



Flight Services

737: Fly the Leader Today and Tomorrow

Mike Bair

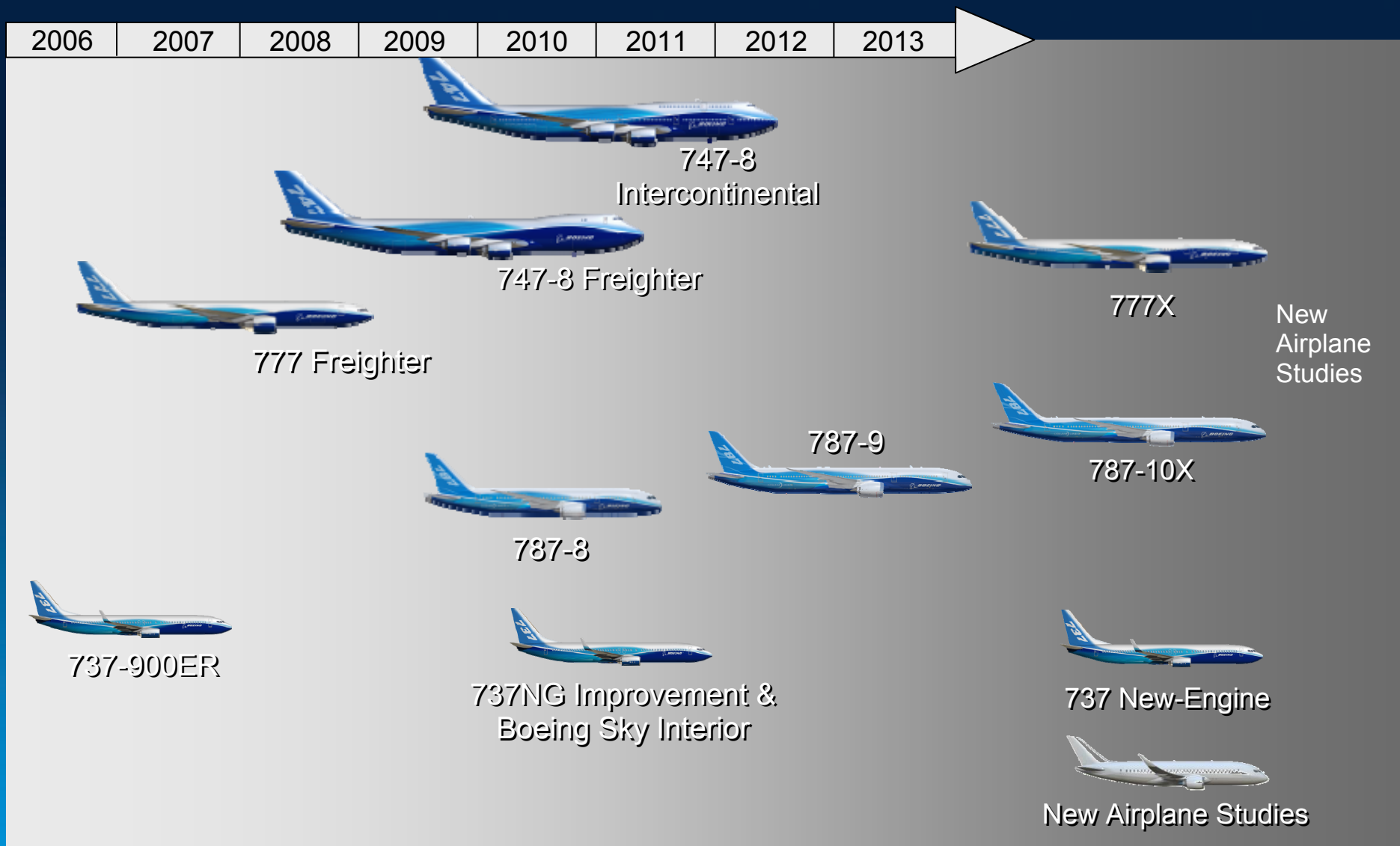
VP 737 Advanced PD

Boeing Commercial Airplanes

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Boeing Product Development Activities

