



EDUCATION IN MOTION

■ WHERE THEORY MEETS PRACTICE ■

Handout for Air Travel with a Wheelchair

The information from the PowerPoint is in this documents. Photos and drawings are removed to align with Regulatory Guidelines.

Jessica Presperin Pedersen OTD, MBA, BSOT, ATP/SMS FAOTA, RESNA Fellow

Objectives

- Identify one US mandate pertaining to reporting damage of DME during flight.
- Identify two design ideas promoting ways a wheelchair with a rider can safely stay in the cabin.
- Describe how a rider and family can protect the wheelchair for storing underneath the wing.
- Identify the process for preparing for a 2-3 hour flight, getting through TSA, boarding a plane, and seating on an aircraft.

GETTING READY FOR THE TRIP

- Online Ticket Purchase
 - Indicate you use a wheelchair



- Fill out any information pertaining to traveling with a wheelchair provided by the airline
- Seat assignment
- Check in online, Call airline 24 hours before to confirm
- Hydration Concerns
- Edema- compression stockings
- Arrive a minimum of 2 hours before domestic flight
- TSA- can go through security line-do not have to get out of chair.
- Identify needs to Ticket Agent
- aisle chair/assistance
- Baggage check
- Checked baggage
- Carry-on
- Wheelchair to gate
- Gate-check items- wheelchair protection

AIRPORT ASSISTANCE

- Have Transport Chairs to push through airport if needed
- Assist getting through TSA
- Provide Boarding Chairs to get into aircraft
- May assist with transfer to airline seat- depends on airline, airport, or transport company in each country

WHATS IN THE BAG

- Wheelchair Bag” –Duffle bag/carry-on
 - Storage of items you need to remove from wheelchair



- Cushion and support surfaces for aircraft seat
- Duct tape
- Wire ties
- Pneumatic tubes for tires if needed
- Plastic roll to wrap wheelchair
- Towel –standard bath size
- Labels with contact information (name, phone, address)
- Power Wheelchair:
 - Make a sign with instructions

BAGGAGE

- Anything medically related is not included in baggage count
- Shower Chair
- Sports Chair
- Medications
- Catheter/Bladder and Bowel management supplies
- Cushion and support devices for aircraft seat

TSA

- Wand or pat body and wheelchair
- They will ask if you can move forward so they can wand your back

CHANGING STATIONS

- Started in UK- Heathrow
- Several in Canada and Australia
- First one in USA 2017- now more than 25 at larger airports.

ONBOARDING/PLANING



Transfer to airline seat

- Transfer to boarding chair
- Transfer to airline seat
 - Cushion: protect skin!
 - Direct 2-person lift into airline seat
...or...

Independent transfer

BOARDING CHAIRS:

Aislemaster Columbia

Staxi

Eagle Lift

LIFT ASSIST

CUSHIONS

STABILITY

FOOT SUPPORT

COMMERCIALLY AVAILABLE PRODUCTS

BLADDER and PRESURE MANAGEMENT

- Length of flight
 - Pressure Relief Technique
- Bladder Management
 - Mountain Dew
 - Blanket
 - Urine bag->gel
 - Accessible bathroom



STOWAGE OF WHEELCHAIRS ON COMMERCIAL AIRCRAFT

- Generally storage for **one** manual wheelchair in-cabin
- Cargo hold for most chairs (1)
- Some very compact designs may be allowed in-cabin beyond this (2)
- RGK

STOWAGE OF WHEELCHAIRS CARGO HOLD

WHAT CAN GO WRONG?

- Untrained TSA staff
- Lack of assistance at airports
- Non-working boarding chairs
- Aircraft seat armrests do not flip up
- Dropped transfers
- Inability to get to lavatory
- Unsupportive aircraft seats
- Lost or damaged wheelchair

OVERVIEW OF RESEARCH

INCIDENCE

- Estimate 744,00 flights with wheelchairs on USA commercial flights 2022. (DOT report)
- Estimate 835,327 flights with wheelchairs on USA commercial flights 2023. (DOT report)

INCIDENCE

UNITED STATES DOT AIR TRAVEL CONSUMER REPORT

- FAA Reauthorization Act of 2018: Must report



- All handled wheelchairs on all flights
- All mishandled wheelchairs and scooters
- From January 1, 2019 and after, airlines must also report this data for their branded codeshare partners.
- Department of Transportation publishes yearly results each February
- 2023 Statistics
 - 11,527 wheelchairs mishandled
 - .38/100
- Down from 2022
 - 1.41/100

PEOPLE'S REACTION AIR TRAVEL ADVOCACY

- All Wheels Up
- PVA
- United Spinal
- Flying with Wheels- UK
- WheelchairTravel.org
- Letters to Congress
 - Social Medica
 - Decrease wheelchair damage
 - Increase Safe transfers
 - Wheelchair in the cabin
 - Accessible Lavatories
 - Training



AIR TRAVEL ADVOCACY FOR PASSENGERS WITH WHEELCHAIRS

AIR TRAVEL ADVOCACY FOR PASSENGERS WITH WHEELCHAIRS

Airlines 4 America

- Part of RESNA ATAT (Assistive Technology for Air Travel Standards)
- USA and Canadian Airlines Involved
- Airline focus
 - Ticketing
 - Tagging
 - Training for Passenger transfers and disability awareness
 - Training for the “below the wing” crew for safe wheelchair stowage



<https://www.airlines.org/who-we-are/>

AIR TRAVEL ADVOCACY FOR PASSENGERS WITH WHEELCHAIRS

Federal Aviation Administration Reauthorization Act 2018

- Study on the feasibility of flying in a wheelchair
- Mishandled wheelchair data
- ACAA Federal Advisory Committee
- Bill of right for passengers with disabilities

