

The logo for Arizona State University (ASU) is prominently displayed in the background. It features the letters 'ASU' in a large, bold, serif font. The letter 'A' is a solid purple color, while the 'S' and 'U' are a lighter, semi-transparent purple. A yellow sunburst graphic is positioned behind the 'S'. A registered trademark symbol (®) is located to the upper right of the 'U'.

U.S.-Mexico Partnership on Education and Technology Transfer for the Aerospace Industry

J. Rene Villalobos, Jorge Limon*
Industrial Engineering Department
Arizona State University

*Ingeniería Industrial y de Sistemas
Instituto Tecnológico y de Estudios Superiores de Monterrey

Innovations, sustainability and long term duration

- Establishment of a dual MS program in Industrial Engineering/Logistics. Currently it includes ASU and ITESM. The next phase include the expansion of this program to ITSON and other Mexican universities → This guarantees the long term continuation of the program.
- An informal MS - Ph.D. program between ASU and ITESM was started → Expansion of program to research activities
- Organization of workshops and projects → Development of closer ties with the aerospace industry
- Establishment of a steering committee for the development suppliers for the aerospace industry → Long term insertion in economic development activities

Students

- **First Cohort**

- Luis Trevino (ITESM)
- Luis Gaxiola (ITESM)
- Manuel Romero (ITESM)
- Elias Olivares (ITESM)
- Gerardo Trevino (ITESM)
- Guillermo Alvarez (ITESM)
- Carlos Calleros (ITESM)

- **Second Cohort**

- Juan Ojeda (ITESM)
- Brenda Perez (ITESM)
- Mario Morales (ITESM)
- Luis Mejia (ITESM)

- **Third Cohort**

- Mario Coba (ITSON)
- Cinthia Rangel (ITSON)

- **Fourth Cohort**

- Rosa Gonzalez (ITESM)
- Eileen Ruelas (ITESM)
- Jose Camacho (ITESM)
- Jorge Martinez (ITESM)
- Sarahi Castro (ITSON)
- Eduardo Serrano (ITSON)
- Raul Esquivel (ITESM)

- **Fifth Cohort**

- Laura Consuelos (ITESM)

Students Stats

	LT	LG	MR	EO	GT	GA	CC	JO	BP	MM	LM	MC	CR	RG	ER	JC	JM	SC	ES	RE	LC	Total
Started Program on Fall 2004	X	X	X	X	X	X	X															7
Started Program on Fall 2005								X	X	X	X											4
Started Program on Spring 2006												X	X									2
Started Program on Fall 2006														X	X	X	X	X	X	X		7
Started Program on Spring 2007																					X	1
Finished Program on May 2005	X		X	X	X	X	X															6
Finished Program May 2006								X	X	X	X											4
Finished Program on Dec 2006													X									1
Finished Program on May 2007												X		X	X	X	X	X	X	X		8
Finished Program on Dec 2007*																					X	1
From ITESM	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X			X	X	17
From ITSON												X	X					X	X			4
Males	X	X	X	X	X	X	X	X		X	X	X	X			X	X		X	X		16
Females									X					X	X			X			X	5
<= 25 Years Old	X							X	X	X	X	X	X		X	X		X	X	X		12
> 25 Years Old		X	X	X	X	X	X							X			X				X	9



Projects – First Cohort

- Study of current Air Cargo Infrastructure in Mexico: Current strategic needs for transportation activities, operational performance and national airport infrastructure
- The Aircraft Industry in Europe: Structure and potential opportunities for supplier development
- The passenger airline industry in Mexico
- Lean enterprise model proposal for the emerging Mexican aerospace industry
- Business Opportunities for supplier development in the Aircraft maintenance Industry

Projects – Second Cohort

- Development of Regional Clusters of Suppliers in Mexico for the Aerospace Industry (<http://eal.asu.edu/logistika>)
- Regional and Operational Aerospace supplier clusters in Mexico
- Titanium Distribution Center in Mexico
- Logistics study of a manufacturing facility based in Guaymas, Sonora, Mexico

Projects – Third & Fourth Cohort

- Determination of logistics costs to supply a plant in Mexico from United States by shipments consolidation
- Location of a Consolidation Center for Aerospace Industries in the USA served by a cluster of suppliers in Mexico
- An AHP Framework for locating Aerospace Facilities in Mexico
- National Aviation-ASU project for setting up a facility at Mexico
- Aerospace Supplier Developer & Incubator
- Vehicle Routing Problem : Improving Bashas' Distribution

Students – Where are they now?