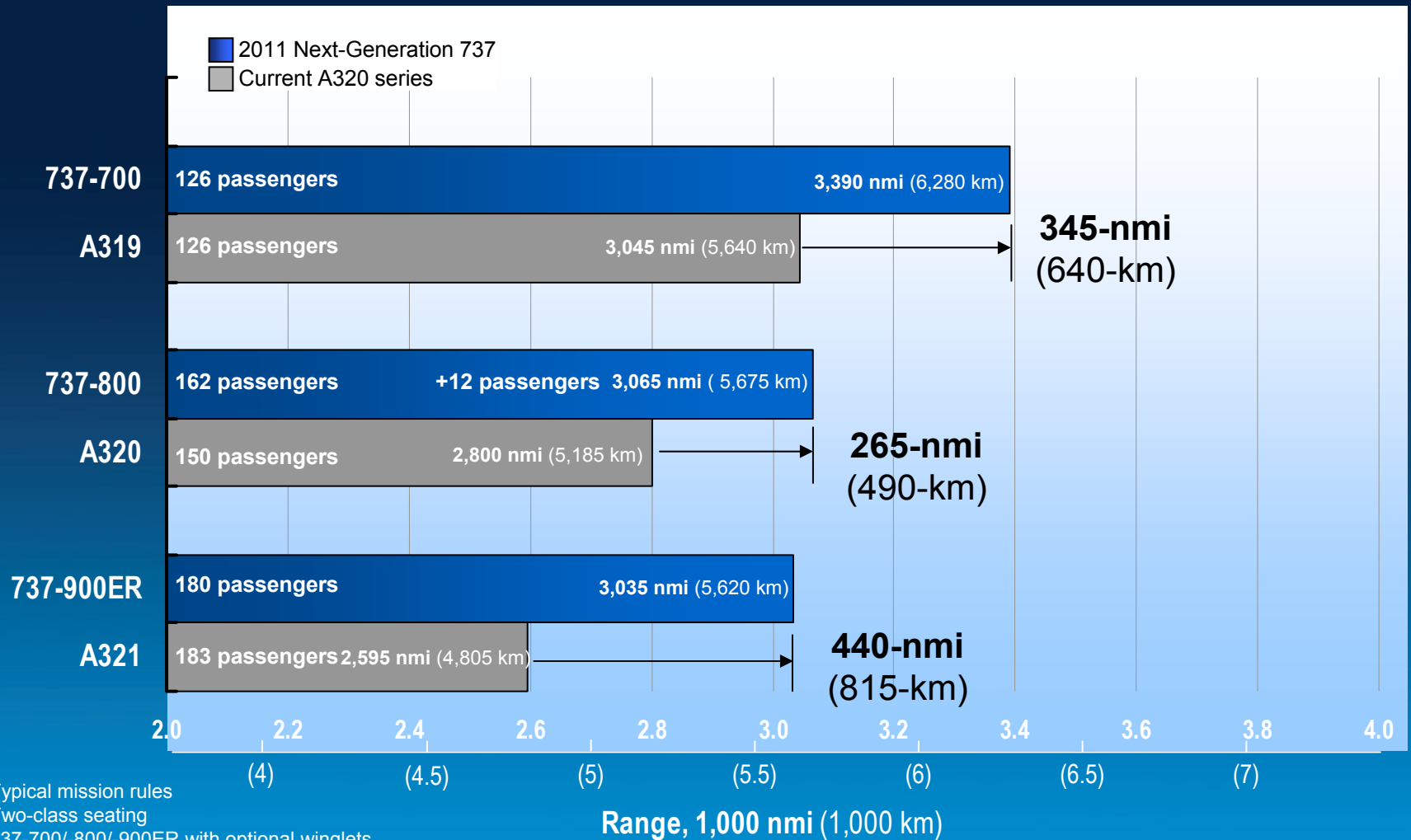


Today The 737 Enjoys A Substantial Advantage Over The A320

- Better economics
- Better performance
- Better fuel efficiency
- Better reliability and maintainability



Today The 737 Enjoys Substantial Range Superiority Over The A320



- Typical mission rules
- Two-class seating
- 737-700/-800/-900ER with optional winglets
- 737-900ER and A321 include one auxiliary fuel tank
- A320 series airplanes with CFM engines

Today's 737 Weight Advantage Reduces Costs

737: Lighter, more efficient structure means:

