



**Aviation Safety Council
Taipei, Taiwan**

**UNI AIR FLIGHT 815 MD-90, B-17919,
RUNWAY EXCURSION AFTER
LANDING IN THE RAIN**

Executive Summary

Executive Summary

On August 24, 2000, UNI Air flight 815, bearing registration no. B-17919, aircraft type MD-90, departed from Songshan Airport for Kaohsiung International Airport at 1308 local time (Taipei) and landed at 1348:41. After passing the end of Runway 09L and the clearway, the aircraft overran the runway for around 31.4 meters on the grass. No injuries were reported, and the aircraft suffered no damages.

Findings

1. The flight crews were properly qualified and licensed.
2. The aircraft was released for duty according to MEL and complied with airworthiness directives.
3. Weight and Balance of the aircraft was within the regulated limits.
4. The meteorological condition during the accident was conformed to the operating limitations of MD-90 aircrafts of UNI Air.
5. In the Flight Operations Manual, the crew callouts were merely listed till the moment before landing.
6. The check procedures and operations of the pilots were not conformed to the requirements of "MD-90 Flight Crew Operation Manual".
7. The pilots made excessive conversations in the cockpit leading to the reduction of situation awareness and affected flight

operations.

8. The inexistence of the Auto brakes System was not confirmed by the before landing checklist.
9. Landing flaps for wet runway was 28.
10. The landing speed was 12.5 knots faster than normal value.
11. The touchdown point of the aircraft was 3,270 feet from the threshold of Runway 09L, too late to touch down.
12. The timing of the brakes used on the runway was late, the captain was not able to realize in time, and the first officer was not able to realize or remind in time as well.
13. After the aircraft passed the end of runway 09L and the clearway, it overran the runway for around 31.4 meters on the grass, no injuries were reported and the aircraft suffered no damages.
14. The teamwork, coordination and interaction were insufficient among crewmembers.
15. After the accident, the hydraulic pressure, brake system and wheels of the aircraft were all checked to be normal.

Probable Causes

Before the aircraft landed, the inexistence of the Autobrakes System was not confirmed, landing speed was faster than normal speed and the touchdown was overshoot; After touchdown, the focus of the flight crew was not completely on maneuvering the aircraft, insufficient teamwork and too late to decelerate leading to the incapability of stopping the aircraft on the runway.

Safety Recommendations

To Civil Aeronautics Administration (CAA)

1. Review the examining system and the executing status of the “Flight Operations Manual” of UNI Air, and the training and supervision of the company. (ASC-ASR-00-12-001)
2. Supervise and test UNI Air pilots of the comprehensive levels of all relevant manuals and regulations, the operating procedures and the practice of crew callouts. (ASC-ASR-00-12-002)

To UNI AIR

1. Review the requirements and trainings of crew resource management, and implement according to “Nationality Airways Crew Resource Management”. (ASC-ASR-00-12-003)
2. Review the differences between Flight Operations Manual and the Flight Crew Operation Manual, and make explicit regulations. (ASC-ASR-00-12-004)
3. Review the responsibilities of Captain/First Officer or Pilot Flying/Pilot Not-Flying during each phase of flight, and make explicit definitions for abnormal situations. (ASC-ASR-00-12-005)
4. For aircrafts without auto brakes systems in the MD-90 fleet, establish related operating regulations, check procedures and notes according to the differences aircrafts equipped with autobrakes systems. (ASC-ASR-00-12-006)
5. Establish principles of the timing for explanations and conversations inside the cockpit according to the flight

operations, teamwork, coordination and interaction situations .(ASC-ASR-00-12-007)

6. Carry out flight operations and check procedures according to “MD-90 Flight Crew Operation Manual”. (ASC-ASR-00-12-008)
7. Make sure the choice of landing configuration is made and based on the advice of “MD-90 Flight Crew Operation Manual”, combined with the aircraft and the environmental circumstances. (ASC-ASR-00-12-009)
8. Review the operations and crew cooperation regulations in the after landing phase. (ASC-ASR-00-12-010)

Intentionally Left Blank