



OPSGROUP

**THIS AIN'T
NO COUNTRY CLUB**



**The only thing necessary for
the triumph of bureaucracy
is for good people to do
nothing.**

IN THE AREA OF THE AIP AD 2 LIML 3-3 NEW OBSTACLE LIGHTS
PENETRATING TAKE OFF FLIGHT PATH AREA RWY 01
172.1M AFTER THR35 AND 172.1M RIGHT RCL ON TAKE OFF
DIRECTION - COORD (WGS-84): 453022.0N 0091555.0E MAX ELEV
80.2M/227.0FT MAX ELEV AMSL 185.7M/609.3FT ROTATING JIB 67M
ICAO SIGNAL UNPROVIDED PSN 5997.2M AFTER THR35 AND 243.1M
RIGHT RCL ON TAKE OFF DIRECTION - COORD (WGS-84): 453023.9N
0091558.1E MAX ELEV AGL 80.2M/263.1FT MAX ELEV AMSL
196.7M/645.5FT ROTATING JIB 67M ICAO SIGNAL UNPROVIDED. 24 MAY
13:46 2018 UNTIL PERM. CREATED: 24 MAY 13:46 2018. THIS NOTAM IS
ISSUED TO STATE THAT TURKISH NOTAM A2419/05 LGGGYNYX IS
MISLEADING AND UNACCEPTABLE SINCE GREECE HAS NEVER
REFUSED TO PROMULGATE A RELEVANT NOTAM. ON THE CONTRARY
RELATIVE NOTAM A1674/05 LGGGYNYX, DATED 26 JUL 2005, HAS BEEN
ISSUED ANNOUNCING THE SAID TURKISH MILITARY EXERCISE
ACTIVITIES WITHIN ATHINAI FIR. FURTHERMORE HELLENIC CAA
HAS INFORMED TURKEY, BY COORDINATION MESSAGE, THAT AS THE
COMPETENT AUTHORITY TO ISSUE NOTAMS ONLY WITHIN ATHINAI
FIR, ACCORDING TO ICAO RULES AND REGULATIONS, HAS ALREADY
ISSUED NOTAM A1674/05 LGGGYNYX FOR ALL FOUR EXERCISE
AREAS, WHICH LIE WITHIN ATHINAI FIR ACCORDING TO THE
OFFICIAL ICAO AERONAUTICAL CHARTS AND RELEVANT ICAO
REGIONAL AGREEMENTS. CONSEQUENTLY, THE ABOVE SAID
REFERS TO TURKISH MILITARY ACTIVITIES NOT ONLY WITHIN
ISTANBUL FIR BUT ALSO WITHIN ATHINAI FIR WHERE IM T
THE ONLY COMPETENT AUTHORITY TO PROMULGATE AND
ISSUE NOTAMS IS THE HELLENIC CIVIL AVIATION THE AN
AUTHORITY AND THEREFORE IT IS CONSIDERED NULL AND
VOID CONCERNING ITS PARTS, WHICH REFER TO AREAS
WITHIN ATHINAI FIR. UKDV DNIPROPETROVSK
FIR A1492 A) UKDV B) 1407141800 C) TEMPO
RESTRICTED AREA INSTALLED WITHIN FIR
DNIPROPETROVSK BOUNDED
BY COORDINATES : 495

**For every unreadable Notam,
there is a human
that must read it.**

**MH17 WAS HORRIFIC. WHAT YOU DON'T
KNOW, IS THAT IT WAS THE 17TH
AIRCRAFT TO BE SHOT DOWN OVER
UKRAINE THAT SUMMER. WE KNEW THE
RISK. THE CREW DID NOT. WE DID NOT
TELL THEM.**



WE KNEW

At twenty-past-four on a Thursday afternoon in the summer of 2014, a 9M-314M warhead exploded to the left hand side of the cockpit of MH17.

It's designed to detonate when it reaches 70 feet from the target, for maximum destruction. And it did. The impact killed 3 people in the cockpit immediately. All 298 occupants lost their lives. On the day of the crash, 160 flights had operated above the eastern part of Ukraine. Every single one of those operators thought that it was safe.

