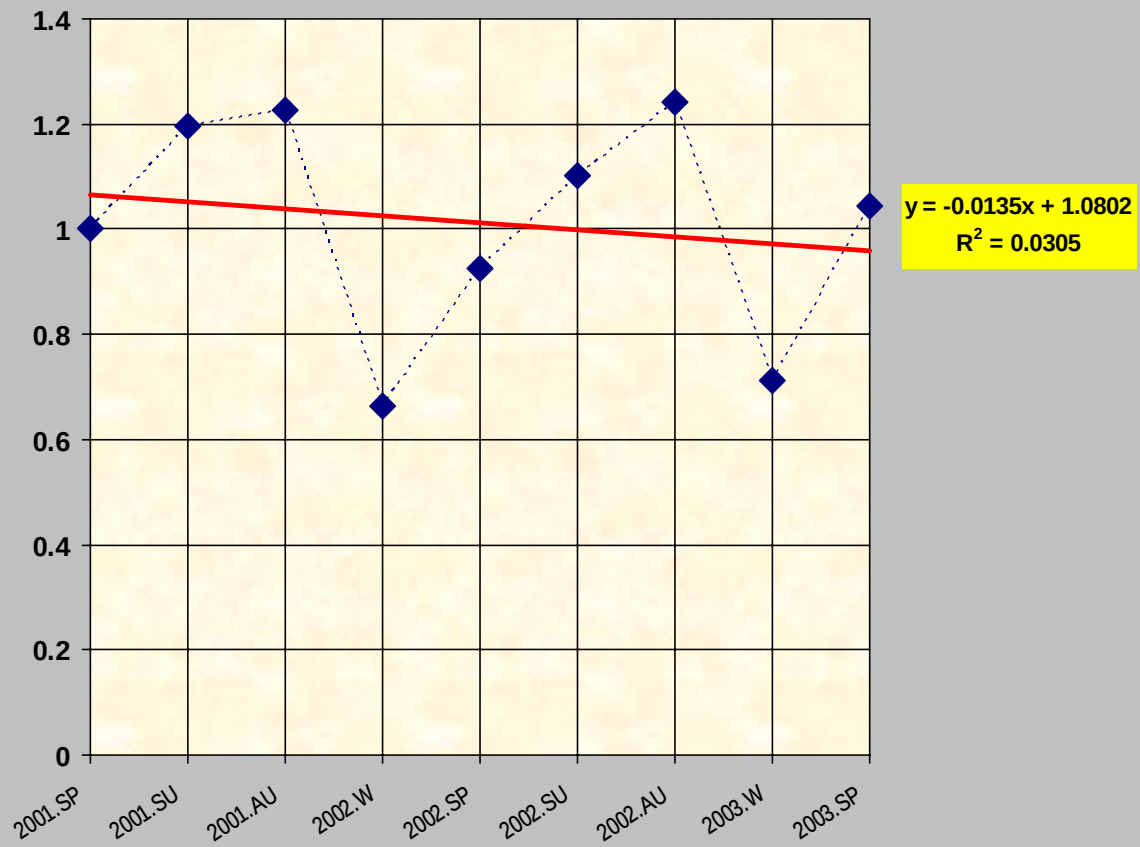
NAOMS EVENT RATE TRENDS

Preliminary Findings
For Internal Use Only

B:AC1 . . . . Bird Strike

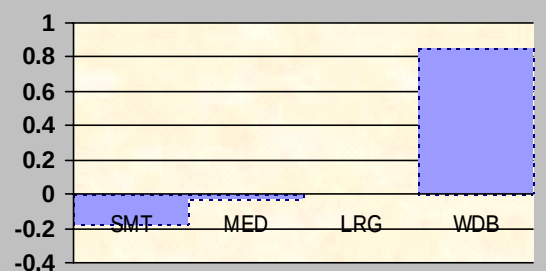
Level: 1

Normalized Rate per Million Flight Legs



- Essentially flat trend line.
- Clear seasonal cycle.
- Greater rate associated with WDB may be due to greater airframe and engine cross-section.

