

DEPARTMENT OF JUSTICE**Antitrust Division****United States v. United Technologies Corporation, et al.; Proposed Final Judgment and Competitive Impact Statement**

Notice is hereby given pursuant to the Antitrust Procedures and Penalties Act, 15 U.S.C. 16(b)–(h), that a proposed Final Judgment, Stipulation, and Competitive Impact Statement have been filed with the United States District Court for the District of Columbia in *United States of America v. United Technologies Corporation, et al.*, Civil Action No. 1:20-cv-00824. On March 26, 2020, the United States filed a Complaint alleging that the proposed merger of United Technologies Corporation (“UTC”) and Raytheon Company (“Raytheon”) would violate Section 7 of the Clayton Act, 15 U.S.C. 18. The proposed Final Judgment, filed at the same time as the Complaint, requires the Defendants to divest the military GPS and optical systems businesses of UTC and the military airborne radios business of Raytheon.

Copies of the Complaint, proposed Final Judgment, and Competitive Impact Statement are available for inspection on the Antitrust Division’s website at <http://www.justice.gov/atr> and at the Office of the Clerk of the United States District Court for the District of Columbia. Copies of these materials may be obtained from the Antitrust Division upon request and payment of the copying fee set by Department of Justice regulations.

Public comment is invited within 60 days of the date of this notice. Such comments, including the name of the submitter, and responses thereto, will be posted on the Antitrust Division’s website, filed with the Court, and, under certain circumstances, published in the **Federal Register**. Comments should be directed to Katrina Rouse, Chief, Defense, Industrials, and Aerospace Section, Antitrust Division, Department of Justice, 450 Fifth Street NW, Suite 8700, Washington, DC 20530 (telephone: 202-307-0924).

Suzanne Morris,
Chief, Premerger and Division Statistics.

United States District Court for the District of Columbia

United States of America, U.S. Department of Justice, Antitrust Division, 450 Fifth Street NW, Suite 8700, Washington, DC 20530, Plaintiff, v. United Technologies Corporation, 10 Farm Springs Road, Farmington, CT 06032, and Raytheon Company, 870 Winter Street, Waltham, MA 02451, Defendants.

Civil Action No. 1:20-cv-00824

Judge: Hon. Dabney L. Friedrich

Complaint

The United States of America (“United States”), acting under the direction of the Attorney General of the United States, brings this civil antitrust action against Defendants United Technologies Corporation (“UTC”) and Raytheon Company (“Raytheon”) to enjoin the proposed merger of UTC and Raytheon. The United States complains and alleges as follows:

I. Nature of the Action

1. Pursuant to an agreement and plan of merger dated June 9, 2019, UTC and Raytheon propose to merge in a transaction that would create the nation’s second-largest aerospace and defense contractor. UTC is an aerospace company whose core products include engines, aerostructures, aircraft subsystems, and other aircraft components. Raytheon is a defense company whose core businesses include missiles, air defense systems, radars, sensors, and electronic warfare systems. Although the core businesses of UTC and Raytheon are different, they overlap in the supply of multiple products to the Department of Defense (“DoD”) and U.S. intelligence community.

2. UTC and Raytheon are the primary suppliers of radios for use in military aircraft (“military airborne radios”) operated by DoD. UTC’s AN/ARC-210 is the standard radio for Air Force and Navy aircraft, and Raytheon’s AN/ARC-231 is the standard radio for Army helicopters. As the only military airborne radios that have been supplied to DoD customers for years, the parties’ products represent the two competitive alternatives to DoD customers, and the sole constraint on either company exercising market power. The proposed merger would eliminate competition between UTC and Raytheon for military airborne radios, likely resulting in higher prices, lower quality, and diminished innovation for these critical defense products.

3. UTC and Raytheon are two of the leading suppliers of military global positioning system (“GPS”) receivers and anti-jam products (collectively, “military GPS systems”) to DoD. To enhance security, in 2012, DoD began the process of developing a new generation of military GPS systems for aviation/maritime and ground-based applications. UTC and Raytheon are likely to be the only competitors for military GPS systems for aviation/maritime applications, and two of only three competitors for military GPS systems for ground-based applications.

The proposed merger would eliminate competition between UTC and Raytheon for military GPS systems for these applications, likely resulting in higher prices, lower quality, and diminished innovation for these critical defense products.

4. The merger also would substantially lessen competition through the vertical integration of the two companies. UTC and Raytheon each have capabilities in critical inputs for electro-optical/infrared (“EO/IR”) reconnaissance satellites, which provide images for DoD and U.S. intelligence community customers. Specifically, Raytheon has a dominant position in electronic detectors known as focal plane arrays (“FPAs”), and is one of several builders of EO/IR satellite payloads. The payload is the system that performs the reconnaissance mission of a satellite, and includes components such as FPAs. UTC is one of only two companies with the capability to build large space-based optical systems for EO/IR satellite payloads. Today, Raytheon has no incentive to favor one optical systems provider over the other when it sells its FPAs to EO/IR payload builders, and UTC has no incentive to favor one EO/IR payload builder over another when it sells its optical systems.

5. The combination of UTC and Raytheon will bring these EO/IR reconnaissance satellite components under control of a single company and provide it with the incentive and ability to harm competition in two ways. First, the merger would provide the combined company with the incentive and ability to refuse to supply EO/IR payload builders with FPAs, or supply them only at higher cost, if the payload builders did not also agree to purchase UTC’s optical system. Second, the merger would give the combined company the incentive and ability to harm Raytheon’s satellite payload builder rivals by raising the prices for UTC’s optical systems, or denying them access to these systems altogether. The proposed merger therefore likely would result in higher prices, lower quality, and diminished innovation for large space-based optical systems and EO/IR reconnaissance satellite payloads.

6. As a result, the proposed acquisition likely would substantially lessen competition in the markets 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.

II. The Defendants

7. 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.

8. 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 FPAs and payloads for EO/IR reconnaissance satellites. Raytheon had sales of approximately \$29 billion in 2019.

III. Jurisdiction and Venue

9. The United States brings this action under Section 15 of the Clayton Act, 15 U.S.C. 25, as amended, to prevent and restrain Defendants from violating Section 7 of the Clayton Act, 15 U.S.C. 18.

10. Defendants develop, manufacture, and sell military airborne radios, military GPS systems, large space-based optical systems, and EO/IR reconnaissance satellite payloads throughout the United States, and their activities in these areas substantially affect interstate commerce. This Court therefore has subject matter jurisdiction over this action pursuant to Section 15 of the Clayton Act, 15 U.S.C. 25, and 28 U.S.C. 1331, 1337(a), and 1345.

11. Defendants have consented to venue and personal jurisdiction in this judicial district. Venue is therefore proper in this district under Section 12 of the Clayton Act, 15 U.S.C. 22 and under 28 U.S.C. 1391(c).

IV. Military Airborne Radios

A. Background

12. 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.

13. 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 waveforms and other features.

14. 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.

B. Relevant Markets

1. Product Market

15. 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.

16. Other communications technologies are not 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.

17. 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.

18. For the foregoing reasons, 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 design, development, production, and sale of military airborne radios is a relevant product market and line of commerce under Section 7 of the Clayton Act, 15 U.S.C. 18.

2. Geographic Market

19. 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.

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

C. Anticompetitive Effects of the Proposed Transaction

21. 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.

22. 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.

23. 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.

D. Difficulty of Entry

24. 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 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.

25. As a result of these barriers, 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.

V. Military GPS Systems

A. Background

26. 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.

27. 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.

28. 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.

29. 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 incumbent's advantage held by the three leading suppliers.

B. Relevant Markets

1. Product Markets

30. 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.

31. Military GPS systems for both applications are highly customized to suit the needs of military end users. With each competition, 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.

32. For the foregoing reasons, 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 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.

2. Geographic Market

33. For national security reasons, DoD, which is the sole purchaser of these products within 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.

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

C. Anticompetitive Effects of the Proposed Transaction

35. 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.

36. 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.

37. The proposed acquisition, therefore, 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.

D. Difficulty of Entry

38. 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.

39. Timely and sufficient expansion of capabilities by a producer of military GPS systems for ground-based applications is also 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.

40. 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.

VI. EO/IR Reconnaissance Satellites

A. Background

41. 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.

42. 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.

43. 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.

44. 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.

45. 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.

46. 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. As explained below, the combination of UTC's market-leading position in large-space based optical systems and Raytheon's market-leading position in FPAs will provide the merged firm with the ability and incentive to foreclose or otherwise harm its rivals in large space-based optical systems and EO/IR reconnaissance satellite payloads.

B. Relevant Markets

1. Product Markets

a. Large Space-Based Optical Systems

47. 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.

48. 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.

b. EO/IR Reconnaissance Satellite Payloads

49. 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.

50. 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.

51. Consequently, 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 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.

2. Geographic Market

52. 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.

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

C. Anticompetitive Effects of the Proposed Transaction

54. As discussed below, the vertical integration of Raytheon and UTC will change the merged firm's incentives to sell FPAs and large space-based optical systems and enable the merged firm to use its significant market position in these products to harm its large space-based optical systems and EO/IR satellite payload competitors.

1. Large Space-Based Optical Systems

55. First, 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.

56. 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.

57. 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.

2. EO/IR Reconnaissance Satellite Payloads

58. Second, 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 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.

59. 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.

60. The proposed acquisition, therefore, 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.

D. Difficulty of Entry

61. 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.

62. 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.

63. 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.

VII. Violations Alleged

64. The merger of UTC and Raytheon likely would substantially lessen competition in the relevant markets alleged above in violation of Section 7 of the Clayton Act, 15 U.S.C. 18.

65. Unless enjoined, the acquisition likely would have the following anticompetitive effects, among others, in the relevant markets:

(a) Actual and potential competition between UTC and Raytheon would be eliminated;

(b) competition generally likely would be substantially lessened; and

(c) prices likely would increase, quality and innovation likely would decrease, and contractual terms likely would be less favorable to customers.

VIII. Request for Relief

66. The United States requests that this Court:

(a) Adjudge and decree that the proposed merger of UTC and Raytheon would be unlawful and violate Section 7 of the Clayton Act, 15 U.S.C. 18;

(b) preliminarily and permanently enjoin and restrain Defendants and all persons acting on their behalf from consummating the proposed merger of UTC and Raytheon, or from entering into or carrying out any other contract, agreement, plan, or understanding, the effect of which would be to combine UTC with Raytheon;

(c) award the United States its costs for this action; and

(d) award the United States such other and further relief as the Court deems just and proper.

