

Ohio Aerospace and Aviation Technology Committee



Chairman's Report
July 2015

Letter from the Chairman

Ohio's aerospace and aviation heritage is second to none. From the Wright Brothers' historic work in Dayton and the significant contributions made by Ohio astronauts like John Glenn and Neil Armstrong, to the current multi-billion dollar aerospace and aviation industry in the state, Ohio has always led the way for the next generation of aerospace and aviation innovation.

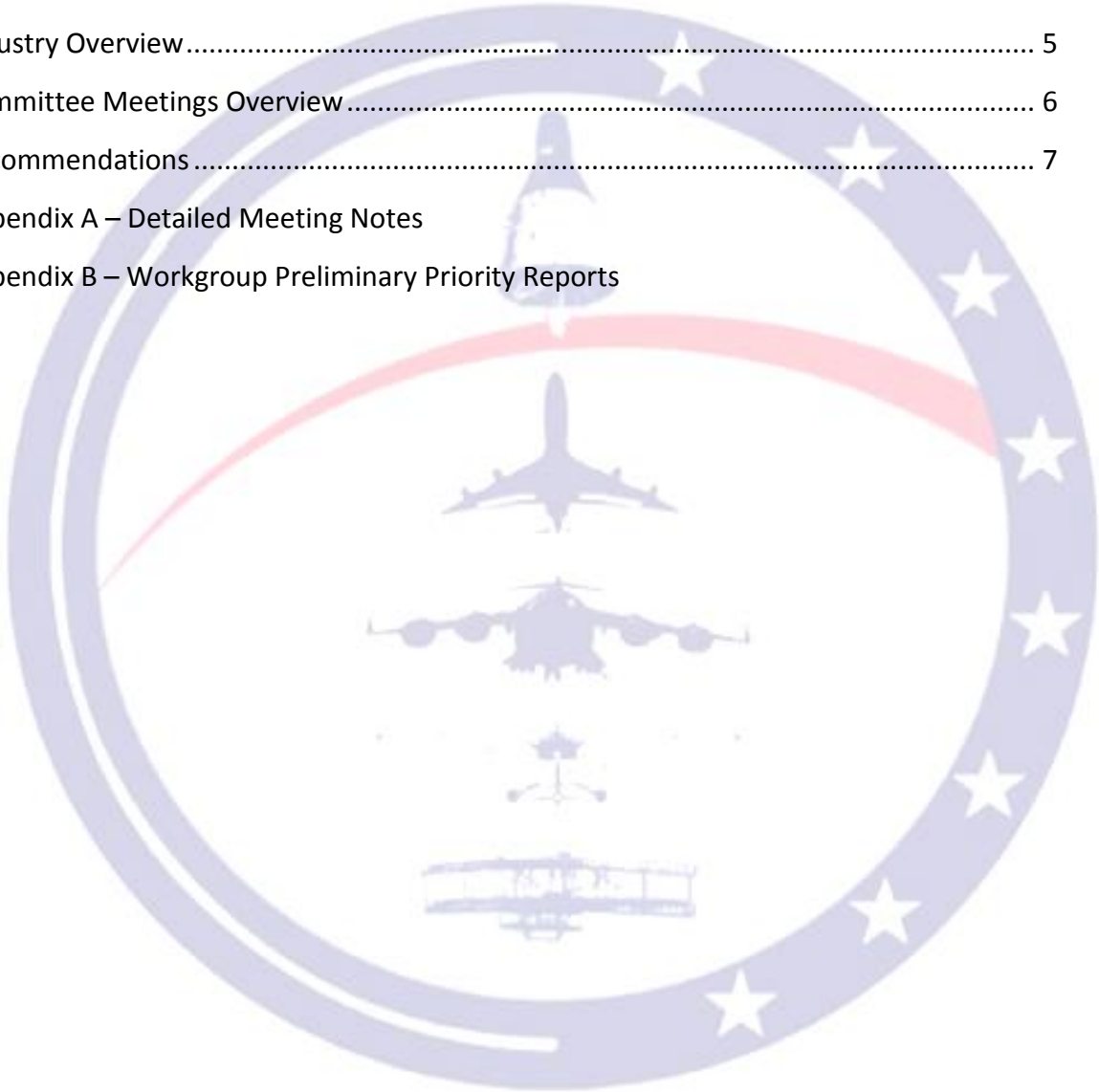
The Ohio Aerospace and Aviation Technology Committee (OAATC) is an initiative to further develop Ohio's leadership in this area. This Committee is bringing together members of an often disparate aerospace community, to include military leaders, academic experts and the industry's top innovators. They are working together, alongside state lawmakers, to develop a singular aerospace and aviation strategy geared at enhancing an already robust economy, unifying the entire state under one banner, and putting Ohio in a position to create new opportunities for our future.

I continue to promote Ohio throughout the country, as the true Birthplace of Aviation (HCR 8), and while I have great respect for the history of this great state, I understand the importance of looking towards the future. As the inaugural chair of the Ohio Aerospace and Aviation Technology Committee, my goal, along with my fellow OAATC members, is to cement the trajectory of Ohio as a permanent leader in the fields of aerospace and aviation. I am confident that the work of this committee will go a long way to achieve that goal.

Respectfully,
Representative Rick Perales
Chairman, Ohio Aerospace and Aviation Technology Committee
73rd Ohio House District

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Committee History

June 17, 2014 – Governor John Kasich signs into law House Bill 292 to create the Ohio Aviation and Aerospace Technology Committee (OAATC).

September 24, 2014 – Speaker William G. Batchelder and Senate President Keith Faber appoint the six legislative members to the OAATC.

October 31, 2014 – Deadline for applications for the fifteen public members.

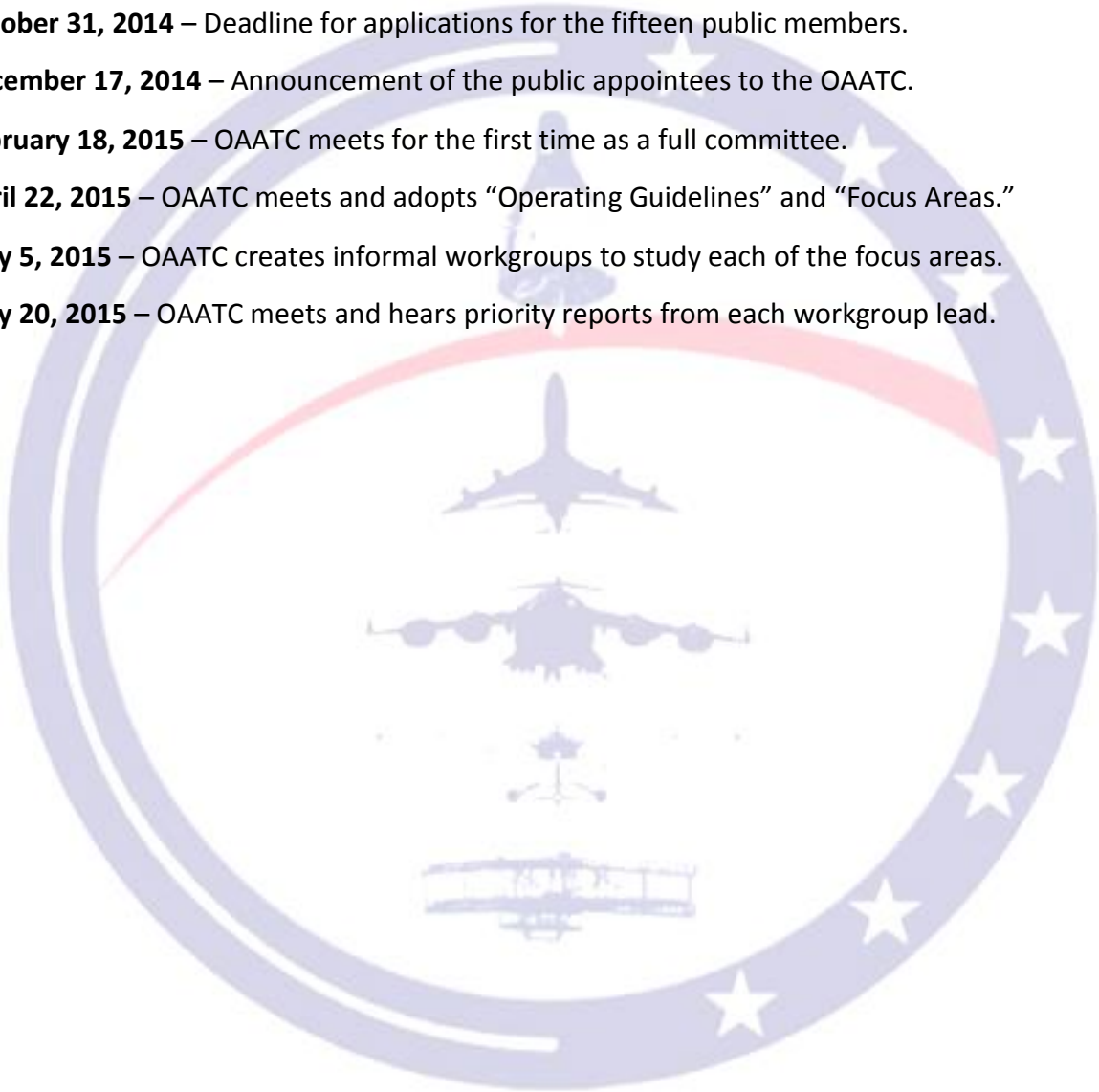
December 17, 2014 – Announcement of the public appointees to the OAATC.

February 18, 2015 – OAATC meets for the first time as a full committee.

April 22, 2015 – OAATC meets and adopts “Operating Guidelines” and “Focus Areas.”

May 5, 2015 – OAATC creates informal workgroups to study each of the focus areas.

