

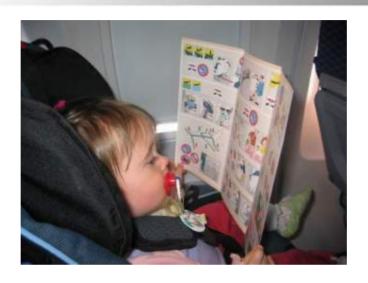


by
Donovan Koch
EMBRAER – Air Safety

Fifth Triennial International Aircraft Fire and Cabin Safety Research Conference Atlantic City, New Jersey, October 29-November 1, 2007.



Introduction



"An alert, knowledgeable person has much better chance of surviving any life or injury-threatening situation that could occur during passenger-carrying operations in civil aviation"

FAA AC 121-24C



Introduction







The Passengers



Introduction





Contents

- 1. The Safety Card Collection
- 2. Statistics
- 3. Passenger Comprehension
- 4. Good Information Not Usually Included

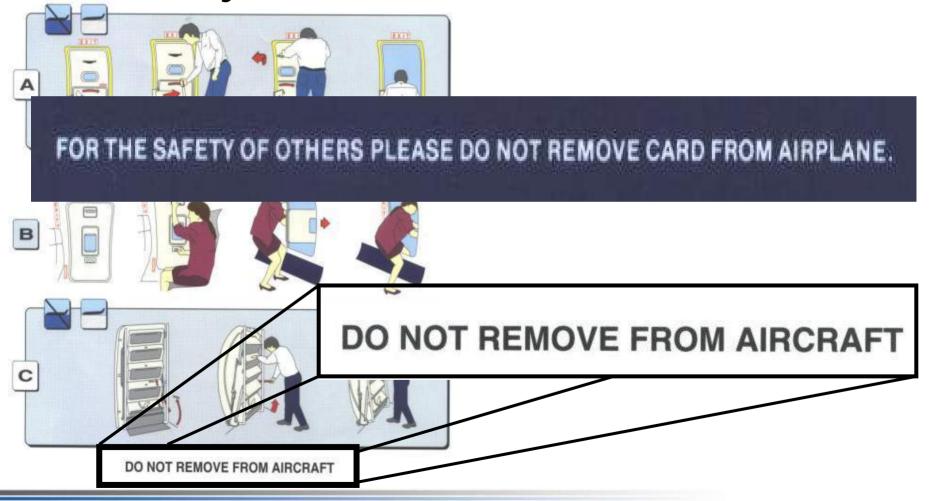


The Safety Card Collection





The Safety Card Collection





The Safety Card Collection

- Classifying the Topics
- Card Size
- Card Area
- Number of Topics per Card
- > Frequency of Topics
- Number of Languages





The Collection – Classifying The Information

§ FAR PART 121.571

- Smoking
- The location of emergency exits.
- The use of safety belts,
- Federal Aviation Regulations require passenger compliance
- The location and use of any required emergency flotation means.
- The placement of seat backs in an upright position
- Location of survival equipment.
- Use of oxygen.
- Location and operation of fire extinguisher.
- Keep their seat belts fastened, while seated.



The Collection – Classifying The Information

35 different types of information found

how to operate the seat belt during takeoff and landing put seat upright during takeoff and landing stow luggage during takeoff and landing close overhead bins no smoking no electronic equipments do not smoke in bathroom keep seat belts on while seated no not mess with smoke alarm in bathroom bracing position bracing position child bracing position pregnant woman bracing position with child on lap during emergency no high hills during emergency no luggage during emergency no glasses during emergency no smoking do not use emergency exit with smoke or fire outside

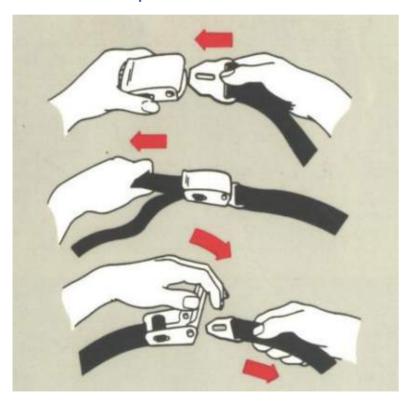
do not use emergency exit if exit blocked with debris how to open doors written instruction to passengers seated on emergency exits evacuation routes landing on ground how to activate the escape slide how to descend the escape slide do get away from aircraft after exiting evacuation routes with lights on floor evacuation routes with lights on floor and person low seats floating device evacuation routes landing on water how to place life vest only inflate life vest outside aircraft door that should not be open during landing on water use of oxygen masks place oxygen masks on child and elderly last life boat instructions



