

EPISODE 224

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[0:00:07] IP: Hello and welcome to episode 224 of AvTalk. I am Ian Petcehnik, here, as always with –

[0:00:16] JR: Jason Rabinowitz. Hello, Ian. How's your July going?

[0:00:20] IP: Hello, Jason. My July is going well. It's been a knock-on wood and whatnot, a relatively quiet week, I think. We've got a good show, but nothing huge to talk about. Later in the show, we're going to have Jeremy Dwyer-Lindgren on. I think we owe him a second sandwich with this appearance on the podcast.

[0:00:40] JR: He never did get that first sandwich.

[0:00:43] IP: That's on you, my friend. That's on you.

[0:00:44] JR: I got to take him to Blimpies one day.

[0:00:46] IP: Exactly. He'll be on the show in a little bit. We talk this week about safety cards. As long-time listeners of the podcast will know, Jeremy is a avid safety card collector and collector of all sorts of airline memorabilia. In this particular instance, he got a behind the scenes look at the folks who design and print those safety cards. He didn't even have to go flying to check this out. He's going to talk to us about what he discovered that he didn't already know about the much loved safety card.

We begin with probably a guy who didn't read the safety card, or as some reports indicate, probably couldn't read the safety card. I'm referring to a unruly passenger. I love the phrase, unruly passenger. It just captures so much.

[0:01:36] JR: It's one way to put it. Sure.

[0:01:40] IP: Wait, putting that jerk over there. This particular unruly passenger was on a United flight, United flight 20 from Houston to Amsterdam. That flight was diverted to Chicago over the weekend, because of that particular passenger needing to be removed from the aircraft. The flight ended up circling over Michigan for a little while to dump fuel and then landed in Chicago where the aircraft was met by Chicago police, who escorted that passenger off the aircraft and who knows where else after that. About two hours later, the aircraft was on its way again.

This was a big one, as far as people having opinions on social media is concerned, because a majority – I would say, a majority of the responses after we posted the tweet breaking the news was that, “Why can't you just dump the passenger?”

[0:02:38] JR: That's a good question. Sure, sure.

[0:02:42] IP: Sentiment agreed. But certainly, it's not possible to dump a passenger over –

[0:02:48] JR: I mean, we discussed recently, you can't open the door. It's physically impossible to dump that passenger, as much as you might want to in the moment, you can't do it. Well, I guess you can dip down to 10,000 feet, pop the door, throw them out, close the door, go back up the altitude, but probably some liability issues with that.

[0:03:07] IP: Yeah, there's some issues there. But I thought there were a couple interesting responses. The funniest was, why not just dump the passenger? Okay. The physical response to that, but I get the emotional response, certainly. But the second thing was, well, why divert the flight? Why not just duct tape him to his chair?

[0:03:24] JR: You can't do that.

[0:03:25] IP: You're already on the way. You just duct tape him to the chair and let Amsterdam deal with the problem, which I understand that sentiment as well. It's certainly, you don't want to delay hundreds of passengers, but also, you want this person off the aircraft as quickly as possible. You don't want to have to deal with the situation devolving any more than it already has. Certainly, you want this person off before someone is injured, or seriously injured. I get that one, too.

Then the third one was, why are we dumping fuel here? What's going on here? Why are we even bothering to dump fuel? Why not fly further on, so you don't have to dump fuel? You can just burn it. Again, it all comes down to the captain made a decision to divert to Chicago and –

[0:04:10] JR: Keep going. Where else are you going to dump the passenger anyway? Northern rural Canada? There is no real option, once you get beyond Chicago. I don't know, Gandor? Probably not somewhere you want to go.

[0:04:24] IP: I mean, I guess the reasoning behind the questions were why Chicago? To answer that question, well, it's a major United hub. There's definitely a better chance of having a 777 crew, if needed, available if they even had to swap out the crew. It's easy to do the ground handling. They can get the bags off quickly. They have all the equipment. They can refuel quickly. All the people that are necessary to give this aircraft back in the air quickly are there. But it's one of those things where it's a confluence of events and you're going, well, this one person screwed up so many people's nights.

[0:05:03] JR: While United was still recovering from its lengthy operational meltdown. I'm sure that aircraft being delayed was unwelcomed over at United's operational center, because that flight actually got out of Houston on time that day, which was probably a nice little win. I think the best take on this whole situation that I think I saw on Twitter, I don't remember who said it was that whatever happened here, the catering onboard United is simply not worth getting in this much trouble about getting this upset. The food on United is not good enough to be that upset about.

Maybe if you're on Singapore, or Cathay, or Japan Airlines, but United, Polaris food, just it's not. Wasn't worth whatever this passenger will go through. I don't know if they got arrested, or if charges were being filed. But in the past during COVID, we did see when dum-dums out there refused to wear a mask and they had to divert a flight or whatever. Some airlines were able to recoup the costs of those diversions from those unruly passengers, that didn't happen a lot. It happened in a very limited number of cases. When you divert an aircraft, you could be looking at hundreds of thousands of dollars of costs incurred between an overweight landing of the

aircraft, or dumping the very expensive fuel, or rebooking passengers, or hotels, or finding a new crew.

This stuff gets expensive. If I were United, I'd go after this passenger for every single penny of the expenses incurred. I think that should be the case for pretty much any unruly passenger event, so long as it's deemed that they were actually unruly, I guess.

[0:06:44] IP: I think if there are charges that you should be able to go after these folks for the costs involved as well. That was another big question. Who pays for all this? The answer is the airline pays for all of this, at least at first. Then it's really up to the airline to see how they can get their money back.

