



# Flight Level Adherence Days

30 September – 1 October 2010



## HELLENIC POST OPS REPORT

Released 08 Oct 2010



Hellenic Civil Aviation Authority  
Area Navigation Department  
Athinaí – Makedonia ACC

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## DOCUMENT REFERENCE

HCAA/AREA CONTROL DEPARTMENT/ATHINAI AREA CONTROL CENTER/1420/08.10.2010

## DOCUMENT PRODUCTION

The following table shows the experts, who have coordinated the different contributions, produced, reviewed and approved this document

	ORGANISATION	OFFICIAL'S NAME	POSITION	SIGNATURE
Prepared	HCAA/AREA CONTROL DEPTMENT/ATHINAI ACC	Kostas PATOURAS	Person of Contact	 07/10/2010
Reviewed	HCAA/AREA CONTROL DEPTMENT/ATHINAI ACC	Roula TANISKIDOU	Head of FMU Section	 08/10/2010
APPROVED	HCAA/AREA CONTROL DEPTMENT/ATHINAI ACC	Dimitris CHALIKOS	ACC Director	 08/10/2010

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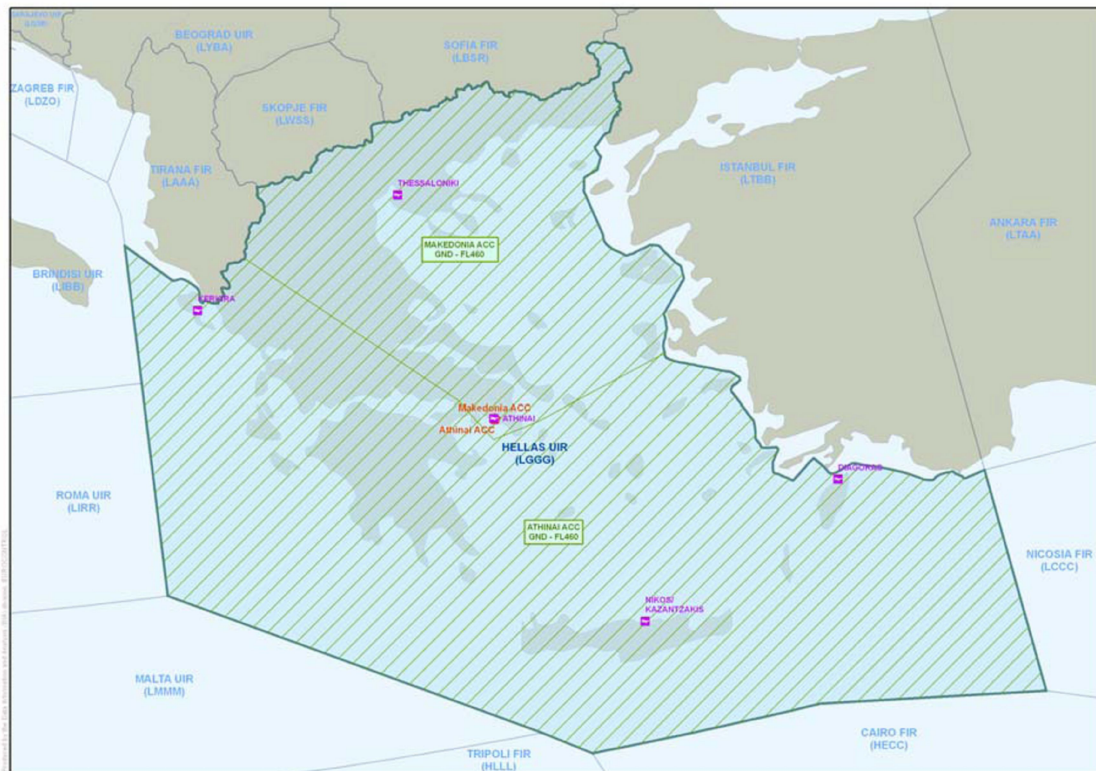
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## FOREWORD

### ACC overview

Athinai/Makedonia Area Control Center, in its present form and location, commenced operations in early 1999 and provides Air Traffic Control Services within Athinai FIR/HELLAS UIR up to FL 460.



Both ACCs operate in the same Operational Room (area: 1000 m<sup>2</sup>) located in the Athenian suburb of Hellinikon where the old LGAT airport was located.

All neighboring States participated in the Trial except for HECC to the South.

