

**Remote Sensing Regulatory Reform
ACCRES Recommendations 7 15 19**

	Topic	Existing Regulations	Proposed Regulations	Comments	ACCRES Recommendation
Executive Summary of Proposed Rules					
			<p>The following rule establishes the U.S. policy and regulatory framework for granting operating licenses to privately owned space-based remote sensing systems. The rule includes detailed information for the operating license application, review, and approval processes; requirements, conditions, constraints, and limits; definitions; and timeline. Owners and operators who are not part of the United States Government but are subject to U.S. laws shall obtain operating licenses from the United States Government, and are required to comply with the following regulations.</p> <p>Over 25 years ago, the United States Government created the domestic, commercial space-based remote sensing industry, and catalyzed market expansion for satellite remote sensing hardware, software, analytics, and value-added services providers. That sector continues to expand and diversify domestically and internationally at an accelerating rate and is a key element of the expanding commercial space sector. U.S. remote sensing policy and the implementing regulatory framework continue to provide significant advantages for U.S. national, economic, and homeland security, and for U.S. foreign policy.</p> <p>The United States Government is promulgating the following update to existing regulations to recognize and take account of these significant and ongoing changes to the remote sensing industry; to maintain and expand the resulting benefits for the U.S. Government; to continue to protect U.S. national and economic security; and to position U.S. industry to maintain a pre-eminent position in the global market for remote sensing, geospatial capabilities and services.</p> <p>The following regulations remain fully consistent with existing statutory requirements and policy objectives reflected in U.S. National Security Strategy, Space Policy, and the National Defense and Intelligence Strategies. In addition, these rules provide an updated, more relevant and more realistic risk managed policy and regulatory framework to review and adjudicate remote sensing license applications in light of (1) the benefits and risks to U.S. national, homeland, and economic security, and to U.S. foreign policy; (2) the status of commercially available remote sensing technologies globally; and (3) the implications of proposed licensing conditions for U.S. industry maintaining, strengthening, or gaining a leading commercial position in the global remote sensing market.</p> <p>In furtherance of these goals, and in recognition of the changes to the U.S. and global remote sensing sector, these rules:</p> <ul style="list-style-type: none"> • Update and clarify the definition of “remote sensing” to differentiate among technologies and capabilities that will continue to require an operating license, from those that realistically can and will be used for purely scientific, commercial, and/or humanitarian applications, and therefore should not require a license; • Establish a review process and license conditions that <ul style="list-style-type: none"> ○ Differentiates between systems (1) with technologies, capabilities, and performance that are or shall be within 36 months widely available in the global market; and (2) with technologies, capabilities, and performance that are not likely now or within 36 months to be available widely in the commercial market; or ○ Focuses on unauthorized use that could provide unique information that cannot be readily obtained by other means; and which demonstrably increase threats to U.S. national, homeland, or economic security, or foreign policy. • Enable the United States Government to 		

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		<ul style="list-style-type: none"> ○ Significantly reduce uncertainty, additional review time, and regulatory burden imposed by individual interagency review for all technologies, systems, and capabilities that are already, and/or shall be widely available in the near-future as defined above; ○ Focus its scarce analytic resources on those applications with potentially significant adverse implications for U.S. national and/or homeland security. <ul style="list-style-type: none"> • Incorporate more specific guidance and regulatory requirements to strengthen licensees’ cyber protections and requires sustained focus and resources to be allocated to maintaining required cyber resiliency throughout the lifecycle for remote sensing systems, capabilities, and/or services; • Require the periodic update of license conditions, and interagency review processes via public notice-and-comment rulemaking, thereby increasing transparency and regulatory certainty; • Reduce the application review time to 60 days for widely available systems as described above and in detail below, and 90 days for systems, technologies, and capabilities not already, or likely to be available in the near-term; • Eliminate the current practice of “clock stoppages” for review of applications, and reduces the compliance burden by eliminating the number and complexity of conditions that provide little or no benefit to the United States Government, but would continue to impose significant costs for U.S. industry. 		<p>In adopting any new rules, the Secretary should explain in the implementing order the purpose for all rule changes and justify any changes that are more burdensome to applicants/licensees than the current NOAA rules. This will help reduce uncertainty regarding the purpose of any revised or new rule and ensure that changes to the NOAA rules are consistent with SPD-2.</p> <p>** Please note that the summary below is not verbatim or complete. **</p>	
1.		960.1 – Sets forth procedural and informational requirements for obtaining a license to operate a private remote sensing space system under the Land Remote Sensing Policy Act and applicable Policy. Includes comprehensive list of intentions of the regulations.	960.1 – Implements the Secretary’s authority to license the operation of private remote sensing space systems under the Land Remote Sensing Policy Act.	<p>The basis of these proposed regulations center on what is critical to national security. But they omit discussion of what is available commercially from other nations that might limit a U.S. company from selling imagery.</p> <p>There is an assumption that small satellites are “cheaper to produce.” Essentially this is true, but what is not determined yet in this industry</p>	

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				is whether a system of small satellites that are produced in quantity, and that may need more frequent replacement due to shorter life spans, will end up with a cheaper life-cycle cost than a larger satellite designed for similar purposes.	
2.	Jurisdiction	960.2(a) - Regulations apply to any person subject to the jurisdiction or control of the United States who operates or proposes to operate a private remote sensing space system, either directly or through an affiliate or subsidiary, and/or establishes substantial connections with the US regarding the operation of a private remote sensing system.	<p>960.2 –These regulations set forth the requirements for the operation of private remote sensing space systems within the United States or by a United States citizen. The Secretary does not authorize the use of spectrum for radio communications by a private remote sensing space system, and in the case of a system that is used for remote sensing and other purposes, as determined by the Secretary, the scope of the license issued under this part will not extend to the operation of instruments that do not support remote sensing.</p> <p>United States citizen means:</p> <p>(1) Any individual who is a citizen of the United States; and</p> <p>(2) Any corporation, partnership, joint venture, association, or other entity organized or existing under the laws of the United States or</p>	<p>Removed substantial connection standard. Instead, moved the foreign involvement to the factors to be considered in categorization.</p> <p>Limits jurisdiction to the remote sensing portion of the system if dual use of the system (e.g. no jurisdiction over satellite servicing portion of a system that also has remote sensing capability.)</p> <p>Question: should US citizen be US “person”? Person or private sector party is defined as any entity or individual other than agencies or instrumentalities of the USG.</p> <p>[Note: The existing regulatory text is at best ambiguous, and in general open ended and almost entirely open to interpretation. It also needlessly involves launch vehicles into a discussion about regulatory scope.]</p>	<p>Industry supports this change to focus regulation on the US and reduces ambiguity around jurisdiction.</p> <p>Recommend the rules explicitly state what is meant to regulate: if it’s not part of the RS system, it’s not regulated. Change intended to minimize ambiguity about “what’s in/out of regulatory scope.</p> <p>Committee recommends that NOAA revisit reference to a United States citizen and consider the use of US Person as defined EAR Part 772 and ITAR 120.15.</p>

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			any State.		
3.	Substantial connection factors	960.2(b) - Factors to consider whether a substantial connection exists: location of control center or operations centers and stations; use of a US launch vehicle; location or administrative control of the ground receiving stations; the investment, ownership, or technology included in the system.	N/A	Substantial connection not used in proposed rules.	
4.	License Requirement	960.4 - No person subject to the jurisdiction and/or control of the United States may operate a private remote sensing space system without a license.	960.25 – Any person who is subject to the jurisdiction or control of the US shall not, directly or through a subsidiary or affiliate, operate a system without a current, valid license for that system.	Inconsistent with jurisdiction provision, which is applicable to the operation of a private remote sensing system within the US or by a US citizen. Whatever the definition of US citizen/person, it needs to be used in this context consistently.	Use the same defined term as in the jurisdiction provision. See recommendation in line item 2.
5.	Application to existing licenses	960.2(c) - Regulations applicable to licenses after May 25, 2006 and pre-existing licenses.	960.3 – Licensees may request that existing licenses be replaced with one developed under the new regulations. Replacement at the sole discretion of the Secretary.	Licensees would be forced to rely on appeal procedure to have existing license replaced to align with new rules if Secretary determines not to replace the license. Change to impose the “burden of proof” on the USG, in only limited cases. Insert an appeal process to shut down DoD, IC, etc. protests that national security risks are solely their	Explicitly state that the rules are not applicable retroactively. Replace all existing licenses to conform to new regulations and conditions. Grandfather all existing conditions and waivers. Operators holding pre-existing licenses shall not be required to apply for new licenses when the new

