

New Technology Reporting System



Improving life on Earth, one technology at a time

A New Technology Report (NTR) is the first step in helping NASA make the most of your technology



Report your NTR or NTSR

Not ready to submit?

Or contact us - we're here to help.

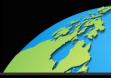


National Aeronautics and Space Administration

NASA Official: Dan Lockney









Contact Us About New Technology Reports

Contractors: Point(s) of Contact at the NASA Center at which the Contracting Officer's Representative (COR) for your contract is located.

Government Employees: Point(s) of Contact at your center.

NASA Center	Point of Contact	Phone Number	E-mail
Ames Research Center	Kelly Garcia	(650) 604-3273	kelly.l.garcia@nasa.gov
Armstrong Flight Research Center	Earl Adams	(661) 276-5307	earl.s.adams@nasa.gov
	Samantha Hull	(661) 276-3368	samantha.m.hull@nasa.gov
Glenn Research Center	Kathy Kerrigan	(216) 433-5625	grc-ntsr@lists.nasa.gov
	Carole Bruck	(216) 433-8446	grc-ntsr@lists.nasa.gov
Goddard Space Flight Center	Scott Leonardi	(301) 286-4698	robert.s.leonardi@nasa.gov
NASA HQ	Carole Bruck	(216) 433-8446	hq-ntsr@lists.nasa.gov
	Kathy Kerrigan	(216) 433-5625	hq-ntsr@lists.nasa.gov
Jet Propulsion Lab	Debbie Wolfenbarger	(818) 354-3829	debora.l.wolfenbarger@jpl.nasa.gov
	Robert Jones	(818) 354-4862	robert.a.jones@nasa.gov

	Kathy Acuna	(281) 483-2066	kathryn.y.acuna@nasa.gov
Kennedy Space Center	Megan Victor	(321) 867-9724	megan.e.victor@nasa.gov
Langley Research Center	Sevet Bassett	(757) 864-5578	sevet.r.bassett@nasa.gov
Marshall Space Flight Center	Carolyn McMillan	(256) 544-9151	carolyn.e.mcmillan@nasa.gov
Stennis Space Center	John Wolverton	(228) 688-2704	john.d.wolverton@nasa.gov
	Lauren Underwood	(228) 688-2096	lauren.w.underwood@nasa.gov
			NASA New Technology Representatives (.docx)

(281) 483-3639 connie.j.sartor@nasa.gov



Johnson Space Center

Connie Sartor









Frequently Asked Questions

Why do I need to submit an NTR?

 NTR stands for New Technology Report, but what counts as "reportable"?

This site explains what we mean by "reportable," but one way to think of it is: If in your work you solve some kind of a technical problem or find a new way of doing things that is somehow better, that is reportable as an NTR. *Any improvement*—no matter how big or small—should be reported in an NTR.

Generally, a new technology is any invention, discovery, improvement, or innovation—whether or not patentable – which includes, but is not limited to, new processes, machines, manufactures, and compositions of matter, and improvements to, or new applications of, existing processes, machines, manufactures, and compositions of matter. New technologies also include new computer programs, and improvements to, or new applications of, existing computer programs.

requires the Agency to about its work as wide appropriate. NTRs pro information about tect	ation (see "US Law - nfo/graphic presented below) disseminate information y as is practical and ride a means to capture	
NASA can disseminal Furthermore, several technology transfer be developed with taxpage	it appropriately. ederal laws require pursued for new technologies ers dollars. NTRs are the first at simply: If we don't know it effectively.	
National Aeronautics and Space Act	To provide for the widest practicable and appropriate dissemination of information concerning its activities and results thereof	
Stevenson-Wydler Techno Innovation Act of 1980 (P.I 96-450)	gy Requires federal agencies to have formal technology transfer programs	
Bayh-Dole Act of 1980 (P. 96-517)	Permits universities, not-for- profits, and small businesses to obtain title to inventions developed with federal funding	
Federal Technology Transi Act of 1985 (P.L. 99-502)	Makes tech transfer a responsibility of every federal laboratory scientist and engineer, establishes CRADAs	

Why are NTPs important to NASA2

Directive 2091.18 "Inventions Made by
Government Employees."

• Contractors and grantees may be subject to
NASA Federal Acquisition Regulations (FAR)
Supplement 1852.227

- Shouldn't NASA's new technology—which was
paid for with taxpayer dollars—be made freely

typically hesitant to use unprotected technologies because they can be easily copied by competitors, thus diluting their value, including:

• Companies that could make money with products or services that use NASA

 So am I required to submit NTRs?
 Yes, all NASA employees must report new technologies. Additionally, many other entities, such as contractors, grantees and NASA partners, have an obligation to report new technologies to NASA as

· Civil servants are subject to NASA Policy

The timing of a disclosure plays an important role in the value of a technology to a company, and thus the likelihood that they will use it. Companies are

required by their agreement.

available to the public?

- technology without paying royalties, in which case taxpayers lose out on the financial return on their investment

 Foreign entities that could use NASA technology in a manner that is in conflict with our national interests
- NTRs allow NASA to manage the release of information about the technology in such a way that the value for the American people is maximized.

When do I submit an NTR?

 Is there a right time and a wrong time to submit an NTR?

The right time to submit an NTR is as soon as you recognize you have a new technology. The technology is not required to be at a certain stage of development or testing to be submitted as an NTR.

Think of it this way: It is never too early to submit an NTR, because you can always come back and update it as its development progresses.

Technically, there is no **wrong** time. However, it is best to submit the NTR **before** publicly disclosing the new technology. But even if that public disclosure has already occurred, please do submit the NTR so that NASA can make the most of your new technology. Better too early than too late, but better late than never.

 Why do I have to submit the NTR before publishing or talking publicly about it?
 The NTR provides the opportunity for the involved parties to decide whether to patent a new technology. Federal laws and regulations require that a U.S. patent application be filed within 1 year of publicly disclosing the new technology.
 Furthermore, most foreign patents cannot be obtained after publicly disclosing the technology.

Therefore, if you release information about a new technology before filing the NTR, then the ability to patent the innovation can be compromised. And this can have a negative impact on the financial return that the American taxpayers can receive on their investment in NASA R&D.

can disseminate information about the new technology and provide value to the American people. For example, the technology can be published in NASA Tech Briefs or otherwise publicized and might be used outside of the traditional license agreement. It could be used by other government agencies. It also could be submitted for an award, which could benefit you.

- All I have is an idea. Should I wait to submit the

How do I submit an NTR?

NTR until I have developed it further?

No. Submit the NTR as soon as you recognize that you have a reportable technology. You can always return to a previously submitted NTR to add new information as development progresses.

- I want to give a paper about a new technology.

Because it takes time for patent counsel to review the NTR and make the patenting decision, please submit the NTR *before* you submit an abstract for a session proposal to the conference organizers.

