This article reviews international law developments in the field of aerospace and defense industries in 2014.1

I. Recent Developments in Unmanned Aircraft International Law

The international aviation law domain was filled with significant progress in 2014 in the area of unmanned aircraft systems (UAS) integration. With Canada and Australia leading the way, and the European Commission following closely behind, the international aviation legal community marched progressively forward towards developing critical facets of UAS law in areas such as air traffic control (ATC) frameworks, airspace integration, safety guidelines, and operational parameters and certifications. With unmanned aircraft already permeating the international skies, and a predicted precipitous increase in UAS use already on the horizon, many states as well as the international community expanded the current International Civil Aviation Organization (ICAO) guidelines in anticipation of full international UAS non-segregated airspace integration. The following sections provide major regional and state-specific updates on the international UAS laws, frameworks, guidelines, and regulations for the year, focusing on ICAO, the European Commission, Great Britain, Canada, Australia, and South Africa.


A. ICAO

The ICAO provided no substantial updates to its current authoritative document on unmanned systems this year; however, it continued to cooperate and plan with member States as well as myriad industry stakeholders to establish regulatory frameworks for unmanned systems operations.  

ICAO regional planning groups continued to focus on unmanned systems integration and safety throughout the year. Of particular note is the ICAO South American Office Regional Planning and Implementation Group Seventeenth Meeting (GREPECAS/17) in July of 2014, which focused on unmanned aircraft global air navigation activities. The group found that in an ideal situation, the air traffic control command, control, and communications (collectively, “C3”) of unmanned aircraft should not require special handling in non-segregated airspace and, therefore, should not require special phraseology; and, emergency procedures should mirror those of manned aircraft. Yet, the group noted ICAO’s recognition of the unique nature of unmanned systems’ emergencies and failure modes, such as a lost command and control (collectively, “C2”) link, and recommended further study of unmanned systems’ aerial contingencies before the establishment of ATC frameworks.

B. European Commission

The European Commission published a Communication to the European Parliament and the Council on April 8, 2014, outlining its views and recommendations on the safe and sustainable operation of unmanned aircraft in European airspace. Specifically, the Commission called for a Euro-centric legal and policy framework and a common safety regulatory framework with the central strategy aimed at “establishing a single RPAS market to reap the societal benefits of [RPAS] innovative technology and at dealing with citizens’ concerns through public debate and protective action wherever needed.” This central strategy relies on the formation of European non-segregated airspace with progressive RPAS integration starting in 2016 and encompasses concerns such as safety, privacy, data protection, security, third-party liability, public acceptance, and insurance.

2. Int’l Civil Aviation Org. [ICAO], UNMANNED AIRCRAFT SYSTEMS (UAS), Cir 328/AN 190 (2011), http://www.icao.int/Meetings/UAS/Documents/Circular%20328_en.pdf. The ICAO has also amended Annexes 2, 7, and 13 to the Chicago Convention to accommodate unmanned systems to be used by international civil aviation.

3. Id. at 5. The ICAO designates unmanned aircraft systems as “RPAS”, Remotely Piloted Aircraft Systems.


5. ICAO, AGENDA ITEM 3, supra note 4, at 2.


7. Id. at 4.

8. Id. at 4-5.
The Commission’s strategy is based on the RPAS roadmap for the European aviation system, published in June of 2013.9

Additionally, the Commission published a major study in November 2014 on the issues of third-party liability and insurance requirements for RPAS.10 It simultaneously published a study on privacy, data protection, and the ethical risks of RPAS operations.11

C. GREAT BRITAIN

In 2014, the British Civil Aviation Authority (CAA) established a tiered system in which limitations on unmanned aircraft operations vary with vehicle weight. Aircraft with an unfueled weight of 20 kg or less are considered “small unmanned aircraft” that do not require airworthiness approval.12 The remote pilot of such an aircraft must maintain “unaided visual contact” with the vehicle at all times.13 Small unmanned aircraft with a mass exceeding 7 kg may not, without permission, operate in Class A, C, D, or E airspace; in the vicinity of an airport; or, at a height greater than 400 feet above ground level.14 Permission from the CAA is required to operate a small unmanned aircraft for commercial purposes,15 or a vehicle equipped to undertake “surveillance or data acquisition” over or in the vicinity of a congested area, persons, or property.16

