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Annual Privatization Report 2010: Air Transportation

By Robert W. Poole, Jr. Edited by Leonard Gilroy



Reason Foundation



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Part 1

Airport Privatization

A. Introduction/Overview

Airport privatization began in 1987, when Margaret Thatcher's government privatized (via a 100% public stock offering) the former British Airports Authority (now BAA). In the two decades since then, governments in Europe, Asia, Australia and New Zealand, Latin America and the Caribbean have privatized major airports. In many cases, these privatized entities have gone on to acquire full or partial ownership interests in other airports (both in their own country and elsewhere), as have some government-owned airports. Thus, today's global airport industry is often characterized by airport groups, rather than just individual airports.

Table 1 is excerpted from a table of the world's 100 largest (by revenue) airport groups. Of these 100 largest airport entities, 30 are either fully or partially owned by investors. In cases of partial privatization, either a minority or majority stake is held by the national, regional or local government entity in which the airport is located. A number of these global airport groups also manage overseas airports, on a contract basis, without actually obtaining an ownership share. Several smaller airport companies (e.g., Hochtief Airport, Infratil, Peel Airports) had 2008 revenues below the threshold for inclusion in the top 100, so are not included in the table. Another major player, the airport fund MAP (Macquarie Airports), is not included either, but its major airport holdings (Sydney, Copenhagen, Brussels) are included.

Table 1: Largest Privatized Airport Groups						
Airport Group	Global Rank*	Main Airports	2008 Revenue (\$M)	Privatization		
Ferrovial	1	London Heathrow and Stansted	\$4.860	Full		
Aeroports de Paris	3	Paris DeGaulle and Orly	\$3.712	Partial		
Fraport	4	Frankfurt	\$3.086	Partial		
Aeroporti di Roma	22	Rome Fiumicino and Ciampino	\$837	Full		
Flughaven Wien	24	Vienna	\$805	Full		
Unique	25	Zurich	\$797	Full		
Airports of Thailand	27	Bangkok	\$687	Partial		
Southern Cross Airports	28	Sydney	\$679	Full		
Beijing Capital Airport Group	29	Beijing	\$668	Partial		
Flughaven Dusseldorf	33	Dusseldorf	\$614	Partial		
Copenhagen Airports	34	Copenhagen	\$613	Full		
Brussels Airport Co.	35	Brussels	\$569	Full		

Table 1: Largest Privatized Airport Groups						
Airport Group	Global Rank*	Main Airports	2008 Revenue (\$M)	Privatization		
Athens International Airport	40	Athens	\$536	Partial		
Malaysia Airports Berhad	45	Kuala Lumpur	\$454	Partial		
Abertis	47	London Luton, Cardiff	\$442	Full		
Guangzhou Baiyun International	48	Guangzhou	\$440	Partial		
Australia Pacific Airports	49	Melbourne	\$406	Full		
Airports Company South Africa	56	Johannesburg, Cape Town	\$360	Partial		
Brisbane Airport	58	Brisbane	\$356	Partial		
Flughafen Hamburg	61	Hamburg	\$341	Partial		
Grupo Aeroportuario del Pacifico (GAP)	64	Guadalajara, Tijuana	\$312	Full		
Aeropuertos Argentina 2000	65	Buenos Aires (EZE and AEP)	\$306	Full		
Aeropuertos Del Sureste (ASUR)	70	Cancun	\$283	Full		
Auckland International Airport	72	Auckland	\$270	Partial		
GMR Infrastructure	76	New Delhi	\$259	Partial		
Hannover-Langenhagen	81	Hannover	\$213	Partial		
Operadora Mexicana de Aeropuertos (OMA)	88	Acapulco, Monterrey	\$178	Full		
Save Aeroporto Marco Polo	90	Venice	\$166	Full		
Westralia Airports	91	Perth	\$164	Full		
Adelaide Airport	96	Adelaide	\$127	Full		

Source: "Financial Rankings 2008," Airline Business, December 2009.

In 2010 the company that produced the comprehensive *World Airport Privatisation 2008* report was merged into Big Pond Aviation (www.bigpondaviation.com), which has developed a comprehensive, new Global Airport Investors Database offering details on airport companies, previous investments, failed or lapsed bids and recent financial results.

