



# MANANG AIR

## SAFETY BULLETIN 2019

January 2019 Issue III

### SAFETY BULLETINS

- Message From Executive Chairman
- Safety Activities By Manang Air Pvt. Ltd on 2019
- Controlled Flight into Terrain (CFIT)
- Safety Through Quality in Airlines Industry

#### MESSAGE FROM EXECUTIVE CHAIRMAN

On behalf of Manang Air I am again extremely happy to see the continuing publication of the Safety Bulletin of Manang Air for the issue of January 2019. Nevertheless, Manang Air being a small organization, we are happy to say that the publication of Safety Bulletin has continuously been published since two years although the Bulletin covers only few tips and articles on Maintenance/ Safety tips as well as few informative news. The most important aspect of this Bulletin is its effort to make it continual publication by which we can share our views to our dear readers. However, we shall try to improve the quality and contents of the Bulletin to be published in future. By our little efforts, we are committed to work together with all vigor and enthusiasm to maintain the optimum level of Airworthiness and Safety standard timely by recognizing the imminent hazard and their consequent risk to rectify them by coordinating with all stake holders.

We shall always welcome the suggestions and recommendation from our readers on how we can improve the quality of this Bulletin.

**-Mr. Satis Pd. Pradhan**

**Accountable Manager/Executive Chairman**



#### ABSTRACT

This bulletin establishes information about the safety issues in aviation. The purpose is to continuously contribute to the safety issues in an effective manner & enhancing safe flight operations.

On behalf of Manang Air, we would like to thank all our members, clients and our travelers for their valuable contribution to enhance safety. We look forward for continuous support as usual for journey ahead.

#### CONTROLLED FLIGHT INTO TERRAIN (CFIT) - RISK AVOIDANCE

Controlled Flight Into Terrain (CFIT) – is an accident in which an aircraft that the crew can control in direction and speed collides with the ground or water. CFIT is still the cause of more fatalities than any other accident associated with air travel... (Continued on page 2)

#### SAFETY THROUGH QUALITY IN AIRLINES INDUSTRY

*-By Digamber Rajbhandari*

##### **The Past:-**

Early airline safety department functioned primarily in a reactive mode – investigating the most recent accident or incident and taking action to, hopefully, prevent a recurrence of the problem. Safety department staffs are generally small and personnel lacked specific training on how to do their jobs effectively. Often these departments were staffed with pilots who were no longer able to fly for ... (Continued on page 3)

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### CONTROLLED FLIGHT INTO TERRAIN (CFIT) - RISK AVOIDANCE

... (Continued from page 1)

It should be identified that what should be done by pilots and by airline to minimize the risk of CFIT accidents.

All flight crew should keep the risk potential uppermost in their minds at all times.

#### **1. Before the Aircraft Moves**

Consideration should be given to runway to be used, departure route to be flown, track required accurately, navigation aids to be selected, vertical constraints and the track, after getting airborne, an immediate return to land.

The pre-flight briefing should also consider the effects of any likely degradation of performance due to the presence of relatively high ambient temperatures or to the expected use of engine and airframe anti- or de-icing systems. Note should be made of any differences in instrument layouts and information displays from what may usually be encountered.

#### **2. Before Take-Off**

The commander should ensure that all navigation instruments function correctly. 'Constraints' data, if provided, should be displayed. Any 'last minute' departure changes received from Air Traffic Control should be discussed with other crew members. Any adjustments to navigation aids and function selectors made with care.

The 'present position' displayed should be confirmed as correct. This confidence check is especially important when the initial departure where tracks are not aligned with bearings or radials to or from ground-based navigation aids.

#### **3. After Take-Off**

If flight in VMC is planned, care must be taken to ensure that the cloud and visibility encountered do not prevent the pilot seeing sufficiently far ahead to identify terrain and obstacles that might prove to be a hazard. If doubt arises that VMC may not continue to exist the pilot should - without delay - consider what options are available, and take whatever course of action seems most appropriate. Excessive reliance on GPS in worsening weather without adequate terrain or obstacle clearance being assured is a major hazard for pilots and helicopters.

#### **4. In the Cruise - En-Route**

Routinely, note should be made of any significant terrain features or obstacles that could be cause for concern if the aircraft had suddenly to descend to a lower altitude, as might be the case when avoiding weather or loss of thrust. The crew should all be aware as to what would be done in such circumstances.

#### **5. In the Cruise - Before Descent**

The descent briefing addresses the route intended to be flown before the aircraft leaves its cruising altitude.