Unmanned aircraft that weigh more than 20 kg and up to 150 kg are now subject to the CAA’s airworthiness, registration, and pilot licensing requirements, unless an exemption is granted.17 The European Aviation Safety Agency’s airworthiness regulations apply to aircraft weighing more than 150 kg, subject to exemptions.18 Operations that collect data that can be used to identify living persons may also be subject to the Data Protection Act.19

D. CANADA

Canadian regulations distinguish between small unmanned aircraft used for recreational purposes and all others. Transport Canada defines a “model aircraft” as one that weighs no more than 35 kg, is used for recreational purposes, and does not carry persons or other

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13. ANO 2009, art. 166(3); see CAP 722, § 3.11 (visual line of sight normally accepted out to 500 meters horizontally and 400 feet vertically).
14. ANO 2009, art. 166(4) (Such vehicles are also not normally allowed to fly within congested areas); CAA Information Notice, ¶ 6.1.3, IN-2014/081, (Apr. 25, 2014).
15. ANO 2009 art. 166(5).
16. Id. art. 167.
17. CAP 722 § 2.3.1.
18. Id. at § 2.8.
19. Data Protection Act, 1998, c. 29 (Eng.).
living creatures. An “unmanned air vehicle” is defined as a vehicle/an air vehicle/an aircraft “other than a model aircraft” designed to fly “without a human operator on board.” Unlike operation of a model aircraft, operation of an unmanned air vehicle requires specific advance approval by Transport Canada through the issuance of a Special Flight Operating Certificate (SFOC).

In late 2014, Transport Canada announced it would exempt small unmanned air vehicles from the SFOC requirement. Under this exemption, a vehicle weighing less than 2 kg could be operated without an SFOC if operated below 300 feet above ground level, within line of sight of the pilot, and at least five miles from an airport. Further, under the exemption, vehicles weighing between 2 and 26 kg could be operated without an SFOC if various conditions are followed.

E. Australia

Australia’s Civil Aviation Safety Authority (CASA) proposed amendments, released for public comment in May 2014, to Part 101 (Unmanned aircraft and rockets) of the Civil Aviation Safety Regulations (CASR) 1998. These proposed amendments, if adopted, would, inter alia, “update” the term used for drones from “unmanned aerial vehicle” (UAV) to “remotely piloted aircraft” (RPA) and divide RPA into four categories (large, medium, small, and micro) instead of three. The proposed amendments would exempt “low risk” small RPAs with gross weights of 2 kg or less from requirements for a Remote Pilot (RP) certificate (this term replaces the previous language: “certification as a UAV controller”) or an Unmanned Aerial System Operator’s Certificate (UOC). The amendments would only apply to small RPAs operated under standard RPA operating conditions, including conditions that the RPA be operated pursuant to a “Visual Line of Sight” (VLOS), below 400 feet above ground or water, in “non-populous areas” (including more than 30 meters from persons not directly involved with the RPA’s operation, other than those who have consented to such operation), during daytime only, beyond controlled airspace, outside of prohibited and restricted areas, and more than three nautical miles from an “aerodrome boundary.” Outside of these limits, operational approval would be required, necessitating a “documented risk assessment and treatment plan describing how

20. Canadian Aviation Regulations (CARs), SOR/96-433 § 101.01(1).
21. Id.
22. See CARs § 602.41.
25. Id.
27. Id. at 8.
28. Id.
identified safety risks will be managed to an acceptable level.”29 In addition, CASA proposed three draft advisory circulars on RPA, one on each of the following matters: general, training and certification, and operations.30

In 2014, the Australian Transport Safety Bureau (ATSB) issued safety reports on an “aircraft separation issue” involving an aircraft coming too close to an aerial photography drone31 and two near collisions, one possibly involving a UAV32 and the other definitely involving a UAV and an aircraft.33