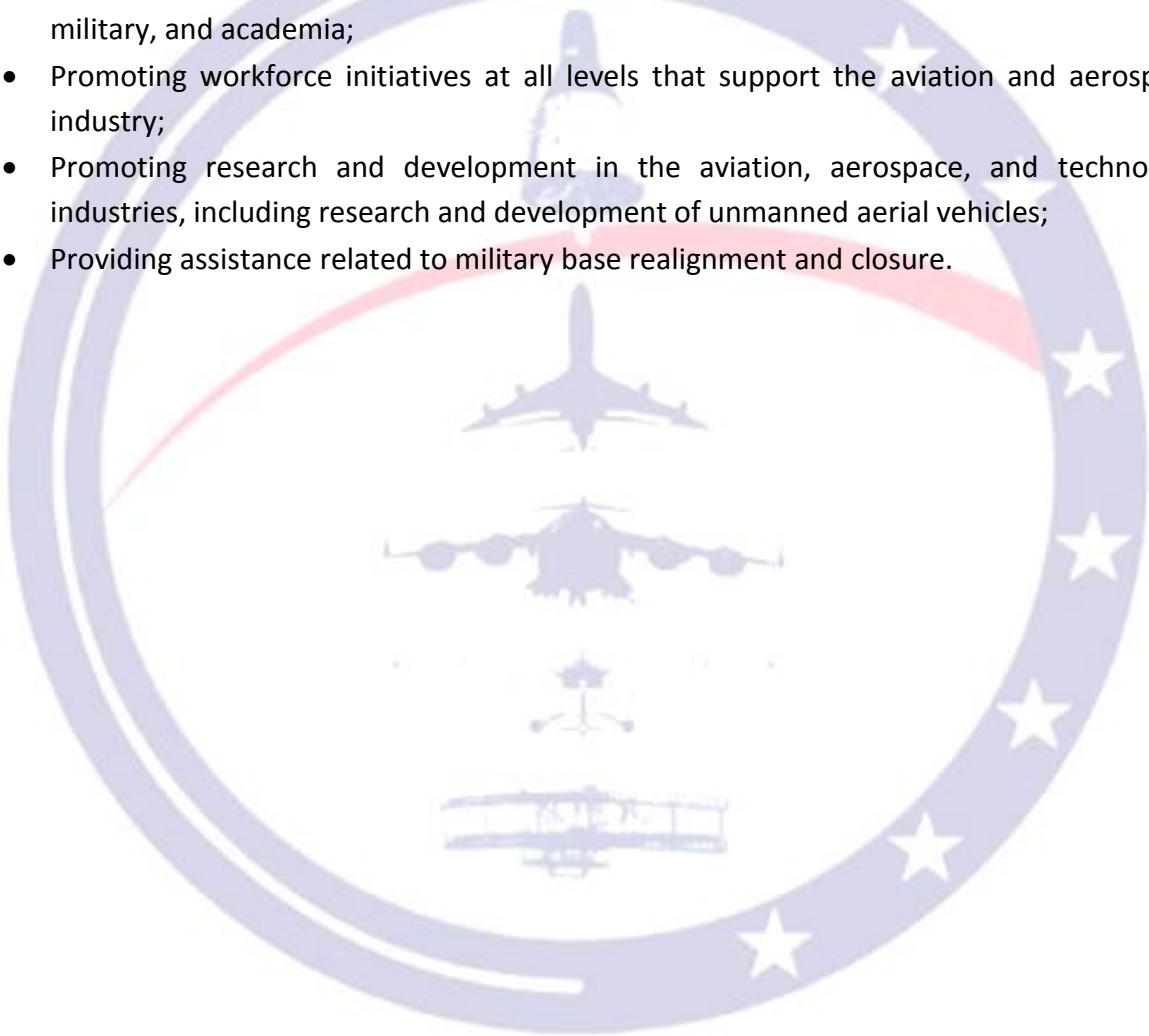
May 20, 2015 – OAATC meets and hears priority reports from each workgroup lead.



Committee Charge

According to the enabling language of HB 292 (ORC 122.98), the duties of the committee shall include, but are not limited to, all of the following:

- Studying and developing comprehensive strategies to promote the aviation, aerospace, and technology industries throughout the state, including through the commercialization of aviation, aerospace, and technology products and concepts;
- Encouraging communication and resource-sharing among individuals and organizations involved in the aviation, aerospace, and technology industry, including business, the military, and academia;
- Promoting workforce initiatives at all levels that support the aviation and aerospace industry;
- Promoting research and development in the aviation, aerospace, and technology industries, including research and development of unmanned aerial vehicles;
- Providing assistance related to military base realignment and closure.



Committee Membership

The OAATC is comprised of six legislators appointed by the President of the Senate and the Speaker of the House. One public member is appointed by the Governor and fourteen public members are elected by a majority vote of the six legislative members.

General Assembly Members:

- Representative Rick Perales (R-Beavercreek) – Chairman
- Representative Nan Baker (R-Westlake)
- Senator Bill Beagle (R-Tipp City)
- Representative Sean O’Brien (D-Bazetta)
- Senator Joe Schiavoni (D-Boardman)
- Senator Chris Widener (R-Springfield)

Public Members:

- Tony Bailey – Spirit Aeronautics
- Mark Brown – Mark Brown Consulting LLC
- Mike Heil – Ohio Aerospace Institute
- Jay Jabour – Wright “B” Flyer Inc.
- John Leland – University of Dayton Research Institute
- Susan Louscher – University of Akron
- Maureen McFarland – Kent State University
- Roderick Munn – Aerospace Enterprises Inc.
- Paul Orkwis – University of Cincinnati
- Jeffery Rolf – Parker Hannifin
- Vincent Russo – Aerospace Technologies Associates
- Ronald Shroder – Frontier Technology Inc.
- Terry Slaybaugh – Dayton International Airport
- Robert Tanner – NetJets Inc
- David Williams – The Ohio State University

Operating Guidelines

Operating guidelines, also known as the committee’s “rules of engagement”, were adopted at the April 22, 2015 meeting in order to guide the committee process. The operating guidelines explain what the committee is following as they develop strategic plans. The operating guidelines are:

- Fulfill duties outlined in enabling legislation
- Make recommendations that are “actionable” and “measureable”
- Leverage or extend Ohio’s existing competitive advantage
- Unite the aerospace and aviation organizations in the state, educational and research organizations, state government agencies, industry, and the national laboratories
- As a group, seek to achieve statewide political consensus

Focus Areas

Focus areas were also adopted at the April 22, 2015 meeting. The following five primary focus areas are meant to reflect the broadest categories that need to be studied by the committee in small informal workgroups:

- Outreach and Branding
 - Lead – Mark Brown
- Workforce Development
 - Lead – Vince Russo
- Technology Development
 - Lead – Paul Orkwis
- Industry Support
 - Co-Lead – Ron Shroder
 - Co-Lead – Tony Bailey
- Federal Installations Support
 - Lead – Jay Jabour

Industry Overview

Ohio's Aerospace and Aviation Industry Quick Facts (Statistics courtesy of JobsOhio)

- 35,873 full-time employees statewide
- 431 businesses statewide
- \$5.3 billion gross state product (GSP)
- \$73,724 average wage per worker
- 17% of total U.S. employment in aviation and aerospace

\$9 billion is invested annually into aerospace **research and development** and testing in Ohio, thanks to world-class research and test facilities such as NASA Glenn Research Center and the Air Force Research Laboratory at Wright-Patterson Air Force Base, industry leaders throughout the state, and numerous state universities and research institutes specializing in aerospace and aviation technologies.

Manufacturing accounts for 17% of Ohio's Gross Domestic Product (GDP), in part because Ohio is the top supplier state to both Boeing and Airbus. According to the US Bureau of Labor Statistics, over 12,000 workers are employed within aircraft engines and parts manufacturing sectors alone.

A study by The Teal Group projects that **Unmanned Aerial Systems** (UAS) could produce \$91 billion in the US over the next ten years. Another study, by the Association for Unmanned Vehicle Systems International (AUVSI), forecasts that by 2025, UAS will create 100,000 jobs and have an economic impact of \$82 billion. If Ohio were to remain at the 17% aviation and aerospace employment rate above, UAS technology could supply 17,000 jobs to Ohioans over the next decade.

Meetings Overview

The following is a brief overview of the first four meetings of the Ohio Aerospace and Aviation Technology Committee (OAATC). For more detailed notes on the activities of each committee meeting, please refer to Appendix A.

OAATC Meeting in Brief – 2/18/2015

- Chairman Perales and others updated the committee on the history and significance of the Committee and administrative items were addressed.
- The Committee had open discussion and brainstorming on issues important to Ohio's aerospace and aviation industries, and a list of these issues was produced and published for further consideration.

OAATC Meeting in Brief – 4/8/2015

- Chairman Perales updated the Committee on current legislation in the General Assembly that was of interest to the OAATC.
- A discussion was facilitated regarding the proposed Operating Guidelines and Strategic Initiatives of the Committee.

OAATC Meeting in Brief – 4/22/2015

- Chairman Perales discussed the value of the Committee website and encouraged the members to review the website and give input on its functions.
- The Committee adopted a set of Operating Guidelines. (see page 4)
- The Committee discussed and then adopted a set of five focus areas and working groups were established to address each Focus Area. (see page 4)

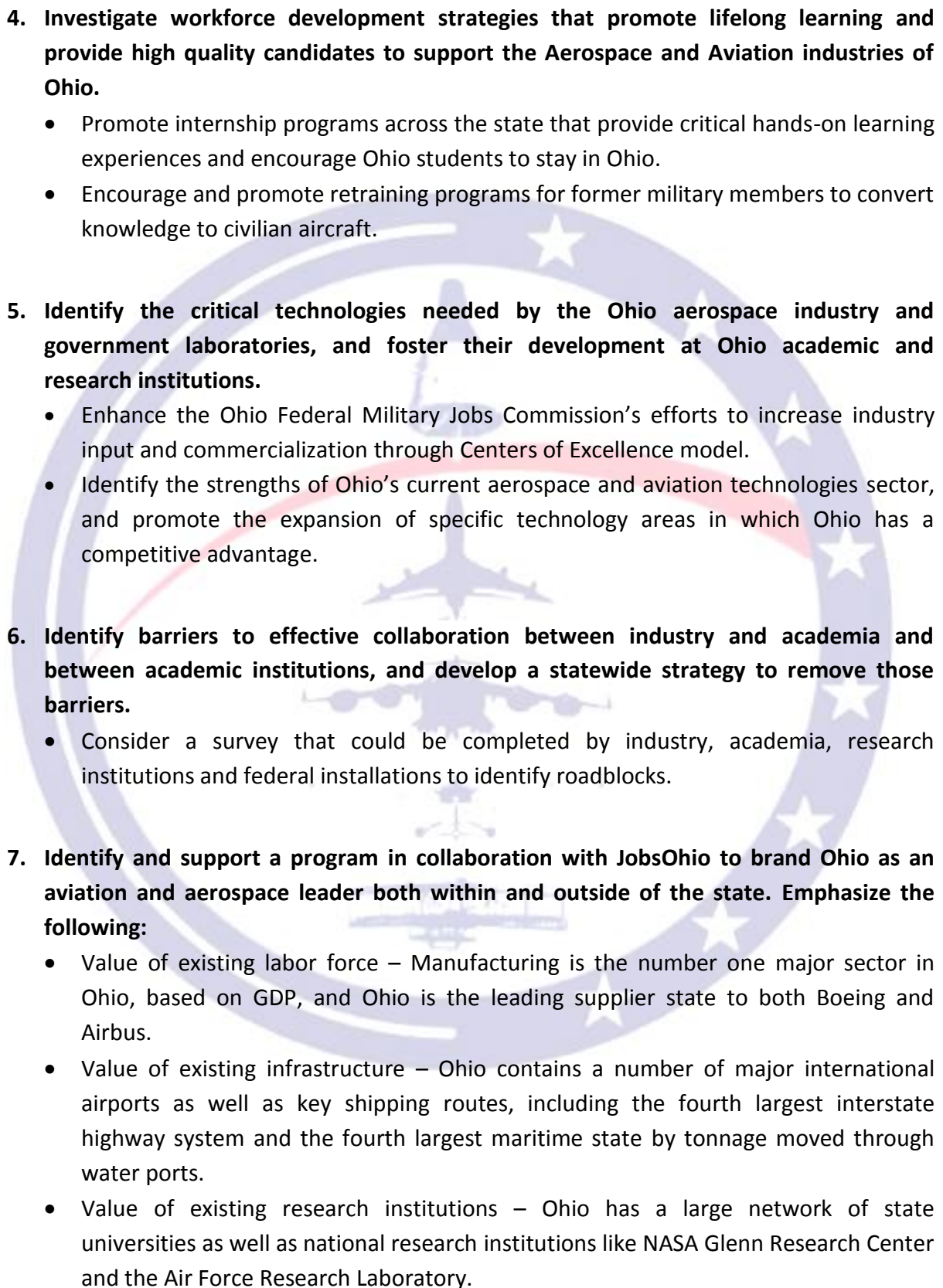
OAATC Meeting in Brief – 5/20/2015

- Col. Dignan, Commander of the 910th Airlift Wing, Youngstown Air Reserve Station, testified about the value of the OAATC and the need for a unified strategy for the State of Ohio.
- Professor Jim Gregory, Department of Mechanical and Aerospace and Engineering at The Ohio State University, informed the Committee that the University joined a national team to run a new National Center of Excellence for Unmanned Aircraft Systems.
- Workgroup leads presented the preliminary ideas of the five working groups' priorities. The findings included recommended priorities for the Committee that will continue to be developed and modified as necessary. (see Appendix B)

