



SAFE Wings

Dornier Aviation Nigeria AIEP Safety Newsletter

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Main Inside Stories;

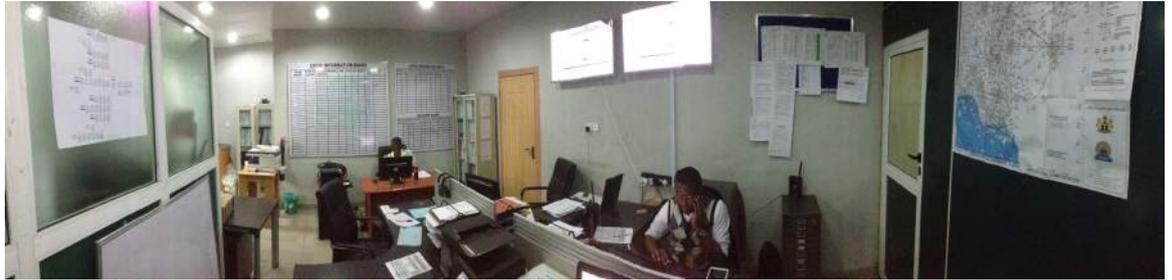
- Working Behind the Scene—Flight Dispatcher
- Cockpit without Cocktail
- Enforcer or Partner—Quality Inspector
- Just Culture—Avoiding the Blame game
- Dornier Transformation—The Journey so Far

Inside this issue:

- | | |
|--|------------------|
| Working Behind the Scene | 2 |
| Cockpit without Cocktail | 2 & 4 |
| Enforcer or Partner | 3 |
| Ground Handling Professionalism | 3 & 4 |
| Compromising Safety By saving on Maintenance | 4 |
| Just Culture | 5 |
| Dornier Transformation—The Journey so Far | 6 & 7 |
| Safety—How Far? | 8 |

LAGOS TAIWO OYEWALE—DISPATCH

Working Behind the Scene—The Flight Dispatcher



"Ayo holds his phone in his right hand, on which end the Pilot laments on bad weather in Bonny, co-pilots complaints as well as personal challenges. He also has another phone held by his head and shoulder, on this end another Pilot sounds more critical, with complaints of destination airport closure and the urgent need to divert to an alternate, with no consideration of his challenges, a mechanic taps him to notify him of an aircraft ramp return due technical, which needs urgent action of disembarking and addressing the passengers".

When embarking on air travel, the common notion is that the souls on board are in the hands of the Pilot, while this is partly true, however the "behind the scene" staff gives adequate support to the pilot to

ensure safe and on-time departure and arrival of every flight.

The behind the scene personnel undertake such tasks which may not project high value for the everyday passenger but remains priceless for the pilot to successfully play his part.

Amongst these are the Dispatchers. Their job role is so connected to the safe operation of the aircraft that the Regulatory Authority has mandated a training syllabus that will ensure that this safety critical job has the right people in the frontline.

Tasks such as Weather monitoring, Flight planning and following is just to mention a few of how they direct-

ly add value to the performance of the pilot. Moreover, they are saddled with long working hours needing full attention even as minor events can escalate without proper follow up.

The Flight Dispatcher can be seen as the unsung hero whose efforts and contribution to the safe operation of the aircraft, though immense is merely recognized by a few who has actually worked close to them.

So next time you are on an air travel, remember the behind the scene heroes while you admire the pilot who puts all their efforts together for your on-time and safe flight. ■

LAGOS CHIDUBEM OBIALO—QUALITY

Cockpit without Cocktail

Cocktail is used by many to unwind or relax, aiding in a way to alter one's mood by decreasing inhibition. As an alcoholic beverage, its consumption is widely accepted, often providing the cornerstone for social gathering and celebrations.

While its use is acceptable, the fact remains that its use affects ones performance in safety-related activities. There is always this tendency to forget that flying an aircraft is a highly demanding cognitive and psychomotor task that takes place in an inhospitable environment where pilots are exposed to various sources of stress.

