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TESTIMONY BEFORE THE U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

*“China’s Emergent Military Aerospace and Commercial Aviation Capabilities”*

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**Introduction**

Chairmen Blumenthal and Videnieks, and members of the U.S.-China Economic and Security Review Commission: the Aerospace Industries Association of America (AIA) appreciates the opportunity to testify at today’s hearing evaluating “China’s Emergent Military Aerospace and Commercial Aviation Capabilities,” and on this panel considering the implications for civil aviation manufacturing in the United States.

My name is Dan Elwell, and I am the Vice President of Civil Aviation at AIA, the nation’s trade organization representing the aerospace manufacturing sector, with 644,200 high skilled employees generating a trade surplus of \$56 billion per year. Given that over 70 percent of all U.S. civil aviation manufacturing is exported, it is important for me to articulate the benefits of international trade with critical markets like China for our country, our industry and the American men and women who manufacture the best aerospace technology in the world.

As you are aware, China is a growing and dynamic market for our industry. Last year we exported approximately \$5.5 billion in commercial aerospace products to China and imported only \$406 million, representing over a \$5 billion aerospace trade surplus. To further put these figures into perspective, U.S. imports of Chinese civil aviation products represented 1.2 percent of our overall civil aviation imports.

Our companies estimate the potential civil aerospace market in China will be 3,770 new airplanes valued at \$400 billion over the next 20 years, a significant figure that does not take into consideration the potential aftermarket for parts and components to maintain those planes or the critical infrastructure needed to operate those aircraft safely and efficiently. China will attempt to address their prodigious need for civil aviation products and services from both domestic and foreign sources. American aerospace products are critical and high-value components on every major commercial aviation platform and system in the world.

**Aircraft**

If we focus on the demand for airplanes, China developed the ARJ-21 regional jet, is developing the COMAC 919 widebody jet, and has an Airbus A320 final assembly line in Tianjin all aimed at supplying some portion of their domestic demand. In the short and medium term, Chinese airlines will have to rely primarily on imported aircraft to meet their needs. Going forward, it is important for those Chinese airlines’ market

competitiveness to continue enjoying the “freedom to shop” among the cutting-edge product offerings, as well as sales and service support of established general aviation, rotorcraft, regional jet, narrowbody and widebody manufacturers from the U.S., Europe, Brazil, Canada and future entrants into these increasingly crowded markets. Longer term, the “freedom to shop” of airlines in other countries will lead to some gain of Chinese market share in contested export markets, but competition is increasing for everyone to produce aircraft that are safe, reliable, economically efficient and environmentally sound.

### **The Civil Aviation Global Supply Chain**

What these global aircraft manufacturers, including China, have all come to recognize is that to pursue a “national jet” strategy that relies on a vertically integrated supply chain completely within their borders instead of sourcing the best parts and components at the best price globally will not produce a competitive aircraft in the international marketplace. In this market environment, a proven track record matters and market share is not easily won by new entrants. Further, the highly technical, safety conscious, ever innovating, and deeply interdependent nature of the civil aviation supply chain ensures that demonstrated performance will more often than not trump price as the critical discriminator for buyers.

U.S. civil aviation parts and components manufacturers benefit from these market trends, but cannot take them for granted. Competition will be equally fierce at this level over time against a number of global players, including Chinese part and component manufacturers, for work on global civil aviation platforms, including those made by Chinese aircraft manufacturers. In other words, Chinese production of full aircraft represents one of many contested export opportunities for U.S. civil aviation suppliers in the years to come. In the end, winning export competitions in the Chinese marketplace for full aircraft as well as parts and components sustains and grows the U.S. industrial base and its expertise in aviation design and development, production and component manufacturing.

To produce viable, domestically produced aircraft, China needs to have access to these capabilities either within its own borders or through imports. The Chinese government would of course prefer the former to the latter. In developing these capabilities, China will consider a range of options to bolster the competitiveness of indigenous firms in both the Chinese and global marketplace. In this regard, AIA continues to support the position of the U.S. Trade Representative (USTR) that all countries involved in civil aviation manufacturing must have a level playing field with guidelines for such government support consistent with the obligations of membership in the World Trade Organization.

It should be noted China has observer status within the Agreement on Trade in Civil Aircraft (ATCA). Article 4 of ATCA states:

### ***Article 4 - Government-Directed Procurement, Mandatory Sub-Contracts - and Inducements***

*4.1 Purchasers of civil aircraft should be free to select suppliers on the basis of commercial and technological factors.*

*4.2 Signatories shall not require airlines, aircraft manufacturers, or other entities engaged in the purchase of civil aircraft, nor exert unreasonable pressure on them, to procure civil aircraft from any particular source, which would create discrimination against suppliers from any Signatory.*

*4.3 Signatories agree that the purchase of products covered by this Agreement should be made only on a competitive price, quality and delivery basis. In conjunction with the approval or awarding of procurement contracts for products covered by this Agreement a Signatory may, however, require that its qualified firms be provided with access to business opportunities on a competitive basis and on terms no less favourable than those available to the qualified firms of other Signatories.*

*4.4 Signatories agree to avoid attaching inducements of any kind to the sale or purchase of civil aircraft from any particular source which would create discrimination against suppliers from any Signatory.*

The U.S. civil aviation industry continues to observe Chinese procurement policies, such as the Indigenous Innovation procurement policy that favors Chinese government procurement from firms producing goods based on Chinese intellectual property. To date, such policies have not contravened the principles of ATCA.

Aerospace supplier companies of all sizes are working to increase their access to Chinese sales opportunities, and therefore consider joint ventures with domestic Chinese firms. The ideal state would be for this cooperation to be win-win – with the Chinese partner gaining some capabilities, while the western company secures long-term access to fulfill Chinese demand. China also encourages joint ventures with many of the same incentives as other countries to companies that are considering locating production facilities within their borders.

