

August 3, 2026

The Honorable Bryan Bedford  
Administrator  
Federal Aviation Administration  
800 Independence Avenue SW  
Washington, DC 20591

**Re: Docket No. FAA-2026-4558 - Designation-Restrict the Operation of Unmanned Aircraft in Close Proximity to a Fixed Site Facility**

Dear Administrator Bedford:

As representatives of patients, organ donors, donor families, organ procurement organizations (OPOs), medical experts and other professionals involved in the organ donation and transplant community, we appreciate the opportunity to comment on the Federal Aviation Administration's (FAA) proposed rule titled "Designation-Restrict the Operation of Unmanned Aircraft in Close Proximity to a Fixed Site Facility" published in the Federal Register on May 6, 2026. We thank the FAA for explicitly recognizing organ transportation in the proposed framework and for its continued engagement with the organ donation and transplant community.

Organ donation and transplant depend on continuous (24/7/365) access to reliable logistics networks capable of transporting time-sensitive, fragile medical shipments across the United States. The organ donation and transplant community has a longstanding record of working across the healthcare, aviation and public safety sectors to ensure the safe, efficient and timely transport of donor organs.

In furtherance of this commitment, a multi-stakeholder coalition has worked to modernize federal protocols with the goal of reducing the risk of damaging or delaying donor organs traveling through the nation's commercial aviation system. This effort included participation in the FAA's Organ Transportation Working Group, which developed strong recommendations to advance these efforts. We appreciate the FAA's impactful leadership and partnership in supporting this critical work.

**As the FAA finalizes this rule, it is essential that the framework accounts for emerging, time-critical medical transportation operations, including unmanned organ transportation, so that enhanced security measures do not inadvertently restrict access to transplantation or worsen existing disparities in care. Scalable risk-based pathways for unmanned organ transportation are necessary to prevent geographic and cost-driven disparities in transplant**

**access while protecting patient outcomes through timely, clinically sound delivery of life-saving organs.**

#### **Response to Section F. What happens after the UAFR goes into effect?**

##### **What additional types of unmanned aircraft operations should FAA allow through a UAFR?**

We encourage the FAA to explicitly allow time-critical medical transportation operations, including unmanned aircraft (UA) conducting organ transport, to operate through UAFRs under defined and standardized conditions. Organ transportation is fundamentally different from discretionary or commercial operations due to its urgent, lifesaving nature and the absence of acceptable alternatives when time, geography, or infrastructure limit traditional transportation options.

Organ transport operations are inherently unpredictable and cannot be scheduled in advance, as they depend on the availability of donor organs and must occur within strict, time-sensitive clinical windows. For example, the viability of a heart outside of the body is about 4-6 hours. With that in mind, we encourage the FAA to consider scalable authorization mechanisms, such as standardized coordination protocols or standing operational qualifications, rather than case-by-case approvals for UA operations through a UAFR. Requiring individual flight approvals in restricted areas risks introducing delays that could result in organ non-utilization or lost transplant opportunities.

##### **What would the justification be for allowing those types of operations?**

Organ transportation today relies on a patchwork of modalities, including commercial air cargo, chartered aircraft, helicopters, and ground transportation. Each presents limitations. Commercial cargo processes can introduce lockout times, inconsistent routing and delays, as they are not designed for time-critical medical shipments. Charter flights can cost anywhere from several thousand to tens of thousands of dollars per trip, are weather dependent, and are frequently unavailable in rural regions or during major public events. Ground transportation is vulnerable to traffic congestion and distance-related delays.

These constraints have become more pronounced as transplant medicine has advanced and allocation policies increasingly emphasize consistent access and prioritization of the sickest patients across broader geographic areas, expanding reliance on long-distance transportation. In recent years, meaningful progress has been made to improve organ transportation protocols within the nation's commercial aviation system, including changes that facilitate the transportation of organs in passenger cabins rather than as cargo. We appreciate the FAA's leadership in advancing this critical modernization, but significant logistical challenges remain.

UA organ transportation presents a meaningful opportunity to address gaps associated with existing organ transport modalities. UA can provide direct, point-to-point transport that avoids cargo restrictions and surface congestion, particularly for first- and last-mile delivery between hospitals, OPOs, and regional airports. UA organ transportation can provide a viable alternative to ground transportation in highly congested urban areas and improve access to rural locations that

are more difficult to reach by traditional air service. Modeling and early testing have demonstrated the potential for UA to reduce delivery times by more than an hour while offering a comparatively lower cost and more sustainable transport option.<sup>1</sup>

Importantly, available evidence indicates that UA organ transportation can maintain organ quality. Studies evaluating temperature, pressure, vibration, and post-flight biopsies have shown no negative impact on organ viability, with vibration levels in some cases lower than those experienced during traditional fixed-wing transport.<sup>2</sup> In limited instances, organs transported by unmanned aircraft have been successfully transplanted into patients.<sup>3</sup> Additionally, United Network for Organ Sharing (UNOS), the National Aeronautics and Space Administration (NASA) and LifeNet Health recently partnered to conduct the first successful organ transportation operation using UA beyond visual line of sight (BVLOS) in June 2026. During the study, research kidneys were biopsied and placed on preservation pumps before and after the flights to assess whether UA transportation affected organ integrity. Temperature, pressure, and altitude were monitored throughout the approximately 15-minute flights. Preliminary findings showed no evidence that the flights negatively affected the organs. These promising BVLOS test flights demonstrate that UA transportation could transform organ logistics by reducing transport time and cost, improving efficiency, and ultimately saving more lives.

