RITA2
REPLAY INTERFACE FOR TCAS ALERTS

ACAS TRAINING
## learning from ACAS incidents

EUROCONTROL

History

The Airborne Collision Avoidance System (ACAS) has been operating in European airspace for more than 10 years. During that time its performance has been closely monitored by examining incidents that have involved ACAS equipped aircraft. As a result, EUROCONTROL, in conjunction with the Centre d'Etudes de la Navigation Aerienne (CENA), has developed a PC based tool: Replay Interface for ACAS Alerts (RITA2).

Description

RITA 2 (Replay Interface for TCAS Alerts) is a tool designed for the ACAS II training of air traffic controllers and also for use as an additional, but essential source of information to reinforce the ACAS training syllabus of flight crews.

RITA 2 provides the synchronous replay of reported and analysed ACAS II (TCAS II Version 7) events, which have been selected for their relevance to training issues, by showing, on the same screen, both what the pilots and the controller could see and what they said.
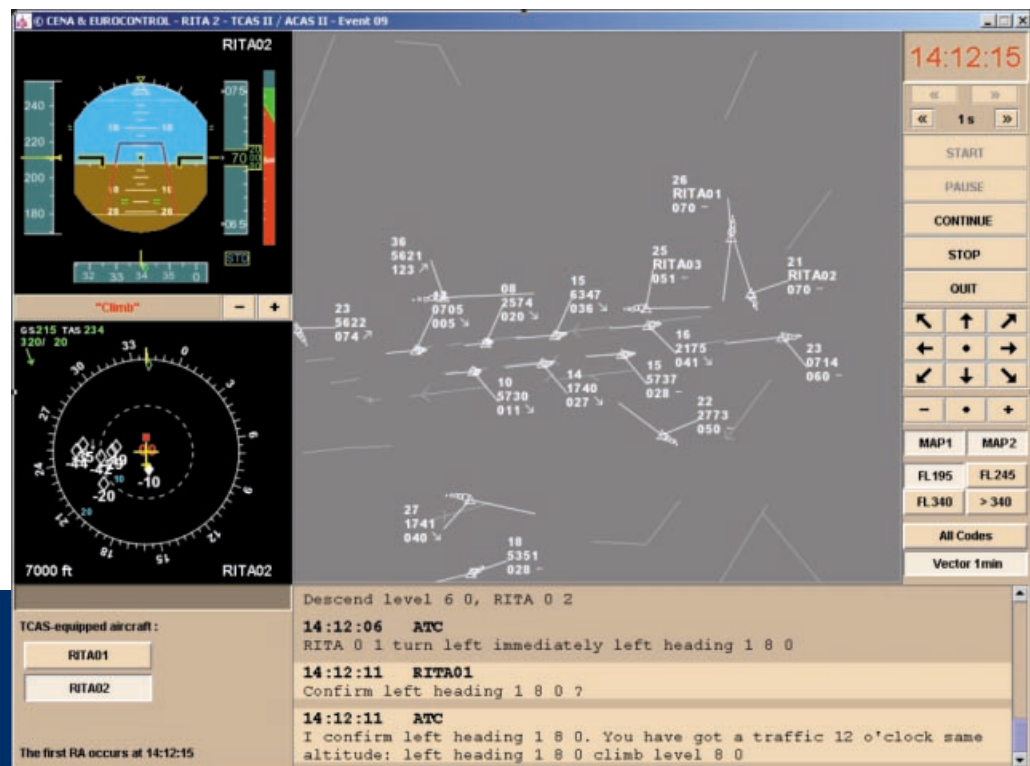
Rita 2
Main Window

Training

To provide high quality training, RITA 2 has been designed to show realistic control situations and to be easy to use by instructors.

