

ATC Can't Fix, But Can Lead
Airline Centric, Pilot Driven
Real Time, "*Day of*" Aircraft
Time Based Flow Manager

April 14, 2026

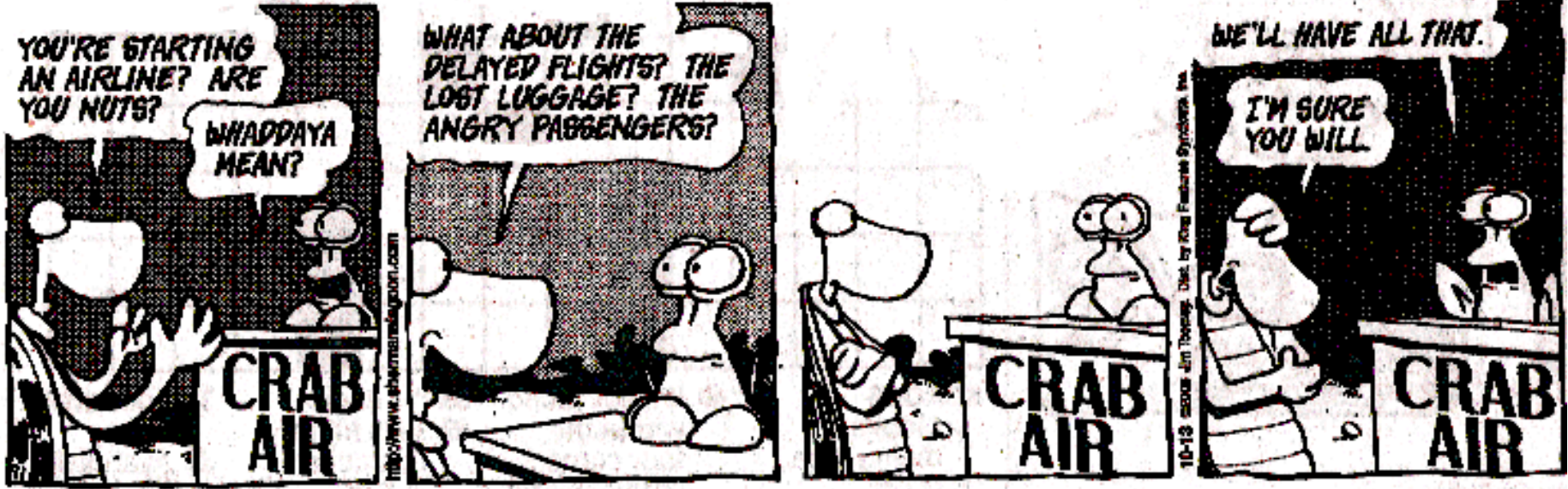
R. Michael Baiada
ATH Group, Inc.

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The Joke Is On Passengers, Shareholders & ATC

Sherman's Lagoon

by J.P. Toomey



One Sigma quality,
in a Six Sigma world

Not Working!



- **ATC and airlines have literally spent \$100s of billions and 50 years trying to solve the airline delay problem, and not succeeded.**
- For decades, the ATC solution was always 10 years and \$100 Billion into the future. This was true in 1980, 1990, 2000, 2010, and still true in 2026
- Airlines have consistently delivered 30% of their customers late (A0) for the last 50 years
- **ATC Centric Flow Plan overloads ATC controllers and ignores the airline's business needs and pilot's 4D navigation capabilities and enroute flexibility**

ATC Centric Flow De-peaks Later in Time



Delay is ATC's only option

(GDP, CFMU, Reroutes, Vectors, Long Finals, etc.)