RELATIVE RATES



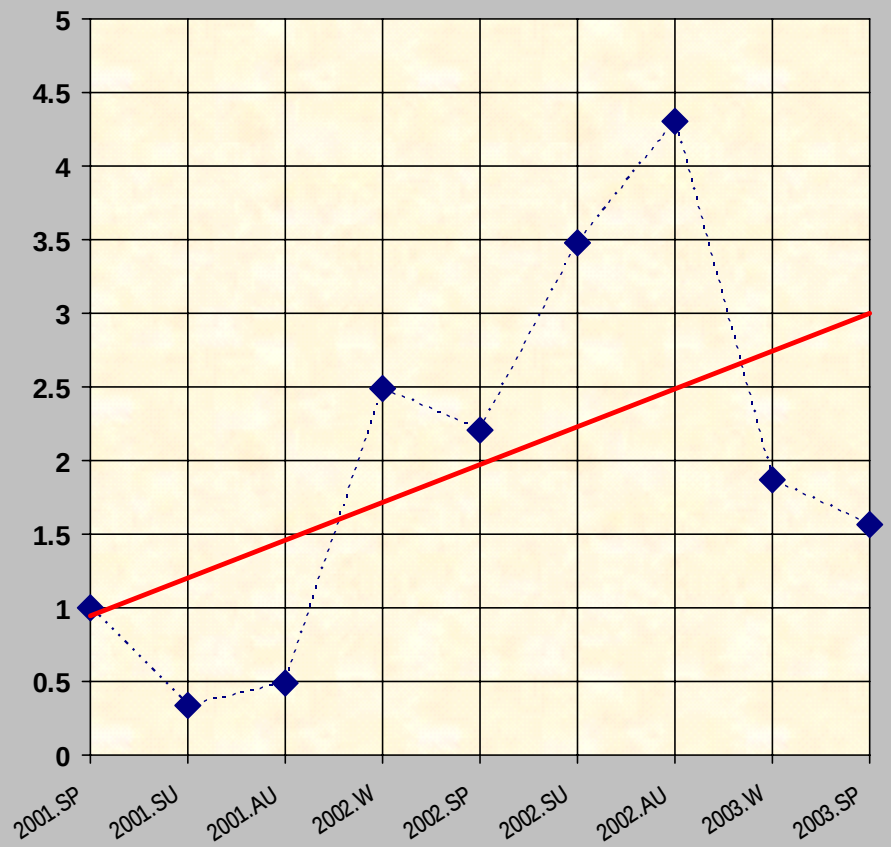
NAOMS EVENT RATE TRENDS

Preliminary Findings
For Internal Use Only

B:AH10 . . . Out-of-Balance Takeoff

Level: 1

Normalized Rate per Million Flight Legs

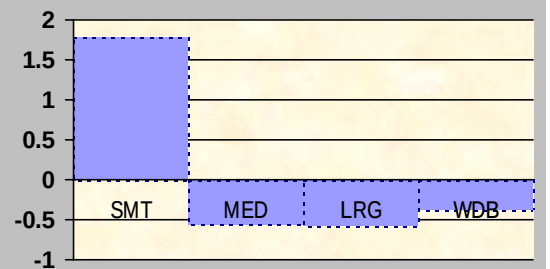


$y = 0.2573x + 0.684$

$R^2 = 0.2834$

- Possible upward trend until winter of 2002.
- US Airways Express Beech 1900 crash Jan 8, 2003.
- FAA response to weight/balance issue January 2003.

RELATIVE RATES



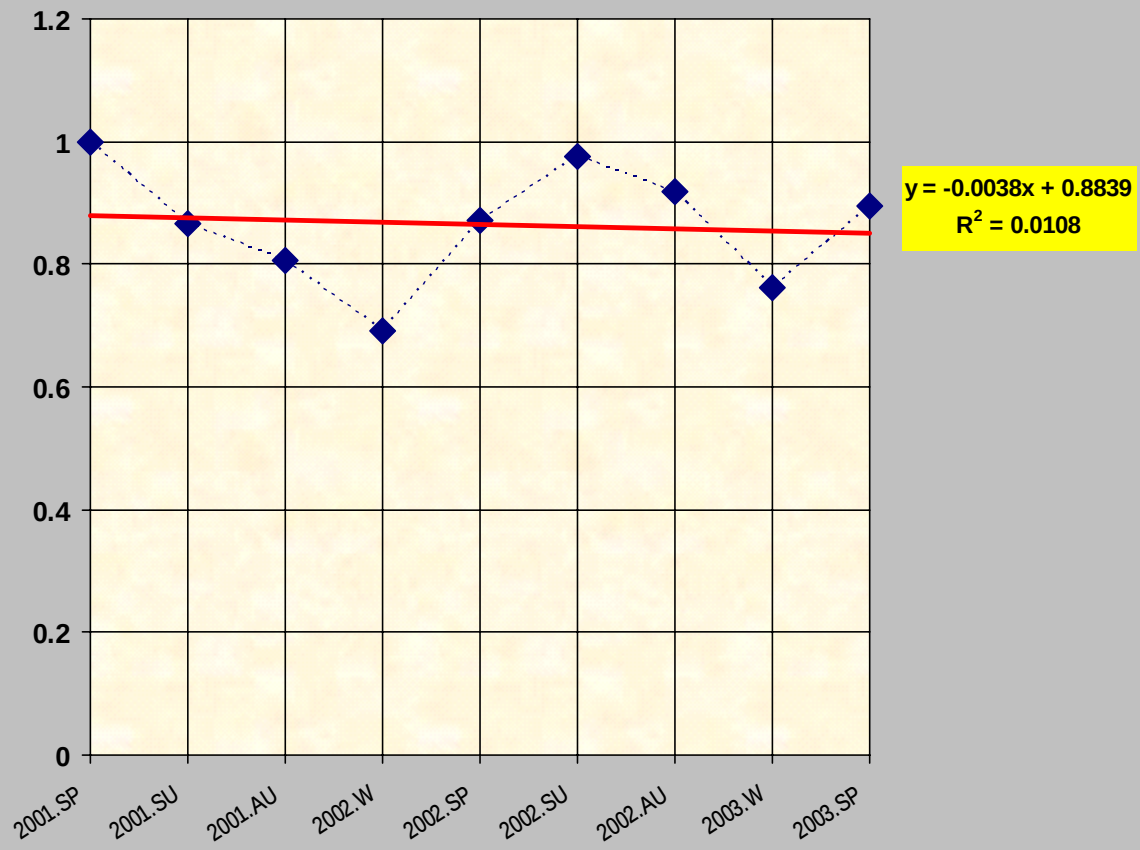
NAOMS EVENT RATE TRENDS

Preliminary Findings
For Internal Use Only

B:AD1 . . . . Altitude Deviation; >300 ft

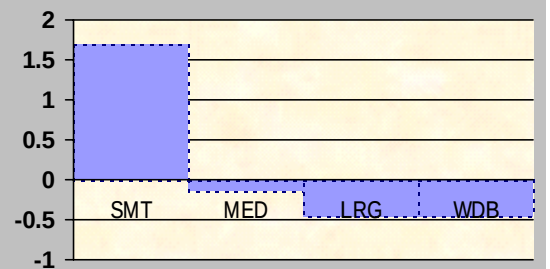
Level: 1

Normalized Rate per Million Flight Hours



- No clear evidence of trend.
- Some indication of a seasonal cycle.

