# **EXPO PORTFOLIO**



# **CabinSpace Live Seminar Theatre**

# FLYING FOR ALL – CREATING AN ACCESSIBLE CABIN

Moderator: Jennifer Coutts Clay, Author, Jetliner Cabins

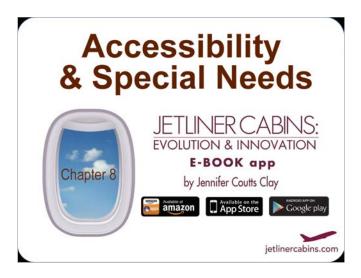
PRESENTATION ON ACCESSIBILITY: SPECIAL NEEDS

(Extended Version)

My Commentary for this Presentation is based on the text in Chapter 8 of my E-book App: *Jetliner Cabins: Evolution & Innovation*.

After 10sep19, the extended Picture Portfolio and Commentary will be displayed on <a href="https://jetlinercabins.com/news-media/news/">https://jetlinercabins.com/news-media/news/</a>. As a *pro bono* gesture, this Presentation will be in Down-loadable format. I hope the Slides and Commentary will be helpful for possible future use by Disabilities Rights Advocates and Activists.

Here are my key points.



Slide #A-1 .....

Welcome to this Cabin Space session, organized by Gillian Jenner of Reed Exhibitions. In my presentation on Accessibility: Special Needs, I am going to show how the Accessibility customer universe can be classed as a valid, operational Market Segment (alongside the traditional airline Market Segments e.g. First Class, Business, Premium Leisure, Economy etc.). We shall then move on to an in-depth discussion with our very distinguished Panellists.



A "New" Accessibility Market Segment

#### WHO (World Health Organization) Reports

There are approx. ONE billion people living with disabilities. Their representative "spend" is approx. US\$8 trillion.

#### By 2050

With population ageing and the rise in non-communicable diseases, there will be more than TWO billion people living with disabilities.

Airlines have major opportunities to develop new platforms for this under-served ACCESSIBILITY MARKET SEGMENT.

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#### Slide #A-2 .....

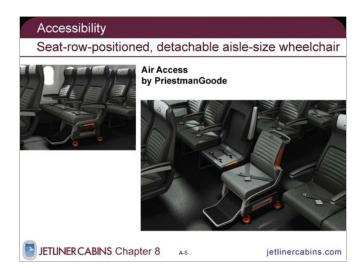
In June 2019, at its 75th annual meeting, IATA unanimously approved a resolution to improve the air travel experience for the estimated one BILLION people living with disabilities. IATA called on governments and airlines to harmonize national legislation and regulations, to ensure dignified, respectful treatment for disabled passengers.

#### Slide #A-3 .....

See text on Slide. WHO Reports. Many Passengers with "Reduced" or "Restricted" Mobility (PRMs) suffer from physical disabilities that are visible. There are other PRMs whose mobility is restricted for disability reasons that are not visible e.g. visual or hearing impairments, autism, intellectual and language difficulties. As we grow older, we all need special assistance. So, at the human level, accessibility is a moral imperative.

#### Slide #A-4 .....

We should add Families to the Accessibility Market Segment because Children have Special Needs. And we should add Seniors: this particular customer group is increasing at an enormous rate. Worldwide, according to United Nations, more than one million people turn 60 every month. And in USA, the world's largest aviation market, 10,000 people turn 65 every day of the year, according to the Wall Street Journal. What other airline Market Segment has a guaranteed, potential customer universe of this magnitude?



When they travel, many PRMs are often accompanied by helpers, health-care employees, family members, friends or qualified medical assistants. Passengers with Special Needs are usually grateful for specialist care and attention, and they are prepared to pay full market rate for professional services.

For travel organizations that develop programs to successfully accommodate PRMs and their accompanying personnel, there is great potential for airline ticket sales and future Return Business -- this is a core, central feature of a buoyant Market Segment.

#### Slide #A-5 .....

So what does all this mean for cabin designers? Well, it means there are MAJOR opportunities to develop creative cabindesign concepts that will accommodate PRMs. This is a new market perspective. Just look at this ingenious seat-row installation: congratulations to Priestmangoode! I hope we shall hear more today about these splendid developments from our distinguished Panellists.

Question: How soon will we see this kind of seating arrangement FAA-certified and flying on launch customer airlines? PRMs would most certainly pay extra to make reservations for this seat position.



## Slide #A-6 .....

When Families travel, all Children have to be carefully supervised. And, for safety reasons, UMs always need specially designated seating arrangements.

Slide #A-7 ..... See text on Slide. Market Segment Action (A).

