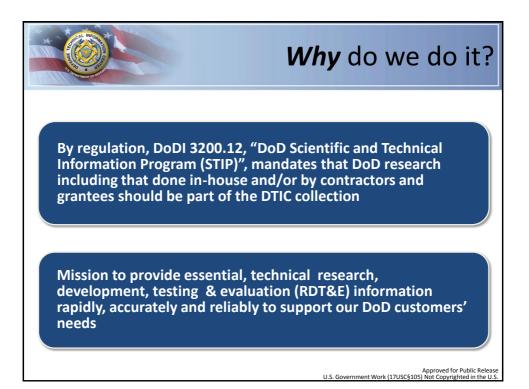
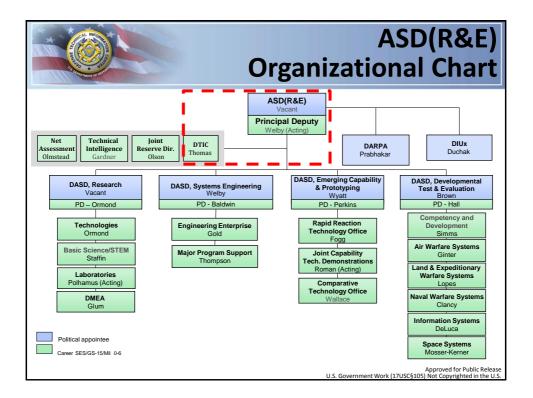
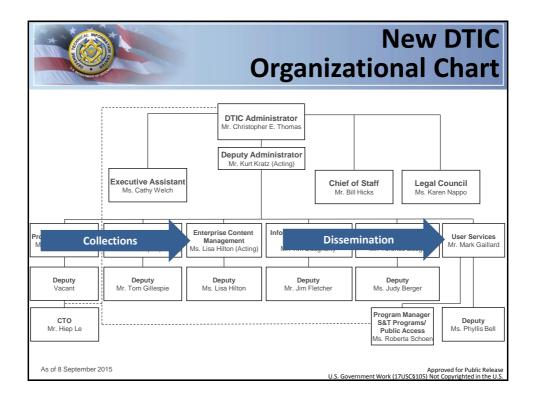


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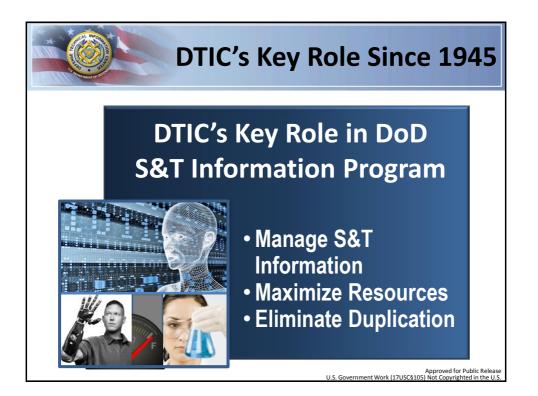








		DTIC Transformation
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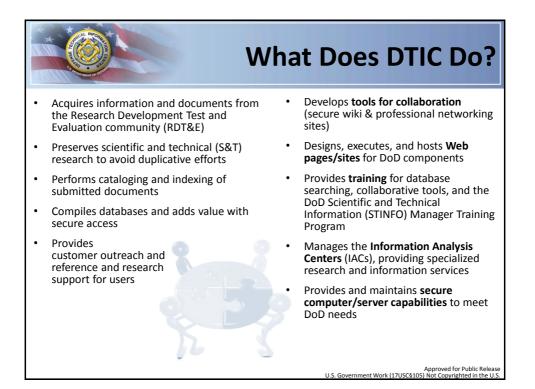


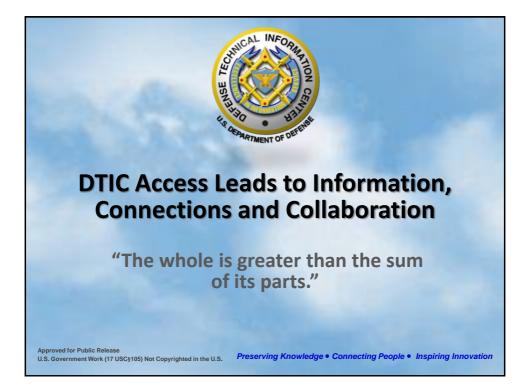
Why Does DTIC Matter?

