MEETING AGENDA

Hillsboro Airport Roundtable Exchange
Wednesday, February 3, 5:30 – 7:30 p.m.
City of Hillsboro Civic Center, 150 E. Main Street

5:30	Brian Lockhart Steve Nagy	**Welcome** • Announcements • Approval of Previous Meeting Minutes
5:40		**Public Comment**
5:50	Henry Oberhelman	**Lead Sub-Committee Report**
6:05	Fred Hostetler	**Noise Sub-Committee Report**
6:20	Bob Braze	**HIO Traffic Observations**
6:25	Jason Gately	**2005 Hillsboro Airport Master Plan** Review of implementation from 2005-2015
6:50		**Break** Check in with presenters and ask questions informally
7:00	Larry Altree	**PCC Aviation Program** Presentation on the aviation science program offered by Portland Community College
7:20		**Public Comment**
7:30		**Adjourn**

Hillsboro Airport Roundtable Exchange Draft Meeting Minutes
November 4, 2015: Hillsboro Civic Center, 5:30 p.m. – 7:30 p.m.

Meeting Summary

MEMBERS PRESENT

Bert Zimmerly	Hillsboro Airport Historian
Brian Lockhart	Global Aviation (Airport Business)
Bob Braze	Citizen
Bob Flansburg	Alternate for House District 30 (Jurisdictional)
Senator Chuck Riley	State Senate District 15
Deanna Palm	Hillsboro Chamber of Commerce (Business)
Fred Hostetler	Citizen (Land owner adjacent to HIO)
Henry Oberhelman	CPO 8 (Citizen)
Kimberly Culbertson	CPO 9 (Citizen)
Larry Altree	Portland Community College (Airport Related Business)
Mike Gallagher	Citizen
Mike Warrens	Oregon International Airshow
Stephen Roberts	Alternate for Washington County Commission (Jurisdictional)
Steve Nagy	Port of Portland
Representative Susan McClain	State House District 29

MEMBERS ABSENT

Annette Campista	Latino Business Community
Bill Braack	Oregon International Airshow Alternate
Debbie Raber	City of Hillsboro (Alternate for Mayor Willey)
Mayor Jerry Willey	City of Hillsboro (Jurisdictional)
Rhonda Legge	FAA (Technical)

CURRENT MEMBERSHIP VACANCIES

Hillsboro Airport Business Association
Westside Economic Alliance
Citizen

SUMMARY

Introductions and Welcome

Brian called the meeting to order at 5:33 p.m. He welcomed the audience, the committee and Fred Hostetler who had been ill. He also said farewell to Jack Lettieri who has moved outside the city, so he will not be serving on the committee any longer. Brian thanked everyone who came out to the Hillsboro Airport Air Fair in the middle of October.

Public Comment

Teresa Tse has been coming to the meetings since February 2014. She is curious to know what the representative from the flight training school will say as she doesn't feel like she should have to spend her time complaining about noise.

Dale Feik lives in Forrest Grove. He has a one-year-old granddaughter, a daughter and a son-in-law that live very close to the airport. He is very concerned about the health and welfare of his family who lives out here. He hopes that the committee will consider that fact when making decisions. He thanked Brooke for making copies of his submitted public testimony. He said he would like the committee to review his submission and make a presentation on how the safety of the airport is being addressed. There are safety issues with the aircraft flying in and out of Hillsboro Airport. He was told that the helicopter portion of the airport is going to be transferred to Troutdale Airport. With Intel flying six daily flights as well as helicopter flights, it is a nuisance. It isn't a decibel level issue; it's an impact of his quality of life since he can't enjoy the quality of life he would like to. He doesn't know where the practice areas are for flight training, but he requests that it be looked at to minimize the impact to people. His third concern is related to toxic air. He's really concerned about lead and diesel. He thinks that jet fuel is diesel. His concern is the fine particulate matter emissions from jets. He has concerns about both piston and jet aircraft emissions and public health. Mike requested that there be a map that shows the helicopter training patterns at the next meeting for reference.

Previous Meeting Minutes

Brian asked for approval of the meeting minutes. Brooke made one note on a date correction. Fred made the motion and Bob Flansberg seconded the motion. The minutes passed.

Jon Hay, Hillsboro Aero Academy

Jon Hay is the president and CEO of the Hillsboro Aero Academy. He has worked for Hillsboro Aviation/Hillsboro Aero Academy for 20 years. Hillsboro Aviation previously owned the flight school. As of November 2014, the flight school became its own company: Hillsboro Aero Academy. The investor owners of Hillsboro Aero Academy are two education companies, along with Max Lyons and John Hay as partial owners. The mission statement of the company is: "Hillsboro Aero Academy exists to make worldwide dreams of aviation a reality through the best training." Educational opportunities throughout the world, as it relates to aviation, are not as good as what are found in the United States.

Based on forecasts, between the years of 2012-2031, there will be a strong need for approximately 460,000 pilots. There is a need for new pilots to meet the demand as well as pilots to replace those that are retiring.

Company overview

- 35 years in business
- 75 aircraft
- 205 employees including 120 CFIs and 24 maintenance staff
- 69,000+ flight hours per year
- Two and four year degree programs available in conjunction with Portland Community College and Embry-Riddle
- Nationally accredited by ACCSC, a US Department of Education accreditor

Services offered

- Individual flight training
- College Partnership Program
- Ab Initio training: all-inclusive training packages for students from overseas

Additional information

- Approximately 65% of the students are training on aircraft vs. 35% on helicopters
- Currently, approximately 68% of all students are international, 32% are domestic
- Three school campuses:
    - Hillsboro
    - Troutdale
    - Prineville

Safety – Setting the bar

- One of the key things they focus on at HAA is safety. It is very important for HAA to make sure their aircraft are safe. It is important to teach their students how to be safe.
    - International Standard for Business Aircraft Operations (IS-BAO) accredited – internationally recognized set of safety standards for business aviation. They were the first flight training school in the world to be accredited.
    - Recognized as a safety leader in the industry with other training schools
        - HAA school director was invited to speak to Chinese airlines and Civil Aviation Administration of China approved flight schools about their use of the Safety Management System
        - Embry Riddle recognition

Mike Gallagher noted that having all the international students is a good opportunity for the city and/or the Port to partner with the school to welcome the students into their homes. Jon responded that there are some small partnerships with churches and others that welcome some of the students into their homes. Bob Braze asked if the academy was teaching any Crew Resource Management (CRM). John responded that teaching CRM was being taught as part of

the safety management system (SMS). Mike asked the average length of time that international students stay in the program. Jon responded between 12-14 months. Bert asked how many hours are collected and if they are reported to the FAA. He also asked if students fly by themselves. Jon responded that the hours collected go in their log books no matter where the flight hours are done, but each country has different requirements on licensing. He also responded that there are some solo flights done, which is required. Representative McClain asked if they accept local students. Jon said that they do. She then asked a follow-up question if she knew how many local market students are in the program. Jon responded that most people would go through the PCC professional pilot program rather than coming to the school as a private student pilot. Those coming to the school as private student pilots are a very small number. Representative McClain asked how many students there were per cycle. Jon responded that there are about 200 students per cycle.

Resiliency Planning: Stan Watters, Port of Portland
The Oregon Resilience Plan looked at a 9.0 magnitude earthquake and what it would mean if it hit. The plan also looked at what could be done in order to recover quickly in the event of a major event. The Port was very active in the development of the plan. Port assets will be very critical to the recovery of our state. Roads will more than likely be compromised, so bringing products in by air and water will be used heavily. The approach to improving seismic resiliency will take time and improvements to the state's infrastructure will be completed over the next several decades. After the resiliency report was completed, there was a blue ribbon panel that was created to look at putting together recommendations to keep the project alive over the next 50 years. The legislature approved a new office at the state that reports directly to the governor that will coordinate all the different organizations together in order to maximize resiliency.

After the Oregon Resilience Plan was completed, the Port took it upon ourselves to look at our critical assets. The analysis was based on which Port owned assets provide community recovery benefit, generate revenue and/or have lots of people dependent on them. There were 18 Port-owned critical assets identified. Hillsboro Airport's runway 13-31 is one of these critical assets.

In examining the differences between HIO and PDX, it was determined that there is very good soil at the Hillsboro Airport compared to PDX. PDX is built upon less stable dredge material. Following a large seismic event, it is anticipated that the PDX runways will not be operational until substantial repairs can be made. In the same major earthquake, the anticipated damage at the Hillsboro Airport would be minor. Currently, the Port is taking this study and identifying those critical assets within our capital plans which require improved seismic resiliency. When doing normal asset maintenance and capital upgrades, it is the most economic and efficient time to maximize the seismic resiliency of these assets.

The final thing the Port is doing is participating in the Cascadia Lifelines project. It is a research project being completed by OSU, funding research to look at how to make the state more resilient. Stan Watters sits on the board that oversees the program and provides direction on what the committee would like to see. The Port also developed a business continuity plan that

would allow the Port to resume business operations as soon as possible after a significant business disruption (such as a large seismic event).

Bob Braze asked if Stan Watters would be involved in the master planning process beginning next year. Stan said that his engineering team has passed along the seismic asset plan to the planning department so that they can include that information in the Hillsboro Airport Master Plan process. Kimberly asked if the entire Port seismic report could be made available. Brooke said that she would get it posted on the HARE website. Senator Riley asked that with limited resources at the state level, how are resiliency issues prioritized in the state. Stan mentioned that the fuel supply and storage for the entire state of Oregon is located on the Willamette River. In the event of a major earthquake, there would be a big issue. Finding ways to locate fuel storage throughout the state in order to minimize that impact will be critical in addition to looking at critical roads that will be important for emergency access to repairing service and getting the state back up and running. Senator Riley asked where communications are placed in that spectrum of importance. Stan responded that communications will also be very important as everyone will need to be talking to each other to work on getting the state back up and running. Mike Gallagher said that based on the likelihood that PDX will become unavailable during a major earthquake, Hillsboro Airport needs to become more of a priority; it will be the only place where cargo aircraft will be able to come in. He strongly suggests that the Port look at the priority ranking for the Hillsboro Airport. Stan responded that that is why the Port does seismic evaluations: to be able to identify ways in which we make our infrastructure stronger so that we can recover quicker. Hillsboro Airport is not less of a priority than PDX, it just has less seismic vulnerabilities than PDX.

Henry thanked Stan for coming and giving the presentation. He asked Stan to elaborate on what community services HIO would provide after a major event. Stan responded that it would be medical supplies, food, fuel, and all the things that the community will need to recover. It will be a staging area. Planes will be coming in fully fueled so that they can get back out, as there will more than likely not be access to fuel. Life Flight operations will also be important. Henry asked a follow-up question if there have been discussions about those that would be stranded and need access to medications that are critical. Stan responded that it was something that was looked at as part of the statewide plan. The hospitals in the area did participate in the statewide planning efforts. Mike asked if anyone has looked at the throughput capability at the airport. He suggested that a throughput capability study be completed to see what would happen if all the airports in the area were out of service. *(Note: capacity of Hillsboro Airport, as well as other airports in the region, can be completed as part of the upcoming Master Plan process.)*

2005 Hillsboro Master Plan: Jason Gately, Port of Portland
Goal:

- To develop a comprehensive tool to guide the airport's development and optimize community compatibility through the year 2025.

Objectives:

- Preserve Public and Private Investments
- Be Reflective of Community Goals and Objectives
- Determine Role
- Maintain Safety
- Preserve the Environment
- Seek to Balance Disruption
- Attract Public Participation
- Strengthen the Economy

Major findings

- HIO will stay a general aviation facility
- Base year and "no action" show inadequate capacity
- Major investments needed in:
    - Pavements
    - Corporate hangars
    - Safety
    - Radar
- Economic benefits of HIO:
    - 1,464 jobs
    - $110 million business revenue
    - $66 million personal income

Mike asked that in light of the previous presentation on HIO being a critical piece of infrastructure, how will the next master plan address these issues. Sean Loughran answered that in looking at the goals and objectives for the next time around, seismic resiliency can be addressed and should be added to the scope of the Master Plan study. Mike asked that it be noted in the minutes that he wants disaster resiliency to be included in the next Master Plan. Steve said that it will be included and this is the reason why we are doing the buildup of all these presentations about the Master Plan. This is the education of what was done in the past, as well as the identification of what should be done in the next Master Plan. Henry said that he thinks that resiliency planning is important to be included in this next master planning process. Mike also mentioned that it would be a good time to look at hiring a noise consultant to ensure that the best noise practices are also included in the next HIO Master Plan. Bob Braze said that he wanted to remind the committee that the Port's noise department is recognized worldwide as a leader with their program and that should be considered before the Port spends more money on outside consultants.

Subcommittee Reports

Brian asked if there are any subcommittee reports. Henry said that there aren't any reports as the committee will be meeting in the near future. He asked Steve for an update on anything related to mogas. Steve mentioned that the Port has had conversations with both Hillsboro Aviation and Hillsboro Aero Academy about the use of mogas. Hillsboro Aviation will have new tanks that will be capable of offering mogas and 100LL fuels at their new facility, scheduled to open April 2016. The Port is also exploring the possibility of incentives for a fuel truck option in order to get mogas to users sooner rather than later.

Fred said that the noise committee is going to meet before the February meeting and discuss some options that they would like to explore further. He requested that there be an agenda item added back that allows for HARE to conduct business.

