

Occurrence Report

AE737

State reporting	Taiwan Island	Date entered	2011/11/1
Reporting org.	Taiwan (ASC)	Report last modified	2014/7/9 PM 04:18:16
State file number	ASC-AIR-02-10-001	Report status	Closed

Headline Ground Collision during Ground Movement in TSA Airport, Mandarin Airlines AE737, B-12272, Fokker 50, and UNI Air, B-17920, MD90

Occurrence class	Serious incident	Occurrence category	RAMP: Ground Handling
Local date	2001/9/21 PM 09:10:00	UTC date	2001/9/21 PM 01:10:00
State/area of occurrence	Taiwan Island	Latitude of occ	25:04 North
Location of occ	RCSS Airport	Longitude of occ	121:33 East

Aircraft Involved

Manufacturer/model	FOKKER - 50	Aircraft registration	B-12272
Call sign	MANDARIN	Operator	Taiwan - Mandrin Airlines - (to be coded)
Flight phase	Standing		

Manufacturer/model	MCDONNELL-DOUGLAS - MD90-30	Aircraft registration	B-17920
Call sign	GLORY	Operator	Taiwan - Uni Air - (to be coded)
Flight phase			

TAIWAN ISLAND, ASC-AIR-02-10-001**Filing information**

Headline	Ground Collision during Ground Movement in TSA Airport, Mandarin Airlines AE737, B-12272, Fokker 50, and UNI Air, B-17920, MD90		
State reporting	Taiwan Island	Date entered	2011/11/1
State file number	ASC-AIR-02-10-001	Reporting org.	Taiwan (ASC)

When

Local date	2001/9/21 PM 09:10:00	UTC date	2001/9/21 PM 01:10:00
-------------------	-----------------------	-----------------	-----------------------

Where

State/area of occurrence	Taiwan Island	Latitude of occ	25:04 North
Location of occ	RCSS Airport	Longitude of occ	121:33 East

Classification

Occurrence class	Serious incident	Occurrence category	RAMP: Ground Handling
-------------------------	------------------	----------------------------	-----------------------

Severity

Damage aircraft	None	Damage aerodrome	None
Third party damage	No	Injury level	None

Injury totals

	Fatal	Serious	Minor	None	Unknown	Total
Total on ground	0	0	0	0	0	0
Total on aircraft	0	0	0	0	0	0
Grand total	0	0	0	0	0	0

ATM relation

ATM contribution	None	Effect on ATM service	No effect
-------------------------	------	------------------------------	-----------

NARRATIVE (ENGLISH)

On September 21, 2001, at 21:00 Taipei Time (UTC 13:00), Mandarin Airlines Flight AE737 , aircraft type Fokker 50, registration number B-12272, pushed back from aircraft stand 15 in Taipei SongShan International Airport, flight destination Taichung . When the aircraft was pushed back to the vicinity of the taxiway and just before taxied, at 21:11, collided with UNI Airlines, aircraft type MD90, registration B-17920, moving from aircraft stand 24 to aircraft stand 10 during pushed back. There were two pilots, three cabin crew and sixteen passengers on the Mandarin aircraft when the occurrence

happened; there was one maintenance personnel in the cockpit of the UNI Air aircraft, as for ground staffs, there were a tow-tractor driver and one headset man. No casualties in the occurrence, both aircrafts suffered partial damages. Findings related to the probable causes 1. UNI Air did not dispatch enough staffs for aircraft ground movement; No wing walker near right wingtip when the accident happened. 2. The tow tractor pushed the aircraft backwards with its rear end, therefore the tow-tractor driver had to turn his head to monitor the pushback route, it was not easy to observe obstacles behind the aircraft. 3. During pushback, the headset man sat in the backseat of the tow tractor, visibility was poor and did not monitor the

NARRATIVE (ENGLISH)

conversation between the air traffic controller and the maintenance personnel to inform the tow-tractor driver to stop pushback in time, hence unable to discover the Mandarin aircraft parked on the apron and ready for taxi, therefore leading to the collision. Findings Related to the Risks 1. The controller cleared UNI Air MD90 to push back before the Mandarin Airlines FK50 taxied away, and the UNI Airlines aircraft did not follow the later issued "Hold position" clearance by the controller. 2. The location of Taipei Airport Control Tower could not easily monitor actual aircraft movements on the aprons in visual condition at night. 3. By the time of the occurrence, daily supervision and management mechanism were not established. For instance, inspect if the staff rotation schedule arranged by ground handling operators complied with the norms, supervision and management items such as if duties were performed according to standards, all were not listed in the working content or check card by the flight operation department. 4. Civil Aeronautics Administration Air Transport Division, Flight Standards Division, Airport Flight Operation Division etc., all had different recognitions for the responsibilities of monitoring the aviation ground handling operators; the supervision of ground handling operators was not completely executed. 5. Civil Aeronautics Administration had held ground handling agency coordination meeting for multiple ground safety incidents which affected aviation safety. All airlines, ground handling operators, every division of CAA and airport staffs joined the coordination. The result of the coordination meeting listed all items that should be done by the responsible unit, which were not completely implemented.

