
Intellectual Property Overview

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IEEE Meeting

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Sections



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What is Intellectual Property?

Intellectual Property is the term for certain creative products of the human intellect. “Intellectual” describes the nature of the product and “property” indicates the legal concept that associates certain legal rights with these creative products.



Intellectual Property-The Concept

Industries with Significant IP:

Aerospace/Defense

Automotive

Biotechnology

Chemistry/Material Science

Electronics

Software

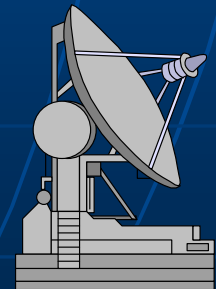
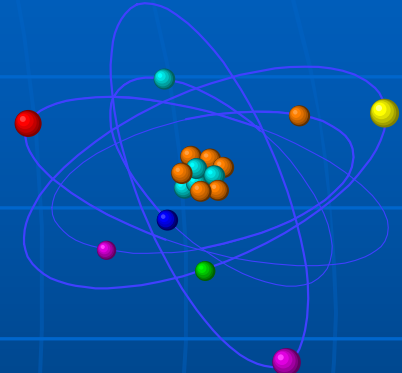
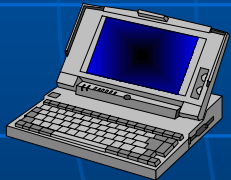
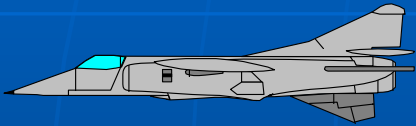
Information Technology

Pharmaceutical

Healthcare

Telecommunications

Government Labs



Examples of a Company's IP Assets:

- **Research & Development Plans/Activities**
- **Inventions & Technical Data**
- **New Product Plans/Timing**
- **Product Development & Production Plans**
- **Unique Manufacturing Processes & Tools**
- **Business and Employee Plans & Strategies**
- **Customer Lists & Product Pricing Data**
- **Financial Information**
- **Production Know-How and Planning**

Intellectual Property-The Concept

Constitutional Basis:

The Congress shall have power...to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive rights to their respective writings and discoveries...

The United States Constitution, Article I, Sec. 8, Cl. 8

Under authority of the Constitution, Congress enacted the Patent Laws (Title 35 of the United States Code), the Trademark Laws (Title 15 of the United States Code) and the Copyright Laws (Title 17 of the United States Code).

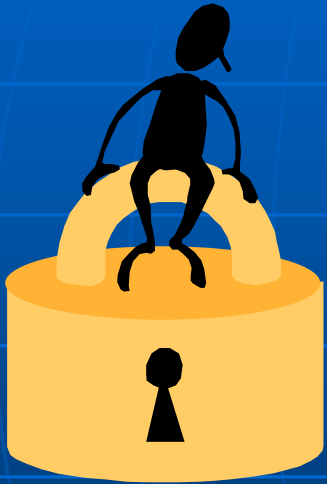
Intellectual Property-The Concept

- **IP can be extremely valuable - it may be used to:**
 - **Create competitive advantage by erecting barriers to entry into the marketplace**
 - **Enhance cash flow and recoup R&D costs through license revenues**
 - **TI: \$600M annual license revenues**
 - **IBM: \$1B+ license revenues for non-core technology**

Intellectual Property-The Concept

- **In order to exploit IP properly, we must first protect it.**
 - **Technology not properly protected results in loss of property right/lost opportunity**
 - **Example:**
 - **Loss of value of cockpit simulation software developed by Hughes in the 70's for military and not patented.**

Means of IP Protection:



1. Patents
2. Trademarks
3. Copyrights
4. Trade Secrets/Proprietary Rights in Data

Section II

Patents

The Patent Laws



- **Normal Term of a typical utility patent: 20 years from filing date for patent applications filed after June 8, 1995.**
- **Patentable subject matter: Whoever invents or discloses any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof... may obtain a patent therefor.**
- **United States Patent & Trademark Office (USPTO) may decide to place your patent under secrecy order. Issuance delayed until order lifted. May get extension to exclusivity.**

What is Granted?

- In return for disclosing the invention to the public, the government grants certain rights to the patentee for the term of the patent to allow the patentee to exploit the invention. (promoting an overall advancement of technology)

What specific rights does the Patentee obtain?

- The right to exclude others from making, using, selling or offering for sale the claimed invention.
- May not give you the right to make use or sell the end product. For example, you patent a flat wall mounted antenna design for a DSS systems. Doesn't give you the right to build DSS system.

Documentation of the Invention is Important:

- **The U.S. is a “first to invent” country (everyone else is first to file). Therefore accurate documentation must be maintained to establish the date of conception and the answers to questions of invention priority (i.e. first to conceive)**
 - **Use Engineering Lab Notebooks for documenting invention development**
 - **Document dates of conception and reduction to practice.**
 - **Maintain detailed, up-to-date and accurate records evidencing all Concepts, Sketches, Tests, etc. pertaining to the invention**
 - **Helpful to have each page Signed, Dated and Witnessed**

Timely Processing of the Invention is Important:

- **U.S. patent applications:**
 - We must file within 1 year from the date of first public disclosure outside the company, sale or offer for sale of the invention.
- **Foreign patent applications:**
 - We must file foreign patent applications before the invention is publicly disclosed or,
 - We must file foreign patent applications within 1 year from U.S. application filing date provided that the invention was not disclosed to the public prior to the filing of the U.S. application. Need USPTO filing license.

Timely Processing of the Invention is Important:

- **Potential Loss of Invention Priority**
 - **Abandonment, suppression, or concealment of the invention or lack of due diligence in reducing the invention to practice can also result in loss of rights to a subsequent inventor.**
 - **Reduction to practice is the physical part of the inventive process that completes and ends the process of invention.**

Certain Legal Barriers Exist Which Can Prevent the Granting or the Issuance of U.S. Patent

The patent applicant is not entitled to a patent if:



- **Bar #1**
 - the invention was publicly known or used by others in the U.S. before the invention by the patent applicant.
- **Bar #2**
 - the invention was patented or described in a printed publication anywhere in the world before the invention by the applicant.
- **Bar #3**
 - the invention was patented or described in a printed publication anywhere in the world more than one year prior to the filing date of the patent application.
- **Bar #4**
 - the invention was in public use in the U.S. more than one year prior to the date of the application for patent.

