disintegrate over any area of terrestrial land or water. When aviation accidents occurred over seas, some claims incorporated maritime law. Families of the deceased argued for application of the Death on the High Seas Act (DOHSA).[112] DOHSA provides a remedy for victims of families lost at sea[113] which offers greater compensation than the remedy provided for in aviation law. It was traditionally established for accidents occurring to sea vessels but was later held applicable to aircraft tragedies that occurred over seas.[114]

In addition, when the space shuttle *Challenger* exploded, the families of the deceased tried to file a claim against NASA but were limited by the Federal Sovereign Immunities Act (FSIA).[115] However, upon further investigation, after finding that the *Challenger* had exploded due to faulty o-rings which were applied to the space shuttle[116], U.S. courts determined that the U.S. Government was not able to assert its immunity under the FSIA and the plaintiffs were able to recover for damages.[117] In this case, the issue of jurisdiction rested on where the cause of the tort occurred.

H. Jurisdiction II: Choosing a Forum

Another aspect of jurisdiction includes choosing the forum in which to file a claim. Virgin Galactic, a company owned by British entrepreneur, Richard Branson, intends to offer suborbital flights out of California's Mojave Desert.[118] Virgin Galactic's website can be accessed from any geographical point around the world, and invites a potential SFP to book his or her flight from the website. In addition, Virtuoso, the exclusive

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[112] *Id.* at 511.

[113] *Id.*

[114] *Id.*

[115] James A. Beckman, *Citizens Without a Forum: The Lack of an Appropriate and Consistent Remedy for United States Citizens Injured or Killed as the Result of Activity Above the Territorial Air Space,* 22 B.C. INT'L & COMP. L. REV. 249 (1999).

[116] *Id.*

[117] *Id.* (Where the Federal Tort Claims Act is applicable, the defense by the U.S. government is to assert the FSIA. In this case, outer space was considered "foreign territory".)

[118] Virgin Galactic also intends to launch flights from a spaceport in New Mexico. *See* Virgin Galactic, *supra* note 106.

travel agency booking sub-orbital space flights for Virgin Galactic[119] has agents worldwide, with the largest group of "accredited space agents"[120] based out of the U.S.[121] Thus, if an SFP has standing to file a claim, it is unclear where the claim could potentially be filed. Virgin Galactic, a subsidiary of the Virgin Group[122] may assert that England, its home nation, has jurisdiction and the SFP may assert jurisdiction lies in his or her home nations, the location where he or she called, or where he or she accessed the travel agency website.

Moreover, if there was a potential claim against the travel agency, the travel agency may assert jurisdiction lies in the state, province and/or Nation that the agent was located or where the agency has its corporate headquarters. Separate liability against the travel agency may not be an issue for Virgin Galactic because "accredited space agents" booking sub-orbital flights function as agents of Virgin Galactic and not the travel agency with which they are affiliated.[123] Unlike civil aviation flights, where flights booked through a travel agency involve paperwork and electronic correspondence provided by the travel agency; all forms provided for sub-orbital space flights, including the contract and consent forms are sent directly from England, by Virgin Galactic.[124] Consumers of a sub-orbital flight,

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[119] Kimi Yoshino, *Selling Trips to the Lap of Luxury*, L.A. TIMES, Aug. 25, 2006, at C7.

[120] There are about 46 "accredited space agents" worldwide. A total of 170 agents from Virtuoso applied to be "accredited space agents" for Virgin Galactic, 46 of whom were selected and trained by Virgin Galactic.
The space agents function as an agent of Virgin Galactic and not the travel agency which they are affiliated with. Telephone interview with Mr. Peter Friedman, Accredited Space Agent for Virgin Galactic (May 10, 2007).

[121] *See* Virtuoso website, www.virtuoso.com/us/ (last visited Dec. 3, 2007). "Accredited space agents" are actually representatives of other travel agencies based throughout the U.S. including states such as Maine, Florida, California, Alabama. *See also* www.virtuoso.com/us/Specialists/ (last visited Dec. 3, 2007). Telephone interview with Mr. Peter Friedman, Accredited Space Agent for Virgin Galactic, (May 10, 2007).

[122] The Virgin Group is headquartered in London, England. Global Business Directory, http://www.medibix.com/company.jsp?company_id=10010865 (last visited Dec. 2, 2007).

[123] Telephone interview with Mr. Peter Friedman, Accredited Space Agent for Virgin Galactic, in Fla.
(May 10, 2007).

[124] Telephone interview with Mr. Craig Buck, Accredited Space Agent for Virgin Galactic, in Cal. (May 10, 2007).

therefore will be provided with a consent form by Virgin Galactic.[125] No other consent form from the local travel agency with which the "accredited space agent" is affiliated will be provided.[126]

Another distinction between travel agencies used for civil aviation flights and those employed for space flights is that no monetary exchange is made between the "accredited space agent" travel agency and the consumer.[127] In fact, the only method of paying for the sub-orbital flight is for the consumer to directly wire the funds to the appropriate Virgin Galactic account from their own bank account.[128]

In maritime law with respect to determining jurisdiction applicable to a passenger's claim, many courts have adopted the "solicitation – plus" doctrine.[129] Rather than focusing on the physical location of the vehicle providing the travel, the "solicitation – plus" doctrine focuses on the physical presence of where the ticket to travel was purchased. [130]

Since most passengers board a cruise ship to leave their current location, a passenger is likely to have purchased his or her ticket in a city other than the intended destination. In some cases, the passenger flies to the city where the cruise ship departs. Then, the cruise ship travels beyond the territorial waters of the departing State, often arriving in the territory of another State. This raises many possible forums for filing a claim. It is likely that sub-orbital flights will raise a similar issue because the company is based out of one State, launches from another State, and the SFP is likely to purchase his or her ticket from whichever State they accessed the internet.