EVENTS**Collision between two aircraft both moving on the ground , during Push-back/tow. {Occurrence}**

Air traffic control use of clearance procedure : Inappropriate

Air traffic controller., Visibility from workspace/workplace : Limited

Pushback/towing procedure

: Not complied with

Management., Human interface-Standard Operating Procedures : Not complied with

Driver of vehicle., Visibility from workspace/workplace : Restricted

Ramp/line crewman., Psychological action-decision making : Inappropriate

Ramp/line crewman., Visibility from workspace/workplace : Restricted

Engineering maintenance technician., The interface between humans in relation to ground - ground communications : Poor

Aerodrome personnel., The interface between humans in relation to supervision : Incomplete

Government - Civil Aviation Authority/Administration, Other human - system support issues : Not enforced

WEATHER**General weather conditions**

Weather conditions		Light conditions	Night/dark
Weather relevant	No	Wind speed	
Speed measured at		Visibility	9999 m

Temperature

Air temperature	26 C	Dew point	21 C
------------------------	------	------------------	------

Precipitation and other weather phenomena

Precipitation intensity	Precipitation type	Characteristics
Light	Rain	Showers

FOKKER - 50, B-12272**Aircraft identification**

Manufacturer/model	FOKKER - 50	State of registry	Taiwan Island
Year built	1993	Aircraft registration	B-12272
Aircraft serial number	20286	Call sign	MANDARIN
		Flight number	AE737

Aircraft Operation

Operator	Taiwan - Mandrin Airlines - (to be coded)	Operation type	Commercial Air Transport - Scheduled revenue ops - Domestic - Passenger
Operator type	Corporate/executive	ICAO information	

Aircraft description

Aircraft category	Fixed wing	Wake turb. category	Medium
Propulsion type	Turboprop	Mass group	5 701 to 27 000 Kg
Number of engines	2	Maximum take-off mass	20400 kg
Landing gear type	Tricycle, retractable	GNSS installed	
EFIS	Yes, partial		

Aircraft status

Total cycles a/c	25678	Maintenance docs.	Current
Aircraft total time	13145 Hour(s)	Airworthiness cert.	Valid

HISTORY OF FLIGHT**Itinerary**

Last departure point	Taiwan - RCSS (TSA): Taipei/Songshan Airport - (to be coded)	Flight phase	Standing
Planned destination	Taiwan - RCLG (TXG): Taichung/Shui-Nan Airport - (to be coded)	Duration of flight	
		Occ. on ground	Yes

INJURIES**Injuries**

	Fatal	Serious	Minor	None	Unknown	Total
Pilot	0	0	0	0	0	0
Co-pilot	0	0	0	0	0	0
Cabin crew	0	0	0	0	0	0
Other flight crew	0	0	0	0	0	0
Crew Total	0	0	0	0	0	0
Passengers	0	0	0	0	0	0
Other on Aircraft	0	0	0	0	0	0
Unknown	0	0	0	0	0	0
Total	0	0	0	0	0	0

AIRCRAFT RECORDINGS**Cockpit voice recorder**

CVR location	Rear fuselage	CVR recovery	
CVR Recording medium	Plastic tape	Underwater locator (CVR)	
Number of channels	4	CVR Reason for data loss	None/not applicable
CVR Recording duration	33 Minute(s)	CVR Recording quality	
Hot microphone			

Flight data recorder

FDR location	Rear fuselage	FDR recovery	
FDR Recording medium		Underwater locator (FDR)	
Number of parameters		Reason for data loss	
FDR Recorder type		FDR data recovery	
		FDR Data usefulness	

MCDONNELL-DOUGLAS - MD90-30, B-17920**Aircraft identification**

Manufacturer/model	MCDONNELL-DOUGLAS - MD90-30	State of registry	Taiwan Island
Year built	1997	Aircraft registration	B-17920
Aircraft serial number	53574	Call sign	GLORY
		Flight number	

Aircraft Operation

Operator	Taiwan - Uni Air - (to be coded)	Operation type	Commercial Air Transport - Other - Other
Operator type		ICAO information	

Aircraft description

Aircraft category	Fixed wing	Wake turb. category	
Propulsion type	Turbofan	Mass group	27 001 to 272 000 Kg
Number of engines	2	Maximum take-off mass	75296 kg
Landing gear type	Tricycle, retractable	GNSS installed	
EFIS	Yes, full		

Aircraft status

Total cycles a/c	8194	Maintenance docs.	Current
Aircraft total time	4947 Hour(s)	Airworthiness cert.	Valid

AERODROME**Aerodrome identification**

Aerodrome type	Land	Aerodrome latitude	25:04 North
Location indicator	Taiwan - RCSS (TSA): Taipei/Songshan Airport - (to be coded)	Aerodrome longitude	121:33 East
Aerodrome status	Military airstrip, public	Elevation above MSL	16.404 ft

RECOMMENDATIONS

Recommendations

Recommendations	Procedures - Compliance Procedures - Study/review Other - Aerodrome facilities Personnel - Management
------------------------	--

MANAGEMENT

Occurrence report

Report identification	AE737	Report last modified	2014/7/9 PM 04:18:16
Report moderator		Report status	Closed
Report source	Accident/Incident investigation	Reporting form type	ICAO - Final Report
Date report created	2011/11/1 PM 02:16:15		