Recommendations

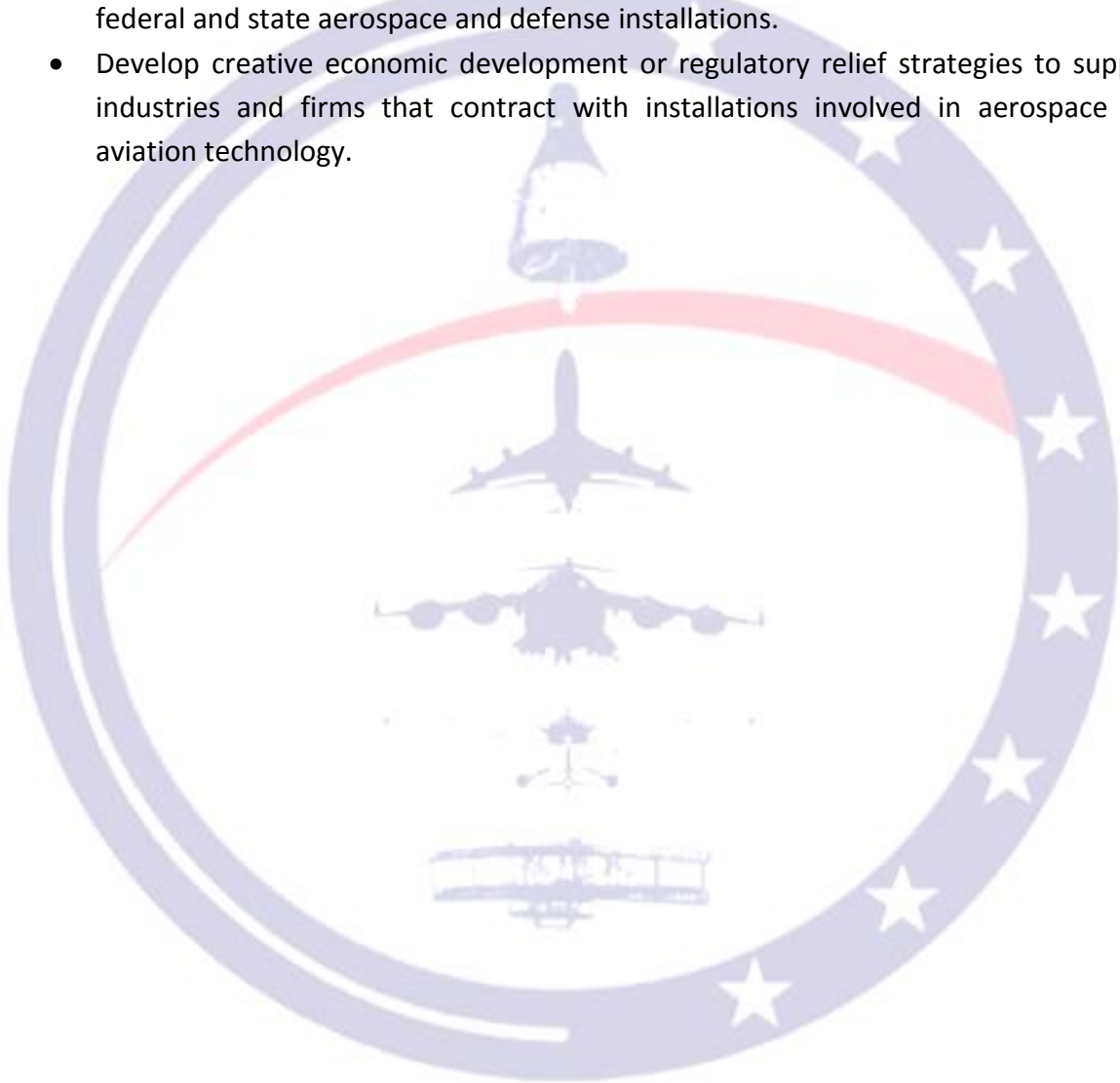
The following recommendations are the committee's high level, first pass in developing a full, detailed strategic plan for the Ohio aerospace and aviation sector. As the committee has more opportunities to engage and strategize, these recommendations will continue to mature and progress as the committee evolves. For a more detailed look at the source of these recommendations, please refer to Appendix B.

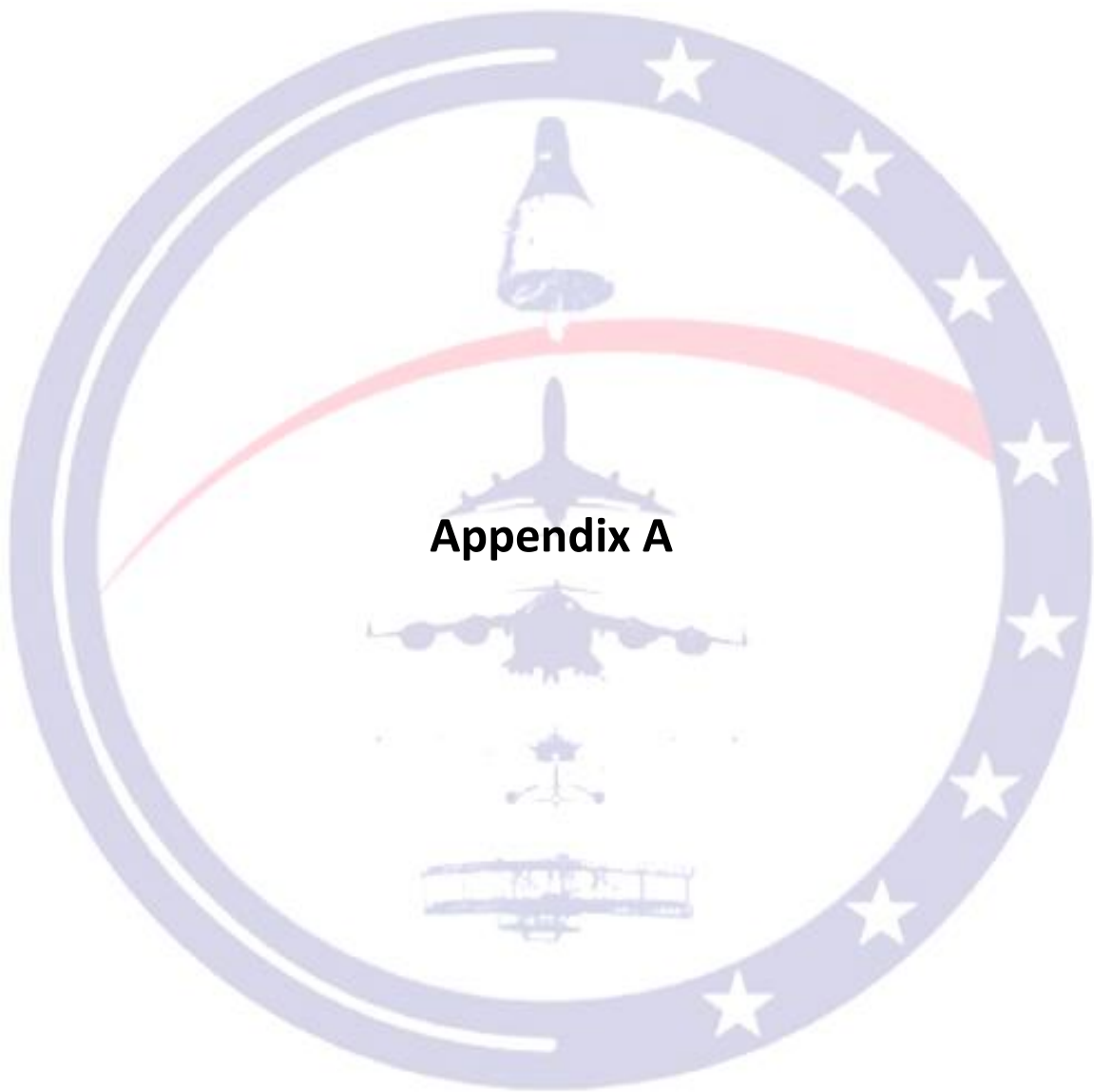
- 1. Establish a comprehensive website that could act as a key resource to businesses, universities, research organizations and military installations. Suggested features:**
 - Page for posting events, news, and research materials relevant to the aviation and aerospace industry.
 - Database listing all businesses, universities, and research organizations including information about their technology and production capabilities.
 - Marketplace for businesses, universities, and research organizations to interact and propose resource pooling, collaborative projects.
 - Posting of all OAATC activities, endeavors, related legislation and opportunities.
- 2. Identify and catalogue existing aerospace and aviation programs, organizations, educational forums/opportunities, and make that information publicly available to the industry.**
 - Identify industry expert personnel and associations and invite those individuals or groups to collaborate with the OAATC focus area informal work groups for the purposes of communication and collaboration.
 - Rank all programs, forums, conferences and other events to target potential opportunities to promote Ohio aerospace and aviation.
- 3. Develop tax incentives and legislation to encourage companies to move to or do more business in Ohio.**
 - Research and discuss a general aviation sales and use tax exemption that would allow for a comprehensive and significant boost to the aviation and aerospace sector by encouraging job-producing operations and a wide variety of supply chain operations to locate and expand in Ohio.
 - Explore opportunities to investigate return on investment, in order to better suit tax policy to the needs of the Ohio aerospace and aviation technology industries.
 - Research legislation that directs aviation fuel tax revenues towards economic development opportunities that benefit Ohio aerospace and aviation industries.