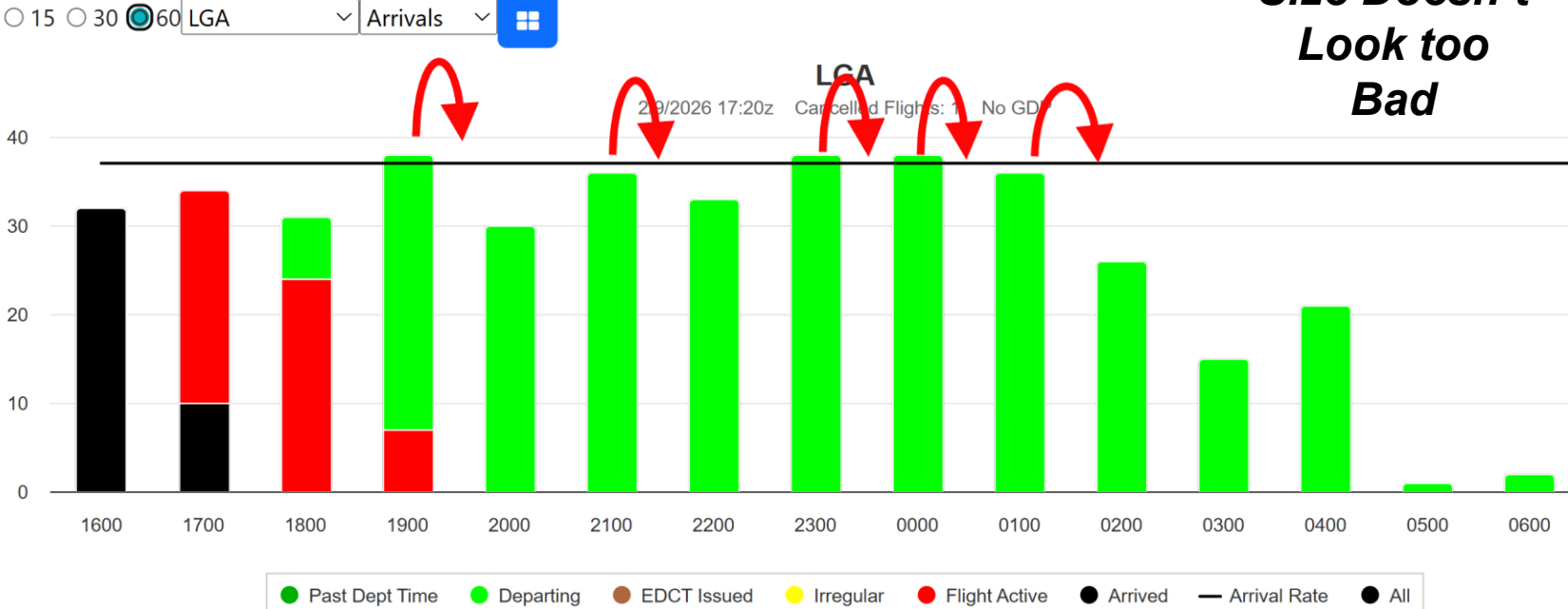


Airport Arrival Demand Chart

ATC Centric Delays

Add New Graph

Demand In 1 Hour Bin Size Doesn't Look too Bad



[FAA Airport Arrival Demand Web Page, Newark, Feb 9, 2026](#)

Airline Centric Flow Depeaks Forward in Time



Only informed airlines can optimally and efficiently access on time, uncongested landing capacity **forward in time**



