UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA, Plaintiff, v. UNITED TECHNOLOGIES CORPORATION, and RAYTHEON COMPANY, Defendants.	Case No. 1:20-cv-00824 (DLF)

COMPETITIVE IMPACT STATEMENT

The United States of America, under Section 2(b) of the Antitrust Procedures and Penalties Act, 15 U.S.C. § 16(b)-(h) (the "APPA" or "Tunney Act"), files this Competitive Impact Statement relating to the proposed Final Judgment submitted for entry in this civil antitrust proceeding.

I. NATURE AND PURPOSE OF THE PROCEEDING

On June 9, 2019, United Technologies Corporation ("UTC") and Raytheon Company ("Raytheon") agreed to merge in a transaction that would create the nation's second-largest aerospace and defense contractor. UTC and Raytheon are leading manufacturers of certain systems and components used by the Department of Defense ("DoD") and U.S. intelligence community. The companies are the primary suppliers of radios for use in military aircraft ("military airborne radios"), and are two of the leading suppliers of military global positioning system ("GPS") receivers and anti-jam products (collectively, "military GPS systems"). The

companies also have capabilities in critical inputs for electro-optical/infrared ("EO/IR") reconnaissance satellites, including large space-based optical systems and EO/IR reconnaissance satellite payloads.

The United States filed a civil antitrust Complaint on March 26, 2020, seeking to enjoin the proposed merger. The Complaint alleges that the likely effect of the merger would be to substantially lessen competition for the design, development, production, and sale of military airborne radios, military GPS systems for aviation/maritime applications, military GPS systems for ground-based applications, large space-based optical systems, and EO/IR reconnaissance satellite payloads in the United States, in violation of Section 7 of the Clayton Act, 15 U.S.C. § 18.

At the same time the Complaint was filed, the United States filed an Asset Preservation and Hold Separate Stipulation and Order ("Stipulation and Order") and proposed Final Judgment, which are designed to address the anticompetitive effects of the acquisition. Under the proposed Final Judgment, which is explained more fully below, the Defendants are required to divest UTC's military GPS and optical systems businesses as well as Raytheon's military airborne radios business. Under the terms of the Stipulation and Order, the Defendants must take certain steps to ensure that the military airborne radios, military GPS, and optical systems businesses are operated in such a way as to ensure that the businesses continue to be ongoing, economically viable, and competitive business concerns during the pendency of the required divestitures, and that the optical systems business is held separate from Defendants' other operations during this period.

The United States and the Defendants have stipulated that the proposed Final Judgment may be entered after compliance with the APPA. Entry of the proposed Final Judgment will

terminate this action, except that the Court will retain jurisdiction to construe, modify, or enforce the provisions of the proposed Final Judgment and to punish violations thereof.

II. DESCRIPTION OF EVENTS GIVING RISE TO THE ALLEGED VIOLATION

A. The Defendants and the Proposed Transaction

UTC is a Delaware corporation with its headquarters in Farmington, Connecticut. UTC produces a wide range of products for the aerospace and defense industries, including military airborne radios, military GPS systems, and large space-based optical systems. UTC had sales of approximately $77 billion in 2019.

Raytheon is a Delaware corporation with its headquarters in Waltham, Massachusetts. Raytheon is one of the world's largest defense manufacturers, with significant capabilities in radars and missiles. It also produces military airborne radios, military GPS systems, and payloads for EO/IR reconnaissance satellites. Raytheon had sales of approximately $29 billion in 2019.

On June 9, 2019, UTC and Raytheon reached an agreement and plan of merger to combine their operations.

B. Military Airborne Radios

1. Background

Military airborne radios allow for secure voice, data, and video communication between aircraft and from aircraft to the ground. This communication occurs either through direct communications links or through a satellite uplink system. Military airborne radios have two main components: radios (transmitter and receiver) and waveforms (communication protocols and related hardware/software). Specialized elements in both the radios and waveforms protect military airborne radio transmissions from being intercepted and decrypted.

There are multiple military airborne radios on every airplane and helicopter used by DoD today, as well as thousands of spares in military depots throughout the world. DoD regularly purchases new military airborne radios as new aircraft are developed and to replace those currently in the field as military airborne radio suppliers develop improved radios with additional features.

UTC's AN/ARC-210 military airborne radio is specified on almost all Air Force and Navy aircraft. Raytheon's AN/ARC-231 military airborne radio is specified on almost all Army helicopters. Military airborne radios from UTC and Raytheon are each the closest substitute for the other, and represent the only competitive alternative for a DoD customer in the event that either UTC or Raytheon increases prices for its military airborne radios or otherwise exercises market power.

2. Relevant Markets

a. Product Market

The quality and usefulness of a military airborne radio is defined by several characteristics, the most important of which are reliability, security, and the ability to access numerous communications networks. For instance, DoD requires highly ruggedized radios that can withstand the extreme environments encountered by military aircraft, including the rapid temperature changes and G-forces experienced on fighter jets. To ensure constant contact and to enable the flow of information throughout the battlefield, DoD radios must also communicate with multiple platforms—including aircraft, ships, ground forces, and smart weapons—using various waveforms, and must also keep those communications secure and encrypted to prevent signals from being intercepted by adversaries.

As alleged in the Complaint, there are no substitutes for military airborne radios. Radios developed for other military purposes, including ground and ship-based radios, cannot withstand the high G-forces and extreme temperature fluctuations experienced by military aircraft, particularly fighter jets. Furthermore, military airborne radios are smaller and more power-efficient than those designed for ground and ship-based uses. Airborne radios developed for commercial purposes—including commercial aviation—are also not substitutes for military airborne radios. Commercial airborne radios lack the high level of encryption and jamming resistance required for military airborne radios. In addition, while commercial airborne radios can access numerous civil and governmental communications networks, they do not incorporate the waveforms and software algorithms necessary to access the numerous specialized networks used by purchasers of military airborne radios.

The Complaint alleges that substitution away from military airborne radios in response to a small but significant and non-transitory increase in price will not be sufficient to render such a price increase unprofitable. Accordingly, the Complaint alleges that the design, development, production, and sale of military airborne radios is a relevant product market and line of commerce within the meaning of Section 7 of the Clayton Act, 15 U.S.C. § 18.

b. Geographic Market

As alleged in the Complaint, for national security reasons, DoD, which is the only purchaser of these products in the United States, strongly prefers domestic suppliers of military airborne radios. DoD is unlikely to turn to any foreign suppliers in the face of a small but significant and non-transitory price increase by domestic suppliers of military airborne radios. The Complaint therefore alleges that the United States is a relevant geographic market within the meaning of Section 7 of the Clayton Act, 15 U.S.C. § 18.

