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U.S. Senate and House Perspectives on Missile Defense Systems Opposed by Russia and China

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Abstract

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MA, California State University, Fullerton, 2011

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Dissertation Submitted in Partial Fulfillment

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Abstract

The United States and its allies and partners have deployed three missile defense systems to protect against Iranian and North Korean missile threats: the European Phased Adaptive Approach, Terminal High Altitude Area Defense, and Ground-based Missile Defense. Russia and China oppose these systems because they view them as undermining their strategic interests. The purpose of the present study was to better understand the perspectives of Senate and House Armed Services Committee HASC members about the three missile defense systems in congressional hearings. The three models of the congressional behavior model, the preference, simple party, and asymmetric categories, and neorealism and neoliberalism schools of thought were applied with a qualitative content analysis case study approach. After comparing the perspectives of SASC and HASC leaders, some overarching themes for next steps were identified. Findings indicated there needed to be less focus in the United States Congress on alarmist rhetoric and more of a focus on why a specific country is a missile threat. This would go much further in educating and enhancing the awareness of the public and legislative branch. There needed to be more dialogue with nations that are deemed as missile threats to prevent misinterpretation and miscommunication. Lastly, financial resources and time are needed to refine and optimize missile defense systems which would lead to positive social change for the future.

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Chapter 1: Introduction to the Study

This is a qualitative content analysis case study to better to understand the perspectives of United States Senate Armed Services Committee (SASC) and House Armed Services Committee (HASC) members in congressional hearings. The study includes three case studies of missile defense systems that are deployed to protect the United States homeland, allies, and partners from global ballistic missile threats: the European Phased Adaptive Approach (EPAA), Ground-based Midcourse System (GMD), and the Terminal High Altitude Area Defense (THAAD; Streubert & Carpenter, 1995, p. 31).

In Chapter 1 I provide additional background information about ballistic missiles for context about weapons oversight, their relevance, and social change implications. Current scholarly literature will be discussed to show how there is a current gap to understanding congressional perspectives on missile defense systems. The perspectives of these leaders are important because they create missile defense policies and fund their development, testing, implementation, and maintenance. Understanding SASC and HASC leaders' perspectives provides clarity as to how the current environment came into existence and the identification of specific actions that can be taken to continue protecting the United States homeland, allies, and partners from global ballistic missile threats. The theoretical frameworks applied in this study were also used to understand the lenses used to collect the data that informed the results.

Study Topic

Ballistic missiles are airborne projectiles powered by rockets that could deliver conventional, nuclear, biological, or chemical warheads at targets to inflict damage or compromise mobile forces by implementing anti-access (A2) and area denial (AD; Chasteen, 2017; Heim, 2015; Mettler & Reiter, 2012; Pugacewicz, 2017). Ballistic missiles cost less to develop than the financial resources involved with sustaining troops and weapon systems to accomplish military objectives (Bell, 2014; Corbett, 2013; Gibilterra, 2015; Weitz, 2013). Since the end of the Cold War, missile defenses have played a critical role in demonstrating alliance commitment without having to deploy a costly force abroad (Fruhling, 2016; Handberg, 2015).

It has been estimated that more than 30 countries have or seek to maintain missile technology with a range that could inflict damage to the United States homeland and its troops and countries that belong to the North Atlantic Treaty Organization (NATO; Kay, 2012). If a 2,000 kilometer-range ballistic missile were launched from the Middle East at a NATO member, the alliance would only have minutes to decide how to respond (Durkalec, 2012). This justifies why NATO has to prepare a variety of responses in advance of ballistic missile strikes and why NATO made missile defense a core responsibility in 2010 (Durkalec, 2012; Wezowicz, 2017).

The missile threats that the United States, NATO, and the Middle East view as most concerning today are from Iran and North Korea (Sankaran & Fetter, 2022; Watson, 2017; Weitz, 2013). According to some estimates, Iran may possess about 1,000 ballistic missiles (Heim, 2015). North Korea has ballistic missiles that could reach United States bases and troops, South Korea, and Japan (Klingner, 2015). Pyongyang has also claimed

that it can miniaturize a nuclear weapon to place on a ballistic missile to cause severe damage at a target (Phillip, 2016b). If a ballistic missile were to be launched at NATO, Article Five of the NATO Treaty likely would be activated. Article Five states that an attack on one member of NATO is an attack on all members of NATO. Missile defense is a unifying opportunity for NATO as it requires close and frequent cooperation with members.

Missile defense systems are designed to intercept incoming missiles prior to reaching targets (Gibilterra, 2015). Successful interception of incoming missiles allows for more time to develop a response and can be considered a form of insurance if a ballistic missile threat of attack fails to deter an attack in the first place (Durkalec, 2012). The United States, Australia, and Japan have increased cooperation with missile defenses due to threat concerns. For instance, United States Aegis ships patrol Japan and the Mediterranean Sea and the Aegis Ashore system is deployed in Romania and Poland (Fruhling, 2016). The United States and its allies do not view missile defenses that protect against adversarial ballistic missiles as offensive (Handberg, 2015).

This purpose of this study is to understand the perspectives of SASC and HASC leaders for these missile defense systems (Streubert & Carpenter, 1995, p. 31). The findings of this study contribute to positive social change because they help new lawmakers quickly obtain an understanding about the history of missile defense systems to inform future decision making. Understanding the multiple perspectives of SASC and HASC leaders also resulted in the identification of actions that can be made to enhance global collaboration and mutual agreements about the ballistic missile threat to reduce or

eliminate future conflicts (Anichkina, 2015; Hyun, 2016; Kim and Cha, 2016; Klingner, 2015; Oh, 2016; Recchia, 2016; Riqiang, 2015; Senn, 2012; Thranert, 2015). The hope is that the results of this study creates momentum for other scholars to continue to examine congressional perspectives about missile defenses and other policies.

Existing scholarly work that focuses on Congress and missile defense includes analysis of some general partisan differences. In some cases, there is brief mention of missile defenses, a potential U.S East Coast missile defense site, funding disagreements, evaluation of the systems, treaties, and congressional sanctions for ballistic missile defense threats. However, a scholarly research gap exists regarding congressional leaders' perspectives, including SASC and HASC members (Anichkina, 2015; Hyun, 2016; Kim & Cha, 2016; Klingner, 2015; Oh, 2016; Riqiang, 2015; Senn, 2012; Streubert & Carpenter, 1995, p. 31; Thranert, 2015).

Because congressional members play such a valuable role creating policies and funding government services, their views on the three missile defense systems are important (Chapman, 2016; De Figueiredo, 2013). Understanding SASC and HASC leaders' views provides clarity as to how the current environment exists today and what can be done to continue protecting the United States homeland, allies, and partners from global ballistic missile threats.

Problem Statement: The Ballistic Missile Threat

Ballistic missiles are airborne projectiles powered by rockets that deliver conventional, nuclear, biological, or chemical warheads at targets (Heim, 2015; Mettler & Reiter, 2012). Ballistic missiles could be used to inflict damage or put mobile forces at

risk by implementing A2 and AD to achieve military goals (Bell, 2014; Corbett, 2013; Gibilterra, 2015; Weitz, 2013). Ballistic missiles are difficult to counter because they are small in size and can reach high velocity and altitudes. They also provide potential United States adversaries a cost effective-means to accomplish objectives compared to developing and deploying military personnel abroad (Bell, 2014; Weitz, 2013). The most immediate missile threats to the West come from Iran and North Korea (Weitz, 2013). EPAA, GMD, and THAAD were deployed to protect America and its allies from these ballistic missile threats.

Missile defense systems are designed to intercept incoming missiles prior to reaching their targets (Gibilterra, 2015). These defense systems allow for more time to develop an offensive response in a crisis and serve as a form of insurance if the threat of retaliation did not successfully deter an attack (Durkalec, 2012). Since the end of the Cold War, missile defenses have allowed the alliance to demonstrate commitment without having to deploy an expensive force abroad (Fruhling, 2016; Handberg, 2015). Tension has resulted because Russia and China perceive these missile defense systems as undermining their future defense capabilities and oppose their deployment (Anichkina, 2015; Armstrong, 2015; Bin, 2016; Bin, 2015; Biswas, 2014; Cirincione, 2013; Durkalec, 2012; Fields, 2014; Hyun, 2016; Kay, 2012; Kim & Cha, 2016; Oh, 2016; Riqiang, 2013; Senn, 2012; Simon, 2016; Weitz, 2015; Yoshihara & Holmes, 2012; Zadra, 2014).

The United States Congress has been given significant powers by the United States Constitution and is the only branch of government that can make new laws or change existing laws. While the President may veto a law passed by Congress, the veto

can be overridden with a two-thirds vote in the Senate and House of Representatives. Congress also establishes the annual budget for the government and provides funding for government services, has significant investigative powers, and can compel the production of evidence or testimony about a topic or inquiry deemed necessary. Members of Congress spend a significant amount of time holding hearings and investigations in committee so it is a natural setting where their perspectives are recorded and can be used to better understand their policy views.

Existing scholarly publications lack clarity about individual SASC and HASC perceptions of these missile defense programs in a sequential and plain language manner. Even though congressional hearing texts are publicly available, very few have the time and commitment to review and analyze the information to understand SASC and HASC member perspectives on this policy topic. Because congressional members play such a valuable role creating policies and funding government services, their views on the three missile defense systems are important (Chapman, 2016; De Figueiredo, 2013). Understanding their views provides clarity as to how the current environment exists today and what can be done to continue protecting the United States homeland, allies, and partners from global ballistic missile threats.

The purpose of this study was to understand the perspectives of SASC and HASC members in congressional hearings with three case studies on missile defense systems. These missile defense systems are the EPAA, GMD, and the THAAD (Streubert & Carpenter, 1995, p. 31).

Theoretical and Conceptual Frameworks

This study provides a clear understanding of SASC and HASC perspectives on the three missile defense systems in a sequential and plain language manner. Understanding their perspectives resulted in the identification of actions and decisions that can be made to enhance global collaboration and mutual agreements about the ballistic missile threat to reduce or eliminate future conflicts (Anichkina, 2015; Hyun, 2016; Kim and Cha, 2016; Klingner, 2015; Oh, 2016; Recchia, 2016; Riqiang, 2015; Senn, 2012; Thranert, 2015). The hope is that this study creates momentum for other scholars to more examine congressional perspectives about missile defenses and other policies and identify points of collaboration for the United States, Russia, and China to collaborate and diminish missile threats together (Creswell & Poth, 2018). The research question is as follows: What similarities, differences, and themes exist amongst SASC and HASC members related to the following missile defense systems: EPAA, GMD, and THAAD?

The congressional behavior model is one theoretical framework that was applied in this study. It consists of three categories to help explain congressional decision-making: the preference, the simple party, and the asymmetric categories (Lawrence et al., 2006). The preference model assumes that each member of Congress hold has personal preferences when they are sworn into office (Lawrence et al., 2006). These preferences solely motivate a member to support or oppose a policy decision according to this model (Lawrence et al., 2006). The simple party category suggests that a member's congressional party solely motivates him or her to decide on a policy issue (Lawrence et

al., 2006). According to this model, a member's vote on a policy issue depends on the political party they belong to and does not include personal preferences when making such a decision (Soliman, 2015). The asymmetric category is a hybrid of the other two categories, stating that members' legislative decisions incorporates *both* the stance of their political party and their personal preferences on the issue (Cox & McCubbins, 2007; Soliman, 2015). The asymmetric category is different in that it does not lump members' legislative decisions into a dichotomy. Both factors, the political party's stance and the members' personal thoughts on the issue, are reflected in the final decision.

Table 1

Congressional Behavior Model Overview

Congressional Behavior Model		
Asymmetric	**Preference**	**Simple Party**
The political party's stance and the members' personal thoughts influenced the statements made	Each member of Congress hold has personal preferences when they are sworn into office	A member's congressional party solely motivates him or her to decide on a policy issue
√ Questions and statements that support personal preference and party stance	√ Questions and statements that support personal preference	√ Questions and statements that support party stance

For an additional layer of analysis, data were also collected and analyzed from the perspectives of the two schools of thought that have dominated international relations for three decades: neorealism and neoliberalism (Saltzman, 2015). Neorealism views power as the most important factor because the international system lacks a centralized government authority (Bessner & Guilhot, 2015). States are motivated to develop offensive military capabilities due to a lack of trust with other states and because a solid

way to determine how states' intentions may change in the future is lacking (Parent & Rosato, 2015). According to this theory, states must first ensure their own survival first to be able to pursue other goals. In comparison, neoliberalism focuses on mutual wins and creating institutions where states gain from mutually beneficial arrangements and compromises (Bessner & Guilhot, 2015). Neoliberalists agree with neorealists that the international system is anarchic, but they do not believe it plays as powerful of a role (Bessner & Guilhot, 2015; Deudney & Ikenberry, 2017; Parent & Rosato, 2015; Polansky, 2016). Neoliberalists believe that rational states create mutual trust by building norms, regimes, and institutions. In short, neoliberalism believes in "the goodness of people" and that it is possible to get rid of war through peaceful outcomes such as increased cooperation and free trade (van da Haar, 2009, p. 35). Neoliberalism views the ultimate goal as maximizing freedom for all people with no interference by other individuals or states (van da Haar, 2009).

Table 2

Neorealism and Neoliberalism Overview

Factors That Determine Neorealism or Neoliberal	
Neorealism	**Neoliberalism**
• Power as an influencing factor in state decision-making • Support increasing defense to protect self-interests • A solid way to determine how states' intentions may change in the future is lacking • States must first ensure their own survival first to be able to pursue other goals.	• Trust the intentions of other states • Trust can be created via mutual agreements, compromises and institutions • Belief in "the goodness of people" • Possible to get rid of war through peaceful outcomes, such as increased cooperation and free trade

Nature of the Study

The research question for this study was answered after the collection and analysis of data filtered through the theoretical framework lenses previously describes. The qualitative content analysis case study approach was selected because the study aims to understand the perspectives of SASC and HASC members in congressional hearings with three case studies of missile defense systems (Weber, 1990). Because congressional members play such a valuable role creating policies and funding government services, understanding their views provides clarity as to how the current environment exists today and what can be done to continue protecting the United States homeland, allies, and partners from global ballistic missile threats (Chapman, 2016; De Figueiredo, 2013; Kuckartz, 2014; Patton, 2015).

The data used in this study to understand the perspectives of SASC and HASC leaders were text documents of congressional hearings available publicly online (Olsen, 2012; Schrank, 2006; Streubert & Carpenter, 1995, p. 31; Yin, 1989; Yin, 2003). Congressional hearing text documents were imported into NVivo software to organize the data collection process efficiently (Kuckartz, 2014). A multi-stage process of categorizing and coding thematically was completed for each missile defense system as a case study. Patterns and themes that emerged from the data provided an understanding of SASC and HASC leaders' perspectives and identified specific actions to continue protecting the United States homeland, allies, and partners from global ballistic missile threats (Kuckartz, 2014; Lawrence et al., 2006).

Trustworthiness

The four criteria developed by Lincoln and Guba (1985) to evaluate the quality of qualitative content analysis are credibility, transferability, dependability, and confirmability. Credibility ensures that the data in a study is represented fairly and accurately. Activities that were conducted to enhance the credibility of this study were persistent observation, triangulation, and checking interpretations against raw data (Bradley, 1993; Flick, 2009; Given, 2008; Weber, 1990). The raw data of congressional hearings and the text that was coded and not coded were repeatedly reviewed to support persistent observation. Data were paused when it was determined that new information was no longer contributing to the perspectives of SASC and HASC members in support of triangulation.

Transferability refers to the extent a working hypothesis can be applied in another context. This was achieved in this study by providing all of the raw and coded data and by producing detailed descriptions for other researchers to potentially apply them to other research settings. Transparent processes were also created and executed for coding and drawing conclusions from the data. The NVivo Codebook for this study is available to other researchers and includes specific definitions and criteria for each coding theme to support transparency (Bradley, 1993; Flick, 2009; Given, 2008). This information allows other researchers to replicate this study, apply it to other policy topics or congressional member, conduct a quality check, or continue to build on the findings of this study.

Dependability refers to how the researcher accounts for the internal process and changing variables and confirmability refers to the extent other researchers agree with the

interpretation of the data in the same manner as this study (Bradley, 1993). Each step that was taken to collect and analyze data and reach conclusions was clearly documented to provide a clear internal process and support the study's potential application in a different setting. All the raw and coded data are available to be shared with researchers in a NVivo file so that other researchers are able to read and confirm or deny my interpretation of data in this study. Credibility, transferability, dependability, and confirmability are necessary for the interpretive method of qualitative content analysis case study.

Scope and Delimitations

Researchers create and implement boundaries for a study using delimitations. One delimitation of this study is that it only included data from SASC and HASC members that made substantive statements and questions about one or more of the case studies in congressional hearings. Congressional members of these two committees would focus the most on the missile defense systems and this would have the most statements and questions to make about them in congressional hearings. SASC and HASC members research, study, and debate various aspects of these missile defense systems in committees prior to presenting perspectives and decisions to other members of Congress.

A second delimitation is that only three missile defense programs were included in this study, which are EPAA, GMD, and THAAD. These missile defense systems were selected because they were deployed to counter the Iranian and North Korean ballistic missile threats. They are also opposed by Russia and China because they are perceived as undermining their strategic interests and limiting their military capabilities (Anichkina,

2015; Hyun, 2016; Kim & Cha, 2016; Klingner, 2015; Oh, 2016; Riqiang, 2015; Senn, 2012; Thranert, 2015).

Self-awareness and documentation when collecting data and conducting analysis were critical to diminish research bias impacting the findings of this study (Brown, 1996; Patton, 2015). The congressional hearing documentations that were coded for this study are neatly organized and stored in NVivo to be shared with other scholars when requested so that it can be evaluated or replicated in the future (Given, 2008). Because congressional hearing documents are historical records from the past, my researcher presence when collecting the data did not impact the population's statements and questions asked in congressional hearings.

Limitations

Limitations are influences that I as the researcher cannot control. One limitation of the study is having access to the members of Congress for data. In person or phone interviews may seem ideal for this study, but members of Congress are so busy with legislative work and travelling to and from their district to Washington, DC to vote that they strategically focus on responding to constituents in their district. If such interviews were attempted, only some members would respond in the best of circumstance. As a former scheduler of a chairman of a House subcommittee, I often received interview requests for the member to be interviewed by students for dissertations and other projects. While the congressman would have enjoyed being a part of such exercises, he simply had to prioritize his tasks and time wisely when deciding who to respond to. This often meant

not having enough time to communicate with individuals outside of his district or unrelated to the policy priorities in his district.

In addition, even if former congressmen were found and responded to interview requests, there is no guarantee they would be able to recall their positions and reasoning on their perspectives of these missile defense programs. Not to mention some members may no longer be in Congress or may have passed. Thus, using past videos and documents about these missile defense systems is the best way to collect data to answer the research questions and gain a clear understanding of how members of Congress experienced making the missile defense decisions.

A second limitation is that the coding process in the analysis stage is dependent on me as the researcher because my perceptions and thoughts influence every categorization that I made. This is because interpretation of data are dependent on the person trying to understand or interpret something -- a person always has preconceptions or assumptions about a subject (Klafki, 1971; Kuckartz, 2014). To avoid researcher bias, I was self-aware when collecting data and conducting analysis (Brown, 1996; Patton, 2015). I accurately tracked and reported the documents that were used, the data that was analyzed, and clearly explained how analysis and realizations were made. Since this study collected data from congressional hearing texts, my presence did not affect the members' statements.

A third limitation is that some information was excluded from the study because content analysis requires simplification (Krippendorff, 2004). As a result, text not explicitly related to the research questions were not mentioned in the data or analysis.

Data that are not included must not be relevant to understanding how members supported or opposed missile defense system decisions.

Significance of the Study

Because this study was to understand the perspectives of these missile defense systems from the perspectives of SASC and HASC members (Streubert & Carpenter, 1995, p. 31), new lawmakers will quickly obtain an understanding about the history of the missile defense systems to inform decision making. Specific actions and decisions were identified to enhance global collaboration and mutual agreements about the ballistic missile threat to reduce or eliminate future conflicts (Anichkina, 2015; Hyun, 2016; Kim and Cha, 2016; Klingner, 2015; Oh, 2016; Recchia, 2016; Riqiang, 2015; Senn, 2012; Thranert, 2015). This study will hopefully motivate other scholars to examine congressional perspectives about missile defenses and other policies.

Summary

The purpose of this qualitative content analysis case study aims to understand SASC and HASC perspectives about three missile defense systems. The three missile defense systems that are the focus of this study are the EPAA, GMD, and THAAD. These three missile defense systems have been deployed to protect the United States homeland, allies, and partners from global ballistic missile threats (Streubert & Carpenter, 1995, p. 31).

The findings of this study contribute to positive social change because it will help new lawmakers quickly obtain an understanding about the history of the missile defense systems in the study to inform their decision making. Understanding the multiple

perspectives of SASC and HASC leaders led to specific actions and decisions that can be made to enhance global collaboration and mutual agreements about the ballistic missile threat to reduce or eliminate future conflicts (Anichkina, 2015; Hyun, 2016; Kim and Cha, 2016; Klingner, 2015; Oh, 2016; Recchia, 2016; Riqiang, 2015; Senn, 2012; Thranert, 2015). The results of this study may also create momentum for scholars to more deeply examine congressional perspectives about missile defenses and other policies. The congressional behavior model and neorealism and neoliberalism theoretical frameworks were used to collect data to better understand SASC and HASC member perspectives. The assumptions, scope and delimitations, and limitations of this study have been summarized to support a foundation for the approach of this study.

Chapter 2 includes the literature review on this topic to demonstrate the gap that currently exists in scholarly publications. This study aims to fill this gap to provide a comprehensive view of SASC and HASC members' perspectives on the case studies and honor the importance of the legislative branch. The theoretical frameworks used to collect and analyze data are shared in detail.

Chapter 2: Literature Review

Introduction

This chapter focuses on the literature review based existing scholarly research about ballistic missiles and the United States Congress and the theoretical frameworks applied in this study. As previously mentioned, ballistic missiles are airborne projectiles powered by rockets that could deliver a conventional, nuclear biological or chemical warhead at targets, potentially inflicting damage because (Mettler & Reiter, 2012). These missiles could put mobile forces at risk and enable adversaries to implement A2 and AD to achieve regional goals (Bell, 2014; Corbett, 2013; Gibilterra, 2015; Weitz, 2013).

To limit or prevent such damage from occurring, missile defense systems are designed to intercept incoming missiles prior to reaching their targets (Gibilterra, 2015). Missile defense systems protect targets and provide leaders with more time to develop an offensive response as needed in a crisis. Missile defense systems serve as a form of insurance if the threat of retaliation fails to deter an attack (Durkalec, 2012). Missile defenses have played a critical role in demonstrating alliance commitment in a cost-effective way since deploying a costly major force abroad is unnecessary since the end of the Cold War (Fruhling, 2016; Handberg, 2015).

The most immediate ballistic missile threats to the West come from Iran and North Korea (Weitz, 2013). The GMD, EPAA, and THAAD are deployed to protect America and its allies from these missile threats. Russia and China oppose these missile defense systems because Moscow and Beijing believe these missile defenses undermine their defense capabilities (Anichkina, 2015; Armstrong, 2015; Bin, 2016; Bin, 2015;

Biswas, 2014; Cirincione, 2013; Durkalec, 2012; Fields, 2014; Hyun, 2016; Kay, 2012; Kim & Cha, 2016; Riqiang, 2013; Senn, 2012; Simon, 2016; Yoshihara & Holmes, 2012; Oh, 2016; Weitz, 2015; Zadra, 2014).

The purpose of this qualitative content analysis case study was to understand SASC and HASC leaders' perspectives on EPAA, GMD, and THAAD (Streubert & Carpenter, 1995, p. 31). Collecting and analyzing data to understand members' experiences resulted in detailed descriptions of their perspectives that were then compared and analyzed to other members' views. This literature review chapter describes the literature search strategy that was implemented to identify the research gap and inform the approach of this study. The theoretical foundations that selected are discussed in more detail to explain how the data were interpreted and analyzed.

Missile threats originating from Iran and North Korea will first be explored to understand the severity of the missile threat problem and its potential consequences. The three missile defense systems, EPAA, GMD, and THAAD, will then be examined to explain how they were designed to protect against missile threats. The Russian and Chinese perspectives about these missile defense systems will then be explored to understand why they believe these systems undermine their defense capabilities and regional goals and why they are concerned with future versions of systems.

Literature Search Strategy

Topics that have been discussed in existing scholarly work related to the United States Congress and missile defense systems will be evaluated to illustrate the research gap that exists about detailed descriptions as to how representatives supported or opposed

each of these missile defense systems (Anichkina, 2015; Kim & Cha, 2016; Hyun, 2016; Klingner, 2015; Riqiang, 2015; Senn, 2012; Thranert, 2015). Examples of some of these subjects include partisan differences, deploying an east coast missile defense site, funding and evaluating the missile defense systems, treaties, and congressional sanctions implemented because of Iran's and North Korea's missile actions.

Recent scholarly literature that focus on these topics were found in several databases, including ProQuest Central, Sage Journal, Taylor and Francis Online, CQ Researcher, Military and Government Collection, International Security & Counter Terrorism Reference Center and Political Science Complete. Key terms used to search for these scholarly works included: United States *Congress, legislative activism, bill co-sponsorship, legislative commitments, nuclear weapons, nuclear arsenals, nuclear posture, nuclear deployment, nuclear stockpiles, nuclear proliferation, strategic concept, massive retaliation, deterrence, nuclear warfare, nuclear assistance, chemical weapons, biological weapons, missile defense, realism, case study, qualitative study, China, Iran, North Korea, THAAD, GMD, EPAA,* and *weapons of mass destruction*.

Theoretical Frameworks

The congressional behavior model is one of the theoretical frameworks applied in this study. This model includes the following three categories to explain congressional decision making: the preference model, the simple party category and the asymmetric category (Lawrence et al., 2006). According to the preference model, members of Congress make decisions according to their preferences. The simple party category holds that members of Congress vote for their party's chosen position. Members that abide by

the asymmetric category consider the majority party's position and their ultimate decision on a policy also includes their personal preferences (Meagher & Wielen, 2012).

Neorealism and neoliberalism were applied for an additional layer of analysis to better understand members' decisions regarding these three missile defense systems (Saltzman, 2015). Neo-realists are focused on maximizing their own security as much as possible to ensure survival and believe others cannot be depended on because everyone is struggling to ensure their self-interests. In contrast, neoliberalism prioritizes participation of domestic decision-making and economic linkage to decrease the likelihood of conflict. Neoliberalism focuses on building confidence and stopping conflict (Assman, 2007).

The congressional decision-making models and neorealism and neoliberalism schools of thought complement each other at an analytical level. This is because the congressional decision-making models will focus on individual and state levels of analysis while the neorealism and neoliberalism schools of thought portray how the international system operates (Bessner & Guilhot, 2015; Polansky, 2016). These theoretical frameworks provided a wholistic view of the three cases of this study from an array of perspectives.

Literature Review

This section explores key variables and concepts found in existing scholarly publications. First the Iranian and North Korean threats will be explained, since the three missile defense systems are deployed to protect against these. The literature related to the three missile defense systems will then be explored, followed by Russian and Chinese opposition to the missile defense systems. Topics related to missile defenses and

Congress will be discussed along with other major topics found in the scholarly publications.

The Iranian Missile Threat

It is believed that Iran has about 1,000 ballistic missiles (Heim, 2015; Weitz, 2013). Ballistic missiles are not only able to cause destruction for targets, but they can also include a nuclear warhead to increase damage (Heim, 2015). Iran has history of testing new ballistic missiles even though it violates the United Nations Security Council. According to Resolution 1929, Iran is not to conduct activity related to ballistic missiles capable of nuclear weapons (Davenport 2015a).

Iran was found to be in violation of this resolution is a 2013 report drafted by a Security Council panel monitoring Iran's compliance with sanctions (Davenport 2015a). Schultz et al. (2014) have noted that Iran violated the International Atomic Energy Agency (IAEA) standards and United Nations Security Council resolutions by having nineteen thousand centrifuges, over seven tons of enriched uranium, and a heavy-water reactor capable of producing plutonium. Iran does not feel obligated to abide by Resolution 1929 because it is based on illegal and manufactured evidence that Iran is developing nuclear weapons (Davenport 2015a). Iran states its nuclear program is for civil purposes, such as medical research. However, some experts state that Iran's infrastructure and stockpile of enriched uranium exceed what is required for civil nuclear programs (Kay, 2012).

Some of Iran's neighbors in the Middle East have expressed desire to develop their own nuclear weapons to counter Iran's ballistic missiles (Davenport & Phillip,

2016; Kay, 2012). For instance, King Abdullah of Saudi Arabia has stated that if Iran acquired nuclear weapons, Saudi Arabia would do the same (Spector, 2016). Israel has also been clear that it will not accept a nuclear Iran would employ military action (Schultz, 2013).

There have been many historical attempts to halt Iran's nuclear program, such as the Joint Comprehensive Plan of Action made with China, France, Germany, Russia, the United Kingdom, and the United States that aimed to increase transparency and inspections for verification of Tehran's activity (Davenport 2015a; Davenport & Phillip, 2016; Rezaei, 2018; Schultz, 2013). The deal froze Iran's nuclear program at lower levels for the next decade, it controversially allowed Iran to enrich uranium up to five percent (Schultz et al., 2014; Spector, 2016). Those who viewed this agreement as controversial believed that Iran in effect receives a special status because being able to enrich is the first step to developing a nuclear weapon (Davenport & Phillip, 2016). The agreement also did not address Iran's ballistic missile program, which is capable of reaching United States bases and allies in the Middle East (Davenport 2015a; Kroenig, 2018). Iranian Defense Minister Brigadier General Hossein Dehqan has stated that Iran will continue to develop its ballistic missiles and does not need permission to do so (Davenport 2015a).

In May 2018, United States President Donald Trump pulled out of the Iran Nuclear Deal (Jaffer, 2019; Juneau, 2019;). The nuclear deal is still in tacked without the United States' support and other countries that support the deal have vowed to work together to prevent its collapse (Juneau, 2019). This will be challenging because the

multiple financial sanctions implemented by the United States on Iran which have detrimental effects on Tehran's economy (Juneau, 2019).

The North Korean Missile Threat

For decades, many have feared that North Korea will possess an intercontinental ballistic missile (ICBM; Karako, 2017; MacDonald & Ferguson, 2015). The threat is not imaginary as North Korea has previously threatened to launch a nuclear attack on Washington, DC and turn Seoul into a "sea of fire" (Easley, 2016).

In 1998, the United States Congress mandated a bipartisan Commission to Assess the Ballistic Missile Threat to the United States, known as the Rumsfeld Commission. After North Korea launched a long-range Taepo Dong missile in 1998, the United States announced it will increase investments for theater and national missile defense systems (MacDonald & Ferguson, 2015). North Korea was the first signatory of the Nonproliferation Treaty to withdraw and stopped allowing IAEA inspectors access to its nuclear facilities (Cirincione, 2013).

North Korea tested its first nuclear bomb in 2006 and has claimed it can place a nuclear warhead on a missile and has made progress for a re-entry vehicle, significant claims as they are required for a deployable and long-range nuclear armed missile (Hyun, 2016; Nichols, 2013; Phillip, 2016b). North Korea's nuclear and missile programs accelerated in 2011 after Kim Jon Un came to power (Karako, 2017; Nichols, 2013; Sankaran & Fetter, 2022). It displayed a road-mobile ballistic missile called the KN-08 visible for the first time in April 2012, which it claims can reach the United States with a nuclear warhead (Davenport, 2015b; Phillip, 2016a). In a 2015 assessment, a United

States Northern Command leader confirmed that the KN-08 is operational and can be used to shoot a warhead at the United States (Davenport, 2015b). Pyongyang has claimed that it has made advancements miniaturizing nuclear warheads that could be placed on missiles (Hyun, 2016; Moon, 2017).

North Korea conducted nuclear tests in 2016 and test launched two ICBMs in 2017 (Sankaran & Fetter, 2022). The range of these ICBMs means United States bases, South Korea, and Japan could be potential targets, resulting in a strain in the nuclear umbrella the United States provides (Chung, 2016; Klingner, 2015). North Korea has shared that because it feels threatened by the United States, nuclear weapons are a necessity. Some specific examples of how North Korea feels threated by the United States include that it provides a nuclear umbrella to protect South Korea, it participates in military exercises with South Korea, and a United States force presence exists in South Korea (Choi, 2015; Lankov, 2017).

The military balance between North and South Korea could also be altered and prevent a peaceful coexistence in Northeast Asia. North Korea could also export nuclear weapons, materials, technology, and warheads to other nations and actors, encouraging nuclear proliferation (Chung, 2016; Moon, 2017). Pyongyang has already tried to provide Syria with a nuclear reactor that could be used to create nuclear weapons (Chung, 2016).

Diplomatic attempts to denuclearize North Korea have been unsuccessful (Choi, 2015). North Korea wants a peace or nonaggression treaty prior to denuclearization on the Korean Peninsula. China and Russia have also supported a peace treaty prior to denuclearization while the United States, South Korea, and Japan have determined that

denuclearization is required for establishing peace on the peninsula (Choi, 2015). This demonstrates a weakness of international efforts to prevent nuclear proliferation, potential cause of tension between the United States and China, and increase the chance for miscalculation that could lead to war on the Korean peninsula (Chung, 2016).

European Phased Adaptive Approach

The EPAA is the American contribution to the NATO missile defense system (Durkalec, 2012). President Barack Obama announced the program in 2009 to protect Europe from Iranian missile threats (Apple, 2012; Armstrong, 2015; Riqiang, 2013). The EPAA was confirmed in 2010 by the United States Ballistic Missile Defense Review (BMDR) Report (Armstrong, 2015; Riqiang, 2013).

The EPAA includes a combination of the Standard Missile-3 (SM-3), the Aegis radar system, and the Pentagon's command, communication, and control systems. The SM-3 includes a kill vehicle attached to a three-stage booster, which allows it to intercept missiles above the Earth's atmosphere. Japan collaborated with the United States to develop some components of the SM-3 by funding a significant portion of the missile and taking the lead on developing the second- and third-stage rocket motors and nose cone (Weitz, 2013).

The Aegis can defeat short- to intermediate-range, midcourse phase ballistic missile threats, and short-range ballistic missile in the terminal phase (Weitz, 2013). Weitz (2013) predicted that the demand for Aegis ships would increase to address threats such as China's pursuit of anti-ship missile capabilities. The United States Air and Space Operations Center at Ramstein Air Base, Germany will host the command and control

(C2BMC) for the EPAA (Durkalec, 2012). This base will also be the location of command and control for NATO missile defense in the future (Durkalec, 2012).

The EPAA is designed to be flexible and adapt to changing threats in security environments by adjusting and maneuvering to respond to dynamic changes (Durkalec, 2012; Weitz, 2013). The EPAA includes three phases, and each stage allows for further and wider protection from ballistic missiles (Durkalec, 2012). EPAA uses Aegis ships and SM-3 Block IA interceptors to destroy short- and medium-range ballistic missiles in mid-flight and limited capability against intermediate range missiles (Durkalec, 2012; Kay, 2012; Weitz, 2013). Aegis ballistic missile defense operates with sensors on the ground, in the air, and in space with other in-theater assets, including THAAD (Hicks et al, 2012). The Aegis can only intercept ballistic missiles outside of the atmosphere (Reif & Davenport, 2016). Various different parts of the system, including radars and Aegis ships, are located in Turkey, Spain, Romania, and Poland (Durkalec, 2012; Kay, 2012; Reif, 2016d). Overall it is more cost effective for the United States to maintain a sea-based missile defense presence in Europe (Durkalec, 2012).

The EPAA initially had four phases, but the Obama Administration cancelled Phase IV in 2009, stating that Iran was making less progress developing ICBMs than expected (Karako, 2017; Kay, 2012; Riqiang, 2013; Weitz, 2013). Phase IV included deploying SM-3 Block IIB interceptors on land to better counter intermediate range ballistic missile and to boost the protection of the continental United States (Durkalec, 2012). This phase was meant to shoot an interceptor at an intercontinental ballistic

missile (ICBM) and lower the costs and increasing the effectiveness of missile defense of the United States homeland (Durkalec, 2012).

While the EPAA focuses on countering Iranian ballistic missile threats, the ballistic missile threats from Russia are not addressed. This is critical as Moscow is modernizing its strategic nuclear missiles and medium-range missiles. According to some, Europe should not be left undefended against Russian missile threats out of optimism. Multiple national systems create a single missile defense architecture for European member NATO states (Armstrong, 2015).

Ground-based Midcourse Defense

The Ground-based Midcourse Defense (GMD) is designed to protect the United States homeland from a limited intercontinental ballistic missile threat (Riqiang, 2013; Thranert, 2015). The system includes three-stage, solid fuel booster ground-based interceptors (GBIs) in Alaska and California. Each interceptor is topped with an exo-atmospheric kill vehicle (EKV) which separates from the missile guided by its onboard sensors and collides with a target using "hit-to-kill" technology above the earth's atmosphere using kinetic energy to slam into an incoming missile (Weitz, 2013). The "hit-to-kill" approach happens so quickly that the incoming missile's warhead does not have sufficient time to detonate, reducing the danger of a nuclear, biological, or chemical weapon on the warhead of an incoming missile (Petraitis, 2013).

The United States Congress passed the National Missile Defense Act in 1999 (Petraitis, 2013). The act required the United States to create a national missile defense system to protect from accidental, unauthorized, or deliberate limited ballistic missile

attacks (Petraitis, 2013). In December 2001, the Bush Administration withdrew the United States from the Anti-Ballistic Missile Defense Treaty because it prohibited deploying a missile defense system. The United States withdrew from the treaty so that it could protect the country from a long-range ballistic missile attack by deploying a missile defense system. GMD was officially deployed in 2004 and has been in development for over 20 years (Anichkina, 2015; Bartles, 2017; Biswas, 2014; Cirincione, 2013; Goodby, 2018; Grego, 2018; Peck, 2017; Rhak, 2017; Riqiang, 2013; Riqiang, 2015; Thranert, 2015; Weitz, 2013; Yoshihara & Holmes, 2012).

