

- Airdrop Operations, delivering to locations that have no infrastructure or delivering packages that can secure needed infrastructure;
- Aeromedical Evacuation, providing for the rapid, effective care of injured forces; and
- Operational and Executive Support Airlift, designed to be responsive to the unique needs of senior leadership and national command authority.

- The United States is committed to continual improvement of key processes.

- Modernization of AMC allows the United States to operate in the 21st century.

- 1997 is the Year of the En Route System.

Seven Key Acquisition Programs and Program Initiatives

The following technologies are planned to make the above possible:

- Acquisition of 120 C-17 transport aircraft,
- New large and small aircraft loaders (specifically the 60K loader and Next Generation Small Loader),
- Global Air Traffic Management Systems for aircraft (the Future Air Navigation System or "FANS"),
- More effective global information management systems,
- Modernization of the KC-135 tanker fleet (Project nickname: Pacer CRAG), and
- Moving the C-130 tactical transport fleet back into AMC from the Air Combat Command (thus enabling AMC to establish all Air Force airlift standards—including theater airlift).

Overall, the Air Force provides people with substantive quality of life improvements, particularly safety and protection through operational risk management.

Technology Transfer from an Aircraft Manufacturer (J.W. Kelsey)

Let me provide some observations from a major developer of aircraft for both the commercial and military sectors.

Large Potential Air Traffic Growth

It is clear that there will be significant growth in both passenger and cargo traffic. Individuals are placing increased value on personal mobility. At the same time, they are also putting greater importance on the value of

time. The issue then becomes: can the system grow to meet the demand and expectations?

Can the Air Transport System Grow to Meet the Projected Demand?

There are major challenges facing all of us. Among them are safety, air space congestion, terminal congestion, economics, and environmental and political constraints.

Aircraft Technology Initiatives

Some of the new systems being developed are

- Propulsion Control Aircraft (PCA),
- Intelligent Damage Adaptive Control System (IDACS),
- Free Flight (Future Air Navigation System),
- Enhanced Synthetic Vision, and
- Improved Flight Crew Situational Awareness.

Advanced Aircraft Concepts

Meanwhile, new vehicles are being considered. Included in the list are

- High Speed Civil Transport,
- Blended-Wing-Body, and
- Super-Short/Vertical Takeoff and Landing.

These technological trends have profound impacts on future aviation.

CONCLUSION

Although the topic of technology transfer is often overworked, the panel discussion illuminated some possibilities toward an intelligent air transportation system. The following summation is offered:

1. The U.S. government, under the commitment to live within it means, is looking for ways to do more with less. Although DOD has been at the cutting edge of technological advances, a reverse direction of technology transfer is becoming more evident. The Global Reach mission of the U.S. Air Force, for example, will be increasingly dependent on the Civil Reserve Air Fleet as well as on Air Force assets.

2. This argues persuasively for technology transfer between the civilian and military communities.