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Safety & Quality E-Newsletter

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Managing Director and CEO's Message

Our safety focus in coming years will be biased towards establishing a positive nod regarding safety culture within the organization.

We have been navigating through an unprecedented Covid-19 pandemic, one to remember for as long as we shall live. The challenges are multilateral - with the global economy enduring a lockdown which poses a threat to the overall continuity of airline businesses. However, rapid and responsible decision-making from the senior management has prevented our beloved airlines from collapsing into shutdown.

Our priority is to ensure the health of our employees along with aviation safety. We took all sorts of abiotic and biosecurity measures as mandated or prescribed by industry agencies like ICAO, WHO, CAAB, IATA, etc. to prevent the spread of the Corona virus species. The Corporate Safety & Quality and Engineering Quality Assurance Divisions regularly conducted audits and inspections to ensure the requirements related to safety and security.

An open and honest safety reporting is the most appropriate input channel for management to make and test the safety decisions. Keeping in line with our commitment to aviation safety, we have been promoting non-punitive safety reporting culture and have set up different reporting channels to facilitate the reporting of safety hazards.

Due to Covid-19 pandemic, we had to switch from the full-scope onsite IOSA audit to the reduced-scope remote (online) audit this year. We have also started working on implementing the ISAGO requirements and are planning for an ISAGO audit by 2022.

Our safety focus in coming years will be biased towards establishing a positive nod regarding safety culture within the organization.

Let us stay safe.

Dr. Abu Saleh Mostafa Kamal

Managing Director and CEO

Safety Policy

Our Commitment

Biman Bangladesh Airlines assigns first priority to safety and is committed to implementing, developing and improving strategies and systems to uphold the highest level of safety performance and meet the national as well as international standards.

Safety Statement

- Comply with all applicable regulations and standards of the organization;
- Continuously improve the level of safety and operational performance;
- Communicate safety policy with visible endorsement throughout the organi zation;
- Periodically review the safety policy to ensure it remains relevant and appro priate;
- Provide necessary resources for implementation of safety policy;
- Promote and maintain a positive safety culture within the organization;
- Promote safety awareness through training and communication;
- Encourage non-punitive safety reporting system;
- Ensure management of operational safety risks;
- Ensure that safety policy is understood, implemented and maintained at all levels;
- Ensure that safety is a primary responsibility of managers at all levels;
- Ensure sufficient skilled and trained human resources to implement safety strategies and processes;
- Ensure that externally supplied systems and services are received meeting existing safety standards;
- Ensure that no disciplinary action is taken against an employee who discloses a safety concern or involved in active failure, unless such disclosure or failure indicate, beyond any reasonable doubt, an illegal act, gross negligence, or a deliberate or willful disregard (rule-breaking) of regulations or procedures.

Dr. Abu Saleh Mostafa Kamal
Managing Director & CEO

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Managing Safety is Everyone's Business

Ziauddin Ahmed
Director Administration & HR
(Joint Secretary)
Biman Bangladesh Airlines Ltd

When we talk or think about safety, so many aspects pop up in our minds such as health safety, food safety, occupational safety, home safety, automobile safety, explosives safety, nuclear safety, aircraft safety and many more. There are different national and international standardization or enforcement bodies who are developing codes for, and/or overseeing different safety aspects. In aviation, International Civil Aviation Organization (ICAO) - an agency of United Nations (UN) is setting the standardization and overseeing the safety implementation. For managing aviation safety, ICAO has developed Annex 19 mandating airlines to have safety management system (SMS) and to implement SMS by airlines ICAO has developed and published SMS manual as a guidance material. ICAO SMS framework focuses only on aviation safety and does not address other sectors such as health, food or occupational safety aspect. That is why, safety professionals in the aviation industry always end up with flight safety whenever there is any safety issue on the table. However, if other area such as health, food or occupational safety issues have the potential to impact aviation safety, SMS has a mechanism to deal with those from affecting aviation safety.

As the frontline personnel and as the last line of defense, the pilots, cabin crews, maintenance staffs, helpers, loaders, GSE operators, refueling staffs, ramp supervisors, flight dispatchers, load controls, etc. Everyone plays the most critical and vital role in managing flight safety. They perform the real time safety responsibilities so they are to be equipped with appropriate tools, equipment, workplace conditions and other resources. To accomplish/ensure safety properly,

they have to be fit mentally and physically. On top of everything, they must be competent and efficient. In aviation competency i.e. attitude, skill and knowledge is vital for each and every work. An organization may have billion-dollar aircraft; but these may become useless or even ruin the organization if the people are not competent. Here comes the importance of organization factors. All corners of the organization are paving the way to the safety of a flight. The followings are snapshots of organizational (other than directly operational disciplines) involvement in safety.