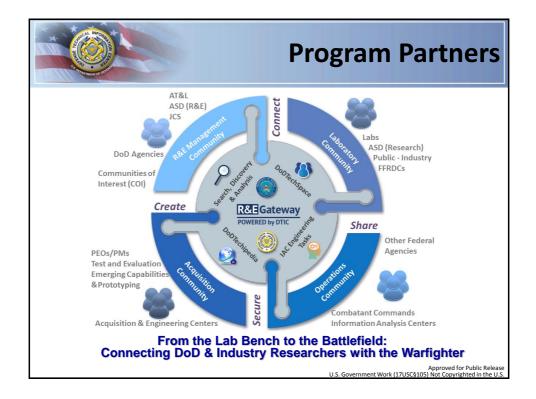


- Serves as centralized location for DoD funded scientific & technical (S&T) information
- Organizes and stores information permanently
- Leverages the multi-billion dollar investment in DoD research and engineering
- Prevents unnecessary or redundant research
- Provides support for research & development (R&D) activities
- Safeguards information with secure access based on user authorization
- Gets digitized information to the right people at the right time

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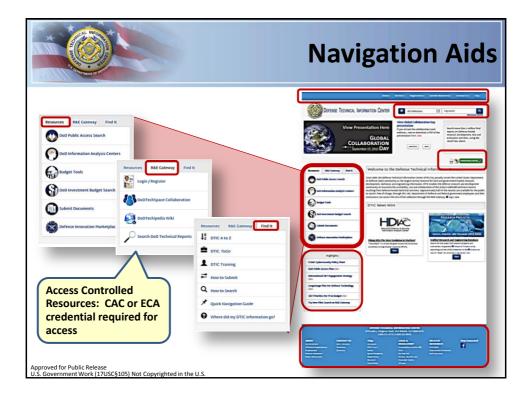


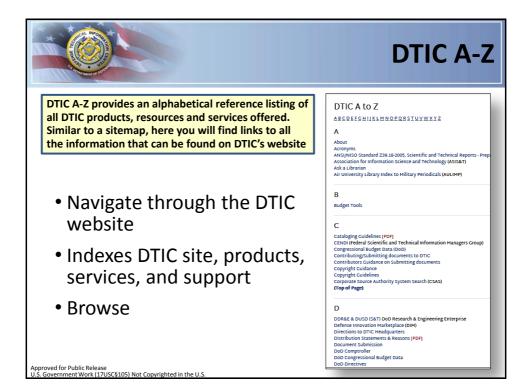




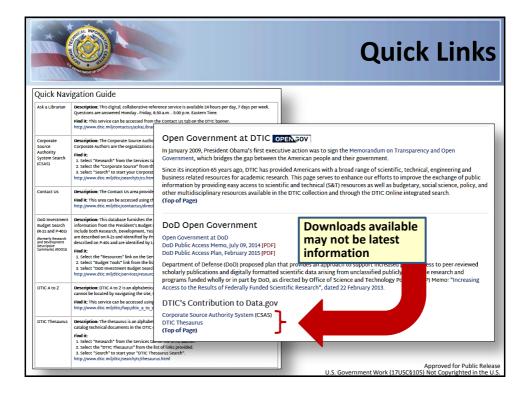


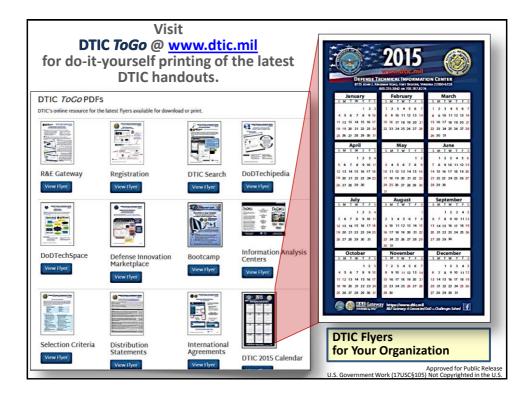


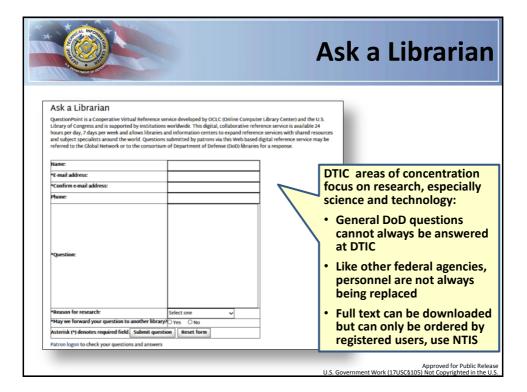




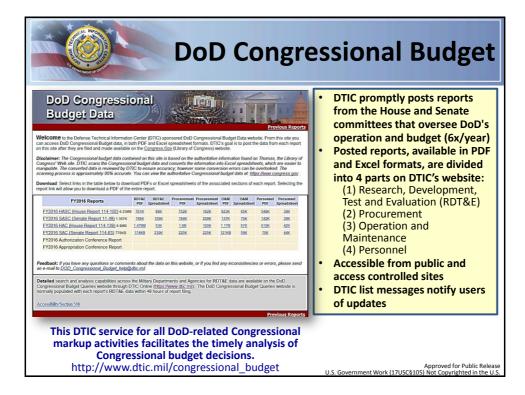
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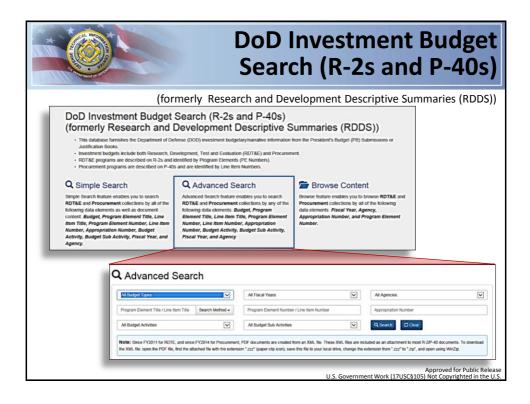