RELATIVE RATES



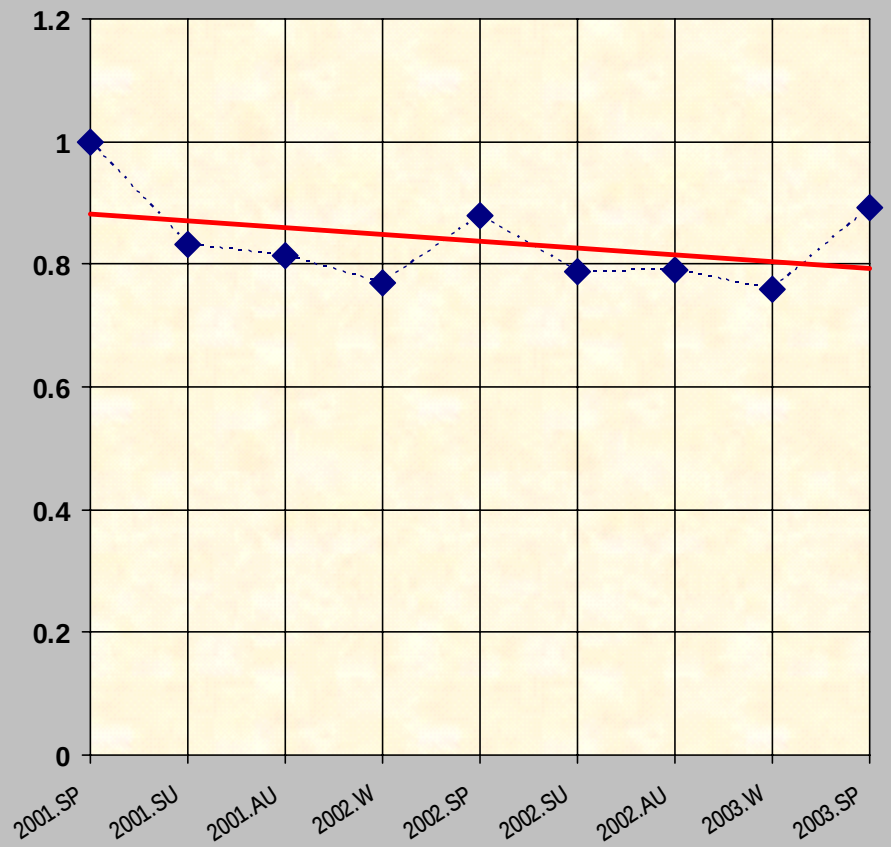
NAOMS EVENT RATE TRENDS

Preliminary Findings
For Internal Use Only

B:AH3 . . . . Lost Sight of Visually Separated Acft

Level: 1

Normalized Rate per Million Flight Legs

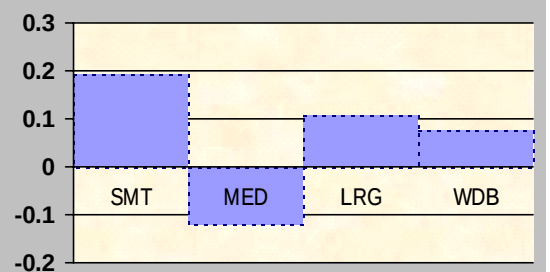


$y = -0.0112x + 0.8925$

$R^2 = 0.159$

- No notable trend.

RELATIVE RATES



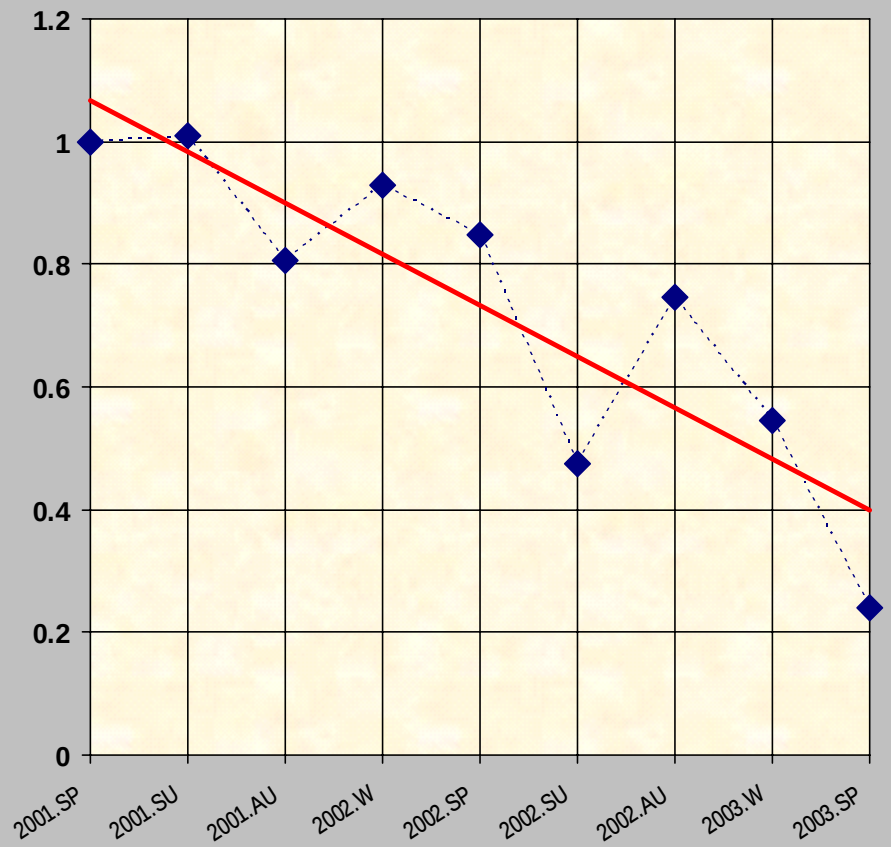
NAOMS EVENT RATE TRENDS

Preliminary Findings
For Internal Use Only

B:GE10 . . . Ground Conflict with Aircraft

Level: 1

Normalized Rate per Million Flight Legs

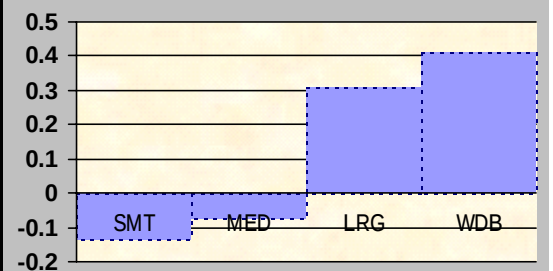


$y = -0.0834x + 1.1504$

$R^2 = 0.7611$

- Impressive decrease in rates over time.
- The scope of this question includes ground conflicts between aircraft on ramps, taxiways and runways, each of which seems to have a distinct trend.

