



LEVEL BUST

The EUROCONTROL level Bust Toolkit contains much advice to help reduce the threat of level busts

The Eurocontrol HEIDI* definition of a Level Bust is "any unauthorised deviation of more than 300 ft from an ATC flight clearance". In RVSM airspace this limit is reduced to 200 ft.

Level busts occur frequently throughout the world, and may result in serious harm, either from a mid-air collision or from collision with the ground (controlled flight into terrain [CFIT]). Occasionally, a rapid avoidance manoeuvre may be necessary, which may result in injuries to passengers, flight crewmembers, and particularly to cabin crewmembers.

By definition, level busts are always the result of pilot action or incorrect action. However, the actions of ATCOs, and of ATM in general, can reduce or increase the chances of a level bust occurring and can have an important effect on the outcome.

The EUROCONTROL Level Bust Toolkit† has been developed as a result of the EUROCONTROL Level Bust Initiative. It contains much important information and advice to help combat the level bust threat. The following is a brief summary of advice for ATCOs.

* HEIDI—Harmonisation of European Incident Definitions Initiative for ATM

† The EUROCONTROL Level Bust Toolkit may be obtained on CD ROM by contacting the Coordinator Safety Improvements Initiative, Mr Tzvetomir Blajev, on tel: +32 (02) 729 3965 fax: +32 (02) 729 9082 tzvetomir.blajev@eurocontrol.int

Lessons Learned

LEVEL BUST - From several safety occurrences we recommend:

- Issue clearances in good time, if possible avoiding periods of high pilot workload;
- Control the speed of transmission especially when pilots are unfamiliar with the area or may have language difficulties;
- Take care not to clip transmissions;
- Use standard phraseology to ensure clear and unambiguous pilot-controller communications;
- Limit the number of items of information in a clearance to a maximum of three;
- Never combine a frequency change with any other clearance;
- Take care to avoid confusion between different items of information, especially heading, speed and flight level;
- Never omit call-signs in a transmission;
- Use of full call-signs reduces the potential for call-sign confusion;
- Take particular care when issuing a clearance to FL 100 or FL 110;
- When two different languages are in use on the same frequency, pilots who do not understand one language may lose situational awareness;
- Insist on full readback after issuing a clearance - "Roger" is not a satisfactory alternative;
- Listen carefully to the read-back and correct any error or apparent misunderstanding of an instruction;
- Do not use readback time to carry out other tasks;
- When circumstances permit, monitor the actions of aircraft after a clearance has been passed, especially if there is reason to believe the clearance may have been misunderstood;
- Notify the pilots involved whenever two aircraft with similar call-signs are on frequency—always report such occurrences and any confusion that results;
- If a blocked transmission is suspected, ensure that both aircraft retransmit their messages and confirm carefully that a clearance has not been taken by an aircraft for which it was not intended;
- Do not issue avoiding action following notification that an aircraft is responding to a TCAS RA;
- In an emergency, use clear and concise communications, allow the pilots time and airspace to deal with the emergency, and when possible, reduce distraction by clearing other aircraft from the frequency.