

Logistics Solutions for Child Restraint Devices in Aviation



*Presented by:
Raffi Patatian
Aviall, Inc.
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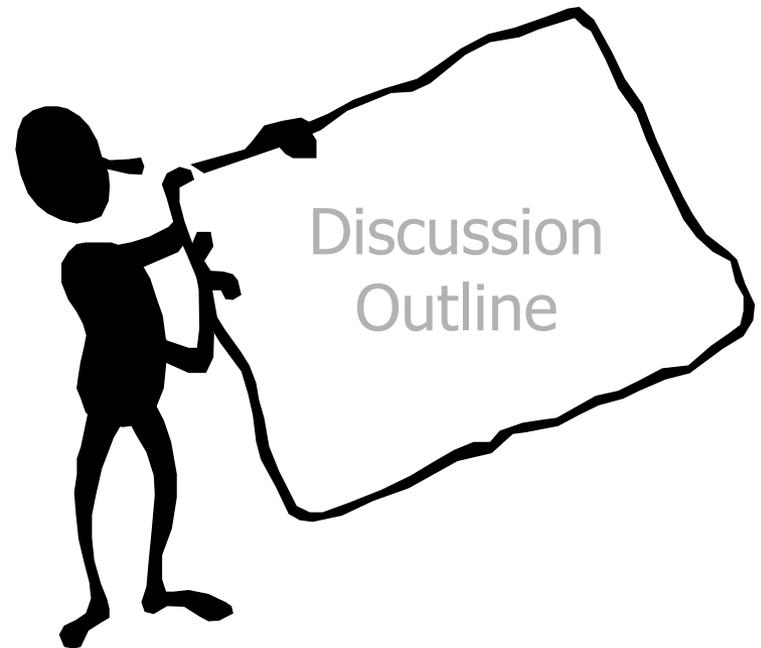
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AVIALL
Aircraft Parts **Global Distribution**



Potential Solutions

- Responsibility
 - Operator
 - Parent/Guardian
 - Third-Party
- Pros and Cons
- Costs



Responsibility: Operator



- Pros

- Visibility of number of children on board
- Advertising: "We care about your children"
- Increased revenue from reservations

- Cons

- Installer training required
- Possibility of theft
- Stock outage situation

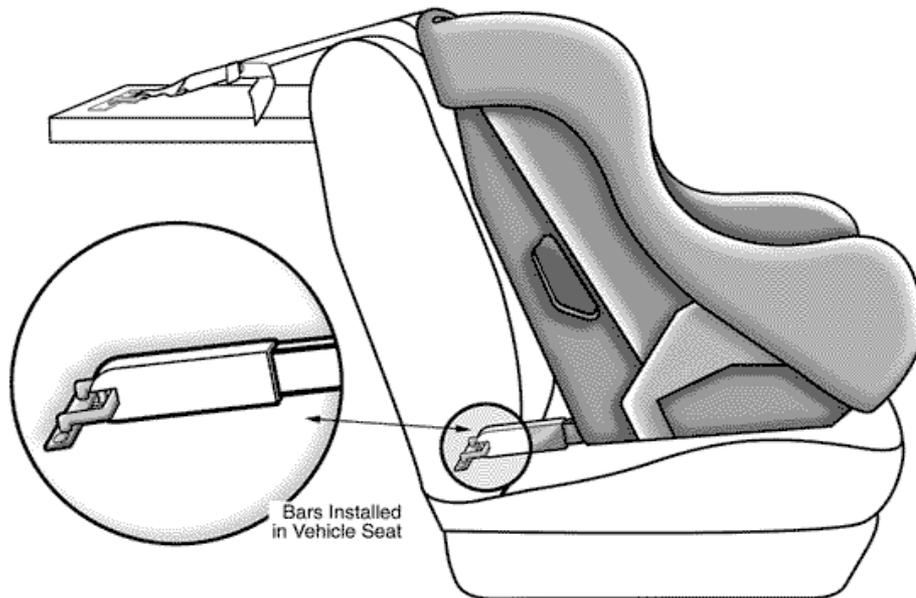
Responsibility: Parent

- Pros
 - Child's own seat
- Cons
 - Not all car seats fit in aircraft seats
 - ISOFIX standard introduced by NHTSA
 - Flight Attendants cannot check for safe installation due to "liability"
 - Boarding process complications
 - Various designs and regulations

