

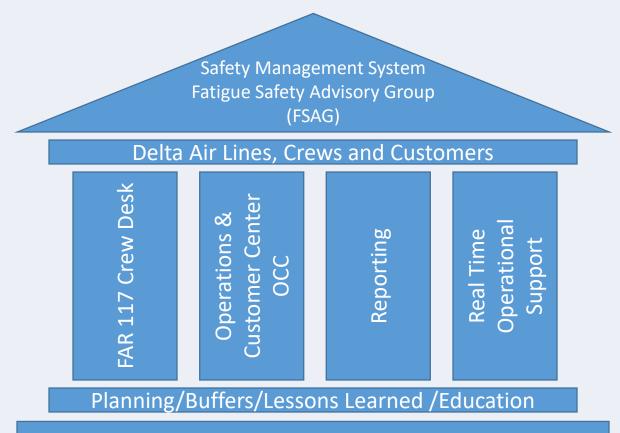
# Managing FAR 117 in Operations

**Delta Air Lines** 





- Delta Air Lines manages fatigue in the operation by building a solid house
  - Team effort
    - Regulator
    - Operator
    - Crew Members





- Begin with the Foundation
  - Fatigue Risk Management Plan (FRMP) – ICAO influenced guiding document
  - Safety Risk Management –
     daily routine of monitoring and
     tracking

Safety Management System Fatigue Safety Advisory Group (FSAG) Delta Air Lines, Crews and Customers FAR 117 Crew Desk Operations & Reporting Real Time Customer Planning/Buffers/Lessons Learned /Education

- Planning is essential
  - FRM starts six months ahead of crew schedule publication
    - Numerous times during monthly process
    - Risk management tools and reporting review
  - Buffers more than just sits
    - Extra time is essential
    - Limit number of segments
    - Limit high workload environments
    - Seasonality
  - Lessons Learned used to improve planning process
  - Education ensure we use lessons learned in communication and education

Safety Management System
Fatigue Safety Advisory Group
(FSAG)

Delta Air Lines, Crews and Customers

FAR 117 Crew Desk

Operations & Customer Center OCC

Reporting

Real Time Operational Support

Planning/Buffers/Lessons Learned/Education



- Real time support
  - FAR 117 support desk
    - Proactively managing unforeseen circumstances
    - Direct crew advocate within the OCC
  - Operational support
    - Actively address crew and OCC questions and operational changes
    - 24/7/365 support of Fitness for Duty Reporting Program – fatigue calls

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#### Delta Air Lines, Crews and Customers

-AR 117 Crew Desk

Operations & Customer Center OCC

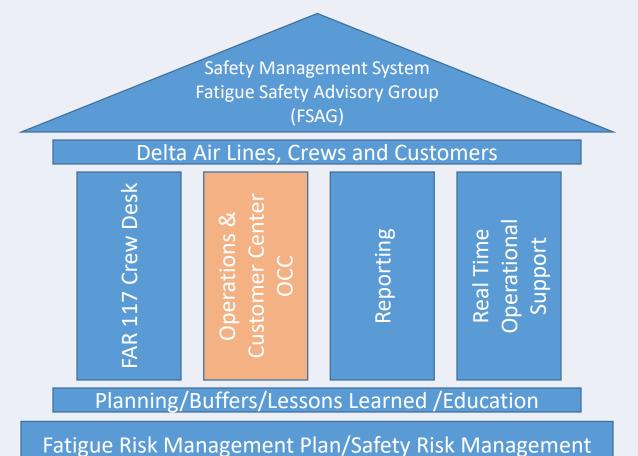
Reporting

Real Time Operationa Support

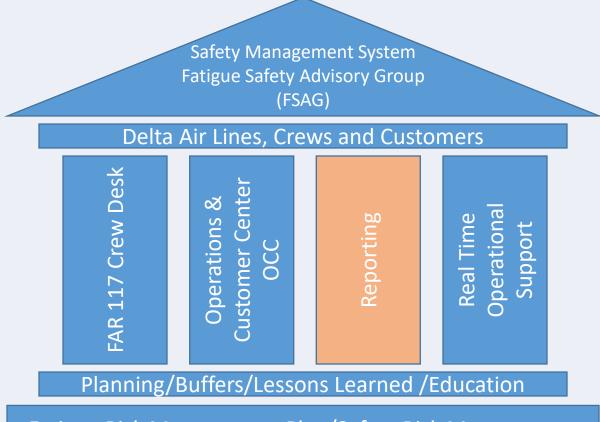
Planning/Buffers/Lessons Learned /Education



- Operations & Customer Center (OCC)
  - 24/7/365 support of our crews and customers
  - Direct connection to ATC, stations and FAA
  - In-house meteorology department
  - Operational control schedule, hotel, training, etc. change support



- Reporting = FeedbackInfluence Change
  - Fitness for Duty Report (FFDR) – fatigue call process
  - ASAP reports direct link to safety reporting
  - Flight Crew Reports (FCR) – outside influencing factors (hotels, ground handling, rotation structure)



- Our goal is to continually support our Pilots and Flight Attendants in managing fatigue in our daily operations
- Our Crews serve as the last line of visibility in many areas and we count on your input
  - Individual fatigue management
  - Operational pressure set the parking break



- Under the roof of this house, SMS guides our FSAG
  - Dr. Philippa Gander and Massey University
  - Working committees
    - Fatigue Risk Management Team
    - Fitness Review Board
  - Delta operational divisional team members, leaders and senior leadership

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When things change. Unforeseen Circumstances

- Proactive management from the 117 Desk and OCC team members
- Schedule adjustments through recrewing, rerouting and delay/cancel
- FAR 117 Extensions with crew concurrence via ACARS

Irregular Operations

Safety Management System Fatigue Safety Advisory Group (FSAG)

### Delta Air Lines, Crews and Customers

FAR 117 Crew Desk

Operations & Sustomer

Reporting

Real Time

Planning/Buffers/Lessons Learned /Education



- Maintaining a solid house takes work from all parties
  - Regulator work closely together on fatigue risk management and compliance
  - Operator continuously review process to ensure we adapt to constant change, assess new tools, produce relevant education and maintain a constant connection with our customers, our Crew Members
  - Crew Members making fatigue a priority in preparing for duty, stopping the operation whenever needed, and when schedule constructions and changes occur

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### What Questions Do You Have?