

捌、附件

一、新聞媒體報導

THE COMMONS DAILY 民眾日報 2015年7月22日



在愛達荷州副州長Brad Little的見證下，工業局長吳明機（右2）與愛達荷州商務廳簽署合作備忘錄。（記者許亞第攝）

經部訪美團 愛達荷州簽備忘錄

【本報記者許亞第台北報導】經濟部工業局吳明機局長率領「台美產業合作與商機訪問團」，20日在愛達荷州副州長Brad Little的見證下，與愛達荷州商務廳簽署合作備忘錄，雙方合作領域擴大為綠能、半導體、航太及創新產業化等4個產業領域。雙方產業將在此一平台下密切合作，開啓「由台美官方搭橋，雙方產業上橋，透過聯盟聚落加速合作」的創新模式，共同推動多元產業合作的新紀元。總計本次簽署備忘錄將可促進新台幣550億元以上之投資與潛在效益。

經濟部表示，半導體是愛達荷州重要產業，全球第4大半導體公司美光科技（Micron）總部即設於此，另包括惠普科技（HP）、美國半導體科技（American Semiconductor）等公司都在愛達荷州設有相當規模的研發及生產基地，深化雙方在半導體產業的合作，將可促進相關美商在台擴大投資，導入半導體先進技術。愛達荷州近年積極發展航太業，並已形成41家頗具規模的產業聯盟，推動雙方航太業者的交流合作，將可爭取雙方廠商合作生產輕型飛機、無人飛機及航電設備等，共同爭取美國暨全球航空市場商機。

此外，愛達荷州創新產業化相當活躍，愛州政府為此更大力推動IGEM（Idaho Global Entrepreneurial Mission）計畫，來活化創新成果，創造新產品、新公司及就業機會。此與我國政府積極推動創新產業化，以促進新產業的方向不謀而合，透過本合作備忘錄的簽署，將可結合雙方資源，共同提升創新價值，加速新興產業發展。

70億美元創投銀彈 瞄準生技

另為拚經濟，經濟部工業局長吳明機率領「台美產業合作與商機訪問團」昨與美國愛達荷州商務廳簽署合作備忘錄，雙方對綠能、半導體、航太、創新產業化等4項產業領域擴大合作，總計將促進550億元以上投資與潛在效益。

臺灣時報
西元2015年(中華民國一〇四年)七月廿二日 星期三

經部與美搭橋 4產業擴大合作

【記者林文雄台北報導】經濟部工業局吳明機局長率領「台美產業合作與商機訪問團」，昨與美國愛達荷州商務廳簽署合作備忘錄，雙方合作領域擴大為綠能、半導體、航太及創新產業化等4個產業領域，開啓「由台美官方搭橋，雙方產業上橋，透過聯盟聚落加速合作」的創新模式，共同推動多元產業合作的新紀元！總計本次簽署備忘錄將可促進550億元以上之投資與潛在效益。

半導體是愛達荷州重要產業，全球第4大半導體公司美光科技總部即設於此，另包括惠普科技、美國半導體科技等公司都在愛達荷州設有相當規模的研發及生產基地，深化雙方在半導體產業的合作，將可促進相關美商在台擴大投資，導入半導體先進技術。

紫光擬收購 美光：不現實

【台北訊】外電報導，記憶體大廠美光已告知中國大陸清華紫光集團，收購提議「不現實」。

國外媒體日前報導，中國大陸清華紫光集團有意以230億美元收購美光。

工業局長率團赴美簽MOU

我與愛達荷州 產業合作

【台北訊】經濟部工業局長吳明機率領「台美產業合作與商機訪問團」，日前在愛達荷州副州長Brad Little見證下，與愛達荷州商務廳簽署合作備忘錄，雙方合作領域擴大為綠能、半導體、航太及創新產業化等四個產業領域。

雙方產業將在此一平台下密切合作，開啓「由台美官方搭橋、雙方產業上橋、透過聯盟聚落加速合作」的創新模式，共同推動多元產業合作的新紀元。

工業局指出，半導體是愛達荷州重要產業，全球第四大半導體公司美光科技（Micron）總部即設於此。

另包括惠普科技（HP）、美國半導體科技（American Semiconductor）等公司都在愛達荷州設有相當規模的研發及生產基地。深化雙方在半導體產業的合作

，將可促進相關美商在台擴大投資，導入半導體先進技術。

愛達荷州近年積極發展航太業，並已形成41家頗具規模的產業聯盟，推動雙方航太業者的交流合作，將可爭取雙方廠商合作生產輕型飛機、無人飛機及航電設備等，爭取美國暨全球航空市場商機。

