



Technology Transition The End Game of R&D



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Technology Transition Starts with the Proposal

Promises, Promises





Expectations





Results





Technology Transition

- Objective: Affordable Operationally Suitable Technology in the Hands of our users.
- Planning is an integral part of R&D process
 - Starts with the proposal
 - Continues throughout development
 - Requires Periodic Deliverables
- Prepares US for the unexpected
- We provide assistance with issues.
- Teamwork makes US all successful.



Tech Transition

Today's Presentation

- Customers – Ours and Yours
- Transition Planning – What's it All About?
- Things you will want to know
- Issues and Answers
- Tools to help you plan.
- Questions



Our/Your Customers

- **Military Services**
- **Federal Agencies**
- **State and Local**
 - Emergency Responders
 - Public Safety





Our/Your Customers

- **Business and Industry**
 - Transportation
 - Energy
 - Communications
 - Construction
 - Infrastructure





Transition Planning

- **Is a Disciplined Teamwork Process**
- **Starts with Proposal Review**
- **Parallels Development Process**
- **Leverages all Markets and Applications**
- **Encourages User Evaluation and Input**
- **Fosters Affordability and Supportability**
- **Facilitates Availability to All Appropriate Users**
- **Protects Government Investment**
- **Enables a Win-Win-Win**



Not Planning





Things You will Want to Know

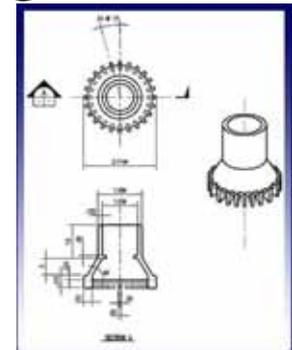
- Who is my Government Advocate?
- What are my IP Rights? - Who owns what?
- Will the government take over my work?
- What goes into a Test Plan?
- What regulations and standards apply?
- Do I have a liability problem?
- Do I produce it or license it?
- Can I continue to use the prototype?
- What about Security?
- Can I export the product?





Transition Planning

- Requirements
- Applications
- Intellectual Property Ownership vs Rights
 - Hardware (Design) & Process Patents
 - Data Rights
 - Software Rights – (They're different).
 - Rights vs Deliverables
 - Licensing Fees and Royalties
- Fear of Government Takeover!





Transition Planning

FAR/DFARS Govt. Rights vs. Developer Assertions

Funding	Government	Mixed	Private
Ownership	Developer	Developer	Developer
Hardware Patent	Non-Exclusive License	Non-Exclusive License	Non-Exclusive License
Data Rights	Unlimited	Govt Purpose	Limited
Software Rights	Unlimited	Govt Purpose	Restricted

You invent it – you own it. We get to use it



Govt Rights vs. Reality

- We want you to be a success!
- If you develop it and want to produce it, we will encourage you in every way we can.
- If you can't produce it - we will help you.
- Government Intervention – A last resort.





Transition Planning

- **Regulatory Issues Analysis**

- **FCC**

- **FDA**

- **FAR/DFARS**

- **EPA**

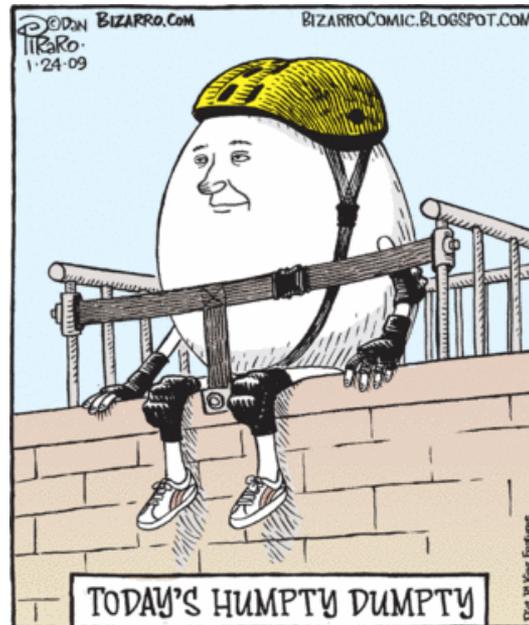
- **NRC**

- **DOE**

- **DOT**

- **OSHA**

- **ATF**



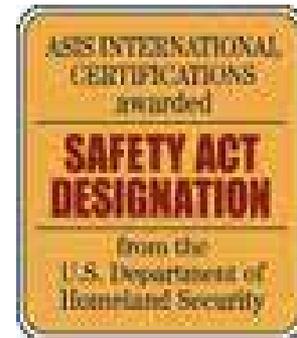


Transition Planning

- **Standards Identification**



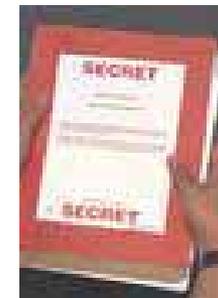
- **Liability Risk Analysis**



- **Security Issues**



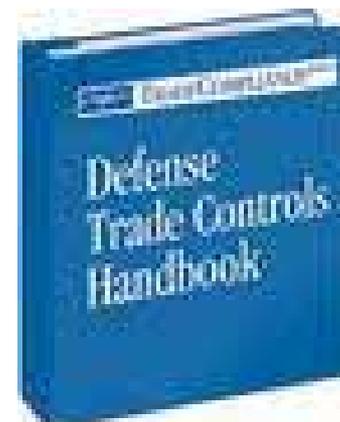
- **Publications**





Transition Planning

- **Export Control**
 - **Commodity Jurisdiction**
 - **Commerce – State – DOD**
 - **Export License**
 - **Universities - Foreign Students**
 - **Green Card Employees**
 - **Deployment of prototypes overseas**
 - **Foreign Testing**
 - **Importing for test**