Before descent, the present position of the aircraft should be verified by using whatever means are most appropriate as visually or by using radio navigation aids.

#### **6. Descent**

The main altimeter subscale settings should be changed to the relevant QNH when the aircraft is cleared to descend to an altitude, all crew members checking immediately that their altimeters read the same (within tolerances) to ensure that no errors have been made. All altitude selector changes should be cross-checked for accuracy, and 'alert' calls made before reaching each new altitude.

Great care should be taken on visual approaches in poor visibility to ensure that when maneuvering to line up with the runway the aircraft does not encounter prominent terrain features or obstacles that cannot be seen and that are not marked. Even when visibility is good, note should be taken of the prevailing wind speed and direction so that the aircraft does not drift closer to adjacent terrain.

#### **7. Go Around**

If required, go-arounds must be flown accurately. Minimum altitudes for maneuvering should be respected, and speeds contained as specified in order that the aircraft stays within airspace that is safe with regard to adjacent terrain.

If the intention is then to fly to an alternate aerodrome, due consideration should be paid to ensuring that the aircraft remains clear of terrain.

#### **8. GPWS and Minimum Safe Altitude Warning Systems**

GPWS and MSAWS both systems have been designed to provide alerts and warnings. Neither system is a substitute and can be relied upon absolutely. There is not, and there never will be, any better 'CFIT Avoidance' system than pilots and other flight crew members who by their pre-flight preparations and in-flight actions ensure that all relevant preventive measures to avoid CFIT are applied conscientiously on every occasion.

#### **9. Training**

Procedure training promotes a healthy 'CFIT Avoidance' attitude. Good crew co-operation - CRM) adds value.

'CFIT Avoidance' standards do not suffer when unexpected circumstances such as weather avoidance, re-routing or change of runway arise.



### SAFETY THROUGH QUALITY IN AIRLINES INDUSTRY

... (Continued from page 1)

Medical reason or other reasons. Similar to the quality control function in the early days, the airlines safety function was informal and tended to be distributed throughout the organization. The number of accident throughout the world brought intense focus on airlines safety and led to several regulatory changes designed to enhance safety.

#### **The Present: -**

To address the increasing accident rate, the regulatory body convened Aviation Safety Summit at different occasion in late 90, bringing together representative from all aspects of aviation, especially airlines operations. Several regulatory regulation and initiatives were enacted as a consequence of these summits- all intended to strengthen safety and reduce accidents. The regulations were put in place requiring airlines to appoint a trained and qualified in Safety department. The regulatory established very specific training requirement for the chief of Safety, including in corporate safety culture, safety data collection and analysis program, Audit, risk management , incident / accident prevention and investigation , and others.

Another dynamics that has changed is our technological capability to collect and analyze data. Data- intensive safety / quality program such as Flight Operation Quality Assurance (FOQA), SMS, Oversight Audit plan, air transport oversight system, Global aviation information Network ( GAIN), and others have been developed for the purpose of giving managers better information upon which to make decision.

#### **The Future:-**

There has been much improvement in the air transportation industry to embrace quality principles. For examples, all the air transportation companies and organization seems to adopt, in whole or in part, achieved through different principles of Safety measures which are mandated by the regulatory bodies. Quality has proven its worth in a host of industry, notably in aviation industry, perhaps yet there need to be more imperative system to incorporate sound quality principles in airline safety environment, by which we can still reduce the consequences of poor quality management in airlines industry to avoid loss of life.

Each organization has different purposes and goals as well as workforce capabilities and training, so it is highly needed to prescribe which quality program and tools should be used. They should develop their own comprehensive quality management system, which will lead to a disciplined approach to developing the airline's safety strategy and methods. With the development of these system and process within the organization, there should be an identification of the knowledge and skills needed to manage the quality system, and creation of training programs that assure qualified people are available to manage the system.

Most would agree that the airline safety department of the future will have the following characteristics:

- A customer focus
- Leadership—Operationally independent and focused on safety
- A process approach to all operations.
- A system approach to management
- Fact-based decision making
- A system for continuous improvement
- Eagerness and capability to implement the “best” safety tools e.q. FOQA, Aviation safety program
- An audit and improvement system
- A proactive rather than reactive approach to safety management

#### **Conclusion:-**

Airline safety is at an important crossroad. Despite a commendable safety record, public apprehension of airline safety is high, modern aircraft and system are becoming increasingly complex, and airspace is very congested in many parts of the country. Many experts believe that these advances and others have outpaced the industry's safety infrastructure. Finally, we must take a proactive role in providing the training necessary to improve airline safety through quality. Faculty and administrators must realize the value of the quality approach to safety through quality management system based all the relevant prescribed literature, principles and manuals.