Relative OEW/seat, %



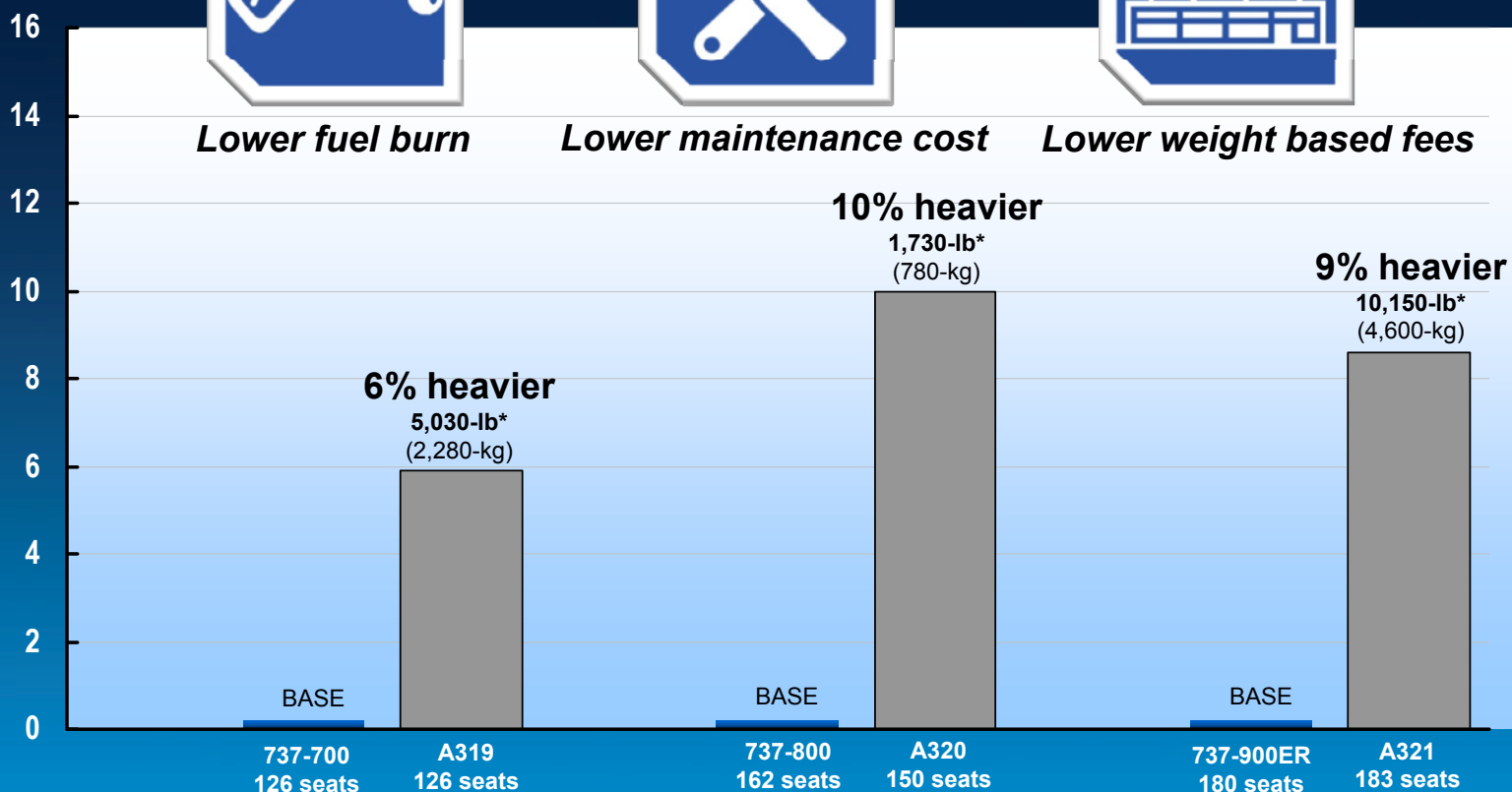
Lower fuel burn



Lower maintenance cost



Lower weight based fees

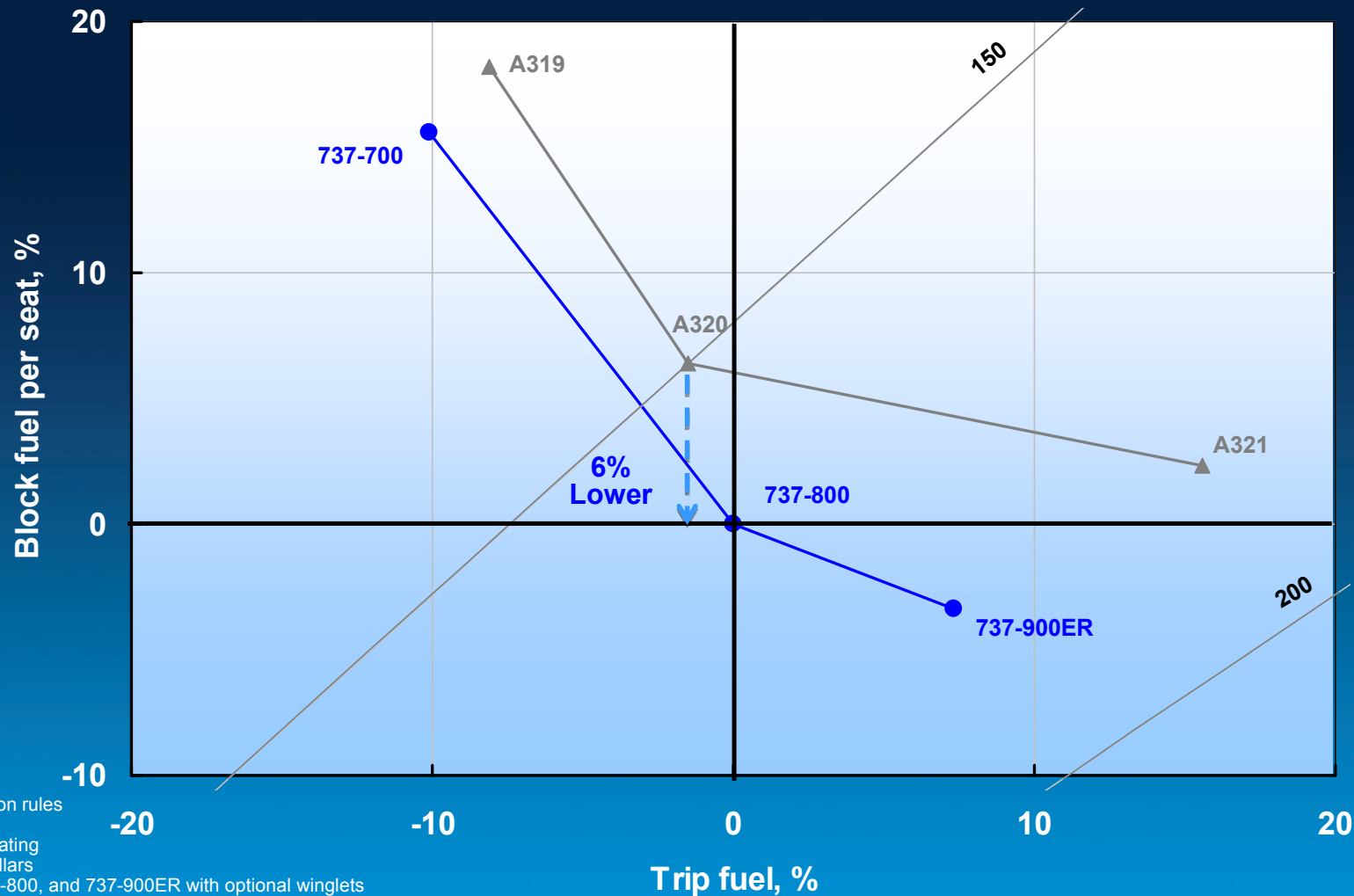


- Two-class seating
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* Total airplane OEW difference