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				call, vice DoC	<p>regulations and conditions are promulgated. Operators holding pre-existing licenses shall not be required to comply with less restrictive conditions or obligations eliminated by the new regulations and conditions.</p> <p>The U.S. Government shall: (1) provide opportunities for applicants seeking licenses under the new rules and current licensees seeking replacement licenses to meet with NOAA prior to final licensing decisions; and (2) provide for a rapid appeal process for applicants and current licensees where there is disagreement regarding the appropriate license conditions..</p>
6.	Authority of other Agencies	960.2(e) - Issuance of a NOAA license does not impact the authority of any other USG agency, including the FCC, FAA, Commerce (EAR) or State (ITAR).	960.2 – License only applicable to remote sensing and does not authorize use of spectrum for radio communications used by such remote sensing space system.	No reference to other agencies.	
7.	Anomaly	<p>[The definition below is provided on NOAA's FAQ but is not codified:</p> <p>Any operational condition or action of the remote</p>	An unexpected event or abnormal characteristic that could indicate a technical malfunction or security threat.	<p>The proposed definition of anomaly is vague and arguably more expansive than the prior definition.</p> <p>Change to more precisely</p>	Committee recommends that NOAA revise and limit the definition of anomalies to events and/or conditions that could reasonably damage U.S. national or

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		<p>sensing space system that is different from those contained in the NOAA license granted to operate such a system, in particular, those found in paragraph 4 of the license. E.g., any condition or action that causes operational control to be conducted outside a location from within the United States, U.S. territories and protectorates; or, tasking of the system occurs in a manner not authorized under the terms of the license; or, communication with the system is lost or interrupted; or, any new orbit or change in orbit; or, any actions taken to protect the system on orbit; or, any other operational deviation or proposed deviation that would violate the conditions of the license.]</p>		<p>define anomalies as those pertain to licensed RS systems. Circumscribed definition is offset by increased responsibility on the part of licensees to monitor and report specific actions with potentially significant adverse consequences.</p> <p>NOAA will need to work with DoD/IC to determine who is notified after licensee contacts NOAA.</p>	<p>homeland security, or foreign policy. The Committee recommends licenses include an obligation for the licensee to notify NOAA of such anomalies within prescribed timeframes to be determined by NOAA, in consultation with the Department of Defense and the Director of National Intelligence..</p> <p>Anomalies reportable to NOAA shall conform to the consequences listed above, and shall be limited to those directly affecting the imaging system, rather than any element affecting the space, communications, and/or ground elements of the space system.</p> <p>For practical reasons, the definition should include a materiality component. For instance, temporary or non-permanent deviations from licensed conditions shall not be required to be reported, unless the consequences conform to the conditions listed above</p> <p>Proposed definition:</p> <p>For purposes of these</p>

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					<p>regulations, an anomaly is defined as, and includes only operations that affect the licensed remote sensing system, and that are clearly not within the scope of operations approved in the license. The licensee will notify NOAA within [X period of time] of detecting such operations.</p> <p>In addition, the licensee shall report to NOAA within [X period of time] of initially detecting any:</p> <ul style="list-style-type: none"> (1) Maneuver or change in orbit not authorized by the licensee, or by the satellite operator, in the event the remote sensing system is a hosted payload on board a satellite operated by another party; (2) Tasking, imaging operation, and/or communications to/from the on-orbit remote sensing system not authorized by the licensee; or (3) Unauthorized contact with, intrusion into, or disruption of the

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					communications, tasking, command and control, and/or data storage supporting the remote sensing system.
8.	Data	<p>Basic Data – unenhanced data generated by the Landsat system or by any remote sensing space system licensed under the Act that have been selected by the Secretary of the Interior to be maintained in the National Satellite Land Remote Sensing Data Archive.</p> <p>Basic Data Set - Unenhanced data generated by the Landsat system licensed under the Act that have been selected by the Secretary of the Interior to be maintained in the National Satellite Land Remote Sensing Data Archive.</p> <p>Unenhanced data – remote sensing signals or imagery products that are unprocessed or subject only to data pre-processing. Data pre-processing may include rectification of system and sensor distortions in remote sensing data as it is received</p>	<p>Data - the output from a remote sensing instrument, regardless of level of processing.</p> <p>Unenhanced Data – remote sensing signals or imagery products that are unprocessed or preprocessed.</p>	Are these still reasonable definitions in light of where the industry is now, and/or is headed?	

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		directly from the satellite registration of such data with respect to features of the Earth; and calibration of spectral response with respect to such data. Does not include conclusions, manipulations, or calculations derived from such data, or a combination of such data with other data. Excludes phase history data for SAR systems or other space-based radar systems.			
9.	Days	N/A	Less than or equal to 10 = working days Greater than 10 = calendar days	Different definition of days may cause confusion. Regulations ought to preclude any USG "timeouts"	Committee recommends using calendar days throughout the regulations rather than the proposed definition.
10.	Ground sample distance or GSD	N/A	The common measurement for describing the spatial resolution of data created from a remote sensing instrument, typically measured in meters.	GSD describes the sample distance, which is generally not the limiting factor for system resolution. GSD is often oversampled relative to the diffraction limited resolution of an optical system. Use of GSD as a resolution metric can apply a restriction that is more restrictive than what would be expected by a layperson. Another committee member had a different perspective: a picture can be oversampled manually but as far as I know that is not regulated. NOAA regulates the system and not the oversampling. A company would be free to resample an	

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				image at any resolution.	
11.	Material fact	N/A	Any fact an applicant provides in the application, or any fact in Parts C or D of the license derived from information an applicant or licensee provides to the Secretary, including the description of all components of the system and the identity and description of the person. (Carve out for ODMSP Plan)	<p>The definition of “material fact” seems unnecessarily broad and would include immaterial statements made in the application or in correspondence provided to the Secretary.</p> <p>Similarly, the obligation to update a pending application should be limited to changes in material information provided and not simply any information provided.</p> <p>Not even sure why this is included, or why the differentiation between “facts” and “material facts.” Why not simply require the licensee to provide any information required by NOAA to adjudicate a license application? One would think this would obviate the need for differentiating between facts, etc.</p>	The definition should be revised to include a materiality component or identify the information requiring ongoing updates.
12.	Modification	N/A	Any change in the text of a license, whether requested by the licensee or required by the Secretary in accordance with the procedures in this part.		
13.	Operate / Operator	To manage, run, authorize, control, or otherwise affect the functioning of a remote sensing space system,	To control the functioning of a remote sensing space system. If multiple persons manage various components of a		Recommend separate definition for “operator” to distinguish between the operation of the system vs.

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		<p>directly or through an affiliate or subsidiary, including commanding, controlling, tasking, and navigation of the system; or data acquisition, storage, processing, and dissemination.</p> <p>Operational control means the ability to operate the system or override commands issued by any operations center or station.</p>	remote sensing space system, the person with primary control over the functioning of the remote sensing instrument is deemed to operate the remote sensing space system.		the party operating such system.
14.	Person	Any individual (whether or not a citizen of the US) subject to US jurisdiction; entity organized or existing under the laws of the US; subsidiary (foreign or domestic) of a US company; any other private remote sensing space system operator having substantial connections with the US or deriving substantial benefits from the US that support its international remote sensing operations sufficient to assert US jurisdiction as a matter of common law.	Person or private sector party - Any entity or individual other than agencies or instrumentalities of the USG.	Not sure of the original definition's intended focus, but the proposed change seems like an "apples v. camels" comparison. What's the purpose of the definition? See earlier discussion regarding US citizen/person.	See recommendation above in line items 2 and 4.
15.	Remote sensing space system	Remote sensing space system, licensed system, or system – any device, instrument, or combination thereof, the space-borne platform upon which it is carried, and any related	Remote sensing space system – all components that support remote sensing to be conducted from an orbit of the Earth or other celestial body, including the remote sensing instrument, spacecraft upon	Expands remote sensing space system definition to include operation from any other celestial body and includes components of the system owned or managed by others	Committee recommends deletion of "to be or being conducted from an orbit of the Earth or other celestial body" in the definition of remote sensing space system and clarification that