***Manang Air believes and encourages in “Just Culture.” No action will be taken against any individual for disclosing a safety concern.***

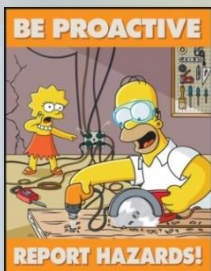




### SAFETY ACTIVITIES BY MANANG AIR

Manang Air has conducted various extra safety activities as below in 2018 in addition to the normal schedule safety activities.

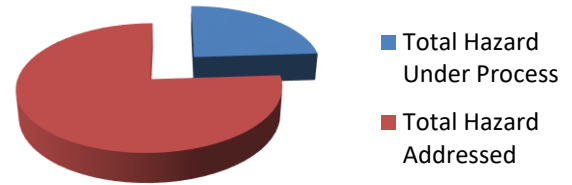
- Safety Bulletin 2<sup>nd</sup> Issue Published in 1<sup>st</sup> January 2018
- Cockpit Familiarization Training for crews conducted on 6<sup>th</sup>, 11<sup>th</sup> and 26<sup>th</sup> of March and 10<sup>th</sup> May 2018.
- AIP refresher Classes on 26<sup>th</sup> March, 2018.
- Company Indoctrination Briefing for Pilots and Staffs on 02<sup>nd</sup> April, 2018
- Briefings for Dispatchers were conducted on 6<sup>th</sup> of May, 2018 and for Ground Staffs on 11<sup>th</sup> of May, 2018.
- Monsoon Operations & CFIT Briefings for Helicopter Operations 10<sup>th</sup> July 2018.
- Safety Survey conducted on August 2018 among the staffs for the subject of Safety Culture within the Organization.
- Internal Investigation Process of Accident/ Incident training was conducted on 31<sup>st</sup> of August, 2018.
- Aviation Security Training for all the staffs was conducted on 2<sup>nd</sup>& 3<sup>rd</sup> September, 2018.
- Ramp Safety Training was conducted on 9<sup>th</sup>& 11<sup>th</sup> of September, 2018.
- Aircraft Marshalling and Hot Refueling procedure Training was conducted on 18<sup>th</sup> September, 2018.
- Ramp Safety Refresher training was conducted on 11<sup>th</sup> of November, 2018.
- Investigation of two safety issues were conducted on June 2018 and August 2018..
- Emergency Evacuation Drill Exercise was conducted with active participation of staffs, crew, operations and maintenance personnel on 12<sup>th</sup> July 2018.



### MANANG AIR SAFETY ISSUES

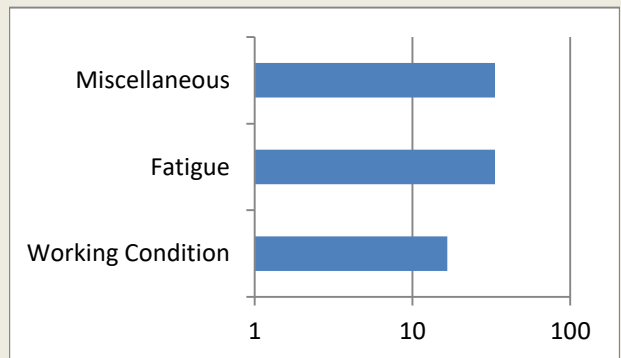
#### Hazard Reporting Status-2018

##### Hazard Report

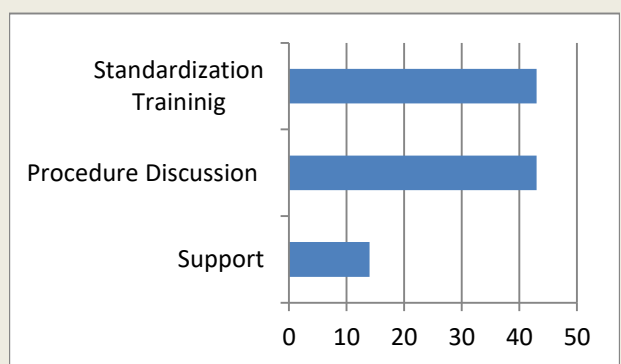


#### Safety Survey August, 2018

##### ➤ Probable cause for Future Incidents



#### ISSUES FOR ACCIDENT PREVENTION PROGRAM



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