Today's Fuel Burn Comparison

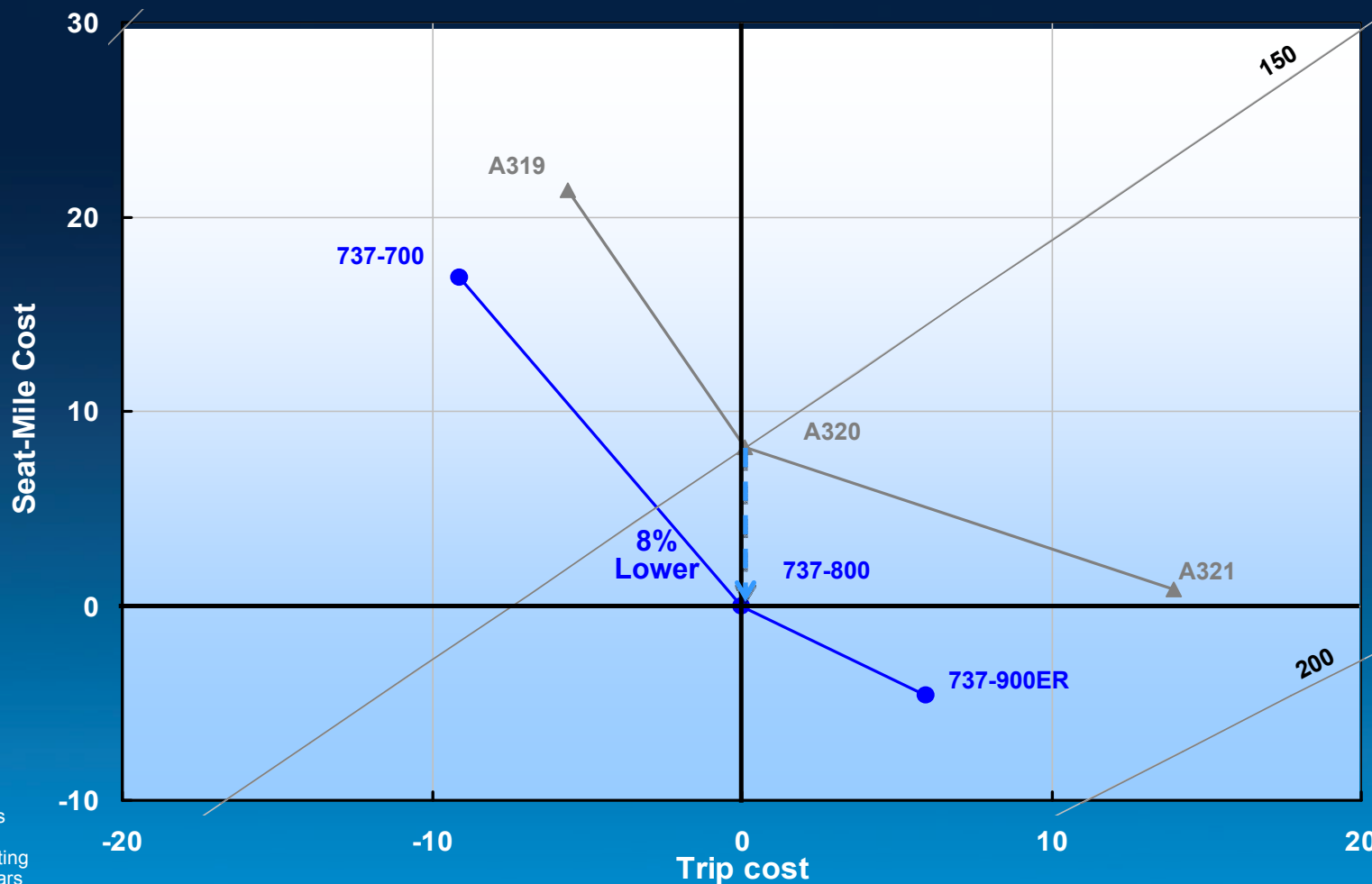
Typical Mission Rules



- Typical mission rules
- 500 nmi trip
- Two-class seating
- 2009 U.S. dollars
- 737-700, 737-800, and 737-900ER with optional winglets
- 737-900ERs and A321s have 1 aux fuel tank

Today's operating cost comparison

European Rules



- European rules
- 500 nmi trip
- Two-class seating
- 2009 U.S. dollars
- Fuel price, \$3.00 per U.S. gal
- 737-700, 737-800, and 737-900ER with optional winglets
- 737-900ERs and A321s have 1 aux fuel tank