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- 4. Investigate workforce development strategies that promote lifelong learning and provide high quality candidates to support the Aerospace and Aviation industries of Ohio.**
 - Promote internship programs across the state that provide critical hands-on learning experiences and encourage Ohio students to stay in Ohio.
 - Encourage and promote retraining programs for former military members to convert knowledge to civilian aircraft.
 - 5. Identify the critical technologies needed by the Ohio aerospace industry and government laboratories, and foster their development at Ohio academic and research institutions.**
 - Enhance the Ohio Federal Military Jobs Commission's efforts to increase industry input and commercialization through Centers of Excellence model.
 - Identify the strengths of Ohio's current aerospace and aviation technologies sector, and promote the expansion of specific technology areas in which Ohio has a competitive advantage.
 - 6. Identify barriers to effective collaboration between industry and academia and between academic institutions, and develop a statewide strategy to remove those barriers.**
 - Consider a survey that could be completed by industry, academia, research institutions and federal installations to identify roadblocks.
 - 7. Identify and support a program in collaboration with JobsOhio to brand Ohio as an aviation and aerospace leader both within and outside of the state. Emphasize the following:**
 - Value of existing labor force – Manufacturing is the number one major sector in Ohio, based on GDP, and Ohio is the leading supplier state to both Boeing and Airbus.
 - Value of existing infrastructure – Ohio contains a number of major international airports as well as key shipping routes, including the fourth largest interstate highway system and the fourth largest maritime state by tonnage moved through water ports.
 - Value of existing research institutions – Ohio has a large network of state universities as well as national research institutions like NASA Glenn Research Center and the Air Force Research Laboratory.

8. Identify which federal and state aerospace and defense installations are potential targets for force structure actions and opportunities, and collaborate with on-going or planned local or regional programs to advance force structure actions which support these installation and the State of Ohio

- Utilize and build on existing inventories and available resources on past force structure actions to identify strengths, weaknesses, opportunities, and threats of federal and state aerospace and defense installations.
- Develop creative economic development or regulatory relief strategies to support industries and firms that contract with installations involved in aerospace and aviation technology.





Appendix A



Ohio Aerospace and Aviation Technology Committee

February 18, 2015 – Minutes

Statehouse Room 122

Chairman Perales called the meeting of the Ohio Aerospace and Aviation Technology Committee to order at 10: 30 AM on February 18, 2015.

- The roll was called.
- Chairman Perales discussed the committee's history (HB 292, Goals/Objective, and Deliverables).
- Chairman Perales went around the room and asked all committee members and attendees to introduce themselves.
- Senator Widener gave an explanation and update on FDMC (Federal Military Jobs Commission)
- Mike Heil gave an explanation and update on OAI.
- Mike Heil gave an explanation and update on OAAC on Jeff Rolf's behalf.
- Glenn Richardson gave an explanation and update on JobsOhio.
- Ryan Smith gave an explanation and update on UAS Test Center.
 - Rep. O'Brien asked a question about how other states are doing in regards to UAS.
 - Ryan Smith: Ohio is 9th in the nation
 - Rep. Perales asked a question about whether there would be more UAV flights based off of recently released FAA guidelines
 - Ryan Smith: Yes but there is still a long ways to go
 - David Williams noted he would like to see more UAV in civilian aerospace.
- Chairman Perales gave an explanation and update on his proposed legislation/legislation ideas (HB 32- the taxation of airplane fuel, Wright Brothers First in Flight, an amendment to HB 292 to create subcommittees and member term restructure)
- Chairman Perales talked to the members of the committee regarding logistics.
 - Dates/Times- Chairman Perales led members to the proposed calendar in member packets and explained difference between formal and work sessions,
 - Locations/Travel- Chairman Perales mentioned he would like to travel twice a year around the state for work sessions and asked for input from members.
 - Website- Chairman Perales noted the overall value of the website and discussed updates which included the member's pictures. He also asked all members to fill in and send in biography template previously sent to them.

- Member Replacement Process- Chairman Perales mentioned that current member, Terry Slaybaugh has decided to take a job in Milwaukee and that his position on the committee is going to be replaced. He asked for the all member's input on candidate process although only the legislative members will be voting on the replacement.
- Chairman Perales then opened up the committee for discussion.
 - Bob Tanner noted that the federal FAA re-authorization act expires on September 16th and that they are looking towards a new strategy for reauthorization.
 - Mike Heil noted that the 100th celebration of the NACA (National Advisory Committee of Aeronautics) and that he hopes Ohio is represented.
 - Rep. Perales asked a question on whether there was going to be another Ohio Aerospace Day.
 - Noted it was something the committee could look at
 - Sue Louscher noted the NACA's birthday.
 - David Williams noted that we need to work with the federal delegation and keep them informed on the committee's progress and activity
 - Ron Shroder emphasized that he would like to see the replacement of Terry Slaybaugh to be geographically coordinated similar to as it was during the appointment process. He noted that it is critical to the vision of the committee.
 - Rep. Baker noted that in the next meeting she would like to establish some short term and long term suspense's.
 - Tony Bailey noted that the aircraft sales tax needs to be addressed and that Ohio has become a fly over state due to the tax.
 - Mike Farrell, from the audience noted that this committee is going to have to carefully look into this issue of changing aviation taxes – this includes to how to do it, where does the money from etc.
- As an ending note, Rep. Perales has asked members to consider the bullet points below (also on white board) for the upcoming committees:
 - Technology transfer from Federal laboratories (AFRL, NASA Glenn, EPA Cincinnati)
 - Technology transfer from Ohio universities
 - Promoting synergy between AFRL and NASA Glenn
 - Unmanned Aircraft System (UAS) {technology development, airspace, NASA Glenn, AFRL, precision agriculture, law enforcement, privacy, promoting manufacturing, etc.}
 - Expanding and enhancing aerospace manufacturing and supply chain
 - Promoting military aviation activities {focus mostly on WPAFB, but also bring in Ohio Air National Guard, AF Reserve; including BRAC (Base Realignment and Closure), defense cuts, etc.}
 - Energy technology (federal laboratories, universities, commercial manufacturing, services; look at advances in energy conservation, renewable, etc.)
 - Supporting and expanding Ohio's commercial aviation industry
 - General aviation
 - Using Ohio's aerospace and technology heritage to promote Ohio's aerospace future
 - Technology workforce issues—how to attract, train, and maintain a technological workforce that supports technology-oriented business
 - Ohio's universities—examining how they support technology in the state, issues facing Ohio universities, how they can be more helpful, etc.

- Information Technology, cyber security, computer research
 - Medical, hospitals, health-related technology
 - Materials, advanced manufacturing, advanced composites
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- With no further business before the committee, the chairman thanked all participants and adjourned the OAATC meeting at 12:42 PM.
 - Next proposed OAATC meeting scheduled for March 25th from 10 AM-noon in Statehouse RM 122, and will be a work session.

Chairman

Secretary



Ohio Aerospace and Aviation Technology Committee

April 8, 2015 – Minutes

Statehouse Room 122

Chairman Perales called the meeting of the Ohio Aerospace and Aviation Technology Committee (OAATC) to order at 10:10 AM on April 8, 2015.

- The roll was called. No quorum was present.
- Chairman Perales announced that minutes for both this meeting and the February 18th meeting will be approved at the April 22nd meeting.
- Chairman Perales indicated that the OAATC would vote on the replacement for Terry Slaybaugh at the April 22nd meeting.
- Chairman Perales announced that the next meeting will be held on April 22nd.
- Chairman Perales gave an update of all current legislation regarding the Aerospace and Aviation industry.
 - House Bill 32-Aircraft Fuel-Taxation of
 - The bill has been introduced and referred to the House Ways and Means Committee.
 - House Bill 49-Commercial Airline and Air Freight Commission-create
 - The bill has been introduced and referred to the House Transportation and Infrastructure Committee.
 - House Concurrent Resolution 8-To repudiate the claim by the State of Connecticut that Gustave Whitehead successfully flew a powered, heavier air machine of his own design on August 14, 1901, or on any other date.
 - The bill has been introduced and referred to the House Transportation and Infrastructure Committee. Sponsor testimony and proponent testimony have occurred and a vote is expected in the near future.
 - Chairman Perales recognized Amanda Wight Lane for her excellent support and testimony for the resolution.
 - For further information on this legislation you can visit <http://www.ohiohouse.gov/legislation/legislative-tools>

- Chairman Perales explained that meetings will occur monthly and meetings will be set and posted on the website.
- Chairman Perales encouraged the use and review of the website by all members of the committee as well as all interested parties. The website will be used for, but not limited to:
 - Committee Members and Professional Information
 - Pertinent Legislation
 - Schedule
 - Minutes
 - Relevant News Items
 - Other Items of Interest to the Committee and Interested Parties
- Chairman Perales introduced Dennis Andersh and Marty Kress as the facilitators for the meeting's work session.
 - Facilitators Mr. Andersh and Mr. Kress summarized their backgrounds.
- Facilitators presented the vision for high end federal jobs with a focus on key requirements at Wright Patterson Air Force Base (WPAFB) and NASA Glenn Research Center (GRC).
- Chairman Perales opened up discussion on the committee's Operating Guidelines and Strategic Initiatives.
 - Operating Guidelines
 - Mr. Kress emphasized the importance of meeting the current duties expressed in the enabling legislation (HB 292)
 - Mr. Kress expressed the importance of creating measurable and actionable initiatives
 - Mr. Kress brought up industry mapping, and the importance of uniting industry leaders, educational organizations, research organizations, state government agencies and national laboratories
 - Dr. Russo added that Battelle had done a similar mapping project 15 years ago.
 - Mrs. Louscher offered to share data which she has access in order to help the industry mapping effort. She also expressed sentiment that data is available, however resources to analyze said data is scarce.
 - Mr. Kress noted the importance of open lines of communications within the industry
 - Mr. Conley (substituting for Mr. Rolf) noted that Ohio is a supplier of many key systems and that any mapping effort should include downstream information for those suppliers.
 - Mr. Orkwis commented that in addition to a mapping effort we should talk about new ideas, not just existing systems and suggests adding some verbiage to express that need in the guidelines.
 - Mr. Shroder posed the question of where does Ohio rank in SBIR awards? He then expressed the need to advertise that answer. He then explained the need for commercial technologies, and the role of political forces in supporting small businesses to reach Phase III.

