U.S. Department
of Transportation

Federal Aviation
Administration

Report to Congress

Aviation War Risk Insurance

Washington, DC 20590

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Report of the Secretary of Transportation
to the United States Congress
pursuant to Section 1204, Homeland Security
Act of 2002

Executive Summary

Section 1204 of the Homeland Security Act of 2002 (HSA) directs the Secretary of Transportation to provide a report to Congress that assesses the availability and cost of commercial war risk insurance for U.S. airlines and other aviation entities for passengers and third parties; analyzes the economic effect upon U.S. air carriers and other aviation entities of such insurance; and describes the manner in which the Department of Transportation (DOT) could provide an alternative means of providing aviation war risk reinsurance covering passengers, crew, and third parties through the use of a war risk retention group or by other means.

At the present time, war risk insurance is generally available from private insurers for airlines and other segments of the aviation industry, albeit at significantly higher costs than similar insurance prior to the terrorist events of September 11, 2001. Air carriers have gone from paying approximately $30 million for commercial passenger, crew and third party war risk coverage to paying direct costs of roughly $135 million, as of November 2002, and paying indirect costs totaling another $500 million in the form of increased premiums for their all risk liability coverage. These costs would be significantly higher in the absence of FAA-provided war risk insurance. The costs of basic war risk coverage for airports, ground handlers, and manufacturers have increased from virtually nothing prior to September 11, 2001 to an annualized cost of approximately $50 million, $15 million and $80 million, respectively.

As to the economic effect on U.S. air carriers of commercial war risk insurance, total war risk-related premiums have increased from approximately 0.03 percent of industry revenues before September 11, 2001 to approximately 0.8 percent of revenues presently. When compared to operating losses, premiums have risen from less than 1 percent of losses to almost 8 percent of losses. The relative impact on other aviation entities is less than the impact on airlines. War risk premiums now constitute approximately 0.2 percent of industry revenue for manufacturers, 0.3 percent for airports, and 0.2 percent for fuel operators and ground handlers.

Under current statutory authority, there are alternative means for the Secretary of Transportation to provide aviation war risk reinsurance covering passengers, crew and third parties. One vehicle would be for DOT to reinsure conventional insurance carriers. Another would be for DOT to provide reinsurance to a risk retention group (RRG), which is a liability insurance company owned and self-funded by its members. The Air Transport Association, working with a number of U.S. airlines, created the legal structure for a U.S. airline RRG in mid-2002, calling it Equitime, but has not yet made it operational. The passage of the Terrorism Risk Insurance Act in November 2002, with the risk limitations it provides insurers, may make either or both of these DOT reinsurance options more attractive to insurers in the future. Another reinsurance alternative might be participation by DOT in reinsuring a global insurance entity. One potential global entity, called Globaltime, has been under consideration by the International Civil Aviation Organization. However, as presently structured, Globaltime does not meet the statutory requirements for

insurance or reinsurance under the DOT Aviation Insurance Program, and U.S. participation would require legislation.

REPORT TO CONGRESS
AVIATION WAR RISK INSURANCE

Section 1204 of the Homeland Security Act of 2002 (HSA) directs the Secretary of Transportation to provide a report to Congress that:

> Evaluates the availability and cost of commercial war risk insurance for U.S. air carriers and other aviation entities for passengers and third parties;
>
> Analyzes the economic effect upon air carriers and other aviation entities of available commercial war risk insurance; and
>
> Describes the manner in which the Department of Transportation (DOT) could provide an alternative means of providing aviation war risk reinsurance covering passengers, crew, and third parties through use of a war risk retention group or by other means.

This report presents the requested information on war risk insurance for components of the U.S. aviation industry.

I. Availability and Cost of Commercial War and Terrorism Risk Insurance

At the present time, war and terrorism risk (war risk) insurance is generally available from private insurers for U.S. airlines and other segments of the aviation industry, albeit at significantly higher costs than prior to September 11, 2001. While coverage limits on airline liability for death or injury to passengers during 2002 remained the same, liability limits for death or injury to third parties in the primary policies offered by private insurers were lowered to $50 million. However, excess third party liability coverage of $1 billion per airline per occurrence, and $2 billion in the aggregate became available, and is still available, from private insurers in the marketplace. In addition, it is likely that coverage of up to $2 billion per occurrence could be negotiated for an airline by combining coverage from two independent underwriters. Similar circumstances exist for other segments of the aviation industry such as airports, aviation service providers, and manufacturers. For these entities, primary war risk liability coverage is presently available up to $50 million, and excess coverage up to $1 billion could probably be negotiated for an additional premium.