23 TMAs are located within the Athinai FIR providing services to 26 controlled Aerodromes.

The ATC En-route units in the Greek airspace, which are of concern to this document, are the following:

ATC UNIT	NUMBER OF SECTORS	Associated FIR(s) – UIR(s)	Remarks
ATHINAI ACC	11	ATHINAI FIR/HELLAS UIR	Athinai ACC (LGGG)
MAKEDONIA ACC	7	ATHINAI FIR/HELLAS UIR	Makedonia ACC (LGMD)



Sectors are either HIGH or LOW.  
No MEDIUM sectors exist.

Division Level for Athinai ACC: FL 305  
Division Level for Makedonia ACC: FL 345

Athinai/Makedonia ACC receives large numbers of southbound arriving aircraft and handles equal amount of northbound departing traffic from popular destinations (Greek islands, especially LGIR, LGRP, LGKO, and LGTS – Turkish Aegean coastline, LTBJ, LTFE etc) during the summer season.

The airspace is very complex with large military TMAs, Military Areas, scattered islands, and National and International airspace.

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## Personnel

Athinaí – Makedonia ACC is staffed with 232 personnel.

201 Licensed ATCos divided in 6 shift teams (aprox 34 persons each) appeared on the roster during the 2 days of the trial. 168 were actively involved during the 48 hour trial period. Although 33 were off duty during the trial, they went under the same briefing procedure as everybody.

The vast majority holds the Area Control Surveillance Rating with Radar Endorsement (ACS-RAD). There are a few holding the Area Control Procedural Rating (ACP) and a small number of Student Air Traffic Controllers on their OJT.

Personnel by Gender	
Male	Female
49%	51%

Personnel by Age				
21-30	31-40	41-50	51-60	Over 61
6%	30%	24%	35%	5%

Personnel by Rating		
ACS-RAD	ACP	STUDENT ATCO
89%	9%	2%

ACS – RAD Holders by years in Rating		
0-5	6-12	>13
39%	57%	4%

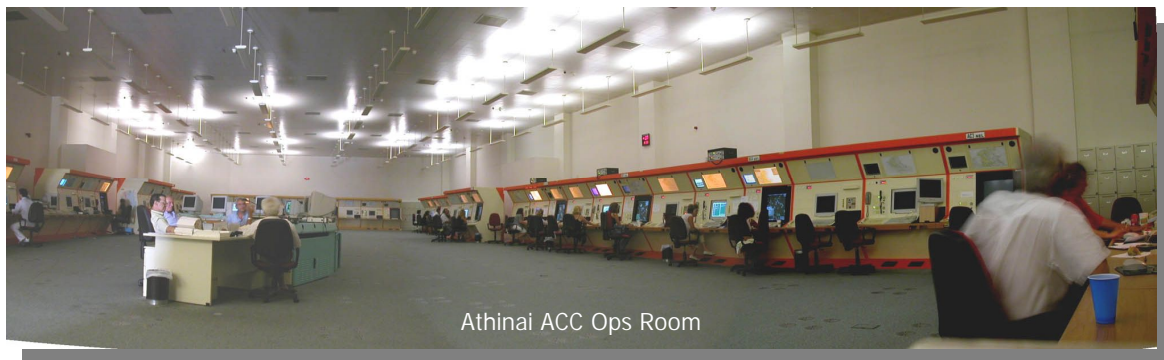


## Equipment

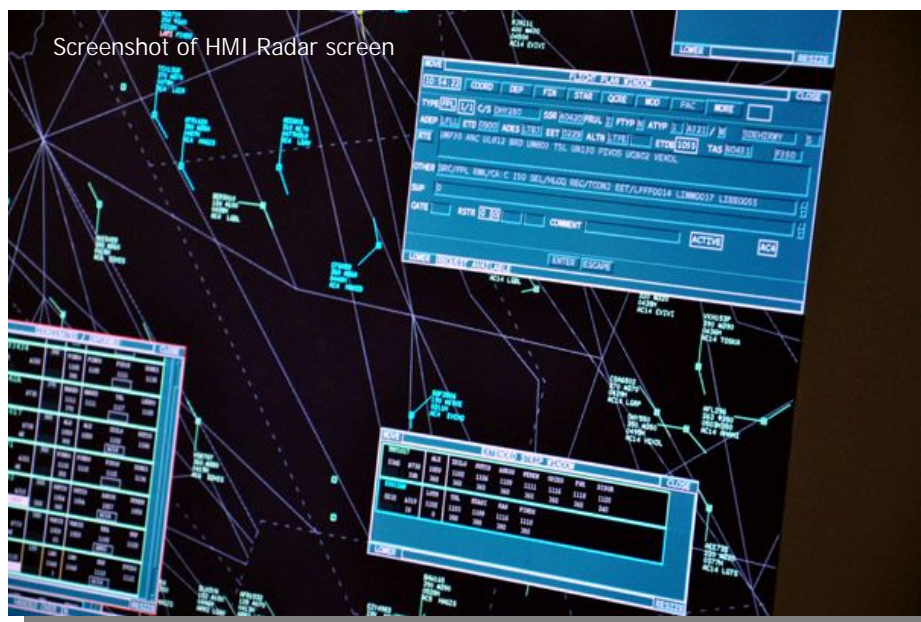
THOMSON'S EUROCAT 2000 upgraded, including Flight Plan Data Processor (FDP).