Dated: March 26, 2020.

Respectfully submitted,
FOR PLAINTIFF UNITED STATES:

Makan Delrahim (D.C. Bar #457795)
Assistant Attorney General.

Bernard A. Nigro, Jr. (D.C. Bar #412357)
Principal Deputy Assistant Attorney General.

Alexander P. Okulian (D.C. Bar #481103)
Deputy Assistant Attorney General.

Kathleen S. O'Neill
Senior Director of Investigations & Litigation.

Katrina H. Rouse (D.C. Bar #1013035)
Chief Defense, Industrials, and Aerospace Section.

David E. Altschuler (D.C. Bar #983023)
Assistant Chief, Defense, Industrials, and Aerospace Section.

Kevin Quin* (D.C. Bar #415268)

Jay D. Owen

Rebecca Valentine (D.C. Bar #989607)

Attorneys for the United States, Defense, Industrials, and Aerospace Section, U.S.
Department of Justice, Antitrust Division, 450 Fifth Street NW, Suite 8700, Washington, DC 20530, Telephone: (202) 307-0922, Facsimile: (202) 514-9033, Email: kevin.quin@usdoj.gov.

* Lead Attorney to be Noticed.

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

United States of America, Plaintiff, v. United Technologies Corporation, and Raytheon Company, Defendants.

Civil Action No. 1:20-cv-00824

Judge: Hon. Dabney L. Friedrich

Proposed Final Judgment

Whereas, Plaintiff, United States of America, filed its Complaint on March 26, 2020, the United States and Defendants, United Technologies Corporation and Raytheon Company, by their respective attorneys, have consented to entry of this Final Judgment without trial or adjudication of any issue of fact or law and without this Final Judgment constituting any evidence against or admission by a party regarding any issue of fact or law;

And whereas, Defendants agree to be bound by the provisions of this Final Judgment pending its approval by the Court;

And whereas, the essence of this Final Judgment is the prompt and certain divestiture of certain rights or assets by Defendants to assure that competition is not substantially lessened;

And whereas, Defendants agree to make certain divestitures for the purpose of remedying the loss of competition alleged in the Complaint;

And whereas, Defendants represent that the divestitures and other relief

required by this Final Judgment can and will be made and that Defendants will not later raise a claim of hardship or difficulty as grounds for asking the Court to modify any provision of this Final Judgment;

Now therefore, before any testimony is taken, without trial or adjudication of any issue of fact or law, and upon consent of the parties, it is ordered, adjudged, and decreed:

I. Jurisdiction

The Court has jurisdiction over the subject matter of and each of the parties to this action. The Complaint states a claim upon which relief may be granted against Defendants under Section 7 of the Clayton Act, as amended (15 U.S.C. 18).

II. Definitions

As used in this Final Judgment:

A. "Acquirer" or "Acquirers" means the entity or entities to whom Defendants divest any of the Divestiture Assets.

B. "Acquirer of the Military Airborne Radios Divestiture Assets" means BAE or another entity to whom Defendants divest the Military Airborne Radios Divestiture Assets.

C. "Acquirer of the Military GPS Divestiture Assets" means BAE or another entity to whom Defendants divest the GPS Divestiture Assets.

D. "Acquirer of the Optical Systems Divestiture Assets" means the entity to whom Defendants divest the Optical Systems Divestiture Assets.

E. "Divestiture Assets" means the Military Airborne Radios Divestiture Assets, the Military GPS Divestiture Assets, and the Optical Systems Divestiture Assets.

F. "UTC" means Defendant United Technologies Corporation, a Delaware corporation with its headquarters in Farmington, Connecticut, its successors and assigns, and its subsidiaries, divisions, groups, affiliates, partnerships, and joint ventures, and their directors, officers, managers, agents, and employees.

G. "Raytheon" means Defendant Raytheon Company, a Delaware corporation with its headquarters in Waltham, Massachusetts, its successors and assigns, and its subsidiaries, divisions, groups, affiliates, partnerships, and joint ventures, and their directors, officers, managers, agents, and employees.

H. "BAE" means BAE Systems, Inc., a Delaware corporation with its headquarters in Arlington, Virginia, its successors and assigns, and its subsidiaries, divisions, groups, affiliates, partnerships, and joint

ventures, and their directors, officers, managers, agents, and employees.

I. "Military Airborne Radios" means radios that enable military aircraft to communicate with other aircraft and with the ground, either as standalone devices or as part of an integrated communication, navigation, and identification suite. "Military Airborne Radios" does not include Cryptographic Modules, identification friend or foe systems, or data links.

J. "Cryptographic Modules" means hardware and software for encryption and decryption of radio signals and related application-specific integrated circuits and field-programmable gate arrays for the Military Airborne Radios Business.

K. "Military Airborne Radios Business" means the business of the design, development, production, and sale of Military Airborne Radios by Raytheon's Tactical Communication Systems division.

L. "Military Airborne Radios Divestiture Assets" means the Military Airborne Radios Business, including:

1. All of Defendants' rights, title, and interests in the facilities located at the following addresses:

a. 5001 U.S. 30 Highway, Fort Wayne, Indiana 46818 (the "Fort Wayne Facility");

b. Office 135 of Building 100 located at the county-owned facility at 7887 Bryan Dairy Road, Largo, Florida 33777;

2. All tangible assets related to or used in connection with the Military Airborne Radios Business, including but not limited to: All manufacturing equipment, quality assurance equipment, research and development equipment, machine assembly equipment, tooling and fixed assets, personal property, inventory, office furniture, materials, supplies, and other tangible property; all licenses, permits, certifications, and authorizations issued by any governmental organization; all contracts, teaming arrangements, agreements, leases, commitments, certifications, and understandings, including supply agreements; all customer lists, contracts, accounts, and credit records; all repair and performance records; and all other records;

3. All intangible assets related to or used in connection with the Military Airborne Radios Business, including but not limited to: All patents; licenses and sublicenses; intellectual property; copyrights; trademarks, trade names, service marks, and service names (excluding any trademarks, trade names, service marks, or service names containing the name "Raytheon"); technical information; computer software and related documentation; customer relationships, agreements, and contracts; know-how; trade secrets; drawings; blueprints; designs; design protocols; specifications for materials; specifications for parts and devices; safety procedures for the handling of materials and substances; quality assurance and control procedures; design tools and simulation capability; all manuals and technical information UTC provides to its own employees, customers, suppliers, agents, or licensees; and all research data concerning historic and current research

software and related documentation; customer relationships, agreements, and contracts; know-how; trade secrets; drawings; blueprints; designs; design protocols; specifications for materials; specifications for parts and devices; safety procedures for the handling of materials and substances; quality assurance and control procedures; design tools and simulation capability; all manuals and technical information Raytheon provides to its own employees, customers, suppliers, agents, or licensees; and all research data concerning historic and current research and development efforts, including but not limited to designs of experiments and the results of successful and unsuccessful designs and experiments; and

4. At the option of the Acquirer of the Military Airborne Radios Divestiture Assets, a worldwide, non-exclusive, royalty-free, irrevocable, paid-up, perpetual license to any intellectual property related to Cryptographic Modules that is held by Raytheon at the time of the filing of the Complaint in this action, or is developed by Raytheon during the term of the supply contract required by Paragraph IV(H) of this Final Judgment, including any extensions of that term approved by the United States; *Provided, however, that the assets specified in Paragraphs II(L)(1)–(4) above, do not include (i) the space leased by Raytheon at 1010 Production Road, Fort Wayne, Indiana 46818; (ii) the space leased by Raytheon in Buildings 100, 400, and 600 at the county-owned facility located at 7887 Bryan Dairy Road, Largo, Florida 33777 (other than Office 135 of Building 100); or (iii) intellectual property solely related to Cryptographic Modules, except as set forth in Paragraph II(L)(4).*

M. "Military Airborne Radios Personnel" means all full-time, part-time, or contract personnel who are or were, at any time between June 9, 2019 and the date on which the Military Airborne Radios Divestiture Assets are divested, (i) employees of the Military Airborne Radios Business, (ii) employees of Raytheon primarily involved in the design, development, production, and sale of Military Airborne Radios (except for Raytheon employees primarily engaged in human resources, legal, or other general or administrative support functions), or (iii) at the option of the Acquirer of the Military Airborne Radios Divestiture Assets, up to sixteen (16) employees of Raytheon knowledgeable in the design, development, production, and use of Cryptographic Modules, to be selected by the Acquirer of the Military Airborne Radios Divestiture Assets. The United

States, in its sole discretion, will resolve any disagreement regarding which employees are Military Airborne Radios Personnel.

N. "Military Airborne Radios Transition Assets" means those Military Airborne Radios Divestiture Assets required for Defendants to comply with their obligations under the supply contract required by Paragraph IV(H) of this Final Judgment.

O. "Military GPS Systems" means military receivers and anti-jam products for global positioning satellite systems.

P. "Military GPS Business" means UTC's business in the design, development, production, and sale of Military GPS Systems.

Q. "Military GPS Divestiture Assets" means the Military GPS Business, including:

1. All tangible assets related to or used in connection with the Military GPS Business, including but not limited to: All manufacturing equipment, quality assurance equipment, research and development equipment, machine assembly equipment, tooling and fixed assets, personal property, inventory, office furniture, materials, supplies, and other tangible property; all licenses, permits, certifications, and authorizations issued by any governmental organization; all contracts, teaming arrangements, agreements, leases, commitments, certifications, and understandings, including supply agreements; all customer lists, contracts, accounts, and credit records; all repair and performance records; and all other records;

2. All intangible assets related to or used in connection with the Military GPS Business, including but not limited to: All patents; licenses and sublicenses; intellectual property; copyrights; trademarks, trade names, service marks, and service names (excluding any trademarks, trade names, service marks, or service names containing the name "United Technologies," "Rockwell," "Collins," "UTC," or "UTX"); technical information; computer software and related documentation; customer relationships, agreements, and contracts; know-how; trade secrets; drawings; blueprints; designs; design protocols; specifications for materials; specifications for parts and devices; safety procedures for the handling of materials and substances; quality assurance and control procedures; design tools and simulation capability; all manuals and technical information UTC provides to its own employees, customers, suppliers, agents, or licensees; and all research data concerning historic and current research

and development efforts, including but not limited to designs of experiments and the results of successful and unsuccessful designs and experiments; *Provided, however,* the assets specified in Paragraphs II(Q)(1)–(2) above do not include (i) the facility located at 855 35th Street NE, Cedar Rapids, Iowa 52498 (the “Cedar Rapids Facility”) or (ii) the facility located at 2855 Heartland Drive, Coralville, Iowa 52241 (the “Coralville Facility”).