Tomorrow The 737 Will Continue The Traditional 737 Advantages Over The A320neo

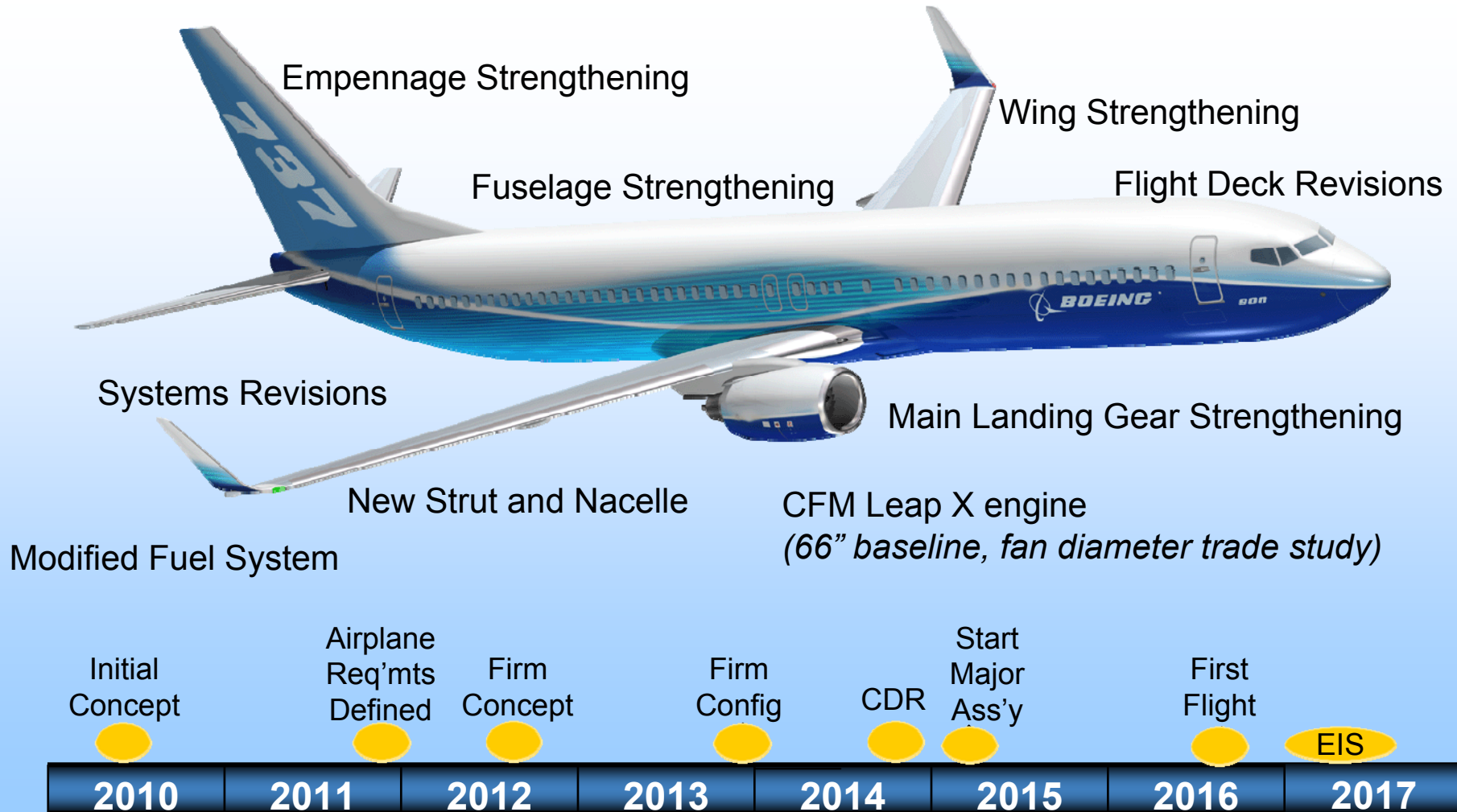
Similar new engines, traditional 737 advantages

- ***Better economics***
- ***Better performance***
- ***Better fuel efficiency***
- ***Better reliability and maintainability***