The one question I don't have the answer to, and maybe somebody listening does, is are airlines insured for these specific events? Does this fall under business interruption insurance? Is this a reinsurance issue? I do not know and want to look more into that. If somebody listening does know before I have the chance to do some research, email us at podcast@fr24.com and let us know what we're missing here, and be interesting to learn more about that. I mean, if they are insured, I wonder if the insurance company then goes after the disruptive passenger.

[0:07:35] The insurance company has to pay. I can guarantee you, they will be going after literally anybody possible to recoup that cost.

[0:07:42] IP: That would be the worst. Okay. Well, the aircraft left after a few hours, made it to Amsterdam. It departed Amsterdam with a few hours delayed. Then it didn't fly for a couple days and now it's still late.

[0:07:58] JR: Had to get over the incident.

[0:08:01] IP: I guess. I guess. Well, Jason, we've talked about this story a few episodes ago. I think you looked up the exact episode number, episode 211, I believe. But this is episode 224, so we're going to talk about it again, because why not? It's official. Icelandair has placed a firm order for 13 Airbus A321 XLR aircraft, and they will also lease an additional four from – I don't

think they've specified the lessor, but they will lease an additional four and that 13 plus four takes the number up to 17, which is the same number as what Jason?

[0:08:39] JR: Probably the exact number of 757s I have operating their fleet today, if I had to guess.

[0:08:44] IP: The 757-200s to be specific. That is exactly right.

[0:08:49] JR: Oh, well, the 300 is a special unicorn with no replacements. Yeah, that checks out.

[0:08:54] IP: That's true. Interestingly enough, in the same configuration, the same two-class configuration that Icelandair runs now, they'll be able to fit more seats into the A321XLR than they do the 757-200. They've ordered the plane that's available to them and they're making out not so poorly.

[0:09:16] JR: Yeah. They still have since the last time they announced this, they still have 12 options available to them to exercise through probably the 2030s, realistically. These are not coming anytime soon. But they still don't have a replacement for the 767s that they operate, which are not a huge number, but they do have a few. I assume they'll still be operating for quite a while. There is no replacement plan for those. I hope at least. I don't want those to retire. I like those.

[0:09:43] IP: Their 767s, they've got three passenger and two freighters. The two freighters are obviously 767 converted freighters. They're operating in the registrations of TFISH, or T-F-I-S-H, but it's, we like the joke. Then they have three passenger freighters. Those are 22, 23 and 25 years, or passenger 767s, not passenger freighters. Passenger 767s, 22, 23, and 25.

[0:10:08] JR: I mean, you're not technically wrong.

[0:10:11] IP: Passenger freighter. Yeah, I suppose they are. Those could stick around for a little bit. But, like Jason said, they eventually you're going to have to be replaced and what they replace them with is, I don't know. But I don't run the airline, so I don't have to know.

[0:10:26] JR: Yup, not our problem.

[0:10:28] IP: Not our problem. When they do replace them, I will like to fly in whatever replacement exists. Good for Iceland. We'll talk a little bit more about how long it's going to take to get the A321XLRs a little bit later in the show. We're filing this under Boeing just can't catch a break. Boeing builds, or not Boeing, but Spirit AeroSystems builds the Boeing 737 fuselages in Wichita. Then they're put on trains, on specialized train cars, and then they are carried on that train from Wichita to Seattle, where the aircrafts are assembled and then they fly away to wherever they're going from that.

In June, a bridge collapsed in Montana. Apparently, it's the only bridge that this particular train carrying the 737X and 737 and P8 fuselages can take. Boeing is having to take the fuselages off the train cars, put them on trucks, drive them around where this bridge is, and then put them back under the train and send them on their way to Seattle.

[0:11:40] JR: I think it's 8 miles, which could be a lot worse. I'm sure there are stretches in the rural West, where you could go a long, long way to have to divert something around like that, since the road network gets a little sparse. But man, Boeing just can't catch a break with any aspect of the assembly of the 737s, or 787s.

Yeah, I think the only industry worse than Boeing and assembling these aircraft right now is the US freight rail industry, too, because it just seems like catastrophe after catastrophe for all of those companies. BNSF, Norfolk Southern, all of them is just nasty thing after nasty thing. Of course, Boeing would get tied up in that somehow in the end. Just a matter of when and how.

[0:12:25] IP: Yeah. Just poor Boeing. With the supply chain still recovering and still strained, just one thing after another. They just can't catch a break.

[0:12:36] JR: At least they have a fix, because I don't imagine that bridge will be rebuilt all that quickly. It's in a very rural area. Obviously, it's in Montana and rural Montana. Hopefully, they can build that back pretty quickly, but that stuff takes a while. But I don't know. Boeing can't catch a break. I hate to laugh at it, but have to.

[0:12:59] IP: I don't know enough about Montanan rail infrastructure, or the peculiarities of which trains can operate on which tracks, because I know that that's a thing in and of itself. It seems crazy to me that there's not another route available for that. I mean, and I know that the 737 –I'm answering my own question out loud here. But I know the 737 fuselages are specialized and they need specific tolerances for bridges and tunnels and things like that. But this isn't something that anyone ever considered before?

[0:13:32] JR: I mean, whatever the cost of fixing this situation from happening in the first place, I'm sure probably outweighs the cost of moving the fuselages on the road for 8 miles. I don't know. Yeah. Bound to happen at some point. I guess, it could be some issue. This is not the first time that we've seen an issue with the fuselages on freight rail. I mean, a number of years ago, probably nearing a decade at this point, a train derailed and a bunch of dreams found their way into a river. I know those were recovered. I don't think they were used, but issues with the delivery of these fuselage just on the trains has happened before. It'll happen again, but not quite to the degree of they are having to take them, load them off the train, load them on a truck, truck them down a highway and then load them back on the train. As long as it works, I guess you got to do what you got to do.

