Avia Global
AVIATION CONSULTANTS

AVIA GLOBAL UPDATE
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1. MESSAGE FROM THE EDITOR

Welcome to the first edition of Avia Global Update for 2020.

The 2020 Hazard to commercial aviation in the Horn of Africa - The United Nation's Food and Agriculture Organisation (FAO) has reported that The Desert Locust situation remains extremely serious in the Horn of Africa where it threatens pastures and crops in Ethiopia, Somalia and Kenya. Numerous swarms have formed in eastern Ethiopia and adjacent areas of northern Somalia. A number of large immature swarms moved south in the Ogaden of eastern Ethiopia and adjacent areas of central Somalia and reached southern Somalia, southeast Ethiopia and, on 28 December, northeast Kenya." The FAO warns a dangerous situation arises at the Horn of Africa and on both sides of the Red Sea.

The Novel Coronavirus also known as COVID-19 is having a global impact on commercial and non-scheduled aircraft operations. In South Africa the AvMed division of the SACAA is holding workshops on the subject to ensure that we are all aware of the precautions that need to be taken. If you have not attended or been invited to a workshop please contact the AvMed Division. The emergency contact number for the Department of Health is 0800 029 999 and is manned from 08.00-16.00 daily.

Vivienne

2. A SMALL MATTER OF KNOWLEDGE

Opsgroup Reports on International ADS-B Mandates

Flight-planning firm Opsgroup has published an updated list of current and upcoming ADS-B equipment and operational mandates. In addition to the well-publicized June 7 2020 deadline in Europe (see **AIN**'s "Compliance Countdown"), Opsgroup reported on the ADS-B mandates in South Africa, New Zealand, Saudi Arabia, and Sri Lanka.

South Africa has deferred their original compliance date of April 1 2020 as its deadline for aircraft operating under IFR to have ADS-B installed. The latest information is that it will most probably be 2023 (**RVSM**) and then full compliance Class A and C airspace (i.e. FAOR and FACT TMA etc.) by 2025.

New Zealand is expected to adopt its proposal to make ADS-B mandatory for all aircraft in controlled airspace below FL245 starting on Dec. 31, 2021. It has also published a detailed description of the operational, performance, and equipment requirements.

Saudi Arabia has delayed the start of its ADS-B requirement in Class A and B airspace to Jan. 1, 2021, according to a recent Notam. Opsgroup said an earlier published document describing the equipage and operational requirements shows Jan. 1, 2020, as the original starting date.

Sri Lanka has not yet mandated requirements, though it started a trial ADS-B program more than five years ago. In September 2014, the country's CAA said ADS-B trial operations had started in Sri Lanka airspace (Colombo FIR) and "will be fully operational covering the entire Sri Lanka sovereign airspace."

3. AFRICA'S 2019 HAZARDS, INCIDENTS, ACCIDENTS AND SAFETY OCCURENCES

Source, amongst others, PlaneCrash info.com; News24, Aviation Herald, Flight Safety Information, SACAA, AIN, FSF.

DATE	A/C TYPE	FATALITIES	LOCATION
ACCIDENTS INVOLVING FIXED WING AIRCRAFT IN AFRICA DURING 2019			
21 Jan 19	Mirage F1	0	Taounate, Morocco
07 Feb 19	Glasair III	0	Donderhoek, Pretoria, RSA
13 Feb 19	Cessna U206G Stationair 6	5	Makutano Forest in Londiani, Kenya
14 Mar 19	Piper PA28	0	Kimberly, RSA
10 Mar 19	B38M	157	Bishoftu, Ethiopia
30 Mar 19	Twin Comanche	0	Baragwaneth, RSA
22 Apr 19	AN26 Freighter	0	Khartoum, Sudan
01 May 19	Diamond	0	Ilorin International Airport in Ilorin, Kwara State, Nigeria
19 May 19	Carl Babst Raven type 1	0	Raton, Pretoria, RSA