The Australian Customs and Border Protection Service (ACBPS) announced that it had prosecuted UAV-manufacturer Cyber Technology Pty Ltd in Magistrates Court for Western Australia (Perth) under Section 233BAB (6) of the Australian Customs Act 1901 and Section 11.1 of the Criminal Code “for attempting to export goods controlled under the Defence and Strategic Goods List without a permit.”34 In the August 29, 2014, hearing, the ACBPS seized Cyber Technology drones and electronics worth AUS $80,000 and required Cyber Technology to post a “good behaviour” bond in connection with its attempt to export controlled goods without approval. ACBPS stated that the maximum fine for a company for this type of offense is AUS $2,125,000.35

Finally, in July 2014, the Australian House of Representatives’ Standing Committee on Social Policy and Legal Affairs issued its “Eyes in the sky” report on drones which included a discussion of privacy and safety issues and contained recommendations for future action.36

F. SOUTH AFRICA

Although it acknowledges that “the current civil aviation legislation does not provide for certification, registration and/or operation of UAS in the South African civil aviation airspace,” and is “cognizant of the urgent need and demand for UAS usage,” the South African Civil Aviation Authority (SACAA) announced that it “is set to clampdown on the

29. Id. at 8-9.
35. Id.

PUBLISHED IN COOPERATION WITH SMU DEDMAN SCHOOL OF LAW
illegal flying, in civil airspace” of UAS.37 The SACAA called on “those that are disregarding the laws to desist from such actions,” in a press release in April 2014.38

G. CONCLUSION

The international aviation law community has been proactive this year in the development and establishment of UAS-specific laws, regulations, frameworks, and guidelines. With full international integration into non-segregated airspace looming on the horizon, many states proceeded with systematic analysis and development of their national airspace laws and regulations to support safe, reliable, and resilient UAS operations for the legions of unmanned aircraft that will soon operate in the international skies.

II. U.S. Executive Order to Establish Labor Law Compliance as an Eligibility Criterion for Government Contractors

On July 31, 2014, United States President Barack Obama issued an Executive Order titled, “Fair Pay and Safe Workplaces” (the EO).39 Once implemented, the EO will require government contractors to report instances of noncompliance with federal labor laws and to have begun corrective actions involving the U.S. Department of Labor (DOL) in order to be eligible to win government contracts.40 The following discussion summarizes the EO and highlights the main compliance issues likely to affect companies in the aerospace and defense industries.

A. SUMMARY OF THE EO

Regulations issued to implement the EO will require contractors to report violations of certain labor laws that occurred in the previous three years.41 Contractors must report at the time of contract formation and every six months thereafter during the life of a contract.42 Ostensibly, there will be a reporting procedure that allows contractors performing multiple government/federal contracts to make a single report (e.g., use of the System for Award Management).43 Violations that contractors must report include “administrative merits determinations”, “arbitral awards or decisions”, and “civil judgments”—the DOL is tasked with issuing definitions of those terms—involving claims or enforcement actions under most federal employment laws including, for example, the Fair Labor Standards Act, the Occupational Safety and Health Act of 1970, Migrant and Seasonal Agricultural Worker Protection Act, and similar state and federal employment laws.44

38. Id.
40. Id.
41. Id.
42. Id. at 45,310.
43. See id.
44. Id. at 45,312.
A contractor that has committed violations of those laws may be found not to be “responsible,” which would make it ineligible to receive a federal contract. A contractor may not be responsible if it has a track record of “serious, willful, repeated or pervasive violations” of the relevant labor laws. Notably, the EO does not require settlements of claims related to labor law violations to be reported, which may pressure contractors to settle these claims rather than report labor law violations and leave their responsibility status to the discretion of contracting officers.

B. Assessing the Impact on Particular Companies

Once the EO is codified in the Federal Acquisition Regulation (FAR), each time a contractor responds to a solicitation for a contract over $500,000, it will need to disclose any reportable violations. If a company tracks this information in “real time,” it will be simple to confirm the accuracy of these certifications with each proposal. But if a large company, for example, does not track this information, and labor law issues are handled by personnel in different locations, it could be difficult and time consuming to repeatedly collect the relevant information. If this information is compiled, say, once per year for updating annual representations and certifications, a contractor must assess whether reliance on periodic collections of information will be sufficient to avoid submitting false or incomplete information if a reportable event occurs after the last update but before the next update.

