

## ITAR Export Control Laws

What every UAV manufacturer needs to know about USML products and ITAR regulations

By Howard Loewen

Globalization, terrorism, and threats of proliferation have led to an increase in the enforcement of export control laws. Technology companies of all sizes are more often finding themselves in violation of these laws due to immigration, widespread foreign travel, outsourcing, and foreign patent protection applications. The exporter is responsible for complying and therefore should be aware of these export laws and the dangers they pose. *Lack of intent* is not a defense in cases of violation, and penalties are sometimes criminal in nature.

The reality is, through the export process, a country can experience their own military technology used against them. International Traffic in Arms Regulations (ITAR) is a set of US government regulations that control the export and import of defense-related products involving US technology. These regulations safeguard US national security and comply with the Arms Export Control Act.

According to the US Department of State, in 2010 Xe Services LLC violated 288 Arms Export Control Act (AECA) and ITAR controls, AAR International, Inc. violated 13, and Interturbine Aviation Logistics GmbH violated 7. In 2009 Air Shunt Instruments, Inc. violated 4 AECA and ITAR controls and Analytical Methods, Inc. violated 29. These companies are agreeing to settlements for millions of dollars.

Violations include:

- Unauthorized export of defense articles
- Unauthorized exports of U.S. origin technical data
- Unauthorized provision of defense services
- Violating the terms of provisos or other limitations of license authorizations
- Unauthorized sales activity involving a proscribed country
- Omission of facts on an export control document

- Failure to maintain records involving ITAR-controlled transactions and false statements

ITAR regulations do not encompass all countries' export control laws; they only refer to US export control laws. Furthermore, ITAR is only one set of US export control laws. However, despite whether an organization involved in unmanned aerial vehicles (UAVs) products are located in the US or not, it needs to understand ITAR export controls. UAVs, UAV production equipment, UAV autopilots, UAV related software, UAV launchers, and many other UAV-related items are subject to export controls. ITAR controls can affect the transport of these items, whether the transfer is temporary, for personal use, or part of doing business. Ignoring these laws can lead to heavy fines or imprisonment.

This white paper offers general guidelines to understanding what constitutes an ITAR-controlled product, the challenges companies face regarding exporting ITAR items, and the consequences of ITAR violation.

### ***ITAR Controlled Items***

Generally speaking ITAR rules apply to any product specially designed for military use, space use, or missile technology, including UAV products and technology. These products are either directly involved in a specific military/space program or used by program subcontractors. Often non-US firms are caught off-guard, unaware ITAR is at play. What determines if a product falls under ITAR regulation is broader than what one might be led to believe.

### **Items Listed on the USML**

Items included on the United States Munitions List (USML) must follow ITAR controls. This list includes defense-related articles, services, and related technology. Among its categories are *Aircraft and Associated Equipment* and *Military Electronics*. Any item included on this list requires an export license issued by the United States State Department. Moreover, the USML list changes periodically, therefore, exporters must recheck this list regularly.

Given the dire consequences of ITAR violation, US firms often err on the safe side and over-classify goods and technology by applying the ITAR to items that perhaps should not be treated as ITAR-controlled. Unfortunately, assessing items as ITAR-controlled imposes ITAR regulations on any customers who purchase the item.

## Incorporated USML Components

Items not listed on USML can also become ITAR controlled. If any USML items are incorporated into a non-USML product, the finished good or technology is considered ITAR-controlled and therefore subject to US export or transfer approvals. A USML component such as a printed circuit board results in the final product becoming subject to the ITAR. Moreover, there is no minimum on content. For example, a hardware item as small and simple as an ITAR controlled washer transforms any complex and expensive product into and an ITAR regulated item.

## ITAR-Controlled Ideas

USML items are not limited to parts and components. The use of any ITAR-controlled information also classifies an item as ITAR. Incorporating certain *ideas* originating from US citizens can deem a non-US product ITAR-controlled. Analysis or suggestions to improve defense products are typical examples of ideas considered US *technology*. Technical assistance, instruction, skills training, testing and consulting also fall into this category. This type of ITAR-controlled US technology can inadvertently land in a non-US product.