總計本次簽署備忘錄將可促進新台幣550億元以上的投資與潛在效益。

經濟部工業局指出，本次合作不僅可促進台灣與愛達荷州產業的優勢互補、創造雙贏局面。

展望未來將成爲我國與美國其他州進行產業科技合作的典範模式。可望促進我國有系統地與美國各州產業聚落連結，開創未來台美產業合作的新局面。

（陳華焜）

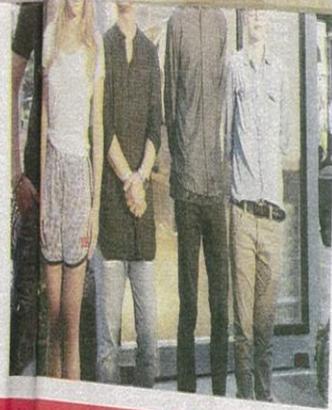
3D列印技術 台美合作開發

【本報記者許亞第台北報導】此刻在美國參訪的經濟部「台美產業合作與商機訪問團」昨天傳捷報，工業技術研究院、塑膠中心與精密機械推動小組在工業局局長吳明機見證下，分別與美國的UL及恩納基科技簽署合作

備忘錄，將針對3D列印技術開發、人才培訓與生產力4.0產業策略合作等項目，攜手共創商機。

吳明機強調，此次與美商Energid簽署MOU的主要意義在於促成美商Energid以技術合作方式，提供台灣

有意發展生產力4.0技術的業者（如：台達電、上銀、廣運及新漢等），針對關鍵技術進行合作（如：高階多軸控制/模擬/視覺系統軟體），協助台灣廠商提升智慧機器人的系統整合能力。



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責任編輯: 杜秀盈

經部訪美團 促成擴大在台投資逾750億

■陳宗慶
經濟部工業局局長吳明機率領的「台美產業合作與商機訪問團」，7月26日自美返國，此行成果豐

碩，不僅拜會美光科技(Micron)、優力國際(UL)、恩納基科技(Energid)等11家廠商，促成擴大在台投資達新台幣750億元以上，

更促成與美國UL、恩納基科技等簽署5項合作備忘錄，將國內半導體、智慧機器人及3D列印等相關產研鏈結美國先進製造技術，為我國廠商在美國合作布局注入新動能。

吳明機局長表示，此次訪問團成功促成美國太空總署之合作廠商恩納基科技與經濟部精密機械工業推動小組，就多軸高階機器人控制、視覺辨識及模擬技術簽署技術與策略合作備忘錄，未來將協助我國廠商如上銀、台達電、新漢及廣運等與恩納基科技策略合作，共同切入全球智慧製造市場，協助業者在台布局，合計投資額約新台幣30億元

，加速推動生產力4.0。

吳明機局長亦表示，此行並促成UL分別與工研院及塑膠中心簽署合作備忘錄，透過UL的3D列印檢測技術引進及專業人才培訓，除促成工研院與塑膠中心的認證結果獲國際承認外，更可協助我國廠商於3D列印相關材料、模組及系統產品能就近於台灣獲得國際認證。

該團也帶領我國產官研機構在愛達荷州副州長見證下，擴大經濟部工業局與愛達荷州商務廳簽署「台灣愛達荷州產業合作備忘錄」，將合作範圍擴大至綠能、航太、半導體及創新產業化等領域。



●工業局局長吳明機(右二)與愛達荷州商務廳廳長Jeffery Sayer(左二)簽署合作備忘錄，並由愛州副州長Brad Little(左一)及愛州航太聯盟主席Garry Hojan(右一)共同見證。圖/工業局提供

台灣新生報

中華民國一〇四年七月二十八日 星期二

台美產業合作與商機團 豐收

促成擴大投資逾750億元

【記者王先國／台北報導】經濟部工業局長吳明機率領的「台美產業合作與商機訪問團」，已於廿六日自美返國，此行拜訪美光科技(Micron)、優力國際(UL)、恩納基科技(Energid)等十一家廠商，促成擴大在台投資達新台幣七五〇億元以上，同時更促成與優力國際、恩納基科技等簽署五項合作備忘錄，將國內半導體、3D列印、智慧機器人等相關產研鏈結美國先進製造技術，為我國廠商在美國合作注入新動能。

吳明機表示，此行並促成優力國際安全認證公司分別與工研院及塑膠中心簽署合作備忘錄，透過UL的3D列印檢測技術引進及專業人才培訓，除促成工研院與塑膠中心的認證結果獲國際承認外，更可協助我國廠商於3D列印相關材料、模組及系統產品就近於台灣獲得國際認證，提升台灣3D列印在工業、醫材與航太等領域競爭力，並有助於台美共同爭取二〇一八年全球逾新台幣四千萬美元之商機。

工業局赴美招商 促成逾750億投資

【郭美懿／台北報導】經濟部工業局近日率團拜會美光科技、優力國際（UL）、恩納基科技（Energid）、American Semiconductor、Power Engineers與Lyondell Chemical等11家廠商，促成擴大在台投資逾750億元。

同時，工業局更促成與優力、恩納基科技等簽署5項合作備忘錄，將國內半導體、智慧機器人及3D列印等相關產業，連結美國先進製造技術，為台灣廠商在美國合作布局注入新動能。

