苏珊·麦克德莫特女士：

各位早上好，首先我要非常感谢中国民航发展论坛组委会邀请我和我们运输部来参加会议，我的发言主要重点放在不断增加的互联网时代，对我们美国还有全球进行民航决策方面的影响。

就像柳芳秘书长所说的，民航在促进全球商务和旅行过程中发挥了重要的作用，今天更是如此。因为我们现在已经进入到了互联网的时代，我们的供应链，还有高价值商品的贸易、国际旅游业的发展，没有互联网是不可能实现的，没有互联网给我们提供的互联互通是不可能实现的。这些趋势又给我们带来了很多的压力。作为监管部门，我们要事先预测互联网对交通运输行业怎么样加强它的管理和发展。

今年我们选择的这个题目是非常及时的，我们现在正在处于一个航空运输行业变革的边缘，我们的航空运输时代已经到来，而且航空业一直在不断地进行革命，又带来其他行业的革命，因此在航空运输行业带来了很多新的、更大规模的发展。

有预测认为，到 2020 年，将可能有 500 亿互联网相连的设备在世界上使用，已经是世界人口的 6 倍之多。这种互联互通使我们的运输系统更加便利、更加安全，这又是一种新的在航空业开展工作的方法。对于所有的监管部门、航空公司、机场、旅行公司，我们已经把我们的路线计划进行了革命，新的卫星系统可

以不断增加飞机的效率。

我们现在看到了智能机场的发展，增加了它的容量，旅客的流通量也多了，而且还有很多的无人系统也都出现了，所有这些新的发展为我们在做计划的过程中、运输系统过程中带来了非常大的影响。我这里给大家举三个例子。

第一个例子，过去的航空公司是通过自己的专门计算机系统来卖机票，或者通过第三方代理商来买。但是现在出现了互联网以后，我们现在看到新的全球的营销系统，可以让客户直接获得各种不同的服务，因此这些系统大大地改变了过去每个消费者买机票的情况。

通过不断地演变发展，这种系统促进了竞争，同时也促进了各个不同方面购买机票的透明度。这种趋势我们把它称之为直接销售，就是航空公司直售。新的在线系统模式把价格整合了起来，还有各种不同的信息提供给客户，这样客户就可以直接做出决策来买机票。直接销售很快将不断地扩展，有各种不同的灵活性，航空公司也可以对自己的产品进行打包，有各种不同差异化的产品，更加灵活，创造更多的需求，也有更多的服务机会和发展机会。

根据国际航协的统计，直接销售在 2016 年达到了二分之一。我们也鼓励航空公司促进这种互联网的发展，找到更多潜在的旅行者，更加有效地销售自己的交通运输服务。我们应该拥抱这种开放服务的原则，同时要认识到互联网能够帮助我们提升这种能

力。要这样做的话，监管机构必须要灵活，同时必须要动态变化。

美国运输部过去是监管运输行业的情况，但是现在不管了，因为现在这个行业变化太快了。这些动态的变化主要是在 GDS 方面的竞争，也就是说它鼓励更多的、没有任何偏见的服务提供。在这种情况下，我们分销环境的开放、有更多的互联网的支持、公开的竞争改变了我们过去把重点放在监管的不同领域。

另外一个趋势，也就是作为政策制定者，在共享经济过程中应该扮演不同的角色。交通运输在大都市进行规划，实际上也都是由于各种不同的共享经济所影响的，消费者可以通过共享，他们可以用自己的车按需获得不同的服务；同时作为都市的规划者来讲应该重新加以考虑。

另外，共享经济在交通运输行业中发展非常快，在航空方面也有一些小的进展，也是不错的。现在我们说一部分的拥有者，通过提供这种前所未有的灵活性，到什么地方去，在什么地方飞行，我们有了这样的能力，通用航空可以让更多的人享受到这种服务。这种业务模式对中小企业确实非常有吸引力，他们确实有这种潜力，不仅让用户和提供服务的人获得好处，因为它会降低成本；同时，它也可以让这个行业得到进一步的发展，有些地方没有这样的情况，也可以获得好处，推动本地的就业市场的发展。

