

ALASKA STATE LEGISLATURE
HOUSE TRANSPORTATION STANDING COMMITTEE

February 2, 2016

1:06 p.m.

MEMBERS PRESENT

Representative Neal Foster, Co-Chair
Representative Shelley Hughes, Co-Chair
Representative Benjamin Nageak
Representative Louise Stutes
Representative Dan Ortiz

MEMBERS ABSENT

Representative Charisse Millett
Representative Matt Claman

COMMITTEE CALENDAR

HOUSE CONCURRENT RESOLUTION NO. 17

Supporting the aviation industry; and urging the governor to make state-owned land available to the unmanned aircraft systems industry for the management and operation of unmanned aircraft systems and related research, manufacturing, testing, and training.

- HEARD & HELD

PREVIOUS COMMITTEE ACTION

BILL: HCR 17

SHORT TITLE: SUPPORT AVIATION INDUSTRY; USE STATE LAND

SPONSOR(S): REPRESENTATIVE(S) HUGHES

01/29/16	(H)	READ THE FIRST TIME - REFERRALS
01/29/16	(H)	TRA
02/02/16	(H)	TRA AT 1:00 PM CAPITOL 17

WITNESS REGISTER

GINGER BLAISDELL, Staff
Representative Shelley Hughes
Alaska State Legislature
Juneau, Alaska

POSITION STATEMENT: Presented HCR 17 on behalf of Representative Hughes, prime sponsor.

STEVE WACKOWSKI, Operations Manager
Tulagaq LLC
Industry Representative, UAS Task Force
Anchorage, Alaska

POSITION STATEMENT: Testified in support of HCR 17.

STEVE COLLIGAN, Owner
Precision Flight Devices
Member, UAS Task Force
Wasilla, Alaska

POSITION STATEMENT: Testified in support of HCR 17.

JOHN PARKER, Owner
Integrated Robotics
Member, UAS Task Force
Kenai, Alaska

POSITION STATEMENT: Testified in support of HCR 17.

ACTION NARRATIVE

[1:06:02 PM](#)

CO-CHAIR NEAL FOSTER called the House Transportation Standing Committee meeting to order at 1:06 p.m. Representatives Stutes, Nageak, Ortiz, Hughes, and Foster were present at the call to order.

HCR 17-SUPPORT AVIATION INDUSTRY; USE STATE LAND

[1:06:17 PM](#)

CO-CHAIR FOSTER announced that the only order of business would be HOUSE CONCURRENT RESOLUTION NO. 17, Supporting the aviation industry; and urging the governor to make state-owned land available to the unmanned aircraft systems industry for the management and operation of unmanned aircraft systems and related research, manufacturing, testing, and training.

[1:07:00 PM](#)

GINGER BLAISDELL, Staff, Representative Shelley Hughes, Alaska State Legislature, on behalf of Representative Hughes, prime sponsor, stated that HCR 17 is offered by the Unmanned Aircraft Systems (UAS) Legislative Task Force ("the task force") in support of UAS companies and manufacturers utilizing state lands for research, testing, training, and general operations for

unmanned aircraft. She stated that components of the legislation are outlined in some of the "Whereas" portions of HCR17, and some of the information, including statistics on the landmass available, came from U.S. Senator Lisa Murkowski's web site. (Technical difficulties) an enormous resource that is not being utilized for this industry with the unpopulated or low-risk land for these types of flights.

MS. BLAISDELL explained that the second portion of the statistics came from the Federal Aviation Administration's (FAA's) federal budget, "some of the kind things they say about Alaska and really promoting this industry." Therefore, she advised, the task force believes that putting this resolution before the legislature will encourage state agencies to use state land for the purpose of benefitting Alaska's economy.

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REPRESENTATIVE ORTIZ asked Ms. Blaisdell to clarify the intent of HCR 17.

MS. BLAISDELL answered that "we have one individual online" who has entered into an agreement with a state agency to secure land space to fly drones unhindered by other structures and highly populated areas. Consequently, the individual is mastering his skill by using state lands. She pointed out that some state agencies may be unaware of the existing opportunities in terms of entering into contracts or making land available to manufacturers and pilots seeking training hours. She offered that the UAS industry may be able to bring some economic benefit to Alaska.

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REPRESENTATIVE STUTES inquired whether space is currently limited and whether there are specific guidelines for drone use.

MS. BLAISDELL replied that currently UAS hobbyists can fly their aircraft just about anywhere for recreational purposes, except within five miles of an airport. Although, she advised, commercial users, with FAA exemptions, can fly their drones for commercial purposes which may provide more area latitude. The goal of the resolution is to increase commercial UAS access to state land, she explained.