23 May 19	Bantam	0	Phalaborwa, RSA
11 Jun 19	Radial Rocket	0	Baragwaneth, GP, RSA
22 Jun 19	Piper PA-18-150 Super Cub	1	Chyulu National Park, Makueni County, Kenya
22 Jun 19	Antonov AN-124-100	0	Tripoli-Mitiga International Airport, Libya
23 Jul 19	B737-300	0	Lagos, Nigeria
03 Aug 19	Sling 4	2	Tabora, Tanzania
06 Aug 19	Cessna 208B Grand Caravan	0	Mafia Airport (MFA), Tanzania
14 Aug 19	Jabbie 430	0	Krugersdorp, RSA
16 Aug 19	Cessna 172	2	Hartbeespoort Dam, west of Akasia in the North West,
14 Sep 19	Cessna 172B	0	Nr. Bloemfontein, FS, RSA
23 Sep 19	Cessna 208B Grand Caravan	2	Serengeti, Tanzania
24 Sep 19	ICP MXP-740 Savannah	0	Graskop, MP, RSA
30 Sep 19	Embraer ERJ-145-MP	0	Maputo International Airport, Mozambique
07 Oct 19	Piper PA-28-140	1	Nr. Vryburg, NW, RSA
09 Oct 19	AN74T-100	0	Mogadishu Airport, Somalia
10 Oct 19	AN72	8	Nr. Kole, DRC
11 Oct 19	Fokker F50	0	Wilson Airport, Nairobi, Kenya
25 Oct 19	Cessna 210	0	Likoma Island, Malawi
11 Nov 19	Piper PA-28-140	0	Springs, Gauteng, RSA
24 Nov '19	Dornier 228-201	17	Goma, DRC
02 Dec 19	Scheibe SF-25 Falke	2	Plettenburg Bay, EC, RSA
ACCIDENTS INVOLVING ROTOR WING AIRCRAFT IN AFRICA DURING 2019			
19 Jan 19	Z-9	0	Kati, Mali
03 Feb 19	SA341G Gazelle	0	Rand Airport, RSA
20 Feb 19	MIL	2	Rechaiga, Algiers
03 Mar 19	Bell 505	5	Lake Turkana, Kenya
18 Apr 19	Augusta 109	0	Centurion, GP, RSA
02 May 19	Dauphin	TBA	Guemar airport, El-Oued, Algeria
10 Sep 19	RH22 Beta	0	The Hills Eco Estate, Gauteng RSA
12 Sep 19	RH44	0	Hartebeesfontein, NW, RSA
20 Aug 19	Squirrel	0	Virginia Airport, Durban, KZN, RSA
11 Oct 19	Bell 412	0	Mediterranean Sea 65nm out of Port Said, Egypt
25 Oct 19	RH44	0	Pretoria, RSA
25 Nov '19	Eurocopter Tigre HAP (EC 665) & Aérospatiale AS 532UL Cougar	13	Liptako Malian, Mali.
28 Nov 19	Bell 505	0	Kimberly, NC, RSA
05 Dec 19	RH44	1	Eshowe, KZN, RSA
OTHER AVIATION RELATED ACCIDENTS DURING 2019			
24 Mar 19	BE20	1	Matsieng Airfield, Botswana
12 Jun 19	MI35M	0	Katsina Airport, Nigeria
30 Jun 19	B787	1 - Stowaway	Originated in JKIA, Kenya stowaway fell out of wheel bay on finals into London Heathrow, UK
20 Jul 19	Balloon	0	A hot air balloon crash-landed near the M44 in Soshanguve on Saturday, leaving two people injured.
ACCIDENTS INVOLVING FIXED WING AIRCRAFT IN AFRICA DURING 2020			
09 Jan 2020	Lockheed C130BZ Hercules	0	Goma, DRC
12 Jan 2020	FK14B POLARIS	2	Springs, RSA
12 Jan 2020	Windlass Trike	0	Petersgift Airfield, RSA
14 Jan 2020	Sling 2	0	Morningstar Airfield, WC, RSA
23 Jan 2020	Cessna 550	3	Outeniqua Mountains, RSA
28 Jan 2020	Sling 2	0	East London, EC, RSA
28 Feb 2020	Twin Comanche	0	Grand Central Airport, RSSA
ACCIDENTS INVOLVING ROTOR WING AIRCRAFT IN AFRICA DURING 2020			
25 Jan 2020	SANKA AK 1-3 Z	0	Glen Eden, EC, RSA
04 Feb 2020	RH22	0	Worcester, WC, RSA
INCIDENTS AND OCCURRENCES DURING JAN AND FEB			
DATE	A/C TYPE	LOCATION	DETAILS	TYPE OF OP

DATE	A/C TYPE	LOCATION	DETAILS	TYPE OF OP
02 Jan 2020	A330-300	Cape Town, RSA	A/C was climbing out of Cape Town's RWY 19 when the crew was unable to retract the landing gear and stopped the climb at FL080. The A/C entered a hold to work the checklists and burn off fuel. After about two hours in the hold the aircraft set course to divert to FAOR, climbed to FL200 at first, later FL220. The aircraft landed safely on Johannesburg's RWY 03R about 4:20 hours after departure. The aircraft taxied to the apron.	COM
09 Jan 2020	B737-700	Dire Dawa, Ethiopia	A/C was on final approach to Dire Dawa's RWY 15 when it flew through a swarm of grasshoppers and received a huge number of insect impacts into engines, windshield and nose of the aircraft. The crew went around, attempted a second approach but again needed to go around and diverted to their ultimate destination Addis Ababa (Ethiopia), where the aircraft landed safely about 90 minutes after departure from Djibouti.	COM