Introducing A New Engine For The 737

Changes Required Are Well Understood

Increased range and Maximum Takeoff Weight with reduced fuel burn

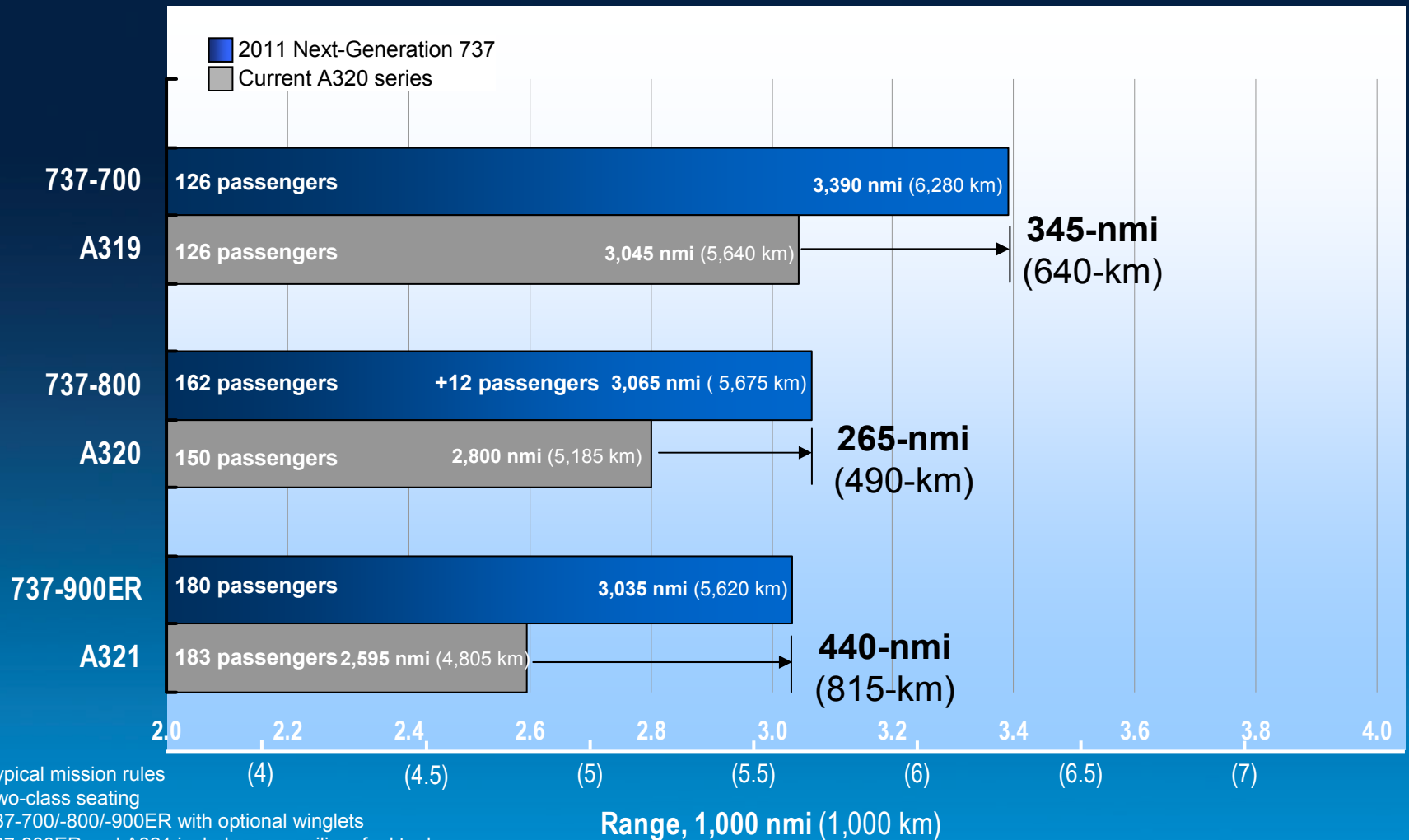


737 New Engine Events Completed to Date

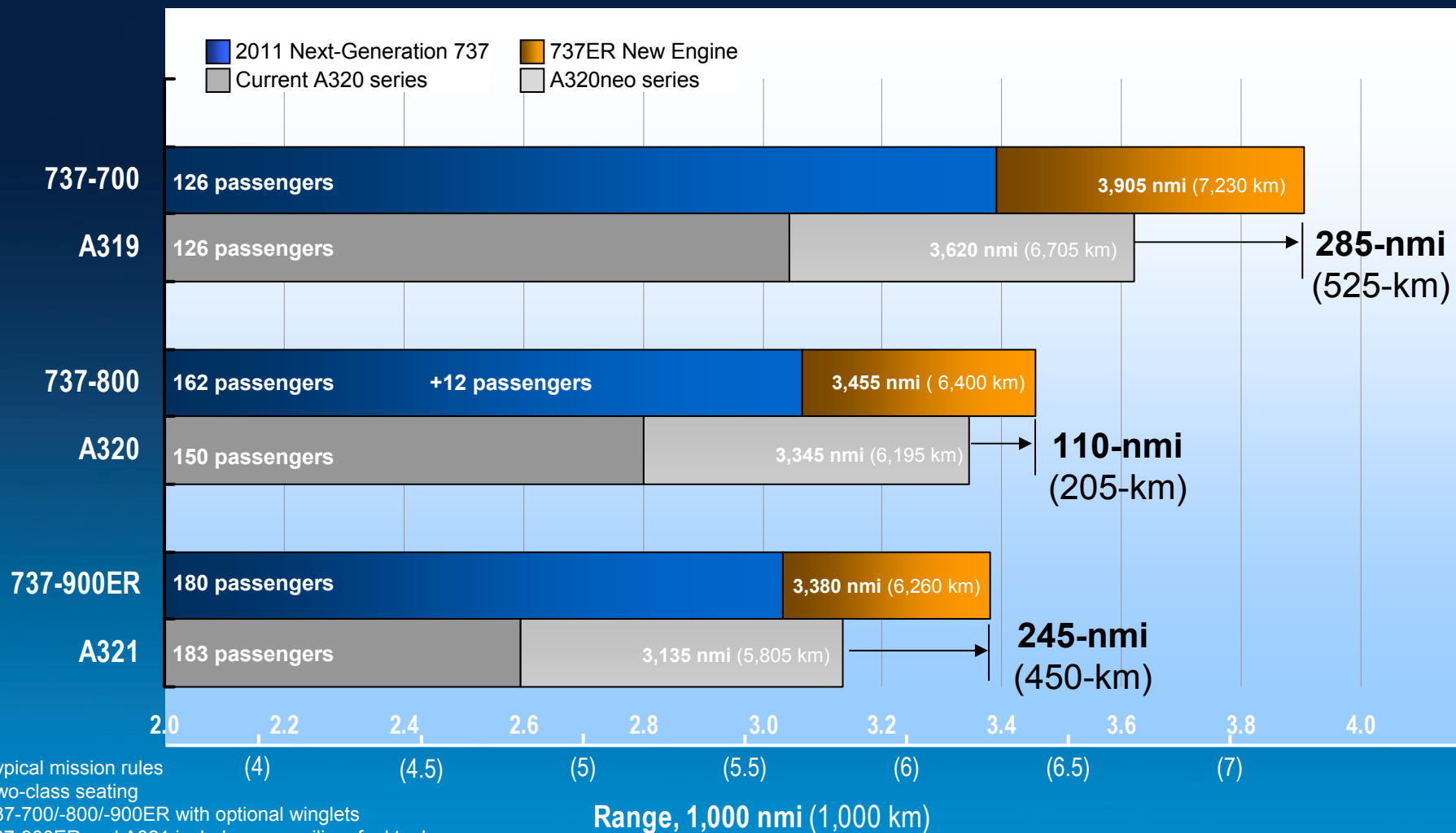
- High and low speed wind tunnel tests
- Airframe loads assessment to validate structural changes
- Engine technology benchmarking study; engine selection and CFM MOU
- Revised baseline configuration definition
- Preliminary certification plan developed and reviewed with FAA
- Major trade studies for further optimization identified