Despite the credit market crunch of 2008–2009, the airport market seems to have entered a recovery phase, with several major transactions having taken place in 2009–2010. An article in the April 2010 issue of *Infrastructure Investor* suggested that airport prospects vary, depending on which region and markets they serve, what competition they face (e.g., from government-subsidized high-speed rail), and the uncertain degree to which government policies on greenhouse gas reduction may impact the growth of air travel. A Reuters article in June 2010 quoted Fraport's CFO as saying the company is looking for acquisitions, given the bargain prices he predicted airports would sell for in the current market. Before the credit market crunch, he said, airports were valued at 25 times earnings before interest, tax, depreciation, and amortization (EBITDA), but are now at 10 times EBITDA. While that might make government airport owners less eager to privatize, it does suggest a ready supply of would-be acquirers.

In 2008 an important empirical study of airport ownership alternatives was published in the *Journal of Urban Economics*. In "Ownership Forms Matter for Airport Efficiency," Professor Tae Oum and colleagues did a statistical analysis of 109 airports worldwide with a variety of ownership forms. Comparing the airports on a measure of economic efficiency, their analysis found that

airports with investor (or majority-investor) ownership or that have been corporatized are more efficient than those with either traditional government ownership or port authority ownership.

B. U.S. Airport Privatization

1. Airport Privatization Pilot Program

The federal Airport Improvement Program imposes economic regulation on U.S. airports in exchange for annual grant funding. Those regulations preclude airport privatization, because they require all "airport revenues"—including proceeds from a lease or sale—to be reinvested in the airport (or airport system) that generates them. That means a city, county or state that wishes to lease or sell its airport would receive zero financial benefits from so doing. The regulations also prohibit any airport operator (including an investor-owned airport company) from taking any profits off the airport, which means such a company would have no incentive to acquire a U.S. airport.

Responding to growing interest in airport privatization from mayors and other public officials, Congress in 1996 created a limited set of exceptions to these regulations. Under the Airport Privatization Pilot Program up to five airports can apply to the Federal Aviation Administration (FAA) for permission to lease their airports on a long-term basis and transfer the lease proceeds to the general government budget. And the acquirer is allowed to seek profits by operating the airport efficiently. One "slot" in the program is reserved for a general aviation (private plane) airport, and only one of the remaining four can be used for an airport meeting FAA's definition of a "large hub." In order for an airport to be privatized under the Pilot Program, the lease agreement must receive the approval of both (1) 65% of the airlines that provide scheduled service at the airport, and (2) airlines that account for 65% of the annual landed weight (on which landing fees are based) at that airport.

In 2009, the big news was the expected lease of large hub airport Chicago Midway for \$2.5 billion. But by the April deadline to reach financial closing, the winning bidder abandoned the deal, unable to obtain financing. In hindsight, analysts point out that in light of recession-reduced air travel and the general reduction in airport valuations during the credit crunch, the \$2.5 billion bid was excessive. After the dust settled, Chicago applied for and received from the FAA several extensions of its application, the latest of which expires in July 2011. It is expected that the city will try again, although the timing remains uncertain. There was talk that Mayor Daley would wait to pursue it until after his expected re-election in February 2011. But his decision not to run again has left observers uncertain as to the status of Midway privatization. As of mid-2010, no other applicant for the large-hub slot has come forward, so Chicago will likely retain that slot if it continues to pursue privatization.

Despite failure of the initial deal, the Midway exercise had very positive value for U.S. airport privatization, since it led to a pro-forma long-term lease agreement that garnered the required two-

part 65% support from the relevant airlines. As the anchor tenant at Midway, Southwest led the negotiations with the city, and Southwest's Property Manager, Amy Weaver, has said that the terms of the deal "set the pace, process, and expectations for future U.S. privatization discussions."

During the past year, two other commercial airport slots in the pilot program have been approved, for New Orleans Louis Armstrong International Airport and for San Juan's Luis Munoz Marin International Airport. Little new information has emerged about New Orleans since the election of Mitch Landrieu as mayor in the spring of 2010; former mayor Ray Nagin was a supporter of privatizing the airport. Puerto Rico's Public-Private Partnerships Authority is moving ahead with its airport privatization effort, hiring Credit Suisse as its financial advisor and Mayer Brown as its legal advisor on that program.