#### Market Segment Action (A)

Accessibility

For Passengers with Restricted Mobility (PRMs), Special Needs, Handicaps, Disabilities . . .

Does your organization have:

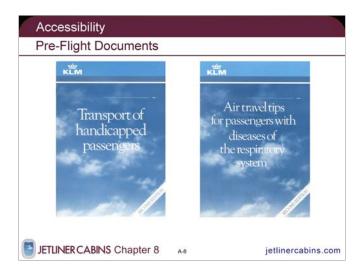
An Accessibility manifesto/statement published on your website and endorsed by your Human Resources or Medical Department?

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An Accessibility Ambassador/Champion (similar to a Brand Manager)?

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#### Slide #A-8 .....

Some airlines issue printed, pre-flight information documents for passengers with Special Needs. And airlines normally display their Accessibility policies on their websites. Contact details are of great importance e.g. emergency telephone or text numbers or Email addresses.

However, many Seniors do not use the internet, and in the emerging markets PRMs might not even have internet access. So, print-versions of helpful documents are often cherished by handicapped passengers (these brochures were carefully stored by my own family members).



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Slide #A-9 ..... Advertising on wheelchairs at airports. Potential ancillary revenue opportunities.

#### Slide #A-10 .....

PRM Information Documents can be helpful and practical. But frequently they stress product details rather than customer benefits. PRM documents offer practical opportunities for adding marketing messages e.g. "Welcome to XYZ ... etc." or "We hope you will enjoy your flight today ... etc." or "Here's how to contact us ... etc." And airlines can use internet communications, pre-and postflight, to develop PRM loyalty and ensure follow-up return customers.

A major question, however, relates to what happens at destination airports? After PRMs disembark from their aircraft, at many airports, ground-handling companies take over responsibility for airline passengers. Sometimes, there are serious problems because care standards can vary from A to Z, outside the control of the airlines on which the PRMs travelled.

Because the PRMs paid money to the airlines for their air tickets, they regard the airlines as being at fault if they encounter difficulties at the airports. Singapore Changi airport has a top-level reputation for its training standards and care of PRMs.



At Swiss airports there are sign-posted Wheelchair drop-off points.

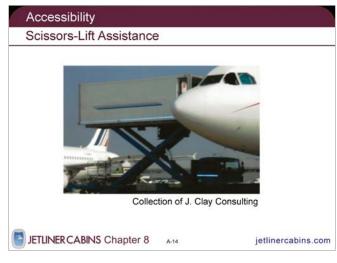
But in many countries airport groundhandling standards can vary dramatically, unfortunately.

#### Slide #A-11 .....

See text on Slide: U.S. DOT Reports on damage to PRMs' own wheelchairs. Think of the recurring nightmare scenarios and press-report horror stories e.g. PRMs being forced to crawl on hands and knees through immigration and customs because their wheelchairs were missing (shortshipped by the airline) or smashed during the flight (incorrectly stowed by baggage loaders). For a wheelchair-user this is the equivalent of the "end -of-the-world." It can take days for wheelchairs to be repaired. How to organize a replacement? Some airlines provide reassurances that they will provide substitute wheelchairs for PRMs whose own wheelchairs have been damaged in transit. But what about typical problems such as store closures, national holidays, remote locations that do not have repair facilities, and lack of suitable replacement parts? Professional training for airport employees is absolutely essential.







## Slide #A-12 .....

There are frequent press reports about PRMs stranded at airport assembly/pickup/put-down points. PRMs have been left helpless and abandoned, locked inside airterminal buildings overnight! Airlines should make sure that PRMs with cell phones have emergency contact numbers to call when they experience transit problems.

#### Slide #A-13 .....

At huge, new airports like Istanbul (the largest single-roof airport building in the world) there are designated pathways for Buggy transfers and the wheelchaircollection points are located alongside. But, at many old-style airports, wheelchair-collection points are often tucked away in distant corners or behind pillars, following no logical pattern and, sometimes, almost invisible.

## Slide #A-14 .....

Some wheelchair passengers cannot walk up and down aircraft steps (IATA code: WCHC). So, if an aircraft is at a Remote Parking location, out on the tarmac (i.e. it is not parked at a Jetway corridor connected to the airport building), airlines often use Scissors-Lift High-Level Loader vehicles. These vehicles can transport wheelchair passengers from the airportconcourse building to Door R1, on the starboard side of the aircraft. (Employees of Flight Kitchens will recognize these vehicles because this is the normal way to deliver catering supplies to parked aircraft.) Wheelchair users will tell vou that being bodily carried up and down a

flight of steps, particularly an exterior stair-case where there might be windgusts or rain-fall, can be a truly terrifying experience.