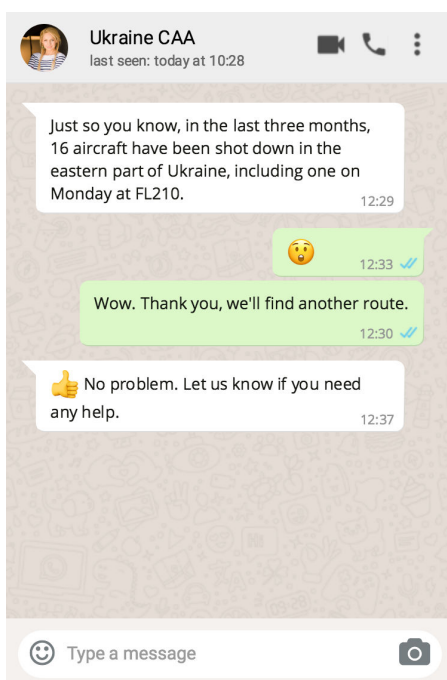
But it was not safe, and some knew it.

The people at the Ukraine CAA knew it. A handful of large airlines knew it. The airspace was not safe. 16 other aircraft – all military, some transport – had been shot down in the three months leading up to MH17.

Three days earlier, on Monday, an Antonov 26 was shot down at FL210. That was the highest yet. The authorities met to discuss. What shall we do? What should we say? The decision: issue a Notam. This Notam. This unreadable, meaningless, Notam.

Why are we speaking in code?

(A1492/14 NOTAMN Q)UKDV/QRTCA/IV/BO /W /260/320/4822N03807E095 A) UKDV B) 1407141800 C) 1408142359EST E) TEMPO RESTRICTED AREA INSTALLED WITHIN FIR DNIPROPETROVSK BOUNDED BY COORDINATES : 495355N 0380155E 485213N 0372209E 480122N 0370253E 471352N 0365856E 465018N 0374325E 465900N 0382000E 470642N 0381324E THEN ALONG STATE BOUNDARY UNTIL POINT 495355N 0380155E. RESTRICTION NOT APPLIED FOR FLIGHTS OF STATE ACFT OF UKRAINE. F) FL260 G) FL320)



And this Notam was on board MH17, in the same cockpit that would disintegrate two hours into flight. It was impossible for the crew to understand the true meaning.

A Notam is just a message. To a Pilot. From a human, to a human.

So why are we not making the message **clear, simple, and in a format that a human can actually understand?**



ONE NIGHT IN JULY 2017, AN
A320 TRIED TO LAND ON A
TAXIWAY AT SFO. THERE
WERE FOUR AIRCRAFT ON
IT. WE WERE **14 FEET** FROM
THE WORST CRASH IN
HISTORY.

THE CAUSE: NOTAMS

14 FEET

**“That’s what Notams are,
they’re just a bunch of
garbage”** - *NTSB*

Robert Sumwalt, Chairman

It doesn’t get any closer. This was the distance **between the bottom of the tires of the Air Canada A320, and the tail of the Philippines Airlines A340**, when the A320 was going around. Three other aircraft would have been involved, had there been a collision.

The Air Canada crew, fatigued, landing at midnight, but body clock on 3am Toronto time, missed the Notam that said 28L was closed, and thought the taxiway was 28R.

Listen to the ATC tape if you haven’t already. Then read the incident report. You must read this report. Even the NTSB says it should be required reading for all crews.

From the Final NTSB Report:

“Concerns about legal liability rather than operational necessity, drive the current system to list every possible Notice to Airmen (Notam) that could, even under the most unlikely circumstance, affect a flight. The current system prioritizes protecting the regulatory authorities and airports. **It lays an impossibly heavy burden on individual pilots, crews and dispatchers** to sort through literally dozens of irrelevant items to find the critical or merely important ones. When one is invariably missed, and a violation or incident occurs, the pilot is blamed for not finding the needle in the haystack!

THE OPSGROUP MISSION:

Make aviation human-friendly for us all.

Aviation is slipping into a void:

where the system is more powerful than the humans that run it, and has left our needs behind - the forces of business and government have become so strong that our human voice is almost extinguished.

Commercial pressure, over-regulation and fear of blame pervades our entire system. **We're drowning in data but missing the message.** Awful Notams, the shutdown of MH17 and the incredibly close call of AC759 show the problem at its most extreme.