- Mr. Kress explained his familiarity with the SBIRs program and the difficulties surrounding the transition to Phase III.
- Chairman Perales asked that the committee discussion return to the discussion of the Operating Guidelines, and table the current discussion until the Strategic Initiatives portion of the work session.
- Mr. Jabour expressed a need for retraining skilled workforce to be added to the bullet point on uniting industry parties.
- Mr. Kress added that the younger generations are generally not looking for manufacturing jobs, and expressed a need to create a culture of making manufacturing 'cool'.
- Chairman Perales explained that while the OAATC and the Federal Military Jobs Commission (FMJC) are closely linked, they are separate entities. While the FMJC is related to only federal job issues, the OAATC is related to Aerospace and aviation regardless of private or public.
- Strategic Initiatives
 - Chairman Perales opened up discussion on bullet points 1 and 2 (Making aerospace and aviation (A&A) a higher state priority, and Increase recognition for the Ohio aerospace and aviation brand, respectively)
 - Mr. Kress expressed that the first two bullets are interconnected and opens up discussion on making A&A a higher state priority and increasing recognition of Ohio's A&A "brand".
 - Dr. Leland adds that Ohio has a stigma of not being a major player
 - Chairman Perales added that Ohio is lacking a significant physical presence at major A&A events in the country and worldwide.
 - Mr. Schroder adds that Ohio is 6th in the country in SBIR awards and suggests the Ohio may be number 1 in country in aviation related grants. He emphasizes the need to advertise this in an effort to improve the Ohio A&A "brand".
 - Mr. Andersh adds that Ohio is 7th in A&A research at the university level.
 - Chairman Perales moves on to the 3rd bullet point (Propose and support legislation at the state level that promotes aerospace and aviation technology development, jobs, manufacturing, services, research, education, and training). The Chair explained the importance that as a state we improve our legislation including borrowing from other states
 - Senator Beagle adds that they are always open to ideas from the experts in the industry.
 - Mr. Orkwis adds that we may need to change verbiage on the 5th bullet point, as not to offend large aviation entities such as GE.
 - Mr. Kress explained that the intent would be to allow small to medium sized firms cooperative options with universities that would otherwise not have access to those resources.

- Chairman Perales moved on to 4th bullet point (Position Ohio as the lead for new emerging technologies associated with aerospace and aviation)
 - The facilitators discussed some of the emerging technologies in the works (i.e. autonomous vehicles and household systems, and remodeling of air traffic control system)
 - Chairman Perales asked specifically where Ohio should focus efforts for UAS systems.
 - Mr. Kress expressed a need to pick a project and run with it.
 - Senator Beagle asked if universities have the capability to turn this endeavor around quickly.
 - Mr. Kress expressed a need for a cooperative effort where industry professionals could lead projects and set deliverable and measurable goals.
- Chairman Perales moved on to the 5th bullet point (Increase support for small and medium-sized aerospace and aviation firms).
 - Senator Beagle asked the facilitators for a vision of how to increase support to these small and medium-sized firms?
 - Mr. Kress and Mr. Andersh explain the opportunities for cooperation where university underutilized assets could be utilized by small firms in a collaborative way.
 - Mrs. Louscher expressed the difficulty in getting funding because of restrictive eligibility requirements.
 - Dr. Leland agreed and seconded this concern.
 - Senator Beagle asked what entities are causing these restrictions.
 - Dr. Leland explained that it was both rule makers and legislators.
 - Mr. Conley suggested that it was 80% rule making and 20% legislative.
 - Dr. Leland agreed.
 - The facilitators explained that expanding eligibilities to programs like Procurement Technical Assistance Centers (PTAC) could reduce time cost to small businesses. They added that a portal similar to the Defense Initiative Marketplace as value, but needs to be properly advertised to create awareness of the system.
- Chairman Perales moved on to the 7th bullet point (Propose and support education policy changes at both K-12 and postsecondary levels to produce an educated workforce that can support a robust aerospace and aviation sector).
 - Senator Beagle expects substantial subcommittee work in this area
 - Mr. Kress explained the need for both internships and hand-on learning (i.e. FIRST robotics program)
- Chairman Perales moved on to the 8th bullet point (Increase aerospace and aviation manufacturing).

- Mr. Andersh expressed the need for a system that makes entities aware of local manufactures that have the necessary capabilities
- Chairman Perales emphasized that we have all the pieces and posed the question of how to make use of the manufacturer's and suppliers.
- Mr. Jabour explained that when firms are looking for a supplier they want to meet two criteria:
 - Are they a trusted supplier?
 - What political benefits do we get?
- Mr. Kress drew a comparison to how this is done in Alabama.
- Senator Beagle asked how does a small business get their foot in the door as a supplier.
- Dr. Leland referenced an initiative to identify 'certified' suppliers (certified suppliers have to meet standards on equipment and capacity), and expresses the need to identify these suppliers and suppliers that are 'nearly certified'.
- Dr. Leland said that this initiative may be able to speak with committee on this topic as early as May or June.
- Mr. Conley added that workforce issues are the primary limiting factor in the manufacturing side.
- Mr. Jabour reiterated that political support is the basis for many subcontracting opportunities.
- Mrs. Louscher suggested generating a table of all state delegates and providing them with how many aerospace jobs are in their district
- Chairman Perales moved on to the 10th bullet point (Other aerospace and aviation initiatives as determined by the committee).
 - Mr. Russo asked about Base Realignment and Closure (BRAC) and obtaining an updated report.
 - Chairman Perales indicated that we will have a separate presentation of the FMJC findings, with key emphasis on how the OAATC can complement and fill in the gaps.
 - Mrs. Louscher suggested developing thrust areas that would perhaps lead to subcommittees and suggested the following
 - Outreach and Advocacy
 - Market Development
 - Workforce Development
 - Technology Development and Transition
 - Mr. Shroder agreed about the need for further organizational structures.
 - Mr. Williams expressed a need to develop priorities for the strategic initiatives.
 - Mr. Kress suggested that after a comprehensive list be made that the committee pick several areas that will validate the usefulness of the

committee and demonstrate the fulfillment of the enabling legislation.

- Mr. Brown (audience) Ohio Transportation Research Center is a similar organization that would be useful to look at and perhaps learn something from.
- Mr. Gessel (audience) wanted to clarify that bullet points 1 and 2 are different in the following way:
 - Bullet 1 (Making aerospace and aviation a higher state priority) would increase ongoing support within Ohio (internal communication).
 - Bullet 2 (Increase recognition for the Ohio aerospace and aviation brand) would increase outgoing communication with the global industry (external communication, branding).
- Chairman Perales thanked members of the committee as well as the attendees.
- Chairman Perales adjourned the OAATC meeting at 12:04pm.



Ohio Aerospace and Aviation Technology Committee

April 22, 2015 – Approved Minutes

Statehouse Room 122

Chairman Perales called the meeting of the Ohio Aerospace and Aviation Technology Committee (OAATC) to order at 10:08 AM on April 22, 2015.

- The roll was called. A quorum was present.
- Chairman Perales asked members to review the minutes from the previous two meetings. With no objections the minutes were approved.
- Chairman Perales explained that Terry Slaybaugh will be continuing in his position on the committee, and therefore there is no need for a new appointment.
- Chairman Perales announced that the next meeting will be held on May 20th, and suggested that an “if needed” meeting could be added in the month of June.
- Chairman Perales gave an update of all current legislation regarding the Aerospace and Aviation industry.
 - House Bill 32-Aircraft Fuel-Taxation of
 - The bill has been introduced and referred to the House Ways and Means Committee.
 - A similar version of the bill has been added to HB 64 which was brought to the house floor later that day and passed.
 - House Bill 49-Commercial Airline and Air Freight Commission-create
 - The bill has been introduced and referred to the House Transportation and Infrastructure Committee.
 - House Concurrent Resolution 8-To repudiate the claim by the State of Connecticut that Gustave Whitehead successfully flew a powered, heavier air machine of his own design on August 14, 1901, or on any other date.
 - The bill has been introduced and referred to the House Transportation and Infrastructure Committee. Sponsor testimony and proponent testimony have occurred and the resolution was voted out of committee unanimously. We hope it will reach the house floor in the next few weeks.
 - Chairman Perales recognized Amanda Wight Lane for her excellent support and testimony for the resolution.
 - HB64-HC2399x2-Ohio Military Facilities Commission-create

- The amendment has been added to the budget bill and passed out of the house.
 - For further information on all the legislation discussed you can visit <http://www.ohiohouse.gov/legislation/legislative-tools>
- Chairman Perales explained what his vision for the website was and asked all members and audience to participate in the review of the website.
- Chairman Perales introduced Mr. Andersh and Mr. Kress to facilitate the work session.
- Mr. Andersh explained that the input from the previous meeting had been synthesized to form focus areas. He also explained that informal work groups would be drawn and that the committee would look for a lead for each work group.
- Chairman Perales asked Mr. Andersh to start with the proposed committee operating guidelines.
- Mr. Andersh asked the members to review the listed operating guidelines in their folders:
 - Fulfill duties outlined in enabling legislation
 - Be “actionable” and “measurable”
 - Leverage or extend existing Ohio competitive advantage
 - Unite the leading aerospace organizations in the State, educational and research organizations, State government agencies, industry, and the national laboratories
 - As a group, seek to achieve statewide political consensus
- Chairman Perales moved to adopt the operating guidelines
- Rep. Baker seconded.
- With no objections, Chairman Perales adopted the committee operating guidelines.
- Mr. Andersh reiterated the focus areas and listed the sub-bullets for the Outreach focus area:
 - Branding Ohio as an aerospace and aviation state outside the state
 - Building support for aerospace and aviation within the state
 - Marketing Ohio’s aerospace and aviation industry
- Mr. Russo suggested that the committee add aviation tourism to the Outreach focus area.
- Mr. Heil agreed and drew comparison with Huntsville as setting a good example in the tourism area.
- Mr. Orkwis suggested that the Outreach focus area include reaching out to students in order to bring them to Ohio universities.
- Rep. Baker explained that Ohio Means Jobs has an extensive website, and suggested that the OAATC partner with Ohio Means Jobs to get a section on the website.
- Chairman Perales agreed, and added that later in the meeting he would request volunteers to lead a work group regarding each focus area. He asked that members keep that in mind moving forward with discussion.
- Sen. Schiavoni introduced himself to the committee and apologized that he would have to be in and out throughout the meeting due to scheduling conflicts. He assured the committee that his busy schedule should not be seen as a reflection of his dedication to the committee
- Chairman Perales thanked him for speaking on that matter.
- Sen. Beagle agreed with the sentiments expressed by Sen. Schiavoni.
- Mr. Andersh listed the sub-bullets for the Workforce Development focus area and opened up discussion on the topic:
 - K-12 education