Thus, the issue regarding jurisdiction does not necessarily have to rest on one body of law. The multi-faceted nature of space law requires applying multiple bodies of law in order to properly develop its fundamentals. It encompasses tort law in regards to informed consent and liability; contract law in re-

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[125] *Id.*
[126] *Id.*
[127] *Id.*
[128] *Id.*
[129] Dickerson, *supra* note 103, at 482.
[130] *Id.*

gards to informed consent, launch arrangements and manufacturing; international law in regards to treaties and bilateral agreements; and, civil procedure and conflict of laws in regards to jurisdictional issues. It should follow that precedents from both aviation and maritime law are equally relevant. Thus, the nation of the SFP in developing its space law should incorporate a cross-section of all relevant areas of the law, rather than isolating one category of law to which definitions and labels must properly conform. The debate seems to emphasize aviation law as a precedent but there are other bodies of law that are being overlooked which can prove to be just as helpful in formulating the legal structure and framework for space law.

I. Aircraft vs. Spacecraft

The U.S. definition of a "suborbital rocket" is a "rocket propelled vehicle intended for flight on a suborbital trajectory, whose thrust is greater than its lift for the majority of the powered portion of its flight."[131] The FAA clarified that physics is the determining factor for distinguishing launch vehicles from aircraft.[132] Although a vehicle has the potential of being classified as a "hybrid"[133] by having both aircraft and rocket characteristics, one member of Congress disagreed with allowing such a hybrid vehicle to be subject to two separate regulating agencies.[134]

Perhaps there is no way of avoiding having a vehicle being subject to two different legal regimes when both regimes are applicable based on its operational characteristics. For example, there is a current terrestrial vehicle that has been in use since

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[131] 68 Fed. Reg. 59977-79 (Oct. 20, 2003).

[132] *Id.*

[133] There are two types of hybrid vehicles. One type refers to a vehicle that has both aviation and space technology, each of which is employed at various stages of the flight. The second type refers to two vehicles which are combined to form a launch system but allows each to still operate independent of the other at a particular stage of the flight. 68 Fed. Reg. at 59977.

[134] Excerpts of a discussion between House Rep. Lucas and House Rep. Boehlert discuss the issue of regulating hybrid vehicles. Rep. Lucas without further elaboration states, "My hope is that such hybrid vehicles would not have to be regulated under two separate regimes." See Hughes & Rosenberg, *supra* note 20, at 32.

World War II, the DUKW, (pronounced as "duck"). It is an amphibious vehicle.[135] These vehicles are capable of navigating on land and in water and were created to transport military supplies and personnel to land from the Normandy coast during World War II.[136] Surplus DUKWs were later sold to private sector companies to be used for commercial tourism.[137] Like commercial space vehicles, these amphibious vehicles were originally used for government purposes by the government sector and now are being used by the private sector specifically as a tourist vehicle.[138]

In one case, the state of Missouri treats these amphibious vehicles as a "vessel, not a motor vehicle" with minor exceptions pertaining to licensing. "A 'motorized amphibious vehicle' is a self-propelled vehicle designed or used for transporting property or eight or more persons on the highways and waters of this state."[139] The state of Missouri requires that the operator of the vehicle comply with highway regulations and obtain a motor vehicle license when operating on the highways.[140]At the same time, the vehicle is also subject to United States Coast Guard requirements when operating in state waters.[141]

The National Transportation Safety Board (NTSB) conducted an investigation when one of these amphibious vehicles sunk in Arkansas while providing a Duck Boat Tour,[142] As a result of its investigation, the NTSB made a recommendation regarding increasing safety for these types of "vehicles." The NTSB concluded that the amphibious vehicle was certified as a "small passenger vessel" and complied with all Federal regulations pursuant to 46 CFR Parts 175-185 (Subchapter T).[143]

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[135] National Transportation Safety Board (NTSB), *Safety Recommendation* (May 2, 2002), http://www.ntsb.gov/recs/letters/2002/M02_1_3_NY.pdf.

[136] *Id.*

[137] *Id.*

[138] *Id.*

[139] Mo. Ann. Stat. § 306.075 (West 2007).

[140] *Id.*

[141] *Id.*

[142] *See* NTSB, *supra* note 135. The *Miss Majestic* sunk in less than 30 seconds causing the deaths of 11 people. A canopy over the amphibious vehicle prevented vertical escape.

[143] *Id.*

The NTSB recommendation and the regulations of other states for amphibious vehicle emphasize the maximum capability of a vehicle to determine its category classification. It seems more reasonable to legally regard an amphibious vehicle as a "vessel" because its maximum capability is designed for the water. If an operator or passenger of the vehicle did not need the "vehicle" for its water capabilities, then it would rely on a vehicle designed solely for land. Thus, where a sub-orbital vehicle has the potential to function in a dual capacity, one way of categorizing the vehicle would be to focus on its maximum capability.

III. CONSIDERATIONS

A. Potential Conflict of Interest: Safety and Promotion

One authoritative view holds that the Department of Commerce should have the exclusive role of promoting the economics of the space industry. It is already a part of their role.[144] One aspect of determining why the Department of Commerce should promote the industry is because space tourism is a form of commerce. The very language used to describe the topic at hand is "commercial space transportation." Commercial is defined as a "connection with commerce or an activity that is carried on for profit."[145] The term "commercial" is used to describe an industry that intends to profit by providing a "commercial" advantage. The current focus of the commercial space transportation industry is on low Earth orbit which is referred to as "rapidly becoming a space enterprise zone."[146]

Moreover, the U.S. Space Transportation policy[147] specifically states, the "U.S. Government must capitalize on the entre-

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[144] USGAO, *Commercial Space Launches: FAA Needs Continued Planning and Monitoring to Oversee the Safety of the Emerging Space Tourism Industry*, GAO-07-16, 32 (October 2006).