Policy and Regulations: formulates and enforces all sort of policies/regulations related to recruitment, promotion, resource requirements, documentation/ records management, authorities, responsibilities, accountabilities, human resource structure, etc. which provides umbrella supports to all operational and non-operational disciplines.

Human Resource: recruits appropriate people for a job.

Personnel Management: positions right people at the right place on right time.

Medical: ensures crew are fit for flying and people are fit for their work.

Finance: prioritizes allocation of money for safety issues.

Corporate planning: ensures aircraft are equipped with required safety equipment, instruments, software, etc. to meet the safety requirements when aircraft are purchased or leased in.

Information Technology: provides infrastructure for smooth flow of safety related information and required software for proper analysis of safety data.

Flight Catering Services: ensure food safety for crew and passengers by ensuring catering supplies are safe.

Marketing and sales: ensure number, size and weight of check-in and cabin baggage, number of passengers including number of infants can be carried.

Motor transport: provides safe, hassle-free, timely transportation of personnel minimizing fatigue and tiredness.

BATC: provides SMS training for all operational and non-operational personnel and impart training for developing competency.

Poultry services: supplies good quality raw materials to BFCC for safe foods.

Printing and publication: supplies safety posters, inflight safety cards, etc. ensuring legible print.

Procurement: procures safety equipment including PPE, ramp side vehicle and other tools and equipment to satisfy safety requirements.

Material management: procures aircraft parts, components and tools required for maintenance functions to maintain the aircraft in airworthy condition.

Project and works: ensures proper workplace environment i.e. temperature control, lighting, hygiene, cleanliness and appropriately furnished.

Security: while ensuring security, some safety measures are automatically taken, such as inadvertent movement of people near the aircraft.
The above-mentioned functions are only a part of safety responsibility of each section/department; there are actually much more.

SMS is an organizational approach to managing safety and we all have our own safety responsibilities. We have inbuilt safety culture within ourselves. That's why we remain alive everyday amidst thousands of death

trappings around us. We just need to channel those to SMS approach to managing safety.

In Biman, we believe and maintain 'safety first'. We never compromise with safety. Even if there is a remote possibility (unlikely to occur, but possible - has occurred rarely) of safety occurrence, we do not continue operations unless the safety risk is reduced to an acceptable level. Just to cite an example – when visibility is degraded beyond acceptable level at a particular airport, due to fog, haze or mist, our pilots proactively take decision not to continue take-off from, or landing at, that airport until the visibility improves to an acceptable level. In many occasions, our valued passengers observe take-off or landing by other airlines under the same visibility conditions and complain why Biman is not operating. Most of the cases it's difficult to appease them to understand the safety issue. Sometimes, a small technical issue causes delay of our flights. Still, we adhere to safety requirements. This is our organizational attitude towards safety. We do not want to try an accident, assuming safety is expensive. Finally, everyday new safety technics are invented and introduced by the concerned authority. We are determined to adopt the safety rules without any delay.

Flight Operation will Continue as Covid-19 Transmission Through Airlines is Very Negligible

Dr. Taslima Akhtar, Chief Medical Officer

IATA released a study in October 2020 showing that since the start of 2020, there have been 44 cases recorded of fight-related transmission of COVID-19 among 1.2 billion travelers, or one case for every 27 million travelers (IATA 2020; as noted by Meaney 2020). Such studies add to the collective body of knowledge about COVID-19 while informing governments and regulatory agencies on best practices when it comes to restrictions that are so impactful to the airline industry.

The impact of travel restrictions on airline operations and passenger demand is driving the need for unprecedented flexibility and speed in decision-making processes [1].

Layered Approach of Preventive Measures

Mask-wearing on board was recommended by IATA in June 2020 and is a common requirement on most airlines since the subsequent publication and implementation of the Takeoff Guidance by the International Civil Aviation Organization (ICAO). This guidance adds multiple layers of protection on top of the airflow systems which already ensure a safe cabin environment with very low risks of inflight transmission of disease.