其中，美商恩納基將與台灣有意發展生產力4.0技術的業者，針對關鍵技術進行合作，協助台灣廠商提升智慧機器人的系統整合能力，預計包括台達電、上銀、廣運及新漢等業者將受惠。

簽署5合作備忘錄

工業局長吳明機表示，藉由恩納基接軌美國自動化終端用戶，與機械手臂、控制系統、精密傳動元件等台灣精密機械產業供應鏈合作，合計投資30億元，目標鎖定規模達3000億元的全球智慧製造市場。

此行也促成優力國際與工研院、塑膠中心簽署合作備忘錄，透過優力的3D列印檢測技術引進及專業人才培訓。

吳明機指出，2018年全球3D列印市場商機逾4000億元，與優力的合作，除了促成工研院與塑膠中心的認證結果獲國際承認之外，更可進一步協助我國廠商在3D列印相關材料、模組及系統產品就近在台灣獲得國際認證，提升台灣3D列印在工業、醫材與航太等領域的競爭力。

在這次的訪美行程中，工業局也與美國愛達荷州商務廳簽署「台灣愛達荷州產業合作備忘錄」，將合作範疇擴大到綠能、航太、半導體與創新產業化等領域。

藉由雙方政府合作搭建的產業合作平台，聚焦金屬高值化、石化高值化及半導體產業，促成在台投資逾750億元。

力。智慧機器人的系統整合能力。莊宗達攝



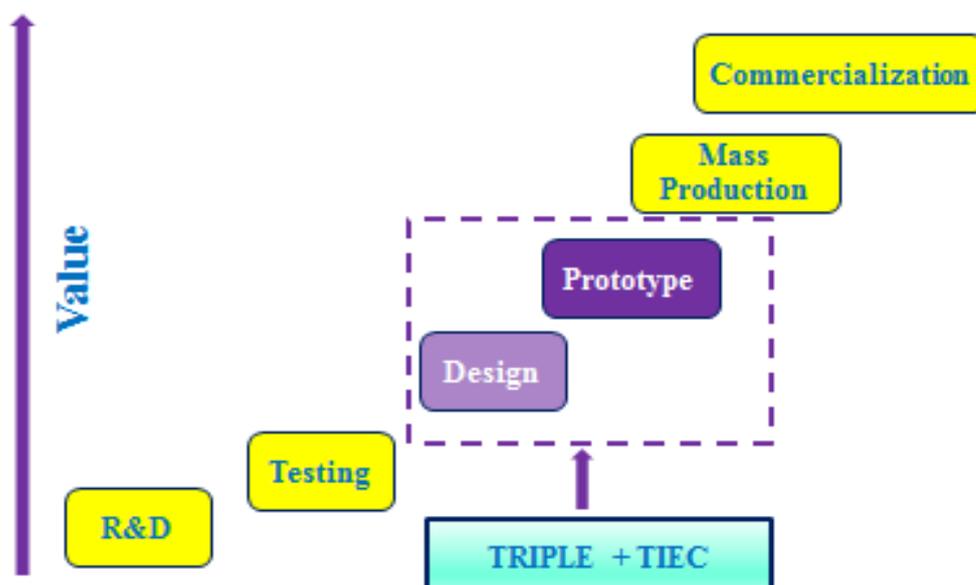
Innovation and Value Creation in Taiwan

Dr. Frank L. Chen

General Director/ITRI &
CEO/TUSA, MOEA
July 20, 2015

1

From R&D to Value Creation - The Hardware Version



Pains of A Startup

- Excellent R&D results, but difficult to get prototypes made cost effectively and delivered timely
- May lack of product design capability
 - Functionality, aesthetics
- May lack of process design capability
 - Degree of automation, cost effectiveness

Taiwan is ready to help coping with the above problems with the establishment of TRIPLE in Taiwan and TIDC at Silicon Valley.

3

What is TRIPLE ?

(Taiwan Rapid Innovation Prototyping League for Entrepreneurs)

- TRIPLE is a **government-funded virtual center** launched on March 30, 2015.
- It aims to provide match-making services to technology startups on **prototyping, product design, and even R&D** if requested. Linkage to potential investors and technology consultation may also be arranged.
- TRIPLE integrates Taiwan's first-tier industrial prototyping capacities and R&D institutions in a consortium to provide quick prototyping services.

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Variety of TRIPLE Members

TRIPLE now has over 280 industrial members which are capable to provide prototyping services, including

- 15 R&D institutions offering over 70 pilot lines in 17 technology fronts.
- First tier SI/ODM: Compal Electronics, Wistron...
- Small & mid Size companies with in-house pilot lines or machinery for prototype fabrication.
- Accelerators and crowd funds : HWTrek, Backer Founder, ...
- VC, Bank, Financial Services: KPMG, H&Q Taiwan, ...

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13

What is TIEC?