HMI suites have three (3) ATCO working positions (Executive, Planner and Assistant) although only two (2) are staffed 99% of the time due to staff shortage.

Executive and Planner Controller have a big screen (2000 pixels x 2000 pixels) at their disposal, instant access to the whole Flight Plan and electronic strips.



Athinaï ACC Ops Room



Screenshot of HMI Radar screen

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## PRIOR TO THE TRIAL

**The NOTAM A1714/10 was issued on 08.09.2010.**

**New NOTAM A1847/10 issued on 23.09.2010 for the final dates**

The Area Control Center Director issued Temporary Operational Instructions (TOI) for all staff involved.

Our ref: HCAA/Area Navigation Department/Area Control Center/1294/15.09.2010

TOI was reissued on 24.09.2010 to reflect the new dates. (30.09-01.10)

Our ref: HCAA/Area Navigation Department /Area Control Center/1349/24.09.2010

### Brief outline of TOI:

1. Six persons (one per team shift) were appointed responsible for briefing the ATCOs prior to the trial and supervising proper operations during the trial
2. Each person appointed was responsible for approximately 35 ATCOs
3. Numerous 45 minute briefing sessions in two briefing rooms (10 person capacity each) were carried out for all personnel from 18/9/2010 to 28/9/2010, supported by PowerPoint presentation and handouts (98% of personnel briefed). Some briefings lasted up to 60 minutes depending on volume of questions. Some ATCOs attended briefing sessions twice.
4. A tactical ATC Feedback form was devised (paper and electronic version. Details to follow).
5. Provision was made for the filled Feedback forms to be collected, studied and further utilized.
6. Flight Level Adherence Days Guidance and Information Version 1.0 - 30 June 2010 document was taken under consideration for our TOI
7. FL Adherence Day Guidance - annex 3 – clarifications (10 Sep) were taken under consideration for our TOI
8. [www.adherencedays.com](http://www.adherencedays.com) FAQs for ATCOs were taken under consideration for our TOI
9. Open language reminder was advised for ATCOs to use in case the pilot insists on getting higher level than filed. (Specific instructions were given for no protracted argument on the frequency):  
« (You are reminded that) European Flight Level Adherence trial in progress. NOTAM: A 1847/10»
10. Shift Supervisors were advised to facilitate the briefings prior to the trial and the conduct of the trial itself.

### Other actions

- Brief trials were carried out for all ATCOs to familiarize themselves with the Tactical ATC Feedback form.
- Posters were set up in the ACC building and flyers were handed out to all ATCOs.
- Filled example Tactical ATC feedback form devised and handed out
- Brief article posted on Major Greek Aviation Internet Portal:  
<http://www.aviationnews.gr/article.pl?mcateg=&id=1292>





- Provision made for 150 copies of blank Tactical ATC Feedback forms to be used during the trial.
- A one page reminder of the most important points described in the TOI was posted next to each Radar screen one hour prior to the beginning of the trial. The page remained there for the whole 48 hour period

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## THE HELLENIC TACTICAL ATC FEEDBACK FORM