Confidence established in airplane changes to meet requirements

Today The 737 Enjoys Substantial Range Superiority Over The A320



New Engines On The 737 Retain The Range Superiority Over The A320

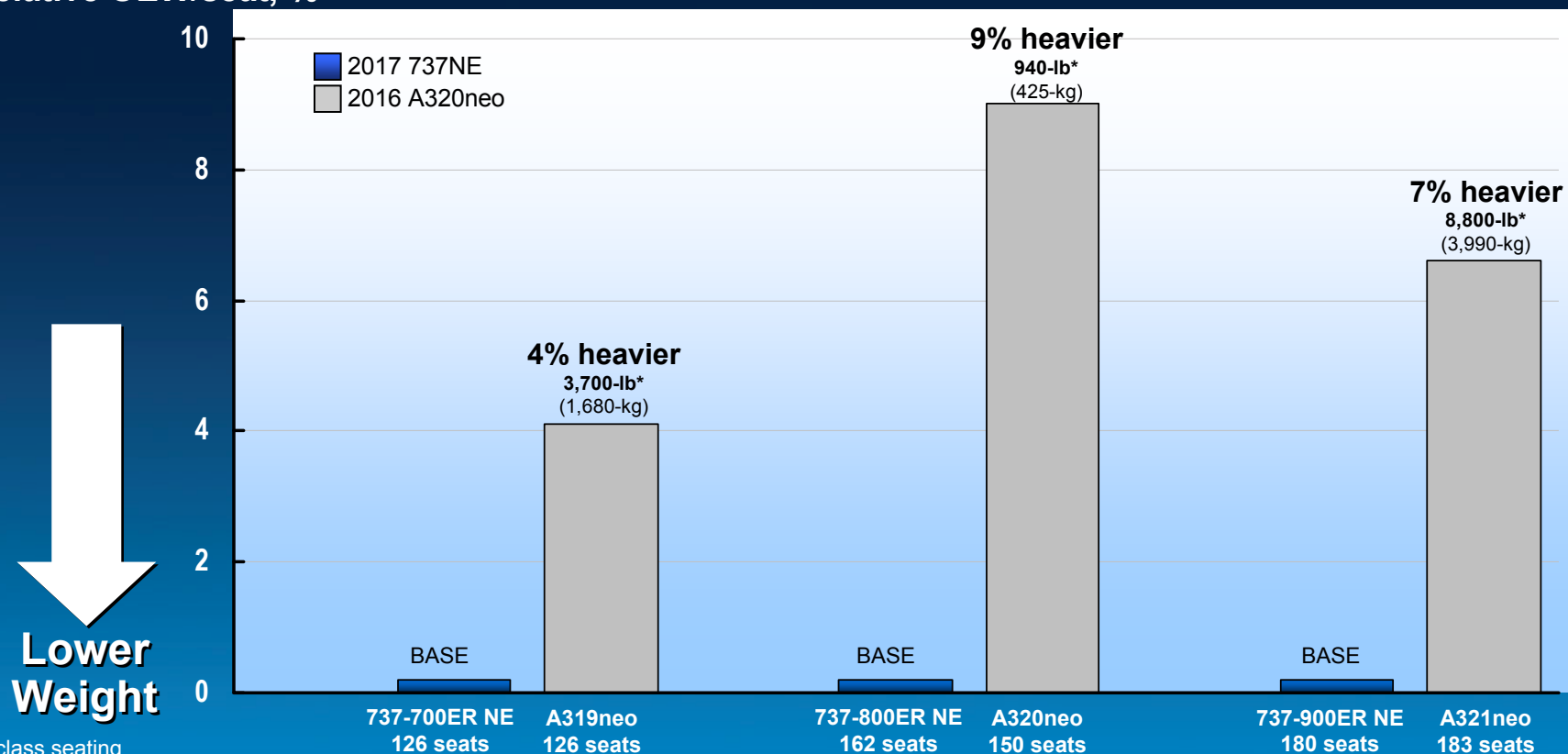


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- A320neo series includes winglets