[0:14:22] IP: Yeah. Boeing for its part says that they're sticking by their 2023 delivery goal. They're going to try and deliver between 400 and 450 737s in 2023. We'll see whether or not this does impact it. But it seems like they've got a fix in place for getting the fuselages where they need to be, when they need to be there. Good for them on that part, but just poor Boeing.

The Telegraph had an interesting article that both Jason and I said, “Hmm, how about that?” The Telegraph is reporting that the Virgin Group, which this particular bit of the Virgin Group would be Virgin Galactic, had signed a partnership with Boom in 2016 and it expired. This would have been expiring in 2020, but it seems like, it's just being reported out now. They had an option to buy some Boom aircraft and they just let it expire. Boom for its part says, they never had a firm commitment, and they're continuing to talk to Virgin about, “Hey, you guys want to buy our supersonic aircraft.”

[0:15:29] JR: I mean, I would highly doubt that any airline has firm plans in place with Boom. I don't think anything we've seen so far is firm. No airline has said, "We will take delivery of these. Here's the money upfront. We're taking delivery of them." Every order we've seen has all sorts of stipulations about safety and fuel burn and requirements and sustainable aviation fuels. I don't think any of this stuff is firm, but not terribly surprising that we're starting to see attrition from some of these orders.

I honestly had forgotten the Virgin Group even had these on lease, or on order at any point anyway. But we'll see if the first of a line of airlines to simply let their orders lapse, or cancel them, or just an outlier.

[0:16:17] IP: Yeah, it'll be interesting to see – I mean, we don't know if there are other orders that have expiration periods in them, but it'll be interesting to see if any of those do lapse, and if so, why, and what excuse is given for not continuing, or not re-upping, or not putting down a second installment, or whatever. Yeah, interesting that it's being reported now. I'd love to hear the backstory there where this came from, but not terribly surprising.

[0:16:50] JR: Yeah. Virgin was one of, if not the earliest orders for the Boom overture way back in 2016. I think they had orders for – or actually 10 of the aircraft. Not terribly surprising. 2016's a long time ago. Most of the orders from American and United, they are much more recent there within the last year, two years. I wouldn't expect anything to change with those. But yeah, Virgin was a very early entrant and supporter of Boom. I guess, they just gave up.

[0:17:20] IP: You will have to see. Let's talk about some NTSB reports, shall we?

[0:17:25] JR: Oh, those are always fun.

[0:17:26] IP: They are always fun. The NTSB released a preliminary report regarding the Delta 717 nose gear up landing at Charlotte a few weeks ago. In this particular case, the NTSB is pointing to the fractured upper lock link.

[0:17:46] JR: Oh, man. I hate when my upper link lock fractures. That's awful.

[0:17:51] IP: Yeah. There's a fractured upper lock link and a displaced lower lock link contacting the nose gear assembly. Basically, a piece of metal broke and the gear couldn't come down.

[0:18:03] JR: Oh, that's much easier to understand. Thank you.

[0:18:05] IP: Yes. I'd like to break things down as simply as possible. The NTSB is saying that they've taken the fractured link to their materials laboratory and they're reviewing the CVR and FDR, as well as maintenance records to find out why possibly this lock link broke. I'm sure we will see a final report and any safety recommendations come out in the relatively near future. Then there's this investigative final report that took quite some time. This is the final report issued today, the 12th of July, 2023 for the LAX gear up landing of a FedEx 767 on August 19th, 2020.

[0:18:51] JR: Ooh, wow. That's almost three years.

[0:18:54] IP: Yes. Do you want to know what the probable cause is?

[0:18:58] JR: I have no idea. This was so long ago. I don't remember anything about it.

[0:19:01] IP: This was a FedEx 767, where they got a gear disagree light when they went to land at LAX. They did a couple of low passes and it was confirmed that the left main landing gear was not lowered. They did a belly-ish landing and the aircraft landed safely. Everyone was fine. They repaired the aircraft and moved on from there. The NTSB says this. This is after three years, this is what we get. "The left main landing gear's failure to extend due to the separation of the brake rod retaining hardware from the aft inboard wheel for reasons that could not be determined based on the available evidence."

[0:19:46] JR: That's not often we get the NTSB, or really, any investigation agency just going, "I don't know."

[0:19:54] IP: The number six brake rod attaching hardware components from the accident airplane were not located after the accident. Concluding a determination of why the pin was in place for takeoff, but not when the crew tried to lower the landing gear.

[0:20:08] JR: Possibly, the part that broke departed the aircraft and is somewhere in the greater LA basin. Without that, we'll never know what happened.

[0:20:16] IP: Exactly. Exactly. They know what happened, but they don't know why, because the why is somewhere east of LAX.

[0:20:24] JR: On somebody's bush.

[0:20:26] IP: Yeah, exactly. It's always an interesting thing where the NTSB goes, "We know what happened, but we don't know why, because reasons."

[0:20:33] JR: Well, it took them three years. I guess, did they have an investigator just out in LA furiously searching for three years for it and just finally said, "You know what? I'm done. I'm coming home."

[0:20:43] IP: Exactly. He just got back.

[0:20:44] JR: Good for him.

[0:20:45] IP: He just got back. We have more Indian aviation news. Jason, would you like to be the new owner of Go First?

[0:20:55] JR: No. But thank you for offering. No, I would not like to be –

[0:21:00] IP: Go First, the Indian airline that is currently grounded for financial reasons has launched a call for expressions of interest in the airline. Several newspapers have carried this call for EOIs and there is a 9th of August deadline for whoever wants to take them over to say, "Hey, we want the airline." Go First stopped operating at the beginning of May and has said, "Oh, we're going to be back in a week. We'll be back in two weeks. We'll be back in a week. We'll be back in three."

[0:21:36] JR: This just hasn't happened. As expected, it just rarely ever happens.