The cost of commercial war risk insurance for air carriers and other aviation entities has increased significantly since September 11. In the aggregate, by the end of November 2002, the cost to U.S. air carriers had increased from approximately $30 million before September 11, 2002 to direct costs of about $135 million. In addition, however, it appears that U.S. air carriers are indirectly paying about $500 million more in indirect costs due to the transfer by insurance carriers of a large portion of the post-September 11 $1.25 per passenger war risk surcharge into the air carriers' all risk premiums. In mid-December 2002, the Federal Aviation Administration (FAA) began providing U.S. air carriers with hull, passenger and crew war risk insurance, thus eliminating the U.S. air

carriers' direct commercial premium costs for war risk insurance.[1] The costs of basic war risk coverage for airports, ground handlers, and manufacturers have increased from virtually nothing prior to September 11, 2001, to an annualized cost of approximately $50 million, $15 million and $80 million, respectively. Under 49 U.S.C. 44310, the DOT's fundamental underlying statutory authority to provide aviation insurance in any form expires as of December 31, 2003.

A. Availability and Cost of Coverage for Passenger and Third Party Liability – Airlines[2]

Airline passenger and third party liability coverage traditionally has been provided through an additional coverage endorsement (usually referred to as AVN 52) to the airline's main all risk liability policy. AVN 52 coverage traditionally has not been offered as a separate product, but only as a part of the all risk liability policy.

Following the events of September 11, 2001, insurers cancelled the AVN 52 endorsement and then offered to reinstate it at substantially higher premiums, but with a greatly reduced coverage limit with respect to third party war risk liability. This situation quickly led to the United States government offering third party war risk insurance to U.S. airlines.

The Situation Immediately Before and After September 11

Prior to September 11, 2001, coverage of $1.5 billion per occurrence was common for major airlines and a few airlines had coverage of $2 billion. In addition, the premium for the AVN 52 endorsement generally was included without charge within the premium for all risk liability insurance or nominally listed at about 10 percent of the all risk premium. There were about 35 insurers writing such coverage.

Immediately after September 11, 2001, this situation changed radically. With respect to coverage limits, while passenger war risk liability coverage remained at the full policy limit (commonly $1.5 billion) on an "per occurrence" basis, third party war risk liability coverage was reduced to $50 million in the aggregate. The premium for the reduced coverage was increased through the addition of a surcharge of $1.25 per passenger. Private insurers offered up to $1 billion in additional third party liability coverage on an excess basis (coverage for the "excess" liability over $50 million) through a separate policy. The premium for $1 billion in excess third-party liability coverage was an additional $1.85 per passenger. Shortly thereafter, DOT offered third party war risk liability insurance to U.S. airlines with coverage limits on a per occurrence basis of double their pre-September 11 coverage limits for commercial all risk passenger and third party liability. The median coverage limit for U.S. airlines was $1.8 billion and

[1] The premiums for this FAA coverage are limited by statute and presently total approximately $70 million on an annual basis. In addition, air carriers are also paying approximately $70 million in premiums, on an annual basis, for FAA third party liability war risk coverage.

[2] There are no definitive, publicly available statistics that detail the cost of liability insurance purchased by airlines and other segments of the aviation industry. Data for airlines are collected by DOT's Bureau of Transportation Statistics on Form 41, which contains limited information on insurance. The Airport Council International gathers survey information that includes a total insurance cost. These data were combined with other information available to the DOT to produce the estimates contained herein.

the maximum was $4 billion. DOT's premium for its excess third party liability coverage was $7.50 per aircraft departure.[3]

While there was little change after September 11 in the number of all risk providers offering passenger and third party war risk liability coverage up to $50 million, several major reinsurers decided either to reduce their excess third party war risk exposure substantially or to leave the market altogether.[4] Initially, only one group of coinsurers offered excess third party war risk coverage. After several weeks, however, a second insurer also began to offer excess third party war risk coverage. Because DOT had offered third party war risk insurance to all U.S. airlines before the end of September 2001, the market for commercial insurance to cover excess third party liability consisted only of non-U.S. airlines.