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		<p>facilities capable of actively or passively sensing the Earth’s surface, including bodies of water, from space by making use of the properties of the electromagnetic waves emitted, reflected or diffracted by the sensed objects.</p> <p>Licensed system consists of a finite number of satellites and associated facilities, including those for tasking, receiving, and storing data, designated at the time of the license application. Small, hand-held cameras shall not be considered remote sensing space systems.</p>	<p>which the remote sensing instrument is carried, facilities wherever located and any other items that support remote sensing data and data management, regardless of whether the component is owned or managed by the applicant or licensee.</p> <p>Remote sensing – the collection and transmission of data about a sensed object by making use of the electromagnetic waves emitted, reflected, or diffracted by the sensed object. Sensing shall not be considered remote if the primary sensed object is physically attached to the remote sensing instrument and cannot be maneuvered to effectively sense any other object.</p> <p>Remote sensing instrument – a device that can perform remote sensing.</p> <p>Private remote sensing space system or system – a remote sensing space system in which the remote sensing instrument is not owned by an agency or instrumentality of the USG.</p>	<p>Carve out from remote sensing definition if the primary sensed object is physically attached to the remote sensing instrument is a positive change.</p> <p>What if such camera is removed by a servicing satellite and repurposed? Would the company need a new license at a future date for the same camera?</p>	<p>the scope of the regulation is limited to remote sensing of the Earth’s surface from space.</p> <p>Committee recommends that there be one licensee, who shall contractually obligate any other party that is involved in the operation of the remote sensing system to conform to all license conditions and regulations.</p>
16.	Revisit Rate	N/A	Period of time that elapses between two occurrences of a remote sensing instrument’s transit over a specific location		

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			on a sensed object such as the Earth.		
17.	Significant or substantial foreign agreement	<p>An agreement with a foreign nation, entity, consortium, or person that provides one or more of the following:</p> <ol style="list-style-type: none"> 1. Administrative control, which may include distributorship arrangements involving the routine receipt of high volumes of the system’s unenhanced data; 2. Participation in the operations of the system; including direct access to the system’s unenhanced data; 3. An equity interest in the licensee held by a foreign nation or person and/or person, if such interest equals or exceeds or will equal or exceed 20% of the total outstanding shares, or entitles the foreign person to a position on the licensee’s board. 	Any contract or legal arrangement with any foreign national, entity or consortium involving foreign nations or entities, the execution of which will require the prior approval of a license modification.	<p>All significant or substantial foreign agreements require license modification; new definition broadens the definition to capture all agreements with foreigners; no connection to the system.</p> <p>The proposed text does not provide a clear definition and creates burdensome ambiguity.</p> <p>The broadly worded, proposed definition, without explanation or justification, appears to expand the foreign agreement approval requirement.</p> <p>Question of scope of what is a “significant or substantial” foreign agreement. Again, could be quite arbitrary and applies equally to all foreign nations. Seems too vague and broad. Even in low-risk category, there is a requirement of no foreign involvement, either in investment, ownership, or managing any component of the system. This may be put in to stimulate U.S. industry, but it could also be unreasonably restrictive for commercial purposes, especially if there are no national security issues in those low risk satellites. And</p>	<p>The Secretary should narrowly and clearly define what is a significant or substantial foreign agreement.</p> <p>The Secretary should establish exceptions for “safe countries.”</p> <p>Committee recommends that NOAA consult with the Departments of Commerce, State and Defense, and reference existing export control statues and regulations, to determine a consistent definition for “foreign” involvement/ownership for purposes of these regulations, and for the permitted limit of that involvement/ownership.</p>

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				<p>if low-risk satellites are mainly from educational institutions, this will basically end all cooperative science research with experts in other nations using these satellites.</p> <p>Why 20% is no longer sufficient?</p>	
18.	Subsidiary or affiliate	<p>Subsidiary – a person over which the applicant or licensee may exercise administrative control.</p> <p>Affiliate – any person:</p> <ol style="list-style-type: none"> 1. Which owns or controls more than 5% interest in the applicant or licensee; or 2. Which is under common ownership or control with the applicant or licensee. <p>Administrative control means the power or authority, direct or indirect, whether or not exercised through the legal or defacto ownership or possession</p>	A person that is related to the applicant or licensee by shareholdings or other means of control.	<p>New definition is vague and not aligned with common understanding; could inadvertently implicate de minimis ownership or distant relationship.</p> <p>What is prompting the change?</p>	<p>Suggest revising definition to reference securities laws or match those definitions</p> <p>Definitions from Section 403 of Securities Act of 1933:</p> <p>Affiliate: An affiliate of, or person affiliated with, a specified person, is a person that directly, or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with, the person specified.</p> <p>Control. The term control (including the terms controlling, controlled by and under common control</p>

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		<p>thereof, ownership of voting securities of a licensee, or by proxy voting, contractual arrangements or other means, to determine, direct or decide matters affecting the operations of the system; specifically, to determine, direct, take, manage, administer, influence, reach, or cause decisions regarding the:</p> <p>(1) Sale, lease, mortgage pledge, or other transfer of any or all of the system or system control assets of the licensee, whether in the ordinary course of business or not;</p> <p>(2) Operation of the system(s), including but not limited to orbit maintenance and other housekeeping functions, tasking and tasking prioritization, data acquisition, data storage, data transmission, processing and dissemination;</p> <p>(3) Dissolution of the licensee;</p> <p>(4) Closing and/or relocation of the command and control center of the</p>			<p>with) means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a person, whether through the ownership of voting securities, by contract, or otherwise.</p> <p>Examples of affiliates include executive officers, directors, large stockholders, subsidiaries, parent entities, and sister companies; however, the SEC has consistently taken the position that the determination of 'control' status is dependent in large part on the facts and circumstances involved and, therefore, has declined to state definitively what circumstances will result in a person being deemed to be in 'control' of an issuer.</p>

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		<p>system;</p> <p>(5) Execution, substantive modification and/or termination or nonfulfillment of any significant or substantial foreign agreement of the licensee regarding direct readout or tasking obligations; or</p> <p>(6) Amendment of the Articles of Incorporation or constituent agreement of the licensee with respect to the matters described in paragraphs (1) through (4) of this definition.</p>			
19.	Tasking	Means any action taken to command a remote sensing space system or its sensor to acquire data for transmission or storage on the satellite's recording subsystem. Such action can be in the form of commands sent to the system for execution or for storage in the satellite's memory for execution at the specified time or location within a given orbit.	N/A		
20.	Licensing Guidelines	N/A	960.5(a) – Two categories of licenses relative to national security threat and international obligations and policies. Low or high risk based on holistic evaluation of	While the Committee recommends moving to a streamlined process, it notes the following:	The presumption in the classification of satellites systems should be weighted toward the streamlined process to support the objectives of SPD-2.

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			<p>factors; different license conditions based on risk.</p>	<p>High risk category is defined as a “relative risk” to national security. Relative to what? This is not a working or clear definition. It is also tied to “prevalence and capabilities of systems in other nations as well as the regulatory environment in other nations.” Again, evaluated under what rules and guidelines? Also note that conditions in other nations can change very quickly, and our information may not be complete or timely about their activities.</p> <p>This section should shift away from a risk focus as the centerpiece, and toward an evaluation in light of commercial availability, with a risk assessment included.</p> <p>Regarding resolution (GSD) for EO, recommend the regs state applicants will not be evaluated on the basis of proposed resolution. There are other, more meaningful parameters to regulate. Moreover, no EO resolution limit meaningfully attenuates risk to US forces at this point. By setting a GSD limit that implicitly asserts that “resolution better than XXXXcm is classified by definition, which is not</p>	<p>The Secretary should consider alternative categories (e.g., streamlined or standard vs. non-streamlined).</p> <p>Committee recommends license applications be reviewed using streamlined criteria/processes, unless the remote sensing space system meets specifically defined criteria that require an alternative review process.</p> <p>Committee recommends avoiding any specific numerical parameters. Consider including concepts such as the commercial availability of the technology and whether the operation of the licensed system would provide unique advantages to an adversary that would pose a risk to U.S. national or homeland security, or U.S. foreign policy.</p>

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				<p>necessarily the case. This would also send a strong, positive message to industry, and also to competitors. It also might tell adversaries, in effect: "everybody is going to be watching you."</p> <p>There isn't much chance of any US (or foreign) commercial provider rushing to field a, for example, 6 inch resolution EO systems until there's a clear non-government market demand for such a capability (given development/production costs). On the other hand, "turning loose" US industry would enable the debate about next generation imagery architectures to be reframed fairly dramatically.....</p> <p>The non-commodity class of systems (whatever the phenomenology) is not described as governed by a "presumption of denial." The regs should be silent on a characterization, but lay out the key parameters on which the license shall be evaluated.</p>	
21.	Considerations to be considered in carrying out Remote Sensing	N/A	960.5(c) – Secretary to consider, among other appropriate considerations: (1) technological changes in remote sensing; (2) non-technological changes in		