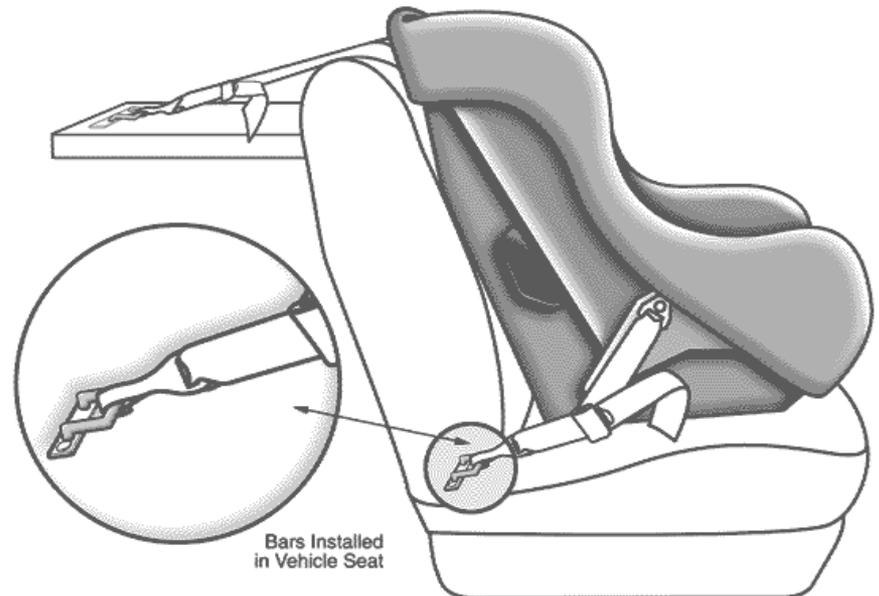


ISOFIX Standard (NHTSA)

**Rigid 2-Point
Lower Attachment
With Top Tether**



**Flexible 2-Point
Lower Attachment
With Top Tether**



Responsibility: Third Party

- Who is a “third party”?
 - Kiosk operators
 - Catering companies
 - Airport Authorities





Responsibility: Third Party

- Pros

- Single brand/model
 - Uniform installation
 - Guaranteed fit
- Existing infrastructures can be used to support operators (ex. catering companies)
- Operators can benefit from “bundling” of childseat service contract with other contracts.

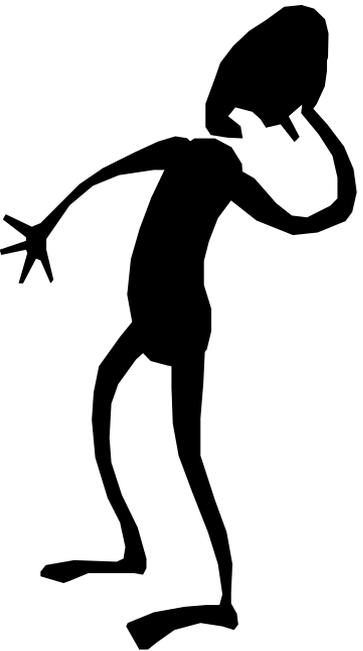


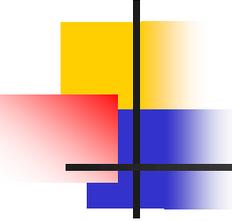


Responsibility: Third Party (cont'd)

- Cons

- Each third party could utilize a different child seat design.
- Mixing of seat types aboard an aircraft can create confusion in methods of securing seat.
- Capital outlay if third party is establishing childseat-only business.
- Operators want customized seats in their colors





Other Considerations

- Regular maintenance & cleaning
- Periodic maintenance
- Operator-specific livery
- Inventory movement/balancing
- Stock-out risk / denied boarding
- Third-party Points of Presence (POP)