The Situation at the End of 2002

By the end of 2002, the availability and cost of commercial passenger and third party war risk liability insurance had improved somewhat. In mid-December 2002, however, DOT implemented the HSA requirement that it offer passenger and hull war risk liability insurance to U.S. airlines at the limit that existed in the airline's commercial war risk policy as of the date of enactment of the HSA, November 25, 2002. Presently, there is no economic incentive for U.S. airlines to purchase any commercial war risk liability insurance due to the HSA's mandatory expansion of the DOT program to include hull loss and passenger liability coverage at rates significantly lower than commercial rates.

At present, the basic coverage limits available from commercial insurers remain the same as those available immediately after September 11, 2001. However, private insurers have expanded coverage limits on additional third party war risk liability coverage purchased on an excess basis. Presently, the available excess aggregate coverage limit has increased from $1 billion to $2 billion.

It is difficult to determine with precision the current premium charged by commercial insurers for war risk liability coverage, because the total cost appears to have at least three main components. First, toward the end of 2002, private insurers eliminated the $1.25 per passenger surcharge for war risk liability coverage, but it appears that they transferred a significant portion of the surcharge into an increase in the airlines' overall all risk liability premiums. In the majority of cases, insurers appear to have incorporated about 65 percent, or $0.82 of the previous $1.25 per passenger war risk surcharge, into the all risk liability premium.[5] Second, the AVN 52 endorsement adding war risk coverage for passenger, hull, and $50 million of third party liability to all risk policies now costs about 15 percent of the stand-alone all risk premium, or approximately $0.20 to $0.25 per passenger. Third, private insurers appear to have reduced the premium for $1 billion excess third party war risk liability coverage to $0.70 per passenger for large airlines. Although the actual circumstances for each carrier differ, it appears that an approximate total of the three components for war risk liability coverage for a typical large carrier would be about $1.72 per passenger. In

[3] The DOT premium reflected the ability of the Secretary of Transportation to limit the third party war risk liability of U.S. airlines to $100 million per occurrence.

[4] Richard Pinkham, "Covering Up," *Airline Business*, February 2003, p. 54.

[5] The $0.82 per passenger increase is equivalent to an industry-wide cost of approximately $500 million per year.

comparison, the DOT premiums for equivalent coverage (passenger, hull, and all third party war risk liability) now equate to a total of approximately $0.20 per passenger.

The number of all risk airline liability insurance providers now offering third party war risk insurance at a $50 million coverage limit has decreased from about 35 to between 20 and 30 companies. Two major reinsurers – Swiss Re and Munich Re – have exited the market. Three commercial insurers, AIG, Berkshire Hathaway, and Allianz, are currently offering third party liability war risk insurance in excess of $50 million. While the latter two insurers are willing to issue quotes for U.S. airlines, they have stated that they would make decisions to underwrite each risk on a case by case basis and would seek to limit their overall airline industry exposure and maintain a balanced portfolio.

B. Availability and Cost – Airports, Aviation Service Providers and Manufacturers

Airports, aviation service providers, and aviation manufacturers generally purchase liability insurance only with respect to the products and services they provide, as they do not generally operate aircraft and do not therefore need aircraft hull or passenger coverage. When establishing premium rates for aviation service providers, commercial insurers consider factors such as the type of operation, proximity/access to aircraft, loss record, type of aircraft handled, and contractual arrangements with customers.

The Situation Immediately Before and After September 11

Prior to September 11, 2001, third party war risk liability coverage was available for the full policy limit purchased by these entities on an "per occurrence basis." Most non-airline aviation entities tended to purchase coverage at much lower limits than airlines (up to $50 million), with only the major airports, major ground handlers and aviation manufacturers purchasing coverage at limits of $1 billion or above. War risk insurance coverage was generally included within the premium charged for the overall liability coverage or nominally rated at 10 percent of the liability premium. This was true for all categories of aviation service providers. Approximately 30 companies offered war risk coverage.

Immediately after September 11, 2001 commercial insurers generally cancelled war risk insurance for airports and other non-airline aviation entities, as they had for airlines. They quickly offered to reinstate $50 million of war risk coverage, except for security screening companies, for an additional premium. A spokesman for one major insurer suggested at the time that war risk coverage of an additional $100 million in excess of the limited $50 million in coverage would cost large airports about $0.10 per passenger, and that higher limits would cost another $0.04 to $0.10 per passenger. These decreases in coverage caused many airline service providers to threaten to cease service to airlines. Consequently, as a part of the third party war risk coverage provided by DOT to airlines, DOT agreed to include coverage of payments under indemnity agreements between airlines and agents, vendors, and subcontractors, including airports, for liability awards arising from war risk occurrences.