If I've already publicly disclosed my new technology, should I still file the NTR?

Yes. Although NASA's options for protecting (patenting) the new technology may be limited at this point, there are still other productive ways we

When should I file the NTR?

 Where do I submit an NTR and do I need an account?
 If this is your first NTR, request an account here.
 Once you have the account, login to enter your NTR data electronically. You can also download the PDF version or the Word version of the NF1679 form.

- submission. - I have all of the information about the new technology in a separate file. Can I load that into the system and not fill in the fields? Although it is useful to include supporting
 - documentation when you submit your NTR, it is very important that you complete the fields of the online form in as much detail as possible. Information

- Can I have someone else submit the NTR

Yes. Anyone familiar with the innovation can submit the NTR. They simply need to ensure that they have sufficient information to complete the NTR, which includes listing all of the innovators as part of the

information for me?

rights to that intellectual property.

- about your innovation can then be easily tracked by NASA personnel to ensure that the technology is properly protected and to identify opportunities for the technology to be used within the Agency or by
- the public via the technology transfer process - Why do I need to include the innovators' employer information? We require the innovators' employer information because NASA is limited in what it can do with the
- technology reported in an NTR depending on whether the government owns the technology. A new technology's ownership (also referred to as "title") is affected by whether the innovators are civil servants or contractors. More specifically, the ownership rules are different for contractors who
- work for a large entity vs. those who work for a small entity, a university, or a nonprofit. The rights that NASA has in R&D developed with Government funding depends on who invented the technology, and any agreement that governs the

What happens after I submit an NTR?

 Who has access to the information submitted into the online NTR system? Is it publicly

- accessible?

 Only authorized NASA technology transfer personnel have access to the system. It is not
 - accessible by other civil servants, contractors, or the public.

 How can I find out the current status for my
 - You should receive notification, either from the NASA-wide system or from personnel at your center,

informing you whether your NTR submission is

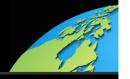
- complete or if more information is needed. If you have not received notification, please contact the new technology representative at your center.
- Will my reported technology get patented?

 It might. There are three aspects to patenting:
- Patenting first depends on ownership. If NASA doesn't own it, the Agency cannot patent it.
 Patenting next depends upon whether the new technology can be patented. Not even the patented of the pate
- Patenting next depends upon whether the new technology can be patented. Not every technology reported in an NTR is patentable.
 Finally there is a decision to be made about whether to invest in patenting. Just because a technology can be patented doesn't mean it will be.

- Why doesn't NASA patent everything it can? Some NTRs that can be patented are not selected for patenting. The patenting decision frequently depends on whether the new technology has market potential
 - If NASA determines that a company might be willing to pay for the technology, then it makes sense for the Agency to spend the thousands of dollars in patenting costs to ensure that a financial return on taxpayers' investment can be obtained through licensing and royalties. course of action is to distribute the new
 - . Conversely, if NASA determines that the best technology freely, then there is no need to invest the Agency's resources in patenting it.
 - > More about the technology transfer process







New Technology Reporting System

What Is Reportable?

The definition of "new technology" is broader than you think

Any improvement—no matter how big or small—can be reported as an NTR. It doesn't matter if you consider it a discovery, an invention, an innovation, or simply an advance in the state of the art. For scientists and engineers, recognizing when you have something reportable can be hard to gauge, since it's easy to feel that you are just doing your job to meet project or program objectives. But it is still important for NASA to know about your work.



It can be difficult to identify when you really have created something new or novel or truly made an improvement. If you created something that works faster or better, is stronger or lighter or more robust, or is cheaper or easier to make, you have an innovation that you may be required to report in an NTR. The following examples can also help you identify reportable technologies:

New technology, designs, or concepts

biological models)

- New or improved hardware, devices, machines, or prototypes, including at the nano or molecular level
- New or improved methods, assays, analyses, tests, processes, procedures, simulations, testbeds, integration, packaging, encapsulation, or miniaturization methods
- New or improved models (including, but not limited to, animals, tissue culture, cellular, molecular, or other
- New materials, compositions of matter, new arrangements of matter (including, but not limited to, synthetic, biological, genomic, proteomic, or molecular arrangements)
- New or improved manufacturing or fabrication approaches
- New software application or computer program, or even just a few lines of code
- New or novel uses or applications of existing technologies
- New process, technique, or formula
- New way of assembling commercial components
- New, modified, or updated software, algorithms, software concepts, simulations, or apps
- New or novel uses or applications of existing softwarerelated or computing technologies

Even if it's just an idea for an improvement that has not been built or tested, it is reportable as an NTR.

> Read more about when to report an NTR

Still wondering whether your work is reportable? Contact us — we're here to help.





New Technology Reporting System

When to Report an NTR

It is never too early to submit your NTR!

The best time to submit an NTR for your technology is as soon as you realize that you have something new and before you disclose it publicly. It may feel premature to report an idea or innovation before you have been able to vet it or develop a prototype, but the earlier you report it, the easier it will be for NASA to protect it.

- No need to wait until the end of the project: Even if there is still more work to do, submit the NTR.
- No need to have prototyped or proven the technology: Even if it's just an idea, submit the NTR.
- No need to achieve a certain technology readiness level (TRL): Even if more development is needed, submit the NTR.
- No need to wait until it has been used in a NASA project: Even if that decision still needs to be made, submit the NTR.
- No need to know whether it can be patented/copyrighted: Submit the NTR (and other required paperwork) and let NASA's patent counsel figure that out.

Even if you or someone on your project team already disclosed the work, it is still important to submit the NTR. Although you may believe that the invention can no longer be patented due to publication or use bars, you should still report it. Your discovery may still be valuable to other U.S. government agencies, industry partners, or other NASA projects. And in the case of software, it may be protected under copyright regulations. — Better late than never.

Remember:

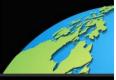
- The sooner we know about your new technology, the better
- It is never too early to submit an NTR • Submit the NTR before disclosing the invention publicly
- Even if you or someone on your project team already disclosed the work, submit the NTR

Still have questions? Contact us — we're here to help.











How to Submit an NTR

An NTR is the first step for NASA to make the most of your technology

The NTR is the first step in an important process of tracking and identifying novel applications for NASA's new technologies. Your improvements, modifications, innovations, and discoveries are valuable assets for NASA and the nation. Ensuring that your work has a chance to make a difference in the world begins with the NTR.

NTR submission is simple and quick using e-NTR, especially when you have all of the needed information handy. After you have filled out the online NTR form, NASA's technology transfer personnel review your submission to ensure it is complete. Acceptance of the NTR is the final step of the submission process.

In cases where NASA owns the rights to an innovation, tech transfer personnel work closely with patent counsel to evaluate the NTR and make decisions regarding patenting, release of software, and whether/how to pursue technology transfer. In cases where rights to the technology are elected or requested by an organization outside of NASA, the owner may be responsible for IP protection and commercialization.