Certain Legal Barriers to the Issue of a Patent Cont.



- **Bar #5**
 - the invention was on sale or offered for sale in the U.S. more than one year prior to the date of the application for patent.
- **Bar #6**
 - the applicant has abandoned, suppressed or concealed (trade secret) the invention.
- **Bar #7**
 - the applicant files a foreign patent application more than one year before filing a corresponding U.S. patent application and the invention becomes patented in the foreign country before the applicant files the U.S. application.

Certain Legal Barriers to the Issue of a Patent Cont.



- **Bar #8**
 - the invention was described in a U.S. patent granted to someone else and the application for that patent was filed in the U.S. before the applicant's invention.
- **Bar #9**
 - the applicant is not the true inventor.
- **Bar #10**
 - before the applicant's invention, the invention was made in the U.S. by someone else who had not abandoned, suppressed, or concealed the invention.

Patents

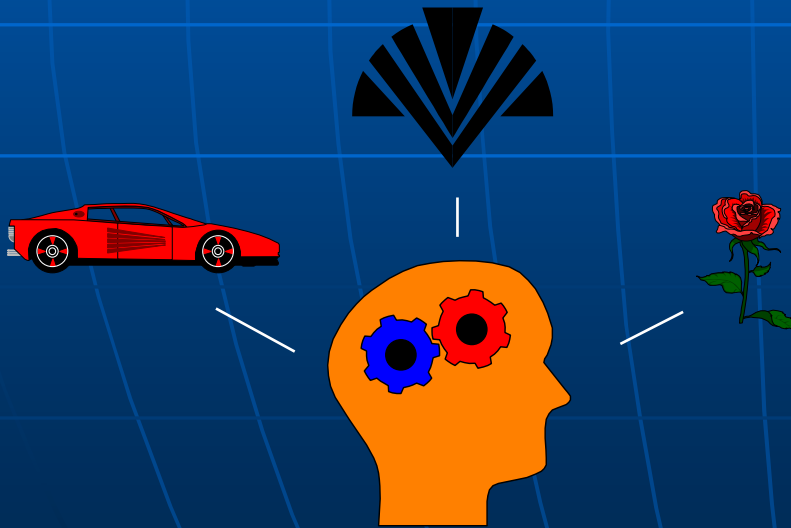


Types of Patents

- Utility Patent
- Design Patent
- Plant Patent
- Software Patent
- Business Methods Patent

Elements of a Patent

- Specification:
 - Field of the Invention
 - Background of the Invention
 - Description of the Drawing(s)
 - Detailed Description of the Preferred Embodiment of the Invention
- The Claims!!!
- Your invention disclosure does not need all of the above
- See www.uspto.gov for examples



Requirements

- **Novelty:** is present if at least one element of the claimed invention is not disclosed in any prior art
- **Non-obviousness:** exists if the claimed invention could not be easily deduced by someone skilled in the art
- **Usefulness:** performs some useful function for society

What is "Reduction to Practice"?

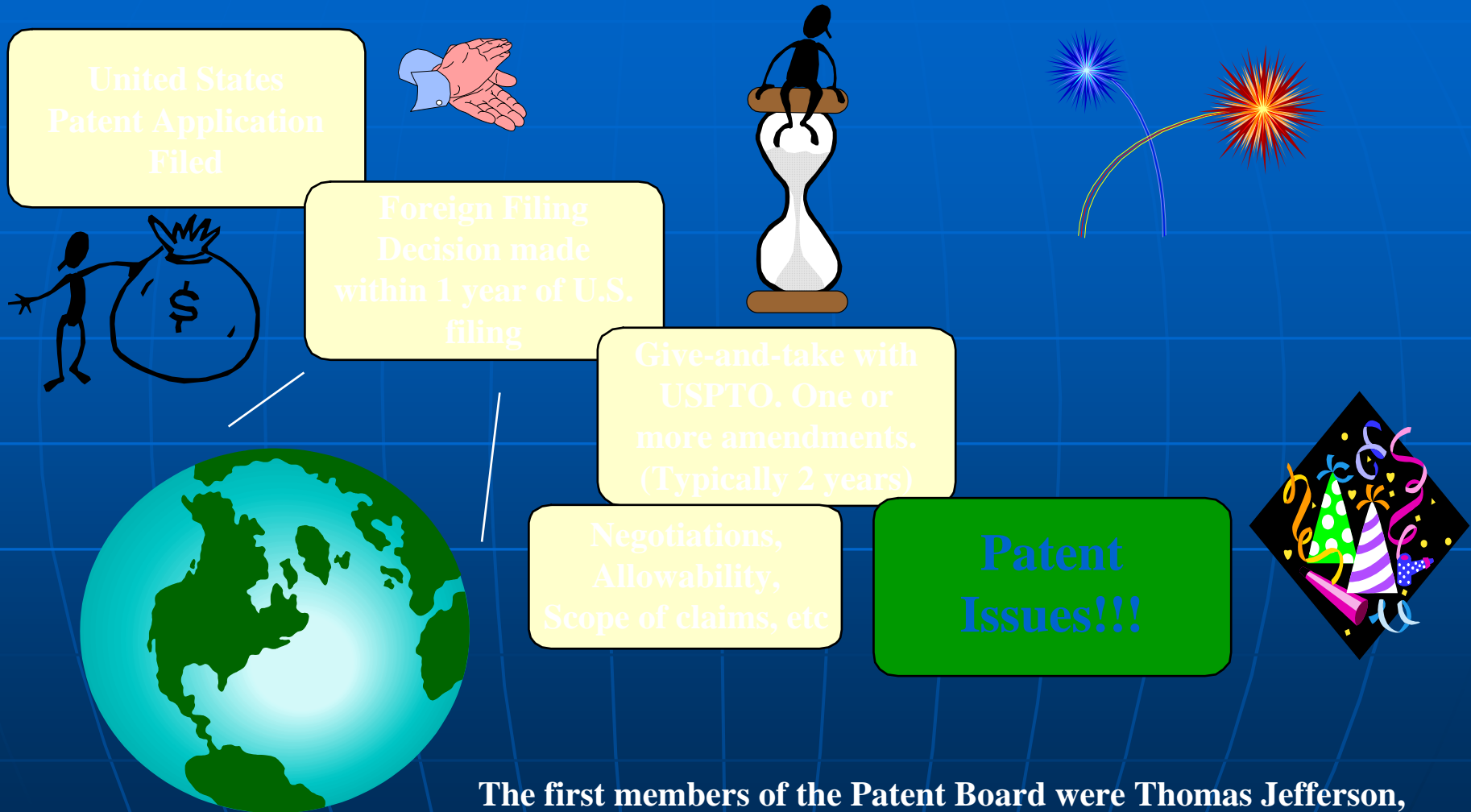
- An Inventor must demonstrate diligence in reducing the concept to practice.
- Reduction to practice occurs either:
 - by physical construction of an apparatus (physical reduction to practice) (not required) or,
 - by filing a patent application that adequately discloses the invention (constructive reduction to practice) or
 - by computer simulation (may not always be adequate)

