AMC – Key Issues

- ✓ What is the AMC?

- ✓ Why the need for AMC?

- ✓ AIRAC cycle?

- ✓ How do we use the AMC?

- ✓ On day of AMC update?

- ✓ What if someone doesn't do it?

- ✓ How to get started?

What is the AMC?

✓ ATS Messaging Management Centre is a repository of world-wide AMHS addressing data managed by EuroControl

✓ ICAO mandates an update of AMHS addressing information on the 28-day AIRAC cycle

Why the Need for the AMC?

✓ AMHS data changes regularly

- Addressing scheme changes: e.g. XF to CAAS
- Additional facilities

✓ It is essential, for both efficiency and safety, that all operational systems have the same data set

✓ How can this be achieved?

✓ Use of AIRAC data

AIRAC Cycle

✓ What is AIRAC?

- Aeronautical Information Regulation And Control
- Stems from ICAO Annex 15 - Aeronautical Information Services (AIS)
- Defines a series of common dates and an associated standard aeronautical information publication procedure for States.

✓ What is the AIRAC cycle?

- Adopted by ICAO in 1964 and further improved over the years
- Worldwide effective dates with 28 day intervals
- Effective days are always on a Thursday.
- Last was September 19
- Next will be October 17

How This Applies to AMHS

✓ All addresses world-wide are converted between AFTN/CIDIN and AMHS during AMHS message exchange (each AFTN address in a message is converted to AMHS)

✓ As previously mentioned, EuroControl maintains this addressing information within the AMC

✓ ICAO mandates an update of this AMHS addressing information on the 28-day AIRAC cycle

How Do We Use The AMC

✓ Files containing addressing information can be downloaded from AMC web site by registered users (3 .csv files)

- AMHS Management Domain Register
- AMHS CAAS Tables
- User Addresses

✓ Process these files as per AMHS vendor instructions

- This is an off-line activity in preparation for system load

How Do We Use The AMC (cont'd)

✓ Install on operational systems on AIRAC cycle day (more discussing upcoming on that)

✓ Note that there are not always going to be changes for every cycle

   ▪ Changes are posted to AMC bulletin board on day 14

AMC Procedure Cycle

✓ Within the 28-day AIRAC cycle, days are identified for update, verification and retrieval of AMC data

✓ Some examples:

- Day 14: Changes identified and posted to bulletin board
- Day 21: Data moved to pre-operational area
- Day 24: Data moved to operational area for download

✓ See table on next slide

AMC Procedure Cycle

Day in Cycle		Data Entry by CCC / Ext COM / AMC	Data Validation and Processing by AMC	ACK Phase by CCC	ACK Processing by AMC	Data Retrieval and Implementation (by CCC) Data Publication (by AMC)
1		███				
2		███				
3		███				
4		███				
5		███				
6		███				
7		███				
8			🟥			
9			███			
10			███			
11			███			
12			███			
13			███			
14			🟪			
15				███		
16				███		
17				███		
18				███		
19				███		
20				███		
21					███	
22					███	
23					███	
24					🟦	
25						███
26						███
27						███
28						🟨

LEGEND

🟥	AMC Operator locks COM Centres	
🟦	AMC Operator releases the routing matrix	
🟪	AMC Operator transfers to pre-operational area	
🟨	AMC Operator moves data to operational area, unlocks COM Centres and makes official publications; CCC Operators use new data for operational service	
🟩	Weekends	

On Day of Update

✓ Need to have identified staff involved in update

- Operational staff?
- Technical staff?
- Vendor assisted?

✓ Have a plan to minimize impact during update

- Hold incoming/outgoing traffic through AMHS
- Capabilities will depend on system configuration

✓ Coordinate with associated remote systems

- Ensure awareness of your potential down time
- Understand remote systems' potential down time as it affects your return to service

What If Someone Doesn't Do It?

- ✓ Data will not be in sync with other operational systems

- ✓ Run the risk of unroutable / non-deliverable messages

- ✓ See operational example on following slide

What If Someone Doesn't Do It? (cont'd)

- ✓ AMC update of May 2, 2013 had the following changes for Cambodia
    - changed from XF to CAAS
    - changed PRMD from VD to CAMBODIA
- ✓ The U.S. performed the update but a neighboring country did not
- ✓ The U.S. then routed messages to Cambodia through the neighboring country

(cont'd)

What If Someone Doesn't Do It? (cont'd)

✓ Neighboring country discarded the messages and sent a notification to their Control Position that indicated "unroutable message"

✓ No error (NDR) was returned to the U.S., and other messages continued to be sent to that country

✓ As a result, it was initially unclear as to what was happening

✓ The messages eventually timed out on U.S. MTA queue

How To Get Started

✓ Register as AMC User; user categories include:

- CCC (Cooperating COM Centre) Operator – international COM Center in EUR/NAT Region

- External Operator – International COM Center outside of EUR/NAT Region

- AMF-I User – Represents ANSP for purposes of that ANSP's implementation of AMHS in their COM Center

✓ Registration site (on last page of this doc) contains a User Types video

✓ Additional information and training resources are available from EuroControl

Some Additional Reference Sites

✓ General AMC Information

  http://www.eurocontrol.int/amc

✓ New User Registration

  http://www.eurocontrol.int/content/amc-registration

✓ AMC User Training

  http://www.icao.int/NACC/Documents/eDOCS/CNS/AMCTrainingSlidesV3-0b.pdf

✓ AIRAC Information

  http://www.eurocontrol.int/articles/airac-adherence-monitoring-phase-1-p-03