This is why Notams suck.



OpsGroup exists to make aviation human-friendly. This is our 'why'. We do this by connecting to each other as people, not professionals, and considering the human impact of decisions that we make.

So, we put humanity before commerce and bureaucracy. We need to remember that we run the system, and not the reverse - we have the power to change things, one good decision at a time.

When we do this, we make aviation work for us, and we can then make aviation a true force for good in the world.



**Real people, connecting,
sharing radically,
speaking plainly,
making aviation human.
That's how we do it.**

#1: Speak plainly

Perfection is achieved, not when there is nothing more to add, but when there is nothing left to take away -

Antoine de Saint-Exupery

Hey you. Yeah. You're reading this, huh? I bet I could tell you anything right now, and you'd believe me. Well OK, maybe not believe, but at least understand. Right?

Yep, well, that's where the bureaucracy fails. Because once we start seeing words like *promulgate*, our brain switches off, and we miss the message.

But wait! That's not professional. You can't just write this stuff in simple words. No? Tell the crew of MH17. Tell the crew of AC759. Bullshit Notams* are behind some of the worst incidents in the recent past.

** That's the technical term for any unreadable Notam, and all Notams issued by Australia.*

It's not just Notams. It's a whole slew of AIC's, Circulars, Documents.

Where we fail is in forgetting that AIC's and Notams are simply a message from one human to another. We wrap them in language so legalese and unreadable that the message is lost.

In OpsGroup, our information is written for the human on the other end of the message. Write like you are writing to a friend. Simple English. Clear and concise. Friendly.

#2: Connect - as real people

Be who you are and say what you want, for those who mind don't matter, and those who matter don't mind. -

Dr. Seuss

Real people. More to the point: people, not *professionals*.

"Be professional" – we hear that a lot in aviation. Sometimes that means "Do the best work you can", and that's a good thing. Mostly though, it means: wear a suit and tie, wear a uniform with nice stripes, put the company first, don't admit mistakes, know all the things you should. Wow, tough job.

When we really want to change how things are, we have to connect as the humans we are. In all our imperfect glory. Then, we can really get things done.

In Opsgroup, we connect as people, not professionals. Real connection comes through vulnerability, not glossy company photos.

There's nothing smart about this. It's not a clever new concept.

It's the opposite.

It's the oldest, deepest thing there is – humans connecting with each other, to take care of each other.

#3: Radical sharing

A spokesman for Qantas said the Australian flag carrier had not used the route for months. Hong Kong-based Cathay Pacific said it had been taking a detour for "quite some time". -

The Guardian, post-MH17 article.

The route you're flying today is the one I will fly tomorrow. So, tell me what you know, and I'll do the same for you.

MH17 showed us that a handful of airlines knew the risk in Ukraine, but there was no mechanism to share that information.

If it's not commercial info, then you should be telling others about risks and dangers you come across.

In OpsGroup, we built **Airport Spy** for airport reports, and **SafeAirspace** for airspace and country risks.

We also have **OpsFox** – our secret spy network, so you can report anonymously.

Share radically. Hide nothing, hold nothing back. The internet is not about information. It's about collaboration. When we learn to share fully, we become greater *than our own little piece of the puzzle.*

#4: Rebels

I knew all the rules but the rules did not know me -

Eddie Vedder ('Guaranteed')

IT'S NOT EASY, standing up to the system. But that's what OpsGroup does. We do it for you – the human behind the machine. Doesn't matter if you're a controller, a pilot, a dispatcher, an engineer, a manager ...

Sometimes, we have to **REBEL**.

Courage. Standing up for what is right, and what makes things better for all of us.

"Rebels are not troublemakers. They're not outcasts. Rebels are people who break rules that should be broken. They break rules that hold them and others back, and their way of rule-breaking is constructive rather than destructive. It creates positive change."

#5: Adventure

The last of the lonely places is the sky, a trackless void where nothing lives or grows, and above it, space itself. Man may have been destined to walk upon ice or sand, or climb the mountains or take craft upon the sea. But surely he was never meant to fly? But he does, and finding out how to do it was his last great adventure –

Frederick Forsyth

Aviation is adventure. Pilots, and all the other who make airplanes fly, are adventurers, explorers. You too, right?