- Postsecondary education
- Internships
- Workforce training
- Mr. Bailey expressed a need for a retraining program specifically for former military members, since their training is mostly on military aircraft, they have skills that can be easily transferred to work on and with commercial aircraft.
- Mr. Russo expressed a need for STEM pipeline for students.
- Rep. Baker advised that the committee keep in mind the existing legislation when the informal work groups are meeting.
 - Rep. Baker explained House Bill 488 from the last general assembly (GA) that offers college credit, special licensing and priority scheduling to former military.
- Mr. Heil spoke about the Ohio Space Grant Consortium.
- Chairman Perales suggested to Julie Hartzel (website) that information on current programs and existing legislation be put on the website.
- Mr. Orkwis expressed a need for adding co-ops to the internship sub-bullet within workforce development.
- Mr. Andersh listed the sub-bullets for the Industry Support focus area and opened up discussion on the topic:
 - Promoting SBIR
 - Tax issues
 - Foreign military sales help
 - Certification for major suppliers
 - Data gathering
 - Linking AFOSR to small business needs
 - Supporting aerospace manufacturing
 - Regulatory relief
 - Assistance particularly relevant to small businesses and start-ups, including building links with universities and government technology facilities
- Mr. Brown expressed a need for tax incentives and added that those incentives for businesses could also aid in multiple categories including the Outreach focus area to help with the “branding” of Ohio as aviation and aerospace friendly.
- Mr. Shroder suggested that commercialization be added under the Industry Support bullet in order to support new technologies at all levels. He emphasized that not just small businesses and start-ups should be targeted but rather the industry as a whole.
- (A member) suggested that somewhere in the bullets there is an emphasis to tighten relations between NASA Glenn and the Air Force Research Laboratory (AFRL).
- Chairman Perales expressed that the relationship between NASA Glenn and AFRL should be a priority item for the committee. He added that the two organizations should be in lock step.
- Mr. Andersh listed the sub-bullets for the Technology Development focus area and opened up discussion on the topic:
 - Technology commercialization from federal entities and university laboratories
 - Securing more connections between AFOSR and Ohio universities

- Identify and support particular emerging technologies associated with aerospace and aviation
- Mr. Andersh suggested that in addition to the Air Force Office of Scientific Research (AFOSR), the committee add NASA Glenn and AFRL to the sub-bullet about involving connecting universities with research organization.
- Mr. Orkwis suggested that state funding be added to the Technology Development focus area.
- Mr. Tanner added that next generation technologies specifically communications technologies should be added to the Technology Development focus area.
- Chairman Perales reiterated that the informal work groups would be able to expand on the sub-bullets listed in order to get more specific within each focus area.
- Mr. Brown brought up the fact that quite a few of the suggested sub-bullet additions are easily absorbed into the Industry Support focus area.
- Mr. Andersh listed the sub-bullets for the Federal Aerospace and Aviation Installations Support focus area and opened up discussion on the topic:
 - Helping installations prepare for a BRAC round
 - Building stronger constituencies with the state in support of federal aerospace and aviation installations
- Rep. O'Brien introduced himself and explained that he had recently been to Youngstown Air Force Base (AFB). He added an emphasis on not duplicating other efforts in the state regarding the Federal Aerospace and Aviation Installations Support focus area.
- Chairman Perales asked Sen. Widener if he would be able to clarify the current landscape regarding this focus area and the roles various organizations currently have.
- Sen. Widener explained that there is already an effort to simplify the large number of commissions and committees tackling this issue:
 - Sen. Widener explained that the Federal Military Jobs Commission (FMJC) has recently split up into small groups and held meetings throughout the State.
 - He also explained that the FMJC will provide a long term strategy to promote workforce development within the state, referencing the need for collaboration between industry and universities.
- Chairman Perales emphasized the need for the various committees and commissions to work together and suggested that one of the primary focuses of the OAATC would be to obtain federal research dollars to support civilian industries at the state level.
- Mr. Kress mentioned that they have developed a tracking chart to ensure all organizations are complimentary and not overlapping.
- Mr. Bailey suggested that the committee be somehow represented at other committee and commission meetings.
- Sen. Widener explained that the FMJC was born from conversations with Huntsville even though they are commonly cited as a competitor. He added that private companies have been historically the best advocate to support the aviation industry.
- Mr. Tanner added that the FAA reauthorization will happen this year and awareness needs to be improved.
- Chairman Perales suggested that be added to the Outreach focus area.

- Mr. Brown reiterated the need to know about existing legislation, programs and events. He also asked about where reports on these items are published.
- Mr. Andersh explained that the FMJC has already submitted it's report and suggested getting that sent out to the members of the OAATC.
- Rep. Baker explained that universities frequently have trade shows and events, and the committee should try to help promote them.
- Mr. Andersh emphasized the significance of "connecting the dots."
- Rep. O'Brien moved to adopt the five focus areas.
- Rep. Baker seconded that motion.
- With no objections, Chairman Perales adopted the committee focus areas.
- Chairman Perales explained that he would now ask for volunteers to lead five informal work groups.
- Mr. Brown volunteered to lead a group focused on Outreach.
- Mr. Russo volunteered to lead a group focused on Workforce Development.
- Mr. Bailey and Mr. Shroder volunteered to lead a group focused on Industry Support.
- Mr. Orkwis volunteered to lead a group focused on Technology Development.
- Mr. Russo nominated Mr. Jabour to lead a group focused on Federal Aerospace and Aviation Installations Support.
- Robert McColley (audience) asked if non-committee members could participate in the informal work groups.
- Chairman Perales responded that the committee would address that question after introductions. He then asked all audience members to introduce themselves and tell about who they represent.
- Audience members introduced themselves. (Please see attached)
- Chairman asked if there were any objections to non-committee members participating in informal work groups. There were none.
- Chairman Perales asked all committee members to introduce themselves.
- Committee members introduced themselves.
- Mr. Russo asked what the expectations of the group leads were.
- Chairman Perales explained that the leads will be responsible for organizing the groups meetings as well as setting the agenda for those meetings. He then explained that the groups would report back to the committee with their suggestions on how to proceed within each focus area at the meeting scheduled for May 20th.
- Mr. Russo asked if the Chair would send each group lead suggestions for group members.
- Chairman Perales agreed to send those out by the end of the week.
- Chairman Perales thanked everyone for attending the meeting.
- Chairman Perales adjourned the meeting at 11:44am.

OAATC 4/22/15 Audience Sign-in	
Name	Organization
David Turkaic	LNE Group-Parker Hannifin
Glenn Richardson	JobsOhio
Justin McCaulley	McCaulley & Company
Ryan Smith	State of Ohio, Director of UAS
Margie Rolf	University of Cincinnati
Bryan Budds	Aircraft Owners & Pilots Association
Amy Baker	Ohio State University, Gov. Affairs
Brian Perera	Ohio State University
Phyllis Howard	Policy Board FED Aviation Liason
Zane Brown	Independent UAS/Airspace/Aviation Consultant
Doug Hammon	Ohio State University
Thomas Lockhart	Air Force Research Lab
Steven Johnson	Senate Minority Leader J. Schiavoni
Kevin Sigg	Michael Baker International
Paul Strack	Ohio Aviation Association (OAA)
Michael Gessel	Dayton Development Coalition
Tom Kueterman	Friends of NASA Plum Brook Station
Jeff Huber	Friends of NASA Plum Brook Station
Kurt Landefeld	Friends of NASA Plum Brook Station



Ohio Aerospace and Aviation Technology Committee

May 20, 2015 – Approved Minutes

Statehouse Room 017

Chairman Perales called the meeting of the Ohio Aerospace and Aviation Technology Committee (OAATC) to order at 10:06 AM on May 20, 2015.

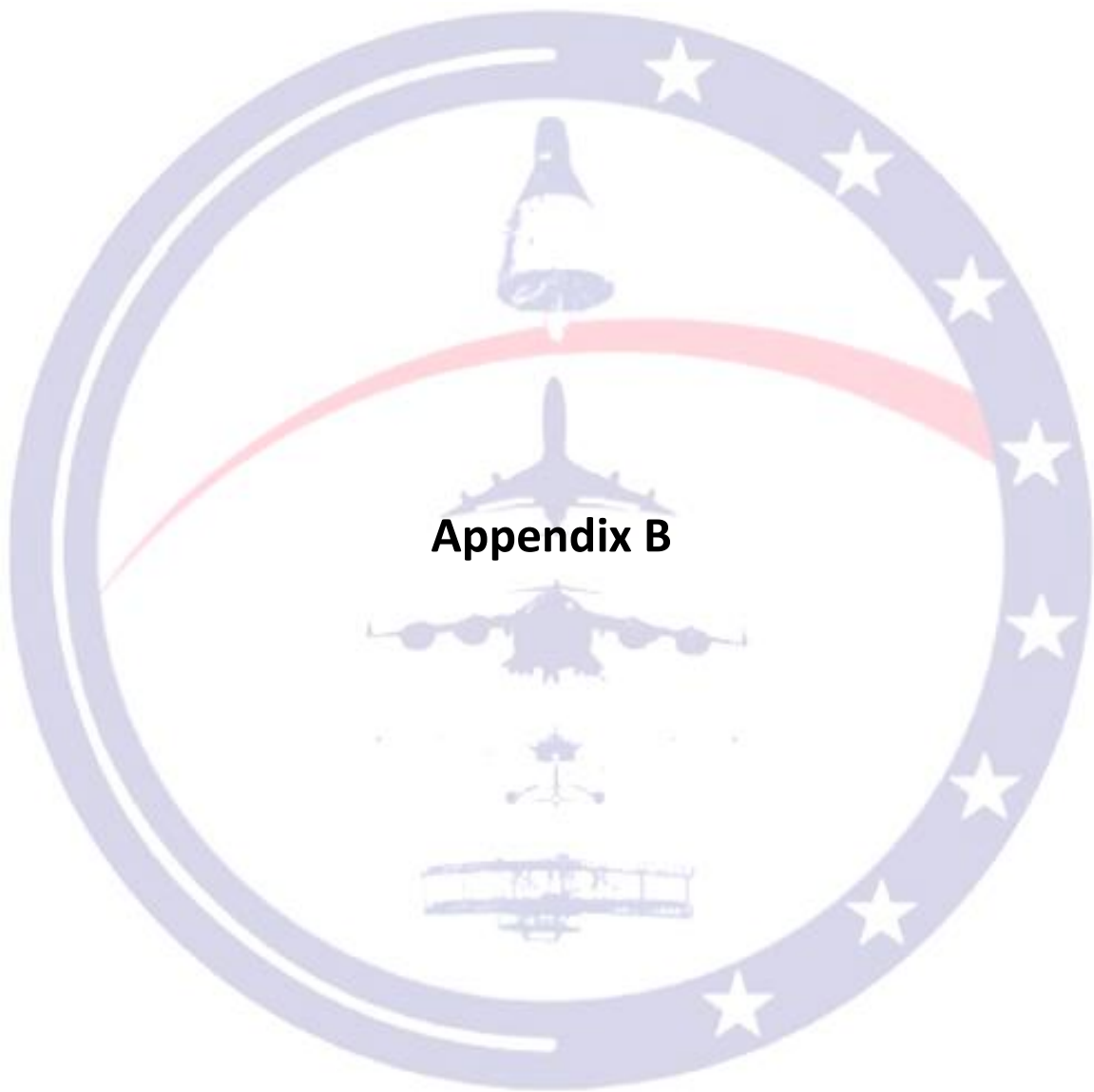
- The roll was called. A quorum was present.
- Chairman Perales asked members to review the minutes from the previous meeting. With no objections the minutes were approved.
- Chairman Perales briefed the committee on current legislation related to aerospace and aviation.
- Chairman Perales explained that the report that is mandated by the statute (HB 292) will be due July 1st.
- Chairman Perales explained that the Chairman's report will be a starting place and that the committee will continue to refine their recommendations over a significant period of time.
- Chairman Perales introduced Col. Dignan, Commander of the 910th Airlift Wing, Youngstown Air Base, Ohio.
 - He testified about the value of the OAATC and the need for a unified strategy for the state of Ohio.
- Chairman Perales introduced Professor Jim Gregory from the Department of Mechanical and Aerospace and Engineering at The Ohio State University.
 - He informed the committee that the University joined a national team to run a new National Center of Excellence for Unmanned Aircraft Systems.
- Chairman Perales thanked the guests for speaking and opened up the discussion of the focus area reports. He then asked for the Outreach workgroup to begin with their priorities.
- Tony Bailey presents on the priorities of the Outreach workgroup.
 - He explained that the goals of the Outreach workgroup were to brand Ohio as a leading aerospace and aviation state both within and outside of the state.
 - He explained that there should be an emphasis on the historical role of Ohio in aviation and aerospace, the current role and the future role.
 - Mr. Bailey listed the major content areas for the marketing message:
 - Existing labor force and infrastructure
 - Colleges and universities supporting aviation and aerospace