3. Anticompetitive Effects of the Proposed Transaction

According to the Complaint, UTC and Raytheon today are the leading suppliers of military airborne radios to DoD. The merger would therefore give the merged firm a dominant share of the market for the design, development, production, and sale of military airborne radios, leaving DoD few competitive alternatives for this critical component of military communications.

UTC and Raytheon compete in the market for the design, development, production, and sale of military airborne radios on the basis of quality, price, and contractual terms such as delivery times. This competition has resulted in higher quality, lower prices, and shorter delivery times for military airborne radios. Competition between UTC and Raytheon has also fostered important industry innovation. The combination of UTC and Raytheon would eliminate this competition and its future benefits to DoD customers. Post-acquisition, the merged firm likely would have the incentive and ability to increase prices, offer less favorable contractual terms, and diminish investments in research and development efforts that lead to innovative and high-quality products. The Complaint alleges that the proposed acquisition, therefore, likely would substantially lessen competition in the design, development, production, and sale of military airborne radios in the United States in violation of Section 7 of the Clayton Act, 15 U.S.C. § 18.

4. Difficulty of Entry

According to the Complaint, sufficient timely entry or expansion of additional competitors into the market for the design, development, production, and sale of military airborne radios is unlikely to prevent the harm to competition that is likely to result if the proposed acquisition is consummated. Because UTC's AN/ARC-210 and Raytheon AN/ARC-

231 are established designs that have been produced in high volumes for many years, they are well-understood by DoD customers and have significant economies of scale. Any new products manufactured by an alternative supplier would require extensive testing and qualification before they would be acceptable to DoD, and even at the end of that process the new supplier still would not have the reputation of UTC and Raytheon with DoD. Moreover, no potential alternative supplier has the large-scale military airborne radio production facilities of UTC or Raytheon, or the expertise of those firms in developing the complex software algorithms necessary for military airborne radios. Accordingly, entry or expansion would be costly and time-consuming.

The Complaint therefore alleges that entry or expansion of additional competitors into the market for the design, development, production, and sale of military airborne radios would not be timely, likely, or sufficient to defeat the anticompetitive effects likely to result from UTC's merger with Raytheon.

C. Military GPS Systems

1. Background

Military GPS systems allow ground vehicles, ships, and planes to receive and process information regarding their position, navigation, and timing. Military GPS systems guide missiles and projectiles to their intended targets, locate friendly fighters in theaters of war, and enable remote operators to fly unmanned aerial vehicles thousands of miles away. Military GPS systems contain technology that protects them from two forms of enemy interference: "spoofing," a signal disruption causing a GPS system to calculate a false position, and "jamming," which occurs when a GPS system's satellite signals are overpowered. To ensure that

spoofing and jamming do not interfere with U.S. military missions, military GPS systems contain encryption modules and anti-jamming technology.

In 2011, the U.S. government announced that "M-Code," a modernized encryption system, would be incorporated into military GPS systems. In September 2012, DoD awarded technology development contracts (and accompanying funds) to UTC, Raytheon, and a third firm to develop M-Code compliant GPS systems that the military could implement quickly. DoD requested two discrete types of GPS systems—one for ground applications and another for aviation/maritime applications. UTC and Raytheon have been working to develop products for both applications—ground and aviation/maritime—while to date the third firm is under contract only for ground applications. While other defense contractors may eventually develop acceptable military GPS systems for these applications, those contractors are years behind, will not be eligible for funding from the U.S. government, and will not enjoy the incumbents' advantage held by the three leading suppliers.

2. Relevant Markets

a. Product Markets

Military GPS systems for aviation/maritime applications and military GPS systems for ground applications serve different functions and cannot be substituted for one another. For example, there are different power, performance, and form factor requirements for aviation/maritime GPS systems and ground GPS systems. Customers therefore cannot substitute an aviation/maritime GPS system for a ground GPS system (or vice versa) without sacrificing important functionality.

Military GPS systems for both applications are highly customized to suit the needs of military end users. For each military GPS system, DoD specifies the form factor (i.e., the

physical size and shape), performance metrics, and encryption standards that must be met. Due to the mission-critical nature of military GPS systems, DoD is far more exacting than commercial customers, and as a result, commercial GPS systems cannot be substituted for military GPS systems for either application. Nor can any alternative technology provide the functionality that a GPS system provides, such as instantaneous position, navigation, and timing information.

The Complaint therefore alleges that customers would not switch to a commercial GPS system or to an alternative technology, nor would they switch between military GPS systems for different applications, in the face of a small but significant and non-transitory increase in the price of a military GPS system for aviation/maritime applications or a military GPS system for ground applications. Accordingly, the Complaint alleges that the design, development, production, and sale of (i) military GPS systems for aviation/maritime applications and (ii) military GPS systems for ground applications are lines of commerce and relevant product markets within the meaning of Section 7 of the Clayton Act, 15 U.S.C. § 18.

c. Geographic Market

As alleged in the Complaint, for national security reasons, DoD, which is the sole purchaser of these products in the United States, prefers domestic suppliers of military GPS systems. DoD is unlikely to turn to any foreign suppliers in the face of a small but significant and non-transitory price increase by domestic suppliers of military GPS systems. The Complaint therefore alleges that the United States is a relevant geographic market within the meaning of Section 7 of the Clayton Act, 15 U.S.C. § 18.

3. Anticompetitive Effects of the Proposed Transaction

According to the Complaint, UTC and Raytheon are the only suppliers of military GPS systems for aviation/maritime applications in the United States. The merger therefore would give the combined firm a monopoly in the market for this product and leave DoD without any competitive alternatives. The merger also would create a duopoly in the supply of military GPS systems for ground applications, as UTC and Raytheon are two of only three suppliers of those products.