Airport Arrival Demand Chart

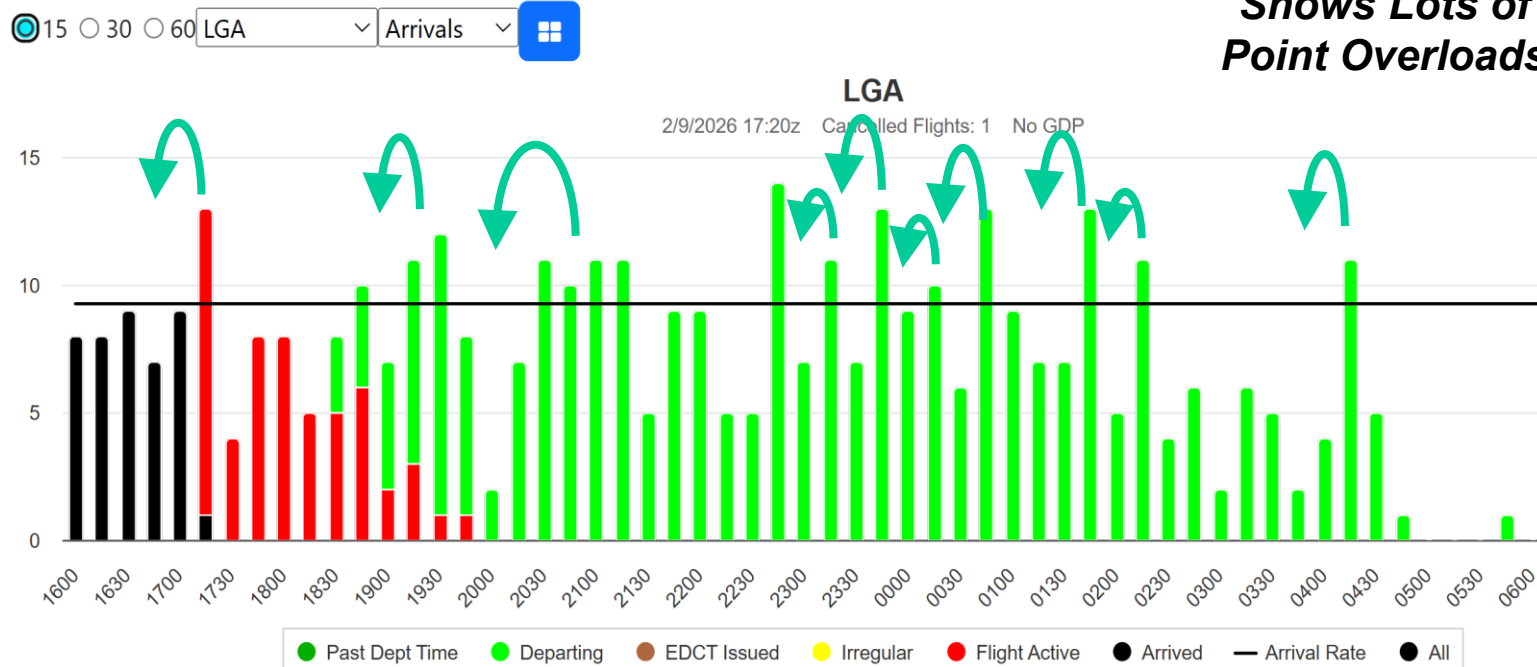
Airline Centric On Time

Add New Graph

Demand In 15 Minute