The list of potential U.S. airport privatizers continues to evolve. In January 2010 Maryland Gov. Martin O'Malley said the state would be open to offers for Baltimore-Washington International Airport, but no subsequent actions appear to have been taken. That same month a list of potential budget-gap closing measures from the mayor and five city council members in Los Angeles included Ontario and Van Nuys Airports on a list of possible privatization candidates. The city of Ontario itself has asked Los Angeles to consider selling the airport back to it, and airport tenants at Van Nuys have suggested turning over that large general aviation airport to a company that might manage it better than the city's airport agency.

In the spring of 2010, the city of Detroit requested proposals from the private sector to manage and revitalize Detroit City Airport, a close-in airport that once had airline service. The request made no reference to the federal Pilot Program. Gary, Indiana's mayor suggested that privatization be considered as a way to revitalize that city's airport (which also currently lacks airline service), but that proposal was not included in the airport's first-ever business plan, unveiled in May 2010. The plan calls for lengthening the runway and focusing on building a niche market for charter leisure air service.

Nothing more has been heard from a number of other cities where airport privatization had been proposed by one or more public officials in 2008 or 2009: Austin, Hartford, Jacksonville, Kansas City, Long Beach, Milwaukee and Minneapolis/St. Paul.

The general aviation slot in the Pilot Program was requested by Gwinnett County, Georgia early in 2010 and its preliminary application was approved by the FAA in May. The airport in question is Briscoe Field, a busy general aviation airport in this affluent Atlanta suburb. Privatization was proposed to county officials by a company called Propeller Investments, which hopes to win any subsequent bidding and develop the airport into a mini-hub for short-haul airline service by planes up to the size of 737s and A320s. Local public opinion appears mixed, with some welcoming an alternative to the long drive to Atlanta Hartsfield-Jackson International Airport and others opposed to the increased traffic and noise that commercial air service would bring.

While local privatization activity continues, Congress struggles to pass the long-delayed (since 2007) bill to reauthorize the FAA. The House version includes anti-privatization language from the former chairman of the House Aviation Subcommittee, Rep. Jerry Costello (D, IL). One section of the House bill would exclude airports leased under the Pilot Program from receiving federal Airport Improvement Program grants—even though passengers using such airports would continue to be charged the airline ticket tax which funds that grant program. In addition, it would increase the airline approval requirement (of the terms of the lease) from the current 65% to 75%. These measures are clearly intended to make airport privatization more difficult to carry out and less attractive to all parties. The Senate bill has no comparable provisions.

2. Airport Contract Management

In all the debate over long-term leasing of airports, many people remain unaware that the private sector has been managing various U.S. airports for decades. A number of firms operate and manage general aviation (GA) airports (those without scheduled airline service). Besides those cases, U.K. firm TBI (now owned by Abertis) still operates Burbank and the terminals at Orlando-Sanford. Avports Management operates Albany, Atlantic City, New Haven, Stewart (NY) and Westchester/White Plains, in addition to a number of GA airports. Avports is the direct descendant of Pan Am World Services, which dates back to the early days of Pan American World Airways. It was subsequently owned by Johnson Controls, then American Port Services, and more recently by Macquarie Aviation. It was most recently acquired by Virginia-based Aviation Facilities Co. (AFCO).

A new wrinkle on GA airport privatization took place in mid-2009 when the FAA approved a 50year lease-management contract for the Oceanside, California airport. The acquiring company is Airport Property Ventures, run by two veterans of the management at Los Angeles International (LAX) and a co-founder of American Airports Corp. Generally speaking, an outright lease would have to be handled via the Pilot Program, but in this case the terms of the original deal were modified in ways that allowed it to go forward outside the program. APV's focus is to maximize the value of airport real estate.

3. Privately Owned Airports

A brand new privately developed airport opened in May 2009 in country music haven Branson, Missouri. A group of entrepreneurs created Branson Airport LLC, acquired a suitable parcel of land in Branson, received airspace approvals from the FAA, and raised \$155 million. With that, they created a one-runway airport with a contractor-operated control tower and a modest terminal building. Because the airport used no federal grant funds, it is not constrained by the usual FAA grant agreements. It is offering airlines two-year exclusive rights to link specific cities to Branson. As of mid-2010, Branson has signed up AirTran for exclusive service to and from Atlanta and Milwaukee, Frontier serving its hub in Denver, and Sun Country serving Minneapolis-St. Paul. In addition, the company has created its own airline, Branson AirExpress, which as of mid-2010 provides service to an additional eight cities.

