

CQSE - Newsletter



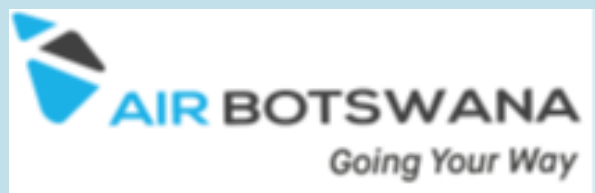
Contents;

1. FDM Program
2. Safety Reports
3. Human Factors In Aviation
4. Safety Campaigns
5. Miscelaneous

Apr – June 2021

Air Botswana

Authored by: CQSE



“Safety Starts With Me”

FDA Programme

The Flight Data Analysis Programme: is a **non-punitive** programme for routine collection and analysis of flight data to develop **objective** and **predictive** information for advancing safety through improvements in:

- flight crew performance,
- training effectiveness,
- operational procedures,
- maintenance and engineering or,
- air traffic control (ATC) procedures.

FDAP is a **mandatory** type of Safety Data Collection and Processing Systems of the SMS for operators of aeroplanes of a maximum certificated take-off mass in excess of 27,000kg (E170), it is also **recommended** for those that are below that mass threshold (AT76).

The main objective is to **Monitor** and **analyze** flight operations and engineering performance.

FDAP involves:

- a. **capturing** and **analyzing** flight data to determine if a flight has deviated from a safe operating envelope;
- b. **identifying** trends; and
- c. **promoting action** to correct potential hazards.

Through this monitoring and analysis, Air Botswana can encourage adherence to standard operating procedures (SOPs) by both Flight Crew and Maintenance personnel respectively, determine non-

standard behavior and provide mitigation thereby improving safety performance.

The primary benefit of the FDAP is to improve **operational efficiency** and **economy** that compensate the needed investment.

- a. **Operational Efficiency** – this can be improved through training of crew on SOPs and constantly identifying areas that need improvement so that training could be tailored to meet those areas.
- b. **Economy** – through trend monitoring, a predictive mitigation plan could be taken to prevent a catastrophic event from occurring.

FDMP forms part of the company's SMS and its principle of SMS is to:

- Collect occurrence data;
- Identify hazards;
- Assess the risks (by combining the **likelihood** of occurrence and the possible **consequences** of each hazard);
- Identify and put mitigation measures in place;
- Monitor the efficiency of the mitigation.

This enables Air Botswana to not only rely from a purely reactive mode (incident analysis based on flight crew reporting) but also rely on a more proactive mode (early identification of undesired events and implementation of mitigation measures).

Air Botswana's SMS Policy has achievable commitments which amongst others includes to;

- *Ensure a **Non-punitive** reporting system, unless it's an illegal act, gross negligence, or a deliberate or willful disregard of regulations or procedures;*

FDAP offers means to achieve the above, hence improving operational safety. Although it offers such a platform for reporting, crew and maintenance personnel are required to make use of other reporting platforms such as Hazard Report Forms, ASR forms and others as it is a regulatory requirement to report any unsafe occurrences.

Currently, all Air Botswana flights are captured and analyzed by an external organization. Reports are generated monthly, however, occurrences that require immediate mitigation can be identified by the relevant office(ers) for immediate action of accessed from each aircraft's Quick Access Recorders as de-identified data and feedback from the service provider sent within 48 hours. Such occurrences may be, but are not limited to the following;

- Hard Landing
- Unstable Approach
- Engine Over-torque
- High Rate of Descent, etc.

A safety team that comprises of personnel from Corporate Quality Safety and Environment, Flight Operations and Engineering has been set up to implement and ensure the success of the FDAP of Air Botswana.

As of January 2021, to June 2021, the below are the 5 leading events that have been captured;

Event	Mitigation
Engine TQ t/o low (84%)	Engineering to review parameters with ATR regarding the minimum TQ required bearing in mind our local atmospheric conditions.
Pitch low 35-climb accl start	A dedicated team has been selected to review the set parameters compared to international standards to determine if there's a need to revise them of for tailored crew training.
Pitch low 35ft t/o	
Ground speed hi taxi straight	
Pitch low 7ft touch down	
Long Flare	

The above is just a brief summary of level 3 events that show a trend, some events are potentially linked to 5 of the 'Significant 7' accident categories. These include;

- Controlled Flight Into Terrain
- Runway Excursion
- Fire
- Loss of Control and
- Airborne Conflict

These are also captured on the monthly reports and full details can be accessed on the Flight Operations Safety Portal.