Aircraft design characteristics add a further layer of protection contributing to the low incidence of inflight transmission. These include:

- Limited face-to-face interactions as passengers face forward and move about very little

- The effect of the seat-back acting as a physical barrier to air movement from one row to another

- The minimization of forward-aft flow of air, with a segmented flow design which is directed generally downward from ceiling to floor

- The high rate of fresh air coming into the cabin. Air is exchanged 20-30 times per hour on board most aircraft, which compares very favorably with the average office space (average 2-3 time per

hour) or schools (average 10-15 times per hour). The use of HEPA filters which have more than 99.9% bacteria/virus removal efficiency rate ensuring that the air supply entering the cabin is not a pathway for introducing microbes [2].

Measures taken to prevent Covid -19 transmission among Biman personnel and passengers

1. Personnel on duty in the check-in counter and ticket counter are to use Face Mask and disposable hand gloves.

2. Frequently wash hands with soap and water if hand is visibly soiled otherwise use hand sanitizer. Airlines should consider providing alcohol-based hand sanitizer to cabin and flight crews for their personal use.

3. In the passengers carrying bus, passengers are to sit at least 1 meter apart from one another. The bus to be disinfected each time after carrying passengers to the aircraft.

4. In the Aircraft, if possible, passengers to be seated 1 meter apart from one another.

5. Under present crisis period, so long the emergency is not withdrawn, all the passengers are to use face masks and the cabin crews are to use face masks as well as disposable gloves.

6. It is advisable not to distribute any food to the passengers in the short haul flight operation. Only sealed BSTI approved drinking water intact bottle may be given.

7. Announcement script on suspected communicable disease published by IATA in Dec 2017 to be read for the passenger before arrival.

8. One or more Universal Pre caution Kit (UPK) shall be carried all the time in the aircraft to protect crew members who are assisting potentially infectious cases of suspected COVID-19.

9. After each flight, the aircraft is to be disinfected with WHO approved insecticide and as per the aircraft manufacturer's guidelines. Interim guidelines updated on 4th March 2020 by CDC, Washington on cleaning and disinfection of the aircraft is to be followed. (Disinfectant: 62%-71% ethanol alcohol/0.5% hydrogen peroxide/0.1% sodium hypochlorite may be used).

10. If any suspected COVID-19 case is identified by the cabin crew, it is to be dealt with as per ACI & ICAO guidelines on management of communicable Disease on board.

11. For management of crew members, EASA guidelines on COVID-19, issue no 01, issue date 26/03/2020 in relation to the SARS-CoV2 pandemic is to be followed.

12. About seating of the passengers: In rows of 3 seats, keep the middle seat vacant (if possible) otherwise provide masks to all the passengers.

13. Ensure that the passengers are not kept on board of an aircraft without proper ventilation for longer than 30 minutes.

14. Maintain distancing (at least 1 meter(during Check-in, Security Check, Pre-boarding, Boarding, Disembarkation and at passport control and to use face masks by all staffs and passengers.

15. During pre-boarding and boarding time call, boarding 2-3 rows at a time instead of bulk boarding.

16. Crew face masks to be replaced regularly at an interval of not exceeding 4 hours. N95 or surgical masks are to be used.

17. Under the present COVID-19 situation all passengers are to fill up Health Declaration Form (HDF) and if a suspected case is identified, then the passengers in the same row of the case and two rows front and two rows behind to fill up Passengers Locator Form (PLF) inside the aircraft and submit both the forms to the Airport Health Authority on arrival.

18. Air Operators should limit the access to the flight crew compartment of crew members other than flight crew to the minimum necessary.

19. Frequent hand washing by the crew members at least after each interaction with a passenger is suggested.

20. Crew members are to dispose of used disposable masks, gloves, caps and gown in the biohazard bags of UPK and to keep it in the designated lavatory after tightly knotted for cleaning by the cleaning crew [3]

Reference:

[1] https://link.springer.com/article/10.1057/s41272-020-00271-1

[2] https://www.iata.org/en/pressroom/pr/2020-10-08-02/

[3] Covid -19 SOP of Biman Bangladesh Airlines.

Safety/Quality Internal Audit Status 2020-21

In line with the requirements of IOSA and Biman Quality Assurance Program, Corporate Safety and Quality (CSQ) conducts internal operational audit of various disciplines of Biman. Like every year, CSQ proposed the yearly audit plan for 2020-2021, and the Accountable Manager approved it.

This time, in every individual discipline, the audits were conducted unit wise. For example - In Engineering and Material Management Directorate, CSQ conducted three audits in three different schedules as follows- -

- one audit for Management System, QMS & SMS,
- one audit in Production & Services and
- one audit in Material Management.