Another would-be private airport is still trying to get off the ground—the third Chicago airport at Peotone, 40 miles south of the Loop. For more than a decade, the local business community, outside consultants and the Illinois DOT have been promoting the airport as the answer to the need for additional airport capacity in the greater Chicago area. While the initial concept was more like Branson, it has evolved into a public-private venture, in which the state DOT is acquiring and will own the land and be responsible for the airside (runways, taxiways, control tower) while the private sector would finance, develop and operate the landside (terminal, parking, etc.). Along the way, Rep. Jesse Jackson (D, IL), who represents much of the South Side of Chicago, has become a champion of the airport. In March 2009, Gov. Pat Quinn renewed the state's commitment to getting the project done, and the 2010 state budget included \$100 million to acquire the remaining parcels of land needed for the airport. The airport is close to the route of the planned Illiana toll road, which both Illinois and Indiana have committed to build.

C. Global Airport Privatization

1. Canada

Although the Canadian government a decade ago claimed to have "privatized" the country's main commercial airports, what the federal government actually did was to divest them to newly created local airport authorities. Other than that, there has been no real airport privatization in Canada, apart from a public-private partnership that developed the new Terminal 3 at Toronto's Pearson International Airport in the late 1980s and contract management of the Hamilton International Airport in the suburbs of metro Toronto. Under the management of Tradeport International, Hamilton has become the 15th largest in passenger enplanements in Canada, as well as a significant cargo airport. In January 2010, a city council member suggested that the city study selling the airport and using the proceeds to upgrade aging city infrastructure. In April, the city advertised seeking expressions of interest.

2. Europe

Late in 2009, following an earlier unsuccessful bidding round, Ferrovial/BAA sold Gatwick Airport to Global Infrastructure Partners for \$2.47 billion. The sale had been forced on BAA by the U.K. Competition Commission, which called for breaking up BAA's near-monopoly on Londonarea service by requiring divestiture of two of its three airports there. BAA put Gatwick on the market while filing legal appeals of the breakup decision, and has taken no further steps to divest airports, either Stansted or one of its two Scottish airports, pending resolution of its appeals. Gatwick purchaser Global Infrastructure Partners (GE and Credit Suisse) is the investment fund that owns London City Airport and a number of other infrastructure enterprises. The price of the transaction slightly exceeded the government's "regulatory asset base value" of Gatwick (\$2.33 billion). Subsequent to GIP's purchase, it was able to sell minority interests to two pension funds: South Korea's National Pension Service (12%) and CalPERS from California (12.7%), and a 15% stake to the Abu Dhabi Investment Authority (a sovereign wealth fund). GIP has also announced plans to invest \$1.5 billion in upgrading Gatwick.

Elsewhere in the United Kingdom, Vancouver Airport Services (VAS) announced in June 2010 that it had acquired a 65% stake in Peel Airports Ltd.'s three British airports—Liverpool John Lennon Airport, Robin Hood Airport Doncaster/Sheffield, and Durham Tees Valley Airport. VAS is owned by the Vancouver Airport Authority and Citi Infrastructure Investors, and has a global portfolio that now includes 19 airports on three continents.

Apart from Gatwick, the biggest news in European airport privatization was Fraport's \$1.6 billion deal for St. Petersburg's Pulkovo Airport, Russia's fourth-largest airport. Under the 30-year concession agreement, Fraport and partners Copelouzos Group and Russian state bank VTB will build a new terminal capable of handling up to 25 million annual passengers by 2025, expand the terminal's apron area, and develop airport real estate. The partners are putting in 37% as equity with the rest being borrowed from Russian and international financial institutions. Contrary to some news reports, this is not the first airport privatization in Russia. Moscow's Domodedovo airport is operated by the Eastline Group under a 75-year lease, and in October 2009 Russia's Transport Ministry announced that it intends to privatize Moscow's Sheremetyevo airport, with that deal to include adding a third runway. And in July 2010, Prime Minister Putin announced that the government wants to "turn aviation infrastructure into a prospective and attractive platform for investment."

Only a handful of other airport deals appear to be in the pipeline in Europe, as of mid-2010. The financially troubled Greek government announced in June that it plans to sell its remaining 55% stake in Athens airport (the balance of which is owned by Hochtief and the Australian Infrastructure Fund). One estimate of the deal's value was €1 billion (about \$1.3 billion as of this writing). Czech politics appear to have killed for now the long-planned privatization of the Prague airport; the lower house of parliament approved a bill requiring the airport to be owned either by the state or by a company owned by the state. And recently independent Kosovo reached a 20-year, €100 million concession deal with Lyon Airport (France) and Limak Investments (Turkey) for its main airport in Pristina.