The Situation at the end of 2002

At the end of 2002, third party war risk liability coverage was generally available for airports, aviation service providers (except for security screening companies), and aviation manufacturers but was limited to $50 million in the aggregate. Additional policies providing excess war risk liability coverage could be obtained from the commercial market with limits up to $1 billion in the aggregate.

For the main policy with a $50 million aggregate primary limit, about 25 companies provide adequate capacity. For war risk liability coverage in excess of $50 million, there are three main sources, AIG, Berkshire Hathaway, and Allianz. However, Allianz will generally only rate larger risks, and only AIG actively seeks to insure service provider risks.

For airports, the premium charge for primary war risk coverage of $50 million is now about 40 to 100 percent of their main all risk liability premium. Premiums for coverage in excess of $50 million depend on the coverage limit. For example, an additional $100 million in war risk coverage is available at double the cost of the $50 million coverage, while an additional $350 million in coverage is available at an additional 60 to 70 percent of this doubled amount.

For other aviation service providers, the cost of primary war risk insurance varies. AVN 52 surcharges added to the all risk liability insurance premium for airline service companies with access to aircraft interiors are approximately 100 percent of the main policy premium. For airline service companies without access to aircraft interiors the cost is 50 to 75 percent of the main policy premium.

According to a London broker, the cost of primary war risk liability coverage of $50 million for aircraft, aircraft engine, and parts manufacturers is approximately 10 to 20 percent of their main liability premium. However, the Aerospace Industries Association suggests that the cost of such coverage may be as high as 40 percent of their main liability premium. For manufacturers, the cost of excess coverage up to $1 billion may be up to twice the cost of their primary war risk insurance.

Following September 11, 2001, the general market withdrew from providing war liability coverage for aviation security screening operations at airports. AIG is the only commercial insurer willing to provide "stand-alone" insurance coverage for airline security screeners. By the end of 2002, the security screening function at almost all airports in the United States had been assumed by the Transportation Security Administration. Hence, there was minimal need for commercial insurance for screening activities within the United States, and no U.S. premium rates are available.

II. The Economic Effect Upon Air Carriers and Other Aviation Entities of Available Commercial War Risk Insurance

Any increase in war risk insurance premiums levied on an aviation-related firm will directly affect the insured entity and may indirectly affect other elements of the industry. Increases in war risk insurance premiums levied on suppliers of aviation goods and services may be passed on to customers. The significance of these premium increases depends on who ultimately pays them and their magnitude relative to total revenues. The magnitude of the impact on any particular entity will depend on the volume of its total business that is subject to the increased war risk insurance premium. Support entities serving both aviation and other industries may not be significantly affected if only a fraction of their business is affected.

The following discussion identifies the factors involved in measuring the impact of these changes. The discussion then addresses the significance and incidence of increased war

risk insurance premiums for industries that supply the air carrier industry, and addresses the combined significance and incidence of increased premiums for both supplier industries and the air carrier industry.

A. Measuring the Impact of War Risk Insurance Changes

Increased war risk insurance premiums have been assessed on airlines and others that supply services. The impact of increased premiums is determined by examining how three factors affect these entities.

The first factor is the degree of excess profits prevailing in the market of each entity. Where firms possess market power they are likely to earn excess profits. Under some circumstances, firms with market power can maximize their profits after a cost increase by absorbing some of the increase so as not to discourage customers from purchasing their products. However, in industries characterized by a high level of competition, little excess profit is likely to be present. Many suppliers to the air transportation industry – including aircraft repair, fueling operations, private passenger screening, and ground handling – operate in competitive markets. Even when services are provided at an airport by a single supplier, that supplier is typically picked by the airport proprietor from among a number of competitors. As a consequence, most suppliers are not in a position to absorb increases in costs – including increased insurance premiums – but must attempt to pass them through to their customers. If unsuccessful, these firms may be required to reduce their output or, in some instances, to leave a market altogether.

The second factor is the degree of difficulty with which any cost increase can be passed on. For airlines, this will depend on the public's willingness to pay higher fares. For entities supplying services to the airlines, this will depend on how critical these services are in the production of air transportation services, and how large they are relative to the total cost of air transportation – cost increases in relatively smaller cost components are more easily shifted than increases in larger components. Where it is difficult to pass on costs, relatively large reductions in the quantities sold will be required for prices to rise enough to offset the costs. Where price increases are tolerated by the purchaser, the required cost increase can be accomplished with smaller reductions in the quantity supplied.