R. “Military GPS Personnel” means all full-time, part-time, or contract personnel who are or were, at any time between June 9, 2019 and the date on which the Military GPS Divestiture Assets are divested, (i) employees of the Military GPS Business, or (ii) employees of UTC primarily involved in the design, development, production, and sale of Military GPS Systems (except for UTC employees primarily engaged in human resources, legal, or other general or administrative support functions). The United States, in its sole discretion, will resolve any disagreement regarding which employees are Military GPS Personnel.

S. “Military GPS Transition Assets” means those Military GPS Divestiture Assets required for Defendants to comply with their obligations under the supply contract required by Paragraph V(H) of this Final Judgment.

T. “Optical Systems” means electro-optical/infrared systems for national security space missions and defense laser warning survivability subsystems.

U. “Optical Systems Business” means UTC’s business in the design, development, production, and sale of Optical Systems.

V. “Optical Systems Divestiture Assets” means the Optical Systems Business, including:

1. All of Defendants’ rights, title, and interests in the facility located at 100 Wooster Heights, Danbury, Connecticut 06810;

2. All tangible assets related to or used in connection with the Optical Systems Business, including but not limited to: All manufacturing equipment, quality assurance equipment, research and development equipment, machine assembly equipment, tooling and fixed assets, personal property, inventory, office furniture, materials, supplies, and other tangible property; all licenses, permits, certifications, and authorizations issued by any governmental organization; all contracts, teaming arrangements, agreements, leases, commitments, certifications, and understandings, including supply agreements; all customer lists, contracts, accounts, and credit records; all repair and

performance records; and all other records; and

3. All intangible assets related to or used in connection with the Optical Systems Business, including but not limited to: All patents; licenses and sublicenses; intellectual property; copyrights; trademarks, trade names, service marks, and service names (excluding any trademarks, trade names, service marks, or service names containing the name “United Technologies,” “Rockwell,” “Collins,” “UTC,” or “UTX”); technical information; computer software and related documentation; customer relationships, agreements, and contracts; know-how; trade secrets; drawings; blueprints; designs; design protocols; specifications for materials; specifications for parts and devices; safety procedures for the handling of materials and substances; quality assurance and control procedures; design tools and simulation capability; all manuals and technical information UTC provides to its own employees, customers, suppliers, agents, or licensees; and all research data concerning historic and current research and development efforts, including but not limited to designs of experiments and the results of successful and unsuccessful designs and experiments.

W. “Optical Systems Personnel” means all full-time, part-time, or contract personnel who are or were, at any time between June 9, 2019 and the date on which the Optical Systems Divestiture Assets are divested, (i) employees of the Optical Systems Business, or (ii) employees of UTC involved in the design, development, production, and sale of Optical Systems (except for UTC employees primarily engaged in human resources, legal, or other general or administrative support functions). The United States, in its sole discretion, will resolve any disagreement regarding which employees are Optical Systems Personnel.

X. “Transaction Regulatory Approvals” means any 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 Transaction to proceed.

Y. “Military Airborne Radios Divestiture Assets Regulatory Approvals” means any 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 by the Acquirer of the Military GPS Divestiture Assets.

Military Airborne Radios Divestiture Assets.

Z. “Military GPS Divestiture Assets Regulatory Approvals” means any 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 by the Acquirer of the Military GPS Divestiture Assets.

AA. “Optical Systems Divestiture Assets Regulatory Approvals” means any 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 by the Acquirer of the Optical Systems Divestiture Assets.

BB. The “Transaction” means the proposed merger between UTC and Raytheon.

III. Applicability

A. This Final Judgment applies to UTC and Raytheon, as defined above, and all other persons, in active concert or participation with any Defendant, who receive actual notice of this Final Judgment.

B. If, prior to complying with Section IV, Section V, Section VI, and Section VII of this Final Judgment, Defendants sell or otherwise dispose of all or substantially all of their assets or of lesser business units that include the Divestiture Assets, Defendants must require the purchaser to be bound by the provisions of this Final Judgment. Defendants need not obtain such an agreement from Acquirers.

IV. Divestiture of the Military Airborne Radios Business

A. Defendants are ordered and directed, within the later of forty-five (45) calendar days after the Court’s entry of the Asset Preservation and Hold Separate Stipulation and Order in this matter, or fifteen (15) calendar days after the Transaction Regulatory Approvals and the Military Airborne Radios Divestiture Assets Regulatory Approvals have been received, to divest the Military Airborne Radios Divestiture Assets in a manner consistent with this Final Judgment to BAE or an alternative Acquirer acceptable to the United States, in its sole discretion. The United States, in its sole discretion, may agree to one or more extensions of this time period not to exceed sixty (60) calendar days in total and will notify the Court of any extensions. Defendants agree to use their best efforts to divest the Military Airborne Radios Divestiture

Assets as expeditiously as possible. Notwithstanding the foregoing, at the option of the Acquirer of the Military Airborne Radios Divestiture Assets, and subject to approval by the United States in its sole discretion, Defendants may, for the sole purpose of fulfilling the supply contract required by Paragraph IV(H) of this Final Judgment, retain the Military Airborne Radios Transition Assets until the earlier of (i) thirty (30) calendar days after the Acquirer of the Military Airborne Radios Divestiture Assets terminates the supply contract required by Paragraph IV(H) of this Final Judgment and requests the transfer of such assets or (ii) thirty (30) calendar days following the expiration of the supply contract required by Paragraph IV(H) of this Final Judgment.

B. In the event Defendants are attempting to divest the Military Airborne Radios Divestiture Assets to an Acquirer other than BAE, Defendants promptly must make known, by usual and customary means, the availability of the Military Airborne Radios Divestiture Assets. Defendants must inform any person making an inquiry regarding a possible purchase of the Military Airborne Radios Divestiture Assets that the Military Airborne Radios Divestiture Assets are being divested in accordance with this Final Judgment and must provide that person with a copy of this Final Judgment. Defendants must offer to furnish to all prospective Acquirers, subject to customary confidentiality assurances, all information and documents relating to the Military Airborne Radios Divestiture Assets customarily provided in a due-diligence process; provided, however, that Defendants need not provide information or documents subject to the attorney-client privilege or work-product doctrine. Defendants must make this information available to the United States at the same time that the information is made available to any other person.

C. Defendants must cooperate with and assist the Acquirer of the Military Airborne Radios Divestiture Assets in identifying and hiring all Military Airborne Radios Personnel, including:

1. Within ten (10) business days following the filing of the Complaint in this matter, Defendants must identify all Military Airborne Radios Personnel to the Acquirer of the Military Airborne Radios Divestiture Assets and the United States, including by providing organization charts covering all Military Airborne Radios Personnel.

2. Within ten (10) business days following receipt of a request by the Acquirer of the Military Airborne Radios Divestiture Assets or the United

States, Defendants must provide to the Acquirer of the Military Airborne Radios Divestiture Assets and the United States the following additional information related to Military Airborne Radios Personnel: Name; job title; current salary and benefits including most recent bonus paid, aggregate annual compensation, current target or guaranteed bonus, if any, and any other payments due to or promises made to the employee; descriptions of reporting relationships, past experience, responsibilities, and training and educational histories; lists of all certifications; and all job performance evaluations. If Defendants are barred by any applicable laws from providing any of this information, within ten (10) business days following receipt of the request, Defendants must provide the requested information to the full extent permitted by law and also must provide a written explanation of Defendants' inability to provide the remaining information.

3. At the request of the Acquirer of the Military Airborne Radios Divestiture Assets, Defendants must promptly make Military Airborne Radios Personnel available for private interviews with the Acquirer of the Military Airborne Radios Divestiture Assets during normal business hours at a mutually agreeable location.

4. Defendants must not interfere with any efforts by the Acquirer of the Military Airborne Radios Divestiture Assets to employ any Military Airborne Radios Personnel. Interference includes but is not limited to offering to increase the salary or improve the benefits of Military Airborne Radios Personnel unless the offer is part of a company-wide increase in salary or benefits that was announced prior to June 9, 2019 or has been approved by the United States, in its sole discretion. Defendants' obligations under this paragraph will expire (i) for Military Airborne Radios Personnel whose services are not required for Defendants to perform under the supply contract required by Paragraph IV(H) of this Final Judgment, six (6) months after the divestiture of the Military Airborne Radios Divestiture Assets pursuant to this Final Judgment, and (ii) for Military Airborne Radios Personnel whose services are required for Defendants to perform under the supply contract required by Paragraph IV(H) of this Final Judgment, six (6) months after the expiration of that supply contract.

5. For Military Airborne Radios Personnel who elect employment with the Acquirer of the Military Airborne Radios Divestiture Assets within the periods set forth in Paragraph IV(C)(4),

Defendants must waive all non-compete and non-disclosure agreements, vest all unvested pension and other equity rights, and provide all benefits that those Military Airborne Radios Personnel otherwise would have been provided had the Military Airborne Radios Personnel continued employment with Defendants, including but not limited to any retention bonuses or payments. Defendants may maintain reasonable restrictions on disclosure by Military Airborne Radios Personnel of Defendants' proprietary non-public information that is unrelated to Military Airborne Radios Divestiture Assets and not otherwise required to be disclosed by this Final Judgment.

6. For a period of twelve (12) months from the date on which the Military Airborne Radios Divestiture Assets are divested to the Acquirer of the Military Airborne Radios Divestiture Assets, Defendants may not solicit to rehire Military Airborne Radios Personnel who were hired by the Acquirer of the Military Airborne Radios Divestiture Assets within the period set forth in Paragraph IV(C)(4)(i), unless (a) an individual is terminated or laid off by the Acquirer of the Military Airborne Radios Divestiture Assets or (b) the Acquirer of the Military Airborne Radios Divestiture Assets agrees in writing that Defendants may solicit to rehire that individual. Nothing in this paragraph prohibits Defendants from advertising employment openings using general solicitations or advertisements.