DATE	A/C TYPE	LOCATION	DETAILS	TYPE OF OP
11 Jan 2020	Cessna 210	Boland Diepkloof Airport, WC, RSA	It was reported that, after landing and whilst taxiing to the end of the runway, the nose landing gear failed, and the propeller struck the ground.	
14 Jan 2020	B737-800	Cape Town, RSA	A/C was climbing through about 9000 feet MSL out of FACT when a panel of the left-hand wing to body fairing dropped off the aircraft and fell into Cape Town's suburb Kayamandi (Stellenbosch) about 12nm east of Cape Town, nobody was injured. The aircraft continued the flight to Johannesburg for a landing without further incident.	COM
14 Jan 2020	PA22-150	Springs, GP, RSA	It was reported that, the pilot was giving familiarisation training to a student in the circuit when on the fourth landing when he applied power for take-off, he lost directional control of the aircraft.	TRNG
16 Jan 2020	Cessna 172	Beaufort West, WC, RSA	It was reported that, the solo student had just returned from the GF when he experienced challenges with landing the aircraft. He made three attempts to land and the aircraft bounced several times. Following the fourth attempt and after several bounces and a go around, he was requested by ATC to fly back to the GF and to come his nerves. On his return, he attempted twice to land and had to do a go around after several bounces. On his third attempt he was successful and during taxi of the runway, the ATC realised that the nose gear tire had deflated and requested the student to stop and shut down.	TRNG
18 Jan 2020	EMB-110P1	Cape Town, WC, RSA	Shortly after take-off, the crew reported a fault with the nose gear. They requested a fly past to allow the ATC to advice on the position of the nose gear. The ATC advised that it was partially retracted. The crew then requested a return for landing and the ATC granted their request. On landing, the crew had problems with the steering system but were able to taxi back to the apron.	COM
22 Jan 2020	CASA C-295M	Accra, Ghana	A/C ran off the apron during an engine test run. There were no injuries.	MIL
23 Jan 2020	ERJ 170	Kimberley, RSA	A/C was accelerating for takeoff from Rwy 28 when at about VR the crew spotted a bird on the runway which flew up towards the right of the aircraft. The right-hand engine (CF34) ingested the bird, emitted banging sounds and vibrations and lost thrust. The crew stopped the climb at 8000 feet and returned to Kimberley for a safe landing on runway 02 about 30 minutes after departure.	COM
24 Jan 2020	AT-402A	Sasolburg, MP, RSA	During rotation the pilot noticed a light delivery vehicle (LDV) approaching from the front. The pilot tried to release the chemical in order to gain speed and height so that he can avoid the vehicle which didn't want to give way to the oncoming aircraft. The aircraft clipped the roof of the LDV with the underside of the right wing. The aircraft aborted take-off and landed on the same runway.	PT137
25 Jan 2020	A320-200	Marrakesh, Morocco	A/C was climbing out of Marrakesh's RWY 28 when the crew stopped the climb at 6000 feet reporting they were unable to fully retract the landing gear. The aircraft entered a hold while the crew worked the related checklists and returned to Marrakesh for a safe landing on RWY 10 about 30 minutes after departure.	COM
27 Jan 2020	A330-200	Mitiga, Libya	A/C was climbing through FL310 out of Mitiga when the crew was made aware of a possible tyre issue and decided to return to Mitiga. The aircraft landed safely back in Mitiga about 45 minutes after departure.	COM
31 Jan 2020	Dash8-400	Kisumu, Kenya	A/C was on approach to Kisumu when the aircraft received a bird strike. The aircraft continued for a safe landing.	COM
17 Feb 2020	A320	Port Elizabeth, RSA	The A/C was forced to make an emergency landing after fumes entered the cabin affecting 2 cabin crew members.	COM
21 Feb 2020	C172	Lanseria, RSA	Nose wheel collapsed on landing.	TRNG

DATE	A/C TYPE	LOCATION	DETAILS	TYPE OF OP
28 Feb 2020	Dash 8-300	Lokichar, Kenya	A/C was climbing out of Lokichar when an engine (PW123) failed prompting the crew to return to Lokichar. Upon landing about 5-10 minutes after departure the aircraft veered off the dirt runway and came to a stop off the runway. There were no injuries, the aircraft did not sustain visible damage.	COM
ROTOR WING INCIDENTS AND OCCURRENCES IN JAN AND FEB 2020				
23 Jan 2020	Bell 222	En-route Tokollo Hospital to Kroonstad, FS, RSA	The helicopter experienced number 2 engine flame out during cruise phase of the flight. A precautionary landing was executed safely with no further damages to the helicopter. No injuries where sustained during the incident sequence.	Air Ambulance

AERODROME HAZARDS	
Bamako, Mali	ATC – low level of proficiency
Beni, Democratic Republic of Congo	RWY rehabilitation nearly completed; Birds, Security
Entebbe, Uganda	ATC; Birds
Bangui, Central African Republic	People and animals alongside the runway
Goma, Democratic Republic of Congo	ATC – low level of proficiency, birds, runway incursions
Juba, South Sudan	Poor ATC, heavily congested airfield, large birds, local insurgents
Lanseria International Airport, RSA	Birds, construction work on airside and landside
Rand Airport, RSA	ATC trainees, birds
Timbuktu, Mali	ATC information only with RPAs (Drones) operating in the area
JKIA, Nairobi, Kenya	Poor Security – check for stowaways / tampering with aircraft

4.   EMERGENCY RESPONSE PLANNING

Blake Emergency Services is the International Crisis Management and Contingency Planning and Response Specialist who, although based in the UK, have extensive experience in Africa having handled accidents, incidents, counselling, repatriation, DNA sampling and confirmation, in amongst others Lagos, Nigeria; Fez, Morocco; Pointe Noire, Congo; Moroni, Comores; Maputo, Mozambique and more recently Ukraine, The Netherlands, Indonesia and Mali. Please go to www.blakeemergency.com or contact rethea.mitchell@blakeemergency.com

If you are interested in becoming a volunteer for Blake Emergency Services, please contact Rethea at the address given above.

An Emergency Response Plan is a required section of your SMS and may also be added to your Operations Manual.

Emergency Response, Incident Response, Operations Control and Family Assistance training together with the writing of Emergency Response Plans and Procedures is now offered through Blake Emergency Services. For more information, please contact Rethea on Rethea.mitchell@blakeemergency.com.

