



PAKISTAN CIVIL AVIATION AUTHORITY
(SAFETY & INVESTIGATION BOARD)



**SERIOUS INCIDENT TO M/S. GALAXY AIR, GAL-4096
IL-18, REG. NO. EX-786 ON 29 AUGUST 2007
AT
ISLAMABAD INTERNATIONAL AIRPORT,
ISLAMABAD**

FINAL REPORT

SERIOUS INCIDENT TO M/S GALAXY AIR IL-18 **REG # EX-786 AT ISLAMABAD AIRPORT** **ON 29 AUGUST 2007**

Authority: Director General Civil Aviation Authority Memorandum No.HQCAA/1901/318/SIB dated 31 August 2007(**Appendix 'A'**).

SYNOPSIS

A Galaxy Air, IL-18, chartered flight took off from Islamabad for Bishkek at 1612 local time on 29th august 2007 with 142 passengers and 11 crew members on board. At 1658 local time the pilot informed that a sick person is on board and wants to return. He was given a priority landing at Islamabad airport. Aircraft landed at 1721 and parked at BAY number 4. Medical assistance and ambulance was timely arranged. On landing it was revealed that majority of passengers were suffering from hypoxia and dehydration. The pilot however had not assessed the gravity of the situation and passed inaccurate information to air traffic control Islamabad airport. The passengers were medical students of Kyrgyzstan State Medical Academy (KSMA). The management of Islamabad airport immediately activated the medical staff in order to cope up with the emergency. First aid was provided by CAA medical staff of Islamabad airport. 13 passengers were evacuated to Rawalpindi General Hospital for medical treatment.

1. FACTUAL INFORMATION

1.1 History of the flight

It was a chartered flight GAL-4096 operating from Islamabad to Bishkek, time of departure was 1612 local time.

1.2 Injuries to persons

13 passengers were admitted in the hospital and then discharged after necessary treatment.

1.3 Damage to aircraft

No damage to aircraft.

1.4 Other damage

No other damage

1.5 Personnel Information

Crew	Name	Age	Validity of Lic	Rating
Pilot	Jitnikov Gennady	56	2008	IL-18
Co-pilot	Jitnikov Evgeny	32	2007	IL-18
Engineer	Valdimir Trubachev	57	2008	IL-18
Navigator	Kosenko Boris	58	2008	IL-18

1.6 Aircraft Information

It was an IL-18 aircraft, maintained and operated by Galaxy Air. Other specifications are as under.

1.6.1 Wing span (m)	37,4
Length (overall) (m)	35, 9
Height (overall) (m)	10, 17
Wing area (m ²)	140
Sweepback angle at 1/4-chord line (degree)	4
Fuselage diameter (m)	3, 5

1.6.2 Engines

Engine type	AI-20M Turboprop Engine
Number of engines (pcs)	4
Propeller shaft power (International Standard Atmosphere, H=0) (h.p.)	4 x 4250
Propeller diameter (m)	4, 5
ICAO standards compliance	App.16, Ch.2

1.6.3 Weights and Volumes

Max take-off weight (t)	64
Max payload (t)	13, 5
Max fuel tanks capacity (liter)	30000

1.6.4 Performance

Cruise speed (km/h)	630
Range with max payload (km)	4300
Flight altitude (m)	8000-10000
Take-off run (m)	1000
Landing run (m)	800

1.6.5 Seats

Flight crew	5
Passengers	110

1.6.6 Service Life

Calendar	42 Years
Flights	18000
Flight hours	40000

1.7 Metrological Information

It was 35 Degree C and humidity level 65 % in Islamabad

1.8 Aids to navigation.

All navigation aids of Islamabad Airport were available and it was a normal landing but given priority due to medical emergency.

1.9 Communication

N/A

1.10 Aerodrome Information

The aircraft was parked on Bay # 4 of Islamabad Airport

1.11 Flight Recorders

Flight data recorder was in Russian and there is no relevant parameter pertaining to air conditioning unit.

1.12 Wreckage and impact information

N/A

1.13 Medical and Para logical information

Pilot medical report was found normal. See **Appendix 'B'**.

1.14 Fire

No fire

1.15 Survival aspects

Oxygen was not available as per ICAO requirements Annex 6.