Safety Reports

Safety reports are an integral part of Air Botswana’s SMS as they help in determining the company’s safety performance. As taken from the **SMS Manual (Policy)**;

“Air Botswana has developed Safety Reports to be used by all employees for reporting information concerning safety. All employees are advised that Air Botswana will not initiate disciplinary actions against an employee who discloses an incident or occurrence involving safety. This policy cannot apply to criminal, intentional or regulatory infractions.”

To better improve both our working environment and our output, we all need to identify hazardous conditions within our workplace, report them and let the responsible office mitigate the hazardous condition and give feedback of such mitigation. As the SMS Policy has been signed by the General Manager, this makes it a management commitment to safety that all responsible parties **MUST** take part in. Therefore, it is imperative that we all take part in safety reporting as it is a measure of the company’s safety performance and some are a regulatory requirement (Mandatory Occurrence Report). Please refer to **SMS Manual Chapter 1.14.5.3** for a list of Reportable Incidents.

Every so often we find ourselves unsure of whether an occurrence is reportable or not, the golden rule is ***“If unsure, just report”***. It probably costs less to analyze each report

that to risk a small event resulting in a catastrophic event and besides, Air Botswana promotes non-punitive reporting system. Refer to the **SMS Chapter 0.6.2** to understand the SMS Policy.

Below is a list of reports captured for the represented months.

Safety Reports	Q1			Category
	Apr 2021	May 2021	June 2021	
Crew Exposed to COLD temperatures during Transit Stops (FAOR)	1			Operational
Torn Jeppesen Charts	1			Operational
Landing on incorrect runway		1		Operational
Liquid Sanitizer Spillage		1		Operational
Some Staff working more than 16 hours.		2		Operational
Unsafe working condition, No lights at the equipment Bay			1	Operational
Torque over limit			1	Technical
EGPWS Warning			1	Technical
Toilet waste spillage			1	Operational
	Environmental		0	
	Technical		2	
	Operational		7	
	TOTAL		9	

Detailed reports can be accessed on the Q-Pulse.

The responsibility for safety reporting rests with each employee. CQSE would like to encourage each one of us to report anything that could be a safety concern and make use of the available reporting channels so as to have a safer working environment.

HUMAN FACTORS



Human factors are among other potential set of factors, commonly found in aviation accidents. Throughout the history of aviation, measures have been taken to mitigate human factors as efforts to improve aviation safety. The most common factor being the famous **pilot error**. Though famous, this is not the only factor but the most critical as pilots are the last line of defense when the aircraft is airborne. Unsafe human factors are not only limited to pilot errors. Third party factors may include;

- **Electromagnetic Interference (portable gadgets)** - the use of certain electronic equipment is partially or entirely prohibited onboard as it might interfere with aircraft operation below 10 000 feet.
- **Ground support equipment accident** – certain ground support equipment operate in close proximity to the aircraft and any error may cause accidental damage such as dents in the skin.
- **Engineering maintenance related problems** – this is critical as maintenance is carried out regularly to ensure the aircraft is ready for

service. If an error is to occur and not rectified, flight crew may have a very eventful day.

The above give an example of where errors resulting from Human Factors could occur within the organization. Some factors could be from external parties providing a service to Air Botswana such as fuel spillage as so, it is pivotal for all working around the aircraft to be vigilant and observant.

Certain measures have been taken throughout the years to mitigate human factors internationally. Air Botswana has also followed international standards through compliance to regulations and IATA Standards to mitigate human factors related incidents. These measures include, but are not limited to the following;

- Crew Resource Management Training
- Proper use of a checklist (read and do/acknowledge)
- Adherence to Standard Operating Procedures
- Use of Standard Phraseology
- Operational Audits, etc.

These ensure that all operational divisions have procedures and processes to be followed while on duty to reduce risks to an acceptable level.

Although all these measures could be perfectly documented and implemented, each individual could have personal matters that may affect their performance at work and may lead to an accident. Human factors may be caused by;

- **STRESS** – a lot of factors contribute to stress such as financial problems, family matters etc.



- **FATIGUE** – overworking or stretching body limits without rest over a prolonged period may lead to fatigue. ICAO defines it as **“A physiological state of reduced mental or physical performance capability resulting from sleep loss or extended wakefulness, circadian phase, or workload”**



- **TERRORISM** – this sabotage can be from within the organization, but normally happens from external through paying passengers. Fortunately, our crew are well trained to handle such situations.

This is to name but a few causes of human factors.

COVID-19 has had a negative impact on everyone directly or otherwise and to be operational in such trying times, as employees, we need to look out for one another and be each other’s safe keepers. **“A re lekodisaneng botsogo”**. Let’s fight till the fight is over and not let distractions deter us from our safety culture. Let’s keep our operation safe

“No man is an island. We are all products of our genetic make-up and social influences. By learning and understanding the internal and external psychological effects on us we can begin to control them.”

