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ORIGINAL

June 7, 2001

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Magalie Roman Salas, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

RECEIVED
JUN 7 2001
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Re: Written Ex Parte Presentation
The Boeing Company
IB Docket No. 99-81
FCC File No. 179-SAT-P/L/97(16)

Dear Secretary Salas:

On June 6, 2001, representatives of The Boeing Company ("Boeing") met with Commission staff to discuss the need for prompt licensing of 2 GHz Mobile-Satellite Service networks, as indicated in the Commission's Report and Order in the above referenced proceeding. Boeing emphasized the importance of the grant of an unconditional license for Boeing's 2 GHz MSS network, which is designed to provide critically-needed air traffic management services for the global aviation industry.

In attendance at the meeting for the Commission were Tom Tycz, Linda Haller, Chris Murphy, Cecily Holiday, Kathleen O'Brien Ham, David Furth, Kris Monteith, Geraldine Matise, and Charlie Rush. In attendance for Boeing were R. Craig Holman, Dennis Muilenburg and Kent Fisher, along with David A. Nall and Bruce Olcott of Squire, Sanders & Dempsey and Philip Malet of Steptoe & Johnson. The attached materials were distributed during the meeting. Please contact the undersigned if you have any questions.

Sincerely,

Bruce A. Olcott

Cc: Tom Tycz, International Bureau
Linda Haller, International Bureau
Chris Murphy, International Bureau
Cecily Holiday, International Bureau
Kathleen O'Brien Ham, Wireless Bureau
David Furth, Wireless Bureau
Kris Monteith, Wireless Bureau
Geraldine Matise, Wireless Bureau
Charlie Rush, Wireless Bureau

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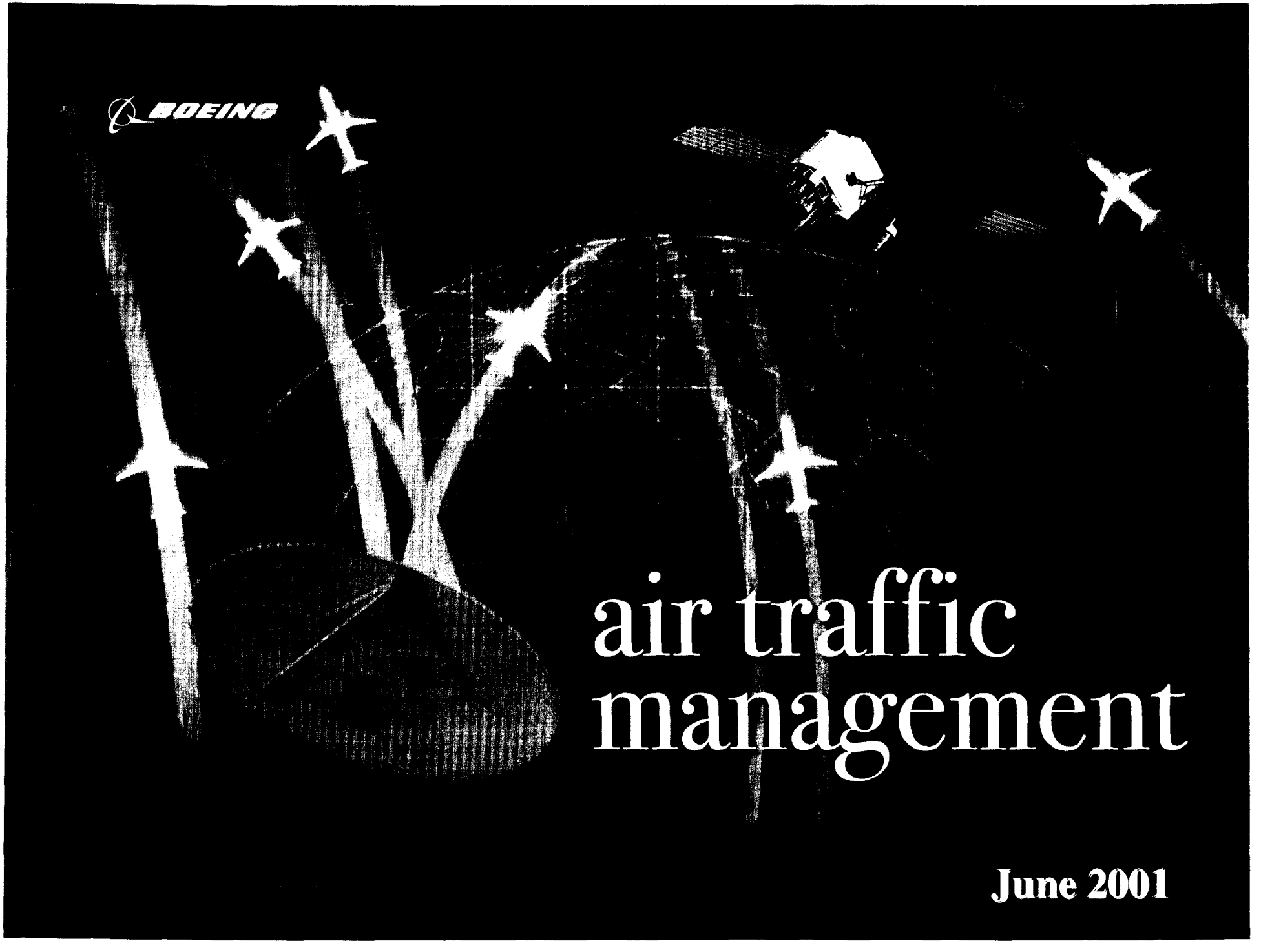
BOEING
air traffic
management
June 2001

Introduction

- Boeing's Commitment
- Relationship to Current FAA Plans
- Boeing's Concepts for Operational Change
- Transition Plan
- Preliminary Benefits Assessment
- Why Boeing?
- What's Next?