- Business taxes and incentives compared to other states
 - Cost of living in Ohio compared to other states
 - Marketing themes, facts, and figures
- Mr. Bailey explained that Ohio should have a more significant presence at trade shows and conferences.
- Chairman Perales agreed that the OAATC should have representation on other committees and councils as well as a presence at aerospace and aviation events and conferences. He adds that if priorities of the groups require expanding the resources of the committee, that responsibility falls to the legislative members of the committee.
- Tony Bailey continued to present on the priorities of the Outreach workgroup.
 - He explained that the four main components in creating this type of program are:
 - Message
 - Target Audience
 - Message Mediums
 - Scheduling
 - He stated that in summary, there is a lot here. It seems daunting, but we need to break it into parts and pick off one thing at a time.
- Chairman Perales opened up the floor for questions
- Glenn Richardson (audience) from JobsOhio brought up that JobsOhio is currently in the process of doing some of what was brought up by Mr. Bailey.
- Mr. Bailey asked if Glenn Richardson would like to join the workgroup in order to aid in their efforts.
- Mr. Richardson replied absolutely and expressed that JobsOhio could be a key resource for the committee and workgroups.
- Chairman Perales thanked Mr. Richardson and added that the Outreach workgroup should add a strategy to create a compilation of events so that the committee could choose selectively which events to be present at.
- Mr. Richardson expressed that there are so many of these events and conferences going on constantly, that the committee would have to choose wisely which to attend.
- Ron Shroder emphasized that communication between workgroups is very important since there is a lot of overlap between different working groups.
- Vince Russo added that every year Ohio hosts the Oscars of Aviation, and that very few people even within the industry are aware of its existence. He asked that this particular event be added to the thought and considerations of the Outreach group.
- Mr. Bailey expressed that there was a common theme of not knowing what was out there, and expressed a need for a strategy for leveraging those opportunities.
- Chairman Perales expressed a need for an inventory of these events in an attempt to make the state smaller and more interconnected.
- Chairman Perales moved on to the Workforce Development workgroup.
- Vince Russo presented the Workforce groups priorities.
 - Mr. Russo explained that a key factor for the Workforce group will be to ensure they are not duplicating the efforts of the Ohio Federal Military Jobs Commission (FMJC).

- Mr. Russo added that the OAATC could focus on K-12 STEM education and leave the post-secondary level to the FMJC.
- He suggested that retraining programs could also be important to support.
- Mr. Russo also expressed a need for administrative help and a need to widen the scope of the group.
- Chairman Perales asked how to best provide this help and asked how Mr. Russo would widen the groups' diversity.
- Mr. Russo suggested including more persons with experience in k-12 STEM education and/or experience with internship programs.
- Mr. Richardson added that the Office of Workforce Transformation could have some resources for the inclusion of retraining programs.
- Chairman Perales moved on to the Technology Development workgroup.
- Mike Heil presented the report of the Technology Development workgroup. He emphasized the history of technology innovation in Ohio beginning with the Wright Brothers and continuing today with the variety of federal and state research institutions. He continued to include the importance of supporting the FMJC Centers of Excellence model to encourage industry input and commercialization to the research institutions.
- Mrs. McFarland added that priority 1 of the Technology development group, "Identify the critical technologies needed by the Ohio aerospace industry and government laboratories, and foster their development at Ohio academic and research institutions", should be the lead priority of the full committee. She also suggested that the full committee develop a list of priorities moving forward.
- Mr. Shroder added that it is important to have a mechanism to distribute that data to companies, citing that at his small business, he has no way to know who in academia he would be able to call in order to bridge the gap.
- Mr. Heil explained that a full package of resources should be available to companies, and that the committee itself would need further resources to accomplish that task.
- Mr. Bailey explained that some technologies are able to be repurposed to different applications.
- Ricky Peters (audience) from the Air Force Research Laboratory (AFRL) explained that currently the majority of money is spent supporting small businesses and that the amount of AFOSR monies going to universities is currently only 4%. He added that he believes that number to be far too low.
- Chairman Perales thanked Mr. Peters for his contribution.
- Jim Free (audience) from NASA Glenn Research Center added that he believes that NASA has lost contact with the state's universities, and suggested that teaming up with universities can be critical in order to leverage federal research dollars. He added that currently 70% of those research dollars are going to small businesses.
- Mrs. McFarland posed the question that with respect to the discussion on federal research dollars and state universities, how many students are remaining in Ohio after they graduate.
- Mr. Russo remarked that Mrs. McFarland's question was very valid and asked whether that responsibility would fall to the OAATC or the FMJC?

- Mr. Shroder added that if the process of commercialization and cooperation between industry and universities is done properly, a possible by-product could be that more Ohio graduates would stay in the state following graduation.
- Chairman Perales moved on to the Industry Support group.
- Mr. Bailey presented the priorities of the Industry Support group.
 - Priority 1 - Data Gathering & Community Feedback – Determine Community’s Priorities and Action Plans
 - Example: Investments with best ROI for Aviation Manufacturing
 - Example: Impact for Industry and Gov of Shared Ohio Technology Thrusts
- Mr. Bailey explained that further research needs to be done before further priorities could be established. He listed the following questions that need to be addressed:
 - What academic and research institution support exists for the industry?
 - What existing programs are there for aviation related services and manufacturing?
 - What commercialization / technology transfer support does the state offer?
 - What legislation is in work currently?
 - What positive incentives exist in other states?
 - What AFOSR collaboration exists for Ohio and what existing support exist for AFSOR?
 - What can be done to facilitate technology from and to various federal orgs in the state?
 - What existing foreign contracting support programs exist for aviation businesses?
 - Can the State set up contracting office in foreign territories?
 - Can industry form some sort of foreign support network?
 - What existing support programs exist for aviation manufacturers?
 - Can the State set up “hunting” teams to go after potential manufacturers?
 - Can industry form some sort of manufacturing support network?
 - What aviation government representation exists for Ohio?
 - What existing support programs exist for regulatory relief?
 - Can industry form some sort of certification support network?
- Mr. Bailey moved on to Priority 2 of the Industry Support group.
 - Priority 2 - Taxes – Identification of Opportunities
 - Example: Fly-Over Taxes
 - Example: Aircraft Lease Tax Incentives
- Mr. Bailey explained that 30 states already have some form of a fly away tax exemption in which the purchaser of an aircraft would not pay sales tax in that state, provided that the aircraft was in the state only temporarily for the purpose of sale and maintenance.
- Mr. Bailey moved on to Priority 3 of the Industry Support group.
 - Priority 3 -Small Business
 - Example: SBIR Incentives
 - Example: AFOSR Collaboration with Academia
- Mr. Tanner explained that all of the focus groups have been looking at similar issues through different lenses. He suggested that all of the priorities mentioned so far fit into three basic areas:
 - Economic development
 - Enhancing of business capabilities

- Federal and state regulatory policy
- Chairman Perales suggested that it is important for the committee to remain open to any changes to the organization of the committee that could make the committee run more efficiently or effectively.
- Chairman Perales moved on to the Installations Support group.
- Mr. Jabour started by explaining that if we continue to focus solely on supporting the physical structures of Ohio's federal and state defense and aerospace installations, that we are fighting battles and not the war.
- Mr. Jabour suggested that the installations group provide support to the Industry Support group in order to identify economic or regulatory recommendations for the committee that would enhance Ohio businesses and suppliers to State and Federal Installations to better posture those installations during force structure evaluations.
- Mr. Jabour suggested that the installations group provide support to the Workforce Development group in order to identify specific workforce related initiatives that Federal installations could benefit from and recommend to the committee how to implement them.
- Mr. Jabour added that the value of internship when looking at retaining Ohio's students and training the next generation of workers is very high, and the committee should support internship opportunities or programs at these state and federal installations.
- Col. Dignan (audience) added that the FMJC is a good start for these installations. He added that the Dayton Development Coalition has had success working in collaboration with Wright-Patterson Air Force Base, however most other bases in Ohio do not have that kind of support. He mentioned that the Youngstown Air Reserve Base has had trouble with finding support at any level including local, regional and state. He continued to add that in Alabama the Governor is responsible for a program that provides a statewide strategic initiative aerospace and aviation.
- Chairman Perales thanked all of the committee members and audience for attending the meeting.
- Chairman Perales adjourned the meeting at 12:04pm.



Appendix B

OAATC Outreach

May 2015

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Outreach Members

- **Lead**
 - Mark Brown
- **Members**
 - Maureen McFarland
 - Jeff Rolf
 - Tony Bailey
 - Sue Louscher

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2



Outreach Goals

- **From the 22 April 2012 meeting:**
 - Branding Ohio as an aerospace and aviation state outside the state
 - Building support for aerospace and aviation within the state
 - Marketing Ohio's aerospace and aviation industry
 - Promoting aviation tourism
- **Outreach means Messaging which includes Message Content, Target Audience, and Transmission Method**
- **Each audience requires a different message (usually) and a different combination of transmission mediums**

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Message Content Needed

- **Branding Ohio as an aerospace and aviation state outside the state**
 - Historical role in aviation and aerospace
 - Current role in aviation and aerospace
 - Future role in aviation and aerospace
 - Branding themes, facts, and figures
 - Target audience for messaging
- **Industry Association Representation**
 - Identify possible associations and "appoint" member representatives
 - Promote Ohio initiatives to Associations
 - Utilize Industry Associations for Federal Government Political Pressure
 - Utilize Association Memberships to target potential Ohio businesses
- **Building support for aerospace and aviation within the state**
 - Historical role in aviation and aerospace
 - Current role in aviation and aerospace
 - Future role in aviation and aerospace
 - Support themes, facts, and figures
 - Target audience for messaging

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Message Content Needed

- **Marketing Ohio's aerospace and aviation industry**
 - Historical role in aviation and aerospace
 - Current role in aviation and aerospace
 - Future role in aviation and aerospace
 - Existing labor force and infrastructure
 - Colleges and universities supporting aviation and aerospace
 - Business taxes and incentives compared to other states
 - Cost of living in Ohio compared to other states
 - Marketing themes, facts, and figures
 - Target audience for messaging
- **Identifying key marketplace needs & matching to Ohio capabilities**
 - Identify key assets of Ohio including fixed assets, educated workforce, airspace, support infrastructure
 - Identify key emerging needs of potential tier 1 airframe, UAV, and engine companies around the world, and their expansion needs
 - Pursuit: Build value proposition and approach prospective customers for Ohio manufacturing, design and development, or testing sites

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Message Content Needed

- **Promoting aviation tourism**
 - Ohio aviation tourism destinations
 - Historical role in aviation and aerospace
 - Current role in aviation and aerospace
 - Future role in aviation and aerospace
 - Marketing themes, facts, and figures
 - What makes Ohio's aviation destinations attractive
 - Target audience for messaging

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Messaging Methodologies/Vehicles

- Radio
- TV
- Magazines
- Newspapers
- Social media
- Trade shows/Conferences
- Others?