Can You Patent Software?

- **YES!** The software must be part of a process and not just a formula. Computer algorithms are patentable, but mere mathematical algorithms and laws of nature are not
- **Software patents issued include:**
 - Database Management Systems
 - Methods of formatting data
 - Probabilistic Learning Systems
 - Expert Systems for making decisions
 - Others (see www.ladas.com/GUIDES/COMPUTER/Patents.USA.html)

Note: A copyright can also be used to protect the form of the expression embodied within the source code (i.e., the actual source code).

U.S. Patent Process



The first members of the Patent Board were Thomas Jefferson, Henry Knox and Edmond Randolph. Now 6,500+ examiners.

Suggestions to Inventors:

- Diligently document your efforts in hardbound notebooks
- Openly offer your ideas and expertise
- Actively solicit ideas and advice of co-workers
- Equitably share the responsibility for:
 - Building and testing the invention
 - Writing the invention disclosure
 - Evaluating prior art search results
 - Participating in inventor interviews
 - Editing and reviewing the patent application from technical standpoint
 - Providing needed comments for amendments during prosecution
- Share in the recognition

What we need you to do:

- Document inventions carefully
- Disclose inventions in a timely manner
- Identify opportunities to exploit the technology
- Identify potential infringements of Boeing's patents (you are the eyes and ears of the company)
- Avoid infringements of patents (request a search)

Authorization and Consent FAR 52.227-1

The US Government normally includes this clause in our contracts. We may infringe the patents of others. The Government assumes the liability for the infringement. This clause is not applicable to commercial contracts.

GOVERNMENT RIGHTS FAR 52.227-11

“Subject invention” means any invention of the contractor conceived or first actually reduced to practice in the performance of work under this contract....

The Contractor may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this clause and 35 U.S.C.203. With respect to any subject invention in which the Contractor retains title, the Federal Government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world.

III Trade Secrets as Proprietary Information

A trade secret is any information that can be used in the operation of a business or other enterprise and that is sufficiently valuable and secret to afford an actual or potential economic advantage over others. Formulas, patterns, datas, devices, methods, computer programs, processes, and techniques are all examples of trade secrets.

Examples:

- **Chemical Formulas**
- **Manufacturing Processes**
- **Machine Designs**
- **Facility Designs**
- **Computer Programs**
- **Customer & Vendor Lists**
- **Financial Data**
- **Employee Lists**
- **Business Plans/Investment Strategies**
- **Ideas Not Developed as Patents**
- **Custom Processes or Equipment Designs**

Distinguishing Features:

- **Covers ideas and their expression & wide range of subjects**
- **Must remain non-public/undisclosed**
- **Offers potential unlimited period of protection**
- **In U.S., governed by the laws of the individual states which vary from state to state (AZ has adopted UTSA)(Civil relief)**
- **US has adopted Economic Espionage Act (Criminal Only)**
- **Requires restrictions on dissemination (disclosure only under Nondisclosure Agreement, must follow NDA procedure)**
- **Requires protection by owner's actions (security measures implemented internally to maintain secrecy & NDAs)**

Protection and Maintenance of Trade Secrets requires taking certain steps:

- Identify documents as “Proprietary”
- Notify employees of the proprietary nature of trade secret materials
- Keep trade secret materials in a secured area when not in use
- Limit access to proprietary/trade secret data to only those individuals who have a “need to know” within the course and scope of their employment by the company

Protection of Trade Secrets Cont.

- **Nondisclosure agreements must be used in conjunction with disclosure of trade secrets outside the company (NDA's)**
(See Contracts, your Supply Chain Representative or Legal for Preparation and Execution of NDAs)
- **Limit access to external partners, suppliers, etc.**
 - **There must be a need to know**
 - **There must be a confidentially obligation between the parties expressed in writing**

What we need you to do:

- Carefully identify and label proprietary material
- Take required steps to protect the trade secret (internal security measures, as well as, NDA's with third parties)
- Identify individuals and/or Companies that may have inappropriately obtained Boeing's trade secrets
- Honor markings of others and NDAs
- Check with legal before you disclose a third parties information to others

Section IV

Ownership & License

Rights

The Data Rights Story

- Federal Acquisition Regulation (FARs)
- Department of Defense, Federal Acquisition Regulation (DFARs)
 - “Retained Rights”: Although the United States Government may, in some instances, obtain some rights to a contractor’s intellectual property, the Contractor may retain significant rights such as commercial and foreign rights.



