

# Investigation Report

6X013-0/00  
May 2001

## Factual Information

Kind of occurrence:	Serious incident
Date:	30.06.2000
Location:	near Zagreb
Aircraft:	Transport category aeroplane
Manufacturer/type:	Airbus Industrie/A 321-231
Injuries to persons:	no injuries
Material damage	aircraft not damaged
Other damage:	none

### History of the flight

On June 30<sup>th</sup>, 2000, during a flight from Düsseldorf to Antalya with an Airbus A321 with 214 passengers and seven crew members aboard, slight cabin pressure variations occurred at flight level FL330. Shortly afterwards there was a rapid cabin de-pressurization. The cabin pressure altitude increased to more than 14000 ft and the passenger oxygen masks deployed automatically.

The flight crew initiated an emergency descent and landed at Vienna-Schwechat Airport. None of the occupants had suffered injuries.

### Investigation

The investigation revealed that the rapid depressurization had been caused by a malfunction of the cabin pressure controller (CPC) of the series 9, which after a defect on the outflow valve (OFV) of the cabin pressure system could not take over the

regulation of the cabin pressure. Within a very short time the outflow valve opened fully resulting in a rapid cabin depressurization and the activation of the oxygen masks so that an emergency descent had to be performed. The flight crew had not tried to eliminate this malfunction by manual action.

From the Airbus Industrie Service Bulletin (SB) A320-21-1116 and the SB 15702-21-006 issued by Nord Micro, the manufacturer of the cabin pressure controllers (CPC), it is clear that the CPC up to and including series 9 had already been recognized for some time as being susceptible to malfunctions and thus have been replaced by the series 10. According to a statement given by Nord Micro, a worldwide CPC replacement programme is in progress.

Pending the replacement of the CPC systems by those of the series 10, Airbus Industrie have issued for the operation of CPC the Operations Engineering Bulletin (OEB) 139/1 dated November 1998 describing this malfunction and a special procedure to eliminate this malfunction.

According to information available to the BFU a series of similar incidents caused by malfunctioning series 9 CPC had happened during the last few years.

## Analysis

In this case as had been found out during the investigation by the BFU the CPC had not been replaced yet by CPC series 10. In addition the procedures to eliminate the problem as described in the OEB 139/1 had not been known or had not been sufficiently known to the operator and the flight crews.

## Conclusions

The serious incident had been caused by a known technical malfunction of the cabin pressure controller.

The flight crew had not tried to eliminate the malfunction by manual action as had been recommended by the manufacturer.

Pending the replacement of the cabin pressure controllers by series 10 cabin pressure controllers on the types A 319 / 320 / 321 the Operations Engineering Bulletin (OEB) 139/1 issued by the manufacturer Airbus Industrie should be included in the checklists of the aeroplanes concerned.

investigator-in-charge

Müller

powerplant

Dorner-Müller

flight performance

field investigation

## Safety Recommendation

Based on the present investigation the BFU had issued the safety recommendation 06/2000 dated July 19<sup>th</sup>, 2000.