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Transmitting the Unique Messages

- **General Branding Plan**
 - Message
 - Delivery medium
 - Timing
- **Intra-State Support Plan**
 - Message
 - Delivery medium
 - Timing
- **Industry Marketing Plan**
 - Message
 - Delivery medium
 - Timing
- **Tourism Advertising Plan**
 - Message
 - Delivery medium
 - Timing

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Outreach Actions

- **Priority 1: The Message**
 - Work to define messaging nuggets for:
 - Historical role in aviation and aerospace
 - Current role in aviation and aerospace
 - Future role in aviation and aerospace
 - Develop additional nuggets for each target audience
 - What will attract them?
 - What can we claim?
 - What should we change to be more attractive?
- **Action Party/Organizations**
 - This is bigger than the Outreach Committee
 - Who can we work with?
 - What information already exists?
- **Description and Actions**
 - A team effort is needed to figure out what our unique messages should be for each target audience

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Outreach Actions

- **Priority 2: Target Audiences**
 - General Branding
 - Intra-State Support
 - Industry Marketing
 - Tourism Advertising
- **Action Party/Organizations**
 - Also bigger than just the Outreach Committee
 - Who can we work with?
- **Description and Actions**
 - The Target Audiences needs further breakdown
 - Their wants and needs need to be understood
 - Messaging needs to be tailored along these lines

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Outreach Actions

- **Priority 3: Message Delivery Medium for each Target Audience**
 - How best to reach/appeal to each target audience
 - What mediums do we have the ability to employ
 - What is our budget
- **Action Party/Organizations**
 - Also bigger than just the Outreach Committee
 - Who can we work with?
- **Description and Actions**
 - Begin to think about the best way to deliver messages to each target audience
 - What resources can be employed

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Outreach Actions

- **Priority 4: Message Delivery Schedule for each Target Audience**
 - Each of these priority areas will have its own schedule
 - The schedules need to be combined to develop an overall program plan
- **Action Party/Organizations**
 - Also bigger than just the Outreach Committee
 - Who can we work with?
- **Description and Actions**
 - Rough out a notional schedule for the next OAATC meeting

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Summary

- **Four major tasks**
 - Message
 - Target Audiences
 - Message Mediums
 - Scheduling
- **All need to be worked**
- **All bigger than the Outreach Committee**
- **We will do our part!**

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OAATC Workforce Development

May 2015

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Workforce Development Members

- **Lead**
 - Vince Russo
- **Members**
 - Maureen McFarland
 - Jeff Rolf
 - David Williams
 - Sue Louscher

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Workforce Development Priorities

- Priority 1: Understand what has already been done, with particular interest in the OFMJC and related activities
- Priority 2: Meet to review information and develop the next steps
- Priority 3: TBD

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Workforce Development Priority 1

- Action Party/Organization
 - Russo
- Description and Actions
 - Initial email to members soliciting their thoughts
 - First meeting held 12 May with Cassie Barlow, Workforce Chair for OFMJC
 - Initial agreement on possible areas of concentration

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Workforce Development Priority 1

Possible areas of concentration

OAATC	OFMJC
K-12 with emphasis on STEM	Post secondary education
Internships and Co-ops	Job placement

Other areas of possible interest

STEM in pre-school
Tools for counselor
Worker training

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Workforce Development Areas of Concern

- No administrative resources
 - Contacts, research, follow-ups, coordination etc. all to be done by volunteers?
- Difficult to arrange team meetings
- Composition of the team needs widening
- Written report expectations
- Timing

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OAATC Technology Development

May 2015

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Technology Development Members

- **Lead**
 - Paul Orkwis
- **Members**
 - John Leland
 - Mike Heil
 - Roderick Munn
 - Bob Tanner

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Technology Development Priorities

- Priority 1 – Identify the critical technologies needed by the Ohio aerospace industry and government laboratories, and foster their development at Ohio academic and research institutions.
- Priority 2 – Identify barriers to effective collaboration between industry and academia and between academic institutions.
- Priority 3 – TBD

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Technology Development Priority 1

- Priority 1- Identify the critical technologies needed by the Ohio aerospace industry and government laboratories, and foster their development at Ohio academic and research institutions.
- Action Party/Organization
 - Ohio Aerospace Companies (Identify)
 - Air Force Research Laboratory and NASA Glenn Research Center (Identify via OFMJC assessment)
 - Ohio Academic Institutions (Organize collaboration teams)
 - General Assembly (Support)
- Description and Actions
 - Enhance OFMJC Centers of Excellence with industry input.
 - Short term – Engage industry in evaluation of OFMJC CoE ability to meet industry needs
 - Long term – Legislation to create line items to fund this program

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Technology Development Priority 2

- Priority 2- Identify barriers to effective collaboration between industry and academia and between academic institutions.
- Action Party/Organization
 - Ohio Academic Institutions and Ohio Aerospace Companies (Identify roadblocks to effective utilization of existing State programs.)
 - General Assembly (Support)
- Description and Actions
 - Eliminate roadblocks
 - Short term – TDWG to survey industry and academia to identify roadblocks
 - Long term – TDWG to work with legislature to implement meaning changes

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OAATC Industry Support

May 2015

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Industry Support Members

- **Lead**
 - Ron Shroder
 - Tony Bailey
- **Members**
 - Roderick Munn
 - Bob Tanner
 - Paul Orkwis

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Industry Support Priorities

- **Priority 1 - Data Gathering & Community Feedback – Determine Community's Priorities and Action Plans**
 - Example: Investments with best ROI for Aviation Manufacturing
 - Example: Impact for Industry and Gov of Shared Ohio Technology Thrusts
- **Priority 2 - Taxes – Identification of Opportunities**
 - Example: Fly-Over Taxes
 - Example: Aircraft Lease Tax Incentives
- **Priority 3 -Small Business**
 - Example: SBIR Incentives
 - Example: AFOSR Collaboration with Academia

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Industry Support Priority 1 Data Gathering

- Industry Support Members
- Description and Actions
 - Identify Required Research by Element and research the following questions
 - What academic and research institution support exists for the industry?
 - What existing programs are there for aviation related services and manufacturing?
 - What commercialization / technology transfer support does the state offer?
 - What legislation is in work currently?
 - What positive incentives exist in other states?
 - What AFOSR collaboration exists for Ohio and what existing support exist for AFSOR?
 - What can be done to facilitate technology from and to various federal orgs in the state?
 - What existing foreign contracting support programs exist for aviation businesses?
 - Can the State set up contracting office in foreign territories?
 - Can industry form some sort of foreign support network?
 - What existing support programs exist for aviation manufacturers?
 - Can the State set up "hunting" teams to go after potential manufacturers?
 - Can industry form some sort of manufacturing support network?
 - What aviation government representation exists for Ohio?
 - What existing support programs exist for regulatory relief?
 - Can industry form some sort of certification support network?
- Timeframe – 6-12 months

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Industry Support Priority 2 Taxes

- Industry Support Members
- Description and Actions
 - Research
 - What existing tax relief programs exist for aviation related services and manufacturing?
 - What legislation is in work currently?
 - What positive tax incentives exist in other states?
 - Propose
 - Fly-Over Tax Incentive
 - Others including aircraft lease, distributor tax, etc.
 - Program Collaboration Opportunities
 - Timeframe – 6-9 months

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Industry Support Priority 3 Small Business

- Industry Support Members
- Description and Actions
 - Research
 - What existing support programs exist for aviation small businesses?
 - What do other states offer aviation small businesses that Ohio doesn't?
 - What innovative approaches can we take to assist small business development?
 - What capabilities does the SBIR program have?
 - How do business get more involved with SBIR?
 - Propose
 - SBIR Support
 - Academia connection with Small Business and AFOSR, sole source, etc.
 - Program Collaboration Opportunities
 - Timeframe – 6-9 months

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OAATC Installations Support

May 2015

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Installations Support Members

- **Lead**
 - Jay Jabour
- **Members**
 - John Leland
 - Ron Shroder
 - Vince Russo
 - Mike Heil

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Installations Support Objectives

- Recommend to the Committee legislation or policies that support State and Federal Aerospace and Aviation related installations
 - Scope
 - Active and reserve military installations
 - National Guard installations
 - Aerospace related Research and Development focused installations
 - Potential Focus Areas
 - Enhance posture of Ohio companies that support installations
 - Educational institutions that support State and Federal installation mission
 - Force structure related activities at the Federal level that may effect Ohio installations

OAATC Installation Support Panel

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Installation Support

- Priority 1
 - Identify recommendations on how to coordinate local and regional efforts that are focused on supporting Active/Guard/Reserve/Research installations in upcoming or potential force structure actions
- Action Party/Organizations
 - Panel members
 - Legislators
- Description and Actions
 - Identify which installations state-wide are potential targets for force structure actions
 - Use past force structure actions to build a list of installations
 - Search service almanacs to identify major installation
 - Identify any local or regional efforts that are on-going or planned and focus on posturing those installations for potential force structure changes

OAATC Installation Support Panel

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Installation Support

- Priority 2
 - Identify economic or regulatory recommendations for the committee that would enhance Ohio businesses and suppliers to State and Federal Installations to better posture those installations during force structure evaluations
- Action Party/Organizations
 - Panel members
 - Industry Support Panel
- Description and Actions
 - Reach out to businesses, educational and trade organizations to identify any economic or regulations that they feel would enhance their posture to support Installations in a force structure evaluation
 - For example, Dayton Defense, NDIA, etc.

OAATC Installation Support Panel

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Installation Support

- Priority 3
 - Identify specific workforce related initiatives that Federal installations could benefit from and recommend to the committee how to implement them
- Action Party/Organizations
 - Panel members
 - Workforce Development Panel
 - OFMJC Coordination
- Description and Actions
 - Identify workforce related initiatives with potential to enhance an installations posture in future force structure actions
 - For Example; State support to Internships that target skill sets needed by Federal Installations
 - Recommend to committee panel of committee implementation

OAATC Installation Support Panel

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