The authors selected the following events because of their significant effect on aviation during the 1990s from a North American perspective. Comments and background on each item follow the list.

1. Rise Of Southwest
The helplessness of major carriers to stop the inexorable rise of Southwest and its European clone, Ryanair, and the failure of other startups or majors to emulate the low-cost, high-profit Southwest model.

2. Change In Players
The permanent demise and liquidation of Juan Trippe’s original Pan Am and Eddie Rickenbacker’s Eastern, and the incredible shrinking act of TWA.

3. New-Airline Effect
The second wave of new-airline entry, punctuated by the rise of ValuJet, the far-reaching power of the ValuJet 592 crash in stifling startups, the subsequent recovery of AirTran and the latest wave of startups, together with new government concern and a threat of deregulation, based largely on alleged mistreatment of these startups by major carriers.

4. Infrastructure Crisis
The unraveling of aviation infrastructure and the contrast between the success of newly privatized Nav Canada and political paralysis over air traffic control reform and privatization in the U.S. and Europe.

5. Major Crashes
Three successive transatlantic crashes of flights that departed from New York Kennedy Airport: TWA 800, Swissair 111 and EgyptAir 990, and the coincidence of two 737 crashes, one by United and the other by then USAir.

6. Burgeoning Alliances
Growth of international airline alliances and the accompanying proliferation of bilateral open-skies agreements, further strengthening inland hubs at the expense of coastal gateways and creating unforeseen frequencies on hub-to-hub funnel routes, such as Detroit-Amsterdam and Chicago-Frankfurt.

7. Fractionalization Of Routes
The continued fractionalization of airline routes everywhere, leading to operation of more routes and frequencies with smaller airplanes — the Boeing 767/777 and the Airbus A330/A340 are replacing 747s on the Atlantic and the Pacific, dooming the A3XX that no one needs or wants.

8. Open Skies
North American open skies, with regional jets flying many new transborder, point-to-point routes from Canada, and U.S. airlines using RJ’s to spread their networks into provincial Mexico.

9. New Routes
A push for frequency as the A319/320 and the Boeing 737 open thin transcontinental routes and the RJ creates once-improbable routes to spoke cities from large and medium-sized hubs, greatly increasing service frequency and competition to the spokes.

10. Travel Agent Squeeze
The distribution squeeze on travel agent commissions and the emergence on the Internet of computer reservations system substitutes, such as Travelocity.com, and innovative new fringe operators, such as Priceline.com.

Commentary

(1) In 1989, Southwest was not counted among the major airlines. A few months from now, in the year 2000 or 2001, Southwest will surpass Delta to become top-ranked in number of domestic departures. Southwest’s growth was achieved without changing its brilliant, low-cost operating model, developed for the intra-Texas market almost 30 years ago. Majors and startups alike envy the Southwest model but cannot duplicate it because it depends not on one silver bullet but on the combination of consistent adherence to a single aircraft...
Top 10 (Cont.)

type, fast turnarounds, reliance on secondary or satellite airports, a balance between in-house and outsourced maintenance and a carefully nurtured employee culture that has landed Southwest firmly in the top 10 "best places to work." Perhaps the biggest surprise of the 1990s was the failure of any startup within the U.S. to achieve a cost structure that even approaches Southwest's, and the fact that the most successful Southwest clone is not a U.S. carrier but Ireland's Ryanair.

(2) At the start of the 1990s, Texas Air was one of the largest airlines in the U.S. Pan Am and TWA carried 64% of all transatlantic traffic of U.S. carriers. But neither had earned one dime in the previous decade, and almost everything of value had been sold, including Intercontinental Hotels, the Pan Am building, and Pan Am's Pacific division. Having given up its prized position at Tokyo Narita Airport in 1986, Pan Am sold its equally valuable London Heathrow slots in early 1991, and TWA soon followed. Pan Am stopped flying in late 1991, and today's TWA is a shadow of its former self, flying one-quarter of its 1989 Atlantic traffic. The discredited hierarchical and misguided management philosophies of Pan Am and Eastern accounted for the plurality of airline failures, older, established airlines and new startups alike, in the 1990s.

(3) Few events change an entire industry like the success of ValuJet in the early 1990s and its subsequent demise. Even though its costs were not especially low, ValuJet had Delta scrambling to defend its fortress Atlanta hub, as ValuJet managed to maintain high yields by nibbling away at Delta's business traffic. The managers at ValuJet were brash and successful, and they followed their own model, not Southwest's. They did not want to be listed on a CRS, they did not care for travel agents, and Wall Street rightly awarded them with more favorable press than any other startup airline. They went into more than 50 markets and retreated from only two.