[145] Lisa J. Savitt, Angeline G. Chen, Michael J. Francesconi, *Aviation and Aerospace: Law and Policy Developments*, 36 INT'L LAW. 507 (2002)

[146] Weeber, et al., *supra* note 58, at 4.

[147] U.S. Space Transportation Policy, Jan. 6, 2005, http://www.ostp.gov/html/SpaceTransFactSheetJan2005.pdf (last visited Dec. 3, 2007).

preneurial spirit of the U.S. private sector"[148] because any such improvements made by the private sector would enhance the opportunities to use space for *commercial* purposes. Moreover, under section IV titled Commercial Space Transportation, the policy states that the "U.S. gov't encourages and facilitates a viable U.S. *commercial* space transportation industry that, amongst other things, benefits the U.S. economy."[149]

Thus, it seems more appropriate for the Department of Commerce rather than the FAA to freely promote the space tourism industry by focusing on the primary objective of generating economic revenue without the restriction of a conflicting interest.

A recent report drafted by the U.S. Government Accountability Office (GAO) stated that the potential conflict that will be addressed, if necessary, based on a Department of Transportation report due in 2008.[150] The U.S. GAO report however addresses the fact that in both aviation and maritime law the promotional and regulating authority vested in one entity was later withdrawn due to a conflict of interest.[151] In the case of maritime law, the original authoritative entity was dissolved and the promotional authority was granted to the Department of Commerce.[152] For purposes of developing space tourism, precedent indicates that a conflict of interest is more than a potential issue. In fact, a conflict of interest seems inevitable.

B. International Regime: Bilateral Agreements in Lieu of International Treaties?

Establishing an international standard may be more efficient because it would diminish the potential problems that would need to be addressed in a conflict of laws situation. For example, one U.S. regulation requirement regarding the scope of disclosure required mandates informing an SFP that he or she may request additional information about an accident that

[148] *Id.*
[149] *Id.*
[150] USGAO, *supra* note 144.
[151] *Id.*
[152] *Id.*

has occurred.[153] However, this same type of disclosure could potentially be restricted by the International Traffic in Arms Regulations (ITAR).[154] The problem lies in the level of disclosure; the FAA requires an operator to inform an SFP by describing each "accident and human space flight incident at the system level" while ITAR would prohibit this information to a foreign national.[155] The implications of this requirement could prevent companies from being hired by a foreign SFP because ITAR would prohibit the disclosure of information that any other SFP would be entitled to. The FAA has agreed to require a "general systems description" which is consistent with ITAR requirements resolving this potential problem.[156] Despite this agreement, the discussion raises the issue of how U.S. national law can interfere with the global expansion of the industry.

The establishment of an international standard may help shape and promote a collaborative global development. Export controls may inhibit this collaborative effort because such controls restrict the opportunity to freely trade space related commodities. A push for setting international standards may provide a means of intensifying international collaboration.

There is already a growing trend toward establishing international uniformity with respect to financing and security which is being considered for application to space tourism. The International Institute for the Unification of Private Law (UNIDROIT), an intergovernmental organization, has established a committee of governmental experts alongside other private entities, such as Space Working Group, to establish commercial space financing standards for space assets.[157]

In proposing that an international agency is inevitably responsible for formulating the regulatory regime necessary to support the space tourism industry; it is essential to examine exactly who the regulations are trying to protect. If aviation

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[153] 14 C.F.R. §§ 460.45(e) - 45(f) (2006).

[154] *Id.*

[155] *Id.*

[156] *Id.*

[157] Martin Stanford, *Legal Issues in Space Tourism: Financing and Security Issues*, *in* ECSL PRACTITIONERS FORUM, SPACE TOURISM-LEGAL AND POLICY ASPECTS (Paris, Mar. 17, 2006).

law is a model, and it has been suggested that an organization as the International Civil Aviation Organization (ICAO) should be looked to as a suggested model,[158] the context in which that organization was established must be understood. In aviation, the international organization was a result of numerous accidents raising the issue of unlimited liability and astronomical insurance premiums.[159]

Bilateral agreements may provide increased cooperation and foster a greater incentive for compliance. Multi-national treaties allow too much room for diffusion of responsibility. Moreover, fines imposed for non-compliance may not be a consequence effective enough to foster compliance. This proposition has been suggested as a more effective way of carrying out FAA regulations.[160] In this regard the terms set forth in a bilateral agreement offer a more level playing field[161] and foster an environment for freedom of contract.

C. Safety Management System: Outcome Based Approach

Since one of the biggest debates rests on the conflicting dualism between the FAA's role in both promoting and regulating the industry, one suggested resolution is to let the industry regulate itself both in the promotion and regulation of the industry. [162] In fact, many members of the industry have already formed an organization, known as the Personal Spaceflight Federation (hereinafter, the Federation).[163] A predominant goal of the Federation is to rely on a self-policing form of governance rather than by an outside organization.[164]

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[158] *Id.*

[159] Charity Trelease Ryabinkin, *Let There Be Flight: It's Time to Reform the Regulation of Commercial Space Travel,* 69 J. AIR L. & COM. 101, 104 (2004).

