

Occurrence Report

B-77008

State reporting	Taiwan Island	Date entered	2012/2/9
Reporting org.	Taiwan (ASC)	Report last modified	2014/7/9 PM 04:43:03
State file number	ASC-AOR-10-01-001	Report status	Data

Headline Helicopter crashed at the side of runway during landing

Occurrence class	Accident	Occurrence category	CFIT: Controlled flight into or toward terrain
Local date	2008/5/24 AM 12:15:00	UTC date	2008/5/23 PM 04:15:00
State/area of occurrence	Taiwan Island	Latitude of occ	24:26 North
Location of occ	RCBS Airport	Longitude of occ	118:22 East

Aircraft Involved

Manufacturer/model	KAWASAKI - BK 117	Aircraft registration	B-77008
Call sign	SUNRISE	Operator	Taiwan - Sunrise Airlines - (to be coded)
Flight phase	Landing		

TAIWAN ISLAND, ASC-AOR-10-01-001**Filing information**

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When

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Where

State/area of occurrence	Taiwan Island	Latitude of occ	24:26 North
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Classification

Occurrence class	Accident	Occurrence category	CFIT: Controlled flight into or toward terrain
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Severity

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

Injury totals

	Fatal	Serious	Minor	None	Unknown	Total
Total on ground	0	0	0	0	0	0
Total on aircraft	0	3	0	0	0	3
Grand total	0	3	0	0	0	3

ATM relation

ATM contribution	None	Effect on ATM service	No effect
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NARRATIVE (ENGLISH)

On May 24, 2008, at 0015 Taipei local time (1615 UTC), Sunrise Airlines, a BK-117B1 helicopter, bearing registration B-77008, crashed on 2900 feet from Runway 24 threshold and the southern side about 20 meters from the runway during approach on KINMEN Airport (RCBS) ILS/DME RWY06, Taiwan. The flight was a ferry flight from Taipei/Songshan Airport (RCSS) at 2215 Taipei local time to RCBS, departed with 2 pilots and 1 EMT (Emergency Medical Technician) aboard, all of the 3 members suffered serious injuries. The helicopter was destroyed. Finding Related to Probable

Causes 1. The pilots did not comply with the instrument flight rules during the approach when visibility were below the limits of the operating minima specified and failed to execute the missing approach procedures when lost visual contact with runway at decision altitude. According to the pilot interview records and radar altitude of MLAT, pilot might lose situation awareness in spatial disorientation then developed a high rate descent on short final approach. The pilots were not able to arrest the rate of descent prior to impact and to cause the occurrence. Findings Related to Risk 1. The

NARRATIVE (ENGLISH)

accident flight had not obtained the valid meteorological information of the destination and/or alternate airports when applied to their departing in Taipei/Songshan airport's Flight Information Station, nor completed flight preparation operation including the operational flight plan before commencing the flight. 2.Sunrise Airlines lack of the appropriate flight operation management in adverse weather condition, such as the detail procedures in the reception and transmission of meteorological information. 3.During the flight, the pilot-in-command conducted the flight without conforming to the Aircraft Flight Operation Regulations. Before commencing the flight, he had not obtained the valid weather information for destination airport or alternate airports, nor complete and certified the operational flight plan; furthermore, he implemented the flight below the aerodrome operating minima, and did not ask his flight crew to fasten safety harness during departure and landing. 4.Before commencing the flight, the pilots did not brief regarding the aerodrome meteorological information including weather forecasts, nor listen in to the latest weather information during the flight, losing several opportunities to aware the effectiveness from adverse weather condition. The pilots did not keep the appropriate situation awareness in usual fog season.

5.Sunrise Airlines did not take any effective prevention implement of the potential threat due to the pilots carried out the task with an empty stomach.

6.After communicated with the flight, the Taichung Approach provided the incomplete weather information to pilots. 7.The flight information officer did not provide the pilots the latest weather information when CM2 submitted the flight plan to Taipei/Songshan Flight Information Station. 8.Taichung Approach did not notify Kinmen Tower immediately after receipting B77008 takeoff information during Kinmen Tower's off duty time. 9.Kinmen Tower did not immediately notify Aeronautical Meteorological Station when receipted the B77008's takeoff information. 10.Without setting comprehensive operating procedures by considering the function and the characteristics of the EMS, and navigation service integrity, Air Navigation and Weather Services of CAA was failure to timely provide needed flight service support to B77008. 11.The pilots did not keep safety harness fasten caused aggravated injury after encountering vibration and collisions. 12.Only one fireman on duty at night in Kinmen Airport's Fire Fighting Station could easily lead to the lack of response ability in an emergency situation. 13.The management system of the Sunrise Airlines failed to ask neither staffs to comply with all regulations and specifications, nor to operate in accordance with the requirements of the aviation safety and the flight operational control. 14.The company's manpower dispatch, aircraft performance, the time limitation in contract, and night flight times, all of these contributing factors would increase operational risk in pilot's fatigue and time pressure. Other Findings 1.The aircraft maintenance manual and wiring diagram manual used by Sunrise Airlines did not incorporate the information of cockpit voice recorder system. 2.The pilots were properly certificated and qualified in accordance with applicable CAA regulations, and normally work and rest within 72 hours before the occurrence; there are no evidence of the occurrence related to drugs or alcohol. 3.Though the visibility was below the operating minima for Kinmen airport, there was no abnormality of the operations of providing weather information and issuing landing clearance by Kinmen Tower after took over the aircraft from Taichung Approach. 4.According to the wreckage inspection, shop test of altimeters, pilot interview, and maintenance record, no evidence indicated the pressure altimeter abnormal before the occurrence. 5. Sunrise Airlines did not have any CVR voice sample records for playing and decoding in this helicopter's annually inspection.