5.   HENLEY AVIATION TRAINING

Should you wish to make a booking for any of the following courses please contact Candice on +27 (0)11 024 5446/7 or by email to training1@henleyglobal.org.za. The full 2020 schedule is posted on the website - http://henleyglobal.org.za/events/

DATES	COURSE	LECTURER	COST EXCL VAT
16 – 17 March 2020 20 – 21 April 2020 11 – 12 May 2020 29 – 30 June 2020	Quality Assurance Auditor Course	Dan Drew	R3,270=00
23 March 2020 6 April 2020 18 May 2020 15 June 2020	CRM Refresher	Verity Wallace	R1,320=00
23 March 2020 6 April 2020 18 May 2020 15 June 2020	Dangerous Goods Refresher	Verity Wallace	R1,050=00

23 March 2020 6 April 2020 18 May 2020 15 June 2020	AvSec	Verity Wallace	R 850=00
2 - 3 March 2020 1 – 2 June 2020	SMS Introductory Course	Dan Drew	R3,250=00
2 - 6 March 2020 1 – 6 June 2020	Integrated Safety Course	Dan Drew	R8,470=00

Notes:
Cost per delegate includes all training materials, refreshments and lunch.
Attendees paying in cash on the day are eligible for a 10% discount
Both Recurrent CRM and Dangerous Goods Training Courses are available upon request – even at short notice.

On request we also offer –

Air Cargo Security (Part 108)   Health and Safety (Medical)
Cargo and Warehouse Security   Risk Management & Investigations
First Aid and the Law

6. HOW ELECTRONIC TECHNICAL LOGBOOKS ENABLE SEAMLESS PILOT TO MAINTENANCE COLLABORATION

Kirk Strutt, Aerospace & Defense Product Manager, IFS, explains how, when done correctly, an electronic technical logbook can streamline all departments on the day of operations-from pilots, mechanics, engineers and the maintenance control centre-to ensure better communication, improved safety and quicker turnarounds.

The aircraft technical logbook plays a key role in aircraft turnarounds. It is the primary communication tool between pilots and a maintenance organization. Pilots can see the maintenance status of the aircraft and then report any faults back and forth with the maintenance team-but efforts to digitize this process have so far been ineffective.

Here, Kirk Strutt, Aerospace & Defense Product Manager, IFS, outlines how the next generation of electronic technical logbooks can strike a balance between pilot engagement, maintenance readiness and aircraft safety.

The Principal Director of Accenture's aerospace and defense practice, Craig Gottlieb, recently went on record to say latest research shows aerospace and defense companies are scaling more than 55 percent of their digital proofs-of-concept to production. However, fewer than 20 percent of them do so successfully to create lasting benefit to their business. Electronic aircraft technical logbooks would seem to be one such development.

The over-arching benefit of a digitized electronic technical logbook is to minimize silos of information between the day of operations workforce-enabling all stakeholders to work in unison to make the aircraft serviceable and ready to depart on time with passengers.

This incredibly paper-heavy process of aircraft technical logbooks seems the obvious target to digitize yet attempts to do so have fallen far short of the mark, mostly due to problems with complexity of the solutions which have been brought forward. The result is an extremely low adoption rate of true electronic technical logbooks among commercial airlines.

First let's look at the reasons why this has been the case.

Electronic   Technical   Logbooks   Historically   Provide   Complexity   for   Airlines
The issue with a paper-based aircraft technical logbook is that all the information it houses essentially sits as a silo outside the core maintenance system an airline may be using-regardless of the software provider an airline uses. These core maintenance systems are incredibly granular and complex, for good reason as they provide a view of all aircraft maintenance activity, right down to every nut and bolt.

But the logbook itself exists as a simple way of interacting between maintenance organization and pilot to minimize turnaround times. It essentially acts as a micro maintenance system-with the ability to sign-off work, track deferred items

and look at the history of what has recently been resolved and fixed on the aircraft. As such it is essential to improving and optimizing aircraft turnaround times.

In a paper-based scenario, the pilot has to wait until they are at the aircraft before seeing what deferrals are associated with a flight. The pilot may have been handed a flight dispatch in a pre-flight briefing, but this may not reflect the current status of an aircraft, often meaning they wouldn't contain an up-to-date view of anything last minute which took place on the inbound journey.

Initial attempts to digitize this process saw electronic technical logbooks integrated into the aircraft itself, which proved a complicated and costly disaster as it required introducing flight proven hardware and software systems, not a viable solution.

Following that, things moved forward with the advent of iPads and other tablets being introduced to the flight deck, which brought the possibility to house maintenance data on a portable mobile device. The main stumbling block here was that these 'paperless systems' actually mirrored the paper-based systems they were trying to replace. Simply logging tasks manually into an iPad rather than pen to paper does not make electronic technical logbooks a fully integrated system.

A New Digitized Approach is Required
From a cost-saving perspective every airline has now provided a pilot with an iPad or tablet, to remove as much paper as possible from the flight deck. Delivering the logbook over a tablet transcends the paper-based platform and gives a pilot access to aircraft status anywhere anytime. But by just electronically mimicking paper-systems, airlines have to effectively integrate two separate maintenance systems together, making for a complex and complicated muddle.

In order for an electronic technical logbook to function effectively it has to be an extension of the core maintenance system that an airline already has in place. But even this is not the silver bullet to logbook success -there are some core elements which should be contained within a truly electronic technical which will provide airlines with solution to enable easy collaboration and further shrink turnaround times.