Bin Sizes Shows Lots of Point Overloads

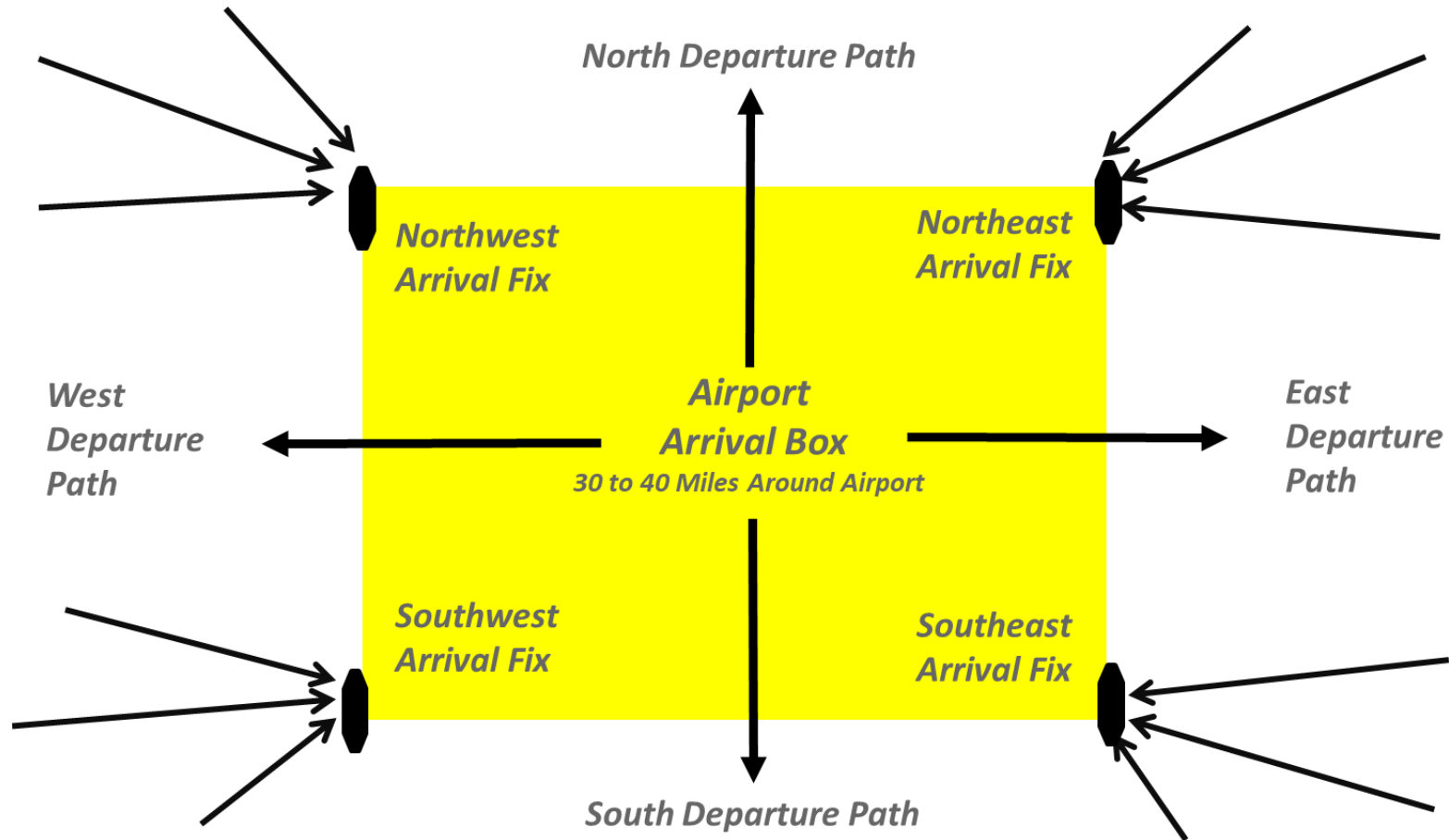
Same Airport, Same Traffic, Same Day, Same Time

