USATODAY.com 04/10/2001 - Travelers face a summer of discontent By Alan Levin, USA TODAY

Following last year's record-breaking gridlock in the skies, travelers have plenty of reason to worry this year. Labor strife at several airlines, more flights in an already crowded system and the usual summer thunderstorms could strangle the system, say more than 20 officials and aviation experts. But starting last fall, these same officials say, the Federal Aviation Administration and the airlines have worked together with an intensity born of the threat of public backlash and congressional punishment.

The result

A long list of improvements to keep jets flying on stormy days. The measures, which the FAA and the airlines say will take the edge off the worst days this summer, include: Allowing jets to swing wide of thunderstorms by flying through places previously off-limits such as military and Canadian airspace. This was supposed to happen last year but never got off the ground. Training thousands of FAA and airline employees to better handle delays. Officials want to improve communications throughout the system. For example, a controller in a field office could undermine efforts to reduce delays if he or she didn't understand the day's plan. Getting airlines and air traffic tacticians to stop last summer's blame game and cooperate. "I have to give the FAA kudos for this," says Jack Ryan, an air traffic expert with the airlines' trade group, the Air Transport Association. "I'm certainly optimistic that we can make a dent in the delays this summer." Ryan's caution comes from experience. The ATA has been an outspoken critic of the FAA's efforts to reduce delays, which have set records the past 2 years. And with that history, few officials are willing to predict a smooth summer this year, either. About one of every four flights last year was delayed, canceled or diverted to an alternate airport. Since bad weather is the single greatest cause, spring and summer thunderstorms complicate matters. Thunderstorms wreak havoc because jets must avoid them. And when they pop up east of the Rockies, especially in lines that stretch for hundreds of miles, they can hamper thousands of flights. For example, if jets heading from Chicago to New York must divert south to avoid storms in Pennsylvania, they clog airways that other jets need. Flights from Atlanta to Washington, D.C., could be delayed, even though the weather is clear between the two. That's why delays surge from May to October. But even the delay numbers don't show the real impact on travelers. New research provided to USA TODAY suggests that passengers were held up for far longer periods last summer than in previous years. Airlines had trouble rescheduling passengers because they canceled more flights and had fewer seats to spare. A missed connection at a hub airport could strand a passenger for hours, sometimes days.

'The week from hell'

Solving delays is also complicated by an aviation system that is near the breaking point. Agam Sinha, one of the nation's foremost experts on air traffic, jokes that it's unfair to say the system is running out of capacity. Iowa has plenty of capacity, he says, it's just that few people want to fly there. An analysis by The Mitre Corp. which is Sinha's firm and the FAA's research arm of a day last summer shows just how stressed the system is. On a day with no weather problems, air traffic slightly overloaded controllers at Newark International Airport. Controllers ordered 15

Newark-bound jets into circular holding patterns north and west of the airport. That blocked some of the normal routes into the New York area, which forced controllers to hold more jets. The initial request delayed 250 aircraft in 20 minutes. And when things really go bad, problems soar. On June 14, bad weather assailed the air traffic system for the fourth day in a row. Low clouds and rain hampered airports in the Northeast. Thunderstorms across the Midwest and mid-Atlantic caught FAA weather forecasters by surprise. Battered by the three previous bad days and flummoxed by inaccurate forecasts, air traffic strategists froze, a federal review says. Instead of acting early to thin traffic, FAA tacticians waited. When the storms arrived, air traffic managers had to slam on the brakes. Nearly 3,000 flights arrived more than an hour late that day, more than twice the summer season's average. Airlines canceled 1,800 more flights, over three times the average. In all, 14% of flights that day were significantly delayed, diverted or dropped entirely. "Day 4 of the week from hell," read a FAA log entry. "Somehow, each night tops the night before." A plan to give more control over handling delays to a national command center was supposed to help. But tension and miscues beset the effort. Ryan called FAA officials one day to angrily demand that they "let my people go." Flights were being held in anticipation of bad weather that did not materialize, he says. Jack Kies, the FAA's chief air traffic tactician, says some airlines added to problems by not keeping the agency informed during bad weather days. If an airline canceled flights but did not tell the FAA, other flights could not take their place.