Unit-wise audit in each discipline, benefited both the Auditors and the Auditee with more in depth look of the processes, better time management, and better work efficiency as well as the workforce utilization.

There were total of 19 audits conducted in the period Oct 2020 - Jun 2021. Among those audits, 18 audits
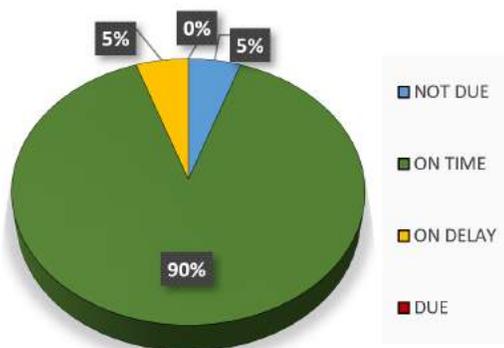
Conduction of Internal Audit 2020-21

were conducted as per the schedule in the yearly audit plan. The audit of Administration directorate was conducted several months later than the planned month. This was due to the fact that they were going after major changes in their process manual.

The audits were conducted to check conformity with the following requirement -

- IOSA Requirements
- Implementation of the Safety Risk Controls

During the audits, apart from checking the mentioned requirements, Corporate Safety and Quality also checked the processes/activities and identified if there is any potential hazards and the scopes of improvement.

Below is the graphical presentation (data updated as on 28 Jul 2021) of all the internal audits conducted in the period 2020 - 2021.
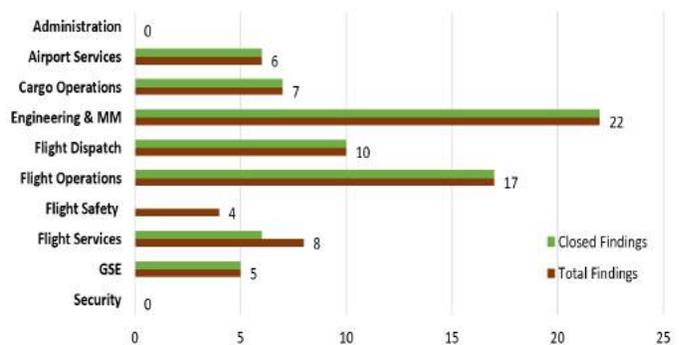
**Internal Audit Status 2020-21** | As on 28 Jul 2021

Above graph reflects, There were no findings resulted in the Administration and Security audits. Flight Operations, Engineering & Material Management, Airport Services, Cargo Operations, Flight Dispatch, and GSE closed all the raised findings. Due to COVID-19 pandemics, some findings were not possible to close by couple of disciplines. Also lack of manpower is another reason. Even though there is limitation, individual disciplines are trying heart and soul for taking the corrective actions to close the remaining findings.

Corporate Safety and Quality also conducted audit of specialized requirements, such as audit of ACC3-RA3 requirements. Total 10 monthly audits and 2 half yearly audits have been conducted. In addition to the above mentioned audits, several ramp inspections were carried out during the period 2020-21.

FDM Statistics

Flight Data Monitoring (FDM) Program:

All our aircraft are under the FDM Program. This program is used to monitor and analyze flight operations events (deviation from SOPs). The followings are statistical information showing year-wise number of flights we analyzed and percentage of flights having FDM events.
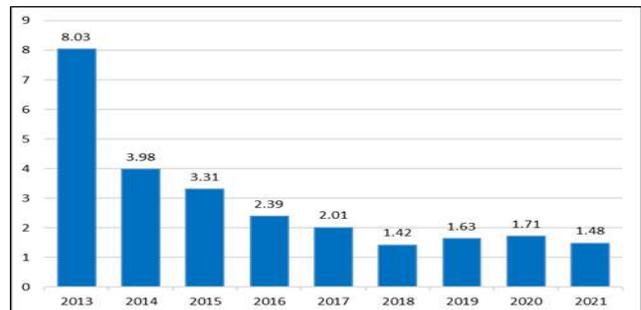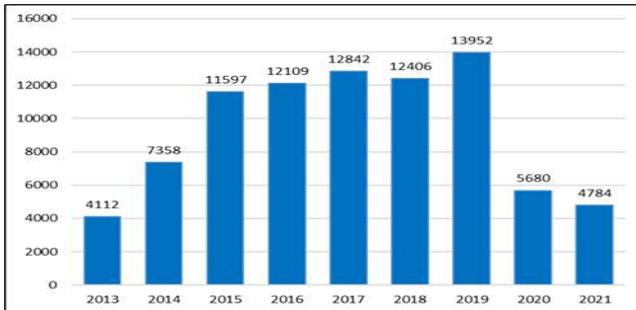
IATA Flight Data Exchange (FDX):