RELATIVE RATES



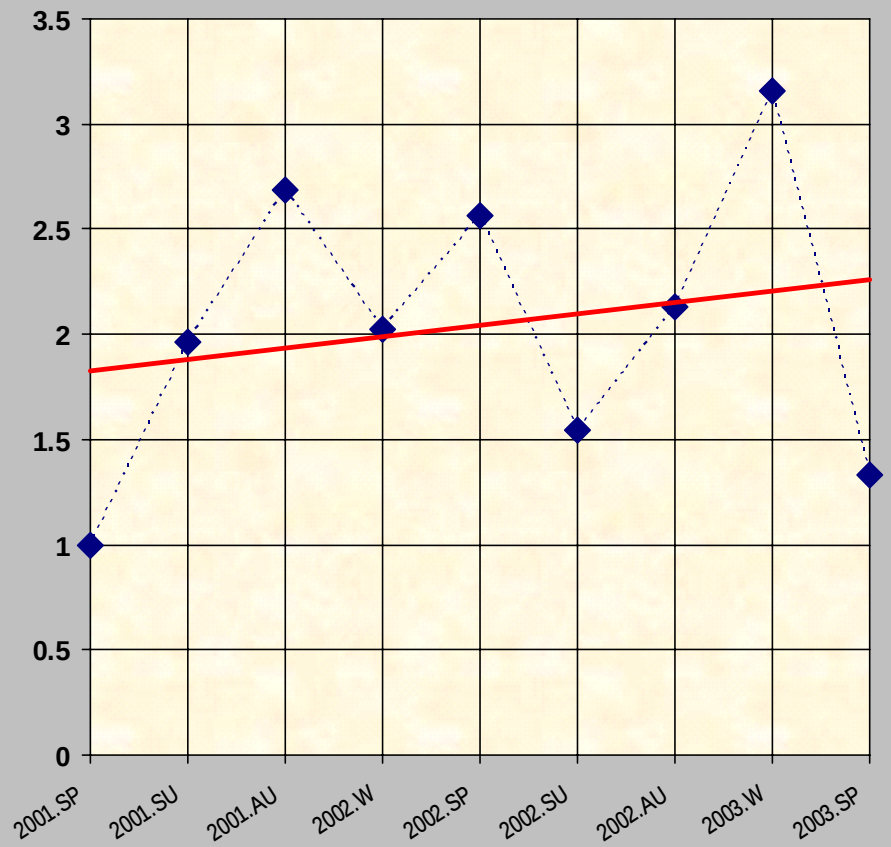
NAOMS EVENT RATE TRENDS

Preliminary Findings
For Internal Use Only

B:GE10A . Ground Conflict with Aircraft on Ramp

Level: 2

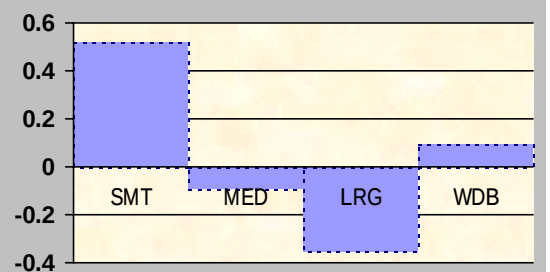
Marginal Rate



$y = 0.0546x + 1.7713$
$R^2 = 0.0473$

- The trend of aircraft conflicts on ramps appear to be relatively flat.