The NTR Process

Submission Process



What Happens Next

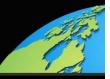


More about these processes is provided in this section, but if you have any questions, feel free to contact us — we're here to help.











Collect Key Information

Keeping a lab notebook is the best way to make reporting your NTR submissions fast and easy



NASA's online system has been streamlined to make submitting NTRs as easy as possible. All you need is very basic information about your new technology.

Here are some tips to help make the process as fast and easy as possible:

 Use a lab notebook: Keeping a record of your daily activities makes it easier to recognize when you have a

Note: Submit the NTR as soon as you recognize that you have a new technology.

 Record key dates: As you develop a new technology or improvement, track your progress from sketch through model/beta through testing/alpha to include these details in the NTR.

Note: You can supplement a previously submitted NTR as development progresses.

 Keep track of public disclosures: If you do publicly disclose the technology, be sure to note the date and location and any other relevant details to include in the NTR

Note: NASA innovators should always report their technology before sharing it publicly. But even if it has already been disclosed, it is still important to report the NTR.

These simple activities not only make it easy and fast to report your technology but also provide all the details that patent counsel may

Questions? Contact us - we're here to help.

need later in the process.



National Aeronautics and Space Administration NASA Official: Dan Lockney







New Technology Reporting System

Submit Your NTR

It takes only about 30 minutes to get started

Once you have an account and are ready to submit an NTR, login and complete the fields in as much detail as you can.

Completing the form takes only 30 minutes or so.



The list below highlights the key information that should be reported via the NTR.

- Description of the innovation
- · Explanation of why the innovation was developed
- · Unique or novel features
- Key benefits
- · Potential commercial applications
- · Developmental milestones

Questions? Contact us – we're here to help.









NTR Approval

Tech transfer personnel work to make the most of your technology



When the review process is complete, you should receive notification—either from the NASA-wide system or from personnel at your center—informing you that your NTR submission is complete and a case number has been assigned.

If you do not receive notification, please contact the new technology representative at your center.







New Technology Reporting System

Technology Transfer

Technology transfer can take many different forms

Depending on the findings of the NTR evaluation, your technology may be selected to continue through the



technology transfer process. Within technology transfer, there are many different paths. Your technology might be suitable for applications within industry, so the technology transfer personnel will seek potential licensees. Or your innovation might be a good candidate for collaborative R&D. Regardless of the type of activity pursued, NASA technology transfer processionals always work to ensure arrangements that are beneficial for NASA, the inventor, and the partner.

As with the R&D that leads up to the new technology, the road for the NTR can be a twisting route with several forks and unexpected turns. It may go quickly or it may take a long time, and you are always welcome to contact us to find out the status of your NTR.

The Technology Transfer Process

The steps taken as part of technology transfer vary depending on the type of technology and the market where it is most likely to be applied. However, there are several tools that technology transfer personnel commonly use to let others know about a technology that is available for license or an opportunity for partnership.

interested in your innovation · Facilitate interactions with interested, qualified parties · If appropriate, arrange for your innovation to be presented at trade shows, conferences, and workshops

the tech transfer personnel at your center.

publicize your innovation

· Prepare and distribute online and/or print materials to

. Contact companies or other organizations that may be

Throughout the technology transfer process, you will have the opportunity to review communications materials, such as articles in NASA Tech Briefs, brochures, online technology listings, etc. If you have any questions along the way, please do not hesitate to contact

mechanisms, including licenses (most of which result in royalty revenue), partnership agreements, and software usage agreements. NASA works hard to ensure that any agreements put in place protect NASA's - and your - interest in the technology while enabling

partners to effectively bring a technology to market, ensure that the American public benefits from the R&D funded by their tax dollars.

Types of Agreements

Technology transfer may be achieved through various agreement

Available agreement types are outlined below.

Licenses

Three types of license agreements are available:

Nonexclusive

 Exclusive Evaluation/Research

Partnership Agreements

(CRADA)

- Space Act Agreement (SAA) Cooperative Research and Development Agreement

Software Release

the software's developers. Before software can be released to these parties via the software release authority, an NTR must generally be submitted. The types of software release are summarized below.

Requests to use NASA software can be made by external parties or

- General public release Open source release
- · US and foreign release
- · General US release only
- US government purpose release



National Aeronautics and Space Administration









Request an Account

If you would like to register your account under a NASA email address, it will not be necessary for you to request an account using the form below. Please visit the Login page and click the "NASA IdMAX Authenticate" button, and your account will be

have an account, you can sign in here created immediately. If you have any questions, please contact the NTR/NTTS Help Desk at (757) 865-2233 or

If you already

If you would like to register your account under a non-NASA email address, please complete and submit the form below. This is a simple and quick process. After you have submitted the form, e-NTR will then send you a confirmation that your account has been established. You are then ready to Login and submit your NTR.

If you need help with setting up or accessing your account please contact the NTR/NTTS Help Desk at (757) 865-2233

Required information for Account

First Name:	
Last Name:	
Current Empil Address:	

For Non-NASA account requests, please use your business/university e-mail address that is associated with your contract, grant, or agreement with NASA.

Note: Public email addresses (gmail, hotmail, etc) will not be accepted without prior approval.

User Name:

Account Type: Select One

> Company: Select this account type if you are a contractor, grantee, or partner that is responsible for submitting New Technology

Summary Reports under your contract, grant or agreement with NASA.

User: All other users without a NASA e-mail address should select this account

NASA Funding

Agreement Number:

NASA Funding Agreement Number is the identification number associated with your contract, grant, cooperative agreement or

Space Act Agreement.

Phone Number:

Format: (xxx) xxx-xxxx

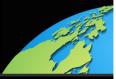
Please enter the numbers and letters in

the box for security:



Submit





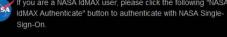


Log in here to report your technology or NTSR

Username:	Forgot Password
Password:	Request Account
Sign In	
	Questions? Contact the Help Desk
authorized to access this system consent to your keystrokes and d have authorization you are wan attempted use, access, commur	. Government Computer System. If not n, please disconnect. By continuing, you at a content being monitored. If you do not ned to disconnect at once. Actual nication, or examination by unauthorized tle 18, United States Code, Section 1030.

If you need to create an account (or have an existing account) under a NASA email address, log in here using your NASA IdMAX credentials:

If you are a NASA IdMAX user, please click the following "NASA"



NASA IdMAX Authenticate

What to expect when logging in through IdMAX

NASA Information Technology Security Policy requires that any account that has been inactive for 30 days or longer be locked. If

your account becomes locked, contact the Help Desk at

ntts-support@lists.nasa.gov or 757-865-2233 to regain access to it.