Taking steps

After the dust settled last October, the FAA sponsored a one-week critique of the summer. After a lot of "venting," says one participant, suggestions tumbled out, including: Better training. Virtually everyone agreed that individual controllers and airline employees who plan flight routes occasionally made delays worse. Controllers holding jets in the wrong place can make dozens of other flights late. To avoid that kind of mistake, the FAA has trained more than 3,000 air traffic managers, controllers and airline dispatchers. By May 15, it will have trained all 15,000 controllers.

Alternate routes. Airlines say they want greater freedom to send jets toward banks of thunderstorms so that pilots can use their on-board weather radar to find openings to fly through. The FAA agreed, provided that jets can safely pass through gaps.

Better planning. The FAA realized that it needed to be better prepared to reroute flights quickly. The FAA "playbook" of alternate routes in the upper altitudes more than tripled over the winter. Similarly, air traffic planners added hundreds of alternate routes for jets flying lower around congested airports.

Freeing up airspace. The FAA announced plans a year ago to use airspace set aside for the military off the Atlantic coast on days when thunderstorms disrupted travel. But controllers found it difficult to route jets out to the ocean; military officials often didn't approve use of the area; and maps were never prepared for pilots. A year of work has eliminated those problems, officials say. A test of the new routes went off without a hitch on March 11. Similar plans to send jets through Canada fizzled last year. This year, Canadian air traffic officials have added additional equipment and manpower to handle the influx of flights.

Airline actions. After getting unprecedented complaints from passengers, airlines have responded with several steps to minimize delays' effects. United Airlines, for example, added spare jets to its standby fleet. In that way, it can put passengers on substitute jets instead of delaying or canceling flights. The result: Officials are cautiously predicting this summer could be better than last. "It won't be hunky-dory, but I think we'll be in better shape this summer, even with the increase in traffic," Transportation Secretary Norman Mineta said at a press conference.

Problems ahead

Despite these efforts, anyone stranded last summer has ample reason for skepticism. **According to research by Massachusetts Institute of Technology professor Cynthia Barnhart**, passengers who felt last summer was much worse than earlier years were right. The percentage of flights delayed since 1995 increased, but only slightly. Barnhart found that delays grew longer and far more disruptive. Flights that fell behind by at least 45 minutes nearly doubled from 1995 to 2000. At the same time, annual cancellations grew from 0.5% of all flights to more than 3.5%. Delay figures do not include cancellations. Delays soared for passengers changing planes at hubs. Longer delays meant more missed connections. With packed jets, it became harder to reschedule passengers on later flights. Using data from a large airline's schedule for 1 month last summer, Barnhart can predict how delays affect passengers at a hub. Of the unnamed airline's passengers, about 7% missed connections. A passenger's chances of being stranded roughly double in the summer when jets are filled to near capacity compared with slower travel seasons. The news is similarly grim on the growth in traffic and on the labor front. The FA projects that airlines will cram 2% more flights into a system that already handles more than 35,000 commercial flights a day an increase of about 700 since last year. At Chicago's O'Hare, the traffic figures have controllers worried. "We can't control the weather. We still have six runways at O'Hare. And we're actually working more traffic than we did last year," says Craig Burzych, the airport's air traffic control union chief. "Unless we have a mild summer, you're going to see the same thing or worse." And several of the nation's largest carriers face labor problems. Pilots of Comair, a Delta regional subsidiary, grounded that carrier March 26. On Monday, Northwest Airlines announced it had reached a tentative settlement with its mechanics union. In aviation, however, improvement efforts frequently yield unexpected consequences. Last year at Dallas-Fort Worth International Airport, for example, the FAA installed a computer system that helped controllers land an additional three to five planes an hour. But delays at the airport increased. It turned out that airlines, led by American, had added flights, which ate up the new computer's benefit. At all but a handful of airports around the country, airlines are free to schedule as many flights as they want. So whatever benefits accrue from FAA and airline cooperation could evaporate. "The bottom line is, nothing magic has happened since last year," **says John Hansman, an MIT professor who specializes in air traffic**. "We haven't gotten lots of new runways. We haven't invented a new way to do air traffic control."