For example, a non-US company might design and manufacture a product for a US military customer. If the US customer specifies a design modification that meets their US military requirement, and the manufacturer makes the modification to the product, then the product becomes classified under USML. Future exports of the non-US manufactured product require domestic export approval and a US export license under ITAR.

## ITAR-Controlled Data

Certain data and documentation is also subject to ITAR control. Technical data such as blueprints, plans, engineering designs, and manuals are examples. Organizations might need to obtain approval to disclosed or transfer this data, *even within US borders*. With so many foreign nationals employed in the US high-tech industry, one can easily see how violations may occur. Even visits to U.S. manufacturing facilities by foreign investors and customers could constitute a violation.

Electronic storage and transfer of software and technical data over the Internet, via PC, or in hardcopy can violate ITAR without proper approval. This category of USMS items offers a multitude of possible violation scenarios. For example, if a Customs and Immigration Service

representative examines or seizes a laptop at a country's border, the person and/or company could be in violation.

In addition, organizations need to obtain proper approval if ITAR-regulated information is held on a server located in the US and then accessed by certain non-US citizens from within the US or abroad. Moving ITAR regulated data from one country to another can also pose problems. In 2002, the DoS found General Motors (GM) in violation of ITAR because they transferred plans for an armored vehicle from Canada to their headquarters in Detroit.<sup>1</sup> These plans were not originally ITAR controlled because they were designed by a Canadian company that GM bought. Simply storing these plans in Detroit made them ITAR controlled, however, GM never thought to gain approvals. After an audit, GM was charged with a slew of violations and settled in court for \$20 million.

Companies often discover they have received an ITAR-controlled item by noting ITAR references on invoices, packing slips, or waybills. Or they might have signed an end-use document, acknowledging ITAR pre-eminence before taking receipt of the goods. Once this product is integrated into a UAV, the manufacturer needs to obtain approval and licenses before exporting the UAV.

### ***How ITAR-Controlled Products Affect Business***

Any item for export that is governed by ITAR requires a license, or a license exception. Selling ITAR products in an international market can be cumbersome. Companies spend time and money acquiring re-export approvals and ITAR reassessments. Also they must stay aware of hiring limitations.

### **Re-export Approval**

Contrary to most other countries, US ITAR controls apply beyond US borders. Normally, once a product or technology is exported, it leaves the jurisdiction of the exporting state. The responsibility shifts to the recipient country to properly control any re-exports without further involvement of the originating country. The US, however, applies its jurisdiction over USML items throughout the product's full lifetime. The US expects foreign entities to seek US re-export approval before transferring USML goods or technology. This can also apply to transfers within the country.

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<sup>1</sup> US Department of State Directorate of Trade Defence Controls; [Generals Motors Corp Draft Charging Letter](#).

Each and every time the item moves across a national border or is transferred to another person or company, the current owner must seek permission from the US Department of State (DoS). Typically, the DoS requests the original equipment manufacturer (OEM) to apply for the re-transfer authorization. If the company proves the OEM is unwilling to apply, then the current owner is allowed to apply for the authorization.

### **Commodity Jurisdiction**

Once the company or US government classifies an item as a munitions list item, ITAR status is permanent. Often goods and technology are incorrectly assessed as USML items and face having to work toward becoming reassessed. Manufacturers have the option to apply for a Commodity Jurisdiction (CJ) to overturn their products' ITAR assessment. However, this takes time, and manufacturers can lose business as a result. For example, a US winch manufacture might be required to register with ITAR because its client list includes the US military. While this company spends months applying for a CJ, their international sales will most likely disappear. The winch company's customers may move to competing winch producers with lower quality products, however, their products are not tied up with ITAR controls.

