



Civil Aeronautics administration

Aviation Safety Bulletin

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Subject : Relevant stipulations in the aircraft maintenance manual (AMM) shall be followed when towing aircraft to preclude human errors that may cause ground safety event.

Background :

A B737-800 passenger aircraft operated by a national air carrier was being towed to the taxiway where the tug driver intended to change the way of towing from pushing-back to forward-towing. The aircraft experienced a free backward sliding after the tug was separated from the aircraft and the aircraft failed to stop until it hit another aircraft, owned by the same operator, on the taxiway awaiting to be towed to the ramp. This incident caused the serious damage of the left-hand side elevator and horizontal stabilizer of the said B737-800 aircraft and the structure damage of left-hand side cockpit of another aircraft that was hit.

The investigation conducted by CAA revealed that the direct cause of this incident was that the mechanic, who was a member of the towing team, sitting in the cockpit failed to follow the stipulations in the AMM to establish the brake pressure to 3,000 PSI prior to commencing the tow. He also failed to monitor the residual pressure during several successive on-and-off towing activities, thus resulting in inadequate pressure available for braking when it was needed. Moreover, there was no wheel chocks provisioned to stop the aircraft during the tow. According to the aircraft towing procedure established by the company, the said incident could be prevented by the crosschecks between the tug driver and the brake person. However, their poor communication and failure to strictly follow relevant stipulations led to the serious ground safety incident.

Recommendation :

1. The aircraft towing or any maintenance activities shall be conducted by faithfully following relevant stipulations.
2. For any maintenance activity that involves more than two interfaces, the training of maintenance resource management (MRM) should be enhanced.
3. The operator shall confirm whether the tools and equipment are adequate to meet the task requirements by reviewing the stipulated procedures.