RELATIVE RATES



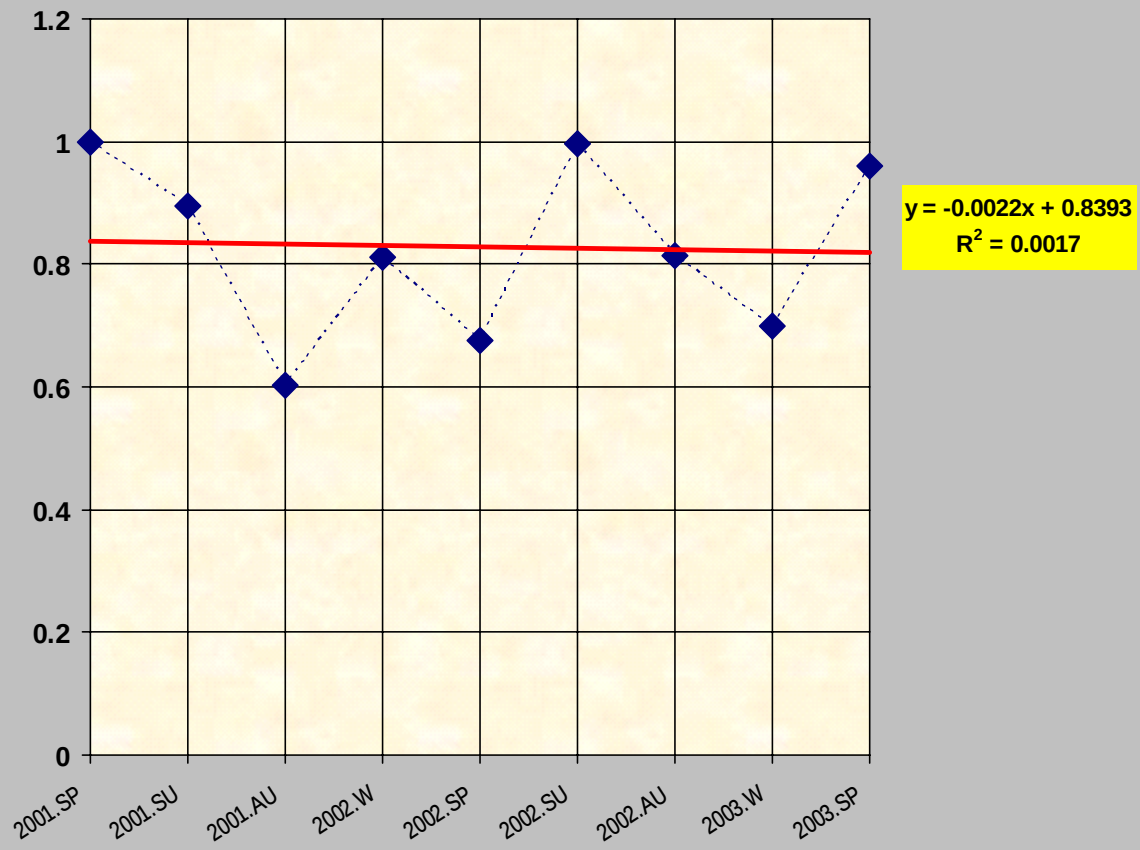
NAOMS EVENT RATE TRENDS

Preliminary Findings
For Internal Use Only

B:GE10B . Ground Conflict with Aircraft on Taxiway

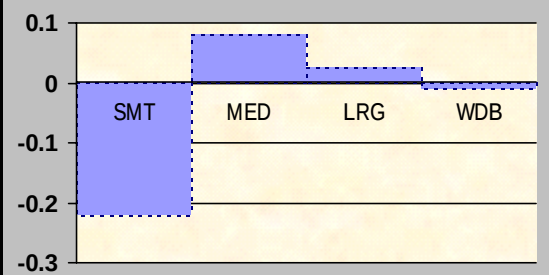
Level: 2

Marginal Rate



- The trend of aircraft conflicts on taxiways is flat.

RELATIVE RATES



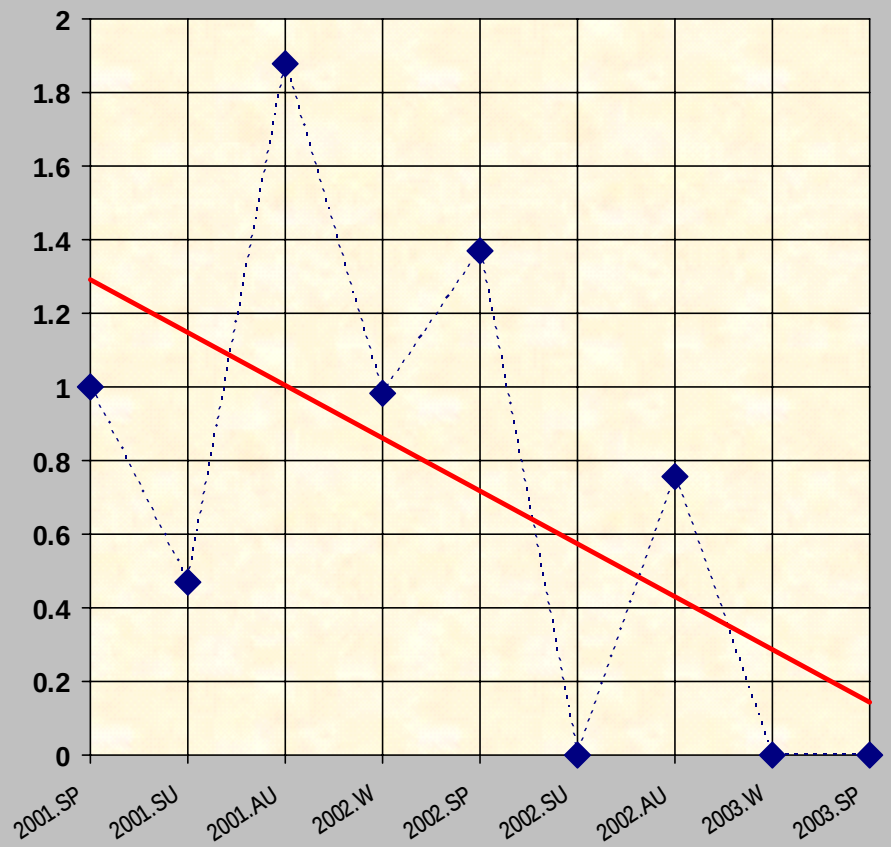
NAOMS EVENT RATE TRENDS

Preliminary Findings
For Internal Use Only

B:GE10C . Ground Conflict with Aircraft on Runway

Level: 2

Marginal Rate

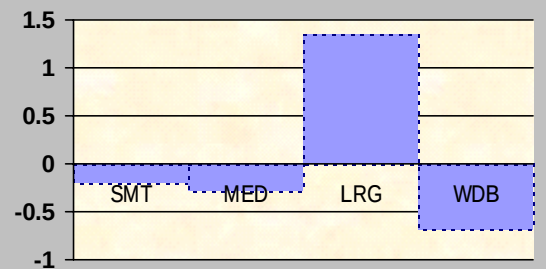


$y = -0.144x + 1.4372$

$R^2 = 0.3524$

- The trend associated with aircraft conflicts on the runway is decreasing sharply.
- This may be a product of FAA and industry efforts to reduce runway incursions.