Hard facts about alcohol includes sedatives, hypnotic and

addictive properties contained therein as well as the resultant impairment of judgment, which can easily contribute to accident. Moreover, its erratic effects does vary from person to person with respect to characteristics like body weight and even gender. Undesirable effects such as hangover can last up to 72hrs from the last drink. The adverse effects mostly relates to the brain, eye and the inner ear, which are three crucial organs to a pilot for effective reasoning, judgment and memory.

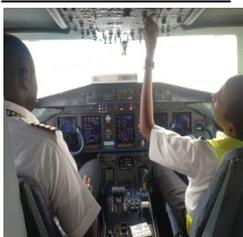
The quantity of alcoholic beverage consumed is directly proportional to the blood alcohol concentration (BAC) which in turn determines the resultant effect of the alcohol on the individual, but also dependent on each individuals level of tolerance. **Table on page 4 show the effects that may be prevalent in respect to BAC.**

Dornier Aviation recognizes the potential risks of alcohol on the performance and judgment of any individual with a resultant effect on their health and safety as well as the environment and assets of the Organization. Dornier aims to minimize and eliminate the detrimental effects therein through the establishment of a Drug and Alcohol Policy.

It seeks to implement the policy in a manner that would not violate the right of the personnel. Its implementation involves various steps such as drug and alcohol testing in accordance with internationally acceptable standards, a programme of health education and training to prevent and discourage the habit, granting assistance to personnel who voluntarily seek medical advice due to drug or alcohol dependence.

Continued on page 4

"The walkie talkie is one of the most useful tool for the Dispatcher, Ground to Ground and Ground to Air communication are made seamlessly with it".



"The adverse effects mostly relates to the brain, eye and the inner ear, which are three crucial organs to a pilot for effective reasoning, judgment and memory".



LAGOS CHIJIJOKE ONYEMEKARA—QUALITY

ENFORCER OR PARTNER

The Quality & Safety Inspector adds immense value to the Organization by cooperating with you not only for Regulatory compliance but also for continuing safety and efficiency.

An initial impression is that a Quality & Safety Inspector must only be a top technical expert on the Aircraft and Equipment type that an organization uses for its operation. For the most part of what the role entails, Technical Knowledge and experience should be a given as it greatly enhances performance.

But Overall, Aircraft technical knowledge and experience are only a part of the Quality & Safety Inspector's necessary skill set. Today's best Quality & Safety Inspectors must be particularly good with interpersonal skills. They must relate to each Employee and Department as they partner in Safety and Compliance. They must be able to manage conflict and

overcome that impression of being only a Compliance Officer.

In most aspects you and the Inspectors have the same Professional Credentials. You share the dedication to Safety in all of your Aviation Maintenance and Operational Activities. You follow the Regulations & Procedures while the Inspector occasionally checks your interpretation and compliance with the rules. When you combine your knowledge and skill with those of the Inspector then the Organization benefits.

The job role necessitates being conversant with the Regulations and Approved Procedures and as such can be called upon for clarification of information and interpretation contained within such documents..

Inspector's role also includes encouraging voluntary reporting by all staff via various means such as Proactive and Reactive Integrated Safety Management (PRISM) and other approved reporting media as all these help to provide sufficient information that foster the Organization's Safety Management System and build its Hazard and Effect management system (HEMP). They also provide multiple solutions to challenges related to safety as they have the benefit of seeing multiple organizations.

Summarily, the reality check is that the Inspectors are not Super heroes, they only strive for professionalism and train for consistent application of prescribed safety standards and as such are susceptible to mistakes and errors in interpretation of the requirements. This is why they should be seen as partners in managing safety and not as Police Officers or Regulatory Enforcement Agents. ■



“combine knowledge and skill set via a common understanding that there’s a shared dedication to safety between the Inspector and the inspected”

LAGOS FEMI BELLO—GROUND HANDLING

Professionalism: A ‘Must Have’ For All Ground Handlers

Everyone who works around airliners must step up to be a safety professional - especially ramp workers who are the last to touch an aircraft before it flies.