[FAA Airport Arrival Demand Web Page Newark Feb 9, 2026](#)



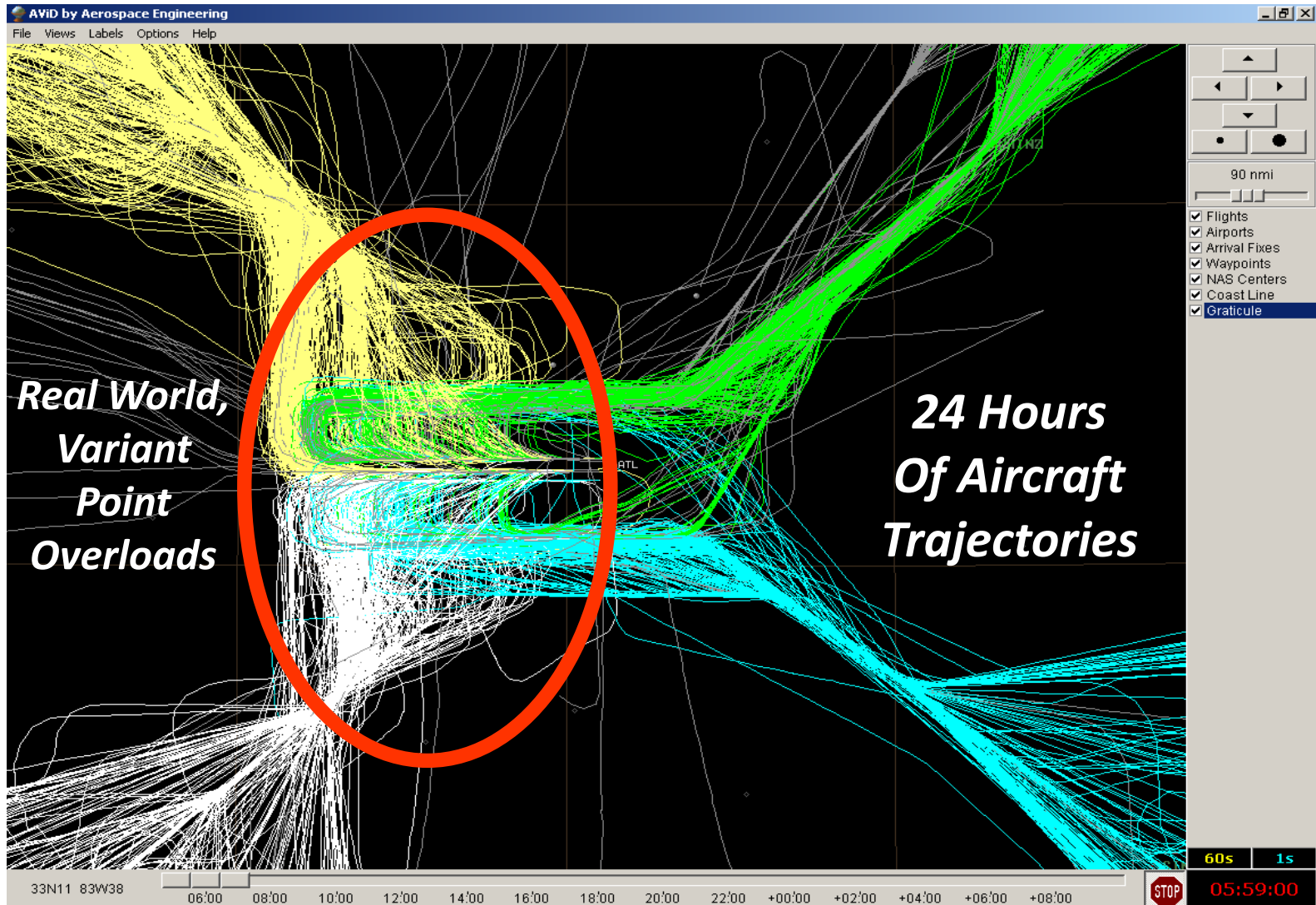
Airline-Managed Box Entry => Less Structure, Complexity, Stress, Delay