RELATIVE RATES



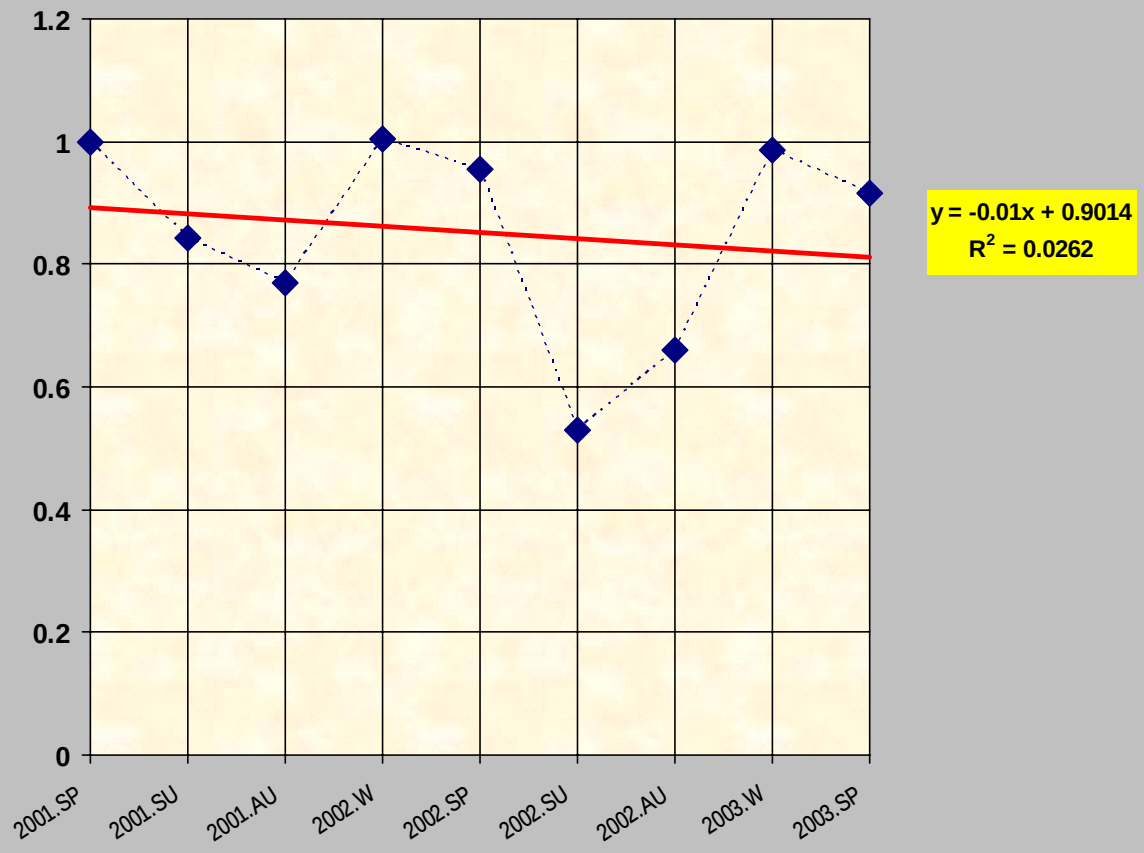
NAOMS EVENT RATE TRENDS

Preliminary Findings
For Internal Use Only

B:TU1 . . . . Severe Turbulence Encounter

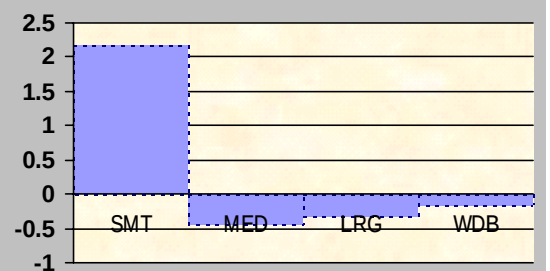
Level: 1

Normalized Rate per Million Flight Hours



- Possible seasonal effect?
- Small transport pilots primary reporters.

RELATIVE RATES



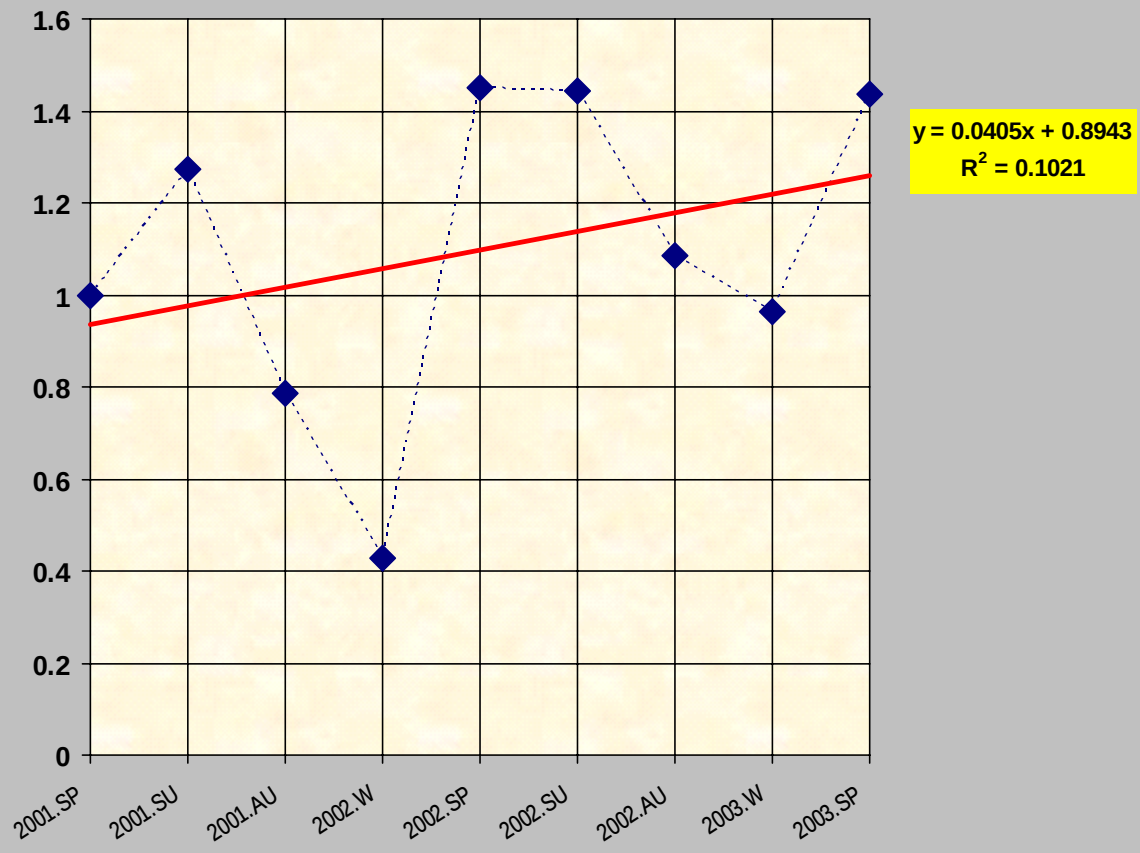
NAOMS EVENT RATE TRENDS

Preliminary Findings
For Internal Use Only

B:WE2 . . . ATC Denied Request to Circumvent Wx

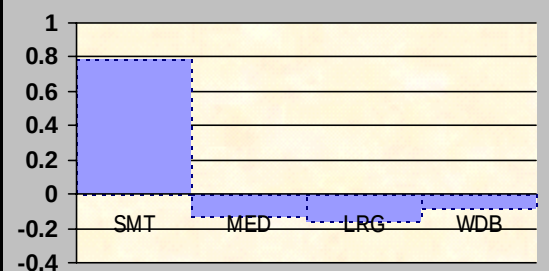
Level: 1

Normalized Rate per Million Flight Hours



- Possilbe 9/11 effect.
- Trend is flat or increasing slightly.