Flight Level Adherence Days, 30 September – 01 Oct 2010

ΑΘΗΝΑΙ ΜΑΚΕΔΟΝΙΑ ACC

### Tactical ATC feedback form

ΗΜΕΡΟΜΗΝΙΑ: / /2010		ΩΡΑ (UTC)		ΑΠΟ:		ΕΩΣ:	
ΕΤΗ ΣΤΗΝ ΕΙΔΙΚΟΤΗΤΑ		ΑΠΟ 0 ΕΩΣ ΚΑΙ 5 <input type="checkbox"/>		ΑΠΟ 6 ΕΩΣ ΚΑΙ 12 <input type="checkbox"/>		ΠΑΝΩ ΑΠΟ 12 <input type="checkbox"/>	
ΤΟΜΕΑΣ:		ΦΟΡΤΟΣ					
		ΕΛΑΦΡΥΣ <input type="checkbox"/>		ΜΕΤΡΙΟΣ <input type="checkbox"/>		ΒΑΡΥΣ <input type="checkbox"/>	
1	ΣΥΝΟΛΙΚΟΣ ΑΡΙΘΜΟΣ ΠΤΗΣΕΩΝ ΠΟΥ ΧΕΙΡΙΣΤΗΚΑ ΣΤΟΝ ΤΟΜΕΑ (από paper strips μετά την αλλαγή)						
2	ΣΥΝΟΛΙΚΟΣ ΑΡΙΘΜΟΣ ΥΠΕΡΠΤΗΣΕΩΝ ΠΟΥ ΕΙΣΗΛΘΑΝ ΣΤΟΝ ΤΟΜΕΑ (από paper strips μετά την αλλαγή)						
3	ΑΡΙΘΜΟΣ ΥΠΕΡΠΤΗΣΕΩΝ ΠΟΥ ΕΙΣΗΛΘΑΝ ΣΤΟΝ ΤΟΜΕΑ ΜΟΥ ΣΕ ΥΨΟΣ ΔΙΑΦΟΡΕΤΙΚΟ ΑΠΟ ΤΟ RFL						
4	ΑΡΙΘΜΟΣ ΥΠΕΡΠΤΗΣΕΩΝ ΠΟΥ ΕΙΣΗΛΘΑΝ ΣΤΟΝ ΤΟΜΕΑ ΜΟΥ ΣΤΟ RFL 2-3 = (συμπληρώνεται μετά την αλλαγή)						
5	ΑΡΙΘΜΟΣ ΥΠΕΡΠΤΗΣΕΩΝ ΠΟΥ ΕΞΗΛΘΑΝ ΑΠΟ ΤΟΝ ΤΟΜΕΑ ΜΟΥ ΣΕ ΥΨΟΣ ΔΙΑΦΟΡΕΤΙΚΟ ΑΠΟ ΤΟ RFL						
6	ΑΡΙΘΜΟΣ ΥΠΕΡΠΤΗΣΕΩΝ ΠΟΥ ΕΞΗΛΘΑΝ ΑΠΟ ΤΟΝ ΤΟΜΕΑ ΜΟΥ ΣΤΟ RFL 2-5 = (συμπληρώνεται μετά την αλλαγή)						
7	ΑΡΙΘΜΟΣ NEGATIVE ΠΤΗΣΕΩΝ						
8	ΠΟΣΟΙ ΠΙΛΟΤΟΙ ΥΠΕΡΠΤΗΣΕΩΝ ΖΗΤΗΣΑΝ ΑΝΟΔΟ ή ΚΑΘΟΔΟ ΑΠΟ ΤΟ RFL ΚΑΙ ΓΙΑΤΙ;	WEATHER	CONFLICT	EMERGENCY	OTHER (OPERATIONAL)		
9	ΠΟΣΟΙ ΠΙΛΟΤΟΙ ΑΝΑΧΩΡΗΣΕΩΝ ΖΗΤΗΣΑΝ ΥΨΗΛΟΤΕΡΟ ή ΧΑΜΗΛΟΤΕΡΟ ΥΨΟΣ ΑΠΟ ΤΟ RFL ΚΑΙ ΓΙΑΤΙ;	WEATHER	CONFLICT	EMERGENCY	OTHER (OPERATIONAL)		
10	ΣΕ ΠΟΣΕΣ ΠΤΗΣΕΙΣ ΖΗΤΗΣΑΤΕ ΝΑ ΑΛΛΑΞΟΥΝ FL ΑΠΟ ΤΟ RFL ΚΑΙ ΓΙΑΤΙ;	CONFLICT	OPPOSITE LEVEL	LOA	OTHER		
11	ΠΙΣΤΕΥΕΤΕ ΠΩΣ Η ΠΙΣΤΗ ΤΗΡΗΣΗ ΤΟΥ RFL ΑΥΞΑΝΕΙ ή ΜΕΙΩΝΕΙ ΤΟΝ ΦΟΡΤΟ ΚΑΙ ΓΙΑΤΙ;						
12	ΤΟ RFL ΕΙΝΑΙ ΕΥΚΟΛΑ ΠΡΟΣΒΑΣΙΜΟ ΑΠΟ ΕΞΑΣ?	ΝΑΙ <input type="checkbox"/>		ΟΧΙ <input type="checkbox"/>			
13	ΤΟ FLIGHT PLAN ΕΙΝΑΙ ΕΥΚΟΛΑ ΠΡΟΣΒΑΣΙΜΟ ΑΠΟ ΕΞΑΣ?	ΝΑΙ <input type="checkbox"/>		ΟΧΙ <input type="checkbox"/>			
ΔΥΣΚΟΛΙΕΣ ΠΟΥ ΑΝΤΙΜΕΤΩΠΙΣΑΤΕ							