The third factor is the length of time since the increase was imposed. Because of reaction times and existing contractual commitments, it may not be possible to adjust prices to shift premium increases immediately. However, with the passage of time, more and more movement toward a final adjustment will occur.

B. Aviation Service Suppliers

Following September 11, 2001, substantial surcharges for war risk coverage were imposed on aviation service providers. Some service providers have chosen to continue this coverage by paying the surcharges while others have not. Also, as mentioned above, many service providers have obtained indemnity agreements from their airline customers

for liability awards associated with war risk occurrences. The following analysis is based on the cost of insurance being purchased at the end of 2002. Thus, it does not capture the economic costs of self-insurance born by those who do not choose to purchase coverage.

Aircraft Manufacturers

Civil aircraft manufacturing is a very large industry. U.S. industry revenues for 2002 are estimated to be in excess of $43 billion, about $8 billion less than 2001.[6] Because firms typically serve a number of sectors in addition to the air carrier industry – most notably national defense and space – total U.S. aerospace industry revenues totaled more than $148 billion in 2002, more than three times the revenues from civil aircraft production alone.[7]

War risk premiums have increased significantly for these firms since September 11, 2001, from being included in overall liability premiums to comprising 10 to 20 percent of these premium. Still, however, at about $80 million annually for basic war risk coverage, they make up less than 0.2 percent of industry revenue from civil aircraft sales and only about 0.05 percent of total industry revenue.

Manufacturers of airframes and engines tend to operate in industries where there are only a limited number of firms or where one or two firms dominate the industry even though there may be other firms in the industry. For example, worldwide, there are only two manufacturers of large completed civil aircraft and only five manufacturers of large turbojet engines.[8] These firms have the potential to possess sufficient market power to earn excess profits. As noted above, under certain circumstances, such firms may be able to absorb cost increases to maintain sales levels. Currently, however, it is likely that manufacturers would find it very difficult to increase prices for new equipment given the slow growth of the economy and the depressed state of the aviation industry. The market values of existing aircraft have declined since September 11, 2001, and many air carriers currently have large numbers of aircraft in storage. Accordingly, it is likely that insurance cost increases imposed on manufacturers are currently being absorbed internally.

Airports

There are approximately 500 commercial service airports in the United States, with total revenues in excess of $15 billion.[9] Since September 11, 2001, primary war risk insurance rates have increased significantly. While some airports have opted to purchase this insurance, many have not. Insurance industry sources estimate total war risk insurance premiums paid by airports to have increased from essentially zero prior to September 11,

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[6] *Civil Aircraft and Aircraft Engines: November 2002, Current Industrial Reports*, U.S. Census Bureau, January 2003.
[7] "Aerospace Industry Sales by Product Group," Aerospace Industry Association, 2002.
[8] The corporate entities that manufacture aircraft and aircraft engines often have affiliated leasing and finance companies.
[9] "U.S. Airport Industry Revenues and Expenses," ACI-NA Survey, July 2002.

2001 to about $50 million for basic war risk coverage in 2002.[10] While premiums paid by airports electing to obtain coverage can be significant to those individual airports, the cost amounts to only a little more than 0.3 percent of total airport industry revenues.

Virtually every major airport serving airlines in the United States is owned by a state or local governmental entity. Most enjoy spatial monopolies, having no competitors. For those localities served by more than one airport, all airports serving the same market are typically owned by the same entity. These airports have control over the prices they charge airlines and other airport users, and over the terms under which they allow others to provide services to airport users.

Air carrier airports typically operate, however, under legal and regulatory constraints designed to ensure that services are provided at reasonable costs. Thus, for the most part, they do not earn excess profits even where they possess the market power to extract such profits. In addition, smaller air carrier airports that serve medium and small communities often run deficits that require subsidies from the governmental entities that own them. Consequently, while airports have the market power to control price, they typically do not earn sufficient excess profits to absorb cost increases. The inability to absorb increased insurance costs is exacerbated by declines in airport activity since September 11, 2001. Passenger enplanements, cargo, and aircraft movements declined 9.5, 3.3, and 6.1 percent respectively between the first half of 2001 and the same period in 2002. Because airports typically have large fixed costs, any decline in activity can be expected to reduce revenues by more than costs, increasing the likelihood of deficits and precluding the ability to absorb cost increases.