7. For a period of twelve (12) months following the expiration of the supply contract required by Paragraph IV(H) of this Final Judgment, Defendants may not solicit to rehire Military Airborne Radios Personnel whose services were required for Defendants to perform under that supply contract and who were hired by the Acquirer of the Military Airborne Radios Divestiture Assets within the period set forth in Paragraph IV(C)(4)(ii), unless (a) an individual is terminated or laid off by the Acquirer of the Military Airborne Radios Divestiture Assets or (b) the Acquirer of the Military Airborne Radios Divestiture Assets agrees in writing that Defendants may solicit to rehire that individual. Nothing in this paragraph prohibits Defendants from advertising employment openings using general solicitations or advertisements.

D. Defendants must permit prospective Acquirers of the Military Airborne Radios Divestiture Assets to have reasonable access to make inspections of the physical facilities and access to all environmental, zoning, and other permit documents and information, and all financial,

operational, or other documents and information customarily provided as part of a due diligence process.

E. Defendants must warrant to the Acquirer of the Military Airborne Radios Divestiture Assets that each asset to be divested will be fully operational and without material defect on the date of their transfer to the Acquirer of the Military Airborne Radios Divestiture Assets.

F. Defendants must not take any action that will impede in any way the permitting, operation, or divestiture of the Military Airborne Radios Divestiture Assets.

G. Defendants must make best efforts to assign, subcontract, or otherwise transfer all contracts related to the Military Airborne Radios Divestiture Assets, including all supply and sales contracts, to the Acquirer of the Military Airborne Radios Divestiture Assets. Defendants must not interfere with any negotiations between the Acquirer of the Military Airborne Radios Divestiture Assets and a contracting party.

H. At the option of the Acquirer of the Military Airborne Radios Divestiture Assets, and subject to approval by the United States in its sole discretion, on or before the date on which the Military Airborne Radios Divestiture Assets are divested to the Acquirer of the Military Airborne Radios Divestiture Assets, Defendants must enter into a supply contract for Military Airborne Radios sufficient to meet the needs of the Military Airborne Radios Business, as determined by the Acquirer of the Military Airborne Radios Divestiture Assets, for a period of up to twelve (12) months on terms and conditions reasonably related to market conditions for Military Airborne Radios. The United States, in its sole discretion, may approve one or more extensions of this supply contract, for a total of up to an additional twelve (12) months. If the Acquirer of the Military Airborne Radios Divestiture Assets seeks an extension of the term of this supply contract, Defendants must notify the United States in writing at least three (3) months prior to the date the supply contract expires. The Acquirer of the Military Airborne Radios Divestiture Assets may terminate this supply contract without cost or penalty at any time upon commercially reasonable notice. The employee(s) of Defendants tasked with supporting this supply contract must not share any competitively sensitive information of the Acquirer of the Military Airborne Radios Divestiture Assets with any other employee of Defendants.

I. At the option of the Acquirer of the Military Airborne Radios Divestiture

Assets, and subject to approval by the United States in its sole discretion, on or before the date on which the Military Airborne Radios Divestiture Assets are divested to the Acquirer of the Military Airborne Radios Divestiture Assets, Defendants must enter into a supply contract for the manufacture of Cryptographic Modules sufficient to meet the needs of the Military Airborne Radios Business, as determined by the Acquirer of the Military Airborne Radios Divestiture Assets, for a period of up to twelve (12) months on terms and conditions reasonably related to market conditions for Cryptographic Modules. The United States, in its sole discretion, may approve one or more extensions of this supply contract, for a total of up to an additional twelve (12) months. If the Acquirer of the Military Airborne Radios Divestiture Assets seeks an extension of the term of this supply contract, Defendants must notify the United States in writing at least three (3) months prior to the date the supply contract expires. The Acquirer of the Military Airborne Radios Divestiture Assets may terminate this supply contract without cost or penalty at any time upon commercially reasonable notice. Defendants must maintain any National Security Agency certifications or approvals necessary to supply the products manufactured under the supply contract entered into pursuant to this paragraph. The employee(s) of Defendants tasked with supporting this supply contract must not share any competitively sensitive information of the Acquirer of the Military Airborne Radios Divestiture Assets with any other employee of Defendants.

J. At the option of the Acquirer of the Military Airborne Radios Divestiture Assets, and subject to approval by the United States in its sole discretion, on or before the date on which the Military Airborne Radios Divestiture Assets are divested to the Acquirer of the Military Airborne Radios Divestiture Assets, Defendants must enter into a contract to provide transition services for back office, human resource, and information technology services and support for the Military Airborne Radios Business for a period of up to twelve (12) months on terms and conditions reasonably related to market conditions for the transition services. The United States, in its sole discretion, may approve one or more extensions of this contract for transition services, for a total of up to an additional twelve (12) months. If the Acquirer of the Military Airborne Radios Divestiture Assets seeks an extension of the term of this contract for transition services, Defendants must

notify the United States in writing at least three (3) months prior to the date the contract expires. The Acquirer of the Military Airborne Radios Divestiture Assets may terminate a contract for transition services without cost or penalty at any time upon commercially reasonable notice. The employee(s) of Defendants tasked with providing these transition services must not share any competitively sensitive information of the Acquirer of the Military Airborne Radios Divestiture Assets with any other employee of Defendants.

K. At the option of the Acquirer of the Military Airborne Radios Divestiture Assets, Defendants must provide the Acquirer of the Military Airborne Radios Divestiture Assets with complete and sole access to the laboratories located in rooms 01-007V004 and 01-002V001 in Building C1-SW, 1010 Production Road, Fort Wayne, Indiana 46818, until the Acquirer of the Military Airborne Radios Divestiture Assets receives any necessary certifications for its own laboratory space, for a period not to exceed three (3) months. 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 (3) months. If the Acquirer of the Military Airborne Radios Divestiture Assets seeks an extension of this period, Defendants must notify the United States in writing at least thirty (30) days prior to the date this period expires.

L. At the option of the Acquirer of the Military Airborne Radios Divestiture Assets, Defendants must provide the Acquirer of the Military Airborne Radios Divestiture Assets with complete and sole access to rooms C1-W-HWL-M, C1-W-Demo, and C1-W-TCS-CR in Building C1-SW, 1010 Production Road, Fort Wayne, Indiana 46818, for three (3) pre-scheduled, 8-hour shifts per room each week, selected by the Acquirer of the Military Airborne Radios Divestiture Assets, until the Acquirer of the Military Airborne Radios Divestiture Assets receives any necessary certifications for its own laboratory space, for a period not to exceed six (6) months. 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 (6) months. If the Acquirer of the Military Airborne Radios Divestiture Assets seeks an extension of this period, Defendants must notify the United States in writing at least thirty (30) days prior to the date this period expires.

M. Defendants must warrant to the Acquirer of the Military Airborne Radios Divestiture Assets that there are no material defects in the environmental, zoning, or other permits

pertaining to the operation of the Military Airborne Radios Divestiture Assets. Following the sale of the Military Airborne Radios Divestiture Assets, Defendants must not undertake, directly or indirectly, any challenges to the environmental, zoning, or other permits relating to the operation of the Military Airborne Radios Divestiture Assets.

N. Unless the United States otherwise consents in writing, the divestiture pursuant to Section IV or by a Divestiture Trustee appointed pursuant to Section VII of this Final Judgment must include the entire Military Airborne Radios Divestiture Assets and must be accomplished in such a way as to satisfy the United States, in its sole discretion, that the Military Airborne Radios Divestiture Assets can and will be used by the Acquirer of the Military Airborne Radios Divestiture Assets as part of a viable, ongoing business in the design, development, production, and sale of Military Airborne Radios, and will remedy the competitive harm alleged in the Complaint. The divestiture, whether pursuant to Section IV or Section VII of this Final Judgment:

(1) Must be made to an Acquirer that, in the United States' sole judgment, has the intent and capability (including the necessary managerial, operational, technical, and financial capability) of competing effectively in the business of the design, development, production, and sale of Military Airborne Radios; and

(2) must be accomplished so as to satisfy the United States, in its sole discretion, that none of the terms of any agreement between an Acquirer and Defendants give Defendants the ability unreasonably to raise the Acquirer of the Military Airborne Radios Divestiture Assets' costs, to lower the Acquirer of the Military Airborne Radios Divestiture Assets' efficiency, or otherwise to interfere in the ability of the Acquirer of the Military Airborne Radios Divestiture Assets to compete effectively.

P. If any term of an agreement between Defendants and the Acquirer of the Military Airborne Radios Divestiture Assets to effectuate the divestiture required by this Final Judgment varies from a term of this Final Judgment then, to the extent that Defendants cannot fully comply with both, this Final Judgment determines Defendants' obligations.

V. Divestiture of the Military GPS Business

A. Defendants are ordered and directed, within the later of forty-five (45) calendar days after the Court's entry of the Asset Preservation and Hold Separate Stipulation and Order in this matter, or fifteen (15) calendar days after the Transaction Regulatory Approvals

and the Military GPS Divestiture Assets Regulatory Approvals have been received, to divest the Military GPS Divestiture Assets in a manner consistent with this Final Judgment to BAE or an alternative Acquirer acceptable to the United States, in its sole discretion. The United States, in its sole discretion, may agree to one or more extensions of this time period not to exceed sixty (60) calendar days in total and will notify the Court of any extensions. Defendants agree to use their best efforts to divest the Military GPS Divestiture Assets as expeditiously as possible. Notwithstanding the foregoing, at the option of the Acquirer of the Military GPS Divestiture Assets, and subject to approval by the United States in its sole discretion, Defendants may retain, for the sole purpose of fulfilling the supply contract required by Paragraph V(H) of this Final Judgment, the Military GPS Transition Assets until the earlier of (i) thirty (30) calendar days after the Acquirer of the Military GPS Divestiture Assets terminates the supply contract required by Paragraph V(H) of this Final Judgment and requests the transfer of such assets or (ii) thirty (30) calendar days following the completion of the supply contract required by Paragraph V(H) of this Final Judgment.