Public Comment

Jim Lubischer provided public comment (see attached). He asked the following questions to the HARE committee members:

1. Would HARE be willing to facilitate the discussion of possible voluntary restrictions between the flight training companies and those affected by rotary operations over their homes?
2. Would HARE be willing to facilitate the discussion of possible voluntary restrictions between the flight training companies and those affected by fixed-wing touch-and-go flights over their homes?
3. Would HARE be willing to facilitate the discussion of possible voluntary restrictions between the flight training companies and those in rural Washington County affected by flight training activity over their homes?

Miki Barnes said that during the last master plan there was discussion of the flight training activity going to remote training locations. She believes that included the Apple Valley Airport area. There has been more than $200,000 spent in legal fees trying to fight the flight training activity at Apple Valley Airport. There are pesticides sprayed everywhere. Her house has been grazed by Mr. Applebee's helicopters. She said she felt that it was striking that the Hillsboro Aero Academy presentation said they were helping people live the dream. They are her nightmare. She said that she has read the Port's mission. It says nothing about flight training, general aviation or foreign flight students. The third runway was $17 million, $4 million of which was state money. This state has the lowest graduation rate in the nation. PCC has a collection of aircraft as well. Why are they using scarce educational dollars to buy planes for a private aviation school that is training private international students? Is it any wonder that our educational system is falling apart at the seams? There is not a single year-round shelter for homeless people in this county. This is appalling, the amount of money being invested into this airport that serves primarily three to four private companies. It is a shameful abuse of taxpayer money. PCC is turning out to be a puppet in the hands of the aviation industry. She thinks PCC has a lot to offer, but she now thinks of incessant noise and flight training when she thinks of PCC. These foreign students have more rights than she does.

Dale Feik provided testimony again. Before he was married, he went to Japan. He was talking with a Chinese pilot on how they are getting subsidized to learn how to fly. He doesn't think that we should subsidize foreign flight students in the event that they would fly again against us in a war. He thinks that there should be fewer pilots in the future, rather than more, due to climate change issues. There needs to be fewer jet airplanes in the future. He asked the committee to consider that in the future.

Mike Gallagher concluded the Public Comment period by stating that the HARE committee needs to decide how to address community concerns or fold up their tent. The HARE committee doesn't seek solutions and they need to face the facts that they are not performing the role that they should.

The meeting was adjourned at 7:35 p.m.

Public Comment Response

Airport Operations

Comment/Question

He thanked Brooke for making copies of his submitted public testimony. He said he would like the committee to review his submission and make a presentation on how the safety of the airport is being addressed (Dale Feik).

Answer

The Port has responsibility for the airport's runways and taxiways to ensure that they are constructed, maintained and operated to FAA safety standards. The Port of Portland does not have the statutory authority for safety of flight of aircraft. The safety of flight of an aircraft is a partnership between the pilot-in-command of the aircraft and the FAA, as the regulatory agency for flight safety. However, the Port has occasionally been a voluntary participant in the safety process with aircraft pilots and the FAA. The Port has partnered, where appropriate, with aircraft pilots and the FAA, when local flight procedures (such as local flight training patterns) are developed. In these instances, the Port of Portland is involved in the development of these local flight procedures to ensure that our concerns for aircraft noise impacts to the local community are incorporated (whenever possible) into the development of these local flight procedures.

Comment/Question

He was told that the helicopter portion of the airport is going to be transferred to Troutdale Airport. With Intel flying six daily flights as well as helicopter flights, it is a nuisance. It isn't a decibel level issue; it's an impact of his quality of life since he can't enjoy the quality of life he would like to. He doesn't know where the practice areas are for flight training, but he requests that it be looked at to minimize the impact to people (Dale Feik).

Answer

Flight training, both fixed-wing and helicopter, occurs at both the Hillsboro and Troutdale Airports. The Port's airports are public use facilities, and as such, the Port cannot direct that an Allowed Use (such as helicopter flight training) cannot occur at one airport, but can operate at another airport. The areas for aerial flight training are established between the FAA and the flight training operators. The Port has no official role in determining where flight training flights occur, once they leave either Hillsboro or Troutdale Airports. Historically, the Port has worked with flight training operators at each airport to voluntarily minimize the impact of flight training operations to members of the surrounding communities.

Comment/Question

He's really concerned about lead and diesel. He thinks that jet fuel is diesel. His concern is diesel emissions from jets. He has concerns about both Intel and aircraft diesel emissions and public health (Dale Feik).

Answer

Diesel fuel used in on-road transportation, locomotives, and construction equipment has different properties than aviation fuel used in jet engines. The two fuels are designed for different types of engines and have different properties (boiling points, viscosity, flash point, et cetera).

Diesel engines are compression ignition engines whose fuel ignition takes place – without spark – as a result of compression of the inlet air mixture and then injection of fuel. In a jet engine, the air is compressed, mixed with fuel and ignited with a spark. In rare cases, jet fuel (kerosene which meets specific properties) has been used in diesel engines.

Aircraft engine emissions are roughly composed of about 70 percent carbon dioxide, a little less than 30 percent water, and less than 1 percent each of oxides of nitrogen, carbon monoxide, oxides of sulfur, volatile organic compounds, particulates, and other trace components including hazardous air pollutants. Unlike aircraft engine emissions, diesel engine emissions are unique in that particulate emissions from diesel engines are particularly toxic. Benzo(a)pyrene, a carcinogen, is emitted at high levels as a coating on the surface of particulates. It is formed from incomplete combustion that occurs at higher levels in a diesel engine, particularly at low speeds.

Comment/Question

Mike requested that there be a map that shows the helicopter training patterns at the next meeting for reference (Mike Gallagher).

Answer

A map is included following these meeting minutes.

Comment/Question
He asked the following questions to the HARE committee members:
Would HARE be willing to facilitate the discussion of possible voluntary restrictions between the flight training companies and those affected by rotary operations over their homes? Would HARE be willing to facilitate the discussion of possible voluntary restrictions between the flight training companies and those affected by fixed-wing touch-and-go flights over their homes? Would HARE be willing to facilitate the discussion of possible voluntary restrictions between the flight training companies and those in rural Washington County affected by flight training activity over their homes (Jim Lubischer)?

Answer
This question is addressed to HARE. HARE can reach out to operators at Hillsboro Airport with this request, if HARE decides to do that. The Port of Portland can assist HARE with contact of tenants at Hillsboro Airport.

Comment/Question
PCC has a collection of aircraft as well. Why are they using scarce educational dollars to buy planes for a private aviation school that is training private international students? Is it any wonder that our educational system is falling apart at the seams? There is not a single year-round shelter for homeless people in this county. This is appalling, the amount of money being invested into this airport that serves primarily three to four private companies. It is a shameful abuse of taxpayer money. PCC is turning out to be a puppet in the hands of the aviation industry. She thinks PCC has a lot to offer, but she now thinks of incessant noise and flight training when she thinks of PCC. These foreign students have more rights than she does (Miki Barnes).

Answer
Provided by Larry Altree, Dept. Chair, Aviation Science Rock Creek, Portland Community College:
I would like to clarify that all aircraft owned by PCC are exclusively used by the Aviation Maintenance Technology (AMT) department at the Rock Creek campus for instructional purposes. Students in the AMT program are working toward becoming FAA certified mechanics – an area in aviation that has a very high demand for skilled workers. These aircraft are used by AMT students for practice, projects and testing. The aircraft are no longer in airworthy condition and are not used for flight training purposes.

It is PCC's mission to deliver accessible, quality education to support the academic, professional, and personal development to the diverse communities and students that it serves. Aviation is an industry that has forecast long term growth and opportunities for both mechanics and pilots. The college's AMT and Aviation Science programs provide opportunity for students to meet this demand.

The aviation industry has been very supportive of PCC's programs, for which we are grateful. This support has included unpaid service by members on the college's advisory committees, donations of equipment and training aids, internships and networking opportunities for our

students and graduates, and training opportunities for our faculty. We also are very appreciative for the important work that the PCC Foundation Board of Directors does in seeking funding that is used to provide opportunities for students who would not otherwise have the opportunity to attend college. PCC's Foundation directors willingly volunteer their time to serve on the board. They believe in PCC's mission, and because they represent a wide range of industries, including aviation, they are vital to fulfilling PCC's mission.

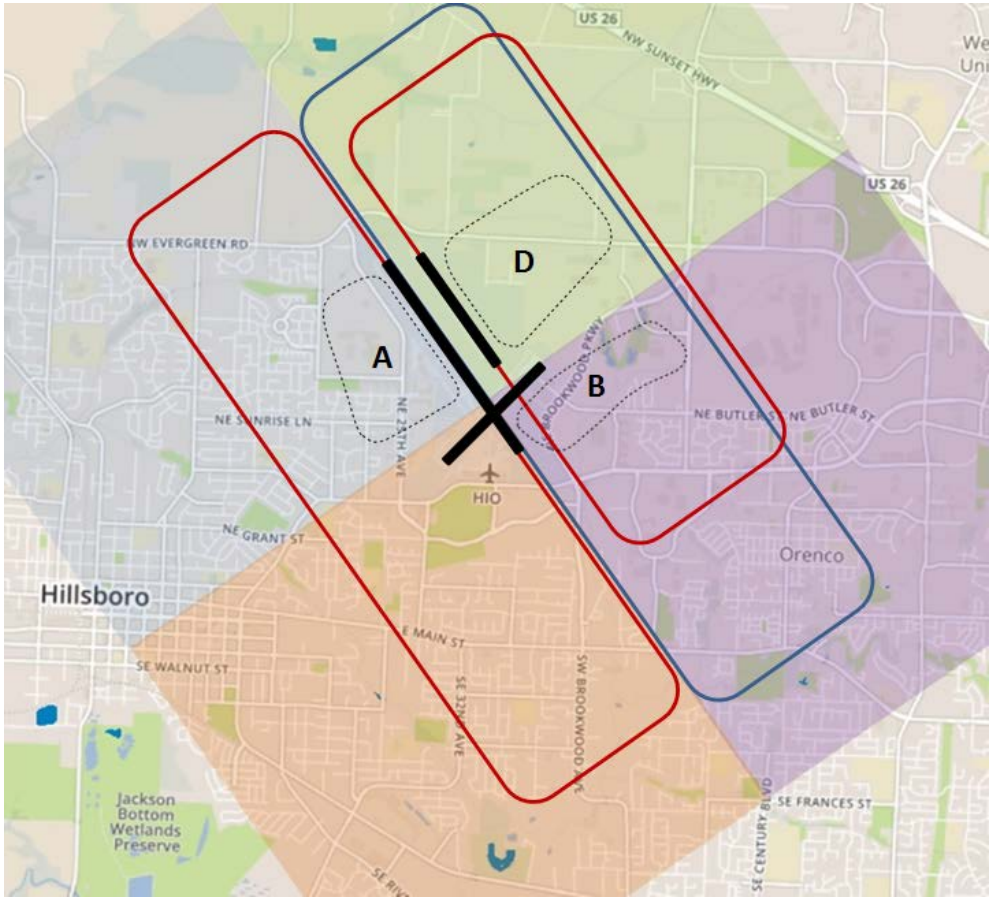
I recognize that Ms. Barnes was probably not intending to be literal in stating that international students have more rights than she does. This is not the first time, however, that she has attempted to foster fear and/or resentment of students who are from other countries and here to receive flight training at PCC. The college's Aviation Science program has a few international students enrolled, and I want to clearly state that I reject the implications in Ms. Barnes' comments and in previous ones she has made: that these students are somehow infringing on our rights or safety. Like our domestic students, international students who attend PCC are hardworking, dedicated and responsible. Non-U.S. citizens have to undergo additional TSA background checks before beginning flight-training activities. I am honored that they choose to come to our country for their education, and I feel privileged when they include the Aviation Science program in addition to their flight training. As a Hillsboro resident, I am proud that our community has, with rare exception, embraced their presence here.

Comment/Question
He doesn't think that we should subsidize foreign flight students in the event that they would fly again against us in a war. He thinks that there should be fewer pilots in the future, rather than more, due to climate change issues. There needs to be fewer jet airplanes in the future. He asked the committee to consider that in the future (Dale Feik).

Answer
Worldwide demand for new commercial aircraft is on the rise. In North America and Europe, these newer commercial aircraft (more efficient and quieter) are replacing older airline aircraft that are being retired. In the East Asia, these new commercial aircraft are entering into brand new markets, where airlines did not previously exist. The worldwide demand for professional, well-trained pilots is increasing. The United States is helping fill that demand for professional pilots by providing flight training opportunities for flight students from throughout the world. In addition, the newest generation of commercial aircraft are being designed to address the environmental impacts of air travel.

Air Quality
Comment/Question
He's really concerned about lead and diesel. He thinks that jet fuel is diesel. His concern is diesel emissions from jets. Diesel is less than 2 million parts per billion. He has concerns about both Intel and aircraft diesel emissions and public health (Dale Feik).

Answer
See answer above.