Exercise has been said to keep the body busy and awake and has proven to be helpful to some, perhaps the below picture can help one cope with stress and avoid the obvious.



SAFETY CAMPAIGN

April is a safety promotion month for BP. During this month various safety campaign activities set to identify and mitigate hazards are carried out at operational facilities as well as Head Quarters (HQ). This is a proactive and reactive way of managing hazards. **“A clean environment is a safe environment”** was the theme chosen for this year.

BBK, FRW and MUB stations chose to love their Ground Servicing Equipment (GSE). The campaign was aimed at ensuring safe operation of the equipment by ensuring serviceability and reliability through maintenance records conducting awareness on the use of GSE then cleaning it and their surroundings areas as well as ensuring health protocols are observed to prevent the spread of COVID-19.

BBK Safety Campaign

Kasane Team lead by Ms. Same Rathedi and Ms. Kesentseng Ntebang took their talents to the field as seen below;



Equipment Operator in full PPE cleaning his cart.

FRW Safety Campaign

Francistown team led by manager Ms. Lorato Keitheile and the safety coordinator Mrs. Kebonwaemang Mbakiso as seen in action.



Francistown team at your service.



Equipment checked for serviceability before being cleaned.



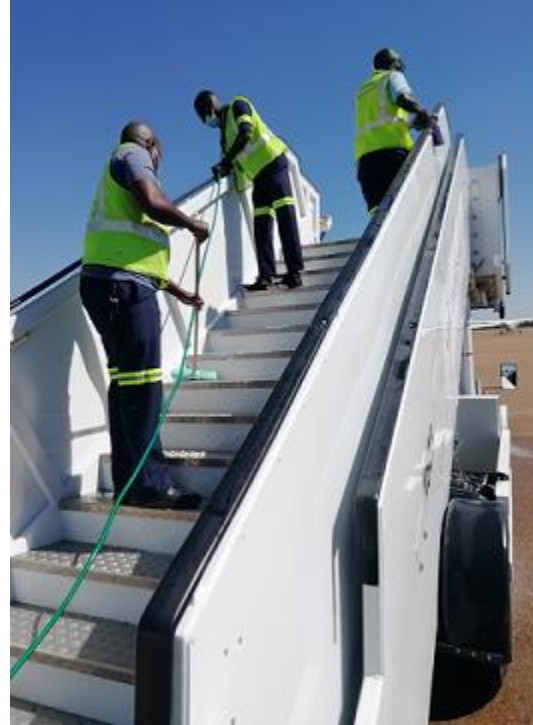
High visibility reflective jackets and cones visible in the area.

MUB Safety Campaign

Led by Manager Mr. Olerato Mosweu and Safety Coordinator Mr. Charles Seabe, the team was ready for action.



The cart and trolley being examined after a wash.



Cooling off the stairs from the Maun heat



Even the shuttle got a splash.

HQ Safety Campaign

At HQ, the focus was different from other stations as they focused on cleaning the surroundings of the HQ building. The General Manager and her Executives lead an energetic team while de-bushing and trimming trees that were seen to be potential hazards.



GM and her team.



Commercial Director with a traditional broom in action.



Team suited and ready.



GM in action.



Trimming trees.

Congratulations to team-BP for the commendable efforts by each participating individual. Let this be an inspiration to all of us to cultivate a safety culture throughout the organization by identifying hazards, reporting them and assisting during the mitigation process.

MISCELLANEOUS

The Finance Director, Mr. Peter H. Kgomotso has been appointed to the IATA Industry Financial Advisory Council (IFAC) as of 16 June 2021 until 2022. Representing Air Botswana, he will form part of a team that plays an advisory role to the Board of Governors and the IATA Director General on matters concerning industry financial services, standards and policy aspects related to international air transport. Another milestone for yet another Air Botswana Professional.



Mr. P. H. Kgomotso – Finance Director

AB- Fleet

21st June marked 2 years since the last flight of the **AT45** (A2-ABN) on the ground. **November** as commonly known, is on Long Term Preservation Storage and hopefully soon, we shall see her with weight off wheels and wings soaring high as she used to. Even on storage, there are maintenance personnel responsible for her safe keeping and ensuring she does not deteriorate by carrying out repeated maintenance checks every;

- 7 days
- 14 days
- 2 months
- 4 months &
- 6 months respectively

At almost 25 years, she has seen better days and better hands to keep her monumental status as the last 500 series owned by Air Botswana.



A2 - ABN

4 engineers have completed refresher training on the AT45 aircraft systems with 2 completing their simulator checks in South Africa.

The **E170** (A2-ABM) is the only Jet aircraft in Air Botswana's fleet, not the 1st but the 1st of her kind. Due to low international travel, Air Botswana route network is limited, and so **Mike** is primarily used for charter flights which has seen it operating as far as Egypt, Tunisia and Burkina Faso. When on home ground, she is available to fill up the roster when needed.



