

Case Study

Radar recording requirements satisfied by CWP recording at Uruguay's capital

DINACIA (Dirección Nacional de Aviación e Infraestructura Aeronáutica) is the Air Traffic Control authority in Uruguay, responsible for the recording equipment at Montevideo and three regional airports.

Cnel. Angel Vanzini, Director at DINACIA is looking forward to the benefits brought about by installing an AudioSoft "at the glass" screen recording system to satisfy ICAO radar recording requirements.*

Background

Cnel. Angel Vanzini is a Director at, DINACIA, which is responsible for the airspace above Uruguay.



Due to the ever increasing volumes of air traffic a decision was made by Cnel. Vanzini and the Directors at DINACIA to replace ageing analogue recording devices at Carrasco airport in Montevideo with a digital system. In compliance with ICAO regulations* when upgrading the audio recording part of the system, it was

also mandatory to upgrade the system to record primary and secondary radar.

Wide variety of media

To fit in with DINACIA's upgrade plan, Cnel. Vanzini needed a recording system

that was able to preserve data from a number of sources including audio channels (both comms and ambient noise), traditional serial radar channels, Asterix radar channels and a Controller Workstation Position screen.

DINACIA required a complete solution that was fully compliant with ICAO requirements but would be flexible enough to cope with changing recording requirements.

Of particular importance was the ability to record a wide variety of media through the same interface with synchronised replay through a single playback application.

Robust, Reliable and Best of Breed

DINACIA needed a solution that would be robust, reliable and easily expanded to meet future changes to the ATC system.

AudioSoft were chosen as the preferred supplier to DINACIA having satisfied all the requirements at a competitive price.

Flexible Solution

In order to protect his investment, Cnel. Vanzini chose a system with both traditional radar recording and "at the glass" CWP screen recording in order to best meet ICAO requirements*, the advantages of which include:

- ▶ Recording system is completely independent of the radar system – does not affect safety case
- ▶ All user actions as well as the displayed radar will be recorded

"Key to this decision was the excellent performance of AudioSoft recording equipment currently installed in three further airports in Uruguay"

Cnel. Angel Vanzini

* State Letter reference AN 13/13/1-05/37 issued on the 24th March 2005, "Adoption of Amendment 43 to Annex 11"

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- ▶ Ideal solution for training purposes as it faithfully recreates the CWP screen
- ▶ Captured screen images can be merged with the recorded audio and exported into industry standard formats for replay in a standard Windows media player
- ▶ Configured for a 1600x1200 screen but can easily be upgraded to record 2k x 2k.

Clear benefits

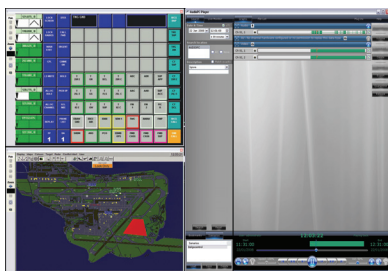
As well as the flexibility of "at the glass" CWP recording, Cnel. Angel Vanzini has become aware of other key benefits offered by the partnership with AudioSoft:

▶ Improved Reliability

Web-based monitoring allows unmanned operation, safe in the knowledge that any alarms will immediately alert an engineer. AudioSoft's heartbeat alarm technology ensures alarm notification, even in the event of complete power failure to the recorders. The heartbeat technology uses SNMP communications, allowing future integration with commercial monitoring packages such as HP's OpenView.

▶ Improved Capability

A Graphical User Interface designed by ATC operators overcomes any potential problems with identifying active channels during incident operations or maintenance.



This same interface can be used to show serial radar, network radar and screen channels as well as the audio for ease of synchronised replay and analysis.

▶ Improved Supportability

AudioSoft systems in Uruguay are supported by Telefax, AudioSoft's in-country agent, whilst the use of standard PC components makes maintenance straightforward and cost effective.

AudioSoft's train-the-trainer methodology and dedicated systems trainer allows for ease-of-use, whilst AudioSoft's new training facility in Cirencester offers modern facilities and a natural learning environment.

*"Thank you for your excellent products, support and expertise"
Cnel. Angel Vanzini.*

▶ Reduced Costs

The savings from having just a single system to record all these different media are not in the system costs alone but also in the reduction of archive media cost, reduced manpower, reduced maintenance and support costs and reduced training costs, giving DINACIA a quick Return on Investment.

Chassis as small as 2U and 1U were used to ensure all the recording capabilities, including the redundant recorders, could be housed in a single rack

▶ Improved Future

DINACIA have scope to expand the number of CWP recording channels as well as adding AudioWord, a sophisticated transcription tool for incident reconstruction. Further legislative changes may include EuroCAE/datalink recording and the possibility of adding AudioSoft's Speaker Identification tool for security purposes.

*Added Gustavo Galimberti,
Director at Telefax, "Thank you for your excellent support and we look forward to working with AudioSoft in the future"*