In OpsGroup, we have many things to fix and inventions to make – often with outcome unknown (the definition of adventure).

Adventure is creativity. It's the essence of tapping into something larger than ourselves, and trusting that we'll be looked after.

And, equally importantly – doing all we do with a **sense of humor**. If it's not fun sometimes, what's the point?

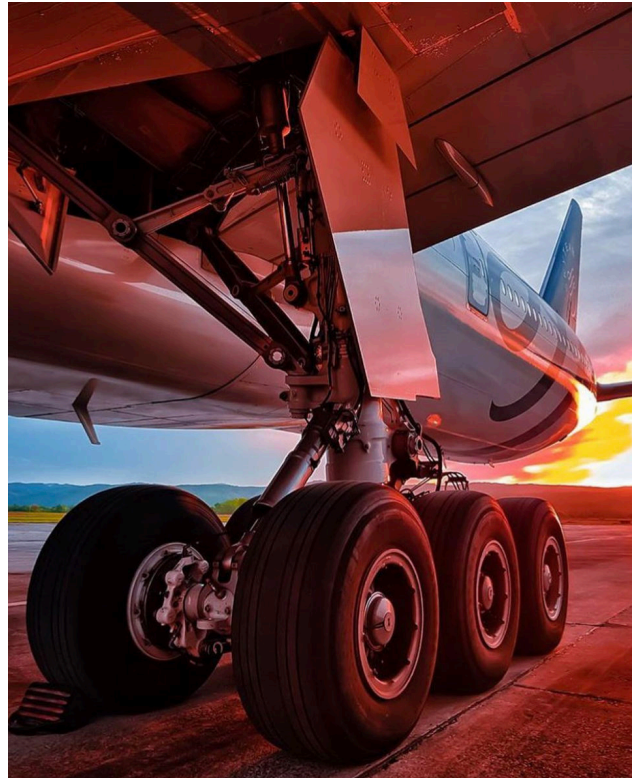
solving serious problems doesn't have to be done seriously all the time. It should be an adventure.



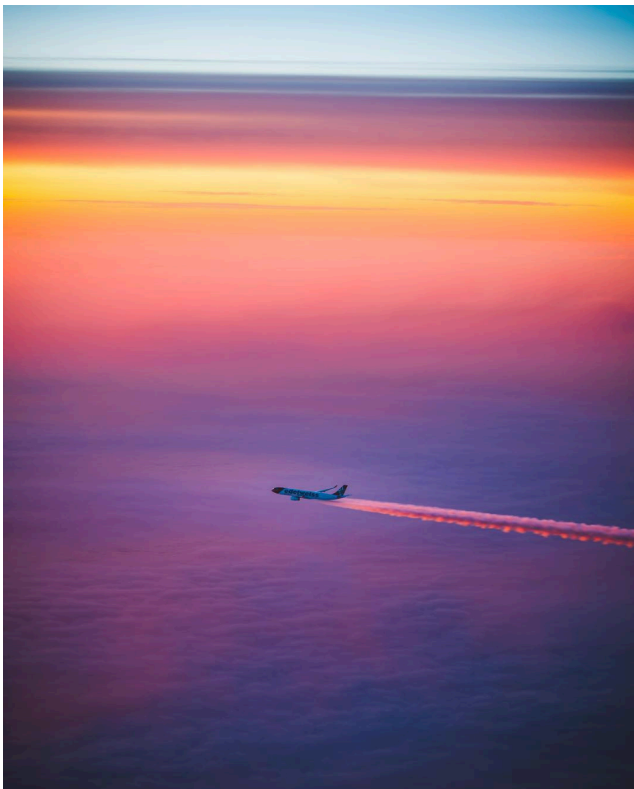
There's nothing smart about Opsgroup, it's not a clever new concept. It's the opposite. It's the oldest, deepest thing there is – humans connecting, to take care of each other.