RELATIVE RATES



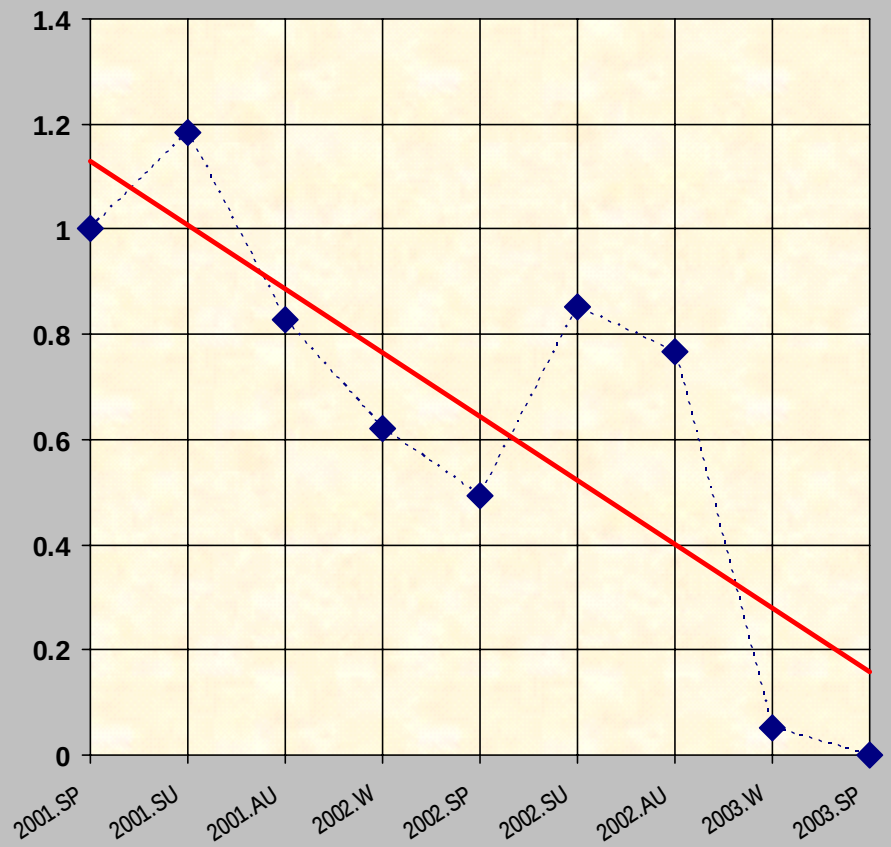
NAOMS EVENT RATE TRENDS

Preliminary Findings
For Internal Use Only

B:WE2A . . ATC Denied Request to Circumvent Wx; Emergency Invoked

Level: 2

Marginal Rate

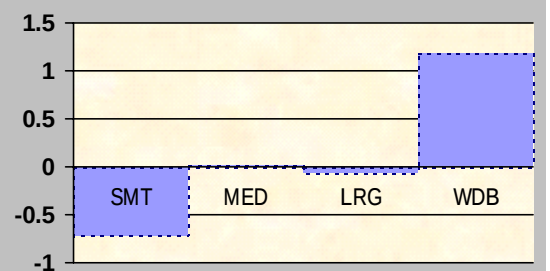


$y = -0.1214x + 1.2511$

$R^2 = 0.6806$

- Possilbe 9/11 effect?
- Seasonal patterns?
- Better ATC access to real-time wx information?