[0:21:43] IP: They're looking for buyers. In the interim, an Indian court this week granted lessors of the Go First fleet access to the aircraft, not to repossess them, but to make sure – reading between the lines, they granted access to the lessors, so that they could ensure that they could be repossessed in the near future.

[0:22:01] JR: Well, that's important. Yea, we've talked about in the past, you can't just leave an airplane on the ground unattended for weeks, or months at a time. There are things you need to do to keep it active and ready to go, if and when it is repossessed. You don't want to have to do maintenance on the aircraft before you repossess it. You want it to be ready to go.

[0:22:16] IP: Certainly not. Exactly. They've been granted access to the aircraft to ensure that they're in proper working order, that all of the paperwork is there and that the maintenance has been performed. It sounds like, the court is moving towards some resolution here, but that's just me reading between the lines. I could be reading them wrongly. Keep an eye on this, because they're not a small airline. What happens to Go First in such a market as India where there is a huge demand for low-cost air travel. It'd be very interesting to see what fills that vacuum.

[0:22:51] JR: Yeah. Something will.

[0:22:53] IP: Something will. We go north now, because Norwegian has bought Widerøe, or is buying Widerøe. The Norwegian air, well, they're both Norwegian Airlines, so that doesn't – The red Norwegian airline is buying green Norwegian airline. The one with the big planes is buying the one with the smaller planes. It's a really interesting thing to see happen, because Norwegian came out and it wasn't one of those things where there was a lot of talk about passenger synergies and brand loving and culture and they go, “No, we're buying them because they make steady money and we need that.”

[0:23:30] JR: That's true. Remember, not too long ago, Norwegian itself was facing the brink of non-existence. They've completely dissolved and given up the long-haul game. Although 78 is actually, some of them are being scrapped and parted out right now, but Norwegian no longer operates long haul at all. They've always had a problem of what do we do in the winter with our

fleet? How do we make money in the winter? Apparently, Widerøe is a part of that equation to just keep money coming in to survive the long, cold, harsh Norwegian winters.

[0:24:03] IP: Yes, with government cash.

[0:24:05] JR: Yeah. I mean, there is that.

[0:24:08] IP: I mean, I don't think that's –

[0:24:09] JR: Look, I like the honesty from them. We're not buying them for synergies.

[0:24:12] IP: There's no secret here. Yeah.

[0:24:13] JR: We're not buying them, because we like their brand. We're buying them, because we need money. You got to spend money to make money.

[0:24:20] IP: Norway has a strong system of what in the U.S. is called essential air service. Basically, government subsidies go towards the cost of the ticket and therefore, Widerøe has a steady source of income throughout the year. In Norway, they are called PAS routes and it operates on a very similar thing. We need to have air service between these cities. There's really no way else to get there besides these aircraft in these particular months, especially. They continue to operate and they're subsidized by the government and Norwegian says, "Well, look, we can do a lot of things. One, we get the cash that they're making in and that's all well and good." I mean, they did mention the fact that they can use Widerøe passengers to then fly on Norwegian. Not long-haul routes, but inter-European routes.

[0:25:15] JR: Yeah, they could also, if Norwegian wants, they could operate their 73s on these essential routes, which I'm sure would be a huge boost to cargo capacity, which is probably badly needed.

[0:25:26] IP: Yeah, that'll be interesting to see which, if any routes that Norwegian aircraft take over. Huh, Jason. I had not thought about that.

[0:25:32] JR: Well, there you go. That's why we have this conversation.

[0:25:35] IP: All right. Let's take a quick break from this particular conversation and go talk with Jeremy about safety cards. We'll be back with Jeremy Dwyer-Lindgren right after this.

[BREAK]

[0:25:51] IP: Welcome back. We're now joined by Jeremy Dwyer-Lindgren, who is a frequent contributor to the podcast. Holds, I believe, the most punch cards on his free sandwich card from anyone, because he is one of the most interesting av geeks on the planet, in the world. Jeremy, you are back today, because you recently went inside the Interaction Group, which is a interesting renamed organization that designs and manufactures the safety cards that you find in the seat back. Welcome back to AvTalk.

[0:26:26] JDL: Thank you for having me, Ian. Yes, I did. As a safety card enthusiast and collector, despite writing an article for PaxEx.Aero for other av geek, Seth Miller, I felt like a kid in a candy store all day, on Christmas day.

[0:26:42] IP: This is one of those job things that isn't really a job. The Interaction Group, they don't necessarily just print the cards. They're working on designing the cards and making them, I guess, the most effective safety cards they can be. Tell us a little bit more about how that process works.

[0:27:02] JDL: Yes, Ian. Thank you. I did have a chance to visit Interaction Research Group. They operate in a small shop just south of Seattle. You wouldn't necessarily guess when you pull up to this retail strip mall thing that one of the largest safety card producers in the world is based next to a Taekwondo shop, I think, or a martial arts shop and a restaurant. I don't remember which one. Lo and behold, there they are. They track back. We had a great chat with Trisha Ferguson, their current CEO. They track all the way back to the 1960s, when a doctor, Daniel Johnson and Bo Altman, both with Douglas Aircraft at the time, teamed up to study crash survivability. They came to a realization that crashes were often considerably more survivable than previously believed.

IRC began doing – a lot of stuff was anecdotal prior to that. Safety cards existed and they tracked well back to the thirties, but they didn't necessarily – you could put whatever you wanted on it. A lot of it was based on anecdotal. This happened to air go now. This is on the card and a lot of cards were limited to just over water flight. You'd see them on an international Paris to Boston, but you might not see it from Boston to Philadelphia.

IRC, or rather, they weren't IRC at the time, but Douglas had done a lot of studies to put together basics for understanding aircraft crashes and post-crash survivability. Then IRC picked up that mantle in the early 70s when the Altman-Johnson duo split. Then went into doing a lot of their own studies to supplement the Douglas once and then advocated for the inclusion of certain information on the safety card that they had done the studies to prove would have an effect to positive effect.