B. In the event Defendants are attempting to divest the Military GPS Divestiture Assets to an Acquirer other than BAE, Defendants promptly must make known, by usual and customary means, the availability of the Military GPS Divestiture Assets. Defendants must inform any person making an inquiry regarding a possible purchase of the Military GPS Divestiture Assets that the Military GPS Divestiture Assets are being divested in accordance with this Final Judgment and must provide that person with a copy of this Final Judgment. Defendants must offer to furnish to all prospective Acquirers, subject to customary confidentiality assurances, all information and documents relating to the Military GPS Divestiture Assets customarily provided in a due-diligence process; provided, however, that Defendants need not provide information or documents subject to the attorney-client privilege or work-product doctrine. Defendants must make this information available to the United States at the same time that the information is made available to any other person.

C. Defendants must cooperate with and assist the Acquirer of the Military GPS Divestiture Assets in identifying and hiring all Military GPS Personnel, including:

1. Within ten (10) business days following the filing of the Complaint in this matter, Defendants must identify all Military GPS Personnel to the Acquirer of the Military GPS Divestiture Assets and the United States, including by providing organization charts covering all Military GPS Personnel.

2. Within ten (10) business days following receipt of a request by the Acquirer of the Military GPS Divestiture Assets or the United States, Defendants must provide to the Acquirer of the Military GPS Divestiture Assets and the United States the following additional information related to Military GPS Personnel: Name; job title; current salary and benefits including most recent bonus paid, aggregate annual compensation, current target or guaranteed bonus, if any, and any other payments due to or promises made to the employee; descriptions of reporting relationships, past experience, responsibilities, and training and educational histories; lists of all certifications; and all job performance evaluations. If Defendants are barred by any applicable laws from providing any of this information, within ten (10) business days following receipt of the request, Defendants must provide the requested information to the full extent permitted by law and also must provide a written explanation of Defendants' inability to provide the remaining information.

3. At the request of the Acquirer of the Military GPS Divestiture Assets, Defendants must promptly make Military GPS Personnel available for private interviews with the Acquirer of the Military GPS Divestiture Assets during normal business hours at a mutually agreeable location.

4. Defendants must not interfere with any efforts by the Acquirer of the Military GPS Divestiture Assets to employ any Military GPS Personnel. Interference includes but is not limited to offering to increase the salary or improve the benefits of Military GPS Personnel unless the offer is part of a company-wide increase in salary or benefits that was announced prior to June 9, 2019 or has been approved by the United States, in its sole discretion. Defendants' obligations under this paragraph will expire (i) for Military GPS Personnel whose services are not required for Defendants to perform under the supply contract required by Paragraph V(H) of this Final Judgment, six (6) months after the divestiture of the Military GPS Divestiture Assets pursuant to this Final Judgment, and (ii) for Military GPS Personnel whose services are required for Defendants to perform under the supply contract

required by Paragraph V(H) of this Final Judgment, six (6) months after the expiration of that supply contract.

5. For Military GPS Personnel who elect employment with the Acquirer of the Military GPS Divestiture Assets within the periods set forth in Paragraph V(C)(4), Defendants must waive all non-compete and non-disclosure agreements, vest all unvested pension and other equity rights, and provide all benefits that those Military GPS Personnel otherwise would have been provided had the Military GPS Personnel continued employment with Defendants, including but not limited to any retention bonuses or payments. Defendants may maintain reasonable restrictions on disclosure by Military GPS Personnel of Defendants' proprietary non-public information that is unrelated to Military GPS Divestiture Assets and not otherwise required to be disclosed by this Final Judgment.

6. For a period of twelve (12) months from the date on which the Military GPS Divestiture Assets are divested to the Acquirer of the Military GPS Divestiture Assets, Defendants may not solicit to rehire Military GPS Personnel who were hired by the Acquirer of the Military GPS Divestiture Assets within the period set forth in Paragraph V(C)(4)(i) unless (a) an individual is terminated or laid off by the Acquirer of the Military GPS Divestiture Assets or (b) the Acquirer of the Military GPS Divestiture Assets agrees in writing that Defendants may solicit to rehire that individual. Nothing in this paragraph prohibits Defendants from advertising employment openings using general solicitations or advertisements.

7. For a period of twelve (12) months following the expiration of the supply contract required by Paragraph V(H) of this Final Judgment, Defendants may not solicit to rehire Military GPS Personnel whose services were required for Defendants to perform under that supply contract and who were hired by the Acquirer of the Military GPS Divestiture Assets within the period set forth in Paragraph V(C)(4)(ii) unless (a) an individual is terminated or laid off by the Acquirer of the Military GPS Divestiture Assets or (b) the Acquirer of the Military GPS Divestiture Assets agrees in writing that Defendants may solicit to rehire that individual. Nothing in this paragraph prohibits Defendants from advertising employment openings using general solicitations or advertisements.

D. Defendants must permit prospective Acquirers of the Military GPS Divestiture Assets to have reasonable access to make inspections of the physical facilities and access to all

environmental, zoning, and other permit documents and information, and all financial, operational, or other documents and information customarily provided as part of a due diligence process.

E. Defendants must warrant to the Acquirer of the Military GPS Divestiture Assets that each asset to be divested will be fully operational and without material defect on the date of their transfer to the Acquirer of the Military GPS Divestiture Assets.

F. Defendants must not take any action that will impede in any way the permitting, operation, or divestiture of the Military GPS Divestiture Assets.

G. Defendants must make best efforts to assign, subcontract, or otherwise transfer all contracts related to the Military GPS Divestiture Assets, including all supply and sales contracts, to the Acquirer of the Military GPS Divestiture Assets. Defendants must not interfere with any negotiations between the Acquirer of the Military GPS Divestiture Assets and a contracting party.

H. At the option of the Acquirer of the Military GPS Divestiture Assets, and subject to approval by the United States in its sole discretion, on or before the date on which the Military GPS Divestiture Assets are divested to the Acquirer of the Military GPS Divestiture Assets, Defendants must enter into a supply contract for Military GPS Systems sufficient to meet the needs of the Military GPS Business, as determined by the Acquirer of the Military GPS Divestiture Assets, for a period of up to twelve (12) months on terms and conditions reasonably related to market conditions for Military GPS Systems. The United States, in its sole discretion, may approve one or more extensions of this supply contract, for a total of up to an additional twelve (12) months. If Acquirer of the Military GPS Divestiture Assets seeks an extension of the term of this supply contract, Defendants must notify the United States in writing at least three (3) months prior to the date the supply contract expires. The Acquirer of the Military GPS Divestiture Assets may terminate this supply contract without cost or penalty at any time upon commercially reasonable notice. The employee(s) of Defendants tasked with supporting this supply contract must not share any competitively sensitive information of the Acquirer of the Military GPS Divestiture Assets with any other employee of Defendants.

I. At the option of Acquirer of the Military GPS Divestiture Assets, and subject to approval by the United States in its sole discretion, on or before the

date on which the Military GPS Divestiture Assets are divested to the Acquirer of the Military GPS Divestiture Assets, Defendants must enter into a contract to provide transition services for back office, human resource, and information technology services and support for the Military GPS Business for a period of up to twelve (12) months on terms and conditions reasonably related to market conditions for the transition services. The United States, in its sole discretion, may approve one or more extensions of this contract for transition services, for a total of up to an additional twelve (12) months. If the Acquirer of the Military GPS Divestiture Assets seeks an extension of the term of this contract for transition services, Defendants must notify the United States in writing at least three (3) months prior to the date the contract expires. The Acquirer of the Military GPS Divestiture Assets may terminate a contract for transition services without cost or penalty at any time upon commercially reasonable notice. The employee(s) of Defendants tasked with providing these transition services must not share any competitively sensitive information of the Acquirer of the Military GPS Divestiture Assets with any other employee of Defendants.

J. At the option of the Acquirer of the Military GPS Divestiture Assets, and subject to approval by the United States in its sole discretion, on or before the date on which the Military GPS Divestiture Assets are divested to the Acquirer of the Military GPS Divestiture Assets, Defendants must enter into a lease for the Cedar Rapids Facility for a period of up to twelve (12) months on terms and conditions reasonably related to market conditions. 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 (6) months. If the Acquirer of the Military GPS Divestiture Assets seeks an extension of the term of this lease, Defendants must notify the United States in writing at least three (3) months prior to the date the contract expires. The Acquirer of the Military GPS Divestiture Assets may terminate a lease without cost or penalty at any time upon commercially reasonable notice.

K. For a period of six (6) months following the divestiture of the Military GPS Divestiture Assets, Defendants must provide the Acquirer of the Military GPS Divestiture Assets with complete and sole access to Laboratories 43, 44, 44 Room 6, 53B, 53C, 53D, 60A, 60B, 60C, 60D, 60F, and 60G located in the Cedar Rapids Facility and Laboratories 2, 4, 1CD100, 1CB100, and 1C0200 located in the Coralville Facility

for two (2) pre-scheduled, 8-hour shifts per laboratory each day, with the Acquirer of the Military GPS Divestiture Assets having first choice among the shifts at each laboratory for three business days per week. After that six (6) month period, until the expiration of the supply contract required by Paragraph V(H) of this Final Judgment, Defendants must provide the Acquirer of the Military GPS Divestiture Assets with unlimited complete and sole access to all the laboratories identified in this Paragraph located in the Cedar Rapids Facility and the Coralville Facility, except that the access to Laboratories 1CB100, 1C0200, and 2 of the Coralville Facility and Laboratories 60A, 60D, and 60G of the Cedar Rapids Facility will continue to be for two (2) pre-scheduled, 8-hour shifts each day, with the Acquirer of the Military GPS Divestiture Assets having first choice among the shifts for three business days per week.

L. Defendants must warrant to the Acquirer of the Military GPS Divestiture Assets that there are no material defects in the environmental, zoning, or other permits pertaining to the operation of the Divestiture Assets. Following the sale of the Military GPS Divestiture Assets, Defendants must not undertake, directly or indirectly, any challenges to the environmental, zoning, or other permits relating to the operation of the Military GPS Divestiture Assets.

