Chairman Larsen, Ranking Member Graves and distinguished members of the House
Subcommittee on Aviation, thank you very much for holding this hearing on aviation safety and
for providing the Transport Workers Union (TWU) the opportunity to present testimony on
issues of vital concern to the American people. Air safety is essential to our economy and no one
knows more about the safety and security of our aviation system than the frontline employees
who work in it every day.

My name is John Samuelsen and I am the International President of the Transport Workers
Union of America. The TWU represents 151,000 members across the U.S. and I am here today
representing those employed in the aviation industry as mechanics, flight attendants, ramp
workers, airline dispatchers, and fleet service workers. For decades, the TWU has been at the
forefront of efforts to increase the level of safety in the aviation industry for the protection of
airline workers, as well as the travelling public. Our members continue to be devoted to creating
and maintaining the safest aviation system possible.

I appreciate the opportunity to address this committee today and to share our concerns about
several ongoing issues which threaten the safety and security of our airspace.

Foreign Repair and Maintenance Facilities
The TWU continues to have grave concerns regarding the outsourcing of aircraft maintenance to
foreign repair facilities. In theory, the FAA requires that all U.S.-flagged commercial aircraft be
maintained to the same standard, whether maintenance work is performed in-house or outsourced
and regardless of whether the work is done in the U.S. or abroad. In reality, our regulatory
structure has created a second, inferior set of safety standards for aircraft maintained outside of
the United States.
While international air commerce requires qualified mechanics and technicians to be available around the globe, regulatory loopholes have created a second tier of safety requirements. This two-tier system is driving U.S. airlines to offshore a significant amount of their maintenance and repair operations because the lower safety standard abroad is cheaper. Insufficient safety regulations, fewer government inspections, and lower minimum qualifications for maintenance workers drive down the cost to the airlines. Because of this structural incentive, we are now seeing the foreign maintenance industry boom at the expense of jobs and safety here in the U.S.

More than 900 overseas aircraft maintenance and repair stations have been certified by the Federal Aviation Administration (FAA) in 65 countries around the world. The number of these facilities has grown by more than 30 percent in just the past four years. These foreign repair stations are located across the globe, including, for example: China (78), Singapore (54), Brazil (22), Thailand (6), Costa Rica (3), and El Salvador (2).

Thailand and Costa Rica are particularly interesting locations for these repair facilities. These countries’ air safety regimes are classified as “category 2” by the FAA – meaning our government does not have confidence in their regulators to guarantee that regulations in these countries meet international safety standards. In the case of Thailand, this designation was reviewed and renewed in February of this year when the Civil Aviation Authority of Thailand failed on 26 different metrics essential to aviation safety.

Thai and Costa Rican airlines are not allowed to initiate new service to the U.S. or to enter into codeshare agreements with U.S. carriers because we cannot certify that they are capable of adequately overseeing their aviation system. Inexplicably, despite this fact, our government continues to allow maintenance of U.S.-flagged aircraft in facilities whose day-to-day operations are overseen exclusively by these governments.

El Salvador is another interesting example. Despite currently having zero commercial flights to the United States, U.S. airlines regularly ferry empty planes to El Salvador for maintenance and repairs. This naked pursuit of a separate safety standard should give regulators and the travelling public pause.

The amount of maintenance being performed on this lower safety standard is already at worryingly high levels. While a lack of consistency in reporting methods makes it difficult to determine exactly how much maintenance and repair work is being outsourced, data from the U.S. Department of Transportation (DOT) shows that, in 2018, the three leading U.S. airlines – American, Delta, and United – consigned 31%, 30%, and 28% (based on dollars spent) of their maintenance work, respectively, to foreign facilities. Frontier Airlines reportedly outsourced 50% of its maintenance work.

More than 8,200 aircraft maintenance jobs have been moved abroad since the early 2000s. The loss of these high quality, middle class jobs should be disturbing in itself. But the additional safety concerns created by moving aircraft repair and maintenance to often unqualified,
uncertified, uninspected foreign workers raise significant issues with the existing public policies which are enabling this regime. The dedication, skill, and professionalism of FAA-certified U.S. mechanics and technicians has been a major factor in creating the stellar safety record of U.S. airlines. The decreasing use of this labor force in favor of cheaper, less skilled workers has a consequential increase in risk for our air safety system.