IRC then became the consulting arm that would come alongside a lot of airlines and regulatory bodies to help them understand what should go on the card, or increasingly, what had to be on the card. IRC spends a lot of time understanding and they have a lot of institutional knowledge understanding what has to be on the card, because that's the single biggest thing that guides what ends up on them. Then in addition, when Miss Ferguson took over in, I want to say, early 2000s as the CEO, she bought a print shop. Now they also, it's a full-service thing. You can, in fact, even go on their website and order up a card for just about anything. Their print runs, I think, run as small as five to 10. Do you want to really bling out your pipe, or command sheet with a card of a tone? I guess, you could do that.

They will help you from the process, starting with what needs to go on the card and broadly speaking, what you'd like it would look – what you want it to look like and what it has to look like, all the way to printing it out and shipping it directly to your house, or hangar.

[0:30:07] IP: What are the most important things to go on the card? I mean, every card I've ever seen has something about seatbelts. It's got something about the exits and it usually gives the over water thing. What else is important to include on a safety card?

[0:30:23] JDL: Right. Well, this is about 48 pages worth of stuff. 45 pages worth of stuff that BFA requires to be on a safety card. Largely, we have IRC's work to thank for that. There's a

number of things that are required to be on. They're basically everything. Despite it not being particularly great design, and we can talk about that in a minute. Every US safety card has that giant block of exit seating text on every card. It's often like, US cards are bifold and other countries are not, like Canada, for example. That has to be on there, pretty much verbatim. Often in multiple languages. Made in the country of final – in a trivial one, comparatively, the country of final assembly has to be on there. Basically, everything you see on there has to be on there and tracks back to a study of some sort. A lot, a lot, a lot has to be on there.

[0:31:20] IP: I mean, it seems to me that there's a lot of cramming of information on to these. Have they done studies? They've done studies that say, these things have happened, and so we should include these on the safety card. Have they gone back and done studies of now that we've put all this stuff on the safety card, can people actually read it and do people actually read it?

[0:31:40] JDL: Those are two different questions. Historically, that's what the safety card has struggled with the most. As you know, and pretty much anyone who listens to this podcast has probably flown before. The safety card occupies space, usually in the seatback pocket. One of the things that's required of it is it has to be visible and accessible. That's largely why they live where they do, or in business class seats, they'll often be at the front of a storage cubby, or something like that. You have to be able to again, to reach it, see it and reach it at any time.

They use a lot of tricks to try to get you to notice it that are based in psychological principles and study work, like color and the amount of text on it. You're considerably more likely to pick it up the less text there is on the card. Text generally converts in our brains to work in difficulty. If it's relatively simple, it makes you more likely want to pick it up. The color is more likely to grab you. Though often, that's something that's dictated by branding guidelines and such. Then when you do pick it up, it tends to have a fairly specific flow to it, so that, for example, things are all clustered together.

All of your overwater material might not be on one part of the card, and another part of the card it's together. They can use color to call your attention to certain things, like red or green that tend to have specific – you associate red and green with things to pay more attention to for the most part. A lot of it are tricks of the psychological trade to get you to want to pick it up and want

to engage with it. Then the safety card has to be understandable. That's another level altogether. I can tell you that they had told me that they do studies of every single card goes out with a research group that takes it into the wild into focus groups, in the US and the country of origin. For example, Lufthansa, a card destined for Lufthansa would also be tested with a focus group in Germany. If they don't hit 90% comprehension, or higher, they go back to the drawing block, drawing board rather and try to work the flow, work the color, work the illustration to get it to a point of 90% comprehension, or higher with the focus groups.

[0:34:07] IP: Okay. That's the can people read it. Do people read it?

[0:34:11] JDL: That is a squishy question. If you really want to dive deep on this, I can't recommend the podcast on safety cards 99%, that 99% visible did several years back now, that actually had one of the two founders. I think it was Altman talking about the specific thing, and they estimate something like 4%, 5% of people actually do pick them up. That is not a particularly high number, obviously.

I didn't necessarily get to ask Trish this question directly. But I do think that it's interesting that it's something that, yeah, it's squishy. I think there's a couple of examples that you could point to and say that people have cited them and a number post-crash, post-incident reports that mentioned that they saw the card and referenced the card. That was part of how they formulated getting off of the aircraft when they had the chance to. It's one of those 4% might pick them up, or those 4% picking them up in the matter.

If you're coming in on the final approach and your engine's on fire and they're getting – the flight attendants are yelling, “Brace, brace, brace through the cabin,” and suddenly, that card becomes way more important and it's right there when you need to pick it up. It's interesting that we put so much work and intention behind something that has such a seemingly low engagement rate. But also, airlines are so safety and travel is so safety that the likelihood that you'll ever need to use it is very low. I guess, the question becomes like, does it matter if 4% read it as long as you have it there when you need it?

[0:35:56] IP: Yeah. I mean, I guess that's a fair point to make. What about the airlines that don't have safety cards necessarily, but have safety placards? I'm, of course, thinking about Ryanair,

which has the seat back placards. It's basically just glued to the seat back. Has there been any studies about the effectiveness, or the uptake rate for those based on their constant visibility versus a card?

[0:36:24] JDL: That's a good question. I'd be curious what they would have to say about that. That didn't occur to me, but that's a good point. In theory, you'd be forced to look at it more simply, because especially at Ryanair, what else are you going to do? I don't know. That's a really good question.

[0:36:40] IP: Well, we'll have to save that one for a future study. We've been talking with Jeremy Dwyer-Lindgren, who went deep into the world of – deeper, I should say, into the world of safety cards as a collector. Jeremy, how many safety cards do you currently have in your collection? Just ballpark it for us.