I have often said that the lure of flying is the lure of beauty. That the reasons flyers fly, whether they know it or not, is the aesthetic appeal of flying. — Amelia Earhart



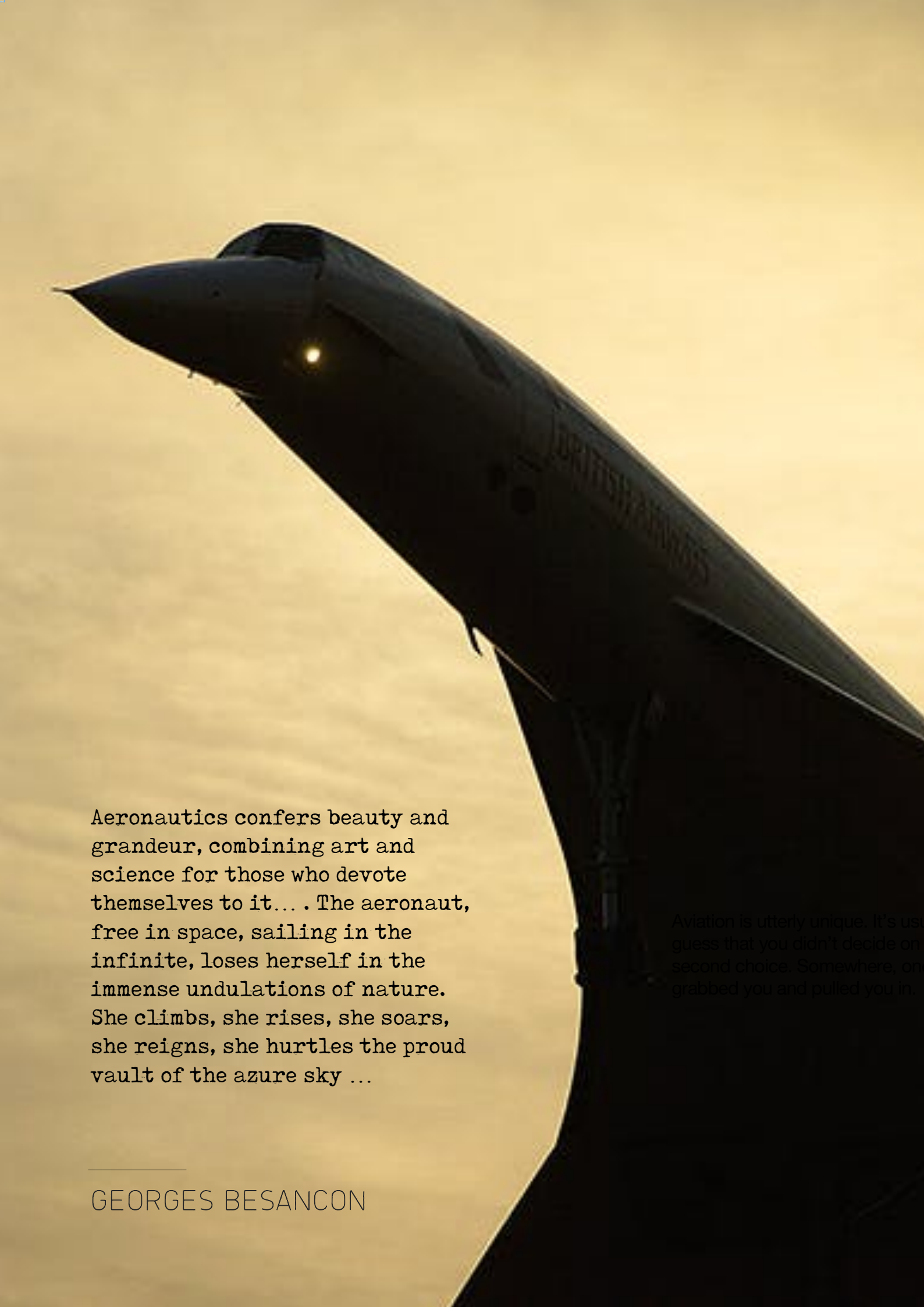
The very existence of aviation is proof that man, given the will, has the capacity to accomplish deeds that seem impossible. — Eddie Rickenbacker



Whether we call it sacrifice, or poetry, or adventure, it is always the same voice that calls — Antoine de Saint-Exupéry



I've never known an industry that can get into people's blood the way aviation does. — Robert Six, founder of Continental Airlines.