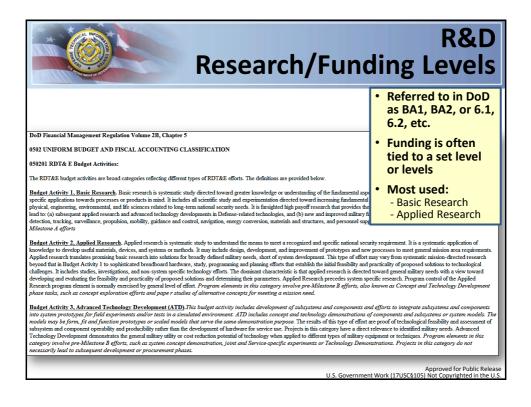
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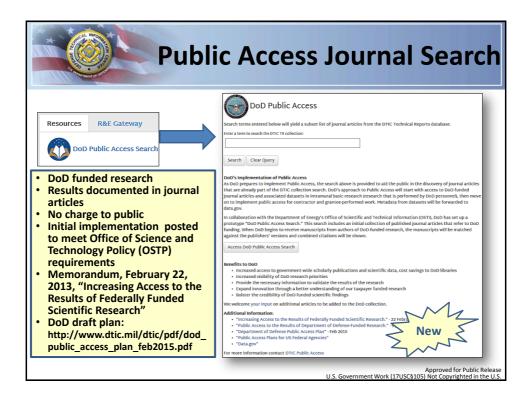
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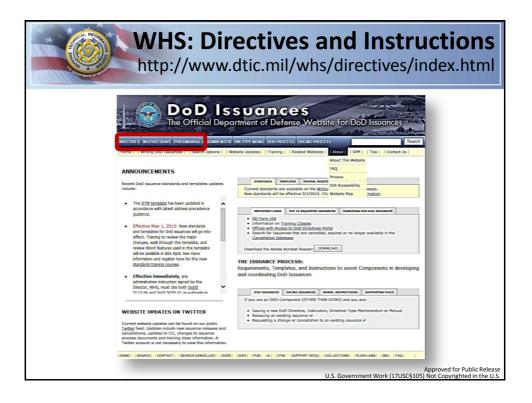


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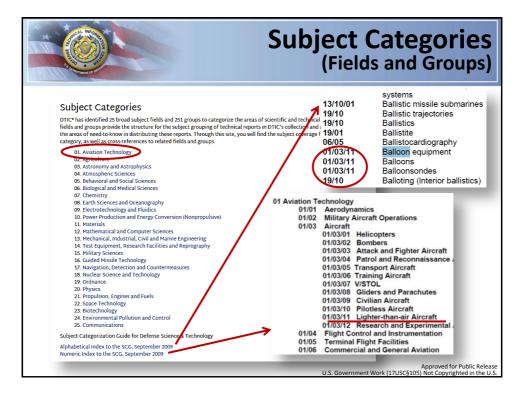


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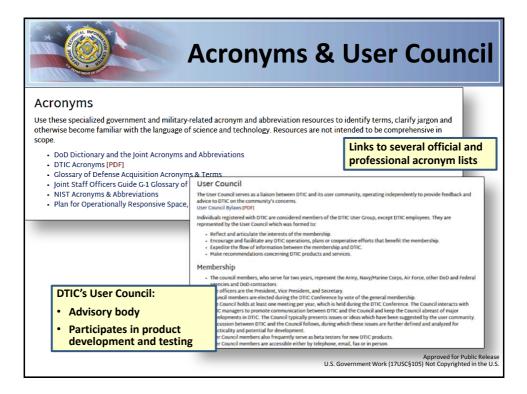