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	Regulations		remote sensing industry, such as to business practices; (3) changes in risks to national security and international obligations posed by systems; (4) relative costs to licensees and benefits to national security and international obligations of restrictive license conditions; (5) changes in methods available to mitigate risks to national security and international obligations; (6) prevalence and capabilities of systems in other nations; (7) remote sensing regulatory environment in other nations; (8) potential for overlapping regulatory burdens imposed by other US Government agencies; and (9) commercial availability of comparable data from other space-based and non-space-based sources.		
22.	Factors to determine low risk category	N/A	<p>960.6 - The system must:</p> <p>(a) Be capable of operating only in one or both of the following electro-optical spectral ranges:</p> <p>(1) In a panchromatic band in the spectral range between 370-900 nanometers, and with a maximum resolution of 15 meters GSD;</p>	<p>While the Committee recommends moving to a streamlined process, it notes the following:</p> <p>“Likely to be regulated by a foreign nation” seems to be a rather poor standard given almost everything is regulated in some form or fashion</p> <p>Requirement to meet all criteria effectively disqualifies</p>	<p>See comments above in line item 20 – presumption should be that all systems are to be reviewed using a streamlined process, unless the systems meet the criteria as described above</p> <p>The Committee notes that the statute covers remote sensing of the Earth. While it is not clear that NOAA has jurisdiction over NEI, if</p>

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			<p>(2) In no more than four multispectral bands in the spectral range between 370-1100 nanometers, and with a maximum resolution of 30 meters GSD;</p> <p>(b) Be capable of operating only using the following spectral bandwidths for multispectral systems:</p> <p>(1) Any bandwidth if the resolution is coarser than or equal to 30 meters GSD;</p> <p>(2) Individual minimum spectral bandwidth(s) wider than 99 nanometers if the resolution is finer than 30 meters GSD;</p> <p>(c) Encrypt tracking, telemetry, and control transmissions where the key length is at least 128 bits, if the system has propulsion;</p> <p>(d) Be incapable of imaging the same center point of an image on Earth more than once in 24 hours from one or more satellites in a constellation, including by slewing or redirecting the satellite or remote sensing instrument;</p> <p>(e) Be incapable of capturing video, defined as:</p>	<p>all commercial operators from streamlined processing by default and effectively forces the Secretary to make a discretionary determination in each case.</p> <p>No commercial systems are likely to meet all criteria.</p> <p>Few, if any, commercial systems are likely to have less than three operational spacecraft.</p> <p>Any satellite in a sun-synchronous orbit would readily exceed daily revisit limitations. No moderate resolution imaging system could commercially operate a system with less than daily revisits.</p> <p>ESA's Sentinel 2a/2b has 10-20 m GSD and its images are freely available.</p> <p>What is the rationale on the video restriction, since DigitalGlobe, among others, can effectively do it now (aside from the basic question of what are we protecting?)</p> <p>Many commercial licensees are likely to have non-zero foreign investment or management.</p>	<p>NOAA in fact does have jurisdiction, the conditions should be less stringent than remote sensing of the Earth. Suggestion to add the following at the end of the introductory paragraph (before paragraph (a)): either be intended to observe celestial objects other than the Earth; or, for Earth imaging and artificial object imaging:</p> <p>Night-time capability should be permitted so long as licensees agree to abide by the exclusion zones.</p> <p>No notification should be required for NEI conducted on cooperating satellites and a waiver process should be added for NEI.</p> <p>Delete reference to the space tracking catalog in (9)(iii)(D).</p>

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			<p>(1) Imaging more than one frame every 10 seconds if the remote sensing instrument's resolution is finer than 30 meters GSD; or</p> <p>(2) Imaging more than 30 frames per second if the remote sensing instrument's resolution is coarser than or equal to 30 meters GSD;</p> <p>(f) Contain no more than three operational spacecraft;</p> <p>(g) Not, as described in its mission profile, disseminate data to the public within 12 hours of collection;</p> <p>(h) Not have any foreign involvement, meaning that:</p> <p>(1) No foreign nationals or entities have any ownership interest in the licensee; and</p> <p>(2) No foreign nationals or entities manage any components of the system;</p> <p>(i) Not, as described in its mission profile, perform night-time imaging, defined as imaging an area of the Earth's surface when the sun elevation is six degrees or more below the Earth's horizon relative to</p>	<p>Many commercial operators use KSAT facilities, which would disqualify an applicant from streamlined processing.</p> <p>It may be very difficult to make decisions on what is "low risk." Criteria are set up to limit the low-risk category to possibly only one-off satellites from educational institutions and not do anything to stimulate commercial space.</p> <ul style="list-style-type: none"> • Limit of 3 satellites in "system" • Limits on both resolution (same as Landsat) and • Limits on timelines • Both limits take away crucial components to most profitable commercial uses 	

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			<p>the imaged area with a resolution finer than 30 meters GSD;</p> <p>(j) Not, as described in its mission profile, perform non-Earth imaging, defined as conducting remote sensing of an artificial object in space.</p>		
23.	Revising Low Risk Factors	N/A	<p>960.7 - Secretary to consider whether to revise the factors at least every 2 years. If Secretary determines to revise the factors, Secretaries of Defense and State must be consulted on matters affecting national security and international obligations and policy and other agencies as appropriate. Any revisions must go through the public notice and comment process. Subject to interagency dispute resolution procedures and timelines in the MOU.</p>	<p>One positive element worth mentioning is the retention of the consultation with Defense and State on meeting our treaty and international obligations and not leaving that analysis to the Secretary of the DOC.</p>	<p>ACCRES supports periodic review to consider relaxing standards for streamlined processing and relaxing license conditions.</p>
24.	Application	<p>MOU - The DOC to provide copies of requests for licensing actions to DOS, DOD, DOI, ODNI, and JCS within 3 working days of receipt; Reviewing agencies allowed reasonable time to review; Reviewing agencies to notify DOC/NOAA of request for more information or time to</p>	<p>960.9 - Pre-application informal consultation available. Application to be reviewed for completion; applicant to be notified within 5 days of submission whether it is complete or additional or clarification required. If any information becomes inaccurate or incomplete during application process, correct or updated information</p>	<p>Proposed rules do not provide a timeframe for response to licensee's request for update on the status of application review.</p> <p>Need to insert a USG deadline to respond.</p> <p>No timeline for Secretary to notify Secretaries of Defense and State upon making the risk</p>	

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		<p>review within 10 days of receipt of the application; request to include (1) any additional information that it believes is necessary to properly evaluate the licensing action, or (2) additional time, not to exceed 10 working days, necessary to complete the review; notification must state the specific reasons why the additional information is sought, or why more time is needed.</p> <p>960.4 - If information in an application becomes inaccurate or incomplete prior to issuance of the license, the applicant must, within 14 days, file the new or corrected information; Assistant Administrator shall, within 14 days, determine whether the deadline must be extended to allow adequate review of the revised application and, if so, for how long.</p>	<p>must be submitted. If significant, Secretary may deem the update as a new application and the previous application withdrawn. Applicant may request status of application review and Secretary required to provide update.</p> <p>960.10 – Within 5 days of notice of completion of application, the Secretary shall make an initial determination of the appropriate category as follows:</p> <p>(1) If the Secretary determines that the application meets all the criteria in § 960.6, the Secretary:</p> <p>(i) Shall categorize the application as low-risk; or</p> <p>(ii) May, in exceptional circumstances, if the Secretary determines the application presents a novel or not previously licensed capability with unforeseen risk to national security or compliance with international obligations or policies, categorize the application as high-risk.</p> <p>(2) If the Secretary determines that the application does not</p>	<p>category determination.</p> <p>Requirement to meet all criteria effectively disqualifies all commercial operators and effectively forces the Secretary to make a discretionary determination in each case.</p> <p>With the ability of the Secretary to change categories of a satellite or system, run the risk of having very arbitrary and capricious delineation of categories and risk appraisal(s).</p> <p>Even in high-risk category, there are two different classifications—standard and “novel.” Seems to be quite a complicated procedure.</p> <p>General comment on an appeal process: Keep this at the Cabinet Officer level, i.e., no Under, Assistant, etc. officials. If DoD or the IC want to appeal a Sec Commerce decision, they need to do so from “the adults’ table.” Remanding this to the “kids’ table” virtually guarantees the issue will be brought forward for decision on the day after never.</p>	