A common topic in the United States Congress is how the confidence of the GMD system will be increased. Generally, the system needs more realistic testing with decoy missiles such as inflatable balloons or rocket debris that would likely be present in a real attack. This is important because the EKVs on GBIs must be able to distinguish a real incoming missile versus decoys to successfully destroy and incoming missile to enhance its operational effectiveness (Auner, 2016; Auner, 2014; Cirincione, 2013; Collina, 2014; Weitz, 2013). Congress has approved hundreds of millions of dollars for system enhancements. Enhancements include building more GBIs, redesigning a stronger EKV, and other improvements (Grego, 2018; Weitz, 2013). One physicist noted that other missile defense programs, such as the Aegis ships for EPAA, illustrates how the reliability of GBI missiles could be improved (Auner, 2014).

Terminal High Altitude Area Defense

THAAD is designed to intercept short- and medium-range missiles in the middle and end stages of flight and could counter intermediate-range ballistic missiles in their

terminal phase. THAAD and took 30 years to develop, test, and deploy (Klingner, 2015; Reif & Davenport, 2016). The first THAAD battery was activated in 2008 and was deployed to Guam in response to increased tension on the Korean Peninsula (Deni, 2013; Weitz, 2013). It has a very high success rate demonstrated by several successful flight tests since 2006 (Reif & Davenport, 2016; Klingner, 2015).

Each THAAD battery consists of a truck-mounted launcher, interceptors, a radar, and a fire control communications system with other support equipment (Reif & Davenport, 2016; Weitz, 2013). According to Deni (2013), the demand for THAAD is very high with almost every Combatant Commander (COCOM) asking for them – each THAAD battery can hold 40 to 72 interceptors (Reif & Davenport, 2016).

South Korea announced the deployment of THAAD to protect South Korea and United States troops in July 2016 after North Korea conducted its fourth nuclear test in January (Kim, 2018; Moon, 2016). Washington has called for deployment of THAAD to the area since 2014, but South Korea was hesitant due to resistance domestically and from China (Hwang, 2017; Lankov, 2017; Moon, 2017). THAAD will improve capabilities to track North Korea missile launches and add a layer of security (Easley, 2016).

China vocally disapproved of deploying THAAD, stating that it exceeds defensive needs on the peninsula, and was a contentious point between China and South Korea (Klug, 2017; Moon, 2017; Terry, 2017; Xiao, 2017). China implemented unprecedented economic sanctions on South Korea even though Washington and South Korea explained the system is not targeting Chinese missiles (Choo, 2020; Panda, 2016;

Swaine, 2010). According to some experts, THAAD radars are not capable of tracking ballistic missiles launched from China and are not covering mainland China (Bin, 2018; Jeon, 2016; Li, 2016; Park, 2016; Sankaran & Fearey, 2017).

Placing THAAD in South Korea benefits the United States because it maintains and strengthens its global hegemony by providing an additional layer of protection for United States territories and for United States forces stationed in East Asia and the western Pacific to counter China's A2/D2 capabilities. At the same time, others believe the deployment of THAAD benefits South Korea's security because it enhances the United States' credibility of extended deterrence (Choi, 2020).

Russian Opposition to Missile Defense Systems

Russia does not want the United States and its allies to expand missile defense system because it believes that they will undermine its strategic interests (Blechman & Vaickonis, 2016). Russia views missile defenses as potentially destabilizing because it could make its nuclear arsenal useless (Cimbala, 2017; Diesen & Keane, 2018; Evans & Schwalbe, 2018). Missile defenses have been an issue of concern since the United States and Soviet Union began dialogues and almost every nuclear arms reduction treaty has included some limitation for missile defenses (Blechman & Vaickonis, 2016).

Moscow is concerned with multiple phases of EPAA and has labeled it anti-Russian. Russia believes that the United States is deploying EPAA to justify expanding its defense capabilities. (Arbatov, 2018; Armstrong, 2015; Biswas, 2014; Cirincione, 2013; Fields, 2014; Oguz, 2018; Weitz, 2015; Zadra, 2014). Some reasons why Russia is against some phases of the program is because it would expand the range of the missile

defense system, could intercept Russian ICBMs and submarine launched ballistic missiles (SLBMs), and would like to limit the speed of some interceptors (Durkalec, 2012; Kay, 2012). It is concerned that EPAA could include as many as 500 interceptors on more than 40 Aegis ships that would allow the United States to deploy missile defenses in the Black Sea, in the Arctic, and on land bases in Poland and Romania within the range of Russian ballistic missiles (Kay, 2012).

Washington has repeatedly stated that the EPAA is meant to protect Europe from ballistic missile threats from Iran, not Russia and it does not undermine Russia's strategic deterrent (Armstrong, 2015; Cirincione, 2013; Weitz, 2015; Zadra, 2014). Furthermore, NATO has attempted to explain to the Russians that it is impossible for the EPAA to shoot down ICBMs according to geography and physics (Reif, 2016d). NATO has even attempted to ease Russia's concerns by offering proposals of cooperation, such as incorporating a Russian early warning radar system (Durkalec, 2012; Kay, 2012; Reif, 2016d). NATO and Russian missile defense discussions lacked trust, noted Zadra (2014), because Moscow did not trust Washington. Russia believed that America was the main motivator behind the European missile defense protection (Senn, 2012).

Armstrong (2015) explained that financial limitations make it impossible for the United States and NATO to create a missile defense system capable of covering the entire range of Russian missile capabilities, but that the EPAA should be deployed as defense on the Russian front of Europe. In fact, Armstrong (2015) goes as far to say "an EPAA that does not account for the emboldened Russian threat is a missile defense system that ultimately fails to do what it is intended to achieve at its very core: protect NATO's

European member-states from the region's prevailing missile threats" (p.112). Moscow wants legal guarantees that the European missile defense system is not directed at Russia, and has made this desire for such a document a condition for further progress on missile defense (Aybet, 2012; Cimbala, 2012; Durkalec, 2012; Senn, 2012; Zadra, 2014).

Russia has expressed that retaliatory measures will be taken with further implementation of the EPAA (Durkalec, 2012). These measures include disabling information for missile defense and guidance systems, deploying capabilities that could destroy parts of the missile defense system in Europe, such as deploying Iskander missiles in Kaliningrad, and putting a halt to future disarmament and arms control agreements with the potential withdrawal from treaties (Durkalec, 2012; Kimball, 2016a; Sankaran, 2013).

After the Bush Administration withdrew the United States from the Antiballistic Missile (ABM) Treaty in 2002, Russians feared it would upset the global nuclear balance (Kay, 2012; Lodal, 2016;). The George W. Bush Administration tried to cooperate with Russia to relieve their concerns about missile defenses in Europe. Bush suggested allowing Russian military officials at NATO missile defense facilities and cooperation at joint missile defense centers to increase confidence and security building measures (Fieldhouse, 2016).

To evade a ballistic missile defense system, Russia developed the Hypersonic Glide Vehicle -- its first successful test occurred in April 2016. This is significant because a Hypersonic Glide Vehicle is a component of an ICBM designed to separate from the warhead and guide itself toward a target with sensors quickly, equipped with a

conventional or nuclear payload (Bartles, 2017). According to Russian Foreign Minister Sergey Lavrov, United States plans to deploy missile defense systems in South Korea are excessive when considering the threat coming from North Korea (Bin, 2016). Lavrov stated, "We will show that such plans, which jeopardize global parity and strategic stability, are absolutely unjustified and we will call on our United States partners to have an honest and informative conversation. Bin (2016) explained that THAAD's X-band radar is capable of monitoring missile tests and firing missiles thousands of kilometers inside of Russia." (Bin, 2016, p. 130).

China's Opposition to Missile Defenses

China is concerned with the future number and quality of United States missile defense systems because it fears that more advanced interceptors and sensors will defensive capabilities (Bin, 2015; Senn, 2012). Many Chinese leaders believe missile defenses have the potential to be strategically offensive and not just a form of defense as expressed by the United States (Kang & Kugler, 2015). Since 2010, China has been testing missile interceptors and is interested in deploying a missile defense system (MacDonald & Ferguson, 2015).

The United States and Japan have worked closely together on the EPAA and China has expressed concern of Washington supplying missile defenses to Japan and Taiwan (Furukawa, 2012; Senn, 2012). China believes that missile defenses could remilitarize Japan and maybe even motivate Taiwan to seek formal independence from China (Senn, 2012). According to Riqiang's (2013), EPAA could potential pose a threat to China if its mobile assets were deployed in Asia. This is because the SM-3 Block IIA

is capable of engaging China's strategic missiles. In fact, one SM-3 Block IIA system can protect most of the United States homeland from China's strategic missiles.

China is not so much concerned about GMD in its existing state, but is concerned about what it may be capable of in the future (Riqiang, 2015; Thranert, 2015; Yoshihara & Holmes, 2012). Riqiang (2013) noted that GMD has the capability to engage China's strategic missiles and Mistry (2013) stated that missile defenses might motivate Beijing to maintain large nuclear forces (Yoshihara & Holmes, 2012).

According to the United States Department of Defense (DOD), China is working on technologies to counter ballistic missile defense systems by developing multiple re-entry vehicles, decoys, and thermal shielding (Glaser & Fetter, 2015). Because Beijing has the ability to deploy several countermeasures to defeat United States ballistic missile defense systems, it is very unlikely that the United States would be able to deploy a version of GMD that would protect against a sophisticated and advanced adversary (Glaser & Fetter, 2015).

Beijing is opposed to deploying THAAD in South Korea to provide protection because it believes it will decrease its power by countering its ballistic missiles and has the potential to eventually become an offensive system by spying on Chinese activities (Easley, 2016; Gibilterra, 2015; Hyun, 2016; Kang & Kugler, 2015; Kim & Cha, 2016; Oh, 2016; Klingner, 2015; Ward, 2016). Tensions between China and South Korea increased when the United States and South Korea announced the deployment of THAAD with China informally implementing sanctions on South Korea (Boustany & Ellings, 2018; Choi, 2020; Han, 2019; Hoshino, 2020; Huang, 2019; Jiang, 2021; Kim,

2019; Lee, 2021; Lim, 2021; Lye, 2017; Moon, 2021; Park, 2018; Park, 2019; Sohn, 2019; Stuart, 2017; Snyder & Byun, 2016; Su, 2020; Sukhee, 2019; Watts, 2019; Watts, 2018; Yang, 2019; Zhang, 2020; Zhu, 2019). The Chinese government even used news media and diplomatic channels to encourage South Korea to reject THAAD (Easley, 2016).

THAAD cannot intercept Chinese ballistic missile. Chinese ICBMs would exceed the THAAD interceptor by range, speed, and altitude. Only the interceptors in Alaska and California, the GMD system, are designed to intercept such powerful missiles. THAAD interceptors are designed to shoot down an incoming missile in its terminal phase heading towards the THAAD interceptors, not in a missile's boost and mid-range phases launched away from THAAD interceptors. Finally, THAAD's radar could not see or track ICBMs because it could only see at a 90-degree angle and it will be directed at North Korea, not China. In other words, Chinese ICBMs would be outside of the X-band radar range (Klingner, 2015). Ultimately, the installation of THAAD was postponed by Moon citing the need to conduct an environmental study (Choo, 2019).

Congress' Power and Influence on Defense Policy

The legislative and executive branches share defense policy power. The legislative branch is different because it represents the interests and views of United States citizens. The legislative branch funds the military, is able to declare war, and regulates commerce (Kay, 2012). The United States congress shapes military operations with its control of financial resources (Ams, 2011). Congress decides on where to spend

money and what to buy. Congressional budget leaders, especially in the HASC, balance fiscal and defense needs (Coleman, 2014; Jordan, Taylor, & Meese, 2011; Kay, 2012).

The United States Congress' influence on Congress's influence on defense policy can also be understood by studying congressional hearings. A congressional hearing is held to educate and increase awareness about a topic among United States citizens because they are public (Chapman, 2016). The topic and witnesses that invited to speak at congressional hearings are selected by committee and subcommittee chairs. Witnesses often include leaders from government, academia, foreign representatives, and sometimes United States citizens (Chapman, 2016; Maguire, 2013). Witnesses' testimonies are sworn and hold the same value as testifying in a court of law. It is illegal for witnesses to provide false or fraudulent statements in congressional committees and such statements may be punishable by a fine or five years imprisonment for each offense (Chapman, 2016).

The public availability of hearings means they have the potential to influence and frame issues for the public and in the press (Maguire, 2013). United States Congressional Committees are one tool to better understand United States defense policies and provide context for legislation that is introduced or passed (Chapman, 2016). Congress' support on policy is important because that is how funding is allocated for a particular outcome and they provide oversight for government programs (Chapman, 2016; Gavin, 2015; Kay, 2012; Kobor, 2013; Kramer, 2013; Recchia, 2016). Opposition in Congress about specific policies or financial resources could result in legislation not becoming law, limitations on implementation of a law due to limited or no financial resources, and a

negative media portrayal of an issue (El-Anis, 2014; Richie, 2016). For instance, Congress can ignore the president's budget, as it did in 2013 by carrying over most of the Fiscal Year (FY) 2012 spending levels (Kramer, 2013). In contrast, the United States Senate provides advice and consent to United States treaties and presidential nominees appointment for various government positions (Kay, 2012).

Congress and Missile Defense

Polarization has existed in the United States since the 1970s. Civil rights issues and the Vietnam War resulted in a realignment of the two political parties that transformed the political landscape. Gerrymandering redrew congressional districts to favor particular political parties and diminish the opportunity for opposing political parties to win election. As a result, voters have become more ideological and primary votes that determine the candidates for general elections have become more influential. After representatives are elected, there is little incentive to compromise or work across the aisle because they need to stay true to their congressional district's political party to win reelection. Thus, personal and partisan agendas are more of a focus along with fundraising to fund the next political campaign (Kay, 2012). According to Kay (2019), this has created a "permanent-campaign environment that results in zero-sum thinking and a winner-take-all attitude." A lot of time is spent on raising money leaving less time for lawmakers to work together to pass legislation and develop an expertise on several issues. It is typical for lawmakers to depend on lobbyists and interest groups for information about specific issues which is a contributing factor to a polarized debate discussion (Kay, 2012). Jordan et al. (2011) noted that Congress focuses on a domestic

constituency with an eye to reelection. Members of Congress generally will support homeland security contracts that involve their districts (Jordan et al., 2011).

Some consensus exists among the Republican and Democrat political parties. Republicans tend to be more emotionally charged on missile defense than Democrats (Durkalec, 2012; Handberg, 2015). Nichols (2013) noted that missile defenses highlight the partisan differences. American neoliberals generally value international institutions, negotiations with opponents, and are sympathetic to the concerns of other nations about America's great power. Neoliberals generally view missile defense as provocative and destabilizing which causes negative effects on American diplomacy. According to this line of thought, missile defense systems should be avoided and nations and populations should be left vulnerable to a potential nuclear attack because such systems would avoid undermining strategic stability (Anichkina, 2015; Riqiang, 2015; Thranert, 2015).

In contrast, American conservatives generally focus on the anarchic structure of the international system and are more attracted to self-help approaches (Bessner and Guilhot, 2015; Deudney and Ikenberry, 2017; Nichols, 2013; Parent and Rosato, 2015; Polansky, 2016). International institutions and negotiations help when they assist United States security that creates some negative views of those institutions and purposes (Nichols, 2013). Conservatives generally view missile defenses as an opportunity to apply technological innovation to add a layer of insurance that "will save lives and limit damage the United States should all else fail" (Nichols, 2013, p.60). Senn (2012) noted that Republicans in Congress generally oppose any limitations on future development and deployment of missile defenses. Hence, missile defense systems have stabilizing effects

since they could deter nuclear proliferators from invading neighbors and nuclear aspirants may be less likely to think of nuclear weapons as tools to obtain regional leverage (Thranert, 2015).

United States East Coast Missile Defense Site

Existing scholarly literature on missile defense includes discussion of a United States East Coast missile defense site to complement the existing GMD system (Auner, 2014). Some congressional members believe a third site will enhance the defense of the homeland from ICBMs launched by a rogue state or launched by accident or due to a miscalculation of another nation (Reif, 2016c).

In the FY 2013 National Defense Authorization Act (NDAA), Congress required DOD to conduct a study to evaluate three potential locations for a third GMD site. The Pentagon is required to select a preferred location within a month of the completion of the draft environmental impact study (Reif, 2016c). In December 2013, the United States Congress voted to drop the creation of an east coast missile defense site which had an estimated cost of about $3-4 billion (Collina, 2014; Reif, 2016c).

Instead, Congress agreed to spend more money to fix existing problems with the GMD system, such as improving sensors to increase its discrimination capability, deploy a long-range discrimination radar to track missiles launched from North Korea, and develop of a new kill vehicle to shoot down incoming missiles (Collina, 2014). Pentagon officials have stated that a decision has not been made to deploy a third missile defense site (Reif, 2015a). MDA also evaluated a space-based missile defense option for the United States to explore how it may enhance protection from an ICBM (Reif, 2015a).

Missile Defense Budget

The missile defense budget is a popular topic in existing scholarly literature about the United States Congress and missile defense. About $4 billion was allocated to missile defense in FY 2000 and the budget increase after the United States withdrew from the Antiballistic Missile (ABM) Treaty (Cirincione, 2013; Senn, 2012). In 2008, Congress cut $85 million from the Polish and Czech deployments of the EPAA until final approval was reached from each country and independent technical evaluations were performed (Kay, 2012). The omnibus bill provided $1.1 billion for the GMD system, including $43 million more than the administration requested to upgrade the EKV and $99.5 million to begin work to redesign the EKV (Reif, 2015b).

The Missile Defense Agency's budget has been reduced about 20 percent from 2006 to 2016 (Reif, 2016b; Rei, 2016e). Corbett (2013) noted that the Missile Defense Agency (MDA) has allocated a lot of resources to intercept an incoming missile in its midcourse phase of flight and has not paid as much attention to destroying an incoming missile in its boost or terminal phases of flight where a rocket can be easily identified. According to the National Research Council, Division on Engineering and Physical Sciences, Naval Studies Board (2012), a missile is easier to identify in its boost phase because a bright plume signature forms and decoys would not confuse missile defenses. Terminating a missile in its boost phase could be a way to counter the discrimination challenges, telling the difference between a missile and debris, the GMD experiences when attempting to shoot down a missile in its midcourse phase flight ("National

Research Council, Division on Engineering and Physical Sciences, Naval Studies Board," 2012).

Several events or conditions have been made over the years to justify decreasing missile defense spending, causing missile defense to not evolve as quickly as they could with sufficient funding (Handberg, 2015; Kay, 2012; Reif, 2016a). Additionally, the United States has been spending helping fund Israel's missile defense system that is creating a competition between funding for United States and Israeli missile defense systems. If this continues, United States missile defense may not be able to outpace future threats. To address the missile defense budget challenge, some believe that Congress should increase funding for MDA and the number of missions the United States supports can be reduced so that it can achieve the proper missile defense capabilities to protect from evolving threats (Reif, 2016e).

International Treaties

The United States has stated that Russia has violated he INF Treaty (Barrie, 2017). Congress passed a bill that required the Pentagon plan to develop intermediate-range missiles in response to Russia's violation. The defense bill also includes provisions for increased congressional oversight of missile defense programs. One provision requires that before production or deployment of an upgraded interceptor or ballistic missile defense system and sufficient and realistic testing needs to be planned and implemented to enhance the effectiveness of GMD which has experienced cost overruns and test failures as a result in rushing to deploy (Reif, 2015b).

The Obama Administration took about one year to develop a response to Russia's violation of the INF Treaty. However, Congress is pressing for stronger, near-term action. Congress held about 60 briefings, hearings, and meetings on this subject (Fieldhouse, 2016). President Donald Trump suspended the INF Treaty because it is believed Russia has been violating the agreement (Sanger & Broad, 2019). There was some resistance in Congress to renew the New START. The only limitation New START had on missile defense is that the United States Russia cannot place interceptors in existing ICBM silos or SLBM launch tubes (Perry, 2013; Shaw, 2012).

United States Congressional Economic Sanctions

Former Senator Kelly Ayotte (R-N.H.) has called for tough sanction on North Korea (Phillip, 2016a). In March 2016, former Senator Kelly Ayotte (R-NH) introduced a bill for more sanctions in response to Iran's March 2016 ballistic missile tests and 11 other Republican senators co-sponsored the bill (Davenport, 2016).

The sanctions are targeted against the individuals involved in the missile tests and against entities that own 25 percent or more of Iran's key ballistic missile organizations (Davenport, 2016). Senator Ayotte led this effort stating, "the potential danger to our homeland, as well as the urgent threat to our forward deployed troops and our allies like Israel, is only growing" (Davenport, 2016, p.25). The United States House of Representatives almost unanimously passed resolution H.R. 757, the most comprehensive North Korean legislation that used targeted financial and economic measures to isolate Kim Jong Un's regime (Hyun, 2016).

Social Implications

The purpose of this study was to understand SASC and HASC leaders' perspectives about the three missile defense systems (Streubert & Carpenter, 1995, p. 31). This allows new lawmakers to quickly obtain an understanding about the history of the missile defense systems to inform decision making. Specific actions and decisions were identified to enhance global collaboration and mutual agreements about the ballistic missile threat to reduce or eliminate future conflicts (Anichkina, 2015; Hyun, 2016; Kim & Cha, 2016; Klingner, 2015; Oh, 2016; Recchia, 2016; Riqiang, 2015; Senn, 2012; Thranert, 2015). Hopefully, this study will motivate other scholars to examine congressional perspectives about missile defenses and other policies.

Summary

An overview of the existing scholar literature has shown that a comprehensive view of SASC and HASC leaders' perspectives on missile defenses is lacking. It is critical to understand lawmakers' perceptions because they provide the funding and oversight for missile defense programs and represent United States citizens (Chapman, 2016; De Figueiredo, 2013; Kay, 2012; Maguire, 2013; Yoshihara & Holmes, 2012). This study provided a clear understanding about SASC and HASC leaders' perspectives and specific actions and decisions were identified to support decision-making and global collaboration regarding missile defenses (Anichkina, 2015; Hyun, 2016; Kim & Cha, 2016; Klingner, 2015; Oh, 2016; Recchia, 2016; Riqiang, 2015; Senn, 2012; Streubert & Carpenter, 1995, p. 31; Thranert, 2015). This study may also motivate scholars to more deeply examine congressional perspectives about missile defenses and other policies.

Chapter 3: Research Method

Introduction

This chapter provides background about the research design and methodology that answered the research question in this study. This information supports why the qualitative research tradition was the best approach to answer the research question. More background will also be provided on the content analysis case study approach and how data were collected and analyzed that informed the findings of this study.

The purpose of this study was to understand the perspectives of SASC and HASC regarding the EPAA, GMD, and THAAD deployed to protect against missile threats from Iran and North Korea (Patton, 2015; Streubert & Carpenter, 1995, p. 31). These perspectives will inform specific actions and decisions to enhance decision-making and global collaboration regarding missile defenses (Anichkina, 2015; Hyun, 2016; Kim & Cha, 2016; Klingner, 2015; Oh, 2016; Recchia, 2016; Riqiang, 2015; Senn, 2012; Thranert, 2015).

Research Design and Rationale

The research question that informed the data collection and analysis for this study is as follows: What similarities, differences, and themes exist amongst SASC and HASC members related to the following missile defense systems: EPAA, GMD, and THAAD (Schrank, 2006)? Congressional hearings were collected, organized, and analyzed to answer the research question. Thick descriptions were created for individual SASC and HASC leaders who made substantive statements or questions about the three missile defense systems.

Qualitative Research Tradition

Qualitative research allows for the study of how people and groups conduct meaning using data to understand how meaning was assigned (Patton, 2015). As explained by Kueger (2010), peoples' stories can illustrate key points or themes and allow researchers to identify new ways to understand people and situations not possible using the quantitative method. In other words, the quantitative approach results in statistical findings that would not be helpful to answer this research question because it does not help identify and communicate SASC and HASC leaders' perspectives on missile defense systems (Patton, 2015).

The qualitative content analysis case study method was selected to answer the research question because it supports the understanding of lawmakers about the three missile defense systems. The specific population that was studied are SASC and HASC leaders that have made substantive questions and statements about at least one of the missile defense systems. Their questions and statements in congressional hearings have been recorded and analyzed to begin understanding their individual issues on the topic (Yates & Leggett, 2016).

Role of the Researcher

The researcher decides what type of investigation should be conducted and what method is best to obtain the information to answer the research question which drives the data collection and analytic procedures (Kuckartz, 2014; Schrank, 2006). As the researcher, I can attempt to set aside biases and preconceived assumptions, but it is impossible for me to approach a topic with no preconceived notions or blank slate. My

prior knowledge of a subject inevitably could impact data collection and analysis because my perceptions and thought processes influence the selection and categorization made for the qualitative data (Kuckartz, 2014). My background, experience, training, skills, interpersonal competence, capacity for empathy, cross-cultural sensitivity and other factors play a role in data collection and analysis which could impact the credibility of findings (Patton, 2015). Thus, how I collect and interpret data are affected by who I am and how I chose to study this topic.

Unlike quantitative analysis, the qualitative method does not have a statistical significance test and substantive significances requires judgement to delete bias (Patton, 2015). Hence, I was as self-aware as possible to accurately record data collection and analysis (Brown, 1996; Patton, 2015). I tried my best to have clear definitions to substantiate why qualitative data belongs to a specific category or theme to support accuracy and consistency as reflected in the NVivo Codebook (Kuckartz, 2014). Because interpretation of the qualitative data are dependent on me trying to understand or interpret something, I thoroughly recorded the steps I took that resulted in the findings of this study. This transparency allows other scholars to evaluate and/or build on the findings (Klafki, 2001; Kuckartz, 2014).

The data used in this study were documents of congressional hearings for SASC and HASC members. The data are publicly available and were recorded before this study began. This is important because it means that my presence as a researcher did not impact the questions and statements made in congressional hearings. At the same time, lawmakers know that congressional hearings are public, and their questions and

statements were made to accommodate a public audience or at least their congressional district base.

I currently provide professional services to government agencies focused on strategic communications unrelated to the three missile defense systems in this study. I did publish articles in various media outlets about missile defense and other defense topics as a former vice president of a bipartisan public policy think tank. Some of the contractors of the defense systems in this study contributed to the think tank, but I no longer work with these stakeholders currently. I also previously worked for a member in the United States House of Representatives, but my work did not involve missile defenses. I was able to conduct a balanced and accurate study to answer the research question.

Methodology

SASC and HASC members represent the population studied. Members that made substantive statements and questions about the three missile defense systems in congressional hearings were included to answer the research question. Data were collected through the lens of the following theoretical frameworks: congressional behavior model, neorealism, and neoliberalism.

Congressional hearings that mentioned at least one of the missile defense systems in this study were identified, downloaded, inputted into NVivo software, and organized with clear labels. If a SASC of HASC member made a statement or question of at least one of the missile defense systems of this study, it was first coded under the SASC or HASC leader's name and then organized into subcategories that serve as themes for

questions and statements that fell under an umbrella topic. The subcategories informed thick descriptions for each SASC and HASC member to understand their perspectives on the three missile defense systems.

Sampling Protocol

This study included three missile defense systems that each serve as their own case study, EPAA, GMD, and THAAD. SASC and HASC leaders featured in the analysis include those that made several substantive statements and/or questions about at least one of the missile defense systems and filtered through the congressional behavior model, neorealism, and neoliberalism theoretical frameworks (Patton, 2015; Gentles et al., 2015). Members that made a brief question or statement about a system were not included because those did not provide substantive value to beginning to understand their perspectives on the missile defense systems. The sampling units are individual SASC and HASC members and their statements and questions in congressional hearing served as the qualitative data to answer the research question for this study.

Data were collected until saturation was reached from publicly available congressional hearing documents. Congressional hearings are a great initial source to answer the research question because this is where SASC and HASC members raise public awareness about issues and provide more context about their view on political topics. Data collection paused when it was determined that new data no longer contributed SASC or HASC leaders' perspectives about the missile defense systems (Gentles et al., 2015). For EPAA, seven HASC and 10 SASC leaders were included in the analysis. For GMD, 15 HASC and 15 SASC leaders were included in the analysis.

For THAAD, eight HASC and six SASC leaders were included in the analysis. The findings of this study are not intended to be generalized to draw inferences about the general population (Patton, 2015). This study provided an initial foundation about the SASC and HASC leaders' perceptions about these missile defense systems. Analytic generalizability will be achieved by comparing the results of this study to previously developed theories (Gentles et al., 2015).

Chapter 4 includes thick descriptions via the theoretical lenses for each SASC and HASC member for the three case studies. These narratives begin to provide an understanding about the perspectives of SASC and HASC members in congressional hearings about the three case studies (Patton, 2015).

Instrumentation

Documents for congressional hearings were identified by entering the missile defense system names in Govinfo. Govinfo is a reliable source provided by the United States Government Publishing Office and provides free public access to official publications from all three branches of the Federal Government. Specific key words that were used in the search included: *Terminal High Altitude Defense, Ground based Midcourse Defense,* and *European Phased Adaptive Approach*. These documents were downloaded and imported in NVivo so that they can be coded and support an organized data analysis. This data also available for other scholars to evaluate how this study was conducted or build on the findings of this study.

To identify key SASC and HASC members related to these missile defense systems, key words were entered into govinfo to search for past congressional hearings

and congressional record documents. Govinfo is a reliable source that is a service provided by the United States Government Publishing Office and provides free public access to official publications from all three branches of the Federal Government. Key words included: *missile defense, Terminal High Altitude Defense, Ground based Midcourse Defense,* and *European Phased Adaptive Approach*.

Analysis of the Data

Content analysis was used to analyze the data for this study and answer the research question (Kuckartz, 2014; Patton, 2015). This form of analysis was introduced by Max Weber in 1910 when he suggested using newspapers for content (Kuckartz, 2014). Kracauer (1952) was the first to call explicitly for a "qualitative content analysis," which relies on hermeneutical traditions to provide principles for understanding and interpreting texts (Kuckartz, 2014). Berelson (1952) is considered one of the founding fathers of content analysis and noted that highlighted that content analysis succeeds or fails by its categories -- content analysis is no better than the categories.

After data were collected and organized in to the NVivo software program, I searched through the text using the three missile defense system names as key words. I used open coding to color code statements and questions that were relevant to the theoretical frameworks under each SASC and HASC leaders' names for each case study. Text that did not help answer the research question or was out of scope based on the theoretical frameworks was not coded and therefore was not included in the data collected. The data under each SASC and HASC leaders' name was then analyzed to identify subcategories in an attempt to classify questions and statements to organize and

understand their perspectives. The classification enabled by subcategories also allows for comparisons to be made. I read through the data several times with the research question in mind to ensure thorough collection of the data to ultimately provide an initial accurate depiction of the SASC and HASC members' perspectives as possible with the information available (Kuckartz, 2014). A matrix was created for each case study to provide a more digestible format of the major points and similarities and differences in the data for each SASC and HASC leader to help answer the research question (Patton, 2015). The subcategories found in the data were analyzed and compared to the expected and unexpected findings of the theoretical frameworks to answer the research question (Lawrence et al., 2006).

Issues of Trustworthiness

A study can be trusted when it includes rigor, which is the quality of the research process (Given, 2008). The purpose of this study was to provide an initial understanding about the perspectives of SASC and HASC leaders on the three missile defense systems to answer the research question. The four criteria developed by Lincoln and Guba (1985) to evaluate the quality of qualitative content analysis are credibility, transferability, dependability, and confirmability. Credibility ensures that the data in a study is represented fairly and accurately. Activities that were conducted to enhance the credibility of this study were persistent observation, triangulation, and checking interpretations against raw data (Bradley, 1993; Flick, 2009; Given, 2008; Weber, 1990). The raw data of congressional hearings and the text that was coded and not coded were repeatedly reviewed to support persistent observation. Data were paused when it was

determined that new information was no longer contributing to the perspectives of SASC and HASC members in support of triangulation.

Transferability refers to the extent a working hypothesis can be applied in another context. This was achieved in this study by providing all of the raw and coded data and by producing detailed descriptions for other researchers to potentially apply them to other research settings. Transparent processes were also created and executed for coding and drawing conclusions from the data. The NVivo Codebook for this study is available to other researchers and includes specific definitions and criteria for each coding theme to support transparency (Bradley, 1993; Flick, 2009; Given, 2008). This provides the information other researchers need to replicate this study, apply it to other policy topics or congressional member, conduct a quality check, or continue to build on the findings of this study.

Dependability refers to how the researcher accounts for the internal process and changing variables and confirmability refers to the extent other researchers agree with the interpretation of the data in the same manner as this study (Bradley, 1993). Each step that was taken to collect and analyze data and reach conclusions was clearly documented to provide a clear internal process and support the study's potential application in a different setting. All the raw and coded data are available to be shared with researchers in a NVivo file so that other researchers are able to read and confirm or deny my interpretation of data in this study. Credibility, transferability, dependability, and confirmability are necessary components of the interpretive method of qualitative content analysis case study.

The data in this study are credible because they are represented fairly and accurately. I conducted an iterative analysis to code the data relevant to answer the research question through the theoretical lens. I also sought for triangulation to ensure the data were paused only after new SASC or HASC leaders were not being identified or the statements and questions found stopped contributing new information (Given, 2008).

Ethical Procedures

The population studied to answer the research question does not involve active human participants. This is because questions and statements that were collected and analyzed were featured in publicly available congressional hearing documents where everything that was said was recorded. This means that my presence as a researcher did not affect the data available because it was collected and recorded well before this study began in the participants' natural setting. SASC and HASC leaders know that congressional hearings are publicly available so I was not required to take any precautions about privacy, consent, or establishing open and honest interactions (Patton, 2015). The approach used for this study to answer the research question was reviewed and approved by Walden University's Institutional Review Board (IRB).

Summary

Publicly available congressional hearing data were collected to answer the research question. The data provided an initial understanding of SASC and HASC leaders' perspectives on the three missile defense systems (Streubert & Carpenter, 1995, p. 31). Chapter 4 includes "thick descriptions" for SASC and HASC leaders that made substantive statements and questions about at least one of the missile defense systems.

Chapter 4: Data Analysis & Research

Introduction

This chapter provides the data collected to answer the research question. The purpose of this study was to understand the experiences of SASC and HASC members. Their statements and questions in congressional about missile defense were filtered through the theoretical frameworks of the congressional behavior model, neoliberalism, and neorealism.

Data were categorized into three case studies, each a specific missile defense system opposed by Russia and China: EPAA, GMD, and THAAD. Each case study includes a narrative of statements and questions made by SASC and HASC members grouped by political party. After the narrative for each member, an analysis of how they align with three theoretical frameworks is provided. The research question answered using this structure is as follows: What similarities, differences, and themes exist amongst SASC and HASC members related to the following missile defense systems: EPAA, GMD, and THAAD?

A matrix has been created for each case study to summarize the kay data findings in a visual manner. Each matrix includes SASC and HASC members' names, political party affiliation, how his or her statements and questions in hearings align with the theoretical frameworks, and key data that supports the categorization of his or her statements and questions.

This chapter includes details about how data were collected and recorded to answer the research question. These step by step details allows scholars to replicate the

study or use the findings in this study to build on more research about congressional members and Congress on missile defense or another political topic.

Data Collection

Data that were collected and analyzed were included only if a SASC or HASC member made substantive statements or questions about at least one of the missile defense systems and was relevant to the theoretical frameworks. Seven HASC and 10 SASC leaders were studied for EPAA. 15 HASC and 15 SASC leaders were studied for GMD. Eight HASC and six SASC leaders were studied for THAAD. To identify which SASC and HASC members would be included in this study, congressional hearings were identified, downloaded, and imported into the NVivo software. The NVivo software made it easy to store many documents and analyze the text to identify applicable codes.

After documents were uploaded into the NVivo software, each file was examined in the NVivo software by searching for key words related to the three missile defense systems. These keywords include *GMD, EPAA, THAAD, GBI, EKV, SM-3, missile defense*, and others. Identified text was then coded into one of the three missile defense systems: EPAA, GMD, and THAAD. The data was aligned to specific SASC and HASC members and themes were identified based on the data for each member. Thick descriptions of narratives were created for each member utilizing this data. A list of codes and their definitions are defined in the codebook in the NVivo program.

To determine which congressional behavior model category SASC and HASC members seem to best align with, data were interpreted and compared to the definitions for each model. To determine if a SASC or HAS member aligned with the asymmetric

category, the data were interpreted to see if it aligned with the following definition: personal preference and party factors are included into his or her point of view about the missile defense systems. To determine if a member aligned with the preference model, data were interpreted to identify if it aligned with the following definition: includes their personal preference in their point of view on the missile defense systems. To determine if a member aligned with the simple party category, the data were interpreted and compared to the following definition: information that shows whether a member had a point of view on the missile defense systems solely based on the party's stance (no obvious constituent benefit from doing so).

To determine how SASC or HASC members aligned with neorealism or neoliberalism, criteria to determine the distinctions was created in advance. For a statement to be categorized as neorealism it had to include the following: how much a member views power as an influencing factor in state decision-making, if a member trusts the intentions of other states, if a member supports increasing defense to protect self-interests and if a member believes trust can be created through mutual agreements, compromises, and institutions. To determine that statements align with neoliberalism, the text had to include the following: mutual wins, creating institutions where states gain from mutually beneficial arrangements and compromises, create mutual trust by building norms, regimes and institutions, increased cooperation and free trade, or maximizing freedom for all people with no interference by other individuals or states.

Data Analysis

Coding only the relevant text for this study greatly reduced the amount of data that needed to be interpreted to create thick descriptions or narratives about the perspectives of SASC and HASC members. After all the documents were coded, they were reviewed a few more times to ensure key pieces of information were not overlooked.

For the EPAA, four major themes were identified under the neorealism category. These themes are budget, an east coast site, protecting allies and the homeland, and threats from Russia, China, Iran, and North Korea. HASC members that made statements about the EPAA and budget are Representative Franks, Representative Rogers, and Representative Turner. The SASC member that has made a statement about the EPAA and the budget is Senator Inhofe. The HASC members that have made statements about the EPAA and an east coast site to replace the cancelled phase four of the program are Representative Rogers and Representative Turner. A third major theme was about the EPAA and protecting allies and the homeland. The HASC members that made statements about this include Representative Kirk, Representative Langevin, and Representative Rogers. The final theme focuses on the Russia, China, Iran, and North Korea threats. The members that made statements on this topic include Representative Franks, Representative Langevin, and Representative Rogers. The SASC member that made a comment about this topic is Senator Inhofe.