ΜΕΤΑ ΤΗ ΣΥΜΠΛΗΡΩΣΗ ΠΑΡΑΔΩΣΤΕ ΣΤΟΝ ΥΠΕΥΘΥΝΟ ΒΑΡΔΙΑΣ



The Tactical ATC Feedback form was an exact translation in Greek of the example provided in the Guidance material with a few modifications and additions in order to extract useful information:

- Field indicating “Years in Rating”
- Fields indicating WEATHER, EMERGENCY, OTHER under the question: How many Pilots of cruising flights requested a climb above/ below RFL & why?
- Fields indicating WEATHER, EMERGENCY, OTHER under the added question: How many Pilots of departing aircraft requested a climb above/ below RFL & why?
- Fields indicating, CONFLICT, OPPOSITE LEVEL, LOA, OTHER under the question: How many flights were offered a climb above/below RFL & why?
- Addition of question: Was the whole Flight Plan easily available to you?

Special care was taken for the form to not exceed one (1) page.

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## THE TRIAL

At least one person of the previously mentioned six persons appointed, was always present at any given time during the 48 hour Trial period. They were not assigned to any other duties.

Their intervention was needed in numerous occasions for clarifications and guidance for the Tactical ATC feedback forms. The vast majority of ATCos was willing to comply and asked for feedback forms to complete while on duty, sometimes with the help of a third person, especially in cases of heavy workload.

Pilots were very cooperative but not especially aware of what was happening. No reports for any kind of protracted arguments on the frequency.

Weather was not a significant factor.

Few controllers refused to fill feedback forms and thought normal operations were inhibited by the trial. They agreed to follow all other Temporary Operational Instructions.

Shift supervisors provided all the help needed and facilitated the trial to the best of their ability.

The Adherence Days took place without any major operational difficulties

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## RESULTS

168 filled feedback forms were collected after the trial. 12 of them were discarded as inconsistent or erroneous.

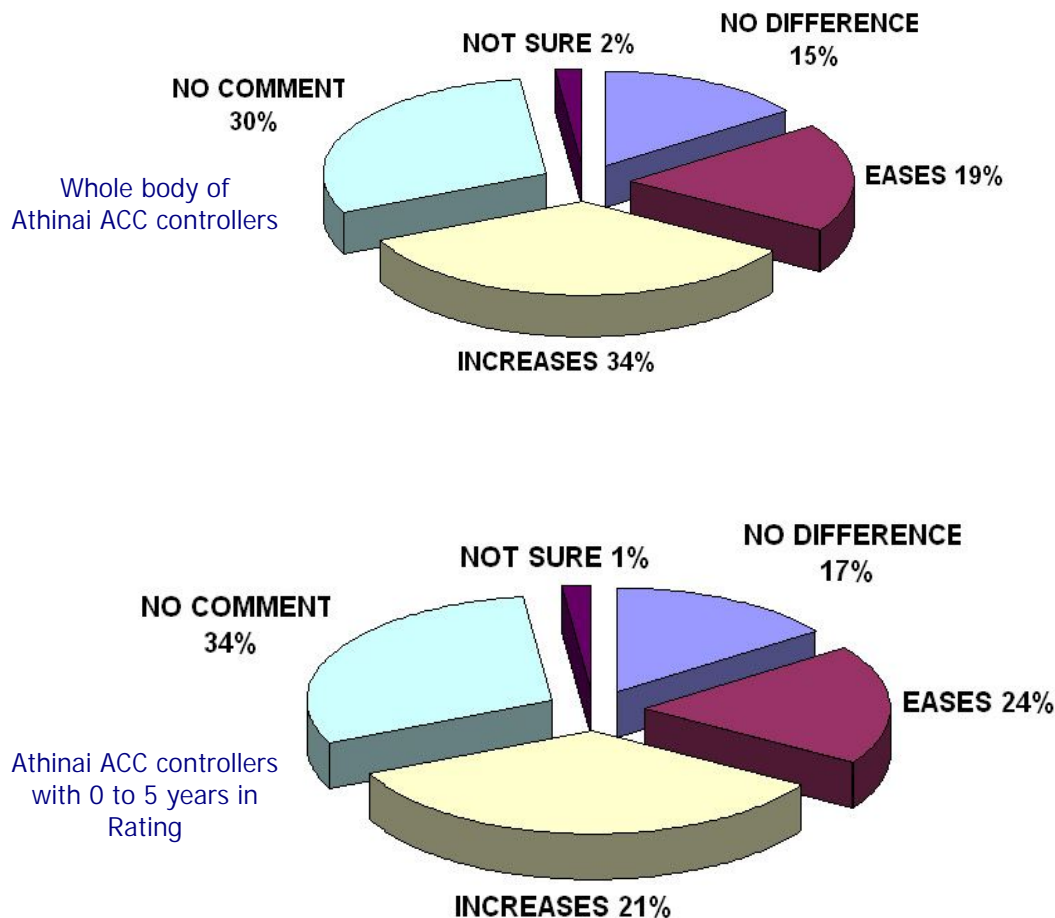
The final 156 which were processed provided the following information:

### Opinions

Do you believe that adhering to RFL increases or eases workload and why?

Approximately a third of Greek ATCos expressed the belief that Flight Level Adherence increases workload mostly because of the additional task of checking the FPL frequently. One out of five Controllers believes that it eases workload because of less communications and significant number states: "No difference". A large number chose not to make any comment.

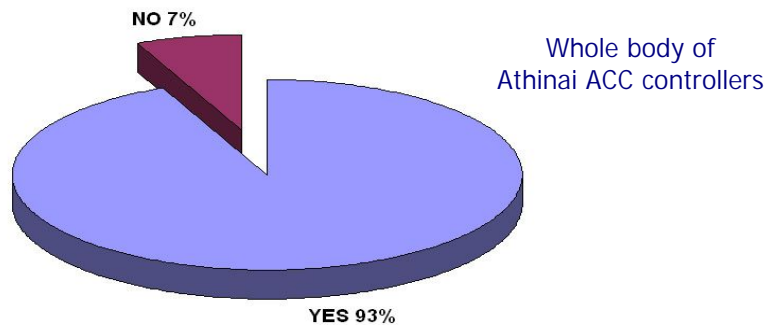
Younger controllers tend to be more in favor of Filed Requested Flight Level Adherence.





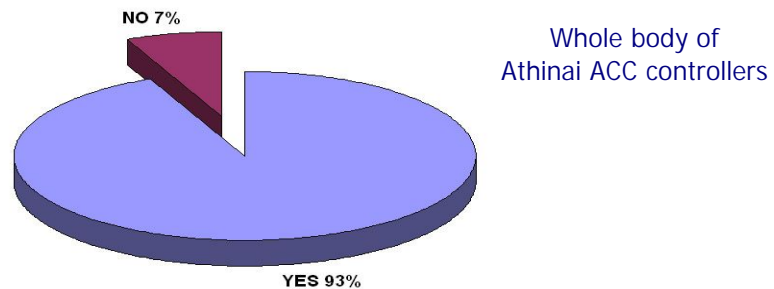
Was RFL data easily available to you?

The vast majority of all the controllers answered “YES” regardless of seniority:



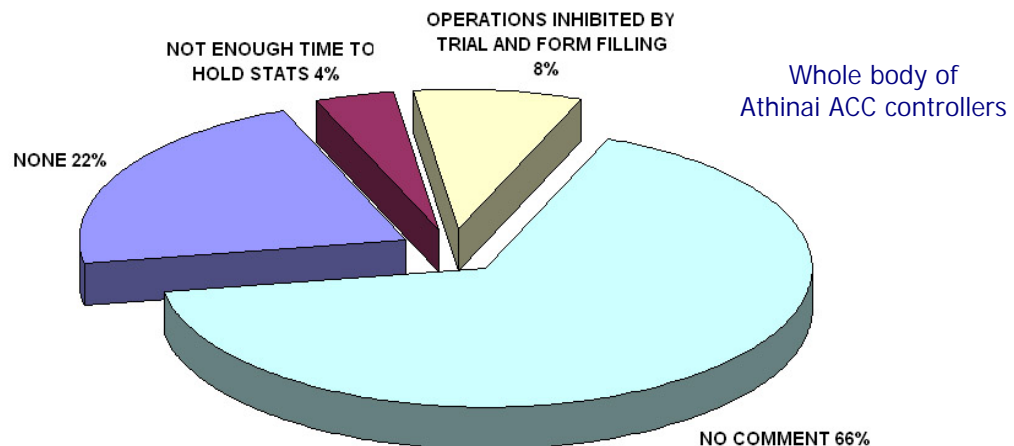
Was the whole Flight Plan easily available to you?

Our System's Flight Data Processor (FDP) provides for instant access to the whole Flight Plan from any screen in the Ops room:



Did you experience any other operational difficulty related to the adherence days?