In June Ferrovial made public its intention of selling its stake in the Naples airport, and Reuters reported that the company had received offers in the range of \in 150-200 million. Crete has announced plans to privatize its Castelli airport, and it hopes to receive something close to \in 1 billion. On the lower end of the scale, Sweden's LFV Group (spun off from the country's air navigation service provider) seeks to sell six smallish airports, and Northern Ireland's Derry has sought expressions of interest from potential purchasers of its airport. At the upper end of the scale, Portugal's plan for a new \in 5 billion airport for Lisbon, to be developed as a public-private partnership, has been put on hold due to the government's financial difficulties.

3. Latin America and the Caribbean

Unlike Europe, where the principal mode of airport privatization has been the sale of partial or 100% ownership stakes in airports, in Latin America the long-term concession model has prevailed. That trend was discussed in the keynote speech at an Airports Council International conference in November 2009 in San Salvador, Brazil by outgoing ACI-World chairman James Cherry. He presented a set of ACI guidelines for such agreements, which include:

- Clarify the government's roles and responsibilities to ensure that regulations will not hinder airport operators from adapting to market conditions;
- Ensure a reasonable sharing of risks between public and private partners;
- Create a neutral, independent regulatory body to enforce the terms of the concession agreement;
- Implement special measures, as needed, to ensure that the concession deal can be financed.

Increasingly, airport operators in one Latin American country are branching out into other countries. For example, Airports Argentina 2000 has developed the Carrasco airport in Montevideo, Uruguay. Brazil's Andrade Gutierrez Concessoes is one of four partners (along with Aecon and ADC of Canada and HAS Development Corp. from the United States) in Quiport, the company developing the new Quito, Ecuador airport under a concession agreement. HAS Development is a for-profit division of the Houston Airport System, a government airport authority. It has developed and helps operate a number of overseas airport concessions projects, often with ADC and increasingly with Canadian pension fund OMERS.

Brazil seems likely to be the new frontier for South American airport privatization, as the government gears up to modernize both Rio de Janiero's Galeao International and Sao Paulo's Viracopos. The country will host the World Cup in 2014 and the Summer Olympics in 2016. Mexico's three privatized airport companies (ASUR, GAP and OMA) now operate 35 airports. The Mexico City airport is still state-owned, but the government is reportedly considering privatization options. GAP received government approval for a capital improvements program over the next five years at its 12 airports, with the largest investments planned for Guadalajara, Los Cabos and Puerto Vallarta.

Jamaica several years ago privatized its major tourist airport—Sangster International, in Montego Bay—via a 30-year build/operate/transfer (BOT) concession. Based on the success of that privatization, the government wants to do the same thing for its other major airport, Norman Manley International in Kingston. In March 2010 it named a committee to develop the plans and timetable.

4. Asia/Pacific

India's three greenfield airports developed under long-term concessions (at Bengaluru, Cochin and Hyderabad) have been successful, leading the government to authorize several more: at Kannur in Kerala, at Mopa in Goa, and a cargo airport near Jaipur. The Bengaluru airport has introduced a number of firsts to India, including a heavy emphasis on common-use infrastructure: ticket counters, gates and IT are all common, enabling the airport to flexibly manage capacity and reduce costs. The greenfield cargo airport near Jaipur will emphasize no-frills low-cost operations, which are rarely available to air cargo carriers in India. Major milestones have occurred on the long-term concession projects to modernize the congested airports at New Delhi and Mumbai. A third runway was opened at the former in 2008, and its huge new Terminal 3 opened in July 2010. The Delhi concession is a joint venture of GMR Infrastructure, Fraport, Malaysian Airport Holdings and the Airport Authority of India. (GMR, incidentally, has recently won a 20-year concession to modernize the Male International Airport in the Maldives.) The Mumbai airport concession-holder is a joint venture of GVK (India) and ACSA (South Africa).