A2-ABM

The current workhorse closing a loop on the company's route network is the **AT76** fleet (A2-ABK/L), one of which is always

featuring on the cover page of the newsletter. They are the successors of the 500 series and bring with them new generation technology for flight crew, cabin crew and dispatch.



AT76 cockpit

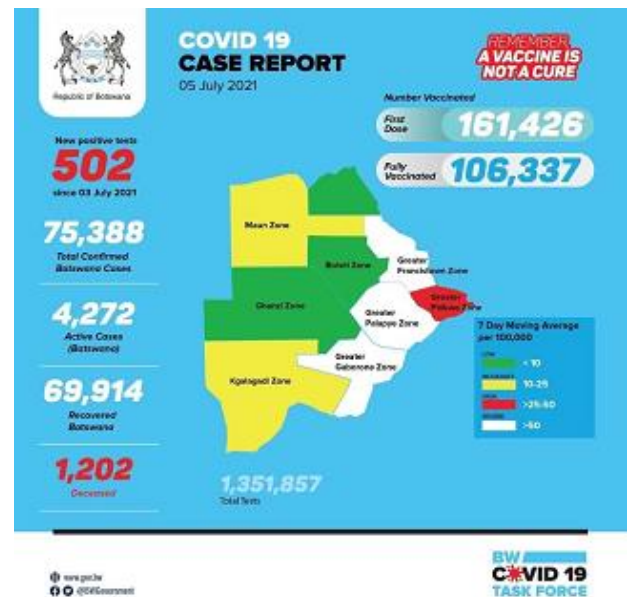
Air Botswana has embraced technology through training of relevant staff and thus ensuring passenger safety and comfort.

COVID-19

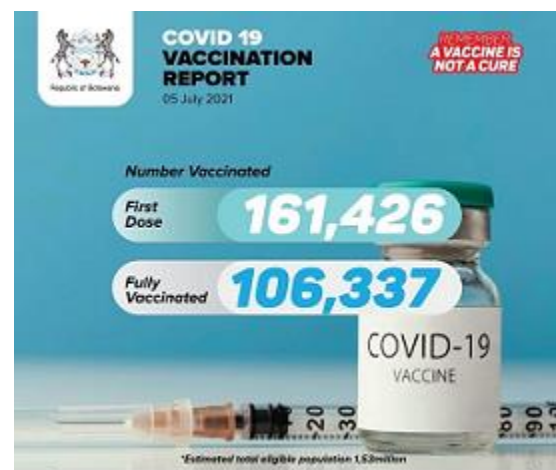
There are multiple COVID-19 variants notable worldwide and are under strict health monitoring. There are currently 5 variants being;

1. B.1.1.7 (**Alpha**) initially detected in the United Kingdom in 2020.
2. B.1.351 (**Beta**) initially detected in South Africa in December 2020.
3. P.1 (**Gamma**) initially detected in Japan from a traveler from Brazil in January 2021.
4. B.1.617.2 (**Delta**) initially detected in December 2020 but struck India with the second wave in February 2021.
5. C.37 (**Lambda**) initially detected in Peru in June 2021.

Though the Lambda is still dominant in Latin America, it has been detected even outside those borders. To date, the Delta Variant has been detected in Botswana and our statistics are not showing any improvement. With that, lets all be reminded to comply with all COVID-19 protocols at all times especially our frontline staff. Below is the latest statistics for Botswana.



Phase two of the vaccine rollout program will cover an age group that most employees are on (30 to 54 years). Hopefully all employees would receive a dose during this phase.



A positive COVID Test Result can be devastating to any individual, however, we are advised to test whenever we feel any or all symptoms of the virus and make use of the COVID-19 call center – **16649** for any assistance. See below what to expect should you test positive as taken from the Ministry of Health and wellness.

1. Undergo isolation (self-isolation or hospital isolation as determined and advised by the health care provider).
2. Provide a list of those who you have been in contact with for the past 2 days before developing symptoms or before testing.
3. Monitor your symptoms daily. Alert health care providers if your symptoms get worse e.g. difficulty in breathing
4. Wear your surgical mask properly at all times
5. After 10 days of isolation, the health care provider will assess and determine if you have recovered
6. Even when recovered, continue following preventive precautions.

Employees are advised to always ensure that your immediate supervisor is aware of your status should you need to isolate. Make use of your Safety Coordinators and report forms should you lack PPE in your divisions. Let us protect ourselves and our passengers too.



From CQSE – stay safe, stay strong, observe COVID-19 health protocols and remember...

*****Safety Starts With Me*****