The Collection – Type of Information

how to operate the seat belt

during takeoff and landing put seat upright







The Collection – Type of Information

during takeoff and landing stow luggage

during takeoff and landing close overhead bins





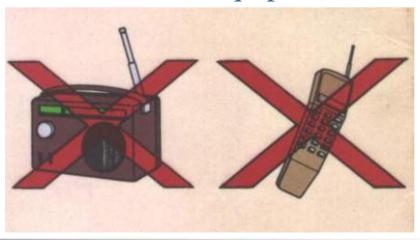


The Collection – Type of Information

no smoking



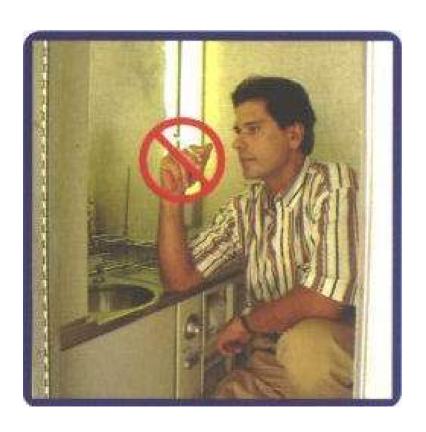
no electronic equipments





The Collection – Type of Information

do not smoke in bathroom









The Collection – Type of Information

bracing position pregnant woman



bracing position child on lap





The Collection – Type of Information

during emergency no high hills





The Collection – Type of Information

during emergency no luggage



during emergency no glasses





The Collection – Type of Information

do not use emergency exit with smoke or fire outside



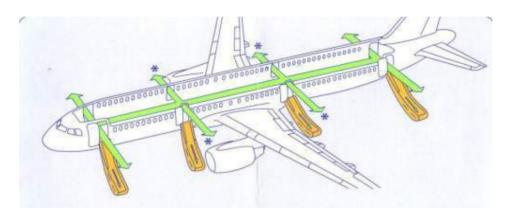
during emergency no smoking





The Collection – Type of Information

evacuation routes landing on ground



how to open doors









The Collection – Type of Information

written instruction to passengers seated on emergency exits

EXIT ROW SEATING

Passengers in exit rows should identify themselves to a crewmember, if they cannot read, speak or understand English.

RANGEES COMPORTANT UNE SORTIE

Les passagers dont le siège se trouve sur une rangée comportant une sortie doivent s'identifier auprès d'un membre de l'équipage s'ils ne lisent pas l'anglais, ne le parlent pas ou ne le comprennent pas.

ASIENTOS CERCANOS A LA SALIDA DE EMERGENCIA

Los pasajeros sentados cerca de la salida de emergencia que no sepan leer, escribir y entender ingles deben identificarse a un miembro de la tripulación.

出入口列の座席

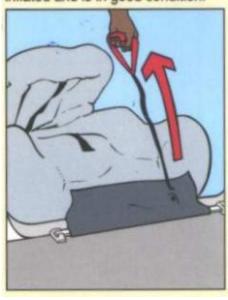
出入口列座席のお客様で、英語ガ不自由な方は、お手数ですがその旨乗務 員にご連絡ください。



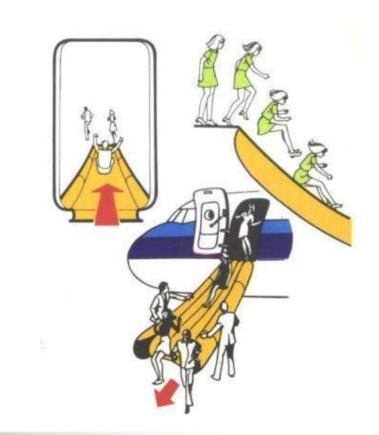
The Collection – Type of Information

how to activate the escape slide

Check that the slide has properly inflated and is in good condition.



how to descend the escape slide





The Collection – Type of Information

do get away from aircraft after exiting

Use handles to stabilize slide.