(Taiwan Innovation & Entrepreneurship Center)

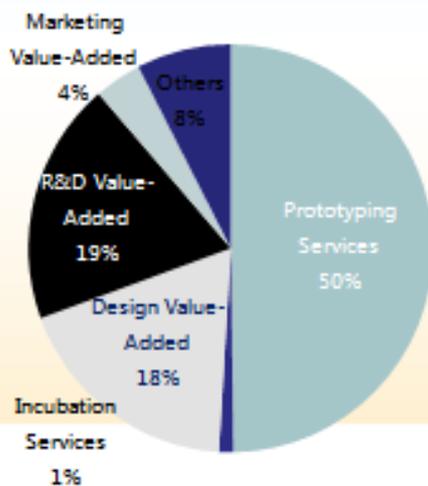
- **A contact point for TRIPLE located in Silicon Valley**
 - Service international startups which need to develop prototypes or products to link with TRIPLE in Taiwan, to accelerate their speed of prototype development.
 - Assist Taiwan's startups to join the innovation community in the US.
 - Liaise between Taiwan's VCs, such as the Taiwan-Silicon Valley Fund, and the American VC's.

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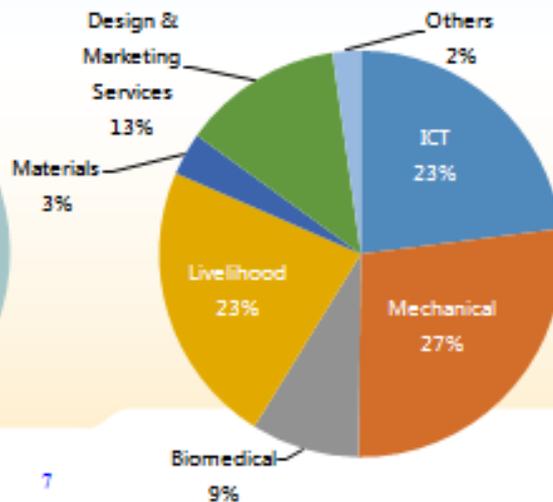
TRIPLE Members

- More than 280 members
 - Large Enterprises: 20%
 - Small and Medium Enterprises: 74%
 - R&D Organizations: 6%

Service Types



Industry Segments



A Success Case

創新會員
Startup



Case submitted to TRIPLE

快製中心
TRIPLE



Identify & match prototyping resources

快製聯盟
Rapid Prototype League



Startup: Alchemia

Winner of 2014 Mobilehero (hosted by MediaTek & MOEA; 2014/12)

- Needs/Idea: (Personal/Home) **Smart brewer system**
- Product: smart brewer bottle (w/ **sensors and Bluetooth connection**), recipe and monitoring app and wine-making social networking site

Matched in 17 days



METRO

- A professional design center offers project management, industrial design, prototyping and small batch production.
- Provide HW/SW Integration Solution for crowd-funding/ Start-ups/ makers

metro
design/build/ship



Industrial Technology Research Institute

- IoT & Wearable Electronics
- Wireless Communications
- Big Data and Cloud Computing



Information and Communications



Medical Device and Biomedical

- Medical Electronics & Imaging
- Biomarker & In-vitro Diagnostics
- Orthopedic Device & Tissue Regeneration

- Flexible Display
- Lighting
- Semiconductor Technologies
- Human Machine Interface



Electronics and Optoelectronics



Mechanical and Systems

- Intelligent Robot
- Electric Vehicle
- Additive Manufacturing
- Digital Manufacturing

- Bio-based Chemicals
- High-value Petrochemicals
- Materials for Next Generation ICT
- Plant Factory



Materials, Chemicals and Nanotechnology



Green Energy and Environment

- Renewable Energy
- Energy Efficiency, Management and Policy
- Clean Environment
- Energy ICT

Employee: ~ 6,000

Ph.D. :	1,323
Master :	3,009
Bachelor :	1,234

Total Patents

22,622

Startups & Spinoffs (2014)

260

Industry Services (2014)

Provided Services : 15,086

Transferred Technologies : 626

Conclusion

- Taiwan launches a new campaign of helping entrepreneurs and startup companies worldwide by providing timely and cost-effective design and prototyping services through its well known manufacturing ecosystems.
- A TIEC Office is recently opened in Silicon Valley to receive requests or applications from the innovation community in the United States.
- The TRIPLE Center in Taiwan will serve to identify and match the design and prototyping capacities among its member companies or institutions.
- Terms of service contracts are negotiated on a case-by-case basis.