C. Labor Law Compliance Likely to Become an “All or Nothing” Eligibility Factor—Not a Differentiator

The EO provides that contracting officers are to consider contractors’ labor law compliance issues when determining whether contractors are “responsible.” If a contracting officer finds a contractor to be non-responsible, that contractor will not be eligible for the award (and likely will not be eligible for awards from other agencies) until it takes certain remedial actions outlined in the EO (i.e., enters into an agreement with the DOL to resolve violations and fix its problems). The EO does not, however, direct contracting officers to consider differences in employment law violations as an evaluation criterion. In other words, in a situation where competing contractors have each committed some employment law violations, but those violations are not serious enough for the contractors to be found non-responsible, the EO does not call for contracting officers to weigh the relative seriousness of each contractor’s violations as a differentiating factor in the award decision. While the FAR Council, the rulemaking body responsible for promulgating regulations that are part of the FAR, likely has the authority to provide for evaluation criteria that take into account differences in labor law violations among competing contractors, the EO does not call for the Council to do so.

46. Id.
47. See id.
48. Id. at 45,309.
49. Id. at 45,310.
50. Id. at 45,311.
D. No Advance Agreements to Arbitrate Employment Disputes

The EO requires contractors to agree that they will not require employees to consent to arbitrate certain employment discrimination or harassment claims before those claims arise—they may only arbitrate those claims pursuant to mutual agreement between contractors and their employees after such claims arise.\(^\text{52}\)

E. No Apparent International Reach

The EO does not refer to employment laws in countries other than the United States or employment-related claims that arise elsewhere.\(^\text{53}\) Therefore, issues that develop in a contractor’s overseas operations generally would not constitute reportable violations under the EO. The EO, at least to some small extent, may tend to encourage contractors to move operations to other countries—particularly operations that present potential risks to employee safety.

F. Implementation Likely to Take Until 2016

The EO will not begin to affect contractors until the government issues final procurement regulations, and those regulations are included in solicitations.\(^\text{54}\) The FAR Council has not yet issued a proposed rule implementing the EO. The rulemaking process likely will not be complete before late 2015 or early 2016. Aerospace and defense firms should have a much better sense regarding exactly how this EO will affect them when the FAR Council issues a proposed rule, which is likely to appear in the Federal Register by the time this article is published.

III. Limitation on Use of Cost-Reimbursement Line Items

Effective September 30, 2014, the U.S. Department of Defense (DoD) adopted a final rule prohibiting the DoD from entering into cost-type contracts for the production of major defense acquisition programs (MDAPs).\(^\text{55}\) This limitation applies to all contracts entered into on or after October 1, 2014.\(^\text{56}\) The new rule implements Section 811 of the National Defense Authorization Act for Fiscal Year 2013\(^\text{57}\) by adding Defense Federal Acquisition Regulation Supplement (DFARS) Section 216.102 Policies, prohibiting the “use of any cost-reimbursement line item for the acquisition of production of [MDAPs],” with one exception.\(^\text{58}\) Pursuant to the exception, the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) may submit to the Congressional defense committees a written certification that particular cost-reimbursement line items are

\(^{52}\) Id. at 45,314.
\(^{53}\) See id.
\(^{54}\) Id.
\(^{56}\) Id. at 58,694.
needed to provide a required capability in a timely and cost effective manner along with an
explanation of the steps taken to ensure that cost-reimbursement line items are used only
to achieve such purposes.59 Although the implementing statute expressly excludes individ-
ual line items from coverage under the limitation to cost-reimbursement contracts,60 the
DoD chose to extend the prohibition to cost-reimbursement line items, as well.61 However,
some believe the limitation will have little practical effect62 because it only applies to
the contracts for MDAPs in the production phase.63 Generally, before a program
reaches production, the design is stable and manufacturing risk is limited.64 While cost-
reimbursement contracts are often appropriate in the development phase and other early
phases of a program where costs are uncertain, production phase costs are typically easier
to estimate. Thus, “consistent with sound acquisition practice . . . very few major defense
acquisition programs should be in production unless program risk has already been re-
duced to a manageable level,” and cost-reimbursement contracts in the production phase
are rare.65 In accordance with the DoD’s “Better Buying Power” guidance, contracting
officers are instructed to employ the “appropriate contract type” standard for each par-
ticular acquisition,66 and the new rule leaves open the question of when, if ever, fixed-price
contracts are appropriate at the development phase of an MDAP.67