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			<p>meet all the criteria in § 960.6, the Secretary:</p> <p>(i) Shall categorize the application as high-risk; or</p> <p>(ii) May, if the Secretary determines the application presents a low risk to national security and international obligations and policies, categorize the application as low-risk.</p> <p>(b) If the Secretary makes an initial determination that an application is high-risk, the Secretary shall also make an initial determination of whether the application should be subject to specific license conditions under § 960.18. The Secretary shall presume that the standard license conditions are sufficient, unless the application presents a novel or not previously licensed capability with unforeseen risk to national security or compliance with international obligations and policies.</p> <p>Secretary to notify Secretaries of Defense and State.</p> <p>Secretaries of Defense and State have 10 days to object to categorization, subject to interagency dispute resolution</p>		

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			procedures and timeline in the MOU. Within 25 days of notice of completion of application, Secretary to notify applicant of categorization. Secretary may change in categorization anytime during application process by notifying applicant. If the Secretaries of Defense and State object to the change in categorization and Secretary disagrees with objection, Secretary to elevate to dispute resolution procedures in MOU.		
25.	Confidentiality	960.5 – Proprietary information in an application shall be treated as business confidential or proprietary information if explicitly designated and marked; within 30 days of issuance of license, licensee must provide a publicly releasable summary of the licensed system.		Confidentiality of application and licenses not addressed in proposed rules.	Consistent with current rules, the proposed regulations should expressly state that designated and marked proprietary information will be treated as business confidential and proprietary and not publicly disclosed. Doing so will facilitate more open transfer of information between licensees and regulators.
26.	License Grant or Denial (Low Risk Category)	MOU – Secretary to review any application and make a determination within 120 days of receipt of such application; If no determination within such period, Secretary to inform the applicant of any pending issues and of actions required to resolve them. MOU - After receiving a	960.12 – Presumption that licensee will comply with Act, rules and license unless specific, credible evidence to the contrary. If Secretary determines licensee will comply, license to be granted. Licensee to be notified within 60 days of notice of completion of application. If not notified within 60 days, Licensee may request grant of the license,	Proposed rules do not provide for “clock stoppages”; positive change	

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		<p>complete license package, including any additional information requested, reviewing agencies to provide final recommendations within 30 days, or otherwise request additional time.</p> <p>Subject to interagency dispute resolutions procedures and timelines in MOU.</p> <p>960.6(f) No license to be granted unless Secretary determines that licensee will comply with the Act and rules and the granting of the license and operation of the system would be consistent with national security interests, foreign policy and international obligations of the US.</p> <p>960.6 – If license is denied, Assistant Administrator to provide written notification to applicant along with concise statement of facts supporting the denial; final agency action 21 days after notice unless appealed.</p>	<p>which will be granted within 3 days of request unless mutually agreed to extend the review period or the Secretary has determined, with specific evidence that the licensee will not comply.</p>		
27.	License Grant or Denial (High Risk Category)	MOU – Secretary to review any application and make a determination within 120 days of receipt of such application; If no	960.19 – Presumption that licensee will comply with Act, rules and license unless specific, credible evidence to the contrary. If Secretary	Proposed rules do not provide for “clock stoppages”; positive change	

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		<p>determination within such period, Secretary to inform the applicant of any pending issues and of actions required to resolve them.</p> <p>MOU - After receiving a complete license package, including any additional information requested, reviewing agencies to provide final recommendations within 30 days, or otherwise request additional time.</p> <p>Subject to interagency dispute resolutions procedures and timelines in MOU.</p> <p>960.6(f) No license to be granted unless Secretary determines that licensee will comply with the Act and rules and the granting of the license and operation of the system would be consistent with national security interests, foreign policy and international obligations of the US.</p> <p>960.6 – If license is denied, Assistant Administrator to provide written notification to applicant along with concise statement of facts supporting the denial; final</p>	<p>determines licensee will comply, license to be granted. Licensee to be notified within 90 days of notice of completion of application. If Licensee has not been notified within the 90 day period, applicant may request grant of the license. Within 10 days, Secretary must either grant the license, deny or notify in writing any pending issues and specific actions required to resolve. License must be granted or denied within 60 days of such notice unless mutually agreed to extend the review period.</p>		

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		agency action 21 days after notice unless appealed.			
28.	Standard License Conditions (Low Risk Category)	<p>960.11 –</p> <ol style="list-style-type: none"> 1. operate system in manner to preserve national security and observes foreign policy and international obligations of the US. 2. maintain operational control from within the US, including ability to override 3. maintain records; reporting/recordkeeping requirements in license 4. May be required to limit data collection and/or distribution as necessary to meet significant national security or foreign policy concerns or international obligations; must provide unenhanced restricted images exclusively to USG on commercial basis 5. Approval of foreign agreements 6. Make available on reasonable commercial terms and conditions any unenhanced data designated by Assistant Administrator. 7. Provide USG with complete list of archived unenhanced data. 8. Make available unenhanced data on reasonable cost terms and conditions to Department of Interior. 	<p>960.13 –</p> <p>Following conditions cannot be waived.</p> <ol style="list-style-type: none"> 1. Comply with the Act, rules, license, applicable legal obligations and international obligations of the US. 2. operate system in manner to preserve national security and observe international obligations. 3. Make available unenhanced data to the government of the country which is the subject of the unenhanced data unless prohibited by law or license conditions 4. In order to make disposition of any satellites in space in a manner satisfactory to the President upon termination of operations under the license: (i) Comply with the latest version of the Orbital Debris Mitigation Standard Practices (ODMSP) issued by the U.S. Government; and (ii) Maintain at all times an up-to-date document that explains how the licensee will comply with the ODMSP; 	<p>960.13 (a)(4) - question why it is necessary where it indicates “none”.</p> <p>Obligation to notify any anomaly burdensome to licensee where an anomaly may not impact license conditions</p> <p>Notification period is unnecessarily brief or inexplicably shortened.</p> <p>The numerous notification requirements seem ministerial in nature and could be unnecessarily burdensome.</p> <p>As to the debris issue, requiring adherence to the ODMSP is fine, but is that parallel to the requirements for other, possibly competitive, foreign systems? Does this limit or encourage U.S. remote sensing?</p> <p>ODMSP process does not permit input from non-government stakeholders. Many commercial entities have considerable operational and technical expertise, and their perspectives would not necessarily be reflected in standard-setting processes</p>	<p>The requirement that certain conditions not be waivable seems unnecessary and rigid. There is no obvious harm to allow applicants/licensees to request a waiver of any rule or condition. The Secretary is under no obligation to grant such waiver.</p> <p>See line item 7 above regarding the obligation to notify NOAA in the event of an anomaly.</p> <p>To the extent modifications are justified, the rules should allow licensees to file required notifications within a reasonable period of time, for example 30 days of the event, unless there is a reasonable justification for a shorter notification period. For example, there is no obvious reason why system deployment notices must be made within 5 days and why that time frame is not waivable.</p> <p>Unless expressly justified, no proposed notification periods should be shorter than notification periods</p>

	Topic	Existing Regulations	Proposed Regulations	Comments	ACCRES Recommendation
		<p>9. Offer all licensed data to National Satellite Land Remote Sensing Data Archive before purging.</p> <p>10. Provide unenhanced data to the government of the country which is the subject of the unenhanced data except where the release is contrary to US national security concerns, foreign policy or international obligations or otherwise prohibited by law</p> <p>11. Immediate notice of operational deviation which would violate the license, unless emergency posing imminent or substantial threat to human life, property, the environment or the system itself, in which case not as soon as circumstances permit</p> <p>12. dispose the satellite upon termination of operations in manner satisfactory to the President.</p> <p>13. submit Data Protection Plan for review and approval</p> <p>14. restriction on mortgage, sale, and pledge of the asset.</p>	<p>5. Notify Secretary of launch and deployment of system and any deviations from the description of the system provided, in each case within 5 days</p> <p>6. License modification required before taking any action that would contradict a material fact in the license, including executing any significant or substantial foreign agreement.</p> <p>Following additional conditions may be waived or adjusted upon request:</p> <ol style="list-style-type: none"> 1. Refrain from disseminating data of the State of Israel (SOI) area at a resolution more detailed than two meters GSD. The SOI area includes the SOI and those territories occupied by the SOI in June 1967 (the Gaza Strip, the Golan Heights, and the West Bank); 2. Certify that all material facts in the license remain accurate pursuant to the procedures in 	<p>involving only federal entities.</p>	<p>under the current NOAA rules.</p> <p>The Secretary should enable commercial entities to participate in or otherwise contribute to the orbital debris standard setting process.</p> <p>Make accommodation for Encrypted Authentication using identical key strength with respect to Low Risk Category systems, so that amateur satellites may use FCC spectrum that prohibits transmission of encrypted data.</p>