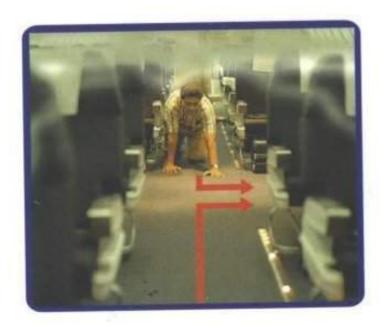
evacuation routes with lights on floor



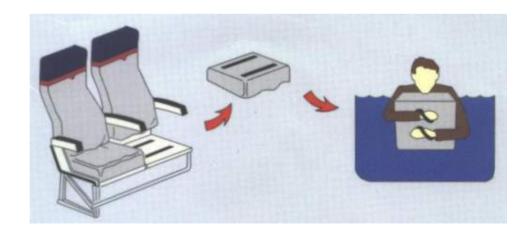


The Collection – Type of Information

evacuation routes with lights on floor and pax low



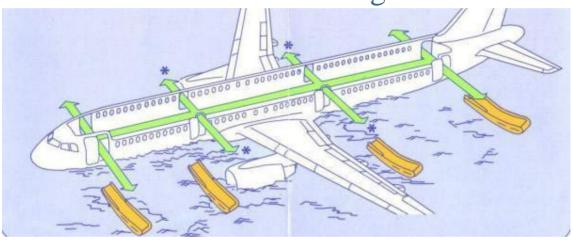
seats floatation device





The Collection – Type of Information

evacuation routes landing on water



how to place life vest











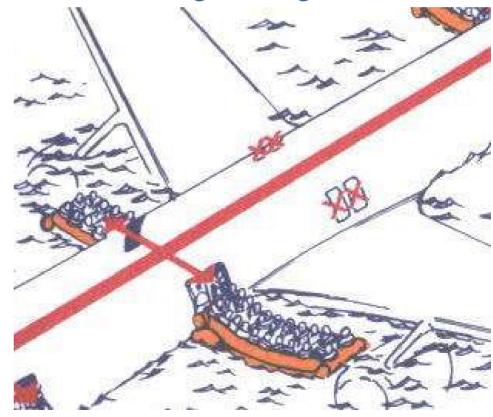


The Collection – Type of Information

only inflate life vest outside aircraft



door that should not be open during landing on water





The Collection – Type of Information



use of oxygen masks

place oxygen masks on child and elderly last





life boat instructions







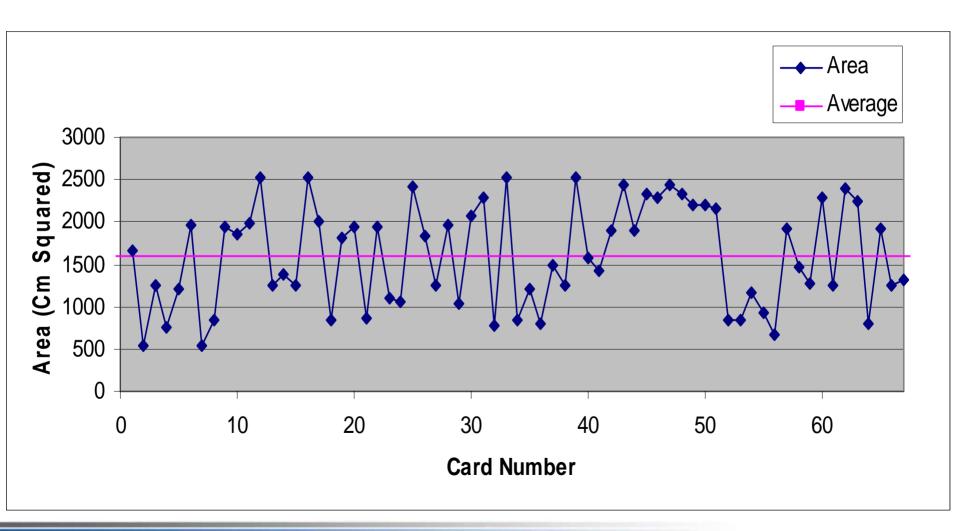
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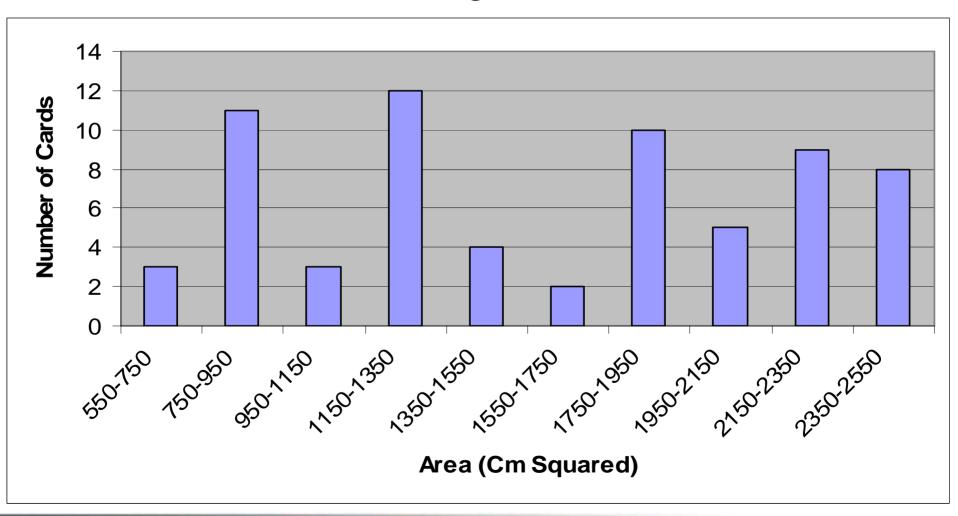