REPRESENTATIVE STUTES asked for confirmation that the proposed resolution would be directed at commercial users, as opposed to private individuals and their drones.

MS. BLAISDELL replied that's correct.

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REPRESENTATIVE HUGHES stated that she wanted to add (technical difficulties) but of course it's a concurrent resolution, so it would not be binding. A portion of the task force's duty, assigned legislatively, was to encourage the development of the private sector UAS industry, and HCR 17 was in response to that. The task force realized that 20 percent of Alaska is state lands, which is 5 percent of the entire U.S. land mass. She suggested that in the event the state could remove barriers and offer that space to local, national, and global UAS businesses, Alaska could receive a better slice of the economic pie in this burgeoning industry, which is the basis of this resolution.

REPRESENTATIVE NAGEAK described Alaska as an aviation state with thousands of private airplanes flying throughout the state in small and large towns. Representative Nageak voiced his concern as to how the drones would be regulated to ensure safety was given due consideration during its policy development. He related a story about a friend in the [Matanuska-Susitna] Valley who has an airstrip on his property, and he noted that pilots tend to migrate toward areas uninhibited by power lines and trees. He reiterated his concern regarding interference with other aviation traffic, and that Alaska should work with the industry to ensure that the rules and regulations address pertinent safety issues.

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REPRESENTATIVE ORTIZ requested verification that the FAA currently grants permission for UAS commercial operations.

MS. BLAISDELL confirmed Representative Ortiz's understanding.

REPRESENTATIVE ORTIZ inquired whether, moving in the direction of policy similar to what HCR 17 calls for, the FAA would still remain the organization in charge of monitoring and managing the UAS industry.

MS. BLAISDELL replied that the proposed resolution applies specifically to commercial operators, and currently an FAA

Section 333 exemption is necessary in order to operate commercially. In order to obtain the FAA exemption, commercial operators must have a pilot, ground crew, and a certified aircraft, with certain requirements to be met before becoming a commercial operator. In addition to the exemption, she explained, there is a requirement that commercial pilots broadcast a Notice to Airmen (NOTAM) informing other pilots of the commercial flight plan even in the instance of a small piece of UAS equipment. Other pilots can quickly check a website to see who is flying and where in order to avoid each other. Ms. Blaisdell advised that commercial UAS pilots are required to have the same licenses as pilots of conventional aircraft, and they are held to the same safety parameters as other aviators overseen by the FAA.

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REPRESENTATIVE STUTES noted that the title of the proposed resolution does not appear to exclude the private sector, yet that was the intent of this resolution. She suggested that the title be rewritten to more specifically explain that HCR 17 would not apply to the private sector.

REPRESENTATIVE HUGHES clarified that the intent of the proposed resolution is to allow and encourage commercial UAS operators to operate over state owned property. She noted that the resolution would not ask anything of private property owners and asked Representative Stutes for further clarification.

REPRESENTATIVE STUTES stated her understanding in that the resolution would only address commercial users of drones, and the purpose of HCR 17 is to prohibit private operators from using the same state lands commercial operators would be granted access to. In her interpretation, she said, the title does not specify this exclusion.

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MS. BLAISDELL directed attention to page 2, lines 20-22, "BE IT RESOLVED that the Alaska State Legislature supports the economic growth of the unmanned aircraft systems industry," and stated that the legislation is designed to focus on the commercial aspect of drone use. Currently, under FAA rules, hobbyist or recreational use operators are not governed under FAA regulations. There are guidelines for safe flying, advising operators to avoid airports and dangerous situations but private operators are not currently regulated, and she emphasized that

HCR 17 is focused on the industry aspect because it has much tighter restrictions. The title originated with Legislative Legal and Research Services, and she said she could ask Legislative Legal and Research Services whether it could be rewritten for purposes of clarification.

REPRESENTATIVE STUTES asked whether the intent is to exclude private drone use.

MS. BLAISDELL replied that there is no exclusion language in HCR 17. Therefore, hobbyists can fly wherever they choose with very specific exceptions, such as within the boundaries of an airport or over large crowds. Currently, private operators can fly on state land, she said.

REPRESENTATIVE STUTES asked, hypothetically, whether as a private citizen she could operate a drone on state land.

MS. BLAISDELL replied affirmatively.

REPRESENTATIVE STUTES thanked Ms. Blaisdell for the clarification.

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REPRESENTATIVE HUGHES stated that the term "unmanned aircraft industry" is being used in the United States to indicate the commercial industry, and typically, [in reference to private operators], the conventional nomenclature is "recreational" or "hobbyist." She reiterated that the resolution addresses commercial users, exclusively. She pointed out that a person may think that industry word includes both the hobbyist and commercial, but typically it is being used solely for commercial which is the way it is being used here.