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			<p>§ 960.15 no later than October 15th of each year;</p> <p>3. Cooperate with compliance, monitoring, and enforcement authorities described in the Act and this part, and permit the Secretary to access, at all reasonable times, any component of the system for the purpose of ensuring compliance with the Act, the regulations, and the license;</p> <p>4. notice of disposal of on-orbit component of system within 5 days of disposal</p> <p>5. Notify the Secretary in writing no later than five days after detection of an anomaly affecting the system, including, but not limited to, an anomaly resulting in loss of ability to operate an on-orbit component of the system;</p> <p>6. Notify the Secretary in</p>		

	Topic	Existing Regulations	Proposed Regulations	Comments	ACCRES Recommendation
			<p>writing no later than five days after the licensee's financial insolvency or dissolution; and</p> <p>7. Protect the system and data therefrom by:</p> <p>(i) Implementing appropriate National Institute of Standards and Technology (NIST)-approved encryption, in accordance with the manufacturer's security policy, and wherein the key length is at least 128 bits, for communications to and from the on-orbit components of the system related to tracking, telemetry, and control; and</p> <p>(ii) Implementing measures, consistent with industry best practice, that prevent unauthorized access to the system and identify any unauthorized access.</p> <p>No other conditions may be imposed on low risk licensees</p>		

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			after issuance of the license.		
29.	Standard License Conditions (High Risk Category)	<p>960.11 –</p> <ol style="list-style-type: none"> 1. operate system in manner to preserve national security and observes foreign policy and international obligations of the US. 2. maintain operational control from within the US, including ability to override 3. maintain records; reporting/recordkeeping requirements in license 4. May be required to limit data collection and/or distribution as necessary to meet significant national security or foreign policy concerns or international obligations; must provide unenhanced restricted images exclusively to USG on commercial basis 5. Approval of foreign agreements 6. Make available on reasonable commercial terms and conditions any unenhanced data designated by Assistant Administrator. 7. Provide USG with complete list of archived unenhanced data. 8. Make available unenhanced data on reasonable cost terms and conditions to Department of Interior. 	<p>960.20 –</p> <p>Same unwaivable conditions as low risk except encryption must be 256 for high risk, and licensee must maintain a document which describes the means by which the licensee will comply with the conditions in paragraphs (c)(7)(i) and (ii) of 960.20, using the latest version of the NIST Cybersecurity Framework; semi-annual certification on April 15 and October 15.</p> <p>Same additional waivable conditions as low risk, plus:</p> <p>(8) Comply with limited operations directives issued by the Secretary, in accordance with a request issued by the Secretary of Defense or the Secretary of State pursuant to the procedures in Section IV(D) of the MOU, that require licensees to temporarily limit data collection and/or distribution in exceptional circumstances to meet significant concerns about national security and international policy; and</p> <p>(i) Be able to comply with limited operations directives at</p>	<p>Same comments on conditions which overlap with low risk category</p> <p>Comments on the additional conditions applicable to high risk or non-standard systems:</p> <p>960.20(b)(4)– question why it is necessary where it indicates “none”.</p> <p>960.20(c)(2) and (6) are duplicative except with respect to the notice period – 5 days vs. 3 days</p> <p>(10) Could be erroneously interpreted to capture non-imaging phenomenology and should be reworded to remove this ambiguity. Example correction: “...using any imaging remote sensing technique other than...”</p> <p>(10)(i) precludes any use of SWIR or LWIR for NTI. Is this the intent? SWIR is already very limited by GSD. This is a significant burden. Foreign providers are disseminating NTI at much finer resolutions.</p> <p>(12)(iii) Is burdensome. Existing licensees rely on remote ground terminals</p>	<p>Reword (10) so that it explicitly defines NTI as an imaging remote sensing process and does not, for example, capture collection of AIS radio messages or other non-imaging remote sensing data at night. “...using any imaging remote sensing technique other than...”</p> <p>Reduce GSD limitations for NTI dissemination in (10).</p> <p>Change (10) to read: “...using any imaging remote sensing technique other than...”</p> <p>Change (10) to read: “If the licensee collects night-time imaging data (“NTI data”), meaning imaging data of an area of the Earth's surface...”</p> <p>Change (12)(iii) to read: “Transmit unencrypted SAR data to or decrypt SAR data at any ground station located outside the United States”;</p> <p>Change (12)(v) to read: Intentionally receive SAR</p>

	Topic	Existing Regulations	Proposed Regulations	Comments	ACCRES Recommendation
		<p>9. Offer all licensed data to National Satellite Land Remote Sensing Data Archive before purging.</p> <p>10. Provide unenhanced data to the government of the country which is the subject of the unenhanced data except where the release is contrary to US national security concerns, foreign policy or international obligations or otherwise prohibited by law</p> <p>11. Immediate notice of operational deviation which would violate the license, unless emergency posing imminent or substantial threat to human life, property, the environment or the system itself, in which case not as soon as circumstances permit</p> <p>12. dispose the satellite upon termination of operations in manner satisfactory to the President.</p> <p>13. submit Data Protection Plan for review and approval</p> <p>14. restriction on mortgage, sale, and pledge of the asset.</p>	<p>all times;</p> <p>(ii) Provide and continually update the Secretary with a point of contact and an alternate point of contact for limited operations directives;</p> <p>(9) If the licensee conducts remote sensing of an artificial object in space (“collects NEI data”), the licensee shall:</p> <p>(i) Use only the 370-900 nanometers portion of the electromagnetic spectrum while collecting NEI data;</p> <p>(ii) If the licensee has received written permission to collect NEI data from the operator of the sensed object, the licensee shall request approval from the Secretary to collect that NEI data at least 30 days prior to the planned collection and shall conduct the remote sensing only if the Secretary approves the request. The request shall include an identification of the object; confirmation that the owner and operator have notified applicable manufacturer(s); the orbital location of the object; the licensee’s proposed orbital maneuver plan during the remote sensing of the object; dates of the remote</p>	<p>outside of the United States to route encrypted traffic to US based ground stations. The regulation as drafted will create the impression that licensees cannot pass encrypted traffic through foreign remote ground terminals.</p> <p>(12)(v) It creates unnecessary ambiguity because other radar systems will as a matter of course be intercepted unintentionally.</p> <p>Are the specific limits of SAR data limiting to the competitive commercial value of these U.S. systems as compared to foreign SAR commercial products?</p> <p>It seems there is an even stronger requirement for NEI in the NPRM than what was floated earlier - it now says that you must not only give 30 days advance notice to the USG but also must have positive permission from the Secretary of Commerce beforehand.</p> <p>The committee needs to devote some time to the entire non-Earth imaging question, which will force an internal USG debate that requires DoD/IC to actually demonstrate what</p>	<p>radar pulses from remote sensing instruments not listed in this license.</p> <p>Strongly support (12)(i) change to 0.25-m IPR limit, but recommend changing to 0.24-m to achieve US parity with existing German COMSAR products.</p> <p>NEI of a cooperating satellite should be evaluated through a streamlined process. There is no clear national security risk when the imaging party has obtained the imaged satellite operator’s consent.</p>

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			<p>sensing; and the distance between the remote sensing instrument and the object.</p> <p>(iii) If the licensee has not received permission to collect NEI data from the operator of the sensed object, the licensee shall not disseminate or retain in an archive:</p> <p>(A) NEI data at a resolution finer than 0.5 meters;</p> <p>(B) NEI data in which the object fills more than 3x3 pixels of the remote sensing instrument's focal plane in two orthogonal axes simultaneously;</p> <p>(C) Metadata associated with such NEI data, such as time, position, and altitude of the licensee's remote sensing instrument; or</p> <p>(D) NEI data of an artificial object in space that has not been successfully correlated with the space tracking catalog found at space-track.org.</p> <p>(10) If the licensee collects night-time imaging data ("NTI data"), meaning data of an area of the Earth's surface when the sun's elevation is six degrees or more below the Earth's</p>	<p>restrictions on NEI actually protect, given what's publicly available, what a person with a good telescope can see, etc.</p> <p>Comments previously provided to NOAA (to be discussed at meeting to obtain consensus – see comment below):</p> <ul style="list-style-type: none"> • The US government should specify the process and timeline for responding to NEI emergency waivers and getting approval to disseminate uncorrelated tracking data. • The US government should demonstrate the need for wavelength restrictions on NEI, and weigh the impact of such restrictions on rendezvous and characterization CONOPS. • Sensitive NEI data should be require encryption only during transmission and storage, and any filtering should only be required when data is accessed for distribution/dissemination. • The requirement to obtain prior owner/operator or government consent before conducting resolved NEI should be waived for space objects identified in the public catalog as space debris or spent rocket 	