RELATIVE RATES



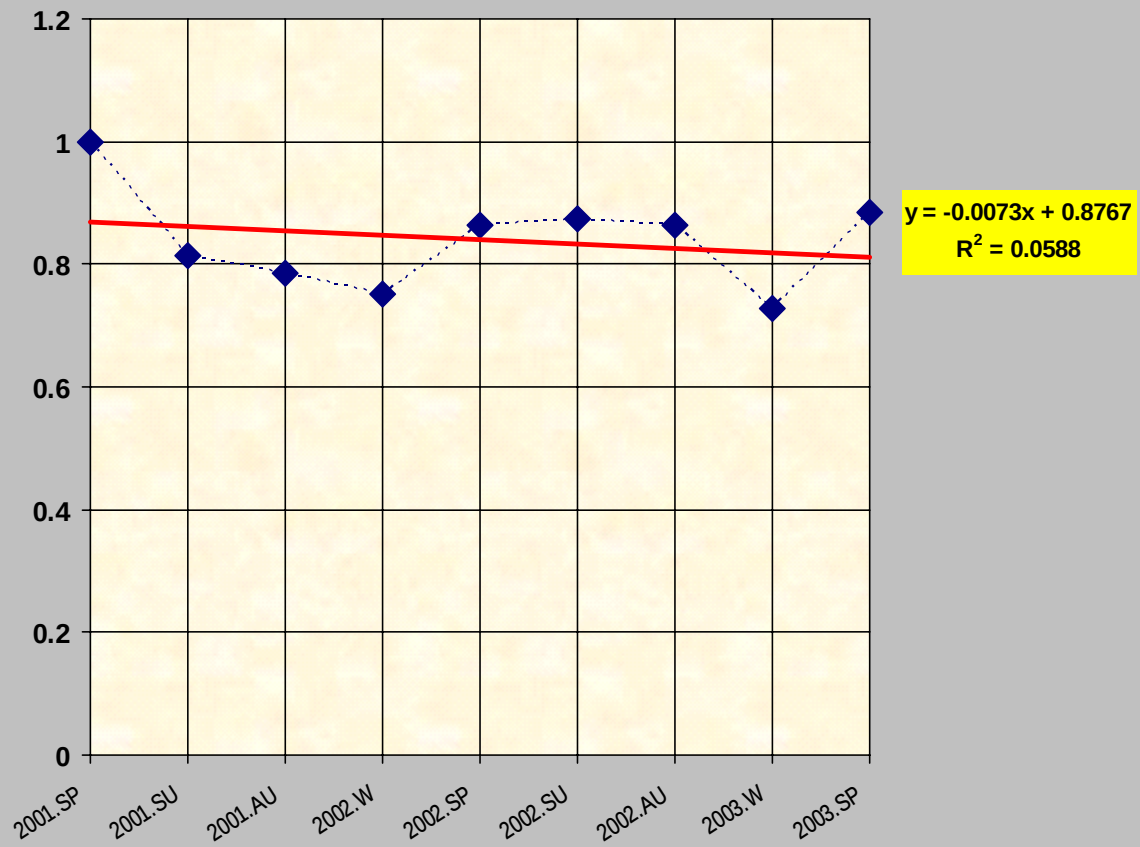
NAOMS EVENT RATE TRENDS

Preliminary Findings
For Internal Use Only

C:IC1 . . . . . ICAC Requests Received

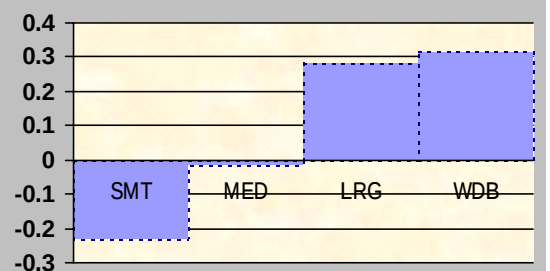
Level: 1

Normalized Rate per Million Flight Legs



- Trend is flat.
- Appears to be more common among large and WDB aircraft.
- May be associated with traffic congestion at large airports with multiple runway configurations?

RELATIVE RATES



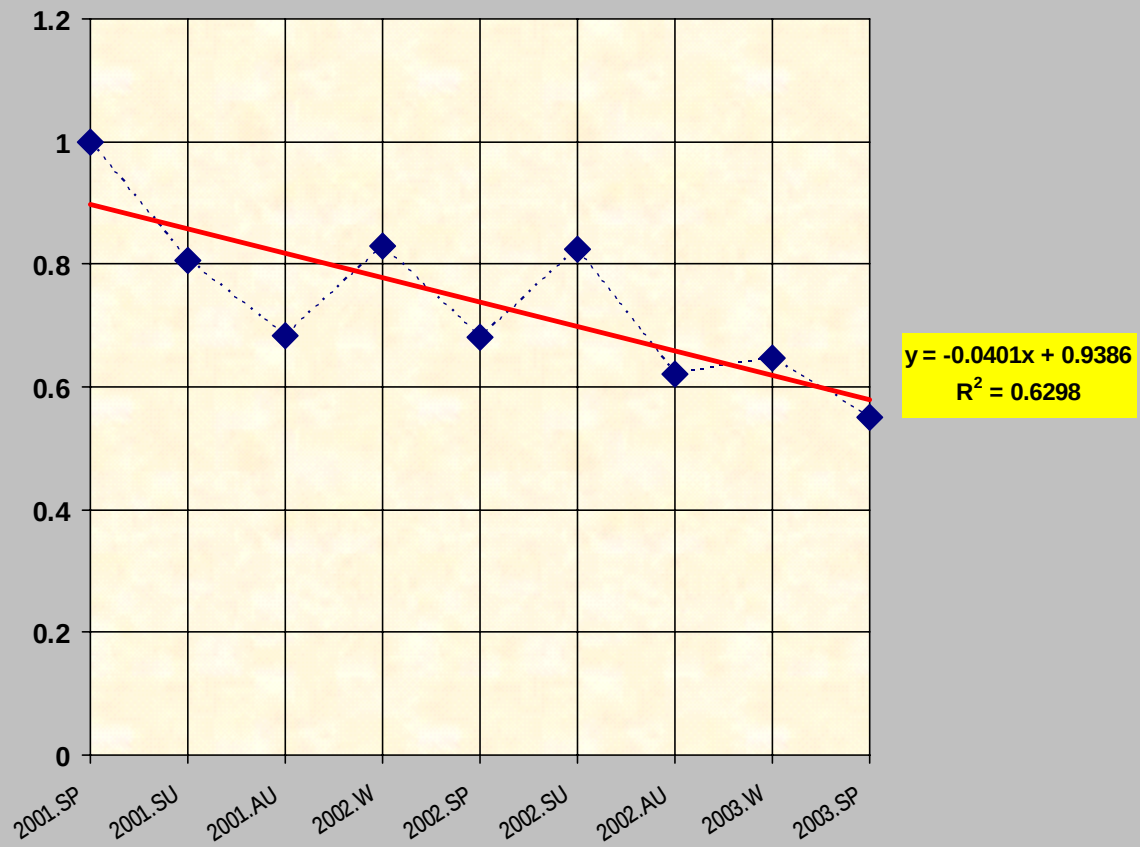
NAOMS EVENT RATE TRENDS

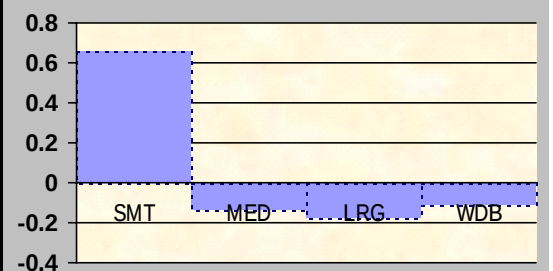
Preliminary Findings
For Internal Use Only

C:IC1B_07 Resulted in Landing Long or Fast

Level: 3

Marginal Rate



- Clear downward trend.

RELATIVE RATES