Professionalism is not something reserved for airline pilots & engineers. Everyone who works around airliners must step up to be a safety professional. That includes fuelers, baggage handlers, and in fact all Ramp workers who are the last to touch the aircraft before it flies. Ramp Workers must strive to maintain professionalism, take responsibility for personal actions and remain aware of how each individual contributes to the overall safety of the company and air transportation at large. What are a few actions you can take each day?

First of all, you must be *fit for duty*. While fitness often refers to a physical condition, the real challenge is to ensure a mental fitness for duty. The quality and quantity of sleep is

an important means to ensure necessary mental awareness and attitude. The basic rule: Get about eight hours of sleep every night.

While fitness for duty is a personal, professional responsibility, management must also recognize that schedules must be reasonable. A human cannot



withstand repeating 12-hour shifts, or split shifts that do not allow for quality rest.

Safety-minded Ramp workers use *voluntary reporting systems*. No one likes to make an error

and then tell everyone about it. However, professionals know they can learn from the error and also help ensure that no one else makes the same mistake. Again, it takes cooperation between management and workforce to ensure a voluntary report of an honest mistake is treated in a just manner.

Dornier is currently working towards extending the practice of Compliance monitoring into the Ramp handling. The system will help Ground Handlers conduct non-threatening peer-to-peer audits of normal operations. This system will help identify both the good and the suboptimal practices. This will permit Dornier to predict problems rather than waiting for an event to occur.

Helping others is another trait of professional Ground Handlers.. They strive to guide new employees who may not be familiar with a new aircraft or procedure.

Continued on Page 4

“The system will help Ground Handlers conduct non-threatening peer-to-peer audits of normal operations.”



PORT HARCOURT COLIN ROSSOUW—MAINTENANCE

COMPROMISING SAFETY BY SAVING ON MAINTENANCE

The Licensed Aircraft Maintenance Engineer

Why the Licensed Aircraft Maintenance Engineer is important:

The licensed engineer is the sole arbitrator of safety whilst the aircraft is on the ground. The Licensed Aircraft Maintenance Engineer will only supply their signature to a Certificate of Release to Service (CRS) when he/she are 100% certain that the aircraft is safe to fly. The CRS is a legal document clearing an aircraft, as far as engineering is concerned, safe and serviceable to fly. In effect, the engineer takes full responsibility for the quality of any maintenance performed while the aircraft was on the ground.



Why maintenance matters:

There is a close link between standards of maintenance and safety. The International Civil Aviation Organization (ICAO) has established minimum standards of airworthiness and operational safety for operating aircraft. The Licensed Aircraft Maintenance Engineer has studied long and hard to obtain his qualification in accordance with ICAO requirements. In some countries it can take as long as 6 years for an AME to get approved to sign CRS on a type of aircraft.

Why aviation is different from other sectors of industry:

The key feature making aviation different from other sectors of industry is safety criticality. It is true that safety is also important for other transport sectors, but the failure of a key system during aircraft operation is more likely to lead to catastrophic results. The Licensed Aircraft Maintenance Engineer is a key figure in ensuring that your flight was completed not only safely but also without any major events.

Saving on maintenance costs.

Airline operators are under enormous pressure to produce a profit. The Licensed Aircraft Maintenance Engineer and in fact maintenance as a whole are not often seen in the limelight and so are considered by many as an easy target for cost cutting. This type of cost cutting takes on many forms but needless to say very few are actually beneficial to you the passengers. This has the potential to be the single most effective cost cutting exercise to negatively affect safety to date. The License itself is an independently issued document belonging to the individual. This personal license coupled with company supplied specific aircraft type training ensures that maintenance is performed and supervised by highly trained individuals. As the link between standards of maintenance and safety has already been established by ICAO, any cut backs here can severely increase the risks of air travel. ■

Professionalism: A ‘Must Have’ For All Ground Handlers—Continued

The person being mentored demonstrates professionalism by learning and, ultimately, teaching a new co-worker. It is a two-way street.