The success story came to an untimely end with the crash of ValuJet 592 in May 1996, arousing wide-spread opposition to low-cost startups. Not only was ValuJet under attack, but FAA nearly collapsed under the pressure. The industry had to endure a 90-day investigation of FAA, the result of which was that $2 billion was spent on airport security, which had nothing to do with the ValuJet crash. The FAA decided to change the way it monitored startups, but it took two years to put new rules in place, further repressing startups. DOT, meanwhile, not noticing that the hiatus in startup activity was a creation of the FAA, blamed the problems of startups on alleged "predatory" pricing activity by the major airlines. Fortunately, since 1998, startup activity has taken off again, and a consensus has emerged that startup difficulties in the past were caused not by the major airlines but by undercapitalization, poor management strategy, and government constraints on the availability of slots and gates.

(4) Next to the handling of the ValuJet crash and its aftermath, infrastructure ranks as the outstanding public policy failure of the 1990s. Since there were no Presidential commissions on the airline industry in the 1980s, a new observer would have been astonished by the large number of commissions in the 1990s, plus the continuing failure of the FAA to install modern equipment and to establish a separate public or private corporation to manage ATC efficiently. In Europe, matters were even worse, with no progress toward achieving a unified European-wide ATC network. Europe moved even closer to gridlock than the U.S., with delays running above 30% in 1999. The only ray of hope was the willingness of the DOT to open a few slots at Washington National and New York LaGuardia airports, representing perhaps 1/1000 of one percent of domestic capacity.

(5) The most notable crashes of the 1990s from the U.S. viewpoint seemed to contradict the assumption that the most dangerous parts of air travel...
Top 10 (Cont.)

were takeoff and landing, especially in stormy or windshear conditions. The most publicized crashes occurred in mid-air, including the three ex-JFK Atlantic crashes and the two 737 crashes thought to be related to rudder problems. Another change came in the nature of publicity and media attention to airline crashes. Round-the-clock coverage of air crashes and search/salvage efforts of the Atlantic crashes by CNN and other cable TV news media seemed to imply that there was an audience out there that loves air crashes. Significant damage was done to sales at USAir and TWA after their crashes, and the ValuJet crash led to the shutdown of that airline.

(6)-(9) These items summarize the structural changes in both domestic and international routes, few of which were foreseen in 1989. In that year, TWA and Pan Am dominated Atlantic traffic, and all international traffic going beyond the initial foreign destination was carried on interline tickets that did not reflect favoritism or price advantages for particular carriers. The Northwest-KLM alliance in 1992 paved the way for double connections to be carried over hub-to-hub “funnel routes,” such as Detroit-Amsterdam (on which the carriers have announced five daily frequencies for summer 2000), with coordinated pricing that pried passengers away from independent, interlining carriers, and other alliances soon followed. American and TWA, which were not aligned with a dominant European carrier in a particular country, were forced to withdraw from many routes. The shift from coastal gateways to interior hubs, plus the change from 747s to smaller widebody aircraft, started in the 1980s by American and Delta, gathered steam in the 1990s.

Within the domestic U.S. market in 1989, it appeared that the domestic industry dynamic was to build more medium-sized hubs like Dayton, San Jose, Nashville and Raleigh/Durham, but these soon were abandoned, at least by the traditional majors. Many of the thin routes flown from the abandoned hubs have since been reincarnated by regional jets, and RJs have added many new hub-to-spoke and point-to-point routes as well, much to the benefit of customers in small spoke cities, which now enjoy competitive service to multiple hubs. RJs are tipping the balance among large domestic carriers, exemplified by the substantial advantage achieved by Delta and Continental, which thus far have escaped tight scope-clause limitations on the numbers of RJs their regional affiliates can fly.

(10) The malaise of travel agents and rise of the Internet were of only marginal importance in the 1990s (except from the point of view of bankrupt travel agents and the lucky shareholders of Priceline.com). By 1999, Internet sales totaled only a small fraction of total sales, although this will doubtlessly change in the next decade. While yield management in the 1980s had a role in undermining People Express, in the 1990s new methods emerged for undercutting the price structure, among them e-fares offered by airlines only over the Internet and the “name-your-own-fare” gimmick of Priceline.com. In 1989, lower-than-published fares were the domain of consolidators and, with few exceptions, were available only on international routes.

It was inevitable that travel agent commissions would eventually catch the cost-cutting eyes of airline CEOs, but few would have guessed that the beginning shot in the distribution wars would be Delta’s capping commissions at $50. A succession of squeezes brought commissions down to the current level of five percent, about the same cost as an airline processing a reservations directly. The real pressure will not come from the airline’s internal reservations systems, however, but from the Internet. Compare the average cost of almost $30 per transaction for travel agents before the caps and cuts with a staggering low $5 per transaction on the net.

Just as Southwest’s low costs led it to dominate any route it chooses to fly, so the low costs of Internet transactions will inevitably lead to a two-tier market in which price-sensitive leisure travelers increasingly shift from travel agents to some combination of airline web sites and third-party travel booking providers, while last-minute business travelers continue to rely on the knowledge and convenience of telephone booking through corporate travel departments and travel agents.

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