Boeing is Committed to this Project

- Boeing has a vested interest to succeed in enhancing capacity
  - $30 billion core business linked to future capacity of air traffic system
- Created new business unit
  - Growing rapidly
  - Developing significant Washington D.C. presence
- Substantial internal investment
- Outside acquisitions
- Willing to consider investment in infrastructure and new forms of doing business with government

Boeing Supports the Current FAA Plans

- Boeing fully supports going forward with the Operational Evolution Plan
- Our approach builds upon and accelerates concepts in existing plans
- New paradigm necessary to keep pace with traffic growth

The time for defining the next generation system is now

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Concepts for Operational Change

- Integrated total system solution
- 3 fundamental features
  - Trajectory-based flow planning, traffic planning and separation management
  - Common information network
  - Airspace design and procedures criteria
- Enabled with advanced space-based CNS
- Open system principles – growth for the future
- Phased implementation plan – builds on the FAA's plan

Working Together, using a systems engineering approach

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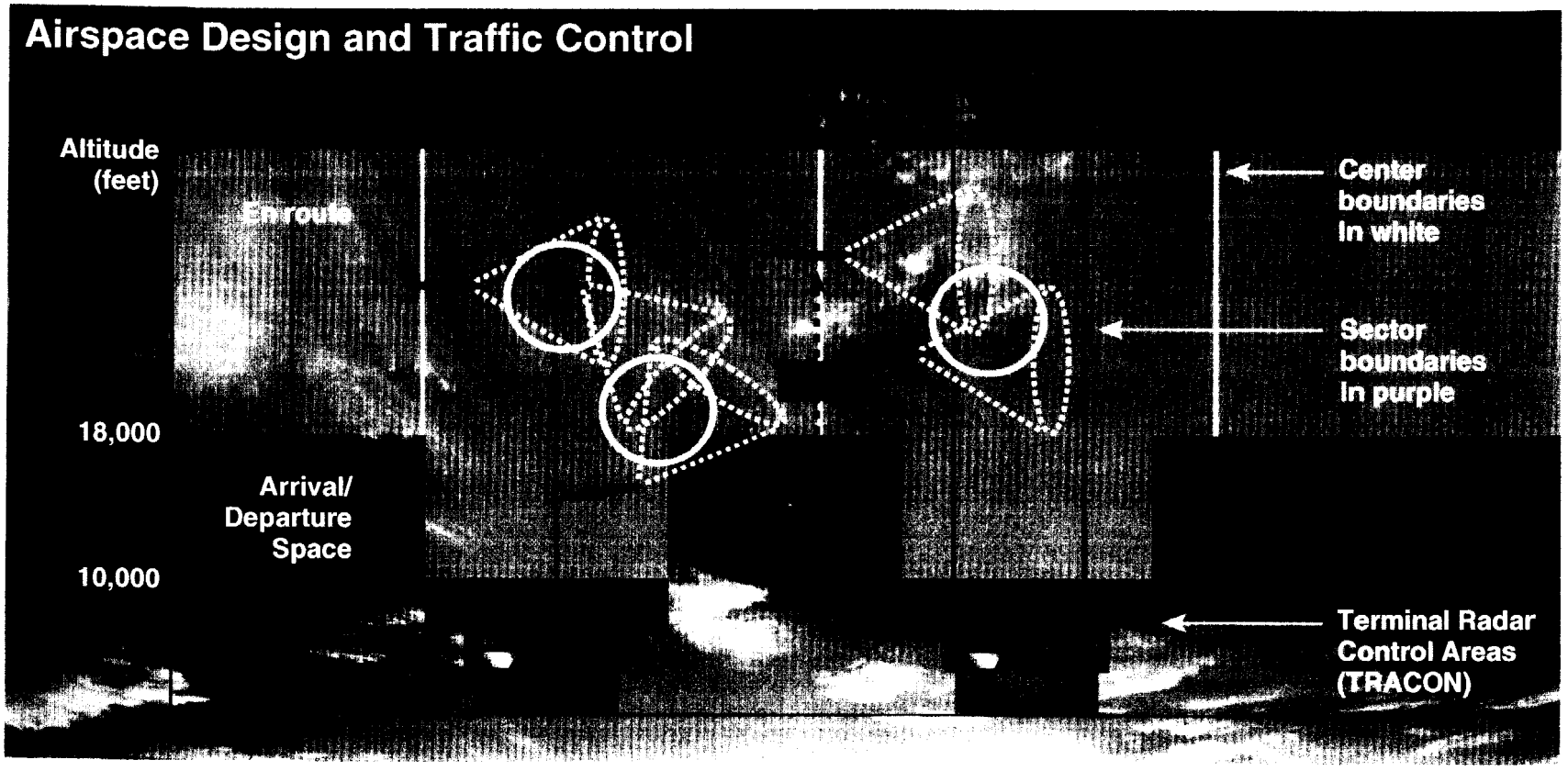
Current National Airspace System



