Surveillance Aircraft and the Borders of Schengen

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Abstract
There is a widespread perception that the development of surveillance technologies in border management is antagonistic to civil liberties. This article attempts to contribute to a better understanding of the need for new technological means to survey the EU’s external border. Contrary to the critics, it contends that there is no liberty without security. It argues that the so-called militarisation of the EU’s borders is a precondition for countering the dangers which threaten our liberties. These dangers include organised cross-border crime, illegal migration and incursions by hostile powers. The article also demonstrates that the use of border surveillance aircraft contributes to saving lives at the EU’s external border and that the use of modern technologies generates record trails which make it easier to track potential human rights abuses committed by border guards. To manage migration, facilitate legitimate commerce, monitor for illegal waste dumping and guarantee the undisturbed functioning of our institutions, improved border management with the help of modern technologies is a necessity.

Keywords
Surveillance aircraft, Border management, Schengen, New technologies, Migration, Organised crime

Introduction
State borders exist to allow government control over the territory of the state. The borders of a nation-state make possible the privileged treatment of those who find themselves on the territory of the state, in contrast to those who find themselves outside that territory (see Hansen 2016, 253). In Europe, the external borders of the Schengen Area serve the same purpose, allowing the member states of the Area to control, through
mutual cooperation, access to its territory. The removal of internal border controls within the Area allows passport-free movement for anyone, whatever their nationality or legal status.

Passport-free movement inside the Schengen Area has necessitated the establishment of an Integrated Border Management (IBM) system at the Area’s external borders. The purpose of this system is, among others, to ensure checks and surveillance as part of border control, to conduct risk analyses, to gather intelligence and to detect cross-border crime (EuropeAid Cooperation Office and the International Centre for Migration Policy Development 2015, 7). The flow of legitimate commerce is another essential aspect of IBM.

External border control in the Schengen Area consists of border checks and border surveillance. While border checks are regulated by the Schengen Borders Code, border surveillance is predominantly governed by the EUROSUR Regulation (European Parliament and Council 2013). The Regulation establishes a joint European information system for border surveillance (Nowak 2019).

However, there is another dimension to border management. The EU has about 7,400 kilometres of external land borders and 57,800 kilometres of external maritime borders and coastline (European Commission 2018, 6). Technology plays an increasingly important role in guarding this long external border, discouraging people from circumventing the checks at crossing points and apprehending those who attempt to cross the land or maritime borders away from legal border crossings. The types of technology deployed include piloted and unmanned aircraft (the focus of this article), radars, surveillance cameras and biometric fingerprinting systems (see Transnational Institute 2019).

Drones (unmanned aerial vehicles, or remotely piloted aircraft systems) and piloted aircraft are relatively new phenomena in the surveillance of the EU’s external borders. These surveillance aircraft have, however, been used for some time by the EU’s military operations under the Common Security and Defence Policy. For example, the EU Naval Force ATALANTA, created in 2008, has used maritime patrol and reconnaissance aircraft to counter piracy off the coast of Somalia, monitor fishing and create a more secure maritime environment (EU Navfor n. d.).

Non-military use of surveillance aircraft is more recent. As late as 2013, an EUobserver article stated that the Mediterranean Sea remained outside the surveillance scope of the EU member states and Frontex, the Warsaw-based European Border and Coast Guard Agency. The same article quoted the head of research and development at Frontex as saying: ‘We do not know at present what is going on in the Mediterranean Sea. We do not know, nor do the member states’ (Nielsen 2013).

Nevertheless, aircraft surveillance technology is becoming highly sophisticated and widely used. The utility of drones and piloted aircraft in civilian border surveillance is now widely recognised.
This article argues that surveillance aircraft are a welcome addition to the management of the external EU borders and that, in fact, surveillance technology contributes to saving lives at these borders. The present section has introduced the main concepts in surveillance of the external borders. The subsequent section describes the context for European investment in border surveillance and provides examples of usage. This is followed by outlining some criticisms of border surveillance technology. This author’s field visit to a private border surveillance contractor is depicted in the ensuing section. Concluding remarks and responses to criticism constitute the final section. The article draws on official reports from the European Commission and EU agencies, academic articles, think-tank and newspaper pieces, as well as the author’s field visit in December 2019. For reasons of confidentiality, neither the identity of the provider nor the area of operation is disclosed here.