### **Hiring Constraints**

In addition to controlling what items can and cannot be exported and to whom, ITAR also controls who can access USML items. For example, employees holding dual- or third-country nationality from certain countries including Vietnam, China, North Korea, Syria and Iran, as a general rule, do not have access authority. This poses problems for companies when delegating employees to work on the item or be involved in some way. In addition, companies going forward, are limited as to whom they can hire.

### **Money and Time**

The biggest disadvantage to manufacturing and exporting ITAR-controlled products is the amount of time and money spent on jumping through hoops and pushing through bureaucratic process. Companies can spend several months (minimum 3 months) on gaining permissions to sell a USML item or a product containing an USML item. Employees are caught up with paperwork, phone calls, and more, when unfortunately their expertise is needed elsewhere. In addition, companies need to register with ITAR, incur annual registration costs, and pay separate fee for each export permit. These extra steps and headaches ultimately increase costs and affect companies' bottom lines.

For example, before transferring an item or technology, a UAV manufacturer might have to contact the OEM, persuade them to apply for an export license on its behalf, and win the approval of the DoS for that particular end user and destination. Each application to DoS carries a price tag and takes weeks, if not months, to process.

Moreover, an ITAR stamp can directly impact sales. Potential customers may forgo purchases when they consider the approvals they are required to obtain later on. Many of these customers will go to a competitor with no ITAR strings attached.

### ***Consequence of ITAR Violation***

The US DoS has several means to enforce compliance with ITAR controls. To minimize negative impact, non-US companies need to understand ITAR and its implications to minimize negative impact. This is crucial.

### **Fines and Debarment**

Export control laws provide substantial penalties, both civil and criminal. Failure to comply with ITAR can result in civil fines as high as \$500,000 *per violation*, while criminal penalties include fines up to \$1,000,000 and 10 years imprisonment *per violation*. Furthermore, the DoS can bar companies from conducting business with US companies. Additionally, specific persons, such as directors and officers can be barred from doing business in the US.

### **Imprisonment**

Prison sentences are a potential penalty for those who violate ITAR laws. In 2009, a US-based company was indicted for conspiracy and violating ITAR export laws when it exported miniature controls for unmanned aircraft to China. One of the company founders was sentenced to six months in prison.<sup>2</sup>

If the US government is not able to indict individuals or companies directly, they pursue action against arms of businesses they have access to, including US subsidiaries, parent companies, sales offices, R&O maintenance facilities – anything within US jurisdiction. In some cases, corporate officers of foreign companies have been arrested and pulled off of

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<sup>2</sup> Consulate General of the United States: [http://hongkong.usconsulate.gov/uscn\\_t\\_doc\\_2010032301.html](http://hongkong.usconsulate.gov/uscn_t_doc_2010032301.html)

airplanes that touchdown in the US. The DoS can detain and arrest company officials visiting the US or even transiting the US.

### ***MicroPilot is not ITAR controlled***

MicroPilot is well informed when it comes to export controls, including ITAR. MicroPilot purposely builds and sells UAV autopilot products that are not ITAR controlled. As a result, their customers are able to build UAVs that are also free of ITAR jurisdiction. This is one more way MicroPilot helps its customers grow their businesses and flourish in their markets.

### ***About MicroPilot***

With 600 clients in 60 countries, MicroPilot is the world leader in miniature autopilots for UAVs and MAVs. MicroPilot offers a family of autopilots weighing 28 grams that can fly fixed-wing, transitional and helicopter UAVs as well as complementary products such as the Xtender SDK, our trueHWIL, payloads, and catapults.

MicroPilot's low cost MP2128<sup>HELI</sup> flies helicopters, VTOL and fixed wing UAVs. MicroPilot's provides triple redundancy autopilots, MP2128<sup>HELI3x</sup> for helicopters, and MP2128<sup>3x</sup> for fixed wing UAVs. Just released MP-trueHWIL Matlab-based hardware in the loop electrically simulates all sensors, providing the highest fidelity autopilot simulation available.

For more information contact [info@micropilot.com](mailto:info@micropilot.com), or visit [www.micropilot.com](http://www.micropilot.com).