Potential conflict

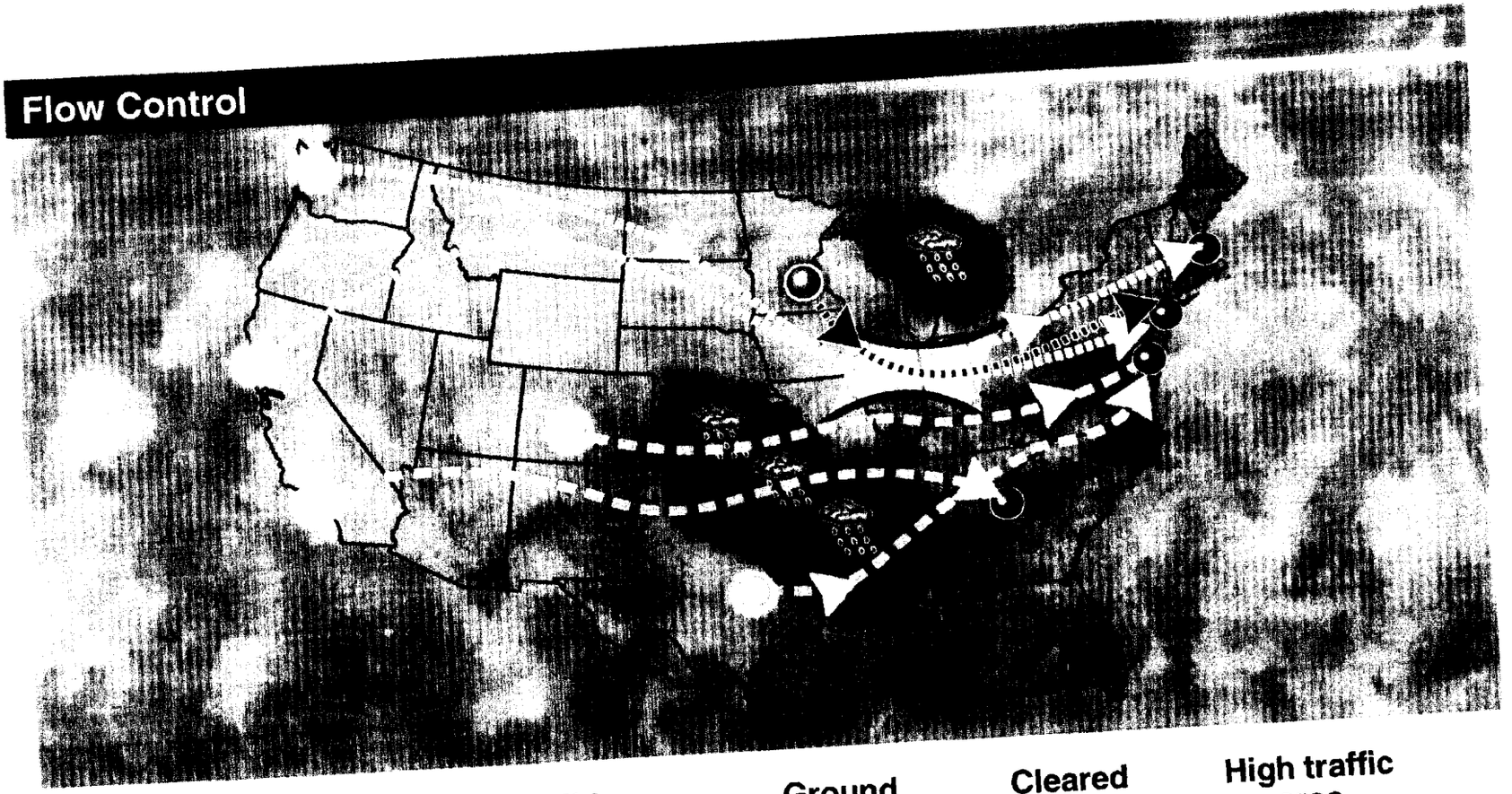
Possible future position

Ground hold

Cleared to fly

High traffic area

Current National Airspace System



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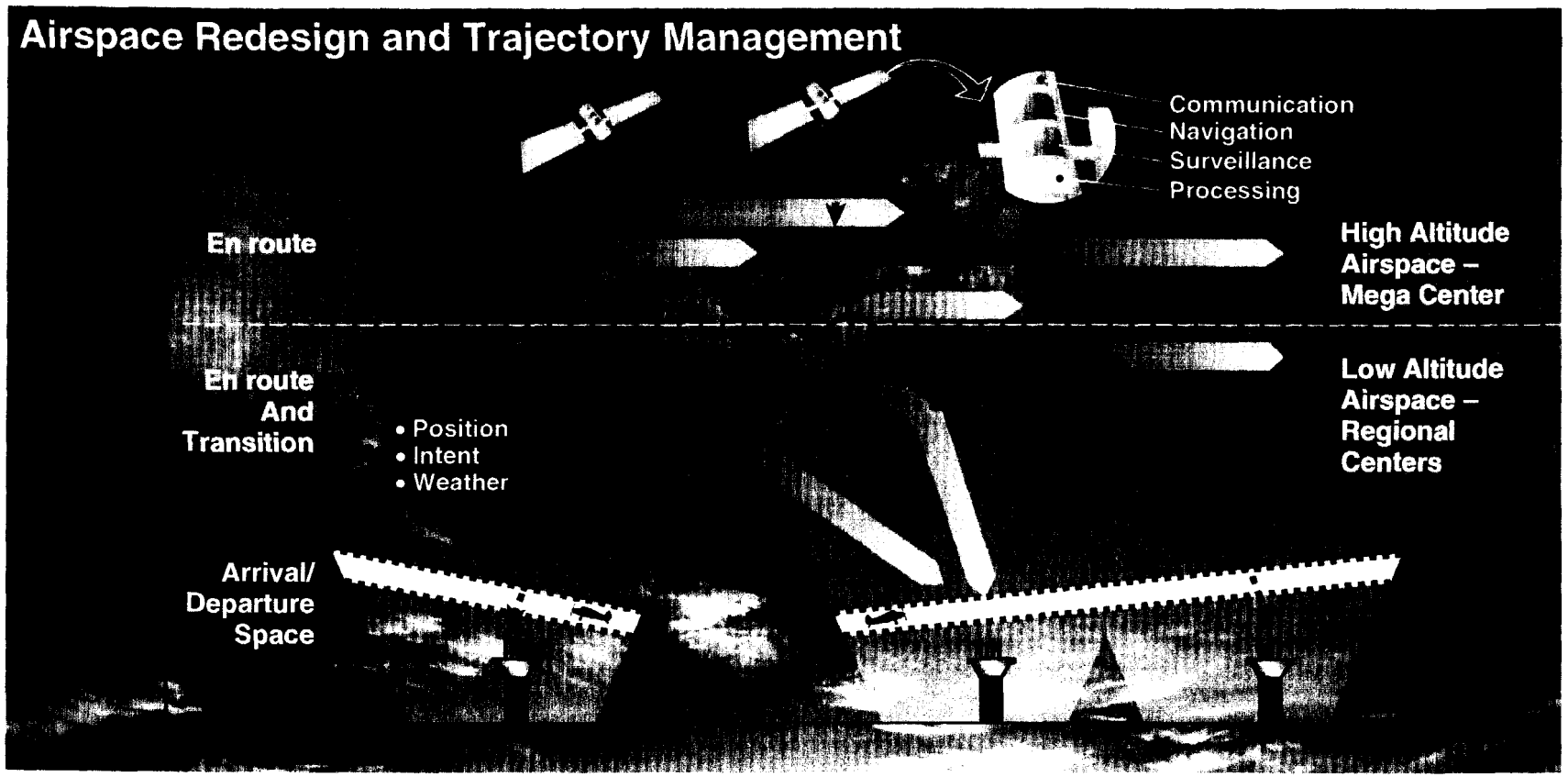
Boeing Proposal