Another one is that Professional Ground Handlers follow procedures. They take personal responsibility to follow the principles and practices of the Aircraft /ground equipment manufacturer or the company manuals. “Failure to follow procedures” is the most common cause of personal injury and aircraft ground damage.

“Safety Culture” is a popular term in aviation safety circles. In a safety culture, management and workers recognize safety is critical to meet the passengers’ expectations and ensure the success of a company and the longevity of everyone’s job. In a safety culture, each employee knows his/her specific actions ensure continued safety. Every individual working within a safety culture is a professional. ■



Cockpit without Cocktail—Continued

However, appropriate disciplinary action will be taken against an offender in accordance with disciplinary measures contained in the Policy.

Flying, while fun and exciting, is a precise, demanding, and unforgiving endeavor. Any factor that impairs the pilot’s ability to perform the required tasks during the operation of an aircraft is an invitation to disaster.

The use of alcohol is a significant self-imposed stress factor that should be eliminated from the cockpit. The ability to do so starts from the pilot. ■

Table 1. Some of the effects of various blood alcohol concentration

Blood Alcohol Concentration	Resultant Effect on Individual
0.01-0.05 (10-50 mg%)	average individual appears normal
0.03-0.12* (30-120 mg%)	mild euphoria, talkativeness, decreased inhibitions, decreased attention, impaired judgment, increased reaction time
0.09-0.25 (90-250 mg%)	emotional instability, loss of critical judgment, impairment of memory and comprehension, decreased sensory response, mild muscular incoordination
0.18-0.30 (180-300 mg%)	confusion, dizziness, exaggerated emotions (anger, fear, grief) impaired visual perception, decreased pain sensation, impaired balance, staggering gait, slurred speech, moderate muscular incoordination
0.27-0.40 (270-400 mg%)	apathy, impaired consciousness, stupor, significantly decreased response to stimulation, severe muscular incoordination, inability to stand or walk, vomiting, incontinence of urine and feces
0.35-0.50 (350-500 mg%)	unconsciousness, depressed or abolished reflexes, (abnormal body temperature, coma; possible death from respiratory paralysis (450 mg% or above)

LAGOS WALE ADEBISI—SAFETY
JUST CULTURE

One key to the successful implementation of safety regulation is to attain a “just culture” reporting environment within aviation organizations, regulators and investigation authorities. This effective reporting culture depends on how those organizations handle blame and punishment. Only a very small proportion of human actions that are unsafe are deliberate (e.g. criminal activity, substance abuse, use of controlled substances, reckless noncompliance, sabotage, etc.) and as such deserve sanctions of appropriate severity. A blanket amnesty on all unsafe acts would lack credibility in the eyes of employees and could be seen to oppose natural justice. A “no-blame” culture per se is therefore neither feasible nor desirable.

What is needed is a “JUST culture”, what is “JUST Culture”, *A culture in which frontline operators or others are not punished for actions, omissions or decisions taken by them that are commensurate with their experience and training, but where gross negligence, willful violations and destructive acts are not tolerated.* An atmosphere of trust in which people are encouraged, even rewarded, for providing essential safety-related information - but in

which they are also clear about where the line must be drawn between acceptable and unacceptable behavior.

There is a need to learn from accidents and incidents through safety investigation so as to take appropriate action to prevent the repetition of such events. In addition, it is important that even apparently minor occurrences are investigated, in order to prevent catalysts for major accidents. Safety analysis and investigation is a necessary and effective means of improving safety, by learning the appropriate lessons from safety occurrences and adopting preventative actions. It is therefore important that an environment exists where occurrences are reported, the necessary processes are in place for investigation and for the development of necessary preventative actions such as re-training, improved supervision.