M. Unless the United States otherwise consents in writing, the divestiture pursuant to Section V or by a Divestiture Trustee appointed pursuant to Section VII of this Final Judgment must include the entire Military GPS Divestiture Assets and must be accomplished in such a way as to satisfy the United States, in its sole discretion, that the Military GPS Divestiture Assets can and will be used by the Acquirer of the Military GPS Divestiture Assets as part of a viable, ongoing business in the design, development, production, and sale of Military GPS Systems, and will remedy the competitive harm alleged in the Complaint. The divestiture, whether pursuant to Section V or Section VII of this Final Judgment:

(1) Must be made to an Acquirer that, in the United States' sole judgment, has the intent and capability (including the necessary managerial, operational, technical, and financial capability) of competing effectively in the business of the design, development, production, and sale of Military GPS Systems; and

(2) must be accomplished so as to satisfy the United States, in its sole discretion, that none of the terms of any agreement between an Acquirer and Defendants give Defendants the ability unreasonably to raise the Acquirer of the Military GPS Divestiture Assets' costs,

to lower the Acquirer of the Military GPS Divestiture Assets' efficiency, or otherwise to interfere in the ability of the Acquirer of the Military GPS Divestiture Assets to compete effectively.

N. If any term of an agreement between Defendants and the Acquirer of the Military GPS Divestiture Assets to effectuate the divestiture required by this Final Judgment varies from a term of this Final Judgment then, to the extent that Defendants cannot fully comply with both, this Final Judgment determines Defendants' obligations.

VI. Divestiture of the Optical Systems Business

A. Defendants are ordered and directed, within the later of ninety (90) calendar days after the Court's entry of the Asset Preservation and Hold Separate Stipulation and Order in this matter, or fifteen (15) calendar days after the Transaction Regulatory Approvals and the Optical Systems Divestiture Assets Regulatory Approvals have been received, to divest the Optical Systems Divestiture Assets in a manner consistent with this Final Judgment to an Acquirer acceptable to the United States, in its sole discretion. The United States, in its sole discretion, may agree to one or more extensions of this time period not to exceed sixty (60) calendar days in total and will notify the Court of any extensions. Defendants agree to use their best efforts to divest the Optical Systems Divestiture Assets as expeditiously as possible.

B. Defendants promptly must make known, by usual and customary means, the availability of the Optical Systems Divestiture Assets. Defendants must inform any person making an inquiry regarding a possible purchase of the Optical Systems Divestiture Assets that the Optical Systems Divestiture Assets are being divested in accordance with this Final Judgment and must provide that person with a copy of this Final Judgment. Defendants must offer to furnish to all prospective Acquirers, subject to customary confidentiality assurances, all information and documents relating to the Optical Systems Divestiture Assets customarily provided in a due-diligence process; provided, however, that Defendants need not provide information or documents subject to the attorney-client privilege or work-product doctrine. Defendants must make this information available to the United States at the same time that the information is made available to any other person.

C. Defendants must cooperate with and assist the Acquirer of the Optical Systems Divestiture Assets in

identifying and hiring all Optical Systems Personnel, including:

1. Within ten (10) business days following receipt of a request by the Acquirer of the Optical Systems Divestiture Assets or the United States, Defendants must identify all Optical Systems Personnel to the Acquirer of the Optical Systems Divestiture Assets and the United States, including by providing organization charts covering all Optical Systems Personnel.

2. Within ten (10) business days following receipt of a request by the Acquirer of the Optical Systems Divestiture Assets or the United States, Defendants must provide to the Acquirer of the Optical Systems Divestiture Assets the information set forth in Paragraph VI(C)(1), and to the Acquirer of the Optical Systems Divestiture Assets and the United States the following additional information related to Optical Systems Personnel: Name; job title; current salary and benefits including most recent bonus paid, aggregate annual compensation, current target or guaranteed bonus, if any, and any other payments due to or promises made to the employee; descriptions of reporting relationships, past experience, responsibilities, and training and educational histories; lists of all certifications; and all job performance evaluations. If Defendants are barred by any applicable laws from providing any of this information, within ten (10) business days following receipt of the request, Defendants must provide the requested information to the full extent permitted by law and also must provide a written explanation of Defendants' inability to provide the remaining information.

3. At the request of the Acquirer of the Optical Systems Divestiture Assets, Defendants must promptly make Optical Systems Personnel available for private interviews with the Acquirer of the Optical Systems Divestiture Assets during normal business hours at a mutually agreeable location.

4. Defendants must not interfere with any efforts by the Acquirer of the Optical Systems Divestiture Assets to employ any Optical Systems Personnel. Interference includes but is not limited to offering to increase the salary or improve the benefits of Optical Systems Personnel unless the offer is part of a company-wide increase in salary or benefits that was announced prior to June 9, 2019 or has been approved by the United States, in its sole discretion. Defendants' obligations under this paragraph will expire six (6) months after the divestiture of the Optical Systems Divestiture Assets pursuant to this Final Judgment.

5. For Optical Systems Personnel who elect employment with the Acquirer of the Optical Systems Divestiture Assets within six (6) months of the date on which the Optical Systems Divestiture Assets are divested to the Acquirer of the Optical Systems Divestiture Assets, Defendants must waive all non-compete and non-disclosure agreements, vest all unvested pension and other equity rights, and provide all benefits that those Optical Systems Personnel otherwise would have been provided had the Optical Systems Personnel continued employment with Defendants, including but not limited to any retention bonuses or payments. Defendants may maintain reasonable restrictions on disclosure by Optical Systems Personnel of Defendants' proprietary non-public information that is unrelated to Optical Systems Divestiture Assets and not otherwise required to be disclosed by this Final Judgment.

6. For a period of twelve (12) months from the date on which the Optical Systems Divestiture Assets are divested to the Acquirer of the Optical Systems Divestiture Assets, Defendants may not solicit to rehire Optical Systems Personnel who were hired by the Acquirer of the Optical Systems Divestiture Assets within six (6) months of the date on which the Optical Systems Divestiture Assets are divested to the Acquirer of the Optical Systems Divestiture Assets unless (a) an individual is terminated or laid off by the Acquirer of the Optical Systems Divestiture Assets or (b) the Acquirer of the Optical Systems Divestiture Assets agrees in writing that Defendants may solicit to rehire that individual. Nothing in this paragraph prohibits Defendants from advertising employment openings using general solicitations or advertisements.

D. Defendants must permit prospective Acquirers of the Optical Systems Divestiture Assets to have reasonable access to make inspections of the physical facilities and access to all environmental, zoning, and other permit documents and information, and all financial, operational, or other documents and information customarily provided as part of a due diligence process.

E. Defendants must warrant to the Acquirer of the Optical Systems Divestiture Assets that each asset to be divested will be fully operational and without material defect on the date of sale.

F. Defendants must not take any action that will impede in any way the permitting, operation, or divestiture of the Optical Systems Divestiture Assets.

G. Defendants must make best efforts to assign, subcontract, or otherwise transfer all contracts related to the Optical Systems Divestiture Assets, including all supply and sales contracts, to the Acquirer of the Optical Systems Divestiture Assets. Defendants must not interfere with any negotiations between the Acquirer of the Optical Systems Divestiture Assets and a contracting party.

H. At the option of the Acquirer of the Optical Systems Divestiture Assets, and subject to approval by the United States in its sole discretion, on or before the date on which the Optical Systems Divestiture Assets are divested to Acquirer of the Optical Systems Divestiture Assets, Defendants must enter into a supply contract to meet the needs of the Acquirer of the Optical Systems Divestiture Assets for image processing software to support projects of the Optical Systems Business for a period of up to twelve (12) months on terms and conditions reasonably related to market conditions for image processing software. The United States, in its sole discretion, may approve one or more extensions of this supply contract, for a total of up to an additional twelve (12) months. If the Acquirer of the Optical Systems Divestiture Assets seeks an extension of the term of this supply contract, Defendants must notify the United States in writing at least three (3) months prior to the date the supply contract expires. The Acquirer of the Optical Systems Divestiture Assets may terminate the supply contract without cost or penalty at any time upon commercially reasonable notice.

I. At the option of the Acquirer of the Optical Systems Divestiture Assets, and subject to approval by the United States in its sole discretion, on or before the date on which the Optical Systems Divestiture Assets are divested to the Acquirer of the Optical Systems Divestiture Assets, Defendants must enter into a contract to provide transition services for back office, human resource, and information technology services and support for the Optical Systems Business for a period of up to twelve (12) months on terms and conditions reasonably related to market conditions for the provision of the transition services. The United States, in its sole discretion, may approve one or more extensions of this contract for transition services, for a total of up to an additional six (6) months. If the Acquirer of the Optical Systems

Divestiture Assets seeks an extension of the term of this contract for transition services, Defendants must notify the United States in writing at least three (3)

months prior to the date the contract expires. The Acquirer of the Optical Systems Divestiture Assets may terminate a contract for transition services without cost or penalty at any time upon commercially reasonable notice. The employee(s) of Defendants tasked with providing these transition services must not share any competitively sensitive information of the Acquirer of the Optical Systems Divestiture Assets with any other employee of Defendants.

J. Defendants must warrant to the Acquirer of the Optical Systems Divestiture Assets that there are no material defects in the environmental, zoning, or other permits pertaining to the operation of the Optical Systems Divestiture Assets. Following the sale of the Optical Systems Divestiture Assets, Defendants must not undertake, directly or indirectly, any challenges to the environmental, zoning, or other permits relating to the operation of the Optical Systems Divestiture Assets.

K. Unless the United States otherwise consents in writing, the divestiture pursuant to Section VI or by a Divestiture Trustee appointed pursuant to Section VII of this Final Judgment must include the entire Optical Systems Divestiture Assets and must be accomplished in such a way as to satisfy the United States, in its sole discretion, that the Optical Systems Divestiture Assets can and will be used by the Acquirer of the Optical Systems Divestiture Assets as part of a viable, ongoing business in the design, development, production, and sale of Optical Systems, and will remedy the competitive harm alleged in the Complaint. The divestiture, whether pursuant to Section VI or Section VII of this Final Judgment:

(1) Must be made to an Acquirer that, in the United States' sole judgment, has the intent and capability (including the necessary managerial, operational, technical, and financial capability) of competing effectively in the business of the design, development, production, and sale of Optical Systems; and

(2) must be accomplished so as to satisfy the United States, in its sole discretion, that none of the terms of any agreement between an Acquirer and Defendants give Defendants the ability unreasonably to raise the Acquirer of the Optical Systems Divestiture Assets' costs, to lower the Acquirer of the Optical Systems Divestiture Assets' efficiency, or otherwise to interfere in the ability of the Acquirer of the Optical Systems Divestiture Assets to compete effectively.