For the GMD program the following neorealism themes were found in the data: budget, east coast site, improving the overall system, and threats from Iran and North

Korea. HASC members that made statements about GMD and the budget include Representative Lamborn and Representative Rogers. SASC members that made statements about this theme are Senator King and Senator Sessions. For the GMD east coast site theme, the two SASC members that made statements about this topic are Senator Inhofe and Senator Sessions. HASC members that made statements about improving the GMD system are Representative Cooper, Representative, Johnson, Representative Lamborn, and Representative Rogers. SASC members that made statements about this theme are Senator Donnelly and Senator Sessions. HASC members that made statements about GMD and the missile threats from Iran and North Korea include Representative Lamborn and Representative Langevin. SASC members include Senator Fischer and Senator Sessions.

THAAD data resulted in three themes belonging to the neorealism category: allies, testing, and missile threats from Russia, China, Iran, and North Korea. The HASC members that have made statements about THAAD and allies are Representative Larsen and Representative Turner. The SASC member that has commented on this theme is Senator Donnelly. Representative Langevin is the HASC member that has made a statement about THAAD and testing. HASC members that have made statements about THAAD and the missile threats from Russia, China, Iran, and North Korea are Representative Brooks and Representative Rogers. SASC member Senator Sessions also made a statement about this topic.

To draft thick descriptions on the perspectives of each SASC and HASC member on the three missile defense systems, the text that aligned with their name was reviewed

and the main points were summarized to describe an accurate depiction of the questions they asked the statements they made in hearings. As these descriptions were written, the data document was reviewed once again to ensure key words were accounted for when drafting this perspective. These thick descriptions help understand the viewpoints of SASC and HASC members in the past and going forward.

Evidence of Trustworthiness

Credibility or validity ensures that the data in a study is represented fairly and accurately. To demonstrate the trustworthiness of this study's results, triangulation was used to ensure a comprehensive and diverse perspective was collected as I aimed to understand SASC and HASC members' perspectives (Flick, 2009). In addition, I considered what was missing or not present in the text being analyzed. This is why it took me an extensive amount of time to collect sources. The goal was to collect as many sources as possible to produce an accurate read of the perspectives of SASC and HASC members and it also demonstrated that the data collected and analyzed that formed the results can be trusted. Additionally, I provided specific examples for the conclusions reached in the analysis (Given, 2008).

As this study was conducted, accurate notes were kept for transparency so that each step of the study can be described in detail, including the collection and analysis of the data that ultimately form the thick descriptions that allowed for the identification of patterns and themes. Not only does this allow a researcher to examine the steps conducted, it also allows a researcher to replicate the study for a quality check or build on

the study to support a clearer understanding of the United States Congress and how its members form policy.

Since this is a qualitative study, I am aware that I have some influence over the research findings (Given, 2008). Taking this to account, I tried to the best of my ability to consider how my cultural, political, social, linguistic, and economic origins may have influenced my perspective (Patton, 2015). This along with the self-awareness to document each detail of the steps taken to conduct this study would illuminate any potential bias that may have come about during the process of this study and can be evaluated (Brown, 1996; Patton, 2015).

Results

The results of data collection were summarized in thick descriptions for each SASC and HASC member to answer the following research question: What similarities, differences, and themes exist amongst SASC and HASC members related to the following missile defense systems: EPAA, GMD, and THAAD?

Case Study #1: European Phased Adaptive Approach

This section includes thick descriptions based on questions and statements made by United States SASC and United States HASC members about the EPAA. The descriptions were pulled from data coded from numerous hearings. This case study includes congressional hearing statements of 15 HASC members (two are women) and 13 SASC members (one is a woman). Appendix B features a matrix that includes SASC and HASC members' main points and perspectives on EPAA in a more digestible manner.

Representative Trent Franks (R-AZ)

Representative Trent Franks (R-AZ) made statements about EPAA related to the budget, planning, and the Russian and Iranian threats. Representative Trent Franks was a member of the United States House of Representatives from January 2003 until December 2017. Representative Franks expressed concern that the United States did not move quick enough with the EPAA, and that progress should have been made at a quicker pace because it could have decreased Iran's nuclear ambitions in a more effective manner. He expressed concerns that the Administration at the time may cancel, delay, or deploy EPAA in a way that it will not have any effect on Iran's nuclear program, which may change the future in a profound way ("Future Roles and Missions of the Missile Defense Agency," 2009).

Representative Franks asked a question to highlight the fact that Russia is undertaking a significant modernization to its missile defense system. He also asked if the United States has received assurances that Russia's nuclear deterrent is not targeting the United States Representative Franks thought this question was reasonable to ask because of Russia's "hysteria" about the United States' small non-nuclear armed missile defense system when Russia has deployed one that is aimed at the United States. In a 2015 hearing, he stated that the ballistic missile threat is a growing threat to the United States and its allies at a pace faster than before. He asked questions to see if witnesses were also concerned about this trend and for military advice. He also expressed concern that the budget for missile defense was decreased by $7 billion from FY 2009. Representative Franks also daringly asked, "Why is it the policy of this administration not to keep pace with the threats, and they continue to reduce our ballistic missile defense budget?" ("The

Posture of the United States European Command and United States Africa Command," 2013, p.22).

Representative Franks asked several questions about EPAA planning to witnesses in hearings. He asked if the SM-3 1B and SM-3 2A have completed their inventory objectives. He also asked witnesses how much oversight the Missile Defense Agency have if the Ballistic Missile Defense System accountability report and the GAO mandate biannual and alternated the submissions. He asked how the agency would be able to focus better on mission if this change was made ("FY 2018 Priorities and Posture of Missile Defeat Programs and Activities," 2017).

Based on statements and questions that Representative Franks made in hearings about EPAA, he seems to align with the simple party category of the congressional behavior model. His statements and questions align with the political party at the time and no information was uncovered that demonstrates that he has any personal preferences on the missile defense system. Representative Franks also aligns with neorealism because his statements and questions in hearings focus on ballistic missile threats faced by the United States and allies and the need to protect and deter those threats. He specifically referenced how Russia is significantly modernizing its missile defense system and asked if the United States has received assurances that Russia's nuclear deterrent is not targeting the United States These examples show how Representative Franks does not trust the intentions of Russia.

He also clearly stated a support in financial resources to protect the United States and its allies by inquiring about why the ballistic missile defense budget decreased.

Neorealists are supportive of increasing spending to ensure survival and pursue goals. Representative Franks did not make any statements or questions that showed interest in mutual cooperation with other states in the data collected.

Representative Mike Rogers (R-AL)

Representative Rogers highlighted that Russia and China are building their missile defenses against United States and strategic forces and wonders why there is a need to worry about their concerns about United States missile defenses. In 2009, Representative Rogers stated his position with the Obama Administration's decision to restructure the missile defense shield in Europe and serves as a serious blow to the Czech Republic and Poland. He called for the administration to brief Congress about what the details are for a new missile defense system plan so that the United States homeland is adequately protected from the Iranian threat ("Congressmen on Missile Defense Caucus Blast President Obama's Abandonment of European Missile Defense," 2009).

Representative Rogers made a general statement about the missile defense budget. He stated he is "deeply concerned" that the presidential administration is not supporting the Missile Defense Agency with funding and that the agency's budget has dwindled for more than five years. According to Representative Rogers, "We are paying for these decisions now in a more dangerous world" (Albon, 2013). Representative Rogers stated that missile defense is a critical to enhance security in an uncertain world and is a critical to enhance bilateral relationships. He cited DOD's advice that the missile defense system Poland procures be interoperable with the NATO missile defense system to enhance

protection for Poland and the alliance ("Rogers: Poland Should Buy Interoperable NATO Missile System," 2014).

In a 2014 press release, Representative Rogers stated that President Obama's decreased funding for missile defenses for the FY 2015 budget undermines the military's strength. He explained that may be the president's position but that Congress holds the purse strings and that he opposes the president's funding proposal because it is a failure in leadership. He also shared that he is concerned about how Russia threatens allies and cited the invasion of Ukraine and violation of the INF Treaty ("Rogers: Strengthen Missile Defenses; Hearing focuses important line of defense against Russia," 2014). Representative Rogers asked about a potential East Coast missile defense. He wanted to know more details about what such a site would look like to protect the United States and if there is benefit in deploying this site sooner rather than later ("The Posture of the United States Northern Command and United States Southern Command," 2014).

He questioned "Why do we maintain there is something ''destabilizing'' about United States missile defenses but nothing about theirs?" ("FY 2016 Budget Request for Strategic Forces," 2015, p. 72). He noted that in the 2010 BMDR states that the United States is seeking to building a collaborative and cooperative partnership. Representative Rogers asked how the administration is doing with this and he also asked that if Russia were to attack United States forces in Europe with missiles, whether our missile defense capabilities would protect against them. He went on to ask why the United States uses missile defense to protect aircraft carriers from China's missile, but why the United States doesn't plan to use its missile defenses to protect American cities. Representative

Rogers has also inquired about a potential East Coast missile defense site in place of the canceled phase four phase of the EPAA. He specifically wanted to learn more about the benefits of a third site and related funding (FY 2016 Budget Request for Strategic Forces, 2015). Representative Rogers noted in 2015 that continuing to decrease the budget for the Missile Defense Agency have left the United States and allies more vulnerable to Russian and Iranian missile threats

Representative Rogers highlighted how Iran is developing ballistic missile systems and space satellite programs, noting that President Obama is not supporting a long-term strategy for the military and national defense. He highlighted that Alabama plays a critical role in missile defense and highlighted that the president's budget request reflects he does not support missile defense ("Rogers: Iran Fires Up Rocket Program While Obama Weakens United States Missile Defense; Rep. Mike Rogers (R-AL) News Release," 2015). Representative Rogers asked a witness why it is important that NATO announce operational capability of EPAA when the alliance meets for the Warsaw Summit. This question likely seeks for Honorable McKeon to explain why this capability it so important to protect United States allies ("U.S Strategic Forces Posture," 2016).

Representative Rogers best aligns with the asymmetric category of the congressional behavior model. The statements and questions he made in hearings includes that the Missile Defense Agency has a large presence in his state. This means that while Representative Rogers aligns with the stance of the Republican Party on this issue, he also has personal preferences to support his views. Because voters of the Missile Defense Agency have a major presence in Alabama, especially the Huntsville area, and is

where the United States Army Space and Missile Defense Command at Redstone Arsenal is located. This means that many voters of his may be employed or related to people who are employed by the agency and have a vested interest in increasing funding for missile defense. It can be assumed that Representative Mike Rogers aligns with the asymmetric voter preference model because is views align with his party's and are based on his personal interests to be re-elected.

Representative Rogers seems to best align with neorealism. He highlighted that Russia and China are enhancing their missile defenses to compete with the United States He also noted how Russia has invaded Ukraine and has violated the INF Treaty. He also viewed the Obama Administration's cancellation of the fourth phase of EPAA as concerning and wants to know how the United States homeland will be protected from the Iranian threat as a result. He shared that the Obama Administration is not supporting a long-term strategy for the military and national defense, noting how Iran is making developments with its ballistic missile systems and space satellite programs. His concerns focus on protecting the United States based on its self-interests. This shows that he does not trust the intentions of other countries. He also does not mention how mutual agreements or compromises could achieve a peaceful outcome with the countries of concern. Instead, he is focused on what needs to be done in response to countering these countries' advancements in missile defense, such as ensuring a strong budget to continue enhancing United States missile defenses and potential benefits of deploying an East Coast missile defense site. When he did mention the importance of relationships, it was

about how to make the missile defense system in Poland in operable to protect Poland and allies from missile threats.

Representative Mike Turner (R-OH)

Representative Turners' statements and questions regarding EPAA revolve around the budget, East Coast site, and protecting allies and the United States Homeland. Representative Turner emphasized that EPAA is offered by the United States as a contribution to NATO free of charge. He asked what is being done to ensure that allies are chipping in financially to the system. He also wanted clarity on how much the system will cost for each of the phases ("Budget Requests From United States European Command and United States Africa Command," 2012). Representative Turner noted that he does not see any funding for a third East Coast missile defense site which NORTHCOM recommended before President Obama announced the EPAA. He noted that it is worth to begin conducting an environmental impact study that would take 18 months so that it can serve as a backup plan in case the United States is wrong about the Iranian missile threat. Representative Turner did note that the EPAA is being provided to NATO free of charge which is estimated to cost at least $8.5 from 2013 to 2017 ("FY 2013 National Defense Authorization Budget Request For Missile Defense," 2012).

Representative Turner also made it clear in 2013 that House supports the EPAA and that is demonstrated by the fact it is funding the program. He noted that recent press reports indicated that Congress is cutting funding, but made clear the House is funding the program ("The Posture of the United States European Command and United States Africa Command," 2013). He noted that the president had cancelled the fourth phase of

the EPAA and the third missile defense site which the Bush Administration supported. Both of these systems were to protect the United States homeland from an attack. He noted that a sound strategy would in a third missile defense site on the east coast to protect the United States from an attack to make up for the fact that the fourth phase of the EPAA was cancelled and aimed to serve the same purpose ("The Posture of the United States Northern Command and United States Southern Command," 2014).

It appears as though Representative Turner best aligns with the simple party category of the congressional behavior model. His viewpoints on EPAA align with the Republican Party's stance on the matter and no information was found as far as his personal preferences on the matter.

Representative Turner seems to best align with neorealism. He expressed the need to consider deploying the East Coast missile defense site to protect against the Iranian missile threat. This shows that he does not trust Iran's intentions and supports additional financial resources to explore new ways to enhance missile defense of the United States, especially considering that the fourth phase of EPAA was cancelled and was supposed to help protect the United States homeland from Iranian missile threats. He also highlighted Congress' commitment to funding EPAA because some media reports were stating otherwise. This shows how he supports increased defense spending to protect United States interests. Representative Turner does not mention the possibility of how mutual agreements or compromises may help address the Iranian threat. He is solely focused on funding missile defense and what needs to be done to address missile threats.

Representative James R. Langevin (D-RI)

Representative Langevin's questions and statements about EPAA focused on the budget, protecting allies and the homeland, and the Iranian missile threat. Representative Langevin noted that EPAA includes significant force structure implications and asked witnesses if they have been quantified ("Budget Request from the DOD," 2010). Representative Langevin highlighted the fact that President Obama announced the EPAA in 2009 to defend Europe and the United States against a growing threat of ballistic missiles. He asked a question about how delays will be mitigated for each phase of the EPAA and overall cost estimates for tracking ("Status of Implementing The Phased Adaptive Approach To Missile Defense In Europe," 2010).

Representative Langevin aligns with the simple party category of the congressional behavior model based on the data collected. He stays true to the Democratic Party's stance on this issue and there was no information found that showed he has personal preferences on this issue. Data that supports that he has personal preferences on the issue are required to along with the other two voter preference models.

Representative Langevin does not seem to align with neorealism based on the data collected. His statements and questions in hearings focused on the management of EPAA. He did state that the Obama Administration announced EPAA in response to the Iranian missile threat, but did not spend much time communicating the specific details of the threats as neorealist typically do. Representative Langevin also did not advocate increasing spending on EPAA. Instead, he focused more on properly managing the program, such as planning for different components and mitigating delays. While Representative Langevin does not seem to align with neorealism, no data were collected

to support that his statements and questions align with neoliberalism either. He did not mention anything about mutual agreements or compromises for the program or counter missile threats and he did not necessarily trust other states because he specifically noted the Iranian missile threat as a threat.

Representative Donald Norcross (D-NJ)

Representative Donald Norcross' statements and questions about EPAA focused on planning. He noted that the SM-3 had been tested a lot and had some issues recently. While those have been resolved, he asked if there are any concerns about the SM-3's reliability ("FY 2018 Priorities and Posture of Missile Defeat Programs and Activities," 2017).

Representative Norcross aligns with the simple party category of the congressional behavior model based on the data collected. No information was collected that demonstrated he has any personal preferences about EPAA. The data did not help inform if Representative Norcross best aligns with neorealism or neoliberalism. He did not highlight the missile threats with specific examples or express concerns with the missile defense budget as neorealists typically do on this topic. His statements and questions focused on EPAA's reliability and planning for the future. He did not highlight the value of mutual agreements or cooperation or express any trust in other states. Because data does not exist to definitively support either category Representative Norcross cannot be categorized as a neorealist or a neoliberalist.

Representative Loretta Sanchez (D-CA)

Representative Loretta Sanchez's questions and statements about EPAA involved the East Coast missile defense site and protecting allies and the homeland. Representative Sanchez noted that the BMDR stated that ballistic missile defense capabilities must be flexible to adapt to threats as they evolve. She noted the recent intelligence updates about the Iranian and North Korean threats and asked if the current EPAA plan along with the proposed hedging policy still considered adequate in response to the changing missile threats ("FY 2013 National Defense Authorization Budget Request for missile Defense: Hearing before the United States HASC," 112th Congress (2012). Representative Sanchez noted that an East Coast missile defense site will cost $4 billion and does not include manning the site and other costs. She asked witnesses if construction of a new site should begin and asked what are the priorities to strengthen the protection of the East Coast ("FY 2016 National Defense Authorization Budget Request for Missile Defense Programs," 2015).

Representative Sanchez seems to align with the simple party category of the congressional behavior model. Her questions and statements about EPAA align with the Democratic Party's stance at the time and no information was collected that showed she has personal preferences on this issue. Representative Sanchez's questions and statements in hearings about EPAA are difficult to categorize as aligning with neorealism or neoliberalism. She acknowledged the Iranian and North Korean missile threats, but did not spend a lot of time on specifics and highlighting the threat. She also was not explicitly supportive about a potential East Coast missile defense site to protect the United States Homeland which the cancelled Phase 4 of the EPAA was supposed to

support. She did note that the site would cost over $4 billion and what should be done to protect the east coast from missile threats. While her points gently touch on neorealism aspects, they are not done so in a strong and explicit fashion as neorealists typically communicate on this issue. Representative Sanchez does not seem to align with neoliberalism either because she does not provide information that shows she trusts other states and values mutual agreements and cooperation based on the data collected.

Representative Ellen O. Tauscher (D-NJ)

After the United States and Poland agreed to deploy a missile defense system on Polish Territory Representative Tauscher made a public statement that the agreement is not designed to protect against Russian missiles. It is designed to protect against future Iranian missile threats. According to Representative Tauscher, "The missile defense interceptors that would be located in Poland are not designed to protect against Russian missile threats, but a long-range threat from Iran that has not yet emerged. The United States has properly characterized Russia's belligerent rhetoric about the proposed deployment - which would create no discernable threat to Russian capabilities -- as misguided. Any linking now of the proposed interceptors with recent Russian actions will only undermine months and months of United States assurances that there is no relationship" ("Representative Tauscher on Proposed United States-Poland Missile Defense Pact," 2008).

Representative Tauscher noted that the Navy's test of Aegis BMD in 2008 determined it to be "operationally effective and suitable" and noted that this is a major

accomplishment and something that should be take pride in ("The Future of Missile Defense Testing," 2009).

It appears as though Representative Tauscher can best be aligned with the simple party category of the congressional behavior model. Her viewpoints align with the Democratic Party stance and no data were found indicating her personal preferences on the matter. Representative Tauscher seemed to gently aligned with neoliberalism about Russia. In 2008, she made a statement that the missile defense plans in Poland were not to protect against Russia, but designed to protect against the Iranian missile threat. She made sure to imply to policymakers and the public the value of cooperation required for mutually assured destruction with Russia. At the same time, she explicitly shared how EPAA is aimed to protect against the Iranian missile threat, implying cooperation is not valued with that country and trust is lacking. This view can be aligned with neorealism qualities. Thus, it seems Representative Tauscher aligns with neoliberalism when it comes to Russia and with neorealism as it relates to the Iranian missile threat. She also highlighted the Navy Aegis test, which is part of EPAA, in 2008. Such pride in offensive military capabilities could be viewed as aligning with neorealism.

Senator Saxby Chambliss (R - GA)

Senator Saxby Chambliss' questions and statements about EPAA focused on the planning, protection of allies, and the Iranian missile threat. Senator Chambliss asked if European allies will be financial supporting the Aegis Ashore BMD site in Romania, which is part of EPAA. He asked what assets and funding DOD needs to implement EPAA, especially when it comes to the SM-3 interceptors and Aegis ships.

Senator Chambliss wanted to know if the Aegis Ashore system in Romania be able to defend against Iran's Shahab-3 missile. He also wanted to know what modifications, specifically equipment and technology are required for the sea-based Aegis system to be converted to the land-based Aegis-Ashore system ("DOD Authorization For Appropriations For FY 2011," 2010).

Senator Chambliss shared several concerns related to planning for EPAA. He noted that he is confident at the Aegis SM-3 system may succeed and that he is concerned about future policy and programmatic challenges. He noted that the Navy is planning for a lot of growth in coming years and has concerns about whether the Navy will be able to refit cruiser-destroyer with Aegis technology while simultaneously meeting the maritime demands of reginal combatant commander while operating with 88 total cruisers and destroyers.

Senator Chambliss also asked about how the Aegis Ashore sites will be manned, trained and equipped in Romania and Poland since the Navy is significantly focusing on refitting its ships with Aegis BMD capabilities. He also stated that he believes in the "fly before you buy" concept and support operationally real testing. He also noted that systems do not need to test perfectly to be deployed. He wanted witnesses to comment on these points ("DOD Authorization For Appropriations For FY 2011," 2010).

Senator Chambliss' statements and questions in hearings about EPAA seem to align with the simple party category of the congressional behavior model. His views aligned with the Republican Party's stance at the time and no information was found that supports he has personal vested interests in the program. Senator Chambliss' statements

and comments in hearings about EPAA seem to align with neorealism. He asked if NATO allies will provide financial resources for the Aegis Ashore site in Romania, which shows that he supports offensive military capabilities and increasing defense to protect self-interests. While he generally supports EPAA in this way, he wanted to be sure allies are participating financially since they will benefit from the protection. He also wanted to be sure that the military tests Aegis Ashore sites before more money is spent on them, also known as the "fly before you buy" concept. At the same time, he recognizes that a system does not require perfect testing for it to be deployed. This shows that he supports an effective defense, but also wants to be smart in how it is implemented. While he is about ensuring a system works, he realizes that some refinements can be made after deployment and that perfect should not be the enemy of the good. Senator Chambliss also asked for reassurance that the Aegis Ashore system in Romania will protect against Iran's Shahab-3 missile. This shows that he is focused on the Iranian threat and ensuring EPAA can protect against it to protect United States interests.

Senator Susan M. Collins (R-ME)

Senator Susan M. Collins' questions statements about EPAA focused on protecting the United States homeland and allies. Senator Collins noted that the Obama Administration significantly changed the policy last year about how the United States would help protect NATO allies from ballistic missiles by launching the EPAA. She noted that she visited the Czech Republic, Poland and Russia and agrees with the policy change. She noted that many Aegis ships will be tied to specific areas of operation and that they will not fully be able to support more traditional missions. She noted that some

analysts have stated that if all of these missions are to be executed successfully, then a larger number of major surface combatants may be needed. She asked how the overall size of the fleet is affected since ships will be focused on specific areas ("DOD Authorization For Appropriations For FY 2011," 2010).

Senator Collins belongs to the simple party category of the congressional behavior model. Overall, she aligns with the Republican Party's stance on the issue of protecting the United States and allies from ballistic missile threats. Where she strays a bit from the political party is when she explicitly stated that she agrees with the Obama Administration's EPAA approach when it was new at the time. Many Republicans during that time were vocally against the Obama Administration's significant change in policy.

Senator Collins' questions and statements about EPAA is hearings seem to align with neorealism. She supports increasing defense to protect the United States and its allies by pointing out that more Aegis ships would likely be needed to implement EPAA because some will be tied to specific areas of operation and not available to support other mission needs, especially unexpected ones. Her statements and questions did not demonstrate that she trusts the intentions of other states or show that she is focused on mutual agreements and cooperation to address the ballistic missile threat to Europe and the United States.

Senator John Cornyn (R-TX)

Senator John Cornyn's questions and statements about EPAA focused on China as a nuclear missile threat and cooperation with Russia on missile defense. He noted that since 2001, China has tripled the size of its ICBM force, they seek to develop a

submarine-based nuclear force, and that China could have as many as 3,000 nuclear missiles and thousands of miles of underground tunnels to hide its nuclear arsenal. He cited Dr. the Acting Under Secretary of Defense for Policy at the time, that "the lack of transparency surrounding China's nuclear programs – their pace and scope, as well as the strategy and doctrine that guide them – raises questions about China's future strategic intentions" ("DOD Authorization for Appropriations for FY 2013 and the Future Years Defense Program," 2012, p.216).

He asked for witnesses to comment on the assessment that if the United States continues to reduce its nuclear weapons would it incentivize China and other nuclear to build up to United States and Russian levels and how many nuclear weapons the United States needs to possess to convince China not to seek the strategic equivalent. Senator Cornyn that he was concerned about President's Obama telling Russian President Dmitry Medvedev that he is waiting until after the election so he can exercise the flexibility to handle missile defense issues. He said that making concessions with the Russians puts the United States safety and security at risk. He noted that to obtain Senate support for the New START Treaty, President Obama promised to continue with developing and deploying all stages of the EPAA and asked for a precise status of the program and the remaining three phases at the time ("DOD Authorization for Appropriations for FY 2013 and the Future Years Defense Program, 2012"). Senator Cornyn also noted that Russian President Medvedev highlighted that the United States and Russia hold opposing positions on missile defense. He quoted a former Senator that stated at a conference that Russia is not convinced by United States technical responses that the missile defense

system is not a threat to the Russians. He asked for witnesses to comment on the perspective whether continued dialogue with the Russians will lessen they fears about the deployment of EPAA in Europe. He asked if additional concessions with the Russians, such as viewing the Aegis SM-3 missile defense flight tests, will increase the chances of Russia's willingness to cooperate on missile defense in the future and asked what the potential consequences would be if the United States continues to deploy the EPAA without Russia's support ("DOD Authorization for Appropriations for FY 2013 and the Future Years Defense Program," 2012).

Senator Cornyn's statements and questions about EPAA align with the simple party category of the congressional behavior model. No data were collected to show that he had any personal preference about EPAA, which is required for the other two categories. Senator Cornyn did focus on United States-Russia cooperation on missile defense which is not exactly in alignment with the Republican Party. However, his other statements and questions are best aligned with neorealism.

Senator Cornyn's statements and questions about EPAA in hearings seem to generally align with neorealism. At the same time, he did make a point about potential cooperation with Russia on missile defense which shows a bit of alignment with neoliberalism. He highlighted that China is a nuclear missile threat, considering it has tripled its ICBM force and seek to build a submarine-based nuclear force. He is concerned about China's lack of transparency about its nuclear programs and the strategy and doctrines that informs decisions about the nuclear programs. He asked witnesses if

the United States, continues to reduce its nuclear arsenal would it motivate China to continue increasing its nuclear weapons.

He expressed how President Barack Obama put United States security at risk when he stated how President Obama told the Russian President that he will have more flexibility about the missile defense issues after the election when his mic was on. The Russians are not convinced that the that the missile defense system in not a threat. He asked witnesses to share their views as to when dialogue should continue with the Russians to decrease their fears about EPAA. He noted that the Russian president at the time believes the United States and Russia have conflicting views on missile defense. While a lot of Senator Cornyn's points align with neorealism, the fact that he inquired about United States cooperation with Russia on missile defense is more aligned with neoliberalism. Neoliberalism focuses more on cooperation and mutual agreements while neorealism focuses more on protecting self-interests.

Senator Jim Inhofe (R-OK)

Senator Inhofe's questions and statements about EPAA align with the following themes: budget, planning, protect allies and the homeland, Russia, China, Iran, North Korea, and testing. Senator Inhofe mentioned testing challenges for the SM-3 Block IB and IIA and how IIB is still just a concept. He noted that intelligence estimates that Iran will have a long-range ballistic missile capability by 2015. He asked witnesses about the current confidence level to deploy IIA by 2018 and IIB by 2020. Senator Inhofe cited how the 2010 BMDR noted that the demand for missile defenses for each region for the next decade will surpass supply. He asked if there are enough Aegis ships and missiles to

protect Europe from the Iranian threat and have Aegis ships deployed around the world to conduct the missile defense mission and maritime security, anti-submarine warfare and surface warfare missions ("DOD Authorization for Appropriations for FY 2012 and the Future Years Defense Program," 2011).

Senator Inhofe mentioned a Defense News article that stated that Aegis radars are not in good shape and is raising questions as to whether the fleet is able to protect Europe from ballistic missiles, its high-profile new mission in 2012. He asked witnesses if there are readiness concerns for this mission. He also asked why Aegis ships are carrying 10 or 11 missiles when they are each configured to carry 20 missiles and how the Navy is managing Aegis BMD ships since the demand is greater than the supply. He also mentioned that deploying seven Aegis ships in European waters would provide limited protection and doing so would require more than 18 Aegis ships in inventory. He asked witnesses if we have enough Aegis ships to protect Europe from an Iranian threat and have them deployed around the globe simultaneously ("DOD Authorization for Appropriations for FY 2012 and the Future Years Defense Program," 2011).

Senator Inhofe noted that his concerns about EPAA multiplied after reading a report by the Defense Science Board and Government Accountability Office. According to the report, EPAA is experiencing major delays, cost overruns, and technology challenges. He asked to see the current and planned funding for the program, total procurement and fielding timeline for the SM-3 IB, IIA and IIB, and original and current program costs for radars, Aegis ships, command center, and other sensors to fully deploy EPAA. He also asked witnesses if a GMD site in Europe or on the east coast of the

United States would provide greater capability to defend against an Iranian ICBM threat. He also asked if there are enough Aegis ships and missiles programmed in the budget to support EPAA while fulfilling other combatant commanders' requirements, such as PACOM ("DOD Authorization For Appropriations for FY 2013 and the Future Years Defense Program," 2012).

He asked several questions to witnesses about the Iranian missile threat and if they could have a nuclear weapon and delivery vehicle within three to four years. He also asked for confirmation that that North Korea's ICBM capabilities and development of nuclear capability represents a threat to the United States He also asked for confirmation that the proliferation of ballistic missile technologies continue to increase and that countries making their own ballistic missile has tripled in the past four years from four to 12 countries. He also asked for confirmation that just four years ago there were 4,000 ballistic missiles deployed around the world and that currently there are over 6,000 ballistic missiles deployed in the world. He stated that the administration has failed to provide congress a hedge strategy if North Korea or Iran continue to develop ICBMs to target the United States He asked witnesses if this is due to the administration's uncertainty about missile defense and the growing threat ("DOD Authorization For Appropriations for FY 2013 and the Future Years Defense Program," 2012).

Senator Inhofe highlighted that potential adversaries' pursuit of advance weapons developments in a manner not seen in decades. In fact, potential adversaries in some cases are catching up or passing the United States with some capabilities. He shared that General Stewart called it the "new normal" and that it bothered him because it seemed as

though any better is not expected. He asked for clarity on what was mean by the "new normal" reference.

Senator Inhofe stated that the first Obama budget in 2009 cut missile defense by $1.4 billion and noted that from 2008 until 2017 has declined by 14 percent even though the threat is increasing. He also noted that the fourth phase of EPAA was a big step for Poland because it would alienate them from Russia. Poland asked for reassurance that the United States would remain firm on this phase can then this was cancelled. He asked a question to gain a better understanding how what else is being done to ensure protection with the cancellation beside adding 14 more GBIs to the existing 30 for the GMD program ("DOD Authorization for appropriations for FY 2017 and the Future Years Defense Program," 2016, p.178).

Senator Inhofe focused on potential missile threats, such as Iran, and is concerned that it may have a long-range ballistic missile capability by 2015. He is a strong supporter of defense, which is supported by how he asked witnesses to share confidence levels that SM-IIA and SM-IIB missiles will be deployed in 2018 and 2020. He shared that the demand for missile defenses by region for the next 10 years will exceed supply and asked if we will have enough Aegis ships to protect Europe from the Iranian threat.

He is very familiar with the specifics of the program. He asked why Aegis ships are carrying around 10 missiles when they are able to carry 2- missiles. He shared that 18 Aegis ships would be needed in European waters and that seven Aegis ships would not suffice. He wants to be sure there are enough Aegis ships to protect Europe from Iranian missiles and enough to address other concerns with Aegis ships globally. He asked if Iran

could have a nuclear weapon and delivery weapon in three to four years and asked if North Korea's ICBM and nuclear capability are a threat to the United States.

He is a strong supporter of defense spending and is concerned that the first budget of the Obama Administration in 2009 reduced missile defense by $1.4 billion. He noted that missile defense spending has declined by 14 percent from 2008 until 2017 even though threats are increasing.

Based on the data collected, it appears that Senator Inhofe aligns with the simple party category of the congressional behavior model. His views generally align with the Republican Party of the time and no personal interests were reveled in the data. He seems to align with neorealism because he wanted to be sure there are enough Aegis ships to protect Europe from the Iranian threat and he is a supporter of increased defense spending. He did not generally communicate trust in other states or highlight the importance of mutual agreements and cooperation. He mainly focused on missile threats and how to support EPAA with funding and program management and implementation.

Senator John McCain (R-AZ)

Senator John McCain's questions and statements about EPAA were related to budget and protecting the United States homeland and allies. Senator McCain highlighted the growing threat from China, North Korea and the Middle East and his concerns as to whether DOD has sufficient resources and asserts to defense the United States and its allies ("Ballistic Missile Defense Policies and Programs," 2010, p. 140). Senator McCain made a point that Aegis, along with other missile defense assets, are not sufficient based on worldwide combatant command needs. He sought clarity about how the DOD and the

budget will seek to fulfill the "stressing demands" of the EPAA and the needs in the Pacific, Middle East and the United States Homeland ("Ballistic Missile Defense Policies and Programs," 2010, p. 140).

Senator McCain's questions and statements about EPAA align with the simple party category of the congressional behavior model. No data were found that supported that he had any personal preferences about the program. Senator McCain's questions and statements about EPAA seem to align with neorealism. He highlighted the Iranian, North Korean, and Chinese missile threats. He asked if DOD has sufficient resources to protect the United States and its allies. This shows he is a supporter of building up defense and spending the money to do so. He said that the United States does not have enough Aegis ships to fulfill all of combatant command needs. He asked how DOD and the budget will address the increasing demand needs in the Pacific, Middle East and the United States homeland. His statements and questions did not include data on mutual agreements or cooperation that are best categorized with neoliberalism.

Senator Jeff Sessions (R-AL)

Senator Sessions' statements and questions about EPAA in hearings mostly focused on planning while briefly mentioning Iran and North Korea. He asked for a general status update on Phase 1 in Europe. He asked when a decision must be made for the placement of a radar in Southern Europe to ensure Phase I is fully deployed by the end of 2011. He cited a GAO report that stated that a management process has not been fully implemented by DOD to link the European Missile Defense acquisition activities and ensure transparency and accountability. He noted that these metrics are crucial to

conduct effective oversight. He asked what tools will be used to ensure accurate planning and execution of the four phases considering each phase is linked to a specific timeframe. He shared that he thinks the schedule for developing and deploying SM-3IIB is overly optimistic and asked how confident witnesses are that SM-3IIB will be delivered by 2020 for Phase 4 of EPAA (DOD Authorization for Appropriations FY 2012 and the Future Years Defense Program, 2011).

Senator Sessions said EPAA created a global framework to address regional uncertainties. He said if it is executed correctly and on time it is flexible with its location and scalable to address missile defense challenges. He cited the BMD review and explained how Phase Four and the SM-3 IIB will improve the defense of the United States homeland. He looks forward to learning more about how the SM-3 IIB will help defend the homeland compared to the previously planned two-stage GBI to protect Europe and the United States from Iran. He noted that if there are any delays with the SM-3 IIB the previously planned two-date GBIs will serve as a contingency ("Part 7: DOD Authorization for Appropriations for FY 2012 and the Future Years Defense Program," 2011).

Senator Sessions asked for more details about the two-stage GMD site in Poland and how long it will be for it to be deployed. He noted that the United States is experiencing severe financial challenges and he is unable to determine that there will not be additional future financial resource cuts ("Part 7: Strategic Force DOD Authorization for Appropriations for FY 2013 and the Future Years Defense Program," 2012). Senator Sessions asked if there are a sufficient number of Aegis-capable ships to address the

North Korean threat and other ballistic threats, such as those in the Middle East ("DOD Authorization for Appropriations for FY 2014 and the Future Years Defense Program," 2013).

Senator Sessions could be categorized as aligning with the simple party category of the congressional behavior model based on the data. The data did not show that he had any personal thoughts or connections to the questions and statements he made about EPAA in hearings. Senator Sessions' statements and questions about EPAA seem to align with neorealism. His statements and questions mostly focused on planning to successfully execute the program and lightly mentioning the North Korean and Iranian missile threats. While he did not blatantly advocate for more defense spending, his questions and statements focused on keeping things on schedule. Thus, there was definitely support to decrease spending on the program or trust other states' intentions. While he did not highlight focus on the North Korean and Iranian missile threats, he clearly viewed them as a threat and did not mention mutual agreements or compromises that could help address the threats.

Senator Joe Donnelly (D-IN)

In a 2015 hearing, Senator Donnelly asked is the Aegis Ashore site in Poland is still expected to be completed in 2018 and asked if Poland wants additional capabilities ("DOD Authorization for Appropriations for FY 2016 and the Future Years Defense Program," 2015). Senator Donnelly noted the high demand for Aegis system which protects deployed troops and allies and partners. He noted that it is important to think about how Aegis will be deployed and train war fighters about how to operate them to

provide protection in today's demanding environment ("DOD Authorization for Appropriations for FY 2016 and the Future Years Defense Program," 2018).

Senator Donnelly cannot be classified with the congressional behavior model. While the data did not show that he has any personal interests or thoughts on this issue, his statements and questions also do not align with the simple party category. His views seem to stray from what policymakers belonging to his party would typically communicate. Most notably, asking if Poland would like additional missile defense capabilities – in essence advocating for more defense infrastructure and spending. Senator Donnelly's statements and questions in hearings about EPAA seem to align with neorealism. It seems as though he supports increasing defense to protect self-interests when he asked if Poland wants additional missile defense capabilities. He also noted that Aegis ships, which is part of EPAA, is in high demand to protect deployed troops, allies and partners. It seems that the he trusts states that cooperate with out EPAA program goals, such as Poland, and supports cooperating with them. However, there is not mention of cooperating with other countries, such as Iran, North Korea, Russia, and China as others have notes.