US: ACAA Advisory Committee

- Established 2019



- Recommended standards and improvements to airline checklists and forms for handling wheelchairs to increase consistency across airlines
- Air Transportation Association – consistently apply the Special Service Request Codes.
- Creation of Passenger Accessibility Advisory Group

US: Government Accountability Office GAO

November 2022 Report to Congress addressed:

- Barriers to accessible air travel

Sensory and physical assistance

TSA checks

Ticketing

Handling and stowage of devices

Onboard assistance and lavatories

- Steps airlines have taken to reduce those barriers
- DOT has progressed response to and enforcement of FAA Reauthorization Act of 2018
- Recommended Passenger Accessibility Advisory Groups, now taken up by all major US airlines

POLICY AND STANDARDS

INTERNATIONAL WORKING GROUP (IWG)

NORTH AMERICA AND EUROPE

- Recommendations for safe transport of mobility aids on single aisle aircraft
- RESNA, IATA, Airlines 4 America
- Safety- #1 Priority



- Contains essential information Universal Tag
- Mobility Aid Handling Checklist
- Communication from initial station to receiving station about what was done to wheelchair
- Training

POLICY AND STANDARDS

FOR AIR PASSENGERS WITH WHEELCHAIRS

Government Involvement- IATA

IATA

- supports aviation with global standards for airline safety, security, efficiency and sustainability.”
- North American and European government involvement
- HQ is in Canada
- Technical requirements and standards
- Wheelchair batteries have to conform to these standard
- Website resources for passengers
- Mobility aid passport



<https://www.google.com/search?client=safari&rls=en&q=iata+mobility+aid+passport&ie=UTF-8&oe=UTF-8>

RESNA Assistive Technology for Air Travel Standards

(ATAT) For Powered and Manual wheelchairs

- North American, but with consideration of wider global standards
- Testing and standards for stowage and handling of wheelchairs
- Recommendations for standardised icons
- Air Travel Configuration form
- IATA is part of this group

IN-CABIN SEATING

LIVE QUICKIE RESOURCES



WHAT RIDERS CAN DO PROTECTING WHEELCHAIR

ATAT WHEELCHAIR TAG

MANUFACTURER ROLE

- Specific downloadable tags
- Compliance with ATAT icons on wheelchairs
- Travel with a wheelchair resources
- Battery info
 - Owner's manuals to all powered wheelchairs
 - United Kingdom pilot QR Website
 - Downloadable tags
 - Manufacturer battery certificates
 - Blogs – external resources
 - Pilot of QR stickers on wheelchairs in production

RESNA ATAT ICON STICKERS

- Ansley, H., Axelson, P. (2021). ACAA Webinar. *Paralyzed Veterans of America*. <https://pva.org/wp-content/uploads/2021/10/ACAA-Webinar-October-2021.pdf>
- Civil Aviation Authority, CAA Airline Data 2016 Foreword, https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard_Content/Data_and_analysis/Datasets/Airport_stats/Airport_data_2016_annual/Foreword.pdf 2016.
- Darcy, S. (2012). (Dis)embodied air travel experiences: Disability, discrimination and the affect of a discontinuous air travel chain, *Journal of Hospitality and Tourism Management*, 19.
- Civil Aviation Authority, CAA Airline Data 2016 Foreword, https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard_Content



/Data_and_analysis/Datasets/Air-
port_stats/Airport_data_2016_annual/Foreword.pdf 2016.

- Federal Aviation Administration (nd) PackSafe Wheelchairs and mobility aids with lithium-ion batteries, with batteries installed and protected.
https://www.faa.gov/hazmat/packsafe/more_info/?hazmat=35
- Hunter-Zaworski, K., M. Mobility aids and air travel final report *Centre of Expertise for Accessible Transportation Canadian Transportation Agency*(2019) <https://otc-cta.gc.ca/eng/publication/mobility-aids-and-air-travel-final-report>
- Peck, M. ,P. (2021). Canada The Time has Come, the Walrus Said to talk about Many Things: Wheelchair Securement Spaces on Commercial Airlines. *Canadian Journal of Disabilities Studies* 10(3)
- Presperin Pedersen J. (2019) Leaving on a Jet Plane: What Professionals in the Wheelchair Industry Need to Know. *Canadian Mobility and Seating Conference*, Invited Plenary Speaker
- Presperin Pedersen J. (2019) Air travel for people who use wheelchairs: Survey results- Paper, *ACRM Annual Conference*, Nov 4-8 Chicago
- Presperin Pedersen J. (2018) Flying with a wheelchair: What the wheelchair supplier needs to know. *NRRTS Webinar*
- Presperin Pedersen J, & Shea M. (2018) Leaving on a jet plane: Will I see my chair again? *European Seating Symposium*, Dublin, Ireland
- Presperin Pedersen J, * Shea M Air Travel with a Wheelchair: What Seating Experts Should Know. *Proceedings 33rd Annual International Seating Symposium 2017* Nashville, TN
- Presperin Pedersen, J., & Axelson, P. (2016). I'm leaving on a jet plane. I hope I'll see my chair again. In *Proceedings from 32nd International Seating Symposium: Imagine the Possibilities*, Vancouver, British Columbia: University of British Columbia. 247-253.
- Shea, Mary & Dyson-Hudson, Trevor. (2016). Tips and Tricks for Successful Air Travel, On the Move – A Consumer Conference for



People with Spinal Cord Injury, West Orange, NJ, September 23, 2016.

- United Spinal Association. (2013). *Accessible air travel: A guide for people with disabilities*. Kew gardens, NY: United Spinal Association.
-