The advantage of having data available at the fingertips of pilots as they travel to the airport means they can see anything which was raised during the inbound flight, even if it hasn't necessarily been dispositioned yet. They can start thinking about how a certain type of fault might impact the flight they have, for example the aircraft may require extra fuel because of a performance penalty.

Once the pilot arrives at the aircraft, they no longer need to physically walk onto the flight deck to sign-off the logbook. The pilot can be down on the ground, outside the aircraft, signing-off tasks by sending a push notification through their tablet to the airline maintenance department, indicating whether they are happy to begin the flight.

Faults Logged in Real Time Means Maintenance on Arrival
Once the pilot is flying the aircraft, if they encounter any problems, they should be able to log the fault in the app, which should be able to push updates to the maintenance department, either in real-time or when the aircraft touches the ground. On aircraft with in-flight internet connectivity the maintenance organization will immediately receive a push notification outlining the fault and start preparing work orders and parts, so they are ready to address it the moment the aircraft lands.

Another area where previous electronic technical logbooks have often failed is overloading the pilot with information in a format they are not used to dealing with. It makes no sense to simply expose the complete core maintenance system to a pilot. They require a slim and tailored interface which provides quick and easy access to the information they need, without the need to go digging around.

This new approach to a true electronic technical logbook, extended from a core maintenance system, relies on a simple and elegant user interface for the pilot and maintenance technicians. No complex integration to aircraft systems or other separate maintenance systems; just the right core information delivered between pilot and maintenance organization, at the right time.

A pilot-driven user experience means the electronic technical logbook developer must build into the UX an understanding of the flight deck environment where pilots are operating. Many pilots are already using in-flight apps, so an electronic technical logbook should look and feel like an extension of those. This includes inherently built-in dark modes for operating in night-time environments for example, and other unique requirements which come from working on an aircraft flight deck. Sounds obvious but not often done!

Benefits Beyond the Flight Deck-The Connected Workforce.
The widespread benefit of next generation electronic technical logbooks is an increasingly connected workforce. Airlines are striving towards connectivity across their operations, from check-in, in-flight connectivity right down to a connected and fleet-wide maintenance system.

This is the goal, and an effective electronic technical logbook allows pilots to communicate clearly and quickly with the whole team involved in flying an aircraft on the day of operations-spanning mechanics, maintenance control centres, engineers and more.

There are also benefits which extend into aircraft safety. When dealing with a paper logbook, mechanics have to wait for an aircraft to land, taxi and have passengers disembark before even accessing the paper log. The mechanic records the faults, then manually inputs it into the core maintenance system. Core systems then run a complex compliance analysis and validation, which flags any faults-sometimes delaying the turnaround time or, even worse, flagging after an aircraft has left for its next destination.

With an electronic logbook inputting data into the core system in real-time, compliance discrepancies can be caught immediately, preventing the release of an aircraft in a non-compliant state.

According to Frost & Sullivan, Tier I airlines in particular, take a holistic view of digital transformation, viewing it as an umbrella term that embraces changes to culture, business models, people, products, as well as advanced technologies. The adoption of electronic technical logbooks should be considered a key part of the digitization of airline processes, because maintenance should be a focus point for them.

Why? By arming the pilot with logbook information well in advance, and connecting the entire operations workforce, airlines can significantly minimize the last-minute surprises which contribute to longer aircraft on ground (AOG) scenarios-keeping planes in the air, passengers happy and looking after that bottom line.
https://www.aviationtoday.com/2019/12/30/electronic-technical-logbooks-enable-seamless-pilot-maintenance-collaboration/

7.   GLOBAL FLIGHT TRACKING PROGRESSES AS IATA PROPOSES DISTRESS REPOSITORY

Ten years after the disappearance of Air France Flight 447, and five years after the disappearance of Malaysia Airlines Flight MH370 which remains a mystery, the airline industry is still not tracking 100% of the global aircraft fleet.
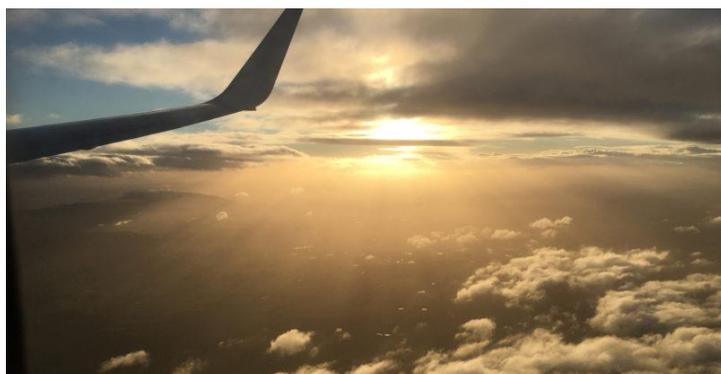
The ICAO requirement that aircraft flying under normal operating conditions be tracked every 15 minutes or less went into effect in November 2018. But an IATA survey of members, conducted eight months ago, showed that only 70% of airlines operating flights in remote regions had implemented aircraft tracking solutions that meet the GADSS requirements. A few airlines that might not have been compliant at the time assured IATA they had plans in place and dates for compliance.

During the International Air Transport Association's Media Days recently in Geneva, IATA senior vice president, safety and flight operations Gilberto Lopez Meyer said it's difficult to get an exact number on compliant aircraft in part because of the exceptions accepted when GADSS was drafted.