American mechanics, technicians, and pilots are regularly alarmed by egregious examples of incompetent work performed on and nefarious modifications made to aircraft maintained outside of the U.S. Their discoveries have included:

- Critical engine components held together with tape and wire;
- Parts on the aircraft exterior doors installed incorrectly, leading to mid-flight cabin depressurization;
- Aircraft covered with flammable paint; and
- Drug smuggling in aircraft noses, wheel wells, avionics, and lavatory panels.

That U.S.-flagged aircraft are flying in these conditions is only possible because sovereign laws allow foreign repair stations to remain exempt from the vast majority of regulations governing U.S. facilities, including those requiring:

- Mandatory security background checks for workers;
- Risk-based safety and security evaluations for facilities;
- Employee drug and alcohol testing;
- Unannounced FAA inspections; and
- FAA certification standards for mechanics and technicians.

Congress has directed the FAA and the DOT to address these safety gaps several times over the past decade. The TWU fully supports existing statutory requirements directing our regulators to close these gaps – requirements which are now years overdue. In late June of this year, the TWU, in conjunction with several other unions, wrote to Transportation Secretary Chao, imploring her to act immediately on these directives.

Since 1991, all mechanics at U.S. aircraft repair stations have been subject to federally mandated testing as a condition of employment. The 2012 FAA Reauthorization Act directed the FAA to issue a proposed rule mandating that all repair station employees responsible for safety-sensitive maintenance on U.S. aircraft be subject to an alcohol and controlled substance testing program no later than February 14, 2013. An advanced notice of proposed rulemaking was issued by the Obama Administration in 2014 and the 2016 FAA Extension Act also included another requirement for the FAA to issue a proposed drug and alcohol testing rule within 90 days of enactment and a final rule within one year. To date, no such rule has been enacted.

The 2016 FAA Extension Act also required that, within six months of enactment, the FAA would guarantee that all workers at foreign repair stations who perform safety-sensitive work undergo a pre-employment background check to ensure that they are not a threat to aviation
safety. Minimizing risks to airline passengers and crew must be our highest priority. As aircraft systems increase the amount of software and interconnectivity, they become more vulnerable to dangerous cyber attacks. By allowing workers at foreign repair stations access to these aircraft systems without having been vetted through extensive background checks, we are recklessly exposing our skies to an increased number of serious security hazards. Workers at U.S. repair facilities are subject to background checks and it only makes sense that workers at overseas stations should be as well.

In addition, the 2016 bill required the FAA to increase risk-based safety oversight of foreign repair stations with demonstrated records of poor performance. A key element to this provision is the requirement that airlines report data to the FAA related to the seriousness and frequency of corrective measures undertaken as a result of substandard work performed at overseas repair facilities. Distressingly, this mandate has yet to be implemented either.

Simply put, the FAA is failing to exercise the minimum oversight mandated by Congress and necessary to protect the flying public. The recent, tragic crashes of two Boeing 737 Max aircraft demonstrate the consequences of negligence on behalf of our air safety regulator. For years, the FAA has allowed companies like Boeing to self-certify components of their aircraft designs without the oversight necessary to ensure this self-certification was meeting minimum standards. The TWU is concerned that the FAA’s indifferent approach to aircraft type certification is being replicated in their oversight of foreign repair stations – potentially opening our air safety system up to other systemic failures in the future.

Our safety regulators must do a better job on all fronts. The FAA must properly regulate foreign repair stations – including conducting unannounced inspections and ensuring a minimum set of qualifications for the workers repairing our flagged fleet.

The TWU supports these commonsense directives contained in previous FAA Reauthorization bills, as well as all efforts to improve safety in the aviation industry. We thank this committee for acting on a bipartisan basis to move the FAA to take these necessary actions.

**Flags of Convenience Airline Legislation**

The TWU supports H.R. 3632, the Fair and Open Skies Act, which was introduced last week by Representatives Peter DeFazio, Rick Larsen, Rodney Davis, Sharice Davids, and Drew Ferguson. This act would require the U.S. Department of Transportation to exercise more scrutiny prior to issuing foreign air carrier permits to flag of convenience carriers. Flag of convenience airlines split pieces of their operations across several countries in order to skirt tax, labor, and safety regulations in their home countries. These airlines present a long-term threat to the safety of our air system.