Senator Carl Levin (D-MI)

Representative Carl Levin's statements and questions related to EPAA focus on the east coast site, planning, protecting allies and the homeland, testing, Russia, China, North Korea and Iran. Representative Levin noted that some have suggested that EPAA reduces the United States security commitment to allies, especially Poland and the Czech Republic, and asked if decisions would be made that diminishes United States

commitments to NATO. Representative Levin asked witnesses if the Joint Chiefs agree that the EPAA is a better and faster way to counter the Iranian missile threat. He also asked if this decision was aimed at Russia in a hostile manner and noted that this is a way to strengthen European security ("The President's Decision on Missile Defense in Europe," 2009).

Senator Levin asked how many more successful flight tests are needed for Aegis to have confidence in the system to perform effectively ("DOD Authorization for Appropriations for FY 2008," 2007). Senator Levin highlighted that the Polish Minister of Defense wrote an article in the Washington Post that placing GMD interceptors and a radar in Europe, which are the components of the EPAA system, "could provoke a spiral of misunderstanding, weaken NATO, and deepen Russian paranoia, and cost the United States some of its last friend on the continent," ("DOD Authorization for Appropriations for FY 2008," 2007, p.161). He then asked if deploying these in Europe as part of EPPA is in the national security interest.

Senator Levin that the timeline at the time to deploy EPAA may happen after Iran develops a long-range missile with foreign assistance, which is about a five-year gap based on calculations at the time. He asked for clarity from witnesses as to whether such a gap exists ("DOD Authorization for Appropriations for FY 2008," 2007). Senator Levin noted that phase four of EPAA is planned to have the capability to defeat future long-ranged Iranian missiles in about 2020. He noted that based on current information, Iran may have this capability in 2015 and there is a five-year gap when planning for this

threat. He asked for witnesses to comment on whether such a gap does in fact exist ("DOD Authorization for Appropriations for FY 2011," 2010).

Senator Levin shared that there has been an increased in the budget request from the previous year of $450 million. One of the key objectives is to deploy phase 1 of the EPAA to provide protection from existing and future Iranian threats to NATO. Senator Levin asked witnesses if EPAA addresses an existing threat and asked for more information about its advantages ("Part 1: DOD Authorization for Appropriations for FY 2012 and the Future Years Defense Program," 2011).

Senator Levin noted that the Joint Chiefs unanimously supported the EPAA to Europe and asked witnesses to explain more as to the military benefits of the EPAA missile defense system. Senator Levin noted that one witness noted in their testimony that it is priority to create a cooperative relationship with Russia because significant opportunities to enhance national security along with some challenges. He asked the witness to explain why such a cooperation is in United States, interest and asked if it would send a strong signal if both the United States and Russia oppose Iran's ballistic missile program ("DOD Authorization for Appropriations For FY 2012 and the Future Years Defense Program," 2011).

Senator Levin that the BMDR states that the policy is to not deploy new missile defense systems until they have been tested so that a realistic evaluation can take place. He asked if the same logic should apply with the EPAA even if that means extending its timeline for deployment ("DOD Authorization for Appropriations for FY 2013 and the Future Years Defense Program," 2012).

Representative Levin seems to align with the simple party category of the congressional behavior model based on the data collected. His statements and questions made in hearings align with the Democratic Party's stance and no information was found to show that he has personal preferences on the issue. Representative Levin made statements and comments that align with neorealism and neoliberalism. Overall, they can be categorized with neoliberalism because of his extensive focus of cooperating with Russia. Representative Levin highlighted the Iranian threat and asked if it can be addressed in faster way other than EPAA. He noted that EPAA will be implemented likely long after Iran develops a long-range missile and asked for clarity about this gap from witnesses, noting Iran will likely have this capability in 2015. This focus on the Iranian threat can be classified and neorealism because it shows that trust is lacking and there was not statement or question made that asked how cooperation and a mutual agreement could be pursued with Iran.

He highlighted how EPAA can enhance cooperation, noting that EPAA is a way to strengthen European security. He asked for clarity as to whether deploying EPAA to Europe is in United States national security interest. These statements can be viewed as neorealism because they support protecting self-interests and investing in defense to protect interests. There is no mention of trusting other states and cooperating with them other that the nations that support EPAA which are NATO allies.

Most of Representative Levin's statements and questions are aligned with neoliberalism. He focuses greatly on the potential value of cooperating with Russia and decreasing their paranoia in regards to missile defense. He asked if the program is being

implemented as a hostile jab aimed at Russia. He cited an article that stated that parts of EPAA can weaken NATO and increase Russian paranoia. He highlighted a statement made by a witness that stated it is a priority to create a cooperative relationship with Russia. This is because opportunities to enhance national security exist. He asked for more information as to why it would be beneficial to cooperate with Russia and asked if it would send a strong signal to Iran and its ballistic missile program.

Even though previous comments seemed like Senator Levin supports increasing defense capabilities to protect self-interests, he noted that there is an increase in the budget request for missile defense of about $450 million compared to the previous year. He asked witnesses to confirm if the program is countering an existing threat and how the program is beneficial. He noted that the BMDR states that realistic testing and evaluation be conducted before a new system is deployed. He noted that this should be the case for EPAA even if it means an extended timeline or delay to deploy.

Senator Joseph I. Lieberman (D-CT)

Senator Joseph I. Lieberman's questions and statements about EPAA focused on the Iranian missile threat. He stated that he is disappointed by the president's decision to scrap phase four of the EPAA which was the Polish-Czech ground-based midcourse defense. He is concerned that this means that the United States, Europe, and the Middle East will not have adequate defense from an ICBM long range missile that is launched from Iran.

He mentioned recent intelligence that stated that Iran's short-range and medium-range missile programs are have made more development progress than we initially

thought. To Senator Lieberman, this suggests that Iran's ICBM program may be reached sooner that the current estimate of 2015 as well. He cited a Congressional Budget Office Report that shows a map of how silo-based GBIs in Poland would protect the United States. He said that some people may view this as redundant, but it is common practice to build redundancies in systems to avoid single points of failure. While he is grateful for the GBI sites in California and Alaska that provide protection, the Polish site would have provided an opportunity to knock an ICBM off its past first, before even reaching the other systems which would have a second shot at protecting the homeland ("The President's Decision on Missile Defense in Europe," 2009).

It is difficult to align Senator Lieberman's statements and questions in hearings about EPAA with a congressional behavior model category. While no personal interests were uncovered from the data so he cannot align with the asymmetric or preference models, he also does not align with the simple party category. The statements and questions he made in hearings about EPAA do not align with what is typically communicated by the Democratic Party on this issue. In fact, his questions and statements align best with the Republican Party. Thus, the congressional behavior model is not applicable for this senator.

Senator Lieberman's statements and questions in hearings about EPAA can be categorized as neorealism. He highlighted the missile threat from Iran. He noted that analyses have found that the Iranian missile program is more mature that initially thought and Iran may reach this ability before 2015. He explicitly stated his disappointment that the President Obama decided to cancel phase four of the program, which was a ground-

based midcourse defense site in Poland and Czechoslovakia. In his view, this means that the U.S, Europe, and the Missile East will not have the defense needed to protect an ICBM launched from Iran.

He cited a Congressional Budget Office Report to show how phase four of the EPAA would have included GBIs in Poland that would protect the United States from an Iranian long-range missile. He said that some people may view such a system in Poland as redundant, but noted that redundancies are needed to prevent single points of failure. The Polish site would have allowed for the ability to potentially knock down a long-range missile from Iran before reaching the other missile defense systems in the United States, adding an additional layer of protection.

Considering that Senator Lieberman is aligned to the Democratic Party, it is a bit surprising to see that his statements and questions in hearings about EPAA align more with the Republican Party. Very few Democrats explicitly state their disappointment with President Obama's cancellation of phase four of the EPAA but he seemed to have no problem doing so.

Senator Bill Nelson (D-FL)

Senator Nelson noted a new law that requires the DOD to place a priority on missile defenses in regards to development, testing, fielding and improving missile defense capabilities, including the Aegis system. He has how the DOD plans to implement this requirement and what changes have been made to comply with this new law ("DOD Authorization for Appropriations for FY 2008," 2007).

Senator Nelson noted how one of the successes of the Aegis BMD program with its SM-III interceptor for EPAA is that is a collaborative program with the United States Navy. He asked if enough of the interceptors are being purchased to develop the system to its full potential. According to the joint capability mix study twice the number of SDM-3 missiles need to be purchased than currently planned. He asked if the additional interceptors are necessary to have additional procurement. He also asked witnesses to confirm that the system will have greater capability with the SM-3 after it has improved hardware and software to allow launching and engaging remote sensor tracks ("Part 7: DOD Authorization for Appropriations for FY 2009," 2008).

Senator Nelson shared that some view EPAA as a system or architecture with fixed assets and capabilities. However, in the BMDR EPAA is described more as a strategy or an approach that a specific system or architecture. He asked for witnesses to clarify if EPAA is a missile defense approach or a specific system architecture. He noted that DOD developed EPAA as a regional policy approach for missile defense in Europe and not a specific acquisition program and asked why it appears that GAO is evaluating EPAA as though it is a new major defense acquisition program ("Part 7: DOD Authorization for Appropriations for FY 2012 and the Future Years Defense Program," 2008).

Senator Nelson mentioned how DOD plans to deploy a new variant of the SM-3, the Block IIB missile, on land in 2020 as part of Phase 4 in EPAA. The interceptor is intended to defense Europe against medium-, intermediate-, and long-range missiles and to supplement the existing GMD system in the United States, which protects against

ICBMs from North Korea and Iran. He noted that there is not a design for the new interceptor and that MDA just started developing the technology needed for the missile. He asked what the confidence level is for this new missile to be deployed in 2020 considering these factors ("Part 7: DOD Authorization for Appropriations for FY 2012 and the Future Years Defense Program," 2008).

Senator Nelson noted that the Aegis BMD program is the most mature when it comes to development and operational sustainability and the Aegis Ashore program planned for deployment in Europe is based on this existing program. He asked witnesses why GAO believes the Aegis Ashore program still has a degree of developmental risk considering these positive factors. He also noted that recent discussions have stated how important the forward-deployed AN/TPY-2 radar is for Phase 1 of EPAA. He noted that the radar would also improve the GMD system in the United States and asked witnesses for more details about how this radar would supplement the current system. ("Part 7: DOD Authorization for Appropriations for FY 2012 and the Future Years Defense Program," 2008).

Senator Nelson noted that in November 2010 NATO decided to adopt missile defense of NATO Europe as a core mission at the Lisbon Summit. This decision included expanding them missile defense command and control system endorsed the United States plan for EPAA, and invited Russia to cooperate with NATO on missile defense. He asked witnesses for their perspective on the significance of this decision and how it could benefit Europe's security ("Part 7" DOD Authorization for Appropriations for FY 2012 and Future Years Defense Program," 2011).

Senator Nelson explained how SM-3 Block IIB interceptor for Phase 4 of the EPAA is planned for deployment at the Aegis Ashore sites in Romania and Poland to intercept potential future long-range Iranian missile. He asked if the missile could be made safe for deployment on ships and, if it could, would that significantly enhance missile defense capabilities. He also asked witnesses if they would support having SM-3 Block IIB deployed at sea from a warfighter's perspective. He also asked about how the forward-based X-band radar (designated AN/TPY-2) in Turkey as part of Phase of EPAA protects Europe against ballistic missiles from Iran while also helping the United States homeland defense ("Part 7: Strategic Forces DOD Authorization for Appropriations for FY 2013 and the Future Years Defense Program," 2012).

Senator Nelson's statements and questions about EPAA are difficult to categorize with the congressional behavior model. No data were collected that revealed he has personal preferences or interests on this topic. At the same time, he does not align well with the simple party category. He strays away from his political party when he advocates for more defense infrastructure and spending as was done when he brought attention to the need to purchase more missiles and inquired about having missiles on ships for additional warfighter options. However, he also highlighted how NATO's commitment to missile defense included inviting Russia to cooperate on this issue. It can be concluded that he cannot align with one of the categories of the Congressional Behavior Model because he has no personal preferences nor does he align with the general view of his political party on this issue.

It seems as though Senator Nelson's statements and questions about EPAA in hearings align with both neorealism and neoliberalism. When he advocates for more defense infrastructure, such as buying more missiles and equipping missiles on ships, that very much aligns with neorealism and the protection of self-interests. However, the act that he highlights that NATO invited Russia to cooperate on missile defense really aligns with neoliberalism which trusts other states' intentions and promotes compromises and mutual agreements.

Senator Jeanne Shaheen (D-NH)

Senator Jeanne Shaheen's questions and statements about EPAA focus on planning, specifically for the AN/TPY-2 radar. Senator Shaheen stated that deployment of AN/TPY-2 radars play a valuable role in ensuring EPAA's success and fulfilling combatant commanders' missile defense needs across the globe. She asked if DOD is planning a multi-year procurement for the radar and for background logic about that decision, including if cost savings would result from such an approach. She also asked a witness if the current radar development plans are adequate to meet COCOM and EPAA needs ("DOD Authorization For Appropriations For FY 2012 and the Future Years Defense Program," 2011).

Senator Shaheen seems to align with the simple party model of the congressional behavior model. She does not share any personal interests about EPAA in hearings and generally aligns with the Democratic Party at the time. Senator Shaheen was most concerned for planning and procuring the radar to ensure EPAA's effectiveness. She seems to align with neorealism because she is focused on spending and planning more

and does not mention anything about pursuing mutual cooperation or agreements to combat missile threats.

Case Study #2: Ground-Based Midcourse Defense

This section includes thick descriptions of SASC and HASC members' views on the GMD. Figure 3 is high-level overview of the HASC and SASC members that are included in the GMD portion of this study. Figure 4 provides an overview of how the members have been categorized based on the theoretical models of this study. Appendix C features a matrix that includes SASC and HASC members' main points and perspectives on GMD in a more digestible manner.

Representative Rob Bishop (R-UT)

Representative Bob Bishop's questions and statements about GMD focused on planning. He noted that there has yet to make a commitment to a program to sustain ICBMs until 2030. He also stated that it seemed to him that the DOD may decide to produce additional GBIs in response to the evolving threat landscape, assuming the industrial base exists to do so. He has some doubt that the private sector will exist to be able to produce additional GBIs because long-term planning has not been done to keep them in business. ("Budget Request From the DOD," 2010).

Representative Bishop appears to align with the simple party category of the congressional behavior model. He makes no mention of any personal preferences for his viewpoints and his perspective aligns with the Republican Party stance. He seems to best align with neorealism because he supports expanding defense capabilities when highlighting the importance of sustaining ICBMs past 2030 and that he thinks DOD will

produce additional GBIs. He expressed concerns that the industrial base will be available to produce what is needed for GMD because long-term planning is lacking. There was no mention of trusting other states or working with them to compromise or create a mutual agreement. All statements and questions focused on sustaining GMD and ensuring long-term planning occurs so that the industrial base exists so that necessary components can be produced.

Representative Jim Bridenstine (R-OK)

Representative Jim Bridenstine's statements and questions about GMD focus on improving the system. He mentioned that there have been tests of GMD in the past that have been successful and unsuccessful. He noted that when an unsuccessful test occurs, some use that as an example that the system does not work and that people do not say there has been an accomplishment when a successful test occurs. Representative Bridenstine stated that this needs to stop happening and that the United States needs to continue to advance this system.

He asked a witness how important it is to have a robust Research and Development capability an infrastructure for missile defense to conduct testing and validation. He stated that these capabilities need to be funded, but that the United States does not want to fund them if people highlight the failed test and scrap the whole system ("Adapting United States Missile Defense For Future Threats: Russia, China And Modernizing The National Missile Defense Act," 2014). He asked witnesses for confirmation that testing will be prioritized for GMD and asked for clarification as to

what is being prioritized for testing in the future. ("FY 2016 National Defense Authorization Budget Request for Missile Defense Programs," 2015).

Representative Bridenstine appears to align with the simple party category of the congressional behavior model. His viewpoints align with the Republican Party and makes no mention of personal interests on this subject. His statements and questions about GMD in hearings seem to align with neorealism. He supports increase defense spending and enhancing military capabilities, especially when it comes to testing and validating the system. He did not mention anything in regards to compromising or creating mutual cooperation agreements with other nations. He is simply focused on getting the system the funding it needs so it can improve and be effective.

Representative Mo Brooks (R-AL)

Representative Mo Brooks' questions and statements about GMD focus on an East Coast site, improving the system, and North Korea. He explained that GMD in Alaska and California is the missile defense system that protects the United States from a long-range ballistic missile attack. He asked if the American people should be confident in the system's ability to protect the country. He also asked witnesses if the United States is protected with the GMD sites in Alaska and California and if they have any opinion about needing additional facilities or capabilities on the East Coast. He also noted that North Korea is advancing their capabilities and maybe the number of missiles they have. He asked witnesses if North Korea will be ahead of the game in two years ("FY 2018 Priorities and Posture of Missile Defeat Programs and Activities," 2017).

Representative Brooks seems to best align with the simple party category of the congressional behavior model. The data that was collected included no mention if personal interests or preferences on this issue. Representative Brooks seems to align with neorealism. He highlights that North Korea is an increasing threat because it is advancing its capabilities. He also highlighted the benefits of the system which is to protect the United States from an ICBM and inquired about the need for an East Coast missile defense site. There was no mention of cooperating with other countries or forming cooperative agreements. His focus was solely on the advancing missile threat and highlighting the benefits of the system.

Representative Mike Coffman (R-CO)

Representative Mike Coffman's questions and statements about GMD include a potential East Coast site, improving the system, and North Korea. Representative Coffman asked witnesses how an East Coast sensor would enhance the GMD system ("FY 2016 National Defense Authorization Budget Request for Missile Defense Programs," 2015). He asked a witness to provide a vision of what enhancements and improvements should be made to GMD to defend against future threats and ensure the system is reliable into the 2030s. He also asked a witness how the changing of funding and support has affected GMD in the past and asked how the GMD program being formally endorsed by Congress would help with his future plans.

Representative Coffman noted that 44 GBIs will be added to GMD by 2017 to fulfill OSD policy and protect from the increasing ballistic missile threat to the United States homeland. He asked for an update on MDA meeting this requirement and asked if

additional funding would help meet this deadline. Representative also noted that the sensors that support GMD are ground-based radars with the addition of the Sea Based X-Band Radar (SBX). He asked what the limitations are for sea-based and land-based radars and asked what kind of benefits a space-based sensor would provide. He also cited a MDA report about testing and noted that the GMD GBI EKV may benefit from such testing. He asked how MDA plans to incorporate this type of testing and how it plans to fund it or justify why no such plans have been made by the agency.

North Korea is of particular concern to Representative Coffman. He expressed concerns about North Korea's progress with long-range missile development. He asked witnesses if there is any possibility to improving GMD to defend against ICBM threats. He also asked witnesses if they are comfortable with the speed of GMD improvements taking into consideration the threats to the United States homeland ("FY 2016 National Defense Authorization Budget Request For Missile Defense Programs," 2015).

Representative Coffman seems to best align with the simple party category of the congressional behavior model. The data that was collected indicated no personal preferences on this topic and his questions and statements generally align with the Republican Party at the time. Representative Coffman seems to align with neorealism. He is concerned with outside threats to the country, especially North Korea. He advocates for increased defense spending and infrastructure as he wants to ensure that GMD is impactful into the 2030s. There is no mention of cooperating or trusting other nations. His focus is on enhancing the system to protect the homeland from long-range threats.

Representative Trent Franks (R-AZ)

Representative Trent Franks' questions and statements related to GMD include improving GMD and North Korea. He asked witnesses if there is another system besides GMD that can protect the United States from long-range threats ("The Future of Missile Defense Testing," 2009). He asked what studies have been conducted to determine the force structure requirements for GMD and associated radars and sensors ("Budget Request for National Security Space and Missile Defense Programs," 2009).

He noted that the 2010 budget has some challenging decisions to make when it comes to missile defense programs. He said that we need to invest in these programs now to stay ahead of missile threats. He noted that it was important to turn GMD on when North Korea began fielding missiles. He asked what will be next for the Missile Defense Agency after all programs fielded, referring to EPAA, THAAD, and GMD. He considers these investment programs that need to be funded now to ensure future protection ("Future Roles and Missions of the Missile Defense Agency," 2009).

Representative Franks made a statement about how kill vehicles are related to discrimination for missile defenses. He asked witnesses if there is any kind of agreements on improving the kill assessment capability for the system. He asked how feasible it is to leverage current kill capabilities, what kind of new capabilities are required, and if it is possible for the United States to enhance the kill capability by the end of this decade ("Budget Request for Missile Defense Programs," 2013).

Representative Franks asked for the timeframe as to when GMD has operational spares to ensure there are 44 GBIs at all times. He asked what needs to be done so that 44 total GBIs are in place in calendar year 2018 and asked when GBIs will be bought to add

to the existing inventory ("FY 2018 Priorities and Posture of Missile Defeat Programs and Activities," 2017).

Representative Franks seems to align with the simple party category of the congressional behavior model. His viewpoints align with his political party and does not mention any personal reasons for his position. Representative Franks seems to align with neorealism. He highlights the North Korean threats and notes how GMD protects the homeland. He is an advocate for defense spending and enhancing defense infrastructure, such as ensuring adequate GBI spares and improving the kill vehicle, because he wants to invest in the system to ensure it can protect the homeland in the future.

Representative Duncan Hunter (R-CA)

Representative Duncan Hunter's questions and statements about GMD in hearings focus on improving the system. He mentioned that $21 million was requested for a new radar in Hawaii to support BMD. He also asked if the SM-3 IIB has been examined to potentially protect against the North Korean threat ("FY 2018 Priorities and Posture of Missile Defeat Programs and Activities," 2017). Representative Hunter seems to align with the simple party category of the congressional behavior model. The data shows no personal preferences on this topic and his inquiries generally align with the Republican Party at the time.

Representative Hunter seems to align with neorealism. He highlights the need for more defense spending and infrastructure to ensure the United States has protection against missile threats. He also inquires if a particular missile may also be able to protect against the North Korean threat. Representative Hunter does not mention cooperating

with other states to create mutual agreements or anything of the sort. He is solely focused on the missile threat and what is occurring with the system to improve it and protect the United States homeland from missile threats.

Representative Doug Lamborn (R-CO)

Representative Doug Lamborn's questions and statements about GMD focus on the budget, a potential East Coast site, improving the system, Iran and North Korea. He questioned whether enough testing is scheduled for the GMD system. He noted that it is his understanding that only two tests are scheduled over the next two years ("Budget Requests From the United States Southern Command and United States Northern Command," 2010). He noted that GMD is supposed to have an expected lifetime of 20 years and asked how many flight tests are required each year to ensure the reliability of this system into the future. He also mentioned that Missile Defense Agency documents state that 14 GBIs will be available for testing. He asked witnesses if they believe the MDA has planned and budgeted enough GBIs to support development and testing to enhance reliability of the system. He also asked a witness if the United States should continue to develop and test the two-stage GBI to hedge against a potential Iranian threat, for example ("Report On The BMDR And The FY 2011 National Defense Authorization Budget Request For Missile Defense Programs," 2010).

He mentioned how the presidential administration reduced the number of GBIs from 44 to 30 for GMD in 2009 because the threat was slower to evolve as previously expected. He noted that since that decision was made, North Korea and Iran have made great developments with their long-range missile programs. He asked witnesses at what

point would they reevaluate the number of GBIs. In other words, asking for clarity as to what would need to happen to reconsider the GBI number ("The Status of the United States Strategic Forces," 2010)

He highlighted that GMD is the only missile defense system that protects the United States homeland and that the president's budget includes a $1.65 billion cut for GMD. He asked witnesses If they are committed to adequate resourcing of GMD in the future and highlighted how Secretary Gates depended on the information from the system in 2006 when a warning shared potential launch activity of a long-range ballistic missile from North Korea ("The Future Of National Defense And The United States Military Ten Years After 9/11: Perspectives Of Secretary Of Defense Leon Panetta And Chairman Of The Joint Chiefs Of Staff General Martin Dempsey," 2011). He asked witnesses to share more details about the Iranian missile threat and our ability to deal with such a threat without a missile defense site on the East Coast ("FY 2018 Priorities and Posture of Missile Defeat Programs and Activities," 2017).

Representative Lamborn aligns with the simple party category of the congressional behavior model. The data did not reflect that he had any particular preferences on this topic and his statements and questions in hearings generally align with the Republican Party at the time. Representative Lamborn's questions and statements about GMD in hearings seems to align with neorealism. He advocates for defense spending and infrastructure by focusing a lot on testing the GMD system and if there are enough GBIs to support all the testing required. He also highlighted the missile threats from North Korea and Iran. Representative Lamborn spent a lot of time

supporting improvements with this system to protect the United States and its allies. He did not mention cooperating or creating mutual agreements with other nations as a possibility.

Representative Mike Rogers (R-AL)

Representative Mike Rogers' questions and statements in hearings about GMD focus on the budget, improving the system, Iran, and North Korea. He supports additional funding for the GMD program to redesign a new kill vehicle and enhance discrimination capabilities. He asked for clarity as to why the budget is being cut for FY 2015 and cited the various program elements that the Obama Administration cancelled, including the Multiple Kill Vehicle and Kinetic Energy interceptor. He noted the president did not test GMD for five years and reduced the missile defense budget from $9.4 billion to $7.8 billion in one year. Before sequestration, the president cut more than $3.7 billion out of the Missile Defense Agency budget. He noted that the president claims there are no funds lest to create an East Coast site to protect the homeland from Iranian ballistic missiles which the Intelligence Community cautioned could reach maturity by 2015. He noted that the FY 15 budget request proposal is the lowest since the Clinton Administration's FY 2001 budget, before the United States withdrew from the ABM Treaty.

Representative Rogers said that the president could propose the policies he wants but Congress funds him. He made it very clear that he will not support the president's policies because "weakness is a choice." He made it clear that he supports "peace through strength" ("FY 2015 National Defense Authorization Budget Request for Missile Defense Programs, 2014," p.2).

Representative Rogers noted that President Obama decreased the number of deployed GBIs from 44 to 30, reduced the GMD budget in half and terminated the kill vehicle modernization programs like MKV. He asked if it is any wonder why the system has experienced difficulty as result. He also asked Ambassador Joseph to provide the facts about whether the GMD system was rushed into development without testing, as some witnesses claimed ("Adapting United States Missile Defense For Future Threats: Russia, China And Modernizing The National Missile Defense Act," 2014).

Representative Rogers noted that the intelligence community has consistently concluded that Iran will have ICBM capability in 2015 and asked if the United States is still operating based on that analysis. He asked what more we can do to prepare against such a threat ("FY 2016 National Defense Authorization Budget Request For Missile Defense Programs," 2015).

Representative Rogers' statements and questions about GMS can best be aligned with the simple party category of the congressional behavior model. This is because they align with the Republican Party perspectives of the time and no personal preferences were uncovered from the data collected in this study. Representative Rogers seems to align with neorealism. He supports additional defense funding to redesign the new kill vehicle and enhance discrimination capabilities for GMD. He highlighted the period where the system was not tested for five years and the budget decreased funding to support the system's advancement. He clearly advocated for "peace through strength" and said "weakness is a choice" ("FY 2015 National Defense Authorization Budget Request for Missile Defense Programs, 2014," p.2). Representative Rogers did not show

that he has any trust in other countries or desired to cooperate with other states. His focus is to enhance GMD and provide the funding to support the system's ability to protect the homeland from missile threats.

Representative Mike Turner (R-OH)

Representative Mike Turner's questions and statements about GMD in hearings focus on the budget, improving the system and North Korea. He said he was perplexed by the DOD's decision to deploy only 30 GBIs instead of 44, reduce the program by 35 percent, and curb its development. He said he has seen no analysis or force structure requirements that supports such a decision or a decrease of threat in an assessment from the intelligence communities. He noted the disconnect between Secretary Gates' commitment to robustly fund research and development for GMD and the MDA's budget overview which states it intends to curtail GMD development. He said MDA's budget overview calls for more rigorous testing, which he agrees with, but has not seen any additional test plans for FY 2010. He also asked why an increase for other missile defense systems mean that less investment must be made in GMD ("Budget Request for National Security Space and Missile Defense Programs," 2009).

He said he is deeply concerned about GMD because of the back to back test failures questions the effectiveness and reliability of the system. He noted that the GMD budget has significantly decreased over the years and cited numerous examples of how the program has been defunded. He shared that GMD must be a priority to avoid additional setbacks. He highlighted that GMD is the only system that protect the United

States homeland from long-range ballistic missile attacks and it is critical to get it right ("Budget Request for Missile Defense Programs," 2011).

Representative Turner noted in 2012 that when the President decided to cut $3.2 billion from the missile defense budget, the United States lost six GBI silos in Alaska along with other missile defense equipment. He noted that the President's missile defense policy must be re-evaluated to ensure that national missile defense is adequately funded. ("FY 2013 National Defense Authorization Budget Request for Missile Defense," 2012).

Representative Turner asked a witness if they agree with Secretary Gates' statement that North Korea's development of long-range missiles and potential road-mobile ICBM that North Korea is becoming a direct threat to the United States. Dr. Roberts agreed. Representative Turner also asked questions about North Korea's road mobile ICBM capability to help determine if the United States has enough GBIs to support such a capability. Throughout this hearing Representative Turner was highlighting how President Obama was deploying EPAA free of charge and yet other missile defense systems need funding to enhance them, including GMD ("FY 2013 National Defense Authorization Budget Request for Missile Defense," 2012).

Representative Turner's questions and statements about GMD in hearing best align with the simple party category of the congressional behavior model. His remarks generally aligned with the Republican Party at the time and no data were found to show that he has personal preferences on this topic. Representative Turner seems to align with neorealism. He is an advocate for increased defense spending and multiple times expressed disagreement with the program's decrease in funding. He supports expanding

defense capabilities, noting that testing of the system is critical to ensure reliability, highlighting that GMD is the only system that protects the United States from long-range missile attacks. He did not mention cooperating with other nations or creating mutual agreements. He was focused on expressing the need for more funding to enhance the system.

Senator Tom Cotton (R-AR)

Senator Tom Cotton's questions and statements about GMD in hearings focus on improving the system and North Korea. He asked a witness about intercepting a missile in its boost phase. He shared that he is a major supporter of the technology because boost phase missiles are "big and…hot so easy to detect, and most importantly they're over the bad guys' territory, not over ours." However, he asked a witness to confirm that boost phase defenses are not suitable for the missile threats from Russia and China because these are large countries and can position their missiles far inland. He said boot phase defenses may be more suitable for North Korea and maybe Iran, but not for Russia or China ("DOD Authorization for Appropriations for FY 2019 and the Future Years Defense Program," 2018, pp. 117).

Senator Cotton's statements and questions about GMD best align with the simple party category of the congressional behavior model. They generally align with the Republican Party views of the time and no personal preferences were found from the data collected. Senator Cotton's perspectives on GMD seem to align with neorealism. He is a supporter of advancing defense capabilities, mentioning that he is a supporter of enhancing the capability to destroy a missile in its boost phase before it is launched.

There was no mention of how to cooperate or compromise with other nations to address thus threat. Statements and questions focused on enhancing capabilities to confront and address the threat to protect self-interests.

Senator Deb Fischer (R-NE)

Senator Deb Fischer's statements and questions about GMD focus on the budget and North Korea. She highlighted that the presidential administration increased the FY 2018 budget for missile defense to almost $4 billion. This supports adding an additional 20 interceptors by 2023 and the missile defense budget support continues in the FY 2018 request with an almost 25 percent increase for the Missile Defense Agency.

Senator Fischer highlighted the fact that it is important to stay ahead of evolving threats and noted that the main threat to the United States homeland is North Korea, but it only represents a portion of the general missile threat. To support this logic, she cited a report from the National Air and Space Intelligence Center which noted that Russia has the largest force of ballistic missile and China has the most active and diverse ballistic missile development program in the world. Senator Fischer also asked General Robinson if the budget helps address the most pressing threat from North Korea ("DOD Authorization for Appropriations for FY 2019 and the Future Years Defense Program," 2018).

Senator Fischer's statements and questions about GMD in hearings seems to align with the simple party category of the congressional behavior model. They generally align with the Republican Party during that time and no personal preferences were uncovered from the data collected. Senator Fischer's perspectives on GMD seem to align with

neorealism. She highlighted and supported the financial increase of support for the missile defense budget and noted that it is critical to stay ahead of evolving threats in this space, specifically mentioning North Korea, Russia, and China. The emphasis placed on staying ahead of threats shows how it is critical to her for the United States to protect its own interests. There was no mention of potential mutual agreements or compromises that could be made with the nations that pose as evolving threats. The focus was on enhancing capabilities to stay ahead of them with a competition mindset.

Senator James M. Inhofe (R-OK)

Senator James Inhofe's questions and statements about GMD focus on improving the system, Iran, and North Korea. Senator Inhofe mentioned the challenges with the EKV on the GMD system. He said it has long been a source of concern and there will likely be more challenges with the EKV even after the most recent issues is hopefully resolved. He noted that the EKV was never intended to be the permanent kill vehicle for the GMD and the current EKV is heavier, less capable, and less reliable than it should be. However, since the MKV program was cancelled in 2009, the system must operate with the existing EKV for the foreseeable future. He noted that a new kill vehicle is under development for the SM-3 IIB for the EPAA program and asked if the Missile Defense agency has thought about potentially leveraging the kill vehicle to under for GMD as well ("DOD Authorization for Appropriations for FY 2013 and The Future Years Defense Program," 2012).

He asked if a GMD site on the east coast or in Europe provide a better defense from an incoming missile from Iran. He noted that the presidential administration has

failed to create a hedge strategy if North Korea or Iran continue to develop their ICBM capabilities. He asked for more of an explanation as to why this is and how the administration views the threats ("DOD Authorization for Appropriations for FY 2013 and The Future Years Defense Program," 2012).

Senator Inhofe's questions and statements about GMD align with the simple party category of the congressional behavior model. They are generally in line with the views of the Republican Party at the time. Also, no data were collected to show that he has personal preferences on this matter. Senator Inhofe's perspectives on GMD seem to align with neorealism. He demonstrated that he supports defense spending and enhancing defense capabilities by mentioning how the EKV needs to be enhanced and expressing interest in building an East Coast missile defense site enhance protection of the United States homeland from an Iranian ICBM. He also highlighted the missile threats from North Korea and Iran, noting that the president has not addressed how to ensure these countries do not continue to develop their ICBM capabilities. The questions and statements demonstrate a competitive mindset, one that is interested in protecting self-interests and the homeland. There was no mention of how to create dialogue, mutual agreements, or compromises with the countries that serves as missile threats.

Senator John McCain (R-AZ)

Senator John McCain's statements and questions about GMD focus on the budget, improving the system, Iran and North Korea. He noted that a robust missile defense it critical to the United States' security. He relayed concerns about the President's FY 2010 budget that reduces funding for GMD by almost $800 million which protects the United

States from ballistic missiles from rogue nations and accidental launches, which the previous presidential administration deemed necessary. He said he wanted to learn more about how a 30% reduction of GBIs, which means reducing GBIs from 44 to 30, will affect the protection of the homeland from evolving threats, noting that North Korea and Iran are not reducing funding to develop missile capabilities that potentially could hit the United States He asked questions about the force structure requirements for GMD and whether United States Northern Command provided any formal assessment to the number of GBIs required to protect the United States ("DOD Authorization for Appropriations for FY 2010," 2009).

Senator McCain cited a news article about how Iran and North Korea are working together to develop ballistic missiles and have made great progress. Senator McCain said he was alarmed and asked what other countries North Koreans are working with. He mentioned that North Korea was working with Syria on a facility that Israelis bombed. He asked for clarity about North Korea's continued development of missile technology and how it has been accelerating in a short period of time an asked if it is a threat to the United States homeland. He made statement that while it is impossible to predict future North Korean behavior, the United States should at least be on the safe side and be prepared to counter a bad or worst-case scenario ("DOD Authorization for Appropriations for FY 2010," 2009).

He stated that a lot of attention has been received about the budget proposal to decrease the total number of GBIs for GMD from 44 to 40. He asked what analysis was conducted to make that decision and asked if that decision will be revisited based on

relevant actions from Iran and North Korea. He also asked of modernization and sustainment of GBIs and the testing of a two-stage GBI remains a priority for DOD. He also asked if there will still be dedication to improving GBIs if technical advancements with the SM-3 do not come to fruition ("DOD Authorization for Appropriations for FY 2011," 2010). Senator McCain noted that the delivery of complete EKVs were paused by MDA due to a second consecutive test failure of the GBI. He asked for the current status of GMD and asked for what is necessary to improve existing issues ("DOD Authorization for Appropriations for FY 2012," 2011).

Senator McCain cited recent press reports about how Iran launched a rocket and space capsule into orbit and asked how advances in Iran's space program influence its ICBM development program. He asked witnesses to what extent North Korea and Iran pose a threat to the United States based on the forecast that North Korea would achieve development of an ICBM within five years. He referenced an unclassified DOD report about Iran that stated Iran could probably develop and text an ICBM capable of reaching the United States by 2015 with foreign assistance. He cited that it is well known that Iran and North Korea help each other and asked witnessed if the estimate for Iran's timeline needs to consider North Korea's advances as well ("DOD Authorization for Appropriations for FY 2012 and the Future Years Defense Program," 2011).

Senator McCain's questions and statements about GMD align with the simple party category of the congressional behavior model. They generally align with the views of the Republican Party at the time and no data were collected to demonstrate that he had personal preferences on this issue. Senator McCain's perspective on GMD seem to align

with neorealism. He expressed concern about the decreased missile defense budget, noting that less GBIs will not sufficiently protect the United States from North Korean and Iranian missile threats. He also noted that Iran and North Korea are working together to develop ballistic missile capabilities and provided several examples of how they are threats. These suspicious statements show a lack of trust in other nations and there was no mention of dialogue with these countries or the potential to create a mutual agreement with them to eliminate the missile threat issue.

Senator Jeff Sessions (R-AL)

Senator Jeff Sessions' questions and statements about GMD in hearings focus on the budget, a potential east coast site, improving the system, Iran, and North Korea. Senator Sessions shared that a provision was put in place for FY 2008 to provide greater clarity for MDA missile defense programs. However, it was not intended to delay the fielding of GMD and other missile defense systems. He asked how the provision has impacted the pace of development, testing and fielding of GMD and other systems. He also cited two successful tests in September 2006 and in fall 2007 and asked how this would inform the operational reliability of the system. He noted that the NDAA for FY 2008 requires more than 40 GBIs to be installed at Fort Greely in Alaska ("DOD Authorization for Appropriations for FY 2009," 2008).