He told Runway Girl Network:
We have tried to get the best numbers available. What we have seen is a delay in the countries implementing the requirement in their own national law.

[The way] the system works is that you have an ICAO standard; the ICAO standard obliges the countries and the countries make their own rules, laws, regulations to oblige the airline operators and the airports as well. We have seen that not all countries have been doing that on time.

Or some of the countries have said that they will implement [GADSS] at a certain date with some differences from the ICAO requirement, which they are allowed to do. The only requirement is that they need to notify ICAO of the difference of their own regulations.

So, the system is moving, relatively slowly, but in the right direction.
Some examples of exceptions include the world's most active airline markets. "Europe and US have said, 'Yes, we will comply, but with certain specific differences based on the availability of equipment and possibilities to upgrade equipment'," said Lopez Meyer.

"In general, nobody has said no. Countries can say no. Even if ICAO establishes a mandate, countries have the ability to say no to certain conditions. But nobody has said no."

Part of the reason for these exceptions is that GADSS requirements do not apply for airline operations in areas largely covered by air navigation services. "Most airlines are flying in areas where there is a system already available. Some airlines have 20-30% of their fleet - or even 10% - flying on those remote parts of the world and the rest of their fleet is flying in other areas where they don't have to do anything. So, it's really difficult to measure what is the status in terms of percentage of compliance to ICAO requirements," said Lopez Meyer.

"The industry generally is moving well. We are happy with that. But within the first and second quarter of next year we will do another survey to understand where we are and determine what countries or airlines need a little help or incentivize [them] to do just the normal aircraft tracking."

While public aircraft ADS-B tracking sites are gaining popularity and becoming a go-to resource for media and social media when something goes wrong with a flight, Lopez Meyer said this is not a reliable substitute for GADSS reporting, echoing comments made by SITAONAIR

"Public information is not really accurate enough," he said. "It is a very useful external source of information because before we had nothing. But for the purpose of a permanent, professional aircraft tracking [solution], the systems that we have now, in some cases, are not accurate enough. Where they are accurate is when the plane is flying over Switzerland, for example. But when the aircraft is flying in the South Pacific, those sources of information are not enough."

The critical GADSS requirement, to prevent another aircraft disappearance like MH370, will not go into effect until 1 January 2021. The requirement for distressed aircraft tracking will require aircraft to be automatically triggered into reporting their position every minute when a set of distress parameters are met, or when activated by the pilot.

"Aircraft are traveling six nautical miles per minute, so if you have a precise location every minute, you reduce the search to a radius of six nautical miles. That is incredibly useful, because with every fifteen minutes, you are talking about a radius of 90 nautical miles. The automatic distress will allow us to reduce the area of initial search and rescue to six nautical miles with increased probability to locate the aircraft quickly and precisely," said Lopez Meyer.

The challenge for adoption is that it is a very expensive system to implement, said Lopez Meyer, and thus it is only being required on new aircraft.

Another challenge of GADSS is the multiple reporting requirements on aircraft position. If airlines are flying over a part of the Pacific Ocean controlled by the Hawaiian control centre, for example, the flight must report to the control centre, and to search and rescue, and to any other entity that the airline's regulatory authority has decided needs to be informed on the positioning of their aircraft.

"It's going to be very difficult for any airlines flying a single flight across multiple jurisdictions to have a way to communicate [their position]," said Lopez Meyer.

To resolve this reporting burden, ICAO has proposed the Location of an Aircraft in Distress Repository (LADR) system, which would be responsible for collection and distribution of aircraft positioning data.

"[ICAO] sent an official state letter, a few months ago, asking for voluntary contributions to create this repository for the benefit of everyone," said Lopez Meyer. "Several countries have agreed and IATA is going to contribute. So we solve the problem and we simplify the problem. We expect that it will be ready to operate fully by January 2021. We have a year to develop the system."

Still, Lopez Meyer acknowledged that even now an aircraft disappearance like MH370 is not impossible. "The final answers about [MH370] are not known. It is a very rare event. But what we have seen is that with the implementation of the new system, we are much better than we were before MH370. That [type of event] can happen, but it will be much more rare to happen because of the implementation of normal aircraft tracking. We are much better off than where we were before MH370, because many airlines trying to understand what happened [on MH370], have made the decision to implement tracking even before the mandate," he said.

"It has been very difficult to measure where we are, but we expect that for the next survey it will be better than eight months ago. It's an important investment, and the airlines understand that it is important. I don't see a reaction against it, but it is just a matter of time."
https://runwaygirlnetwork.com/2019/12/19/global-flight-tracking-gradually-progresses-as-iata-proposes-distress-repository/

8. **NTSB VICE CHAIR PROMOTES SAFETY WITH DRUG, DATA AND TECH AWARENESS**
   Molly McMillin | *The Weekly Of Business Aviation*

WICHITA—The National Transportation Safety Board's (NTSB) work to promote aviation safety includes a long list of issues and vice chairman Bruce Landsberg touched on a number of them in a presentation to attendees of a Wichita Aero Club luncheon..

For one, Landsberg had a cautionary tale regarding the use of over-the-counter medications and its contribution to accidents. Diphenhyrdramine, found in common medications such as Nyquil, Benadryl and Advil PM, are sedating and can stay in one's system much longer than expected, he said. In fact, in toxicology reports following fatal aircraft accidents, it is the most common drug found in the deceased pilot's system.