- **Contracts with U.S. Government (or as subcontractor)**
 - Boeing holds title to what it develops regardless of government payment for that development
 - U.S. Government only gets license rights
 - License rights are determined by source of development funding
- **Contracts with Commercial Entities (not part of U.S. Government Procurement)**
 - **Ownership/License Rights are determined by negotiations**

DFAR Rules-Government Secures (See 252.227-7013):

- “Limited Rights” in Technical Data developed Exclusively at Private Expense
- “Restricted Rights” in Computer Software developed Exclusively at Private Expense (252.227-7014)
- “Government Purpose Rights” in Data/Software developed with Mixed Funding (GPR = loss of data to competitors). After 5 years, GPR become unlimited rights
- “Unlimited Rights” in Data/Software developed Exclusively at Government Expense
- All other is “Specifically Negotiated License Rights”

DFAR Rules:

- **U.S. Government License Rights in software and technical data are determined by the development “source of funds”**
- **Source of Funding - Rights**
 - **Private Expense - Limited Rights/Restricted Rights**
 - **Mixed Funding - Government Purpose Rights**
 - **Government Expense - Unlimited Rights**
- **U.S. Government obtains License Rights, Not Title, from the Contractor**

DFAR Rules:

- All-encompassing definition of “Government Expense” has been narrowed: Government no longer obtains “Unlimited Rights” in Data unless (1) Exclusively Funded as a direct cost; and (2) Specified as an element of performance; or (3) Designated as a deliverable.
- DoD cannot acquire “Unlimited Software Rights” merely by Specifying as element of performance or Designating as a deliverable.

DFAR Rules:

- Contractors retain rights in Data/Software funded with Indirect, as well as other Company Funds
- Development charged to any Indirect cost pool, including, but not limited to, IR&D, Capital and B&P, is now “Developed Exclusively at Private Expense” resulting in Government Limited/Restricted Rights
- FAR Part 31, CAS, and increased DCAA scrutiny protect against potential contractor abuses

DFAR Rules:

- Private Expense determinations shall now be made at the “lowest practicable level”, i.e. subsystems, data packages, etc!!!!
- Government can assert only limited/restricted rights in those segregable sub-items, sub-components or sub-processes “developed exclusively at private expense”
- DoD cannot “break out” privately developed components for separate procurement, but the Source Selection Evaluation Board can evaluate detrimental evaluation impact

License Rights Ownership



“Developed” means that an item, component, or process exists and is workable. Thus, the item or component must have been constructed or the process practiced. Workability is generally established when the item, component, or process has been **analyzed or tested sufficiently to demonstrate to reasonable people skilled in the applicable art that there is a high probability that it will operate as intended.** Whether, how much, and what type of analysis or testing is required to establish workability depends on the nature of the item, component, or process, and the state of the art. To be considered “developed,” the item, component, or process need not be at the stage where it could be offered for sale or sold on the commercial market....(DFAR 252.227-7013)

License Rights Ownership



- A Contractor does not lose his rights when an item developed on a breadboard is subsequently constructed under a government contract on a brassboard or in a form factored marketable form.
- FAR 27.406 (a)(3) Data delivery requirements should normally not require that a contractor provide the Government, as a condition of the procurement, unlimited rights in data that qualify as limited rights data or restricted computer software. Rather, form, fit, and function data may be furnished with unlimited rights in lieu of the qualifying data, or the qualifying data may be furnished with limited rights or restricted rights if needed. If greater rights are needed such need should be clearly set forth in the solicitation and the contractor fairly compensated for such greater rights.

DFAR Rules:

- **Mandatory flow-down to all subcontractors**
- **DoD expressly prohibited from directly or indirectly reverse engineering, de-compiling, or disassembling software**
- **GPR are the evolved standard for mixed-funding situations after funding has been segregated to lowest level**
- **Government receives rights in data/software for “government purpose” only; developers retain all rights for commercial use**

Under Current DFAR's:

- **“Government purposes”** now include Foreign Military Sales, and sales of spare parts to foreign governments
- GPR are subject to a negotiable (nominal 5 yr.) period, at the end of which the Government obtains **unlimited rights**
- Commercial items are presumed to be **“developed exclusively at private expense”**
- Commercial Data clause at 252.227.7015 is invoked for Data; and Subpart 227.72 mandates commercial terms and conditions for software

DFAR Rules:

- **Dissuades contracting officers from challenging a contractor's assertion that an asset is commercial, unless the government can “produce credible evidence” that it contributed to the development**
- **Contracting officers cannot deny an asserted restriction solely because of a lack of contractor response to a challenge notice under Validation Clause**

Notice for Proprietary Information Delivered to other than the Government:

- Put the appropriate proprietary data notice on every page of all documentation, including software, developed by the company.

Your Company Name

- Have your contracts/supply chain representative prepare and have signed a Non Disclosure Agreement before you make the first disclosure. Read and comply with the agreement

Notice for Proprietary Information Delivered to the Government

- **Boeing Proprietary information to be distributed to the U.S. Government - Department of Defense (DoD) must be marked in one of three ways, depending on whether the information is in form of:**
 - **(1) a Technical Proposal or Quotation**
 - **(2) a Data Submission under a DoD contract**
 - **(3) Computer Software Submission under a DoD contract**

Notice for Proprietary Information Delivered to the Government in the form of a Technical Proposal or Quotation to DoD

- In accordance with DFAR 252-227-7017, the following legend should appear on every page containing Boeing Proprietary Data:

Boeing PROPRIETARY

Use or disclosure of data contained on this sheet is subject to restriction the title page of this proposal or quotation

- In addition, the following legend should appear on the title page of the Proposal or Quotation:

Boeing PROPRIETARY

This proposal or quotation includes data that shall not be disclosed outside the Government and shall not be duplicated, used or disclosed - in whole or in part - for any purpose other than to evaluate the proposal or quotation. If, however, a contract is awarded to this offeror or quoter as a result of - or in connection with - the submission of this data, the Government shall have the right to duplicate, use or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets marked: "Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal or quotation."