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			<p>horizon relative to that area using any remote sensing technique other than synthetic aperture radar, the licensee shall:</p> <p>(i) Use only the 370-1,100 nanometers portion of the electromagnetic spectrum while collecting NTI data;</p> <p>(ii) Not disseminate NTI data at a resolution finer than 30 meters GSD;</p> <p>(iii) Not disseminate or retain in an archive, at any resolution, NTI data of the sites identified in the most recent list of NTI Geographic Exclusion Areas provided by the Secretary; and</p> <p>(iv) Not disseminate the list of NTI Geographic Exclusion Areas or the information contained therein (by restating, paraphrasing, or incorporating it in a new form) to any person except its employees and contractors to carry out their job-related duties.</p> <p>(11) If the licensee collects data using the shortwave infrared (1,200-3,000 nanometers) portion of the electromagnetic spectrum ("SWIR data"), the licensee</p>	<p>stages.</p> <p>Another committee member disagrees with the previously provided comments above regarding the waiver for the obligation to seek owner/operator permission. Such permission is essential to preserve intellectual property data when imaging in resolved mode. Ownership can easily be obtained from public catalogs. Unresolved SSA-type sensing is already possible without prior permission.</p>	

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			<p>shall not:</p> <p>(i) Disseminate SWIR data at a resolution finer than 3.7 meters GSD;</p> <p>(ii) Disseminate or retain in an archive, at any resolution, SWIR data of the sites identified in the most recent list of SWIR Geographic Exclusion Areas provided by the Secretary; or</p> <p>(iii) Disseminate the list of SWIR Geographic Exclusion Areas or the information contained therein (by restating, paraphrasing, or incorporating it in a new form) to any person except its employees and contractors to carry out their job-related duties.</p> <p>(12) If the licensee collects data using a synthetic aperture radar ("SAR data"), the licensee shall not:</p> <p>(i) Disseminate SAR data, associated single-loop complex data, or any complex valued products, at a resolution finer than 0.25 meters impulse response ground plane quality;</p> <p>(ii) Disseminate SAR phase</p>		

	Topic	Existing Regulations	Proposed Regulations	Comments	ACCRES Recommendation
			<p>history data, at any resolution;</p> <p>(iii) Transmit SAR data to any ground station located outside the United States;</p> <p>(iv) Utilize any SAR technology, data processing algorithms, or radar signatures developed by the licensee for the U.S. Government, in whole or in part, without the prior written approval of the responsible U.S. Government agency; or</p> <p>(v) Receive SAR radar pulses from remote sensing instruments not listed in this license.</p> <p>Adjustment or waiver during application process; may be granted in Secretary's sole discretion upon a showing that the requirement does not apply to the applicant, the applicant will achieve the goal in a different way, or there is other good cause to waive or adjust the condition.</p>		
30.	Application Specific License Conditions (High Risk Category Only)	MOU – If DOS determines that imposition of conditions on the actions being reviewed are necessary to meet the international obligations and foreign policies of the United States, or DOD determines that imposition	960.18 – Secretaries of Defense and State to determine whether additional license conditions are necessary to meet national security concerns and international obligations and notify the Secretary. Secretary to craft least burdensome conditions;		

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		<p>of conditions are necessary to address the national security concerns, the MOU Par(y) identifying the concern will promptly notify, in writing, DOC/NOAA and those departments and agencies responsible for the management of operational land imaging space capabilities of the United States. Such notification shall: (a) describe the specific national security interests, or the specific international obligations or foreign policies at risk, if the applicant's system is approved as proposed; (b) set forth the specific basis for the conclusion that operation of the applicant's system as proposed will not preserve the identified national security interests or the identified international obligations or foreign policies; and (c) either specify the additional conditions that will be necessary to preserve the relevant U.S. interests, or set forth in detail why denial is required to preserve such interests.</p>	<p>Secretary must determine whether concerns may reasonably be mitigated by the USG and whether the concerns can reasonably be mitigated by the applicant. Subject to interagency dispute resolutions procedures and timelines in MOU.</p>		
31.	Revising Standard License		960.8 – Secretary to consider whether to revise at least every 2 years, in coordination	Burden on licensee to request modified license.	

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	Conditions		with Secretaries of Defense and State on all matters affecting national security and international obligations and policies. Changes subject to public notice and comment. Secretary may consult with Secretary of Interior of determination of whether to designate unenhanced data that Licensee must provide. Modified conditions not automatically apply to all licenses. Licensee must request modification of license for updated conditions. Subject to interagency dispute resolution procedures and timelines in the MOU.		
32.	Licensee Requested Modifications (Low Risk Category)	960.7 – Licensee must obtain an amendment prior to: (1) Assignment of any interest in or transfer of the license from one entity to another, renaming, or any change in identity of the license holder; (2) Change in or transfer of administrative control; (3) Change of operational control; or (4) Deviation from orbital characteristics, performance specifications, data collection and exploitation capabilities, operational characteristics identified under Appendix 1., or any other change in	960.14 - Licensee may request modification, or the Secretary may invite the licensee to submit a request if conditions may be available that are less burdensome; Secretary may approve or deny the request, but decision must be made within 30 days of request, in consultation with Secretaries of Defense and State; Subject to interagency dispute resolutions procedures and timelines in MOU; If modification would recategorize from low to high risk, Secretary to consult with the Secretaries of Defense or State to determine whether additional conditions are	Foreign Agreement review addressed through modification process.	

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		license parameters. See Application for MOU procedure and timelines.	required. Licensee has opportunity to withdraw or revise the request if additional conditions are required.		
33.	Licensee Requested Modifications (High Risk Category)	960.7 – Licensee must obtain an amendment prior to: (1) Assignment of any interest in or transfer of the license from one entity to another, renaming, or any change in identity of the license holder; (2) Change in or transfer of administrative control; (3) Change of operational control; or (4) Deviation from orbital characteristics, performance specifications, data collection and exploitation capabilities, operational characteristics identified under Appendix 1., or any other change in license parameters. See Application for MOU procedure and timelines.	960.22 – Licensee may request modification. Secretary may approve or deny the request, or consult with Secretaries of Defense or State to determine approval would require additional conditions. If additional conditions are required, Secretary may approve the modification request, subject to additional conditions, after notifying licensee. Licensee has opportunity to withdraw or revise the request. Secretary to inform licensee of decision within 30 days of request.	Foreign Agreement review addressed through modification process.	
34.	USG Required Licensed System Modification (High Risk Category Only)	N/A	960.21 – After license is granted, USG may require technical modification to a licensed system to meet a national security concern. Secretary to consult with licensee and USG agencies to determine whether technical modifications will cause licensee to incur additional costs or be unable to recover	Only applicable to high risk licenses (no new conditions on low risk licenses once issued); reimbursement not mandatory	

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			past development costs (including cost of capital). Secretary may require USG agency(ies) who determined national security concerns to reimburse the licensee. Once reimbursement arrangements made, license will be modified.		
35.	License term	<p>960.9 – License is valid for the operational lifetime of the system or until the Secretary determines licensee is not in compliance with the Act, rules or license, or the activities or system operations are not consistent with the national security, foreign policy and international obligations of the US.</p> <p>License will be terminated if licensee becomes financially insolvent or dissolves, the demise of the system, or licensee decides to discontinue system operation.</p> <p>Licensee has 5 years to meet PDR milestone.</p>	<p>960.16 – Term begins when signed license is sent to licensee, regardless of operational status of the system. Valid until:</p> <p>(1) licensee has disposed or will dispose of all in-orbit components of the system in accordance with the license conditions;</p> <p>(2) The licensee never had system components on orbit and has requested to end the license term;</p> <p>(3) license is terminated as a result of an investigation/enforcement; or</p> <p>(4) The licensee has executed one of the following transfers, subsequent to the Secretary's approval of such transfer:</p> <p>(i) Ownership of the system, or the operations thereof, to an agency or instrumentality of the U.S. Government;</p>		