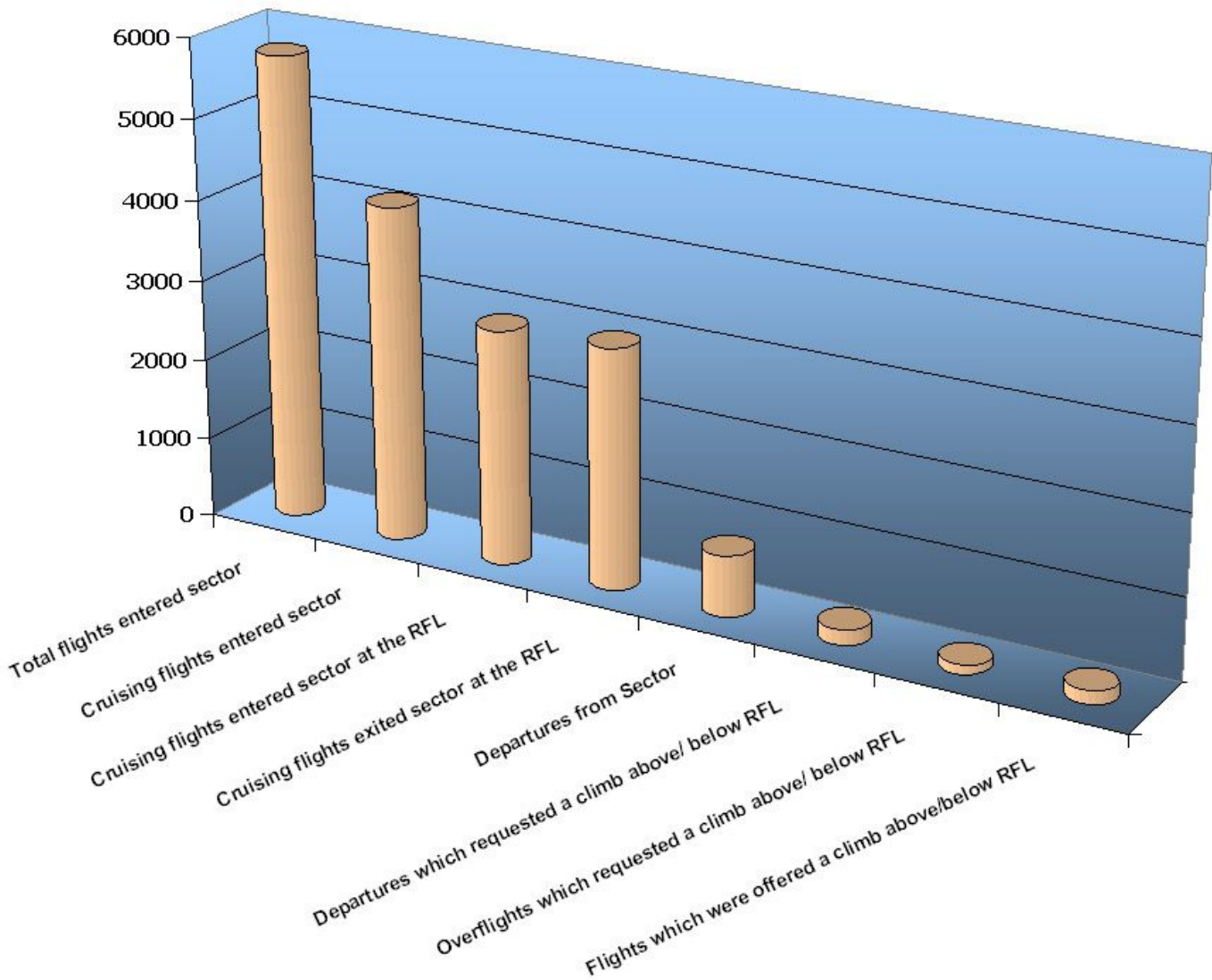
Free text answers were categorized after the trial to these: “None”, “Not enough time to keep stats”, “OPERATIONS INHIBITED BY TRIAL AND FORM FILLING” and “No comment”





## Traffic

According to the forms, a total of 5770 flights were handled. This is a consolidated chart which depicts what happened in brief:



Total flights entered sector	Cruising flights entered sector	Cruising flights entered sector at the RFL	Cruising flights exited sector at the RFL	Departures from Sectors	Departures which requested a climb above/ below RFL	Overflights which requested a climb above/ below RFL	Flights which were offered a climb above/below RFL
5770	4164	2915	2982	761	194	107	160