Note that you will be logged off this system after 15 minutes of inactivity. An autosave of open web pages is occurring every five minutes.

NASA Form 1679 (NF1679) - Disclosure of Invention and New Technology (Including Software): (Use when a new

technology/invention is developed). You may either log in above and fill out the electronic version of the NF1679 or download the PDF or Word version to be sent via email to your NASA center.

What qualifies as new technologies and innovations is very broad They include any invention, discovery, improvement or

What qualifies as new technologies and innovations is very broad. They include any invention, discovery, improvement, or innovation that was either conceived or first actually reduced to practice in the performance of NASA work. This includes any new and useful processes, machines, manufacture, or composition of matter; or any new and useful improvement in existing processes, machines, manufacture, or compositions of matter. Also included are

matter; or any new and useful improvement in existing processes, machines, manufacture, or compositions of matter. Also included are new computer programs, and improvements to, or new applications of, existing computer programs, whether or not copyrightable. A representative list of new technologies and innovations includes, but is not limited to: new or improved techniques, products, devices, materials, methods, processes, chemical compositions, systems, machines apparatuses, articles, fixtures, tools, or software.

Interim New Technology Summary Report (NTSR): a listing (every 12 months from the start of the Contract) of all new technologies (inventions and/or innovations) developed during the reporting period, or certification that there were none.

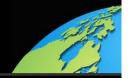
Final New Technology Summary Report (NTSR): a listing (prior to the Contract closeout) of all new technologies (inventions and/or innovations) developed during performance of the Contract, or certification that there were none.

NASA prefers that contractors/grantees/recipients use the NASA NTSR form, by way of the New Technology Reporting System when submitting an NTSR.

Paperwork Reduction Act Statement: This information collection meets the requirements of 44 U.S.C. § 3507, as amended by section 2 of the Paperwork Reduction Act of 1995. You do not need to answer these questions unless we display a valid Office of Management and Budget control number. The OMB control number for this information collection is 2700-0052 and it expires on mm/dd/yyyy. We estimate that it will take about eight (8) hours to read the instructions, gather the facts, answer the questions, and transmit. You may send comments on our time estimate above to: Peter Tran, Ames Research Center, Moffett Field, CA. 94035. Send only comments relating to our time estimate to this address, not the completed form.









Account Retrieval

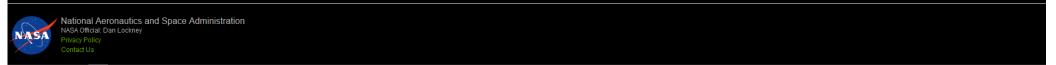
If you have forgotten your user ID or password for logging into the electronic New Technology Reporting system (e-NTR), enter the e-mail address associated with your e-NTR account into the form below to have your user id and new password delivered to your e-mail.

If your account is associated with a NASA email address, it will not be necessary for you to request a new password. Please visit the Login page, click "NASA IdMAX Authenticate" and use your IdMAX credentials to log in.

E-mail:	
Please retype numbers and	
letters for security:	
	GyVx6e

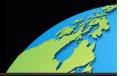
Submit

If you have questions or comments, please contact the NTR/NTTS Help Desk at 757-865-2233 or ntts-support@lists.nasa.gov.







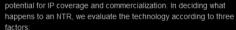


New Technology Reporting System

Evaluation and IP Protection

NASA evaluates NTRs according to several factors

For NTRs covering innovations developed by civil servants, as well as those for which the contractor or grantee has decided not to pursue patent protection and commercialization, NASA conducts an evaluation process to determine the



- Technology readiness
- Market attractiveness
- · Intellectual property (IP) strength

We rely on our technical expertise and market research to determine:

- How does the technology compare to what is currently available?
- . Who could use it and how much do they need it?
- Is it ready to be used now and is the innovator available to assist with the transfer?
- Can it be protected?



Depending on the answers to these questions, your NTR may be:

- Prepared for pursuit of patent protection in the United
- · Submitted for an award from NASA or an external organization
- Published in NASA Tech Briefs

States and/or foreign countries

- Listed in NASA's technology transfer portal
- Publicized on your center's technology transfer site
- · Actively marketed to potential licensees or
- collaborators/partners . Placed "on hold" to monitor the market's readiness for the technology or to wait until further development of the technology has occurred

Innovators support the tech transfer process

Innovators can provide valuable input in helping to identify commercial applications and potential partners, since you are very

familiar with the current state-of-the-art and key players in industry. As a result, it is very important for you to complete the sections in the NTR related to the potential commercial markets. In most cases, technology transfer professionals will contact the innovators to discuss their NTRs. You may also be asked to participate in some of the activities highlighted above—for example, reviewing an award application or marketing materials.

More about IP Protection

In most cases, intellectual property protection comes in the form of a patent. Software might be patentable or it could be eligible for copyright. If NASA decides to pursue patent or copyright protection for your technology, NASA's patent attorneys will work with you to protect the intellectual property.

What is a patent? A patent for an invention is the grant of a property right to the owner. The owner can then selectively give that right to others via a license, usually in exchange for financial payments such as up-front fees and/or royalties. Most companies are not interested in a technology if it is not patented, since other companies can easily copy it and use it themselves, taking away the competitive advantage.

Can anything be patented?

In order for a utility patent to be granted, the invention must be new, non-obvious (not an obvious difference from the prior art), and have a useful purpose.

Does NASA patent everything it can?Because it costs thousands of dollars to patent a new technology,

NASA is selective in deciding what to patent. If the Agency expects there to be a financial return or some other benefit that can be achieved only by patenting the technology, then NASA will apply for a patent.

Can software be patented?

Yes, some software may be protectable by patent, but only if it forms an integral and necessary part of a qualifying machine, manufacture, or process. Underlying concepts in a computer program may be patentable, but normally the code is only protected by copyright.

What is copyright?

Copyright gives the author of an original work the exclusive right to make copies, publish, distribute, and adapt it.

Can NASA software be copyrighted?

Copyright protection is not available in the U.S. for software developed **solely** by federal government employees in the scope of their employment, although foreign copyright may be available. Copyright protection may be available in the U.S. for software that is co-developed with federal government employee(s) along with non-federal government employee(s). NASA can also obtain copyright in software from third parties via an assignment or license.