Thanks for your attention



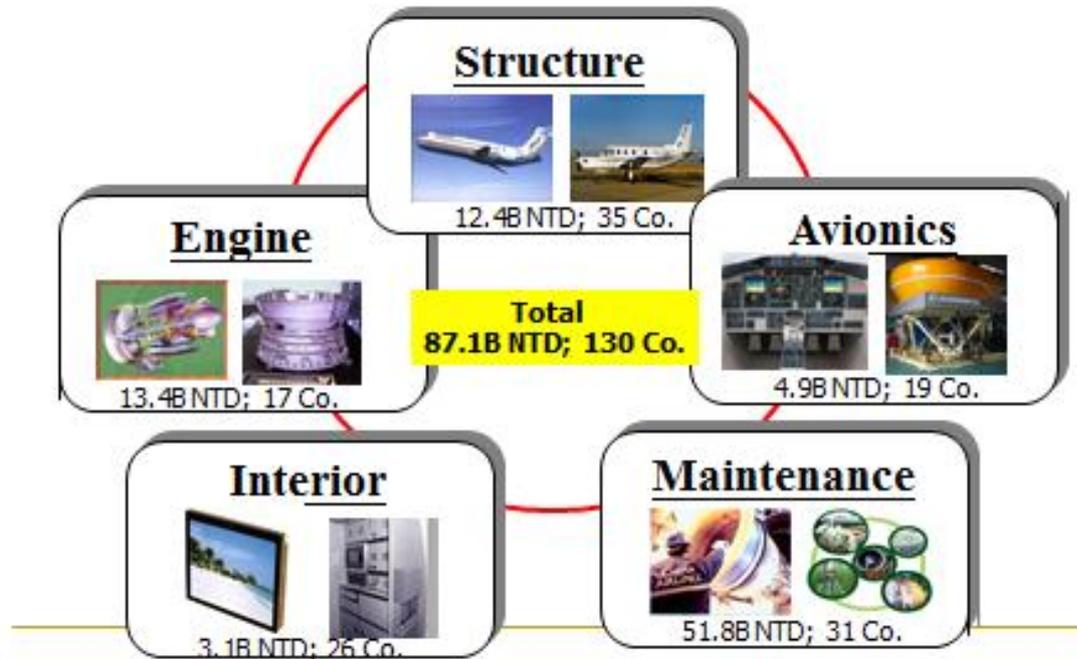
Current Aviation Industry Development and Opportunities In Taiwan

Industrial Development Bureau (IDB),
Ministry of Economic Affairs (MOEA)
July, 2015

The Current Status of Taiwan Aviation Industry



The Current Status of Taiwan Aviation Industry (Cont'd)



3

The Current Status of Taiwan Aviation Industry (Cont'd)

- 35 Local Companies for Aero Structure:

- AIDC: A321 Barrel, Learjet/Challenger 300 Empennage, S-92 Cockpit
- Chenfull: Machining Parts
- Drewloong: LJ-45 Parts, Sheet Metal Parts



(AIDC: A321 Section 16a Barrel)



(AIDC: A320 Empennage)



(Drewloong: 8737 Sheet Metal Parts)



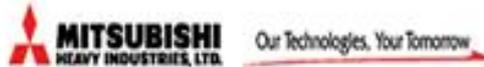
(AIDC: S-92 Cockpit)



(AIDC: Learjet-45 Empennage)

4

Major Global Aerostructure Customers



5

The Current Status of Taiwan Aviation Industry (Cont'd)

• 17 Local Companies for Engine:

- AIDC: CFM56 Fan Blade, Case
- Aero Win: CFM56 Bushing, Ring
- Chaheng: CFM56 Fan Blade, Compressor
- Magnate: CFM56 Case Machining
- Chenfull: CFM56 Case Machining
- NAFCO: Engine Fasteners



(AIDC: CFM56 Front case)



(Aero Win: CFM56 Bushing)



(Chaheng: CFM56 Blade Rotor)



(Magnate: Engine Mount)

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Major Global Aeroengine Customers



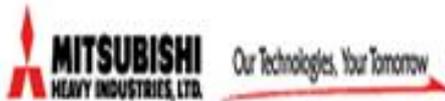
GE imagination at work



Pratt & Whitney
A United Technologies Company



Rolls-Royce



7

The Current Status of Taiwan Aviation Industry (Cont'd)

■ 26 Local Companies for Interior:

- Topkey: Seat's Composite Structure, Lavatory
- SAI: Forging Seat's frame
- Fuchi: Interior Fabric
- Chiao Fu: Foam
- Taiwan Fylin: Air Cargo Container
- Magyco: Galley Inserts



(SAI: 16G Seat Frame)



(Taiwan Fylin: Container)



(Topkey: C-17 Lavatory)



(Fuchi: Fabric)

8

The Current Status of Taiwan Aviation Industry (Cont'd)

- 19 Local Companies for Avionics/ Others:

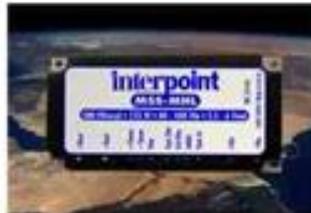
- Crane Aerospace: DC Converter
- Innolux: LCD Panel
- Aerovision Avionics: IFE System
- DNI: IFE power supply
- NAFCO: Special Fasteners



(NAFCO: Fasteners)



(Aerovision: IFE System)



(Crane Aerospace: DC-DC Converter)



(Innolux: LCD Panel)

9

The Current Status of Taiwan Aviation Industry (Cont'd)

- 5 Main Companies for Maintenance/ Conversion:

- China Airlines
- Evergreen Aviation Technologies
- Air Asia Company Ltd.
- Aerospace Industrial Development Corp. (AIDC)
- Asian Compressor Technology Services Co., Ltd



10

Future Potential Cooperation

Manufacture Supplier Chain Cooperation on Structure and Engine



Brand Product Cooperation and Marketing Sales on Interior and Avionics



New Developing Program Cooperation



11

Summary

- Developing aviation industry is one of our top priorities
- We do hope to expand international mutual cooperation opportunity
- Taiwanese aviation industry with quick market response will be your first choice for the best partner in Asia Pacific

Taiwan Aviation Industry



USA Aviation Partners



12

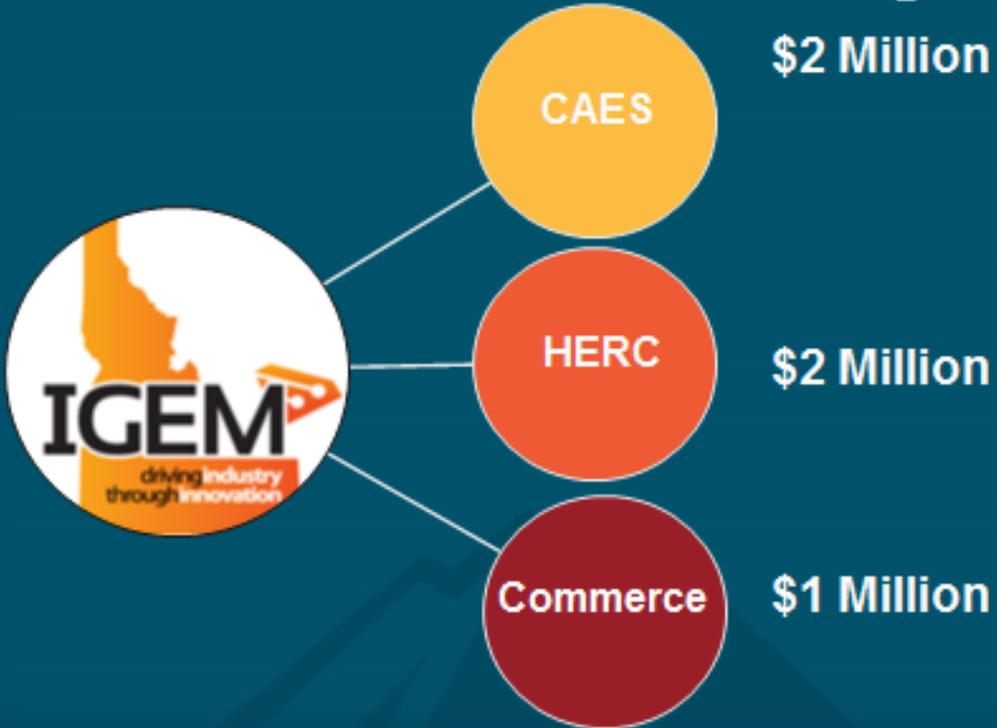


IDAHO GLOBAL ENTREPRENEURIAL MISSION

July 20, 2015



IGEM Structure & Funding



IGEM - Commerce



Partnering private sector experts with Idaho research professionals to bring commercially viable technologies to market