Notice for Proprietary Information Delivered to the Government in the form of a Technical Proposal or Quotation to DoD:

- **The Proposal or Quotation must also identify, to the extent known at the time an offer is submitted to the Government, the technical data or computer software that the Offeror, his subcontractor or suppliers, or potential subcontractors or suppliers, assert should be furnished to the Government with restrictions on use, release, or disclosure**

Ownership/License Rights



Notice for Proprietary Information Delivered to the Government in the form of a Technical Proposal or Quotation to DoD:

Technical Data or
Computer Software
to be Furnished
With Restrictions*

(List)*****

Basis for
Assertion**

(List)

Asserted
Rights
Category***

(List)

Name of Person
Asserting
Restrictions****

(List)

* For technical data (other than computer software documentation) pertaining to items, components, or processes developed at private expense, identify both the deliverable technical data and each such item, component, or process. For computer software or computer software documentation identify the software or documentation.

** Generally, development at private expense, either exclusively or partially, is the only basis for asserting restrictions. For technical data, other than computer software documentation, development refers to development of the item, component, or process to which the data pertain. The Government's rights in computer software documentation generally may not be restricted. For computer software, development refers to the software. Indicate whether development was accomplished exclusively or partially at private expense. If development was not accomplished at private expense, or for computer software, or for computer software documentation, enter the specific basis for asserting restrictions.

*** Enter asserted rights category (e.g., government purpose license rights from a prior contract, rights in SBIR data generated under another contract, limited, restricted, or government purpose rights under this or a prior contract, or specifically negotiated licenses).

**** Corporation, individual, or other person, as appropriate.

***** Enter "none" when all data or software will be submitted without restrictions.

Date _____
Printed Name and Title _____
Signature _____

February 15, 2006

Notice for Proprietary Information Delivered to the Government:

- **Data Submission under a DoD contract (i.e. “Limited Rights” or “Government Purpose Rights” data) should be marked in accordance with DFAR 252-227-7013**
- **Data delivered or otherwise furnished to the DoD with limited rights shall be marked with the following legend on each page containing Boeing Proprietary data.**

LIMITED RIGHTS

Use or disclosure of data contained on this sheet is subject to the “Limited Rights” restriction on the title page of this document.

Notice for Proprietary Information Delivered to the Government:

- In addition, the following legend must appear on the title page of the document:

LIMITED RIGHTS

Contract No. _____

Contractor Name _____

Contractor Address _____

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b) (3) of the Rights in Technical Data-Noncommercial Item clause contained in the above identified contract. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify the above named Contractor.

Notice for Proprietary Information Delivered to the Government:

- **Data Submission under a DoD contract (i.e. “Limited Rights” or “Government Purpose Rights” data) should be marked in accordance with DFAR 252-227-7013**
- **Data delivered or otherwise furnished to the DoD with “Government Purpose Rights” shall be marked with the following legend on each page containing Boeing Proprietary data.**

GOVERNMENT PURPOSE RIGHTS

Use or disclosure of data contained on this sheet is subject to the “Government Purpose Rights” restriction on the title page of this document.

Notice for Proprietary Information Delivered to the Government:

- In addition, the following legend must appear on the title page of the document:

GOVERNMENT PURPOSE RIGHTS

Contract No. _____

Contractor Name _____

Contractor Address _____

Expiration Date _____

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b) (2) of the Rights in Technical Data-Noncommercial Item clause contained in the above identified contract. No restrictions apply after the expiration date shown above. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings.

Notice for Proprietary Information Delivered to the Government:

- **Computer Software/Documentation Submission under a DoD contract (i.e. “Restricted Rights” or “Government Purpose Rights” data) should be marked in accordance with DFAR 252-227-7014**
- **Computer Software/Documentation delivered or otherwise furnished to the DoD with restricted rights shall be marked with the following legend on each page containing Boeing Proprietary data.**

RESTRICTED RIGHTS

Use or disclosure of software/documentation contained on this sheet is subject to the “Restricted Rights” restriction on the title page of this document.

Notice for Proprietary Information Delivered to the Government:

- Additionally, computer software/documentation, developed at Boeing's private expense should be marked on the title page as follows:

RESTRICTED RIGHTS

Contract No. _____

Contractor Name _____

Contractor Address _____

The Government's rights to use, modify, reproduce, release, perform, display, or disclose this software are restricted by paragraph (b) (3) of the Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation clause contained in the above identified contract. Any reproduction of computer software or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such software must promptly notify the above named Contractor.

Notice for Proprietary Information Delivered to the Government:

- **Computer Software/Documentation delivered or otherwise furnished to DoD with “Government Purpose Rights” shall be marked as follows on each page containing Boeing Proprietary Data.**

GOVERNMENT PURPOSE RIGHTS

Use or disclosure of software/documentation contained on this sheet is subject to the “Government Purpose Rights” restriction on the title page of this document.

Notice for Proprietary Information Delivered to the Government:

- Additionally, computer software/documentation, developed at Boeing's private expense should be marked on the title page as follows:

GOVERNMENT PURPOSE RIGHTS

Contract No. _____

Contractor Name _____

Contractor Address _____

Expiration Date _____

The Government's rights to use, modify, reproduce, release, perform, display, or disclose this software are restricted by paragraph (b) (2) of the Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation clause contained in the above identified contract. No restrictions apply after the expiration date shown above. Any reproduction of software or portions thereof marked with this legend must also reproduce the markings.

V Trademarks

Trademarks



“Goretex”

(coined)

“Kleenex”

(coined)

“Coke”

(coined)

“Mountain Goat”

(All Terrain Vehicle - Suggestive)

A trademark is a distinctive word, name, symbol, logo, color, scent, sound or other designation, or a combination of such designations, that identifies and distinguishes one’s goods and services from another’s.

“Never leave home without it”

(arbitrary)

“Apple Computers”

(arbitrary)

“Nike”

(coined)

Trademarks



Types of Marks:

Generic	Descriptive	Suggestive	Coined or Fanciful	Arbitrary
<ul style="list-style-type: none">•Not registerable•Never capable of being registered even after extended use	<ul style="list-style-type: none">•Not registerable•Only registerble after extended exclusive use and showing of secondary meaning	<ul style="list-style-type: none">•Kleenex•Mountain Goat (ATV)•Putting Energy on Target	<ul style="list-style-type: none">•Goretex•Kleenex•Coke•Kodak•Exxon•Nike	<ul style="list-style-type: none">•Apple (computers)•Camel (cigarettes)•“Never leave home without it”•“It’s the real thing”

Examples of lost trademarks

Escalator or Cellophane

The Value of Trademarks

The value of an trademark is established over time with the buying public's recognition of the mark as being associated with a particular owner and the buying public's high regard for the quality of the goods and services manufactured/provided by that particular owner.