Senator Sessions observed that there has been a $1.2 billion cut for missile defense which is about 15 percent of the missile defense budget. He asked for confirmation that GMD will experience a $700 million reduction from previous budget plans. He noted specific efforts that have been eliminated or been placed on hold plus the

reduction of 44 to 30 interceptors and expressed his concern. At the same time, it is expected that GMD improve over time and it has been shared that GBIs production will not be capped and the GBIs will continue to be produced, upgraded, and tested to ensure operational readiness. He shared that the North Korean threat is increasing based on witness testimony and the budget for MDA seem to contradict these points. He asked for more context about the disconnect between the idea of continuing the development and improving the system with massive budget reduction ("DOD Authorization for Appropriations for FY 2010," 2009).

He noted that the president's budget request last year included cutting back on deployed GBIs from 44 to 30 and curtailing future modernization. This year, however, it seems that the budget request remains dedicated to improving the GMD system, including purchasing additional GBIs for testing and stockpile reliability. He asked for support for a robust modernization GMD program to keep pace with the evolving threat ("DOD Authorization for Appropriations for FY 2011," 2010).

He noted that MDA has a Stockpile Reliability Program to ensure GMD reliability over its service life, but there appears to be little emphasis on actual flight testing with an emphasis on ground tests and inspections and modeling and simulations to assess GBI reliability. He noted that MDA has concluded that three flight tests over 12 years is sufficient to maintain system reliability. He asked if the COCOM responsible for missile attack on the homeland was asked for their opinion on this program. He asked witnesses if they agree that only three GBIs are needed between 2019 and 2032 to conduct flight testing to ensure GBI and GMD reliability. He asked witnesses if they will

be sure enough flight testing to ensure reliability for GBIs and the GMD system as a whole is planned ("DOD Authorization for Appropriations for FY 2011," 2010).

Senator Sessions stated that he has supported the focus on GMD for a while since it is the only system responsible for protecting the United States from a missile attack. He stated that the budget continues to deprive this program of the financial support it needs to refine the system. He said that without the proper financial resources GMD will not success and the two recently failed tests serve as reminders that more needs to be done to ensure the program improves over time. He said that he is confident that difficulties the program is experiencing will resolve over time. He cited a GAO report that stated that DOD still lacks the information it needs about GMD's capability and limitation and that DOD has shifted its focus to improving its knowledge about GMD capabilities and improving integration. Senator Sessions wants to be sure that we are not getting ahead of ourselves and suggested the potential need to evaluate assumptions and conclusions. He shared that 20 GBIs are in silos currently and asked witnesses if they believe are capable of defeating incoming missile likely received from Iran or North Korea ("DOD Authorization for Appropriations for FY 2012 and the Future Years Defense Program," 2011).

Senator Sessions asked if the budget provides enough financial resources to keep the program on track and solve identified failures. He noted that about $40 billion more has been spent on GMD that expected and that the program needs to proceed when so much has been invested. He pointed out that the two-stage testing and the production of GBIs is being paused now but those will add more costs in the future. He applauded the

efficiencies that have been found for the program and noted that the program will hit the budget more than expected because of the identified test failures ("DOD Authorization for Appropriations for FY 2012 and the Future Years Defense Program," 2011).

He noted that the recent competition for the GMD contract demonstrated how this process can save taxpayer dollars. The new contract is estimated to save about 20 percent compared to the contract it replaces and provides five more GBIs. He asked whether the new contract is a firm fixed price contract. He also asked if long term sustainment of GMD and flight tests may require additional GBIs ("DOD Authorization for Appropriations for FY 2013 and the Future Years Defense Program," 2012).

Senator Sessions that it has been a year and a half since the last failed flight test and the problems remained unfixed. He seeks to understand how MDA plans to achieve success with GMD quickly while also pursuing the modernization efforts that have been delayed since 2010. He said that a lot of financial resources have been spent on this program and success must be achieved. He said that North Korea reminded us a few weeks ago that diplomacy will not change their intent to develop a missile capable of reaching the United States. He highlighted that GMD is the only system capable of protecting the United States from ballistic missiles and bringing it back to full capability must be the highest priority ("DOD Authorization for Appropriations for FY 2013 and the Future Years Defense Program," 2012).

He noted that the MKV program was cancelled in 2009 and was supposed to be the successor of the CE-II kill vehicle. He asked if the GMD modernization strategy includes place to upgrade or replace current EKVs with new ones ("DOD Authorization

for Appropriations for FY 2013 and the Future Years Defense Program," 2012). He noted that SBX plays a critical role in supporting the shoot-look-shoot capability for GMD and asked for confirmation this is true. He asked what has changed to support the early retirement of SBX ("DOD Authorization for Appropriations for FY 2013 and the Future Years Defense Program," 2012).

He noted that Iran has demonstrated an early ICBM capability by launching satellites into space and that it appears it is ear to acquire a nuclear capability. Senator Sessions asked a witness if Iran poses a direct threat to the United States. Senator Sessions also noted that the SM-3 bloc IIB program of the EPAA was terminated, which means that the United States homeland will not be as protected against missile threats from the Middle East as envisioned by the two previous presidents. Senator Sessions also asked if the Standard Missile could possibly play a role with protecting the U.S, homeland, as initially intended with the IIB variant Senator Sessions asked if this means that an additional missile defense site should be built in the United States ("DOD Authorization for Appropriations for FY 2014 and the Future Years Defense Program," 2013).

He asked about the technical and operational advantages of a third missile defense site along with how much such a system would cost and approximately how long it would take to build. He also asked if he would deploy the current GBI or a two-stage version of the GBI at such a third site. Senator Sessions also noted that the additional 14 GBIs in Alaska are meant to address the North Korean threat. He asked whether the United States would have enough missiles for protection if Iran and North Korea collude

("DOD Authorization for Appropriations for FY 2014 and the Future Years Defense Program," 2013).

He also asked what the timeline is to provide the new kill vehicle for the GBI, how much it will cost, and whether the timeline will keep up with the growing missile threat. Senator Session also asked if there is funding in the FY 2014 request for the new kill vehicle and whether the feasibility of placing more than one kill vehicle on the GBI will be examined. Senator Sessions also asked for a summary of missile defense deployments to protect the United States homeland, troops, and allies against the North Korean threat. He specifically asked what missile defense assets were activated in the region and in the United States to protect against the North Korean threat. Senator Sessions asked whether there is confident that if North Korea were to launch a missile capable of reaching the United States that the missile could be destroyed in flight ("DOD Authorization for Appropriations for FY 2014 and the Future Years Defense Program," 2013).

Senator Sessions noted that the Secretary Defense announced last year to deploy 14 more GBIs in Alaska and deploy a second AN/TPY2 radar in Japan to provide enhanced early warning of a missile threat, especially from North Korea. He said he believed that this highlights the long-range missile threat faced by the United States homeland and that the threat is increasing faster than expected ("DOD Authorization for Appropriations for FY 2015 and the Future Years Defense Program," 2014).

He explained that this year's budget includes various projects to enhance GMD: a RKV for the GBIs, a new long-range discrimination radar deployed in Alaska, and

software improvements to enhance threat discrimination. He applauded these steps and said they will likely save taxpayer dollars in the future. He shared that if we can further improve the discrimination capability to determine real from false threats, fewer launches will be used to defend the homeland. MDA expects to spend about $700 million over the next five years to design a new EKV and he said this is long overdue ("DOD Authorization for Appropriations for FY 2015 and the Future Years Defense Program," 2014).

Senator Sessions asked if improving the reliability of the current EKV or improving performance is the focus at the moment. He asked if the redesigned kill vehicle (RKV) will be more capable. He asked if there are plans to develop a MKV where more than one EKV is placed on top of a GBI. He asked what other steps are being taken by MDA to improve GMD other than the RKV. He also noted that the presidential administration was surprise by the threat from North Korea which led to the March 2013 decisions to add 14 GBIs in Alaska which the DOD cancelled in 2009. He asked how we would know if the administration will not be surprised by Iran in the same manner ("DOD Authorization for Appropriations for FY 2015 and the Future Years Defense Program," 2014).

Senator Sessions highlighted Russia's and China's aggressiveness and that it is important we do not send a signal that we are not modernizing or using the strategic triad. He also asked what kind of ICBM threat would prompt the presidential administration to make a deployment decision for a third GMD site. Senator Sessions asked what stakes can be taken to decrease the time to field a third GMD site in the United States ("DOD

Authorization for Appropriations for FY 2015 and the Future Years Defense Program," 2014).

Senator Sessions noted Russia's and China's aggressiveness and stated that the United States does not need to send a signal that it is unwilling to modernize. He noted that China has a growing nuclear arsenal and asked if nuclear reductions should be done on a trilateral basis ("DOD Authorization for Appropriations for FY 2015 and the Future Years Defense Program," 2014). Senator Sessions noted that the United States began initial operations for GMD 10 years ago and that it provides a good measure of protection from limited ICBM threats, especially from rogue nations like North Korea and potentially Iran ("DOD Authorization for Appropriations for FY 2016 and the Future Years Defense Program," 2015).

Senator Sessions highlighted the key developments to the GMD system. These include increasing GBIs from 30 to 44, enhancing the sensor network, retrofit GBIS with high performance RKV, and revolutionize GBIs with a multi kill vehicle. He noted that the Missile Defense Agency requires to sufficient funding to make this possible. He also noted that China has a growing nuclear arsenal. He also asked the Deputy Assistant Secretary of Defense, Nuclear and Missile Defense Policy, DOD, what kind of ICBM threat from Iran would necessitate a third GBI site. He asked questions about the RKV to understand how to enhance accuracy to identify nontargets more accurately and be more effective ("DOD Authorization for Appropriations for FY 2016 and the Future Years Defense Program," 2015).

Senator Sessions' statements and questions about GMD align with the simple party category of the congressional behavior model. They align with the Republican Party's stances of the time and no data showed that he has personal preferences on the matter. Senator Sessions' perspectives on GMD seem to align with neorealism. He supports increased spending for GMD capabilities, such as enhancing the EKV, purchasing more than 40 GBIs, and more tests are needed to improve the overall system. He is very vocal about hoe he is concerned about the decreased missile defense budget because financial resources are needed to improve the overall system from missile threats. He explicitly noted that he views Iran, North Korea, Russia, and China as threats. Senator Sessions seems to support protecting United States self-interests and shows no interest in having a dialogue or creating mutual agreements with the countries he views as missile threats. His statements and comments are very much focused on missile threats, increased spending needed to improve the system, and concern that the missile defense budget is being decreased.

Senator Dan Sullivan (R-AK)

Senator Dan Sullivan's questions and statements about GMD in hearings focus on the budget, improving the system, and North Korea. He mentioned a list of items that the GMD system needs in the near- and long-term. He asked for witnesses to prioritize the following items: 44 GBIs, LRDR, new two-stage GBI Boosters, East Coast LRDR-type radar, new EKVs, system upgrades at Fort Greely, "left of launch" capabilities, and an east coast missile defense site ("DOD Authorization for Appropriations for FY 2017 and the Future Years Defense Program," 2016).

Senator Sullivan asked how space-based sensors would benefit the missile defense system, how they would help with a layered and integrated defense related to GBIs and other components of the missile defense system. He said he believes that there is a need for a stronger layered missile defense needed today and it does not currently exist. He asked how critical space sensors are in this regard ("DOD Authorization for Appropriations for FY 2018 and the Future Years Defense Program," 2017).

He cited the test conducted by North Korea over the past weekend and noted that it is not a question of if but when North Korea will have the ability to target the United States, not just Hawaii and Alaska but the lower 48 states. He said he thinks more should be done to protect the United States, such as if North Korea launches a certain number of missiles, then there is a 99 percent chance of shooting them sown and the United States will retaliate ("DOD Authorization for Appropriations for FY 2018 and the Future Years Defense Program," 2017).

Senator Sullivan aligns with the simple party category of the congressional behavior model. His statements and questions generally align with the Republican Party at the time and the data collected did not show any personal preferences on this topic. Senator Sullivan's perspectives on GMD align with neorealism. He supports enhancing existing missile defense system capabilities, highlighting the need for a stronger layered missile defense systems and potential benefits of space-based sensors to provide the system with additional data points. He specifically noted the North Korean missile threat and said the United States will retaliate if North Korea successfully launched a missile attack on the United States These statements are of a competition and conflict mindset.

Senator Sullivan seems to be placing United States self-interests as priority and does not mention communication or potentially compromising with North Korea or other countries viewed as missile threats.

Senator Mark Udall (R-CO)

Senator Mark Udall's questions and statements in hearings about GMD focus on improving the system, protecting the homeland, and North Korea. Senator Udall asked witnesses to confirm that the GMD system protects the entire United States, including the East Coast, from missile threats originating from Iran and North Korea. He said he wanted this clarified for the record because there seems to be some confusion about GMD's capability to protect the entire homeland on Capitol Hill. Senator Udall mentioned how the Defense Intelligence Director at the time said the Iranians are acting to develop an ICBM and that weaponizing the missile is another challenge that would require additional time ("DOD Authorization for Appropriations for FY 2015 and the Future Years Defense Program," 2014).

Senator Udall noted that there has not been a successful intercept test with the GMD system since 2008 and have had failures with the early a most recent model of deployed EKVs. He highlighted that it is MDA's highest near-term priority to conduct a successful and realistic intercept test this summer to demonstrate the corrections that have been made to the system ("DOD Authorization for Appropriations for FY 2015 and the Future Years Defense Program," 2014).

He noted that there have been several challenges with the currently deployed EKV because rigorous design, engineering an acquisition practices were not followed.

The budget includes funds to create a RKV that is reliable and robust and he wants to confirm with witnesses that the new EKV demonstrates that it works before it is deployed, which is also known as "fly-before-you-buy." He wanted MDA to confirm that additional GBIs will not be built or deployed until after successful flight tests results occur and asked witnesses for their perspectives on this approach. Senator Udall noted that GAO has been an advocate for the "fly-before-you-buy" approach and has warned that deploying parts of a system before they are completely developed and tested could take more time and financial funds than using a rigorous acquisition approach in the first place ("DOD Authorization for Appropriations for FY 2015 and the Future Years Defense Program," 2014).

Senator Udall noted that about three years have been spent trying to fix the currently deployed EKVs for GMD and have conducted several expensive flight tests that were planned and unplanned to do so. He noted one failed test, FTG–07, in July that occurred because the Capability Enhancement (CE)-I EKV failed to separate from its booster and hit the incoming target. He asked witnesses for the cause of this failure and how it is planned to be resolved and whether the same test should be conducted to demonstrate it has been resolved. He asked what factors are critical to creating a fully rigorous EKV redesign acquisition program to make sure that the same problems do not occur as currently experienced by the prototype EKV design that is deployed ("DOD Authorization for Appropriations for FY 2015 and the Future Years Defense Program," 2014).

He noted that improving the sensor discrimination capability is more of a priority investment than building an additional east coast site. He noted that the budget request includes funds to enhance the discrimination capability and asked witnesses to explain why this capability is so important to improve the existing system to improve the United States homeland. He asked for a rough estimate as to how much it will cost to try and fix these problems after they have been deployed, including the additional flight tests. He said that he imagines it to be over $1 billion and asked if a "fly-before-you-buy" approach would have avoided these additional costs ("DOD Authorization for Appropriations for FY 2015 and the Future Years Defense Program," 2014).

He noted that the some have advocated for GMD tests to occur at a faster pace to help accelerate system development. He asked witnesses for more details about what variables are involved in the pace of testing and whether they think it should be accelerated or if testing should occur as currently planned. He also asked for clarity as to what has been put in place currently to move forward with system development ("DOD Authorization for Appropriations for FY 2015 and the Future Years Defense Program," 2014).

Senator Udall's statements and questions about GMD in hearings seem to align with the simple party category of the congressional behavior model. His views generally align with the Republican Party of the time and the data did not reveal any personal interests related to GMD. Senator Udall seems to align with neorealism. He highlighted the Iranian ICBM threat and supports more realistic testing of the system to enhance its accuracy and defensive capabilities. He highlighted that the current EKV should be

replaced by a modernized RKV and that improving the sensor discrimination capability of the EKV should be more of a priority than creating an additional east coast site to protect the homeland from ICBMs. This means he indirectly supports additional funding because financial resources are needed to support more rigorous testing. He did not mention any form of cooperation or mutual agreements on this topic. His questions and statements solely focused on how to improve the system and enhance defensive capabilities against ICBMs.

Senator David Vitter (R-LA)

Senator David Vitter's statements and questions in hearings about GMD focus on modernizing the system. He said there is a need to continuously improve GMD but the MDA budget does not include a budget for modernization. He noted how missile threats from North Korea and Iran are constantly in the news and enforces the need for United States to continue investing an adequate missile defense system. He cited a May 15 quote from the Secretary of Defense stating that as North Korea's missile capabilities becoming more "sophisticated," so does the need for a more "sophisticated" defense for the United States homeland and GBIs need to improve over time to enhance as a result. He asked what plans DoD has to modernize the system and asked why the MDA does not have a budget request to pursue modernization of GMD ("DOD Authorization for Appropriations for FY 2010," 2009).

Senator Vitter appears to align with the simple party category of the congressional behavior model. His views generally align with the Republican Party at the time and no data were collected that demonstrated he has personal preferences on this issue. It seems

that Senator Vitter aligns with neorealism. He noted that there is a need to continuously improve GMD, including the GBIs, and highlighted that MDA needs the budget to do so. He expressed concern that MDA has not budgeted to modernize GMD and asked for clarification for the reasoning. Her also highlighted the North Korean and Iranian missile threats, stating that United States defense capabilities needs to be enhanced as their missile capabilities improve. Because Senator Vitter supports improving GMD, it shows that he supports spending financial resources to enhance defense capabilities to prepare from the Iranian and North Korean missile threats. He has a desire to gain clarity on why MDA has not included GMD modernization in its budget. He did not express any interest in cooperation with other countries or mutual agreements. He was very much focused on why funds have not been allocated to improve the system.

Representative Robert Andrews (D-NJ)

Representative Robert Andrews' statements and questions about GMD focus on improving the system. He noted that flight testing of the GMD was said to not have a high-level of confidence in a report and said it sounds like GMD is a C-minus or D-plus. He said that it appears that GMD testing did not go through the same rigor and scrutiny typically found in testing. He asked questions to witnesses to get their perspective on how GMD has not been tested in a traditional manner compared to other systems, such as Aegis for the EPAA. He also mentioned that there is a laundry list of things that need to be done to improve the system and asked about the timeline to complete them and increase confidence in the system ("The Future of Missile Defense Testing," 2009).

Representative Andrews appears to align with the simple party category of the congressional behavior model. His questions and statements generally align with the Democratic Party at the time and the data collected did not reveal personal preferences. Representative Andrews seems to align with neorealism. He noted that there is not a high level of confidence for the GMD system and that it has lacked the rigorous testing that is usually done. He said there is a "laundry list" of things that need to be done to improve the system and asked for clarity about a timeline to increase confidence in the system. While he did not explicitly highlight missile threats or support expanding and increasing funds for defense capabilities, he did imply support for these efforts. To plan and execute the type of rigorous testing to increase confidence as he desires, additional funding is needed to support improvements. By improving the confidence of the system, defense capabilities are enhanced because they would better protect against ICBM. Representative Andrews did not mention cooperating with other countries or forming mutual agreements. He was solely focused on improving the system and conducting realistic testing to enhance confidence of the system.

Representative Jim Cooper (D-TN)

Representative Jim Cooper's questions and statements in hearings about GMD focused on improving the system. He asked what needs to be achieved to reach complete confidence in the GBIs before deploying an additional 14 GBIs. He wanted to specifically understand what flight or intercept tests need to be successful and what capabilities must be demonstrated in these tests to reach full confidence and to improve reliability for the warfighter. He also asked for specific details comparing kill vehicles

that would be placed on new GBIs and the related costs. He also asked for the logic that supports the deployment of 14 additional GBIs and how that specific number was reached ("Budget Request for Missile Defense Programs," 2013).

He noted in 2014 that the last three tests of the GBIs of GMD have failed. However, he said that this does not mean it is a failed program because when work first began on missiles many tests failed and then were resolved over time. He hopes that this will be the case for GBIs as well. He stressed that the United States should "fly before it buys" to save taxpayer dollars and noted that the GAO supports this (FY 2015 National Defense Authorization Budget Request for Missile Defense Programs, 2014).

Representative Cooper seems to seems to align with the simple party category of the congressional behavior model. His stance generally aligns with the Democratic Party of the time and the data collected did not reveal any personal preferences for GMD. Representative Cooper appears to align with neorealism. He did not highlight any missile threats but he did want specifics as to what needs to be done to increase confidence in the system before adding 14 more GBIs. He asked for the reasoning behind adding 14 GBIs to the system and sought more information as to how that decision was reached. He also was seeking more information to fully understand what intercept tests need to be conducted to increase confidence in the system and improve the reliability for warfighters. He asked for a comparison of kill vehicles and the related costs and noted that failed test does not necessarily mean a failed system. He noted that many failed missile system tests have occurred and issues were resolved in the past. Representative cooper's questions and statements about GMD were focused on information seeking to

reach full confidence in the system. He did not explicitly state that he supports expanding defense capabilities or supports increasing spending to expand defense capabilities, but these are implied because they are required to achieve full confidence in the system. He did not mention any form of mutual agreements, cooperation, or compromises with other articles. He was solely focused on getting more information to better understand what needs to be done to improve the system.

Representative Colleen Hanabusa (D-HI)

Representative Colleen Hanabusa's questions and statements about GMD focus on testing and improving the system. She asked how long the radar in Hawaii will be built if it were to be funded in the 2018 NDAA. She asked for clarity as to whether the GMD sites in Alaska and California support the defense of Hawaii. She also noted that some think the best location for GBI is in Hawaii but asked witnesses to confirm that the existing locations in Alaska and California are actually the best places to defend Hawaii. She also asked for the specific location of interception for a recent test of GMD and asked if the test that was conducted followed the same route as North Korea would likely take ("FY 2018 Priorities and Posture of Missile Defeat Programs and Activities," 2017).

Representative Hanabusa appears to align with the simple party category of the congressional behavior model. Her views on GMD generally align with the Democratic Party at the time and the data did not reveal any personal preferences related to this system. Representative Hanabusa seems to align with neorealism. She asked if the GMD sites in Alaska and California protect Hawaii and noted that some have suggested that Hawaii is a good location for GBIs. This leads one to believe that she supports increased

defense spending and expanding defense capabilities in her state because both are required to make this happen. She also sought clarity on a recent flight test that was conducted and asked if the testing was realistic and similar to a potential path a potential North Korean may take when aiming to attack the United States. This shows that she is concerned about the missile threat, especially from North Korea. She did not mention any cooperation or mutual agreements with other actors. She sought clarity on how effective the current GMD site are, whether a recent test was realistic, and quickly noting that some support Hawaii as a good place for another GMD site.

Representative James R. Langevin (D-RI)

Representative James R. Langevin's questions and statements about GMD in hearings focus on the budget, improving the system, and Iran. He asked a witness to confirm that the guidance in the BMDR is contingent on whether North Korea and/or Iran develop long-range missiles. He asked why the DOD completed 14 GMD silos in Missile Field 2 at Ft. Greeley, Alaska when the plan the previous year was to stop construction. He asked if there was a specific development that led to this decision to continue. He also asked for witnesses to explain the level of confidence they have for GMD, citing a report that said that the system has limited capability against a simple threat ("Report On The BMDR And The FY 2011 National Defense Authorization Budget Request For Missile Defense Programs," 2010).

Representative asked witnesses what exactly needs to be achieved, including specific intercept tests and demonstrated capabilities to attain "complete confidence" in GBIs, a prerequisite by the Secretary of Defense before 14 additional GBIs are deployed.

He asked if the 14 additional GBIs will be deployed with the new CE-II kill vehicle and if it is still estimated that they will be deployed in 2017 ("NDAA for FY 2014," 2013).

Representative Langevin seems to align with the simple party category of the congressional behavior model. His views generally align with the Democratic Party at the time and the data revealed no personal preferences on this topic. Representative Langevin's questions and statements about GMD in hearings seem to align with neorealism. He sought clarity about what specifically needs to be achieved to increase confidence in the system and highlighted a report that stated that GMD has limited operational confidence. While he did not explicitly support increasing defense spending and expanding capabilities, these are implied because they are required to achieve his goal of increasing the confidence of GMD. There was no mention of compromises or mutual agreements with other actors. There was a sole focus on what needs to be done to enhance the confidence of the system.

Representative Loretta Sanchez (D-CA)

Representative Loretta Sanchez noted that GMD explained that many are interested in improving the system and the issue is not that it has not been funded. She noted that some believe the system in place may be a "façade" and that it is not able to protect us from incoming long-range missiles ("The Future of Missile Defense Testing," 2009, p.27). She noted that many in Congress are supportive to continue testing to figure out how to make it work. She asked a witness how concerned we should be given North Korea's recent activity and the system's level of confidence ("The Future of Missile Defense Testing," 2009).

Representative Sanchez noted that the GMD system has about a 45 percent test success rate and that the causes of recent test failures need to be determined and resolved before buying additional expensive interceptors. She asked questions about delaying intercepts tests and if there is sufficient funding in the next FY budget to accommodate this delay ("FY 2013 National Defense Authorization Budget Request for Missile Defense," 2012). Representative Sanchez submitted various post-hearing questions for witnesses to answer, including whether they think President Obama chose to spend more on regional missile defense instead of national missile defense for FY 2013, whether they agree to limit GBIs to 30 per Secretary Gates' recommendation, and others (FY 2013 National Defense authorization Budget Request for Missile Defense, 2012).

Representative Sanchez cited a 2012 National Research Council report that concluded that GMD is deficient based on six principles of a cost-effective system. She then asked witnesses why the presidential administration is recommending purchasing 14 more GBIs when the report found the current system so lacking. She mentioned that Secretary Hagel said a prerequisite to purchasing 14 additional GBIs is that tests must be successfully conducted. She asked for more clarity as to what capabilities must be demonstrated in testing to meet this requirement ("Budget Request for Missile Defense Programs," 2013).

Representative Sanchez said she understood the cost of an East Coast site to be $4 billion, not counting manning and Army costs. She asked a witness if we should begin construction of such a site and asked what his priorities are to strengthen the defenses of the East Coast. She also asked what improvements should be made to the system left of

launch ("FY 2016 National Defense Authorization Budget Request For Missile Defense Programs," 2015).

Representative Sanchez appears to align with the simple party category of the congressional behavior model. Her views generally align with the Democratic Party at the time and no personal preferences about GMD were discovered from the data. Representative Sanchez sees to align with neorealism. She sought clarity as to how concerned the United States should be given North Korea's missile activity and what needs to be done to increase confidence of the system. She stated that enough funding has been provided to improve the system and at the same time supports resolving test failures before purchasing GBIs. Conducting and resolving test failures of the system requires time and financial resources. Whether one thinks that enough funding has been provided or not does not really matter because the results are showing that more financial resources are needed. It is difficult to be against providing financial resources and for improving the system – the two are dependent on each other. She also demonstrated interest in expanding defensive capabilities by asking more about capabilities "left of launch," meaning identifying and destroying a missile before it has been launched from a location. There was no mention of mutual agreements or compromises with any other actors. She focused on the North Korean threat, claims funding provided to date has been sufficient, desire to enhance the system's confidence and is interested in new capabilities to destroy a missile before it has been launched.

Representative Ellen Tauscher (D-CA)

Representative Ellen O. Tauscher, chairwoman of the Strategic Forces Subcommittee at the time, highlighted that GMD testing does not support high confidence in the system and aimed to obtain clarity from witnesses as to what can be done to enhance the effectiveness of the system. She also noted that the system was not able to be tested by the Missile Defense Agency in 2008 due to technical challenges and noted that the situation must improve. Representative Tauscher explained that expanding the GMD system into Europe cannot move forward without more testing first. She submitted several questions about testing the GMD system post-hearing, inquiring about specific steps needed to increase confidence of the system, how testing can be revised, what multi-mission events have been introduced during testing, such as cybersecurity threats, among others ("The Future of Missile Defense Testing," 2009).

Representative Tauscher appears to align with the simple party category of the congressional behavior model. The data revealed no personal preferences on this matter and her views generally align with the Democratic Party at the time. Representative Tauscher seems to align with neorealism. She sought clarity as to what specifically needs to be achieved to enhance the system. She also is a big supporter of testing the system more because current testing foes not demonstrate a high confidence of GMD. She did not explicitly support more financial resources for the program or expanding defensive capabilities, but these are both involved to make more testing a reality and to increase the confidence of the system. There was no mention of mutual cooperation or agreements with other actors. The statements and questions focused on what needs to support more testing and enhance the system.

Senator Evan Bayh (D-IN)

Senator Evan Bayh's questions and statements about GMD in hearings focus on the budget, North Korea, and Iran. He asked if thee 44 GBIs being reduced to 30 is due to the limited budget or by an honest assessment of what is needed. He noted that taxpayers should not be asked to pay more than what is necessary for a system that works ("Ballistic Missile Defense Programs," 2009).

Senator Bayh highlighted that the purpose of congressional hearings is to inform members of the committee and also educate the American public. He asked if North Korea could hit Hawaii or Alaska with the current missile technology that it possesses. He specifically asked witnesses when they think they would be able to have the capability to reach the west of coast of the United States. He reiterated the witnesses' responses which was three to five years to produce the missile technology and asked how long it will take North Korea to develop the warhead that could be placed on the missile. He also asked witnesses to confirm that Iran currently has missile that could hit a large amount of Europe. He also asked what the confidence of percentage rate for the system if a rogue missile threat was incoming, such as North Korea. He repeated the wittiness' response to the question which was 99% ("Ballistic Missile Defense Programs," 2009).

Senator Bayh seems to align with the simple party category of the congressional behavior model. His views generally align with the political party of the time and the data collected did not reveal any personal preferences on this matter. Senator Bayh appears to align with neorealism. He sought clarity on North Korea's missile capabilities, such as approximately when they will achieve the capability to place a warhead on a missile. This

shows that he is concerned about this threat and is also conducting due diligence to ensure he understands the threat. He also asked for confirmation about Iran's capability to launch a missile at Europe. This also demonstrated concern for the Iranian missile threat and seeking to thoroughly understand the threat. There was no mention of mutual cooperation or agreements with other actors in the data that was collected. Senator Bayh really honed in on better understanding the missile threats from North Korea and Iran.

Senator Mark Begich (D-AK)

Senator Mark Begich's statements and questions about GMD in hearings focused on the budget, improving the system, and North Korea. He noted that reliability for the system has improved over time and that the 90% confidence rate is not bad. He also noted that the confidence rate will likely further increase with additional testing ("Ballistic Missile Defense Programs," 2009).

He noted that we have spent approximately $20 billion on the GMD system to date. He shared an observation that since the 1998 budget was announced for the system about 40% of North Korea's launches have taken place since. He said it may be a coincidence or it may be another risk factor that needs to be accounted for. He noted that there are three fields for GMD. Field one is completed with six silos and field three has 20. When the missiles for field three need to be placed, those 20 missile silos would need to be shut down. He asked what the risk level is at that point since there will only be six silos in Alaska in field one and four in California that can protect the country from an incoming threat. He noted that the grand total of missile may be 30 but maintenance occurs at these sites and multiple sites exist to have redundancy to support this. He asked

witnesses to comment on the logic he shared ("Ballistic Missile Defense Programs," 2009).

Senator Begich asked how it was determined that 30 missiles are sufficient to protect the United States when the risk of North Koreas is unknown. He noted that North Korea is unpredictable and protecting against a threat that is unknown is quite difficult ("Ballistic Missile Defense Programs," 2009). He asked witnesses if the resources of the current budget are sufficient to progress with the system or if other resources will be used for this purpose. He noted that the presidential administration decided to decrease the number of deployed interceptors from 44 to 30 the previous year. He noted that Phase Four of EPAA was also cancelled and it is important to GMD because it was supposed to augment the existing GMD system. Because of this cancellation, he noted that the missile deployed in Alaska and California are the only United States defenses against an ICBM. He asked for clarity as how the FY 2011 budget and the BDM review provide defense with 30 operational interceptors ("Ballistic Missile Defense Policies and Programs," 2010).

Senator Begich appears to align with the simple party category of the congressional behavior model. His views generally align with the Democratic Party at the time and the data did not reveal any personal preferences on this matter. Senator Begich seems to align with neorealism. He noted that GMD's confidence rating is about 90% and stated that is not that bad considering it will only improve with testing. He noted that redundancy is critical for GMD to support operation during scheduled maintenance when some parts of the system need to be shutdown. He highlighted the North Korean missile

threat and noted that it is difficult to protect the United States and its allies from an unpredictable threat. He expressed concern that Phase four of EPAA was cancelled which was supposed to augment GMD. This point is critical because not many Democrats at the time openly criticized the Obama Administration doing so. He noted that GMD is the only defense system to protect the United States from an ICBM. It seems that Senator Begich supports increasing defense spending and expanding defense capabilities considering all the statements and questions he made about GMD. He did not explicitly state such support but it can be inferred because they are required to address the concerns and points he shared.

Senator Joe Donnelly (D-IN)

Senator Joe Donnelly's statements and questions about GMD focus on improving the system and Iran. He asked witnesses how improving GMD sensors will enhance discrimination capabilities to address evolving threats. He asked about Iran's ICBM capability and asked for more information. He also asked if the intent is to fix challenges with the GMD system and then conduct more tests before building or deploying GBI interceptors. He also brought up a Defense Intelligence Assessment of Iran's ICBM capability and asked for more information about it ("DOD Authorization for Appropriations for FY 2016 and the Future Years Defense Program," 2015).

Senator Donnelly noted that there is an attempt to accelerate the development and deployment of Redesigned Kill Vehicle (RKV) and asks how risks are being addressed with the program ("DOD Authorization for Appropriations for FY 2019 and the Future Years Defense Program," 2018).

Senator Donnelly seems to align with the simple party category of the congressional behavior model. His views generally align with the Democratic Party of the time and he did not express any personal interests on this matter. His perspectives seems to align with neorealism because is focused on enhancing the system to counter the Iranian threat. That implies that more money and time are needed to enhance the system. He also is a supporter of the RKV which is a specific example pf an improvement he seeks. He did not mention cooperation or creating mutual agreements with other nations. He seemed to solely focus on how to advance the system to counter the missile threat.

Senator Kristen E. Gillibrand (D-NY)

Senator Kristen Gillibrand's questions and statements about GMD focus on a potential east coast site. She noted how an east coast terminal for GMD will significantly increase the security for the United States by improving the defense of the east coast from a potential incoming missile from North Korea or Iran. She said that it is her understanding that Fort Drum in New York is under consideration as the site for such a terminal. She asked for more information about why this additional site is sought and for more details about how Fort Drum may be a good location for the data terminal. She also asked how this potential third site would align with planned enhancements for the system ("DOD Authorization for Appropriations for FY 2012 and the Future Years Defense Program," 2011).

Senator Gillibrand appears to align with the asymmetric category of the congressional behavior model. While her views generally align with the Democratic Party at the time, she clearly has some personal interests on the topic by stating that Fort

Drum in New York may be a good location for an East Coast missile defense site. Senator Gillibrand appears to align with neorealism. She supports a new third site on the East Coast to enhance protection from an ICBM launched by Iran or North Korea. This implies she supports increasing defense spending and expanding defense capabilities when it comes to GMD because both are necessary to address the threats she highlighted and to create a third GMD site in her state. There was no mention of compromises or mutual cooperation with other actors. She was solely focused on how to enhance the United States protection against an ICBM from Iran or North Korea and highlighting the fact that her states is a good location for a third GMD site.

Senator Carl Levin (D-MI)

Senator Carl Levin's questions and statements about GMD focus on budget, improving the system, Iran, North Korea and Russia. He noted that the GMD test last September was a success, but there were also some technical issues with the GBI that caused a four-month delay until the next test of the system. He asked a witness to describe the technical issues and status of the corrections for them. Senator Levin also noted that the Polish Minister of Defense Radek Sikorski wrote in the Washington Post that the United States' proposal to place GMD interceptors and a radar in Europe could create a misunderstanding with Russian, weaken NATO and increase Russia's paranoia. He asked Mr. Green is it is in the United States' national security interest to deploy these missiles and radar. Senator Levin asked how many more successful flight tests are needed for GMD to have confidence in the system to preform effectively ("DOD Authorization for Appropriations for FY 2008," 2007).

Senator Levin notes that the presidential administration's budget request continues the production of the 14 remaining GBIs that are now on contract for use as testing and backup interceptors. The budget request includes $180 million for a production of those GBIs in four years as part of a five-year contract It also caps the total number of GBIs at 30. He asked if the witnesses support this approach. He asked what the cost would be for 44 GBIs if Congress were to mandate that number. He also asked if the budget request allows for the purchase of additional GBIs if deemed necessary in the future ("DOD Authorization for Appropriations for FY 2010," 2009).

Senator Levin noted how the EPAA will counter future Iranian threats, including long-range missiles that could reach the United States, and will also augment GMD currently located in Alaska and California ("The President's Decision on Missile Defense in Europe," 2009). Senator Levin noticed there is a difference in opinion between witnesses and a DOT&E report. The report said that here is a high level of confidence from flight testing to date that demonstrates that GMD could knock an incoming missile from North Korea off its path while witnesses said there is a high degree of possibility the system can do so. He asked how one would explain this difference in opinion ("DOD Authorization for Appropriations for FY 2010," 2009).

Senator Levin brought up the topic about potential United States-Russia cooperation ion missile defense. He asked if there is any advantage to the United States in doing so. He sued the example of whether obtaining data from a Russian radar in such a cooperation would be beneficial to the United States He asked if it would be a powerful

signal to Iran if the United States and Russia were to cooperate on a joint missile defense ("The President's Decision on Missile Defense in Europe," 2009).

Senator Levin highlighted that the GMD system in Alaska and California was capped at 30 operational GBIs and significant improvements in their reliability were to be made. He asked witnesses if 30 operational GBIs would provide an effective defense against the ICBM threat from North Korea and Iran. He noted a recent flight test in January that failed to achieve an intercept and he sked for more details as to the reason that occurred. He asked witnessed to confirm that the current GMD system that is deployed has the ability to defend the United States from an Iranian long-range missile threat. He also asked for witnesses to describe the current capability of the system and what is planned for future upgrades. He noted that the AN/TPY-2 radar that is being deployed as part of EPAA Phase 1 will enhance the capability of the GMD system to defend against a potential future threat from Iran. He asked for more details about how the system will be enhanced by this radar ("DOD Authorization for appropriations for FY 2011," 2010).