Overall aircraft traffic volume will not change due to the new runway

Runway used and arrival/departure routes for cross country flights, especially Business Jets and Business Turboprops will remain the same

Pattern depictions are approximate; the actual tracks flown will vary somewhat depending on Air Traffic Control needs and pilot technique

Residents living in these areas are likely to experience some or all of these changes:

D – – – Helicopter Pattern – no changes

Smaller Aircraft Pattern – traffic volume will remain the same, pattern may shift slightly NE

Higher Performance Aircraft Pattern – similar pattern, traffic volume may decrease slightly

B – – – Helicopter Pattern – use will decrease

Smaller Aircraft Pattern – traffic volume will remain the same, some residents south of NE Cornell Rd. may experience fewer overflights

Higher Performance Aircraft Pattern – similar pattern, traffic volume may decrease slightly

Higher Performance Aircraft Pattern – similar to today's inbound and outbound traffic with a small increase in higher performance aircraft in the training pattern

A – – – Helicopter Pattern – use will increase slightly due to the decreased use of Bravo Pattern

Higher Performance Aircraft Pattern – similar to today's inbound and outbound traffic with a small increase in higher performance aircraft in the training pattern

Questions to HARE, 11-4-15

From Jim Lubischer

Most all of the operations at HIO are flight training operations. The rotary operations over neighborhoods are extremely loud and disruptive and pose a safety hazard to those neighborhoods. The frequent repetitive fixed wing aircraft that circle our neighborhoods with students learning how to land an aircraft ruin the ambience of our neighborhoods with their noise and also pose safety hazards. Training aircraft which use the skies of rural Washington County for training, including using the "turning tree" as a marker, ruin the ambience of those areas with their noise. All of these repetitive noisy operations disregard the health and welfare of those who live below. All of these operations cause loss of enjoyment of property.

In the North Shore Helicopter Route FAA regulatory action, which responded to citizen complaints about helicopter noise, the acting FAA Administrator stated that, "The FAA continues to believe that noise generated by aircraft overflights generally is best addressed locally and with voluntary measures as the primary considerations. However, the FAA is within its authority to address the issue by regulatory action."

The Port of Portland's legal staff has stated that, "the users of the airport can voluntarily agree to restrict operations," and that "Voluntary restrictions are quite common at airports around the country. To be effective, they should be signed by all operators affected by the restriction."

In consideration of the above, I would like to ask HARE the following:

1) Would HARE be willing to facilitate the discussion of possible voluntary restrictions between the flight training companies and those affected by rotary operations over their homes?

2) Would HARE be willing to facilitate the discussion of possible voluntary restrictions between the flight training companies and those affected fixed wing touch and go flights over their homes?

3) Would HARE be willing to facilitate the discussion of possible voluntary restrictions between the flight training companies and those in rural Washington County affected by flight training activity over their homes?

Thank you,

Jim Lubischer

From:	Dale Feik
To:	Berglund, Brooke
Cc:	Fred Hostetler; Henry Oberhelman; Mike Gallagher; Nagy, Stephen
Subject:	Public Comment, Hillsboro Airport Roundtable Exchange Sept 30, 2015 by Dale Feik
Date:	Wednesday, September 30, 2015 3:43:06 PM
Attachments:	Flying Not a Sanitary Thing to Do by Dale Feik.docx Hillsboro Airport email communication with Mike Gallagher Steve Nagy Henry Oberhelman Fred Hostetler.docx

To: Brooke Berglund, Hillsboro Airport Roundtable Exchange facilitator

From: Dale Feik, Citizen, Washington County, cell: 503-504-5972

Re: Public Comment

Date: Sept 30, 2015

As a former pilot, I have two comments that I want to make; one has to do with safety, and the other has to do with MoGas. In addition, I have attached a short article I wrote titled 'Flying, Not a Sanitary Thing to Do'.

1. **Safety:** At the August 4, 2015 Washington County Commissioners meeting I made Public Comment about Local Emergency Planning Committee meetings. During that Public Comment as part of my reasons for implementing the 1986 Federal law mandating Local Emergency Planning Committees I wrote and said: *"Hillsboro Airport is adjacent to Ronler Acres Campus. Large jets fly daily to/from the airport. Based upon testimony/comments at the Hillsboro Airport Roundtable, Hillsboro does not have radar and will not have it or an equivalent system for at least five years. Concerns were expressed by not only local pilots but also people who work at the airport and were in support initially of building a third runway. A large jet or smaller plane could have an emergency and crash into the Ronler Acre facility. At a previous Hillsboro Airshow a small airplane crashed into a home and did extensive damage and I think killed the pilot."*

I also wrote that *"Air traffic controllers' work schedules often lead to chronic fatigue, making them less alert and endangering the safety of the national air traffic system, according to a study the government kept secret for years."* and provided this link: http://www.usnews.com/news/politics/articles/2015/08/10/ap-exclusive-air-controller-study-shows-chronic-fatigue

Shortly after my public comment I had another meeting with Scott Porter, Washington County Director of Emergency Planning, and he said that he will work diligently to get the 1986 Emergency Planning and Community Right to Know Law implemented and I said that I would work hard to help facilitate that process. We both agreed to use the following statement to describe the situation: *"As a community, we have failed to fully implement the intent of the Emergency Planning and Community Right to Know law well."*

Please open and read the attachment titled 'Washington County Commission Public Comment by Dale Feik August.. doc'

Base upon that discussion I have had a chance to talk/email Henry Oberhelman, Mike Gallagher and Steve Nagy.

I have copied those email chains and made the document titled 'Hillsboro Airport Roundtable Exchange Public Comment by Dale Feik Sept 30, 2015'. Please read it.

2. **MoGas –** One of the topics on the agenda for tonight's HARE meeting - Leaded Fuel Replacement (LFR) project for HIO.

As I understand it, the LFR Project has two pieces:

- One piece considers providing a supply of "MoGas" (Unleaded automotive fuel) that could be used by some percentage of the aircraft refueling at HIO. Given a full court press by the Port of Portland this could be available within a relatively short period, just guessing, within a 6 - 12 month window.
- The second piece is the Piston Aviation Fuel Initiative (PAFI) now underway under the nominal auspices of the FAA with an end date of 2018 for "ASTM Research Report - Production Fuel Specification." as reported in www.faa.gov/about/initiatives/avgas/media/media/PAFI_Oshkosh.pdf. It is probably unrealistic to think that the approved fuel will be available to end users at that point in time and perhaps more realistic to estimate perhaps mid 2019 at best and early 2020 to be realistic.

I believe that OAW's position is that any amount of lead in the atmosphere is harmful and if it can be reduced by any degree then appropriate steps should be expeditiously taken to that end.

If the foregoing paragraph is accurate, then the question can be asked: what is the cost of not taking the steps to eliminate leaded aviation fuel.

Establishing that quantitative measure, suitably weighted by probabilistic measures, will not replace consideration of the qualitative measures that are also essential to a fully considered decision on the timetable for implementing leaded fuel replacement at HIO.

It is in the interests of all of us in the community at large to bring this issue to some mutually satisfying resolution, sooner than later.

Do you agree as members of the Hillsboro Airport Roundtable Exchange?

Because I will be able to stay for only the first 10 minutes or so of the meeting, I have emailed these public comments to you.

I look forward to further dialogue.

Safe flying,

Dale Feik
cell: 503-504-5972

Cc: Fred Hostetler
Henry Oberhelman
Mike Gallagher
Steve Nagy

Note: Following are emails from / to certain airport / airplane people. I made this document so that it could be used for discussion, problem solving and coming to common ground that protects the public's safety and health and with the hope that actions can be taken to benefit all. But my emphasis is on safety over corporate profits.

Dale Feik, Sept 30, 2015, public comment to the Hillsboro Airport Roundtable Exchange. I am a former pilot who loved to fly and see the world from above.

From: Dale Feik [mailto:dfeik33@comcast.net]
Sent: Friday, April 03, 2015 4:08 PM
To: 'Allen Schaeffer'
Cc: 'Downing.kevin@deq.state.or.us'; DEQ Palmer Mason (mason.palmer@deq.state.or.us)
Subject: Dale Feik --- Your Testimony on SB 824 Regarding Aircraft Emissions is Incorrect as stated by Allen Schaeffer, Ex Director Diesel Technology Forum

Allen Schaeffer, (Executive Director, Diesel Technology Forum),

I appreciate your feedback on my statement: "diesel is the main emission from jets". I was quoting Fred Hostetler, assistant chair of Hillsboro Airport Roundtable Exchange (HARE) in a private conversation I had with him after the last meeting.

Henry Oberhelman, also a member of HARE, helped clarify the statement that Fred made to me. Both Fred and Henry attended, I think, a workshop about jet emissions but the following may be a more accurate statement: (I am going to forward this email to them to get their feedback also.)

Here's an excerpt from a Wikipedia search for Aviation Fuel: **Jet fuel** is a clear to straw-colored fuel, based on either an unleaded kerosene (Jet A-1), or a naphtha-kerosene blend (Jet B). It is similar to diesel fuel, and can be used in either compression ignition engines or turbine engines. Jet-A powers modern commercial airliners and is a mix of pure kerosene and anti-freeze and burns at temperatures at or above 49 degrees Celsius (120 degrees Fahrenheit). Kerosene-based fuel has a much higher flash point than gasoline-based fuel, meaning that it requires significantly higher temperature to ignite. It is a high-quality fuel; if it fails the purity and other quality tests for use on jet aircraft, it is sold to other ground-based users with less demanding requirements, like railroad engines.[5]

Please note the active links in the above Wikipedia paragraph.

Following are links to the presentation that Kevin Downing, DEQ Diesel specialist, made at the Hearing. Do you agree to the any of the negative health effects of Carbon emissions? I am carbon copying this to Devin Downing. Please reply to all when you reply to me.

http://www.deq.state.or.us/aq/diesel/DieselHealth.htm

Dale Feik, Ed.D.

P.S. I attached my written testimony for HB 3310.

Cc Kevin Downing, DEQ, Diesel specialist

On Apr 3, 2015 4:18 PM, "Dale Feik" <dfeik33@comcast.net> wrote:

Hi Fred,

I appreciated the time you took to talk after a HARE meeting. I ended up quoting you, but I want to make sure that I didn't misquote you. So please let me know whether the following captured our conversation. I hope that we can continue to have many more talks – we have very similar interest, concerns. Another concern of mine as expressed by others is the combination of small aircraft with big and smaller jets – especially since there is no radar and no technology that will be installed soon.

Dale (Feik – feek)

cell: 503-504-5972

Cc: Henry Oberhelman

From: Fred Hostetler [mailto:hostetler.fred@gmail.com]
Sent: Friday, April 03, 2015 8:00 PM
To: Dale Feik
Cc: hoberhelman@gmail.com; Brian Lockhart
Subject: Re: Dale Feik HARE follow-up --- Your (Dale Feik) Testimony on SB 824 Regarding Aircraft Emissions is Incorrect as stated by Allen Schaeffer, Ex Director Diesel Technology Forum

Brian has much more knowledge concerning jets. I'm a GA type flying smaller, 100LL gas engines.

Not sure what you are searching for. Airports usually include large/small and fast/slow aircraft. The FAA control tower and ATC provide separation with or without radar. Pilots provide their own separation when an airport has no control tower.

Fred Hostetler
503-939-4578

From: "Dale Feik" <dfeik33@comcast.net>
To: "Mike Gallagher" <mrgoregon@comcast.net>
Sent: Thursday, September 17, 2015 6:45:07 AM
Subject: Dale Feik HARE quote in this email FW: Local Emergency Planning Committee meetings, public comment made before you August 4, 2015 and this Sept 17, 2015 follow up

Hi Mike,

Glad that we talked at Insomnia coffee. Note in the following email that I make reference to HARE; specifically-- *Hillsboro Airport is adjacent to Ronler Acres Campus. Large jets fly daily to/from the airport. Based upon testimony/comments at the Hillsboro Airport Roundtable, Hillsboro does not have radar and will not have it or an equivalent system for at least five years. Concerns were expressed by not only local pilots but also people who work at the airport and were in support initially of building a third runway. A large jet or smaller plane could have an emergency and crash into the Ronler Acre facility. At a previous Hillsboro Airshow a small airplane crashed into a home and did extensive damage and I think killed the pilot.*

Are these statements accurate?

Dale

cell: 503-504-5972

From: Mike Gallagher [mailto:mrgoregon@comcast.net]
Sent: Thursday, September 17, 2015 7:51 AM
To: Dale Feik
Cc: Nagy, Stephen

Subject: Re: Dale Feik HARE quote in this email FW: Local Emergency Planning Committee meetings, public comment made before you August 4, 2015 and this Sept 17, 2015 follow up

Dale,

The Hillsboro tower does have a display of radar information which provides information useful in sequencing arriving aircraft, especially jets, with aircraft in the traffic pattern. Although the equipment does not see all the way to the ground, it does greatly increase the ability of tower to prevent conflicts. I regularly flew jets into the airport before and after the addition of this equipment and saw first hand how much this helped avoid potential onflicts. The FAA is in the process of switching the entire air traffic control system over to a satellite based network which will eventually replace radar and will provide even better coverage for Hillsboro.

The term large jets isn't correct. The bulk of jet operations at Hillsboro are with medium size business jets which are less than half the weight of Boeing 737s. Intel's airplanes weigh about one-quarter of a 737 and are actually stage IV noise compliant which is well ahead of current requirements. A very few flights by larger MD-80 aircraft support the conversion of these aircraft to aerial tankers by a local firm. I think most people would appreciate the value of this work and these aircraft in light of the tragic fires we've experienced this summer. In addition the conversion work provides good local jobs.

Not sure how to deal with the statement that a plane could crash into the Ronler facility. Of course it is possible that any spot on the Earth could be the site of an aircraft crash, but the

risk of any single spot being hit is miniscule. The immediate arrival and departure areas are heavily restricted since the bulk of mishaps happen in those relatively small areas.

Reference the third runway, I have to say that from my perspective it has reduced the noise from general aviation aircraft where I live (just east of the airport). Most pilots using the new runway are following the desired ground track which takes them approximately over Costco and avoids residential areas. Since the runway threshold is further inside the airport boundary, aircraft remain at higher altitudes during the portions of the traffic pattern outside the airport boundary.