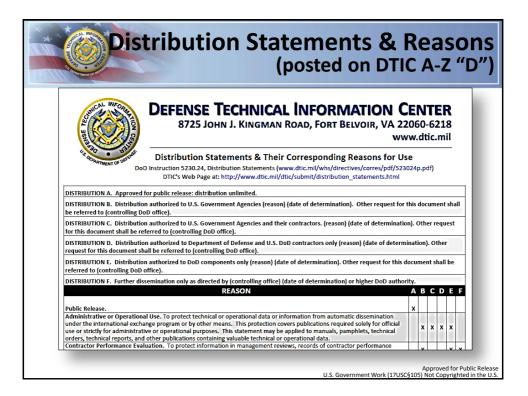


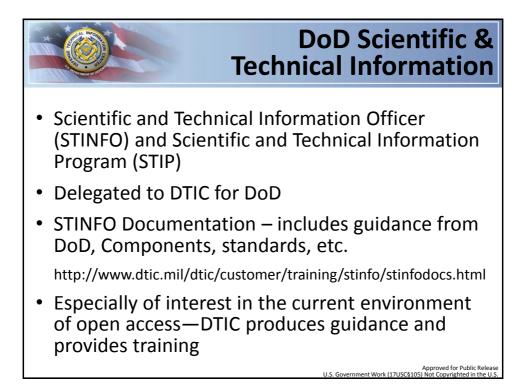


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01	Aerodynamics	Flight characteristics and problems of they are affected by the dynamics of theoretical and experimental aerody Missile Dynamics, Configurations an see 22/03, Spacecraft Trajectories an see 13/13, Structural Engineering an	Accession Number : ADA587008 Title : Design of a Lighter Than Air Vehicle That Achieves Positive Buoyancy in Air Using a Vacuum			
02	Military Aircraft Operations	Military aircraft operations such as t night flight, taxiing, approach, and i accident studies; Aircraft simulators Guided Missile Technology. For spac navigation and air traffic control, se	Descriptive Note : Master's thesis Corporate Author : AIR FORCE INSTITUTE OF TECHNOLOGY WRIGHT-PATTERSON AFB OH GRADUATE SC			
03	Aircraft	Design, production, and maintenanc Structural studies of complete aircr Airworthiness; Crashworthiness; Air effects of gunfire and blast on aircra Civilian Aircraft. For specific types o 16, Guided Missile Technology and F	Personal Author(s) : Metlen, Trent T Full Text : <u>http://www.dtic.mil/get-tr-doc/pdf?AD=ADA587008</u> Report Date : Jun 2012			
03/01	Helicopters	Includes attack helicopters. For civil	Pagination or Media Count : 188			
03/02 03/03	Bombers Attack and Fighter Aircraft		Abstract : Three designs for a Lighter Than Air (LTA) structure that achieve positive buoyancy using a vacuum in pl ratio of structure weight to the weight of displaced air was termed Weight/Buoyant Force (W/B) where a W/B1 corr			
03/04	Patrol and Reconnaissance Aircraft	Includes observation aircraft.	geometrically stiffening a sphere were investigated and their W/B evaluated. A thin shelled sphere of beryllium stiffe High Modulus (UHIM) carbon epoxy was predicted to give a W/B= 0.79. A geodesic sphere composed of a frame of a thin external membrane was evaluated using Finite Element Analysis. A W/B=0.57 was calculated for the frame. Zvlon was used to reinforce a Mvlar membrane. which resulted in a predicted structure W/B=0.94. These structure			
03/05	Transport Aircraft	Includes tanker aircraft.	optimization routine in Matlab. A unique LTA vehicle concept composed of twin counter-rotating cylinders that mad			
03/06	Training Aircraft		maintain structural integrity with a vacuum was also investigated and found to be infeasible.			
03/07	V/STOL		Descriptors : *AIRCRAFT, BUCKLING, GEODESICS, OPTIMIZATION, SPHERES, STRUCTURES, THESES, VA			
03/08	Gliders and Parachutes	Includes paragliders and kites, for be	Subject Categories : Lighter-than-air Aircraft			
03/09	Civilian Aircraft	Does not include aircraft modified fo				
03/10	Pilotless Aircraft R.P.V.; Drones.	Includes full size aircraft when confi	Distribution Statement : APPROVED FOR PUBLIC RELEASE			
03/11	Lighter-than-air Aircraft	Airships, blimps, dirigibles, balloons,	for both civilian and military applications. Approved for Public Release. U.S. Government Work (17USC§105) Not Copyrighted in the U.S.			

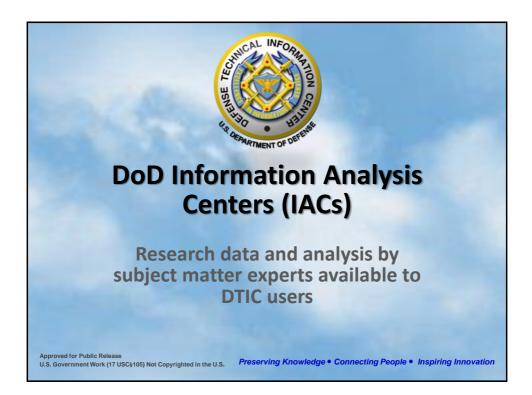
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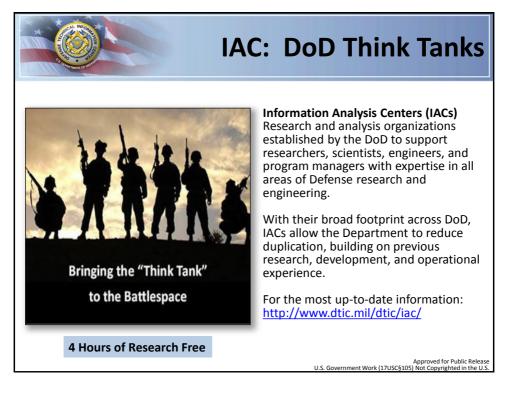