Senator Levin noted that production of EKVs was stopped because they have been experiencing some challenges. He said that he agrees with stopping production until issues have been resolved before it is produced and deployed. In the past, this has not been done with missile defense ("DOD Authorization for appropriations for FY 2012 and the Future Years Defense Program," 2011).

Senator Levin noted that the GMD Development and Sustainment Contract costs about $1 billion less than the government cost estimate. The cost of each GBI was also

reduced by about $20 million below the previous contract cost. He asked how such savings was achieved and if future savings will be sought after in future MDA contracts. He noted that several years previously there was discussion after some contractor failures to include a defense clause in MDA contracts. This intent of this is to protect taxpayers from paying for defective work. He said the new GMD Development Sustainment contract includes such a clause and asked who would pay for the defective work if it were to occur ("DOD Authorization for Appropriations for FY 2013 and the Future Years Defense Program," 2012).

Senator Levin appears to align with the simple party category of the congressional behavior model. His views generally align with the Democratic Party at the time and the data did not reveal any personal preferences on this matter. Senator Levin seems to align with neorealism. Her sought clarity with statements and questions in hearings about how many more flight tests are needed to increase confidence of the GMD system. He also asked witnesses if the budget allows for more GBIs to be purchased if deemed necessary. This implies that he supports increasing defense spending and expanding defensive capabilities because both are needed to increase confidence of GMD and allow for some wiggle room to purchase additional GBIs if needed. There was no mention of mutual cooperation or agreements. He was focused on how to improve the confidence of GMD and allowing for the purchase of more GBIs if the threat environment determines that is required.

Senator Bill Nelson (D-FL)

Senator Bill Nelson's comments and questions about GMD focus on the budget, a potential east coast site, improving the system, and Iran. Senator Nelson said if Iran wanted to strike targets in Europe, it likely would focus on regional missiles instead of ICBMs. He asked if an east coast missile defense site would be effective in defending Europe against an Iranian medium-range or intermediate-range missiles performance ("DOD Authorization for Appropriations for FY 2007," 2006).

Senator Nelson explained how models and simulations are used in testing to predict the performance of a system. He asked if there have been instances in the models used for the GMD program where they did not correctly predict the performance of the system. Senator Nelson asked if GMD would provide coverage of the United States against a potential future Iranian ICBM threat. Senator Nelson noted a new law that requires the DOD to place a priority on missile defenses in regards to development, testing, fielding and improving missile defense capabilities, including the GMD system. He asked how the DOD plans to implement this requirement and what changes have been made to comply with this new law. Senator Nelson explained how the GMD system plans to shoot down incoming missiles by shooting two GBIs at a target. He reasoned that since that is how it is supposed to work it would be important to include that real-life scenario in testing to demonstrate that capability – he asked witness if they agree with this logic. Senator Nelson explained how the GMD system is designed to defeat a small number of simple targets and asked if it would be valuable to demonstrate this capability in testing against multiple targets to enhance confidence in the system ("DOD Authorization for Appropriations for FY 2008," 2007).

Senator Nelson asked if witnesses are confident that MDA will be able to deploy additional eight GBIs at Fort Greely quickly if DOD chooses to take this path. He mentioned two recent flight failures and how two additional tests are scheduled to verify the solution for the challenge. Additional GBIs will be needed to support testing but that number has yet to be determined. He asked for confirmation that the number of GBIs needed will be assessed after the two tests confirm the problems have been resolved. He noted that witnesses mentioned several enhancements will be made to GMD and asked for more details about those enhancements and how they fit into the overall missile defense strategy. He noted that GMD has 30 GBIs and the last two flight tests failed to intercept the targets. He asked for details as to why this happened and what is being done to fix the problem ("DOD Authorization for Appropriations for FY 2008," 2007).

Senator Nelson cited a February 2008 GMD flight test report that stated troops from Fort Greeley did not participate in the tests. He asked that if these troops had participated in the test, would they have been more reflective of an actual real-life scenario and would it add to the confidence level that the system works as intended. He noted that the primary sensor for the GMD system is the Cobra Dane radar on Shemya Island. This radar is responsible for identifying a potential missile launched from North Korea and provide data to GMD interceptors to defeat the incoming missile. He noted that even though the Cobra Dane radar is so critical, there has never been a flight test conducted with it. He asked if a successful flight test using the Cobra Dane would increase the confidence level of the system and asked if one could be scheduled as soon as possible ("DOD Authorization for Appropriations for FY 2009," 2008).

Senator Nelson asked if GMD testing should include operational testing. He asked what is being done with coordination with MDA and Strategic Command to conduct realistic testing for GMD. He asked if there is a military requirement to have 44 GBIs in Alaska and California or GMD and asked how that number was reached ("DOD Authorization for Appropriations for FY 2010," 2009).

Senator Nelson noted that the 2010 BMDR emphasized that protecting the country from a possible missile attack from countries such as North Korea and Iran is critical to protect United States troops, allies and partners overseas from the growing threat of regional missiles. He said that GMD allows us to stay ahead of such threats and he wants to keep it that way. He noted that GAO has stated that BMD is the largest single acquisition program in DOD and while it is expensive to develop, test and deploy these capabilities, lives depend on their performance ("DOD Authorization for Appropriations for FY 2012 and the Future Years Defense Program," 2011).

Senator Nelson mentioned some quality issues with MDA's contractors that caused failed flight tests and hundreds of millions of dollars for rescheduled tests. In its new contract for GMD, MDA included a quality clause but there has not been time to assess its effect. He asked witnesses if they plan to monitor the effectiveness of this clause and other steps to improve contractor quality performance. Senator Nelson noted how a witness previously mentioned that there is an aggressive GBI reliability improvement program that aims to reduce the number of GBIs required to obtain a successful intercept of an incoming missile, potentially doubling the number of ICBMs that can be defeated by GMD. Senator Nelson asked how this effort fits into the GBI

strategy ("DOD Authorization for Appropriations for FY 2013 and the Future Years Defense Program," 2012).

Senator Nelson noted that several models and simulations are used in testing to predict the performance of the system. He asked if there have been instances where the models incorrectly predict the performance of the system. He mentioned how congress enacted legislation last year to place a priority on missile defense capabilities. He asked how this requirement has been implemented and what changes were made to comply and how the FY 2009 funds that were requested supported these capabilities. He noted that everyone agrees that realistic testing is needed to increase confidence of the GMD system. He asked if witnesses agree that a test should be conducted that demonstrates firing two interceptors at a target since the GMD system firing doctrine is premised on this principle. He also stated that GMD is designed to destroy a number of relatively simple targets and asked if that is valuable to demonstrate this capability in a flight test against multiple targets to enhance confidence of this capability. He asked if this would be operationally realistic given GMD's mission ("DOD Authorization for Appropriations for FY 2013 and the Future Years Defense Program," 2012).

Senator Nelson seems to align with the simple party category of the congressional behavior model. His views generally align with the Democratic Party at the time and the data did not reveal any personal preferences on this matter. Senator Nelson appears to align with neorealism. He supports real scenario testing of GBIs to demonstrate the system's capability of shooting down an incoming ICBM. Planning and executing more flight tests require time and financial resources. By supporting more flight testing, he

indirectly supports increasing defense spending and expanding defense capabilities when it comes to this specific system. He did not mention mutual cooperation or agreements. He was focused on supporting more flight tests to demonstrate the accuracy of GMD.

Senator Jack Reed (D-RI)

Senator Jack Reed's questions and statements about GMD in hearings focus on the budget and improving the system. He mentioned the flight test of GMD, specifically FTG-04, and asked for the costs that were budgeted and expended for that specific test. This test has been budgeted and rescheduled five times between October 2005 and February 2008. He asked for a specific comparison as to what was budgeted and spent for this test as a result. He also asked for detailed costs to retrofit or refurbish each GBI for the GMD ("DOD Authorization for Appropriations for FY 2009," 2008).

Senator Reed noted that experts have stated that there have not been enough flight tests of GMD to validate and verify models and simulations. The system was scheduled to conduct two flight tests per year but only one was conducted last year because of various problems and only one test will be conducted this FY as well. He asked if it will take longer than expected to get sufficient data to gain confidence in the system's capability if only one flight test is conducted each year ("DOD Authorization for Appropriations for FY 2009," 2008). He asked a witness to confirm that there is a more need for GMD, not less ("DOD Authorization for Appropriations for FY 2008," 2007).

Senator Reed appears to align with the simple party category of the congressional behavior model. His views generally align with the Democratic Party at the time and the data did not reveal any personal preferences on this matter. Senator Reed seems to align

with neorealism. He is a strong supporter of planning and executing more flight tests to validate GMD's effectiveness. By supporting more flight testing, he indirectly supports increasing defense spending and expanding defense capabilities when it comes to this specific system. He did not mention mutual cooperation or agreements. He was focused on supporting more flight tests to demonstrate the accuracy of GMD.

Case Study #3: Terminal High-Altitude Aerial Defense

This section includes thick descriptions of HASC and SASC members' views about the Terminal High-Altitude Aerial Defense (THAAD). Figure five is a high-level overview of HASC and SASC members included in this study for THAAD. Figure 6 provides an overview of how the members have been categorized based on the theoretical models of this study. Appendix D features a matrix that includes SASC and HASC members' main points and perspectives on THAAD in a more digestible manner.

Representative Jim Bridenstine (R-MI)

Representative Bridenstine noted in a hearing that the Fires Center of Excellence is at Fort Sill in his state of Oklahoma. He shared that he has been at the center and stated they do great work there. He noted that there is an increased funding request for THAAD training to obtain a radar training device. He asked for clarity as to what we are purchasing for THAAD training ("FY 2016 National Defense Authorization Budget Request For Missile Defense Programs," 2015).

Representative Bridenstine aligns with the asymmetric category of the congressional behavior model. His statements and questions on THAAD align with the Republican Party's stance on the topic and he mentioned that the Fires Center of Excellence

is located in his state of Oklahoma where THAAD training is conducted. This means that he has some personal preferences on this issue. Whenever a policy leader can get additional support to constituents or potential future constituents this could translate into more votes during elections, allowing him to keep his job. Representative Bridenstine seems to align with neorealism. He supports increased defense spending when it comes to THAAD training and sought clarity as to what is being purchased to supplement THAAD training. He was focused on expanding funding and training for THAAD and did not focus a lot on missile threats or potential communication or compromises with potential missile threat nations.

Representative Mo Brooks (R-AL)

In a 2018 hearing, Representative Brooks noted that THAAD was operationalized in Hawaii in 2009 to provide additional homeland defense against longer range threats from North Korea. He suggested maybe the THAAD could provide another layer of dense to protect the homeland against ICBMs and asked if there are any plans to test that against ICBM targets. He noted that follow-on development for THAAD has been eliminated even though other missile defense systems have follow-on development after fielding.

He noted that that the pace of threats is evolving globally and that THAAD is a successful and in demand system. He asked if there are any follow-on plans to further enhance the system. He also asked a witness if they are concerned that the current THAAD battery and interceptor availability will be challenging due to current and future operational requirements. He also asked if there are any plans to provide additional

THAAD batteries to the Army or any launchers to existing batteries to increase defensive capabilities ("FY 2019 Budget Request for Missile Defense and Missile Defeat Programs," 2018).

Representative Brooks' statements and questions about THAAD align with the simple party category of the congressional behavior model. His perspectives generally align with the Republican Party at the time and the data did not uncover any personal preferences related to THAAD. Representative Brooks' perspectives on THAAD seem to align with neorealism. He highlighted the fact that missile threats are evolving globally and supports enhancing defense capabilities. He asked if it is possible that THAAD could provide protection to the United States homeland and if additional THAAD batteries are planned to be provided to the United States Army. He also wants to be sure that there are enough THAAD batteries to meet needs because the system is in high demand.

Representative Mike Rogers (R-AL)

Representative Mike Rogers noted that Secretary Kerry has been focused on missile defenses lately and invited China to receive technical briefings on THAAD ("The Missile Defeat Posture and Strategy of the United States – the FY 2017 President's Budget Request," 2016). Representative Rogers said the Missile Defense Agency is aiming to install other defenses to West Coast sites and is considering THAAD to protect the West Coast from North Korean missiles after North Korea tested a new type of ICBM that can fly over 8,000 miles and South Korea warned places Washington, DC within the target range ("Pentagon Evaluating United States West Coast Missile Defense Sites",

2017; "US 'Planning Anti-Missile Bases On West Coast' To Shield Itself From North Korean Nuclear Threat", 2017).

Representative Rogers aligns with the simple party category of the congressional behavior model. His statements and questions generally align with the Republican Party at the time and no data were uncovered to show that he has person interests on this topic. Representative Rogers seems to align with neorealism. He highlighted the North Korean missile threat and mentioned that MDA may install other sites on the West Coast to protect the United States homeland. This shows he is focused on external threats and supports expanding defense capabilities to protect self-interests. He did mention that the Secretary of Defense at the time is communicating with China about THAAD's technicalities, but stated it more as a matter of fact than something he supports. No real mention of communication or agreements with countries viewed as missile threats, such as North Korea, were mentioned. Statements and questions focused on missile threats and how United States capabilities can be expanded to protect self-interests.

Representative Mike Turner (R-OH)

Representative Mike Turner's questions and statements in hearings about THAAD focus on budget, planning, and protecting allies. He noted a study conducted by the Joint Staff recommending an increase of THAAAD interceptors and noted that the budget request supports this requirement. He also asked why such an increase has to come at an expense to other missile defense systems that protect the United States homeland and allies ("NDAA for FY 2010," 2009).

He noted that demand for THAAD exceeds supply. There have been plan to have an inventory for THAAD and the funding is planned for out years which results in production gaps for the near future. He asked if there are dedicated THAAD asset in the United States European Command and asked how they will flow in and out with Aegis in the area ("Report on the BMDR and the FY 2011 National Defense Authorization Budget Request for Missile Defense Programs," 2010). He noted a quality problem for some systems delivered to MDA, one example being an air-launched target for a THAAD intercept test. He asked if MDA is considering changes to the contracts to support better quality and holding contractors accountable for quality problems ("NDAA for FY 2012," 2011).

Representative Turner noted that the President reduced the missile defense budget by $3.6 billion which means cutting three THAAD batteries and 60 THAAD interceptors and other missile defense components. He asked what requirement changes support reducing THAAD battery purchases by three and 66 interceptors. He also noted it is interesting that the President continues to pursue EPAA to NATO free of charge ("NDAA for FY 2013," 2012).

He expressed concern that the budget request last year which was continued in the President's Budget for FY14 this year limits the procurement of only 12 TPY-2 radars and six THAAD batteries. He noted that prioritization was done in collaboration with combatant commanders and asked if they have sufficient THAAD and TPY-2 capabilities ("NDAA for FY 2014," 2013).

Representative Turner aligns with the simple party category of the congressional behavior model. His statements and questions about THAAD generally align with the Republican Party at the time. Additionally, no data were discovered to show that he has personal interests about THAAD. Representative Turner's perspectives on THAAD seem to align with neorealism. He supports expanding defense capabilities by increasing the number of THAAD interceptors. He also supports increasing defense spending as he was quite vocal that the missile defense budget requests result in less batteries and interceptors purchased for THAAD even though demand exceeds supply. His perspectives were on expanding defense capabilities and ensuring demand can be met which requires adequate funding. There was no mention of communication or mutual agreements with missile threat nations.

Representative Robert Andrews (D-NJ)

Representative Andrews' questions and statements in hearings about THAAD focus on the budget. He listed several missile defense programs that had been cut and noted that the procurement of THAAD increased by $316 million and noted that six out of six flight tests for the system were successful. He highlighted that it has been so successful that the United Arab Emirates wants to procure THAAD for about $6.9 billion ("NDAA for FY 2010," 2009).

Representative Andrews' statements and questions about THAAD align with the simple party category of the congressional behavior model. He generally aligns with the Democratic Party at the time and no data were collected that demonstrated he had personal interests regarding THAAD. Representative Andrews's perspectives on

THAAD align with neorealism. He highlighted the increased funding for THAAD by hundreds of millions of dollars. It seems as though he supports defense spending when it comes to THAAD because he even noted that the United Arab Emirates is interested in purchasing it. He also seems to be a supporter of expanding or at least maintaining defense capabilities since he noted the successful flight tests for the system.

Representative James R. Langevin (D-RI)

Representative Langevin's statements and questions in hearings about THAAD focus on the budget, planning and testing. He noted that the budget request for THAAD increased while some other programs were terminated and asked for clarity for the significant increase in funding while cutting back on other efforts ("NDAA for FY 2010," 2009).

He cited that COCOMs asked for at least double of the THAAD interceptors and asked if the president's budget has supported this request. Secretary Gates confirmed that the president's budget has increased for this new approach ("NDAA for FY 2011," 2010). He noted a THAAD failed missile test in December. He asked the cost incurred due to the failure and what measures are being done to ensure high quality testing is being accomplished on schedule. He said that even though this test failed a lot was learned from the failure to move forward ("Report on the BMDR and the FY 2011 National Defense Authorization Budget Request for Missile Defense Programs," 2010).

Representative Langevin aligns with the simple party category of the congressional behavior model. His statements and questions in hearings related to THAAD generally aligned with the Democratic Party at the time and no data were

collected that demonstrated he has personal interests regarding THAAD. Representative Langevin seems to align with neorealism. He asked for clarification as to why THAAD receive increased funding but did not vocalize against this decision. This could be viewed as supporting defense spending of the system because members of Congress would usually state otherwise. He also highlighted the COCOM request to double the number of THAAD interceptors. It seems as though he is interested in expanding the defense capabilities of THAAD because leaders in his position would typically state otherwise when this topic was discussed. It was a bit unusual for Representative Langevin to mention the failed flight tests considering the system's great successful record, but he did note a lot was learned from it. I did not read too much into this statement.

Representative John Spratt (D-SC)

Representative John Spratt's questions and comments in hearings about THAAD focus on planning. He noted that a witness stated here has been about 5,900 increase of various kinds of missiles and that about 93% of them are short-range and medium-range missiles. He asked if missile defense program efforts are focused on the right goals. He asked for confirmation that we are building adequate systems for such threats, such as THAAD, and asked if substantial resources should also be spent elsewhere for missile defense to address the current primary threat ("NDAA for FY 2010," 2009).

Based on Representative Spratt's statements and questions in congressional hearings, it is difficult to categorize him with a congressional behavior model category. The data collected did not demonstrate any personal interests on the subject and the statements and questions that he made do not really align with one party or the other.

Representative Spratt's questions and statements about THAAD seem to align best with neorealism. He highlights the growing number of ballistic missiles and asked if missile defense programs are focused on the right goals. It seems as though he is interested in ensuring missile defense programs are focusing on the right priorities to address the growing number of missiles. This shows that he promotes defense spending and altering programs to enhance capabilities and protect self-interests. There was no mention of mutual agreements, compromises or cooperation with other countries.

Representative Ellen O. Tauscher (D-CA)

Representative Ellen Tauscher's statements and questions in hearings about THAAD focus on protecting allies. She noted that the Secretary of Defense has recommended a significant increase in funding of $900 million for THAAD and other theater missile defense programs. She noted that this decision will protect deployed troops, allies, and partners against short- and medium-range ballistic missile threats. She also noted that this align with combatant commanders' request for more interceptors for theater defense ("NDAA for FY 2010," 2009).

Representative Tauscher's statements and questions about THAAD in congressional hearings are difficult to categorize using the congressional behavior model. No data were collected to demonstrate that she has personal interests on this topic. At the same time, she did not really align with the Democratic Party's view on this matter. She is a strong promoter of investing in THAAD to protect United States interests. Representative Tauscher's views on THAAD seem to align with neorealism. She highlighted the significant increase in funding the program received, showing that she is

an advocate for increase defense spending to support defensive capabilities. She also made sure to highlight how the system will protect troops, allies, and friends and combatant commanders. She did not mention an interest in mutual cooperation or agreements with other nations. She solely focused on the program's funding and its benefits.

Senator Kelly Ayotte (R-NH)

Senator Kelly Ayotte's questions and statements about THAAD in hearings focused on the budget and planning. Senator Ayotte asked if additional funding for the Missile Defense Agency would provide an additional THAAD system to help meet the needs of COCOMs. Senator Ayotte also noted the replacement of a radar due to increased threats in the Pacific region which may slow down intelligence in that area. She asked if additional funding to continue the THAAD system and the radar would relieve combatant commanders' strain on the current inventory of force protection ("DOD Authorization for Appropriations for FY 2014 and the Future Years Defense Program," 2013).

Senator Ayotte's questions and statements about THAAD in hearings align with the simple party category of the congressional behavior model. The data did not show that she has any personal preferences on this topic. With her focus on budget and planning for the system, her views align with the Republican Party of the time. Senator Ayotte's views about THAAD align with neorealism. She supports expanding defensive capabilities by noting that COCOMs need more THAAD batteries to meet their needs and reduce the strain they are experiencing. This indirectly also supports defense spending but it costs money to provide additional defensive capabilities. She did not

mention any type of mutual agreements or cooperation with other nations or actors. She was simply focused on highlighting how THAAD supports United States' interests and relieves COCOM challenges.

Senator Jeff Sessions (R-AL)

Senator Jeff Sessions' questions and statements in hearings about THAAD focus on budget, planning and Russia. He noted some challenges to the warfighter due to a lack of proper funding and planning. He specifically noted that MDA plans to only build 48 THAAD missile and assumes that the United States Army will procure the missiles. This is concerning because the United States Army has no funding for THAAD in its Future Years Defense Plan ("Part 7: DOD Authorization for Appropriations for FY 2007," 2006). He also noted that the president's budget decreased the missile defense budget by more than $3 billion, putting several programs at risk and he specifically asked if this reduction in funding will result in purchasing six THAAD batteries instead of nine and reducing the number of THAAD interceptors from 503 to 320. He also asked if the demand from COCOMs for THAAD and the TPY-radar that supports it has decreased during the past year ("Part 7: Strategic Forces DOD Authorization for Appropriations for FY 2013 and the Future Years Defense Program," 2012).

In a 2015 hearing, Senator Jeff Sessions noted that Russia's short-range ballistic missiles and cruise missiles could be vulnerable to THAAD ("DOD Authorization for Appropriations for FY 2015 and the Future Years Defense Program," 2014).

Senator Sessions' questions and statements in hearings about THAAD seem to align with the simple party category of the congressional behavior model. No data were

collected that showed he has personal interests on this topic and his views align with the Republican Party at the time. Senator Sessions seems to align with neorealism on this topic. He supports defense spending and expanding defensive capabilities when it comes to THAAD. He shared his concern for missile defense budget reductions and lack of thorough planning that will ultimately impact the warfighter and protecting United States interests. He has highlighted the value THAAD has to COCOMs and noted how Russia's short-range and cruise missiles are vulnerable to THAAD. There was no mention of mutual agreements or compromises with other nations or actors. He was solely focused on funding and planning for the program to protect United States interests.

Senator Joe Donnelly (D-IN)

Senator Joe Donnelly's questions and statement about THAAD in hearings focus on planning and protecting allies. He asked if there are any options to increase the coverage or flexibility of THAAD. He also asked a witness about his concerns regarding soldiers being training to use THAAD due to finite resources ("DOD Authorization for Appropriations for FY 2016 and the Future Years Defense Program," 2015).

Senator Joe Donnelly noted that COCOMs have expressed a high demand for THAAD. He stressed the importance of properly allocating these systems and effectively training warfighters to operate them and meet COCOM needs even in the budget constrained environment ("Part 7: DOD Authorization for Appropriations for FY 2017 and the Future Years Defense Program," 2016).

Senator Donnelly noted the high demand for THAAD which protects deployed troops and allies and partners. He noted that it is important to think about how THAAD

will be deployed and train war fighters about how to operate them to provide protection in today's demanding environment ("DOD Authorization for Appropriations for FY 2019 and the Future Years Defense Program," 2018).

Senator Donnelly seems to align with the simple party category of the congressional behavior model. The data collected did not show any personal preferences on this topic and his views generally align with the Republican Party at the time. Senator Donnelly's views on THAAD seem to align with neorealism. He supports expanding defense capabilities, demonstrated by asking if THAD is capable of increasing its coverage. He also supports increasing the funding for THAAD to protect troops, allies, and partners and proper training for warfighters to ensure they are effectively operating THAAD. He highlighted COCOM needs for THAAD. He indirectly supports funding of defense capabilities because all of this extra support requires funding to execute. There was no mention of cooperation or mutual agreements with other nations or actors.

Senator Carl Levin (D-MI)

Senator Carl Levin's questions and statements about THAAD in hearings focused ion planning, protecting allies, Russia, and testing. Senator Levin asked how many more successful flight tests are needed for THAAD to have confidence in the system to perform effectively ("DOD Authorization for Appropriations for FY 2008," 2007).

Senator Levin noted how THAAD plays a critical role for the integrated NATO missile defense system, EPAA. He asked witnesses if THAAD will be available by 2010 to help protect against the Iranian threat. He also asked witnesses for confirmation that THAAD and other missile defense systems will help protect NATO Europe from

medium-, intermediate-, and long-range Iranian missiles ("Part 1: DOD Authorization for Appropriations for FY 2010," 2009). He also noted that Congress told DOD to purchase more THAAD interceptors to defend against short- and medium-range missile threats to address the current Iranian and possible future ballistic missiles. He shared that Congress' policy to develop, test and deploy effective missile defenses provides the following three benefits: it directly addresses the Iranian missile threat, maintains and expands the United States security commitment to Europe, and opens the door to work cooperatively with Russia on a missile define security system. Cooperating with Russia will enhance European security and send a strong signal to Iran that Europe and Russia will take unified action against Iran's threat ("The President's Decision on Missile Defense in Europe," 2009).

Senator Levin noted that the Secretary of Defense is proposing an increase of about $700 million for missile defense funds, including THAAD, to protect United States' forces and allies from a ballistic missile attack in theater. He cited the Joint Capabilities mix Study that states that DOD was not planning for even half of the interceptor needs expressed by COCOMs. This is why the focus of his bill was to include additional THAAD interceptors as the highest priority ("The Secretary of Defense's 2010 Budget Recommendations," 2009).

Senator Levin noted that there has been some disappointment with how some contractors have been performing on the THAAD program. He specifically noted the failure of an air launch target in an important THAAD test. He asked for more information and details about the concern ("Part 1: DOD Authorization for

Appropriations for FY 2011," 2010). Senator Levin asked how space-based sensors would help THAAD and other missile defense systems throughout the world. He asked if this would provide a stronger layered missile defense which he supports. He said that we need a strong layered missile defense today and we do not have one ("Part 7: strategic Forces DOD Authorization for Appropriations for FY 2018 and Future Years Defense Program," 2017).

Senator Levin's questions and statements about THAAD in hearings seem to align with the simple party category of the congressional behavior model. The data collected in this study did not identify any personal interests on this subject and his views generally align with the Democratic Party at the time. Senator Levin's views on THAAD align with neorealism and neoliberalism. He highlighted the value of THAAD to the integrated NATO missile defense system, EPSS and expressed his concerns with the Iranian missile threat. He also supports increased defense spending for THAAD and explained how purchasing more THAAD priorities is one of the main priorities for United States Congress. The one statement he made that aligns with neoliberalism is about cooperating with Russia. He shared that Congress's priority to develop, test, and deploy missile defenses addresses the Iranian threat, enhances European security, and opens the door for cooperation with Russia. Very few SASC and HASC members even mention potentially working with Russia to relieve strains so this is a significant and noteworthy statement.

Senator Bill Nelson (D-FL)

Senator Nelson noted that a witness recently testified that is important to expand the United States missile defense system beyond long-range ICBMs to protect deployed forces and allies. He was referring to short- and medium-range missiles, including THAAD. Senator Nelson also noted that there is a plan of 96 THAAD missiles and whether protecting deployed forces and meeting COCOMs' operational requirements will require more than planned. Senator Nelson also asked if THAAD could provide defensive coverage for unprotected parts of Europe against future ballistic missile threats ("DOD Authorization for Appropriations for FY 2019 and the Future Years Defense Program," 2018).

Senator Nelson noted a new law that requires DOD to place a priority on missile defenses in regards to development, testing, fielding and improving missile defense capabilities, including the THAAD system. He asked how DOD plans to implement this requirement and what changes have been made to comply with this new law. Senator Nelson noted that the THAAD missile could be upgraded to have a greater capability against missile of greater range and complexity and asked a witness whether they support upgrading to this capability to enhance defenses ("DOD Authorization for Appropriations for FY 2008," 2007).

Senator Nelson's question and statements about THAAD in hearings seems to align with the simple party category of the congressional behavior model. The data showed no personal interests on this topic and his questions and statements generally align with the Democratic Party of the time. Senator Nelson's views on THAAD seem to align with neorealism. He supports defense spending and expanding capabilities by

noting that more THADD interceptors need to be purchase to meet COCOM needs. He also highlighted that DOD is making missile defense a priority and that THAAD could be upgraded to further enhance defensive capabilities. There was no mention of mutual agreements or cooperation with other nations or actors.

Figure 1

A Word Cloud That Includes the Top 100 Words in the Coded Data

Summary

Chapter 4 provided detailed narratives for SASC and HASC members that made substantive questions and statements about the three missile defense systems via the theoretical frameworks. While this is a lot of detailed information collected from several years' hearings, chapter 5 discusses what has been learned to communicate how the findings of this study contribute to the existing body of knowledge. The limitations of the study will also be discussed along with key recommendations and implications based on the results.

Chapter 5: Conclusions

The United States has deployed three missile defense systems to protect against Iranian and North Korean missile threats. These three missile defense systems are the EPAA, GMD, and THAAD. While these missile defense systems protect the United States allies and partners, Russia and China oppose these systems because they perceive them as putting their strategic interests at risk.

This study provided an understanding of the perspectives of SASC and HASC Senate and members' in congressional hearings for each missile defense system (Patton, 2015). The research question that was answered in this study is as follows: What similarities, differences, and themes exist amongst SASC and HASC members related to the following missile defense systems: EPAA, GMD, and THAAD? The thick descriptions and matrices created and featured in chapter 4 were developed based on statements and questions made by SASC and HASC members via the lenses of the theoretical frameworks. This chapter will focus on the findings of this study and explain how they contribute to existing literature on this topic.

These perspectives will contribute to positive social change by clarifying the key points of similarities discussed in hearings amongst congressional members and by identifying areas for collaboration between the United States, Russia, and China (Pugacewicz, 2017; Streubert & Carpenter, 1995, p. 31). Additionally, this study may motivate other scholars to further examine congressional decision-making about missile defense systems to diminish its threats to the United States and its allies and partners. The three models of the congressional behavior model, the preference, simple party, and

asymmetric categories, and neorealism and neoliberalism schools of thought, were applied with a qualitative content analysis case study approach to understand the perspectives of congressional leaders in hearings (Lawrence et al., 2006; Streubert & Carpenter, 1995, p. 31).

Interpretation of Findings

Thick descriptions of SASC and HASC members have been provided in chapter 4 to understand their perspectives on each missile defense system. A matrix was developed for each case study to provide a high-kevel overview of each member's major points for each case study. This section will share the interpretation for each case study.

Case Study #1: European Phased Adaptive Approach

This section will explain the themes identified amongst SASC and HASC members for the EPAA. Table 3 also provides succinct view of these themes.

The two Republican HASC themes identified are that they highlight missile threats related to EPAA and concern is consistently expressed about funding EPAA. The missile threats mentioned in regards to EPAA included how Iran is developing its ballistic missile systems and space satellite programs and how Russia and China are enhancing their missile defenses to compete with the United States.

Three themes were identified for the Democratic HASC members: they emphasized effective management of EPAA, expressed concern related to funding, and suggest offering reassurances to Russia. Representative Tauscher in particular made sure to state that EPAA is not deployed against Russia in any way.

Three themes were identified with Republican SASC members along with some outliers. Republican SASC members consistently highlighted missile threats related to EPAA. They specifically highlighted the Iranian, North Korean, and Chinese missile threats. Republican SASC members support a high missile defense budget for EPAA to protect the United States and its allies.

There were a few interesting outliers in the data for this group. Senator Cornyn supports United States Russia cooperation in missile defense. This is an outlier because this is rarely stated by Republican SASC members.

Democratic SASC members support cooperation with Russia. This was explicitly stated by Senator Levin. Senator Lieberman made an outlier statement by noting that he does not support the Obama Administration's decision to cut the fourth phase of EPAA. This is significant because rarely to Democrats denounce this decision.

Table 3

EPAA Themes

European Phased Adaptive Approach	
Republican HASC Themes (2)	
Theme	**Description**
Highlight EPAA missile threats	• Russia and China are enhancing missile defenses to compete with United States • Iran is making developments with its ballistic missile systems and space satellite programs
Consistent concern about EPAA funding	• Congress is committed to funding EPAA
Democratic HASC Themes (3)	
Emphasize properly managing the program Cost conscious	• East Coast site, funding it is a concern

Offer Russia reassurances	• Rep. Tauscher stated EPAA was not deployed against Russia
Republican SASC Themes (3)	
Highlighted missile threats related to EPAA	• Highlighted the Iranian, North Korean, and Chinese missile threats
Support high missile defense budget for EPAA	• To protect self-interests • Supports increasing defense to protect the United States and its allies • United States does not have enough Aegis ships to fulfill all combatant command needs - McCain
Outliers	• Senator Cornyn: Supports United States-Russia cooperation on missile defense • Senator Lieberman: stated disappointment Obama cut fourth phase when most Democrats did not mention it and Republicans did
Democratic SASC Themes (1)	
Support cooperation with Russia	• Support cooperation with Russia – Senator Levin

Case Study #2: Ground-Based Midcourse Defense

This section will focus on the interpretation of findings for Case Study #2: The Ground-based Midcourse Defense. Table 4 is a detailed matrix that describes major themes related to GMD in an easy to read format.

HASC Republicans generally aligned under two themes: highlighting GMD missile threats and supporting long-term planning with adequate funding to enhance the system. North Korea and Iran were cited as missile threats, but there was particular emphasis on North Korea by many members and some highlighted how GMS protects against the North Korean missile threat. Representative Turner noted that GMD is the only system to protect the United States homeland from a missile attack.

Several HASC Republican expressed concern about how long-term planning for GMD is lacking and needs to occur to enhance the system and ensure future protection.

Enhancing the system is critical so that GMD is able to defend against ICBM threats in the 2030s. Representative Rogers is a big supporter of "peace through strength." They support increasing funding to support more testing and validation of the system. Representative Turner specifically stated in one hearing that he is against the 35% budget cut for missile defense.

Three main themes were identified among Democratic HASC members. Generally, they sought information about missile threats instead of citing the threats as known facts like the HASC Republicans. For instance, instead of just stating that North Korea is a missile threat a member asked witnesses how concern the United States should be given North Korea's missile activity and the level of confidence in the system. This allowed witnesses to share recent conclusions and provide details as to why a specific country is a missile threat than just plainly accepting it and stating so in a hearing. This may be more digestible for the public because they have more information as to why a particular country is deemed a missile threat.

Republican SASC members generally focus on four main themes. The first is highlighting missile threats related to GMD, specifically noting that North Korea, Iran, Russia, and China are threats. The second theme is supporting the expansion of GMD missile defense capabilities. Some of these expanded capabilities include destroying a missile in its boost phase before it launches, modernizing the EKV which is able to tell a threat from a non-threat, conducting realistic testing, and deploying an East Coast site. Senator Sessions specifically stated that he supports more than 40 GBIs for GMD. Senator Sullivan said he supports a stronger layered missile defense with space-based

sensors. Senator Udall stated that he prioritizes enhancing the discrimination capability of the EKV over an east coast missile defense site.

Republican SASC members support increasing the budget to enhance the GMD system. Senator Vitter in particular said that he is concerned that MDA has not included GMD modernization in its budget.

Democratic SASC members sought clarity on missile defense threats related to GMD. They wanted more information on North Korea's capabilities and when approximately it will achieve placing a warhead on a missile. They also asked for confirmation about Iran's capability to launch a missile at Europe and more information about Iran's ICBM capabilities. Senator Begich highlighted the North Korea threat and shared the difficulty of preparing for such an unpredictable rogue threat.

Democratic SASC members support enhancing the GMD system. They asked for details about how improving sensors on the EKV will enhance discrimination capabilities and address evolving threats. They also support more GMD testing before additional GBIs are purchased and asked for clarity about how many more flight tests will need to be conducted to enhance the system's confidence and expressed they support real scenario testing to demonstrate the GBI's capability of shooting down an incoming missile. They also noted that redundancy is critical for GMD to support its operation during scheduled maintenance when some parts of the system need to be closed.

There were a few interesting outliers with this group. Senator Begich noted that GMD has a confidence of 90%, which is good, and that will only get better with testing. This was refreshing to hear from a Democratic considering how the party harps on the

system's operational effectiveness. He also noted that phase four of EPA was cancelled and this is significant because it was intended to augment GMD. Very rarely does a Democrat criticize the Obama Administration's decision to cancel the fourth phase which makes this comment interesting. Even though Senator Gillibrand is a Democrat, she supports expanding GMD with an east coast site and mentioned that her state would be a good location for a third GMD site. Typically, Democrats are wary about spending money to expand a system when they feel a lot of work needs to be done to enhance the operational effectiveness of GMD. It seems that Senator Gillibrand is different from her party in this respect, supporting a third east coast GMD site. Senator Levin also asked witnesses if the budget will allow for the development of more GBIs if they are deemed necessary for the future. Again, Democrats are typically concerned with improving the system but Senator Levin seems a bit different here because he wants to be sure there is flexibility available if the missile threat evolves into the future.