[160] Mark Lee Morrison, Note, *Navigating the Tumultuous Skies of International Aviation: The Federal Aviation Administration's Response to Non-Compliance with International Safety Standards,* 2 SW. J.L. & TRADE AM. 621, 634 (1995).

[161] *Id.*

[162] Parsons, *supra* note 31, at 519.

[163] *Id.* at 520.

[164] *Id.*

Self-regulation is not far from a growing trend toward the emergence of global administrative law. [165] One type suggested by scholars addressing this trend is for a private entity to have regulatory functions.[166] One example of this model is the International Standardization Organization (ISO) which has set over 13,000 standards for products worldwide.[167] One counter argument however, is the adventurous nature of space tourists is not likely to deter future adventurers.[168]

Arguably, there is a greater amount of pressure on industry leaders to design the safest vehicle possible because any accidents or catastrophes would be self-destructive to the industry by reducing tourist confidence.[169] The space tourism companies' funding is greatly fueled by the individuals who want to participate. Over seven thousand people have signed up for a ticket[170] on Virgin Galactic, Mr. Richard Branson's space vehicle that will provide a tourist with a three and a half hour trip to outer space.[171] This type of self-regulation would encourage industry leaders to not only take safety precautions, but to strive for the most optimum safety standards.[172] The alternative to allowing the FAA to set standards now, is that it may not exert enough pressure necessary for achieving the greatest safety possible because it may foster a bare-minimum approach.[173] By allowing the industry to self-regulate, a greater threshold of safety may be achieved.

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[165] *See* Benedict Kingsbury, Nico Krisch & Richard B. Stewart, *The Emergence of Global Administrative Law*, 68 LAW & CONTEMP. PROBS. 15 (2005). Scholars address five types of "global administration" including administration by private institutions that possess regulatory functions and a hybrid comprised of both government and private participants.

[166] Kingsbury et al., *supra* note 165, at 22.

[167] *Id.*

[168] *Id.*

[169] *See* Britt, *supra* note 96, at 10.

[170] Tickets are currently priced at $200,000. Virgin Galactic Frequently Asked Questions, http://www.virgingalactic.com/htmlsite/faq.php?subtitle=Space%20Ticket&src=25 (last visited Dec. 3, 2007).

[171] Steven Freeland, *Up, Up and …Back: The Emergence of Space Tourism and Its Impact on the International Law of Outer Space,* 6 CHI. J. INT'L L. 1 (2005).

[172] Parsons, *supra* note 31, at 522.

[173] *Id.*

One alternative to self-regulation is a hybrid arrangement. The "hybrid intergovernmental-private arrangement" is comprised of "both government and private actors."[174] This arrangement may be the most beneficial model because it offers the industry a chance to grow while still balancing a need for public safety. By establishing a hybrid entity comprised of both government and private industry leaders; this dynamic should foster the ability to satisfy a greater constituency.

One proposed idea for a hybrid arrangement was made by Mr. Rutan.[175] Mr. Rutan suggested that spaceship safety should be a result of negotiations between the government and the industry developer.[176] The problem with the government being the sole regulating entity is that they do not know how to regulate spacecraft because they do not know what type of spacecraft will exist yet.[177] The developer should define the testing needed to demonstrate the safety of the spaceship's system.[178] After defining the test plan and negotiating with the FAA, it would be at the discretion of the FAA to then approve whether the developer met the safety test.[179] This hybrid arrangement fosters an approach to safety system regulation because it allows the industry developer to determine the means to achieving a particular outcome while the government proscribes the outcome.

Initially it seems that this type of outcome based regulation gives the industry developer too much discretion that may result in cost cutting, thereby compromising safety. Moreover, if too much discretion is left to the developer, then the developer might set standards that are minimal for the industry to achieve.

On the contrary, it would actually be self-destructive for the industry to compromise its safety system for the sake of saving money because the industry's goal is to build a space tourism

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[174] Kingsbury et al., *supra* note 165, at 20.

[175] Interview by Ted Balaker with Burt Rutan, Space Entrepreneur, Scaled Composites (Apr. 2005), *available at* http:www.reason.org/apr2005/space_travel.pdf. (last visited Dec. 3, 2007).

[176] *Id.*

[177] *Id.*

[178] *Id.*

[179] *Id.*

market.[180] The market will grow once the flight costs decrease and the flight costs will only decrease as consumer interest increases. Failure to provide safe flights will likely decrease consumer confidence. Mr. Rutan stated that its company policy on safety is to always question the safety of the vehicle rather than defend it so as to ensure the product is being built to its safest capacity.[181] Naturally it is in the best interest of the industry developers to make safety their primary goal.

IV. CONCLUSION

Examining the regulatory regime of sub-orbital flights reveals a variety of issues and considerations that exist at the interface between between air and space law. These issues and considerations are dynamic and can be expected to evolve as experience grows.

If the FAA continues regulating the space tourism industry, its focus should shift to the regulation of those who are at greater risk, namely the space flight participants and crew. It is because the doctrine of informed consent is so complex that more safety regulation instead of less should be afforded to the space flight participant.

Since a space flight participant aboard a suborbital flight may be analogized to a tourist aboard a cruise ship, maritime law may also provide an analogue that offers relevant precedents for suborbital flights – especially with regard to jurisdictional issues. This is not to say that maritime analogs should be chosen over aviation analogs, but rather they should be considered in the development of space law, at least, to the same extent that aviation law is regarded.