Contractual relationships between airports and the air carriers they serve vary widely both as to how charges are assessed and the length of agreements. At some airports, air carriers annually pay only enough to make the airport self-sufficient after all other revenues are taken into account, while at others they are expected to pay the total cost of services provided. Moreover, while some airports enter into long-term agreements with air carriers, others utilize short term or even annual agreements. Although contractual arrangements may determine the length of time before costs can be passed through to air carriers, ultimately charges must increase to cover increased war risk premiums unless these increases are absorbed by the governmental entities that own airports. Because airport services obviously are critical to air transportation, airlines have no choice but to pay any increased airport charges.

Fueling Operations and Ground Handling

Air carriers contract for refueling and other selected services – including ramp services, cleaning, and catering – from service companies. Total sales for these companies are estimated to be at least $7 billion per year.[11]

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[10] Airport industry and airport insurance providers indicate that most – about 75 percent – of commercial airports have opted to self-insure for war risk.

[11] National Air Transportation Association.

As a result of the terrorist attacks of September 11, 2001, insurance industry sources estimate that total premiums paid by service companies increased from essentially zero prior to September 11 to about $15 million for basic war risk coverage in 2002. This amounts to about 0.2 percent of total revenues in these industries.

The service industry is dominated by four or five large firms, which account for about 75 percent of total sales to air carriers. The remaining 25 percent of revenues are produced by as many as 100 additional firms – many very small. Even though the industry is dominated by several large firms, the existence of many smaller ones coupled with the air carriers' practice of aggressively encouraging competition for service contracts has resulted in very thin profit margins in the industry.[12] Thus, it is unlikely that these firms have the ability to absorb any cost increases for long, but must pass them through to their air carrier customers. However, large firms in the industry may have sufficient financial reserves to sustain losses to preserve market share in the short-run.

C. Airlines

During 2002, DOT's Bureau of Transportation Statistics (BTS) received reports from 42 passenger and 26 all-cargo large commercial airlines. In addition, BTS received reports from about 79 regional airlines. Presently, about 10 large carriers carry a majority of passengers and report a majority of passenger miles. However, since the deregulation of airline markets in 1978, there has been continuous entry by new low fare carriers into the industry, producing high levels of price and service competition. This intense competition has resulted in the reorganization, liquidation or merger of several major airlines and the rapid growth of several low cost airlines. Revenue pressure on the industry intensified with the economic downturn of 2001 and the further shock of the terrorist events of September 11, 2001. Both recreational and business travelers are now much more sensitive to fare changes.

Total insurance premiums paid by the U.S. air carrier industry are now significantly higher than those paid before September 11, 2001. By the end of 2002, the total premiums paid directly by air carriers, for passenger, hull, and third party liability coverage, had increased by about $270 million annually from pre-September 11, 2001 levels. Most of these premiums – about 75 percent – were paid directly to commercial insurers, with the remainder representing premiums for federally provided war risk insurance. In addition, as noted above, it appears that commercial insurers may have transferred as much as $500 million in new premiums, initially identified as a war risk surcharge after September 11, into the all risk insurance premium charged to air carriers.

The increase in these premiums may also be compared with total industry revenues – the value of industry output – and total industry operating losses. Total war risk premiums paid directly by airlines increased from about 0.03 percent of total revenues prior to September 11, 2001 to about 0.3 percent in 2002.[13] If the $500 million in war risk

[12] Mark Pilling, "Seeking Stability," *Airline Business*, January 2003, p. 41.

[13] If aviation service provider war risk premiums were passed through to airlines, the increased direct and indirect burden might be as much as 0.45 percent of revenues.

surcharges that were wrapped into the air carriers' all risk policies by the end of 2002 were considered to be part of the cost of war risk insurance, the total cost increase would be about 0.8 percent of industry revenues. In comparison to operating losses, direct premiums have risen from 0.76 percent of total losses to about 3 percent of total losses. Again, however, if the $500 million increase in the cost of all risk insurance were considered to be a part of the cost of war risk insurance, the total cost increase would be greater – up to 8 percent of total operating losses. Put another way, the increase in war risk insurance premiums accounts for about $3 of every $100 lost by the air carrier industry in 2002, or up to $8 if the $500 million all risk increase is taken into account.

At the end of December 2002, pursuant to the requirements of the HSA, DOT offered hull and passenger liability war risk insurance. Most U.S. airlines now purchase this insurance in place of commercial war risk insurance, resulting in a direct premium rate reduction of close to 50 percent for hull and passenger war risk coverage.