UTC and Raytheon compete to design, develop, produce, and sell military GPS systems for aviation/maritime applications and ground applications on the basis of quality, price, technological capabilities, and contractual terms such as delivery times. This competition has resulted in higher quality, lower prices, innovation, and shorter delivery times for military GPS systems for both applications. The combination of UTC and Raytheon would eliminate this competition and its future benefits to DoD customers. Post-acquisition, the merged firm likely would compete less along the dimensions of innovation, quality, price, or contractual terms. The Complaint therefore alleges that the proposed acquisition likely would substantially lessen competition in the design, development, production, and sale of military GPS systems for aviation/maritime applications and for ground applications in the United States in violation of Section 7 of the Clayton Act, 15 U.S.C. § 18.

4. Difficulty of Entry

According to the Complaint, sufficient, timely entry of additional competitors into the markets for the design, development, production, and sale of military GPS systems for aviation/maritime applications and for ground applications is unlikely to prevent the harm to competition likely to result if the proposed acquisition is consummated. A new entrant would need significant capital to develop prototypes and establish a manufacturing operation. Even

with a prototype, an entrant would need a network of government and prime contractor contacts to assist with testing and troubleshooting. Finally, an entrant would need to clear the qualification process to become a supplier to DoD. Together, these steps would take years to complete. Accordingly, entry would be costly and time-consuming.

The Complaint also alleges that timely and sufficient expansion of capabilities by a producer of military GPS systems for ground-based applications is unlikely to prevent the harm to competition in military GPS systems for aviation/maritime applications that is likely to result if the proposed acquisition is consummated. A producer of ground-based military GPS systems would need to ruggedize its product to withstand the high G-forces and temperature extremes experienced by military aircraft. It would also need to match its system to the size, weight, and power restrictions imposed on all aircraft based electronic systems. These modifications would require substantial investments in skilled personnel and modification of production, and the product would require extensive development and subsequent testing by customers. Accordingly, expansion into this different application would be costly and time-consuming.

The Complaint alleges that, as result of these barriers, entry into the markets for the design, development, production, and sale of military GPS systems for aviation/maritime applications and military GPS systems for ground applications would not be timely, likely, or sufficient to defeat the anticompetitive effects likely to result from UTC's merger with Raytheon

D. EO/IR Reconnaissance Satellites

1. Background

Space-based reconnaissance systems provide essential information to end-users in DoD and the intelligence community, including communications intelligence, early warning of missile launches, and near real-time imagery to United States armed forces to support the war on

terrorism and other operations. They also provide data essential for managing disaster relief, monitoring global warming, and assessing crop production. Space-based reconnaissance systems generally are deployed on satellites, where they constitute the "payload," a term for the system that performs the primary mission of the satellite. Payload suppliers are subcontractors to satellite prime contractors, who combine payloads, structural components, power supply systems, ground communications systems, and other components into a complete satellite for delivery to the DoD or intelligence community end-user customer.

One important type of reconnaissance satellite payload is an electro-optical/infrared ("EO/IR") payload, which is a camera-based system that collects visible and infrared light. The components of an EO/IR reconnaissance satellite payload are advanced versions of the components found in consumer digital cameras: an optical system—a lens or mirror—focuses light onto an electronic detector, known as a focal plane array ("FPA"), which converts light to digital images for transmission via radio signals. Optical systems and FPAs are critical inputs in EO/IR reconnaissance satellite payloads.

Raytheon has industry-leading capabilities in the provision of FPAs for EO/IR reconnaissance satellite payloads, having been the beneficiary of decades of large investments by government end-user customers. Specifically, Raytheon is the leading provider of FPAs sensitive to visible light and one of the two leading providers of FPAs sensitive to infrared light. Raytheon is also one of multiple firms that supply EO/IR reconnaissance satellite payloads to the satellite prime contractors who assemble the satellite for the DoD or intelligence community customer. UTC is one of only two firms capable of producing large space-based optical systems such as those used in EO/IR reconnaissance satellite payloads. While other suppliers have the

capability to produce smaller optical systems for use in space, none can produce optical systems in sizes comparable to those produced by UTC and the other industry leader.

The FPAs and large space-based optical system used in a particular EO/IR reconnaissance satellite payload usually are selected by the payload supplier. In some cases, however, the DoD or intelligence community customer will specify the FPA or large space-based optical system supplier.

2. Relevant Markets

a. Product Markets

i. Large Space-Based Optical Systems

According to the Complaint, large space-based optical systems have specific requirements that distinguish them from other optical systems. Smaller space-based optical systems have insufficient light-gathering and resolving power. Optical systems designed for use on the ground do not possess the high strength, rigidity, low weight, temperature stability, and radiation-hardening that large space-based optical systems require to be safely and cost-effectively launched into orbit and used in space.

The Complaint therefore alleges that customers would not switch to smaller optical systems or optical systems designed for use on the ground in the face of a small but significant and non-transitory increase in the price of large space-based optical systems. Accordingly, the design, development, production, and sale of large space-based optical systems is a line of commerce and relevant product market within the meaning of Section 7 of the Clayton Act, 15 U.S.C. § 18.

ii. EO/IR Reconnaissance Satellite Payloads

According to the Complaint, EO/IR reconnaissance satellite payloads have specific capabilities that distinguish them from other reconnaissance satellite payloads. Other types of payloads such as radar and electronic intelligence payloads do not provide the same type of information as imagery. The Complaint alleges that aerial reconnaissance imagery cannot substitute for the imagery produced by EO/IR reconnaissance satellite payloads. Many parts of the globe that are of critical interest to DoD and the intelligence community are effectively closed to reconnaissance aircraft operated by the United States. Even for areas open to overflight, satellite surveys are quicker and more efficient than aerial reconnaissance.

The Complaint alleges that customers will not switch to other types of payloads or to aerial reconnaissance imagery in the event of a small but significant and non-transitory price increase for EO/IR reconnaissance satellite payloads. The Complaint therefore alleges that the design, development, production, and sale of EO/IR reconnaissance satellite payloads therefore is a line of commerce and product market within the meaning of Section 7 of the Clayton Act, 15 U.S.C. § 18.

b. Geographic Market

As alleged in the Complaint, much of the information regarding EO/IR reconnaissance satellites is highly sensitive, and data concerning the capabilities required in such satellites is released only to a select group of U.S.-based manufacturers that possess the necessary security clearances and are subject to close government oversight. For this reason, DoD and intelligence community customers, who are the only customers for these products in the United States, are unlikely to purchase large space-based optical systems or EO/IR reconnaissance satellite payloads from sources located outside the United States in the event of small but significant and non-transitory price increases by domestic producers of those products.