Air travel continues its rapid growth in China, and to help meet the demand for airport capacity the government has gradually lifted restrictions on foreign investment in airports (now up to 49%). Among those taking partial stakes in various airports have been Aeroports de Paris, Changi International, Copenhagen Airports, Fraport and the Airport Authority of Hong Kong. Both AdP and Copenhagen Airports have since withdrawn from their minority stakeholdings in Beijing Capital and Hainan Meilan airports, respectively, but Fraport remains committed to China and is seeking new opportunities. The planned initial public offering of Hong Kong International, first planned for 2006, still has no revised date.

Singapore's highly regarded Changi International Airport was corporatized in 2009 and continues as an active investor in overseas airport concession projects. South Korea's Incheon Airport was announced as a privatization candidate in August 2008, but the government held off during the credit market crunch. Observers now expect an initial public offering of up to 49% in either 2010 or 2011. The Philippines is also expected to privatize the airport terminal at Caticlan.

Nearly all of Australia's airports were long-term leased in the late 1990s, culminating with Sydney in 2002. But the state-owned airports in Queensland—Brisbane, Cairns, Mackay and Mount Isa—were not. In 2008 Queensland sold Mackay to a consortium of private interests and later sold part-interests in Brisbane and Cairns. And Australia's federal government has begun the process of seeking a site for a second airport to serve the Sydney region, since expansion of single-runway Sydney International has been ruled out.

Part 2

Airport Security

In a 2009 report prepared for the OECD's International Transport Forum, Reason Foundation's Robert Poole found many parallels in the aviation security policies of Canada, the European Union countries and the United States. In all three cases, policy changes were driven by hijacking incidents, especially after the 9/11 attack on the United States. In all three cases, there is much rhetoric about the importance of risk-based policies (i.e., allocating resources in ways that reflect the risks and benefits), but instead major policy decisions made for political reasons, with little evidence of the practical application of such risk-based analysis. This is particularly the case for passenger and baggage screening.

A. Passenger and Baggage Screening

Poole and other security researchers find that a general policy of "target-hardening," unless done in a flexible and ever-changing manner, is a losing proposition, since advanced societies are inherently target-rich environments, whereas terrorists present governments with a miniscule number of targets. There is greater leverage in intelligence and interdiction efforts than in target-hardening. Nonetheless, since air transportation seems to be an attractive target for various reasons, some kinds of defenses against terrorist attacks on it are probably justified. But security policy should avoid creating the equivalent of Maginot Lines—costly, static defenses such as the 100% screening of passengers and baggage at airports.

The OECD/ITF paper finds similar airport passenger and baggage screening in all three jurisdictions. But the United States stands out in two ways. First, it is the only one of these jurisdictions to use very costly explosive detection systems on all checked bags. Second, it is the only one whose passenger and baggage screening system is operated almost entirely by government employees. In Canada, screening is the responsibility of a Crown corporation called CATSA. Rather than hiring and training a large force of civil servants, CATSA contracts with a dozen private security companies that must meet defined performance standards. This enables the number of screeners to be easily adjusted upward or downward, as threat levels dictate. And should terrorists turn their attention to other sectors at some point in the future, it would be relatively easy to scale back the extent of passenger and baggage screening in Canada. In most EU countries, screening is the responsibility of the airport, under national government regulatory oversight. In most cases, the screening operations are outsourced to private security companies operating under

performance contracts. Even more so than in Canada, the level and extent of such screening operations can be tailored to the circumstances of each country and airport. And the system retains the flexibility to increase or decrease the number employed for this purpose.

By contrast, the U.S. system mandated by Congress in the Aviation and Transportation Security Act of 2001 is highly centralized. In all but a handful of cases, airport screeners are direct, civil service employees of the Transportation Security Administration, hired and trained by TSA and paid uniform salaries and benefits nationwide. This 43,000-person workforce would be difficult to downsize, should conditions change. It is also difficult to adjust the number of screeners to rapidly changing levels of airline service (and hence passenger throughput).

In a compromise with opponents of centralization, Congress permitted five airports to opt out initially. After 2004, all other airports in theory were allowed to opt out. However, since TSA is also the aviation security regulator, no airport that already has a large TSA screener workforce has chosen to "kick out" the TSA screeners—though all five original opt-out airports (including San Francisco and Kansas City) have chosen to remain with contract service. The only airports that have taken advantage of the post-2004 opt-out provision have been small airports just beginning to offer scheduled air service at the level that requires airport screening—approximately a dozen.