III. Alternative Means of Providing Reinsurance

Under current statutory authority, if authorized by the President, the Secretary of Transportation could provide aviation war risk reinsurance through several alternative means, including reinsurance of conventional insurance carriers, or reinsurance of risk retention groups (RRG's). A third alternative, a cooperative international airline insurance entity called "Globaltime," has been proposed, but under current statutory authority, DOT could not provide insurance or reinsurance to that entity as presently structured. Each of these alternative means entails an unspecified cost to the federal government that depends on such factors as the probability of a loss under the program, the likely magnitude of such a loss, provisions for sharing risk with policyholders, insurers, and reinsurers, and program administration costs.

A. DOT Reinsurance of Commercial Underwriters

Aviation insurance in the United States is provided through insurance companies and insurance pools. While there are a few companies in the United States that specialize in aviation insurance, others provide aviation insurance as one of several insurance services. Because of the specialized nature of aviation insurance, a number of insurers in the United States combine their resources to write aviation business in pools. Each member of the pool authorizes the pool manager to handle aviation insurance business on its behalf. United States Aviation Insurance Group (USAIG) is one pool that writes all forms of aviation insurance.

Aviation risks are frequently insured by co-insurers. Each enters into a separate contract of insurance with the insured. To improve efficiency, the co-insurers generally appoint one of their group to be the leading underwriter. Insurers will also frequently obtain reinsurance from a reinsurer so as to reduce their ultimate exposure to any given risk they are insuring against.

Under existing authority, if authorized by the President, the Secretary could provide reinsurance to individual commercial insurance companies and members of insurance pools in a manner similar to private reinsurers. DOT could provide reinsurance in any of a number of forms, such as reinsuring a fixed percentage of a risk or reinsuring all losses above a fixed dollar amount. Reinsurance could be provided directly by DOT or through an insurance carrier known as an underwriting agent.

Immediately after the terrorist events of September 11, 2001, insurers reduced airline third party war risk liability insurance coverage limits to $50 million and increased the cost of both hull loss and passenger and third party liability war risk coverage. Before the end of September 2001, DOT provided direct third party liability war risk insurance coverage for losses in excess of $50 million to U.S. airlines.

In an attempt to encourage increased airline war risk insurance coverage limits from private liability insurers at reduced cost, DOT offered on October 1, 2001, to provide either coinsurance in partnership with private insurers and reinsurers, or reinsurance. However, no underwriters or reinsurers chose to pursue this offer. DOT made similar offers to individual underwriters during the spring of 2002. Again, no private insurers pursued the possibility of co-insurance or reinsurance.

On January 28, 2003, DOT again asked several major insurers and reinsurers whether they might utilize DOT/FAA reinsurance to provide war risk insurance to airlines after the congressionally mandated period for DOT insurance ended. Although there was no request for DOT reinsurance by insurers as a result of this inquiry, the insurers expressed a willingness to discuss at a later time possible DOT provision of reinsurance.

B. DOT Reinsurance of Risk Retention Groups

Insurers in the United States are regulated by the States pursuant to the McCarran-Ferguson Act of 1945, 15 U.S.C. 1011. Each State may authorize insurers and establish requirements for the maintenance of reserves, capitalization, form of insurance policies and premiums. However, under the Risk Retention Act of 1986 (Chapter 65 of title 15, United States Code), exemptions may be obtained from a significant number of state insurance laws and regulations for a liability insurance company that is owned and self-funded by its members.[14] Such entities are known as risk retention groups (RRG's).

RRG's can be formed to provide airline war risk passenger and third party liability insurance. If authorized by the President, DOT could provide reinsurance to such RRG's under its existing Chapter 443 authority in the same manner as it could provide reinsurance for conventional insurers or reinsurers.

[14] The requirement for adequate reserves, called "financial responsibility," has been held to be reserved to the States.

In response to the disruption of airline insurance markets after September 11, the Air Transport Association (ATA) and individual member airlines, in conjunction with an insurance broker (Marsh Inc.), evaluated and ultimately sought to license an RRG. The entity, called Equitime, was conditionally licensed to operate by the Vermont Department of Banking, Insurance, Securities and Health Care Administration on June 6, 2002, subject to obtaining adequate capitalization and acceptable reinsurance.