The Complaint therefore alleges that the United States is a relevant geographic market within the meaning of Section 7 of the Clayton Act, 15 U.S.C. § 18.

3. Anticompetitive Effects of the Proposed Transaction

a. Large Space-Based Optical Systems

As alleged in the Complaint, by combining UTC's capabilities in large space-based optical systems with Raytheon's dominant position in FPAs, the merger would give the combined company the incentive and ability to reduce competition from UTC's only large space-based optical systems competitor. Because Raytheon does not build large space-based optical systems today, it has no incentive to demand that a particular optical system supplier be selected by the payload builder. Following the merger, this incentive would change. The combined company likely would refuse to supply payload builders with FPAs, or supply them only at higher cost, if the payload builders do not also agree to purchase UTC's optical system. With visible-light FPAs, and in situations where the DoD or intelligence community end-user directed payload providers to use Raytheon's infrared FPAs, the payload provider would have no alternative but to accept UTC's large space-based optical system, even if it was of lower quality or higher priced than large space-based optical systems available from the other source. As a result, the merged company would be able to charge higher prices for its optical system, or provide a system of lower quality, than would have been possible before the merger.

The Complaint alleges that UTC competes to design, develop, produce, and sell large space-based optical systems on the basis of quality, price, and innovation, as well as contractual terms such as delivery times. This competition leads to more innovation, higher quality, lower prices, and shorter delivery times. The combination of UTC and Raytheon would give the merged firm the incentive and ability to weaken this competition and its future benefits to DoD

and intelligence community end-users, likely resulting in less innovative, more expensive products with lower quality and longer delivery times. The Complaint alleges that the proposed acquisition, therefore, likely would substantially lessen competition in the design, development, production, and sale of large space-based optical systems in the United States in violation of Section 7 of the Clayton Act, 15 U.S.C. § 18.

b. EO/IR Reconnaissance Satellite Payloads

As alleged in the Complaint, by combining Raytheon's position as a producer of EO/IR reconnaissance satellite payloads with UTC's position as one of only two companies with the capability to build large space-based optical systems, the merger would also give the combined company the incentive and ability to harm its payload rivals. Because UTC does not produce payloads today, it has a strong incentive to make its optical systems available to all payload builders. Following the merger, this incentive would change, and, particularly in situations where the DoD or intelligence community end-user directed payload providers to use UTC's large space-based optical systems, the combined company likely would raise prices for UTC's optical systems to rival payload builders, or simply refuse to provide UTC's optical systems at any price. As a result, the merged company would be able to charge higher prices for its payload, or provide a payload of lower quality, than would have been possible before the merger.

According to the Complaint, Raytheon competes with other EO/IR reconnaissance satellite payload suppliers on the basis of quality, price, and innovation, as well as contractual terms such as delivery times. This competition leads to innovation, higher quality, lower prices, and shorter delivery times. The combination of UTC and Raytheon would give the merged firm the incentive and ability to weaken this competition and its future benefits to DoD and intelligence community end-users, likely resulting in less innovative, more expensive products

with lower quality and longer delivery times. The Complaint therefore alleges that the proposed acquisition likely would substantially lessen competition in the design, development, production, and sale of EO/IR reconnaissance satellite payloads in the United States in violation of Section 7 of the Clayton Act, 15 U.S.C. § 18.

4. Difficulty of Entry

According to the Complaint, sufficient, timely entry of additional competitors into the markets for the design, development, production, and sale of visible-light or infrared FPAs for EO/IR reconnaissance satellite payloads is unlikely. Production facilities for these FPAs require a substantial investment in both capital equipment and human resources, and a new entrant would largely need to re-create the investment made in Raytheon by the United States government over the course of several decades. A new entrant would need to set up a foundry to produce electronic components, establish production lines capable of manufacturing read-out integrated circuits and other electronic components, and build assembly lines and testing facilities. Engineering and research personnel would need to be assigned to develop, test, and troubleshoot the detailed manufacturing processes, involving hundreds of steps, that are necessary to produce these FPAs. Any new products would require extensive testing and qualification before they could be used in payloads. These steps would require years to complete.

The Complaint also alleges that sufficient, timely entry of additional competitors into the market for the design, development, production, and sale of large space-based optical systems is also unlikely. A new entrant would require significant investment in the facilities and skilled personnel required to grind and polish the complex curved surfaces required for large-space based optical systems, and then test these optics in an environment that replicates conditions in

space. In addition, because spaceflight is an exceptionally demanding and high-risk endeavor, payload builders, satellite prime contractors, and end-user customers have a strong preference to purchase from established suppliers. Years of dedicated and costly effort would be required for a new entrant to demonstrate expertise comparable to UTC.

The Complaint alleges that, as result of these barriers, entry into the markets for the design, development, production, and sale of visible-light and infrared FPAs for EO/IR reconnaissance satellite payloads and large space-based optical systems would not be timely, likely, or sufficient to defeat the anticompetitive effects in the markets for the design, development, production, and sale of large space-based optical systems and EO/IR reconnaissance satellite payloads likely to result from UTC's merger with Raytheon.

III. EXPLANATION OF THE PROPOSED FINAL JUDGMENT

The divestitures required by the proposed Final Judgment will remedy the loss of competition alleged in the Complaint by establishing one or more viable competitors in the design, development, production, and sale of military airborne radios, military GPS systems for aviation/maritime applications, military GPS systems for ground-based applications, and optical systems in the United States.

A. Military Airborne Radios Divestiture

Paragraph IV(A) of the proposed Final Judgment requires the Defendants, within the later of 45 calendar days after the entry of the Stipulation and Order by the Court or 15 calendar days after all regulatory approvals needed to complete the transaction and divestiture have been received, to divest the Military Airborne Radios Divestiture Assets to BAE Systems, Inc., or an alternative acquirer acceptable to the United States, in its sole discretion. The regulatory approvals are defined in Paragraphs II(X) and II(Y) of the proposed Final Judgment, and include

approvals or clearances pursuant to filings with the Committee on Foreign Investment in the United States ("CFIUS") or under antitrust or competition laws required for the merger between UTC and Raytheon and approvals or clearances pursuant to filings with CFIUS or under antitrust, competition, or other U.S. or international laws or regulations required for the acquisition of the Military Airborne Radios Divestiture Assets. The Military Radios Divestiture Assets are defined as Raytheon's Military Airborne Radios Business,[1] and include two facilities (a manufacturing facility in Fort Wayne, Indiana and an office in Largo, Florida); all tangible and intangible assets related to or used in connection with the Military Airborne Radios Business (except for the Raytheon brand name); and, at the acquirer's option, a worldwide, non-exclusive, royalty-free, irrevocable, perpetual, and fully-paid up license to any intellectual property related to cryptographic modules that is held by Raytheon at the time of the filing of the Complaint or that is developed by Raytheon during the term of a supply contract for military airborne radios, which is described below. Cryptographic modules are hardware and software for encryption and decryption of radio signals, as defined in Paragraph II(J) of the proposed Final Judgment. As their use is not limited to military airborne radios, they are being retained by Raytheon subject to the license and supply contracts set forth in Paragraphs II(L)(4) and IV(I), respectively, of the proposed Final Judgment.

