Lesson 3 Progress Check

- Due No due date
- Points 100
- Questions 10
- Time Limit 15 Minutes
- Allowed Attempts Unlimited

Instructions

This quiz checks your understanding of lesson concepts.

- This is a timed assessment.
- You are allowed multiple attempts.
- Minimum passing score is 80%.

Take the Quiz Again

Attempt History

	Attempt	Time	Score
KEPT	Attempt 2	15 minutes	50 out of 100
LATEST	Attempt 2	15 minutes	50 out of 100
	Attempt 1	14 minutes	40 out of 100

ⓘ Correct answers are hidden.

Score for this attempt: 50 out of 100
Submitted Nov 1 at 5:09pm

This attempt took 15 minutes.

Incorrect Question 1

0 / 10 pts

According to AU-18, *Space Primer*, what is “one of the most discreet and deniable forms of attacking our space systems,” and why?

A ground segment attack, because the ground segment is often the most vulnerable of most space systems, subject to attack by a variety of means, ranging from physical attack to computer network intrusion.

One of the easiest ways to affect space systems is to attack or sabotage the associated ground segment. Spoofing is one of the most discreet and deniable forms of attacking our space systems because it takes over the space system by appearing as an authorized user. (AU-18, *Space Primer*, pages 274-276)

Downlink jamming, because it broadcasts a radio frequency signal of approximately the same frequency as the targeted downlink signal, but with more power.

Uplink jamming, because it affects a transponder’s ability to distinguish the true signal from a jamming signal.

Spoofing, because it takes over the space system by appearing as an authorized user.

Question 2

10 / 10 pts

According to DNI Clapper in his 2016 *Worldwide Threat Assessment of the US Intelligence Community*, what is a global threat to satellite communications and global navigation space systems, and does he believe this technology will continue to proliferate?

A global threat to satellite communications and global navigation space systems comes from a complex foreign intelligence apparatus. DNI assess foreign intelligence technology will continue to proliferate to new actors and our more advanced adversaries will continue to develop more sophisticated systems in the next few years.

A global threat to satellite communications and global navigation space systems comes from electronic warfare systems. DNI assesses this technology will continue to proliferate to new actors and our more advanced adversaries will continue to develop more sophisticated systems in the next few years.

According to DNI Clapper in his 2016 Worldwide Threat Assessment, a global threat to satellite communications and global navigation space systems comes from electronic warfare systems. DNI assesses this technology will continue to proliferate to new actors and our more advanced adversaries will continue to develop more sophisticated systems in the next few years. (DNI *Worldwide Threat Assessment of the US Intelligence Community* (2016), page 9)

A global threat to satellite communications and global navigation space systems comes from electronic warfare systems. DNI assesses this technology will diminish in proliferation to new actors; however, our more advanced adversaries will continue to develop more sophisticated systems in the next few years.

A global threat to satellite communications and global navigation space systems comes from antisatellite systems. DNI assesses this technology will continue to proliferate to new actors and our more advanced adversaries will continue to develop more sophisticated systems in the next few years.

Question 3

10 / 10 pts

According to the 2015 RAND study, *The U.S. - China Military Scorecard: Forces, Geography and the Evolving Balance of Power 1996-2017,* what risk do Chinese counterspace capabilities pose to US space functions?

The risk to most US space functions appears to be growing faster than the US ability or effort to mitigate them; however, 2017 is projected to be characterized by continued parity.

According to the 2015 RAND study, the risk to most US space functions appears to be growing faster than the US ability or effort to mitigate them; however, 2017 is projected to be characterized by continued parity. (*The U.S. - China Military Scorecard: Forces, Geography and the Evolving Balance of Power 1996-2017,* (2015), pages 250-253)

US weather satellites are at highest risk of Chinese counterspace attack since they typically conduct operations in low-earth orbit and support military operations.

The risk to US space systems has decreased as a result of decreased Chinese investment in counterspace capabilities.

Chinese counterspace capabilities are not a risk to US space systems since they are designed to be for anti-ballistic missile systems only.

IncorrectQuestion 4

0 / 10 pts

In Szymanski's article, "Techniques for Great Power Space War," which of the following does he repeatedly mention in his Rules for Conducting Space Warfare?

Considering what our adversary will believe, do, or be unable to do.

Considering how budget cuts may undermine our space-based capabilities.

Considering how strong our national will may be to pursue conflict in and through space.

Considering the Laws of Armed Conflict and space-related treaties.

Your answer is incorrect. Please review Lesson 3 Objective 2.

Question 5

10 / 10 pts

In "Bringing Space Crisis Stability Down to Earth," Finch discusses the concept of “mutual understanding” between the U.S. and China. What US space capability does Finch highlight as being a source of misunderstanding for the Chinese?

Space Fence

X-37B

In "Bringing Space Crisis Stability Down to Earth," Finch discusses the concept of “mutual understanding” between the U.S. and China. The US space capability Finch highlights as being a source of misunderstanding for the Chinese is the X37-B. ("Bringing Space Crisis Stability Down to Earth," page 20)

Geosynchronous Space Situational Awareness Program (GSSAP)

Joint Interagency Combined Space Operations Center (JICSpOC)

Question 6

10 / 10 pts

In "Bringing Space Crisis Stability Down to Earth," Finch discusses the linkage between strategic stability and the space domain. How does Finch describe the importance of this linkage?