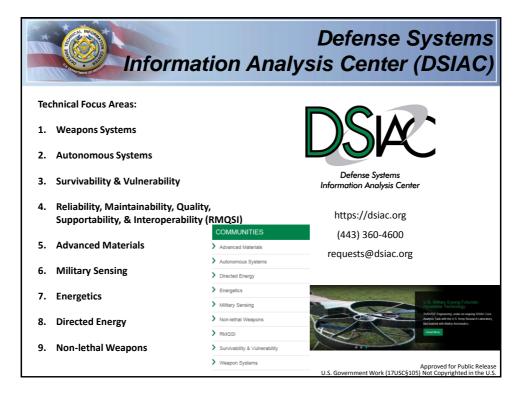


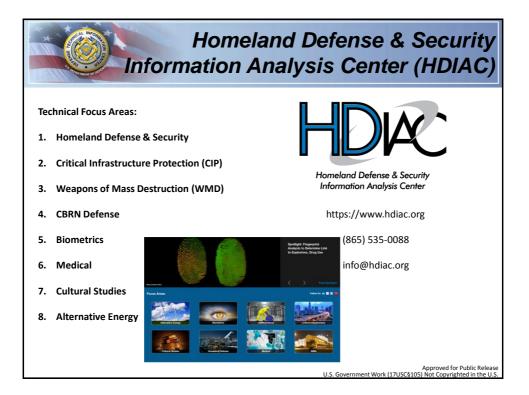




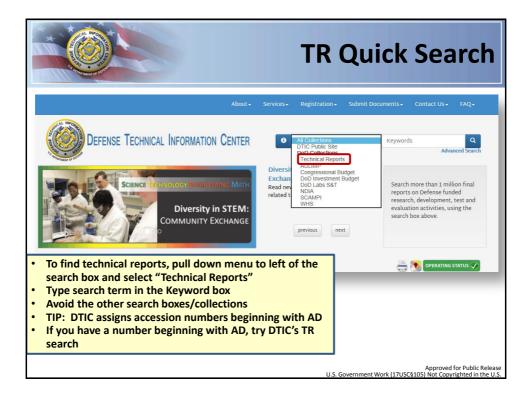


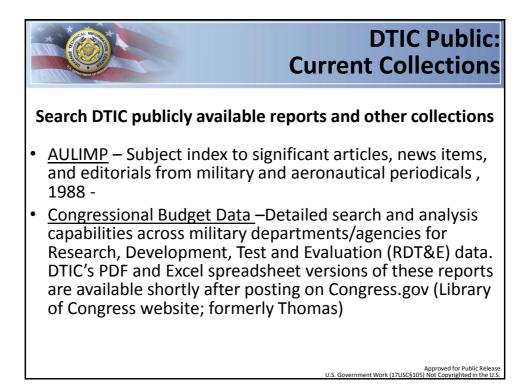


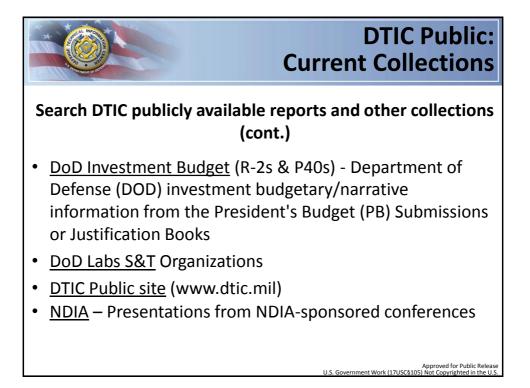


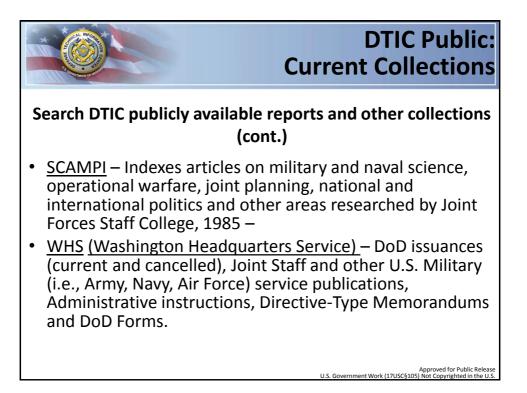












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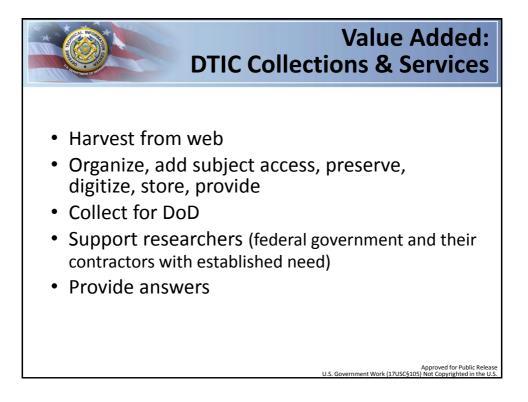