The international arena should be considered in the development of U.S. national space law, with respect to attracting foreign markets to U.S. space tourism companies. In regards to international regulation, bilateral agreements may prove to be more effective than international treaties because it increases the level of accountability and compliance from the parties that

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[180] *Id.*
[181] *Id.*

are in agreement. In addition, it fosters a universally accepted theme of freedom of contract which is essential to the innovative nascent of this industry.

Finally, a hybrid entity comprised of both governmental and private actors may be the entity most capable of addressing these issues of first impression. An outcome based approach to safety system regulation may help to reconcile the competing interests raised by the private ventures of the commercial space transportation industry.

A STUDY OF AEROSPACE LEGISLATION OF CHINA

Qi Yongliang[*]

In the past several decades, China has been continuously strengthening and improving its law system. On March 15, 2007, the third session of the ninth National People's Congress (NPC) passed "the Legislation Law" marking the beginning of a more improved and more matured period of China's legislation. In recent years China's space activities have developed rapidly and made astonishing achievements. On October 15, 2003, the manned Shenzhou-5 (SZ-5) was launched successfully, turning into reality a thousand-year old Chinese dream to fly into space. In 2007, China will launch the "Chang'e 1 exploration satellite to realize the dream of Chang'e to fly to the moon. In the course of its development, China's space technology needs the protection of laws, and further study of aerospace legislation laws.

I. THE MANAGEMENT SYSTEM OF THE AEROSPACE ACTIVITIES OF CHINA

The management of the China's space activities relies mainly on the country's relevant policies, the State Council's resolutions and orders, and a large amount of internal managerial regulations of the departments in charge of aviation. The former Ministry of Astronautics Industry had over 300 regulations for internal management. They are mainly the regulations for management of various areas, such as planning, technology, quality, security and finance. In 1998, the State Council established a new Commission of Science Technology and Industry for National Defense (COSTIND) (China National Space Administration (CNSA)) as the top organization of China's aviation industry. COSTIND has at different times made regula-

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tions such as "the Method for Managing Space Objects Registration", and "the Method for Managing Temporary License of Civil Space Launch Projects". Until now, The NPC and the State Council have not laid down any specific laws, nor rules on the management of space activities. This is not comparable to our needs to develop space activities at high speed.

II. CHINA NEEDS AEROSPACE LEGISLATION

China's aerospace legislation has long been emphasized by the State overseeing authorities and experts in the fields. In 1986, to accelerate the development of the aviation industry, the Ministry of Aerospace Industry submitted its seventh five-year legislation plan to the State Council, suggesting making provisions on vitalizing aviation industry.

In 1993, on the eighth NPC, the Shanghai delegation signed unanimously and submitted to the Congress a bill for legislating China's aerospace law. In the bill, it was pointed out that China's aerospace technology develops rapidly, and has entered an international market of launching service. In order to solve the new problems encountered in developing aerospace technology in the new situation, the bill suggests that China develop its aerospace law as early as possible.

In 1996 and again in 1997, Professor Qizhi He, the well known Chinese space law expert and a legal consultant of the Department of Foreign Affairs, wrote letters to the Administrator of the CNSA suggesting China make aerospace law as soon as possible to regulate the management of domestic companies engaging in aerospace activities.

In 1997, on the 15th National Chinese Communist Party's Congress (NCCPC), the president of China Academy of Aerospace Technology Research proposed that China should develop aerospace law so as to safeguard outer space resources and maintain the country's interests; to protect aviation properties and promote the development of space enterprise; and to protect the talented people in aviation industry and guarantee there are successors.

On November 17, 1998, at COSTIND legislation strategy symposium, Enjie Luan, the Vice Minister of COSTIND and the

Administrator of CNSA, emphasized the urgency and necessity of a State aerospace legislation. He hoped to enact China's aerospace law as early as possible.

On the fifth session of the tenth NPC in March 2007, through seminars, private consultations and research, many a NPC representatives drafted the "Proposal on Speeding up the Legislation of China's Aerospace Activities", suggesting a speed-up in China's aerospace legislation.

From the managerial point of view for aerospace activities, the Chinese economic system has transformed from a planned economy to a socialist market economy. It is no longer adequate for China to rely solely on the regulations and the management of the government's administrative means in carrying out certain important aerospace activities. In order to smooth the management relations and improve the development of aerospace activities, China needs the regulation of a State's law.

China has acceded to four international aerospace treaties passed by the United Nations' General Assembly and has taken international responsibilities and duties accordingly. The related provisions of these international treaties should be reflected in China's laws so that government organizations, legal persons and natural persons who are engaged in aerospace activities can understand and obey these regulations.

From the point of view of aerospace legislation, whether comparing China's aerospace legislation to that of the major countries in the world, or comparing China's aerospace legislation to the development of China's aerospace technology, China needs to bring about the aerospace legislation as early as possible.

III. RESEARCH ON CHINA'S AEROSPACE LEGISLATION

The organizations in charge of aerospace legislation in China and the related institutions, as well as the experts, have carried out beneficial investigations in China's aerospace legislation, and have taken on research work in various areas.

1. The Aerospace Corporation Has Set Up an Investigative Group for Aerospace Law Legislation In 1993, on the eighth NCP, the Shanghai Delegation submitted a pro-

posal to legislate the aerospace law. When the Ministry of Aviation and Aerospace (CNSA) was preparing the bill, an investigative group for the aerospace law legislation was established. They consulted the Shanghai NPC standing committee for specific comments on aerospace legislation, collected and translated aerospace laws of U.S., Russia, Ukraine and others. They consulted the NPC's Commission of Law Enforcement and the Bureau of Laws and Regulations of the State Council for opinions on legislating a State aerospace law. They also carried out research on the framework of aerospace law and at the same time conducted a research study on "The Aerospace Law Legislation of China".