**Institutional infrastructure for border surveillance aircraft and examples of usage**

Recognising the need to survey the long external borders of the Schengen Area and to address the insufficient capacity of the national coastguard agencies, governments and EU institutions have been increasing EU and national funding for the deployment of these surveillance technologies. In fact, Frontex’s mandate includes research and innovation with regard to surveillance technologies for IBM.

At the EU’s southern maritime border, drones gather and supply intelligence for EU and national agencies based in Europe, as well as for some North African coastguards that the EU finances. This intelligence concerns illegal border crossings; search and rescue operations; the smuggling of weapons, drugs, oil and other contraband; marine pollution; and the surveillance of fishing activities. The deployment of drones makes maritime, land and inland-water border surveillance more effective and less demanding on staff.

Drones are used to patrol the land borders between the Baltic states and Russia. In 2014, an Estonian border guard was abducted by Russian forces on the land border between the two countries (BBC 2014). In response to this incident, but also in response to migrant and contraband smuggling and hostile drone flights from Russia, the Estonian government ordered nine domestically produced surveillance drones, financed by the EU’s Internal Security Fund as well as domestic resources (see Cavegn 2018). According to one Estonian official, ‘using drones is a good way to prevent and react to incidents on the border. . . . They are a quicker and more convenient way to gain an overview of situations in places that weren’t easily accessible’ (Cavegn 2018). Belgium has begun deploying surveillance drones both to monitor irregular maritime arrivals and departures and to find children lost on the beach and support search and rescue operations (see Galindo 2019).

According to The Guardian (Howden et al. 2019), the EU has rolled out an investment programme worth some €112 million for surveillance drones. This programme,
run by Frontex and the Lisbon-based European Maritime Safety Agency (EMSA), has been implemented since Operation Sophia, an EU anti-smuggling operation, was stripped of its naval element in March 2019. This author’s field research confirmed that the withdrawal of the naval element of Sophia has created a new space for aerial border surveillance and reconnaissance operations run by Frontex. (The Operation’s website showed that in February 2020 five piloted surveillance aircraft—from Spain, the Netherlands, Italy (two) and Poland were deployed, along with one Italian drone. EU Navfor Med. n. d.).

Border surveillance aircraft have been procured by national governments as well as EU-level agencies. EU inter-agency cooperation has been established for the provision of drones. According to the European Commission, ‘the European Maritime Safety Agency (EMSA), the European Fisheries Control Agency (EFCA) [based in Vigo, Spain] and [Frontex] have established common maritime information and surveillance services’, including drones (Statewatch News 2019). EMSA has taken the lead in this process. During 2018 and 2019, EMSA provided drones of different types and with differing operational goals ‘for an average of three months each to Portugal, Spain, Denmark, Greece, Croatia, Italy and Iceland’. Operations are remotely coordinated from the Frontex Situational Centre in Warsaw (EMSA 2018; Statewatch News 2019).

In Portugal, EMSA provides drone services direct to Frontex to survey the national coast. The pilot operator directs the drone from a control station in Portugal, supervised by the Portuguese air force (EMSA 2018; Statewatch News 2019).

Non-governmental organisations are using surveillance aircraft, too. The charity Open Arms is developing a drone to aid migrant search and rescue operations in the Mediterranean Sea. The drone includes software that can detect if a ship in distress is drifting. It traces the trajectory of the vessel and sends an alert to the rescue ship (Martinez 2019). The charity Sea-Watch uses Moonbird, a piloted surveillance aircraft, for the same purpose. Moonbird even monitors whether commercial vessels and European coastguards are ignoring appeals for help and tracks interceptions by the Libyan coastguard (Hayden 2020). Outside Europe, the UN uses drones to identify Rohingya refugee camps in Bangladesh that are at risk of flooding (Telford 2020).