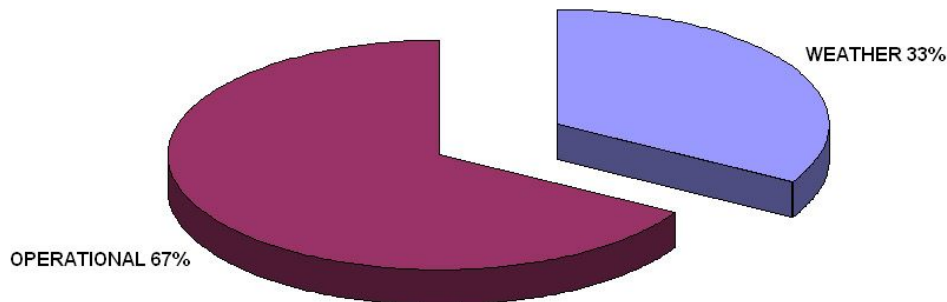
70% of all the cruising flights that entered sectors were at their RFL. This is slightly higher than any other working day.

On northbound traffic entering from HECC no measurable difference existed and no action was taken to “correct” their cruising level to reflect the filed RFL.

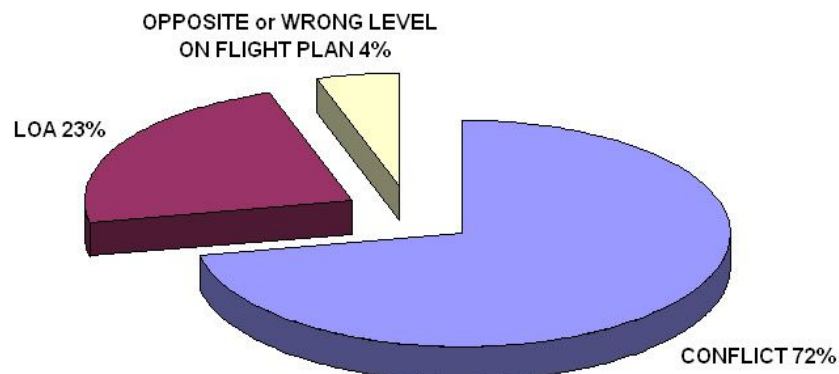
More cruising flights exited the sectors at their RFL than the entering cruising traffic. This indicates that some kind of “correction” occurred, presumably due to the occasional reminders passed to pilots who requested to climb above/below their filed RFL and the level changes pilots asked for when entering from HECC.

25% of the departing traffic from sectors requested a climb above/ below RFL. This is slightly lower than any other working day. When the reminder was passed to them they alleged either operational reason (too heavy) at the 99% of the occurrences or weather conditions - temperature (1%).

3% of all overflying traffic requested a climb above/below RFL.  
Reasons offered:



3% of all traffic handled was offered a climb above/below RFL by ATCOs.  
Reasons:



High percentage of “Conflict” proves complexity of airspace.

There were virtually no unplanned aircraft entering the sectors (1‰)

Note: All results are similar regardless of traffic levels reported or ATCO seniority (irrelevant to findings).



## FL ADHERENCE CONSOLIDATED ACC REPORT

(as proforma 2 in Guidance material).

Date of report: 06.10.2010	Athinaï Makedonia ACC
Total number of flights handled	5770
<b>Was there any issue with controllers understanding the intent of the day?</b>	
No	
<b>Was the RFL in field 15 of flight plan available to tactical controllers?</b>	
Yes	
<b>Was there any noticeable difference in level compliance?</b>	
<p>70% of all the cruising flights that entered sectors were at their RFL. This is slightly higher than any other working day.</p> <p>On northbound traffic entering from HECC no measurable difference existed and no action was taken to "correct" their cruising level to reflect the filed RFL.</p>	
<b>Was there any change in sustainable capacity above the monitoring value?</b>	
No	
<b>Were there any issues with Pilots wanting to alter RFL?</b>	
<p>Pilots were very cooperative but not especially aware of what was happening. No reports for any kind of protracted arguments on the frequency.</p>	
<b>Were there any tactical controller issues relating to adherence to the filed FL?</b>	
No, whoever felt uncomfortable was invited to note it on the feedback form.	
<b>Was there any issue with controllers thinking service provision was being inhibited?</b>	
<p>Only a few controllers refused to fill feedback forms and thought normal operations were inhibited by the trial.</p>	
<b>If so: How was the issue factually determined?</b>	
<p>They agreed to follow all other Temporary Operational Instructions and in some instances a third person was appointed to help.</p>	
<b>Any Other issues</b>	
None	