Paragraph IV(N) of the proposed Final Judgment requires that the Military Airborne Radios Divestiture Assets be divested in such a way as to satisfy the United States in its sole discretion that they can and will be operated by the purchaser as part of a viable, ongoing business that can compete effectively in the design, development, production, and sale of

[1] Paragraph II(K) of the proposed Final Judgment defines the "Military Airborne Radios Business" as "the business of the design, development, production, and sale of Military Airborne Radios by Raytheon's Tactical Communication Systems division."

military airborne radios. Defendants must take all reasonable steps necessary to accomplish the divestiture quickly and must cooperate with prospective purchasers.

The proposed Final Judgment contains several provisions to facilitate the transition of the Military Airborne Radios Business to the acquirer. First, Paragraphs IV(H) and IV(I) of the proposed Final Judgment require the Defendants, at the acquirer's option, to enter into supply contracts for military airborne radios and cryptographic modules, respectively, sufficient to meet the needs of the Military Airborne Radios Business for a period of up to twelve months. Upon the acquirer's request, the United States, in its sole discretion, may approve one or more extensions of either or both supply contracts for up to an additional twelve months. As described in Paragraph IV(A), at the option of the acquirer and subject to approval by the United States in its sole discretion, the Defendants temporarily may retain assets required to fulfill their obligations under the military airborne radios supply contract. These assets must be transferred to the acquirer 30 days after the termination or expiration of the supply contract.

Second, Paragraph IV(J) of the proposed Final Judgment requires the Defendants, at the acquirer's option, to enter into a transition services agreement for back office, human resource, and information technology services and support for the Military Airborne Radios Business for a period of up to twelve months. The paragraph further provides that the United States, in its sole discretion, may approve one or more extensions of this transition services agreement for a total of up to an additional twelve months. Paragraphs IV(H), IV(I), and IV(J) each provide that employees of the Defendants tasked with supporting any of these agreements must not share any competitively sensitive information of the acquirer with any other employee of the Defendants.

Finally, Paragraphs IV(K) and IV(L) require the Defendants to provide the acquirer with complete and sole access to certain laboratories at Raytheon's facilities in Fort Wayne, Indiana.

These laboratories will be used to support classified and non-classified military airborne radio development projects while the acquirer transitions these projects to its own laboratories. The acquirer will have access to the laboratories identified in Paragraph IV(K) for a period not to exceed three months, but the United States, in its sole discretion, may approve one or more extensions of this period for a total of up to an additional three months. The acquirer will have access to the laboratories identified in Paragraph IV(L) on a scheduled shift basis for a period not to exceed six months, but the United States, in its sole discretion, may approve one or more extensions of this period for a total of up to an additional six months.

The proposed Final Judgment also contains provisions intended to facilitate the acquirer's efforts to hire employees engaged in the Military Airborne Radios Business. Paragraph IV(C) of the proposed Final Judgment requires the Defendants to provide the acquirer and the United States with organization charts and information relating to these employees and to make them available for interviews, and it provides that the Defendants must not interfere with any negotiations by the acquirer to hire them. In addition, for employees who elect employment with the acquirer, the Defendants must waive all non-compete and non-disclosure agreements, vest all unvested pension and other equity rights, and provide all benefits that the employees would generally be provided if transferred to a buyer of an ongoing business. This paragraph further provides that the Defendants may not solicit to rehire any employee engaged in the Military Airborne Radios Business who was hired by the acquirer, unless that individual is terminated or laid off by the acquirer or the acquirer agrees in writing that the Defendants may solicit or hire that individual. The non-solicitation period runs for 12 months from the date of the divestiture, except that with respect to employees whose services are required for the Defendants to carry out

their obligations under the military airborne radios supply contract, the non-solicitation period runs for 12 months from the expiration of that supply contract.

B. Military GPS Systems Divestiture

Paragraph V(A) of the proposed Final Judgment requires the Defendants, within the later of 45 calendar days after the entry of the Stipulation and Order by the Court or 15 calendar days after all regulatory approvals needed to complete the transaction and divestiture have been received, to divest the Military GPS Divestiture Assets to BAE Systems, Inc., or an alternative acquirer acceptable to the United States, in its sole discretion. The regulatory approvals are defined in Paragraphs II(X) and II(Z) of the proposed Final Judgment, and include approvals or clearances pursuant to filings with CFIUS or under antitrust or competition laws required for the merger between UTC and Raytheon and approvals or clearances pursuant to filings with CFIUS or under antitrust, competition, or other U.S. or international laws or regulations required for the acquisition of the Military GPS Divestiture Assets. The Military GPS Divestiture Assets are defined as UTC's Military GPS Systems Business, and include all tangible and intangible assets related to or used in connection with the Military GPS Business (except for UTC's brand names).[2] Because the assets will be transferred to facilities owned by the acquirer, UTC's facilities are excluded from the divestiture. Paragraph V(J) of the proposed Final Judgment, however, requires the Defendants, at the option of the acquirer, to enter into a lease for UTC's facility in Cedar Rapids, Iowa for a period of up to twelve months. The United States, in its sole discretion, may approve one or more extensions of this lease, for a total of up to an additional six months. This lease option provides the acquirer with the opportunity to lease UTC's facility

[2] Paragraph II(P) of the proposed Final Judgment defines the "Military GPS Business" as "UTC's business in the design, development, production, and sale of Military GPS Systems."

while it prepares a facility of its own. Paragraph V(M) of the proposed Final Judgment requires that the Military GPS Divestiture Assets be divested in such a way as to satisfy the United States in its sole discretion that they can and will be operated by the purchaser as part of a viable, ongoing business that can compete effectively in the design, development, production, and sale of military GPS systems for aviation/maritime applications and military GPS systems for ground-based applications. Defendants must take all reasonable steps necessary to accomplish the divestiture quickly and must cooperate with prospective purchasers.