National Aeronautics and Space Administration NASA Official: Dan Lockney Privacy Policy Contact Us



	[User Name:	Account Type: user Email:
ou need to create a New Technology Summary Rep quest your account type be changed to "Company".	ort (NTSR), please call	the Help Desk at 757-865-2233 and
ow is a list of items that you have submitted for review. A played in the appropriate box below.	fter your submitted entry	has been accepted or denied, it will be
— My Drafts / Submitted for Review (0) —		
No Records Found		
— My Accepted Entries (0) No Records Found		
— My Accepted Entries (0) ————————————————————————————————————		

Last Updated: 04/19/2012



Auto Save in 5 minute(s) NTR Report Date:	NTRs Create New NTR		[User			Logout Change Pas e: user Email: i	ssword 🙍
General Information New Technologies are defined as any invention, discovery, improvement, or innovation whether or not patentable, either conceived or first actually reduced to practice in performance of NASA work. This includes, but is not limited to, new processes, machines, manufactures, and compositions of matter, and improvements to, or new applications of, existing processes, machines, manufactures, and compositions of matter. New Technologicalso include new computer programs, and improvements to, or new applications of, existing computer programs. Please do not submit ITAR sensitive information or attachments into this system. (If you are a NASA Civil Servant, choose the Center at which you work. If you are a Contractor, choose the Center at which your Contracting Officer's Representative (COR) works. If you are a Grantee, choose the Center at which your Grant Technical Officer works.) Which NASA Center does this New Technology Report belong to? (required) Select a NASA Center Company Tech Rep. Name: NTR Title (required) Internal Docket No./Contractor Tracking No. If the entity at which the submitter is employed uses an internal identification code for tracking technologies, it would be entered here. Funding Mission Directorate (required) + Add Funding Mission Directorate (For more information on NASA Mission Directorates click here)	Auto Save in 5 minute(s)						Save Save
General Information Description Commercialization Technology Readiness / Software Development History General Information New Technologies are defined as any invention, discovery, improvement, or innovation whether or not patentable, either conceived or first actually reduced to practice in performance of NASA work. This includes, but is not limited to, new processes, machines, manufactures, and compositions of matter, and improvements to, or new applications of, existing processes, machines, manufactures, and compositions of matter. New Technologicals on include new computer programs, and improvements to, or new applications of, existing computer programs. Please do not submit ITAR sensitive information or attachments into this system. (If you are a NASA Civil Servant, choose the Center at which you work. If you are a Contractor, choose the Center at which your Contracting Officer's Representative(COR) works. If you are a Grantee, choose the Center at which your Grant Technical Officer works.) Which NASA Center does this New Technology Report belong to? (required) Select a NASA Center Select and Select		NTR Rep	ort Date:	e-NTR#: 1490186	611		_
Seeneral Information New Technologies are defined as any invention, discovery, improvement, or innovation whether or not patentable, either conceived or first actually reduced to practice in performance of NASA work. This includes, but is not limited to, new processes, machines, manufactures, and compositions of matter, and improvements to, or new applications of, existing processes, machines, manufactures, and compositions of matter. New Technologia sio include new computer programs, and improvements to, or new applications of, existing computer programs. Please do not submit ITAR sensitive information or attachments into this system. (If you are a NASA Civil Servant, choose the Center at which you work. If you are a Contractor, choose the Center at which your Contracting Officer's Representative(COR) works. If you are a Grantee, choose the Center at which your Grant Technical Officer works.) Which NASA Center does this New Technology Report belong to? (required) Select a NASA Center Company Tech Rep. Name: NASA COR Name: NTR Title (required) Internal Docket No./Contractor Tracking No. If the entity at which the submitter is employed uses an internal identification code for tracking technologies, it would be entered here. Funding Mission Directorate (required) + Add Funding Mission Directorate (For more information on NASA Mission Directorates click here)	General Information					Development History	1
lew Technologies are defined as any invention, discovery, improvement, or innovation whether or not patentable, either conceived or first actually educed to practice in performance of NASA work. This includes, but is not limited to, new processes, machines, manufactures, and compositions of matter, and improvements to, or new applications of, existing processes, machines, manufactures, and compositions of matter. New Technologic loss include new computer programs, and improvements to, or new applications of, existing computer programs. Please do not submit ITAR sensitive information or attachments into this system. If you are a NASA Civil Servant, choose the Center at which you work. If you are a Contractor, choose the Center at which your Contracting Officer's Representative(COR) works. If you are a Grantee, choose the Center at which your Grant Technical Officer works.) Which NASA Center does this New Technology Report belong to? (required) Select a NASA Center Company Tech Rep. Name: NASA COR Name: NATR Title (required) Title Elected by Waiver #: Title Elected by Waiver #: Title Elected by Waiver #: Funding Mission Directorate (required) Add Funding Mission Directorate (For more information on NASA Mission Directorates click here)	General information	Description	Confinercialization	reciniology Readines	S / Sultware	Development History	
Officer's Representative(COR) works. If you are a Grantee, choose the Center at which your Grant Technical Officer works.) Which NASA Center does this New Technology Report belong to? (required) Select a NASA Center Company Tech Rep. Name: NASA COR Name: NTR Title (required) It the entity at which the submitter is employed uses an internal identification code for tracking technologies, it would be entered here. Funding Mission Directorate (required) Add Funding Mission Directorate (For more information on NASA Mission Directorates click here)	New Technologies are defined as a deduced to practice in performance of matter, and improvements to, or also include new computer program Please do not submit ITAR sen	any invention, dis e of NASA work. new applications ms, and improver asitive informat	This includes, but is n s of, existing processe ments to, or new applic tion or attachments	ot limited to, new proce es, machines, manufact cations of, existing com into this system.	esses, machine ures, and comp puter programs	s, manufactures, and co lositions of matter. New s.	ompositions Technologies
Company Tech Rep. Name: NASA COR Name: ITITE Elected by Waiver #: INTR Title (required) Internal Docket No./Contractor Tracking No. If the entity at which the submitter is employed uses an internal identification code for tracking technologies, it would be entered here. Funding Mission Directorate (required) Add Funding Mission Directorate (For more information on NASA Mission Directorates click here)							acting
NASA COR Name: NTR Title (required) Title Elected by Waiver #: Internal Docket No./Contractor Tracking No. If the entity at which the submitter is employed uses an internal identification code for tracking technologies, it would be entered here. Funding Mission Directorate (required) Add Funding Mission Directorate (For more information on NASA Mission Directorates click here)	Which NASA Center does	this New Tec	hnology Report b	elong to? (require	ed) Select a N	IASA Center	~
f the entity at which the submitter is employed uses an internal identification code for tracking technologies, it would be entered here. Funding Mission Directorate (required) + Add Funding Mission Directorate (For more information on NASA Mission Directorates click here)	NTR Title (required)				Title	Elected by Waiver #:	
+ Add Funding Mission Directorate (For more information on NASA Mission Directorates click here)							
			•	ion code for tracking te	chnologies, it w	rould be entered here.	
Funding Mission Directorate Description	If the entity at which the submitter	is employed uses	•	ion code for tracking te	chnologies, it w	ould be entered here.	.ii
No records found.	Funding Mission Directoral + Add Funding Mission Directorate	is employed uses	s an internal identificati			ould be entered here.	.::