The aircraft mishap following an airshow several years ago resulted in some changes in airshow operations to reduce the chances of a similar mishap. Although the mishap did result in a fatality to the pilot and damage to some structures I wouldn't call the damage extensive.

I've info'd Steve Nagy on this email since I am not a spokesman for the airport or the Port of Portland and have just shared some personal observations.

Mike Gallagher

From: Nagy, Stephen [mailto:Stephen.Nagy@portofportland.com]
Sent: Thursday, September 17, 2015 12:20 PM
To: Mike Gallagher; Dale Feik
Subject: RE: Dale Feik HARE quote in this email FW: Local Emergency Planning Committee meetings, public comment made before you August 4, 2015 and this Sept 17, 2015 follow up

Mike,

Thank you for copying me in your response. You've accurately portrayed the Port's understanding of the FAA radar capabilities and how they use the technology locally at Hillsboro tower. HIO is primarily a Visual Flight Rules (VFR) airport and flight training (which overflies the area of concern around the Ronler Acres campus), is done only under VFR conditions. When the airport is under Instrument Flight Rules (IFR) conditions, the local flight training patterns are suspended and flights to and from HIO are typically on direct arrival or departure corridors (which generally do not overfly the area of concern around the Ronler Acres campus).

Our understanding of the FAA's procedures in and around HIO are that radar is used by the FAA's Portland TRACON for active traffic management and separation and that local controllers in the HIO tower can only use STARS radar screen repeaters in the HIO tower to provide air traffic advisories for aircraft in vicinity of the airport. Having said all this, I will confirm HIO tower procedures with the new ATCT manager and follow up with you at the HARE meeting this month.

In addition, the work that we did on developing the proposed Airport Safety and Compatibility Overlay (ASCO) zone a few years ago was partially based on California Department of Transportation risk analysis of aircraft incidents and accidents surrounding airports. There is a lot of good information about ground based risk from aviation that is contained within the California

Department of Transportation's handbook on this subject. In general, their conclusions were that ground based risks are mainly contained along the axis of the runway and very little risk is located laterally from the runway.

I hope this is helpful.

Steve Nagy
Port of Portland
General Aviation Airports Manager
Hillsboro and Troutdale Airports
stephen.nagy@portofportland.com

From: Henry Oberhelman [mailto:hoberhelman@gmail.com]
Sent: Thursday, September 17, 2015 2:54 PM
To: Dale Feik
Cc: Nagy, Stephen; Mike Gallagher
Subject: Re: Dale Feik HARE quote in this email FW: Local Emergency Planning Committee meetings, public comment made before you August 4, 2015 and this Sept 17, 2015 follow up

Let me jump in on this discussion.

"Large" or "Medium" may be in the eye of the beholder. Here's a link to a publication that might provide useful information, but with the caveat that I can't vouch for it's veracity:

http://128.173.204.63/courses/cee5614/cee5614_pub/acft_classifications.pdf.

I believe that both Mike's and Steve's comments on radar pertain to the control of air traffic relative to the use of HIO (Hillsboro Airport) but not necessarily to the identification of aircraft flight paths. I've heard in individual conversations or in anecdotal comments at public meeting that there are systems in use that can identify the flight tracks of individual aircraft operating around HIO irregardless of the altitude or size of those aircraft. Steve, can you provide an authoritative response on this aspect of the subject? For example, is it possible, by any means, to confirm the actual flight path of, say, an R22 helicopter operating in the Charley training area? While the community's need for this may have diminished with the relocation of some of the industrial scale flight training, it may return with the commencement of the operations of the Hillsboro Academy's new facility, particularly if the OLive's depiction of helicopter's on the ramp is accurate.

With regard to aircraft accident risk management (perhaps more correctly called threat assessment), it has the dimensions of both the likelihood and the consequences of an event. While the likelihood of an aircaft crashing while in flight over a high tech company with it's storage of hazardous chemicals may be miniscule, the consequences can be very large. Both aspects need consideration. The likelihood of any individual aircraft impacting any particular spot on the ground is dependent on many factors but certainly it's altitude, forward velocity, and aerodynamic characteristics of the bits and pieces at the inception of the crash would seem to be instrumental in the assessment of risk to a particular spot on the earth. I believe those considerations coupled with the somehow practically determined boundaries of the study area lead to the results of the overlay zone study areas.

Steve, thanks for the reference to the California Department of Transportation risk analysis. Assuming that "ground based risk" means the risk of damage being incurred to something on the ground as a result of overhead air traffic. then it follows that the concentration of air traffic along the axis of the runway will incur higher risk levels. NextGen, the label attached to the satellite based network that Mike refers to, concentrates air traffic into a much narrower approach pattern. This has led to much greater noise impacts at several larger east coast airports. It has also had influence, if not causal effects, on the introduction of remotely controlled airport control towers. Steve might wish to add to this line of discussion particularly as to the schedule and impact on HIO.

Re the Firefighting aircraft conversion: In my experience, the appearances of the large aircraft at HIO, e.g., MD-80, are so infrequent as to be virtually invisible. And yes, the national fleet of firefighting aircraft is inadequate. And yes, the work is valuable and provides good local jobs and yes, those jobs and that work could be performed at any number of airports in Oregon thus boosting those local economies which by any measure are in need of such a boost.

Henry

"'That's Not a Sanitary Thing to Do! "

by Dale H. Feik

Flying over Eastern Oregon, I had finally realized my dream. I had just obtained by private pilot's license, and my wife and I were on the last leg of our airplane trip around Oregon. On our way back to Hillsboro, the engine suddenly coughed, sputtered, and then died.

"Dale! Were going to crash! "screamed my wife, as she stiffened against the seat.

My muscles tightened, my throat was gauze.

Then I heard a voice, Holly's voice. "Relax. Establish a normal glide. Pick a field and start your approach. Don't change your mind in the middle of the stream—that's not a sanitary thing to do!"

I spotted my field: high wheat, telephone poles with wires at both ends.

"Make sure you have enough altitude to get to it, and then slip to settle right in," Holly kept saying.

The poles looked like daggers staring me in the face. But we slipped over the top of them, thrashed the heads of the wheat and sank to the bottom of the golden sunshine. Miraculously, we climbed out, intact.

In a daze, we tramped to a nearby ranch, where I telephoned Holly. "Thanks for talking me down, Holly. You're a great flight instructor."

After that incident, I have had time to reflect on what made Holly a truly exceptional flight instructor:

a. His enthusiasm for flying and teaching,

b. His ability to organize a flight lesson, and

c. His warm, friendly personality.

Let me illustrate what I mean.

When I met Holly, he was talking with a group of guys about their Experimental Aircraft Association fly-in to a forest service airport between Eugene and Crater Lake. After introducing myself, I said to Holly, "I started flying two years ago, but I quit because of fear. Will you help me get my license?"

"Well, let's find out what you know and don't know, see what you need to work on and get on with it," replied Holly, emphasizing safety. "I'm pretty old", Holly continued, "and I started flying when I was just a young whipper-snapper. I want all of my students to live as long as I have."

While observing me preflight the airplane, Holly observed that I was unsure of myself.

"Damn!" I muttered. "I left the owners-manual checklist in the office. I'd usually go back and get it."

I'm surely not going to stop you," responded Holly.

After Holly explained how to check for birds under the cowling, the oil level, and the correct fuel level and octane, I started the engine. Using the radio didn't frighten or confuse me. Holly had typed the crucial phrases on a card and I had studied them.

"Remember to tell the guys in the tower what you are going to do; don't make a request. You're the pilot in command," said Holly.

"How does the airplane perform during take-off at higher altitudes?' I wanted to know.

"You take the yoke and let me control the throttle, and I'll show you," instructed Holly. We were half-way down the runway and weren't at lift-off speed yet.

"Don't panic" assured Holly. "Get her flying before you rotate the nose. That's it."

During our preflight planning I said that I wanted to work on accelerated stalls. Realizing that precision of any maneuver comes from the putting together all the components of the whole, Holly reviewed the principles of throttle and airspeed control, slow flight, power-on and power-off stalls.

Approaching an unfamiliar airport to land, I remembered to use what Holly told me, "Visualize your home airport's runways and associate to them the runways of the unfamiliar airport you are landing on." I flew straight into the correct landing pattern configuration.

As we were taxing by the tie-downs, Holly said, "See that older fellow preflighting the Piper Cub? That's Jim. I taught him how to fly too. Once Jim did a foolish thing. On his climb-out, he banked and turned right into the middle of a cloud. That evening I called him and asked, that wasn't you that I saw fly into the clouds, was It?"

Jim sheepishly said "Yes."

Holly went on to say, "Just because a student gets his license doesn't mean that I'm through thinking about his safety. I want all of my students to live long good lives!"

After my emergency landing in Eastern Oregon, I was thankful to be alive so that I could call Holly. Even though Holly might point out a deficiency, I would welcome a call from Holy anytime.

"That's not a sanitary thing to do," is advice I can use the rest of my life.

Primary flight Instructor for Dale H. Feik was Holly K. Robinson, CFI 374613. Issued License by Examiner H.M. Ruberg (sp?), Final FAA Certificate progress check for Private Certificate October 13, 1973, Certificate No. 2200564, Airplane Single Engine – Land.

I, Dale Feik, started flying at Springfield, Oregon, at McKenzie Flying Service July 13, 1970, Ron Byers, Instructor. Last flight with license was September 22, 1977 with 136.6 total hours flown, mainly with Cessna 150 or Cessna 152s.

From:	Dale Feik
To:	Berglund, Brooke
Cc:	Fred Hostetler; Henry Oberhelman; Mike Gallagher; Nagy, Stephen; Susan McLain; chuck Riley
Subject:	HARE public comment failed to attach this --- FW: Andy Duyck all commissioners Davis, Prince Porter Local Emergency Planning Committee meetings, public comment made before you August 4, 2015
Date:	Saturday, October 03, 2015 8:00:22 AM
Attachments:	Washington County Commissioners Public Comment Aug 4 2015 Local Emergency Committees.docx

To: Brooke Berglund for HARE committee
From: Dale Feik
Re: Failed to include a document that I referenced in my Public Comment that I made to HARE Sept 30, 2015

Date: Oct. 3, 2015

My flight instructor said it is always better to admit to the Tower early when I am in trouble or when I make a mistake. So, I goofed. I said that was going to attach the public comment that I made before the Washington County Commissioners relating to Local Emergency Planning Committee meetings. I failed to do so. So following is that public comment. Please note my last two paragraphs and how it relates to my Hillsboro Airport comments.

Thank you Steve for suggesting to Chair Brian Lockhart that I be allowed to make public comment at the beginning of the meeting because I had a Washington County Citizen Action Network (WC–CAN) Board meeting starting at 6:00 pm. Thank you also for letting me know that the meeting time had been changed from 6:00 pm to 5:30 pm.

Safe flying,

Dale (Feik –feek)
cell: 503-504-5972

Cc: Fred Hosteller
Henry Oberhelman
Mike Gallagher
Steve Nagy
Rep. Susan McLain
Senator Chuck Riley

From: Dale Feik [mailto:dfeik33@comcast.net]
Sent: Tuesday, August 11, 2015 11:00 AM
To: andy_duyck@co.washington.or.us; 'dick_schouten@co.washington.or.us'; greg_malinowski@co.washington.or.us; roy_rogers@co.washington.or.us; bob_terry@co.washington.or.us
Cc: Robert Davis (robert_davis@co.washington.or.us); Mark Prince (markp@ci.hillsboro.or.us); Scott Porter (SCOTT_PORTER@CO.WASHINGTON.OR.US)
Subject: Andy Duyck all commissioners Davis, Prince Porter Local Emergency Planning Committee meetings, public comment made before you August 4, 2015

To: Andy Duyck, Chair Washington County Commission and Commissioners, Dick Schouten, Greg

Malinowski, Roy Rogers, Bob Terry

From: Dale Feik, citizen Washington County

Date of public comment made: August 4, 2015, follow up of comments August 11, 2015

Re: Local Emergency Planning Committee meetings

Thank you for your comments and questions after my two-minute Public Comments. I put those comments into written form. See below and attachment.

Public Comment made before the Washington County Commissioners August 4, 2015.

Dale Feik
Cell: 503-504-5972

Topic: Local Emergency Planning Committee meetings

After receiving from the State Fire Marshal's office in Salem all of the lists of the Extremely Hazardous Chemicals that Intel has on site at the Ronler Acres and Aloha Silica Chip Manufacturing facilities for the years 2009 through 2014, I became very concerned about a serious chemical spill and/or fire emergency.

The State Fire Marshal representative told me that based upon the 1986 Federal Title 42 – Public Health and Welfare, Chapter 116 – Emergency Planning and Community Right-To-Know Act, that the State Emergency Response Commission shall appoint local emergency planning committees. Therefore, the representative suggested that I use the following when talking with the Hillsboro Fire Marshal:

1. I want to participate in a Local Emergency Planning Committee.
2. Who is on the Committee?
3. When is the next meeting?

So I made an appointment with the Hillsboro Fire Department Fire Marshal, Mark Prince, and he told me that they do <u>not</u> have a Local Emergency Planning Committee. He recommended that I talk with Scott Porter, Emergency Management Cooperative Director of Washington County. I did. Scott also said that they do <u>not</u> have a Local Emergency Planning Committee as some other counties do, that he had been working to get one started, and that he appreciated my concern.