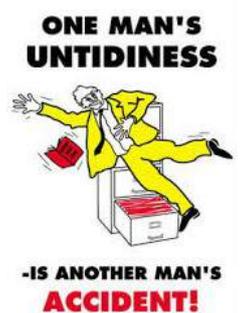
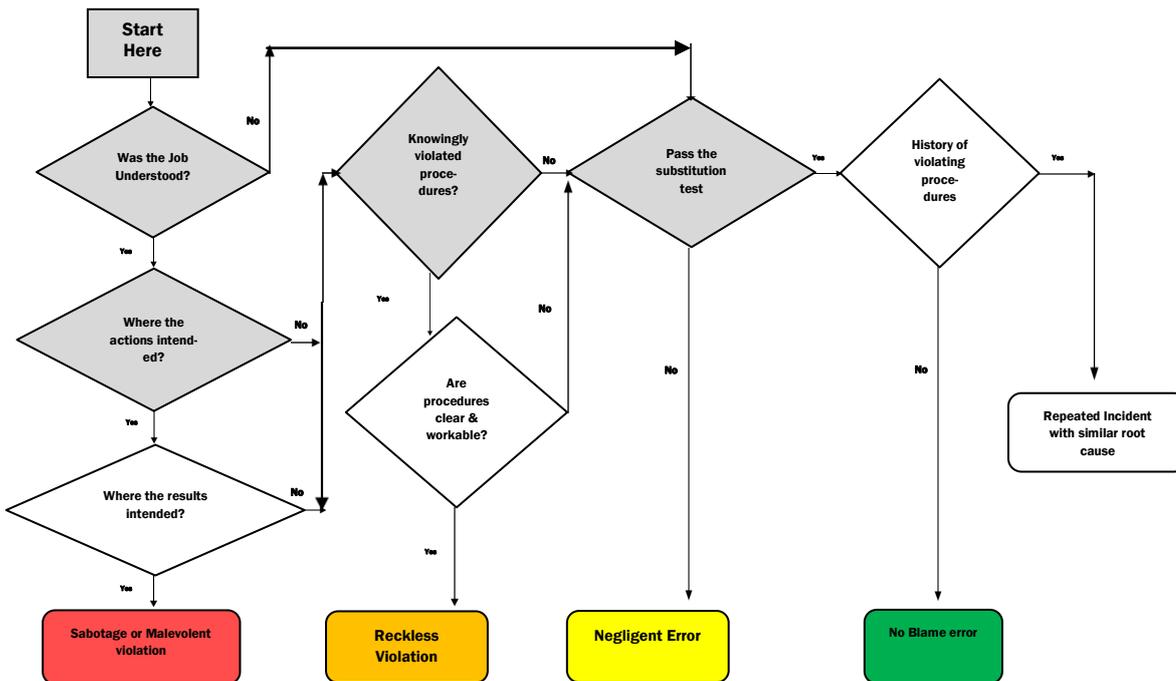
Under “Just Culture” conditions, individuals are not blamed for „honest errors”, but are held accountable for willful violations and gross negligence. People are less willing to inform the organization about their own errors and other safety problems or hazards if they

are afraid of being punished or prosecuted. Such lack of trust of employees prevents the management from being properly informed of the actual risks. Managers are then unable to make the right decisions in order to improve safety. However, a totally “no-blame” culture is neither feasible nor desirable.