Fundamental Increase in Capacity



Potential conflict

No conflict

Intended flight path

Tunnel through controlled airspace

Ground hold

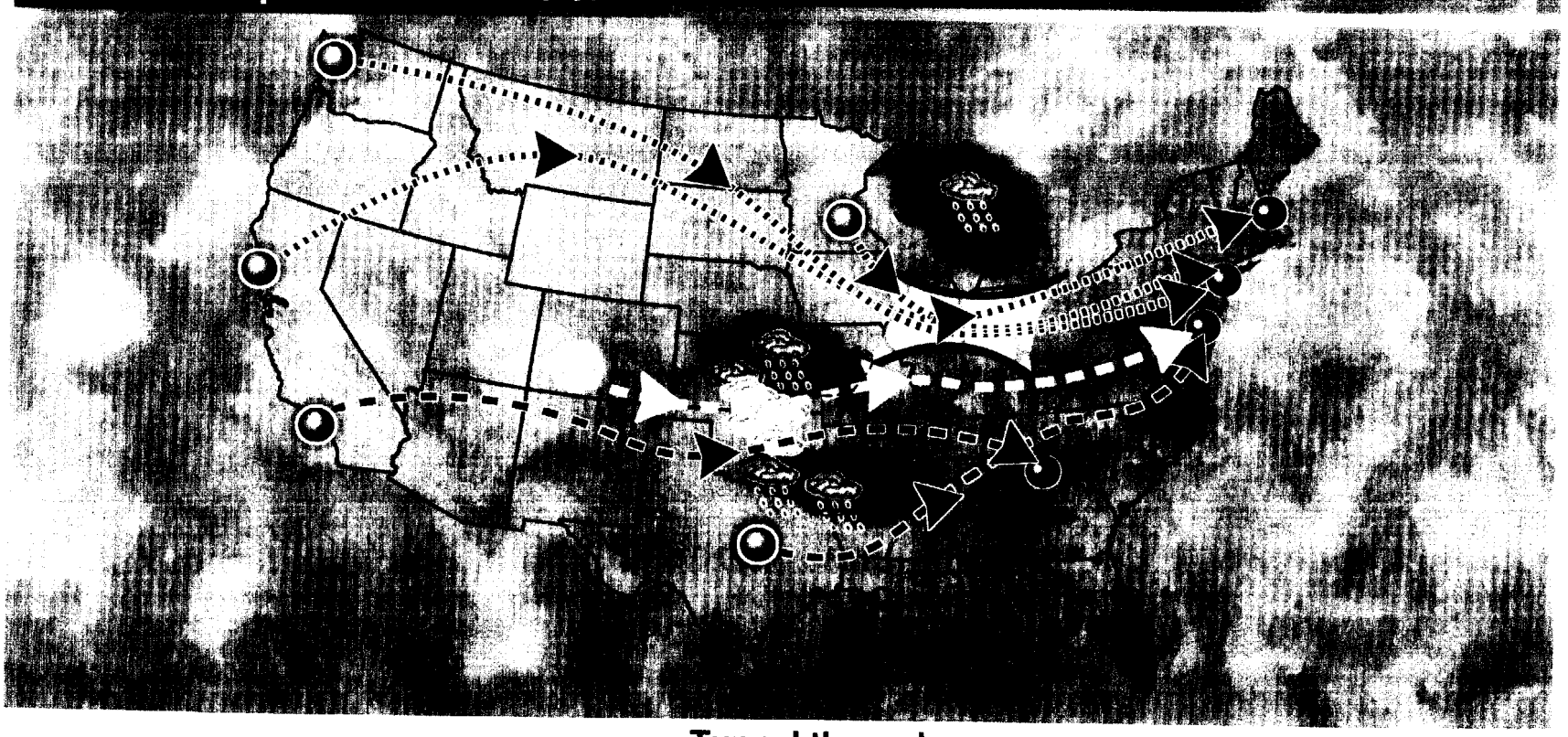
Cleared to fly

High traffic area

Boeing Proposal

Fundamental Increase in Capacity

Robust, Adaptive Flow Control



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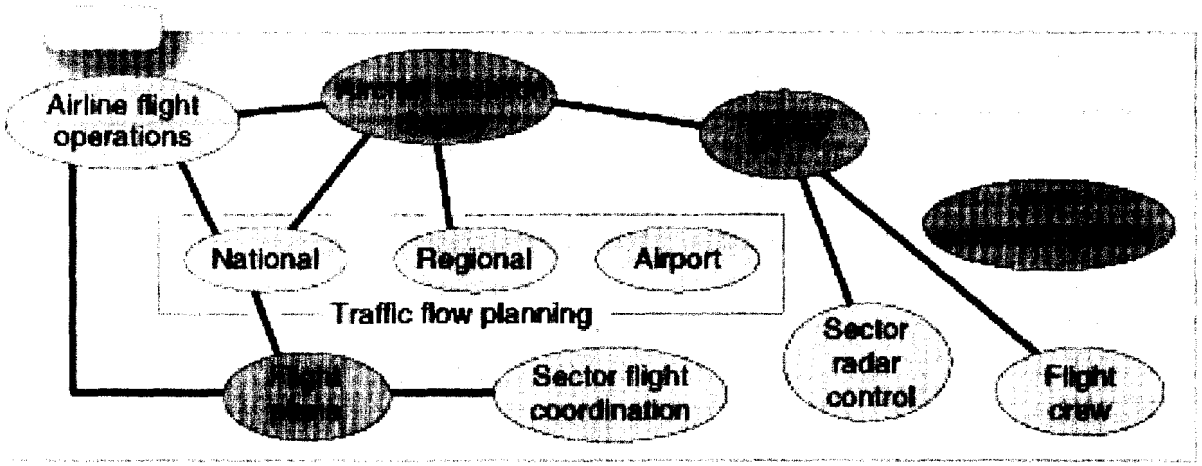
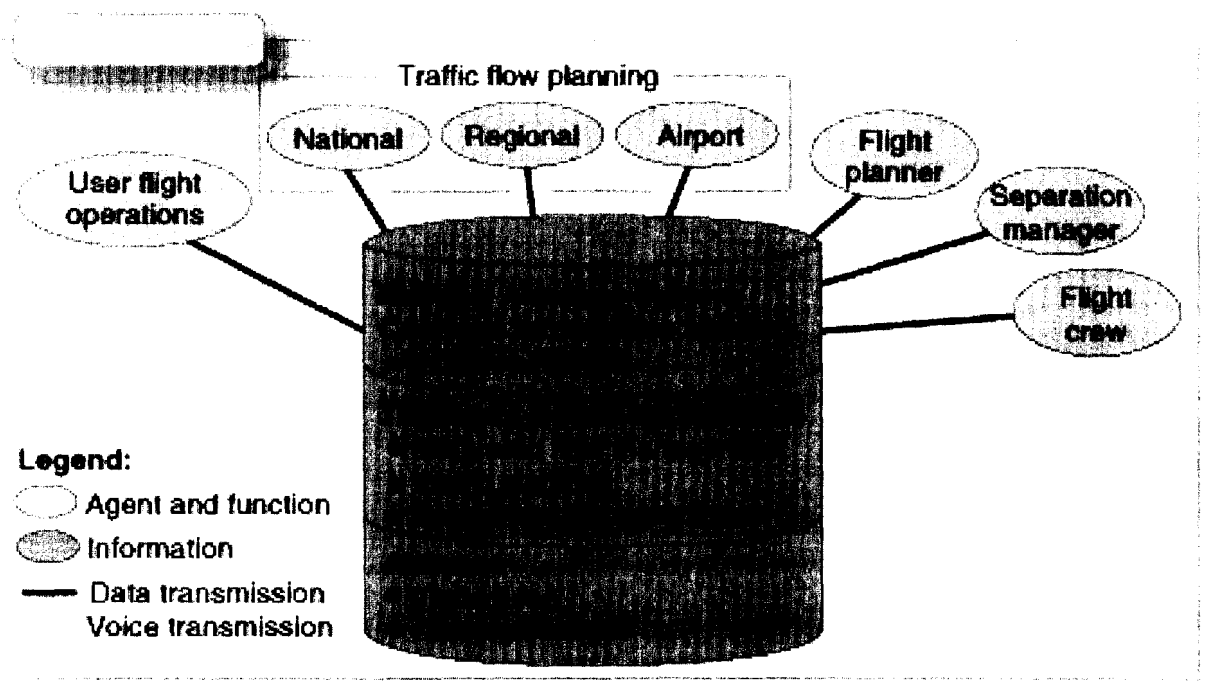
Common Information Network





Global CNS System (GCNSS)

- Integrated communication, navigation and surveillance data
- CNS capabilities on each satellite
- Complementary to modernized GPS
- Unique, novel architecture designed for safety of flight applications
  - Integrity, redundancy
- Enhanced performance CNS capabilities
  - High accuracy and integrity positioning
  - High integrity and low latency COM
  - Enables trajectory-based separation management
- Global coverage – affordability
- Mid earth orbit (MEO) constellation with ground support elements (control, monitor, access)

