UNMANNED AERIAL VEHICLES
IMPLICATIONS FOR FRAGILE STATES

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OVERVIEW: Though still a relatively novel technology around the world, there is a growing concern of unmonitored UAV use in fragile states. This piece highlights the opportunities and threats of UAV use in fragile states, and argues for a forward-thinking approach to how these vehicles can be regulated for the greater good in these jurisdictions.

I. INTRODUCTION

The massive growth of drone use in the last decade has signaled a profound shift in the way that individuals, businesses, and state governments utilize unmanned aerial vehicle (UAV) technology. As manufacturers compete globally for market share amid the rising demand for UAV technology, the industry continues to expand as new designs and capabilities are introduced to the market. As this growth continues along its current trajectory, governments and other oversight entities will need to introduce legislation that balances the benefits of UAV technology with the potential risks presented by aerial threats and surveillance.

In the face of these challenges, this factsheet examines the role of international UAV regulation and discusses the implications of UAV technology in the context of fragile states. Although many fragile states already face increasing security threats from non-state UAV use and have begun to embrace UAV technology to further their development and governance goals, this factsheet outlines why governments should initiate legislation to regulate UAV use within their borders.

II. FRAGILE STATES (CONTEXT/APPLICATION)

In defining fragile states (FS), this analysis utilizes a classification system that distinguishes fragile states using a set of four primary characteristics rather than a ranked index or quantified list:

- **Weak State Legitimacy**
- **Poor Governance**
- **Low Social Cohesion**
- **Limited Institutional Capability**

While there is a valid concern for the capacity of fragile states to implement and effectively monitor UAV use within their borders, UAV oversight signals an implicit shift toward investing in security for citizens, while also facilitating greater investment in technology that can be leveraged for greater social welfare (see Implications section below).
III. THREATS + OPPORTUNITIES

Threats:
As the UAV industry continues to proliferate, so too does the potential for UAV technology to be used for illicit activities and targeted violence. Most readily, threats to national and international security takes four forms:

1. ISTAR
   a. Intelligence + Surveillance + Target Acquisition + Reconnaissance
2. Hacking
   a. Stealing sensitive information
   b. Jamming signal
   c. Overtaking flight (Controls and/or video feed)
3. Weaponization of UAVs
   a. Arming UAVs with dangerous payload
   b. Release of chemical or biological agent
   c. Intentional collision with aircraft or infrastructure
4. Illicit Activities
   a. Transport of illicit goods (drugs, contraband, etc.)
   b. Smuggling into restricted areas and prisons
   c. Symbolic factors: terrorist propaganda and intelligence

Opportunities:
Although the security threat that UAV technology poses to fragile states in terms of privacy and safety are significant, government regulation is just as important in supporting and providing a legitimate governance structure for commercial UAV use in a variety of industries and development contexts.

IMPLICATIONS:
The question still remains: if fragile states are typified by poor governance, limited institutional capability, low social cohesion and weak legitimacy\(^6\) then why should UAV regulation be a priority to states facing more tangible constraints?\(^7\)? Three reasons emerge for why governments initiate legislation to regulate UAV use within their borders:

As priorities, these three elements are necessary components for a move away from fragility towards resilience. While legislation alone cannot achieve public safety, national security or private sector growth, it does signal to other states that the fragile government is willing to:

1. Integrate or align with the international regulatory system (though the motivation for doing so varies)
2. Emphasize long term planning by:
   - Providing structure and controls within the UAV sector which promotes economic growth by establishing a system in which companies can align their activities and protocols
   - Establishes a system with an oversight mechanism early in anticipation of future growth and technological change within the UAV sector
3. Demonstrate a desire towards improving governance and government agency by creating a system for promoting:

Regulation alone is not enough to transition out of a state of fragility, and fragile states undoubtedly face greater obstacles relative to other countries due to their limited capacity and legitimacy. In fact, regulation in fragile states is often characterized by uneven implementation and enforcement\(^8\). However, regulation represents one of the preliminary steps needed to build a foundation of good governance both in terms of government oversight and providing a framework for the private sector to develop the UAV industry.
ENDNOTES


2. Larry Friese, Emerging Unmanned Threats: The Use of Commercially-Available UAVs by Armed Non-State Actors (Perth: Armament Research Services, 2016)


8. Constraints including but not limited to: political instability, access to electricity, and lack of basic infrastructure including clean water and transportation.

One Earth Future (OEF) is a self-funded, private operating foundation seeking to create a more peaceful world through collaborative, data-driven initiatives. OEF focuses on enhancing maritime cooperation, creating sustainable jobs in fragile economies, and research which actively contributes to thought leadership on global issues. As an operating foundation, OEF provides strategic, financial, and administrative support allowing its programs to focus deeply on complex problems and to create constructive alternatives to violent conflict.

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