Statistics - Card Area



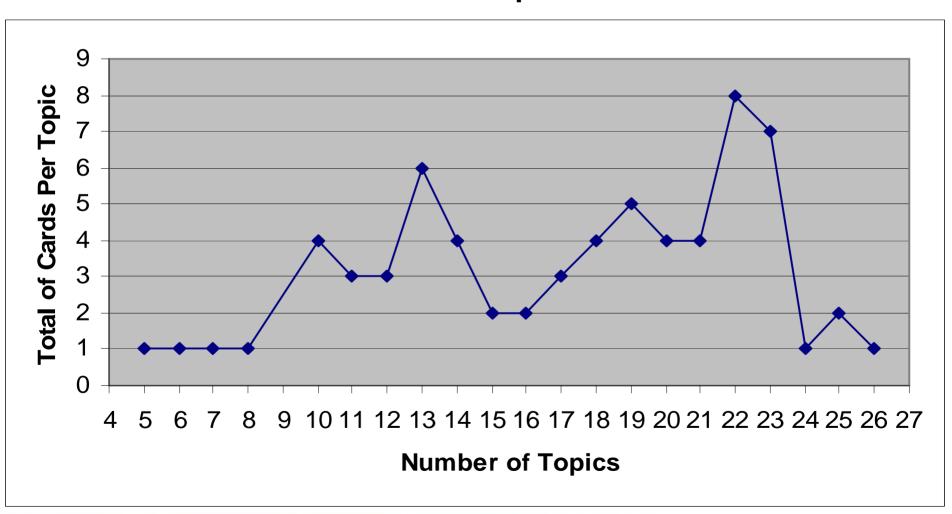


Statistics – Area Histogram



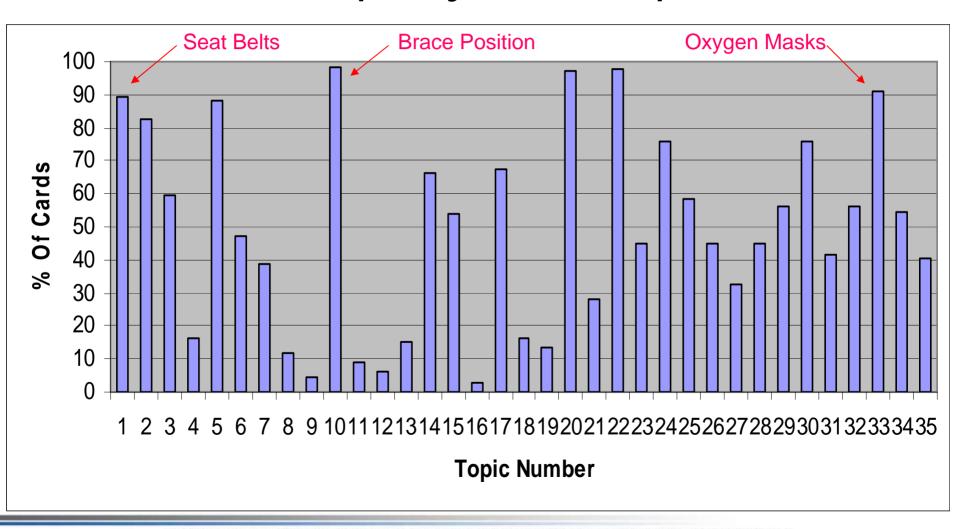


Statistics – Number of Topics Per Card



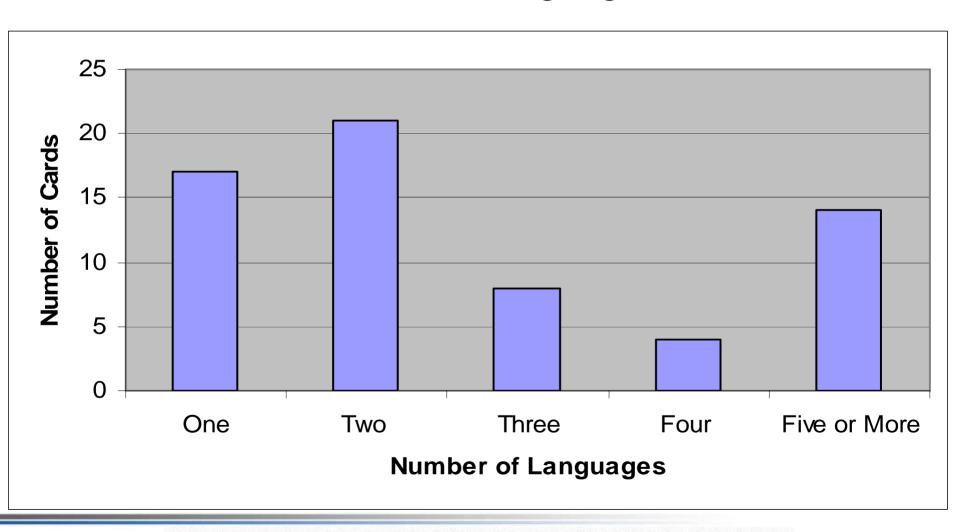


Statistics – Frequency of Each Topic





Statistics – Number of Language





DOCTOR FUN

30 November 95



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Life's final disappointment

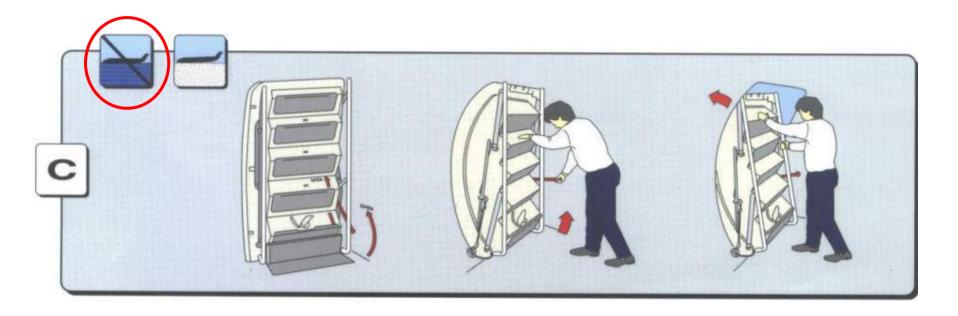