EVENTS**Flight preparation related event , during Standing. {Occurrence}**

Aircraft dispatch weather advisory : Not obtained

*Flight crew., Psychological action-pre-flight planning : Incomplete**Flight crew., Psychological action-procedure violation**Flight crew., Time pressure factors**Flight crew., Meteorological knowledge : Insufficient**Operator., Pressure to achieve : Adversely affected**Meteorological briefer., Air Traffic Services weather information : Not updated**Air traffic services organization., Human interface-air traffic control procedures : Incomplete***Deviation from ATM Regulation , during Cruise. {Occurrence}**

Flight crew's decision to continue flight : Inappropriate

*Flight crew., Psychological action-procedure violation**Air traffic controller., Air Traffic Services weather information : Incomplete**Flight crew., Knowledge of flight rules : Insufficient***Loss of visual reference , during Final approach. {Occurrence}**

Fog

Runway visual range : Below minima

Aircraft collision with level terrain/water , during Final approach. {Occurrence}

Flight crew's decision to land : Illegal/violation

*Flight crew., Psychological action-procedure violation**Flight crew., Knowledge of flight rules : Insufficient*

Flight crew's control of the aircraft's rate of descent : High

*Flight crew., Visual disorientation factors : Adversely affected***WEATHER****General weather conditions**

Weather conditions	VMC	Light conditions	Night/dark
Weather relevant	Yes	Wind speed	11 kt
Speed measured at		Visibility	500 m

Clouds

Cloud amount	Overcast	Height of cloud base	98.425 ft
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Temperature

Air temperature	24 C	Dew point	23 C
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KAWASAKI - BK 117, B-77008**Aircraft identification**

Manufacturer/model	KAWASAKI - BK 117	State of registry	Taiwan Island
Year built	1989	Aircraft registration	B-77008
Aircraft serial number	1032	Call sign	SUNRISE
		Flight number	B-77088

Aircraft Operation

Operator	Taiwan - Sunrise Airlines - (to be coded)	Operation type	General Aviation - Other - Ferry/positioning
Operator type		ICAO information	

Aircraft description

Aircraft category	Helicopter	Wake turb. category	Light
Propulsion type	Turboshaft	Mass group	2 251 to 5 700 Kg
Number of engines	2	Maximum take-off mass	3200 kg
Landing gear type	Skid	GNSS installed	No
EFIS	No		

Aircraft status

Total cycles a/c	13482	Maintenance docs.	Current
Aircraft total time	4330.5 Hour(s)	Airworthiness cert.	Valid

HISTORY OF FLIGHT**Itinerary**

Last departure point	Taiwan - RCSS (TSA): Taipei/Songshan Airport - (to be coded)	Flight phase	Landing
Planned destination	Taiwan - RCBS (KNH): Kinmen Airport - (to be coded)	Duration of flight	120 Minute(s)
		Occ. on ground	Yes

Speed and altitude at first event

Speed (first event)		True airspeed	
Type of speed	Ground speed		

Landing

Type of landing	Forced landing	Automatic landing	
Electronic landing aids		Landing location.	

Person at controls

Person at controls	Pilot-in-command
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INJURIES**Injuries**

	Fatal	Serious	Minor	None	Unknown	Total
Pilot	0	1	0	0	0	1
Co-pilot	0	1	0	0	0	1
Cabin crew	0	0	0	0	0	0
Other flight crew	0	0	0	0	0	0
Crew Total	0	2	0	0	0	2
Passengers	0	0	0	0	0	0
Other on Aircraft	0	1	0	0	0	1
Unknown	0	0	0	0	0	0
Total	0	3	0	0	0	3

AIRCRAFT RECORDINGS**Cockpit voice recorder**

CVR location	Mid fuselage	CVR recovery	Recovered
CVR Recording medium	Solid state	Underwater locator (CVR)	
Number of channels	4	CVR Reason for data loss	None/not applicable
CVR Recording duration	30 Minute(s)	CVR Recording quality	Poor
Hot microphone	No		

FLIGHT CREW**PILOT-IN-COMMAND****Flight crew member**

Age	48 Year(s)	Category	Pilot-in-command
Gender - Crew Member	Male		

Flight crew rest/duty

Duty last 24 hours	1.3 Hour(s)	Rest before duty	24 Hour(s)
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Flight crew experience

	Last 24 hours	Last 90 days	Total
This Aircraft type			3419.11 Hour(s)
All types	1.5 Hour(s)	89.55 Hour(s)	6741.27 Hour(s)

Flight crew licences

License type	Ratings	Validity	Registry State issued	Instructor rating	Instrument rating
Helicopter pilots - Airline transport pilot - helicopter	Held required rating	Valid, no waivers	Yes		

CO-PILOT**Flight crew member**

Age	43 Year(s)	Category	Co-pilot
Gender - Crew Member	Male		

Flight crew rest/duty

Duty last 24 hours	1.5 Hour(s)	Rest before duty	24 Hour(s)
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Flight crew experience

	Last 24 hours	Last 90 days	Total
This Aircraft type			137.77 Hour(s)
All types	1.5 Hour(s)	16.44 Hour(s)	4223.26 Hour(s)

Flight crew licences

License type	Ratings	Validity	Registry State issued	Instructor rating	Instrument rating
Helicopter pilots - Airline transport pilot - helicopter	Held required rating	Valid, no waivers	Yes		

MANAGEMENT**Occurrence report**

Report identification	B-77008	Report last modified	2014/7/9 PM 04:43:03
Report moderator		Report status	Data
Report source	Accident/Incident investigation	Reporting form type	ICAO - Final Report
Date report created	2012/2/9 PM 03:03:13		