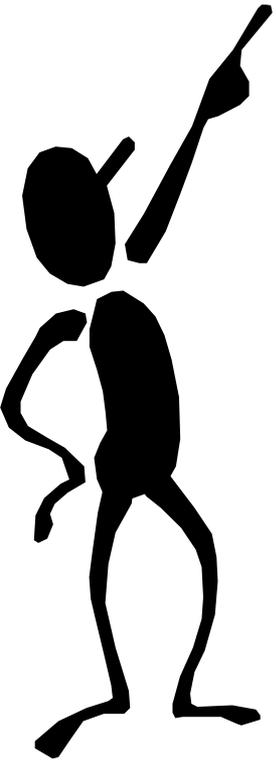




Third Party Costs

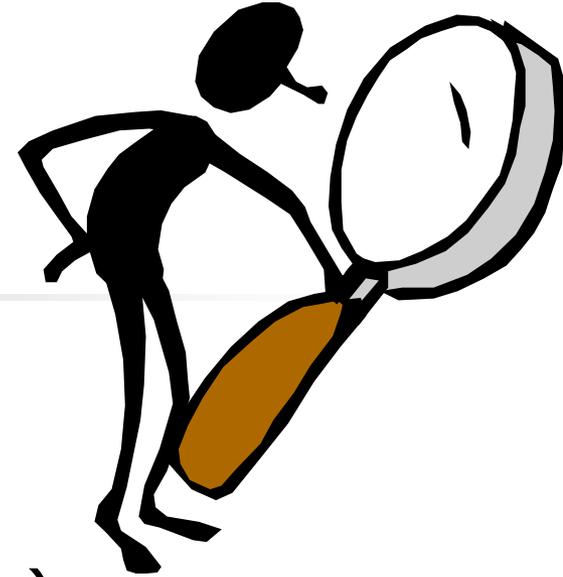
- Annual Unit Usage

- # of children per flight = 4 children
- # of flights per day = 1000 flights
- Total Children transported per day = 4000 children
- Total Children transported per year = 1,460,000 children



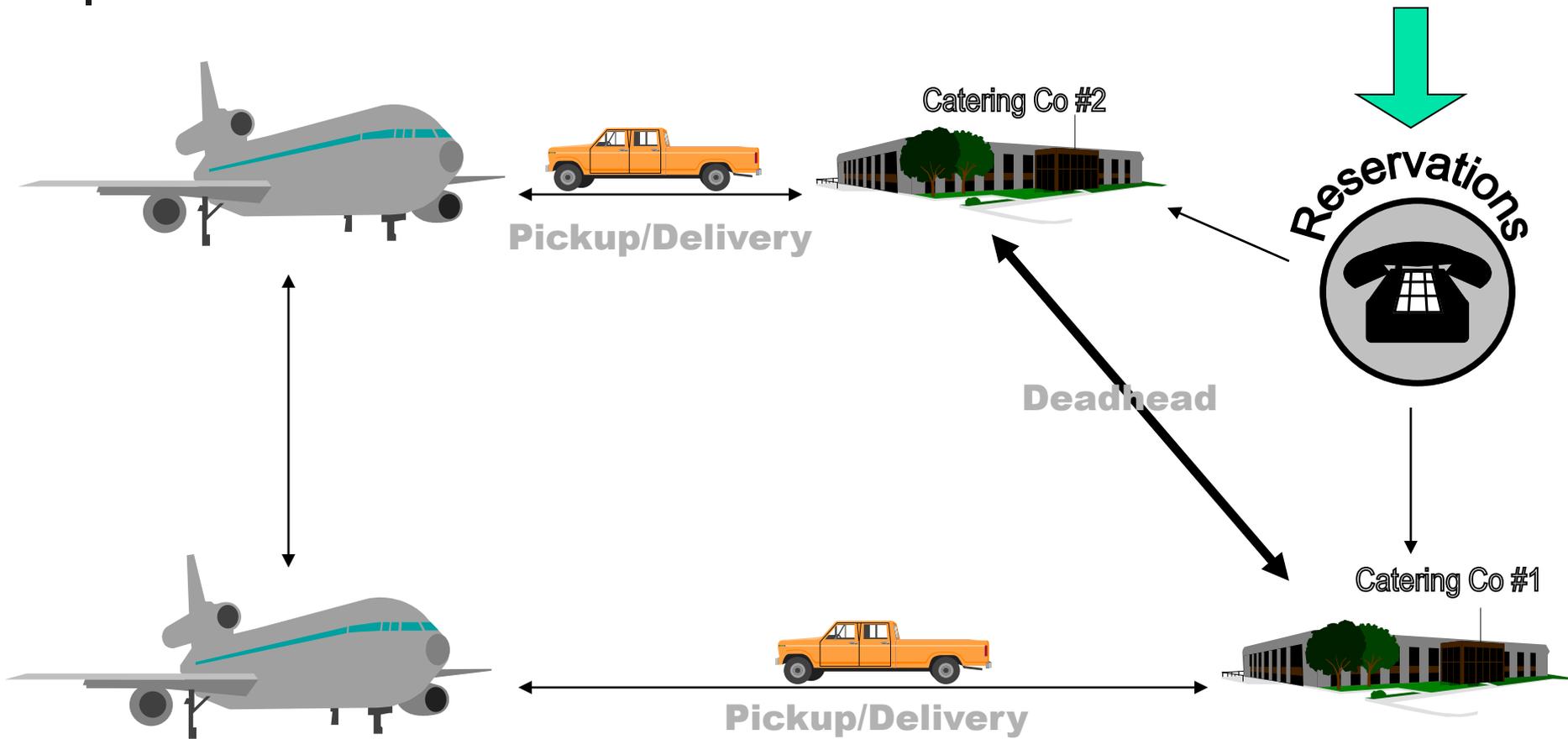


Third Party Costs



- Revenues
 - Seat rentals to parents
 - “Power-by-the-hour” (airlines)
 - Passenger fee
- Operating Costs
 - Land/Buildings: \$10/ft²/yr, 1000 ft²
 - Labor: \$20/worker/hr, including benefits
 - Insurance, fuel, seat maintenance/repair