Typical Airport Arrival/Departure Flow

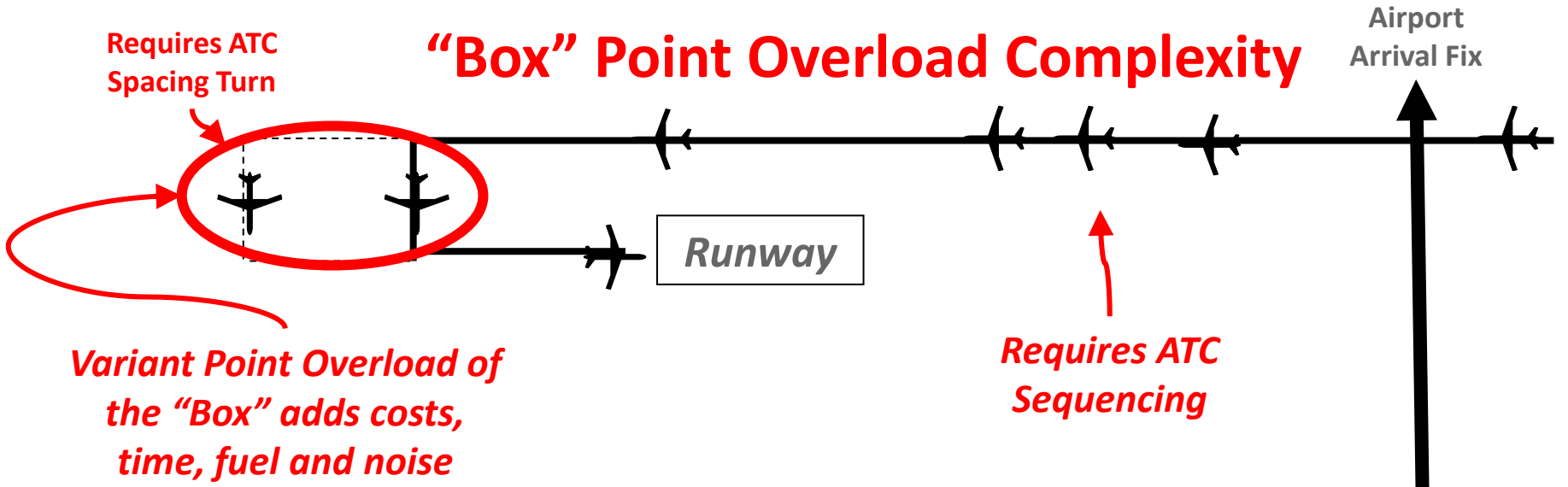


Airline Centric Flow Doesn't Overload The Box

Visual of Actual Point Overloads



Random Point Overloads Are Preventable

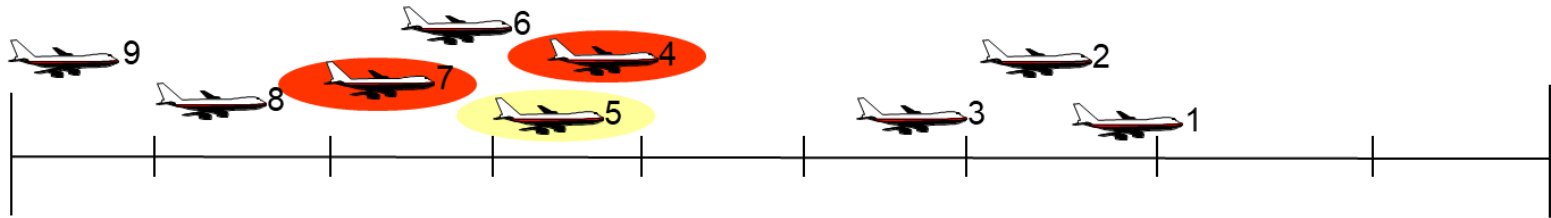


Which Aircraft Lands 1st, 2nd, 3rd, etc., is Critical to Airline Profitability

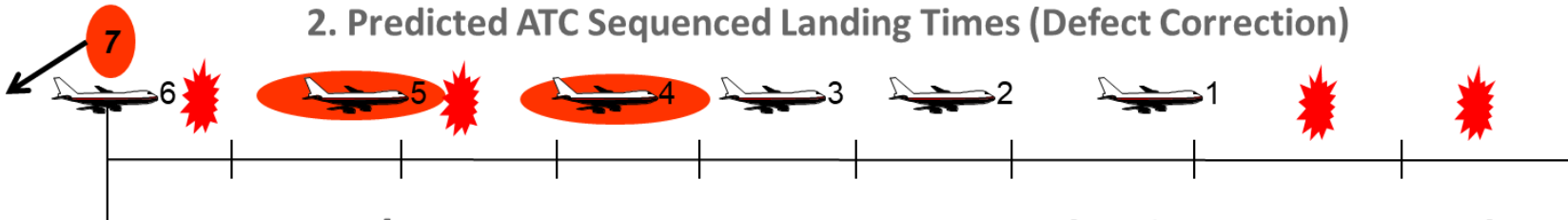
Airline Centric Flow Manager - Defect Prevention

Aircraft landing sequence and timing are critical to airline profitability

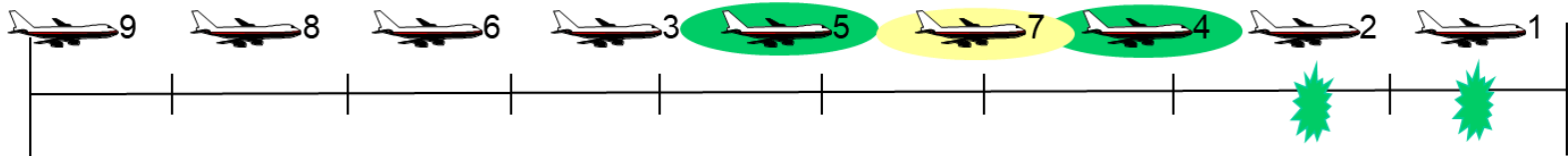
1. Predicted Random, Unaltered Landing Times (Hours Prior to Landing)