As with the Military Airborne Radios Business, the proposed Final Judgment contains several provisions to facilitate the transition of the Military GPS Business to the acquirer. Paragraphs V(H) and V(I) of the proposed Final Judgment require the Defendants, at the acquirer's option, to enter into contracts to supply military GPS systems and to provide transition services, under terms and conditions similar to those applicable to the contracts described above for the Military Airborne Radios Business. As described in Paragraph V(A), the Defendants temporarily may retain assets required to fulfill their obligations under the supply contract under terms and conditions similar to those applicable to the supply contract for the Military Airborne Radios Business. Paragraph V(K) of the proposed Final Judgment requires the Defendants to provide the acquirer with complete and sole access to certain laboratories at UTC's facilities in Cedar Rapids, Iowa and Coralville, Iowa during the term of the military GPS systems supply contract. These laboratories will be used to support classified and non-classified military GPS system development projects while the acquirer transitions these projects to its own laboratories. For the first six months, this access will be provided on a scheduled shift basis, and after that period the acquirer will obtain unlimited access to certain of these laboratories and will continue to access the other laboratories on a scheduled shift basis.

Paragraph V(C) of the proposed Final Judgment also contains provisions intended to facilitate the acquirer's efforts to hire employees engaged in the Military GPS Business. These provisions are similar to those applicable to employees of the Military Airborne Radios Business, as described above.

C. Optical Systems Divestiture

Paragraph VI(A) of the proposed Final Judgment requires the Defendants, within the later of 90 calendar days after the entry of the Stipulation and Order by the Court or 15 calendar days after all regulatory approvals needed to complete the transaction and divestiture have been received, to divest the Optical Systems Divestiture Assets to an acquirer acceptable to the United States, in its sole discretion. The regulatory approvals are defined in Paragraphs II(X) and II(AA) of the proposed Final Judgment, and include approvals or clearances pursuant to filings with CFIUS or under antitrust or competition laws required for the merger between UTC and Raytheon and approvals or clearances pursuant to filings with CFIUS or under antitrust, competition, or other U.S. or international laws or regulations required for the acquisition of the Optical Systems Divestiture Assets. The Optical Systems Divestiture Assets are defined as UTC's Optical Systems Business, and includes UTC's facility in Danbury, Connecticut, and all tangible and intangible assets related to or used in connection with the Optical Systems Business (except for UTC's brand names).[3] Paragraph VI(K) of the proposed Final Judgment requires that the Optical Systems Divestiture Assets be divested in such a way as to satisfy the United States in its sole discretion that they can and will be operated by the purchaser as part of a viable,

[3] Paragraph II(U) defines the "Optical Systems Business" as "UTC's business in the design, development, production, and sale of Optical Systems." Paragraph II(T) defines "Optical Systems" as "electro-optical/infrared systems for national security space missions and defense laser warning survivability subsystems."

ongoing business that can compete effectively in the design, development, production, and sale of Optical Systems. Defendants must take all reasonable steps necessary to accomplish the divestiture quickly and must cooperate with prospective purchasers.

As with the Military Airborne Radios Business and the Military GPS Business, the proposed Final Judgment contains provisions to facilitate the immediate use of the Optical Systems Business by the acquirer. Paragraphs VI(H) and VI(I) of the proposed Final Judgment require the Defendants, at the acquirer's option, to enter into contracts to supply image processing software and to provide transition services, under terms and conditions similar to those applicable to the contracts described above for the Military Airborne Radios Business and the Military GPS Business. Paragraph VI(C) of the proposed Final Judgment also contains provisions intended to facilitate the acquirer's efforts to hire employees engaged in the Optical Systems Business, which are similar to those described above for employees of the Military Airborne Radios Business and the Military GPS Business, except that the non-solicitation provision expires 12 months from the date of the divestiture.

D. Divestiture Trustee

If the Defendants do not accomplish all of the divestitures within the periods prescribed in Sections IV, V, and VI of the proposed Final Judgment, Section VII of the proposed Final Judgment provides that the Court will appoint a divestiture trustee selected by the United States to effect any remaining divestitures. If a divestiture trustee is appointed, the proposed Final Judgment provides that the Defendants will pay all costs and expenses of the trustee. The divestiture trustee's commission will be structured so as to provide an incentive for the trustee based on the price obtained and the speed with which any remaining divestitures are accomplished. After the divestiture trustee's appointment becomes effective, the trustee will

provide periodic reports to the United States setting forth his or her efforts to accomplish the remaining divestitures. At the end of six months, if any divestiture remains to be accomplished, the divestiture trustee and the United States will make recommendations to the Court, which will enter such orders as appropriate, in order to carry out the purpose of the trust, including by extending the trust or the term of the divestiture trustee's appointment.

E. Monitoring Trustee

Section XII of the proposed Final Judgment provides that the United States may apply to the Court for appointment of a monitoring trustee with the power and authority to investigate and report on the Defendants' compliance with the terms of the proposed Final Judgment and Stipulation and Order, including the sale of the divestiture assets and the implementation of the transition services agreements, supply contracts, laboratory access arrangements, and short-term leases provided for in the proposed Final Judgment. The monitoring trustee will not have any responsibility or obligation for the operation of the Defendants' businesses. The monitoring trustee will serve at the expense of the Defendants, on such terms and conditions as the United States approves, and Defendants must assist the monitoring trustee in fulfilling its obligations. The monitoring trustee will file monthly reports with the United States and shall serve until all of the divestitures required by the proposed Final Judgment have been accomplished, or until the term of any transition services agreements, supply contracts, laboratory access arrangements, and short-term leases required by the proposed Final Judgment have expired, whichever is later.

F. Other Provisions

The proposed Final Judgment also contains provisions designed to promote compliance and make the enforcement of the Final Judgment as effective as possible. Paragraph XVI(A) provides that the United States retains and reserves all rights to enforce the provisions of the

Final Judgment, including its rights to seek an order of contempt from the Court. Under the terms of this paragraph, the Defendants have agreed that in a civil contempt action, a motion to show cause, or a similar action brought by the United States regarding an alleged violation of the Final Judgment, the United States may establish the violation and the appropriateness of any remedy by a preponderance of the evidence and that the Defendants have waived any argument that a different standard of proof should apply. This provision aligns the standard for compliance obligations with the standard of proof that applies to the underlying offense that the compliance commitments address.