2. In 1998, after the new COSTIND was established, it became the organization in charge of the State aerospace activities. COSTIND laid a great importance on the study of the aerospace legislation. Every year there were research studies related to issues of aerospace legislation. Among the studies, two important research projects were accomplished by entrusted institutions. In 2001, "A Study on the Legislation Structure of China's Aerospace Law" was finished. The study laid out the framework for China's aerospace legislation system and also the substance for its composing parts. In 2003, "A Comparative Study on Aerospace Laws of World Powers" was finished. Through this comparative study, suggestions for China's aerospace legislation were made as reference. Included were the major contents of China's aerospace law and the acceleration of the legislation. The accomplishment of these two important projects has laid a good foundation for State aerospace legislation.

3. Begin the Study of "The People's Republic of China Management Regulations of Aerospace Activities". In recent years, on top of its regular work and its related research tasks, COSTIND started studies on "The P. R. C. Management Regulations of Aerospace Activities". It focuses on the provisions that should be included in the management regulations of the aerospace activities.

IV. AN OUTLOOK ON CHINA'S AEROSPACE LEGISLATION

1. China Has the Conditions Necessary for Aerospace Legislation.

In addition to the need for aerospace activities management, our country's aerospace legislation has a relatively a good foundation in terms of technical conditions in aerospace legislation.

a. China's aerospace activities have taken place on a considerable scale. The development of its aerospace science and technology maintain a high speed and stability. After decades of hard work, Chinese aerospace activities have made remarkable achievements in the world and are of considerable scale. There are a large number of internal managerial regulations and rules, which put down a good foundation for China's aerospace legislation.

b. The international treaties joined by China, and the bilateral and multilateral agreements on aerospace activities signed by the Chinese government with many countries regulate the rights and responsibilities in carrying out space activities. They also provide some important contents for the legislation of China's aerospace activities.

c. China's experience in aerospace legislation and years of research studies on aerospace legislation, especially the study organized by COSTIND in recent years, have created a favorable condition for its aerospace legislation.

2. Establishing a System in China Aerospace Legislation

According to China's legislation rules and regulations, the Chinese aerospace law system should take a comprehensive aerospace law as its basis, supplemented with other related laws, administrative rules and institutional regulations to form a more complete aerospace law system. According to differentiated administrative duties and needs of the State, government and responsible institutions, corresponding laws, administrative rules or regulations should be made respectively. Currently,

China should continuously modify, enrich and improve the making of the regulations. At the same time, China should be actively engaged in the making of administrative rules and the study of legislating the aerospace law.

3. The Management Regulations of Aerospace Activities Are in Hope to Come Out Early.

In both procedure and the degree of difficulty, making administrative rules is much faster than legislating a set of laws. We are still in the period of reform, and a considerable amount of laws pertaining to the country's policies and its people's lives need legislation or modification urgently. If putting aerospace legislation on the NPC legislation agenda requires a long period of time, then making administrative rules and regulations first will be the faster alternative. Thus, we will not only fill in a blank in China's legislation, but will also lay down a foundation for legislating the aerospace law. COSTIND is working on "The People's Republic of China Aerospace Activities Regulations". It will soon come into being.

4. Legislating China's Aerospace Law is the Developing Trend.

The rapid development of China's space technology and the daily improvement of China's legal system will certainly bring forward the development of China's aerospace legislation. On basis of the existing administrative regulations and established administrative rules regarding aerospace activities, plus the achievements of many years of studies in aerospace legislation, an aerospace law of China is no longer a distant dream but a reality in the near future.

CASE NOTE

CORPORATE-SOVEREIGN SYMBIOSIS: *WILSON v. IMAGESAT INTERNATIONAL*, SHAREHOLDERS' ACTIONS, AND THE DUALISTIC NATURE OF STATE-OWNED CORPORATIONS

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INTRODUCTION

It has long been established in corporate law that directors owe a duty of loyalty to an entity's shareholders[1] and that a corporation must honor the terms of its authorized commitments.[2] It is also well-recognized that a Nation-State may, in certain situations, exert influence over what and to whom an entity may sell.[3] It is considerably less common, however, to discover a case in which all three of these principles converge.

In the case of *Wilson v. ImageSat International N.V.*,[4] a dispute currently pending in the United States District Court for the Southern District of New York, the plaintiffs—minority shareholders and holders of ImageSat stock options—allege a variety of grievances against the company, its principal

[1] *See* Williams v. 5300 Columbia Pike Corp., 891 F. Supp. 1169, 1183 n.30 (E.D. Va. 1995).

[2] *See* Genesco Entertainment v. Koch, 593 F. Supp. 743, 748 (S.D.N.Y. 1984).

[3] *See* United States v. Bozarov, 974 F.2d 1037, 1038 (9th Cir. 1992).

[4] 2007cv6176 (S.D.N.Y. 2007).

shareholders, and several other affiliated individuals. While the case will likely be without resolution for some time, the complaint highlights a number of issues relevant to corporations in general, and to those engaged in the development and sale of militarily-sensitive technology in particular. Many of these issues invoke well-established principles of corporate law that need no further discussion, but the case does raise some novel and important questions. What are the fiduciary responsibilities of a State-owned entity? Can a State-owned firm ever be immune from suit? When a Nation-State seeks to further its political objectives through a corporate form, to what extent can it incur liability? Given the proliferation of State-supported entities in the technology and defense industries, these questions merit discussion.