2. Predicted ATC Sequenced Landing Times (Defect Correction)

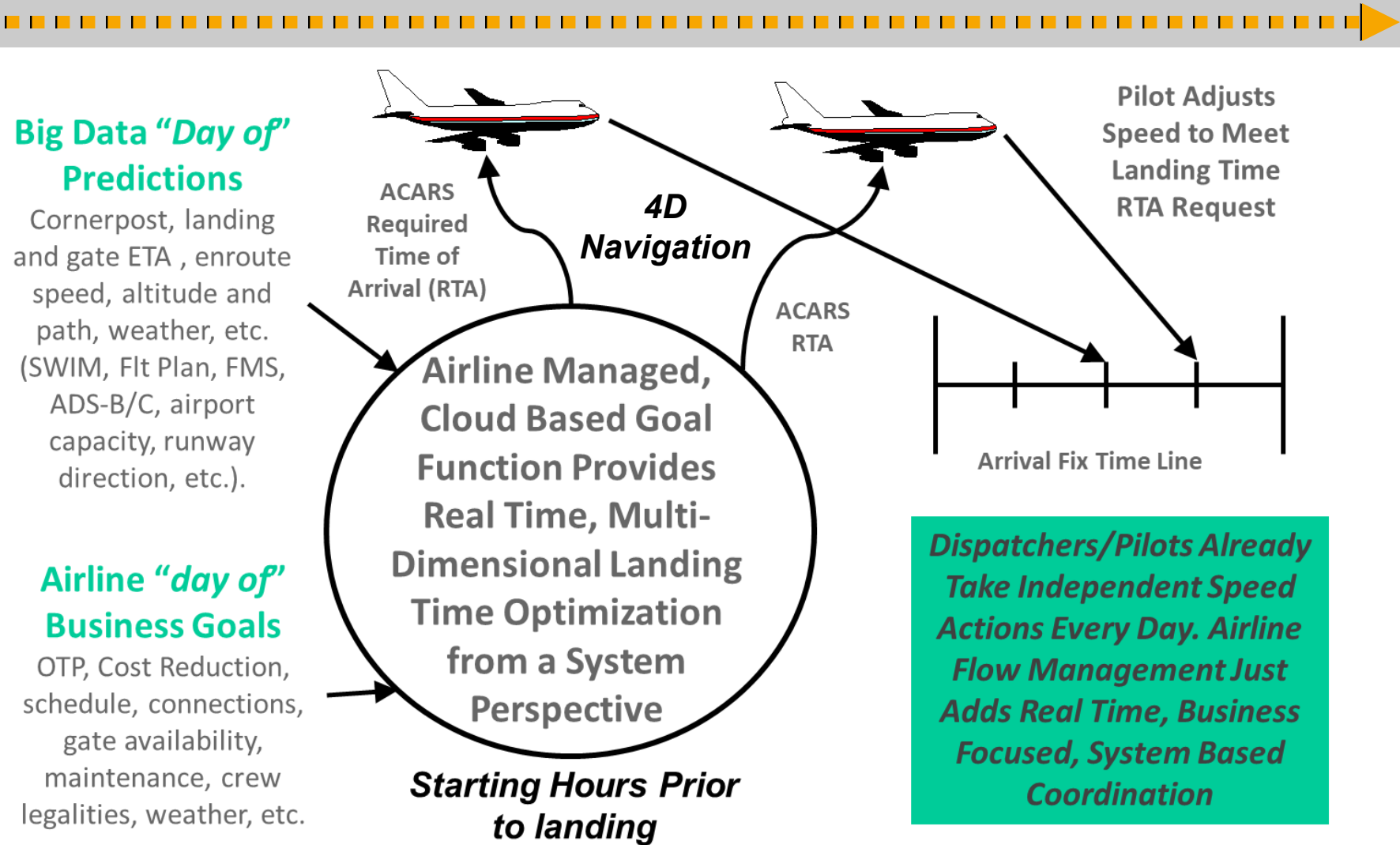


3. Airline/User Managed Landing Times (Defect Prevention)



- Real Time airline/user goals considered by Airline Flow Management Process
 - Aircraft #1 and #2 are **early**, but benefit entire queue by moving forward
 - Aircraft #4, #5 and #7 are **late** but managed to early
 - Aircraft #3 is slightly ahead of schedule and may be re-sequenced to remain OT
- Capacity Spoilage  and Recovery 

Airline Centric, Pilot Driven Operational Concept



Aircraft landing sequence and timing are critical to airline profitability

1995 Analysis - Block Time = Largest Opportunity to Cut Cost

Sample Value of Productivity Gains

Domestic Aircraft Only (727, 737, 757, DC10-10)	411 aircraft
Average Daily Flight Hours (Block)	10.85 hours/day
Average Number of Flights	4.92 flts/day
Average Hours per Flight (Block)	2.21 hrs/flt
Average Time Savings (all sources)	18.08 mins/flt