REPRESENTATIVE HUGHES noted that she would like to take this opportunity to educate the public that information on the recommended safety guidelines for UAS use is on alaskadrones.org. She emphasized that due to the significant number of manned aircraft operating in the state, and for the safety of the public, tragedies and incidents must be avoided. Although, she acknowledged that is a separate issue from HCR 17, she wanted to remind private UAS operators they should check the guidelines and noted that they are currently required to register their aircraft with the FAA.

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REPRESENTATIVE NAGEAK offered that it may be prudent to amend the title to include the wording "commercial unmanned aircraft systems industry" or something similar.

CO-CHAIR FOSTER recommended that members wait to amend the resolution until after public testimony and any other committee input. He said he will hold this resolution over until the next meeting, and suggested Representative Nageak offer a title change as a conceptual amendment.

REPRESENTATIVE NAGEAK responded that he would defer to Co-Chair Foster regarding the form of that amendment, and reiterated his desire for clarification between recreational and commercial users in the title.

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REPRESENTATIVE ORTIZ noted that in addition to safety, another area of concern is privacy issues for private property owners. For example, an insurance company using UAS on private property. He asked whether there would be sacrifices related to privacy if [the committee] were to move in the direction of the resolution.

MS. BLAISDELL answered that a benefit of flying over state lands would be less concern regarding [infringements] of individual privacy, which is a reason state lands are considered an opportunity to bolster the economics of the UAS industry. The task force received national attention for the safety and privacy guidelines it developed and, she pointed out, Alaska is one of the first states to publish guidelines regarding personal privacy. She added that the guidelines are available on alaskadrones.org.

[Technical difficulties 1:27:30 p.m. to 1:27:35 p.m.]

[1:27:35 PM](#)

CO-CHAIR FOSTER opened public testimony on HCR 17.

[Technical difficulties 1:27:41 p.m. to 1:27:55 p.m.]

[1:27:55 PM](#)

[Technical difficulties.]

STEVE WACKOWSKI, Operations Manager, Tulagaq LLC; Industry Representative, UAS Task Force, thanked Representative Hughes and Ms. Blaisdell for their hard work in the development of the proposed resolution. He offered that from an industry perspective, the resolution sends a strong signal that Alaska is "open for business," and that [the UAS industry] is in the state to give back to the economy and provide jobs. He advised that in his company's 3.5 year history, Tulagaq conducted several major UAS operations in the Arctic, including a 1.5 month campaign in Wainwright where it hired two locals to help support operations and conduct Science, Technology, Engineering & Mathematics (STEM) outreach to the village school. He pointed out that Tulagaq is owned by Alaskan companies and the Alaska Native Regional Corporation shareholders. This resolution would send a strong signal, and he expressed his hope that companies like Google, Amazon, and Facebook would look to Alaska to provide high-tech jobs and open up businesses.

MR. WACKOWSKI noted, in response to a previous question from Representative Ortiz regarding safety, that the federal government still regulates all airspace - state land, private land, "two inches above your back lawn to your house" and considers that airspace within its regulatory [jurisdiction]. He said that [the commercial UAS industry] has very strict rules in place for safety. For example, [commercial UAS operators] de-conflict any airspace immediately before operating and usually do not fly in the vicinity of any manned aircraft. Further, he noted, for the Wainwright operation, an individual was stationed at the FAA radar observing the operations, the entire time, ensuring there was no air traffic in or out of the operations area.

MR. WACKOWSKI acknowledged that privacy is a concern, and remarked that frequently the drones are not equipped with "spy cameras" as depicted on Youtube.com. He continued that some UAS produce high-resolution elevation data or are equipped with synthetic aperture radar for detecting changes in ice pack or conducting fish and game counts. The capabilities of these aircraft go well beyond the \$200 UAS available to hobbyists; these are commercial operations producing high-resolution data, he said. Frequently, he commented, [commercial UAS operators] have no ambition to be near other people, homes, or other aircraft; therefore, the opportunity to focus operations on state land and the air above it would be ideal. He reiterated that the proposed resolution would send a strong message to commercial UAS industry members who may invest in Alaska and provide jobs.