IMAGESAT INTERNATIONAL AT A GLANCE

The purpose of ImageSat International according to its mission statement is to provide its customers in the national security sector with "the benefits of a domestic, high-resolution imaging capability, including complete autonomy, exclusivity, and confidentiality, while minimizing the cost and risk associated with the development of a national space imaging program."[5] Said another way, ImageSat seeks to provide its clients with "high-resolution imaging services from [ImageSat's] satellites, as if they are operating their own national sensors."[6] For a fee, a nation's civilian or military program can acquire the use of two highly-sophisticated reconnaissance satellites which ordinarily would have been beyond their ability to develop or employ.[7]

Putting this business model into practice, ImageSat's main method of generating revenue comes from entering into Satellite Operating Partner (SOP) agreements with its government cli-

[5] ImageSat International Mission, http://imagesatintl.com/default.asp?catid={471BB0D0-DD1C-4BD8-A609-C2A23A7DC251} (last visited Oct. 13, 2007).

[6] ImageSat International History, http://imagesatintl.com/default.asp?catid={F4E1341A-1E2C-4684-BDB1-291FC83F557C} (last visited Oct. 13, 2007).

[7] ImageSat International SOP Program, http://imagesatintl.com/default.asp?catid={C430687B-FB8B-4CCC-B3B9-EDC528B0D044} (last visited Oct. 13, 2007).

ents.[8] ImageSat trains and equips the employees of its client States to operate ImageSat's satellites, and whenever one of them passes over that client's respective portion of the globe, local ground operators exercise exclusive and autonomous control over what it views.[9] Because of its internationally-focused business system, ImageSat does not monitor or report what its clients see, and no SOP can preempt the operations of another.[10] Exclusivity, autonomy, secrecy, and flexibility are premium services ImageSat proudly offers.[11]

THE HISTORY AND ORGANIZATIONAL STRUCTURE OF IMAGESAT

Before delving into the intricacies presented in *Wilson v. ImageSat International N.V.*, a review of the history of the firm and the relationship it maintains with its principal shareholders is in order.[12] Following the collapse of the former Soviet Union and the global proliferation of military satellite technology in the early 1990s, the United States Congress authorized the commercialization of high-resolution satellite imaging in hopes of creating a market based upon the technology's civilian applications.[13] While this was unfolding, Israel launched *Ofeq 3*, a high-resolution reconnaissance satellite designed to deliver state-of-the-art real-time imagery.[14]

In May of 1994, Stephen Wilson—the lead plaintiff in the case—proposed to Israel Aircraft Industries (later Israel Aerospace Industries, or IAI) the creation of a new company that would compete in the recently-developed civilian satellite market.[15] IAI, a corporation owned entirely by the Israeli govern-

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[8] According to the plaintiffs' complaint, over 90% of the company's revenue has been generated through the SOP program. Wilson v. ImageSat International N.V., Complaint, ¶ 58 (July 2, 2007) [hereinafter Complaint].

[9] *See supra* note 7.

[10] *Id.*

[11] *Id.*

[12] This information comes largely from the complaint filed on July 2, 2007 in the U.S. District Court for the Southern District of New York. As such, it may contain inaccuracies which cannot be independently discovered.

[13] *See* Land Remote Sensing Policy Act of 1992, 15 U.S.C. § 5601 (1992).

[14] *See supra* note 6.

[15] Complaint, *supra* note 8, at ¶ 58. IAI was one of the chief developers of the Ofeq satellite program. *Id.* at ¶ 61.

ment,[16] and Core Software Technology, a U.S.-based firm, joined forces to establish the entity that would one day become ImageSat.[17] Under the terms of ImageSat's formation, neither of the originating firms nor their successors could ever own more than 50% of the company, or it would be subject to the regulatory regimes of the United States and Israel.[18] Given the type of service the company sought to offer, it was essential that it be "multinational rather than centered in any one country, but explicitly not in the United States or Israel" because of the perception that affiliating with either country would harm the company's ability to offer autonomous, confidential, and exclusive satellite access.[19] After incorporating in the Cayman Islands as West Indian Space in 1997, the company relocated its corporate domicile to the Netherlands Antilles in June of 2000, adopting the current name of ImageSat International N.V.[20]

In response to the demands of Elbit Systems Ltd. (formerly known as ElOP), a privately held Israeli defense company which manufactured the *Ofeq* satellites' electro-optical imaging payload, the Israel Ministry of Defense (IMOD) directed IAI to share its 50% ownership stake such that it was left controlling 37.5% of ImageSat's stock while ElOP gained a 12.5% interest in the company.[21] As consideration for their shares, "ElOP agreed to grant to ImageSat the exclusive rights to commercialize its contributions to the collective '*Ofeq* satellite technology,' and not to compete with ImageSat in the exploitation of its satellite earth observation technology…."[22] This exclusivity arrangement was "precisely [the same] as IAI had done through the initial joint venture agreements in 1994 and 1995."[23] Soon

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[16] *Id.* at ¶ 40.

[17] *Id.* at ¶ 60.

[18] *Id.* at ¶¶ 59-60.

[19] *See supra* note 17.

[20] Complaint, *supra* note 8, at ¶ 56. "N.V." or "Naamloze Vennootschap" refers to the entity's designation as a public limited liability company under the laws of the Netherlands Antilles. *Id.* Although the company maintains an office on the Netherlands Antilles island of Curacao, its principal place of business is in Israel. *Id.* at ¶ 39.

[21] *Id.* at ¶ 61.