[0:36:54] JDL: After checking my spreadsheet, Ian, I am up to 794.

[0:37:00] IP: You absolutely have to keep that organized. Well, here's to your ever-growing collection. Thanks for taking us down the safety card rabbit hole today. It was always good talking with you.

[0:37:08] JDL: Likewise, Ian. Thanks for having me.

[BREAK]

[0:37:15] IP: Welcome back. Jason, I hope you have your safety card still in your seat back pocket and ready to go. Do you read the safety card when you fly?

[0:37:23] JR: Sometimes, depending if I'm on a new aircraft, or a new class of service that I haven't been before. Recently, actually, on the Air France 777-300ER I flew, I noticed that there was a separate addendum to the safety card, talking about the suite door on the new seats they installed, which was interesting. You had to read the complete prior to that seat safety card. Then you had to look at a different safety card about the door in particular, which is –

[0:37:52] IP: Specifically for the door.

[0:37:54] JR: Yeah. I guess, it saves them from printing up entirely new safety cards, so that was interesting.

[0:37:59] IP: Yeah, that's true. Yeah, I suppose they can use it for the door and doorless seats.

[0:38:03] JR: Exactly. Synergy.

[0:38:05] IP: Yeah. Synergy. You start charging you money every time you say synergy. Yeah. Let's talk about Gatwick.

[0:38:15] JR: Never been. What's going on there?

[0:38:18] IP: All right. Well, so as you, I believe, are aware and as many listeners may be aware, Gatwick is a very, very, very, very, very busy single runway airport.

[0:38:30] JR: Is it the busiest single runway airport? I don't believe so. But it is got to be up there.

[0:38:35] IP: It's definitely up there. I think it goes back and forth, but I believe it may be, if not the busiest then certainly in the top few. But by 2030, that may no longer be the case, because Gatwick actually has two runways.

[0:38:55] JR: Do they not like the other one?

[0:38:55] IP: They just can't use both of them at the same time.

[0:38:58] JR: Oh. Why?

[0:38:59] IP: They can't use both of them at the same time, because they're too close together. Now there's a plan.

[0:39:03] JR: Oh, **[inaudible 0:39:03]** to Newark. Come on. The two runways are basically one wide runway.

[0:39:10] IP: The runways themselves are only a few hundred meters apart. That's too close for safe operation of both of them. The plan now and they don't have to do – I mean, it sounds simple, but it's apparently going to take five years and 2 billion dollars to move the center line of the northern runway, which is the auxiliary runway that's used generally as a taxiway, 25 feet.

[0:39:34] JR: 25 feet.

[0:39:35] IP: 25 feet. They're going to move the center line, 25 feet. They need to basically add 25 feet of runway on the north side of the northern runway, so that they can use that runway as a departure runway and then the other runway will be used for arrivals and departures as well. The plan has been submitted. They've been talking about this since 2018. The plan has now officially been submitted in 2023. It will take, apparently, take two years to have this plan approved and construction begins in 2025. It will take apparently, five years for this to happen, and so that they can have two runways.

[0:40:12] JR: I mean, looking at Gatwick on Google Maps, I guess, if they were to move the center line of the north runway 25 feet to the north, you also then have to move all of the taxiways that are to the north of that runway, also up a bit. There looks to be room to do that. We should definitely take a look at the plans here. I guess, I could understand why it would take so long to do that, but how many billion did you say this would take to do? I don't understand.

[0:40:39] IP: 2 billion.

[0:40:40] JR: It's just asphalt and electrical systems for lights and stuff. Are they physically relocating the entire airport?

[0:40:48] IP: I'm sorry. 2.2 billion pounds. Roughly two and three-quarter billion dollars.

[0:40:56] JR: Yeah, I don't understand that. Not one bit. Wow. Okay. Expect your tickets at a Gatwick to go up ever so slightly to pay for that.

[0:41:04] IP: Yeah. That'll be interesting to see if it gets approved, because they've been talking about it. I can find an article from 2018 that says, "This is what we're going to do."

[0:41:13] JR: Whatever money they're saving by not building a third runway at Heathrow, they can just spend down there at Gatwick.

[0:41:18] IP: There you go.

[0:41:18] JR: Because that is just never going to happen.

[0:41:21] IP: I wonder how much money was spent, or has been spent, or is being spent on the proposals and studies and legal wrangling over the third runway at Heathrow that was clearly –

[0:41:31] JR: We should be consultants. We don't have a podcast anymore. Yeah. If we were just consultants for this industry –

[0:41:36] IP: We wouldn't need to do anything anymore.

[0:41:37] JR: No, no. We'd be set. Someone's making money. It's not us.

[0:41:41] IP: It ain't us. Speaking of government, I was going to say shenanigans, but that doesn't seem right in this particular context. In transitions maybe, or –

[0:41:54] JR: Yeah. Flip-flopping. How about flip-flopping?

[0:41:57] IP: Flip-flopping. We've talked about the government mandated cuts to flights at Schiphol and Amsterdam, back and forth lawsuits. Schiphol won, Schiphol lost, Schiphol won, and then they finally lost again with the courts saying, "Yes, these flight cuts can go into effect as early as next year." Down from 500,000 flights per year down to 460,000 flights per year and they were all set to go. Then the Dutch government collapsed last week.

[0:42:26] JR: Oh, that seems like a problem.

[0:42:28] IP: Now, there is no clarity.

[0:42:30] JR: Yeah, no clarity. I still wouldn't recommend going out of my way to, or out of your way to booking any flights to Amsterdam, because now we still have no idea. I feel so bad for the route planners and schedules that KLM and their friends are trying to figure out, how do we schedule an airline hub in Amsterdam where we don't even know how many flights will be allowed to operate in Amsterdam on top of all the other shenanigans going on in the European aviation space? I feel bad for them. This sucks.