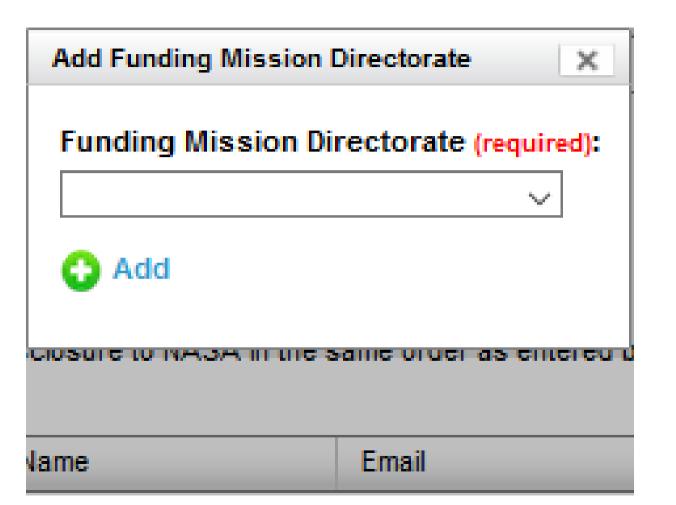
Funding I	Mission Directorate	Des	cription		
No recor	ds found.				
otal Reco	ords: 0				
VBS Inf	ormation				
Add WB9	S Information				
FY	WBS Number		Program Name	Project Name	
No recor	rds found.			,	
otal Reco					
	-				
novato	ore (required)				
novato	ors (required)				
ncludes:	Employer, Address, and		n N Δ S Δ in the same order as enteres	t helow	
Includes:	Employer, Address, and e: The Innovators will be		o NASA in the same order as entere	d below.	
ncludes: ease Noti Add Inno	Employer, Address, and e: The Innovators will be		o NASA in the same order as entered	d below. Contract Number	
ncludes: ease Note Add Inno Order	Employer, Address, and e: The Innovators will be wator	e listed in the disclosure to			
ncludes: ease Note Add Inno Order No recor	Employer, Address, and e: The Innovators will be evator Last Name	e listed in the disclosure to			
ncludes: ease Note Add Inno Order No recor	Employer, Address, and e: The Innovators will be evator Last Name	e listed in the disclosure to			
ease Note Add Inno Order No record	Employer, Address, and e: The Innovators will be evator Last Name	e listed in the disclosure to			
ncludes: ease Not Add Inno Order No recor otal Reco	Employer, Address, and e: The Innovators will be evator Last Name rds found.	First Name	Email	Contract Number	
ncludes: ease Not Add Inno Order No recor otal Reco	Employer, Address, and e: The Innovators will be evator Last Name eds found. ords: 0 use Grant Subc	First Name		Contract Number	
ncludes: ease Not Add Inno Order No recor otal Reco	Employer, Address, and e: The Innovators will be evator Last Name rds found.	First Name	Email	Contract Number	
ncludes: lease Not Add Inno Order No recor otal Reco Origin In Hou ddition clude cop	Employer, Address, and e: The Innovators will be evator Last Name ds found. ords: 0 use Grant Subc all Documentation pies or list below any pe	First Name Contract Other June	Email int Prime Contract Multiple iich aids in the understanding or app	Contract Number Contractor Contractor	
ncludes: lease Not Add Inno Order No recor otal Reco Origin In Hou ddition clude cop	Employer, Address, and e: The Innovators will be evator Last Name rds found. ords: 0 Ise Grant Subc nal Documentation pies or list below any pe agineering specs, assen	First Name Contract Other June	Email int Prime Contract Multiple iich aids in the understanding or app	Contract Number Contractor	
ncludes: lease Not Add Inno Order No recor otal Reco Origin In Hou ddition clude coperate, en	Employer, Address, and e: The Innovators will be evator Last Name rds found. ords: 0 Ise Grant Subc nal Documentation pies or list below any pe agineering specs, assen	First Name Contract Other June	Email int Prime Contract Multiple iich aids in the understanding or app	Contract Number Contractor Contractor	
ncludes: ease Note Add Inno Order No recor otal Recor igin In Hou ddition clude cop ports, en	Employer, Address, and te: The Innovators will be evator Last Name ds found. ords: 0 Ise Grant Subcomal Documentation pies or list below any perspineering specs, assents, etc.).	First Name Contract Other June	Email int Prime Contract Multiple iich aids in the understanding or app	Contract Number Contractor Contractor	

Save

Form Approved O.M.B. NO. 2700-0052

Innovator's Information			
Email Address: (required)		Innovator #: (required) 1	
Prefix:	First Name: (required)	Middle Name:	7
_ast Name: (required)	Suffix:		
Current Title:	Phone Number: (required)	Org Codes:	7
□ POC o	Software Author 0		1,
Innovator 🐽	Contributor o		
☐ NASA Employee for this	Case ①		
Place of Performance Wh	en Innovation Was Made		
Employer Name When Innova	ation Was Made: (required)		
Department/Division:			
Address Where Innovation V	Vas Made: (required)		
			1
		14	
City:/Regulred)	State:/Required	Zip Code:(Required)	-0

Add Innovator		×
City:(Required)	State:(Required) Select	Zip Code:(Required)
Country:		
Current Employer Information Sam	e as above	
Employer Name:		
Department/Division:		
Address:		
		.::
City:	State:	Zip Code:
Country:	Non-US Address:	
Contract/Grant Information		
Contract/Grant/Co-op Agreement: (not re-	quired for NASA CIMI Servant)	
Contract Type: (not required for NASA CMI Serva	nt) Select	~
Employer Status: (Required) Select	~	
Add Add		



Add WBS Information X			
Fiscal Year:	Select One 🗸		
Center:	Select One ~		
WBS Number:			
Fund:			
Program Name	:		
Project Name:			
⇔ Add			



🧥 Home | 🌿 Logout | Change Password | 👣 Help My NTRs | Create New NTR [User Name: | Account Type: user | Email: Auto Save in 2 minute(s) M Save e-NTR#: 1490186611 NTR Report Date: General Information Description Commercialization Technology Readiness / Software Development History **Brief Abstract** (A general description of the innovation which describes it's capabilities, but does not reveal details that would enable duplication or imitation of the invention.) Description of the Problem or Objective That Motivated the Innovation's Development (Enter as appropriate: A.- General description of problem/objective; B.- Key or unique problem characteristics; C.-Prior art, i.e., prior techniques, methods, materials, or devices performing function of the innovation, or previous means for performing function of software; and D.-Disadvantages or limitations of prior art.) Technically Complete and Easily Understandable Description of Innovation Developed to Solve The Problem or Meet The Objective (Enter as appropriate; existing reports, if available, may form a part of the disclosure, and reference thereto can be made to complete this description: A. Purpose and description of innovation/software; B. Identification of component parts or steps, and explanation of mode of operation of innovation/software preferably referring to drawings, sketches, photographs, graphs, flow charts, and/or parts or ingredient lists illustrating the components; C. Functional operation; D. Alternate embodiments of the innovation/software; E. Supportive theory; F. Engineering specifications; G.