When any company that has Extremely Hazardous Substances/chemicals that completes the Facility Substance Report for the State Fire Marshal, the Manager (CEO) and the Person completing the form has to answer yes or no to six questions:

1. Facility indicates they are an EHS (Extremely Hazardous Facility)?
2. Facility indicates they are subject to PSM (Process Safety Management)?
3. Facility indicates they are subject to CAA112r (Clean Air Act, section 112r)?
4. Facility indicates they are a TRI 313 (Toxic Release Inventory) Facility?
5. Facility uses the National Fire Protection Agency's 704 code?
6. Facility has placards other that NFPA?

Not until 2014 did Intel, Ronler Acre Campus, answer yes to all of the above first five questions. Never had they answered yes to number 2, subject to Process Safety Management. Now Intel is required to submit forms to EPA for review; and those documents are public. Knowing what the Extremely Hazardous chemicals are, how they are processed, transported, and the protective measures/actions community members can take to prevent accidents, but more importantly knowing how we can be warned of an emergency and how we should act to protect our health and safety during an emergency, is crucial.

Please help establish Local Emergency Planning Committee so that that committee can work cooperatively with Intel and local emergency responders.

Things to consider:

**** On the Right to Know web site Hillsboro Fire Department is listed as the Local Emergency Planning Committee, but that is not true. Please open the following link to verify this:

http://www.rtknet.org/db/rmp/rmp.php?facility_id=100000215144&database=rmp&detail=3&datype=T

****** Why was the Toxics Release Inventory created? (***See page 6 of link below :)***

Bhopal, India December 1984

Methyl isocyanate gas was released at a Union Carbide chemical plant.
Thousands died the first night, thousands more since
Survivors continue to suffer with permanent disabilities.

Institute, West Virginia August 1985

Chemical release at a similar facility in the U.S.
More than 100 people hospitalized.
These events led to increased concern about local preparedness for chemical emergencies and the availability of information on hazardous substances.

The passage of the Emergency Planning and Community Right-to-Know Act in1986 was part of the United States' response.

http://www2.epa.gov/sites/production/files/2014-08/documents/intro_to_tri_for_communities_1.pdf

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Public Comment made before the Washington County Commissioners August 4, 2015.

Dale Feik
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http://www.usnews.com/news/politics/articles/2015/08/10/ap-exclusive-air-controller-study-shows-chronic-fatigue

HARE Avgas (Aviation Lead) Subcommittee
Status Update 2/3/16

Definition of Terms:

- MOGAS = Unleaded Motor Gas
- FBO = Fixed-Based Operator

There are three areas currently suggested for discussion regarding Avgas (100LL aviation fuel):

1. Replacement fuel project at Hillsboro Airport (HIO) (Note: This project aims to provide an immediate source of "Mogas" on HIO for those piston engine aircraft owners that are willing and able to use Mogas as an alternate fuel.)

Status: The Port continues to work with the fuel providers at Hillsboro Airport to gauge their interest in selling retail MOGAS for use by piston aircraft owners. The Port has met several times with a current tenant, which is not an FBO at Hillsboro Airport. They had previously expressed interest in selling MOGAS, but they are not currently an FBO (with the authority to sell retail fuel). They are now interested in becoming a full-service FBO and would like to sell MOGAS. The negotiations with this company continue. In addition, the Port has proposed to both Hillsboro Aviation and Hillsboro Aero Academy a concept whereby the Port would assist with the expense of leasing a fuel truck for the exclusive use of providing MOGAS for retail sale at Hillsboro Airport. This is a significant financial step for the Port and would be a direct investment on the Port's part in bringing MOGAS to HIO. This proposal just went out to Hillsboro Aviation and Hillsboro Aero Academy this week.

2. FAA's Leaded Fuel Replacement Program (Note: This program will provide an across-the-board replacement for leaded aviation fuel.)

Status: There are no significant changes to the FAA Avgas fuel replacement program. The Phase 1 test program was scheduled to conclude in December. The FAA Technical Evaluation Committee (TEC) will convene in January to review the Phase 1 data. Based on this assessment, the FAA TEC will select the two fuels determined to have the lowest impact on the GA fleet and the production and distribution infrastructure for participation in the Phase 2 test program in early 2016. The Phase 2 test program and reports are scheduled for completion by December 2018. Here is a link to the most up-to-date information from the FAA: https://www.faa.gov/about/initiatives/avgas/

3. A preview of emerging contaminants with respect to aviation activities at HIO and how these developing issues will be addressed in the next Master Plan.

Status: The Port will be working with the Lead Subcommittee to provide information on the holistic air quality components of the upcoming HIO Master Plan. The Port will provide the background information on the types of typical air quality issues that are included in an Airport Master Plan. The HARE committee will have the opportunity to make recommendations on the air quality analysis that will be part of the upcoming HIO Master Plan.

Recent announcements concerning the connection between blood lead levels and developmental issues have added a fourth area of possible interest for the subcommittee:

4. A recent report in the journal "Psychological Science" regarding Blood Lead Levels and ADHD (Attention Deficit/Hyperactivity Disorder) raises a question of how this research fits into the aviation regulatory structure and the community environment around HIO.

Status: The Port is concerned about the health quality of communities. However, the Port of Portland is not a regulatory health agency. The health based ambient air quality standards for lead are established at the federal level. The Clean Air Act requires EPA to set national ambient air quality standards (NAAQS) for lead and five other pollutants considered harmful to public health and to periodically review (every 5 years) the standards to ensure that they provide adequate health and environmental protection, and to update those standards as necessary. In December 2014, after carefully reviewing the most recent available scientific evidence, and consulting with the Agency's independent science advisors, EPA is retaining, without revision, the national ambient air quality standards for lead. The law requires that the standards include an adequate margin of safety, intended to address uncertainties associated with inconclusive scientific and technical information available at the time of standard setting.

In 2003, Oregon DEQ formed a state air toxics program that uses the best available science to identify and solve air toxics problems statewide. As part of this program, ambient benchmark concentrations for 52 air toxics of concern in Oregon, including lead, were established based on consensus recommendations from the Air Toxics Scientific Advisory Committee (ATSAC), a panel of experts that provides advice on the state air toxics program that is scientifically and technically sound, independent and balanced. The benchmarks are based on concentration levels that protect the health of the most sensitive individuals. ATSAC reviews all ambient benchmarks at least every five years based on the most recent toxicological information. In their Feb. 18, 2015 meeting, the ATSAC voted to retain the current ambient benchmark concentration of 0.15 ug/m3 for lead, in alignment with the federal NAAQS.

The Port recommends bringing in health policy experts from the appropriate local and state agencies with responsibility for identifying and mitigating the pathways for lead exposure if the Lead Subcommittee would like to pursue the issues of public health risks associated with lead exposure.

Hillsboro Airport Roundtable Exchange

December 2015

Local Community Outreach

1. Build regular Community programs that explains what airplanes are required to do in and around airports. Also, cover specifics that involve operations at Hillsboro Airport.

   a) Develop a power point presentation that lays out what an airplane or helicopter needs to do prior to take-off, during flight, and landing.

   b) The different rules between VFR (no in cloud flying) and IFR (designed for in cloud flying).

   c) What are "rules" vs. "options" for VFR flight? How can suggestions for locally based airplanes/helicopter's work and what can be done in the event of a violation?

   d) Where can these meetings be located and are there inexpensive ideas to draw the local community population to these meetings? One suggestion would be the airport Terminal building conference room. Only a set number of folks could be handled here. Another location would be the fair grounds.

   Changed to: Attend local public functions with a tent or just a presence to answer questions and represent the airport. The Farmers Markets, Main Street activities, possible Fairgrounds, as well as honor invites to HOA's, etc.

   e) Encourage local pilots to attend by offering the meeting as part of FAA's safety program. Various flying organizations such as AOPA, OPA, or aircraft manufacturers would be able to provide suggestions for this activity.

Expand and/or add to the airport Open House

a) Have power point presentation running with a specific time to those interested.

b) Some presentations are available that show the growth of Hillsboro Airport. Offer these similar to "a" above. History pictures and the like are available.

c) Buses to various areas could be offered to bring people close up to what the FBO's do as well as to show the size of runways and taxiways. Needs some more planning.

Look into having a dedicated Park that emphasized aviation

a) Provide a plan to the city, Parks and Recreation, county, and Port for a Park near or at least close to the Airport.

b) The Park would contain a space for U-Control flying models (on wires) and, possibly, a track for RC cars. This could entice visitors to the Park. None of this is offered within city limits.

Changed to: This is a long term, potentially costly undertaking, therefore "delete this for now".

c) The Park would include benches, picnic areas, information boards, and donated old aircraft to climb in and around.

d) Built in mini shows could be activated to give set programs when activated. These could be rotated so each time someone visits the Park, something new is shown. Other simple items such as a sign to show distances to various locations and comparison of flight time vs. driving time to those locations.

e) Again various flying organizations as noted above can be contacted to add items to the Park layout. Local businesses might be willing to include something for a display or information.

f) Add a jog trail, possibly with exercise equipment. Could go around airport perimeter?

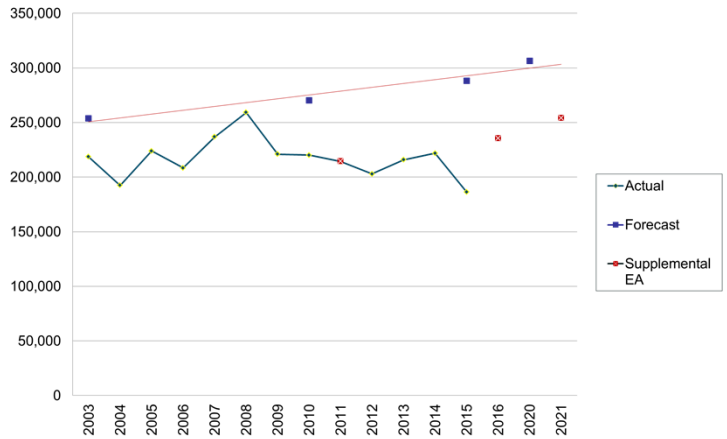
2005 HIO Master Plan Implementation

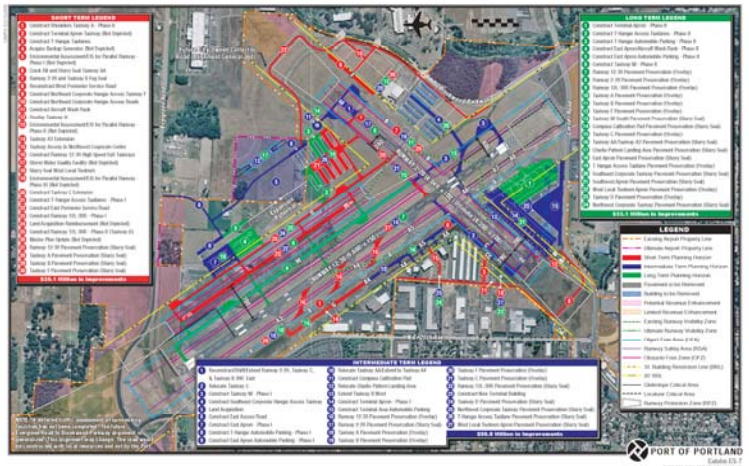
Jason Gately

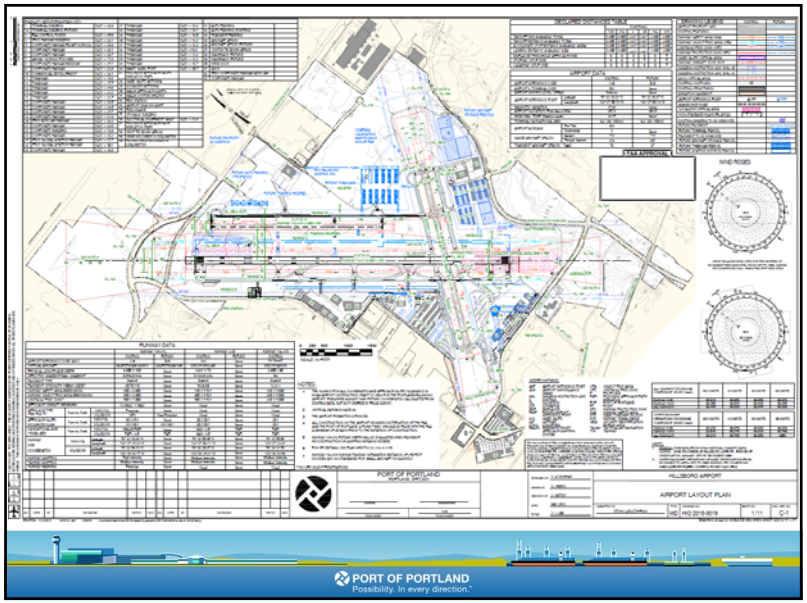
Presentation Agenda

- Review of:
  - Forecast Tracking
  - Major Projects
  - Compatibility Study Implementation

Forecast Tracking – Total Annual Operations






PORT OF PORTLAND
Possibility. In every direction.™


2006/2007
US Customs & Border Protection
U S CUSTOMS AND BORDER PROTECTION
AIRCRAFT PARKING


HEALTH ALERT

2007/2008
High Speed Exits

2009/2010
Taxiway C Extension

2010 Fire Station

2010 Dawson Creek Pump Station – Clean Water Services

2011 Runway 13-30 Threshold Rehab

New Aero Air Hangar

Runway 2-20 & Taxiway C Rehabilitation


PORT OF PORTLAND
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Cornell Road
Hillsboro Airport
Port Property line
Washington County Fair Complex
Approximate alignment of Veterans Way
Brookwood Parkway
City of Hillsboro
NE Veterans Drive 2012/2013


PORT OF PORTLAND
Possibility. In every direction.