In an issue regarding another drug, he cautioned that although marijuana is legal in some states, usage or possession remains against FAA regulations. A pilot recently driving from Colorado, where marijuana is legal, to Kansas, where it is not, was stopped by a state trooper, who found marijuana-laced brownies. When asked about them, he told the trooper, "Oh, I was kind of hoping you wouldn't find that," Landsberg said. The pilot came to the NTSB to appeal the FAA's rule enforcement. "We don't have a choice in that fashion," he said. "We don't mess with the rules."

Why Accidents?
In a broader question, Landsberg asked simply: Why do aircraft crashes still occur?

For one, it is often related to what is called the Dunning Kruger Effect, in which people do not recognize their own shortcomings, he said. For example, in a study of college professors, 94% said they were above average. We tend to think we are more capable at something than we are—and that falling asleep while flying, forgetting to extend the landing gear or having a runway incident could never happen to us, Landsberg said. But it can. Thinking you are better than you are can get you into trouble. On a bell curve, systems are designed for the top half of the curve, for the Luke Skywalkers, not the Homer Simpsons.

Landsberg also encouraged pilots to be proactive in the use of big data to monitor systems, especially on older single-engine aircraft with reciprocating engines. The use of retrieving and analysing data can help warn a pilot of an issue before it becomes critical and causes an inflight engine failure. He has the oil on his aircraft analysed at each oil change and

checks data from his engine analyzer every 20 hr. or so. He also encourages regular borescope inspections to see the condition of the exhaust valves.

"If you're putting all of your eggs in one basket, watch that basket carefully," he said.

The 737 MAX
On the 737 MAX 8 accidents, the NTSB is not the lead investigator because the Lion Air and Ethiopian Airlines crashes occurred in other countries. Still, the NTSB made six recommendations to the FAA. That number will likely increase.
A single-point design failure, such as a failed angle of attack indicator, creates a cascading series of faults that the system did not quite understand and the pilots did not understand, Landsberg said.
When a pilot has "all kinds of lights" and alerts going off, "how do you know which one to deal with first? What's the root cause? What's the most critical thing? We don't have a good system for dealing with that," he said. Automation creates challenges, and the aviation industry must do a better job of standardizing how pilots and technology interact, he said. "The pilots did not behave the way even Boeing or the FAA expected them to," Landsberg said. "There was no standard methodology between how the pilots and technology should interact. Yes, we do have some standardization. Red is bad; green is good, and it doesn't go a whole lot more beyond that."

Landsberg was sworn in as NTSB vice chairman in 2018. He previously served as executive director of the Aircraft Owners and Pilots Association's Air Safety Foundation and then as president of the AOPA Foundation and Air Safety Institute. He is a former associate editor of Flying magazine and product marketing manager at FlightSafety International. He owns a Beechcraft Bonanza and has more than 7,000 hr. of flight experience.
Courtesy of Curt Lewis.

9. NEWS FROM THE JOHANNESBURG AIRPORTS

Users of the Johannesburg aerodromes must be aware of the fact that they all take Aviation Safety and AVSEC seriously. If you want to use these airports as a Pilot or are employed in any way on them, then we would recommend that you make yourself more than familiar with Part 139 in the SACARs and the Rules and Regulations applicable to that particular aerodrome. Be prepared for fines being levied if you breach any of the SARPs.

RAND AIRPORT, GERMISTON – www.randairport.co,za
Safety Meeting – Held On the 2nd Thursday of each month at 09.00 in the Old Customs Hall.
- The wearing of high visibility jackets/waistcoats is mandatory for all persons, excepting for passengers under escort, on airside. (SA CAR 139.02.22(6))
- Drivers found to be speeding on airside will have their access remote taken from them.
- Vehicles being driven on airside must carry proper mandatory insurance cover
- All delivery vehicles and visiting vehicles requiring access to airside MUST be escorted from the access gate to the premises and then after closure of their business back to the gate for egress.
- Cranes are not allowed onto Rand Airport unless their use has been specifically authorised by airport management
- All operators are required to report Bird Strikes to the Airport Rescue and Fire Fighting Services or the Safety Office even if there has been no structural damage to the aircraft as a result of the strike.
- Fuel must not be "trucked" into Rand Airport from other sources. Should there be a special requirement permission must be sought from the Airport Manager.

LANSERIA AIRPORT – www.lanseriaairport.co.za
Safety, Security and Stakeholders Meetings are held on the second Tuesday of each month from January to November at 12.00 in the LIA Training School.
- The wearing of high visibility jackets/waistcoats is mandatory for all persons, excepting for passengers under escort, on airside. (SA CAR 139.02.22(6))
- Drivers shall obey the published speed limits which are 30 on airside and 40 on landside.
- New Airgate system will come into operation soon. Details can be found in the AIP.
- There is a great deal of construction going on both Landside and Airside so extra attention is required when operating into or out of Lanseria.