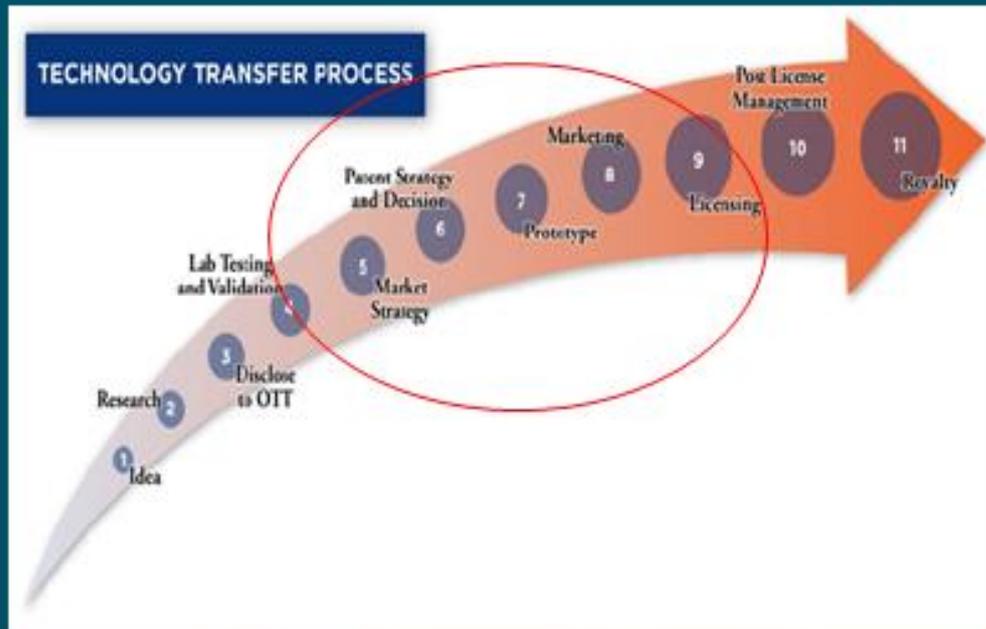


IGEM – Quick Facts

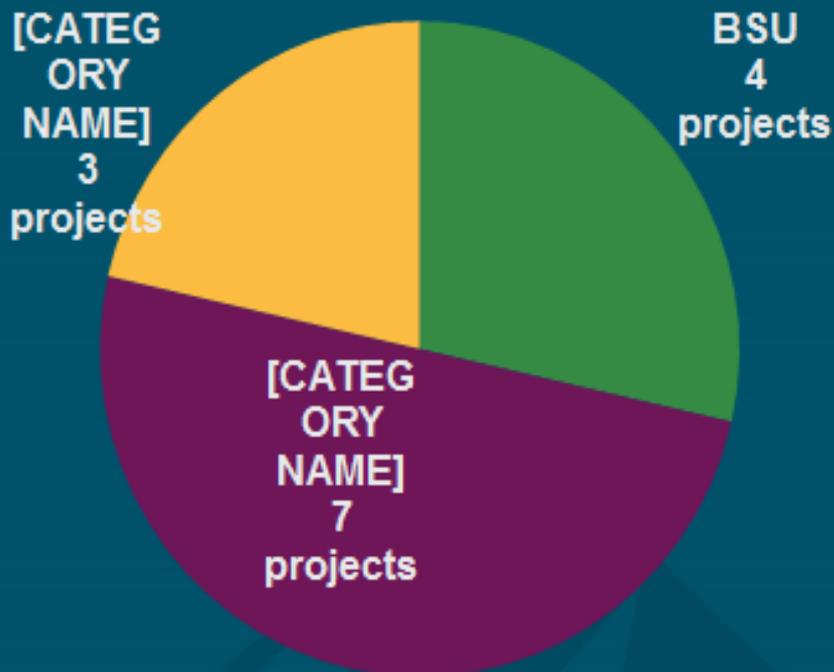
- Commercialization research @ BSU, ISU, UI
 - Funding goes to University
- Applications accepted year round
 - Approved by IGEM Council
- Industry Partner
 - Must provide a Financial Investment
- Grant size: \$46K to \$427K
 - Typically 1 year project, some 2 year projects



Commercialization Strategy

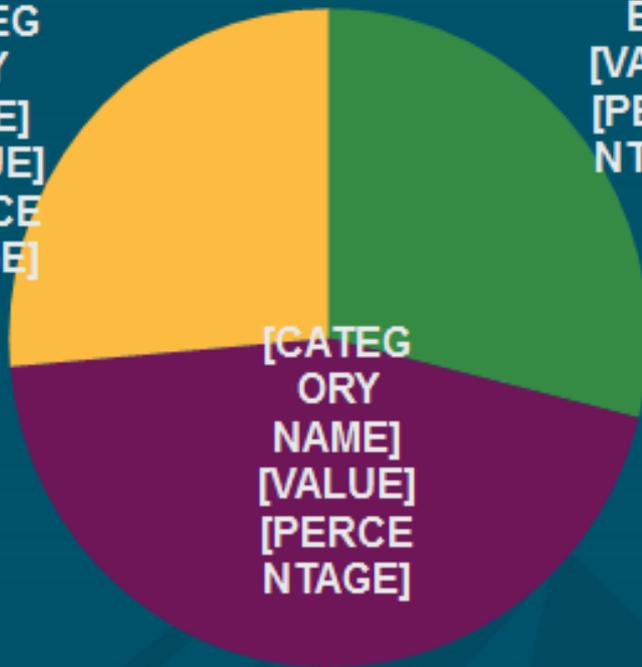


Program Grants FY13 – FY15



Program Grants FY13 – FY15

[CATEGORY
NAME]
[VALUE]
[PERCENTAGE]



BSU
[VALUE]
[PERCENTAGE]



Nanofabrication System



- Nanomachining system
- Semiconductor Research
- \$3.5M system for \$250K
- \$3.5M in new funding



High Measurement & Modeling



- High Speed Digital Package Measurement & Modeling for Next Generation Memory Modules
- Vector Network Analyzer
- Vital to new Micron products
- Long term Micron partnership



Microbial Induced Calcite Precipitation (MICP)



- Viability of MICP
- Controlling soil erosion
- BioCement Technologies Inc.
- Small Business Innovation Research (SBIR) Phase I
 - Funding \$53,968
 - Applying SBIR Phase II



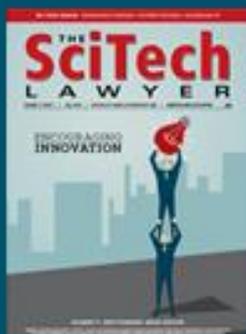
GenZ Sprayer



- Increased efficiency in pesticide application
- Reduced environmental exposure
- Larger field trials (UC Davis)
- \$2M in capital
- 6 new employees



2E Hexenal



- Organic fungicide
- Industry changing
- Benefit Idaho products
- Featured in The SciTech Lawyer



Simplot: UAS & Data Analytics



- Precision Ag – Ag Tech
- Collaboration with ISU & BSU
- Benefits a huge Idaho company
- Agriculture is TECHNOLOGY!