Trademarks



Trademarks identify the source of origin of goods and/or services. Thus, buyers can be confident that the item they select comes from a particular source. Trademark rights are derived from actual use of the trademark within the United States. Federal registration of trademarks provide for enhanced statutory remedies against infringers, as well as, for greater geographical coverage (i.e., throughout the U.S.).

Examples of Registered and Unregistered Marks:

- **Federally Registered Marks:**
Sport Pilot[®] - Apparatus and instrument for navigation, controlling and steering a watercraft
- **Unregistered Marks**
- **Service Marks**

TM

SM



Characteristics of a Strong Trademark:

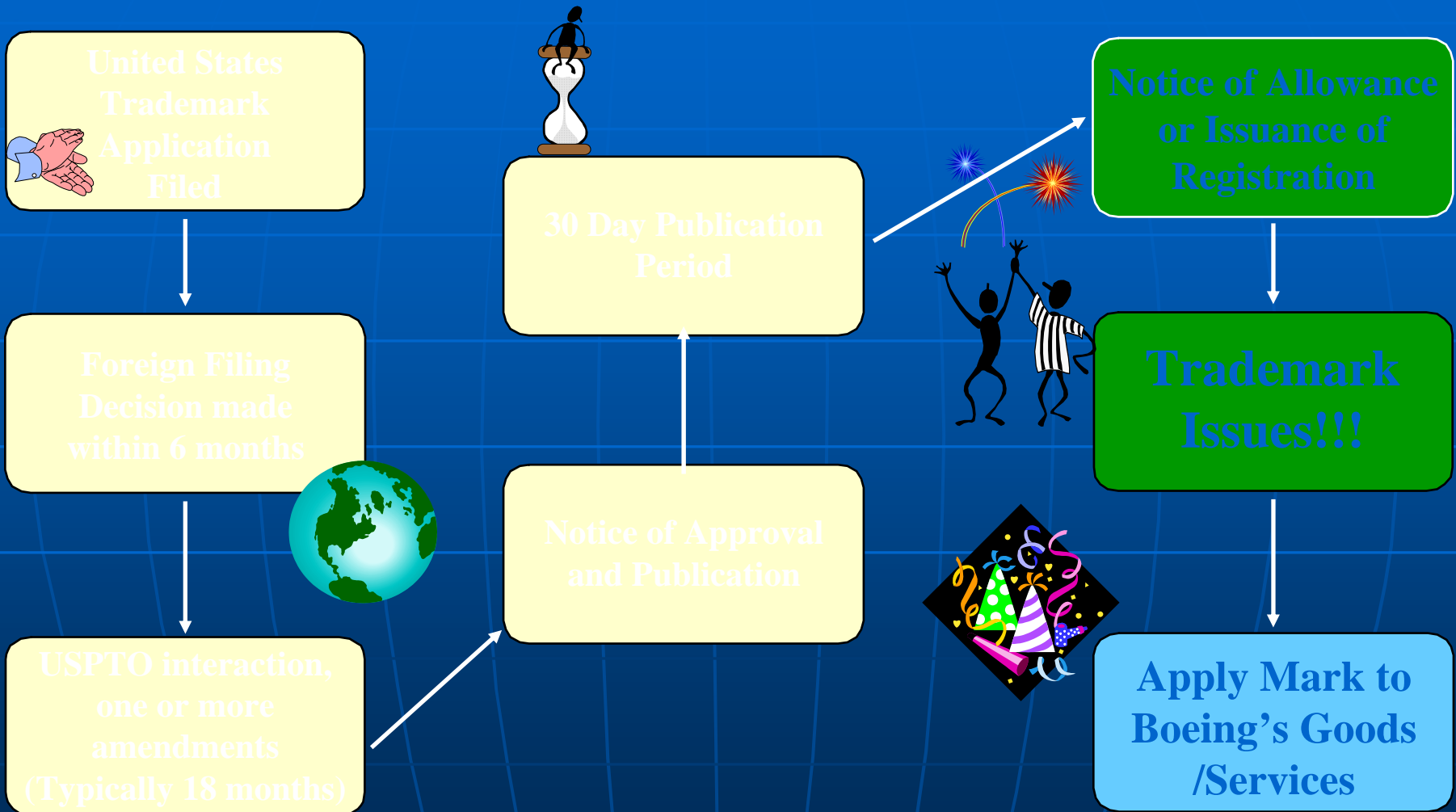
- **Employs a non-descriptive language (i.e. a coined name)**
- **Immediately distinguishable from other existing trademarks**
- **Geographically distinctive**
- **Will fit with future product or service growth**
- **Will not hinder future product or service offerings**

Test for trademark/servicemark infringement - likelihood of confusion as to the source of the goods or services associated with the mark.

How do we select an appropriate Trademark?

- Provide a list of 8-10 trademark choices to the IP Department for proposed use in connection with a particular good or service.
- A preliminary search will be performed to ascertain the availability of these marks for use with the intended classification of goods or services
- Eliminate the weakest candidates, i.e. those marks which are widely used in connection with a broad scope of goods/services, e.g. ACME, EXCEL
- A final, comprehensive search may be performed to identify the best candidate for use in connection with the particular goods or service.

Trademark Process



Requirements of Federal Trademark Registration:

- Use in interstate commerce
- Prepare and file application for registration with drawing of proposed mark in USPTO
- Provide notice to public that a word is a registered trademark, e.g. R
- Identify mode or manner in which the trademark is used on or with the goods or services
- File affidavits of use between fifth and sixth year following registration

Federal or State or Common Law (Unregistered Mark):

- Both federal and state registration of trademarks provide protection for 10 years and are renewable unless the mark is abandoned
- Federally registered mark - rights are governed by USC Title 15 (The Lanham Act) and are enforceable in the federal court system.
- Unregistered trademarks - rights are governed and enforced pursuant to the 50 different bodies of state law.