在这样的一些好处当中，我们可以看到作为监管机构来说，必须要保持我们的灵活性，推动经济增长的过程当中，我们要灵活地允许各种商业模式的出现。在很多的地区，都采取部分拥有

产权的体制，在美国我们也和很多外国的合作伙伴进行合作，了解监管方面有哪些最佳的实践经验，在世界上各个地区，其实没有具体的一些监管。这样的一种商业模式在世界各地扩展的过程当中，我们要确保我们的监管变化和改革是要兼容的，也是要随着商业模式的变化进一步地变化。目前美国也是希望和中国以及其他的大型市场，一起来迎接我们所面临的监管方面的挑战。

另外一个非常重要的事情，是我们这个部门目前也在努力进行的。在互联网时代，我们这个行业所面临的很多的挑战，就是无人空管系统的发展。我们也不断地在强调 UAS 无人航空系统，无人航空系统就是我们经常看到有很多无人机，还有新出现的类似于无人机的飞行器，对我们目前航空行业所造成的冲击。

目前硅谷很多无人机公司都源自硅谷高科技行业，他们在传统航空业基础之上，开发出很多新产品。我们从美国监管部门角度来讲，面临着很多挑战，就是怎么样把无人飞行这样一个新出现行业，和我们传统的国家空域管理很好地结合起来，达成一个平衡，我们支持这些新技术的发展，我们也支持这些新技术的出现给美国人民和其他国家人民带来一些新的商业和生活机会；但是我们也要了解到这些技术对我们目前的空域管理造成的挑战，怎么样让这些无人飞行航空系统能够更好地和我们现有的有人飞行航空系统进行兼容，更好地对它进行合理的监管，是一个非常重要监管挑战。

所以在这个行业的发展过程当中，我们看到这个行业近年来

发展的速度非常快，有大量的创新，给我们监管造成了很多新的问题。安全是其中最重要的一个问题，因为作为航空业来说，安全永远是重中之重，这是人民关心的问题。当我们面对越来越多的无人飞行系统进入传统的空管领域的时候，安全永远是第一位的考量。另外还有开放、创造，有一些前瞻性的思维，需要我们来有一些新的监管思路，对新出现的飞行系统进行监管。

我们作为美国航空监管部门，我们也宣布了一些新的举措，其中包括在创新性的研究开发方面，怎么样利用新出现的技术推动货运的发展。同时我们有一些小型的无人机监管的新规则，同时在监管规则制定过程当中，我们也充分考虑了各方利益。对于我们监管机构来说，其实对于互联网最大贡献，就是我们政策的透明度，以及我们持这样一种开放、合作的态度，和新兴的一些技术、新的行业企业，跟他们进行合作。这个我们认为是非常重要的一个基本的原则，因为所有的利益相关各方都有他们自己的利益考虑。

在这里，合作特别是坦诚、透明的合作是非常重要的，监管部门之间，监管部门和行业之间，监管部门和其他的利益相关团体之间，这样的一种高度透明、坦诚的合作，是我们应对这个行业所面临的一系列新挑战最为关键一个原则。

预祝这次会议取得圆满成功，非常感谢大家！

<文稿根据现场录音整理，未经本人审核。>

Remarks
Susan McDermott
Deputy Assistant Secretary for Aviation and Int'l Affairs
U.S. Department of Transportation

The China Civil Aviation Development Forum
Beijing
May 25, 2017

**Implications for US aviation policymaking and Metropolitan
Transportation planning in the internet era**

Good morning, distinguished hosts and guests.

I would like to extend my appreciation to Vice Minister Feng [FUNG], Deputy Administrator Wang [WONG], and indeed to all in the CAAC and CAMIC for inviting the U.S. Department of Transportation to once again speak as part of this extraordinary program.   Notwithstanding that the new Administration is not yet fully in place, we felt it to be of crucial importance that the Department be here today given the long tradition of DOT's participation at what has come to be one of the more prominent aviation policy forums around the world.   To that end, I am pleased to join you to discuss the implications of this increasingly internet-driven world for aviation policymaking and metropolitan transportation planning in the United States and around the world.

