

Human Systems Integration (HSI)



From Science & Technology to Acquisition: HSI Execution in the U.S. Air Force

Col Bill Mueller

**Director, Human Systems Integration
711th Human Performance Wing
Air Force Research Laboratory**

U.S. AIR FORCE



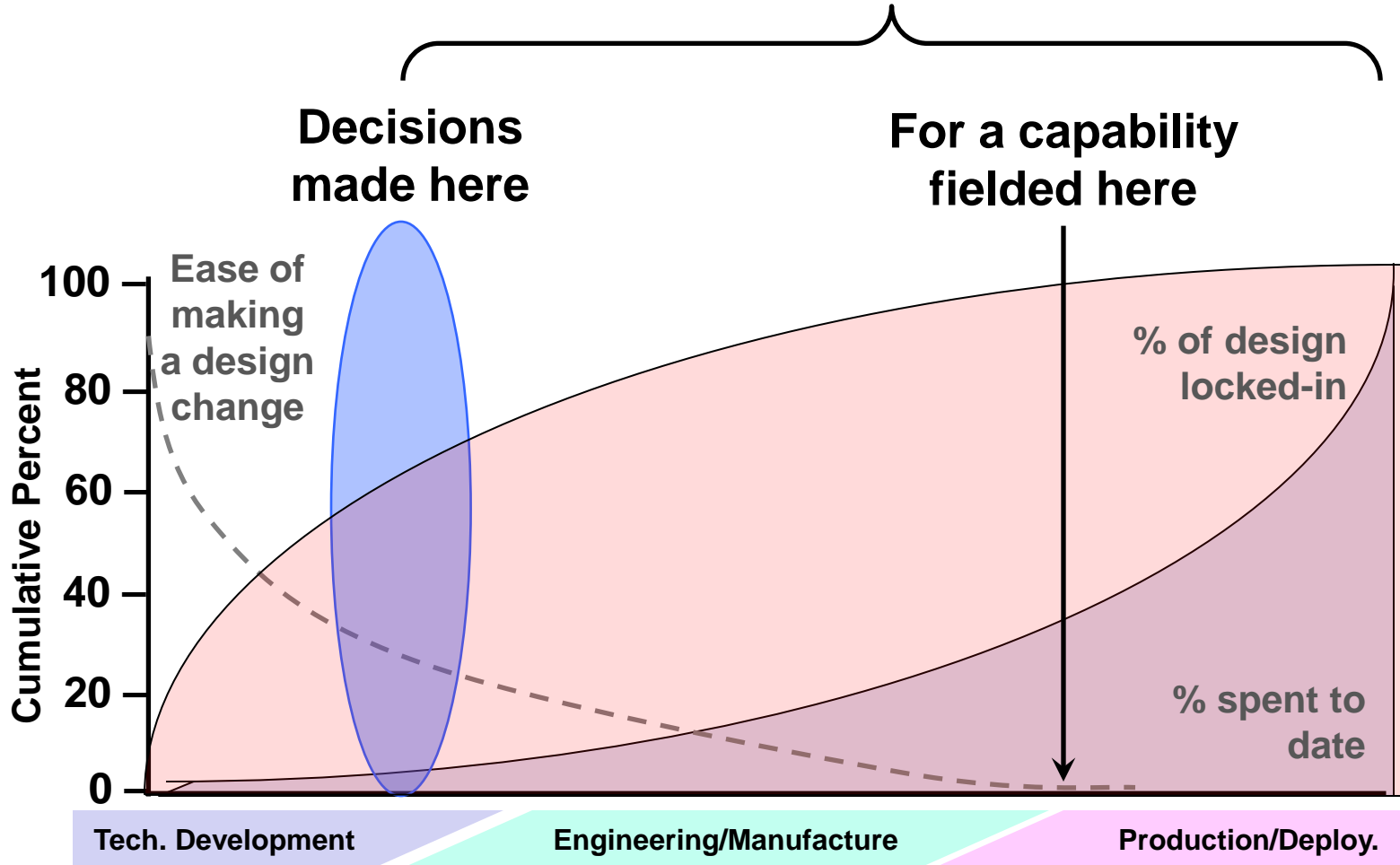
The Human Element

- The Human Element



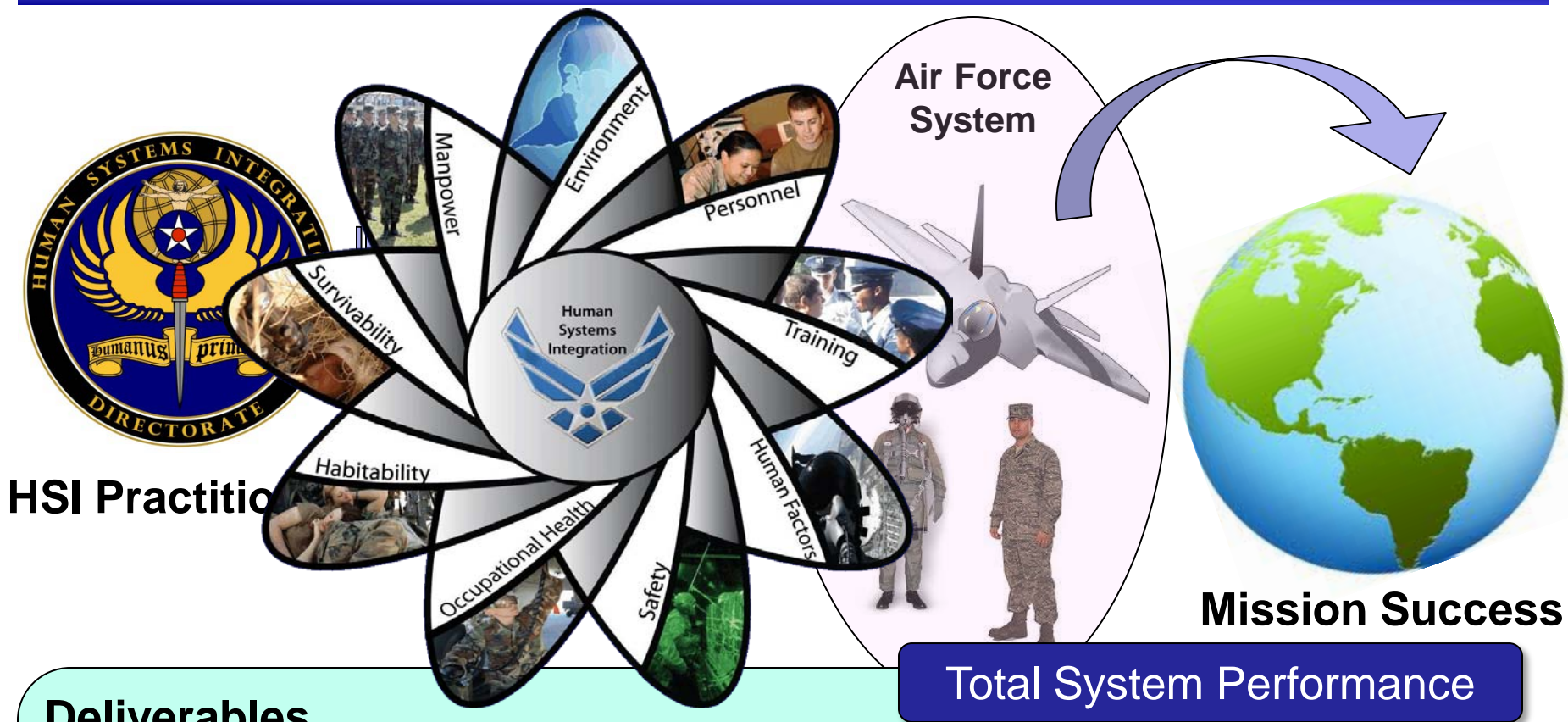
Early HSI

Lock in 80 – 90% of costs here





HSI in the USAF



Deliverables

- Provide HSI assessments at key program decision points
 - Inform** scientists and technology development
 - Provide **risk reduction**
 - Optimize human **performance**
 - Reduce life cycle **costs**



Future HSI Considerations

- Who are operators of the future?
- Operator workload/overload
- In what environments will we fight?
- Medical standards/fitness for UAS operations
- How will we train for future/nonexistent systems?
- Mental health effects of remote warfare
- Autonomous operations and HSI implications



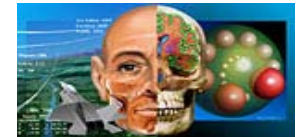
Manpower



Personnel



Training



Human Factors



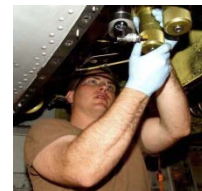
**Personnel
Survivability**



Environment



Safety



Occ Health



Habitability



Questions?