What we need you to do:

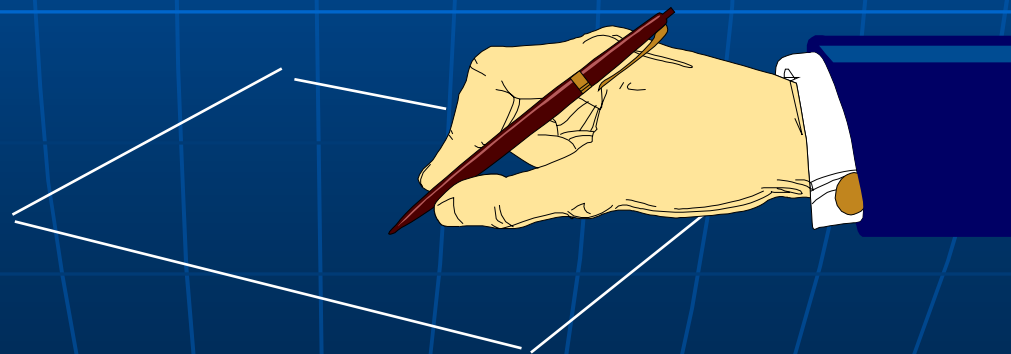
- Carefully select non-descriptive potential trademarks
- Provide the IP Group with the list of potential trademarks so a thorough availability search can be conducted
- Use Registered and Unregistered trademarks properly, i.e. affix proper notice
- Identify potential infringements of Boeing's trademarks

VI Copyrights

Copyrights

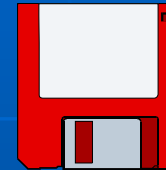


A copyright is the right of the creator of a work fixed in a tangible medium of expression to prevent others from copying, adapting, distributing, performing or displaying the work.



Types of Copyrightable Subject Matter:

- Literary works (i.e. software programs)
- Musical works
- Dramatical works
- Pantomimes and Choreographic works
- Pictorial, Graphical, & Sculptural works
- Motion Pictures & other Audiovisual works
- Sound Recordings
- Factual works (News, Histories, etc)
- Software (digital media evolving legal area NAPSTER)



Owner's Rights:

- **Reproduction Right:** The exclusive right to make copies of original works.
- **Adaptation Right:** The exclusive right to prepare derivative works
- **Distribution Right:** The exclusive right to distribute copies of the original and derivative works to the public by selling, licensing, leasing, etc.
- **Performance Right:** The exclusive right to perform the copyrighted works publicly.
- **Display Right:** The exclusive right to publicly display the copyrighted works.

Copyrights



Duration of Copyright:

General Term:

Author's life plus 70 yrs.

Joint Works:

Life of last surviving author plus 70 yrs

Anonymous Works:

Pseudonymous Works:

Made for Hire Works:

95 years from Year of first Publication, or 120 Years from Year of Creation, whichever comes first.

Copyright Usage:

- **The copyright vests in a work automatically once the work becomes fixed in a tangible medium of expression.**
- **Registered works provide for statutory damages. Non-Registered works entitle the owner to actual damages. (must apply for registration before filing suit for infringement).**
- **Always provide proper copyright notices on copyrighted materials.**

Copyrights



Steps Required for Copyright Protection of Software:

- **Display the appropriate copyright notices on all software and documentation developed by the company**

For software developed under company funding

**COPYRIGHT © 19XX, XYZ COMPANY
ALL RIGHTS RESERVED**

For software developed under government contract

**COPYRIGHT © 19XX, XYZ COMPANY
ALL RIGHTS RESERVED**

**This material may be reproduced by or for the U.S.
Government pursuant to the copyright license under the
clause at DoD FAR SUP 252.22-7014 (clause date)**

- **Register the copyright at the Copyright Office of the Library of Congress by completing the appropriate registration form and forwarding it and a deposit copy of the work to the Copyright Office**

Location of Notice:

- **Place in such manner and location to give reasonable notice of copyright claim**
- **Examples of notice in machine readable copies or copies from which the work cannot be seen without a machine**
 - Notice displayed at a user's terminal either at sign-on or continuously displayed on the terminal while in use
 - Notice embodied in machine readable copies such that when the material is printed, the notice will appear near the title or at the end of the work (or both)
 - Notice durable enough to withstand use on a gummed or other type label, which can be affixed to the copies, to a reel, cartridge, cassette or container used as a permanent receptacle for the copies.
 - Notice attached via affixed label or imprinted onto magnetic medium containing programs (I.e. floppy disc or CDs)

Implications of Not Registering Copyright:

- **Registration is a prerequisite to filing suit for copyright infringement.**
- **However, a lawsuit may be filed subsequent to registration for infringement occurring prior to registration.**
- **Limited to actual damages and possible injunctive relief to restrain further infringement.**
- **One can not obtain statutory damages and attorney's fees for infringing acts occurring prior to the date of registration of the copyright material.**

What we need you to do:

- Carefully identify copyrightable material
- Mark all copyrighted materials with proper copyright notices
- Identify potential infringements of Boeing's copyrights
- Avoid violating copyrights of others
- Contact Technical Library

(Section VII)

Summary

CONSEQUENCES



TRADE SECRETS ACT (18 USC 1905)

Whoever, being an officer or employee of the United States or of any department or agency thereof...publishes, divulges, discloses, or makes known in any manner or to any extent not authorized by law any information coming to him in the course of his employment or official duties or by reason of any examination or investigation made by, or return, report or record made to or filed with, such department or agency or officer or employee thereof, which information concerns or relates to the trade secrets, processes, operations, style of work, or apparatus, or to the identity, confidential statistical data, amount or source of any income, profits, losses, or expenditures of any person, firm, partnership, corporation, or association; or permits any income return or copy thereof or any book containing any abstract or particulars thereof to be seen or examined by any person except as provided by law; shall be fined under this title, or imprisoned not more than one year, or both; and shall be removed from office or employment.