1.16 Test and research

Weighing of aircraft carried out under the supervision of PSIB and it was find out that take off and landing weight limits were violated.

1.17 Organization and management Information

It was an IL-18 aircraft operated and maintained by Galaxy AIR

2. TECHNICAL INVESTIGATION AND ANALYSIS

2.1 Interested parties

The medical emergency was a cause of concern for all the interested parties. The aircraft was operated in the Pakistan and had Pakistani Passengers therefore government of Pakistan is interested party. The state of registry Kyrgyzstan was also interested party.

2.2 History of Defect

In order to ascertain the history of air-conditioning system number one the tech log book was scrutinized. It was revealed from available data that there was no history of mal functioning of air-conditioning system

2.3 The aircraft after landing was inspected at Islamabad Airport the detailed inspection revealed following

2.3.1 Most of the passengers were dehydrated and in panic.

- 2.3.2 Emergency doors and passengers doors were opened during the taxi.
- 2.3.3 The Passengers were also sitting on the floor of the aircraft.
- 2.3.4 The aircraft was not equipped with adequate quantity of Oxygen as per ICAO requirements .Only six oxygen bottles and six masks were available in the aircraft. Requirements are attached as **Appendix 'C'**.
- 2.3.5 The numbers of passengers were 142 against the maximum capacity of aircraft 110. Passenger manifest list is attached as **Appendix 'D'**.
- 2.3.6 Aircraft was weighed and it was found that take off weight was 2 tons more than its maximum allowable take off weight and landing weight was exceeded by 11.7 tons. Refer **Appendix 'E'**.
- 2.3.7 Passenger luggage and cargo was lying in a form of heap and not secured properly as per ICAO regulations. See **Appendix 'F'**.
- 2.3.8 The procedure for non scheduled chartered flights did not include the consideration about capacity of aircraft and number of passengers. Refer AIP Pakistan GEN 1.2-1, Para 3. See **Appendix 'G'**.
- 2.3.9 Air-conditioning system number 1 was not functioning properly. The aircraft is designed such that only one air-conditioning system must fulfill the requirement of the passengers but due to placement of luggage and more number of passengers the Air conditioning system number 2 failed to regulate properly.

3. FINDINGS

3.1 Air conditioning unit number one was found unserviceable.

3.2 Aircraft was loaded with 142 passengers and 11 crew members against a capacity of 110 passengers as per type data sheet specifications.

3.3 Oxygen quantity was not adequate.

3.4 Aircraft took off with a weight of 66 tons against a 64 tons maximum take off weight and it was landed at 63.7 tons against a maximum landing weight of 52 tons.

3.5 Cargo was not secured properly as per standard operating instructions and resulted in the restricted circulation of air and passengers.

3.6 Procedure for charter flight permission did not include consideration about capacity of aircraft and number of passengers.

3.7 Charter Company (M/s. Galaxy Air) had carried out the boarding themselves.

3.8 Ground handling equipment was provided by SAPS.

3.9 Exposition manual of ground handling agent did not contain the procedure to make certain that passenger boarding must not be more than the capacity of aircraft.

3.10 GALAXY AIR was banned by EU and GCAA due to its poor safety practices.

3.11 Civil Aviation Authority of Kyrgyzstan has already taken some steps against M/s. Galaxy Air. See **Appendix 'H'**.

CAUSE OF OCCURRENCE

The cause of air conditioning system malfunction could not be determined. The cause of dehydration and hypoxia among the passengers was due to the lack of oxygen and humidity. Overloading of the aircraft and placement of the luggage restricted air circulation within the aircraft. Operator (M/s. Galaxy Air) and the crew grossly violated aviation safety rules by overloading both passengers as well as cargo.

4. RECOMMENDATIONS

- 4.1 Kyrgyzstan CAA may be approached to revoke the licenses of Pilot and Co-Pilot for violation of aviation safety rules.
- 4.2 Kyrgyzstan CAA may also be approached to revoke the AOC of M/s. Galaxy Air for failing to ensure that aircraft is not loaded beyond its configuration.
- 4.3 CAA Pakistan may propose to the Government of Pakistan to ban operation of M/s. Galaxy Air in/to/from Pakistan.
- 4.4 Regulatory Directorate to review safety oversight and charter approval policy to oversee all foreign chartered operations in Pakistan.