In 2008 TSA received the results of a study it had commissioned on the performance and costeffectiveness of in-house versus contract security, conducted by Catapult Consultants. Judging from a GAO report summarizing the results (GAO-09-27R), the study found that contract screeners performed somewhat better than TSA screeners and probably did so at no higher cost than TSA screeners. The company recommended that TSA reduce its administrative costs at the airports with contract screeners (those costs unfairly inflate the cost of contract screening) and that it take the initiative to expand contract screening to several types of airports: those with low-performing TSA screeners, those with large seasonal swings in passenger throughput, and those where TSA finds it difficult to hire and retain screeners. It also suggested giving screening contractors additional "degrees of freedom" to foster innovation, superior performance and cost controls. Instead of taking these findings and recommendations seriously, TSA did not release the Catapult study and instead did a quick study of its own downplaying the performance comparison and portraying the contract firms' cost in a less positive light.

With the absence of a TSA administrator during 2009 and the first half of 2010, no policy changes have been made by TSA. And with only the House having passed a TSA reauthorization bill as of mid-2010, no policy changes have been imposed by Congress either.

B. Registered Traveler

Several months after 9/11, aviation experts Michael Levine and Richard Golaszewski suggested the idea of "trusted traveler." It began with a thought experiment: why should someone holding a government security clearance have to go through the passenger-screening rigmarole? Wouldn't it

be far more cost-effective to permit frequent flyers (who constitute a large percentage of all those showing up at airports each day) to volunteer for some kind of clearance, and if they passed, and can prove when they get to the airport that they are the person who was cleared (via a biometric identity card), to let them go through an expedited line, no more burdensome than pre-9/11 screening? Subsequent analysis by operations researchers showed that the concept could cut passenger and baggage screening costs dramatically, while permitting screening resources to be focused on higher-risk passengers.

The TSA said it was willing to test the idea, renamed Registered Traveler (RT), and allowed startup company Verified Identity Pass to develop the technology and try it out at Orlando Airport. After several years, TSA opened the program to all airports and allowed other companies to develop interoperable systems. By early 2009, there were three companies in the market, but with nearly all the 22 participating airports offering VIP's "Clear." Unfortunately, in June 2009, VIP declared bankruptcy, terminating all services. In the absence of other airports at which members could use their interoperable ID cards, the other two companies ceased operation as well.

One major flaw was that the TSA still required all RT members to go through exactly the same routine once they were at the checkpoint—removing shoes, jackets, liquids, laptops, etc. Thus, the only real benefit of a \$199/year membership was bypassing the unpredictably long lines that sometimes occur. This simply did not create a large enough value proposition to generate enough membership revenue to cover fixed and variable costs.

TSA took the position that RT was not a security program, but merely an identification program. It maintained this position because the agency itself refused to perform criminal history background checks on those applying for membership. RT program operators sent the fingerprints they took from all applicants to the clearinghouse operated by the American Association of Airport Executives (which also provides this service to airports to facilitate obtaining the required background checks on hundreds of thousands of airport workers who must have daily access to secure areas at airports). The TSA refused to allow the AAAE clearinghouse to submit RT applicants' fingerprints to the FBI. Instead, TSA itself merely checked the name of each applicant against its terrorist watch list, and told the company yes or no to each one. But that is the same check airlines are required to make on *all passengers* before they can be issued a boarding pass.

Ironically, TSA's sister agency within the Department of Homeland Security, Customs & Border Protection, operates what amounts to an international RT program called Global Entry. Would-be members pay a \$100 fee and must pass both a background check and an interview. Then, when returning to the United States, they can bypass regular passport control and go to a kiosk where they scan their passport and biometric ID card. Global Entry is now in regular use at some 20 U.S. airports with international service, and reciprocal programs exist with Germany and the Netherlands.

In September 2009, the House Homeland Security Committee's subcommittee on transportation security held a hearing supportive of reviving RT as a risk-based security program, consistent with

Congress's original intent in the 2001 ATSA legislation. That approach was supported by the Business Travel Coalition and the National Business Travel Association (which have also supported Global Entry). That approach had already been called for in the TSA reauthorization bill enacted by the House in June 2009—for which there is still no Senate counterpart.