Slide #A-15 ..... See text on Slide. Market Segment Action (B).



Accessibility

assistive devices?

Market Segment Action (B)

Does your organization offer a publicly available: Telephone number for PRMs? Dedicated Email contact address?

What sort of training does your organization provide for employees that interact with PRMs and their

#### Slide #A-16 .....

The first illuminated handrail at shoulder level, running from the front to the back of the cabin, appeared on the MD-95, launched by McDonnell Douglas in 1995. This product upgrade is of great benefit to PRMs - and to everyone during periods of air turbulence. The MD-95 was re-named the Boeing 717 after the merger of the two companies, in 1997. Subsequent aircraft roll-outs at both Airbus and Boeing have included shoulder-height handrails. But when the handrails are not illuminated, passengers often do not know that they exist - and ditto for flight attendants.



Market Segment Action (C)

Does your organization provide Special Assistance for PRMs when they are:

Booking and Planning the Flight?

Checking-in at the Airport?

Boarding the Aircraft and On the Flight?

Disembarking and Collecting Luggage at the Destination Airport?

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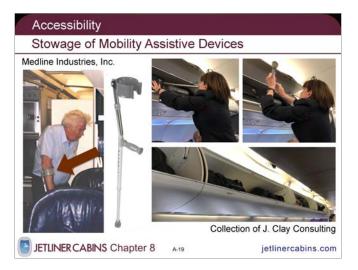
#### Slide #A-17 .....

ANZ launched Skycouch in 2012. Attractive ancillary-revenue potential. Underneath the cushions of these ANZ seats there are pull-out horizontal panels that fill the space between the seat rows. These Skycouch installations, with flip-up armrests, are positioned at certain points on the outboard seat rows of the Economyclass cabin. When seated on the horizontal panels, passengers can lean back against the cabin side-walls. Or they can stretch out across the row of three seats. Joon/Air France launched Cosyjoon Child Beds in 2018. Located near the front of the centreline area of the Economy-class cabin, these seats feature a special headrest-fitting at the top of the seat-back. This headrestfitting assembly can be detached by flight attendants and used to fill the space between the seat rows. Again, ancillary revenue potential.

Slide #A-18 ..... See text on Slide. Market Segment Action (C).

IATA recently promoted a training guide for travel sellers, focusing on service standards and procedures to assist handicapped passengers, covering all disabilities, not just the visible wheelchair requirements. The aim is to develop a consistent delivery of care for Special Needs passengers. Perhaps the Alliances could set an example and develop joint standards for their own participating airlines?

And when Passenger Name Records (PNRs) are entered in airline reservations computers using the SSR code (for a Special Service Request), IATA is calling



for more specific use of the 15 designated categories to clarify individual problems e.g. relating not just to mobility but also to vision, hearing, speech impairment and so on. Perhaps, in the future, Special Needs passengers could be provided with personal, wearable, electronic communications devices linked to groundbased medical facilities? This product development (already in use in the corporate-aviation sector) would ensure professional medical monitoring of the health and well-being of PRMs throughout their journey time. And it would verify the exact location of PRMs (when the Istanbul New Airport is completed it will be larger than the island of Manhattan). More ancillary revenue opportunities.

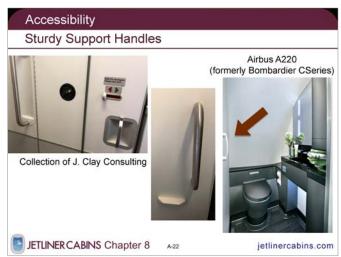
#### Slide #A-19 .....

Onboard stowage of a typical elbow-crutch is near-impossible when overhead bins are small. Crutches and walking-frames can usually be stowed in the larger stowage bins (see the lower image).

When stored in distant closets (by wellintentioned flight attendants) PRMs who can walk inside the cabin (IATA code WCHS) are unable to access their mobility devices rapidly e.g. if they need to use them to move to the lavatory.







# Slide #A-20 .....

These aisle-size, folding wheelchairs (slim but strongly built) are used to bring PRMs from the aircraft door to their seats, and back to the aircraft door for disembarkation. Flight attendants are trained to push these wheelchairs to enable PRMs to reach the lavatory.

In the early 2000s, Continental was a launch customer airline for these onboard FAA-approved wheelchairs. As you can see, this was a major Cabin Accessibility advance.

## Slide #A-21 .....

Curtains that can be pulled in front of lavatory doors provide privacy for PRMs and their helpers. Flip-up armrests ensure ease-of-movement for PRMs when transferring between the wheelchair and the seat row.