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			<p>(ii) Operations to a person who:</p> <p>(A) Will not operate the system from the United States, or</p> <p>(B) Is not a United States citizen.</p> <p>960.24 – High Risk Category same as low risk.</p>		
36.	Routine compliance and monitoring	960.11(b)(3) – Licensee shall allow the Assistant Administrator access, at all reasonable times, to all facilities which comprise the remote sensing space system for the purpose of conducting license monitoring and compliance inspections.	<p>960.15 - Recertification of the accuracy of material facts in license is required by date specified in license; if material facts no longer accurate, provide additional information or explanation or seek guidance from Secretary on how to correct errors;</p> <p>Waivable license condition: cooperate with compliance, monitoring, and enforcement authorities described in the Act and this part, and permit the Secretary to access, at all reasonable times, any component of the system for the purpose of ensuring compliance with the Act, the regulations, and the license</p> <p>960.23 – High Risk Category same as low risk</p>	<p>Access at all reasonable times is vague</p> <p>Ability to inspect any inspection of components owned or managed by person other than licensee</p> <p>Commenters have expressed concerns that on-site inspections are outdated and not cost-effective compliance mechanisms.</p>	<p>Provide flexibility to address unavoidable delays.</p> <p>On-site inspections should only be imposed if there is an identified compliance concern related to a national security risk, and inspections should have clear and stated objectives. To the extent, on-site inspections will continue to be a part of the NOAA enforcement regime, then this practice should be justified in the implementing order.</p>
37.	Prohibitions	960.13 – It is unlawful for any person who is subject to	960.25 – Person subject to US jurisdiction shall not, directly		

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		<p>the jurisdiction or control of the United States, directly or through any subsidiary or affiliate to:</p> <p>(a) Operate a private remote sensing space system in such a manner as to jeopardize the national security or foreign policy and international obligations of the United States;</p> <p>(b) Operate a private remote sensing space system without possession of a valid license issued under the Act and/ or the regulations;</p> <p>(c) Operate a private remote sensing space system in violation of the terms and conditions of the license issued for such system under the Act and the regulations;</p> <p>(d) Violate any provision of the Act or the regulations in this part or any term, condition, or restriction of the license;</p> <p>(e) Violate or fail to comply with any order, directive, or notice issued by the Secretary or his/her designee, pursuant to the Act and/or the regulations in this part, with regard to the operation of the licensed private remote sensing</p>	<p>or through a subsidiary or affiliate: (a) operate a system without a current, valid license; (b) violate the Act, rules or license conditions; (c) Submit false information, interfere with, mislead, obstruct, or otherwise frustrate Secretary's actions in any form at any time; or (d) fail to obtain approval for a license modification before taking action that would contradict a material fact in the license.</p>		

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		<p>space system;</p> <p>(f) Fail or refuse to provide to the Secretary or his/her designee in a timely manner, all reports and/or information required to be submitted to the Secretary under the Act or the regulations;</p> <p>(g) Fail to update in a timely manner, the information required to be submitted to the Secretary in the license application; or</p> <p>(h) Interfere with the enforcement by: (1) Refusing to permit access by the Secretary or his/her designee to any facilities which comprise the remote sensing space system for the purposes of conducting any search or inspection in connection with the enforcement of the regulations in this part; (2) Assaulting, resisting, opposing, impeding, intimidating, or interfering with any authorized officer in the conduct of any search or inspection performed under the regulations in this part; (3) Submitting false information to the Secretary, his/her designee or any authorized officer; or</p>			

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		(4) Assaulting, resisting, opposing, impeding, intimidating, harassing, bribing, or interfering with any person authorized by the Secretary or his/her designee to implement the provisions of the regulations.			
38.	Investigations	960.14 - Any person who is authorized to enforce the regulations in this part may: (1) Enter, search and inspect any facility suspected of being used to violate the regulations or any license issued pursuant to the regulations and inspect and seize any equipment or records contained in such facility; (2) Seize any data obtained in violation of the regulations or any license issued pursuant to the regulations; (3) Seize any evidence of a violation of the regulations or of any license issued pursuant to the regulations in this part; (4) Execute any warrant or other process issued by any court of competent jurisdiction; and (5) Exercise any other lawful authority.	960.26 (a) The Secretary may investigate, provide penalties for noncompliance, and prevent future noncompliance, by using the authorities specified at 51 U.S.C. 60123(a).		

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39.	Penalties and Sanctions	<p>960.15 – Secretary may seek injunction or similar judicial determination to terminate, modify or suspend the license and/or terminate licensed operations on an immediate basis; \$10,000 per day civil penalties</p> <p>Procedure for notice of violation and assessment</p> <p>Factors to be taken into consideration may include the nature, circumstances, extent and gravity of the alleged violation; the licensee’s degree of culpability; any history of prior offenses; and such other matters as justice may require.</p>	<p>960.26</p> <p>(b) When the Secretary undertakes administrative enforcement proceedings as authorized by 51 U.S.C. 60123(a)(3) and (4), the parties will follow the procedures provided at 15 CFR part 904.</p>	<p>Enforcement clauses are vague and non-specific. They eliminate daily specific penalties (\$10K, which is also the amount for violations of FAA licenses) and only imply that penalties may be imposed and/or a license can be denied. This is quite watered down from current law. (Other nations have specific penalties and those in violation may face criminal as well as civil penalties.)</p>	
40.	Grounds for Appeal	<p>960.10(c) – Conduct of military or foreign affairs functions not appealable; determinations concerning limitations on data collection or distribution, license conditions, or enforcement actions to meet national security concerns, foreign policies or international obligations are not subject to hearing; determination to deny an appeal based on these grounds is a final agency action.</p>	<p>960.27 – Licensee may appeal: (1) denial of license; (2) Secretary’s failure to make license determination within timeline; (3) imposition of license condition; and (4) denial of requested license modification.</p> <p>Only acceptable grounds: Secretary’s action was (1) arbitrary, capricious or contrary to law; or (2) based on clear factual error.</p> <p>No appeal available if involved</p>		<p>The Secretary’s determination regarding a request for appeal should be treated as a final agency action, subject to judicial review.</p>

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			conduct of military or foreign affairs functions.		
41.	Procedure	960.10(a) – Licensee must appeal within 21 days of action appealed; must set forth detailed explanation of reasons for the appeal; may request a hearing before a designated hearing officer.	960.28 – Must appeal within 14 days of action by submitting written request to the Secretary; Appeal must include detailed explanation for appeal, including claims of factual or legal error; Secretary to determine whether the request meets the requirements of USC Title 5 Chapter 7 and the rules; if request does not meet the requirements, Secretary to notify person that appeal is not available, which is a final agency action; if request does meet the requirements, Secretary to certify and coordinate a hearing before a hearing officer designated by the Secretary.	Rejection of the claim is final action – should be subject to judicial review.	<p>“Legal error” should be an acceptable basis for appeal under 960.27(b)(2), consistent with the language in 960.28(b).</p> <p>The appeal period should remain 21 days and not be shortened to 14 days without justification.</p>
42.	Hearing	<p>960.10(b)- Hearing to be held no later than 30 days after receipt of appeal, unless the hearing officer extends the time; may present evidence and arguments; hearing may be closed to the public to protect classified or proprietary information; hearing officer must recommend a decision within 30 days.</p> <p>960.10(d) – Administrator</p>	960.28 – Hearing to be held in a timely manner; may present evidence and arguments; hearing may be closed to the public to prevent disclosure of information required by law to be protected from disclosure; hearing officer to recommend decision to Secretary; Secretary to make decision to adopt, reject or modify the recommendation; decision constitutes final agency action, subject to judicial review under USC Title 5 Chapter 7.		

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		<p>may adopt, reject or modify hearing officer's recommendation; must notify appellant of decision and reasoning within 30 days of receipt of recommendation.</p> <p>960.10(e) Administrator may extend any time limit related to an appeal by up to 30 days upon his/her own motion or request from appellant.</p> <p>960.10(f) – Entitled to expedited review of foreign agreement.</p>			
43.		1 - Filing Instructions and Information to be Included in the Licensing Application	A – Application Information Required		
44.		2 - Fact Sheet Regarding Memorandum of Understanding Concerning the Licensing of Private Remote Sensing Satellite Systems Dated February 2, 2000	B – Application Submission Instructions		

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45.			C - License Template		