The 737 With New Engines Is Lighter

The 737 weight advantage continues

Relative OEW/seat, %

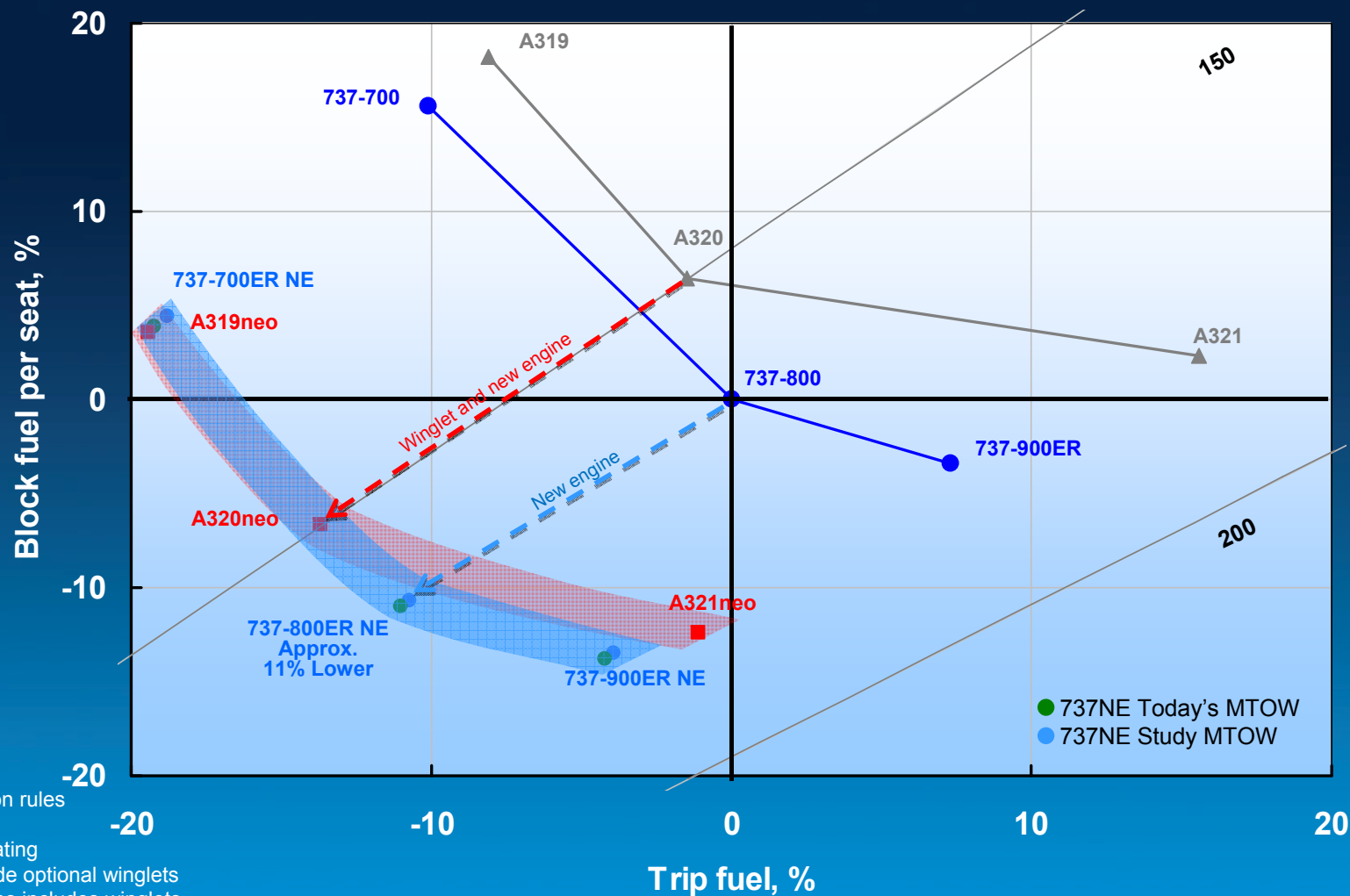


- Two-class seating
- All 737s include optional winglets
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* Total airplane OEW difference

Today And Tomorrow Fuel Burn Comparison

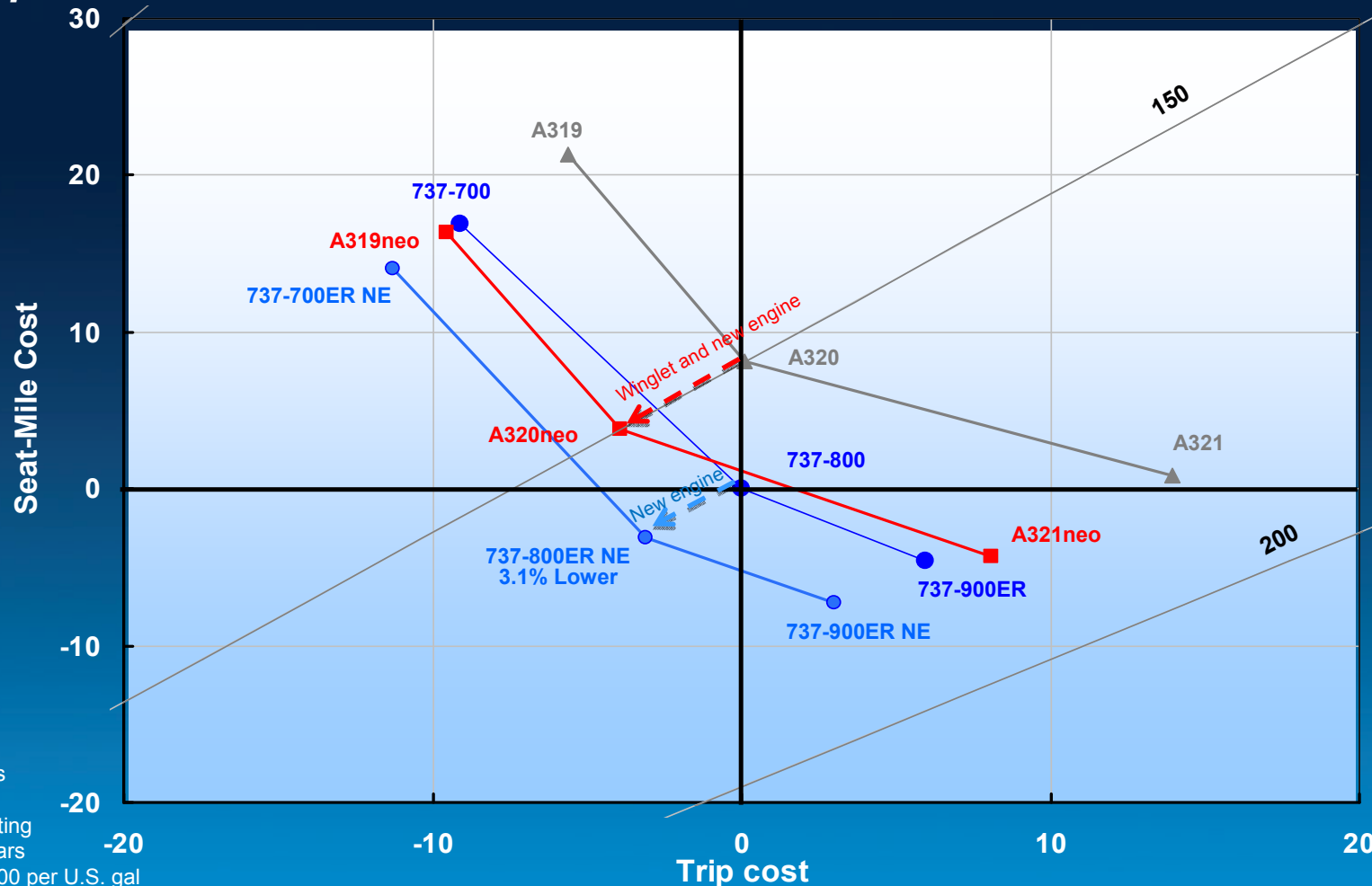
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The New Engine 737 Maintains Lower Operating Costs

European Rules



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