Paragraph XVI(B) provides additional clarification regarding the interpretation of the provisions of the proposed Final Judgment. The proposed Final Judgment was drafted to restore competition the United States alleged would otherwise be harmed by the transaction. The Defendants agree that they will abide by the proposed Final Judgment, and that they may be held in contempt by the Court for failing to comply with any provision of the proposed Final Judgment that is stated specifically and in reasonable detail, as interpreted in light of this procompetitive purpose.

Paragraph XVI(C) of the proposed Final Judgment provides that if the Court finds in an enforcement proceeding that the Defendants have violated the Final Judgment, the United States may apply to the Court for a one-time extension of the Final Judgment, together with such other relief as may be appropriate. In addition, to compensate American taxpayers for any costs associated with investigating and enforcing violations of the Final Judgment, Paragraph XVI(C) provides that in any successful effort by the United States to enforce the Final Judgment against a Defendant, whether litigated or resolved before litigation, that the Defendants will reimburse

the United States for attorneys' fees, experts' fees, and other costs incurred in connection with any enforcement effort, including the investigation of the potential violation.

Paragraph XVI(D) states that the United States may file an action against a Defendant for violating the Final Judgment for up to four years after the Final Judgment has expired or been terminated. This provision is meant to address circumstances such as when evidence that a violation of the Final Judgment occurred during the term of the Final Judgment is not discovered until after the Final Judgment has expired or been terminated or when there is not sufficient time for the United States to complete an investigation of an alleged violation until after the Final Judgment has expired or been terminated. This provision, therefore, makes clear that, for four years after the Final Judgment has expired or been terminated, the United States may still challenge a violation that occurred during the term of the Final Judgment.

Finally, Section XVII of the proposed Final Judgment provides that the Final Judgment will expire ten years from the date of its entry, except that after five years from the date of its entry, the Final Judgment may be terminated upon notice by the United States to the Court and the Defendants that the divestiture has been completed and that the continuation of the Final Judgment is no longer necessary or in the public interest.

IV. REMEDIES AVAILABLE TO POTENTIAL PRIVATE LITIGANTS

Section 4 of the Clayton Act, 15 U.S.C. § 15, provides that any person who has been injured as a result of conduct prohibited by the antitrust laws may bring suit in federal court to recover three times the damages the person has suffered, as well as costs and reasonable attorneys' fees. Entry of the proposed Final Judgment neither impairs nor assists the bringing of any private antitrust damage action. Under the provisions of Section 5(a) of the Clayton Act, 15

U.S.C. § 16(a), the proposed Final Judgment has no prima facie effect in any subsequent private lawsuit that may be brought against the Defendants.

V. PROCEDURES AVAILABLE FOR MODIFICATION OF THE PROPOSED FINAL JUDGMENT

The United States and the Defendants have stipulated that the proposed Final Judgment may be entered by the Court after compliance with the provisions of the APPA, provided that the United States has not withdrawn its consent. The APPA conditions entry upon the Court's determination that the proposed Final Judgment is in the public interest.

The APPA provides a period of at least 60 days preceding the effective date of the proposed Final Judgment within which any person may submit to the United States written comments regarding the proposed Final Judgment. Any person who wishes to comment should do so within 60 days of the date of publication of this Competitive Impact Statement in the *Federal Register*, or the last date of publication in a newspaper of the summary of this Competitive Impact Statement, whichever is later. All comments received during this period will be considered by the U.S. Department of Justice, which remains free to withdraw its consent to the proposed Final Judgment at any time before the Court's entry of the Final Judgment. The comments and the response of the United States will be filed with the Court. In addition, comments will be posted on the U.S. Department of Justice, Antitrust Division's internet website and, under certain circumstances, published in the *Federal Register*.

Written comments should be submitted to:

Katrina Rouse
Chief, Defense, Industrials, and Aerospace Section
Antitrust Division
U.S. Department of Justice
450 Fifth Street, NW, Suite 8700
Washington, D.C. 20530

The proposed Final Judgment provides that the Court retains jurisdiction over this action, and the parties may apply to the Court for any order necessary or appropriate for the modification, interpretation, or enforcement of the Final Judgment.

VI. ALTERNATIVES TO THE PROPOSED FINAL JUDGMENT

As an alternative to the proposed Final Judgment, the United States considered a full trial on the merits against the Defendants. The United States could have continued the litigation and sought preliminary and permanent injunctions against the merger of UTC and Raytheon. The United States is satisfied, however, that the divestiture of assets described in the proposed Final Judgment will remedy the anticompetitive effects alleged in the Complaint in each of the relevant markets. Thus, the proposed Final Judgment achieves all or substantially all of the relief the United States would have obtained through litigation, but avoids the time, expense, and uncertainty of a full trial on the merits of the Complaint.

VII. STANDARD OF REVIEW UNDER THE APPA FOR THE PROPOSED FINAL JUDGMENT

The Clayton Act, as amended by the APPA, requires that proposed consent judgments in antitrust cases brought by the United States be subject to a 60-day comment period, after which the Court shall determine whether entry of the proposed Final Judgment "is in the public interest." 15 U.S.C. § 16(e)(1). In making that determination, the Court, in accordance with the statute as amended in 2004, is required to consider:

> (A) the competitive impact of such judgment, including termination of alleged violations, provisions for enforcement and modification, duration of relief sought, anticipated effects of alternative remedies actually considered, whether its terms are ambiguous, and any other competitive considerations bearing upon the adequacy of such judgment that the court deems necessary to a determination of whether the consent judgment is in the public interest; and
>
> (B) the impact of entry of such judgment upon competition in the relevant market or markets, upon the public generally and individuals alleging specific

> injury from the violations set forth in the complaint including consideration of the public benefit, if any, to be derived from a determination of the issues at trial.