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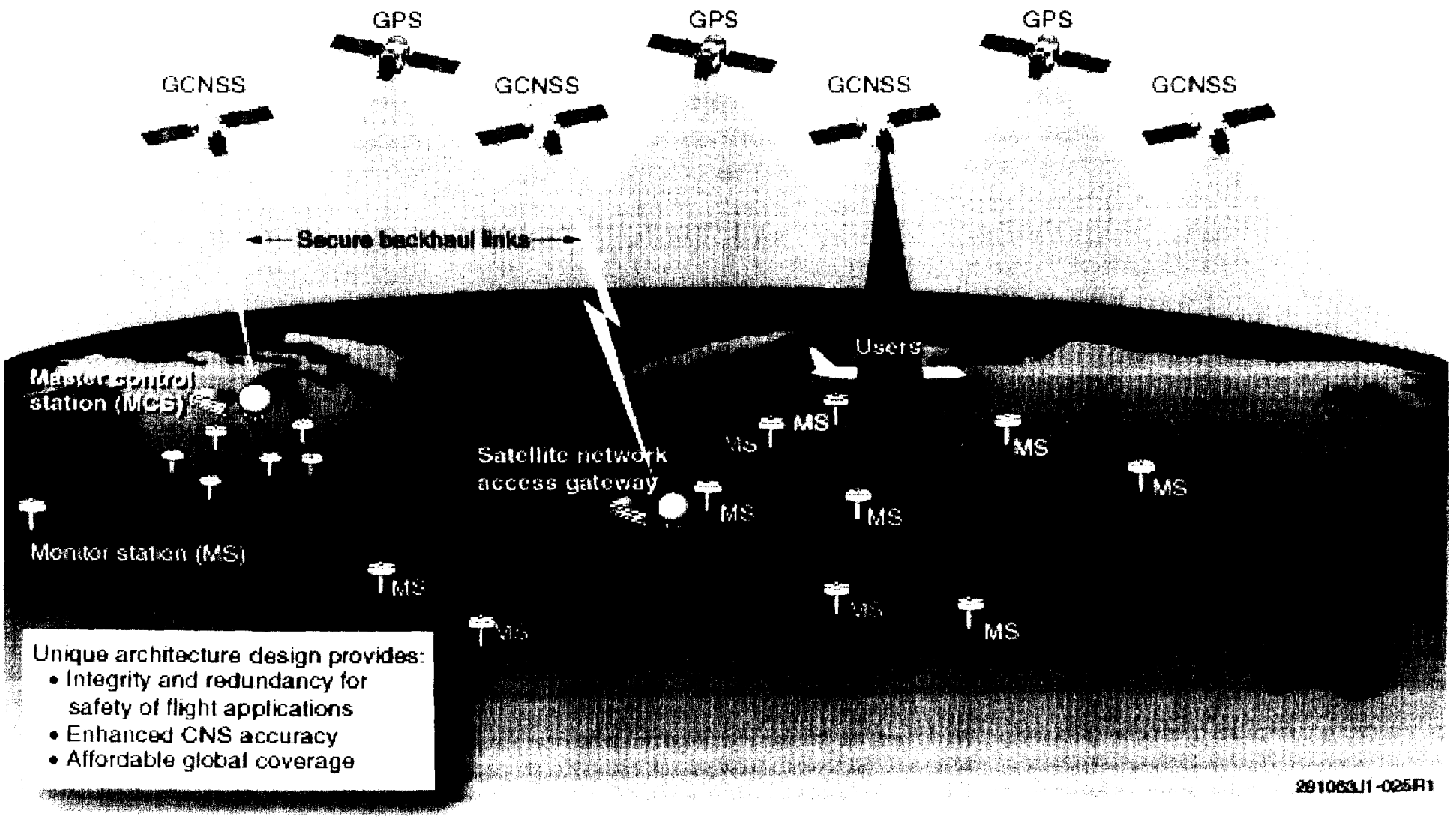
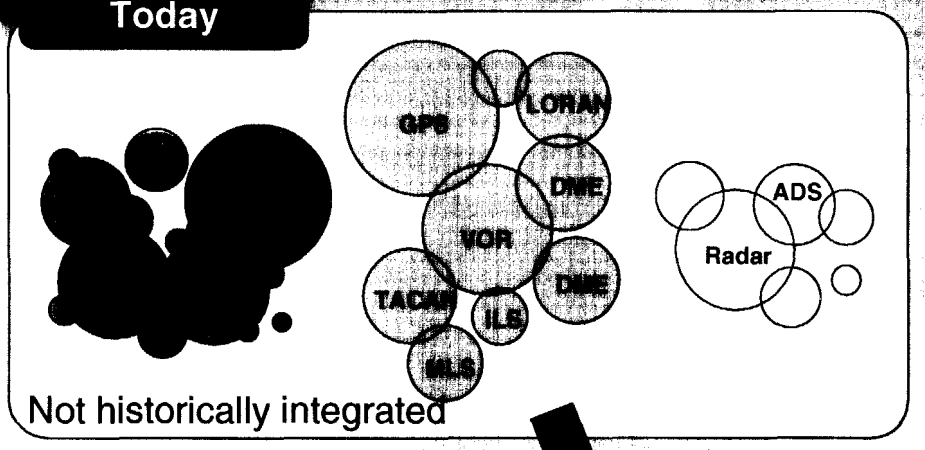
Global CNS System (GCNSS) Architecture