Although it is possible to use it individually, RITA 2 is better used with the help of an instructor who has already a good knowledge of TCAS II performance and its effect in the replayed events, so as to focus attention on the important points (i.e. the training objectives of RITA 2) and not on irrelevant details. The most appropriate use of RITA 2 is through briefing sessions to small groups of pilots or controllers. The replay of relevant events with RITA 2 may also help introductory presentations of ACAS II (performances, operational impact, regulation, etc.)
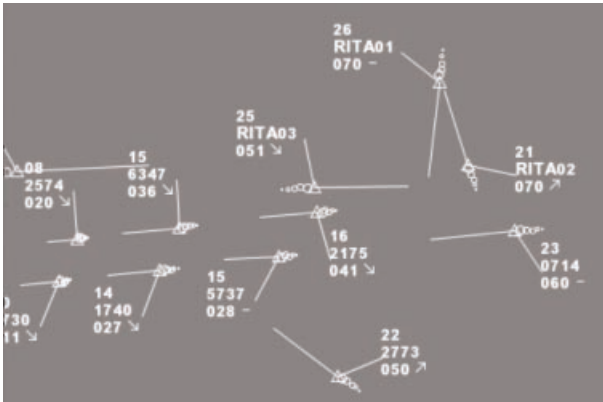
The Display

The display is divided into four parts:

controller's view

the visual display of all traffic, provided from radar data recordings and any STCA (Short Term Conflict Alert) warnings, on a generic controller ODS-like display;

pilot's view

the visual display of the results of the TCAS II alerts by the simulation performed during the analysis of the event, on either an IVSI (Instantaneous Vertical Speed Indicator) or an EFIS (Electronic Flight Instrument System), with the associated aural alarms;
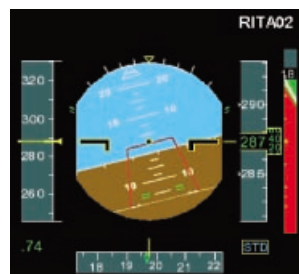
communication

displayed transcripts of the RTF between controller and pilots;
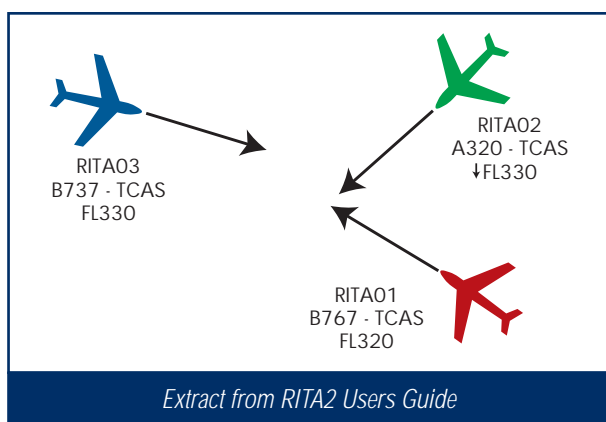
RITA2 control panel

simple command keys to control the event replay sequence (freeze, stop,acceleration,...) and the display options (zoom, translation, maps, altitude band selection,...
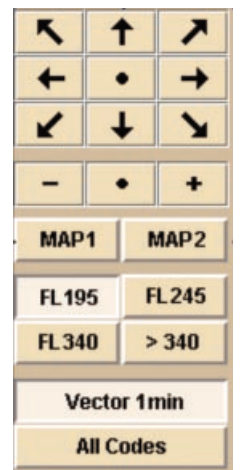
Users Guide

The RITA 2 package includes a User Guide booklet and a CD-ROM for PC. The User Guide booklet is designed to help the instructors in the use of RITA 2 for the replay of the TCAS II events. The CD-ROM also includes a detailed PowerPoint presentation about ACAS II / TCAS II and some additional relevant documents.

Descriptions, commentaries and lessons learnt about each incident are contained in a user guide.

RITA03
B737 - TCAS
FL330

RITA02
A320 - TCAS
↓FL330

RITA01
B767 - TCAS
FL320

Extract from RITA2 Users Guide

Training Courses

Training courses for controller instructors, both about ACAS and how to use RITA2, have been designed by the Institute of Air Navigation Services (IANS) in Luxembourg. Information about those cources is available at www.ians.lu

Course Reservation Office

Telephone number: ++352-43-60-61-205 (307)
Fax number: ++352-42-20-71
Email address: ians.reservation@eurocontrol.int