

CAD proactively follows up on momentary hitch of ATMS

The Flight Data Processors (FDPs) of System I of the Civil Aviation Department (CAD)'s Air Traffic Management System (ATMS) experienced a momentary hitch on August 13. After the technical staff on-site switched the ATMS to System II, an identical system, in accordance with the established procedures, the processing and display functions of the FDPs returned to normal. The occurrence lasted six minutes. Throughout the occurrence, full information (including flight position, altitude information, secondary surveillance radar code, call sign and aircraft type) of the vast majority of flights in the Hong Kong Flight Information Region (HKFIR) was continuously displayed on the radar screens, except for three flights for which only the three essential types of information, i.e. flight position, altitude information and secondary surveillance radar code, could be shown. Aviation safety was not affected by the occurrence.

The Air Traffic Control Officers (ATCOs) were able to keep direct voice communication with the pilots at all times and simultaneously obtain all flight information (including full information of the three flights mentioned above) through the displays using Automatic Dependent Surveillance-Broadcast technology to provide air traffic control (ATC) services. As a precaution, the ATCOs deferred giving clearance to departing flights momentarily for about six minutes. Arrivals and flights flying through the HKFIR were not affected.

"At 4.20pm on August 13, the ATMS issued an alert stating that the FDPs were not functioning properly. The technical staff on-site immediately followed up and carried out investigations. Having co-ordinated with the ATC supervisors on-site, the technical staff switched from System I to System II according to the established procedures at 4.26pm. The ATCOs then continued to provide services as usual. Once System I was rebooted, the operation of System I returned to normal and it then served as a backup as per design," a CAD spokesman said.

"The ATMS has built-in multiple fallback systems to tackle different scenarios. System I and System II are independent but identical systems with the same design and functionality, which can immediately take up the role of each other in the event of an outage for maintaining ATC services continuity. During the occurrence, the ATMS dealt with unexpected situations and sustained continuous ATC operations as per design. Professional ATCOs and engineers also responded to the occurrence in a timely and prudent manner in accordance with training and established procedures. It was not necessary to activate the Ultimate Fallback System of the ATMS in the process," he added.

The CAD attaches great importance to the occurrence. The contractor was tasked right after the occurrence to conduct a thorough investigation and come up with a solution as soon as possible. The CAD will continue to follow up on the occurrence proactively.