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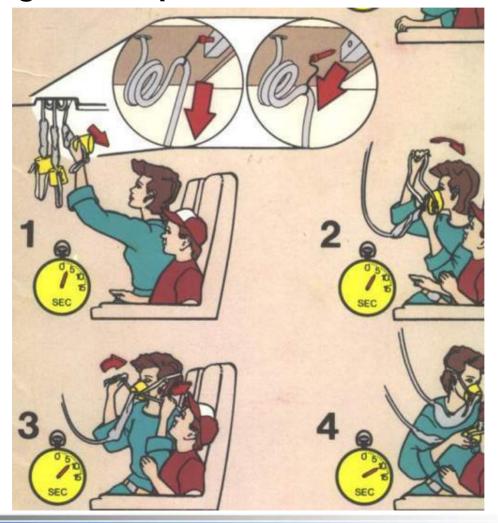
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Passenger Comprehension









Passenger Comprehension

When Using the Escape Slide



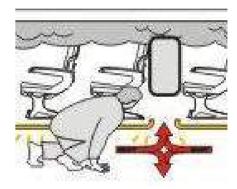
No High Hills

During Emergencies



Schuhe ausziehen
Remove shoes
Enlever les souliers
Descalzar
Descalçar os sapatos
Togliere le scarpe
ΕΝΕ
CHRΤЬ ΟΘΥΒЬ
Ζσίας buty
Izujte cipele
Βγάλτε τά παπούτσια
Αγακκαbilari çıkarınız