L. If any term of an agreement between Defendants and the Acquirer of the Optical Systems Divestiture Assets to effectuate the divestiture required by this Final Judgment varies from a term

of this Final Judgment then, to the extent that Defendants cannot fully comply with both, this Final Judgment determines Defendants' obligations.

VII. Appointment of Divestiture Trustee

A. If Defendants have not divested all of the Divestiture Assets within the periods specified in Paragraphs IV(A), V(A) and VI(A), Defendants must immediately notify the United States of that fact in writing. Upon application of the United States, the Court will appoint a Divestiture Trustee selected by the United States and approved by the Court to effect the divestiture(s) of any of the Divestiture Assets that have not been sold during the time periods specified in Paragraphs IV(A), V(A) and VI(A).

B. After the appointment of a Divestiture Trustee by the Court, only the Divestiture Trustee will have the right to sell those Divestiture Assets that the Divestiture Trustee has been appointed to sell. The Divestiture Trustee will have the power and authority to accomplish the divestiture(s) to an Acquirer(s) acceptable to the United States, in its sole discretion, at a price and on terms as are then obtainable upon reasonable effort by the Divestiture Trustee, subject to the provisions of Sections IV, V, VI, VII, and VIII of this Final Judgment, and will have other powers as the Court deems appropriate. Subject to Paragraph VII(D) of this Final Judgment, the Divestiture Trustee may hire at the cost and expense of Defendants any agents or consultants, including, but not limited to, investment bankers, attorneys, and accountants, who will be solely accountable to the Divestiture Trustee, reasonably necessary in the Divestiture Trustee's judgment to assist in the divestiture. Any such agents or consultants will serve on such terms and conditions as the United States approves, including confidentiality requirements and conflict of interest certifications.

C. Defendants may not object to a sale by the Divestiture Trustee on any ground other than malfeasance by the Divestiture Trustee. Objections by Defendants must be conveyed in writing to the United States and the Divestiture Trustee within ten (10) calendar days after the Divestiture Trustee has provided the notice required under Section VIII.

D. The Divestiture Trustee will serve at the cost and expense of Defendants pursuant to a written agreement, on such terms and conditions as the United States approves, including confidentiality requirements and conflict of interest certifications. The

Divestiture Trustee will account for all monies derived from the sale of the assets sold by the Divestiture Trustee and all costs and expenses so incurred. After approval by the Court of the Divestiture Trustee's accounting, including fees for any of its services yet unpaid and those of agents and consultants retained by the Divestiture Trustee, all remaining money will be paid to Defendants and the trust will then be terminated. The compensation of the Divestiture Trustee and any agents or consultants retained by the Divestiture Trustee must be reasonable in light of the value of the Divestiture Assets and based on a fee arrangement that provides the Divestiture Trustee with incentives based on the price and terms of the divestiture and the speed with which it is accomplished, but the timeliness of the divestiture is paramount. If the Divestiture Trustee and Defendants are unable to reach agreement on the Divestiture Trustee's or any agents' or consultants' compensation or other terms and conditions of engagement within fourteen (14) calendar days of the appointment of the Divestiture Trustee, the United States may, in its sole discretion, take appropriate action, including making a recommendation to the Court. Within three (3) business days of hiring any agent or consultant, the Divestiture Trustee must provide written notice of the hiring and rate of compensation to Defendants and the United States.

E. Defendants must use their best efforts to assist the Divestiture Trustee in accomplishing the required divestiture(s). The Divestiture Trustee and any agents or consultants retained by the Divestiture Trustee must have full and complete access to the personnel, books, records, and facilities of the business to be divested, and Defendants must provide or develop financial and other information relevant to such business as the Divestiture Trustee may reasonably request, subject to reasonable protection for trade secrets; other confidential research, development, or commercial information; or any applicable privileges. Defendants may not take any action to interfere with or to impede the Divestiture Trustee's accomplishment of the divestiture(s).

F. After appointment, the Divestiture Trustee will file monthly reports with the United States setting forth the Divestiture Trustee's efforts to accomplish the divestiture(s) ordered by this Final Judgment. Reports must include the name, address, and telephone number of each person who, during the preceding month, made an

offer to acquire, expressed an interest in acquiring, entered into negotiations to acquire, or was contacted or made an inquiry about acquiring any interest in the Divestiture Assets and will describe in detail each contact with any such person. The Divestiture Trustee will maintain full records of all efforts made to divest the Divestiture Assets.

G. If the Divestiture Trustee has not accomplished the divestiture(s) ordered by this Final Judgment within six months of appointment, the Divestiture Trustee must promptly file with the Court a report setting forth: (1) The Divestiture Trustee's efforts to accomplish the required divestiture(s); (2) the reasons, in the Divestiture Trustee's judgment, why the required divestiture(s) has not been accomplished; and (3) the Divestiture Trustee's recommendations. To the extent such report contains information that the Divestiture Trustee deems confidential, such report will not be filed in the public docket of the Court. The Divestiture Trustee will at the same time furnish such report to the United States, which will have the right to make additional recommendations to the Court consistent with the purpose of the trust. The Court thereafter may enter such orders as it deems appropriate to carry out the purpose of this Final Judgment, which, if necessary, may include extending the trust and the term of the Divestiture Trustee's appointment by a period requested by the United States.

H. If the United States determines that the Divestiture Trustee is not acting diligently or in a reasonably cost-effective manner, the United States may recommend that the Court appoint a substitute Divestiture Trustee.

VIII. Notice of Proposed Divestiture

A. Within two (2) business days following execution of a definitive divestiture agreement, Defendants or the Divestiture Trustee, whichever is then responsible for effecting the divestiture required herein, must notify the United States of a proposed divestiture required by this Final Judgment. If the Divestiture Trustee is responsible for effecting the divestiture, the Divestiture Trustee also must notify Defendants. The notice must set forth the details of the proposed divestiture and list the name, address, and telephone number of each person not previously identified who offered or expressed an interest in or desire to acquire any ownership interest in the Divestiture Assets, together with full details of the same.

B. Within fifteen (15) calendar days of receipt by the United States of this notice, the United States may request

from Defendants, the proposed Acquirer(s), other third parties, or the Divestiture Trustee, if applicable, additional information concerning the proposed divestiture, the proposed Acquirer and other prospective Acquirer(s). Defendants and the Divestiture Trustee must furnish the additional information requested within fifteen (15) calendar days of the receipt of the request, unless the United States provides written agreement to a different period.

C. Within forty-five (45) calendar days after receipt of the notice or within twenty (20) calendar days after the United States has been provided the additional information requested from Defendants, the proposed Acquirer(s), other third parties, and the Divestiture Trustee, whichever is later, the United States must provide written notice to Defendants and the Divestiture Trustee, if there is one, stating whether or not the United States, in its sole discretion, objects to the proposed Acquirer(s) or any other aspect of the proposed divestiture. If the United States provides written notice that it does not object, the divestiture may be consummated, subject only to Defendants' limited right to object to the sale under Paragraph VII(C) of this Final Judgment. Absent written notice that the United States does not object or upon objection by the United States, a divestiture may not be consummated. Upon objection by Defendants pursuant to Paragraph VII(C), a divestiture by the Divestiture Trustee may not be consummated unless approved by the Court.

D. No information or documents obtained pursuant to Section VIII may be divulged by the United States to any person other than an authorized representative of the executive branch of the United States, except in the course of legal proceedings to which the United States is a party (including grand-jury proceedings), for the purpose of evaluating a proposed Acquirer or securing compliance with this Final Judgment, or as otherwise required by law.

E. In the event of a request by a third party for disclosure of information under the Freedom of Information Act, 5 U.S.C. 552, the Antitrust Division will act in accordance with that statute, and the Department of Justice regulations at 28 CFR part 16, including the provision on confidential commercial information at 28 CFR 16.7. Persons submitting information to the Antitrust Division should designate the confidential commercial information portions of all applicable documents and information under 28 CFR 16.7. Designations of confidentiality expire ten years after

submission, "unless the submitter requests and provides justification for a longer designation period." See 28 CFR 16.7(b).

F. If at the time a person furnishes information or documents to the United States pursuant to Section VIII, that person represents and identifies in writing information or documents for which a claim of protection may be asserted under Rule 26(c)(1)(G) of the Federal Rules of Civil Procedure, and marks each pertinent page of such material, "Subject to claim of protection under Rule 26(c)(1)(G) of the Federal Rules of Civil Procedure," the United States must give that person ten calendar days' notice before divulging the material in any legal proceeding (other than a grand-jury proceeding).

IX. Financing

Defendants may not finance all or any part of Acquirer's purchase of all or part of the Divestiture Assets made pursuant to this Final Judgment.

X. Asset Preservation and Hold Separate

Until the divestiture required by this Final Judgment has been accomplished, Defendants must take all steps necessary to comply with the Asset Preservation and Hold Separate Stipulation and Order entered by the Court. Defendants will take no action that would jeopardize the divestiture ordered by the Court.

XI. Affidavits

A. Within twenty (20) calendar days of the filing of the Complaint in this matter, and every thirty (30) calendar days thereafter until the divestiture required by this Final Judgment has been completed, Defendants must deliver to the United States an affidavit, signed by each Defendant's Chief Financial Officer and General Counsel, describing the fact and manner of Defendants' compliance with this Final Judgment. Each affidavit must include the name, address, and telephone number of each person who, during the preceding thirty (30) calendar days, made an offer to acquire, expressed an interest in acquiring, entered into negotiations to acquire, or was contacted or made an inquiry about acquiring, an interest in the Divestiture Assets, and must describe in detail each contact with such persons during that period. Each affidavit also must include a description of the efforts Defendants have taken to solicit buyers for and complete the sale of the Divestiture Assets, and to provide required information to prospective Acquirers. Each affidavit also must include a

description of any limitations placed by Defendants on information provided to prospective Acquirers. If the information set forth in the affidavit is true and complete, objection by the United States to information provided by Defendants to prospective Acquirers must be made within fourteen (14) calendar days of receipt of the affidavit.

B. Within twenty (20) calendar days of the filing of the Complaint in this matter, Defendants must deliver to the United States an affidavit that describes in reasonable detail all actions Defendants have taken and all steps Defendants have implemented on an ongoing basis to comply with Section X of this Final Judgment. Defendants must deliver to the United States an affidavit describing any changes to the efforts and actions outlined in Defendants' earlier affidavits filed pursuant to Section XI within fifteen (15) calendar days after the change is implemented.