We thank the FAA for including considerations as to how UAFRs may impact UA organ transport operations in the proposed rule. If implemented without targeted pathways for medical operations, UAFRs could disrupt direct routes between hospitals- particularly in dense metropolitan areas where multiple transplant centers operate in close proximity. Additionally, requiring individual transplant centers or operators to seek separate approvals for each restricted area could introduce operational friction that is incompatible with the time-sensitive nature of organ donation. We encourage the FAA to consider a scalable, nationwide framework for UA organ transportation operations that would better support patient outcomes while maintaining appropriate security safeguards.

### **What information should an unmanned aircraft operator need to provide to establish their credibility and demonstrate that they are not a security threat?**

We support the FAA's goal of ensuring that operators permitted to transit UAFRs present no credible security risk and encourage the FAA to require UA operator credibility indicators that are objective, verifiable, and repeatable. These may include demonstrated regulatory compliance,

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<sup>1</sup> Gilmour RG, Hoff M. Drone-Assisted Organ Transport: A Scoping Review of Clinical, Regulatory, and System Readiness. Clin Transplant. 2025 Dec;39(12):e70398. doi: 10.1111/ctr.70398. PMID: 41383068; PMCID: PMC12699177.

<sup>2</sup> Scalea, J. R., Restaino, S., Scassero, M., Blankenship, G., Bartlett, S. T., & Wereley, N. (2018). An initial investigation of unmanned aircraft systems (UAS) and real-time organ status measurement for transporting human organs. \*IEEE Journal of Translational Engineering in Health and Medicine, 6\*, 4000107. <https://doi.org/10.1109/JTEHM.2018.2875704>

<sup>3</sup> University of Maryland Medical Center received the first drone-delivered organ used for transplant. (2019, April 29). MPower Maryland. <https://mpower.maryland.edu/university-of-maryland-medical-center-received-the-first-drone-delivered-organ-used-for-transplant/>

documented operational performance, a clearly defined medical mission purpose, chain-of-custody accountability, and established coordination protocols with healthcare entities and appropriate authorities.

In cases where organ transport operations using UAFRs require coordination with Air Traffic Control, the FAA may consider supporting the specialization of UA Automated Data Service Providers (ADSPs) to facilitate organ transport operations, such as clearances or designations, in coordination with Remote Operations Centers (ROCs). These ADSPs and ROCs should specialize in medical transport and have dispatchers and systems capable of communicating effectively with local medical staff and OPOs to ensure proper digital security and accurate flight planning for the organ.<sup>4</sup>

In general, we encourage the FAA to avoid ad hoc or duplicative documentation requirements that could introduce delay without materially enhancing security, particularly for operations involving life-saving medical transport.

**Are there additional requirements, either technological or procedural, that must be in place for these operators to be able to operate in the UAFR?**

We recognize the role of technological and procedural safeguards, such as Remote Identification, coordination with affected sites, and engagement with law enforcement, in supporting secure operations within restricted areas. We encourage the FAA to ensure that such requirements are proportionate to risk and feasible for time-critical medical missions.

Experience across the transplant system demonstrates that procedural delays can have direct clinical consequences. Requirements that rely on standardized protocols, real-time coordination, and post-operation accountability may be more compatible with urgent medical transport than advance approvals that could delay departure. Clear, nationally consistent protocols would support compliance while preserving the ability to respond rapidly to transplant opportunities.

Additionally, appropriate cybersecurity protocols must be established for data transfer between stakeholders involved in UA organ transport missions to prevent interference by bad actors. Access control, authentication, and regular data security training will be necessary for UA organ transport operations across the board.<sup>5</sup>

## **Conclusion**

As representatives of patients, organ donors, donor families, OPOs, medical experts and professionals involved in the organ donation and transplant community, we appreciate the FAA's

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<sup>4</sup> Hasan, S., Constant-Coup, K., Goyal, R., Davis, T., Justin, C., Cimtalay, S., Hayes, T., Frankel, C., & Spitz, W. (2026). Advanced air mobility (AAM) public good mission & use case development. National Aeronautics and Space Administration. <https://ntrs.nasa.gov/citations/20260002866>

<sup>5</sup> Hasan, S., Constant-Coup, K., Goyal, R., Davis, T., Justin, C., Cimtalay, S., Hayes, T., Frankel, C., & Spitz, W. (2026). \*Advanced air mobility (AAM) public good mission & use case development\*. National Aeronautics and Space Administration. <https://ntrs.nasa.gov/citations/20260002866>

efforts to strengthen the safety and security of the National Airspace System while recognizing essential medical operations. As the FAA finalizes this rule, we respectfully urge the agency to ensure that UA organ transportation operations are accommodated through scalable, risk-based pathways that reflect the time-sensitive and life-saving nature of transplantation. Doing so will help protect patient outcomes, promote equity in access to care, and support the long-term resilience of the nation's organ transportation system.

Sincerely,

34 Lives

American Association of Kidney Patients

American Foundation for Donation & Transplantation

American Society for Histocompatibility and Immunogenetics

American Society of Nephrology

American Society of Transplant Surgeons

American Society of Transplantation

Association of Organ Procurement Organizations

Donate Life America

Donate Life Virginia

LifeNet Health

MaxQ Research LLC

National Kidney Foundation

North American Transplant Coordinators Organization

Northernmost

Organ Donation Advocacy Group

Renal Physicians Association

Strata Critical Medical

The Mended Hearts, Inc.

Transplant Families and Children's Organ Transplant Association

Transplant Recipients International Organization

Trinity Medical Solutions

TxJet

United Network for Organ Sharing

Virginia Innovation Partnership Corporation

Waitlist Zero

X-Therma