Most people desire some level of accountability when a mishap occurs. In an attempt to solve that problem, J. Reason described a “Just Culture” as an atmosphere of trust in which people are encouraged, and even rewarded, for providing essential safety related information, but in which they are also clear about where the line must be drawn between acceptable and unacceptable behavior. Hence, a Just Culture supports learning from unsafe acts in order to improve the level of safety awareness through the improved recognition of safety situations and helps to develop conscious articulation and sharing of safety information. Consequently, a Just Culture can be regarded as an enabler, and even indicator of, (a good) Safety Culture. ■



-individuals are not blamed for “honest errors”, but are held accountable for willful violations and gross negligence.-



KADUNA MARK SNOXELL—MANAGING DIRECTOR

Dornier AIEP Transformation—The Journey So Far



- Main entrance to Dornier Offices— Operations Control Center, Safety and Quality

The journey into the oil sector has been interesting, challenging but worth all the efforts. This started with Schlumberger, Transocean services, Hess Malabo and now NLNG / SHELL.

In each of these contracts, Dornier had her fair share of challenges, Benefits and lessons learnt.

However the NLNG/Shell operations came with its peculiar challenges ranging from:

1. Need for Exclusive use of a private terminal for passengers/ baggage handling
2. Maintenance Needs with standards above regulatory requirements
3. Safety & Quality Requirements above regulatory requirements
4. Employment of qualified Operational and maintenance crew that meet standards above regulatory requirements.



-Maintenance Hangar



- Departure Lounge



-Maintenance Hangar, Departure Gate , Arrival Gate and Muster Point

The decision for use of concord terminal facility was quite challenging because of the skepticism expressed by the inspection team who considered transforming the facility to meet NLNG/Shell requirements as an impossible task. Nevertheless, the transformation was started and today these challenges were surmounted by:

1. Successfully transforming the Concord facility to meet safety and security requirements of NLNG/Shell
2. Employment of qualified licensed operations and maintenance personnel that meet standards above regulatory requirements.

3. Development of Personnel and to a large extent culture of both Dornier and Concord personnel

Today, we can look back, have a sense of satisfaction and not rest on our oars as we continue to work towards creating an enviable reputation in the oil industry as an Air transport provider. ■



- X-Ray scanning machine



- Reception



- Main Entrance Gate, Security House and Muster Point



- Main Entrance Gate, Security House



- Baggage Hall

Beechcraft 1900



A Dornier Aviation Nigeria AIEP Beechcraft 1900D

Role	Regional airliner, cargo, and corporate aircraft
Manufacturer	Beechcraft
First flight	September 3, 1982
Introduction	February 1984
Status	In service
Primary users	Dornier AIEP, Mobil Producing Nigeria
Produced	1982-2002
Number built	695
Unit cost	US\$ 4.995 million
Developed from	Beechcraft Super King Air

Dornier 328-100



Dornier AIEP Dornier 328-100 aircraft

Role	Airliner
Manufacturer	Dornier, Fairchild-Dornier
First flight	6 December 1991
Introduction	1993
Status	Out of production, in service
Primary users	Dornier AIEP
Produced	1991-2000
Number built	217
Unit cost	US\$ 12 Million
Developed into	Fairchild Dornier 328JET



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**MANAGING DIRECTOR
Commitment to Safety**

"Safety is one of our core business functions.

We are committed to developing, implementing, maintaining and constantly improving strategies and processes to ensure that all our aviation activities take place under a balanced allocation of company resources, aimed at achieving the highest level of safety performance and meeting national and international standards, while delivering our services.

All levels of management and all employees are accountable for the delivery of this highest level of safety performance, starting with the managing director.

Our commitment is to Support the management of safety through the provision of all appropriate resources, that will result in a company culture that fosters safe practices, encourages effective safety reporting and communication, and actively manages safety with the same attention to results as the other management systems of the company "

Dornier Aviation Nigeria AIEP (DANA) Ltd has been in operation since 1979 and has grown to become Nigeria's leading private aircraft service and charter center. At Dornier Aviation, we provide regular and spot charter services, maintenance support to airlines, charter companies and private aircraft owners in Nigeria and the West-African sub region who own Dornier DO228 and DO328 aircrafts. We are the only DORNIER aircraft service center in Africa and one of the three HONEYWELL engines (Garret) Major Service center on the continent.