Table 4

GMD Themes

Ground-based Midcourse Defense	
Republican HASC Themes (2)	
Theme	**Description**
Highlight GMD missile threats	• Mention North Korea and Iran, but North Korea repeatedly mentioned by many members • GMD protects against North Korea threat • Turner: Highlighted GMD as the only system to protect the homeland from missile attacks
GMD long-term planning required with adequate funding to advance the system	• Long-term planning is lacking • United States needs to continue to advance this system • Increase funding for testing and validation • Turner: Against decreasing program funding by 35 percent

	• Improve GMD to defend against ICBM threats in the 2030s • Invest in GMD to ensure future protection • Aims to improve the system • "peace through strength" – Rep Mike Rogers
Democratic HASC Themes (3)	
Sought information about threats instead of blatantly accepting that a given that threats exist	• Sought clarity on how concerned the United States Should be given North Korea's missile activity and the level of confidence of the system
Enhance confidence of GMD	• Supports more rigors GMD testing • Desires a clearer timeline to enhance GMD • Sought details to understand what testing needs to be done to improve the system • Sought clarity on a recent flight test and if it was similar to a potential North Korea missile path • Seeks clarity on what specifically needs to be achieved to have complete confidence in GMD • Highlighted a report that stated there is limited confidence in GMD • Supports resolving test failures before additional GBIs are purchased • Supports more testing of GMD – current testing does not demonstrate a high confidence of GMD
Sufficient funding has been provided for GMD	• Believes funding has been provided to improve the system
Outliers	• Rep Cooper: Noted that failed tests do not necessarily mean a failed system • Sanchez: Interested in improving capabilities "left of launch," before a missile is launched – expanding defense capabilities
Republican SASC Themes (3)	
Highlights missile threats related to GMD	• Views North Korea, Russia, and China as threats • Views North Korea and Iran as threats
Expand GMD missile defense capabilities	• Supports expanding missile defense capabilities, such as destroying a missile in its boost phase • Supports enhancing defense capabilities, such as the EKV and East Coast site • Sessions: Supports more than 40 GBIs for GMD

	• Sullivan: Supports a stronger layered missile defense, including space-based sensors • Senator Udall: Prioritizes enhancing the discrimination capability of the EKV over an east coast missile defense site • GMD needs to be continuously improved, including GBIs • Supports more tests to improve the system and modernization of the EKV • More realistic testing
Increase GMD spending	• Supports increased spending to enhance GMD • Sen Vitter: Concerned that MDA has not included GMD modernization in its budget • Supports increased defense spending for GMD – against decrease in the missile defense budget
Democratic SASC Themes (2)	
Clarity on missile threats related to GMD	• Sought clarity on North Korea's missile capabilities, such as when they approximately achieve placing a warhead on the missile • Asked for confirmation about Iran's capability to launch a missile at Europe • Senator Begich outlier: Highlighted the North Korea threat and how it is unpredictable and difficult to know what is needed to protect from such a rogue threat • Sought more information on Iran's ICBM capabilities
Enhance the GMD system	• Redundancy is critical for GMD to support its operation during scheduled maintenance when some parts need to be shutdown • Asked for specifics about how improving sensors will enhance discrimination capabilities and address evolving threats • Supports more GMD testing before additional GBIs are purchased • Sought clarity about how many more flight tests need to be conducted to enhance confidence of GMD • Supports real scenario testing of GBI to demonstrate its capability of shooting down and incoming missile • Highlighted the need for more flight tests to validate GMD effectiveness
Outlier	• Senator Begich: GMD has 90% confidence which will improve with testing – positive D • Senator Begich: Phase four of EPAA was cancelled and meant to augment GMD

- Senator Gillibrand supports east coast site: Mentioned that a specific location in her state would be a good option for a third GMD site
- Senator Levin budget: Asked witnesses if the budget allows for more GBIs if deemed necessary in the future

Case Study #3: Terminal High Area Altitude Defense

This section will focus on major findings for Case Study #3: Terminal High Area Altitude Defense. Figure 10 includes the major themes identified in the data in an easily digestible format. Four themes were identified in the data among HASC Republicans. They highlighted missile threats in relation to THAAD, specifically viewing North Korea as a missile threat. HASC Republicans also support an increased budget for THAAD. Some expressed concern that the missile defense budget cut is being reduced which could mean less batteries and interceptors for THAAD. This group supports enhancing THAAD capabilities, including increased training for THAAD and tools to enhance training, increasing the number of THAAD interceptors, and consideration of deploying THAAD on the West Coast to help protect against the North Korean missile threat. HASC Republican iterated that the system is in high demand and the demand often exceeds supply.

The data showed about four major themes for Democratic HASC members along with some outliers. Some members want more information as to why THAAD experienced an increase in funding and some members support doubling the number of THAAD interceptors to meet COCOM needs. Representative Andrews praised a successful flight test for THAAD which is not often mentioned by members in hearings for the system. Generally, Democratic HASC members seek more information about

missile threats instead of just stating that certain countries are missile threats like Republicans. Representative Spratt is one of the few Democrats that noted the growing number of ballistic missiles in the world. Also, Representative Tauscher highlighted how THAAD protects troops, allied, friends and COCOMs. It is not very common for Democratic members to speak highly of a missile defense system, but apparently THAAD is an exception.

Two major themes were identified among SASC Republicans: expand THAAD capabilities and increase funding for THAAD. SASC Republicans noted that COCOMs have requested more THAAD batteries to relieve strain. They also noted that Russia's short-rang cruise missiles are vulnerable to THAAD. This is a bit concerning considering the United States repeatedly states that missile defense systems are not targeted against Russia. Several SASC Republicans stated how they are against decreasing funding for missile defense and have expressed concern about planning and budgeting for enough THAAD batteries to meet COCOM needs.

Democratic SASC members shared their concern with the Iranian missile threat. They noted the benefits of THAAD, explaining that it plays a critical role in the integrated NATO missile defense system, EPAA. Some members are interested in expanding THAAD capabilities. Senator Donnelly is interested in options to increase the coverage and flexibility of THAAD and Senator Levin explained how purchasing more THAAD interceptors is one of the highest priorities in Congress. Senator Nelson also noted that more THAAD batteries are need to meet COCOM needs. Democratic SASC members are especially supportive of THAAD than any other missile defense system in

this study. This is further demonstrated by how they support increasing funding for THAAD to protect troops, allies, and partners and support training warfighter to effectively operate the system.

Table 5

EPAA Themes

Terminal High Altitude Area Defense	
Republican HASC Themes (4)	
Theme	**Description**
Highlight threats related to THAAD	• Views North Korea as a missile threat
Support spending	• Against decrease budget for missile defense, which means less batteries and interceptors for THAAD • Supports the increase budget for THAAD
Enhance capabilities	• Supports increased training for THAAD and tools to enhance training • Seeking to enhance THAAD and noted it is high in demand
Expand defense capabilities	• Demand for THAAD exceeds supply • Supports THAAD to be considered on West Coast to protect against North Korean missile threat • Supports increase of THAAD interceptors
Democratic HASC Themes (4)	
Highlight success of THAAD	• Rep Andrews: Praised successful flight tests for the system
Clarification on funding	• Clarification why funding increased for THAAD
Expand defense capabilities	• Supports doubling THAAD interceptors per COCOMs
Highlight THAAD failure	• Noted a failed THAAD missile test
Outliers	• Rep Spratt: Highlights the growing number of ballistic missiles • Rep Tauscher benefits: THAAD protects troops, allies, and friends and combatant commanders
Republican SASC Themes (2)	
Expand THAAD	• COCOMs need more THAADs to relieve the strain they are experiencing • Russia's short-range and cruise missiles are vulnerable to THAAD

Support increase defense spending	• Against decreased missile defense budget • Concerned about planning and budgeting for THAAD to meet COCOM needs
	Democratic SASC Themes (4)
Highlight missile threats related to THAAD	• Concerned with the Iranian missile threat
Benefits of THAAD	• THAAD plays a critical role for the integrated NATO missile defense system
Expand capabilities of THAAD	• Sen Donnelly: Interested in options to increase the coverage or flexibility of THAAD • Highlighted COCOM needs for THAAD • Senator Levin: Purchasing more THAAD interceptors is one of the highest priorities to Congress • Sen Nelson: More THAAD missiles needed to meet COCOM needs
Support defense spending for THAAD	• Supports increased funding for THAAD to protect troops, allies, and partners • Supports training warfighters to effectively operate THAAD • Senator Levin: Supports increased defense spending for THAAD

Limitations of the Study

It is common for research studies to include variables that I as the researcher am not able to control, which are known as limitations. The limitations of this study will be described to provide transparency about some of the variables that were not able to be controlled for in this study.

An obvious limitation of this study is that former and current SASC and HASC members are not accessible for this study. Some SASC and HASC members have passed and others are often too busy to respond to inquiries outside of their immediate priorities. I experienced this first hand as a former scheduler for a chairman of a United States House of Representative subcommittee. During my tenure, it was very common for

dissertation students to seek time and responses from the member. While I'm sure the member would have been thrilled to be involved, competing constituent and legislative priorities often made that difficult. Instead of facing an uphill battle of trying to grab the attention of former and current SASC and HASC members, this study used the next best source of data possible which are congressional hearings. All congressional hearings are recorded in documentation form and readily available to the public.

One limitation of this study is that not all SASC and HASC members were included in the data, analysis, and findings. For SASC and HASC members to be included in the study, they would have had to made substantive remarks about one or more of the missile defense case studies in hearings to ensure a good amount of information is available to analyze via the theoretical frameworks and understand the perspectives in congressional hearings of SASC and HASC members. While it can be assumed that SASC and HASC members who are passionate about missile defense would likely have several questions and statements to make in congressional hearings, this still does not provide a clear picture of SASC and HASC members' perceptions on this topic. This raises the question about what other data are available besides congressional hearings to provide a more comprehensive picture of SASC and HASC members' perceptions on this topic. How this potentially can be accounted for will be discussed in the section about recommendations for future studies.

Another common limitation for qualitative studies is researcher bias which could impact data collection, analysis, and findings. At the end of the day, the data collected, analyzed, and findings of this study are based on my interpretation and understanding of

the facts (Klafki, 1971; Kuckartz, 2014). While researcher bias cannot be completely eliminated, I did my best to account for each step taken in the data collection, analysis, and findings phases. This transparency allows other scholars the opportunity to evaluate the steps taken and identify areas to further build on in future research. It is worth noting that because this study used recorded historical documents of congressional hearings, my "presence" as a researcher did not impact the statements or questions made by SASC and HASC members. The data were shared and recorded prior to my research study so my decision to focus on this topic could not have impacted the data. At the same time, SASC and HASC members are aware that congressional hearings are recorded and made public. This may have impacted their statements and questions in hearings, but my presence as a researcher did not contribute to this effect on the data.

Overall, the neorealism and neoliberalism theoretical frameworks provided helpful perspectives to analyze SASC and HASC members for this study. The Congressional Behavior Model did not seem to add much value. This is likely because the sole data for this study is congressional hearings. Some SASC and HASC members explicitly stated their personal interests on the topic. However, that does not mean that all members who have personal interests openly stated so as well. How this can potentially be resolved will be discussed in the future section of recommendations for future studies.

Implications of this Study

This section will focus on conclusions drawn from the results and how the findings are important for policy and practice. The thick descriptions created for SASC and HASC members in this study led to the identification of themes by political party and

why they are supported or not by congressional leaders. Understanding all sides of a policy issue is critical to identify the best path forward.

This study can be used by current and future policy leaders to quickly get up to speed on these missile defense systems. This may result in more leaders on this issue and more diverse populations aware of the details involved with these missile defense systems.

There needs to be less of a focus on alarmist rhetoric about a nation being a missile threat and more focus on why a country is a missile threat. The purpose of congressional hearings is to educate the public and it is critical for both parties to be viewed as conducting their due diligence and getting updates on key missile programs before ringing the alarm and scaring the public. Overall, the SASC and HASC Democrats did a better job at this than Republicans.

There needs to be more of a focus on dialogue with nations that are viewed as missile threats. While continuing to enhance these missile defense systems are critical to the United States, allies, and partners, dialogue and potential compromises and mutual agreements should not be halted. Many dangerous misinterpretations, miscommunication, and misunderstandings occur when two-way dialogue does not occur. This is especially dangerous considering the focus is on missile threats.

It is critical for congressional leaders to understand that when they want to improve or enhance the capabilities of a missile defense system, that take financial resources and time. There have been budget cuts in the past which have left less resources to enhance or expand the capabilities of missile defense systems, which means that the

systems will not reach their full capability because they are dependent on funding. If it is not possible to provide adequate funding, what is to be funded needs to be prioritized so that the effectiveness of the systems is improving and not stagnating.

This study has shown how important the United States legislative body is on missile defense policy when it comes to making law and funding programs. It is my hope that congressional perspectives on missile defense and other policy issues are studied more so that we have a better understanding of our policymakers and the decisions they make.

Recommendations for Future Studies

The findings from this study resulted in several ideas for future studies that can build off of the results of this study. In this section I provide some ideas for future studies to hopefully inspire future scholars to build off of the results of this study.

As mentioned in the limitations of this study section, this study used one source for data collection: congressional hearings. While this is a great foundational start, future research could take these initial summaries and continue to refine them based on other data sources. Other data sources could include media articles about the SASC and HASC members, public speeches made on the topic, social media posts that mention the topic, and other sources of data that would allow one to understand the perspectives of SASC and HASC members. Collecting more data sources would also potentially help the congressional behavioral model be more helpful for these narratives and topic because the narratives would not solely rely on the member publicly stating their personal interests in congressional hearings.

This study highlighted the fact that existing research on this topic often focuses on the presidential administration's view on missile defenses. While this study aims to shift this focus to understanding the importance of the United States Congress related to missile defense policy, the two can still be fused together to provide a more accurate picture of the congressional and presidential dynamics about missile defense throughout history. The thick descriptions created in this study could be evaluated and compared against presidential stances on the three missile defense systems. This would allow for the identification of aspects that are in alignment and that are in contention on this topic and provide a clearer understanding of both the executive and legislative branches of government on this issue.

Because statements and questions from congressional hearings are recorded and available to the public, it would be a great idea to compare statements and questions made by members in the past and compare them to today's current events to see who predicted the future or missed a critical point.

Another interesting idea for a future study is to analyze the perspectives of other countries' legislative branches on this issue. The findings could then be compared to the those in this study and then cross-country perspectives can be evaluated and compared to identify similarities and differences. It would especially be interesting to see the legislative branch's perspectives on this topic from the following countries: Iran, South Korea, Russia, and China. All of these countries have competing interests with United States missile defense policy and it would be interesting to see how they compare historically.

While this study focused on SASC and HASC members, it can be scaled to include other members of congress and their statements and questions on these missile defense systems in hearings. While this is a large undertaking because the number of players and amount of documentation that would need to be collected and analyzed, it would provide a more comprehensive view of congressional experiences related to these missile defense systems.

Another idea that can be incorporated into a future study is to study the diverse players who have been vocal on missile defense, such as women, people of color, and other diverse backgrounds. These perspectives could be compared to those who are not considered in the diverse category to see in what aspect they are similar and different. It also could inspire more diverse leaders to learn and become future leaders on this topic to protect the United States homeland and its partners and allies.

This study highlights the importance of the legislative branch. While this study focused on missile defense systems, the foundation of this study can be repurposed to really study any policy issue in the United States Congress. Perhaps beginning with the statements and questions made by members in congressional hearings is a good starting point which can then be built on with other sources of data to provide a wholistic picture, such as media articles, public speeches, social media posts, and other sources.

Conclusion

This study provided a clear understanding of the perspectives of SASC and HASC members about missile defense policy. The thick descriptions that summarize these perspectives were used to organize the information into matrices. Together, they allowed

for the interpretation findings by each missile defense case to provide a clear picture as to which SASC and HASC members align with which theoretical frameworks and which topics lend themselves to disagreement between the political parties. The findings of this study contribute to positive social change to society and policy. As a result of this study, we now have a better understanding our congressional leaders' thought process related to missile defense policy. These results can be compared to other policies so that we can better understand how Congress makes decisions and what they tend to include in their decision-making process. The results of this study also describe key differences in opinion on particular issues for each missile defense system between the political parties. These differences can now be better understood and could lead to informed future decisions so that SASC and HASC members work a collaboratively more together instead of in silos.

References

Adapting United States Missile Defense For Future Threats: Russia, China and Modernizing The National Missile Defense Act: Hearing before the Strategic Forces Subcommittee of the United States HASC, 113th Cong. (2014). https://bit.ly/3PsTiQ4

Albon, C. (2013). Rogers: Nuclear modernization, missile defense cuts pose national security threat. *Inside The Pentagon, 29*(17), 7. https://bit.ly/3bY5L0k

Anichkina, T. (2015). Limit missile defense -- or expand it? A Russian response. *Bulletin of Atomic Scientists, 71*(2), 17-20. https://bit.ly/3w28lJr

Apple, J., Keagle, J. M., & Gavrila, L. (2012). Avoiding a new arms race: Why missile defense cooperation is the best alternative to competition with the Russian Federation. *Management and Socio-Humanities*, 35-47. https://bit.ly/3Pjo0L7

Arbatov, A. (2018). The vicissitudes of Russian missile defense. *Bulletin of the Atomic Scientist, 74*(4), 227-237. https://bit.ly/3T1pwov

Armstrong, I. (2015). The lagging architecture of NATO missile defense. *International Policy Digest, 2*(7), 111-112. https://bit.ly/3phHkhd

Assman, L. (2007). Theater Missile Defense (TMD) in East Asia: Implications for Beijing and Tokyo. Germany: LIT Verlag. https://bit.ly/3R0RIGf

Auner, E. (2014). Missile defense budget holds steady. *Arms Control Today*, *44*(3), 33-34. https://bit.ly/3C4Im84

Aybet, G. (2012). The evolution of NATO's three phases and Turkey's transatlantic relationship. *Perception, 17*(1), 19-36. https://bit.ly/3vZwnVt

Ballistic Missile Defense Policies and Programs: Hearing before the United States SASC, 111th Congress (2010).

Ballistic Missile Defense Programs: Hearing before the United States SASC, 111th Congress (2009).

Barrie, D. (2017). Allegation, counter-allegation and the INF Treaty. *Survival, 59*(4), 35-43. https://bit.ly/3QMt38e

Bartles, C. K. (2017). Russian threat perception and the Ballistic Missile Defense System. *The Journal of Slavic Military Studies, 30*(2), 152-169. https://bit.ly/3QMoHxP

Bell, W. F. (2014). Have adversary missiles become a revolution in military affairs? *Air & Space Journal*, 47-60. https://bit.ly/3bSOu8J

Berelson, B. (1952). Content analysis in communication research. *The ANNALS of the American Academy of Political and Social Science*, *283*(1). https://bit.ly/3JWK90A

Bergmann, K. (2017). Ballistic missile defence & North Korea. *Defence Review Asia*, 4.

Bessner, D., & Guilhot, N. (2015). How realism waltzed off: Liberalism and decision making in Kenneth Waltz's Neorealism. *International Security, 40*(2).

Bin, L. (2015). Chinese thinking on nuclear weapons. *Arms Control Today*, 8-12. https://bit.ly/3Am19dz

Bin, L. (2018). China's attitudes towards missile defense and its limitation. *Bulletin of the Atomic Scientists, 74*(4), 243-247. https://bit.ly/3AkKSFT

Bin, Y. (2016). China-Russia relations: H-bomb plus THAAD equals Sino-Russian Alliance? *Comparative* Connections*: A Triannual E-Journal on East Asian Bilateral Relations*, *18*(1), 127-137. https://bit.ly/3C9TK2n

Budget Request for National Security Space and Missile Defense Programs: Hearing before the Committee on Armed Services House of Representative, 111th Congress (2009).

Budget Request from the DOD: Hearing before the Committee on Armed Services House of Representative, 111th Congress (2010).

Budget Requests From United States European Command and United States Africa Command: Hearing before the United States HASC, 112th Congress (2012). https://bit.ly/3SSsADk

Biswas, S. (2014). Nuclear Desire: Power and the Postcolonial World Order. University of Minnesota Press. Biswas, S (2014). https://bit.ly/3SMHgng

Blechman, B., & Vaicikonis, J. (2016). Unblocking the road to zero: US-Russian Cooperation on missile defenses. *Bulletin of the Atomic Scientists*, *66*(6), 25-35. https://bit.ly/3AgJ1ln

Boustany, C., & Ellings, R. J. (2018). China and the strategic imperative for the United States. *Asia Policy*, *13*(1), 47-67. https://bit.ly/3AjVCnQ

Bradley, J. (1993). Methodological issues and practices in qualitative research. *Library Quarterly, 63*(4), 431-449.

Brown, J. R. (1996). The I in science: Training to utilize subjectivity in research. Oslo, Norway: Scandinavian University Press.

Budget Request For Missile Defense Programs: NDAA For FY 2011 And Oversight Of Previously Authorized Programs: Hearing before the Strategic Forces Subcommittee of the United States HASC, 112th Cong. (2011). https://bit.ly/3RBAzUz

Budget Request For Missile Defense Programs: NDAA For FY 2014 And Oversight Of Previously Authorized Programs: Hearing before the Strategic Forces Subcommittee of the United States HASC, 113th Cong. (2013). https://bit.ly/3ASp316

Budget Request For National Security Space And Missile Defense Programs: Hearing before the Strategic Forces Subcommittee of the United States HASC, 111th Cong. (2009). https://bit.ly/3yQT5Qm

Budget Request From The DOD: NDAA For FY 2011 And Oversight Of Previously Authorized Programs: Hearing before the United States HASC, 111th Cong. (2010). https://bit.ly/3zcId0x

Budget Request from the DOD: Hearing before the United States HASC, 113th Cong. (2013). https://bit.ly/3z9AbW8

Budget Requests From United States European Command and United States Africa Command: Hearing before the United States HASC, 112th Congress (2012). https://bit.ly/3pggZ35

Budget Requests From The United States Southern Command And United States Northern Command: NDAA For FY 2011 And Oversight Of Previously

Authorized Programs: Hearing before the United States HASC, 111th Cong. (2010). https://bit.ly/3AQvEsL

Budget Requests from United States Southern Command and United States Northern Command: Hearing before the United States HASC, 112th Cong. (2012). https://bit.ly/3O7SHCs

Chapman, B. (2016). United States congressional committee hearings on Korea during the 113th congress 2013-2014: overseeing multifaceted aspects of Washington's peninsular interests. *The Korean Journal of Defense Analysis*, *28*(1), 85-101. https://bit.ly/3SSqt20

Chasteen, L. (2017). How to reduce Russia/China concerns on missile defense. *Institute of Electrical and Electronics Engineers*, 1-6. https://bit.ly/3w4BYtC

Chen, Y. 2016. "THAAD Deployment in ROK Destroys Regional Strategic Stability." PLA Daily, August 5, 7.(In Chinese: 陈岳, 《"萨德"入韩破坏地区战略平衡》, 《解放军报》, 2016 年8月5日。第7版。).

Choi, K. (2015). The North Korean nuclear problem: Twenty years of crisis. *Asia Policy, 19*, 28-36. https://bit.ly/3bY7PW8

Choi, Y.S. (2020). Keeping the Americans in: The THAAD deployment on the Korean peninsula in the context of Sino-American rivalry. *Contemporary Security Policy*, *41*(4), 632-652. https://bit.ly/3zPLcei

Choo, J. (2020). South Korea's China policy. *East Asian Policy, 12*(2), 93-105. https://bit.ly/3zToUIv

Choo, J. (2019). South Korea's politics 2018: Unpredictable external relations and a slowing economy. *East Asian Policy, 11*(1), 100-110. https://bit.ly/3JSKX6Q

Chung, S. (2016). North Korea's nuclear threats and counter-strategies. *The Journal of East Asian Affairs, 30*(2). https://bit.ly/3QO05Vv

Cimbala, S.J. (2012). Missile defense malpractice: United States-Russian relations and nuclear fallacy. *Journal of Slavic Military Studies, 25*(3), 269-283. https://bit.ly/3SOhHSR

Cimbala, S.J. (2018). Deal breakers or speed bumps? Missile defenses and Russian-American nuclear arms control. *The Journal of Slavic Military* Studies, *31*(1), 1-14. https://bit.ly/3zOZ9sM

Cimbala, S.J. (2017). Nuclear arms control: A nuclear posture review opportunity. *Strategic Studies Quarterly*, 95-114. https://bit.ly/3Am1CMR

Cirincione, J. (2013). Nuclear Nightmares: Securing the World Before It Is Too Late. Columbia University Press. https://bit.ly/3SIvGtg

Coleman, T.W. (2014). Budget uncertainty puts America's national security interests at risk. I*nternational Policy Digest, 1*(5), 10-12. https://bit.ly/3bUREZq

Collina, T.Z. (2014). Hill to Fix, Not Expand, Missile Defense. *Arms Control Today*, *44*(1), 39-40. https://bit.ly/3bXUzk3

Congressmen on Missile Defense Caucus Blast President Obama's Abandonment of European Missile Defense. (2009, September 17). *Federal Information and News Dispatch, Inc.*

Corbett, M. (2013). A new approach to ballistic missile defense for countering anti-access/area-denial threats from precision-guided weapons. *Air & Space Power Journal*, 83-106. https://www.airuniversity.af.edu/Portals/10/ASPJ/journals/Volume-27_Issue-2/F-Corbett.pdf

Corbin, J. & Strauss, A. (1998). *Basics of qualitative research.* London: Sage.

Cox, W. & McCubbins, M.D. (2007). *Legislative Leviathan: Party Government in the House*. New York: Cambridge University Press.

Creswell, J. & Poth, C.N. (2018). Qualitative Inquiry and Research Design: Choosing Among Five Approaches. SAGE Publications, Inc.: Thousand Oaks, CA.

Cushman, C.B. (2014). An Introduction to the United States Congress. Routledge.

Davenport, K. (2016). Iran's missile tests raise concerns. *Arms Control Today*, 25. https://www.armscontrol.org/act/2016-03/news/iran%E2%80%99s-missile-tests-raise-concerns

Davenport, K. (2015a). Iran tests new missile. *Arms Control Today*, 22.

Davenport, K. (2015b). North Korea tests missile for submarine. *Arms Control Today*, 30-31.

Davenport, K., & Phillip, E. (2016). A French view on the Iran deal: An interview with Ambassador Gerard Araud. *Arms Control Today*, 15-20

De Figueiredo, J.M. (2013). Committee jurisdiction, congressional behavior, and policy outcomes. *Public Choice, 154*, 119-137.

Democrats Successfully Rein in Nuclear Weapons. *United States Federal News* (2005, May 12).

DOD Authorization for Appropriations for FY 2003: Hearing before the United States SASC, 107th Congress (2002).

DOD Authorization for Appropriations for FY 2008: Hearing before the United States SASC, 110th Congress (2007). https://bit.ly/3zPEzbU

DOD Authorization for Appropriations for FY 2010: Hearing before the United States SASC, 111th Congress (2009).

DOD Authorization For Appropriations For FY 2011: Hearing Before the United States SASC, 111th Congress (2010).

DOD Authorization for Appropriations for FY 2012 and the Future Years Defense Program: Hearing Before the United States SASC, 112th Congress (2011).

DOD Authorization for Appropriations for FY 2013 and the Future Years Defense Program: Hearing Before the United States SASC, 112th Congress (2012).

DOD Authorization for Appropriations for FY 2014 and the Future Years Defense Program: Hearing before the United States SASC, 113th Congress (2013). https://bit.ly/3pAQ6ax

DOD Authorization for Appropriations for FY 2015 and the Future Years Defense Program: Hearing before the United States SASC, 113th Congress (2014). https://bit.ly/3PrPRsC

DOD Authorization for Appropriations for FY 2016 and the Future Years Defense Program: Hearing Before the United States SASC, 114th Congress, 2015). https://bit.ly/3Ak62Uq

DOD Authorization for Appropriations for FY 2017 and the Future Years Defense Program: Hearing before the United States SASC, 113th Congress (2016). https://bit.ly/3bSvR4F

DOD Authorization for Appropriations for FY 2019 and the Future Years Defense Program: Hearing before the United States SASC, 115th Congress (2018). https://bit.ly/3pfrWC2

Part 1: DOD Authorization for Appropriations for FY 2012 and the Future Years Defense Program: Hearing before the United States SASC, 112th Congress (2011).

Deni, J. R. (2013). Strategic landpower in the Indo-Asia-Pacific. *Parameters, 43*(3), 77-86.

DOD Information Technology, Cybersecurity an Information Assurance for FY 2022: Hearing before the United States HASC, 117th Congress (2021).

Deudney, D. & Ikenberry, J. (2017). realism, liberalism and the Iraq war. *Survival, 59*(4), 7-26. https://bit.ly/3Qp84II

Diesen, G. & Keane, C. (2018). The offensive posture of NATO's missile defence system. *Communist and Post-Communist Studies, 51*(2), 91-100.

Donnelly, J.M. and Milero, E. Veto threats set up shutdown with White House GOP over defense policy. *Congressional Quarterly Today* (2011, May 24).

Durkalec, J. (2012). NATO missile defence: In search of a broader role. *The Polish Quarterly of International Affairs, 21*(1), 61-87.

Dumez, H. (2015). What is a case, and what is a case study? *Bulletin of Sociological Methodology, 127*(1), 43-57.

Easley, L. (2016). Kaesong and THAAD: South Korea's decisions to counter the North. *World Affairs, 179*, 21.

El-Anis, I. (2014). Interests, trust and security in United States-Jordanian nuclear relations. *Journal of Developing Studies, 30*(4), 459-482.

Evans, D. & Schwalbe, J. (2018). Intercontinental ballistic missile and their role in nuclear forces. *Air & Space Power Journal*, 37-49.

Fieldhouse, R.W. (2016). INF treaty impasse: Time for Russian action. *Arms Control Today*, 8-15.

Fields, J. (2014). State Behavior and the Nuclear Nonproliferation Regime. University of Georgia Press.

FY 2012 National Defense Authorization Budget Requests for United States European Command, United States Southern Command, and United States Northern Command: Hearing before the United States HASC, 112th Cong. (2011). https://bit.ly/3oa3FwA

FY 2013 National Defense Authorization Budget Request For Missile Defense: Hearing before the Subcommittee on Strategic Forces of the United States HASC, 112th Cong. (2012) https://bit.ly/3aLAAES

FY 2015 National Defense Authorization Budget Request For Missile Defense Programs: Hearing before the Subcommittee on Strategic Forces of the United States HASC, 113th Cong. (2014) https://bit.ly/3yKIZQH

FY 2016 Budget Request for Strategic Forces: Hearing before the Subcommittee on Strategic Forces of the United States HASC, 114th Cong. (2015) https://bit.ly/3OskHkB

FY 2018 Priorities and Posture of Missile Defeat Programs and Activities: NDAA For FY 2018 and Oversight Of Previously Authorized Programs: Hearing before the Subcommittee on Strategic Forces of the United States HASC, 115th Cong. (2017) https://bit.ly/3o9QL1M

FY 2019 Budget Request for Missile Defense and Missile Defeat Programs: Hearing before the United States HASC, 115th Congress (2018). https://bit.ly/3AjGgzD

FY 2020 Priorities for Atomic Energy Defense, Nonproliferation, Safety and Environmental Management: Hearing before the Strategic Forces Subcommittee of the United States HASC, 116th Cong. (2019). https://bit.ly/3yJvSzn

FY 2022 Budget Request for Missile Defense and Missile Defeat Programs: Hearing before the United States HASC, 117th Congress (2021). https://bit.ly/3bWtgXl

FY 2016 National Defense Authorization Budget Request For Missile Defense Programs: Hearing before the United States HASC, 114th Congress (2015). https://bit.ly/3bUq7aK

FY 2020 Priorities for Atomic energy Defense, Nonproliferation, Safety, and Environmental Management: Hearing before the United States House Committee on Armed Services, 116th Congress (2019). https://bit.ly/3piEvwE

FY 2021 Priorities for Missile Defense and Missile Defeat Programs: Hearing before the United States House Committee on Armed Services, 116th Congress (2020). https://bit.ly/3AljpnC

Flick, U. (2009). An Introduction To Qualitative Research. SAGE Publications, Inc. Thousand Oaks, CA.

Fruhling, S. (2016). Managing escalation: missile defense, strategy and US alliances. *International Affairs, 92*(1), 81-95.

Furukawa, K. (2012). Japan's Nuclear Option in Over the Horizon Proliferation Threats. Redwood City, US: Stanford Security Studies.

Future Roles and Missions of the Missile Defense Agency: Hearing before the Strategic Forces Subcommittee of the United States HASC, 111th Cong. (2009). https://bit.ly/3AQZJIV

Gavin, F.J. (2015). Strategies of inhibition: United States grand strategy, the nuclear inhibition, and nonproliferation. *International Security, 40*(1), 9-46.

Gentles, S.J., Charles, C., Ploeg, J, & McKibbon, K.A. (2015). Sampling in qualitative research: Insights from an overview of the methods literature. *The Qualitative Report, 20*(11), 1772-1789.

Gibilterra, J. (2015). Conditional deterrence and missile defense. *Comparative Strategy*, *34*(1), 64–73. https://bit.ly/3SN0itG

Given, L.M. (2008). Content Analysis. The SAGE Encyclopedia of Qualitative Research Methods. DOI: http://dx.doi.org.ezp.waldenulibrary.org/10.4135/9781412963909.n65

Given, L.M. (2008). Rigor in Qualitative Research. The SAGE Encyclopedia of Qualitative Research Methods. DOI: http://dx.doi.org.ezp.waldenulibrary.org/10.4135/9781412963909.n409

Given, L.M. (2008). Text. The SAGE Encyclopedia of Qualitative Research Methods. DOI: http://dx.doi.org.ezp.waldenulibrary.org/10.4135/9781412963909.n447

Glaser, C.L. and Fetter, S. (2015). Should the United States reject MAD? *International Security*, *41*(1), 49-98 https://bit.ly/3Por0Ge

Goodby, J. E. & Postol, T. A. (2018). A new boost-phase missile defense system – and its diplomatic uses in the North Korea dispute. *Bulletin of the Atomic Scientists, 74*(4), 210-219. https://bit.ly/3w1j7zq

Grego, L. (2018). United States ground-based midcourse missile defense: Expensive and unreliable. *Bulletin of the Atomic Scientists, 74*(4), 220-226. https://bit.ly/3Alw4Xw

Han, S. (2019). Resetting the South Korea-China relationship: The THAAD controversies and their aftermath. *The Korean Journal of Defense Analysis*, *31*(4), 539-557. https://bit.ly/3SQCBAQ

Handberg, R. (2015). The symbolic politics of ballistic missile defense: Seeking the perfect defense in an imperfect world. *Defense & Security Analysis*, *31*(1), 44-57.

Heim, J.L. (2015). The Iranian missile threat to air base: A distant second to China's conventional deterrent. *Air and Space Power Journal, 29*(4).

Henehan, M.T. (2010). Foreign Policy and Congress: An International Relations Perspective. University of Michigan Press.

Hicks, B., Galdorisi, G., & Truver, S.C. (2012). The aegis BMD global enterprise: A "high end" maritime partnership. *Naval War College Review*, *65*(3), 65-80.

Hoshino, M. & Hiraiwa, S. (2020). Four factors in the "special relationship" between China and North Korea: a framework for analyzing the China-North Korea relationship under Xi Jinping and Kim Jong-un. *Journal of Contemporary East Asia Studies, 9*(1), 18-28. https://bit.ly/3JWxR8O

How is DOD Responding to Emerging Security Challenges in Europe? NDAA for FY 2016 and Oversight of Previously Authorized Programs Hearing before the United States HASC, 114th Cong. (2015). https://bit.ly/3OcnAWn

Huang, W.H. (2019). A rusty but provocative knife? The rationale behind China's sanction usage. *Journal of Contemporary Eastern Asia, 18*(1), 30-48. https://bit.ly/3w2LmxK

Husserl E. (1900). Logical investigations. Vol. 1. London: Routledge & Kegan Paul.

Hwang, B.Y. (2017). The United States pivot to Asia and South Korea's rise. *Asian Perspective, 41*(1), 71-97.

Hyun, I. (2016). An enduring dilemma on the Korean peninsula: The North Korean nuclear conundrum and South Korea's strategic choices. *The Korean Journal of Defense Analyses, 28*(2), 163-180.

Jaffer, J.N. (2019). Elements of its own demise: Key flaws in the Obama Administration's domestic approach to the Iran nuclear agreement. *Case Western Reserve Journal of International Law, 51*(1/2), 77-101.

Jiang, Q., Cheng, Y., & Cho, S.K. (2021). Media coverage and public perceptions of the THAAD event in China, the United States and South Korea: A cross-national network agenda-setting study. *Chinese Journal of Communication, 14*(4), 386-408. https://bit.ly/3bVsGcy

Jordan, A.A., Taylor, W.J., & Meese, M.J. (2011). American National Security (6). Baltimore, US: Johns Hopkins University Press, 2011.

Juneau, T. (2019). The enduring constraints on Iran's power after the nuclear deal. *Political Science Quarterly, 134*(1), 39-61. https://bit.ly/3QmjVr5

Kang, C. & Gibum, K. (2017). A thought on North Korea's nuclear doctrine. *The Korean Journal of Defense Analysis*, *29*(4), 495.511. https://bit.ly/3dvN2tl

Kang, K. & Kugler, J. (2015). Assessment of deterrence and missile defense in East Asia: A power transition perspective. *International Area Studies Review*, *18*(3), 280-296. https://bit.ly/3zTmR7m

Karako, T. (2017). Homeland missile defense: How the United States got here. *Bulletin of the Atomic Scientists*, *73*(3), 159-166. https://bit.ly/3JUBfkl

Karako, T. (2017). Missile defense and the nuclear posture review. *Strategic Studies Quarterly, 11*(3) 48-64. https://bit.ly/3C5Ax1R

Karako, T. (2019). The missile defense review: Insufficient for complex and integrated attack. *Strategic Studies Quarterly, 13*(2), 5-15. https://bit.ly/3c04Ig6

Kay, S. (2012). NATO's missile defense – realigning collective defense for the 21st century. *Perceptions, 17*(1), 37-54. https://bit.ly/3PlGcnp

Kim, D. (2017). Military effectiveness of the THAAD deployment and the future of the Korean peninsula. *Gukjejeongchinonchon*, *57*(2), 290–327. [In Korean].

Kim, E. & Cha, V. (2016). Between a rock and a hard place: South Korea's strategic dilemmas with China and the United States. *Asia Policy, 21*, 101-121. https://bit.ly/3C4pwO9

Kim, I. & Park, S. (2018). Deterrence under nuclear asymmetry: THAAD and the prospects for missile defense of the Korean Peninsula. *Contemporary Security Policy*, *40*(2), 165-192. https://bit.ly/3C4RyJr

Kimball, D.G. (2016a). Back to the nuclear brink? *Arms Control Today*, *4*(2) p.3. https://bit.ly/3bWlMDV

Kimball, D.G. (2016b). North Korea and nuclear testing. *Arms Control Today*, p.3. https://bit.ly/3w2hEZZ

Klafki, W. (1971). Hermeneutic Methods in Educational Science. In: Klafki, W. et al. (ed.): Radio College of Education. Educational Science 3. An Introduction. Weinheim, Germany.