C. Defendants must keep all records of all efforts made to preserve and divest the Divestiture Assets until one year after the divestiture has been completed.

XII. Appointment of Monitoring Trustee

A. Upon application of the United States, the Court will appoint a Monitoring Trustee selected by the United States and approved by the Court.

B. The Monitoring Trustee will have the power and authority to monitor Defendants' compliance with the terms of this Final Judgment and the Asset Preservation and Hold Separate Stipulation and Order entered by the Court, and will have other powers as the Court deems appropriate. The Monitoring Trustee will be required to investigate and report on Defendants' compliance with this Final Judgment and the Asset Preservation and Hold Separate Stipulation and Order, and Defendants' progress toward effectuating the purposes of this Final Judgment, including but not limited to: Defendants' sale of the Divestiture Assets and Defendants' compliance with the terms of the transition services agreements, supply contracts, laboratory access arrangements, and short-term leases provided for in this Final Judgment.

C. Subject to Paragraph XII(E) of this Final Judgment, the Monitoring Trustee may hire at the cost and expense of Defendants any agents and consultants, including, but not limited to, investment bankers, attorneys, and accountants, who will be solely accountable to the Monitoring Trustee, reasonably necessary in the Monitoring Trustee's judgment. Any such agents or consultants will serve on such terms

and conditions as the United States approves, including confidentiality requirements and conflict of interest certifications.

D. Defendants may not object to actions taken by the Monitoring Trustee in fulfillment of the Monitoring Trustee's responsibilities under any Order of the Court on any ground other than malfeasance by the Monitoring Trustee. Objections by Defendants must be conveyed in writing to the United States and the Monitoring Trustee within ten (10) calendar days after the action taken by the Monitoring Trustee giving rise to Defendants' objection.

E. The Monitoring Trustee will serve at the cost and expense of Defendants pursuant to a written agreement with Defendants, on such terms and conditions as the United States approves, including confidentiality requirements and conflict of interest certifications. The compensation of the Monitoring Trustee and any agents or consultants retained by the Monitoring Trustee must be on reasonable and customary terms commensurate with the individuals' experience and responsibilities. If the Monitoring Trustee and Defendants are unable to reach agreement on the Monitoring Trustee's or any agents' or consultants' compensation or other terms and conditions of engagement within fourteen (14) calendar days of the appointment of the Monitoring Trustee, the United States may, in its sole discretion, take appropriate action, including making a recommendation to the Court. Within three (3) business days of hiring any agents or consultants, the Monitoring Trustee must provide written notice of the hiring and rate of compensation to Defendants and the United States.

F. The Monitoring Trustee will have no responsibility or obligation for the operation of Defendants' businesses.

G. Defendants must use their best efforts to assist the Monitoring Trustee in monitoring Defendants' compliance with their individual obligations under this Final Judgment and under the Asset Preservation and Hold Separate Stipulation and Order. The Monitoring Trustee and any agents or consultants retained by the Monitoring Trustee must have full and complete access to the personnel, books, records, and facilities relating to compliance with this Final Judgment, subject to reasonable protection for trade secrets; other confidential research, development, or commercial information; or any applicable privileges. Defendants may not take any action to interfere with or to impede the Monitoring Trustee's

accomplishment of the Monitoring Trustee's responsibilities.

H. After appointment, the Monitoring Trustee will file reports monthly, or more frequently as needed, with the United States setting forth Defendants' efforts to comply with Defendants' obligations under this Final Judgment and under the Asset Preservation and Hold Separate Stipulation and Order.

I. The Monitoring Trustee will serve until the divestiture of all the Divestiture Assets is finalized pursuant to this Final Judgment, or until the term of any transition services agreements, supply contracts, laboratory access arrangements, and short-term leases required by this Final Judgment have expired, whichever is later.

J. If the United States determines that the Monitoring Trustee is not acting diligently or in a reasonably cost-effective manner, the United States may recommend that the Court appoint a substitute Monitoring Trustee.

XIII. Compliance Inspection

A. For the purposes of determining or securing compliance with this Final Judgment, or of related orders such as an Asset Preservation and Hold Separate Stipulation and Order, or of determining whether this Final Judgment should be modified or vacated, and subject to any legally-recognized privilege, from time to time authorized representatives of the United States, including agents retained by the United States, must, upon written request of an authorized representative of the Assistant Attorney General in charge of the Antitrust Division and reasonable notice to Defendants, be permitted:

(1) Access during Defendants' office hours to inspect and copy or, at the option of the United States, to require Defendants to provide electronic copies of all books, ledgers, accounts, records, data, and documents in the possession, custody, or control of Defendants relating to any matters contained in this Final Judgment; and

(2) to interview, either informally or on the record, Defendants' officers, employees, or agents, who may have their individual counsel present, regarding such matters. The interviews must be subject to the reasonable convenience of the interviewee and without restraint or interference by Defendants.

B. Upon the written request of an authorized representative of the Assistant Attorney General in charge of the Antitrust Division, Defendants must submit written reports or respond to written interrogatories, under oath if requested, relating to any of the matters contained in this Final Judgment.

C. No information or documents obtained pursuant to Section XIII may be divulged by the United States to any

person other than an authorized representative of the executive branch of the United States, except in the course of legal proceedings to which the United States is a party (including grand jury proceedings), for the purpose of securing compliance with this Final Judgment, or as otherwise required by law.

D. In the event of a request by a third party for disclosure of information under the Freedom of Information Act, 5 U.S.C. 552, the Antitrust Division will act in accordance with that statute, and the Department of Justice regulations at 28 CFR part 16, including the provision on confidential commercial information, at 28 CFR 16.7. Defendants submitting information to the Antitrust Division should designate the confidential commercial information portions of all applicable documents and information under 28 CFR 16.7. Designations of confidentiality expire ten years after submission, "unless the submitter requests and provides justification for a longer designation period." See 28 CFR 16.7(b).

E. If at the time that Defendants furnish information or documents to the United States pursuant to Section XIII, Defendants represent and identify in writing information or documents for which a claim of protection may be asserted under Rule 26(c)(1)(G) of the Federal Rules of Civil Procedure, and Defendants mark each pertinent page of such material, "Subject to claim of protection under Rule 26(c)(1)(G) of the Federal Rules of Civil Procedure," the United States must give Defendants ten (10) calendar days' notice before divulging the material in any legal proceeding (other than a grand jury proceeding).

XIV. Limitations on Reacquisition

Defendants may not reacquire any part of or any interest in the Divestiture Assets during the term of this Final Judgment.

XV. Retention of Jurisdiction

The Court retains jurisdiction to enable any party to this Final Judgment to apply to the Court at any time for further orders and directions as may be necessary or appropriate to carry out or construe this Final Judgment, to modify any of its provisions, to enforce compliance, and to punish violations of its provisions.

XVI. Enforcement of Final Judgment

A. The United States retains and reserves all rights to enforce the provisions of this Final Judgment, including the right to seek an order of contempt from the Court. Defendants

agree 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 this Final Judgment, the United States may establish a violation of this Final Judgment and the appropriateness of a remedy therefor by a preponderance of the evidence, and Defendants waive any argument that a different standard of proof should apply.

B. This Final Judgment should be interpreted to give full effect to the procompetitive purposes of the antitrust laws and to restore the competition the United States alleged was harmed by the challenged conduct. Defendants agree that they may be held in contempt of, and that the Court may enforce, any provision of this Final Judgment that, as interpreted by the Court in light of these procompetitive principles and applying ordinary tools of interpretation, is stated specifically and in reasonable detail, whether or not it is clear and unambiguous on its face. In any such interpretation, the terms of this Final Judgment should not be construed against either party as the drafter.

C. In an enforcement proceeding in which the Court finds that Defendants have violated this Final Judgment, the United States may apply to the Court for a one-time extension of this Final Judgment, together with other relief that may be appropriate. In connection with a successful effort by the United States to enforce this Final Judgment against a Defendant, whether litigated or resolved before litigation, that Defendant agrees to reimburse the United States for the fees and expenses of its attorneys, as well as all other costs, including experts' fees, incurred in connection with that enforcement effort, including in the investigation of the potential violation.

D. For a period of four (4) years following the expiration of this Final Judgment, if the United States has evidence that a Defendant violated this Final Judgment before it expired, the United States may file an action against that Defendant in this Court requesting that the Court order: (1) Defendant to comply with the terms of this Final Judgment for an additional term of at least four years following the filing of the enforcement action; (2) all appropriate contempt remedies; (3) additional relief needed to ensure the Defendant complies with the terms of this Final Judgment, and (4) fees or expenses as called for by Section XII.

XVII. Expiration of Final Judgment

Unless the Court grants an extension, this Final Judgment will expire ten (10) years from the date of its entry, except

that after five (5) years from the date of its entry, this Final Judgment may be terminated upon notice by the United States to the Court and Defendants that the divestitures have been completed and the continuation of this Final Judgment no longer is necessary or in the public interest.

XVIII. Public Interest Determination

Entry of this Final Judgment is in the public interest. The parties have complied with the requirements of the Antitrust Procedures and Penalties Act, 15 U.S.C. 16, including by making available to the public copies of this Final Judgment, the Competitive Impact Statement, comments thereon, and the United States' responses to comments. Based upon the record before the Court, which includes the Competitive Impact Statement and any comments and responses to comments filed with the Court, entry of this Final Judgment is in the public interest.

Date: _____

[Court approval subject to procedures of Antitrust Procedures and Penalties Act, 15 U.S.C. 16]

United States District Judge

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)

Judge: Hon. Dabney L. Friedrich

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.

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."

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 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 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

²Paragraph 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."

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, 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

³Paragraph 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."

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, DC 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 consonant 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, Public Law 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

Kevin C. Quin (D.C. Bar #415268) *

Attorney, United States Department of Justice, Antitrust Division Defense, Industrials, and Aerospace Section, 450 Fifth Street NW, Suite 8700, Washington, DC 20530, (202) 307–0922, kevin.quin@usdoj.gov.

* Lead Attorney to be Noticed.

[FR Doc. 2020–08764 Filed 4–23–20; 8:45 am]

BILLING CODE 4410–11–P