From an economic standpoint, the concern that such partnerships may represent an “outsourcing” of U.S. manufacturing capabilities in civil aviation is understandable but not credible in the short and medium term. Competition in the global supplier base is fierce and geographically widespread, and there are high barriers to successful entry as a global player (a fact borne out by trade statistics where established players dominate). In the near and medium term, the business case for these joint ventures is best suited to capture market share within China rather than serving as an export platform. Manufacturing in the civil aircraft sector is highly specialized and capital intensive, meaning that ramping up new production lines is not necessarily an easy or worthwhile task the higher up the value chain you go. As discussed earlier in this testimony, labor and other cost advantages are generally overcome by technical and quality factors. Organizing the time, effort and resources necessary to satisfy demand in China alone is a sufficiently complex task to occupy the production facilities of any civil aviation supplier doing business in China. Meeting all of China’s demand with indigenous or joint venture

production alone is also not viable in the short or medium term, meaning export opportunities for U.S. companies will predominate.

In the long term, all global high technology companies can and do consider carefully the ramifications of transferring production know-how and other forms of their intellectual property through overseas joint ventures. First and foremost in the thought process is how to protect their intellectual property and maintain both their short and long-term competitive advantage. AIA does not take a position on specific corporate decisions, but in general AIA supports joint ventures because they advance U.S. technological leadership and increase the number of high quality American aerospace jobs through the growth of exports and market share.

### **Technology Exchange**

It is important to note that the highly specialized nature of civil aviation manufacturing means that no one company has the technical expertise to transfer technology in a manner that drastically affects the competitiveness of lower tier suppliers. In other words, if the U.S. customer of a U.S.-based parts and components supplier begins to locate production in China, the supplier has not assuredly lost its sales opportunities. The supplier may still have the business case to serve their customer from their U.S. operations, or even (as AIA encourages many members of our Supplier Management Council to consider) discover that they too can seek international partnerships to become an even bigger force in the global supply chain.

Speaking of technology exchange, it is also important to note that U.S. civil aviation companies undertake technology trade with China in strict accordance with U.S. export control laws and regulations. U.S. aerospace companies partner closely with the U.S. government and Congress as advocates for strong and sensible export control policies and processes that assure protection against diversion of military or intelligence sensitive technologies while allowing legitimate, non-sensitive exports to occur. AIA member companies also regularly engage Chinese companies and the Chinese government on the rationale behind U.S. export controls, and the critical importance of maintaining compliance best practices in China as a prerequisite for sustaining the flow of appropriate, high technology trade with the United States.

Engagement and cooperation for capacity building in China has a proven track record of benefit on many levels to the U.S., as exemplified by the U.S.-China Aviation Cooperation Program (ACP). Launched in 2003 by the U.S. Trade and Development Agency (USTDA) and the Federal Aviation Administration (FAA), the ACP program was conceived as a counter to “EU Incorporated.” The European Union approach consists of joint European public and private sector coordination to engage the Chinese civil aviation leadership and promote European solutions to Chinese training, infrastructure and product needs. Through ACP programs, the Chinese have become increasingly familiar with the products and expertise of U.S. suppliers. To date, the nearly \$6 million in USTDA grants to the China ACP program can be linked to \$1.5 billion in exports of U.S. aviation equipment to China (\$720 million in 2009 alone). These export sales extend both to civil aircraft and related components as well as civil

aviation infrastructure (e.g. China's air traffic control system) designed to increase the capacity for more aircraft operating safely, efficiently and in an environmentally sound manner in the second largest aviation system in the world.

### **Maintenance, Repair, and Overhaul**

Having commented on the implications for U.S. civil aviation aircraft and component manufacturers of developments in China, I now will comment on the impact of China's expansion of maintenance, repair and overhaul (MRO) operations. China's competitiveness in offering MRO services is constrained in a few ways, most notably by the operation of aircraft that have the range to go there for MRO work and the similar aspirations of many of their neighbors in the Asia-Pacific (e.g. Singapore, Malaysia, Vietnam). The market potential for aircraft operating in China cited earlier in this testimony is sufficient to provide many Chinese customers for Chinese MRO services. China has a good track record in aviation safety to date, but their air space will become more complex. FAA Administrator Randy Babbitt noted in a speech in Beijing last week that improved aviation safety and mitigating environmental impact in China are two areas "where we have not only a need, but an obligation, to cooperate."

### **Conclusion**

In conclusion, America's future leadership in aerospace and other high-technology manufacturing industries will be derived from our unique ability to innovate and our drive to compete in global export markets. It is useful to consider that there was a time when similar concerns about U.S. civil aviation trade with China cropped up in discussions about civil aviation trade with Japan. Significant U.S. engagement and technology cooperation with Japan has resulted in dominance in that marketplace with benefits that have accrued to the expansion of U.S. civil aviation capabilities and competitiveness. U.S. civil aviation companies have come to know that given the globalized nature of the civil aviation supply chain and the ever expanding number of market entrants into general aviation, rotorcraft, regional jet, narrowbody and widebody aircraft construction, there are both opportunities for cooperation and competition everywhere, more often than not in the same country.

Going forward, it is readily apparent that China has significant potential to be a global leader in both supply of and demand for civil aviation products and services. The potential demand certainly provides incentives for civil aviation manufacturers around the world to cooperate with the Chinese on their ability to compete as civil aviation suppliers. I hope this testimony shows that, given a fair and level playing field, in the near, medium, and long term we run a far, far greater risk of losing the growing and dominant U.S. share of the China market opportunity to other, capable civil aviation manufacturers in the global marketplace than we do ceding our industry's global competitiveness to China itself.