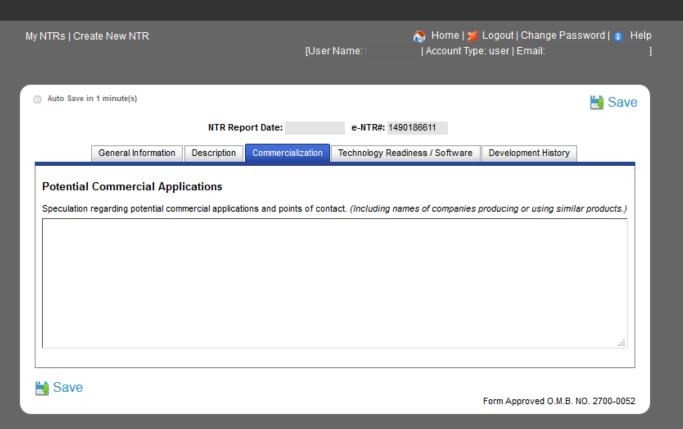
Peripheral equipment; and H. Maintenance, reliability, safety factors.)

Technically Complete and Easily Understandable Description of Innovation Developed to Solve The Problem or Meet The Objective
(Enter as appropriate; existing reports, if available, may form a part of the disclosure, and reference thereto can be made to complete this description: A. Purpose and description of innovation/software; B. Identification of component parts or steps, and explanation of mode of operation of innovation/software preferably referring to drawings, sketches, photographs, graphs, flow charts, and/or parts or ingredient lists illustrating the components; C. Functional operation; D. Alternate embodiments of the innovation/software; E. Supportive theory; F. Engineering specifications; G. Peripheral equipment; and H. Maintenance, reliability, safety factors.)
Unique or Novel Features
(Enter as appropriate: A novel or unique features; B Advantages of Innovation/software; C Development or new conceptual problems; D Test data and source of error; EAnalysis of capabilities; and F For software, any re-use or re-engineering of existing code, use of shareware, or use of code owned by a non-federal entity.)

Save

Form Approved O.M.B. NO. 2700-0052







Nome | 🌿 Logout | Change Password | 🐧 Help My NTRs | Create New NTR | Account Type: user | [User Name: Auto Save in 5 minute(s) M Save NTR Report Date: e-NTR#: 1490186611 General Information Description Commercialization Technology Readiness / Software Development History **Publications** PREVIOUS OR CONTEMPLATED PUBLICATION OR PUBLIC DISCLOSURE INCLUDING DATES Provide as applicable: A. - Type of publication or disclosure, e.g., report, conference or seminar, oral presentation; B. - Disclosure by NASA or Contractor/Grantee; and C. - Title, volume no., page no., and date of publication. + Add Publication Information Type Title Volume Publication/Conference Date No records found. Total Records: 0 Degree of Technical Significance (Which best expresses the degree of technological significance of this innovation?) Degree of Technical Significance State of Development ☐ Concept Only ☐ Design ☐ Prototype ✓ ☐ Modification ☐ Production Model Please Select One Used in Current Work **Patent Status** Enter information on any prior patents or patent applications disclosing or related to this new technology/innovation. + Add Patent Status Patent Number Issue Date App Serial Num App File Date No records found. Total Records: 0 **Development Timeframe** Indicate the dates or the approximate time period during which this innovation was developed. (i.e., conceived, constructed, tested, etc.)

Questions for Software Only

Add Patent Status	×
☐ Application Filed ☐ Patent Issued	
Patent Number:	
Issue Date:	
Application Serial Number:	
Application Filing Date:	
C Add	

Add Publication Information	×
Type of publication or disclosure:	Select ~
Disclosure by:	Select
Publication/Conference Name:	
Title (required):	
Volume number:	
Page number:	
Publication/Conference Date:	
	Contemplated
→ Add → Ad	

(vvnicn best expresses the degree of tech	nnological significance of this	s innovation?)	
Degree of Technical Significance	State of Development		
Please Select One	Concept Only Desig Modification Product Used in Current Work		
Patent Status			
Enter information on any prior patents or p + Add Patent Status	atent applications disclosing o	or related to this new technology/innovation	n.
Patent Number	Issue Date	App Serial Num	App File Date
No records found.			
Total Records: 0			
Development Timeframe Indicate the dates or the approximate time	period during which this innov	vation was developed. (i.e., conceived, co	onstructed, tested, etc.)
Questions for Software Only Software innovations include computer pr design details, algorithms, formulae, flow of thereof, to be produced or created. Softw documentation that discloses the type of in Please read the following careful Software Application (If this is a software related invention, che	charts, and related material the are innovations do not include nformation described above si ally:	at would enable a particular computer pro e computer databases or software docum hould be submitted with any disclosure of	gram, or a functional equivalent entation. However, software
<mark>∖</mark> Save			



Auto Save	in 3 minute(s)				=	∮ Sav
		NTR R	eport Date:	e-NTR#: 1490186611		
	General Informa	ation Description	Commercialization	Technology Readiness / Softv	ware Development History	
Month, Yea	ar, Location, and Id	ve not completed a	Records Supporting Fac		lease enter "N/A" in the supporting t	facts
irst disc	losure to othe	rs. Year:	Location:			
Month	~	rear.	Location:	15		
JENIII T 3	UPPORTING WITNE					
						.:i
First ske	tch, drawing, l	ogic chart or c	ode.			.ii
F irst ske t Month:	tch, drawing, l					.::
First sket Month: Month	tch, drawing, l	ogic chart or c	ode. Location:			, ii
First sket Month: Month	tch, drawing, l	ogic chart or c	ode. Location:			.d
First sket Month: Month	tch, drawing, l	ogic chart or c	ode. Location:			.ii.
First sket Month: Month	tch, drawing, l	ogic chart or c	ode. Location:			.::
First sket Month: Month DENTIFY SL	JPPORTING WITNES	ogic chart or c Year: SSES (NASA in-hor	ode. Location:			.di
First sket Month: Month DENTIFY SU	tch, drawing, l	ogic chart or c Year: SSES (NASA in-hor	ode. Location:			

DENTIFY SUPPORT	TING WITNESSES (NASA	in-house only):	
ompletion of	first model of full s	ized device (invention) or beta version (software).	
onth:	Year:	Location:	
onth	~		
ENTIFY SUPPORT	TING WITNESSES (NASA	in-house only):	
Month:	Year:	Location:	
Month	~		
ENTIFY SUPPORT	TING WITNESSES (NASA	in-house only):	
ontribution of	f innovators.		



