RUNWAY EXCURSION

Each year we hear of many runway excursion accidents and incidents. Some of these result in tragic loss of life and untold misery for the families and friends of those involved. In other cases, heavy financial losses may result, from the damage to aircraft and the buildings or other items struck by the aircraft, as well as the consequential financial costs, which may be very large. Even when there is no injury and damage is slight, the effect on the airline may be considerable due to loss of passenger confidence etc. The effect of closing a busy airport, even for a short time while the aircraft is cleared from the manoeuvring area, must also be taken into account.

Runway excursions have many causes, including the following:

- Technical malfunction (brakes, landing gear, nose-wheel steering, power units, flaps, speed brakes, etc.)
- Extreme weather (wet or slippery runway, strong or gusting winds, wind shear, turbulence, etc.)
- Pilot error (e.g. unstabilised approach, or decision to land when a go-around or diversion would be more appropriate)
- Controller error (poor positioning for the approach - alignment, height, speed, distance from preceding aircraft, etc.)

- Inadequate weather information (out of date or inaccurate weather reports, meteorological equipment failure).

Ultimately, it is the pilot's decision to land, but he/she has to base that decision on known facts. Of course, he/she may make the wrong decision even when the facts presented to him/her suggest that a go-around would be the right decision - that is beyond our control. But we can try to create an environment which will help the pilot to reach the right decision.

Our training and experience guides us in the right direction by telling us how to line up an aircraft for a successful approach and landing. Our standard operating procedures (SOPs) tell us under what conditions we may refuse permission to land or order a go-around, how often we must pass weather reports, when we must allow the pilot to adjust his/her speed for the landing, and so on.

If we follow our training and the SOPs we will have a clear conscience if the aircraft goes off the runway on landing - or will we? Did the pilot know about unusual conditions at our airport? Did we tell the pilot that the last ten aircraft had diverted due to extreme weather? Did we pass on the landing report made by the previous aircraft? Did we… do everything we could?

Lessons Learned

From several safety occurrences we recommend:

- Controllers must recognise and understand the pilots' working environments and constraints;
- Controllers have a primary responsibility for safety, therefore the requirement to position aircraft so that a safe approach and landing is possible is overriding;
- Altitude or speed restrictions should be clear and unambiguous and must be removed as soon as they cease to be necessary;
- In bad weather conditions, pass the pilots any additional information that will help them to make the correct landing decision.