Biman is participatory to IATA FDX program. The FDX platform publishes global FDM event statistics based on the data provided by the participant airlines. The following graphs provide some comparison between FDX and Biman (BBC) event rate for the last 6 months.
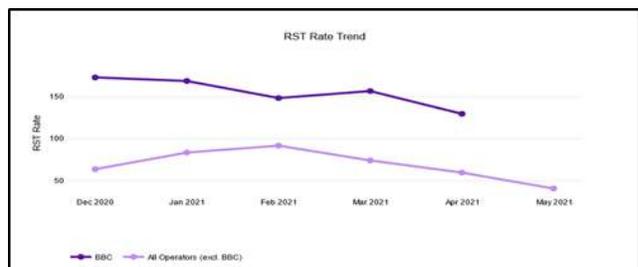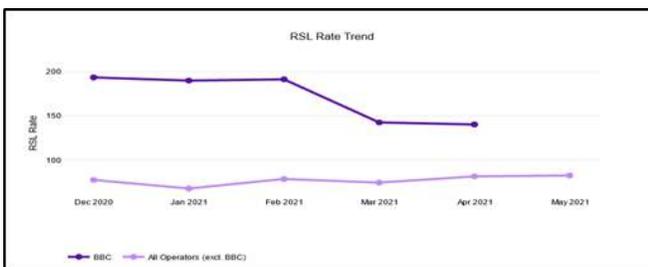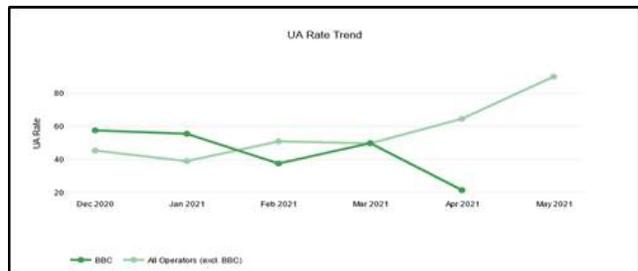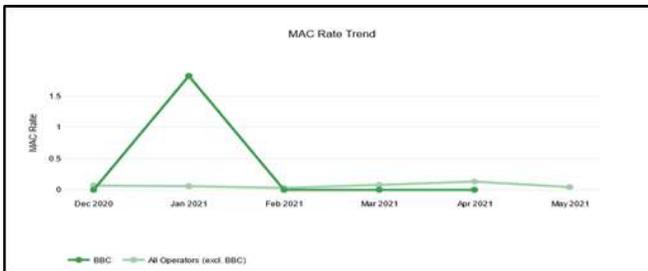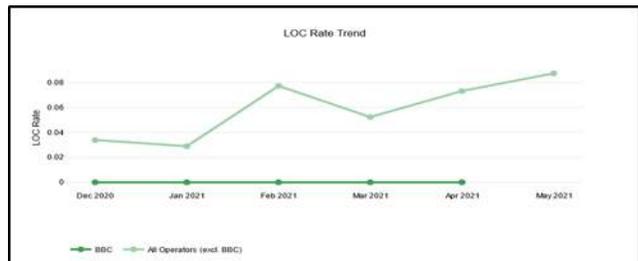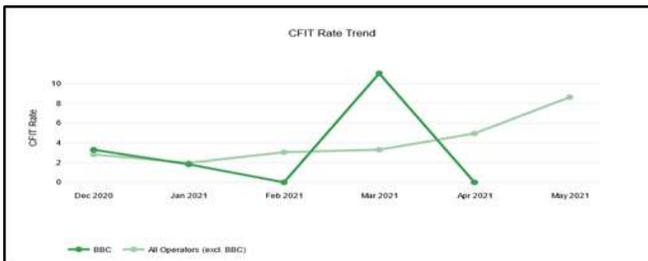
Graph Legends:

CFIT – Controlled Flight Into Terrain (GPWS)   UA – Unstable Approach
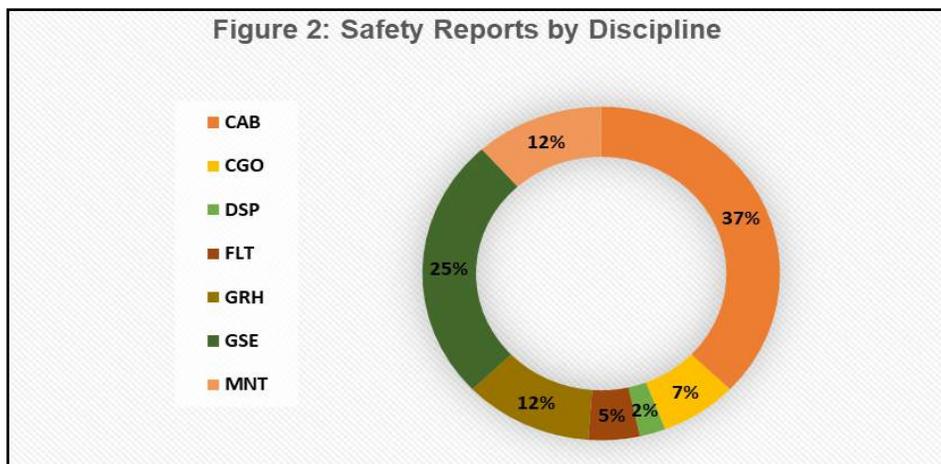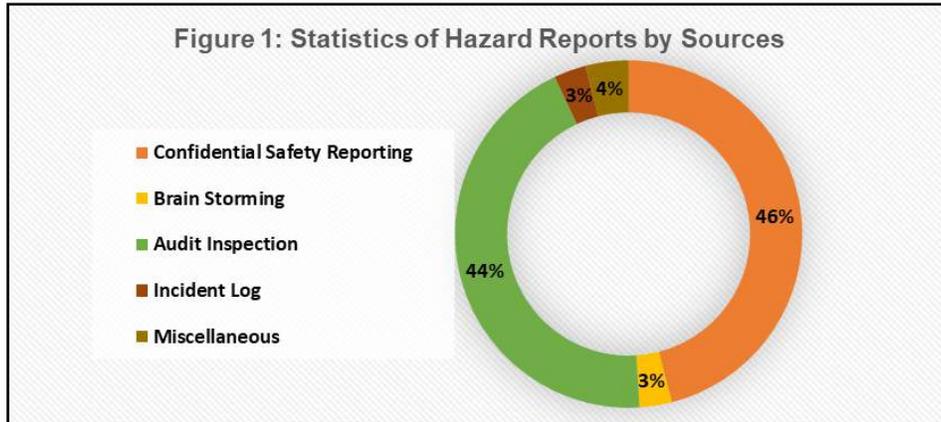LOC – Loss Of Control   MAC – Mid Air Collision (TCAS)
RSL – Runway Safety Landing   RSL – Runway Safety Take-off

Safety Reporting in Biman

Biman Bangladesh Airlines puts utmost importance on safety reporting system and has paved different reporting channels. Safety reporting boxes with hardcopy reporting forms are installed in all operational areas. The forms are made available onboard the aircraft for reporting by crew members. Biman employees can submit safety reports through email account - safetyreporting@bdbiman.com. All the reporting systems are confidential. Beside the reporting channels mentioned here, there are other operational reporting system devised by individual operational area.

Safety reporting system supports our Safety Management System (SMS) by providing the data necessary to proactively identify, assess and mitigate risks in operational areas. The success of this system is reflected in the number of confidential reports submitted and analyzed in recent times. As can be seen from figure 1, of all the safety hazards we identified and analyzed, 46 percent came from safety reporting channels.

Figure 2 shows the discipline-wise percentage of safety reporting.

Figure 1: Statistics of Hazard Reports by Sources

- Confidential Safety Reporting
- Brain Storming
- Audit Inspection
- Incident Log
- Miscellaneous

3% 4%
46%
44%
3%

Figure 2: Safety Reports by Discipline

- CAB
- CGO
- DSP
- FLT
- GRH
- GSE
- MNT

12%
37%
25%
12% 5% 2% 7%

Biman actively promotes safety culture and communicates the same via all means possible with a view of engraving safety practices into the behavior of people. To encourage people to report, Biman provides training to all employee, conducts management meeting, performs briefing sessions to frontline personnel, etc.

Biman has committed to strengthening positive safety culture. Biman safety policy emphasizes on non-punitive safety reporting system. No disciplinary action will be taken against an employee, unless a failure indicate, beyond any reasonable doubt, an illegal act, gross negligence or willful rule-breaking.

We welcome your feedback

Corporate Safety and Quality

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