Aeronautics confers beauty and
grandeur, combining art and
science for those who devote
themselves to it... The aeronaut,
free in space, sailing in the
infinite, loses herself in the
immense undulations of nature.
She climbs, she rises, she soars,
she reigns, she hurtles the proud
vault of the azure sky ...

Aviation is utterly unique. It's usually a
guess that you didn't decide on your
second choice. Somewhere, one day,
it grabbed you and pulled you in.

GEORGES BESANCON



A LETTER FROM MARK ZEE OPSGROUP FOUNDER

Hello! What is Opsgroup all about? Hmm. Can I start with a story?

I'm in the cockpit of our Fokker 100, about 20 minutes before departure to Rostov-on-Don, Russia, on a scheduled airline flight. It's a little before 10am in Vienna and as I'm turning off my phone, I see a story from the BBC about two helicopters having been shot down in Ukraine that morning. Looking at our charts, we plot the name of the town where this happened, and we see that it's almost exactly on our route.

"Maybe we'll see something interesting". That was the sum of our risk concern at that time, as the pilots operating this flight. This was two months before a missile from the same area hit a Malaysian 777 enroute from Amsterdam to Kuala Lumpur - MH17 - killing all 298 on board. Prior to that, nobody thought that the conflict in Ukraine translated into a risk for those of us overflying.

But that's not quite true. Some people knew. A number of airlines said they had been avoiding Ukraine for months. MH17 was in fact the 17th aircraft to be shot down over Ukraine that summer. The Ukrainian CAA knew of the risk, too.

Why did the airlines not tell anyone else? Simply put, there was no mechanism to do so. Further, it wasn't in the culture, at the time - a culture where the airline is a kind of stand alone unit. Airlines are competitors. Competitors don't share information.

Why did the CAA, the Ukrainian government, not tell anyone? In the years since, we've seen it become clear that states are very slow to publish information that puts their country in a bad light, in any form. Economic, trade, and political interests will always come ahead of human ones.

Three days before MH17, another flight - military transport - was shot down at FL210. That was the highest yet, and so the CAA had to do something. What they did, was publish an obscure, unintelligible Notam, as a warning - this Notam was in the cockpit of MH17, but the crew never understood its meaning. That's not surprising. The Notam system may well be the worst example of a communications system that exists.

In our own research, half of the 2,000 pilots and dispatchers we asked said they had, several times, missed critical flight information that was buried in the noise. 63% often had issues decoding, reading, or understanding a Notam. It's not a system designed for humans to read. The crew of Air Canada 759, within 1 second of landing on a busy taxiway in SFO last year, had missed the Notam to warn them of the changed configuration. 1 second from the worst aviation disaster in history.

OPSGROUP IS: HUMANS OF AVIATION

So if states, airlines, and authorities are not putting the human interest first, then who is?

Aviation is slipping into a void where the system is more powerful than the humans that run it - the forces of business and government have become so strong that our human voice is almost extinguished. Commercial pressure, over-regulation and fear of blame pervades our entire system. We're drowning in data but missing the message.

So the answer is: **we are**. Our mission is to turn this around. Our mission is to make aviation human-friendly for us all.

OPSGROUP IS: PEOPLE, NOT PROFESSIONALS

Professionalism. Interesting word, limiting concept. In aviation we get our own language, our own alphabet, codes, abbreviations. We get fancy uniforms and hats, and little stripes, and wings. We get books of procedures, ways to be, things to say. We don't show weakness, nor uncertainty. We are professional!

This is all great news for the passengers - makes them feel comfortable. It's also very good to have standard ways of doing things. But at a certain point, for a truly safe cockpit, we must connect as people, not professionals. Vulnerable, uncertain humans. For a truly safe operation, you must connect to other operators. So wear your uniform at the passengers, not at each other.

Sharing relies on us connecting as humans, too. Looking out for each other not because we have four stripes or two, not because we're in some airline alliance, or fly at the same outfit, but because we're all in this together.

LET'S TALK

Radical sharing is a foundation of Opsgroup. If you ride the New York subway, you'll see "*If you see something, say something*" on the posters. We're looking out for each other. Same deal here.

We're here to share information on risk that might affect us all, and reports on different places that we operate to. Whether its an airline 787 or a G-IV charter, we all need the same parking spots, handlers and ATC. We're all affected by strikes, new rules, and hazards. When one member knows, we all know. Simple but effective.