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STEVE COLLIGAN, Owner, Precision Flight Devices; Member, UAS Task Force, said he is a member of the task force, a long time commercial operator in mapping and geometric space, and he owns Precision Flight Devices. He thanked the committee for the opportunity to testify, and allowing the Academy of Model Aeronautics (AMA) to present information to the [committee] addressing best practices for hobbyist use of UAS last year. He pointed out that the State of Alaska has received substantial recognition for publication of manuals and its proactive approach to safety. At the end of the day, Alaska is well known, not only due to its opportunities, but also to the state's open approach and attention to safety, privacy, and the public. There have been discussions regarding private use versus hobbyist use, or commercial use versus hobbyist use, and he explained that the commercial operation is considered a meaningful use of the product or device.

MR. COLLIGAN explained that the proposed resolution pertains specifically to the profound hardware side of the UAS operation, but opined that in many ways the software that promotes the hardware is more profound. The software utilized in the UAS industry enables three-dimensional modeling, surveying, quantity take-off, environmental monitoring, etcetera, within the line-of-sight for a gravel pit or other small operational areas, and it is used by engineers, surveyors, and public agencies. He said unmanned aircraft systems have excellent logistical advantages over airplanes in terms of flying to remote areas and under clouds. He opined that increasing the ability for agencies and the private sector to practice and develop skills is the purpose of furthering [commercial use] on public lands. The UAS technology is coming, he stated, and agencies and engineering firms are already buying, looking at buying, or figuring out how to use both the hardware and software to create end-user products.

MR. COLLIGAN related that he is a life-long Alaskan who has had a nostalgic view of the [new technology] ever since his Dad gave him a children's mechanic book, published in 1940. He pointed out that an opportunity and responsibility exists to start using this technology for the purpose of efficiency and creating better products for the state and the private sector. During the presentation last year, he noted, it was discussed that hobbyist UAS pilots would appreciate access to public lands, and he compared it to creating a soccer field rather than allowing

kids to play in the streets. He remarked that both hobbyists and commercial users are looking for safe places to fly and practice. Although, he noted, on the commercial side developing practice areas to learn how to map wetlands and other small projects is important to get things moving.

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JOHN PARKER, Owner, Integrated Robotics; Member, UAS Task Force, stated that his company was in the process of developing sensor technology for the safe operation of unmanned aircraft in [Alaska] airspace, and he thanked the committee for allowing him the opportunity to participate in the hearing. He stated that he supports HCR 17 as a beginning aid to industrial development of new technology to help Alaska move away from its reliance on oil, gas, fishing, and tourism, as its primary means of economic growth, and he noted, discussions have indicated that those industries have been in a significant downturn. The state is currently operating in deficit spending, the Alaska State Legislature needs to determine if it is going to support one of the fastest growing industries in the United States, projected by 2025 to bring billions of dollars into the U.S. economy and create hundreds of thousands of jobs, he opined. The task force was established to promote the safe and legal growth of the UAS industry in Alaska and recommend to the legislature a means to assist the industry grow within the state. Alaska possesses some talented entrepreneurs in [the UAS] technology sector, who spoke earlier in this hearing, who have been thwarted at every turn in their attempt to grow their respective businesses, he pointed out. He said he does not blame that on state; it is a consequence of circumstances surrounding growth of any new industry.

MR. PARKER said the Department of Commerce, Community & Economic Development (DCCED) has worked closely with the UAS task force to identify ways to promote business development in the UAS sector. One area of potential growth is to acquire grant funding for UAS research projects through the university system, something the majority of the UAS commercial industry cannot do. He opined that Alaska has more (indisc. - coughing) airspace than the entire rest of the country combined. A great deal of that airspace is state land, well-suited to be used to assist in the growth of the UAS industry within the state through research and development, and testing and training, of both unmanned aircraft platforms and their corresponding flight crews, he said.

MR. PARKER recommended that HCR 17 be forwarded through the legislature to the governor, and that [the legislature] follow-up with his office to expeditiously designate state lands suited for safe research and development, flight testing, and flight crew training for commercial UAS operations. He re-emphasized that his recommendation applies to commercial operation, not recreational. He suggested that criteria be established for the commercial industry to use state lands based upon the conditions currently required by the FAA Sec. 333 exemption process, plus a requirement for liability insurance with a minimum of one million dollars per occurrence.

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MR. PARKER said that while he is in complete support of the FAA's safety mission, opined that the state should open dialogue with the FAA to streamline the permitting process as it relates to UAS operations on state lands. He related that the layers of permits necessary to conduct any flight operation are slowing commercial operations. Commercial operations with an FAA Sec. 333 exemption have a 200-foot certificate of authority (COA). He stated that it seems logical and practical for the state to obtain a blanket COA for state lands used for commercial operations conducting the aforementioned research, testing, and flight crew training. He put forth that there are commercial industries in the State of Oregon, working directly with the State of Oregon's agencies to obtain contracts to work on state lands for those agencies. He suggested another way the state could help both the industry and itself is by supporting technology incubators to bring more of this technology into Alaska. He further suggested that this could be accomplished through favorable leasing of state lands for incubators, tax incentives, and support of specific vocational programs aimed at building the UAS industry. Mr. Parker concluded by thanking the committee for the opportunity to speak and expressed his hope in moving HCR 17 forward.

