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# Blended learning courses

## Aviation Meteorology Case

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## Pilot course objectives

- Enable the trainees to update and deepen general knowledge in aviation and practical knowledge in meteorology needed for aeronautical forecasting, particularly the awareness of significant weather phenomena for aeronautics
- Demonstrate a new blended learning approach to training in EUMETCAL cooperation context
- Further develop the design and content of the course with the contributions of the participants

## Detailed features (1)

### Target audience

- Meteorologist personnel or equivalent involved in forecasting or meteorological services for the world of aeronautics. The very first session was especially designed for attendees having already some experience in aviation meteorology.

### Prerequisites

- Knowledge of general and aviation meteorology
- Good proficiency in the English language
- Well established personal motivation to participate in new training and communication developments

## Detailed features (2)

### Contents of the course

- Basics of pertinent aviation domains, i.e. flight mechanics, air regulations (airspace, flight rules, operating minima), navigation principles, aircraft and airport operations
- Significant weather phenomena and aviation
  - Poor visibility
  - Aircraft icing
  - Turbulence, wind shear
  - Thunderstorm and hail
  - Jets
- Flight planning and flight operations : effects of meteorological parameters on aircraft performances, effects of meteorological phenomena on operations.
- Synoptic review of regulation and codes of international organisations and ICAO recommendations.
- Training aviation meteorology diagnoses: case studies, real time situations, etc.

# Synchronous distance learning tools and software

## Choice criteria

- Ease to settle and use the software, particularly for trainees
- Ease to deliver the course (particularly to present slides through the software, with animations and quiz) for the trainers
- Good interactivity level : possibility for the trainees to ask for their turn to speak, to give their opinion (understood or not, difficulty or not)
- Availability of a “white board” on which the trainer can deposit documents to be annotated or corrected online, as well by trainees as by the trainer himself
- Quality of the sound (often a weakness)
- Price of the tool

## Sequence of the operations

- During February and March 2007, 7 distance training sessions, followed by 5 days classroom training at Ecole Nationale de la Météorologie in Toulouse
- 35 applications received versus 15 vacancies opened to European services in charge of aeronautical meteorology
- 1 Australian expert coming from the Bureau of Meteorology Training Centre (BMTC), and providing a look from the outside
- Preliminary forwarding of teaching written material, chat window available in real time and associated discussion room open permanently
- A certificate of completion was issued to the trainees based on the results of a final test at the end of classroom session (in quiz form with 30 questions). All participants were effectively awarded with this certificate, taking into account the satisfactory level gained by

each of them

# Evaluation

- Operational running of the course, trainers team level and competencies, ability to deliver a course in English language, educational resources used (particularly the synchronous distance learning platform) were held as the main assets
- As to the future possibilities of progress, the course standard should be more advanced, especially for those sessions aimed at training senior forecasters
- Practical exercises should be more numerous and focused on methods rather than (French) specific tools
- The course content could be completed with self-training modules, put at trainee's disposal, between distance learning sessions

# Quick survey