No Shoes





No Nothing























Passenger Comprehension



JANELA DE EMERGÊNCIA EMERGENCY WINDOW



PORTAS









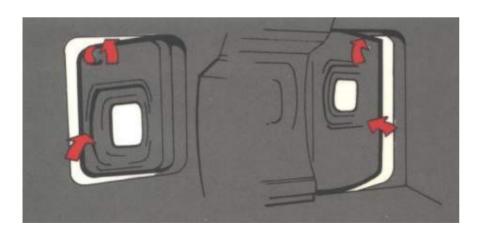






















Passenger Comprehension



Poorly-conceived airline passenger safety cards



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Good Information Not usually Included

PASSENGER SAFETY INFORMATION

FOR YOUR SAFETY, PLEASE STUDY THIS CARD.

THERE IS LITTLE LIKELIHOOD THAT WE WILL ENCOUNTER A SITUATION REQUIRING EMERGENCY PREPARATIONS. HOWEVER, IT IS A GOOD PRACTICE TO BECOME ACQUAINTED WITH THE SAFETY FEATURES WE HAVE PROVIDED FOR YOU ON THIS AIRCRAFT.

FOR YOUR SAFETY, know the quickest way to get out of this plane.

Do you know:

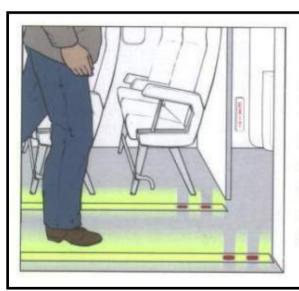
Where your exits are?

How to open the exits?

How to jump into the escape slide?

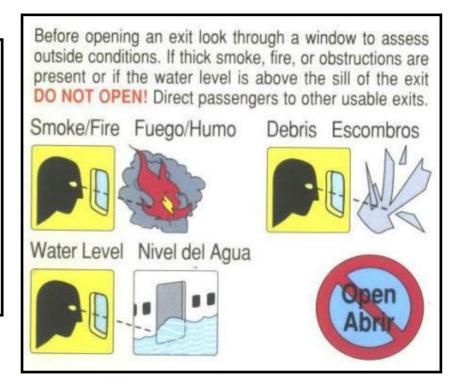


Good Information Not usually Included



Follow lights to exits. Keep in mind the closest exit may be behind you.

Siga las luces de salida. Tenga presente que la puerta de salida más cercana puede estar detrás de usted.



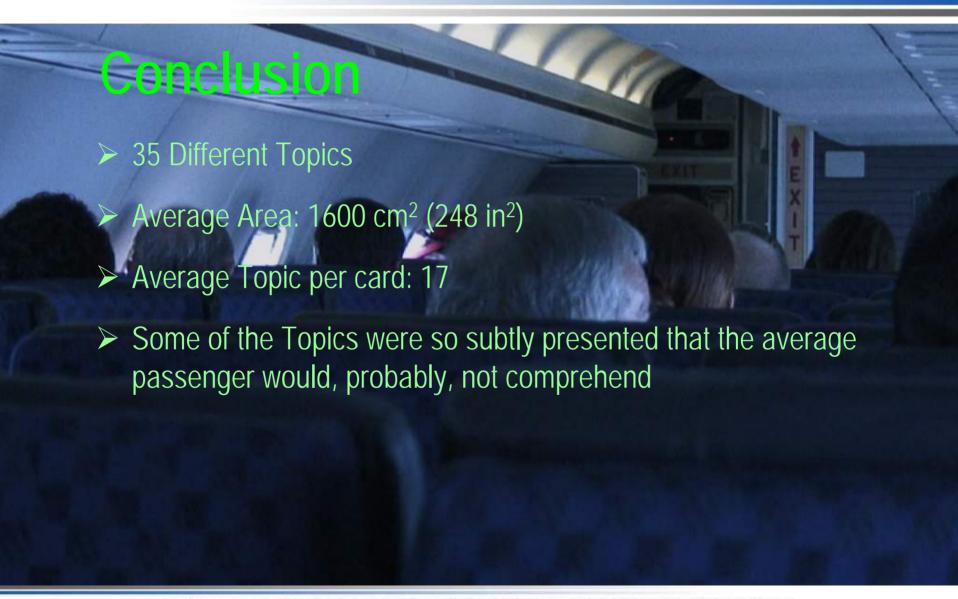


Good Information Not usually Included













Have a Safe Flight Home and Thank You!