Criticisms

The use of border surveillance technologies by governments is subject to fierce criticism from some quarters. For example, a 2017 report by the Transnational Institute criticised the ‘militarisation of European borders’. It contends that ‘respect for fundamental rights, individual liberties and democratic standards’ should ‘take precedence over politics and policies beholden to panicked security demands and the wishes of big business’ (Jones 2017, 4 and 10). A related charge concerns the ‘criminalisation of migration’ driven by technology, allegedly promoted by the self-interested ‘security-industrial complex’ of private companies, governments, research institutes and EU institutions (Jones 2017; Singler 2018). Other issues raised by critics include the accountability of Frontex and
national coastguards in operating drones and other border surveillance technologies. Questions are also being raised about responsibility for saving people at sea. For example, Howden et al. (2019) have argued that the withdrawal of the naval elements of Operation Sophia amounts to a deliberate attempt by the EU to stop saving lives in the Mediterranean. All this is said to ‘kill the dream of a more open Europe’ (Transnational Institute 2019).

Private contractors

Private contractors play an important role in the development of the EUROSUR system (Nowak 2019) and, thus, in creating better IBM. A number of concerns have been raised with regard to the operation of private security contractors in the security sector in general and in the field of migration control in particular, reflecting human rights abuses, data protection, legal ambiguities and the potential for loss of government control over the activities of private security providers (Tzifakis 2012; Saner et al. 2019).

These concerns are legitimate and should not be dismissed. In this section, the findings of this author’s field visit to a private contractor are presented. This visit revealed a surprising degree of integration of the provider’s activities with the information networks of the relevant national border-guard agency and that of Frontex. If findings from this one case could be generalised, they would demonstrate that the activities of private providers of border surveillance services are subject to multiple safeguards.

During a visit to the company headquarters in December 2019, the author learned that the company had been contracted by Frontex to provide a piloted surveillance aircraft (a ‘special mission aircraft’ in Frontex jargon) to survey a section of the Mediterranean Sea. The company’s liaison officer is based at the headquarters of the relevant national coastguard and has access to information from the coastguard’s and Frontex’s surveillance planes. (A Frontex officer is also present at the national headquarters.)

An officer of the national coastguard is always present during flights of the private contractor’s piloted aircraft. Thanks to its radars and cameras, the aircraft sees all ships in the area, including migrant- and drug-trafficking boats. The information gleaned from the company’s aircraft is immediately transmitted to Frontex, the national coastguard agency and, where relevant, EMSA and EFCA. Depending on the incident or situation, this results in a rescue boat being sent out if a migrant boat is spotted, a police boat being dispatched if drug or other contraband smuggling is involved, or the relevant agency responding to a situation such as a fire or marine pollution. Thus, the company contributes to the ‘common pre-frontier intelligence picture’ as defined in the EUROSUR Regulation (European Parliament and Council 2013, art. 11).

The company’s headquarters also hosts an ‘integrated control centre’, a set of technological tools and networks that provide the company’s staff with live and highly detailed information on the situation in the area of the Mediterranean where it operates. The company’s efforts are thus fully integrated with the work of the relevant national and EU
law-enforcement and border agencies. At the same time, the integrated control centre enables the company to provide flight safety support to crew and on-board member state and Frontex observers.

Analogically to the mandate of Frontex (as well as that of Operation Sophia), saving lives is part of the contract that the private company signed with the EU’s border agency. The private contractor’s aircraft provides ‘top cover’ for lifesaving. This includes identifying a boat in distress and dropping life vests, life rafts and the water pumps needed to keep inflatable boats afloat. A paratrooper doctor can even be present during flights. Typically, entities other than the company are involved in the actual lifesaving on the sea, the treatment of the rescued passengers, and their subsequent disembarkation and registration.