2012 Terminal Apron Reconstruction


2014 Global Aviation Hangar
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Ochoco Hangar
PORT OF PORTLAND
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Runway 13L-31R
PORT OF PORTLAND
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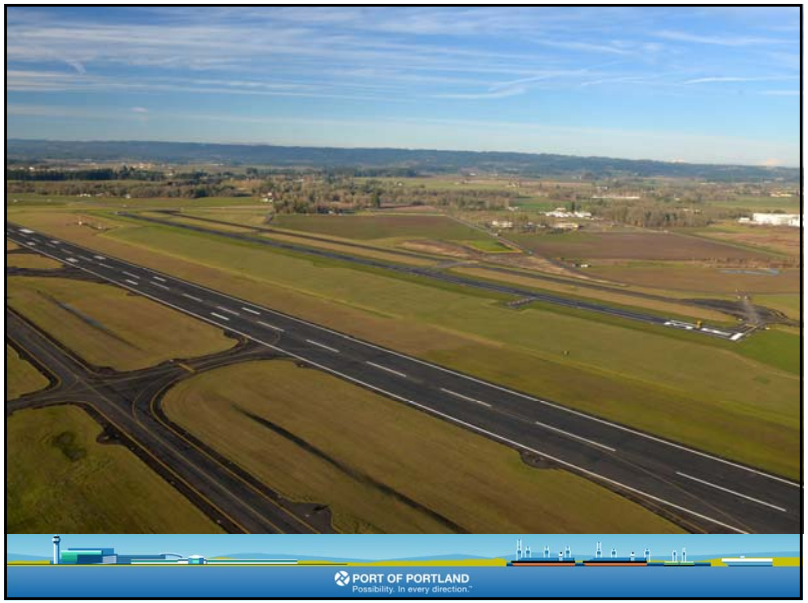
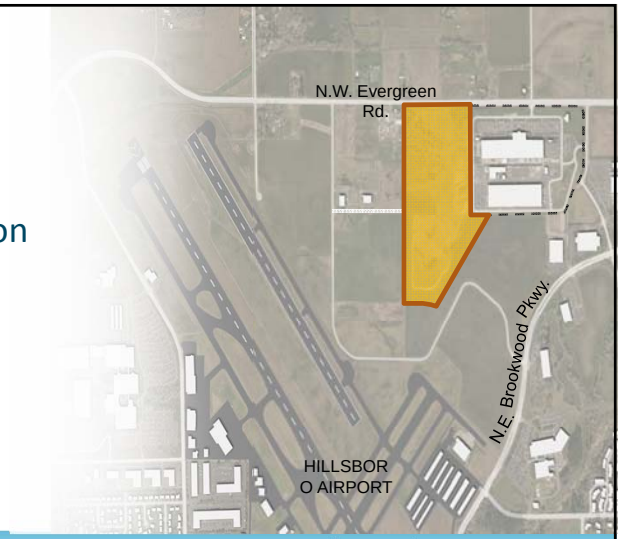

PORT OF PORTLAND
Possibility. In every direction.


2014 West Apron Rehabilitation
PORT OF PORTLAND
Possibility. In every direction.


2015/2016
HAI Hangar & Ramp


2015 Taxi lane L (Lima)

2015 Property Acquisition



Compatibility Study – 32 Operational Elements

Element	Current Status	Notes
Aircraft Operations **1, 2, 4 – 9, 11 – 22, 24, 25**	All implemented with the exception of 14 and 25	•14 not pursued due to low feasibility, 25 due to low activity levels •13 and 20 thru RNAV procedures for jet aircraft only
Airfield Improvements **3, 10, 23**	Implemented with the exception of 23	•10 – helicopters operate on txwy D, permanent pad in planning •23 - low feasibility due to airfield and operational impacts
Technology **26 - 29**	Implemented with the exception of 26	•26 – radar is under the FAA's authority, in lieu the Port built a multilateration (MLAT) flight tracking system for noise monitoring purposes
Stakeholder Involvement, Outreach **30 - 32**	All implemented	

Compatibility Study – Land Use

- Ensure Compatible Land Uses Around the Airport through
- Adopt Airport Related Zoning
  - Base Zoning
  - Overlay Zoning
- Coordinate with City/County on land use reviews
- Maintain height restrictions within existing development regulations.

Community Involvement

- Annual Open House
- Hillsboro Airport Issues Roundtable
- Jackson Bottom Wetlands Mitigation with ODOT and Clean Water Services
- Washington County Fairgrounds Advisory Committee
- City Comprehensive Planning Technical Advisory Committee

PCC

Aviation Science
Aviation Maintenance Technology

Two Aviation Programs

- Aviation Maintenance Technology
  - Since 1969
  - Based at the Rock Creek Campus
  - AAS Degree
    - Students earn their Airframe and Powerplant Mechanic Certificates
- Aviation Science
  - Since 1999
  - Rock Creek Campus / HIO
  - SE Center / TTD
  - AAS Degree
    - Students earn their Commercial Pilot and Flight Instructor Certificates

Aviation Maintenance Technology

- 30,000 Foot, two-hangar complex.
  - Seven classrooms, six shops, tool room and computer resource center

AMT "Fleet"

(non-flying condition)

- Turbo-AeroCommander 680T (Twin turbo-prop)
- Beechcraft QueenAir Model 65 (Former Dept. of the Interior)
- Cessna 150M (Single engine trainer)
- Cessna 150 (Structure only)
- Cessna 305A, (Also called L-19 "Bird-dog" by military, former U.S. Army)
- Cessna 310Q (Twin reciprocating engines)
- Cessna P337 Skymaster (Pressurized cabin/twin)
- Piper Tomahawk PA-38 (Single engine trainer)
- Piper Cherokee PA-28 (Structure only)
- Piper Cheyenne PA-31T (Structure only)

- Huey, Bell UH-1H (Turbine powered, former Army National Guard)
- McDonnell Douglas/Hughes 369A (Turbine powered, OH-6A military designation)
- Bell 47 (Model 47-G2), (OH-13H military designation, former U.S. Army)
- UH-12C Hiller (Also called OH-23C, former U.S. Army)
- UH-12C Hiller (Also called OH-23C, former U.S. Army)

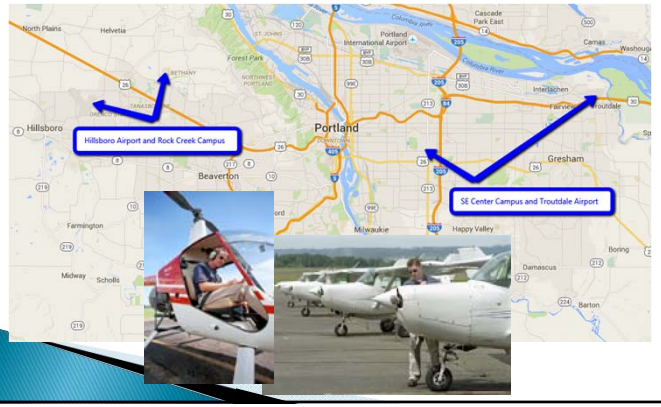
Airplanes | Helicopters

AMT Degree

- FAA Mechanic Coursework
  - General, Airframe and Powerplant
  - 1900 hours of required training
    - Part 147
  - Extensive FAA written and practical testing
- Comprehensive Degree Requirements
  - 16 Credit Hours General Education
  - Math and Writing Competencies
- 23 Months Total
  - 7am – Noon, Monday – Friday

Aviation Science

- Professional Pilot Program



PCC – HAA Partnership

- PCC
  - Provides AAS degree opportunity
  - Instruction for all academic courses
- HAA
  - Provides quality flight instruction for PCC flight courses
  - Students pay flight training fees through PCC:
    - Airplane: Approximately $79,000 including exam fees
    - Helicopter: Approximately $103,000 including exam fees

Aviation Science – Airplane

- **General Education**
- **Math and Writing Competencies**
- Aviation Academic Courses:
  - Intro to Aviation
  - Applied Aerodynamics
  - Systems Airframe
  - Systems Powerplant
  - Pilot Human Factors
  - Meteorology
  - Aviation Weather Services
  - Aviation Careers
  - Aviation Laws and Regs
  - Economics of Flight Ops
  - Pilot Performance (CRM)
- Private Pilot Flight
- Instrument Flight
- Intro to Commercial
- Commercial Flight
- Multi-engine Instructor
- Single-engine Instructor
- Instrument Instructor

Academic Courses (at PCC)

Flight Courses (at Hillsboro Aero Academy)

Aviation Science – Helicopter

- **General Education**
- **Math and Writing Competencies**
- Aviation Academic Courses:
  - Intro to Aviation
  - Applied Aerodynamics
  - Systems Airframe
  - Systems Powerplant
  - Pilot Human Factors
  - Meteorology
  - Physics
  - Aviation Weather Services
  - Aviation Careers
  - Aviation Laws and Regs
  - Economics of Flight Ops

Academic Courses (at PCC)

- Private Pilot Flight
- Basic Commercial-Instrument
- Advanced Commercial
- Flight Instructor/Instrument Instructor

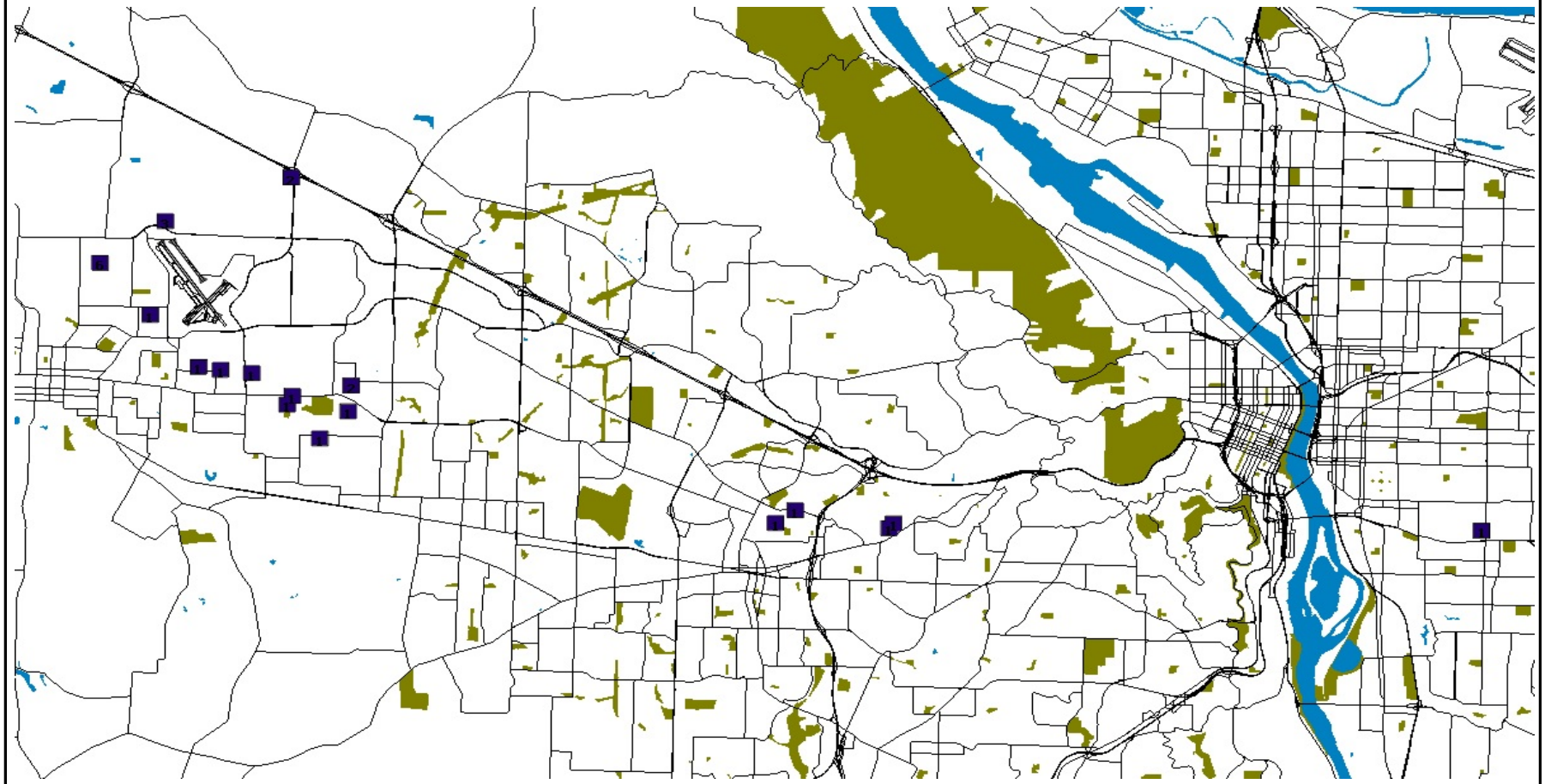
Flight Courses (at Hillsboro Aero Academy)