MCTL
Militarily Critical Technologies List



Transition Planning

- **Market Analysis - Federal Sector**

- Agency Proponent(s)

- Do you have a User Task Manager?

- If you build it, **WILL THEY COME?**

- Are they **BUDGETING** for it?



- **Market Analysis - Private Sector**

- Your job - we may be able to help.

- Larger market = lower costs and lower prices.

- Everyone Benefits





Transition Planning

- **Transition Strategy**
 - **Venture by Developer**
 - **Partnership**
 - **License to Producer**
- **Transition Resourcing**
 - **Federal Acquisition**
 - **Sponsored LRIP**
 - **Investment Capital**





Test & Evaluation



Development
Testing



Operational Testing



Realism



It Must Work!





Transition Planning

- **Supportability & Sustainability**
 - **Designed in**
 - **Operations Manual**
 - **Training**
 - **Sustainment**
 - **Logistics**
 - **Service**
 - **Warranties**





Transition Planning

- **Outreach to Federal Users**
- **State and Local Government Users**
 - Web Notices
 - DHS Responder Knowledge Base
 - DOD 1401 Program
- **International Partners**
- **Use of Prototypes for further development**





Assistance

- Transition Plan - LIVING DOCUMENT
- Test Plan – We have Guidelines
- Fact Sheets – Export Control, Liability...
- Licensing Recommendations
- Federal Lab assistance via CRADA
- Outreach via FEDBIZOPS and Web





On Line References

www.cttso.gov

- Transition Plan Guidelines
- Radio Frequency Spectrum and Emissions Management
- The DOD Intellectual Property Guide
- Technology Readiness Levels – definitions
- Safety Act and Application Kit
- Test and Evaluation Planning Guide
- Off Line References via e-mail
 - Introduction to Tech Transition
 - 10 Steps to Reducing Liability during R&D
 - Export Control Guidance
 - LRIP Cost Analysis Model



http://www.cttso.gov/technologytransition.html (1/2/2009 10:13:07 AM)



Avoid Surprises





Teamwork is the Key

- **Close Coordination and a Win-Win Approach**
 - **Project Manager**
 - **Contracts Officer**
 - **IP Counsel**
 - **Developer /User**
 - **Transition Manager**
- **Transition Plan**
- **Communication**





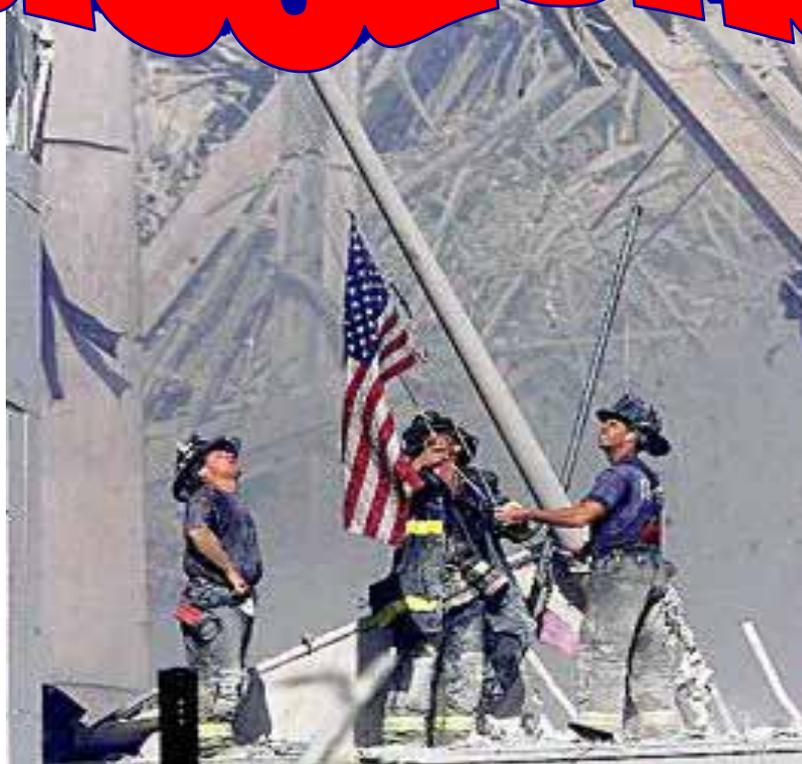
Plan Ahead!

Don't Let Your Technology Become
Homeless





Questions?





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