IV. Export Control Reform and the Impact on Aerospace and Defense

A. Background on U.S. Export Control Reform

The U.S. Government made significant strides in its Export Control Reform (ECR)
initiative in 2014 through its continuing effort to modernize and streamline U.S. export
controls. ECR is a broad-based interagency review of the current export control system
with an aim towards accomplishing “fundamental reform in all four areas of our current

64. Production of an MDAP includes “the production and deployment of a major system that is intended to
achieve an operational capability that satisfies mission needs, or any activity otherwise defined as Milestone C under Department of Defense Instruction 5000.02 or related authorities.” National Defense Authorization Act for Fiscal Year 2013 § 811(c)(3)(B).
65. DEPT. OF DEFENSE, DODI INSTRUCTION No. 5000.02, OPERATION OF THE DEFENSE ACQUISITION SYSTEM (2015).
67. DEPT. OF DEFENSE, MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS, IMPLEMENTATION DIRECTIVE FOR BETTER BUYING POWER 2.0—ACHIEVING GREATER EFFICIENCY AND PRODUCTIVITY IN DEFENSE SPENDING, UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY AND LOGISTICS (2013).
system—in what we control, how we control it, how we enforce those controls, and how we manage our controls.”

The current U.S. export control system is based on two primary control lists administered by separate agencies. The Department of State’s Directorate of Defense Trade Control (DDTC) administers the International Traffic in Arms Regulations (ITAR), which regulates the transfer of defense articles and services listed on the U.S. Munitions List (USML). The Department of Commerce’s Bureau of Industry and Security (BIS) administers the Export Administration Regulations (EAR) and controls the export of dual-use goods, as well as some purely military commodities and technologies. The EAR includes the Commerce Control List (CCL), which lists Export Control Classification Numbers (ECCNs) for products, software, and technologies.

Now nearing the end of Phase II, ECR has caused the shift of many less sensitive military items from the jurisdiction of the ITAR to the more flexible controls of the EAR. Revisions to each USML category—which began in 2013—have resulted in the revised USML categories becoming more “positive” and the BIS controlling items using objective, technical-based criteria rather than “catch-all” criteria. Most of the articles determined to no longer warrant control under the USML have transitioned to the CCL under a new “600 series” of ECCNs.

Many of the commodities that have transferred jurisdiction include parts and components that were previously controlled for export under the ITAR as they were “specifically designed, developed, configured, adapted, or modified” for a military article included on the USML. Certain regulatory changes implemented by the Departments of State and Commerce in 2013 harmonized important definitions such that specifically designed articles were no longer automatically controlled by the ITAR. The Departments of State and Commerce instead introduced a new definition of “specially designed.” Certain sections of the revised USML categories as well as CCL 600-series entries continue to control items “specially designed” for the listed article, but the controls are much less pervasive than the previous controls related to “specifically designed” articles.

The third phase of ECR will consolidate licensing and enforcement into a single agency, with the ultimate goal of merging the two lists (ITAR and EAR) into a single control list with a single licensing mechanism and IT system. This effort, however, will require Congressional action in the form of new legislation and thus will be at least several years away. As it nears the end of Phase II, the U.S. also has formed a multiagency Export Enforcement Coordination Center and is working on a single licensing database that would bring the three largest departments involved in exports—Defense, State, and Commerce—onto a single licensing platform.

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72. Id.
73. 22 C.F.R. Part 120.3 (2014).
B. 2014 Updates to Export Control Reform

ECR involved a number of significant developments in 2014, with fifteen of the twenty-one categories on the USML having been rewritten as of the end of 2014. With each revision to the USML and corresponding CCL revisions, the Departments of State and Commerce published parallel proposed rules outlining the changes and inviting comments. Final rules were also simultaneously published by both agencies, and generally involved a 180-day implementation before the revisions became effective. In order to implement the transition, the rules also created new ECCNs and structures within the EAR to maintain tight controls over certain defense articles that were moved to the CCL. As detailed above, the final rules removed broad catch-all wording within the USML and added subparagraphs to specifically enumerate the articles controlled.