[Technical difficulties 1:41:10 through 1:41:23.]

[REPRESENTATIVE ORTIZ asked a question regarding incubators.]

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MR. PARKER answered that technology incubators are operations that support the growth of technology because some emerging companies do not have the resources to finance their own growth. He related that this does not necessarily refer to financing a

given company, but rather its resources. For example, a building could be provided for technology companies to use for their research and, he added that incubators come in the form of investors providing administrative support to help the companies learn how to grow.

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CO-CHAIR FOSTER questioned whether there are any exceptions to the five-mile exclusionary area. Take for example, Nome and many other villages wherein the airports are essentially in the villages, and that most villages do not have roads that go out five miles. He pointed out that under the current provisions, if an operator wanted to shoot a tourism video he/she might not be able to use the drone to get the shot.

MR. PARKER replied that the five-mile exclusion is a safety exclusion, but does not completely exclude operations. He offered the example of an AMA sanctioned aerodrome within 1.5 miles of the center of the runway in Kenai. He said to operate in that location, operators need only notify the tower staff that they are operating in the area, what type of aircraft they are operating, how many people are present, and at what elevation they will operate. Clearly, it would be undesirable for UAS to enter terminal airspace and, he commented, the pattern altitude at Kenai Airport is 1000 ft. Most UAS operators, especially in "the hobby grade," are generally only flying their aircraft to a maximum of 100 to 150 feet. He posited that it is a matter of common sense and communication via NOTAMS informing other airmen of the intended operation in or near the five-mile exclusionary area.

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REPRESENTATIVE ORTIZ, noting the relatively nascent nature of the UAS industry, asked whether there has been an increase [technical difficulties] in collisions with traditional commercial aircraft.

MR. COLLIGAN replied there have been plenty of reports of UFO sightings, and people will call in and report seeing a small unmanned system, more frequently at the hobbyist level than at the commercial level. He opined there have been some incidents during military operations, but not on the commercial side. The reality is, for the existing millions and millions of small unmanned aircraft, there has not been one commercial or full-sized aviation incident or crash, he opined. He stated that the

FAA's sighting database is filled, almost exclusively, with reports from people who have seen one in the air, whether it is an approved commercial operator, or a hobbyist acting inappropriately. As a hobbyist and a commercial operator, there are boundaries and rules and people need to respect each other's privacy. He continued that it does not matter if someone is "taping a phone to a broomstick" and using it inappropriately; state laws prohibit people from spying and "Peeping Tom" activities. He clarified that it doesn't matter what the device is, it's the activity that is inappropriate.

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REPRESENTATIVE ORTIZ asked whether sacrificing privacy is an inevitable consequence to society with these developing UAS capabilities.

MR. COLLIGAN replied that usage of cell phones can be traced, have GPS, and provide a greater opportunity for misuse because smartphones are more intrusive. People are not aware of the information they are sharing just by carrying a cell phone around with them, and he described UAS as useful tools.

CO-CHAIR FOSTER left public testimony open.

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CO-CHAIR FOSTER, on a personal note, said he finds the topic of UAS interesting, and shared information about a recreational drone type he found particularly exciting. He expressed his appreciation to the sponsor for taking the lead on developing legislation regarding UAS technology, and that it is something the state can embrace rather than just focusing on concerns. Although, he said, existing concerns need to be addressed, UAS opens new opportunities.

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REPRESENTATIVE HUGHES emphasized that as [the legislature] works through the process of allowing opportunities for the UAS industry, the privacy issues will be granted significant consideration. She stated that [the task force] interfaces with the public consistently, and it has had ongoing conversations with law enforcement surrounding these issues. There are ongoing areas of concern, and public testimony is open at every task force meeting, with privacy being one of the main topics of discussion. The FAA claims jurisdiction "all the way to the

grass blade in your yard" and there is some controversy regarding jurisdiction, she said. Privacy and jurisdiction concerns are top priorities for the task force but, she emphasized that these must be balanced by allowing meaningful and beneficial use of UAS. The technology can be "a wonderful tool in good hands," and the task force strives to ensure it does get into good hands, she said.

[HCR 17 was held over.]

[1:52:04 PM](#)

ADJOURNMENT

There being no further business before the committee, the House Transportation Standing Committee meeting was adjourned at 1:52 p.m.