All of us are well aware that aviation plays a pivotal role in facilitating global travel and commerce.   A robust aviation sector is not only vital to providing countries with access to the global economy, but also to promoting economic development and innovation within one's own borders.   At no time has this been truer than in today's world of the internet-driven economy.   Just-in-time supply chains, increased trade in high-value goods, and unprecedented growth in international tourism are all possible because of the internet and the accessibility it provides – not just to air transportation itself, but to other goods and services that are delivered to consumers using air transportation.   Together, these trends place ever-greater pressure on us, as regulators, to anticipate how the internet can be harnessed to bolster the air transportation industry.

The theme that our hosts have chosen for this year's Forum could not be more timely. Indeed, we seem to be on the precipice of a revolution in the aviation industry.

While the internet age began some time ago and has already revolutionized a countless number of global industries, its effects on the aviation industry – and the transportation industry, generally - look set to take on new scale in the immediate future. By some estimates, by the year 2020, there will be over 50 billion internet-connected devices around the globe – that is more than six times the world's population. This connectivity has the potential to make our transportation systems safer and more efficient than ever before.

This era promises a new way of doing business in the aviation industry for all players – regulators, airlines, airports, travelers, shippers and manufacturers. Already, we have seen new software that is revolutionizing route planning capabilities and new satellite systems that are increasing on-time performance and aircraft efficiency. We are seeing the development of "smart airports" that increase capacity and speed passenger throughput, as well as the deployment of unmanned aerial systems – or drones. All of these developments have profound implications for the way we oversee the air transportation system as policymakers and regulators.

To give you an example of what I mean, consider the role that the internet has already played in the way that consumers purchase air travel.

In the United States, this is perhaps the area where the internet has had one of the strongest impacts on the aviation industry to date. Gone are the days when U.S. airlines relied exclusively upon their own proprietary computer reservation systems – as we once called them – to sell tickets through direct and third-party agents. With the advent of the internet, we saw the birth of the modern day global distribution systems that empowered consumers with direct access to services and fares. These systems have transformed the way in which the average consumer buys a plane ticket.

Through their continued evolution and increasing complexity, GDS's have facilitated increased competition and transparency in practically every aspect of the purchasing process. In the United States, this evolution shows no sign of abating. In recent years, we have seen a trend toward what we call "direct selling" by air carriers. Newer online business models now consolidate fares and other information, but then direct you to the airline for the actual purchase of a ticket. "Direct selling" will rapidly expand the universe of potential travelers throughout the worldby giving airlines increased flexibility to package and differentiate their products, enabling new segments of the population to fly, creating more demand, and, in turn, more viable service opportunities and network development. While this trend is just beginning, we expect it to grow significantly in the coming years. According to IATA, direct sales account for one-third of sales in 2016, but by 2021 it will account for 45 percent.

As regulators, we ought to encourage and support airlines in bolstering the power of the internet to reach new potential travelers and to more efficiently sell air transportation, in turn, maximizing the utility of the air transportation systems that we oversee. We should embrace openness and transparency in these services and recognize the ability the internet provides to support these principles. To do this, our regulations must be flexible and dynamic.

The Department used to regulate travel distribution, but we do not anymore because the dyanamics of the industry changed.

Those changed dynamics are primarily seen in competition among the GDS' that incentivize the unbiased presentation of the maximum amount of services and fares possible. In this sense, the liberalization of the distribution environment, spurred in large part by the broad availability of the internet and open competition among GDS's, changed the necessary focus of the regulatory oversight that was appropriate. Our regulatory oversight at DOT is now geared toward ensuring that the presentation of information is done in a way that does not mislead or confuse consumers as to the services they are purchasing or the prices they are paying for those services.

