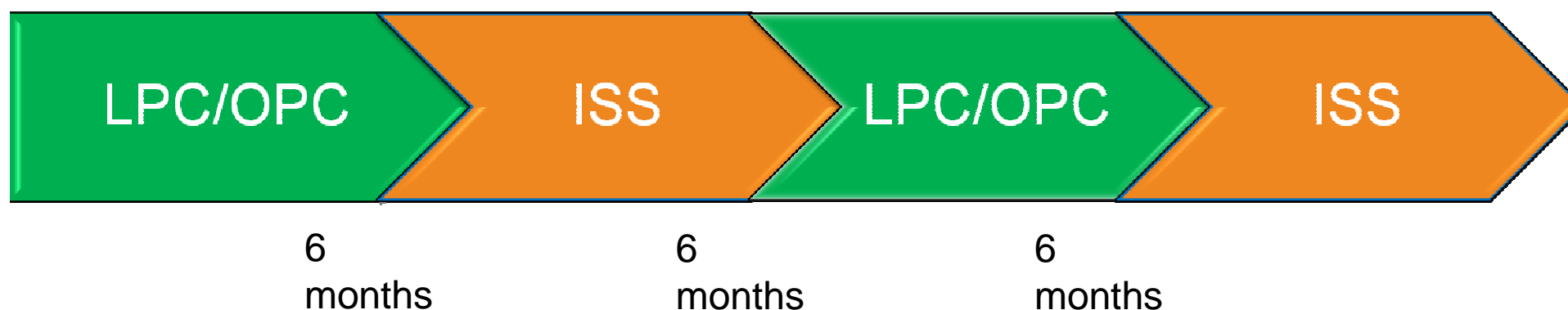


Example of a TOP 5 EU-AO

Recurrent Training

17

□ ATQP Program (AMC1.ORO.FC.A.245)



- LOE unknown realistic real time scenario
- TRAINING DAY train to proficiency selected items:
 - Identified by Operations: LOSA-FDM
 - Identified by Training: ETR

ATQP case study: 1 ENG G-A

18

LPC success rate				
	2009	2010	2011	2012
1 ENG G-A	94%	97%	97%	97%
includes 1st attempt passes with repeat				

2009: Introduction ATQP

LPC repeats					
	2009	2010	2011	2012	2013
1 ENG G-A	11%	8%	13%	12%	9%

2011: Introduction many “ab-initio” entrants to airline

Conclusions - Recommendations

19

- **Regulators:**
 - ▣ **Should go-around from DH be a mandatory item?**
 - ▣ **is it still the main reason for Go-Around?**
- **Simulator Manufacturers**
 - ▣ **Allow realistic scenario's** various ground traffic scenario's
more dynamic weather changes
flight parameter deviation from IOS
- **Airlines / instructors / examiners**
 - ▣ **ATQP**
 - ▣ **Variation in recurrent Go-Around scenario's**
 - ▣ **Train the GA from various positions/reason's**

Questions - Discussion Points

20