SAFETY & QUALITY DESK Safety—How far?

"Safety is one of Dornier Aviation's core business functions. We are committed to developing, implementing, maintaining and constantly improving our strategies and processes to ensure that all our aviation activities take place under a balanced allocation of company resources aimed at achieving the highest level of safety performance and meeting national and international standards while delivering our services. All levels of management and employees are accountable for the delivery of this highest level of safety performance starting with the Managing Director"

My Brothers and Sisters see grammar ooo! This is an excerpt from Dornier's Safety Policy. The question will always be, how has the Talk been walked?

Dornier has put in place a number of strategies to ensure that safety of operations is system-

atically managed to meet target of zero accidents. These strategies stand on principles of encouraging safety reporting, analyzing and managing the reports to see that operational hazards are managed to as slow as reasonably possible. Implementation of these strategies gave birth to use of PRISM (Proactive and Reactive Integrated Safety Management System), Voyage Reports, Ground Occurrence reports, Mandatory Occurrence Reports (MOR), Hazard and Effects Management Process (HEMP), Management of Change (MOC), Bowtie Methodology and Just Culture.

How have these Strategies worked towards achieving overall aim of zero accidents.

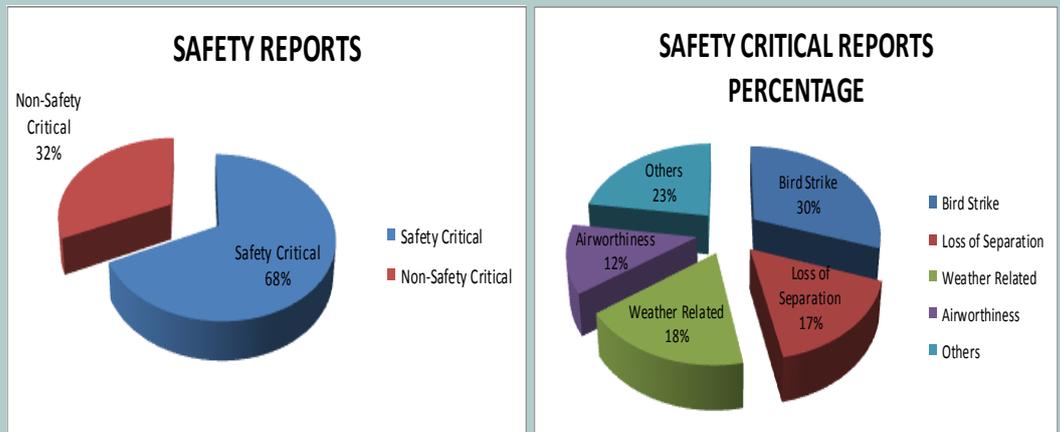
Since the inception of this Contract in 2013, Dornier has recorded zero accidents, approximately 97 safety reports, 66 of which were adjudged to be safety critical events ranging from Loss of Sep-

aration, Bird strike, Missed Approach Diversions due weather, Airworthiness etc. Meeting this target of zero accidents came from continual efforts towards implementation of these strategies from all employees.

Statistics also show that out of the approximate 66 operational safety critical reports, 30% are Bird strike related, 17% are Loss of separation related, 18% are weather related while 12% are Airworthiness related. These currently constitute major safety concerns to our operations as at today and which are being managed effectively through the strategies mentioned above and assistance of our Clients' Safety Practitioners.

Overall Passengers can be rest assured that indeed Dornier has so far walked the talk in ensuring zero accidents.

Pictorial representation of 'Critical Safety Report' distribution in accordance with nature of Event



Editorial Board: Bola Doyin-Hassan, Solomon Attah, Taiwo Oyewale, Adewale Adebisi, Chijioke Onyemekara and Chidubem Obialo.