A summary of the final rules that took effect in 2014 is as follows:

- **USML Category IV** consists of launch vehicles, guided missiles, ballistic missiles, rockets, torpedoes, bombs, and mines. Revisions to USML Category IV became effective July 1, 2014, and included the removal of demolition blocks and blasting caps from Category IV and the transfer of explosive excavating devices from Category IV to the jurisdiction of the EAR.77

- **USML Category V** consists of explosives and energetic materials, propellants, incendiary agents, and their constituents. Revisions to USML Category V, which became effective July 1, 2014, included the removal of the former catch-all paragraphs and the addition of a specific list of materials that warrant ITAR control. Examples of such materials removed from the various catch-all paragraphs and now controlled on the CCL are spherical aluminum powder and hydrazine and its derivatives.78

- **USML Category IX** consists of military training equipment. Revisions to Category IX, which became effective July 1, 2014, consisted of changing the title of Category IX to limit its scope to military training equipment only. Certain items moved from this category to the jurisdiction of the 600-series controls in Category 0 of the CCL.79

- **USML Category X** consists of personal protective equipment. Revisions to Category X, which became effective July 1, 2014, include the removal of shelters, which are now subject to the jurisdiction of the EAR under ECCN 1A613. Certain types of body armor, anti-gravity suits, pressures suits, and diving suits also shifted to the jurisdiction of the EAR.80

- **USML Category XI** consists of military electronics. Category XI was revised, effective December 30, 2014, to more specifically enumerate controlled articles. Four new “600 series” ECCNs were created in CCL Category 3 to control computers, telecommunications equipment, and radar and avionics.81

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78. Id.
79. Id.
80. Id.
81. See Amendment to the International Traffic in Arms Regulations, 79 Fed. Reg. 37,536 (July 1, 2014); Amendment to the Export Administration Regulations, 79 Fed. Reg. 37,351 (July 1, 2014).
Category XV consists of spacecraft and related articles. Revisions to Category XV, which became effective on November 10, 2014, include the transfer of certain commercial communications and remote sensing satellites and related items from the USML to the CCL. Items transferred from Category XV are controlled under a new “500 series” of ECCNs. Items that transferred include the following: (1) certain commercial communication satellites and lower-performing remote sensing satellites; (2) ground control systems and training simulators “specially designed” for telemetry, tracking, and control of spacecraft controlled in ECCN 9A515; (3) radiation-hardened microelectronics formerly controlled in Category XV of the ITAR; and (4) parts and components of satellite bus and payloads not listed on the USML.82

Category XVI consists of nuclear weapons and related articles. Revisions to Category XVI, which became effective July 1, 2014, include removing nuclear radiation detection and measurement devices from Category XVI and transferring them to the CCL.83

C. Benefits of Export Control Reform to Industry

Companies may already be experiencing a number of benefits from the revamped export controls regime. For one, manufacturers of parts and components for military items may find that some or all of their articles are now under the licensing jurisdiction of the Department of Commerce. Where a company no longer manufacturers or exports ITAR-controlled products, it will no longer be subject to the Department of State’s registration requirements.

Companies face the continued challenge, however, of understanding how to properly classify their products to ensure that the articles, technology, and services are exported in accordance with the appropriate regulatory jurisdiction (ITAR or EAR) and, further, the appropriate USML category or ECCN. Exporters cannot assume that the part or component they manufacture remains ITAR-controlled simply because it is specially designed for a military item without undergoing careful review of the revised ITAR categories, including the new definition of “specially designed.”

Whether ECR will fulfill one of its goals of “easing[ing] the licensing burden on U.S. exporters”84 may take more time to fully realize. Some companies may experience short-term complexities in terms of reclassifying their items and in understanding how to fully utilize license exceptions that may not previously have been available. Companies should continually monitor further ECR developments to ensure continued compliance with the evolving regulations.