As we have witnessed in the maritime shipping industry, where the flag-of-convenience business model predominates, companies will seek a minimum safety standard if allowed to compete on safety. These companies destroy safety cultures by threatening their employees with retribution.
should they decline to utilize unsafe machinery – a practice which is only possible due to forum shopping for the very lowest labor and safety standards around the world. Even when the minimum international standards are violated by these companies, there is little chance that they will face any consequences because they effectively report to no government regulator. This business model will cause a race to the bottom in all our existing standards, which puts both crews and passengers at great risk.

The TWU strongly supports the Fair and Open Skies Act in order to enhance the safety of the travelling public.

**Cabin Air Safety**

The TWU is also concerned about the quality of the air in our aircraft cabins. In order to create breathable air at 40,000 feet above sea level, aircraft pull air from the surrounding atmosphere, heat it over the engines, and compress it before circulating this air into the cabin. This process of “bleeding” air from around the plane has enabled modern jet travel; however, when the mechanical pieces of this process malfunction, cabin air can become toxic and extremely harmful to both passengers and crew members. The fact that our aircraft currently are not equipped to monitor cabin air quality is of great concern.

Engine oil, hydraulic fuel, and other aircraft fluids, when gasified, become potent nerve agents that can cause respiratory, neurological, and psychiatric symptoms as well as cancer. These nerve agents can be absorbed both by inhalation and through the skin. Repeated or prolonged exposure to these agents – such as that endured by flight attendants – can have devastating effects. Concern about toxic exposure in aircraft cabins is not theoretical or abstract. We have documented cases of TWU flight attendants who have suffered severe and career-ending disabilities due to this chemical exposure.

Passengers are at equal risk to the negative health effects from these fumes caused by bleed air. Because these fumes can smell like dirty socks or other everyday items, travelers may not recognize the health threat as it is happening. Some passengers mistake the symptoms of toxic fume exposure for jetlag. Recently, however, there has been a spate of incidents in which air travelers have become severely ill due to toxic cabin air, including on board aircraft on which TWU members served as crew. For example, eight passengers on a recent flight were hospitalized after one such event while waiting to take off.

Federal legislation recently introduced in Congress addresses the serious issue of bleed air. The Cabin Air Safety Act, H.R. 2208, sponsored by Representative John Garamendi, will help ensure that the air we breathe when we fly is healthy and safe. The TWU fully endorses this important bill.

**10-Hour Rest for Flight Attendants**

Last year, Congress recognized the importance of establishing a 10-hour minimum rest period for flight attendants between shifts by directing the DOT to change the existing regulations as
part of the 2018 FAA Reauthorization bill. The deadline for implementing this rule change passed in December without any action taken by the Department of Transportation.

Flight attendants are safety professionals who are responsible for ensuring the well-being of passengers throughout their flights. The flying public expects and relies on flight attendants to act with the highest level of professionalism, especially in cases of emergency. Adequate rest is essential to their performing their crucial duties to the highest standards. The 10-hour minimum rest rule will help ensure that the passengers are served by well-rested workers ready to react immediately to safety threats. We thank the members of this committee for their bipartisan efforts to implement this important safety improvement.

**National In-Flight Sexual Misconduct Task Force**

Safety onboard our aircraft requires passengers and cabin crew to be confident they will not be harassed during a flight. The TWU applauds the bipartisan efforts of this committee to direct the Department of Transportation to establish the National In-Flight Sexual Misconduct Task Force, pursuant to the FAA Reauthorization Act of 2018. The task force is charged with reviewing and evaluating U.S. airlines’ current policies and procedures for responding to and reporting passengers’ allegations of sexual misconduct onboard commercial aircraft. Their report, complete with recommendations on best practices for training, reporting, and data collection related to sexual misconduct on the part of airline passengers, is due to Congress later this year.

TWU Local 556 President Lyn Montgomery is representing flight attendants on the task force. Ms. Montgomery’s insights as a frontline employee representing workers responsible for maintaining a safe cabin will be essential for the task force to meaningfully address sexual assault and misconduct onboard our aircraft.

Flight attendants are safety critical workers. Passengers interfering with their operations, including through sexual misconduct, is illegal. However, TWU’s members report that incidents involving passengers harassing flight attendants are an ever-present threat onboard our aircraft. These incidents distract our workers from their mission and pose serious safety threats. The TWU believes that any final report from the task force that does not address passenger-on-flight attendant misconduct would be incomplete.

**Conclusion**

I greatly appreciate the opportunity to testify before the committee on these important aviation industry issues. The TWU looks forward to working with the committee to advance policies that will improve aviation safety and health for airline passengers and crew members.