[22] *Id.*

[23] *Id*.

after, Core Software Technology also sold off a portion of its interest to a group of private investors.[24]

To finance the company's day-to-day operations and particularly the costs associated with the launch of its first satellite, *EROS A*, ImageSat's executive team focused heavily on obtaining private investment.[25] As an inducement to investors, the complaint alleges that "[f]rom the outset, it was understood and agreed that ImageSat would be an apolitical, commercial enterprise"[26] and that beyond "certain narrowly defined limitations by the IMOD (in its role as the export control authority for classified Israeli technology used by the company) ImageSat's business decision-making, including the selection of the customers (countries) with which [it] would do business, was to be completely apolitical."[27] ImageSat thus began operation with a unique ownership structure comprised of both private and State-supported entities.

WILSON V. IMAGESAT INTERNATIONAL N.V.

The veracity of the allegations against ImageSat and its co-defendants has yet to be proven in court. Nonetheless, the charges raised in the complaint implicate several bedrock principles of corporate law and, in some instances, raise unique twists on their historic doctrines. Many of these issues—such as breach of contract, shareholder rights, and corporate responsibility—have been litigated for decades if not centuries, so a review of them here is unlikely to shed new light on any matter of substance. However, the actions taken by a State-owned company to the detriment of other shareholders, and the fiduciary relationship owed therein, present an unusual dynamic in an otherwise routine complaint.

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[24] *Id.* at ¶ 62. After the stock transfers, ImageSat's ownership composition appeared as follows: IAI (37.5%); Elbit Systems (12.5%); Core Software Technology (31.25%); private investors (18.75%).

[25] *Id*. at ¶ 79. This was accomplished through the use of "bridge warrants" which could later be converted into ImageSat common stock. *Id.* at ¶ 84. EROS (Earth Remote Observation Satellite) was the commercial version of Ofeq. *See supra* note 6.

[26] Complaint, *supra* note 8, at ¶ 63.

[27] *Id.*

A. The Origins of the Lawsuit

The plaintiffs in this case are minority shareholders of ImageSat International who, along with holders of ImageSat stock options and convertible bridge warrants, allege that:

> Instead of properly recognizing [their] rights [as] minority shareholders, [the] Defendants have deprived them of their voice in the operation of the Company and have engaged in a series of actions and transactions characterized by multiple breaches of fiduciary duty, self-dealing, and other willfully fraudulent, deceptive, and oppressive acts, the net effect of which . . . has been to strip hundreds of millions of dollars of shareholder value from ImageSat and to further and wrongfully dilute and devalue or destroy each of the Plaintiffs' ownership interests in the Company.[28]

Although the plaintiffs bring their lawsuit chiefly against ImageSat International, nineteen of their twenty-two claims for relief also involve allegations against another defendant—the State-owned IAI. Since the lawsuit against ImageSat raises few, if any, novel legal questions by itself while the action against the State-owned corporation IAI offers many more, the following analysis will be confined exclusively to discussing IAI's role in the case.

B. The Allegations Against IAI

The allegations against IAI are numerous and varied. Six of the claims allege breach of fiduciary duty; two allege liability for corporate waste; and the remainder raise allegations ranging from self-dealing to common-law fraud.[29] Two particular allegations to be discussed herein include IAI's alleged interference with ImageSat's negotiations with the Government of Venezuela, and also its alleged campaign to diminish ImageSat's international operations through targeted contract breaches.

Looking to the first claim of IAI's alleged interference with the Venezuelan negotiations, the plaintiffs seek damages of

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[28] *Id.* at ¶ 3.

[29] *Id*. at ¶¶ 194 -389.

$215 million on this particular count stemming from IAI's "[m]anipulat[ion of] ImageSat's SOP program to enhance the attractiveness of [its] own sales initiatives in Venezuela" and also its failure "to take advantage of the Venezuelan opportunity for reasons unrelated to the best interests of the Company and its shareholders."[30] These actions allegedly devalued the company by millions. In 1999, Stephen Wilson and two other plaintiffs acting on ImageSat's behalf began discussions with the Venezuelan government to see about obtaining a lucrative SOP contract.[31] Negotiations proved successful when Venezuela allocated funds for ImageSat's program in 2002.[32] The complaint alleges that shortly thereafter, "IAI's senior international marketing and sales team . . . informed the Venezuelan Air Force that ImageSat's SOP proposal was withdrawn and that instead, the *EROS* satellite program had been 'bundled' with a comprehensive and more expensive high-tech intelligence program proposed by IAI."[33] If true, this behavior would certainly support the "manipulation" allegation regarding the Venezuelan deal.

Looking to the second charge in this allegation, that IAI deliberately failed to take advantage of the Venezuelan opportunity for "reasons unrelated to the best interests of the Company and its shareholders," the geopolitical landscape at the time provides a likely reason for why this might have occurred. In 2002, the relationship between the United States and Venezuela was worsening and Israel had to decide where it stood in relation to these changes.[34] The plaintiffs allege that the deteriora-

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[30] *Id.* at ¶¶ 226-34.

[31] *Id.* at ¶ 134.

[32] *Id.* at ¶ 135.

[33] *Id.*

[34] "Protests in April 2002 led to a gun-battle in Caracas between government and opposition supporters and the deaths of more than a dozen people. In these circumstances military leaders refused to act on orders by Chavez to repress demonstrators and subsequently on the evening of April 11 asked the president to leave office. However a small right-wing group of military leaders then took control, closing the assembly. In these confused circumstances, the military high command then asked Chavez back to power late on April 13. . . . The coup was significant for two reasons. First, in the wake of the coup Mr. Chavez began to purge political opponents in the armed forces and gradually cemented his control over the institution. Second, the coup contributed to [the] deterioration in relations between the United States and Chavez."