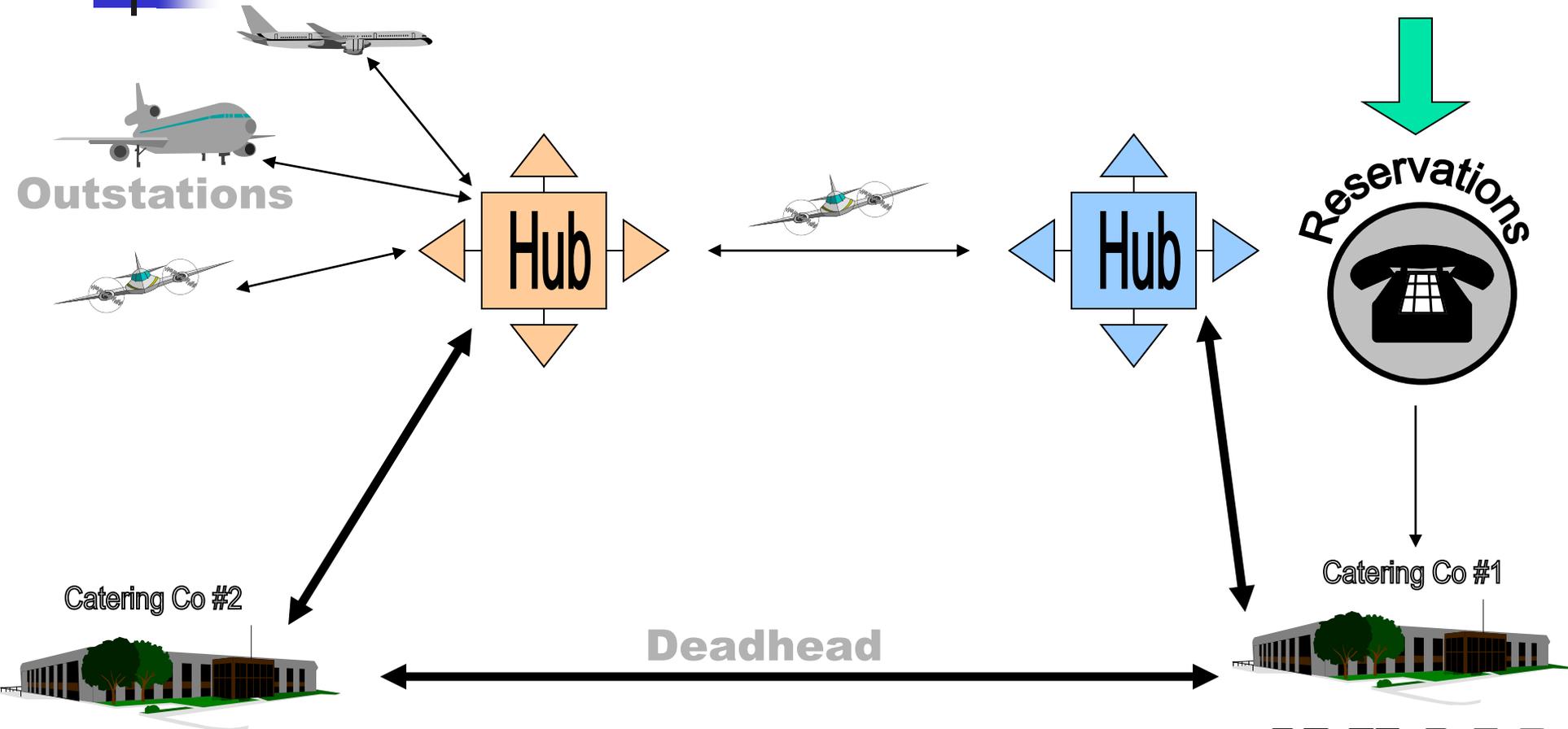
Point-to-Point System



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Hub 'n Spoke System



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