CONSEQUENCES



ECONOMIC ESPIONAGE ACT (18 USC §1832)

- (a) Whoever, with intent to convert a trade secret, that is related to or included in a product that is produced for or placed in interstate or foreign commerce, to the economic benefit of anyone other than the owner thereof, and intending or knowing that the offense will, injure any owner of that trade secret, knowingly--
- (1) steals, or without authorization appropriates, takes, carries away, or conceals, or by fraud, artifice, or deception obtains such information;
 - (2) without authorization copies, duplicates, sketches, draws, photographs, downloads, uploads, alters, destroys, photocopies, replicates, transmits, delivers, sends, mails, communicates, or conveys such information;
 - (3) receives, buys, or possesses such information, knowing the same to have been stolen or appropriated, obtained, or converted without authorization;
 - (4) attempts to commit any offense described in paragraphs (1) through (3); or
 - (5) conspires with one or more other persons to commit any offense described in paragraphs (1) through (3), and one or more of such persons do any act to effect the object of the conspiracy, shall, except as provided in subsection (b), be fined under this title or imprisoned not more than 10 years, or both.
- (b) Any organization that commits any offense described in subsection (a) shall be fined not more than \$5,000,000.

CONSEQUENCES



ARIZONA REVISED STATUTES TITLE 44, CHAPTER 4, *UNIFORM TRADE SECRETS ACT*

In this chapter, unless the context otherwise requires:

1. "Improper means" includes theft, bribery, misrepresentation, breach or inducement of a breach of a duty to maintain secrecy or espionage through electronic or other means.
2. "Misappropriation" means either:
 - (a) Acquisition of a trade secret of another by a person who knows or has reason to know that the trade secret was acquired by improper means.
 - (b) Disclosure or use of a trade secret of another without express or implied consent by a person who either:
 - (i) Used improper means to acquire knowledge of the trade secret.
 - (ii) At the time of disclosure or use, knew or had reason to know that his knowledge of the trade secret was derived from or through a person who had utilized improper means to acquire it, was acquired under circumstances giving rise to a duty to maintain its secrecy or limit its use or was derived from or through a person who owed a duty to the person seeking relief to maintain its secrecy or limit its use.
 - (iii) Before a material change of his position, knew or had reason to know that it was a trade secret and that knowledge of it had been acquired by accident or mistake.

CONSEQUENCES



3. "Person" means a natural person, corporation, business trust, estate, trust, partnership, association, joint venture, government, governmental subdivision or agency or any other legal or commercial entity.

Trade secret" means information, including a formula, pattern, compilation, program, device, method, technique or process, that both:

- (a) Derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use.**
- (b) Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.**

CONSEQUENCES



- A. Except to the extent that a material and prejudicial change of position before acquiring knowledge or reason to know of misappropriation renders a monetary recovery inequitable, a complainant is entitled to recover damages for misappropriation. Damages may include both the actual loss caused by misappropriation and the unjust enrichment caused by misappropriation that is not taken into account in computing actual loss. In lieu of damages measured by any other methods, the damages caused by misappropriation may be measured by imposition of liability for a reasonable royalty for a misappropriator's unauthorized disclosure or use of a trade secret.**
- B. If willful and malicious misappropriation exists, the court may award exemplary damages in an amount not exceeding twice any award made under subsection A**

Conclusions and Recommendations

- **Do not hesitate in contacting one of Boeing's IP attorneys and/or IPB if you have questions or are unsure of an issue**
- Consider all means of intellectual property protection and use a combination when possible
- Identify opportunities to exploit and protect IP
- Seek patent or trade secret protection on novel ideas and processes
- Always put copyright notice on company funded, as well as, government funded projects
- Do not give any information, documentation, material or software to a third party without determining if appropriate nondisclosure agreements have been signed
- Make sure that if proprietary documentation or software is provided to the government as part of a contract, it has the proper markings

Conclusions and Recommendations

- When participating in a proposal effort, make sure any proprietary information including supplier proprietary information is identified to the customer prior to contract award
- Never purchase commercial software for incorporation into an end item deliverable, including test equipment or ground support equipment, without first contacting an IP attorney
- Remember: Government gets only **limited rights** in technical data and **restricted rights** in computer software when either are developed at private expense. Even when the government pays for development, we retain many rights including title
- If you need a NDA, contact your Contracts or Supply Chain representative Don't forget to process a Technical Paper Disclosure Request before publishing you paper

IX Attachments

- **Forms**

- **Proprietary Information Agreement (Data from Boeing)**
- **Proprietary Information Agreement (Data to Boeing)**
- **Proprietary Information Agreement (Two-Way Domestic)**
- **Proprietary Information Agreement (Two-Way International)**
- **Invention Disclosure Instructions**
- **Invention Disclosure Detailed Description**
- **Invention Disclosure Questionnaire**
- **Technical Publications Clearance Request**
- **Employee Statements and Agreements**

- **FAR/DFAR Clauses**

- **FAR 52.227-1 Authorization and Consent**
- **FAR 52.227-10 Filing of Patent Applications - Classified Subject Matter**
- **FAR 52.227-11 Patent Rights - Retention by the Contractor (Short Form)**
- **FAR 52.227-12 Patent Rights - Retention by the Contractor (Long Form)**
- **DFAR 252.227-7013 Rights in Technical Data - Non-Commercial Items**
- **DFAR 252.227-7014 Rights in Non-Commercial Computer Software and Non-Commercial Computer Documentation**
- **DFAR 252.227-7015 Technical Data Commercial Items**
- **DFAR 252.227-7016 Rights in Bid or Proposal Information**
- **DFAR 252.227-7017 Identification and Assertion of Use, Release, or Disclosure Restrictions**
- **DFAR 252.227-7019 Validation of Asserted Restrictions - Computer Software**
- **DFAR 252.227-7026 Deferred Delivery of Technical Data or Computer Software**