The radical part of the sharing revolves around who you tell. We're good at telling the people close to us about risks and changes. If you are handing over your airplane to another crew on the airbridge, you'll tell them everything they need to know about the flight you just had. What we want you to do is get better at sharing that critical information with everyone else - not just your own airline or operation. Why? Because they'll do the same for you, and we're all in this together.

LET'S TALK, BUT LET'S TALK PLAINLY

My favorite two words in Opsgroup - "Speak plainly". Can't say it any simpler! So much of the information we get - Notams, AIC's, AIP supplements, SFARs, warnings, guidance - is in over verbose, complex language. Have you read an Australian Transport Security Program recently? How about the FAA's TSA Waiver Notam? When I look at this stuff, my eyes glaze over and my body goes into shutdown. I have to force myself to stay with it, to try to understand WTF it means.

Why is this language necessary?

While we slowly get authorities to understand that less is more, and to speak to us like humans, let's begin by talking to each other as humans! Then we understand the message. Nothing is more important. When the Ukrainian CAA told MH17 of the risk, they typed out a list of coordinates. What if they had said what they meant: "In the last three months, 16 aircraft have been shot down, including one on Monday at FL210". Who would fly over that airspace?

SOMETIMES WE FIGHT

States, airlines, and authorities are not putting the human interest first. Ahead of giving the right information to pilots and dispatchers comes tourism, commerce, economy, and satisfying national laws. We know this, and we get it. But Opsgroup does put the human interest first. Our first question is, "What do our crews need to know to be safe?". And so, sometimes, we get conflict.

When Ethiopia tried to hide an ATC strike in 2018, we had to tell members. The CAA didn't like this, and tried to shut down our notices. We didn't give in. Might be surprising, but countries hate it when advice is published that says they are unsafe. Same goes for a handful of countries that objected to the Conflict Zone Information Repository that ICAO set up after MH17.

And so, Opsgroup started SafeAirspace.net - available to all pilots and dispatchers - where every single piece of airspace risk information is published, whether or not the affected states like it. Sometimes, we have to rebel against the system to get stuff done.

We'll also fight against and report on bureaucracy, stupid rules, corruption, thievery, overcharging, ridiculous costs. When we see something that simply isn't right, we do whatever it takes to get the truth out to our members and the wider community.

LUCKY STAR CHICKEN

Not everything you see in this group will make sense at first. It doesn't make any sense that we would run a Chinese restaurant in Berlin. But we do (order number 17 if you ever visit, *luckystarchicken.com*). It also doesn't make sense that we would be given control of the Clipperton FIR in the South Pacific. Nor that we would take live goats to EBACE for the great Notam Show of 2018.

Not everything will be as you might expect. Keeping things interesting (entertaining, even?) is part of how we get the message across.

Most importantly, solving serious problems doesn't have to be done seriously all the time. It should be an adventure.

THIS AIN'T NO COUNTRY CLUB

This is on the cover and it's important. Opsgroup is best defined by what it isn't. It's not a trade group, not a professional organization. It's not a cozy cartel. It's not a lobby group. And yep, not a country club.

We are a community of people that want to make aviation human-friendly, we do this by sharing radically, connecting as people and not professionals, speaking plainly, telling each other what's really going on out there, and engaging as adventurers and rebels when we have to.

Mostly we are pilots, air traffic controllers, dispatchers - the Ops people of aviation, at the sharp end. And because we are at the sharp end, making things happen, we can also make things better. We elevate humanity above commerce and bureaucracy. We run the system, and not the reverse - we have the power to change things, one good decision at a time.

Aviation is inherently a wonderful thing. I think it's really important to remember this. There's a reason that we all got into aviation in the first place - and it had something to do with magic and beauty.

Aviation is capable of so much. I am curious to see what it can do, when we turn around the current state of affairs - remembering that it is humans that make this all work, and that when we make our system work for us, we have the power to make aviation a true force for good in the world.

Thank you for joining us!

A handwritten signature in black ink, appearing to be the name 'Mark' with a stylized, cursive flourish at the end.

Mark.

**TURN UPSIDE DOWN FOR
A FIELD GUIDE TO
NOTAMS**

**WE ARE
OPS.GROUP**