Klingner, B. (2015). The Importance of THAAD Missile Defense, *The Journal of East Asia Affairs, 29*(2), 21-41. https://bit.ly/3AjV29z

Klug, F. (2017, April 28). AP fact check: US anti-missile system in S. Korea has limits. AP News. Retrieved from https://bit.ly/3dudmnI

Kobor, L. (2013). Empty Silos: Eliminating the ICBM From the United States Nuclear Force Structure. *Journal of Politics and Society,* 92-129. https://bit.ly/3PoV7xh

Kong, W.N. (2022). Economic effect and resolution idea of the THAAD political conflict on South Korea's exports to china. *The Chinese Economy*, *55*(2), 88-110. https://bit.ly/3QrWAnU

Kracauer, S. (1952). The Challenge of Qualitative Content Analysis. *Public Opinion Quarterly, 16*(4), 631-642. https://bit.ly/3w3qiY4

Kramer, D. (2013). West Coast national labs trying to cope with roller-coaster budget picture. *Physics Today*, *66*(5), 19-20. https://bit.ly/3AkOckd

Krippendorff, K. (2004). Content Analysis: Introduction to Its Methodology. SAGE Publications, Inc.: Thousand Oaks, CA.

Kroenig, M. (2018). The return to the pressure track: The Trump Administration and the Iran nuclear deal. *Diplomacy & Statecraft, 29*(1), 94-104. https://bit.ly/3JQpdbO

Kuckartz, U. (2014). Qualitative Text Analysis: A Guide to Methods, Practice & Using Software https://bit.ly/3SMbyqj

Krueger, R.A. (2010). Using Stories in Evaluation. Handbook of Practical Program Evaluation. Eds. Kathryn E. Newcomer, Harry P. Hatry, Joseph S. Wholey. John Wiley & Sons, Inc.: Hoboken, NJ. https://bit.ly/3SMiFPr

Lankov, A. (2017). Why nothing can really be done about North Korea's nuclear program. *Asia Policy, 23*,104-110. https://bit.ly/3QyzJXk

Lawrence, E.D., Maltman, F. & Smith, S.S. (2006). Who wins? Party effects in legislative voting. *Legislative Studies Quarterly*, 33-69. https://bit.ly/3QAysiE

Lee, S.H. (2021) Seoul's up-and-down romance with China amid United States China rivalry: A Korean perspective. *China Report*, *57*(3), 309-326. https://bit.ly/3zXIRhm

Li, B. 2016. "The Security Dilemma and THAAD Deployment in the ROK." Kyunghyang Daily, August 3. https://carnegieendowment.org/2016/08/03/securitydilemma-and-thaad-deployment-in-rok-pub-64279

Lim, D.J. & Ferguson, V.A. (2021). Informal economic sanctions: The political economy of Chinese coercion during the THAAD dispute. *Review of International Political Economy*. https://bit.ly/3phEd93

Lincoln, Y.S. & Guba, E.G. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage Publications.

Lodal, J. (2016). Book Review: The Future of Nuclear Weapons. *Arms Control Today*, 31-36. https://bit.ly/3QJvwAg

Lye, L.F. & Juan, C. (2017). China-South Korea relations: THAAD system deployment ad implications for bilateral ties. *East Asian Policy*, *9*(4), 27-40. https://bit.ly/3zNNJpa

MacDonald, B.W. & Ferguson, C.D. (2015). Chinese strategic missile defense: Will it happen, and what would it mean? *Arms Control Today*, *45*(9), 14-20. https://bit.ly/3QmkfFX

Maguire, L. (2013). The United States Congress and the politics of Afghanistan: An analysis of the Senate Foreign Relations and Armed Services Committees during

George W. Bush's second term. *Cambridge Review of International Affairs*, *26*(2). https://bit.ly/3QEbqao

Meagher, E.A. & Wieland, R.J.V. (2012). The effects of party and agenda control: Assessing the ideological orientation of legislation directing bureaucratic behavior. *Political Research Quarterly*, *65*(3). https://bit.ly/3dusWzI

Mettler, S.A. & Reiter, D. (2012). Ballistic missiles and international conflict. *Journal of Conflict Resolution*, 57(5). https://bit.ly/3C68Ztc

Mistry, D. (2013). Containing Missile Proliferation: Strategic Technology, Security Regimes, and International Cooperation in Arms Control. University of Washington Press.

Mollenhauer, K. & Uhlendorff, U. (1992). On the Method of Hermeneutic Diagnostic Interpretation Social Social-Pedagogic Diagnoses (pp. 28-35). Weinheim: Germany.

Moon, C. (2017). Managing North Korean nuclear threats: In defense of dialogue and negotiations. *Asia Policy, 23*, 74-82. https://bit.ly/3C2Tgei

Moon, C. (2021). Race, transnational militarism, and neocoloniality: The politics of the THAAD deployment in South Korea. *Security Dialogue*, *52*(6), 512-528. https://bit.ly/3Qhbm0x

Munhall, P., & Oiler, C. (1986). *Nursing research: A qualitative perspective*. East Norwalk, CT: Appleton-Century-Crofts.

NDAA for FY 2010: Hearing before the United States HASC, 111th Congress (2009).

NDAA for FY 2011: Hearing before the United States HASC, 111th Congress (2010).

NDAA for FY 2017: Hearing before the United States HASC, 114th Congress (2016).

NDAA for FY 2018: Hearing before the United States HASC, 115th Congress (2017).

National Research Council, Division on Engineering and Physical Sciences, Naval Studies Board (2012). Making Sense of Ballistic Missile Defense: An Assessment of Concepts and Systems for United States Boost-Phase Missile Defense In Comparison to Other Alternatives. National Academies Press.

National Security Challenges and United States Military Activities in Europe: Hearing before the United States HASC, 117th Congress (2021).

National Security Challenges and United States Military Activities in the Indo-Pacific: Hearing before the United States HASC, 117th Congress (2021). https://bit.ly/3SZvGp4

National Security Challenges and United States Military Activity in North and South America: Hearing before the United States HASC, 116th Congress (2020). https://bit.ly/3PnzSM7

Nichols, Y.M. (2013). Haney Foundation: No Use: Nuclear Weapons and United States National Security. University of Pennsylvania Press.

Nominations: Hearing before the United States SASC, 112th Congress (2011).

Nominations: Hearing before the United States SASC, 113th Congress (2013).

Nominations: Hearing before the United States SASC, 113th Congress (2014).

Oguz, S. (2018). Missile defense in Europe: against whom? *Insight Turkey*, *20*(3), 265-282. https://bit.ly/3dr0UVF

Oh, C.J. (2016). Neo-Cold war in the Korean Peninsula: Rising tension between South and North Korea. *Uluslararasi Hukuk ve Politika*, *12*(1), 27-32.

Park, J.H., Lee, Y.S., & Seo, H. (2018). The rise and fall of Korean drama export to China: The history of state regulation of Korean dramas in China. *The International Communication Gazette*, *81*(2), 139-157. https://bit.ly/3zY0f5E

Part 1: DOD Authorization for Appropriations for FY 2004: Hearing before the United States SASC, 108th Congress (2003).

Part 1: DOD Authorization for Appropriations for FY 2005: Hearing before the United States SASC, 108th Congress (2004).

Part 1: DOD Authorization for Appropriations for FY 2010: Hearing before the United States SASC, 111th Congress (2009).

Part 1: DOD Authorization for Appropriations for FY 2011: Hearing before the United States SASC, 111th Congress (2010).

Part 1: DOD Authorization for Appropriations for FY 2012: Hearing before the United States SASC, 112th Congress (2011).

Part 1: DOD Authorization for Appropriations for FY 2015 and the Future Years Defense Program: Hearing before the United States SASC, 113th Congress (2014).

Part 1: DOD Authorization for Appropriations for FY 2016 and the Future Years Defense Program: Hearing before the United States SASC, 113th Congress (2015).

Part 1: DOD Authorization for Appropriations for FY 2017 and the Future Years Defense Program: Hearing before the United States SASC, 113th Congress (2016).

Part 1: DOD Authorization for Appropriations for FY 2018 and the Future Years Defense Program: Hearing before the United States SASC, 115th Congress (2017).

Part 1: DOD Authorization for Appropriations for FY 2019 and the Future Years Defense Program: Hearing before the United States SASC, 115th Congress (2018).

Part 7: DOD Authorization for Appropriations for FY 2003: Hearing before the United States SASC, 107th Congress (2002).

Part 7: DOD Authorization for Appropriations for FY 2007: Hearing before the United States SASC, 109th Congress (2006).

Part 7: DOD Authorization for Appropriations for FY 2008: Hearing before the United States SASC, 110th Congress (2007).

Part 7: DOD Authorization for Appropriations for FY 2009: Hearing before the United States SASC, 110th Congress (2008).

Part 7: DOD Authorization for Appropriations for FY 2012 and the Future Years Defense Program: Hearing before the United States SASC, 112th Congress (2010).

Part 7: DOD Authorization for Appropriations for FY 2013 and the Future Years Defense Program: Hearing before the United States SASC, 112th Congress (2012).

Part 7: DOD Authorization for Appropriations for FY 2015 and the Future Years Defense Program: Hearing before the United States SASC, 113th Congress (2014).

Part 7: DOD Authorization for Appropriations for FY 2016 and the Future Years Defense Program: Hearing before the United States SASC, 113th Congress (2015).

Part 7: DOD Authorization for Appropriations for FY 2017 and the Future Years Defense Program: Hearing before the United States SASC, 114th Congress (2016).

Part 7: DOD Authorization for Appropriations for FY 2018 and the Future Years Defense Program: Hearing before the United States SASC, 115th Congress (2017).

Part 7: DOD Authorization for Appropriations for FY 2019 and the Future Years Defense Program: Hearing before the United States SASC, 115th Congress (2018).

THAAD. The Diplomat. Retrieved from https://bit.ly/3PjlVPj

The President's Decision on Missile Defense in Europe: Hearing before the United States SASC, 111th Congress (2009).

The Secretary of Defense's 2010 Budget Recommendations: Hearing before the United States SASC, 111th Congress (2009).

Parent, J.M. & Rosato, S. (2015). Balancing in neorealism. *International Security*, 40(2).

Park, H. E. (2019). The South Korea-United States alliance under the North Korean nuclear threat: A reluctant return to the "autonomy-security trade-off." *Inha Journal of International Studies*, *34*(2), 447-472.

Patton, M.Q. (2015). Qualitative Research & Evaluation Methods: Integrating Theory and Practice (Page 747). SAGE Publications. Kindle Edition.

Peck, M. (2017). Deterring North Korea. *Aerospace America*, *55*(1), 40. https://bit.ly/3QLfzJx

Pentagon Evaluating United States West Coast Missile Defense Sites. (2017, December 5) *Channel NewsAsia*.

Perry, W. (2013). Emerging challenges to American arms control and security policy. *The Fletcher Forum of World Affairs*, *37*(1), 83-89. https://bit.ly/3drbT1l

Peterson, M. (1997). The limits of social learning. Translating analysis into action. *Journal of Health Politics, Policy, and Law*, *22*(4), 1077-1114. https://bit.ly/3pfmHCz

Petraitis, D. (2013). Missile defense – what it is designed for and how it is understood. *Lithuanian Annual Strategic Review*, *11*(1), 29-53. https://bit.ly/3pkkUvK

Philipp, E. (2016a). North Korea claims hydrogen bomb test. *Arms Control Today*, 36-38. https://bit.ly/3popPvD

Philipp, E. (2016b). States adopt new North Korea sanctions. *Arms Control Today*, 20-22. https://bit.ly/3bTuMcV

Polansky, D. (2016). Drawing out the leviathan: Kenneth Waltz, Hobbes, and the neorealist theory of the state. *International Studies Review*, *18*, 268-289.

President Obama's New Plan For Missile Defenses In Europe And The Implications For International Security: Hearing before the United States HASC, 111th Cong. (2009). https://bit.ly/3O6oHHf

Pugacewicz, T. (2017). Missile defense roles in the post-cold war United States strategy. *Politeja*, *5*(50), 261-291.

Recchia, S. (2016). Why seek international organisation approval under unipolarity? Adverting issue linkage vs. appeasing Congress. *International Relations*, *30*(1), 78-101.

Reif, K. & Davenport, K. (2016). South Korea to deploy United States defense system. *Arms Control Today*. https://bit.ly/3QrGYki

Reif, K. (2016a). Hill denies money for submarine fund, *Arms Control Today*, 45-47. https://bit.ly/3SP40TO

Reif, K. (2016b). New missile defense concepts advance, *Arms Control Today*, 28-30. https://bit.ly/3JQV8IY

Reif, K. (2016c). Pentagon completes missile defense study, *Arms Control Today*, 5. https://bit.ly/3QEi8gE

Reif, K. (2016d). Romania missile defense site activated. *Arms Control Today*, *46*(5), 35. https://bit.ly/3SNrJn4

Reif, K. (2016e). The Missile Defense Agency and the color of money, *Arms Control Today*, 7.

Reif, K. (2015a). Hill urges military response on INF pact. *Arms Control Today*, 26-27. https://bit.ly/3JU0un5

Reif, K. (2015b). Hill Withholds Funds for Work on Russia. *Arms Control Today*, 28-30. https://bit.ly/3zVcJej

Report On The BMDR And The FY 2011 National Defense Authorization Budget Request For Missile Defense Programs: Hearing before the United States HASC, 111th Cong. (2010). https://bit.ly/3cj6Qj9

Representative Tauscher Outline Agenda for Missile Defense in Europe. *United States Federal News* (2007, April 19).

Representative Tauscher Welcomes Secretary Rumsfeld's Acknowledgment of Need for Missile Defense Testing *United States Federal News* (2006, August 29).

Report on the BMDR and the FY 2011 National Defense Authorization Budget Request for Missile Defense Programs: Hearing before the United States HASC, 111th Congress (2010). https://bit.ly/3C0cDVv

Representative Tauscher on Proposed United States-Poland Missile Defense Pact. *United States Federal News* (2008, August 15).

Rezaei, F. (2018). Iran's nuclear agreement: The three specific clusters of concerns. *Insight Turkey*, *20*(2), 167-199.

Rhak, P.H. (2017) South Korean preparedness for the North Korean nuclear threat: A few steps behind. *Korea Institute for Defense Analyses, 29*(2), 231-251.

Richie, D.A. (2016). The United States Congress: A Very Short Introduction. Oxford University Press: New York, NY.

Riqiang, W. (2013). China's anxiety about United States missile defence: A solution. *Survival*, *55*(5), 29-52. https://bit.ly/3JUEIzn

Riqiang, W. (2015). Limit missile defense -- or expand it? A Chinese response. *Bulletin of the Atomic Scientists*, *71*(2), 9-12. https://bit.ly/3QnL4tH

Rogers: Iran Fires Up Rocket Program While Obama Weakens United States Missile Defense. (2015, February 4). *Federal Information and News Dispatch, Inc.*

Rogers: Poland Should Buy Interoperable NATO Missile System. (2014, September 15). *Federal Information and News Dispatch, Inc.*

Rogers: Strengthen Missile Defenses; Hearing focuses important line of defense against Russia; Rep. Mike Rogers (AL) (R-AL) News Release. (2014, March 25). *Federal Information and News Dispatch, Inc.*

Saltzman, I.Z. (2015). Growing pains: Neoclassical realism and Japan's security policy emancipation. *Contemporary Security Policy*, *36*(3), 498-527. https://bit.ly/3K07EWU

Sanger, D.E. & Broad, W.J. (2019). United States Suspends Nuclear Arms Control Treaty With Russia. *Washington Post*. https://nyti.ms/2Wzxo3e

Sankaran J., & Fetter, S. (2022). defending the United States: Revisiting national missile defense against North Korea. *International Security*, *46*(3), 51-86. https://bit.ly/3bQCG6L

Sankaran, J., & Fearey, B. L. (2017). Missile defense and strategic stability: THAAD in South Korea. *Contemporary Security Policy, 38*(3), 321–344. https://bit.ly/3wqsfy7

Sankaran, J. (2013). Missile defense against Iran without threatening Russia. *Arms Control Today*, *43*(9), 15-21.

Schrank, A. (2006). A Handbook for Social Science Field Research: Essays & Bibliographic Sources on Research Design and Methods. Edited by: Ellen Perecman & Sara R. Curran. https://bit.ly/3w4Em3D

Schultz, G.P. (2013). Reducing the Nuclear Threat: Lessons from Experience in Nuclear Security: The Problems and the Road Ahead. Hoover Institution Press.

Schultz, G., Drell, S., & Kissinger, H. (2014). Nuclear Security: The Problems and the Road Ahead. Hoover Institution Press.

Security Update on the Korean Peninsula: Hearing before the United States HASC, 116th Congress (2020).

Senn, M. (2012). Spoiler and enabler: The role of ballistic-missile defence in nuclear abolition. *International Journal*, *67*(3), 747-764. https://bit.ly/3Clkm0H

Shaw, J.T. (2012). Richard G. Lugar, Statesman of the Senate. Indiana University Press.

Shifrinson, J. (2019). Security in Northeast Asia: Structuring A Settlement. *Strategic Studies Quarterly*, *13*(2), 23-47. https://bit.ly/3dvRacD

Sigal, L.V. (2016). Getting what we need with North Korea. *Arms Control Today*, 8-13.

Simon, L. (2016). The 'third' us offset strategy and Europe's 'anti-access' challenge. *Journal of Strategic Studies*, *39*(3), 417-445.

Snyder, S. & Byun, S.W. (2016). China-Korea relations. *Comparative Connections: A Triannual E-Journal on East Asian Bilateral Relations*, *18*(2).

Soliman, C. (2015). Do demographics trump party loyalty: A study of legislative representation. *Political Analysis*, *17*(6). https://bit.ly/3pjj26u

Spangler, M.A. (2016). Preparing for North Korea's collapse: Key stabilization tasks. *Parameters, 46*(2), 37-51.

Sohn, Y. (2019). South Korea under the United States-China rivalry: Dynamics of the economic-security nexus in trade policymaking. *The Pacific Review*, *32*(6), 1019-1040. https://bit.ly/3AkJ53B

Spector, L.S. (2016). A proliferation plateau may offer unique opportunities. *Arms Control Today*, 14-19.

Status Of Implementing The Phased Adaptive Approach To Missile Defense In Europe: Hearing before the United States Subcommittee On Strategic Forces Of The HASC, 111th Congress (2010). https://bit.ly/3dtz1MT

Stone, M. United States seeking new missile defence sites on West Coast as North Korea nuclear attack fears grow, congressmen say; Pressure grows on government to respond to increasing likelihood Kim Jong-Un regime has missiles that could hit mainland America (2017, December 3). *The Independent.*

Strauss, A. & Corbin, J. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory, 2nd ed. Thousand Oaks, CA, US: Sage Publications, Inc.

Streubert, H., & Carpenter, H. (1995). *Qualitative research in nursing: Advancing the humanistic imperative*. Philadelphia: J. B. Lippincott.

Stuart, D. (2017). America's pivot to Asia: A eulogy of an interim report? *Marine Corps University,* 8(1), pp. 21-38. https://bit.ly/3QFCiH6

Su, L., Stepchenkova, S., & Dai, X. (2020). The core-periphery image of South Korea on the Chinese tourist market in the times of conflict over THAAD. *Journal of Destination Marketing & Management*, 17. https://bit.ly/3QZI9Y7

Sukhee, H. (2019). Resetting the South Korea-China relationship: The THAAD controversies and their aftermath. *The Korean Journal of Defense Analysis, 31*(4), 539-557.

Swaine, M. D. (2010). China's assertive behavior, part one: On "core interests". *China Leadership Monitor, 34*,1–25. https://bit.ly/3w25Si7

Terry, S.M. (2017). Hazards on the road ahead: The United States and the Korean Peninsula. *Asia Policy*, *23*, 21-28.

The FY 2016 National Defense Authorization Budget Request from the Military Departments: NDAA for FY 2016 and Oversight of Previously Authorized Programs: Hearing before the United States HASC, 114th Cong. (2015). https://bit.ly/3aL9Fc4

The FY 2021 National Defense Authorization Budget Request for the Department of the Army: Hearing before the United States HASC, 116th Congress (2020).

The FY 2021 National Defense Authorization Budget Request for the DOD: Hearing before the United States HASC, 116th Congress (2020). https://bit.ly/3bRrTtb

The FY 2021 National Defense Authorization Budget Request for the Department of the Navy: Hearing before the United States HASC, 116th Congress (2020).

The Future of Missile Defense Testing: Hearing before the Strategic Forces Subcommittee of the United States HASC, 111th Cong. (2009). https://bit.ly/3OfBIy2

The Future Of National Defense And The United States Military Ten Years After 9/11: Perspectives Of Secretary Of Defense Leon Panetta And Chairman Of The Joint Chiefs Of Staff General Martin Dempsey: Hearing before the United States HASC, 112th Congress (2011). https://bit.ly/3JWq370

The Missile Defeat Posture and Strategy of the United States – The FY 2017 President's Budget Request: Hearing before the Strategic Forces Subcommittee of the United States HASC, 114th Cong. (2016). https://bit.ly/3RHE2kk

The Posture of the United States European Command and United States Africa Command: Hearing before the Strategic Forces Subcommittee of the United States HASC, 113th Cong. (2013) https://bit.ly/3AWi4V4

The Posture of the United States Northern Command and United States Southern Command: NDAA for FY 2015 and Oversight of Previously Authorize Programs: Hearing before the United States HASC, 113th Cong. (2014) https://bit.ly/3uU71rm

The Status of United States Strategic Forces: Hearing before the Strategic Forces Subcommittee of the United States HASC, 111th Cong. (2010). https://bit.ly/3ckoxhY

The Status of United States Strategic Forces: Hearing before the Strategic Forces Subcommittee of the United States HASC, 112th Cong. (2011). https://bit.ly/3AWlAOU

The Posture of the United States European Command and United States Africa Command: Hearing before the United States HASC, 113th Congress (2013). https://bit.ly/3dsFUhg

The Posture of the United States Northern Command and United States Southern Command: Hearing before the United States HASC, 113th Congress (2014). https://bit.ly/3QMiK3X

The President's Decision on Missile Defense in Europe: Hearing before the United States Senate Committee on Armed Services, 111th Congress (2009). https://bit.ly/3Akc8UO

The 2014 Quadrennial Defense Review: Hearing before the United States HASC, 113th Cong. (2014). https://bit.ly/3aHsMDW

Thranert, O. (2015). Limit missile defense -- or expand it? A German response. *Bulletin of Atomic Scientists*, 71(2), pp. 13-16. https://bit.ly/3dujqN0

Update on Navy and Marine Corps Readiness in the Pacific in the Aftermath of Recent Mishaps: Hearing before the United States HASC, 116th Congress (2020).

United States Defense Posture Changes in the European Theater: Hearing before the United States HASC, 116th Congress (2020).

United States European Command: Hearing before the United States SASC, 114th Congress (2016).

"US 'Planning Anti-Missile Bases On West Coast' To Shield Itself From North Korean Nuclear Threat." 2017, December 3). *Mirror.*

United States Strategic Forces Posture: NDAA for FY 2017 and Oversight of Previously Authorized Programs: Hearing before the Strategic Forces Subcommittee of the United States HASC, 114th Cong. (2016). https://bit.ly/3O8tBU9

van da Haar, E. (2009). Classical Liberalism and International Relations. *Policy*, *25*(1).

Ward, O. (2016). China threatens sanctions over THAAD proposals. *International Policy Digest*.

Watson, D. E. (2017). Rethinking the United States nuclear triad. *Strategic Studies Quarterly*, 134-150.

Watts, R.C. (2018). “Rockets’ Red Glare” Why does China oppose THAAD in South Korea, and what does it mean for United States policy? *United States Naval War College*, *71*(2), 1-29.

Weber, R.P. (1990). *Basic Content Analysis*. Newbury Park, CA: Sage Publications.

Weitz, R. (2013). United States missile defense: Closing the gap. *World Affairs*, *176*(2) 80-87.

Weitz, R. (2015). shattered hopes? A farewell in European arms control? *World Affairs*, *178*(3), 84-91.

Wezowicz, R. (2017). Missile defense and Polish security. *Politeja*, *5*(50), 293-320.

Williams, H. (2016). Russia still needs arms control. *Arms Control Today*, 16-23. https://bit.ly/3dn0X4J

Xiao, R. (2017). Old wine in a new bottle? China's Korea problem. *Asia Policy*, *23*, 83-89.

Yang, F. (2019). asymmetrical interdependence and sanction: China’s economic retaliation over South Korea’s THAAD deployment. *Issues & Studies: A Social Science Quarterly on China, Taiwan, and East Asian Affairs*, *55*(4), 1-39. https://bit.ly/3Pr2uUK

Yates, J. & Leggett, Y. (2016). Qualitative research: An introduction. *Radiol Technol, 88*(2), 225-231.

Yin, R.K. (1989). Case study research: Design and methods. London: Sage Publications.

Yin, R.K. (2003). Case Study Research: Design and Methods, SAGE Publications, Inc: Thousand Oaks, CA.

Yoshihara, T. & Holmes, J.R. (2012). Strategy in the Second Nuclear Age: Power, Ambition, and the Ultimate Weapon. Georgetown University Press.

Zadra, R. (2014). NATO, Russia and missile defense. *Survival*, *56*(4), 51-61.

Zhang, H., Cho, T., & Wang, H. (2020). The impact of a THAAD incident on tourism risk perception and attitude change of Chinese tourists traveling to South Korea. *Sustainability*, *12*(7), 1-13. https://bit.ly/3SQJFxa

Zhu, Q. & Fang, X. (2019). Building an "Association of Trans-Korean Peninsula Nations" and China's role toward the RPG approach. *The Korean Journal of Defense Analysis*, *31*(1), 61-82. https://bit.ly/3QFkWKr

Appendix A: Perspectives About EPAA

This is a high-level matrix overview of SASC and HASC members' perspectives about EPAA based on the data collected in this study to answer the research question.

EPAA		
Republican HASC (3)		
Member	**Frameworks**	**Notes**
Representative Trent Franks (R-AZ)	Simple Party; Neorealism	• Views generally align with political party at the time • Highlights the need for protection against missile threats • Russia is modernizing missile defense system • Concerned about missile defense budget cuts
Representative Mike Rogers (R-AL)	Neorealism; Asymmetrical	• Large missile defense presence in Alabama • Russia and China are enhancing missile defenses to compete with United States • Iran is making developments with its ballistic missile systems and space satellite programs
Representative Mike Turner (R-OH)	Simple Party; Neorealism	• Views generally align with political party at the time • East Coast missile defense site to protect against the Iranian missile threat • Congress is committed to funding EPAA
Democratic HASC (4)		
Representative James R. Langevin (D - RI)	Simple Party; Neorealism	• Views generally align with political party at the time • EPAA was created in response to the Iranian missile threat • Emphasized properly managing the program
Representative Donald Norcross (D-NJ)	Simple Party; N/A	• Views generally align with political party at the time • Did not highlight the missile threats

Representative Loretta Sanchez (D-CA)	Simple Party; N/A	• Did not highlight the value of mutual agreements or cooperation • Acknowledged the Iranian and North Korean missile threats • No information about mutual agreements or cooperation
Representative Ellen O. Tauscher (D-NJ)	Simple Party; Both (Neorealism and Neoliberalism)	• Highlighted cost of an East Coast site • EPAA designed to protect against the Iranian missile threat • Missile defense plans in Poland were not to protect against Russia
Republican SASC (6)		
Senator Saxby Chambliss (R - GA)	Simple Party; Neorealism	• Views generally align with political party at the time • Supports offensive military capabilities and increasing defense to protect self-interests • Focused on the Iranian threat
Senator Susan M. Collins (R-ME)	Simple Party; Neorealism	• Views generally align with political party at the time • Supports increasing defense to protect the United States and its allies
Senator John Cornyn (R-TX)	Simple Party; Both (Neorealism and Neoliberalism)	• Views generally align with political party at the time • China is a nuclear missile threat • Supports United States-Russia cooperation on missile defense
Senator Jim Inhofe (R-OK)	Simple Party; Neorealism	• Views generally align with political party at the time • Strong supporter of defense spending
Senator John McCain (R-AZ)	Simple Party; Neorealism	• Views generally align with political party at the time • Highlighted the Iranian, North Korean, and Chinese missile threats • United States does not have enough Aegis ships to fulfill all combatant command needs
Senator Jeff Sessions (R-AL)	Simple Party; Neorealism	• Views generally align with political party at the time • North Korean and Iranian missile threats
Democratic SASC (5)		

Senator Joe Donnelly (D-IN)	Simple Party; Neorealism	• Views generally align with political party at the time • Supports increasing defense to protect self-interests
Senator Carl Levin (D-MI)	Simple Party; Neoliberalism	• Potential value of cooperating with Russia and
Senator Joseph I. Lieberman (D-CT)	N/A; Neorealism	• Does not align with what is typically communicated by the Democratic Party • Highlighted the missile threat from Iran • Disappointed that the President Obama decided to cancel phase four of the program
Senator Bill Nelson (D-FL)	N/A; Both (Neorealism and Neoliberalism)	• Does not align with what is typically communicated by the Democratic Party • Advocates for more defense infrastructure
Senator Jeanne Shaheen (D-NH)	Simple Party; Neorealism	• Views align with Democratic Party • Supporter of EPAA radar • Seeks multiyear procurement for radar

Appendix B: Perspectives About GMD

This is a high-level overview of SASC and HASC members' perspectives about GMD based on the data collected in this study to answer the research question.

GMD Republican HASC (9)		
Member	**Frameworks**	**Notes**
Representative Rob Bishop (R-UT)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Supports expanding defense capabilities • Long-term planning is lacking
Representative Jim Bridenstine (R-OK)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Increase funding for testing and validation • United States needs to continue to advance this system
Representative Mo Brooks (R-AL)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • North Korea is advancing their capabilities • Highlighted benefits of the system
Representative Mike Coffman (R-CO)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • North Korea is of particular concern • Improve GMD to defend against ICBM threats in the 2030s
Representative Trent Franks (R-AZ)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected

		• GMD protects against North Korea threat • Invest in GMD to ensure future protection
Representative Duncan Hunter (R-CA)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Aims to improve the system • Highlights north Korean missile threat
Representative Doug Lamborn (R-CO)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Highlights missile threats from Iran and North Korea • Advocates for defense spending and infrastructure
Representative Mike Rogers (R-AL)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Advocates for defense spending and infrastructure • "peace through strength"
Representative Mike Turner (R-OH)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Against decreasing program funding by 35 percent • Highlighted GMD as the only system to protect the homeland from missile attacks
	Democratic HASC (6)	
Representative Robert Andrews (D-NJ)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Supports more rigors GMD testing • Wants to enhance confidence of the GMD system

		• Desires a clearer timeline to enhance GMD
Representative Jim Cooper (D-TN)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Wants GMD to reach full confidence • Sought details to understand what testing needs to be done to improve the system • Noted that failed tests do not necessarily mean a failed system
Representative Colleen Hanabusa (D-HI)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Inquired if GMD sites in Alaska and California protect Hawaii – some have suggested Hawaii is a good location for GBIs • Sought clarity on a recent flight test and if it was similar to a potential North Korea missile path
Representative James R. Langevin (D-RI)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Seeks clarity on what specifically needs to be achieved to have complete confidence in GMD • Highlighted a report that stated there is limited confidence in GMD
Representative Loretta Sanchez (D-CA)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Sought clarity on how concerned the United States should be given North Korea's missile activity and the level of confidence of the system • Believes funding has been provided to improve the system

		• Supports resolving test failures before additional GBIs are purchased • Interested in improving capabilities "left of launch," before a missile is launched
Representative Ellen Tauscher (D-CA)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Seeks clarity about what needs to be achieved to enhance GMD • Supports more testing of GMD – current testing does not demonstrate a high confidence of GMD
Republican SASC (8)		
Senator Tom Cotton (R-AR)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Supports expanding missile defense capabilities, such as destroying a missile in its boost phase
Senator Deb Fischer (R-NE)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Supports increased spending to enhance GMD • Views North Korea, Russia, and China as threats
Senator James M. Inhofe (R-OK)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Supports enhancing defense capabilities, such as the EKV and East Coast site • Views North Korea and Iran as threats
Senator John McCain (R-AZ)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected

Senator Jeff Sessions (R-AL)	Simple Party; Neorealism	• Supports increased defense spending for GMD – against decrease in the missile defense budget • Views North Korea and Iran as threats • Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Supports more than 40 GBIs for GMD • Against missile defense budget cuts • Supports more tests to improve the system and modernization of the EKV • Views Iran, North Korea, Russia, and China as threats
Senator Dan Sullivan (R-AK)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Supports a stronger layered missile defense, including space-based sensors • Views North Korea as a threat
Senator Mark Udall (R-CO)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Supports more realistic testing • Prioritizes enhancing the discrimination capability of the EKV over an east coast missile defense site • Highlighted the Iranian ICBM threat
Senator David Vitter (R-LA)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • GMD needs to be continuously improved, including GBIs • Concerned that MDA has not included GMD modernization in its budget
Democratic SASC (7)		
Senator Evan Bayh (D-IN)	Simple Party Neorealism	• Views generally align with political party at the time

		• No personal preferences were uncovered from the data collected • Sought clarity on North Korea's missile capabilities, such as when they approximately achieve placing a warhead on the missile • Asked for confirmation about Iran's capability to launch a missile at Europe
Senator Mark Begich (D-AK)	Simple Party Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • GMD has 90% confidence which will improve with testing • Redundancy is critical for GMD to support its operation during scheduled maintenance when some parts need to be shutdown • Highlighted the North Korea threat and how it is unpredictable and difficult to know what is needed to protect from such a rogue threat • Phase four of EPAA was cancelled and meant to augment GMD • GMD is the only defense system to protect the United States from an ICBM
Senator Joe Donnelly (D-IN)	Simple Party Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Asked for specifics about how improving sensors will enhance discrimination capabilities and address evolving threats • Sought more information on Iran's ICBM capabilities • Supports more GMD testing before additional GBIs are purchased
Senator Kristen E. Gillibrand (D-NY)	Asymmetric; Neorealism	• Views generally align with political party at the time

		• Mentioned that a specific location in her state would be a good option for a third GMD site • Supports an East Coast GMD site to enhance protection from an incoming missile from North Korea or Iran • Mentioned that Fort Drum in New York may be a good potential option
Senator Carl Levin (D-MI)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Sought clarity about how many more flight tests need to be conducted to enhance confidence of GMD • Asked witnesses if the budget allows for more GBIs if deemed necessary in the future
Senator Bill Nelson (D-FL)	Simple Party; Neorealism	• Views generally align with political party at the time • No personal preferences were uncovered from the data collected • Supports real scenario testing of GBI to demonstrate its capability of shooting down and incoming missile

Appendix C: Perspectives About THAAD

This is a high-level overview of SASC and HASC members' perspectives about THAAD based on the data collected in this study to answer the research question.

THAAD		
Republican HASC (4)		
Member	**Frameworks**	**Notes**
Representative Jim Bridenstine (R-MI)	Asymmetric; Neorealism	• The center where THAAD training is conducted is in his state • Supports increased training for THAAD and tools to enhance training
Representative Mo Brooks (R-AL)	Simple Party; Neorealism	• Views generally align with political party at the time • No data were uncovered that showed personal interests • Missile threats are evolving globally • Seeking to enhance THAAD and noted it is high in demand
Representative Mike Rogers (R-AL)	Simple Party; Neorealism	• Views generally align with political party at the time • No data were uncovered that showed personal interests • Views North Korea as a missile threat • Supports THAAD to be considered on West Coast to protect against North Korean missile threat
Representative Mike Turner (R-OH)	Simple Party; Neorealism	• Views generally align with political party at the time • No data were uncovered that showed personal interests • Supports increase of THAAD interceptors • Demand for THAAD exceeds supply • Against decrease budget for missile defense, which means less batteries and interceptors for THAAD
Democratic HASC (4)		
Representative Robert Andrews (D-NJ)	Simple Party; Neorealism	• Views generally align with political party at the time • No data were uncovered that showed personal interests

Representative James R. Langevin (D-RI)	Simple Party; Neorealism	• Supports the increase budget for THAAD • Praised successful flight tests for the system • Clarification as to why THAAD experienced an increase in funding • Supports doubling THAAD interceptors per COCOMs • Noted a failed THAAD missile test
Representative John Spratt (D-SC)	N/A; Neorealism	• Data collected did not demonstrate any personal interests • Statements and questions that he made do not really align with one party or the other • Highlights the growing number of ballistic missiles • Wants to ensure missile defense programs are focusing on the right priorities
Representative Ellen O. Tauscher (D-CA)	N/A; Neorealism	• Data collected did not demonstrate any personal interests • Statements and questions that he made do not really align with one party or the other • THAAD protects troops, allies, and friends and combatant commanders • Supports COCOM needs
	Republican SASC (2)	
Senator Kelly Ayotte (R-NH)	Simple Party; Neorealism	• Data collected did not demonstrate any personal interests • Views align with the Republican Party of the time • COCOMs need more THAADs to relieve the strain they are experiencing
Senator Jeff Sessions (R-AL)	Simple Party; Neorealism	• Data collected did not demonstrate any personal interests • Views align with the Republican Party of the time • Concerned about planning and budgeting for THAAD to meet COCOM needs • Against decreased missile defense budget

		• Russia's short-range and cruise missiles are vulnerable to THAAD
	Democratic SASC (4)	
Senator Joe Donnelly (D-IN)	Simple Party; Neorealism	• Data collected did not demonstrate any personal interests • Views align with the Democratic Party of the time • Interested in options to increase the coverage or flexibility of THAAD • Supports increased funding for THAAD to protect troops, allies, and partners • Supports training warfighters to effectively operate THAAD • Highlighted COCOM needs for THAAD
Senator Carl Levin (D-MI)	Simple Party; Neorealism & Neoliberalism	• Data collected did not demonstrate any personal interests • Views align with the Democratic Party of the time • THAAD plays a critical role for the integrated NATO missile defense system • Concerned with the Iranian missile threat • Supports working cooperatively with Russia on missile defense • Supports increased defense spending for THAAD • Purchasing more THAAD interceptors is one of the highest priorities to Congress
Senator Bill Nelson (D-FL)	Simple Party; Neorealism	• Data collected did not demonstrate any personal interests • Views align with the Democratic Party of the time • More THAAD missiles needed to meet COCOM needs • Supports DOD making missile defenses a priority • Noted that THAAD could be upgraded to enhance defenses