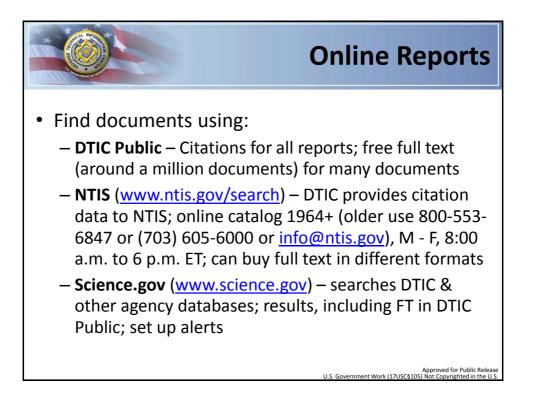
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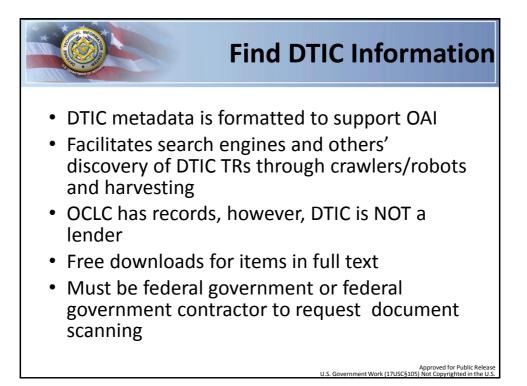
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4.	Nanobiotechnology Report of the National Nanotechnology Initiative Workshop. October 9-11. 2003. Arlington. Virginia Title : Nanobiotechnology Report of the National Nanotechnology Initiative Workshop, October 9-11. 2003. Arlington, Virginia. www.dtic.mil/docs/citations/ADA572152 - 24k - 2005-10-01 - <u>Cached</u> - <u>PDF</u>	Easy way to
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6.	X-rays and Neutrons: Essential Tools for Nanoscience Research. Report of the National Nanotechnology Initiative Workshoo Washington. DC 	<u>p. June 16-18, 2005.</u>
7.	The Future of the National Nanotechnology Initiative Accession Number: ADA572112. Title : The Future of the National Nanotechnology Initiative Descriptors : "NANOTECHNOLOGY www.dtic.mil/docs/citations/ADA572112 - 21k - 2003-11-07 - Cached - PDE	
8.	Instrumentation and Metrology for Nanotechnology Title : Instrumentation and Metrology for Nanotechnology Descriptors : *NANOTECHNOLOGY INSTRUMENTATION, METROLOGY www.dtic.mil/docs/citations/ADA572139 - 22k - 2004-01-29 - <u>Cached</u> - <u>PDF</u>	
9.	A Nanotechnology Enhancement to Moore's Law Accession Number : ADA5/1321. Title : A Nanotechnology Enhancement to Moore's Law. Descriptive Note : Journal article www.dtic.mil/docs/citations/ADA571321 - 25k - 2013-01-01 - <u>Cached</u> - <u>PDE</u>	
10.	Nanotechnology-Enabled Optical Molecular Imaging of Breast Cancer Accession Number: ADA565328. Title : Nanotechnology-Enabled Optical Molecular Imaging of Breast Cancer. Descriptive Note : Annual rept www.dtic.mil/docs/citations/ADA586328 - 23k - 2012-07-01 - Cached - PDE U.S. Government Work (17USC)	Approved for Public Release §105) Not Copyrighted in the U.S.

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Accession Number : ADA586328
Title : Nanotechnology-Enabled Optical Molecular Imaging of Breast Cancer
Descriptive Note : Annual rept. 15 Jun 2011-14 Jun 2012
Corporate Author : RICE UNIV HOUSTON TX
Personal Author(s) : Drezek, Rebekah
Full Text : http://www.dtic.mil/get-tr-doc/pdf?AD=ADA586328
Report Date : Jul 2012
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Abstract : This project focuses on development of nanotechnology-enabled optical molecular imaging technologies for applications in both breast cancer diagnosis and monitoring therapeutic response. The project consists of two major efforts: (1) optical instrumentation technology development and (2) development of complementary engineered nanomaterials for use in conjunction with the instrumentation created to provide molecular specificity. A particularly significant effort is underway to develop needle-compatible fiber optic probes to enable in vino imaging of tumors with thircor resolution in order to provide a new microscopic, high resolution imaging modality. These microscopic devices will complement the macroscopic, wide-field optical imaging devices being developed in this project.
Descriptors : "BREAST CANCER, "NANOTECHNOLOGY, "OPTICAL IMAGES, DIAGNOSIS(MEDICINE), FIBER OPTICS, HIGH RESOLE • DTIC
Subject Categories : Medicine and Medical Research Optics • DTIC Fields and Vocabulary
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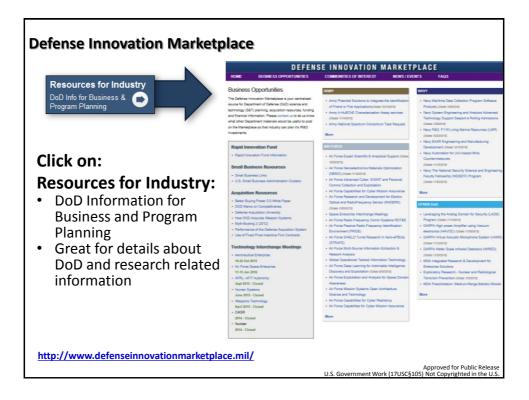
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Report Cover	Standard Form 298 – Report Documentation Page	
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TITLE: Nanotechnology-Enabled Optical Molecular Imaging of Breast Cancer	Nanolechnology-Enabled Optical Molecular Imaging of Breast Cancer 56: GAART NUMBER 1951 (1971) 57: 242(3) 56: ROOSAN ELEMENT NUMBER	
	6. AUTHOR(5) 54. PROJECT NUMBER	
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PREPARED FOR: U.S. Army Medical Research and Materiel Command Fort Detrick, Maryland 21702-5012	This project focuses in thereforement of nontrethenitory-needed copical inductors imaging burbenitypes for applications in tool hand crasses disparses and monitoring hereaview response. The project complex for the project disparse of the copical instantians for the mark provide and copical instantians are an coportion with the instantianities created to provide molecular specificity. A particular significant of the underspecific of the provide a develop needs-compatibilities (the projects to enable in vice imaging of humons with molecular specificity. These microscopic disparses and compatibilities are an ecological and the provide a new microscopic, bigh results, marking molecular specificity. These microscopic disparses and companies are the according to the complex disparse of according to the according to the complex disparse of according to the complex disparses of according to the complex disparses of the constrainty engineers. The complex disparses of the complex dispars	
DISTRIBUTION STATEMENT: Approved for Public Release; Distribution Unlimited	optical imaging devices being developed in this project.	
	11. MultaCCT TERMs nanotechnology, molecular imaging, optical imaging	
The views, opinions and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy or decision unless so designated by other documentation.		