Employment Outlook

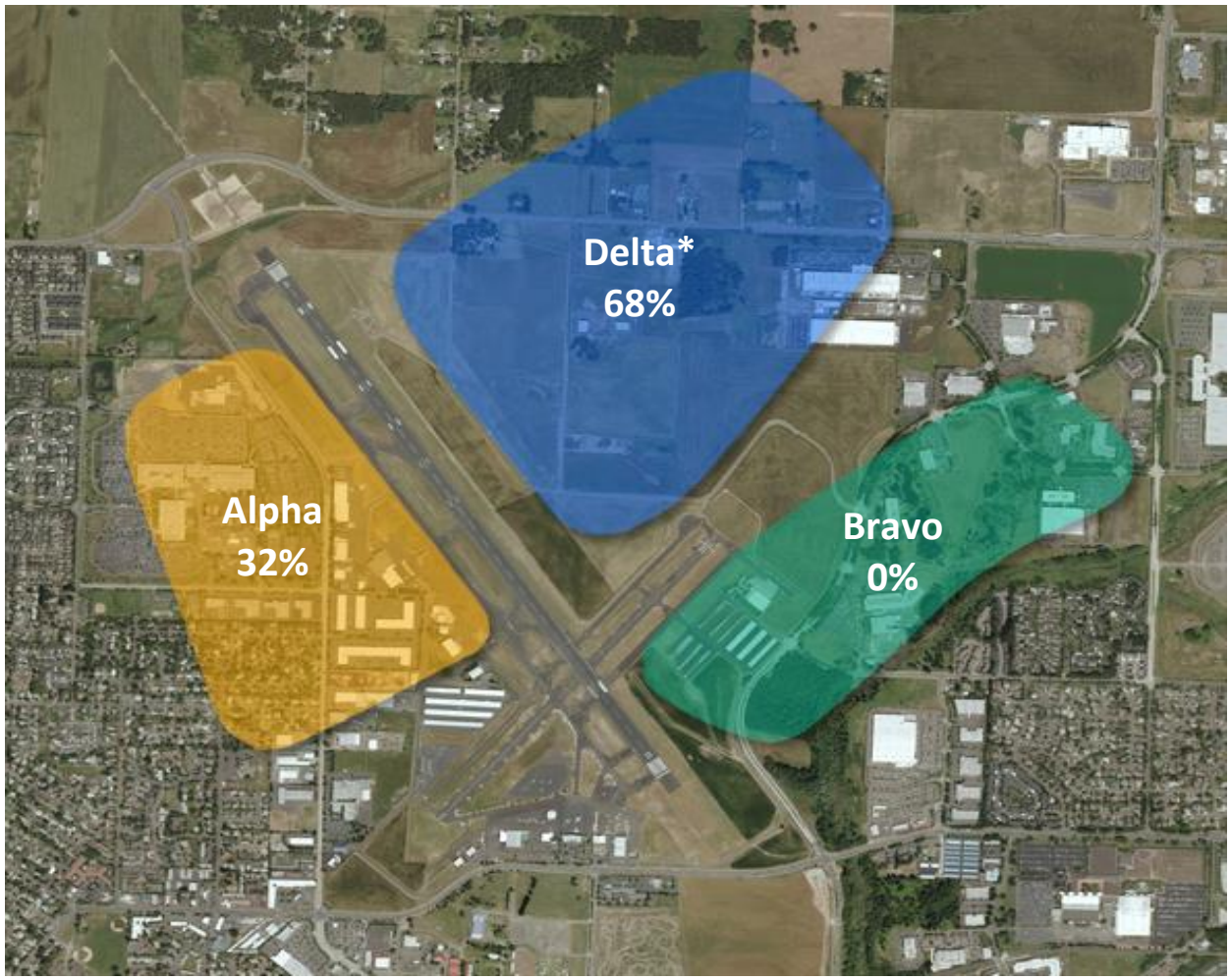
- **"Demand unprecedented for pilots and technicians"**
  - "To meet this tremendous growth, the 2015 Boeing Pilot and Technical Outlook forecasts that between now and 2034, **the aviation industry will need to supply more than one million new aviation personnel—558,000 commercial airline pilots and 609,000 maintenance technicians."**

2015 – 2034 Boeing Market Outlook

Q4 - 2015 HIO NOISE COMPLAINT LOCATIONS



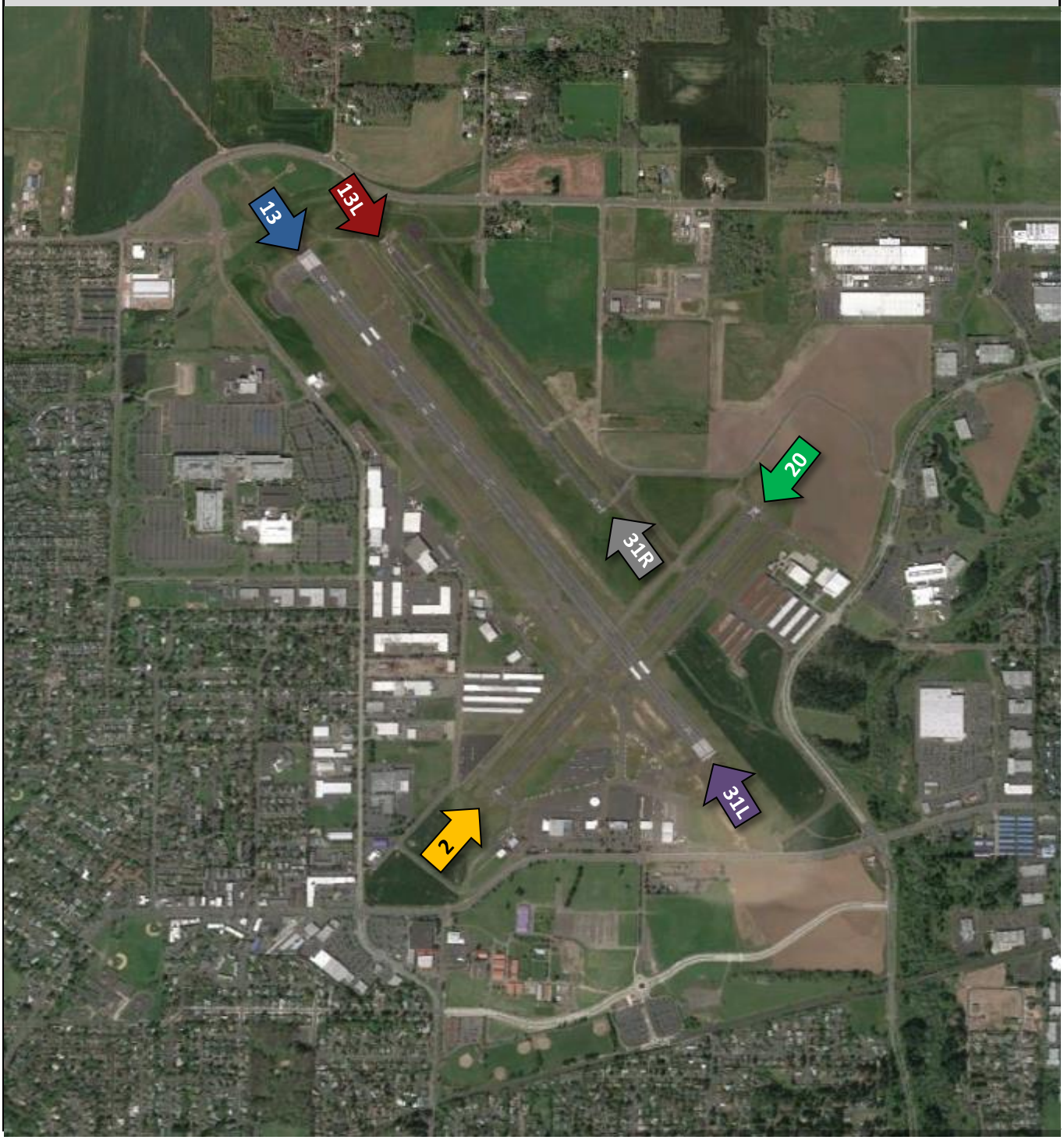
HILLSBORO HELICOPTER PATTERN UTILIZATION - Q4, 2015



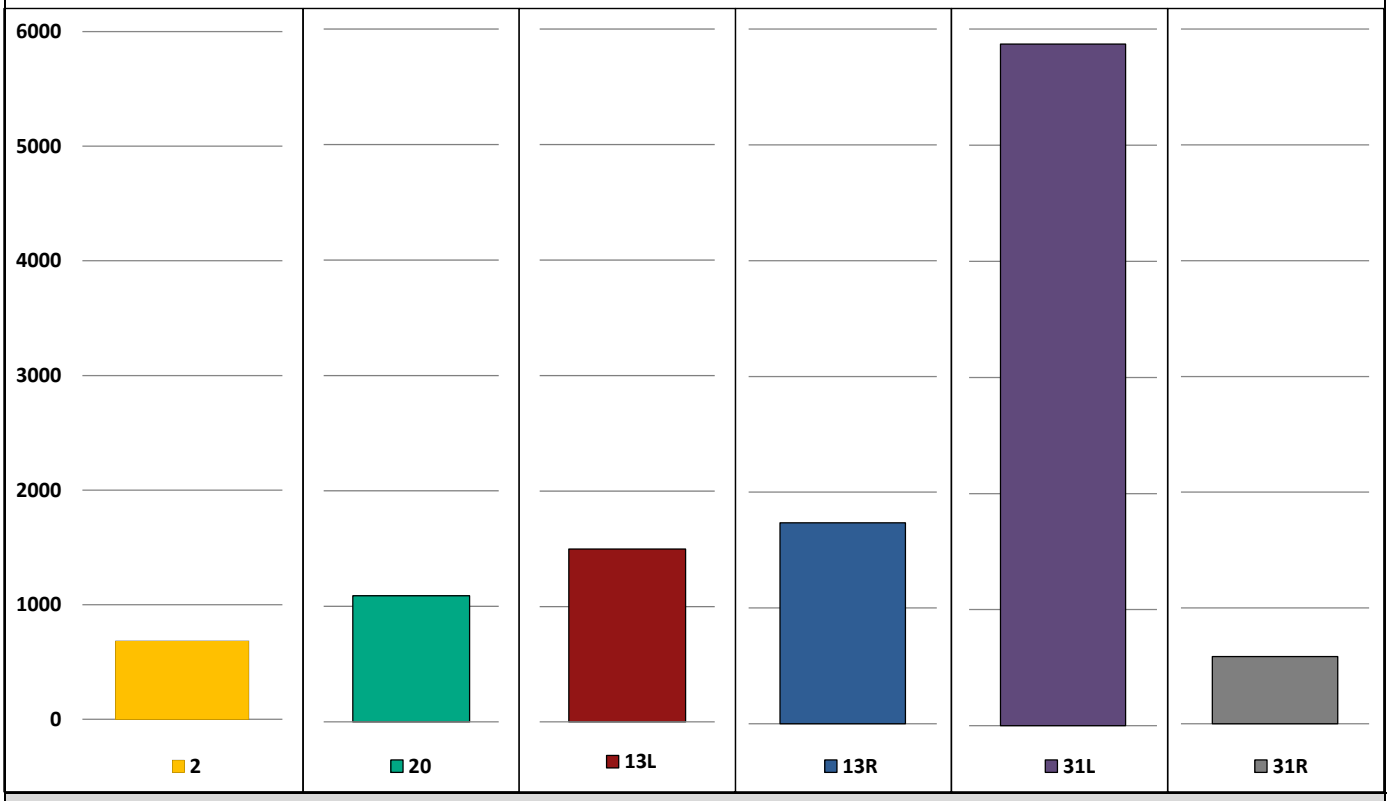
Month	Alpha		Bravo		Delta*		Total
	Count	Percent	Count	Percent	Count	Percent	
Jan	1072	27%	104	3%	2818	71%	3994
Feb	1505	30%	103	2%	3342	68%	4950
Mar	2018	37%	108	2%	3368	61%	5494
Q1	*4595*	*32%*	*315*	*2%*	*9528*	*66%*	*14438*
Apr	2266	44%	64	1%	2868	55%	5198
May	814	17%	5	0%	3915	83%	4734
Jun	659	14%	5	0%	4117	86%	4781
Q2	*3739*	*25%*	*74*	*1%*	*10900*	*74%*	*14713*
Jul	1273	26%	45	1%	3622	73%	4940
Aug	1260	24%	42	1%	3926	75%	5228
Sep	709	20%	44	1%	2843	79%	3596
Q3	*3242*	*24%*	*131*	*1%*	*10391*	*75%*	*13764*
Oct	1587	48%	2	0%	1731	52%	3320
Nov	1067	28%	5	0%	2715	72%	3787
Dec	457	18%	14	1%	2106	82%	2577
Q4	*3111*	*32%*	*21*	*0%*	*6552*	*68%*	*9684*
YTD	*14687*	*28%*	*541*	*1%*	*37371*	*71%*	*52599*

