

Emerging Issues on PEDs

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Aviation: moving the world

- Air travel delivers global mobility
- 3 billion passengers
 - 8 million per day
- Carries 35% by value of global trade
- Wider social and economic benefits
- Outstanding safety record
- Committed to sustainable growth



Source: ATAG

AAPA Association of Asia Pacific Airlines



- Regional trade association
- Members include major international airlines based in Asia Pacific
- Open to all scheduled international airlines based in Asia Pacific region
- Committed to promoting sustainable growth of the aviation industry serving both passenger and freight needs
- Permanent secretariat headquartered in Kuala Lumpur, Malaysia
- Representation in Washington and Brussels
- Flight Operations Safety WG
- Cabin Safety WG

Aims to support the interests of all

Asia-Pacific airlines

Portable Electronic Devices (PED)



MacRumors

clickcare/design

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PED Applications



- Flight Deck – Electronic Flight Bag Class 1 and 2
- Cabin – Operations manual – Defect manual – Portable Inflight Entertainment
- Passenger Personal Devices

In Flight Entertainment (IFE)



- Most medium to long haul carriers provide a comprehensive and sophisticated IFE at each seat
- For some airlines for ancillary revenue make IFE a chargeable service
- Narrow body operations tend to have no IFE systems but some carriers are providing tablet IFE on a cost/ no cost basis
- Certification and guidance material for tablet IFE limited
- Typical issues to consider
 - Onboard Storage
 - External Power Supply
 - Electromagnetic Interference/ Non-Interference
 - Battery

In Flight Entertainment



- Storage system requirements could include
 - Temperature monitoring
 - Cooling and venting capability
 - Monitor for smoke
 - Fire protection
 - Power supply protection if external power provided
- EMI testing in accordance with RTCA requirements
- Power supply connected to aircraft power will require design approval
- Battery
 - Procedures must address battery lifespan, proper storage, handling, and safety
 - rechargeable lithium batteries should not exceed 300 watt-hours (Wh)

Portable Electronic Devices



- Airline policy on PED usage
 - Pre-departure announcement requiring all PEDs to be turned off and stowed
 - At approx 10000ft announcement allowing the use of PEDs with the exception of mobile phones
 - At top of descent announcement requiring all PEDs to be turned off and stowed
 - On landing airlines may allow mobile phones after leaving the runway or only after disembarking the aircraft

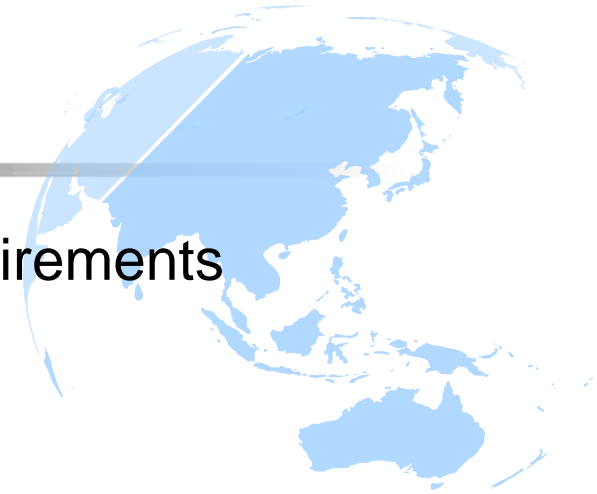
Expansion of PED usage

- FAA and EASA now allow airlines to expand use of personal electronics Oct/ Nov 2013
- Not all regulators have announced support
- Requires airlines to perform a demonstration for each aircraft type it operates to gain approval
- Passenger confusion as airline approval will differ from airline to airline country to country
- Usage of cell phones for voice communications during flight remains unchanged



Closing Thoughts

- Inconsistent regulation and certification requirements
- Limited available guidance
- Airlines required to certify usage of tablets
- Manufacturers of PED should be required to meet minimum HIRF requirements permitting automatic use on aircraft
- Lithium batteries widely used in PEDs need to address potential risk of thermal runaway and potential fires
- Potential passenger confusion and disruption due to differing PED usage policy among airlines
- Greater need to educate the passenger on cabin safety



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Cabin Safety Workshop 22 May 2013

<http://www.aapairlines.org>



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