New Technology Summary Reporting

My NTRs Create New NTR My NTSRs Create New NTSR	[User Name:	Mome ★ Logout Change Password Account Type: company Email:
elow is a list of items that you have submitted for review. splayed in the appropriate box below.	After your submitted en	try has been accepted or denied, it will be
My Drafts / Submitted for Review (To	otal Records: 0) —	
No Records Found		
Accepted Summary Reports (Total R	ecords: 0)	
— Accepted Summary Reports (Total R	decords: 0)	
No Records Found		



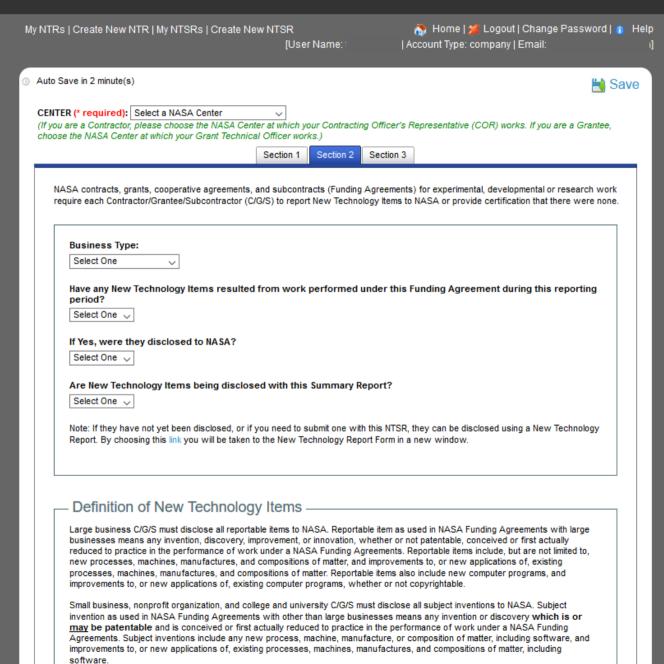
New Technology Summary Report

NTRs Create New NTR My NTSRs Create New NTSR [User Name	Mome March Logout Change Password Nome Logout Change Password Nome Logout Change Password Nome Logout Logout
Auto Save in 5 minute(s)	⊟ Sav
CENTER (* required): Select a NASA Center (If you are a Contractor, please choose the NASA Center at which your Conchoose the NASA Center at which your Grant Technical Officer works.)	ntracting Officer's Representative (COR) works. If you are a Grantee,
Section 1 Secti	ion 2 Section 3
NASA contracts, grants, cooperative agreements, and subcontracts (Fi require each Contractor/Grantee/Subcontractor (C/G/S) to report N none.	runding Agreements) for experimental, developmental or research work New Technology Items to NASA or provide certification that there were
Disclosure of Invention and New Technology (Including Software) NASA Form 1679 or equivalent information required.	The C/G/S must submit a detailed disclosure of each New Technology Item (reportable item or subject invention - see definition below) made under the funding agreement within two months after innovator's disclosure to the C/G/S.
New Technology Summary Report (NTSR) (check marked Interim)	The C/G/S must submit a detailed disclosure of each New Technology Item (reportable item or subject invention - see Section 2 for definition) made under the funding agreement within two months after innovator's disclosure to the C/G/S.
New Technology Summary Report (NTSR) (check marked Interim)	Report (NTSR) (check marked "Interim") For multi-year efforts, the C/G/S must submit a summary listing of all New Technology Items developed during the reporting period, OR provide certification that there were none. The first Interim New Technology Summary Report is due 12 months from the effective date of the effort. Additional reports are due annually thereafter.
New Technology Summary Report (NTSR) (check marked Final)	The C/G/S must submit a cumulative summary listing of all New Technology Items developed during the entire performance of the Funding Agreement, OR provide certification that there were none. The Final New Technology Summary Report must be submitted within 3 months of end date.
NASA Funding Agreement Information –	
NASA Funding Agreement Number (* required):	Туре:
Company Name:	Select One V
Company Address:	

Email:				
Phone:				
Report Sub	mitted By (If not Ne	ew Technology Re	nresentative)	
Name:	Tillica by (il flot ive	ow reciliology re	presentative) ———	
Email:				
Phone:				
		0/14/155		
	mission Date (YYY			
Report Sub				
	on:			
Date of Submission	on:			
Date of Submission	eport —	0		
Interim V	on:	0		
Date of Submission	eport —	0		



New Technology Summary Report



Small business, nonprofit organization, and college and university C/G/S must disclose all subject inventions to NASA. Subject invention as used in NASA Funding Agreements with other than large businesses means any invention or discovery which is or may be patentable and is conceived or first actually reduced to practice in the performance of work under a NASA Funding Agreements. Subject inventions include any new process, machine, manufacture, or composition of matter, including software, and improvements to, or new applications of, existing processes, machines, manufactures, and compositions of matter, including software.

Note: Subject to approval by C/G/S who retain or obtain title to subject inventions or reportable items, all such technologies are evaluated for publication in NASA Tech Briefs magazine. If an item is published in NASA Tech Briefs, the innovator may be considered for an award from NASA. Innovations meeting eligibility requirements may also be considered for additional Space Act Awards (http://icb.nasa.gov).

II. New Technology Items –

Please provide the following information for all New Technology Items reportable under this Funding Agreement during the reporting period.

+ Add New Technology Item

Title	Internal Docket No./Contractor Tracking No.	e-NTR No	NASA Case No.	Submitted Date	
No reco	rds found.				

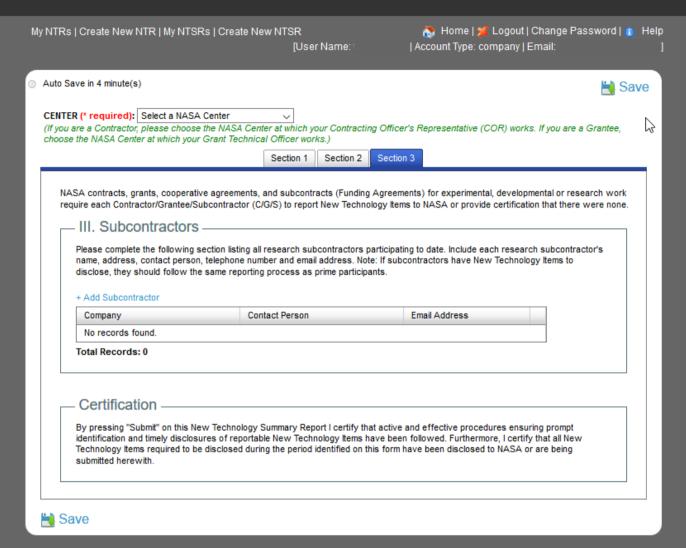
Total Records: 0



Save



New Technology Summary Report



Subcontractors	×	
Company Name:		
Company Address:		
City: Zip:		
Country: Province:		
Contact Person:		
Phone: E-mail Address:		
Add Add		