- Luis Trevino, FEMSA Logistica , Monterrey, NL
- Carlos Calleros, NEMAK, Monterrey, NL
- Elias Olivares finished his PhD at ITESM on May 2007
- Guillermo Alvarez finished his PhD at ITESM on May 2007
- Manuel Romero, self employment, Guadalajara, Jalisco
- Gerardo Trevino, PhD student at ASU
- Mario Morales, International Business Solutions, Mexico
- Juan Ojeda, Grupo Chamberlain, Nogales, Sonora
- Brenda Perez finished her Masters at ITESM on May 2007
- Luis Mejia, PhD student at ASU
- Rosa Gonzalez, PhD student at ITESM
- Eileen Ruelas, PhD student at ITESM
- Jose Camacho, PhD student at ITESM

Workshop



Workshop - Description

- The first US-Mexico Binational Aerospace Workshop for Supplier Development was organized by Arizona State University (ASU) in partnership with Monterrey Tech as part of the activities of the USAID-sponsored graduate program on logistics of the aerospace industry. The workshop was also co-sponsored by the Secretariat of Industrial Development of the State of Chihuahua; and it took place in the city of Chihuahua, Mexico on October 5th and 6th, 2006.
- One of the main objectives of the USAID-sponsored program on logistics is the improvement of the global competitiveness of an integrated North American aerospace industry, for the benefit of the economy and the welfare of North America.
- The Workshop included participation of OEM's, representatives from the Mexican Federal Government, government of a selected group of Mexican States; developers, international and Mexican suppliers.

Workshop - Results

- Identification of Current Obstacles for the Development of Aerospace Suppliers in Mexico
 - Certification of Special Processes
 - Lack of commitment from OEM's
 - Lack of information on capabilities/players
 - Raw materials. Supply Chain Management. (Expensive and time consuming)
 - Capital Cost in addition to cost of money + payback

Workshop - ... Results

- Identification of Strategic Aerospace Industry Issues for an Industry-Government-Academia Consortium
 - Consortium Objectives:
 - Lower entry barriers through info sharing
 - Develop infrastructure
 - Provide training
 - Networking opportunities for the community
 - Strong industry presence
 - Request to government more industry presence (summits)
 - Have a database of members and capabilities
 - Develop local clusters

Workshop - ... Results

- Consortium creation current status
 - Founding member includes OEM's and tier 1 suppliers (Hamilton Sundstran, Honeywell, Bombardier)
 - A permanent council will be designated
 - The first draft of the statutes is under revision

- Creation of a NADCAP site in Monterrey
 - ITESM and Hamilton Sundstrand established a NSDCAP office in Monterrey

Additional Information

- Visit the web site of the program at:
 - www.eas.asu.edu/ie/ieaero
 - www.asu.edu/USAID-Consortium
 - eal.asu.edu/logistika
- Or send us an e-mail to:
 - rene.villalobos@asu.edu
 - Jorge.Limon@itesm.mx
- Or call me at:
 - 480-965-0437

- ***Part II:***
- Please describe for participants in your session the contributions of your partnership to the conference objectives. Specifically:
- How has your partnership identified new opportunities for sustainable collaborations*?
 - Working with industry and the governments of the states we identified as a long term/sustainable objective the development of aerospace industry suppliers
- How has your partnership expanded networks related to trade and business development?
 - Industry workshop
 - Creation of industry led consortium
- *Examples: for example, by bringing together stakeholders in Natural Resource Management and Public Health; Business and Environment; Public Po

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- How has your partnership identified resources for sustainability and/or gained access to new, potential resources in the private and public sectors?
 - State and Federal government
 - What potential does your partnership offer for replication in the region (North America; Central America; the Caribbean), beyond the borders of the U.S. and Mexico?
 - Logistics is a bottleneck for the development of most Latin-American countries