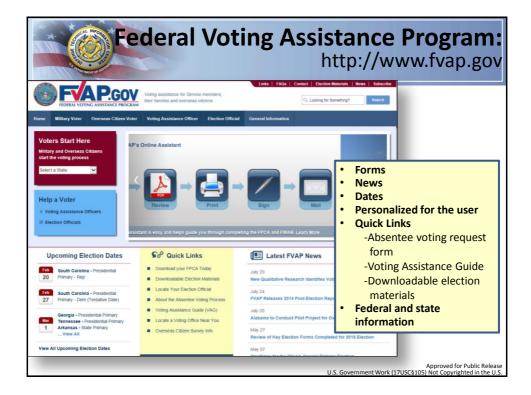


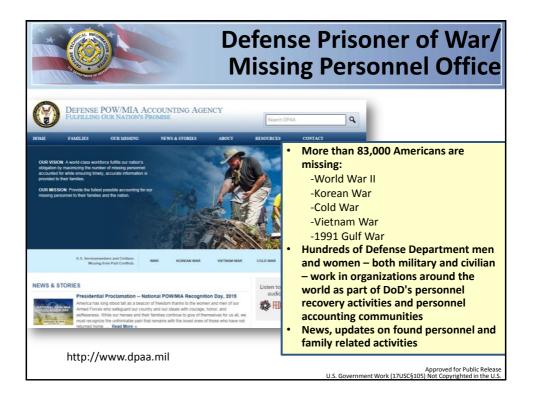












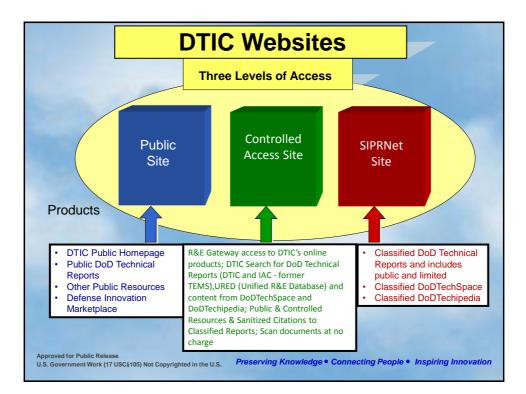


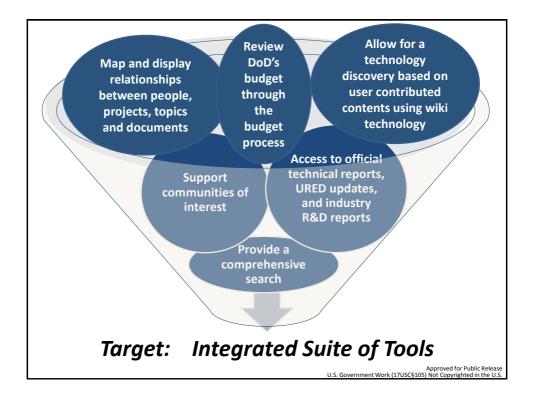
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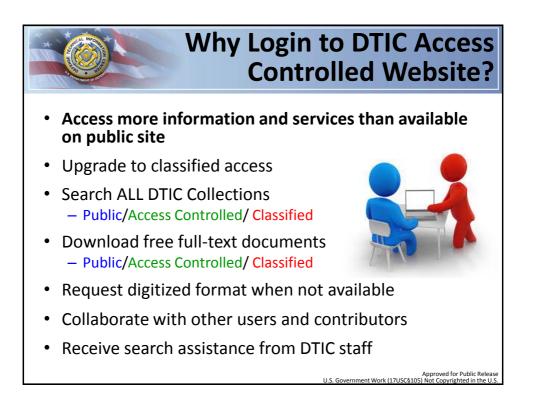
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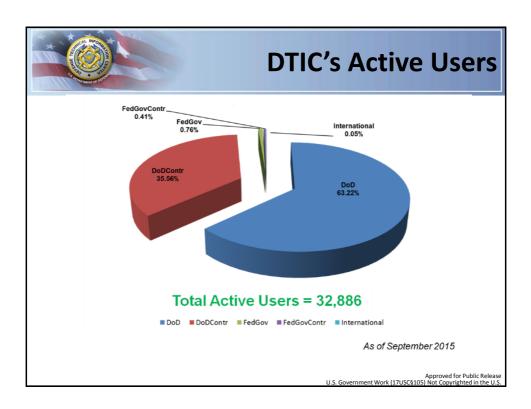
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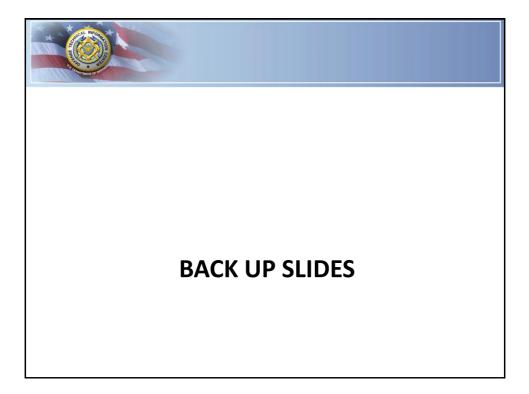