*** Charlie pattern was renamed Delta with the opening of runway 13L / 31R on 4/30/15**

HILLSBORO AIRPORT RUNWAY LAYOUT



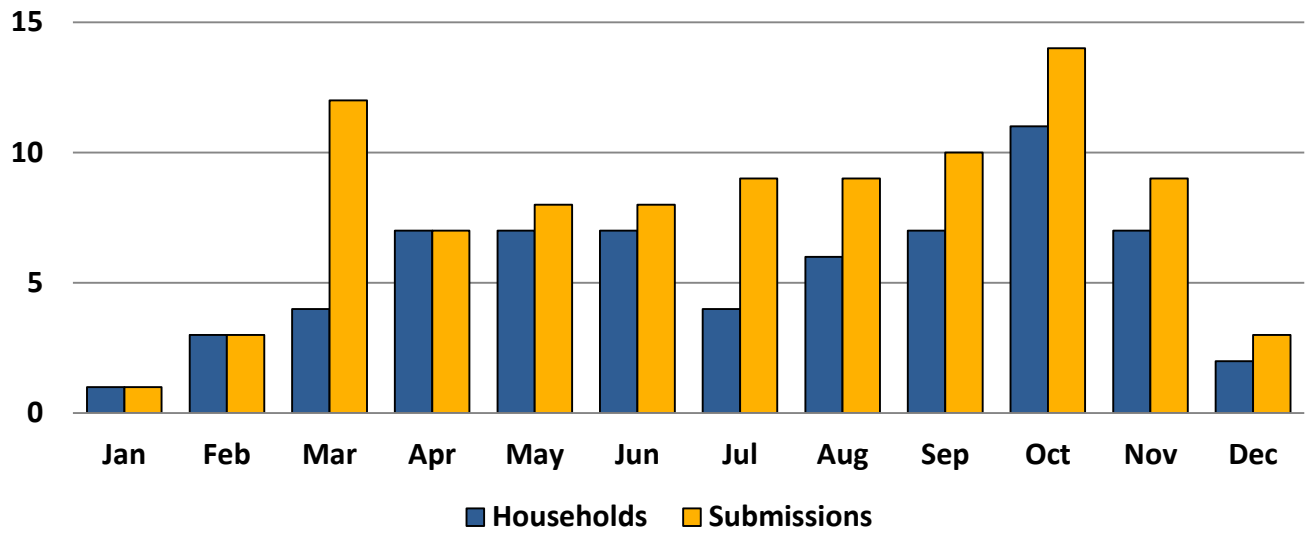
Combined Runway Utilization, Q4 - 2015



		Jan	Feb	Mar	Q1	Apr	May	Jun	Q2	Jul	Aug	Sep	Q3	Oct	Nov	Dec	Q4	YTD
2	Ops Count	156	600	175	931	296	325	324	945	136	94	237	467	263	250	173	686	3029
	Percentage	4%	15%	4%	7%	6%	6%	5%	6%	3%	2%	4%	3%	5%	6%	7%	6%	5%
20	Ops Count	387	387	770	1544	447	311	291	1049	392	493	387	1272	357	452	284	1093	4958
	Percentage	10%	10%	16%	12%	9%	6%	5%	6%	10%	9%	7%	8%	7%	12%	11%	10%	9%
13L	Ops Count	0	0	0	0	0	906	2769	3675	815	853	520	2188	749	601	147	1497	7360
	Percentage	0	0	0	0%	0%	17%	45%	22%	20%	16%	9%	14%	15%	16%	6%	13%	13%
13R	Ops Count	523	538	785	1846	496	214	127	837	43	194	374	611	370	483	884	1737	5031
	Percentage	13%	14%	16%	14%	10%	4%	2%	5%	1%	4%	6%	4%	7%	12%	34%	15%	9%
31L	Ops Count	2896	2419	3227	8542	3865	3632	2504	10001	2609	3636	4186	10431	3159	1957	755	5871	34845
	Percentage	73%	61%	65%	66%	76%	67%	41%	60%	65%	68%	72%	69%	63%	51%	29%	51%	62%
31R	Ops Count	0	0	0	0	0	41	109	150	44	94	103	241	128	127	325	580	971
	Percentage	0	0	0	0%	0%	1%	2%	1%	0%	2%	2%	2%	3%	3%	13%	5%	2%
All	Total	3962	3944	4957	12863	5104	5429	6124	16657	4039	5364	5807	15210	5026	3870	2568	11464	56194

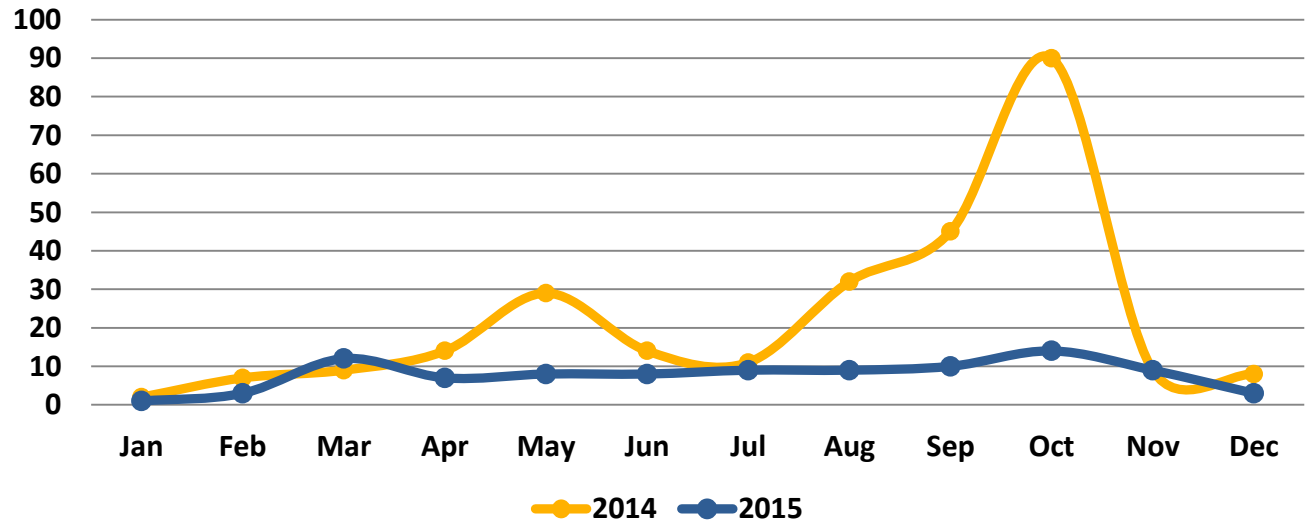
Notes: 1) Runway 13L / 31R became operational on April 30, 2015. 2) Counts reflect total operations, divide in half to estimate arrivals and departures. 3) Relatively short distance between the parallel runways limits ability to accurately separate their operations counts.

HIO SUBMISSIONS TO HOUSEHOLD COMPARISON



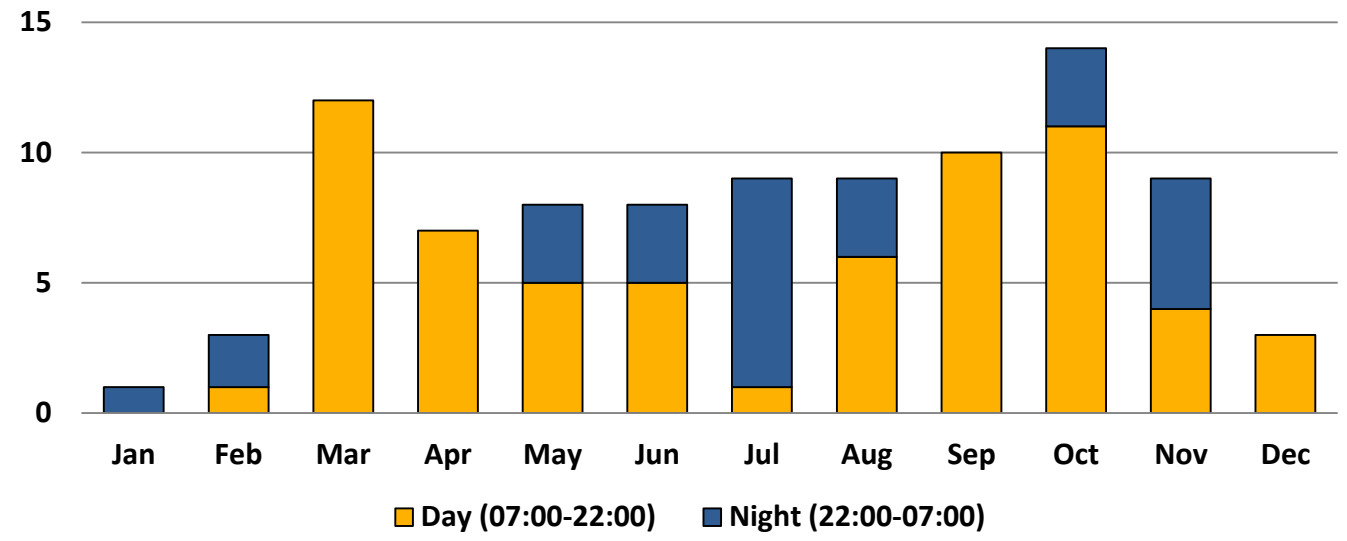
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Households	1	3	4	7	7	7	4	6	7	11	7	2
Submissions	1	3	12	7	8	8	9	9	10	14	9	3

HIO ANNUAL SUBMISSIONS COMPARISON - YEAR TO DATE



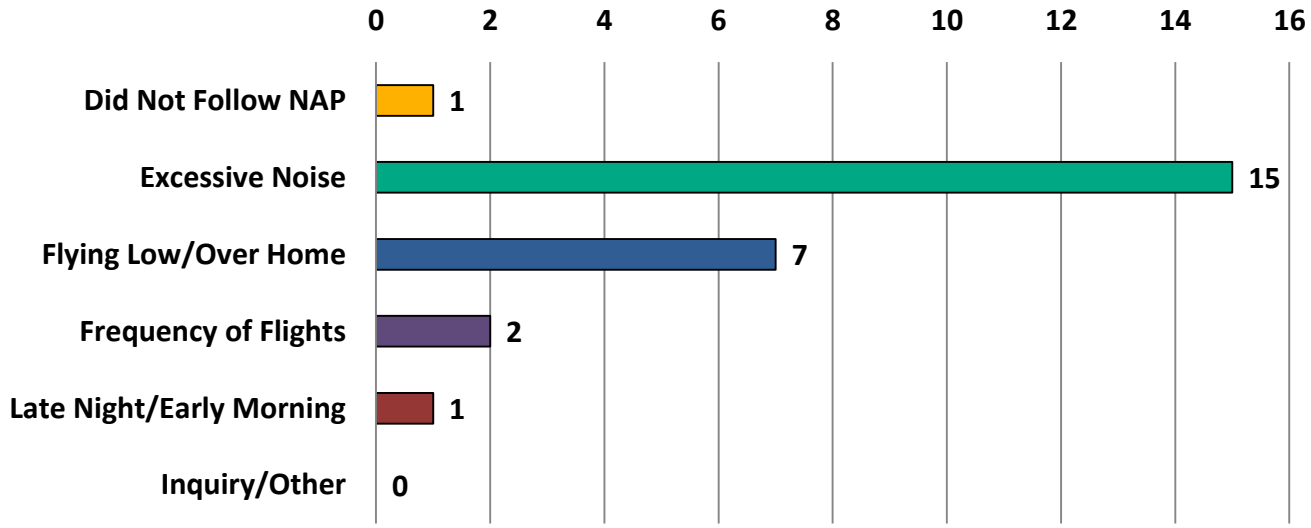
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014	2	7	9	14	29	14	11	32	45	90	9	8
2015	1	3	12	7	8	8	9	9	10	14	9	3

HIO SUBMISSIONS BY TIME OF DAY



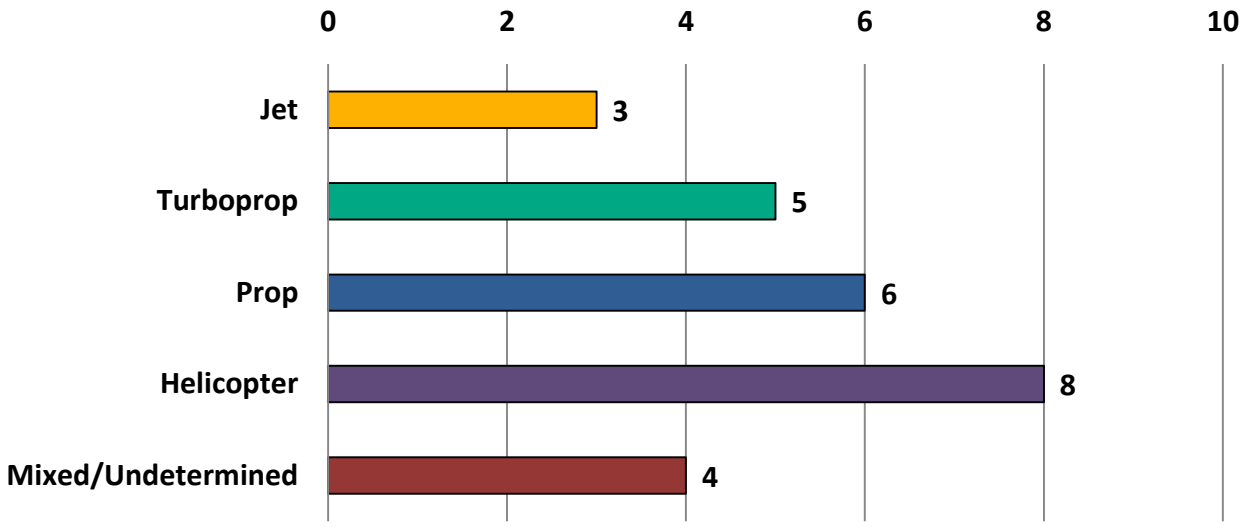
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Day (07:00-22:00)	0	1	12	7	5	5	1	6	10	11	4	3
Night (22:00-07:00)	1	2	0	0	3	3	8	3	0	3	5	0

HIO SUBMISSIONS BY MAIN CONCERN Q4 - 2015



	Q1	Q2	Q3	Q4
Did Not Follow NAP	0	0	0	1
Excessive Noise	11	9	16	15
Flying Low/Over Home	2	6	9	7
Frequency of Flights	3	2	2	2
Late Night/Early Morning	0	4	1	1
Inquiry/Other	0	2	0	0

HIO SUBMISSIONS BY AIRCRAFT CATEGORY Q4 - 2015



	Q1	Q2	Q3	Q4
Jet	0	3	0	3
Turboprop	1	3	0	5
Prop	3	4	9	6
Helicopter	3	6	11	8
Mixed/Undetermined	9	7	8	4