As originally conceived by the organizers, Equitime would provide passenger and third party war risk liability insurance for airlines and possibly other aviation companies. It would insure the first $300 million in war risk liability for an airline, with DOT reinsuring the excess to a policy limit of $2 to $3 billion. Over time, the RRG would increase its retained policy limit allowing a reduction in reinsurance. Equitime would obtain substantial initial capitalization, $50 million, from participating airlines or banks. It was anticipated that Equitime would provide insurance at lower cost than available from private insurers based on assumptions of low or no claims experience during early years of operation coupled with the provision of reinsurance by the DOT at rates lower than those offered by the private market.

Equitime has not become operational, in part because the organizers have not yet contributed the required start-up capital, presumably because DOT has been required to provide direct war risk insurance at least through August 31, 2003. In January 2003, after enactment of the HSA, the ATA informed DOT that there was no longer agreement by all ATA members to continue with the implementation of Equitime.

C. Potential Interaction of RRG's, TRIA, and DOT Reinsurance

The Terrorism Risk Insurance Act (TRIA) enacted in November 2002 provides private insurers with a backstop for terrorism committed by or on behalf of a foreign government or organizations through 2005. RRG's and captive insurance companies might be considered "insurers" under the TRIA, subject to determination by the Treasury Department, which administers TRIA.

If eligible for TRIA support, an airline RRG such as Equitime could obtain TRIA reimbursement of most of its terrorism claims. By law, the RRG would be required to absorb 10 percent of the loss plus an additional deductible amount based on its annual premium income. Thus, it is possible that TRIA could make an RRG such as Equitime feasible more by reducing the amount of initial capital needed and the amount of risk retention. It is possible that an RRG might seek to reinsure the 10 percent retention requirement imposed by TRIA with DOT or private insurers.

Not all war risk perils are covered by TRIA. Therefore, an airline RRG would probably seek separate reinsurance from DOT or private insurers for acts of terrorism committed on behalf of domestic causes and for risks such as conventional war and the detonation of atomic weapons.

D. DOT Reinsurance of an International Aviation War Risk Insurance Entity

Beginning in 2001, simultaneously with ATA consideration of Equitime, the International Air Transport Association (IATA), London insurance brokers, and the International Coordinating Council of Aerospace Industries Associations proposed to establish a new global insurance entity, called Globaltime, to provide third party war risk liability insurance to airlines and other segments of the aviation industry. The International Civil Aviation Organization (ICAO) Council approved in principle this international insurance entity in the spring of 2002, and has asked its member Nations to declare their intentions with respect to participation.

As originally proposed, Globaltime would provide third party war risk coverage in excess of $50 million up to $1.5 billion to airlines, airports, airline service providers, aircraft and parts manufacturers, lessors, financiers, air traffic control providers and aviation security services from ICAO member Nations that agree to participate. A premium would be paid only by airlines. In the event of a loss exceeding Globaltime's accumulated reserves, participating states would each pay a share of the difference between the amount of the claims and the amount of reserves. Each member's participation would be limited to its percentage share of ICAO dues, and total participating member liability would be limited to $15 billion. Under that formula, if the United States participated, its maximum liability would be $3.75 billion. In the event of claims in excess of reserves, Globaltime premiums would be increased to repay the member states.[15]

A potential advantage of Globaltime over a wholly domestic RRG, or direct DOT insurance, is that U.S. citizens flying on foreign airlines would be more likely to be covered adequately.

Under existing law, DOT does not have the authority to provide the guarantees that would be required of Nations participating in Globaltime or the authority to provide insurance for entities other than airlines and airline service providers as originally contemplated by ICAO. Existing law requires DOT to collect premiums, in advance, that are "to the extent practical. . .based on consideration of the risk involved."

E. Conclusions

If necessary insurance is not available on reasonable terms, the FAA's existing Chapter 443 authority permits DOT to provide airline war risk reinsurance to private insurance companies and risk retention groups. Implementation of any alternative, however, seems unlikely before August 31, 2003, and DOT's underlying statutory authority expires December 31, 2003. Premiums for war risk insurance now being provided by DOT are limited by the Homeland Security Act, eliminating any economic incentive for U.S. airlines to purchase commercial war risk insurance. The future implementation of any particular alternative is dependent on the President's determination of the best interests of the United States, choices of U.S. airlines, the desire and financial capacity of the

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[15] A number of participants in the Globaltime project have been in discussions recently to change some of the characteristics of the project, such as by requiring all insured parties to pay premiums and increasing coverage limits. As of the date of this Report, however, there have been no formal proposals to ICAO to make any changes.

potential reinsured entity, and the availability, terms and cost of DOT reinsurance. The Administration will continue to monitor the situation and will make appropriate decisions based on the industry's insurance needs.