Flip-up armrests were first introduced by Pan American, in 1970, at the time of the launch of the Boeing B747.

# Slide #A-22 .....

Lavatory interiors need strong grab bars. Many major airlines fly one larger-size lavatory suitable for wheelchair access. And there is a recent development whereby folding divider-partitions can be used to convert two, adjacent, small-size lavatories into one larger-size lavatory, suitable for wheelchair access.



Market Segment Action (D)

To develop your Accessibility Market Segment: Have you monitored the PRM statistics for the main cities/countries where your organization operates?

Example. In USA: Approx. 10,000 people turn 65 each day of the year.

People over 50 account for 70% of bank deposits. (American Bankers Association)

Source: Wall Street Journal, 25jan19, page A3.

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#### Accessibility

Service and Emotional Support Animals?

**Pioneered by Virgin Atlantic Bluebox Aviation Systems &** Guide Dogs for the Blind Assoc.



Image via instagram.com/ventiko



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Newark Liberty Int'l Airport, NJ



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#### Slide #A-23 .....

This award-winning design concept from Hamburg Technical University is really brilliant! Let's hope this concept can be developed and implemented by major airlines.

Slide #A-24 ..... See text on Slide. Market Segment Action (D).

#### Slide #A-25 .....

In 2017, Virgin Atlantic developed inflight literature in Braille e.g. Safety Cards. With Bluebox, Virgin Atlantic developed "Accessible IFE," a portable screen display to help vision-impaired passengers to access seat-back IFE. Pedro, the gorgeous Service Dog, attended special training courses to accompany blind air travelers onboard.

Sadly, in 2018, there was a serious case of **Denied Boarding at Newark Liberty** Airport: Dexter the Peacock, a passenger's Emotional Support Animal, was not permitted to board the aircraft even





though Dexter certainly knows a lot about flying - he has his wings, yes?

And concerning the carriage of Emotional Support Animals, DOT recently issued new guidelines that are rather alarming: they say small horses are OK in the cabin? Regulators and airlines need to clarify and harmonize terms and conditions relating to carriage of animals inside the aircraft. This is a very difficult subject for everyone.

# Slide #A-26 .....

Wheelchair passengers at Baggage Reclaim. Many airlines carry doctorprescribed "medical equipment" free of charge to passengers; and the weight of the medical equipment is not counted as part of the passengers' personal baggage allowance.

Airlines provide robust "Bicycle Flight Boxes" for placement in the Cargo hold. Are we going see robust "Wheelchair Flight Boxes"?

# Slide #A-27 .....

"Luggie"-type Scooters. There is space for the passenger's suitcase on the horizontal foot-panel at the front of his 4-wheeled Scooter. This Scooter was used by the PRM at both the origin and destination airports (witnessed by me). For the flight, this Scooter was folded into a solid, compact, box-type shape, and it travelled in the Cargo-hold of the aircraft from JFK to LHR.

The Owner told me his Scooter has never been damaged while travelling. Scooters of this type can be battery- or electricpowered, and they sell for a few thousand dollars.

#### Market Segment Action (E)

Have you communicated your organization's Accessibility Mission to your business associates: manufacturers, vendors, suppliers, travel agencies etc.?

Possible target timeframe for the launch of your organization's Accessibility Market Segment:

2020 Tokyo Paralympic Games; 25 August - 06 September.

22 different sports: Competitors fly in from all over the world.

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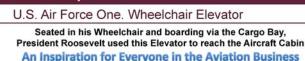


Slide #A-28 ..... See text on Slide. Market Segment Action (E). And in 2020, the USA will celebrate the 30th anniversary of the passing of the Americans with Disabilities Act (ADA). This legislative milestone will provide an all-important opportunity for the aviation sector to signal its key advances in the transportation of passengers with disabilities.

#### Slide #A-29 .....

Dreams of PRM advocate, activist and leading lobbyist: Mr Chris Wood.

#### Accessibility





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#### Slide #A-30 .....

To close my Presentation, here is President Roosevelt's wheelchair cabin access. A customized elevator was installed on the Presidential aircraft, Air Force One, a Douglas V-54C Skymaster (these days Air Force One is a Boeing 747). Seated securely in his wheelchair, the President entered the aircraft via the Cargo bay. The wheelchair was then rolled into this special elevator. The elevator moved up, within the Cargo hold, to reach the aircraft cabin. In this way, the President was able to enter, and leave, the aircraft cabin in full safety and comfort (instead of having to be bodily carried up and down the exterior

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steps of the aircraft). This U.S. Air Force initiative is an inspiration for everyone in the aviation business.