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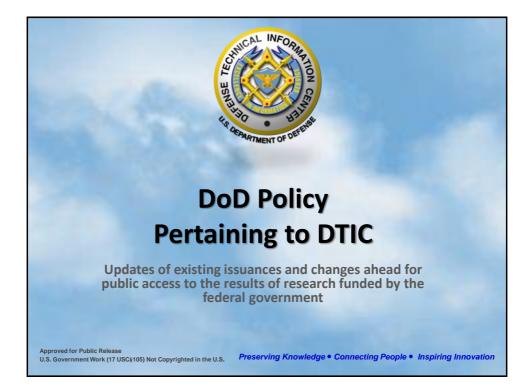
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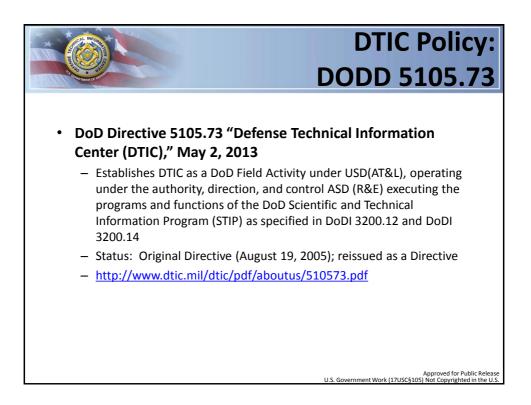


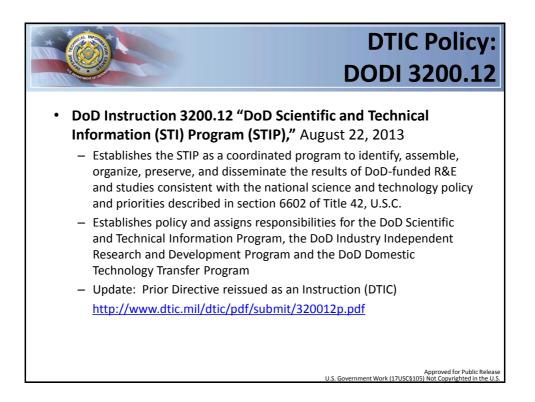


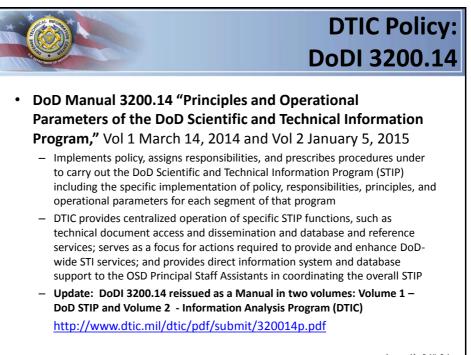








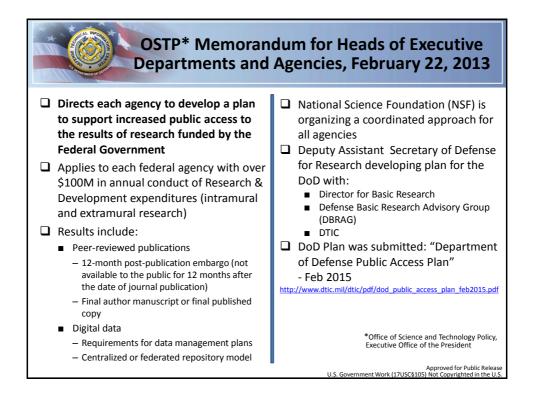




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