[0:42:59] IP: Yeah, it's not just KLM and the folks at Air France as well. It's some of the smaller airlines, according to one study, at least would be more impacted than even KLM, such as easyJet, where you would have a higher percentage of flights impacted, or a higher percentage of the existing flights would go away, which is not great if you're trying to plan around things and then all of a sudden, you're like, "Okay." Well, we at least know what the bad news is and now you don't even know what the bad news is yet, because you don't have a government to set the limits.

[0:43:29] JR: Or this also is painful for new entrants, like JetBlue and their precious one or two slots. Those might be on the chopping block as well. We don't know. They don't know. Nobody knows. That's why it's so annoying.

[0:43:40] IP: Nobody knows. Yeah. But we'll keep after this. I didn't have following Dutch politics on my list of things that I would need to do this year.

[0:43:52] JR: You got to have that on. You can't every leave that off.

[0:43:54] IP: Following Dutch politics. It's not even a World Cup year.

[0:43:57] JR: No, it's usually just about bicycles.

[0:43:59] IP: There you go.

[0:44:00] JR: This year, all about airplanes.

[0:44:03] IP: All right. More airplanes is what we're going to have, because Airbus has officially inaugurated its new final assembly line for the A320neo family in Toulouse.

[0:44:14] JR: It is bittersweet. Bittersweet moment here.

[0:44:17] IP: Yeah. This was space, it was formerly occupied by the A380 final assembly line. Now it will be occupied by the A320 family, especially the A321neo, because as of last month with all of those orders coming in at the Paris Air Show, Airbus has officially made the A321neo the most ordered Airbus aircraft ever surpassing the original A320neo. The A321neo currently accounts for 60% of the A320neo family backlog.

[0:44:53] JR: Wow.

[0:44:54] IP: That's a lot of planes.

[0:44:55] JR: That's a lot. Not terribly surprising, given the airplane doesn't have a true competitor in the market. Yeah, they're running away with it. Yeah, how many aircraft did we say? This brings them up to in the near future for the entire A320 family. I think it was 75 per month.

[0:45:13] IP: They're on their way to 75 by 2026 –

[0:45:17] JR: That is –

[0:45:18] IP: - across all of the –

[0:45:19] JR: - crazy number of aircrafts.

[0:45:21] IP: - the final assembly lines.

[0:45:22] JR: I hope they can actually achieve given all the – they don't put any of their fuselages on trains, do they?

[0:45:27] IP: Barges, I believe.

[0:45:29] JR: Yeah, barges. Okay. I mean, those thing –

[0:45:31] IP: At least, the A3 – Yeah. If I remember correctly, the A321 fuselages that are assembled in Mobile are –

[0:45:40] JR: Yes. They are ferried over in a barge.

[0:45:42] IP: - shipped across.

[0:45:44] JR: Yup. All the way across the Atlantic. Somehow, still makes sense to do that.

[0:45:48] IP: There you go. You get in there somehow, I guess. Here's a story that I didn't expect to include this week, because I didn't think it was possible. Jason, tell me what happened in Lagos.

[0:46:00] JR: In Lagos, Nigeria, somewhere apparently that has been struggling with security issues at the airport for decades, turns out an entire runway lighting system was stolen. The whole thing, gone. This comes to us from the BBC when the details are sketch, but I'll quote them saying, "Thieves have stolen the lighting system for one of the runways at Nigeria's busiest airport just months after it was installed." An airport authority spokesman has confirmed to the BBC. Investigations going on. It's not clear when the system was taken. Local media reported that airport –

[0:46:34] IP: They didn't know it was missing right away?

[0:46:36] JR: They didn't know it was missing right away. It's gone, the runway was closed for a while. They said, the ground lights were installed in November, ending years of after dusk restrictions on landing on that wing of the airport. Apparently, the BBC goes on to say that

domestic airlines were forced to land on another runway that was two and a half miles, four kilometers on the other side of the airport and they had to taxi all the way back to the domestic terminal. Then that's an operational headache.

Yeah, but apparently, the airport had been closed for a few months for maintenance and they took the lighting system. Impressive, because the lighting system for a runway is large and a lot. But when I dug into this story a little bit and looked at the NOTAMs issued, it seems it's actually the poppy system, not the approach lights, or not somehow the lights embedded in the runway itself. But if the NOTAM for the poppy system is to be believed, that is probably the part that was taken. That is the system of, I guess, it's four lights, or four LED assemblies off to the side of the runway, that gives pilots a visual indication of the glide slope.

White over red, or red over white, depending on if you're above the glide slope, or under the glide. I would assume that's what was taken, which isn't a huge assembly, I guess. I could see someone trying to strip that apart for the copper, or whatever is inside. I just can't believe it went missing and no one noticed for a while. If the runway is not in service, I guess I understand it.

[0:48:07] IP: Okay, I guess a little more. I guess, I understand.

[0:48:10] JR: I guess, maybe when the runway opened, they tried to turn it on and nothing happened. They said, "Huh, where did it go?"

[0:48:16] IP: We should go check that out. I wonder where those lights went.

[0:48:20] JR: Yeah. The NOTAM's in effect for a few months. I guess, they don't expect it to be coming – They have to order a new poppy assembly from somebody, somewhere and install that. I don't know. If you find one on eBay anytime soon, you'll probably know where it came from.

[0:48:34] IP: Yeah. Oh boy. Okay. Let's go in a completely different direction and talk about buses.

[0:48:40] JR: Oh, I like buses.

[0:48:41] IP: I like buses, too. In this particular case, these buses take you to airplanes.

[0:48:47] JR: Which is better.

