Global Logistics Systems

Adapted from an Affiliates seminar held at MIT on March 14-15, 2001
Hank Marcus
Professor of Marine Systems, MIT

• Container ships continue to grow in size
  – 5,000 to 7,000 TEU (twenty foot equivalent sized containers)
  – Some carriers are not considering 15,000 TEU ships

• Vision of hub and spoke ocean shipping not fulfilled

• Problems in handling containers at ports
  – A slow process that adds a great deal inventory carrying cost

• Only two modes of international transportation, ship and air
  – A 9:1 difference in cost
Rob Quartel, CEO, FreightDesk Technologies

• The increasing role of international freight execution systems
• Each international shipment involves 20-25 different organizations and 20-40 documents
• 80% of documents require repetitive information
• 30% of the data needs to be entered more than 10 times
Edmund W. Schuster
Director, MIT Affiliates Program in Logistics

  
  – During the past 50 years, transatlantic phone calls now cost 90% less, ocean freight is 50% cheaper and air travel is 80% less expensive.
  
  – As a result of this cheaper global connectivity, global trade has surged to 12% of the U.S. GDP, double that of the 1970s.
  
  – The global economy has impacted USA, the population of Buffalo NY decreased 50% in the past 40 years.
Seminar participants listed the following area for future research:

- **Status of pan-European transportation**: Is Europe moving to a U.S.-style integrated transportation industry rather than their current country-centric one?
- **Experiences with globalization**: How have companies become global? What are the key success factors? Have they made money being global?
- **Patterns of internet usage**: How is the internet being used effectively? How does internet usage vary from country to country?
- **Alliances**: What are the trends in logistics alliances?
- **U.S. infrastructure**: How will public policies on infrastructure impact U.S. competitiveness? What are the impacts of specific concepts such as government outsourcing or customs inspection policies?
- **Asia Logistics Systems**?