GRAND CENTRAL AIRPORT, MIDRAND
Safety Meeting are held on the 1st Tuesday of each month at 12.00 in the Boardroom
- The wearing of high visibility jackets/waistcoats is mandatory for all persons, excepting for passengers under escort, on airside. (SA CAR 139.02.22(6))
- Drivers found to be speeding on airside will have their access revoked
- Should an emergency occur pedestrians are requested to stand still in a safe area out of the way of responding AR&FFS vehicles.
- During any emergency Pilots, Instructors and students should try to keep the frequencies as clear as possible
- Cranes are not allowed onto Grand Central Airport unless their use has been specifically authorised by airport management

10. FINALE – A ROUND UP OF AVIATION RELATED TITBITS OF INFORMATION

KLM Commits to Biofuel Purchase
Dutch carrier KLM has announced plans to buy an undisclosed quantity of used cooking oil-based sustainable aviation fuel (SAF) from Finnish company Neste, which will supply flights from Amsterdam Schiphol on a drop-in basis. The volume is additional to the existing supply from Los Angeles to bridge the period toward the opening of the SAF production plant,

which is to be built in Delfzijl, Netherlands, in 2022. The plant, under development with support from KLM and industry partners, will supply 75,000 tons of sustainable aviation fuel a year to KLM, the Dutch carrier said Dec. 10. The Neste SAF will be used for flights out of KLM's Amsterdam home base. It is a so-called "drop-in" fuel, which means it can be used without any modifications to aircraft engines, or fuel infrastructure at the airport, when blended with fossil fuel. The sustainable fuel is produced from cooking oil and will reduce CO2 emissions by up to 80% compared to fossil kerosene.

Air Zimbabwe passed the IATA Operational Safety Audit (IOSA).
4 December 2019

Air Zimbabwe is the national carrier of Zimbabwe. It was founded as Air Rhodesia in 1967 and was renamed Air Zimbabwe in 1980 when the Republic of Zimbabwe was formed. The airline currently has two Airbus A320s, two Boeing 737-200s, two Boeing 767-200s and two Xian MA60s. Of those aircraft, only one Boeing 767 is currently operational. The airline is preparing a Boeing 737 to resume service.

The IOSA programme is an evaluation system designed to assess the operational management and control systems of an airline. IOSA uses internationally recognised quality audit principles and is designed to conduct audits in a standardised and consistent manner. It was created in 2003 by IATA. All IATA members are IOSA registered and must remain registered to maintain IATA membership.

Nigeria: Air Peace Scales Through IATA Safety Audit

Nigeria's major carrier, Air Peace has set the tone for the aviation sector in 2020 as it recently received its third **International Air Transport Association Operational Safety Audit (IOSA) certification**.

The airline said the development is coming on the heels of its announcement of flight operations into Ibadan from Lagos, Kano and Owerri.

Air Peace noted that it set a record when it obtained its first IOSA, barely two years into its operations and was subsequently inducted as a member of the International Air Transport Association (IATA) In a reaction, the Chief Operating Officer (COO), Air Peace, Mrs. Toyin Olajide, expressed delight that the certification was another feather added to the Air Peace's cap and confirms the airline's uncompromising adherence to safety standards in line with global best practices. She explained that the exercise this time around was tougher than what obtained in previous years but the airline scaled through every phase of the certification process due to, "our unwavering drive to keep raising the bar in our operations."

She also reassured the flying public of the airline's resolve to continue to comply with best safety standards and promised more seamless connectivity and an expanded route network in 2020.

The COO applauded the IATA for its efforts at ensuring that stakeholders in aviation globally comply with stipulated safety standards. She averred that the airline would continue to blaze the trail in Africa's aviation landscape. "Air Peace has attained an enviable position as West Africa's leading airline and will continue to raise the bar in-flight services, while ensuring a hundred percent compliance with all safety codes as required by the industry regulatory bodies," Olajide said.

In a message to Air Peace, the Director of Audit Programmes, IATA, Catalin Cotrut, congratulated the airline on the successful completion of the audit.
https://allafrica.com/stories/202001030347.html

Can we help you with your aviation safety and / or quality assurance requirements?

Under SA CAR 140.01.2 if you and your organisation hold one of the following

- ✈ a category 4 or higher aerodrome licence;
- ✈ an ATO approval;
- ✈ an aircraft maintenance organisation approval;
- ✈ a manufacturing organisation approval;
- ✈ an ATSU approval;
- ✈ a design organisation approval;
- ✈ an AOC issued in terms of Part 101, 121, 127, 135, 141;
- ✈ a procedure design organisation approval; and
- ✈ an electronic services organisation approval,

then you shall establish a Safety Management System for the control and supervision of the services rendered or to be rendered by that organisation.

If you do not already have an approved Air Safety Officer and an approved Safety Management System then please contact us for assistance.

Avia Global in conjunction with Henley Air deliver the following SA CAA Approved training courses at Rand Airport;

- ✈ Safety Management Systems
- ✈ Integrated Safety Officer Course
- ✈ Quality Assurance Auditor
- ✈ Crew Resource Management (Initial and Recurrent)
- ✈ Dangerous Goods
- ✈ Human Factors for AME's
- ✈ Safety Management System Course (every 3 years)

Should your operation be of a size whereby the full-time employment of an Air Safety Officer and/or Quality Assurance Officer is not financially viable then we can provide you with Consultants who have previously held Air Services Licensing Council approval. We can also provide you with a tailor-made SA CAA approved Safety Management System and all Manuals as required by your Regulatory Authority for your operation.

For further information on how we can help you please contact Rethea or Candice on +27 (0)11 024 5446/7 or e-mail admin@aviaglobal.net

"Aviation Safety, in all of its guises, is Avia Global and GAAC's' first and only concern and to that end our clients' safety on the ground and in the skies, is our Alpha and Omega."