[0:48:49] IP: Yeah. We're talking about landline. The bus company that is operating what were formerly regional flights, or what would normally be regional flights for some airlines, like American Airlines. Those bus services are now finally behind security, making them actually useful.

[0:49:12] JR: Yeah. Some of them are behind security, at least only for American, not for United, or some country. They operate for three airlines here in the US. But American had launched this service with landline out of its Philly in, I think the spring of 2022. It had touted when the service launched that these will be behind security. Let's say, for example, at Atlantic City in New Jersey, you go to the airport in Atlantic City, you clear security there, you check your bags just like you would for a normal airport. But when you get to the gate, there's a bus there. There's not a plane. There's a bus.

You get on the bus. They seal it up. They drive you down the Atlantic City expressway to Philly and then you park at a normal gate. Then you just get off, you enter into the terminal and you go on to your connecting gate. This is not intended to be something to take just from Philly to Atlantic City. That would be silly. But you can do that for \$800 or something. The last time I looked it up, you shouldn't do that. Very nice to see this improvement that was promised from the beginning that American had always had on its website, actually. They never updated the page to reflect reality. The web page is so out of date now that it's back into reality.

[0:50:19] IP: It's back up to date.

[0:50:20] JR: Yeah. Back up to date.

[0:50:21] IP: They talk about having the seal on the bus to make sure that no one got off, or got on. Do we know what that is? Is it just a piece of foil tape, like you see on –

[0:50:30] JR: I don't know. I haven't seen it.

[0:50:33] IP: I don't even know what.

[0:50:34] JR: I guess, they're all over the place inside the cabin of an aircraft. If you go in the lavatory, look at the smoke detector assembly, and you'll see a little security seal that if it breaks, they got to find out who broke it, or what broke it. I guess, it's probably something very similar to that. They probably put it on all the luggage compartments of the bus to, because you wouldn't want at a red traffic light someone opening up the luggage compartment, stashing something illicit in there and then closing it up and having that go air side. I can see how this would be a logistical headache and why it took landline, unfortunately, over a year after the launch of service with American to get this into action.

But this is good. This should be the future of very short haul flying. There should not be a flight between Atlantic City and Philly. There should not be a flight between Harrisburg and I think, Philly and I think this one, Allentown to Newark. These should not be flights. It shouldn't exist. It's good in the light of the pilot shortage and in light of congestion in the air. It just makes sense to do this. In many ways, it's actually a faster and better experience than stashing everyone inside a ERJ-145.

[0:51:49] IP: Yeah. I agree with Jason. Everyone knows how much I don't like doing that.

[0:51:53] JR: Excellent.

[0:51:54] IP: But the man is right. This Friday sees the launch of Northern Pacific Airlines first flight.

[0:52:02] JR: Hey, Japan is calling via Anchorage, right?

[0:52:06] IP: About that.

[0:52:08] JR: Oh, right. They're doing Ontario, California to Las Vegas.

[0:52:13] IP: Vegas. Correct. That is correct.

[0:52:16] JR: Got to do something.

[0:52:17] IP: You depart on Friday and you come back on Sunday. The goal is to have a charter flight somewhere in there on Saturday. The first flight is launching this Friday, July 14th, departing at 2 p.m. it's a quick hop on one of their 757-200s over to Vegas on an hour-long flight, eventually. The goal is still to operate from the US West Coast via Anchorage to Asia, eventually.

[0:52:49] JR: Yeah, somehow. Not sure how they're doing with –

[0:52:50] IP: They're starting operations. Good for them. I'm going to leave it there for now and wish them the best of luck.

[0:52:57] JR: Yeah, good luck to them. US's newest, large aircraft carrier. This is good news. Competition is good. I just wish it was under better circumstances, given the uninteresting route.

[0:53:08] IP: There you go. Finally, this week, I am happy, very, very happy to report that Air Tanzania has gotten its A220 back. That was stuck in Maastricht for over a year, because of a commercial dispute and a judge had placed a hold on that aircraft.

[0:53:31] JR: This is not the first time one of its aircraft has been taken.

[0:53:35] IP: It's not even the second time.

[0:53:36] JR: Has leveraged. Poor airline.

[0:53:38] IP: It's not even the second time. This is the third time. It's the second A220 and third aircraft overall. They had previously in 2019, had a pre delivery Dash 8 and an A220 in – I'm not sure where the A220 was exactly, but also seized for a period of time. Well, they worked out a separate dispute. Good for them getting their A220 back and it's already back in service.

[0:54:08] JR: Yeah. They did not waste any time getting that back into service. I guess, they were expecting it.

[0:54:13] IP: Yeah. Yeah. They got it back on the 7th of July and the first flight for the aircraft with passengers was on the 10th.

[0:54:22] JR: Excellent.

[0:54:22] IP: Good for them. I'm glad they got their aircraft back. Maybe one day we'll get some aircraft. Maybe we'll get a Boom overture thing. We can pick one up on eBay with a puppy and just call it a day.

[0:54:34] JR: Yeah, you never know what you find.

[0:54:35] IP: Is that how it works? I'll leave that to you.

[0:54:38] JR: Okay.

[0:54:39] IP: Until then, this has been episode 224 of AvTalk. Thank you so very much for listening. We appreciate, whether or not you're finding the podcast this week for the first time, or you've listened to every single episode. We certainly appreciate you listening, especially all the way to the end. If you're so inclined and you've made it this far, why not leave us a rating, or a review wherever you get your podcast? It helps other people find the podcast as well. The more people listen to the podcast, I think the better, Jason thinks the better. Hopefully, you as listeners think the better as well. We'd be ever so grateful if you did that. For now, I am Ian Petchenik, here, as always with –

[0:55:19] JR: Jason Rabinowitz. Thanks for listening.

[END]