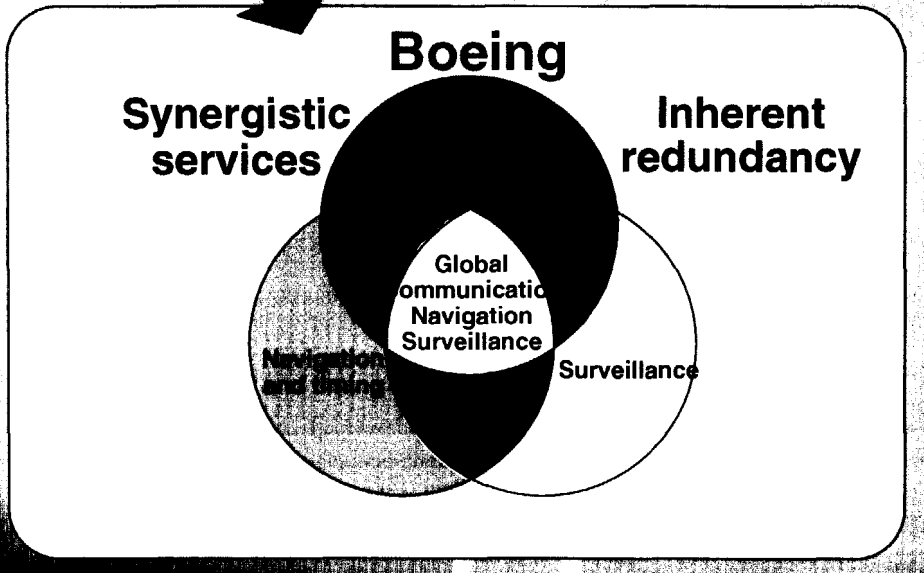


A Paradigm Shift is Needed



Existing systems within the CNS infrastructure

- Communication
- Navigation
- Surveillance



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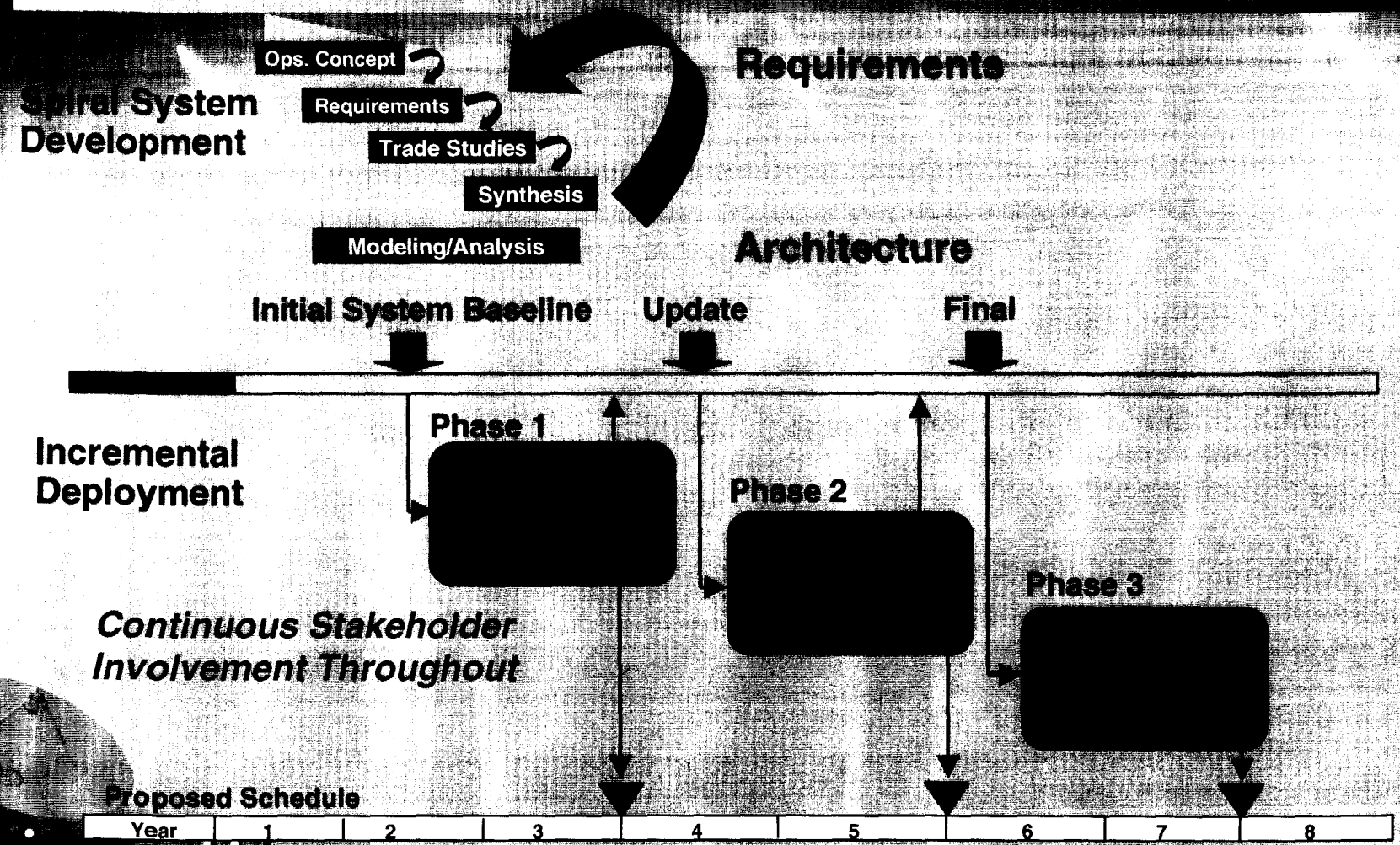