Understanding how space fits into strategic stability, and how actions in space can affect or drive crisis dynamics, is imperative to reduce the risk of miscalculation.

In "Bringing Space Crisis Stability Down to Earth," Finch discusses the linkage between strategic stability and the space domain. Finch describes the importance of this linkage as: Understanding how space fits into strategic stability, and how actions in space can affect or drive crisis dynamics, is imperative to reduce the risk of miscalculation. ("Bringing Space Crisis Stability Down to Earth," page 16)

Strength in the space domain is the determinant of strategic stability, and weakness in space can affect, or even drive, miscalculation.

Weaknesses in other domains can be mitigated in the space domain, providing an overall strategic stability calculus that can balance potential crises.

Strategic stability is dependent on space security. As the U.S. and Russia increase in capability in the space domain, actions by either state in space must be transparent in order to manage crisis dynamics.

IncorrectQuestion 7

0 / 10 pts

Stover and Johnson (2014) explore the argument of a separate space force as one of the potential futures for US space capabilities. What premise do they present as the rationale to look for an alternative to the status quo?

Proponents of a separate space force argue that because space is an inherently unique domain, forces operating there should be organized, trained, and equipped, and funded separately – in the same fashion as air, land, and sea forces.

The rationale for an alternative to the status quo is that in the same way the Air Force broke away from the Army to focus its efforts on air superiority, a space force should break away from the Air Force to focus on space superiority.

Proponents of a separate space force argue that the interconnectedness of space activities in the other domains is the primary reason to pursue separation.

The rationale for an alternative to the status quo is that technological advancements in space capabilities create a natural imperative for a separate organize, training, equip, and funding architecture.

Technological advancements, in of themselves, are not presented as rationale for a separate space force. The authors' premise as the rationale to look for an alternative to the status quo is: Proponents of a separate space force argue that because space is an inherently unique domain, forces operating there should be organized, trained, and equipped, and funded separately – in the same fashion as air, land, and sea forces. ("Space Separatism: Degree of Differentiation," page 18)

IncorrectQuestion 8

0 / 10 pts

What was the vision that Air Force Space Command (AFSPC - redesignated the US Space Force in 2019) developed in response to CDRUSSTRATCOM's concern that he was not happy with the way AFSPC equipped him, because it did not give him the ability or the capabilities he needed to operate in a contested environment. Additionally, how did this vision change AFSPC's approach?

Space Mission Force (SMF). SMF will train space operators to be expert space tacticians in context of the threat instead of in context of platform specifications.

Joint Interagency Combined Space Operations Center (JICSpOC). JICSpOC will break down barriers in between the DoD and Intelligence Community.

Threat-Focused Space Enterprise Vision (SEV). SEV will present space forces in context of the threat instead of the mission.

Joint Space Operations Center (JSpOC). JSpOC will provide space integration support to fielded joint forces.

According to Gen Hyten, Air Force Space Command came up with the Threat-Focused Space Enterprise Vision (SEV) in response to CDRUSSTRATCOM's concerns. SEV will present space forces in context of the threat instead of the mission. (Hyten, National Space Symposium Keynote (2016), page 8)

Question 9

10 / 10 pts

At the 2016 National Space Symposium, Gen Hyten presented a new organize, train, and equip strategy for Air Force Space Command (AFSPC). What organization was stood up at Schriever AFB, CO to address the need for space forces to be able to operate in an environment where a conflict extends into space?

Joint Space Operations Center (JSpOC)

Space Mission Force (SMF)

Global Operations Center (GOC)

Joint Interagency Combined Space Operations Center (JICSpOC)

At the 2016 National Space Symposium, Gen Hyten presented a new organize, train, and equip strategy for Air Force Space Command (AFSPC). The Joint Interagency Combined Space Operations Center (JICSpOC) was stood up at Schriever AFB, CO to address the need for space forces to be able to operate in an environment where a conflict extends into space. (Hyten, National Space Symposium Keynote (2016), page 5)

IncorrectQuestion 10

0 / 10 pts

According to Gen Shelton in "Military Space: At a Strategic Crossroad," what factors define the "strategic crossroad," and why are they important to the potential future for space forces?

The factors are 1) an inability to manage conflicts against multiple peers and 2) a challenging domestic political climate. They are important to the potential future for space forces because our near-peers continue to advance in their space capabilities while the U.S. continues to struggle with how to prioritize its limited resources.

None of the answers are correct.

The factors are 1) a significant increase in congestion in space and 2) a significant increase in contest in space. They are important ot the potential future for space forces because space is no longer a benign operating environment, and must now be treated as a warfighting domain.

While it is true that space has become more congested and contested, according to Gen Shelton in “Military Space: At a Strategic Crossroad” (2013), the factors define the “strategic crossroad,” are 1) a radically different operating environment and 2) a declining budget. They are important to the potential future for space forces because the status quo approach is inadequate, and alternatives must balance required capability, affordability, and resilience. (“Military Space: At a Strategic Crossroad,” pages 4-7)

The factors are 1) a radically different operating environment and 2) a declining budget. They are important to the potential future for space forces because the status quo approach is inadequate, and alternatives must balance required capability, affordability, and resilience.

Quiz Score: 50 out of 100