By May 2010 two contenders were re-starting RT programs, despite the absence of a TSA background-check feature. Start-up AlClear acquired the Clear assets via a bankruptcy auction, and is in the process of contacting former members offering to extend their membership under their new program. And former provider FLO Corp. has teamed with Cogent Systems, ARINC and RAM Associates and announced its first contract, with Indianapolis airport. A new TSA administrator, John Pistole, was confirmed by the Senate late in June, though his views on RT are not publicly known. Thus, the future of domestic RT remains a question mark.

Part 3

Air Traffic Control

A. Global ATC Trends

During the past two decades, nearly 50 governments have "commercialized" their air traffic control systems. That means they have organizationally separated this set of functions from their transport ministry, removed it from civil service, and made it self-supporting from fees charged to aircraft operators for ATC services. These new air navigation service providers (ANSPs) are also, generally for the first time, being regulated at arm's length by their government's aviation safety agency.

Most of these commercialized entities have been set up as government corporations (analogous to the U.S. Tennessee Valley Authority), though a few remain as government departments, despite being paid directly by their users and being able to issue revenue bonds to finance modernization. A handful can be called "privatized," but the two principal examples are non-profit companies. Nav Canada is a non-profit corporation, governed by a board made up of aviation stakeholders—in effect, it functions as a kind of user co-op. And the U.K.'s National Air Traffic Services (NATS) is a public-private partnership, with British airlines owning 42%, airport company BAA owning 4%, employees owning 5%, and the government owning the balance. NATS, also, is operated on a non-profit basis. In June 2010, the new U.K. coalition government indicated that it might sell some or all of its stake in NATS, but no specific proposal has yet emerged.

A growing number of studies have found that the changes encompassed by ATC commercialization have made significant differences in performance, with improved service quality, significantly improved modernization and lower costs. These changes appear to stem from the new customer-provider relationship, in which "user pay means user say," as they describe it in Canada. At the same time, air safety has remained the same or improved and the public interest has been protected. The most recent study is the book, *Managing the Skies: Public Policy, Organization, and Financing of Air Traffic Management*, by Clinton V. Oster and John S. Strong (Ashgate Publishing, 2007). Oster and Strong explain how air traffic control works and review the global evolution of air navigation service providers. They follow this with detailed reviews of the ANSPs of Australia, New Zealand, Canada, the United Kingdom and Europe, followed by a look at the challenges facing developing countries vis-à-vis air traffic control. Finally, they discuss the U.S. system, contrasting the tax-funded, politically controlled FAA system with the customerfocused ANSPs in the rest of the developed countries.

B. U.S. ATC Reform

In 2007 the FAA submitted a sweeping proposal to revamp the way U.S. air traffic control is funded, by shifting largely from user taxes (mostly the tax on airline tickets) to user fees based on the en-route and terminal-area ATC services provided. And the FAA's Air Traffic Organization would be allowed to issue revenue bonds for modernization programs based on the user fee revenue. Because general aviation (private plane) organizations expressed all-out opposition to any switch from their fuel taxes to user fees, the FAA proposal would have let GA continue to pay fuel taxes, but at significantly higher rates, based on a new FAA cost allocation study published in January 2007. The airline industry strongly supported the FAA proposal, the GA organizations strongly opposed it, and Congress almost entirely ignored it.

During 2007, the House passed a status-quo FAA reauthorization bill, including modest increases in GA fuel taxes but leaving the basic funding structure unchanged. The Senate Commerce Committee passed a bill that included a \$25 per flight user fee, only for jet and turboprop planes flying under instrument flight rules (IFR)—the principal users of ATC services. And it included authorization for the ATO to issue up to \$5 billion in revenue bonds, based on that user-fee revenue, with spending decisions overseen by a board representing aviation stakeholders. But that bill did not make it to the Senate floor during 2007, even though the FAA's authorization expired as of September 30, 2007.

In 2008, the FAA essentially reintroduced its previous proposal. The House took no further action, awaiting passage of a companion bill in the Senate. In April 2008, the Senate reached a compromise under which the user fee, revenue bonds and board were dropped from the bill. This was expected to lead to Senate passage, but other business and the November elections took precedence, and the bill never reached the Senate floor.

In 2009, the House Aviation Subcommittee revived and approved most of its 2007 measure, added some controversial labor-supported positions and sent it to the floor, where it eventually passed. By early 2010, the Senate enacted its own bill, with none of the ATC reform features from 2007 and without the controversial labor provisions of the House bill. By autumn 2010, the two bills had still not been reconciled.



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