Slide #A-31 .....

Well, thank you, ladies and gentlemen, for joining our CabinSpace Live Seminar today. I hope I have convinced you - and our Panellists - that the Special Needs customer universe warrants full attention from everyone. I hope you will agree there is a long-term, potential, major-moneymaking revenue stream in the Accessibility Market Segment.

You can download my extended Presentation Slides and Commentary from https://jetlinercabins.com/newsmedia/news/. So, over to you now, for YOUR ACTION! Thank you.

End of extended Presentation

These images are also available in Powerpoint format. Click here to access the Powerpoint file (21MB).

And it's time for us all to move on, to hear from our distinguished Panellists, on the subject of *FLYING FOR ALL – CREATING AN ACCESSIBLE CABIN.* 

## PANELLISTS

Gina Emrich, Senior Manager of Customer Accessibility, American Airlines

Michele Erwin, President, All Wheels Up

Tom Lipscomb, Head of Project Management, PriestmanGoode

Hank Scott, Chief Executive Officer, Molon Labe Seating

# LINKS TO CONTACTS MENTIONED IN THIS CASE STUDY (Listed Alphabetically)

Organization	Website	Slide#
Air Clinic	airclinic.com.tr	13
Air France	airfrance.com	17
Air New Zealand	airnewzealand.com	17
AirAsia	airasia.com	4
Airbus	airbus.com	16, 22,23
Airbus Hamburg - ProtoSpace	airbus.com	23
AirTran Airways	en.wikipedia.org/wiki/AirTran Airways	16
American Airlines	aa.com	9, 10
American Bankers Assoc.	aba.com	24
Bluebox Aviation Systems	blueboxaviation.com	25
Boeing	boeing.com	16
Bombardier	bombardier.com	22
British Airways	britishairways.com	4, 6, 9, 10
Charterwood Mobility	charterwood.co.uk	27
Continental	en.wikipedia.org/wiki/Continental Airlines	20, 21
Crystal Cabin Award	crystal-cabin-award.com	23
Delta Air Lines	delta.com	10
Emirates	emirates.com	12
Gina Emrich/PANELLIST	aa.com	
Michele Erwin/PANELLIST	allwheelsup.org	
FDR Presidential Library & Museum	fdrlibrary.org	30
Fly Jamaica Airways	fly-jamaica.com	2
Guide Dogs for the Blind Assoc.	guidedogs.org.uk	25
HAW Hamburg	haw-hamburg.de	23
Heathrow Access Advisory Group	haag.org.uk	29
Heathrow Airport	heathrow.com	27
IATA	iata.org	2
Istanbul Airport	istanbulhavalimani.com	13
Japan Airlines	jal.com	12, 26

Organization	Website	Slide#
J. Clay Consulting	jetlinercabins.com	2, 9, 11, 12, 13, 14, 16, 19, 22, 26, 27
jetBlue	jetblue.com	6, 9
Jetliner Cabins	jetlinercabins.com	All
JFK Int'l Airport	jfkairport.com	26
Joon	en.wikipedia.org/wiki/Joon_(airline)	17
Junkin Safety	junkinsafety.com	20
KLM	klm.com	8
Tom Lipscomb/PANELLIST	priestmangoode.com	5
Luggie	luggiescooters.com	27
McDonnell Douglas	en.wikipedia.org/wiki/McDonnell Douglas	16
MEA	mea.com.lb	26
Medline Industries, Inc.	medline.com	2, 19
National Museum of the U.S. Air Force	nationalmuseum.af.mil	30
Newark Liberty Int'l Airport	newarkairport.com	25
PriestmanGoode	priestmangoode.com	5
Hank Scott/PANELLIST	airlineseats.biz	
Tokyo Paralympic Games	tokyo2020.org	28
U.S. DOT	transportation.gov	12
UK CAA Access to Air Travel Advisory Group	caa.co.uk	29
Ventiko	instagram.com/dexterthepeacock	25
Virgin Atlantic	virginatlantic.com	25
Wall Street Journal	wsj.com	24
WheelchairTravel.org	wheelchairtravel.org	11
Chris Wood	flyingdisabled.org.uk	21, 29
World Health Organization	who.int	3

# **Accessibility Articles**

In an interview with Marisa Garcia, Jennifer Coutts Clay discusses her keynote presentation at the Aircraft Interiors EXPO

Industry reviews creative air travel accessibility solutions - RunwayGirl Network, 21 August 2019

Jennifer Coutts Clay outlines the airline industry's progressive approach to accessibility over the years

September 2019 issue of Aircraft Interiors International article, A History of Accessibility