According to the company’s director, three thousand lives have been saved on previous mission flights thanks to its work. (In fact, the director is convinced that rescue charities which collaborate with people smugglers notify the national coastguard about a large proportion of the irregular migrant crossings.)

This researcher’s visit revealed that the company’s staff is rigorously trained for and tested on a wide variety of scenarios that could occur. Every mission crew member carries an EU ‘Confidential’ clearance. Highly detailed documentation is taken of each flight, each phone call and each action taken by the crew of the company’s aircraft and the company’s agents. When it comes to the rescued migrants, the national law-enforcement authority gathers detailed information on each saved passenger. This author’s field visit thus confirmed a 2019 statement by Frontex that ‘all drone operators, staff or private contractors are subject to EU laws that mandate the protection of human life’ (Howden et al. 2019).

**Conclusion**

Far from ‘killing the dream of a more open Europe’, border surveillance aircraft and other surveillance technologies are keeping the dream of an open Europe alive. The borders of the Schengen Area and, by extension, free movement within these borders, are being threatened from a multitude of angles. Openness and tolerance in our public life are at risk due to cross-border criminal operations importing weapons, drugs and other contraband. Our environment suffers from reckless individuals polluting our seas. On the way to the EU and once on the territory of the EU, illegal migrants are victims and sometimes perpetrators of crimes. Criminals, smugglers, traffickers and hostile powers use modern technologies too, and it would be ill-advised for the EU and its national governments to lag behind.

Heading off all these threats necessitates the use of modern technologies in the guarding of the EU’s external borders. The critics have no proof whatsoever that legitimate commerce or legal migration have been hampered by the use of these technologies.
Separately, the use of border surveillance aircraft contributes to saving lives in the Mediterranean and probably elsewhere on the external border. Saving lives is built into the operations contracted by Frontex and EMSA to the private surveillance providers. And although direct causality would be difficult to prove, more intensive use of air surveillance and the simultaneous withdrawal of the naval element under Operation Sophia coincided with a decrease in Mediterranean deaths from drowning from 1,971 in the first 9 months of 2018 to 1,080 in the first 9 months of 2019 (IOM 2019).

With regard to the accountability of Frontex, the European Border and Coast Guard Regulation specifies that the agency has to report to the European Parliament in areas such as border management research, risk analysis, vulnerability assessment results, additional financial or operational needs, and situations requiring urgent action at the external borders. The Frontex mandate also defines the reporting and notification obligations related to the Council. ‘In particular, the agency provides the Council with risk analysis products, vulnerability assessment results, financial and operational needs, and the annual activity and single programming documents’ (Frontex n. d.). With the ongoing strengthening of Frontex, there is certainly scope for stronger scrutiny by EU bodies.

As for the danger of the supply of surveillance technologies determining its own demand, this is, of course, a risk. Commercial entities would not operate without aiming to make a profit from the sale of their products. What is important is whether this self-interest also serves the public interest and whether there are sufficient safeguards in place to ensure that the public interest is served. With regard to drones and piloted aircraft procured by national coastguard agencies, Frontex and EMSA, this author’s limited field research has found no evidence that the wishes of ‘big business’ are generating the creation of procurement bids.

Human rights abuses in EU border management certainly could and do occur. Contrary to the critics’ claims, the available evidence suggests that the use of border surveillance technology—in lieu of physical border guards—multiplies the documentation of the actions of the agents involved. In addition, through the use of technology that operates from control centres with a multi-agency presence, many pairs of eyes follow every minute detail of the happenings on the border. The various individuals and agencies involved therefore check one another’s steps.

In general, as demonstrated by the 2015–16 migration crisis, the EU’s external border has suffered from a lack, not an excess, of surveillance. This has been due to a mixture of political and capacity reasons. Surveillance aircraft must therefore be welcomed as a useful addition to the toolbox of our border agencies, along with the renewed will of the member states and the EU institutions to increase oversight at the external Schengen borders.

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