15 U.S.C. § 16(e)(1)(A) & (B). In considering these statutory factors, the Court's inquiry is necessarily a limited one as the government is entitled to "broad discretion to settle with the defendant within the reaches of the public interest." *United States v. Microsoft Corp.*, 56 F.3d 1448, 1461 (D.C. Cir. 1995); *United States v. U.S. Airways Grp., Inc.*, 38 F. Supp. 3d 69, 75 (D.D.C. 2014) (explaining that the "court's inquiry is limited" in Tunney Act settlements); *United States v. InBev N.V./S.A.*, No. 08-1965 (JR), 2009 U.S. Dist. LEXIS 84787, at *3 (D.D.C. Aug. 11, 2009) (noting that a court's review of a consent judgment is limited and only inquires "into whether the government's determination that the proposed remedies will cure the antitrust violations alleged in the complaint was reasonable, and whether the mechanism to enforce the final judgment are clear and manageable").

As the U.S. Court of Appeals for the District of Columbia Circuit has held, under the APPA a court considers, among other things, the relationship between the remedy secured and the specific allegations in the government's complaint, whether the proposed Final Judgment is sufficiently clear, whether its enforcement mechanisms are sufficient, and whether it may positively harm third parties. *See Microsoft*, 56 F.3d at 1458-62. With respect to the adequacy of the relief secured by the proposed Final Judgment, a court may not "make de novo determination of facts and issues." *United States v. W. Elec. Co.*, 993 F.2d 1572, 1577 (D.C. Cir. 1993) (quotation marks omitted); *see also Microsoft*, 56 F.3d at 1460-62; *United States v. Alcoa, Inc.*, 152 F. Supp. 2d 37, 40 (D.D.C. 2001); *United States v. Enova Corp.*, 107 F. Supp. 2d 10, 16 (D.D.C. 2000); *InBev*, 2009 U.S. Dist. LEXIS 84787, at *3. Instead, "[t]he balancing of competing social and political interests affected by a proposed antitrust consent decree must be left, in the first instance, to the discretion of the Attorney General." *W. Elec. Co.*, 993 F.2d at

1577 (quotation marks omitted). "The court should bear in mind the *flexibility* of the public interest inquiry: the court's function is not to determine whether the resulting array of rights and liabilities is one that will *best* serve society, but only to confirm that the resulting settlement is within the *reaches* of the public interest." *Microsoft*, 56 F.3d at 1460 (quotation marks omitted). More demanding requirements would "have enormous practical consequences for the government's ability to negotiate future settlements," contrary to congressional intent. *Id*. at 1456. "The Tunney Act was not intended to create a disincentive to the use of the consent decree." *Id*.

The United States' predictions about the efficacy of the remedy are to be afforded deference by the Court. *See, e.g.*, *Microsoft*, 56 F.3d at 1461 (recognizing courts should give "due respect to the Justice Department's . . . view of the nature of its case"); *United States v. Iron Mountain, Inc.*, 217 F. Supp. 3d 146, 152-53 (D.D.C. 2016) ("In evaluating objections to settlement agreements under the Tunney Act, a court must be mindful that [t]he government need not prove that the settlements will perfectly remedy the alleged antitrust harms[;] it need only provide a factual basis for concluding that the settlements are reasonably adequate remedies for the alleged harms.") (internal citations omitted); *United States v. Republic Servs., Inc.*, 723 F. Supp. 2d 157, 160 (D.D.C. 2010) (noting "the deferential review to which the government's proposed remedy is accorded"); *United States v. Archer-Daniels-Midland Co.*, 272 F. Supp. 2d 1, 6 (D.D.C. 2003) ("A district court must accord due respect to the government's prediction as to the effect of proposed remedies, its perception of the market structure, and its view of the nature of the case."). The ultimate question is whether "the remedies [obtained by the Final Judgment are] so inconsonant with the allegations charged as to fall outside of the 'reaches of the public interest.'" *Microsoft*, 56 F.3d at 1461 (*quoting W. Elec. Co.*, 900 F.2d at 309).

Moreover, the Court's role under the APPA is limited to reviewing the remedy in relationship to the violations that the United States has alleged in its complaint, and does not authorize the Court to "construct [its] own hypothetical case and then evaluate the decree against that case." *Microsoft*, 56 F.3d at 1459; *see also U.S. Airways*, 38 F. Supp. 3d at 75 (noting that the court must simply determine whether there is a factual foundation for the government's decisions such that its conclusions regarding the proposed settlements are reasonable); *InBev*, 2009 U.S. Dist. LEXIS 84787, at *20 ("[T]he 'public interest' is not to be measured by comparing the violations alleged in the complaint against those the court believes could have, or even should have, been alleged."). Because the "court's authority to review the decree depends entirely on the government's exercising its prosecutorial discretion by bringing a case in the first place," it follows that "the court is only authorized to review the decree itself," and not to "effectively redraft the complaint" to inquire into other matters that the United States did not pursue. *Microsoft*, 56 F.3d at 1459-60.

In its 2004 amendments to the APPA, Congress made clear its intent to preserve the practical benefits of using consent judgments proposed by the United States in antitrust enforcement, Pub. L. 108-237 § 221, and added the unambiguous instruction that "[n]othing in this section shall be construed to require the court to conduct an evidentiary hearing or to require the court to permit anyone to intervene." 15 U.S.C. § 16(e)(2); *see also U.S. Airways*, 38 F. Supp. 3d at 76 (indicating that a court is not required to hold an evidentiary hearing or to permit intervenors as part of its review under the Tunney Act). This language explicitly wrote into the statute what Congress intended when it first enacted the Tunney Act in 1974. As Senator Tunney explained: "[t]he court is nowhere compelled to go to trial or to engage in extended proceedings which might have the effect of vitiating the benefits of prompt and less costly

settlement through the consent decree process." 119 Cong. Rec. 24,598 (1973) (statement of Sen. Tunney). "A court can make its public interest determination based on the competitive impact statement and response to public comments alone." *U.S. Airways*, 38 F. Supp. 3d at 76 (citing *Enova Corp.*, 107 F. Supp. 2d at 17).

VIII. DETERMINATIVE DOCUMENTS

There are no determinative materials or documents within the meaning of the APPA that were considered by the United States in formulating the proposed Final Judgment.

Dated: April 14, 2020

Respectfully submitted,

FOR PLAINTIFF
UNITED STATES OF AMERICA

/s/

Kevin C. Quin (D.C. Bar #415268)*
Attorney
United States Department of Justice
Antitrust Division
Defense, Industrials, and Aerospace Section
450 Fifth Street, N.W., Suite 8700
Washington, D.C. 20530
(202) 307-0922
kevin.quin@usdoj.gov

*LEAD ATTORNEY TO BE NOTICED