Technically Achievable Transition Plan



Note: dates of implementation require comprehensive support from stakeholders and government in the very near term.

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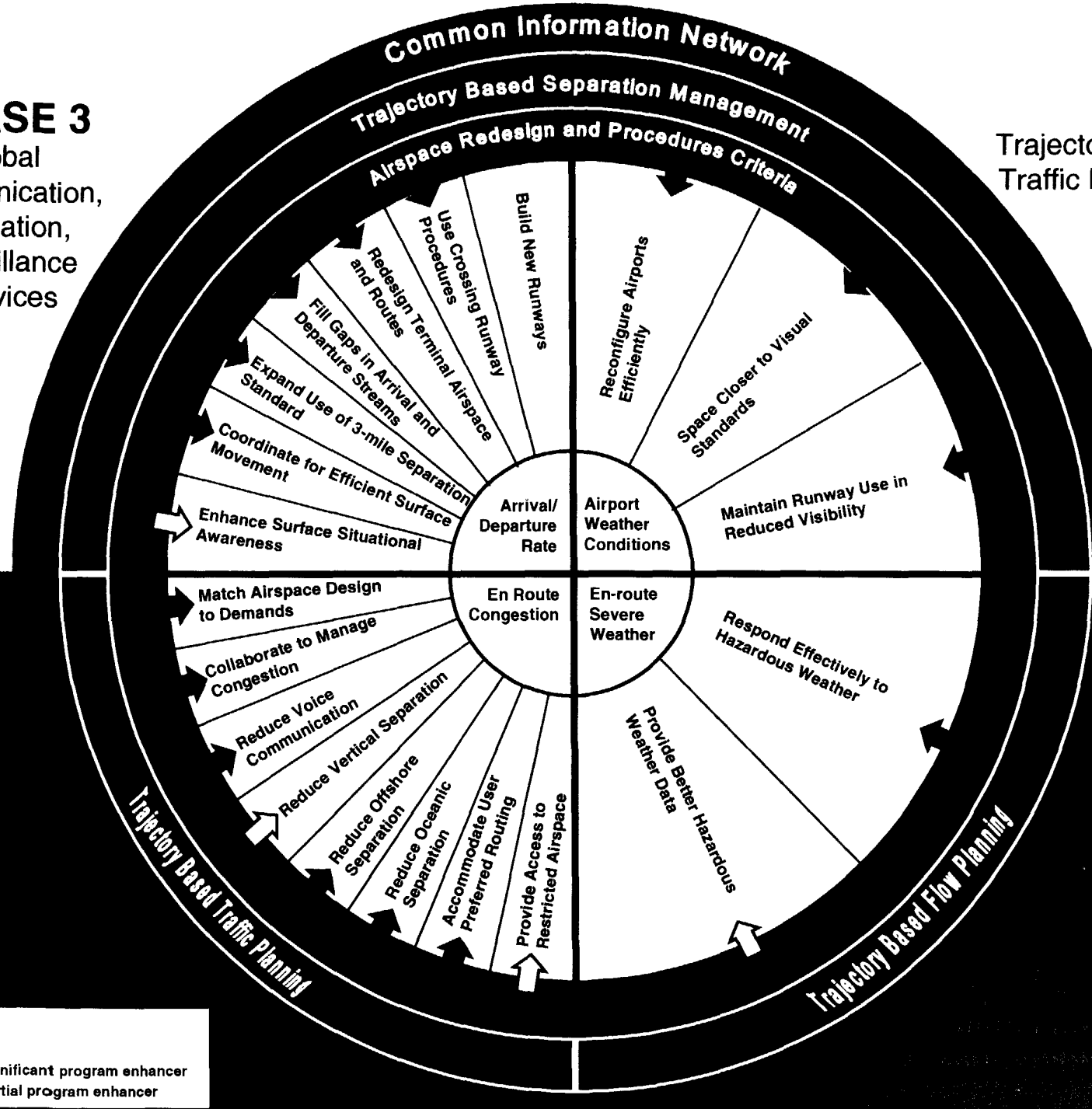
PHASE 3