Another global trend that has resulted from the internet era and has profound implications for us as transportation policymakers is the "sharing economy". Transportation planning in metropolitan areas around the world has been transformed by the proliferation of ride sharing services like Uber and Lyft and flexible car rental services such as Zipcar. The ease with which consumers can now use personal vehicles to transit on-demand has huge implications for the planning of public transportation, as well as metropolitan planning more generally. While, to date, the focus of the "sharing economy" in the transportation sector has been most prominent in the surface transportation realm, there have been developments of a smaller scale in aviation as well. Developments that will inevitably become larger as air transportation becomes available to more and more segments of the global population. The development I refer to in aviation is "fractional ownership", which is essentially ride sharing for air transportation.

By offering unparalleled flexibility for when and where to fly, fractional ownership operations have a unique capability to bring general aviation access to a broader subset of the population. These business models have particular appeal to small and medium businesses. They have the potential to yield benefits not just for users and service providers by lowering the cost of private air transportation, but also allow for the development of industries at locations that might not be otherwise accessible. For governments, this translates into potential economic development and local job growth.

Given these benefits, one can see why we, as regulators, must be careful not to unduly constrain the flexibility that makes fractional ownership business models a driver of economic growth. For "fractional ownership" operations to be successful, we must have compatible regulations around the world. In the United States, we have worked with a handful of foreign partners to come to common understandings on best practice in the regulation of this business model, but much work remains to be done. In many jurisdictions around the world, no specific regulations exist at all. As these business models spread around the world, and as more and more of their operations become international, we will need to ensure that our regulations are as consistent – or at the very least, as compatible as possible. The United States remains eager to engage China and other large growth markets as we address this challenge going forward.

Last not but not least, I would like to take a minute to discuss our Department's work

in an area that is probably the most emblematic of the rapid change our industry is undergoing as a result of the internet era…

The Department's work on unmanned aerial systems –UAS – is perhaps the paramount example of the rapidly changing circumstances we face. We emphasize the term "UAS," rather than "drones" or "UAV," because the unmanned sector is not limited to flying aircraft. Often, UAS firms have the DNA of Silicon Valley. They combine the science of lift with hardware and software to create new applications involving multiple aircraft and complex systems on the ground. They may be equal parts aviation, communications, technology, and consumer product companies.

In this new era, the Department and the FAA are embracing the challenges of fostering the development of the sector while safely and securely integrating UAS into the national airspace. We are aiming high. We want to see the technology blossom and bring new opportunities to the people of the United States and other nations. We envision integrating the technology quickly and comprehensively into the national airspace, eventually, within years, allowing UAS to operate side by side with manned aircraft rather than in a segregated manner as occurs today.

But, to reach these goals, we realize that we need to think differently. The UAS sector is developing at such a rapid pace, and the innovations are so considerable, that we cannot assume the traditional regulatory approaches will work. In fact, we would expect some traditional approaches to limit the growth and potential evolution of the sector. So, we are adopting a new way of thinking about the UAS sector, one that prioritizes safety, but is open to new approaches and ideas…ones that might not even be fathomable today. This requires a great degree of creativity, openness and forward-thinking in how we craft these regulations.

The FAA has announced a number of new approaches, including innovative research and development initiatives such as the Focus Area Pathfinder Program, new small UAS rules, and a registration rule that enables fast and easy web-based registration of UAS. At the Department, we are doing the same thing in the area of economic regulation. We know that air transportation by UAS is on the horizon – first for cargo then, in the future, for people. That is why we are reviewing our current approaches to granting economic authority to air carriers who will use unmanned aircraft. Especially as the sector is emerging, we want to make sure to select approaches that foster competition and new business models well into the future.

I think the biggest contribution of the internet to our work as policymakers and regulators is the transparency and collaboration it facilitates in our work. The ease with which information may be shared is invaluable in allowing our Department to conduct our business in a way that considers the views of all stakeholders as well as that of our international partners. I mention this because cooperation – both between regulators, as well as between regulators and our respective stakeholders – will be key to succeeding in the work that lies before us. The internet era has only heightened the pace with which we must confront new developments in our industry. That means that our cooperation must be heightened as well.

I look forward to hearing from the many distinguished speakers that are present at the Forum.

Thank you.