$18.08 \text{ mins/flt} \times 4.92 \text{ flts/day} \times 1 \text{ hour}/60 \text{ mins} = 1.48 \text{ hrs/day/airplane}$

$1.48 \text{ hrs/day} \times 1 \text{ flt}/1.91 \text{ hrs} \times 411 \text{ airplanes} = 319 \text{ flights per day}$

$100 \text{ pax/flight} \times \$160/\text{pax} = \$16,000 \text{ per flight (does not include cargo)}$

$\$16,000 \text{ revenue/flt} - \$5,000 \text{ direct cost/flt} = \$11,000 \text{ contribution per flight}$

$\$11,000 \text{ contribution/flight} \times 319 \text{ flts/day} \times 365 \text{ days/year} =$

\$ 1.3 Billion per year additional contribution

Source: United Airlines

1995 Analysis = \$2.75 Billion in 2026

Note: Unaudited Data, for illustration purposes only

2026 Analysis - Block Time = Largest Opportunity to Cut Cost



Single Airline Annual Flow Management Benefit Analysis

Preventing Defects, Costs, Revenue Loss and Productivity Loss

Annual Crew Buffer Cost		\$	241,736,458
Annual Defect Rework Cost		\$	365,513,281
Annual Overnight Rework Cost		\$	168,698,438
Annual Fuel Buffer Cost		\$	827,719,216
Annual Aircraft Lost Productivity Cost		\$	3,973,344,375
Annual Lower Ticket Revenue with Low A0 Quality		\$	337,396,875
Total Single Airline Annual Buffer/Rework Cost		\$	5,914,408,644
Annual Recoverable Crew Buffer Cost		\$	131,856,250
Annual Recoverable Defect Rework Cost		\$	91,378,320
Annual Recoverable Overnight Rework Cost		\$	42,174,609
Annual Recoverable Fuel Buffer Cost		\$	451,483,209
Annual Recoverable Aircraft Productivity Revenue		\$	404,034,469
Annual Additional Ticket Revenue with A0 Quality		\$	50,609,531
Total Annual Recoverable Buffer/Rework Cost		\$	1,171,536,389

4,250 flts/day, 11 min schedule buffer, 6 min easily recoverable, fuel \$3/gal

Independently Validated Benefits and Results



***Airline Centric, Pilot Driven, Time Based, Flow Management
Validated Actual Results In Live Hub Operations by FAA,
Embry-Riddle, GE Aviation, Delta Airlines, Georgia Tech, etc.***

Emirates' Dubai Results

[GE Aviation 2013 Independent Analysis](#)

Delta's Atlanta Results

August 2006 through October 2013

KEY METRIC	RESULT
A0 Improvement (Passive to Active)	14.82 %
A14 Improvement (Passive to Active)	12.04 %
Dwell Time Reduction	2.98 Minutes
Fuel Reduction	25,055 Kg / Day

***Delta Managed Flow Delivered
Over \$74,069,046 Saved in Fuel Alone***

- Fuel Saved in Gallons.....30,091,899
- CO2 Reduction in Pounds.....634,788,613
- Flight Time Saved in Minutes.....1,662,726
- Days of Operation.....2,432
- Slots Recovered..... 34,375

ATH Group, Inc.

Benefits of Reducing Random Point Overloads

Wide Ranging Benefits, Early Wins



Airline/User Centric Flow Manager Benefits

- Uniquely incorporates airline's/user's objectives and pilots in the solution
- Improves operating margins and profits
- Increases on time arrival (OTP, A0)
- Reduces fuel burn, CO2 and NOx emissions
- Increases aircraft, crew and overall system productivity
- Reduces ramp congestion
- Improves gate/ramp, above/below wing utilization
- Improves product quality (pax where promised, when promised)
- Increases NPS and reduces passenger stress
- Reduces ATC complexity and costs
- Easily configurable for all airports/users (airlines, biz Jets, military, GA)

***Each benefit pays for the program, rapidly, many times over.
Creates huge wins for passengers, investors, employees.***