Global Communication, Navigation, Surveillance Services

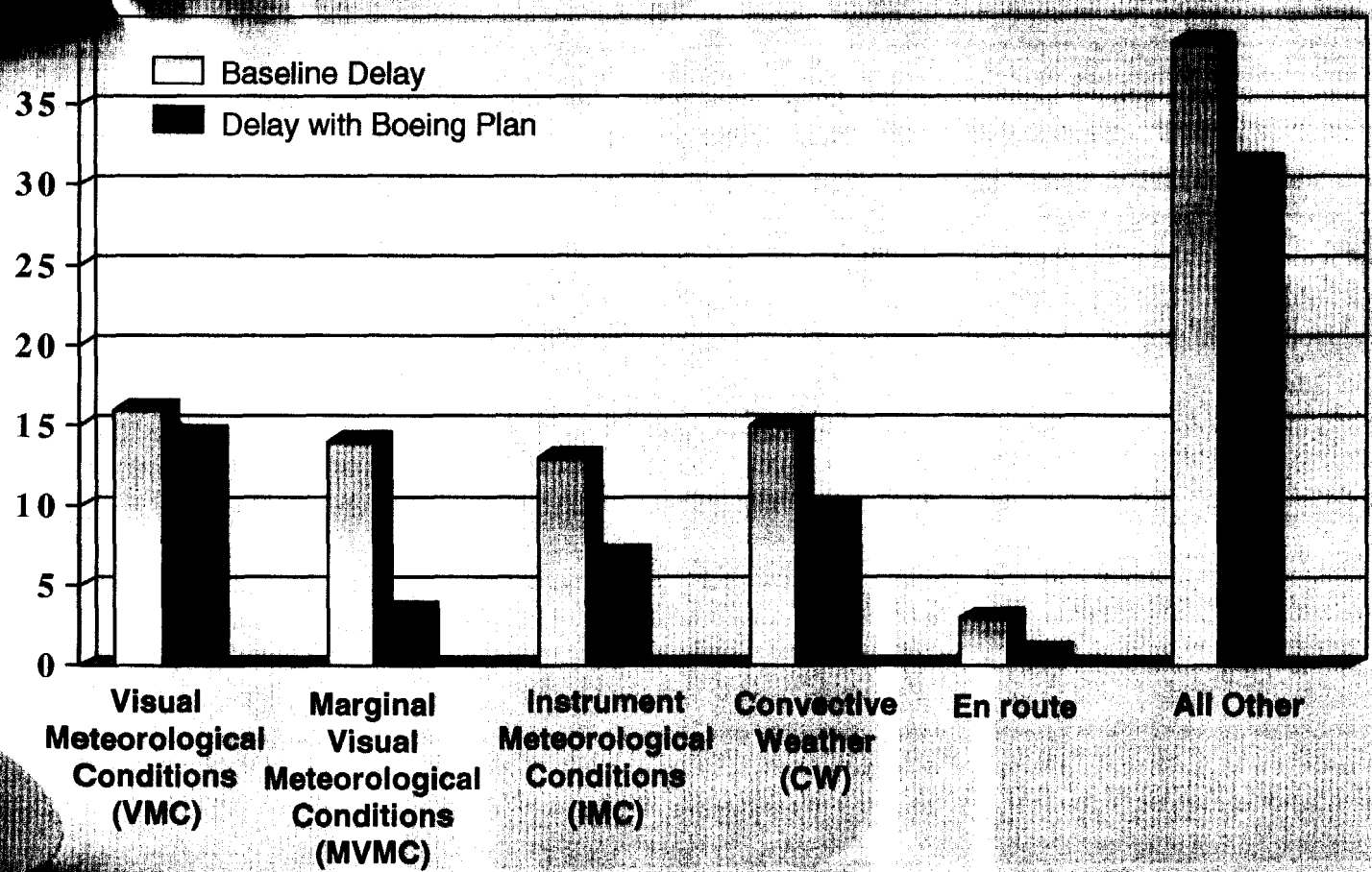
Trajectory Based Air Traffic Management



Legend:

- Boeing Project
- Boeing project is significant program enhancer
- Boeing project is partial program enhancer

Preliminary Analysis: Boeing's Plan Will Reduce Delays



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Overall Benefits Assessment - *Preliminary*

Scope of Capacity Enhancement	Net Delay Reduction	*OR*	Years of Traffic Growth Accommodated
OEP (Incl. Runways)	~ 25%		7-8 years
OEP + Boeing Plan	~ 45%		15-17 years
OEP + Boeing Plan + New Runways and Advanced Airports Concepts	~ 60%		20-25 years

Working Together With All Users Will Be a Key to Success

- [illegible]n the smallest unimproved general aviation landing field will become more safe and capable than today's state of the art international airports
- Private pilots can enjoy broad access
- System remains affordable

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Why Boeing?

- [illegible] capability and resources
- History of bringing safety certified, service ready products to market
- Boeing excels at requirements driven system integration
- $30 billion core business relying on success

BOEING

Autometric

JEPPESEN

THE PRESTON GROUP

HUGHES SPACE & COMMUNICATIONS

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What's Next?

Boeing efforts will complement and accelerate FAA Operational Evolution Plan

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