Industry Partners



Long Term Strategy



IGEM - Commerce



Partnering private sector experts with Idaho research professionals to bring commercially viable technologies to market







Presenter: Garry Hojan – Idaho Aerospace Alliance President

Overview

- History
- Mission
- Membership
- Activities



History

- 2011
 - No Idaho aerospace sector representation
 - \$20MM in TAACT grant Aerospace Workforce Training funds to Washington State
 - \$2.5MM in TAACT grant Aerospace Workforce Training grant funds not awarded to Idaho State
 - Lack of support from Aerospace sector during grant application
 - Lack of governmental recognition of the sector within the state
 - Idaho Department of Labor, North Idaho College and Aerocet convened northern Idaho aerospace sector



History

- 2012
 - Formal non-profit corporate filing of Idaho Aerospace Alliance (IDA) Jan 2012
 - IDA partners with, and membership supports, North Idaho College (NIC) and applies again for TAACT grant Aerospace Workforce Training funds
 - Sept 2012 \$2.97MM awarded to create the NIC-Aerospace Center of Excellence (ACE)
 - Oct 2012 Initial grant funding begins



History

• 2013

- Jan 2013 Two IDA Board positions filled with southern Idaho aerospace Board members
- Oct 2013 Honorable Governor Otter performs ribbon cutting ceremony to open the NIC-Aerospace Center of Excellence
- 500 aerospace students over 3 years
 - ✓ Aerospace Composites
 - ✓ Airframe and Aircraft Systems
 - ✓ Non-Destructive Testing
 - ✓ Aerospace Machining
 - ✓ Quality Systems
- ✓ Power Plant (planned)



History

• 2014-Present

- IDA partners with Pacific Northwest Aerospace Alliance(PNAA) and Inland Northwest Aerospace Alliance (INWAC)
- First aerospace students graduate and hired
- IDA membership expansion
- IDA requested by IDoL to share success story in Boise
- Jim Glenn steps down as President, Garry Hojan steps in as President
- First aerospace trade show of American Manufacturing Network (AMN) and IDA
- Government of Idaho highlights Aerospace industrial sector on website



Current Board

President

- Garry Hojan
- Operations Manager
- Aerocet, Inc.

Vice President

- Mark Adams
- Program/Project Manager
- Lightning Tool and Manufacturing

Secretary/Treasurer

- Penny Stokes
- Administrative Manager
- Space Screw, Inc.

Board Member

- Jon Frank
- Product Manager, Government and Aerospace Applications
- PKG User Interface Solutions, Inc.

Board Member

- Andy Oyevides
- President
- Teton Machining Solutions



Mission

Our mission is to gain knowledge, share information and resources that enhance our ability to serve our customers and promote the Idaho aerospace industry.



Membership

- Approximately 22% of all aerospace related companies in Idaho
- 60% Full Membership 40% Associate Membership
- Expect to double membership by Q4-2016
- Membership Demographics:
 - Manufacturers
 - Supply Chain (AS9100/NADCAP)
 - Aircraft Services and Support
 - Airlines
 - Airports



Membership

- Participation and Endorsements:
 - Hon. Gov. C.L. "Butch" Otter
 - Hon. U.S. Sen. James E. Risch
 - State Senators
 - Idaho Department of Commerce
 - Idaho Department of Labor
 - Academic Institutions



Activities

- Provide-a collective voice for the Idaho Aerospace industrial sector
- Promote-Idaho Aerospace Industry, Companies and their capabilities, Opportunities
- Enhance-The potential for growth of the Idaho Aerospace industry
- Support-Education and Technical growth as it relates to Aerospace



Activities

- Provide B2B Networking Opportunities
- Marketing and Promotion of Idaho Aerospace Companies and their Supply Chain capabilities
- Aerospace/Advanced Manufacturing Trade Shows (Host, and attend)
- Support IDA Membership needs
- Workforce Training advocacy
- Technical Advisory participation
- Support State of Idaho Departments and Agencies



Resources

- Idaho Aerospace Alliance (IDA) <http://www.ideaero.org>
- North Idaho College <https://www.nic.edu>
- Idaho Department of Labor <http://labor.idaho.gov>
- Idaho Department of Commerce <http://commerce.idaho.gov>
- Report: Aerospace Industry in Idaho <https://labor.idaho.gov/publications/Aerospace.pdf>
- List of Idaho Aerospace Alliance Members <http://idaero.org/wordpress1/members/>



Questions?



IDAHO AEROSPACE ALLIANCE

Thank You!